Coastal Rail Trail Segments 10 and 11

Final Environmental Impact Report

State Clearinghouse #2021110080

Volume 3: Draft EIR Appendices

County of Santa Cruz

March 2024

Appendix A. Project Design Plans

- A.1, Ultimate Trail Configuration
- A.2, Optional Interim Trail
- A.3, Design Option A: Interim Trail on Capitola Trestle
- A.4, Design Option B: Inland Side Grove to Coronado
- A.5, Tree Removal for Ultimate Trail Configuration
- A.6, Tree Removal for Optional Interim Trail
- A.7, Tree Quantity and Evaluation Summaries
- A.8, Tree Inventory for Ultimate Trail and Optional Interim Trail

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A.1, Ultimate Trail Configuration

DEPARTMENT OF PUBLIC WORKS
RAIL TRAIL SEGMENTS 10 - 11 TRAIL NEXT TO THE RAIL LINE
(ULTIMATE TRAIL CONFIGURATION)
17th Avenue to State Park Drive

PROJECT DESCRIPTION

SEGMENT 10 INCLUDES CONSTRUCTION OF A MULTI-USE TRAIL LOCATED ALONG THE SANTA CRUZ BRANCH RAIL LINE FROM THE EAST SIDE OF 17TH AVENUE TO THE EAST SIDE OF 47TH AVENUE. THIS SEGMENT ALSO INCLUDES RAIL OPERATIONS EQUIPMENT RELOCATION AND APPROXIMATELY ONE MILE OF TRACK REMOVAL AND RECONSTRUCTION.

SEGMENT 11 INCLUDES CONSTRUCTION OF A MULTI-USE TRAIL LOCATED ALONG THE SANTA CRUZ BRANCH RAIL LINE FROM THE EAST SIDE OF 47TH AVENUE TO OPAL STREET WHERE THE TRAIL DIVERTS ONTO EXISITNG BIKE AND PEDESTRIAN FACILITIES THROUGH CAPITOLA VILLAGE TO MONTEREY AVENUE. IMPROVEMENTS TO THE EXISITNG BIKE AND PEDESTRIAN FACILITIES THROUGH THE VILLAGE INCLUDE NEW DIRECTIONAL SIGNAGE AND PAVEMENT MARKINGS. CONSTRUCTION OF THE MULTI-USE TRAIL PICKS UP ON THE WEST SIDE OF MONTEREY AVENUE ALONG THE SANTA CRUZ BRANCH RAIL LINE AND CONTINUES TO THE WEST SIDE OF STATE PARK DRIVE.

PROJECT DIRECTORY

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PUBLIC WORKS DEPARTMENT
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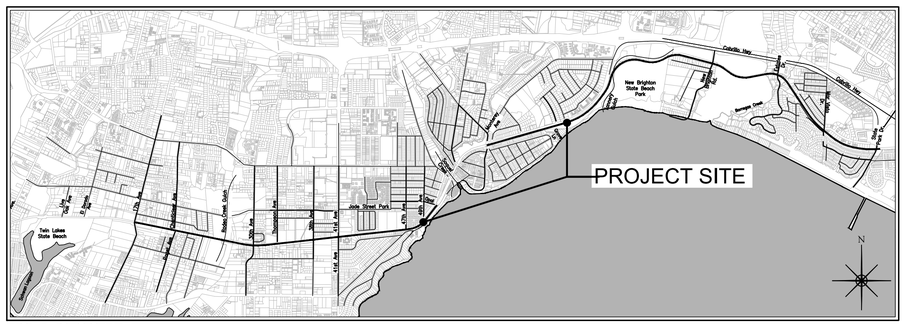
PHONE: (831) 475-7300

VICINITY MAP



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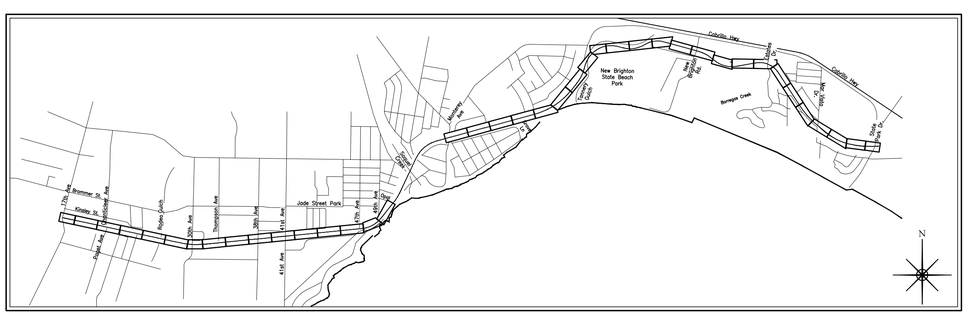

KEY MAP SCALE: 1"=2000'

SHEET INDEX

TS-1.01	TITLE SHEET
DM-1.01-1.14	SEGMENT 10 DEMOLITION PLANS
DM-1.15-1.40	SEGMENT 11 DEMOLITION PLANS
CP-1.01-1.14	SEGMENT 10 CONSTRUCTION KEYNOTE PLANS
CP-1.15-1.40	SEGMENT 11 CONSTRUCTION KEYNOTE PLANS
BP-1.01-10.01	BRIDGE + VIADUCTS GENERAL PLAN SHEETS
BD-1.01-1.04	VIADUCT ABUTMENT DETAILS
WD-1.01-1.02	SOLDIER BEAM RETAINING WALL DETAIL SHEETS
WD-3.01	CONCRETE SPREAD FOOTING RETAINING WALLS
WF-1.00	WAYFINDING SIGNAGE SCHEMATIC

REFINED SCHEMATIC DESIGN SUBMITTAL

FEDERAL PROJECT NO.: ATPL-5936 (154)
STATE PROJECT NO.: 05-2300-0030
COUNTY PROJECT NO.:

REFERENCES	DATE	06/15/23	SCALE AS SHOWN
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	CHECKED	MS/KS	

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Xrefs Attached: N:\Projects\Rail Trail\Segment 10\Drawings\Design\Sheet Files\Segment 10\Xrefs\Segment 10 Base.dwg

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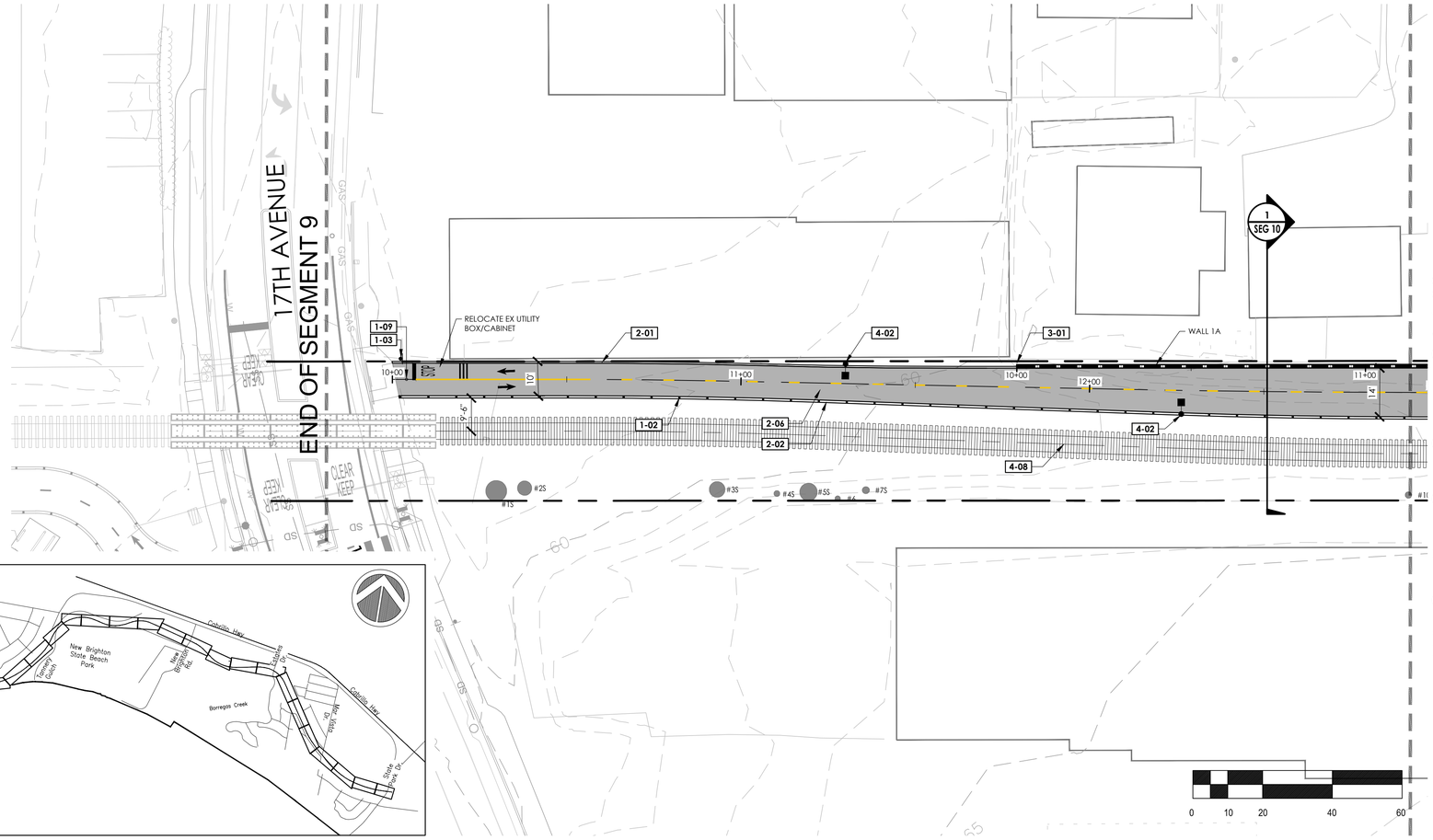

KEYMAP



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
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3-04	BRIDGE
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4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
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	EXISTING FENCE
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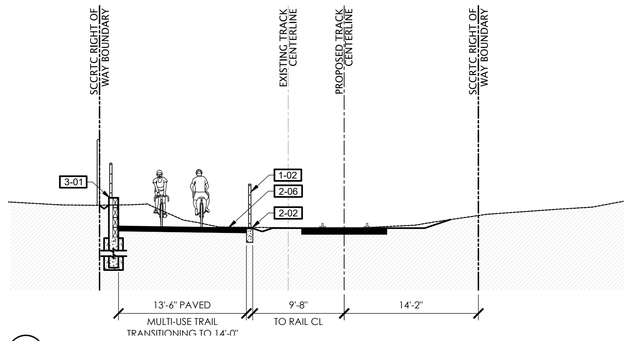
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



1 TYPICAL SECTION
SCALE 1/8"=1'-0"

REVISIONS

rrm design group
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30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.01
VAULT NO.

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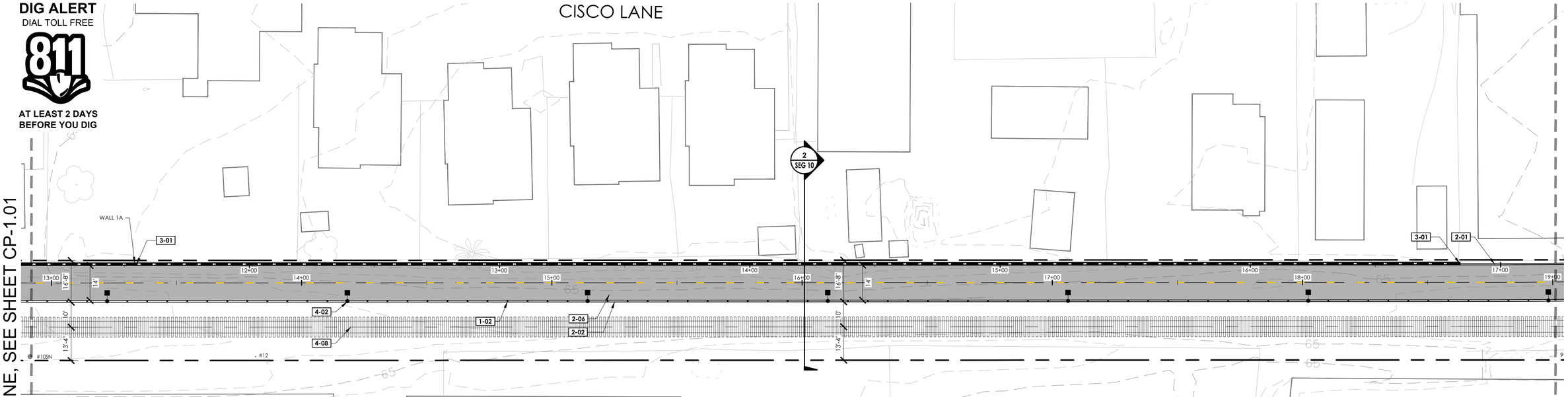
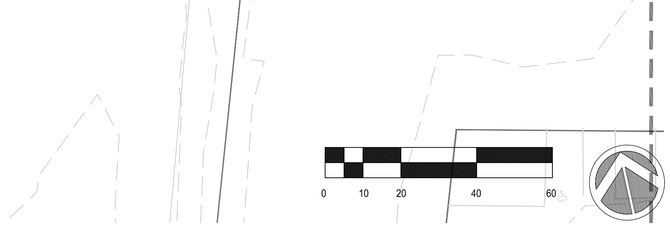


MATCHLINE, SEE SHEET CP-1.01

MATCHLINE, SEE SHEET CP-1.03

KEYMAP





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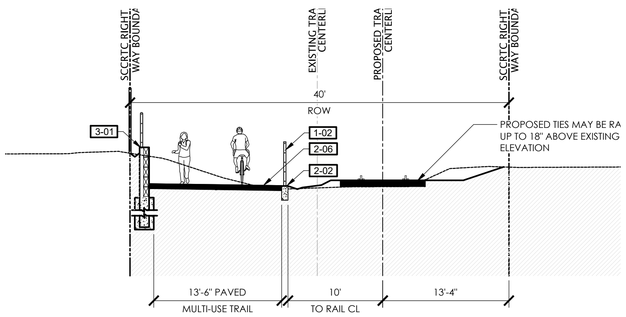

2 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
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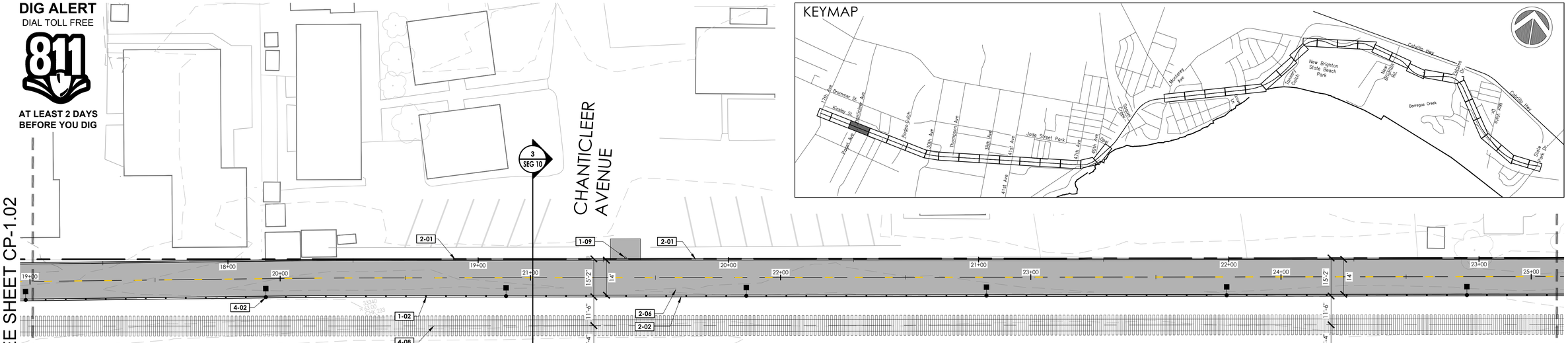
PAGET AVENUE



KEYMAP

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RELEGRINI STREET

REFERENCE NOTES SCHEDULE

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LEGEND

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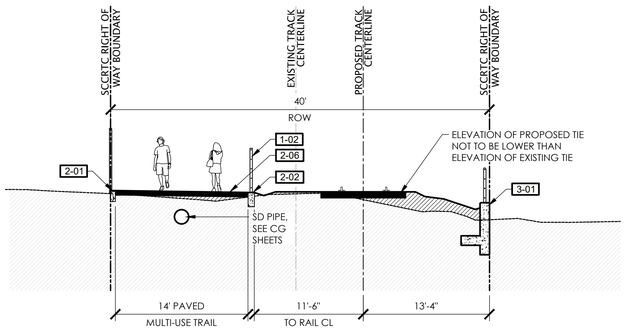

3 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

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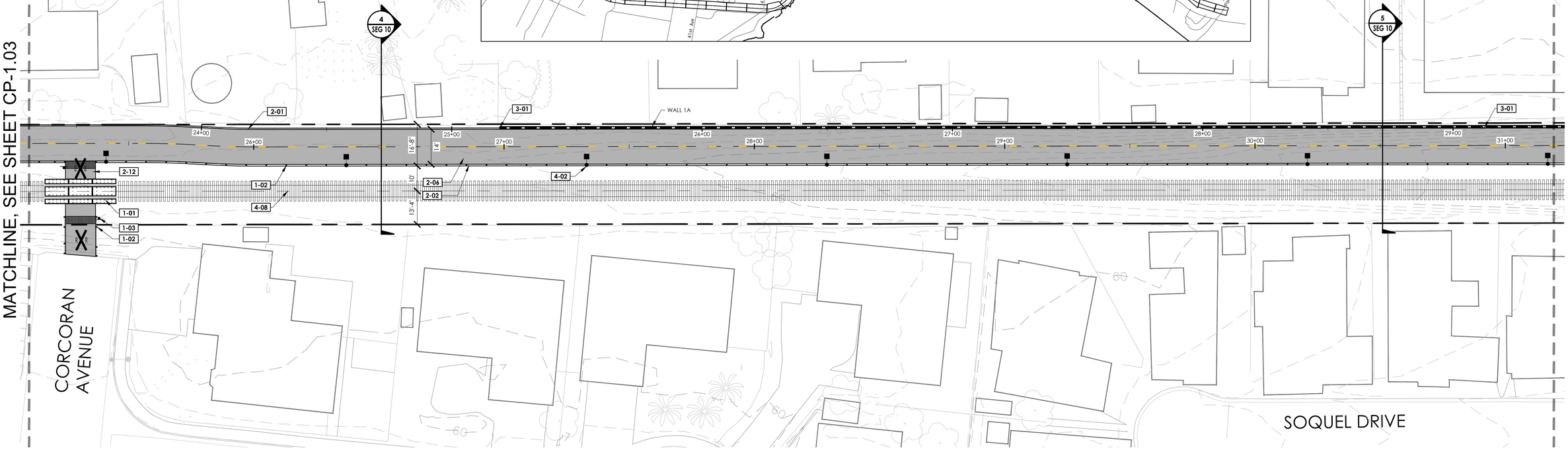
MATCHLINE, SEE SHEET CP-1.05

KEYMAP





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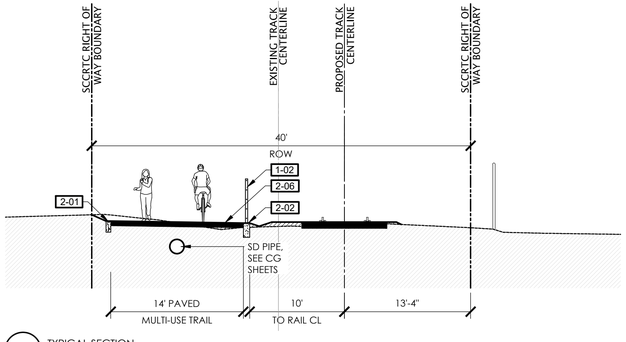
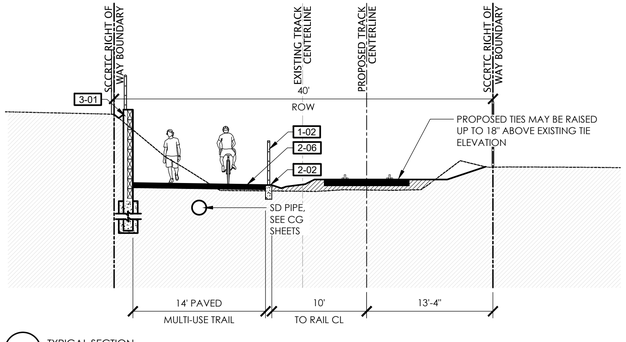


4 TYPICAL SECTION
SCALE 1/8"=1'-0"



5 TYPICAL SECTION
SCALE 1/8"=1'-0"

0 10 20 40 60

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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VAULT NO.	

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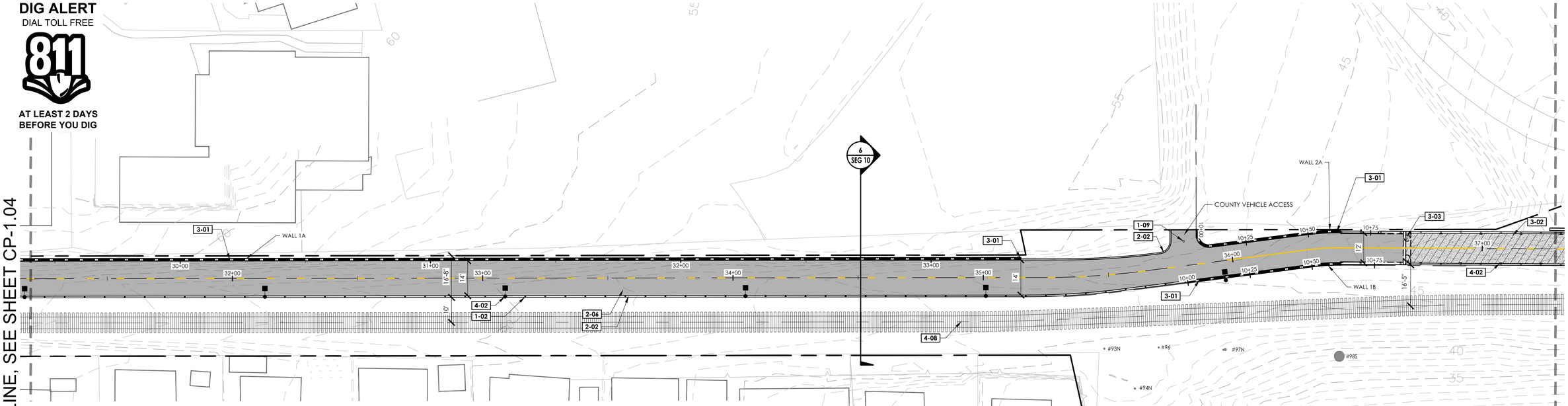
AT LEAST 2 DAYS BEFORE YOU DIG

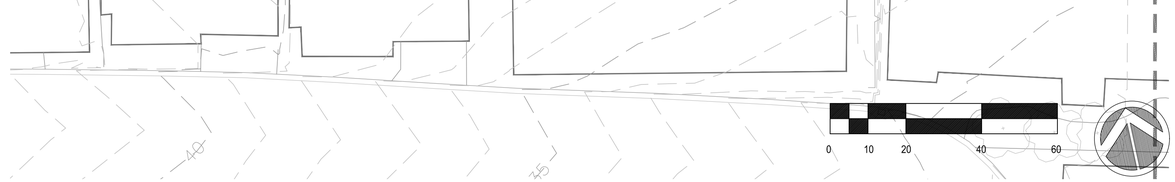
MATCHLINE, SEE SHEET CP-1.04



MATCHLINE, SEE SHEET CP-1.06

KEYMAP



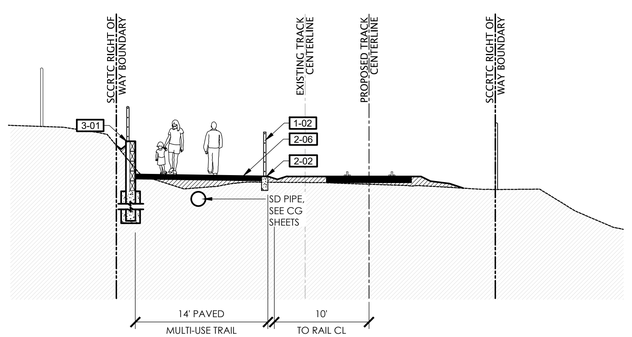


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



6 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RWT-S10

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	KS		CP-1.05
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.05, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XT-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10-Segment 10.dwg, XSB-0193-06-RWT-S10-Segment 11.dwg, XSB-0193-06-RWT-S10-Segment 11-Segment 10.dwg
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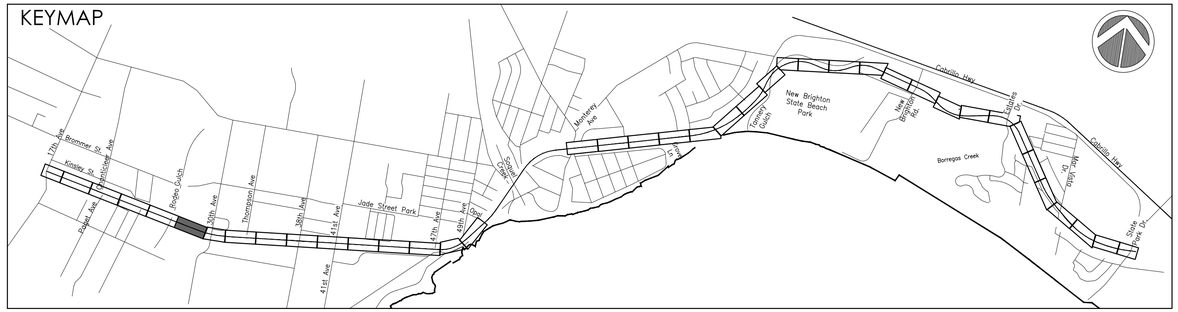
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.05

MATCHLINE, SEE SHEET CP-1.07

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

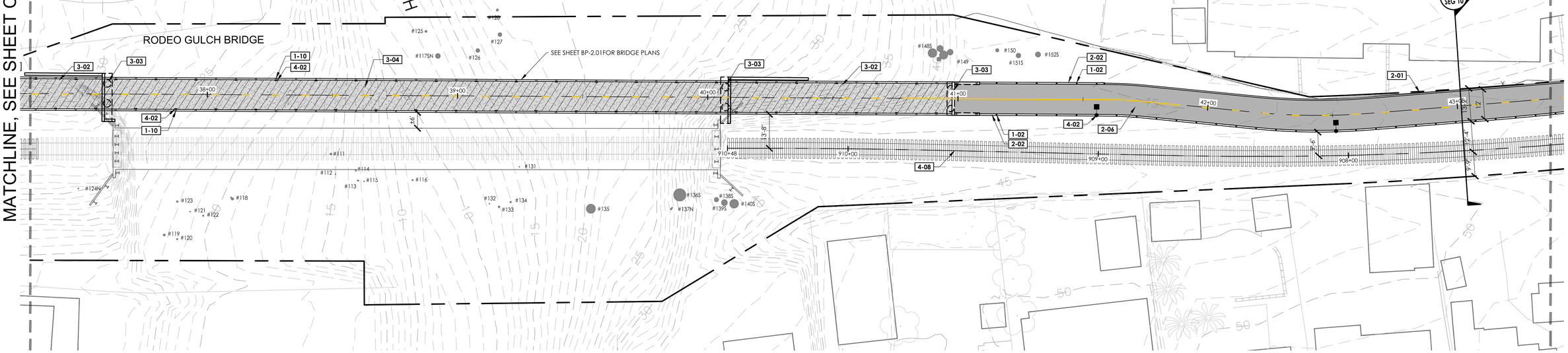
KEYMAP



RODEO GULCH

RODEO GULCH BRIDGE

SEE SHEET BP-2.01FOR BRIDGE PLANS



7
SEG 10

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK

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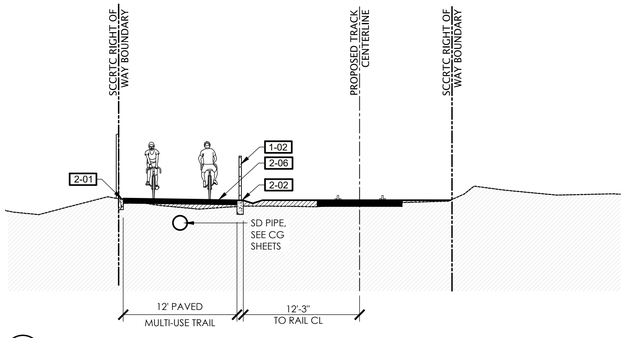

7 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.06
VAULT NO.

Layout Tab Name: CP-1.06, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S10.dwg, XDWG#-0193-06-RCD2.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XDP-0193-06-RWT-S10.dwg, XSP-0193-06-RWT-S10.dwg, XPP-0193-06-RWT-S10.dwg, XW-0193-06-RWT-S10.dwg, XLP-0193-06-RWT-S10.dwg, XLM

DIG ALERT
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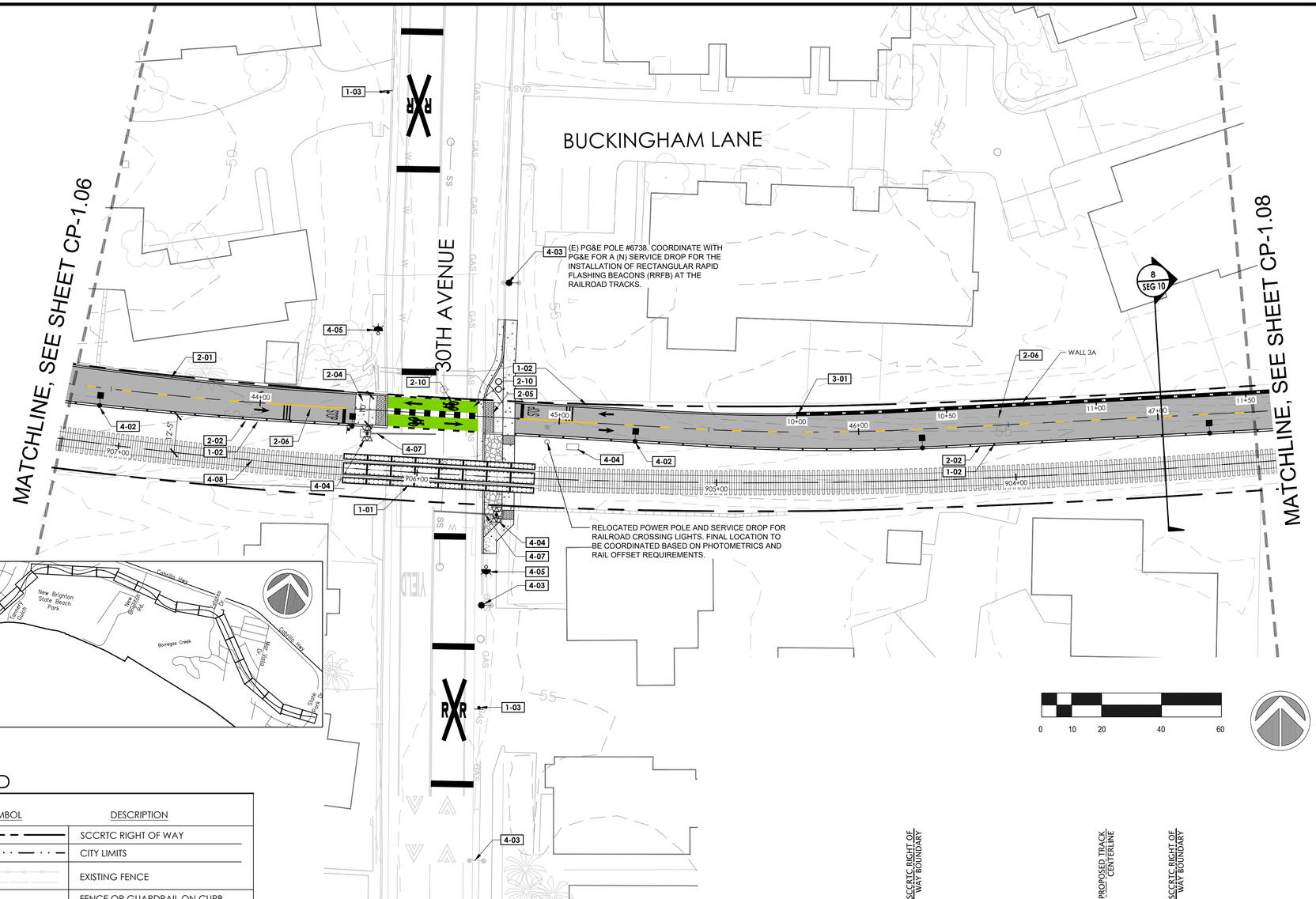

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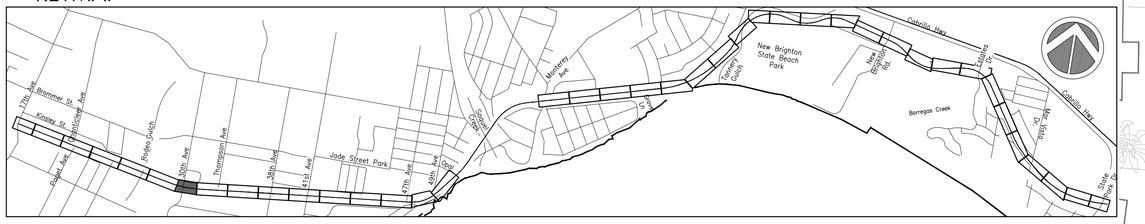
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Capitola Rd
New Brighton State Beach Park
New Brighton Rd
Borregas Creek
Soquel Ave
Monterey Ave
Tannery Gulch
Jade Street Park
Rodeo Gulch
Thompson Ave
Bonita Dr
Bonnie Doon Rd
Bonnie Doon Ct
Kinsley St
Bonnie Doon Ln
Bonnie Doon Way
Bonnie Doon Dr
Bonnie Doon Ct
Bonnie Doon Rd

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

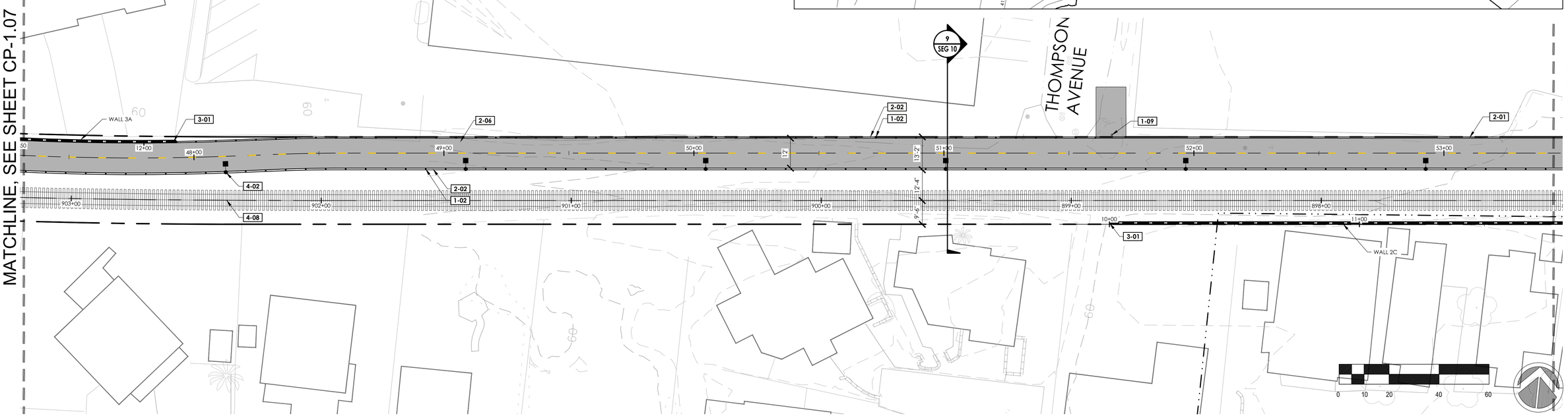
MATCHLINE, SEE SHEET CP-1.07

MATCHLINE, SEE SHEET CP-1.09

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

KEYMAP



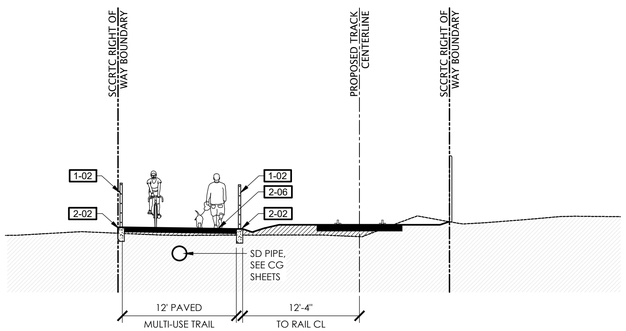


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



9 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN KS	CP-1.08	
DRAWING #: CP-0193-06-RWT-S10	DESIGN KS/MS	VAULT NO.	
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\\Corp.lym\wm-ab\V001\0193-06-RCSD-Santa Cruz Rail-Trail-Seg-10-11\Bid with Trail\Landscape-Architecture\Tom-B-Schematic Design\Sheet-Files\Segment 10\CP-0193-06-RWT-S10.dwg, Plotted By: dnissenbaum, Plotted: Feb 15, 2023 - 5:41pm

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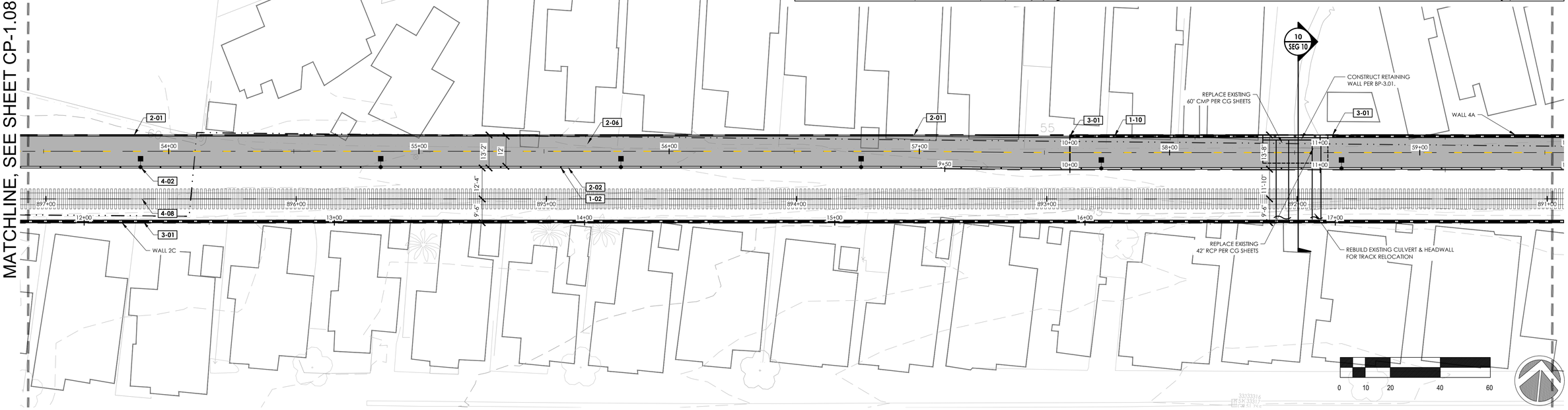
MATCHLINE, SEE SHEET CP-1.08

MATCHLINE, SEE SHEET CP-1.10



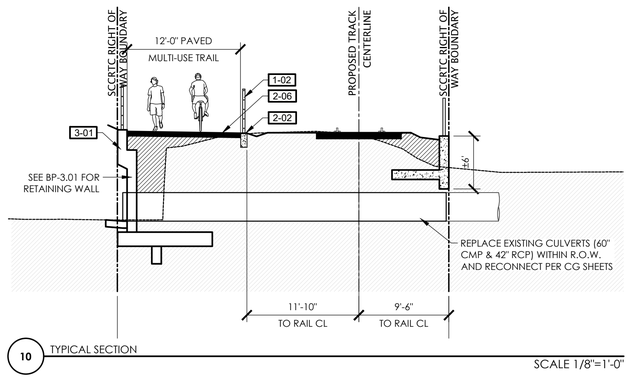


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT-IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



10 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.09
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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MATCHLINE, SEE SHEET CP-1.09

MATCHLINE, SEE SHEET CP-1.11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
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PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
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2-04	CURB RAMP
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2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
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4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
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LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
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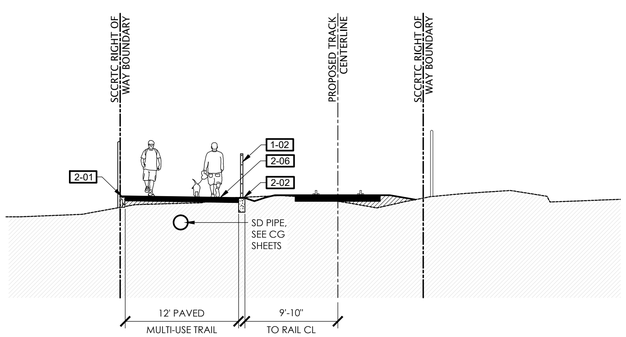
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



11 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.10
VAULT NO.	

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811
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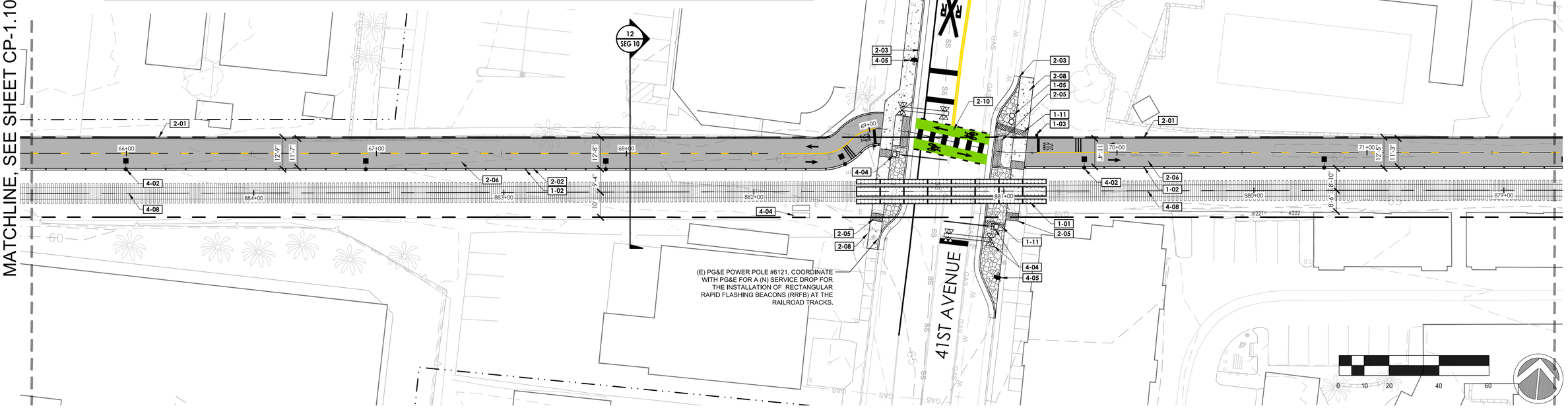
KEYMAP



MATCHLINE, SEE SHEET CP-1.10

MATCHLINE, SEE SHEET CP-1.12



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
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PEDESTRIAN AND TRAFFIC CONTROL	
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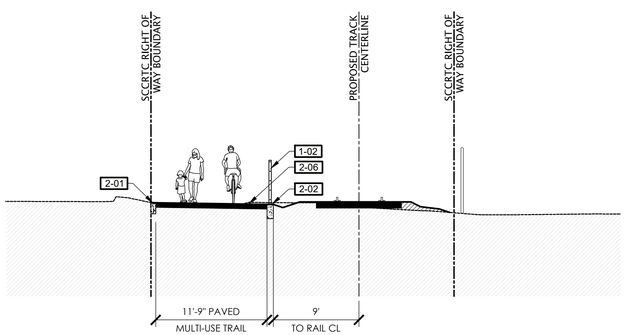
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



12 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.11
VAULT NO.	

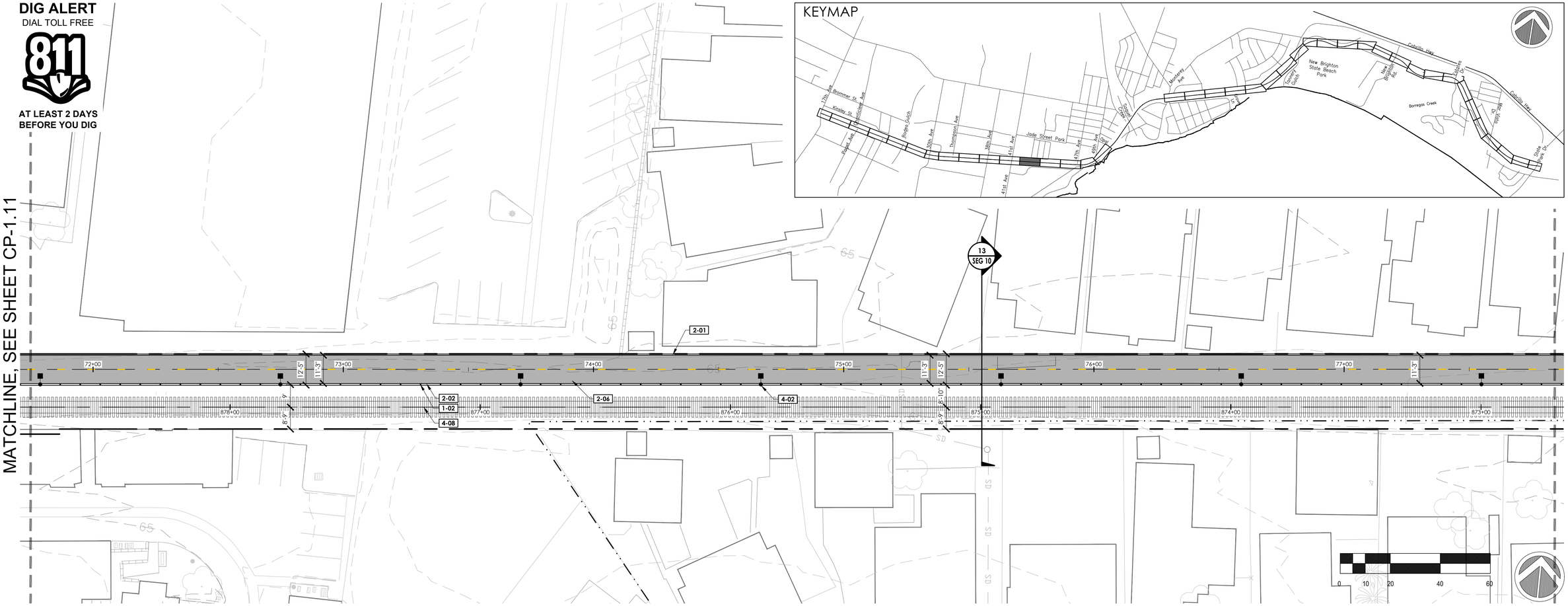
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.11, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, XCMAP-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XP-0193-06-RWT-S10.dwg, \\corp\vm\sm-sdv\0001\0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, XCMAP-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, Plotted By: dnsonstens, Plotted: Feb 15, 2023 - 5:43pm
\\corp\vm\sm-sdv\0001\0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, XCMAP-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XP-0193-06-RWT-S10.dwg, Plotted By: dnsonstens, Plotted: Feb 15, 2023 - 5:43pm
Layout Tab Name: CP-1.11, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, XCMAP-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XP-0193-06-RWT-S10.dwg, \\corp\vm\sm-sdv\0001\0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, XCMAP-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XP-0193-06-RWT-S10.dwg, Plotted By: dnsonstens, Plotted: Feb 15, 2023 - 5:43pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.11

MATCHLINE, SEE SHEET CP-1.13

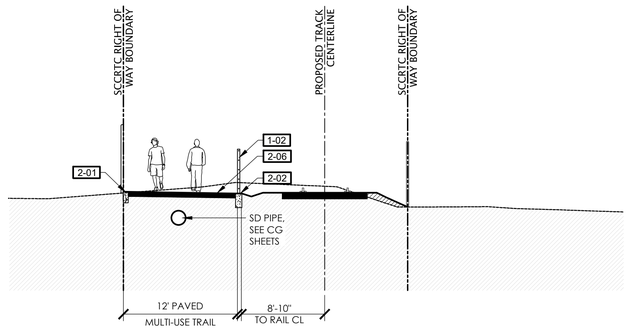


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



13 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.12
VAULT NO.	

Layout Tab Name: CP-1.12 Images: county-logo-black-transparent.png Xrefs: XT-0193-06-RWT-S10.dwg XTB-0193-06-RWT-S10.dwg XC-0193-06-RWT.dwg XC-0193-06-RWT-S10.dwg XDWG-0193-06-RWT-S10.dwg XH-0193-06-RWT-S10.dwg SEC-0193-06-RCSD.dwg SEC-0193-06-RWT-S10.dwg XH-0193-06-RWT-S10.dwg \\Corp\rrm\san-ish\0001\0193-06-RCSD-Santa Cruz Rail-Trail-Seg-10-11\Rail with Trail\Landscape-Architecture\Task-8-Schematic Design\Sheet-Files\Segment 11\CP-0193-06-RWT-S10.dwg Plotted By: dnsamuels, Plotted: Feb 15, 2023 – 5:43pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

CIRCLE DRIVE

JADE STREET PARK

KEYMAP



MATCHLINE, SEE SHEET CP-1.12

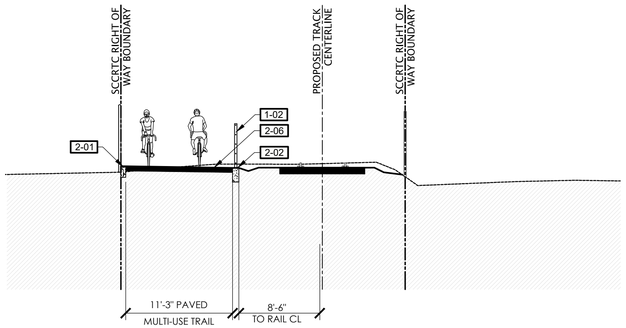
MATCHLINE, SEE SHEET CP-1.14

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT-IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



14 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.13
VAULT NO.

Layout Tab Name: CP-1.13, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S10.dwg, XKEYMAP-0193-06-RCDS.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XSB

DIG ALERT
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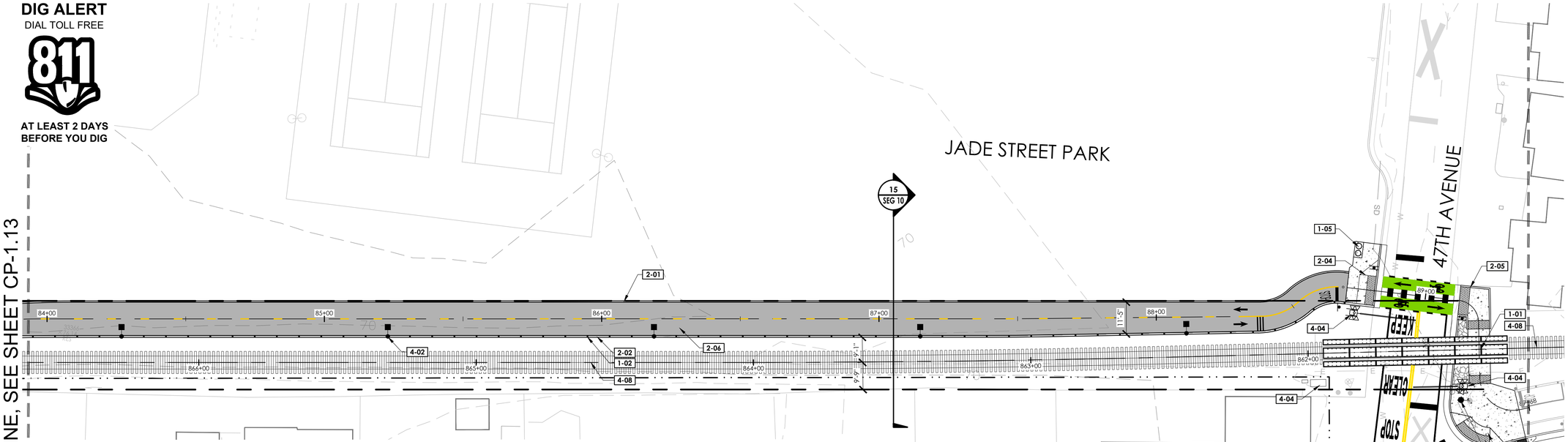
AT LEAST 2 DAYS
BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.13



MATCHLINE, SEE SHEET CP-1.15 (SEGMENT 11)

KEYMAP

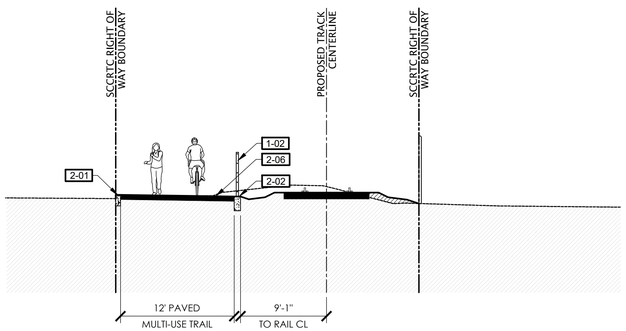


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-05	TRASH RECEPTACLES
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
1-11	PROPOSED SIDEWALK UNDER DRAIN
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-12	PROPOSED AT-GRADE CROSSING
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-04	RELOCATED RAIL EQUIPMENT
4-05	SOLAR LED W11-15 CROSSING SIGN
4-07	FUTURE PHASE RAIL DROP ARM
4-08	PROPOSED RAIL REALIGNMENT

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL
LIGHT ON EX. FIXTURE / ROADWAY LIGHT / TRAIL LIGHT / RECESSED LIGHT-IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK



15 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

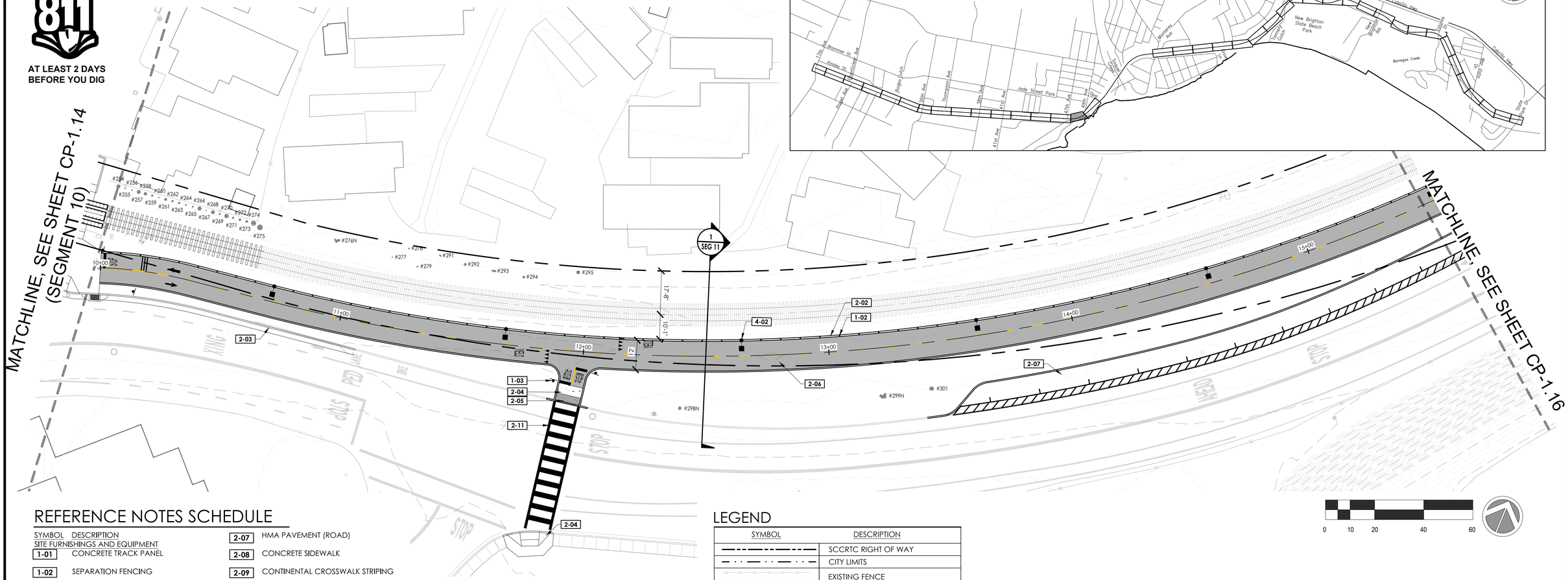
DRAWING #:
CP-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.14
VAULT NO.

Layout Tab Name: CP-1.14, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RCSD.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, \\Copy\mm\un-real\2001\0193-06-RCSD-Soquel-Cruz-Rail-Trail-Seg-10-11\Rail and Trail\Landscape-Architecture\Visio-IB-Schematic Design\Sheet-Files\Segment 10\CP-0193-06-RWT-S10.dwg, Plotted By: alexanderia, Plotted: Feb 15, 2023 - 5:43pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG



KEYMAP

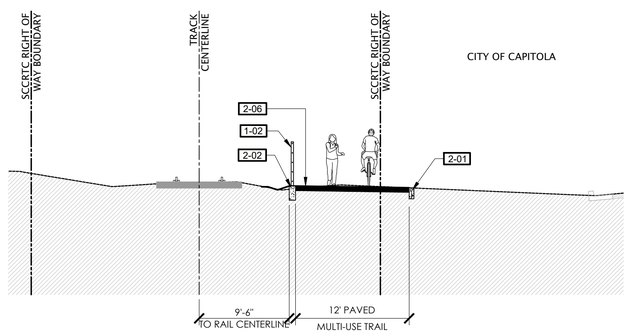
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



1 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

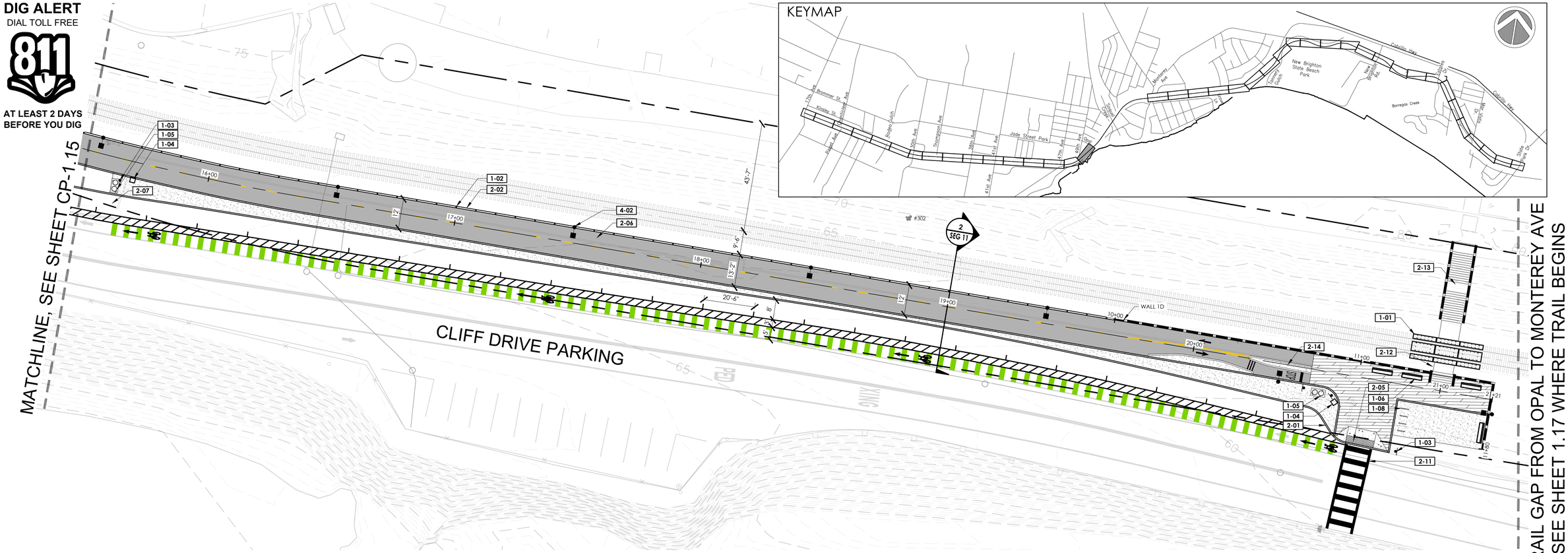
DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.15
VAULT NO.

Layout Tab Name: CP-1.15, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XT-0193-06-RWT.dwg, KEYMAP-0193-06-RCD20.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, Plotted By: mmistovich, Plotted: Jun 15, 2023 - 7:05am
C:\Users\mmistovich\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



TRAIL GAP FROM OPAL TO MONTEREY AVE
SEE SHEET 1.17 WHERE TRAIL BEGINS

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
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2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
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	HMA PAVEMENT (TRAIL)
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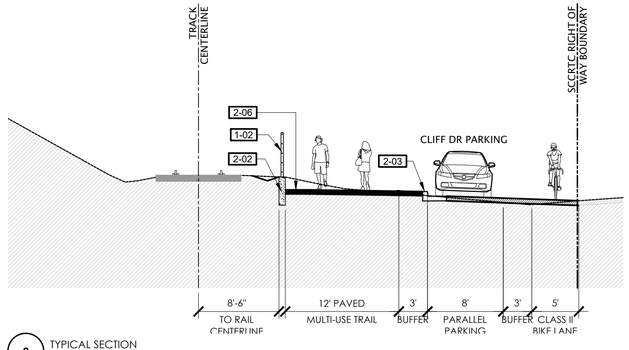
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



2 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.16
VAULT NO.	

Layout Tab Name: CP-1.16, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCD.dwg, SSC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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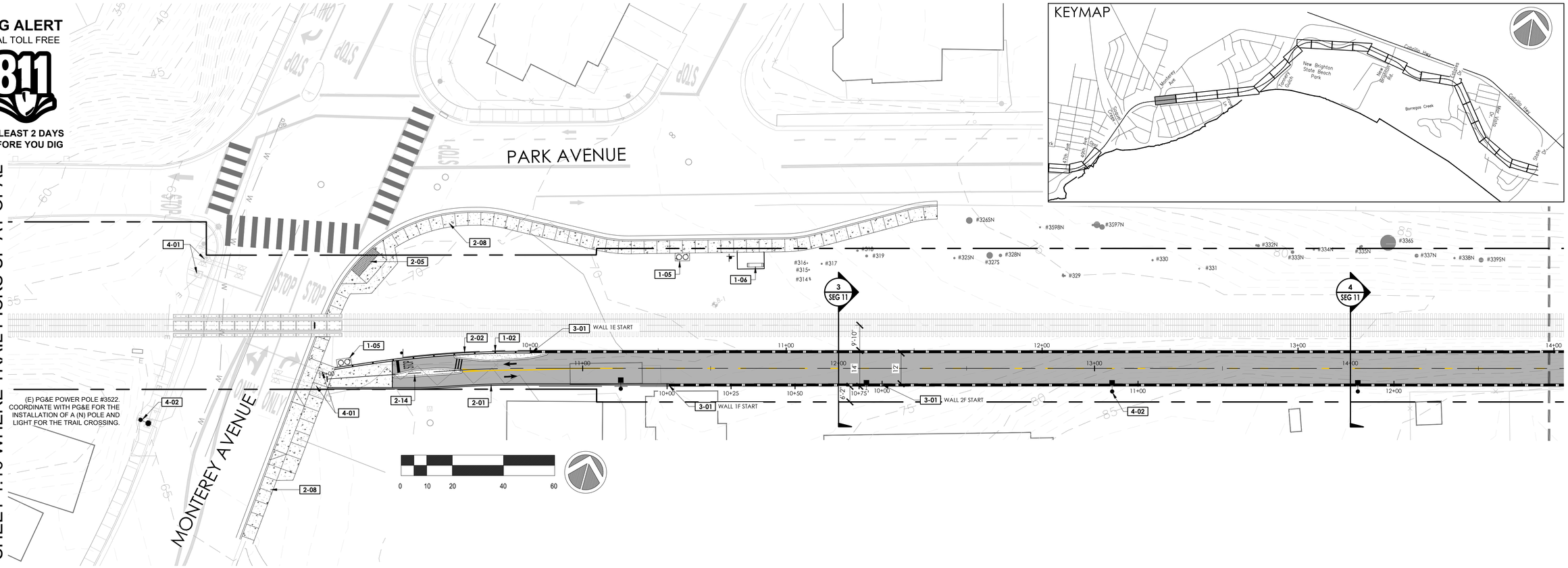
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

TRAIL GAP FROM OPAL TO MONTEREY AVE SEE SHEET 1.16 WHERE TRAIL PICKS UP AT OPAL



MATCHLINE, SEE SHEET CP-1.18

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION

SITE FURNISHINGS AND EQUIPMENT

- 1-01 CONCRETE TRACK PANEL
- 1-02 SEPARATION FENCING
- 1-03 PROPOSED SIGN
- 1-04 RELOCATED PAY STATION
- 1-05 TRASH RECEPTACLES
- 1-06 BENCH
- 1-07 CROSSWALK BARRIER
- 1-08 BIKE RACKS
- 1-09 FLEXIBLE BOLLARD
- 1-10 GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6" WIDE CURB
- 2-02 8" WIDE CURB
- 2-03 6" CURB AND GUTTER
- 2-04 CURB RAMP
- 2-05 DETECTABLE WARNING SURFACE
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 HMA PAVEMENT (ROAD)
- 2-08 CONCRETE SIDEWALK
- 2-09 CONTINENTAL CROSSWALK STRIPING
- 2-10 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED AT-GRADE CROSSING
- 2-13 PROPOSED STAIRS
- 2-14 TRAIL CHICANE

STRUCTURAL

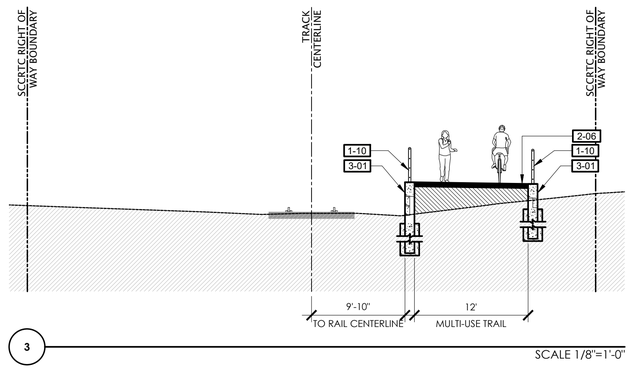
- 3-01 RETAINING WALL, SEE WP SHEETS
- 3-02 VIADUCT
- 3-03 ABUTMENT
- 3-04 BRIDGE

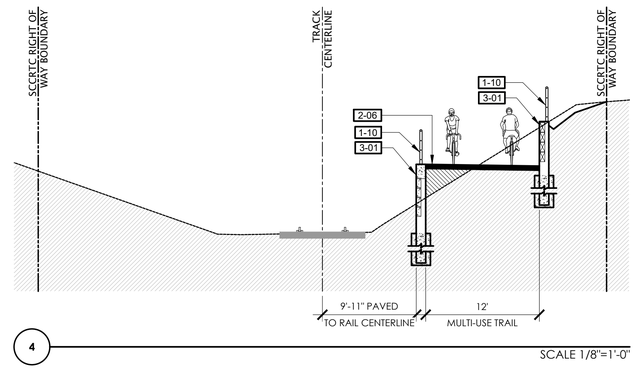
UTILITIES

- 4-01 PIP EXISTING RAIL EQUIPMENT
- 4-02 PROPOSED LIGHT
- 4-03 NEW LIGHT FIXTURE ON EXISTING POLE
- 4-05 SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS





TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

PRELIMINARY NOT FOR CONSTRUCTION

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San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.17
VAULT NO.

Layout Tab Name: CP-1.17, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC02.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, C:\Users\kmistaker\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: kmistaker, Plotted: Jun 15, 2023 - 7:06am

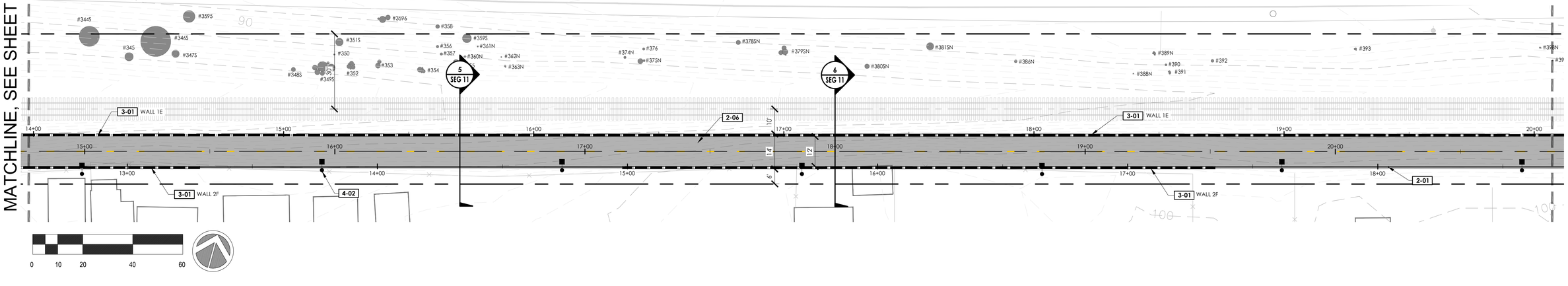
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.17

PARK AVENUE

KEYMAP



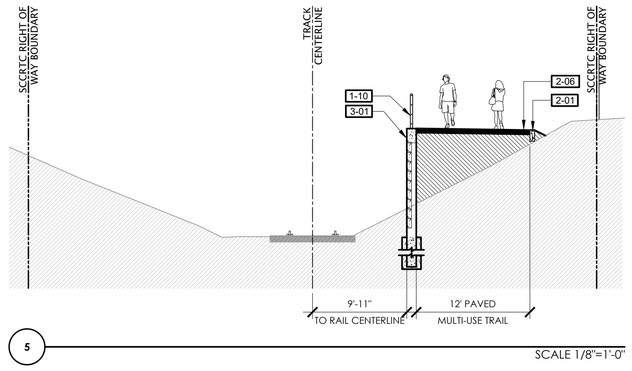


REFERENCE NOTES SCHEDULE

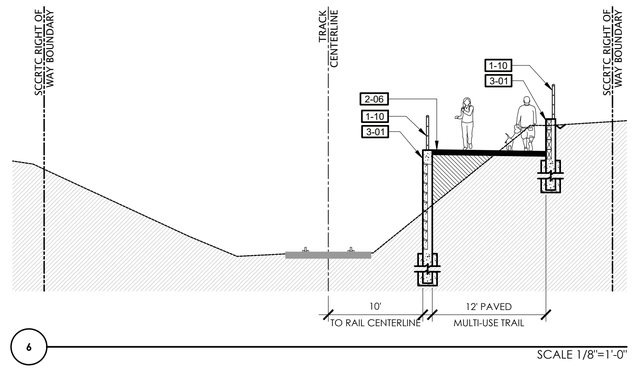
SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



5 SCALE 1/8"=1'-0"



6 SCALE 1/8"=1'-0"

MATCHLINE, SEE SHEET CP-1.19

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES FIELD BOOK:	DATE 02/10/2023	SCALE AS SHOWN	
	DRAWN KS	CP-1.18	
DRAWING #: CP-0193-06-RWT-S11	DESIGN KS/MS	VAULT NO.	
	CHECKED MS		

Layout Tab Name: CP-1.18, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, SEC-0193-06-RWT-S11.dwg, C:\Users\mmistovich\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: mmistovich, Plotted: Jun 15, 2023 - 7:06am

DIG ALERT
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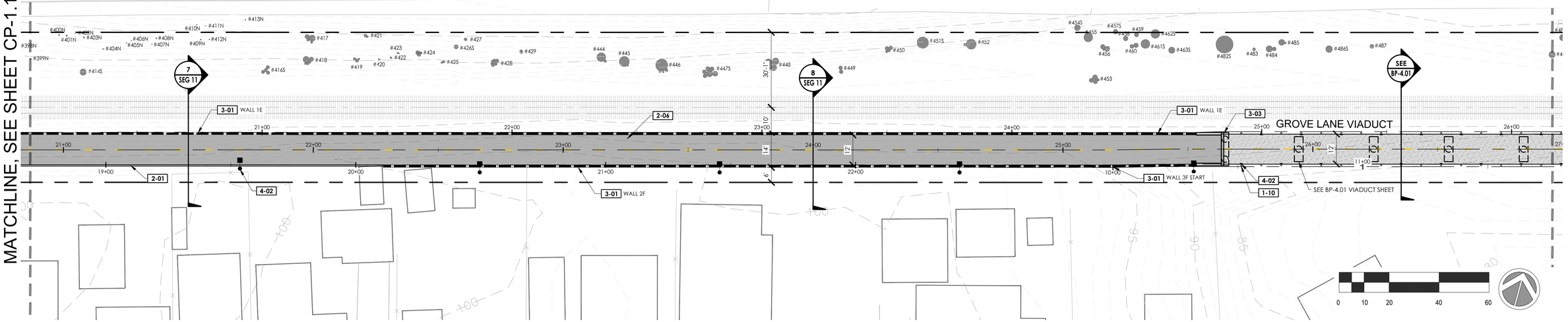
811
AT LEAST 2 DAYS BEFORE YOU DIG



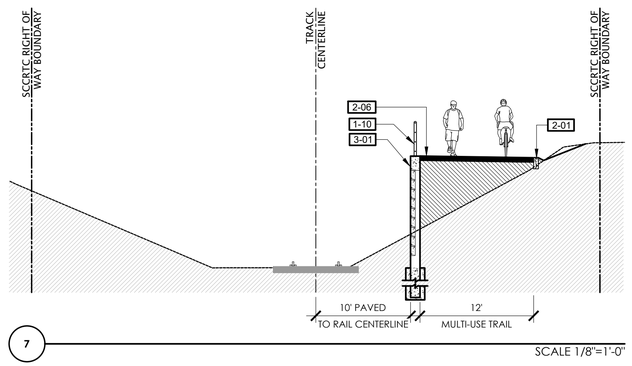


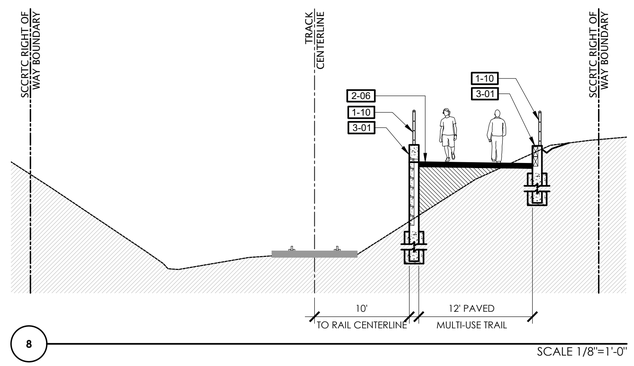
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS





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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

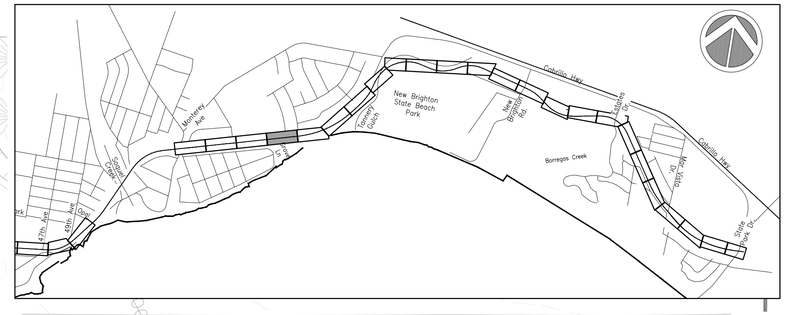
SCALE AS SHOWN
CP-1.19
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.19, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, XSTAMP-0193-06-RCD.dwg, SSC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, C:\Users\mmolaske\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: mmolaske, Plotted: Jun 15, 2023 - 7:07am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



(E) STREET LIGHT AT CORNER OF PARK AVE. AND WESLEY ST. COORDINATE WITH PG&E CITY FOR EXTENSION OF POWER CIRCUIT TO (N) LIGHT AND POLE AT PARK AVE. AND GROVE LANE TRAIL CROSSING.

WESLEY STREET

PARK AVENUE

GROVE LANE VIADUCT

GROVE LANE

ESCALONA GULCH

MATCHLINE, SEE SHEET CP-1.19

MATCHLINE, SEE SHEET CP-1.21

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

SEE BP-4.01 VIADUCT SHEET

0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION

SITE FURNISHINGS AND EQUIPMENT

- 1-01 CONCRETE TRACK PANEL
- 1-02 SEPARATION FENCING
- 1-03 PROPOSED SIGN
- 1-04 RELOCATED PAY STATION
- 1-05 TRASH RECEPTACLES
- 1-06 BENCH
- 1-07 CROSSWALK BARRIER
- 1-08 BIKE RACKS
- 1-09 FLEXIBLE BOLLARD
- 1-10 GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6" WIDE CURB
- 2-02 8" WIDE CURB
- 2-03 6" CURB AND GUTTER
- 2-04 CURB RAMP
- 2-05 DETECTABLE WARNING SURFACE
- 2-06 HMA PAVEMENT (TRAIL)
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- 2-08 CONCRETE SIDEWALK
- 2-09 CONTINENTAL CROSSWALK STRIPING
- 2-10 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED AT-GRADE CROSSING
- 2-13 PROPOSED STAIRS
- 2-14 TRAIL CHICANE

STRUCTURAL

- 3-01 RETAINING WALL, SEE WP SHEETS
- 3-02 VIADUCT
- 3-03 ABUTMENT
- 3-04 BRIDGE

UTILITIES

- 4-01 PIP EXISTING RAIL EQUIPMENT
- 4-02 PROPOSED LIGHT
- 4-03 NEW LIGHT FIXTURE ON EXISTING POLE
- 4-05 SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
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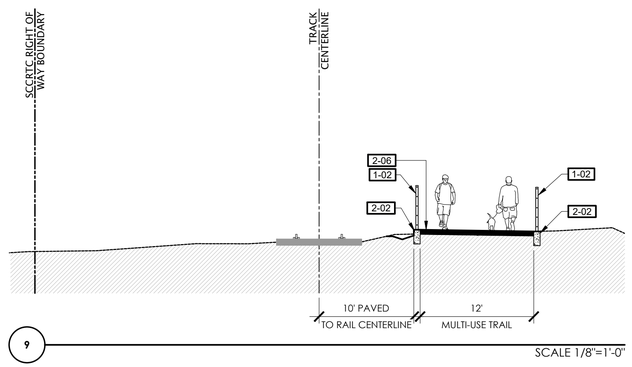
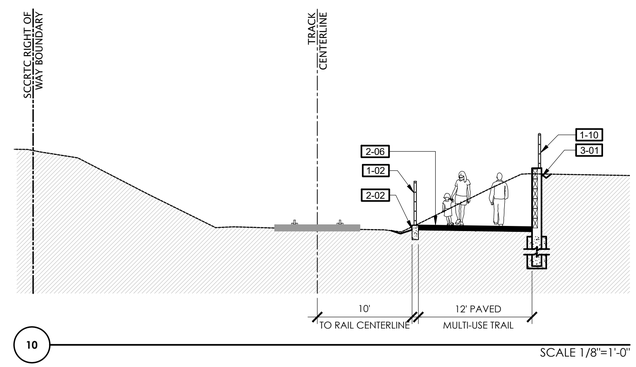
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



9 SCALE 1/8"=1'-0"



10 SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #: CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.20
VAULT NO.	

Layout Tab Name: CP-1.20, Images: county-logo-black-transparent.png Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XT-0193-06-RWT-S11.dwg, BDYMAP-0193-06-RK020.dwg, SEC-0193-06-RWT-S11.dwg, SH-0193-06-RWT-S11.dwg
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DIG ALERT
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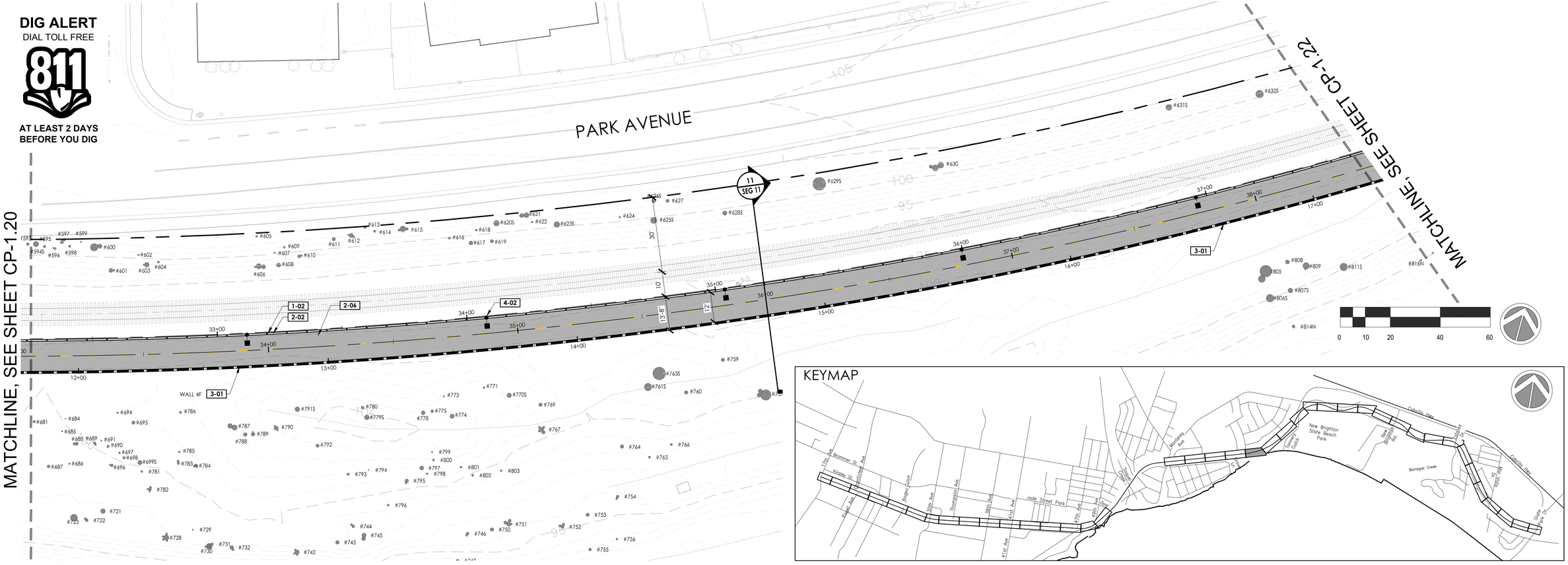
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYMAP

REFERENCE NOTES SCHEDULE

SITE FURNISHINGS AND EQUIPMENT

SYMBOL	DESCRIPTION
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

2-01	6" WIDE CURB
2-02	8" WIDE CURB
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2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE

STRUCTURAL

3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE

UTILITIES

4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
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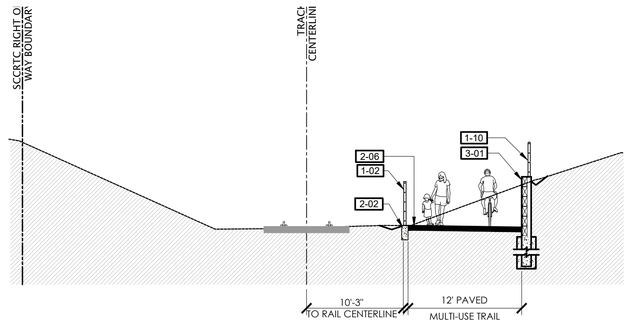
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



11 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

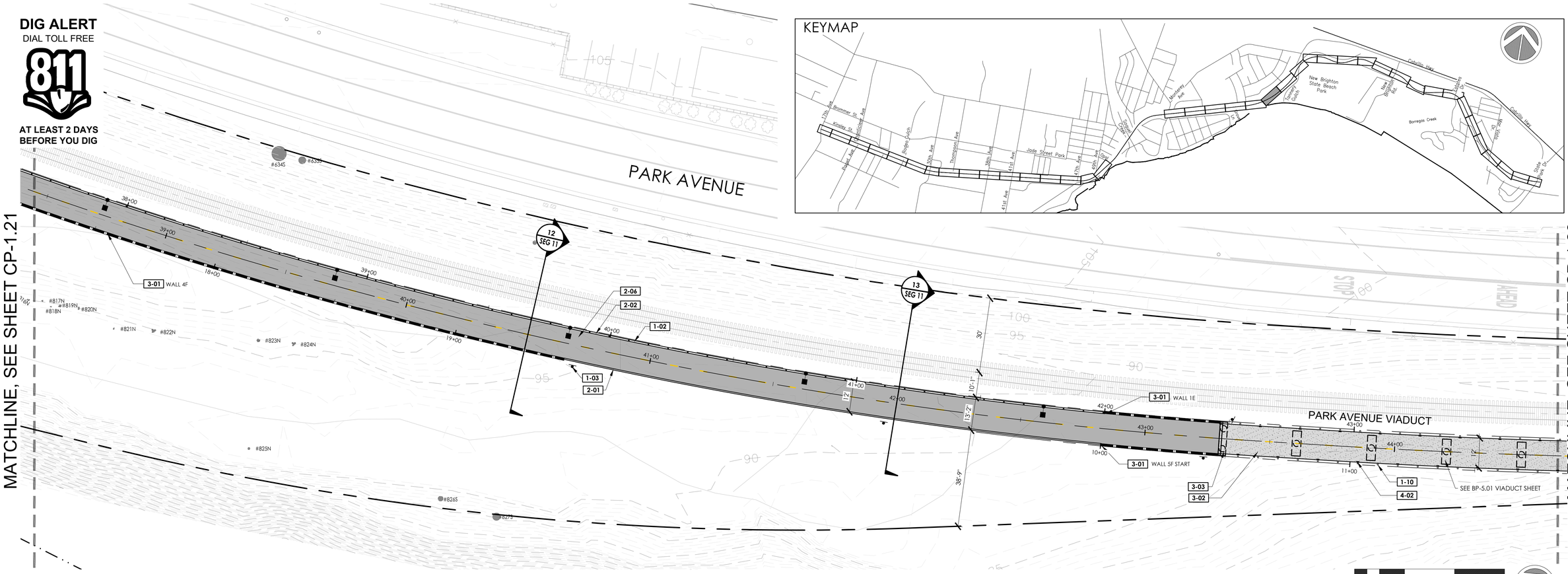
REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.21
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.21, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT.dwg, XT-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, C:\Users\kmistaske\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: kmistaske, Plotted: Jun 15, 2023 - 7:08am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



MATCHLINE, SEE SHEET CP-1.21

MATCHLINE, SEE SHEET CP-1.23

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION

SITE FURNISHINGS AND EQUIPMENT

- 1-01 CONCRETE TRACK PANEL
- 1-02 SEPARATION FENCING
- 1-03 PROPOSED SIGN
- 1-04 RELOCATED PAY STATION
- 1-05 TRASH RECEPTACLES
- 1-06 BENCH
- 1-07 CROSSWALK BARRIER
- 1-08 BIKE RACKS
- 1-09 FLEXIBLE BOLLARD
- 1-10 GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6" WIDE CURB
- 2-02 8" WIDE CURB
- 2-03 6" CURB AND GUTTER
- 2-04 CURB RAMP
- 2-05 DETECTABLE WARNING SURFACE
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 HMA PAVEMENT (ROAD)
- 2-08 CONCRETE SIDEWALK
- 2-09 CONTINENTAL CROSSWALK STRIPING
- 2-10 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED AT-GRADE CROSSING
- 2-13 PROPOSED STAIRS
- 2-14 TRAIL CHICANE

STRUCTURAL

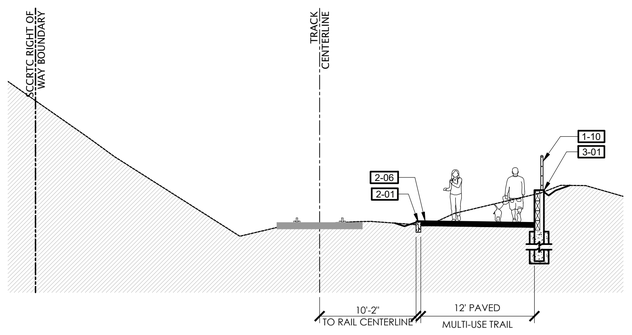
- 3-01 RETAINING WALL, SEE WP SHEETS
- 3-02 VIADUCT
- 3-03 ABUTMENT
- 3-04 BRIDGE

UTILITIES

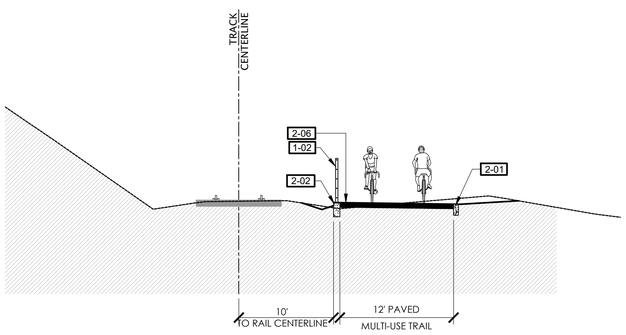
- 4-01 PIP EXISTING RAIL EQUIPMENT
- 4-02 PROPOSED LIGHT
- 4-03 NEW LIGHT FIXTURE ON EXISTING POLE
- 4-05 SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



12 TYPICAL SECTION
SCALE 1/8"=1'-0"



13 TYPICAL SECTION
SCALE 1/8"=1'-0"

0 10 20 40 60

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

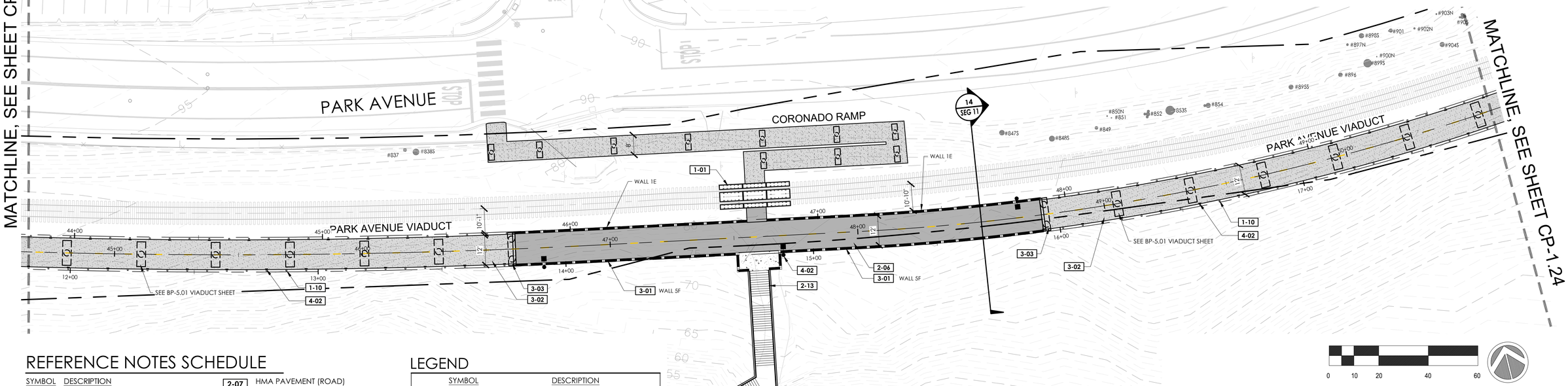
REFERENCES	DATE 02/10/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN KS	CP-1.22	
DRAWING #: CP-0193-06-RWT-S11	DESIGN KS/MS	VAULT NO.	
	CHECKED MS		

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.22, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RDR.dwg, SEC-0193-06-RWT-S11.dwg, BH-0193-06-RWT-S11.dwg
C:\Users\mmassaro\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: mmassaro, Plotted: Jun 15, 2023 - 7:09am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





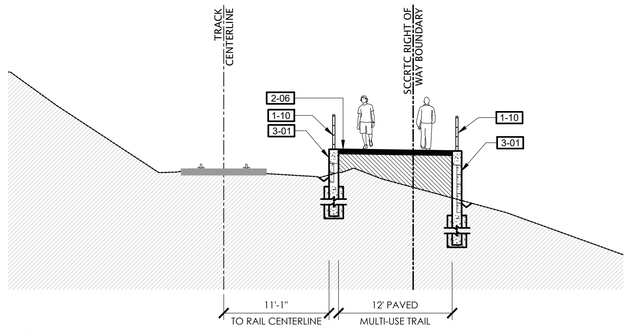
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



14 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

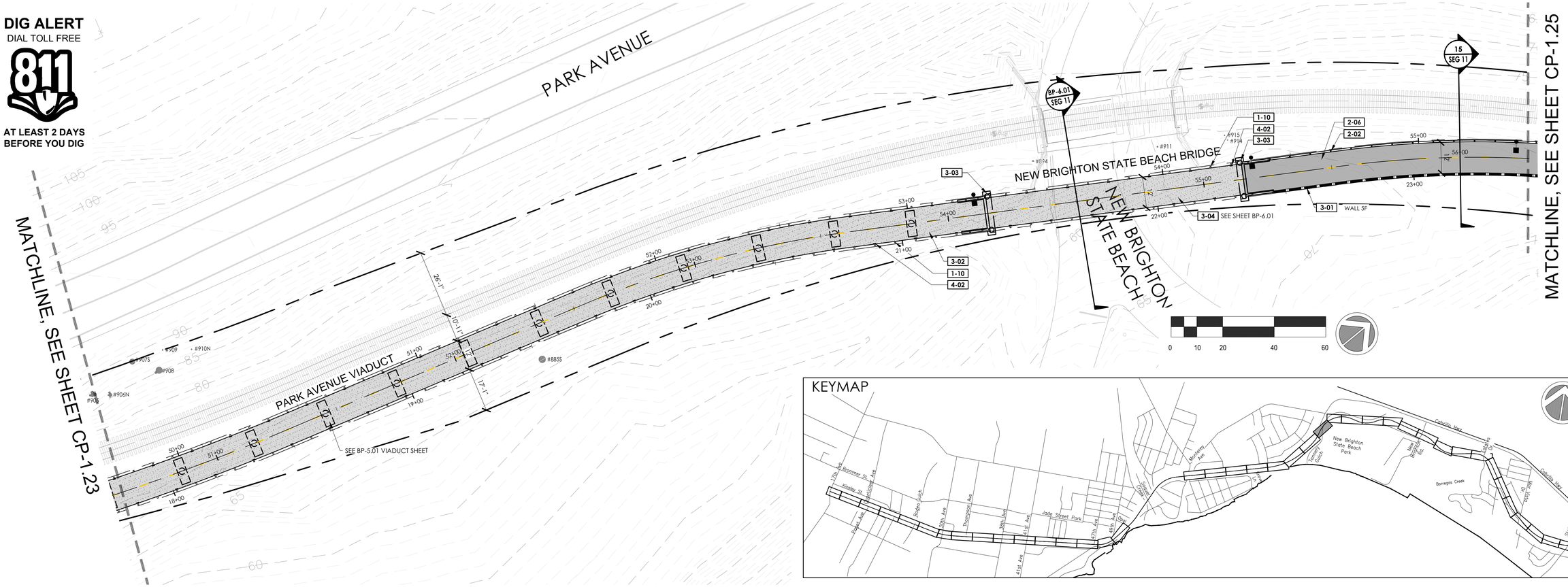
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.23
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.23, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, SEC-0193-06-RWT-S11.dwg, C:\Users\kmistaske\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: kmistaske, Plotted: Jun 15, 2023 - 7:09am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



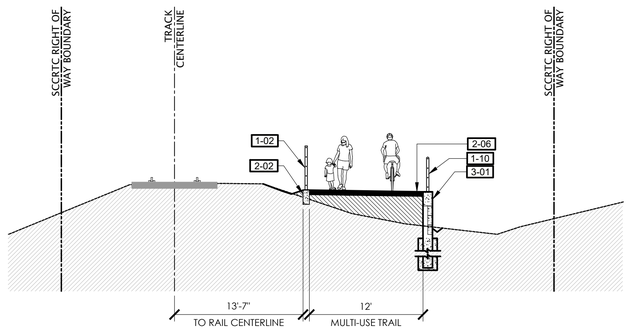
KEYMAP

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



15 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

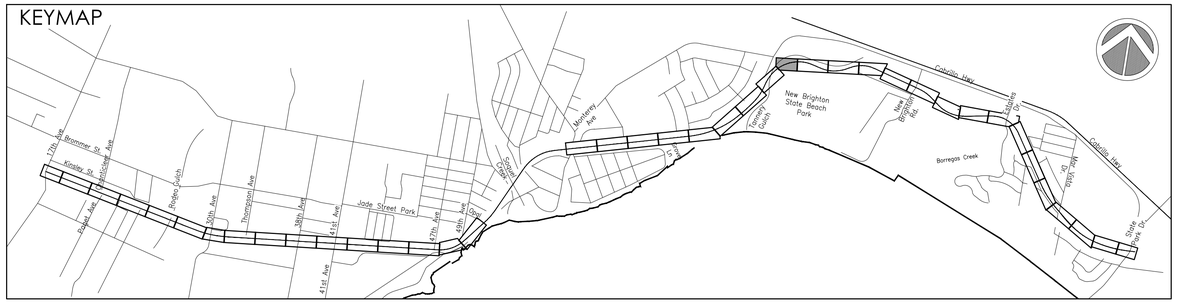
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.24
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.24, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, SEC-0193-06-RWT-S11.dwg, C:\Users\kmistake\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: kmistake, Plotted: Jun 15, 2023 - 7:10am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION

SITE FURNISHINGS AND EQUIPMENT

- 1-01 CONCRETE TRACK PANEL
- 1-02 SEPARATION FENCING
- 1-03 PROPOSED SIGN
- 1-04 RELOCATED PAY STATION
- 1-05 TRASH RECEPTACLES
- 1-06 BENCH
- 1-07 CROSSWALK BARRIER
- 1-08 BIKE RACKS
- 1-09 FLEXIBLE BOLLARD
- 1-10 GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6" WIDE CURB
- 2-02 8" WIDE CURB
- 2-03 6" CURB AND GUTTER
- 2-04 CURB RAMP
- 2-05 DETECTABLE WARNING SURFACE
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 HMA PAVEMENT (ROAD)
- 2-08 CONCRETE SIDEWALK
- 2-09 CONTINENTAL CROSSWALK STRIPING
- 2-10 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED AT-GRADE CROSSING
- 2-13 PROPOSED STAIRS
- 2-14 TRAIL CHICANE

STRUCTURAL

- 3-01 RETAINING WALL, SEE WP SHEETS
- 3-02 VIADUCT
- 3-03 ABUTMENT
- 3-04 BRIDGE

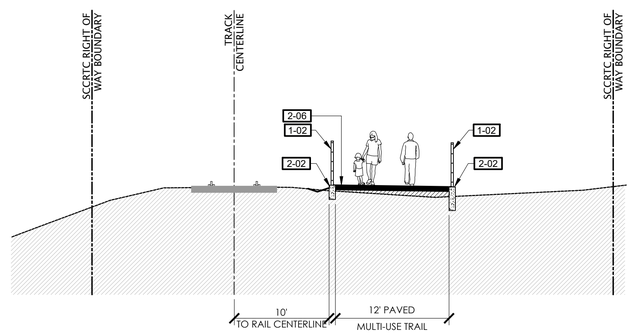
UTILITIES

- 4-01 PIP EXISTING RAIL EQUIPMENT
- 4-02 PROPOSED LIGHT
- 4-03 NEW LIGHT FIXTURE ON EXISTING POLE
- 4-05 SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



16 TYPICAL SECTION

SCALE 1/8"=1'-0"

MATCHLINE, SEE SHEET CP-1.26

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.25
VAULT NO.

Layout Tab Name: CP-1.25, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RO20.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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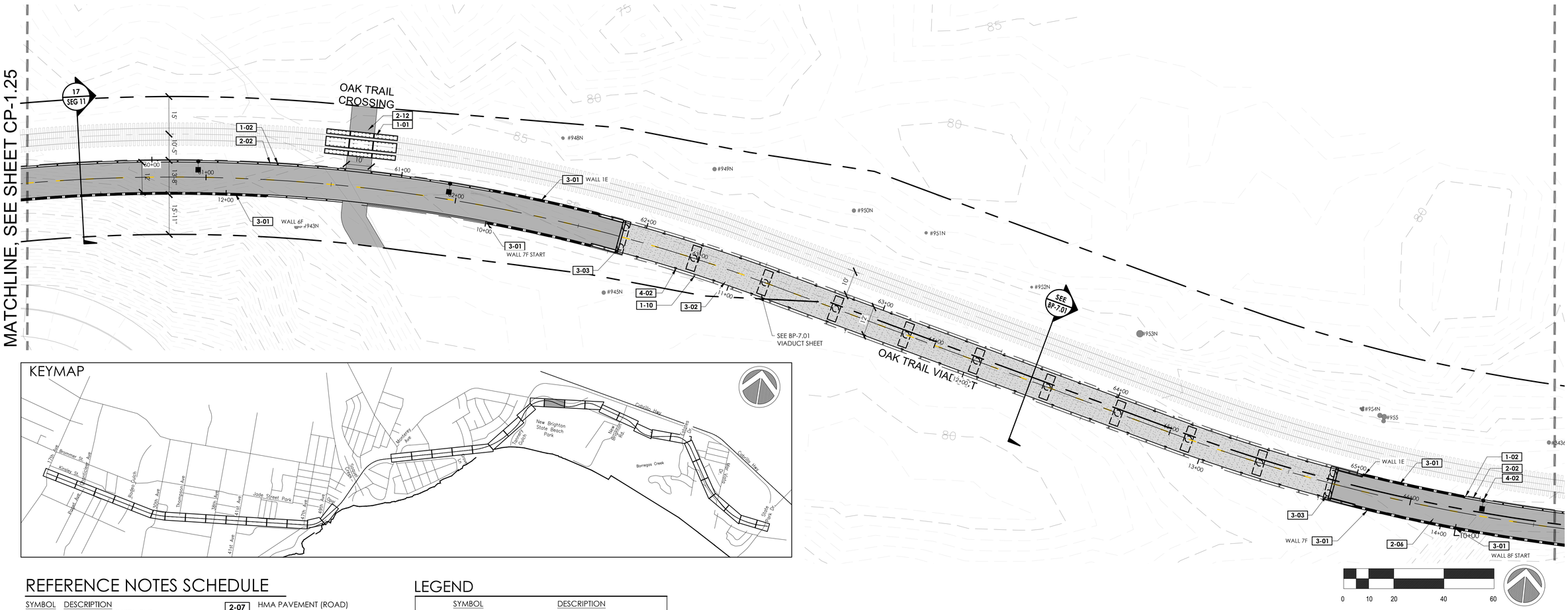
MATCHLINE, SEE SHEET CP-1.25



MATCHLINE, SEE SHEET CP-1.27

KEYMAP

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
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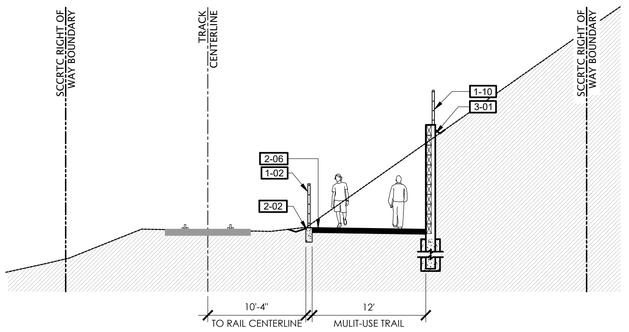
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



17 TYPICAL SECTION

SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

CP-1.26

VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

Layout Tab Name: CP-1.26, Images: county-logo-black-transparent.png, Xrefs: FT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC02c.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, C:\Users\kmistake\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: kmistake, Plotted: Jun 15, 2023 - 7:10am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

KEYMAP



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
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2-03	6" CURB AND GUTTER
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2-09	CONTINENTAL CROSSWALK STRIPING
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2-11	LADDER CROSSWALK STRIPING
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2-13	PROPOSED STAIRS
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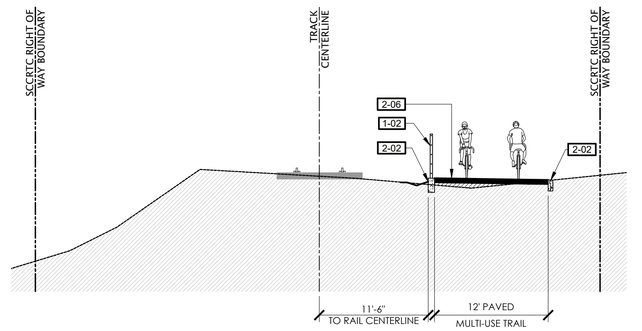
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



18 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.27
VAULT NO.

Layout Tab Name: CP-1.27, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC02c.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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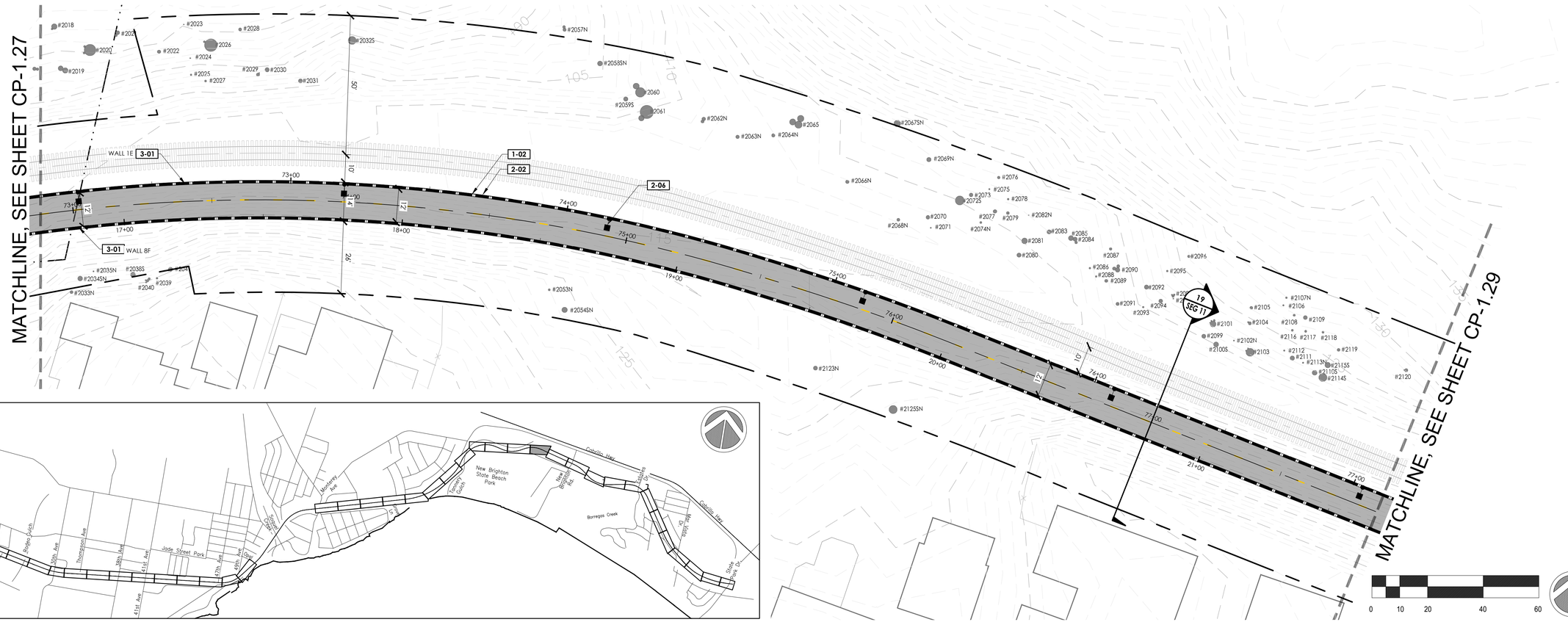
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION

SITE FURNISHINGS AND EQUIPMENT

- 1-01 CONCRETE TRACK PANEL
- 1-02 SEPARATION FENCING
- 1-03 PROPOSED SIGN
- 1-04 RELOCATED PAY STATION
- 1-05 TRASH RECEPTACLES
- 1-06 BENCH
- 1-07 CROSSWALK BARRIER
- 1-08 BIKE RACKS
- 1-09 FLEXIBLE BOLLARD
- 1-10 GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6" WIDE CURB
- 2-02 8" WIDE CURB
- 2-03 6" CURB AND GUTTER
- 2-04 CURB RAMP
- 2-05 DETECTABLE WARNING SURFACE
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 HMA PAVEMENT (ROAD)
- 2-08 CONCRETE SIDEWALK
- 2-09 CONTINENTAL CROSSWALK STRIPING
- 2-10 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED AT-GRADE CROSSING
- 2-13 PROPOSED STAIRS
- 2-14 TRAIL CHICANE

STRUCTURAL

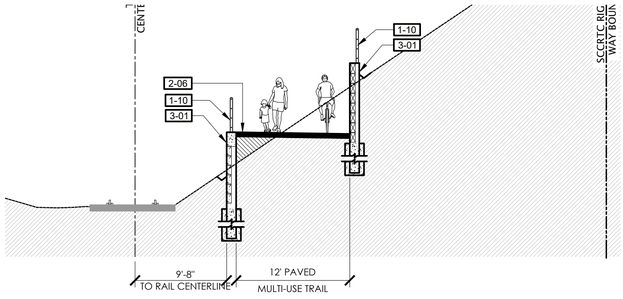
- 3-01 RETAINING WALL, SEE WP SHEETS
- 3-02 VIADUCT
- 3-03 ABUTMENT
- 3-04 BRIDGE

UTILITIES

- 4-01 PIP EXISTING RAIL EQUIPMENT
- 4-02 PROPOSED LIGHT
- 4-03 NEW LIGHT FIXTURE ON EXISTING POLE
- 4-05 SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



19 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.28
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.28 Images: county-logo-black-transparent.png; XRefs: XT-0193-06-RWT-S11.dwg; XTB-0193-06-RWT.dwg; XT-0193-06-RWT-S11.dwg; KEYMAP-0193-06-RWT-S11.dwg; SEC-0193-06-RWT-S11.dwg; XH-0193-06-RWT-S11.dwg
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DIG ALERT
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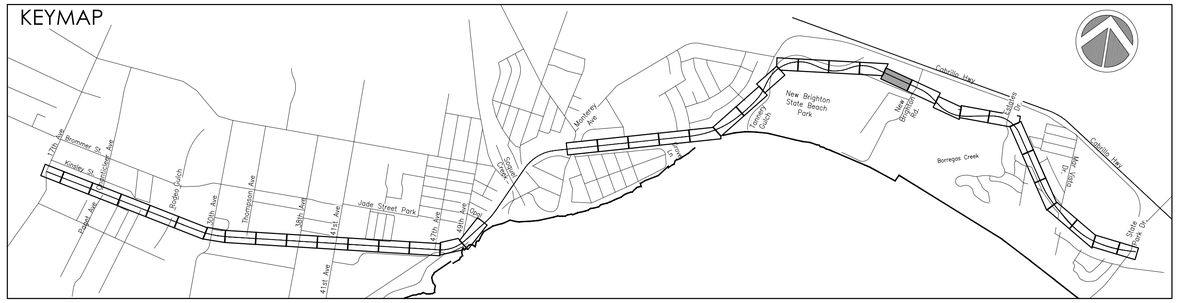
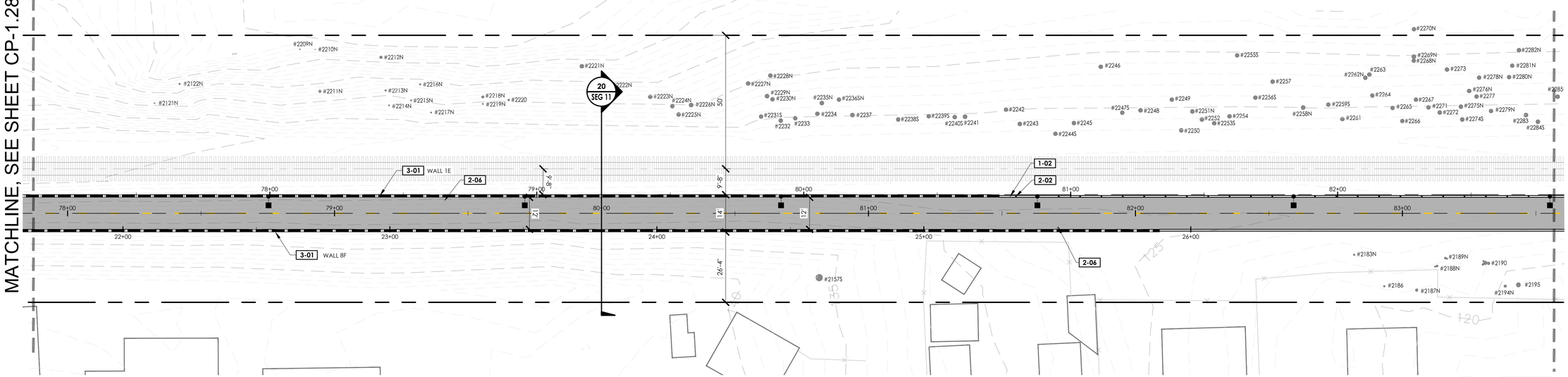




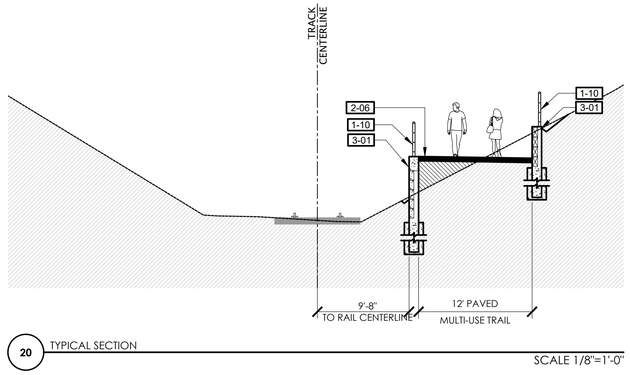
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



20 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.29
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.29, Images: county-logo-black-transparent.png, Xrefs: X1-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, XDTM-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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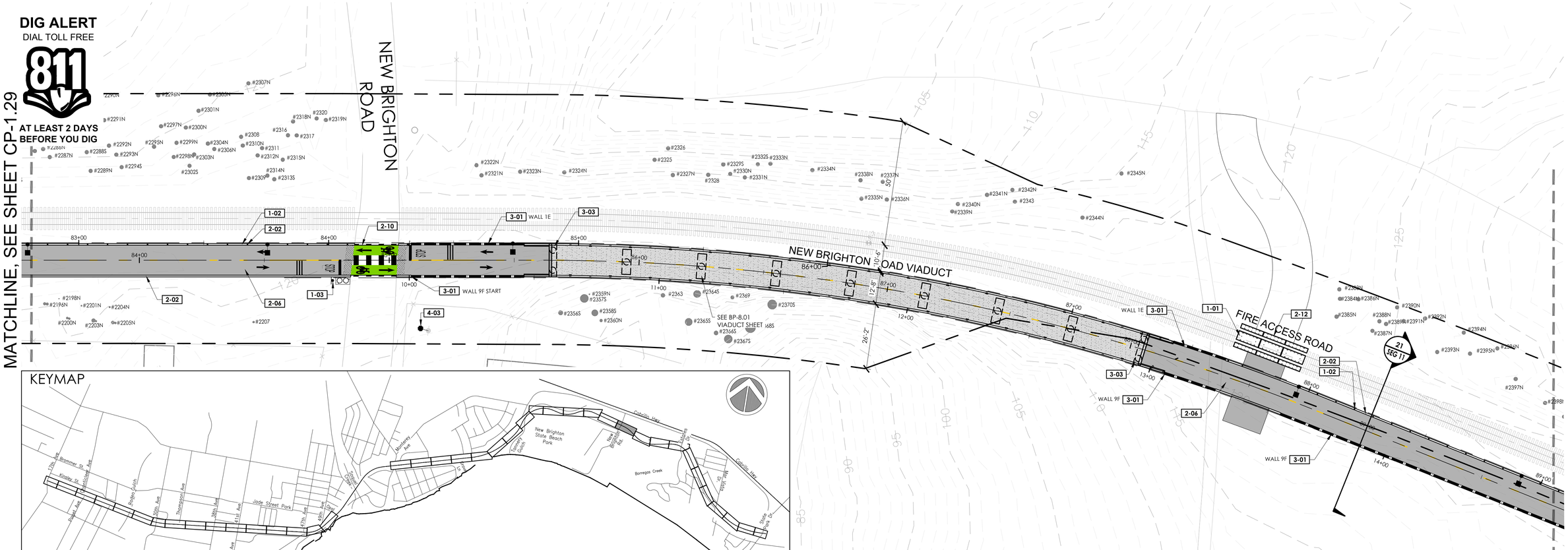
MATCHLINE, SEE SHEET CP-1.29



MATCHLINE, SEE SHEET CP-1.21

KEYMAP

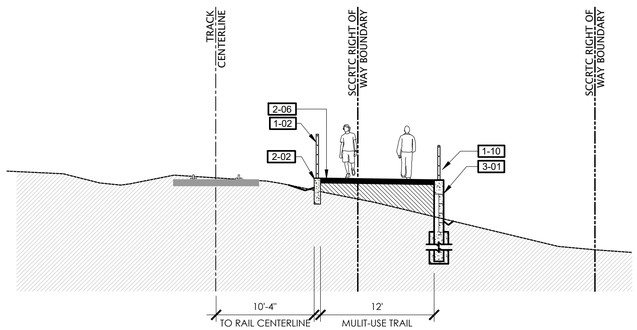
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



21 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.30
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.30, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWP.dwg, SEC-0193-06-RWT-S11.dwg, SH-0193-06-RWT-S11.dwg
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DIG ALERT
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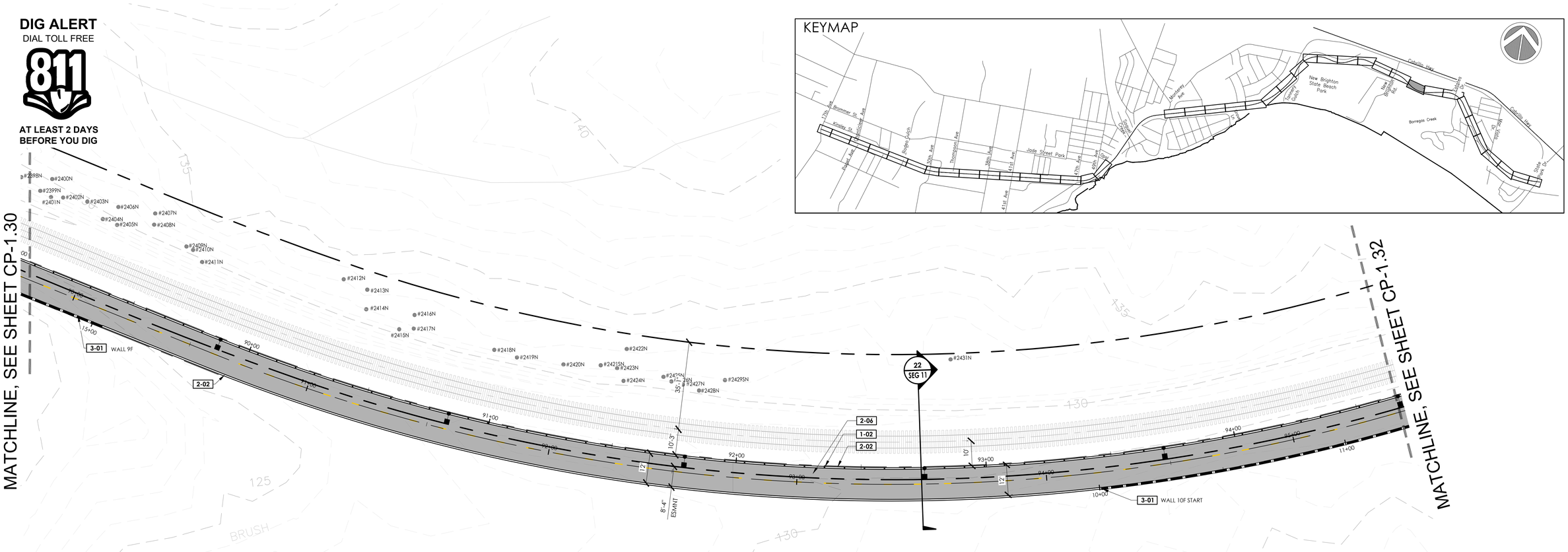


KEYMAP

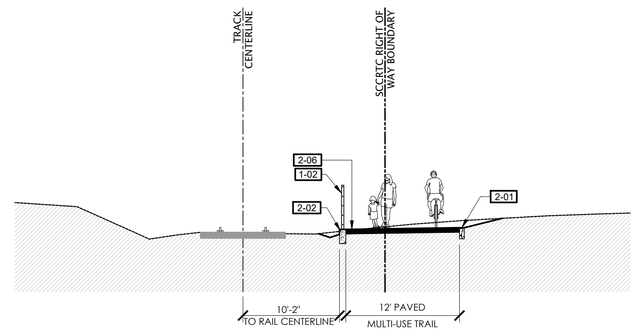
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



22 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.31
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.31, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, XSCHMAP-0193-06-RWT-S11.dwg, XECMAP-0193-06-RWT-S11.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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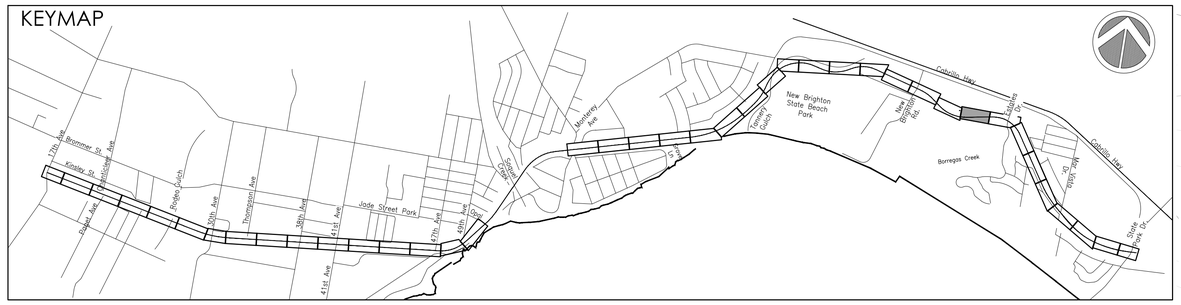
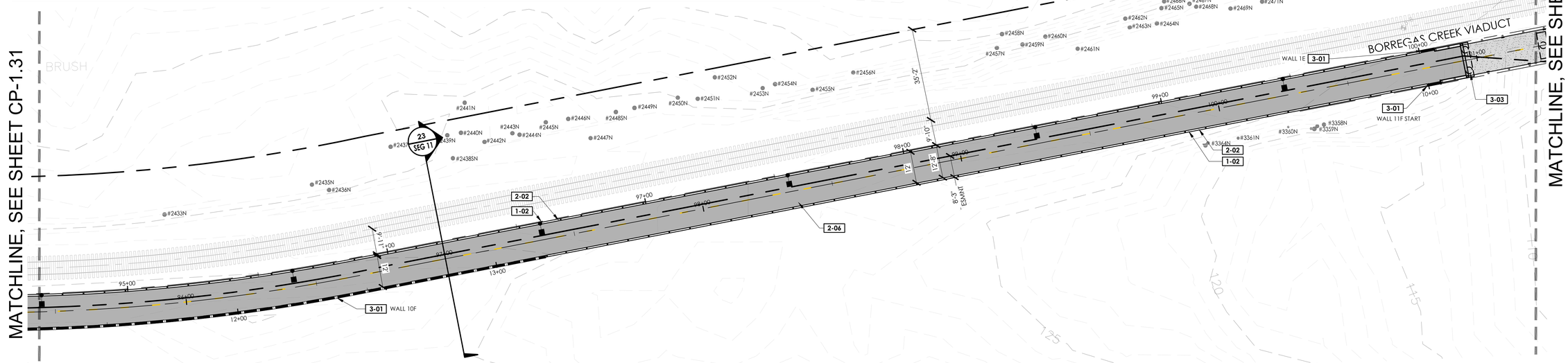
KEYMAP





MATCHLINE, SEE SHEET CP-1.33

REFERENCE NOTES SCHEDULE

SITE FURNISHINGS AND EQUIPMENT

SYMBOL	DESCRIPTION
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

SYMBOL	DESCRIPTION
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE

STRUCTURAL

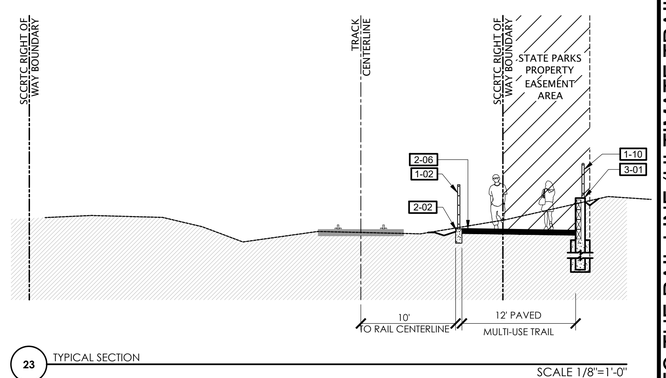
SYMBOL	DESCRIPTION
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE

UTILITIES

SYMBOL	DESCRIPTION
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



23 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.32
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.32, Images: county-logo-black-transparent.png Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, BDYMAP-0193-06-RW20.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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DIG ALERT
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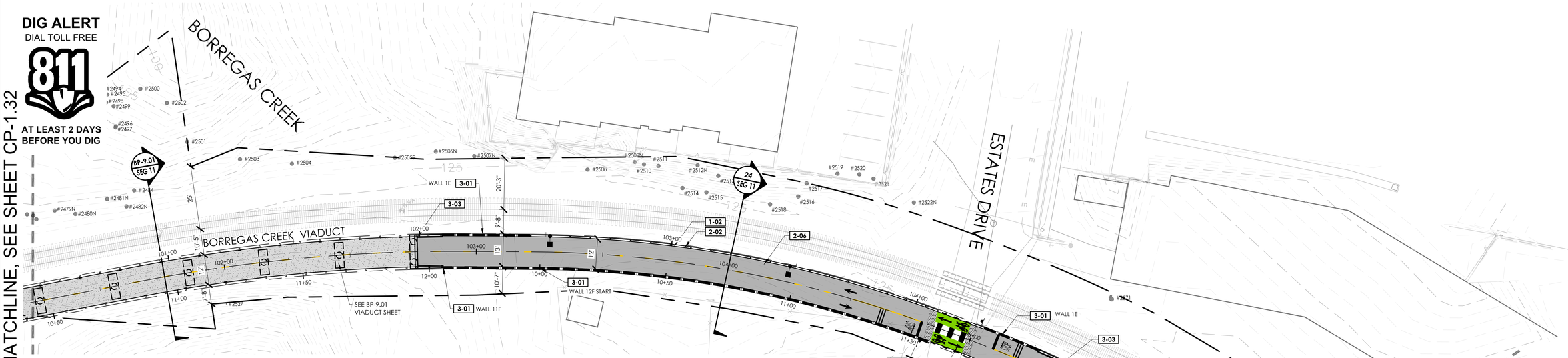
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.32



KEYMAP



0 10 20 40 60

REFERENCE NOTES SCHEDULE

SITE FURNISHINGS AND EQUIPMENT

SYMBOL	DESCRIPTION
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE

STRUCTURAL

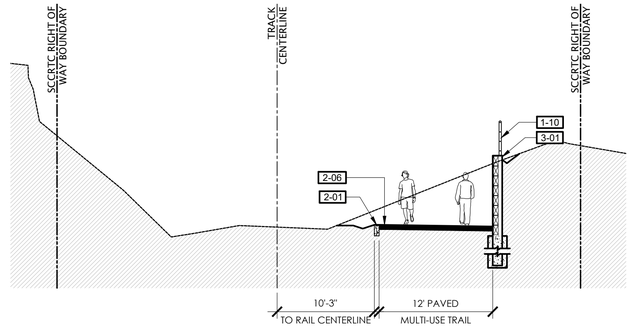
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE

UTILITIES

4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



24 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

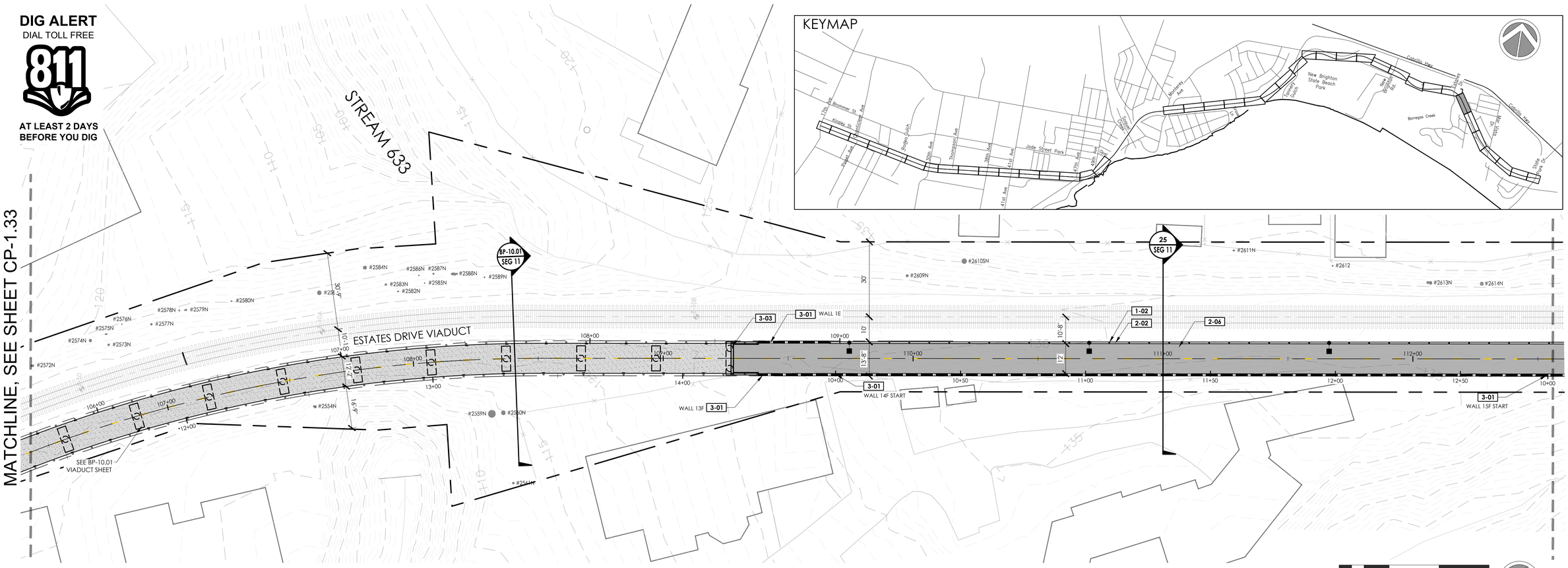
DRAWING #:
CP-0193-06-RWT-S11

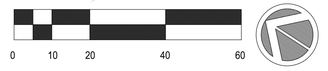
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.33
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout_Tab_Name: CP-1.33 Images: county-logo-black-transparent.png Xrefs: XT-0193-06-RWT-S11.dwg XTB-0193-06-RWT.dwg XT-0193-06-RWT-S11.dwg KEYMAP-0193-06-RWT-S11.dwg XH-0193-06-RWT-S11.dwg SEC-0193-06-RWT-S11.dwg SEC-0193-06-4020.dwg C:\Users\ymatosek\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: mmatosek, Plotted: Jun 15, 2023 - 7:14am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
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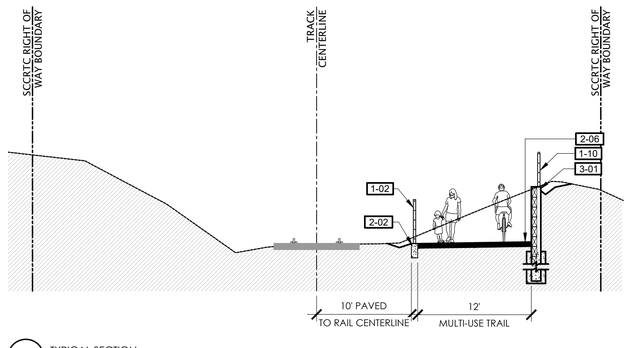
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



25 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.34
VAULT NO.

Layout Tab Name: CP-1.34, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC20.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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DIG ALERT
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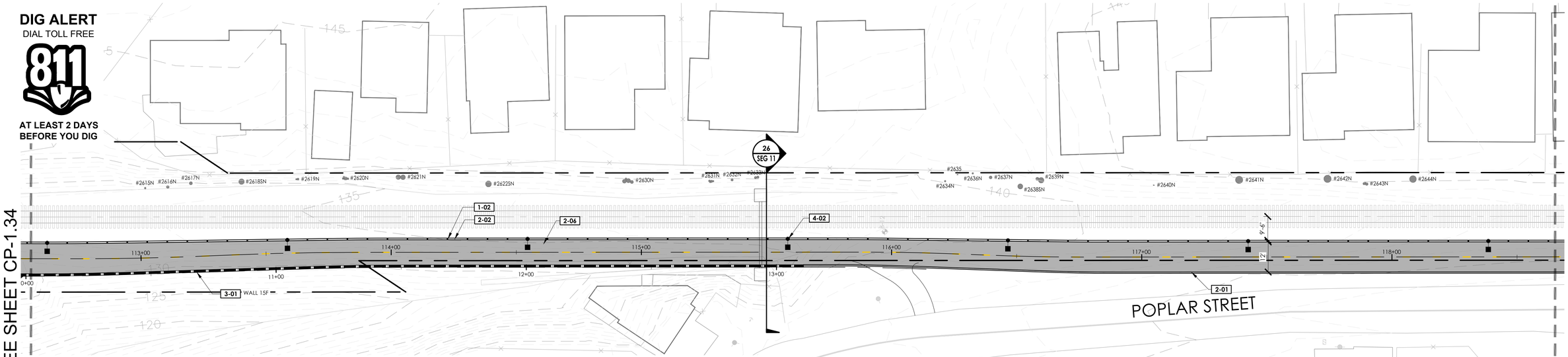
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.34



MATCHLINE, SEE SHEET CP-1.36

KEYMAP



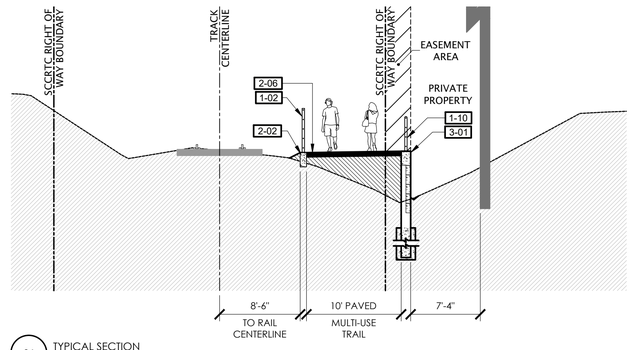
0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



26 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.35
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.35, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, C:\Users\mmistakw\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: mmistakw, Plotted: Jun 15, 2023 - 7:15am

DIG ALERT
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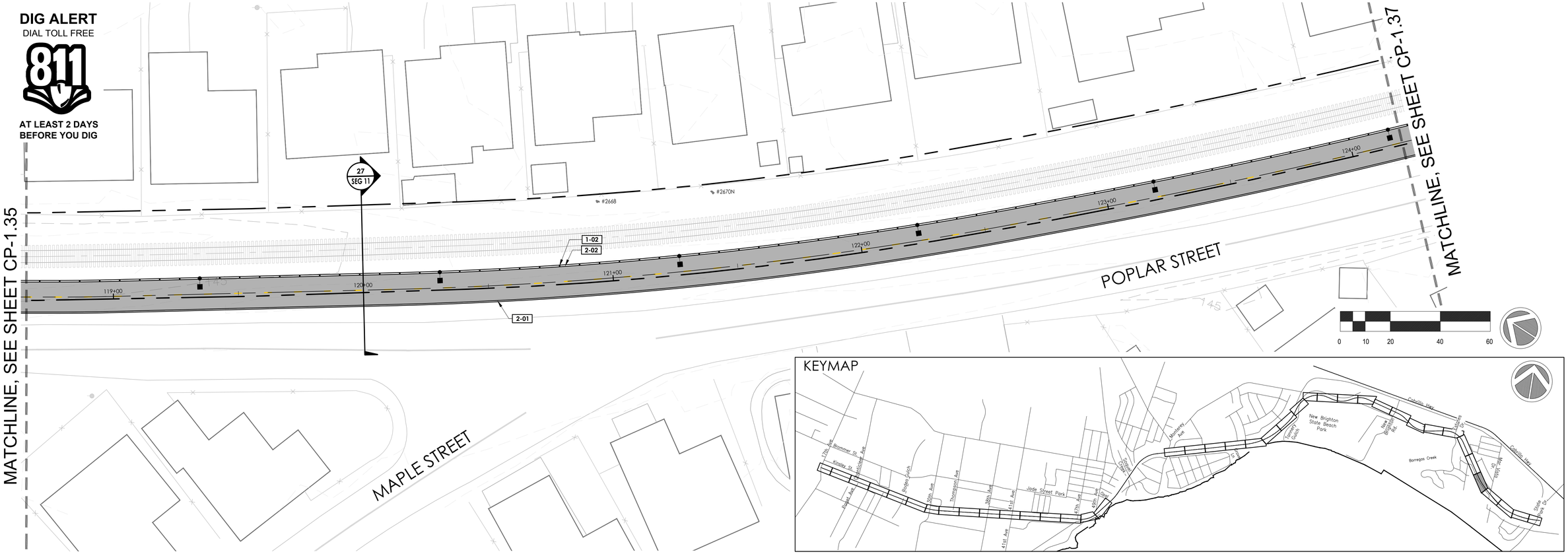
BEFORE YOU DIG

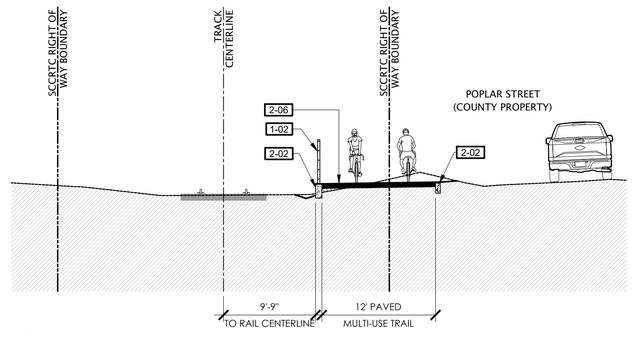


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



27 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY
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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.36
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.36, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCCD.dwg, SSC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, C:\Users\mmolaske\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: mmolaske, Plotted: Jun 15, 2023 - 7:15am

DIG ALERT
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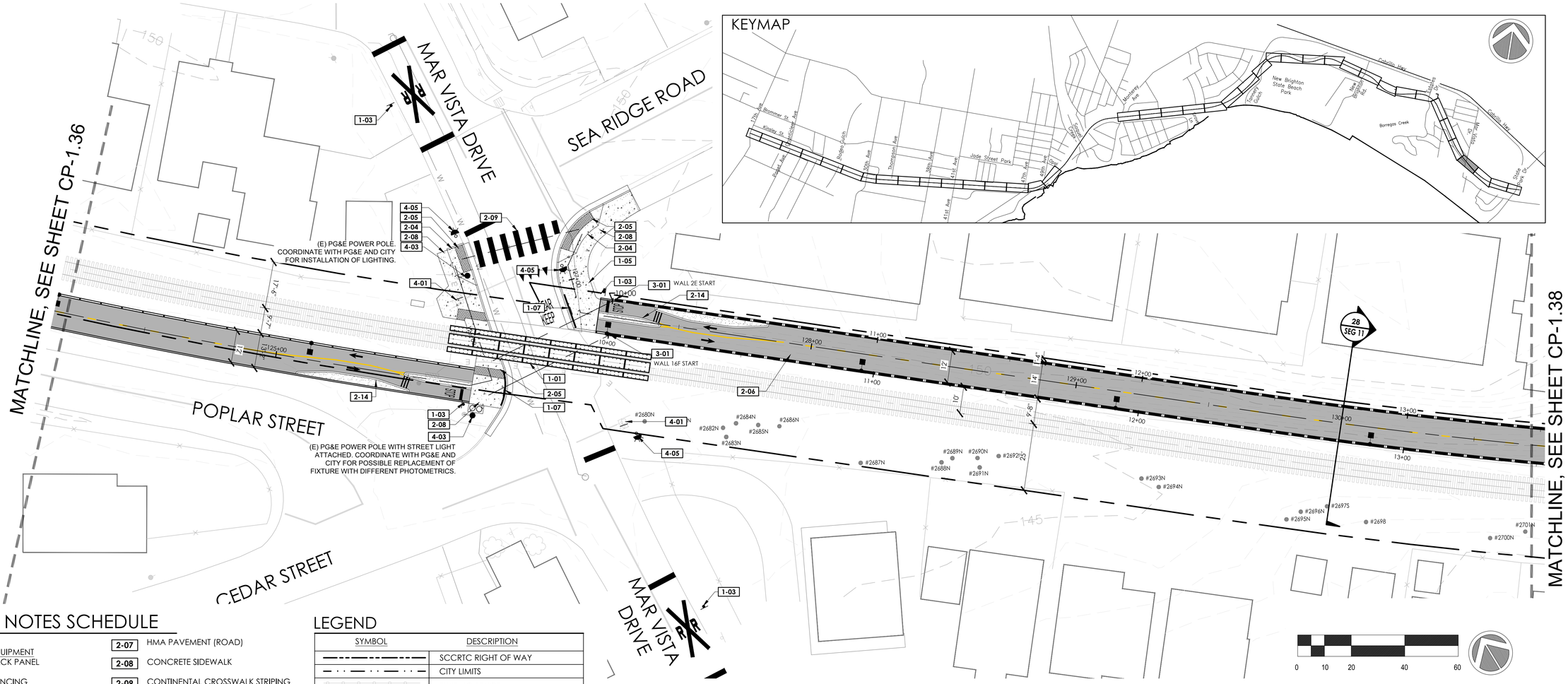
811
AT LEAST 2 DAYS BEFORE YOU DIG



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
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1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
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2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
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3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
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4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
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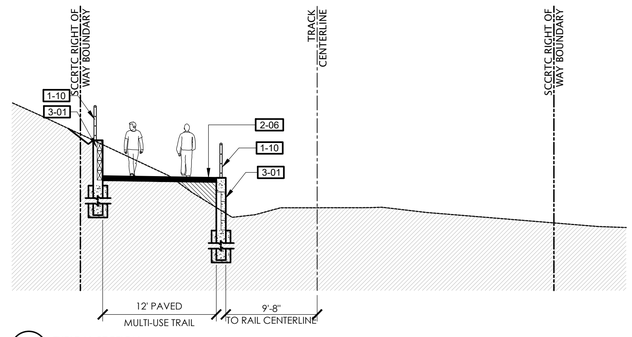
	DECOMPOSED GRANITE
	DECORATIVE PAVERS



28 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.37
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.37, Image: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, XTAB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCZ0.dwg, SSC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg
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DIG ALERT
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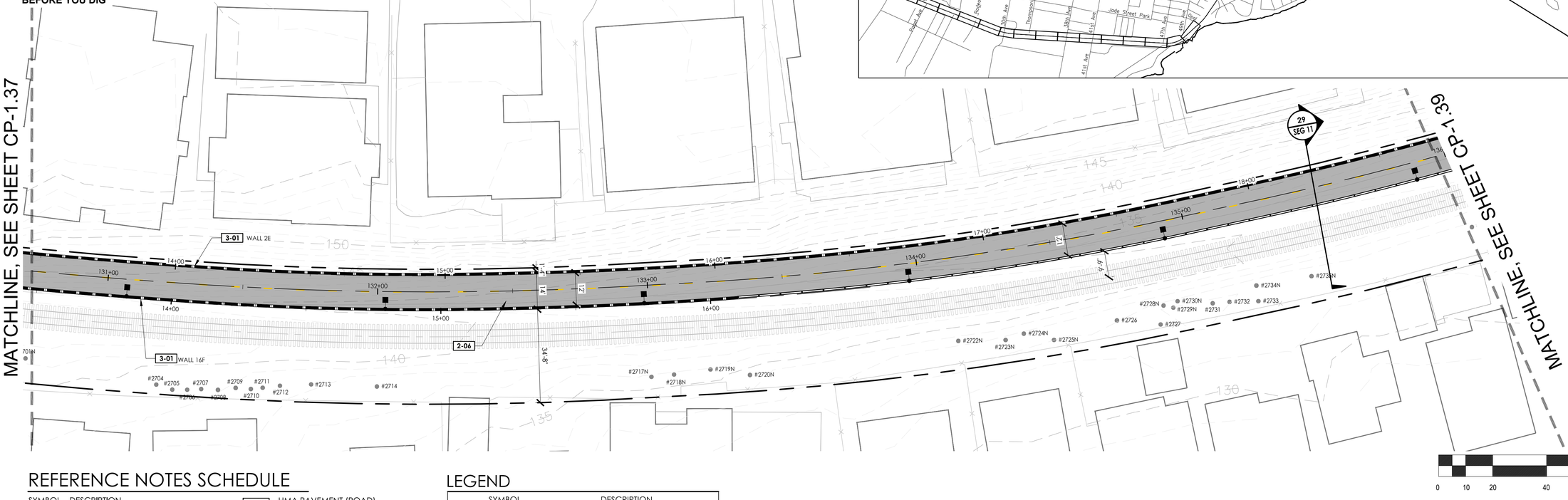
AT LEAST 2 DAYS BEFORE YOU DIG





REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
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LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
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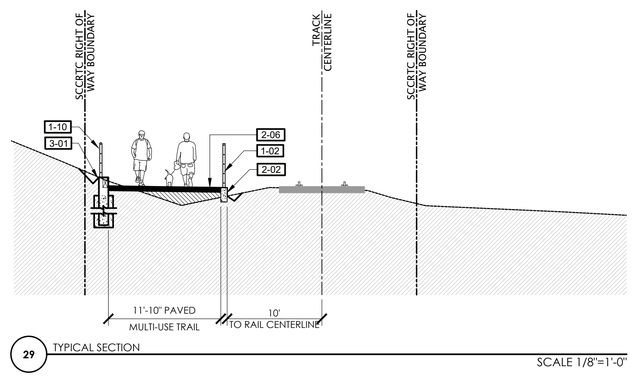
	DECORATIVE PAVERS



29 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

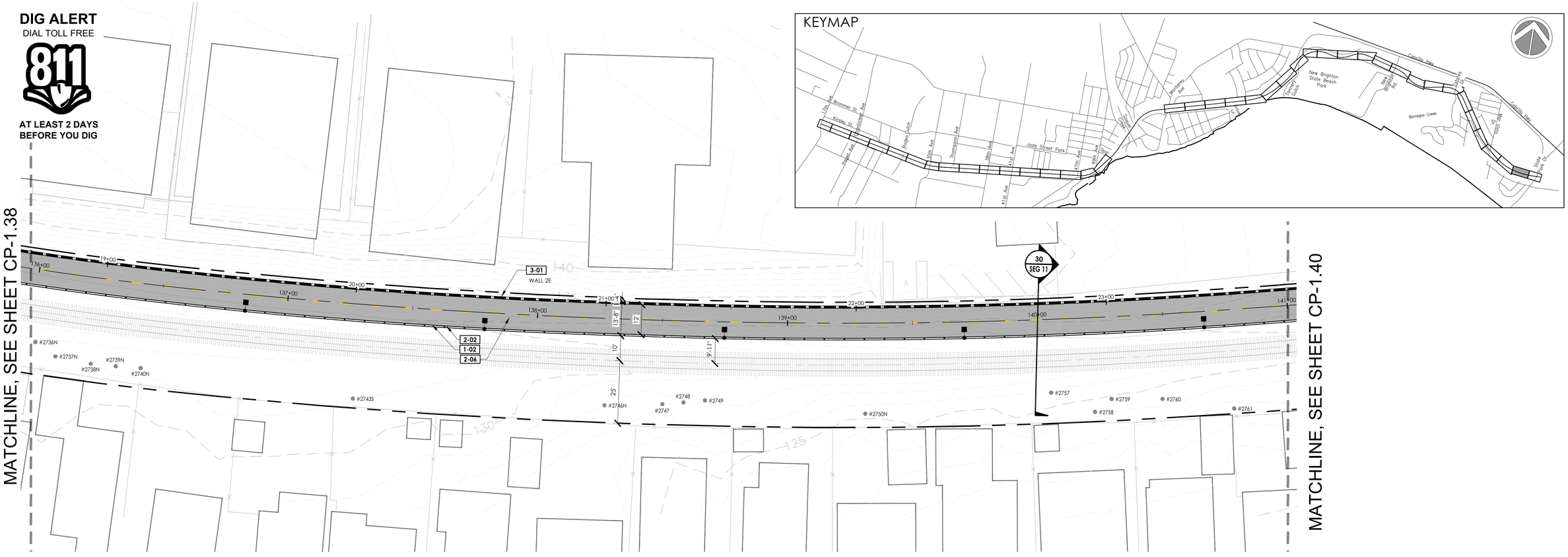
REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.38
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.38, Images: county-logo-black-transparent.png; Xrefs: XY-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCFD.dwg, SEC-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, C:\Users\rmmistake\AppData\Local\Temp\AcPublish_20196\CP-0193-06-RWT-S11.dwg, Plotted By: rmmistake, Plotted: Jun 15, 2023 - 7:16am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



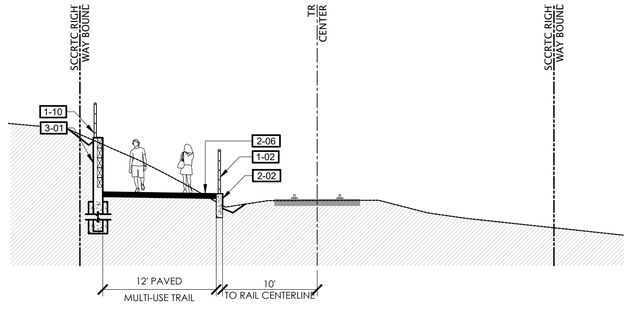
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL, SEE WP SHEETS
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

0 10 20 40 60



30 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

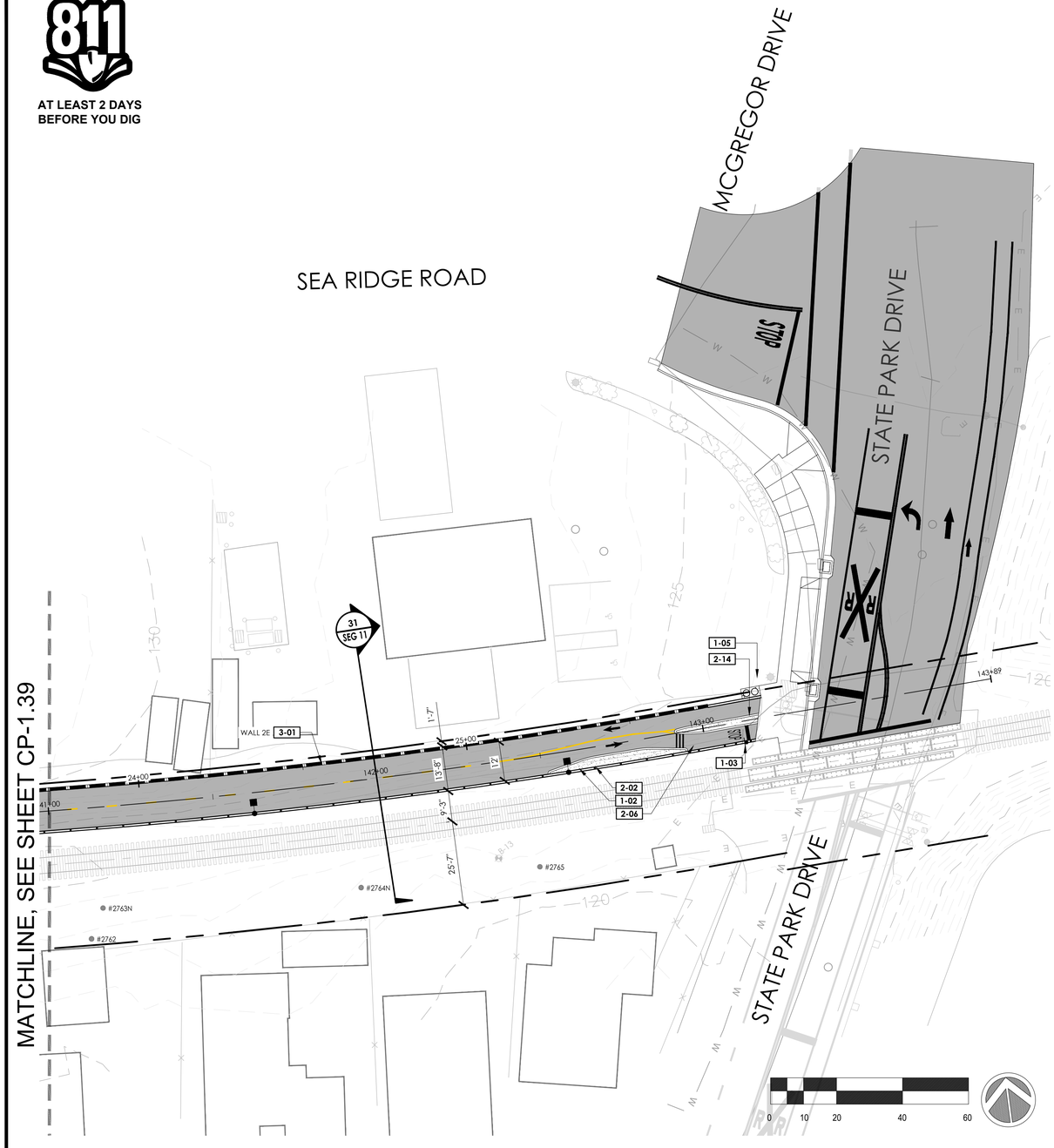
REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RWT-S11

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	KS		CP-1.39
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

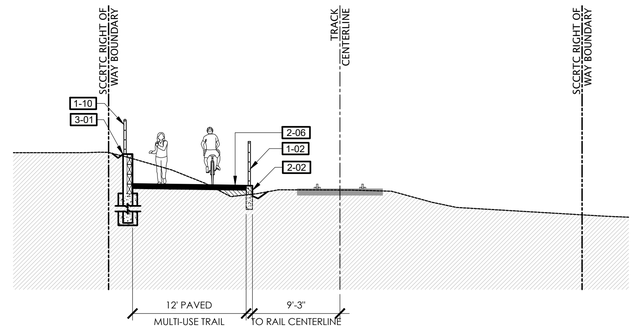
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.39, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg; XTR-0193-06-RWT.dwg; SC-0193-06-RWT-S11.dwg; KEYMAP-0193-06-RCZD.dwg; SEC-0193-06-RWT-S11.dwg; XH-0193-06-RWT-S11.dwg; C:\Users\mmistovich\AppData\Local\Temp\AcPublish_20192\CP-0193-06-RWT-S11.dwg, Plotted By: mmistovich, Plotted: Jun 15, 2023 – 7:16am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG







31 TYPICAL SECTION
SCALE 1/8"=1'-0"

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION

SITE FURNISHINGS AND EQUIPMENT
- 1-01 CONCRETE TRACK PANEL
- 1-02 SEPARATION FENCING
- 1-03 PROPOSED SIGN
- 1-04 RELOCATED PAY STATION
- 1-05 TRASH RECEPTACLES
- 1-06 BENCH
- 1-07 CROSSWALK BARRIER
- 1-08 BIKE RACKS
- 1-09 FLEXIBLE BOLLARD
- 1-10 GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL
- 2-01 6" WIDE CURB
- 2-02 8" WIDE CURB
- 2-03 6" CURB AND GUTTER
- 2-04 CURB RAMP
- 2-05 DETECTABLE WARNING SURFACE
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 HMA PAVEMENT (ROAD)
- 2-08 CONCRETE SIDEWALK
- 2-09 CONTINENTAL CROSSWALK STRIPING
- 2-10 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED AT-GRADE CROSSING
- 2-13 PROPOSED STAIRS
- 2-14 TRAIL CHICANE

STRUCTURAL
- 3-01 RETAINING WALL, SEE WP SHEETS
- 3-02 VIADUCT
- 3-03 ABUTMENT
- 3-04 BRIDGE

UTILITIES
- 4-01 PIP EXISTING RAIL EQUIPMENT
- 4-02 PROPOSED LIGHT
- 4-03 NEW LIGHT FIXTURE ON EXISTING POLE
- 4-05 SOLAR LED W11-15 CROSSING SIGN

LEGE

	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
	DECORATIVE PAVERS

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.40
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.40, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, XH-0193-06-RWT-S11.dwg, SEC-0193-06-RWT-S11.dwg, XP-0193-06-RWT-S11.dwg
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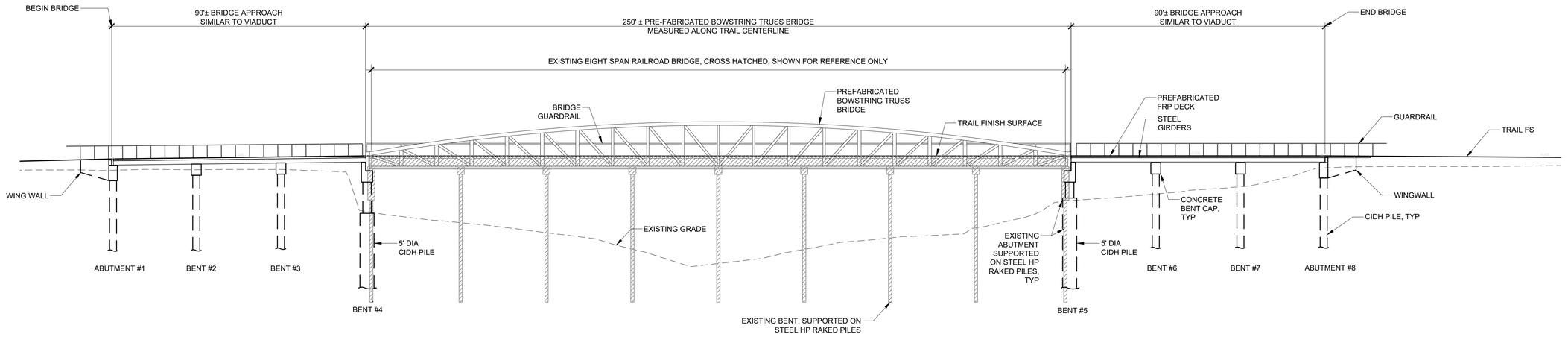
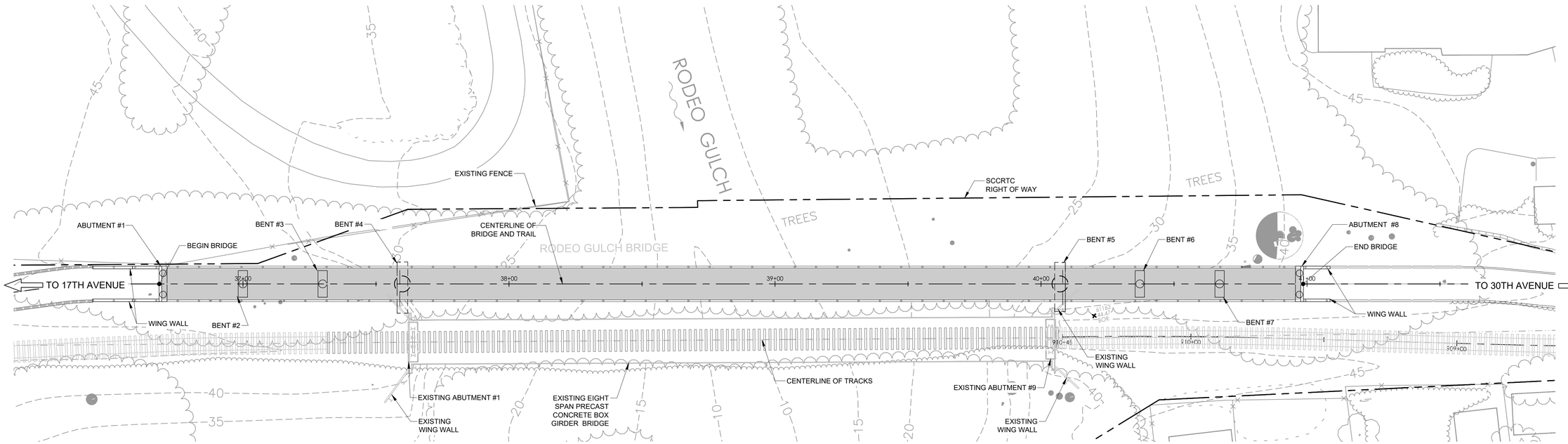


BRIDGE ELEVATION

SCALE: 1" = 20'

20' 0 10' 20' 40'

1" = 20'



BRIDGE PLAN

SCALE: 1" = 20'

20' 0 10' 20' 40'

1" = 20'

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

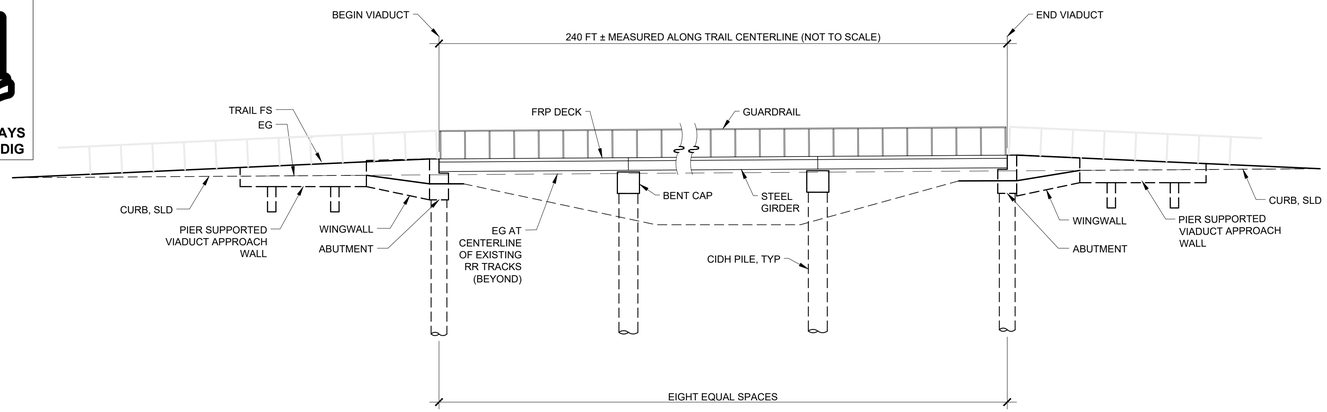
RAIL TRAIL SEGMENTS 10 & 11
MULTI-USE TRAIL
RODEO GULCH BRIDGE GENERAL PLAN SHEET

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	02/10/2023
DRAWN	EDD
DESIGN	DH/PD
CHECKED	PD

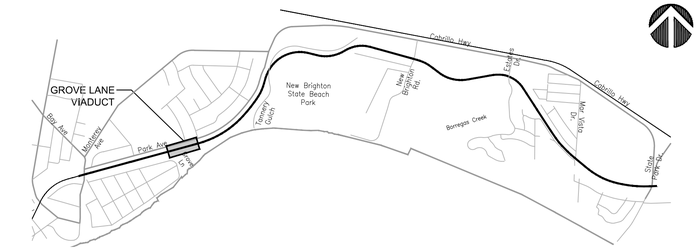
SCALE AS SHOWN
BP-2.01
VAULT NO.

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



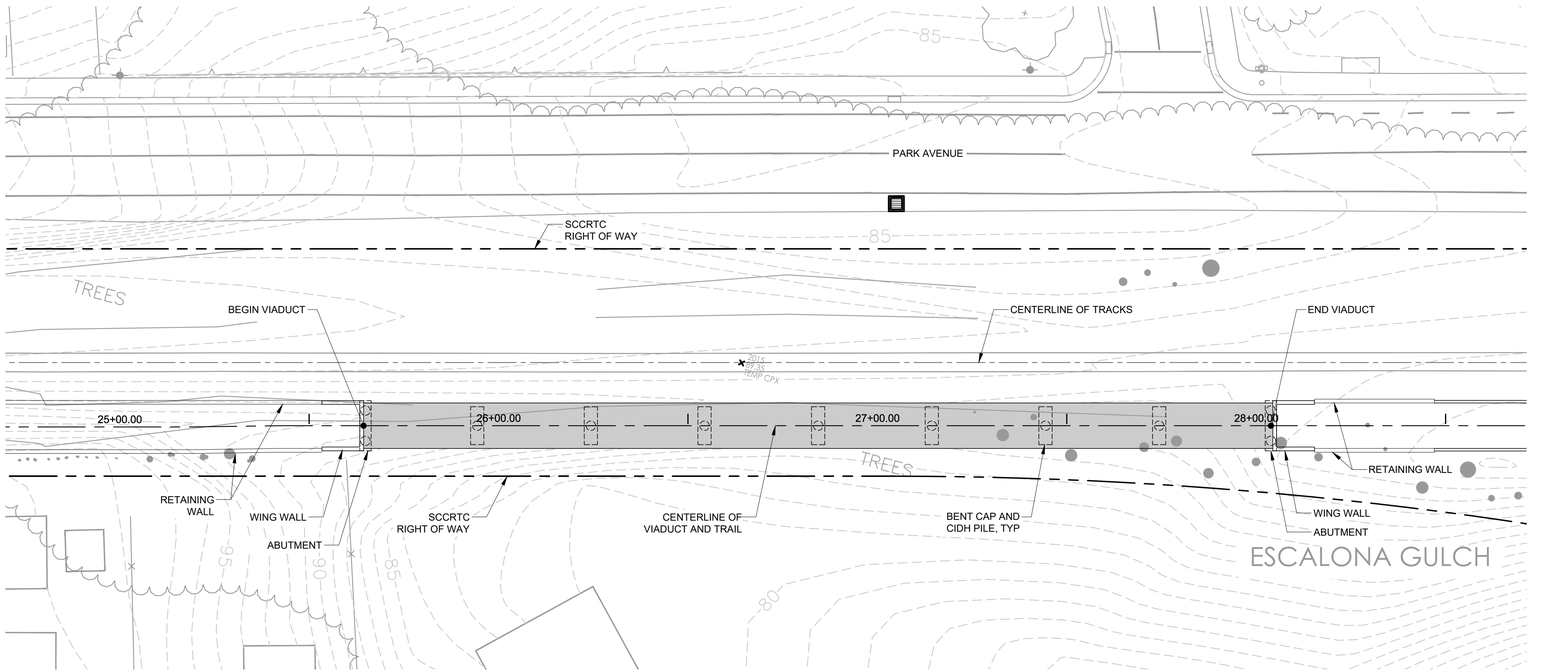
SCHEMATIC FLOATING VIADUCT ELEVATION

SCALE: NTS



STRUCTURAL KEY MAP - SEGMENT 11

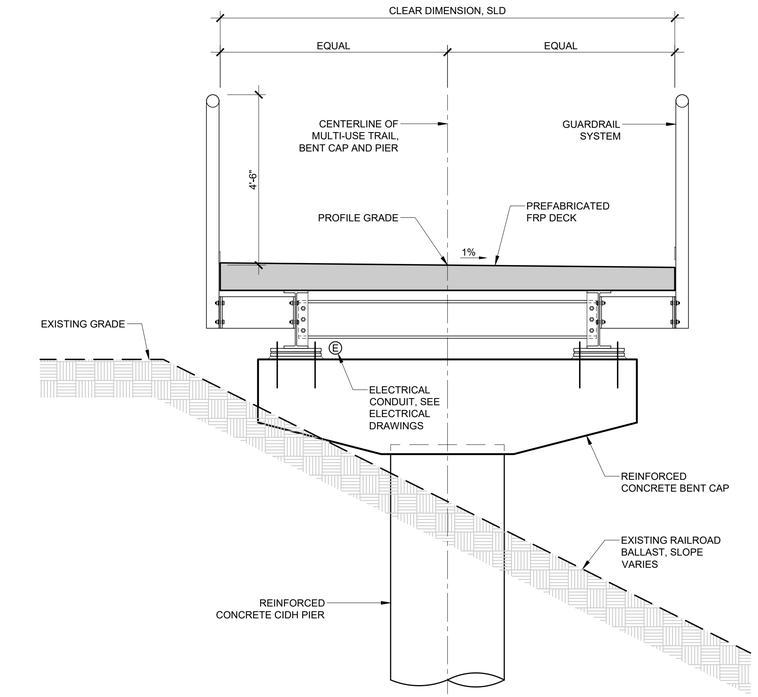
SCALE: NTS



FLOATING VIADUCT PLAN

SCALE: 1" = 20'

20' 0 10' 20' 40'
1" = 20'



FLOATING VIADUCT SECTION

SCALE: 1/2" = 1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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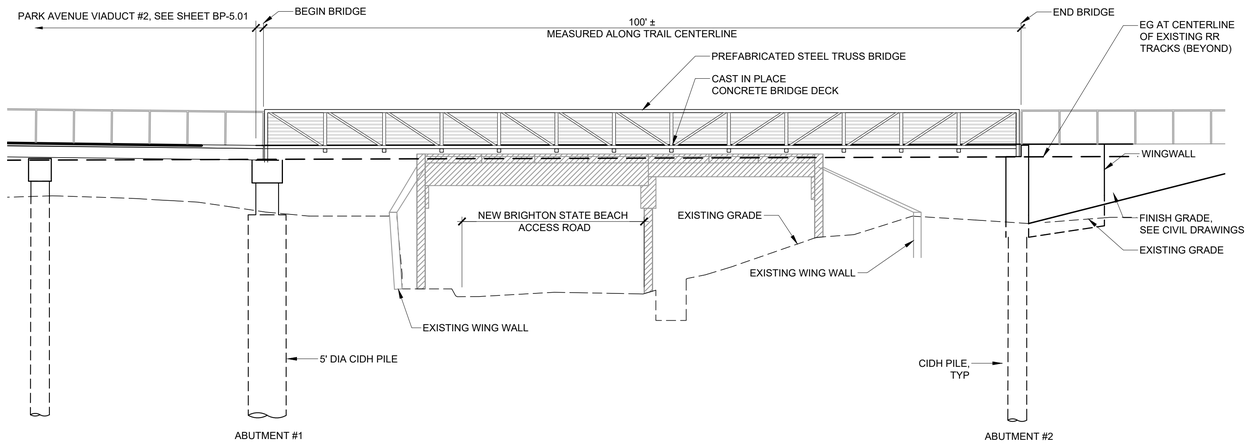
REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
MULTI-USE TRAIL
GROVE LANE VIADUCT GENERAL PLAN SHEET

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN GR	BP-4.01
DRAWING #:	DESIGN DH/PD	VAULT NO.
	CHECKED PD	

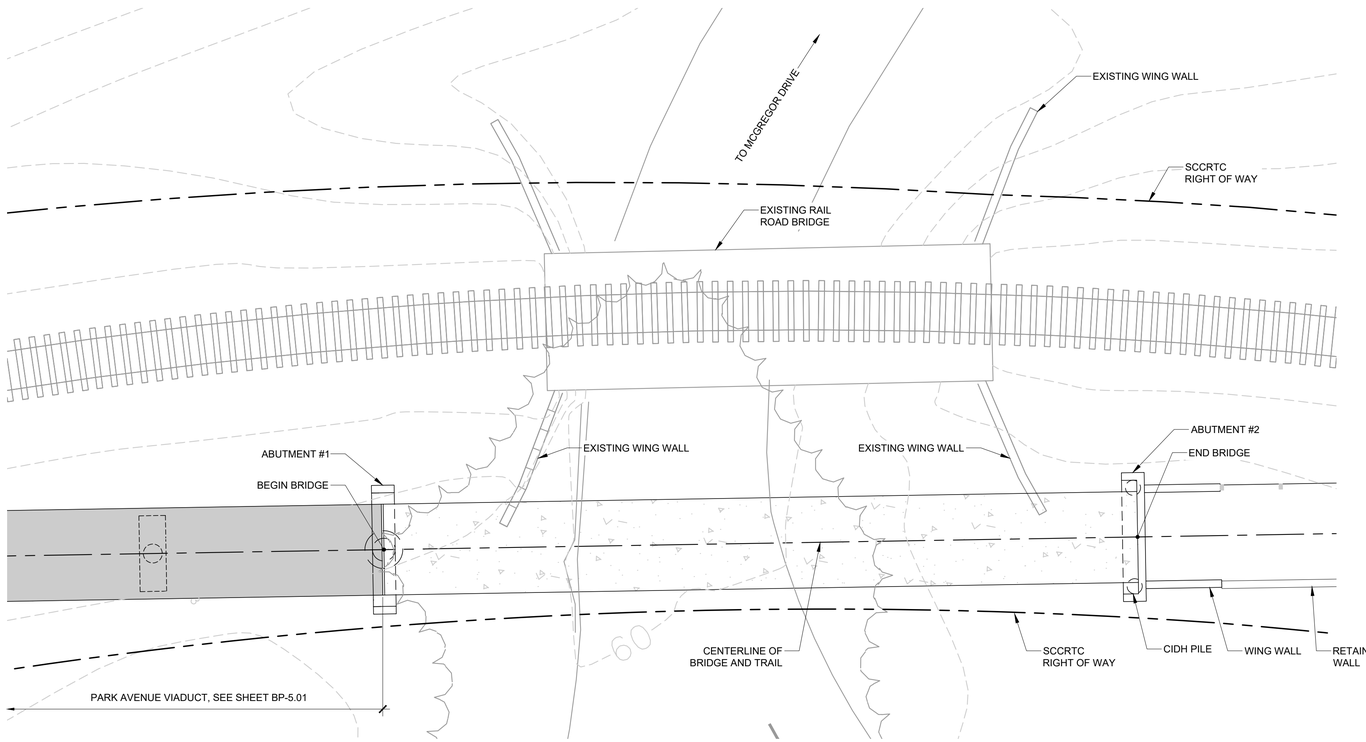


BRIDGE ELEVATION

SCALE: 1" = 10'

10' 0 5' 10' 20'

1" = 10'

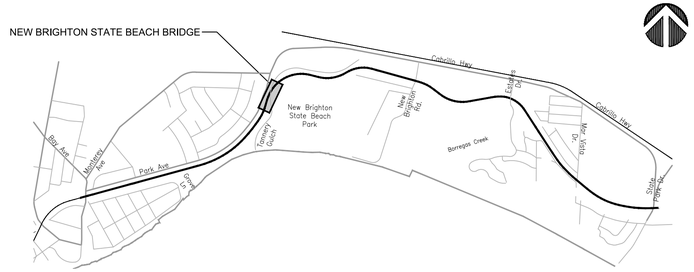


BRIDGE PLAN

SCALE: 1" = 10'

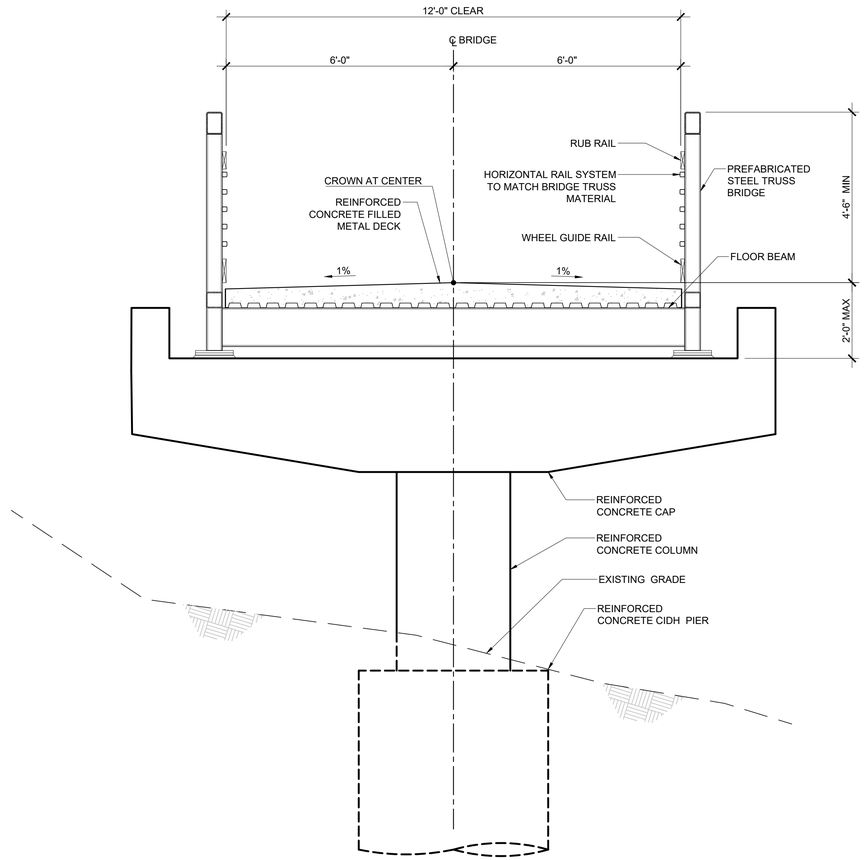
10' 0 5' 10' 20'

1" = 10'



STRUCTURAL KEY MAP - SEGMENT 11

SCALE: NTS



SECTION AT ABUTMENT #1

SCALE: 1/2" = 1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
MULTI-USE TRAIL
NEW BRIGHTON STATE BEACH BRIDGE GENERAL PLAN SHEET

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	02/10/2023
DRAWN	GR
DESIGN	DH/PD
CHECKED	PD

SCALE AS SHOWN
BP-6.01
VAULT NO.

DIAGRAMMATIC WAYFINDING AND DIRECTIONAL SIGNAGE SHOWING APPROXIMATE LOCATIONS FOR REFERENCE



LEGEND

SYMBOL	DESCRIPTION
⊕	WAYFINDING/DIRECTION SIGNAGE LOCATION
	PROPOSED TRAIL
	EXISTING RAIL

NOT TO SCALE

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

PRELIMINARY NOT FOR CONSTRUCTION

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San Juan Capistrano, CA 92675

REVISIONS	

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

WAYFINDING SIGNAGE SCHEMATIC

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	02/10/2023	SCALE	NTS
DRAWN	MMS		WF-1.00
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

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A.2, Optional Interim Trail

DEPARTMENT OF PUBLIC WORKS

RAIL TRAIL SEGMENTS 10 - 11 TRAIL ON THE RAIL LINE (INTERIM TRAIL)

17th Avenue to State Park Drive

PROJECT DESCRIPTION

PICKING UP WHERE SEGMENT 9 TERMINATES, THE SEGMENTS 10 AND 11 PROJECT INCLUDES CONSTRUCTION OF A MULTI-USE TRAIL LOCATED GENERALLY ALONG THE SANTA CRUZ BRANCH RAILROAD CENTERLINE WITH THE REMOVAL OF EXISTING TRACKS AND TIES THROUGH THE PROCESS OF RAILBANKING FROM THE EAST SIDE OF THE 17TH AVENUE TO THE WEST SIDE OF STATE PARK DRIVE.

PROJECT DIRECTORY

OWNER
SANTA CRUZ COUNTY REGIONAL
TRANSPORTATION COMMISSION
CONTACT: GRACE BLAKESLEE PHONE: (831) 460-3200
RAIL CONTACT: TOMMY TRAVERS FAX: (831) 460-6178

LANDSCAPE ARCHITECT
RRM DESIGN GROUP
3765 SOUTH HIGUERA, SUITE 102 PHONE: (949) 361-7950
SAN LUIS OBISPO, CA 93401 FAX: (949) 361-7955
CONTACT: MIKE SHERROD

CIVIL ENGINEER
RRM DESIGN GROUP
325 DAVIS STREET PHONE: (510) 751-4910
SAN LEANDRO, CA 94577 FAX: (510) 686-4910
CONTACT: DARREN CHOY

ELECTRICAL ENGINEER
THOMA ELECTRIC
3562 EMPLEO ST. PHONE: (805) 543-3850
SAN LUIS OBISPO, CA
CONTACT: CHRIS PATCHIN

GEOTECHNICAL ENGINEER
PACIFIC CREST ENGINEERING
444 AIRPORT BLVD PHONE: (831) 722-9446
WATSONVILLE, CA 95076
CONTACT: CHRIS JOHNSON

STRUCTURAL ENGINEER
MESITI-MILLER ENGINEERING
224 WALNUT ST, SUITE B PHONE: (831) 426-3186
SANTA CRUZ, CA 95060
CONTACT: DALE HENDSBEE

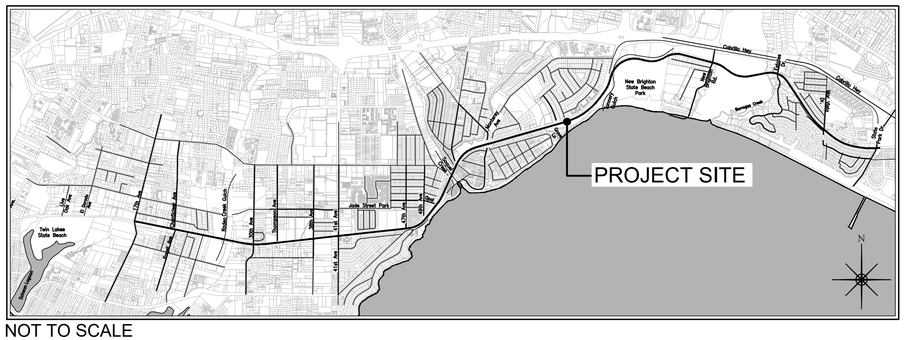
TRAFFIC ENGINEER
WHITLOCK & WEINBERGER (W-TRANS)
1276 LINCOLN AVE, SUITE 204 PHONE: (510) 444-2600
SAN JOSE, CA 9525
CONTACT: STEVE FITZSIMMONS

RAIL ENGINEER
ZEPHYR UAS/RAIL (ZUI)
725 W TOWN & COUNTRY RD, SUITE 550 PHONE: (714) 835-6355
ORANGE, CA 92868
CONTACT: ALFRED YALDA

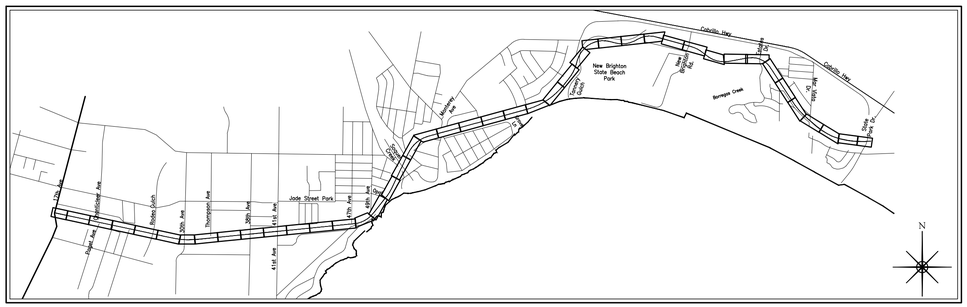
CLIENT
COUNTY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
CONTACT: ROB TIDMORE
PHONE: (831) 454-2160
FAX: (831) 454-2385

SECONDARY CLIENT
CITY OF CAPITOLA
PUBLIC WORKS DEPARTMENT
CONTACT: KAILASH MOZUMDER
PHONE: (831) 475-7300

VICINITY MAP



NOT TO SCALE



KEY MAP SCALE: 1"=2000'

SHEET INDEX

TS-1.01	TITLE SHEET
DM-1.01-1.14	SEGMENT 10 DEMOLITION PLANS
DM-1.15-1.44	SEGMENT 11 DEMOLITION PLANS
CP-1.01-1.14	SEGMENT 10 CONSTRUCTION KEYNOTE PLANS
CP-1.15-1.44	SEGMENT 11 CONSTRUCTION KEYNOTE PLANS
BP-1.01	RODEO GULCH BRIDGE PLAN
BD-1.01	RODEO GULCH BRIDGE DETAILS
BP-2.01	CAPITOLA TRESTLE BRIDGE PLAN
BD-2.01	CAPITOLA TRESTLE BRIDGE DETAILS
BP-3.01	NEW BRIGHTON STATE BEACH BRIDGE PLAN
BD-3.01	NEW BRIGHTON STATE BEACH DETAILS
WD-1.01-1.02	RETAINING WALL DETAIL SHEETS

REFINED SCHEMATIC DESIGN SUBMITTAL

FEDERAL PROJECT NO.: ATPL-5936 (154)
STATE PROJECT NO.: 05-2300-0030
COUNTY PROJECT NO.:

REFERENCES	DATE 06/15/23	SCALE AS SHOWN	
FIELD BOOK:	DRAWN KS/EK/MMS	TS-1.01	
DRAWING #:	DESIGN KS/EK/MMS	VAULT NO.	
	CHECKED MS/KS		

Issued for Bid Set, 2nd Addendum - 07/06/2023 | Issued for Bid Set, 1st Addendum - 06/16/2023 | Issued for Bid Set - 05/19/2023 | Issued for Permit - 03/31/2023 | Issued for Permit Set - 03/24/2023 | Issued for Permit Set - 03/17/2023 | Issued for Permit Set - 03/10/2023 | Issued for Permit Set - 03/03/2023 | Issued for Permit Set - 02/24/2023 | Issued for Permit Set - 02/17/2023 | Issued for Permit Set - 02/10/2023 | Issued for Permit Set - 02/03/2023 | Issued for Permit Set - 01/27/2023 | Issued for Permit Set - 01/20/2023 | Issued for Permit Set - 01/13/2023 | Issued for Permit Set - 01/06/2023 | Issued for Permit Set - 12/30/2022 | Issued for Permit Set - 12/23/2022 | Issued for Permit Set - 12/16/2022 | Issued for Permit Set - 12/09/2022 | Issued for Permit Set - 12/02/2022 | Issued for Permit Set - 11/25/2022 | Issued for Permit Set - 11/18/2022 | Issued for Permit Set - 11/11/2022 | Issued for Permit Set - 11/04/2022 | Issued for Permit Set - 10/28/2022 | Issued for Permit Set - 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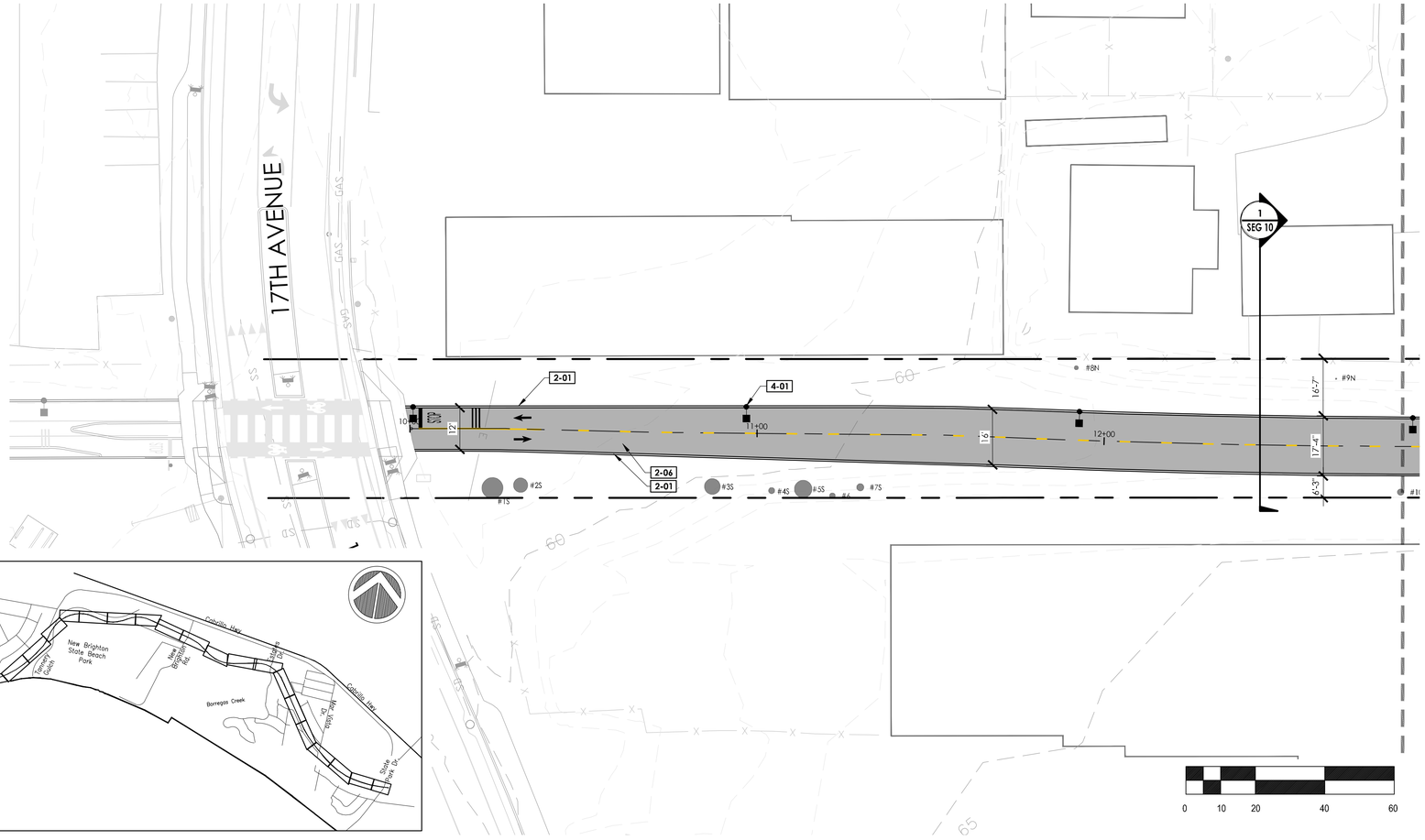
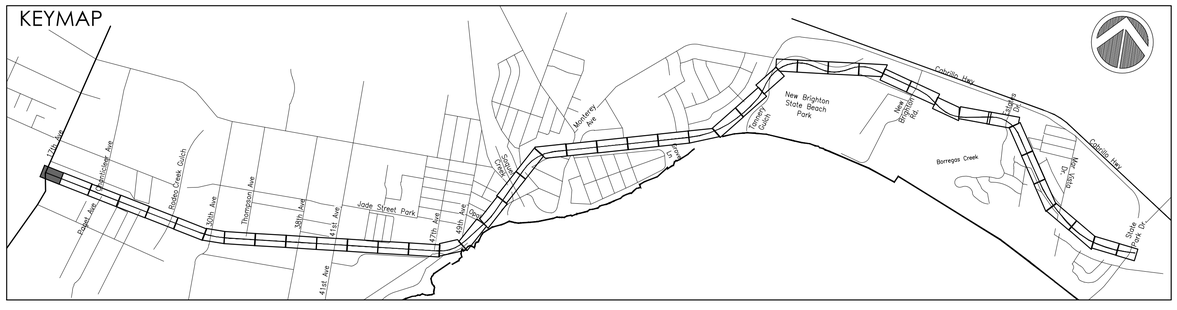
11/19/2009 | Issued for Permit Set - 11/12/2009 | Issued for Permit Set - 11/05/2009 | Issued for Permit Set - 10/29/2009 | Issued for Permit Set - 10/22/2009 | Issued for Permit Set - 10/15/2009 | Issued for Permit Set - 10/08/2009 | Issued for Permit Set - 10/01/2009 | Issued for Permit Set - 09/24/2009 | Issued for Permit Set - 09/17/2009 | Issued for Permit Set - 09/10/2009 | Issued for Permit Set - 09/03/2009

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



MATCHLINE, SEE SHEET CP-1.02

KEYMAP

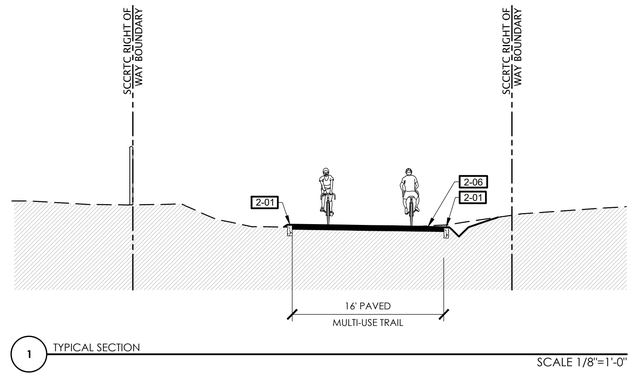


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



1 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.01
VAULT NO.	

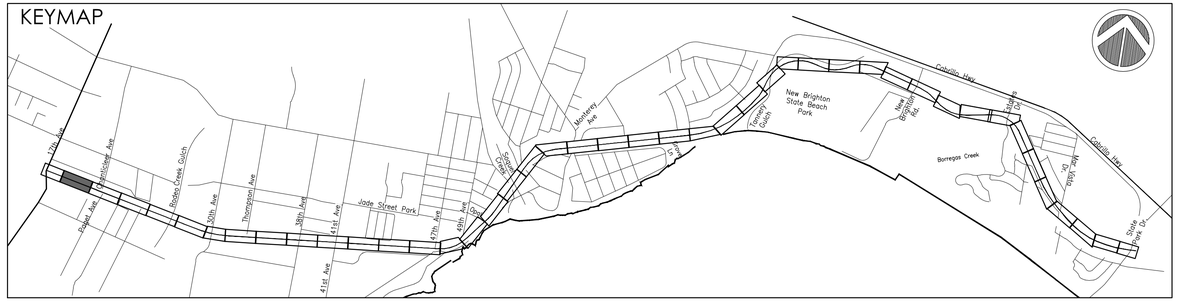
Layout Tab Name: CP-1.01, Images: county-logo-black-transparent.png; Xrefs: KEYMAP-0193-06-RCD2D.dwg, PTR-0193-06-RBT.dwg, XC-0193-06-RBT-S10.dwg, XSR-0193-06-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg, ESC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, N:\2000\0193-06-RCD2-Santa Cruz Rail Trail-Seg-10-11\Wallace + ash ltd\Landscape-Architecture\Task-B-Schematic Design\Sheet Files\Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: KMSzydelski, Plotted: Feb 11, 2023 - 10:43am

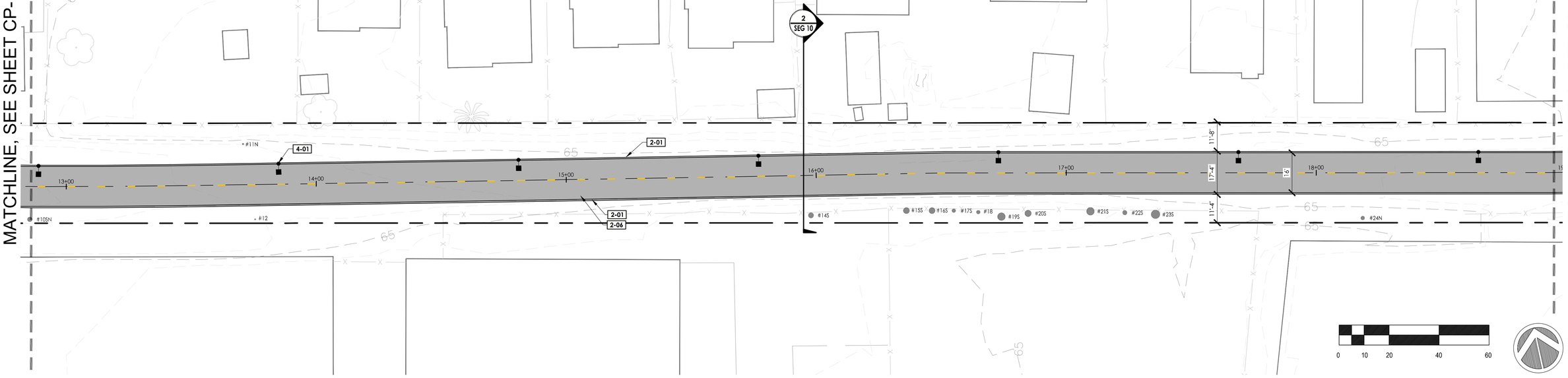
MATCHLINE, SEE SHEET CP-1.01

MATCHLINE, SEE SHEET CP-1.03

CISCO LANE

KEYMAP



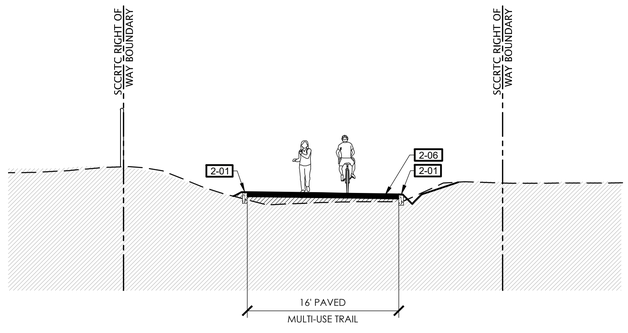


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



2 TYPICAL SECTION

SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.02
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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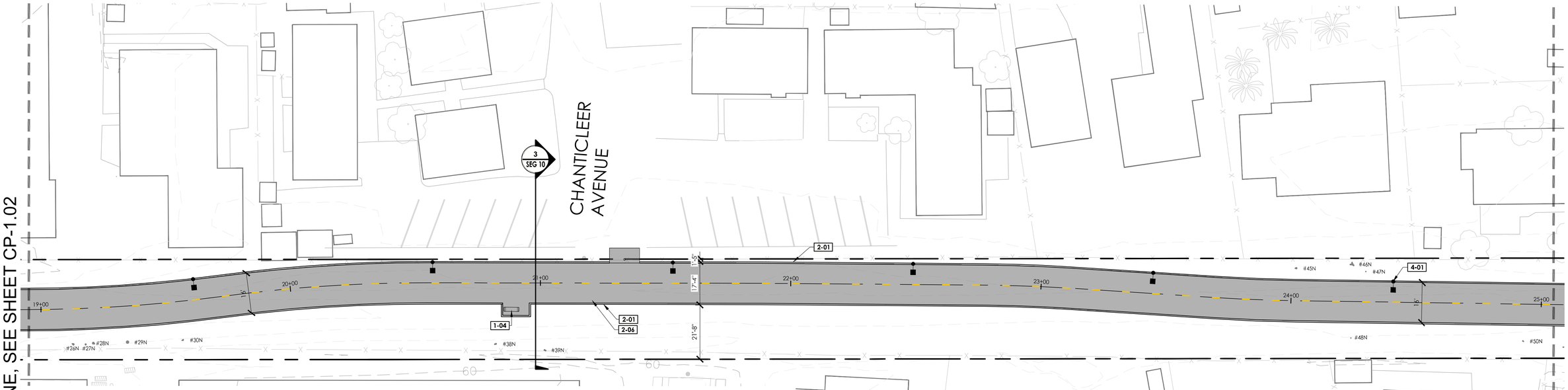
MATCHLINE, SEE SHEET CP-1.02



MATCHLINE, SEE SHEET CP-1.04



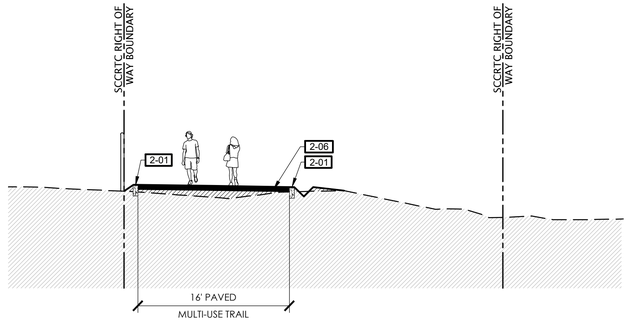


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



3 TYPICAL SECTION

SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
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SCALE	AS SHOWN
	CP-1.03
VAULT NO.	

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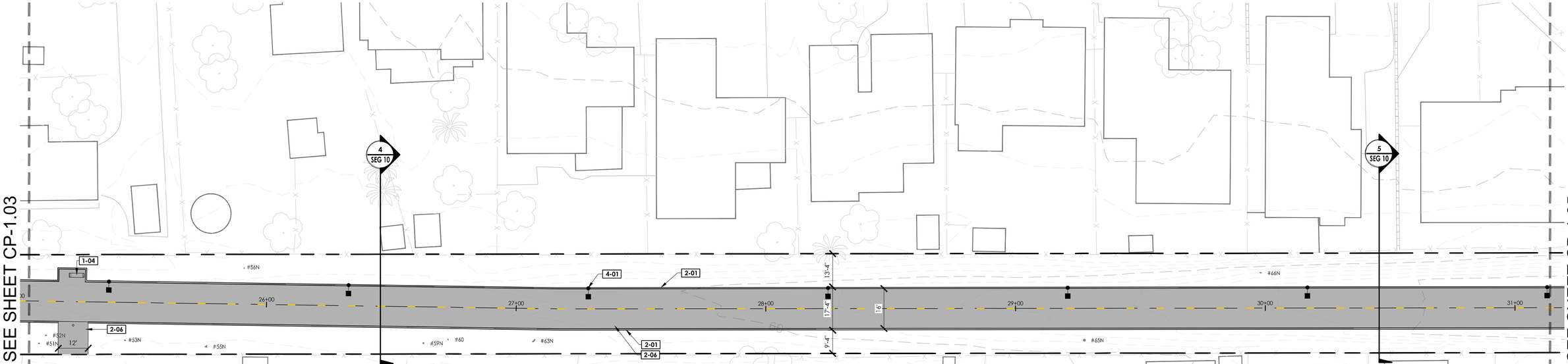
MATCHLINE, SEE SHEET CP-1.03



MATCHLINE, SEE SHEET CP-1.05

KEYMAP

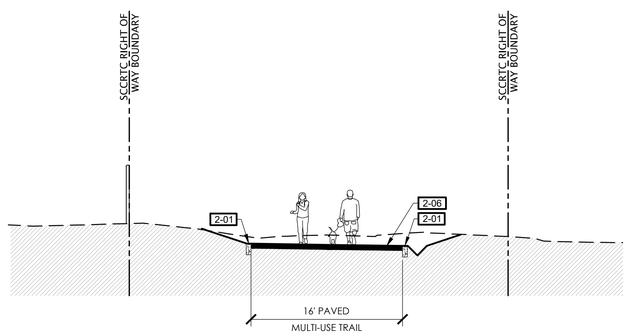


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

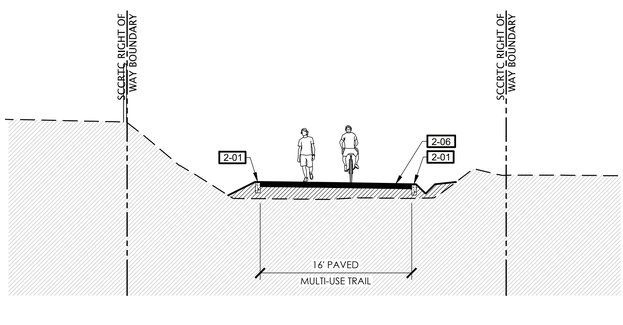
LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



4 TYPICAL SECTION

SCALE 1/8"=1'-0"



5 TYPICAL SECTION

SCALE 1/8"=1'-0"

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REVISIONS

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COUNTY OF SANTACRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.04
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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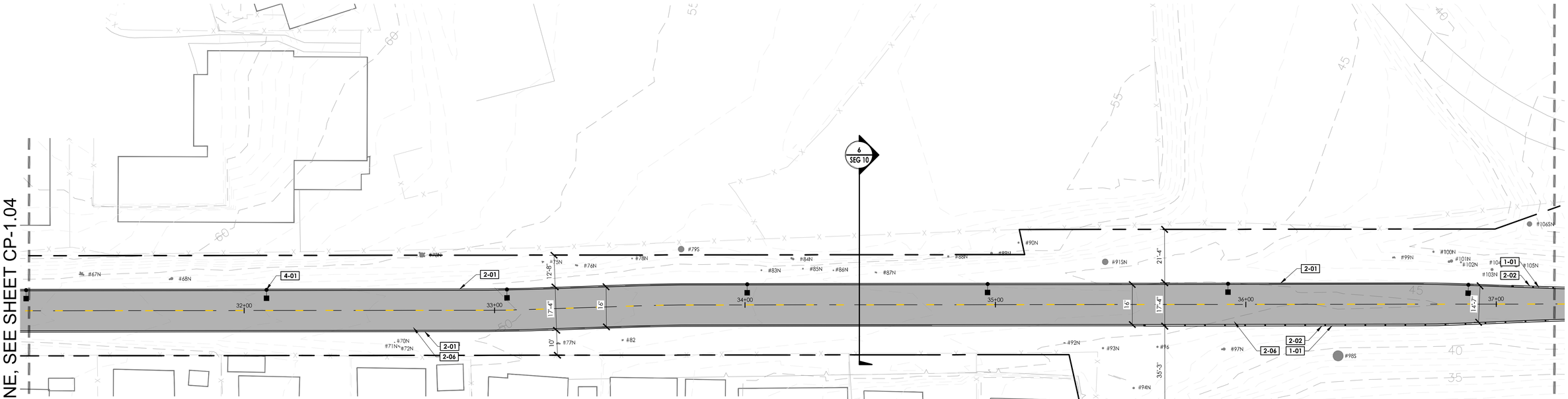
MATCHLINE, SEE SHEET CP-1.04

MATCHLINE, SEE SHEET CP-1.06



KEYMAP



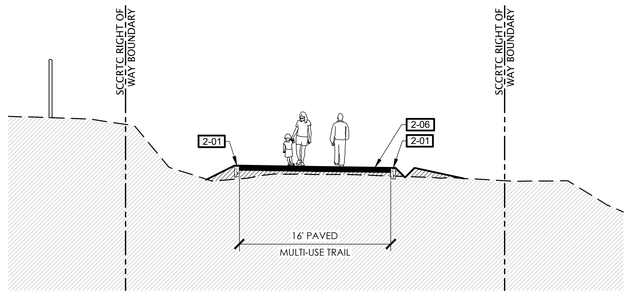
0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



6 TYPICAL SECTION

SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

CP-1.05

VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab: 'Name': CP-1.05, Images: county-logo-black-transparent.png; , Xrefs: KEYMAP-0193-06-RBT20.dwg, XTR-0193-06-RBT.dwg, XC-0193-06-RBT-S10.dwg, XSA-0193-06-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg, SSC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, XS-0193-06-RBT-S10.dwg
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MATCHLINE, SEE SHEET CP-1.05

RODEO GULCH

RODEO GULCH BRIDGE

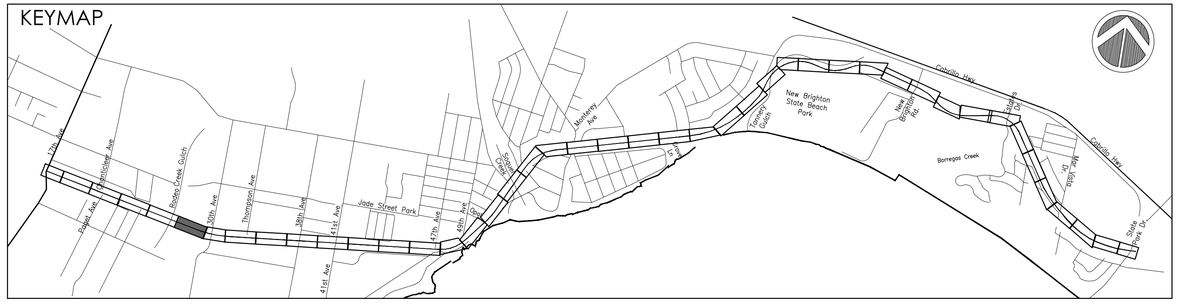
SEE BP-2.01 FOR BRIDGE PLANS

MATCHLINE, SEE SHEET CP-1.07

7
SEG 10

0 10 20 40 60

KEYMAP

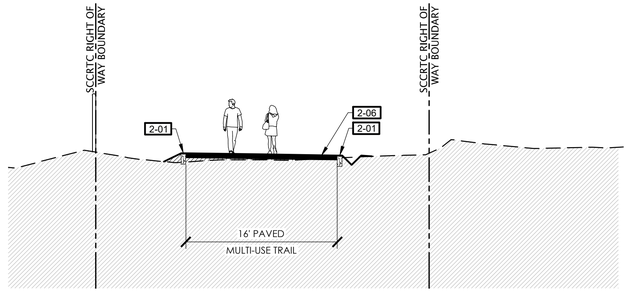


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



7 TYPICAL SECTION

SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

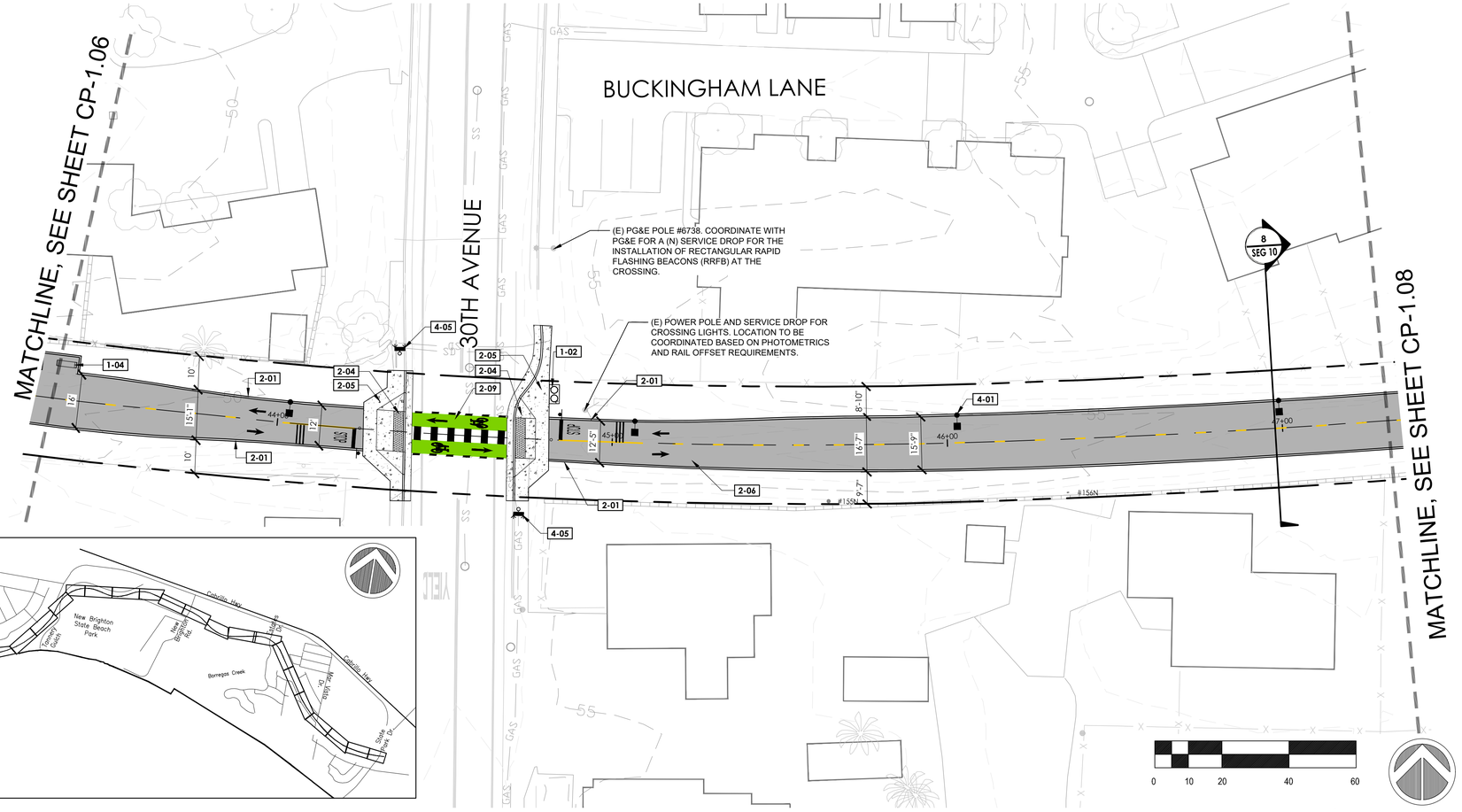
REFERENCES
FIELD BOOK:

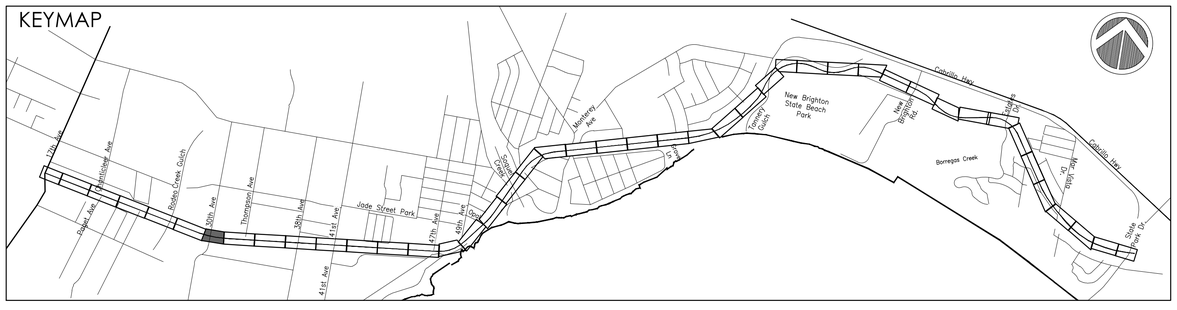
DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.06
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.06, Images: county-logo-black-transparent.png; ; Prefix: K:\DWG\CP-0193-06-RBT-S10.dwg, XR-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XTB-0193-06-RBT-S10.dwg, XSB-0193-06-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, N:\000\10193-06-AC20-Santa Cruz Rail-Trail\Dgn 10-11\Rollback with Trail\Landscape-Architecture\State-B-Schematic Design\Sheet-Files\Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: KMDujakovic, Plotted: Feb 11, 2023 - 10:46am



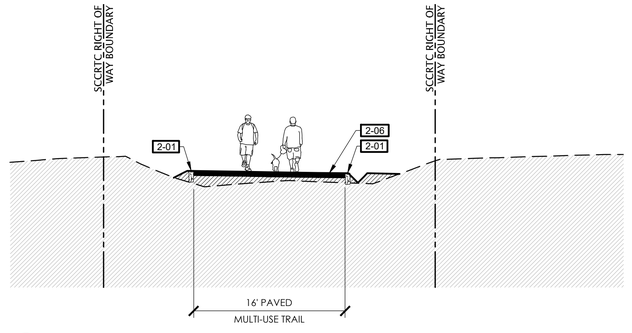


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



8 TYPICAL SECTION

SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

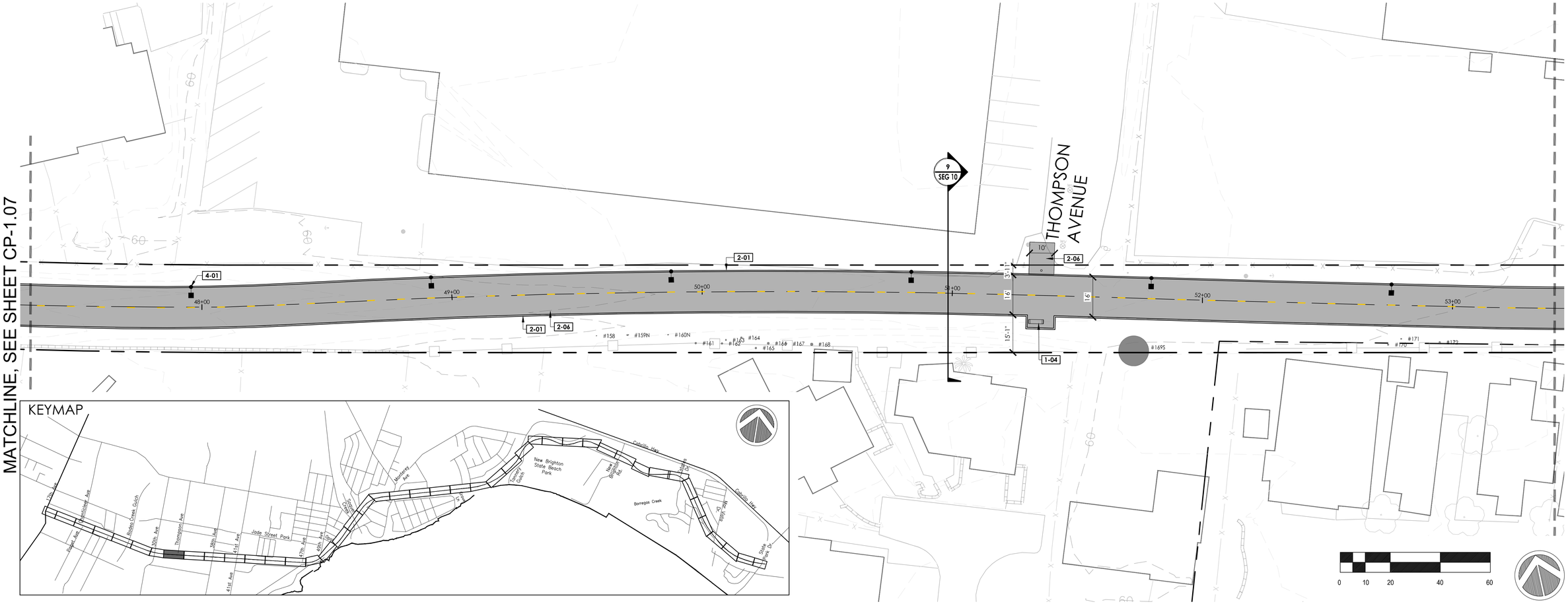
DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.07
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.07, Images: county-logo-black-transparent.png; , Xrefs: KEYMAP-0193-06-RCD20.dwg, XTR-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XSH-0193-06-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, XV-0193-06-RBT-S10.dwg, N:\2001\0193-06-RCD20-Santa Cruz-Rail Trail-Segment 10-11\Drawings\Architecture\Sheet-Files\Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: KMSiudzinski, Plotted: Feb 11, 2023 - 10:47pm

MATCHLINE, SEE SHEET CP-1.07



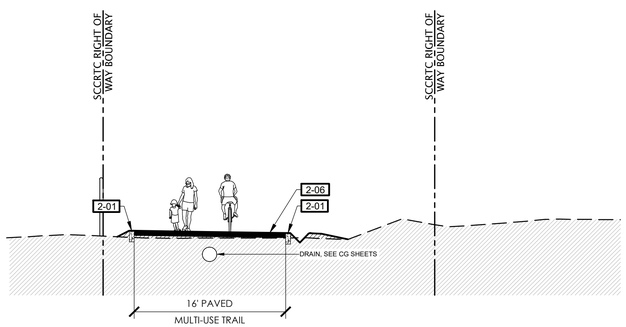
MATCHLINE, SEE SHEET CP-1.09

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



9 TYPICAL SECTION

SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.08
VAULT NO.	

Layout Tab Name: CP-1.08 Images: county-logo-black-transparent.png Xrefs: 6DWG#-0193-06-RCSD.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S10.dwg, XSB-0193-06-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, XC-0001(193)-06-RCSD-Santa Cruz-Rail-Trail-Seg-10-11\Landscape - with Trail\Landscape-Architecture\Task-8-Schematic Design\Sheet-Files\Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: MMSzabelski, Plotted: Feb 11, 2023 - 10:47am

MATCHLINE, SEE SHEET CP-1.08

MATCHLINE, SEE SHEET CP-1.10



KEYMAP

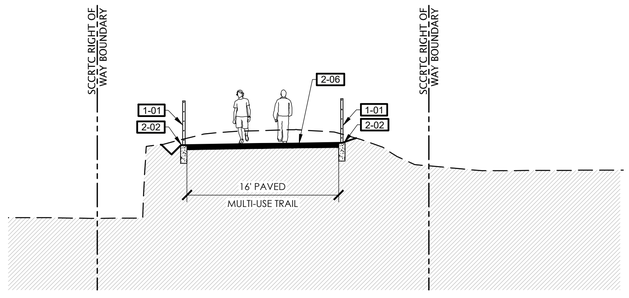


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



10 TYPICAL SECTION

SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

CP-1.09

VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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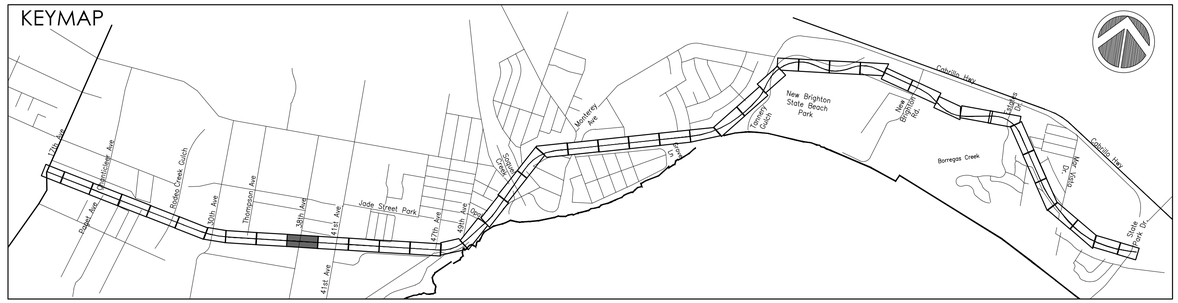
MATCHLINE, SEE SHEET CP-1.09

MATCHLINE, SEE SHEET CP-1.11

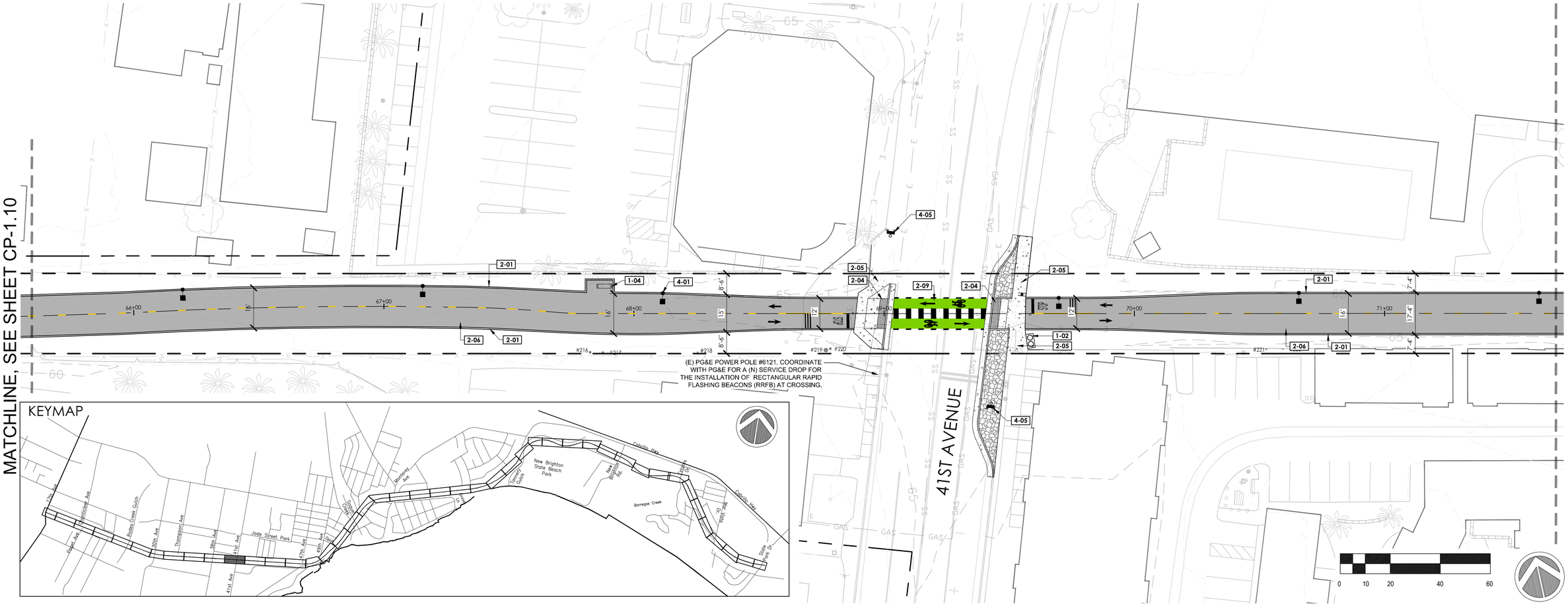
(E) PG&E POWER POLE AT 38th AND MELTON ST. COORDINATE WITH PG&E FOR A (N) SERVICE DROP FOR THE INSTALLATION OF RECTANGULAR RAPID FLASHING BEACONS (RRFB) AT CROSSING.

38TH AVENUE

KEYMAP


Cliff Dr.
Rio Del Mar Blvd.
Aptos Creek Rd.
Soquel Dr.
Bonita Dr.
Rio Del Mar
Aptos Creek
Polo Dr.
Trout Gulch R

MATCHLINE, SEE SHEET CP-1.10



MATCHLINE, SEE SHEET CP-1.12

KEYMAP

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

CP-1.11

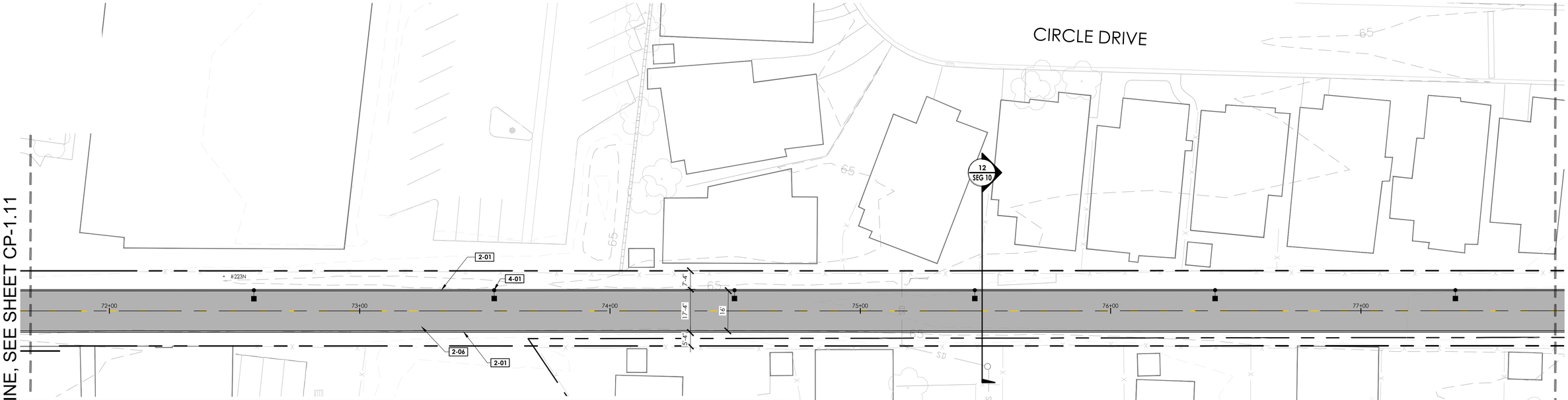
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.11; Images: north-loop-black-transparent.png; ; Prefix: K:\RMA\P-0193-06-RCP\Dwg; XTB-0193-06-RBT.dwg; XC-0193-06-RBT-S10.dwg; XSB-0193-06-RBT-S10.dwg; XT-0193-06-RBT-S10.dwg; SEC-0193-06-RBT-S10.dwg; XH-0193-06-RBT-S10.dwg; XN:\000\10\193-06-RCP\S-Santa Cruz Rail-Trail-Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: KMDjukelic, Plotted: Feb 11, 2023 - 10:48am

MATCHLINE, SEE SHEET CP-1.11

CIRCLE DRIVE



MATCHLINE, SEE SHEET CP-1.13

KEYMAP

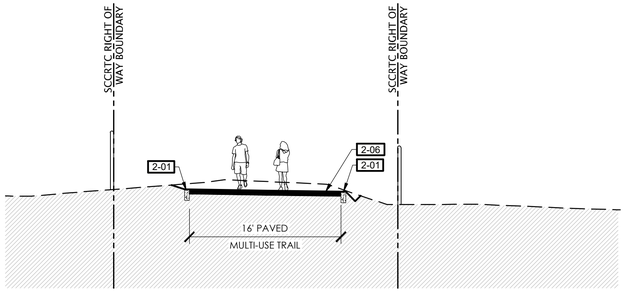


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



12 TYPICAL SECTION

SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

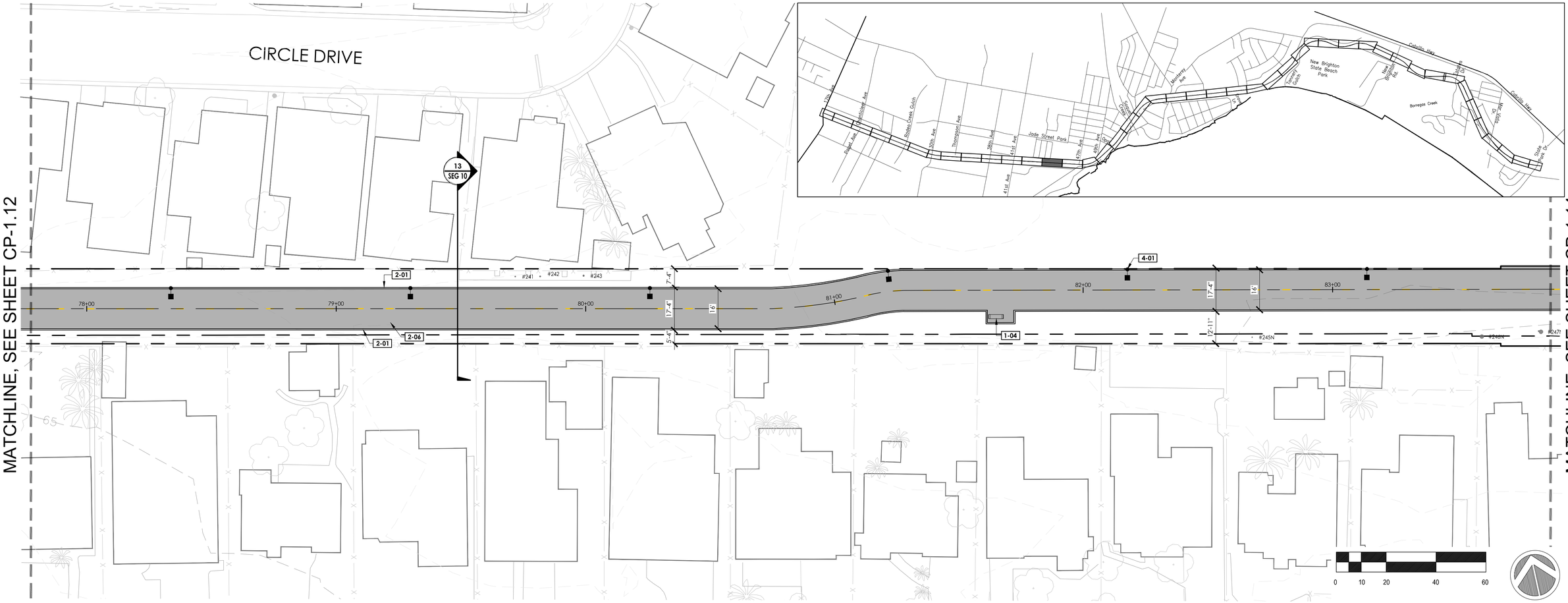
REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	MMS		CP-1.12
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.12, Keymap: exerby-Keys-Maps-Keymapped.png , Prefix KEYMAP-0193-06-RBT20.dwg, XTR-0193-06-RBT-S10.dwg, XR-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XSH-0193-06-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg, SSC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, XV-0193-06-RBT-S10.dwg, N:\DOT\0193-06-RCTP-Santa Cruz-Rail Trail-Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: KMSiudeikis, Plotted: Feb 11, 2023 - 10:49am

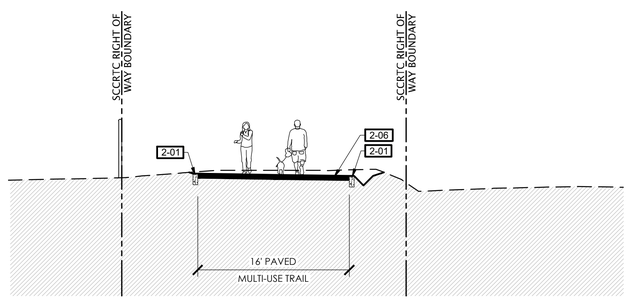


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



13 TYPICAL SECTION

SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	MMS		CP-1.13
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.13, Images: county-logo-black-transparent.png , Xrefs: KEYMAP-0193-06-RBTD.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S10.dwg, XSB-0193-06-RBT-S10.dwg, XP-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XH-N:\2000\10185-06-RCDS-Santa Cruz Rail-Trail-Seg-10-11\Windows with Trail\Landscape-Architecture\Task-8-Schematic Design\Sheet Files\Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: MMSubakkali, Plotted: Feb 11, 2023 - 10:49am

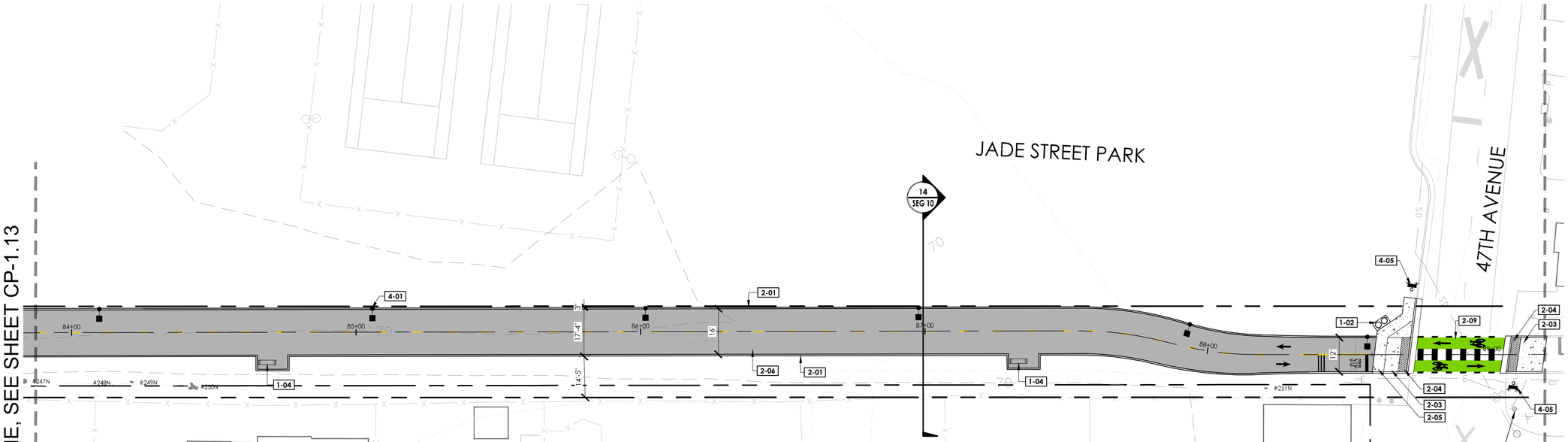
MATCHLINE, SEE SHEET CP-1.13

JADE STREET PARK

14
SEG 10

47TH AVENUE

END OF SEGMENT 10
MATCHLINE, SEE SHEET CP-1.15



KEYMAP



(E) PG&E POWER POLE AT CORNER OF PORTOLA DR. AND 47th AVE. COORDINATE INSTALLATION OF (N) POLE AND LIGHT FIXTURE FOR RAILTRAIL PATHWAY CROSSING AT THIS LOCATION.

PORTOLA DRIVE

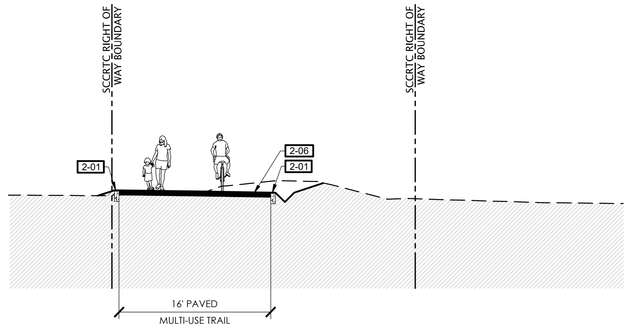
0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
UTILITIES	
4-01	PROPOSED LIGHT
4-05	LED RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



14 TYPICAL SECTION

SCALE 1/8"=1'-0"

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.14
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.14, Images: martin-stein-black-transparent.png; , Prefix: XDWG# 0193-06-RD20.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT.dwg, XSH-0193-06-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, N:\000\10\193-06-RD20-Santa Cruz-Rail-Trail-Seg-10-11\Rollback with Trail\Landscape-Architecture\Trail-B-Scheme\6c Design\Sheet-Files\Segment 10\CP-0193-06-RBT-S10.dwg, Plotted By: KMSojubeiki, Plotted: Feb 11, 2023 - 10:50am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

BEGINNING OF SEGMENT 11
MATCHLINE, SEE SHEET CP-1.14

MATCHLINE, SEE SHEET CP-1.16

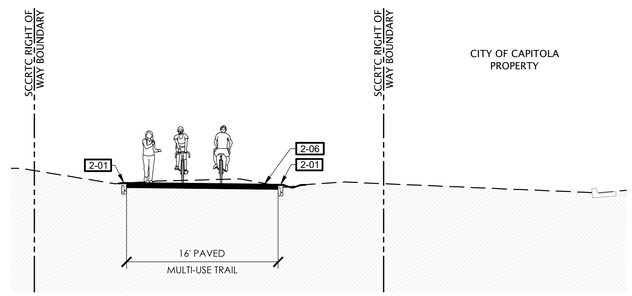


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



1 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.15
VAULT NO.

Layout Tab Name: CP-1.15, Images: county-logo-black-transparent.png, 07397-mid.jpg, Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, XDWN-0193-06-RDS.dwg, XH-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XC-0193-06-RDS-S11.dwg, N:\2000\0193-06-RDS\Santa Cruz-Rail Trail-Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: MMSubotkoski, Plotted: Feb 11, 2023 - 10:04pm

DIG ALERT
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MATCHLINE, SEE SHEET CP-1.15



MATCHLINE, SEE SHEET CP-1.17

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

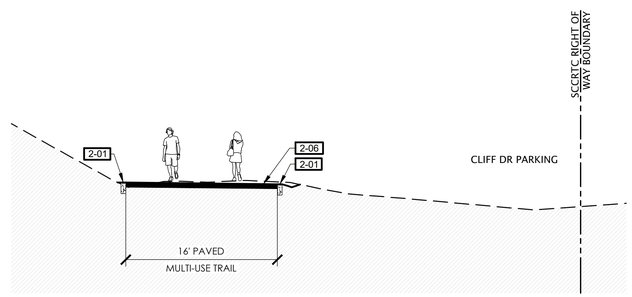
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



2 TYPICAL SECTION
SCALE 1/8"=1'-0"

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.16
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.16, Images: county-logo-black-transparent.png; 07567-mid.dgn ; Xrefs: XTB-0193-06-RBT.dwg, XSA-0193-06-RBT-S11.dwg, XSTAMP-0193-06-RBDG.dwg, XH-0193-06-RBT-S11.dwg, XT-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, N:\000\0193-06-RDDG-Santa Cruz Rail Trail-Seg 10-11\Bidbook with Trail\Landscape Architecture\Sec B-Schematic Design\Sheet Files\Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: KMDoubleA, Plotted: Feb 11, 2023 - 10:04am

DIG ALERT
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AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.16

MATCHLINE, SEE SHEET CP-1.18

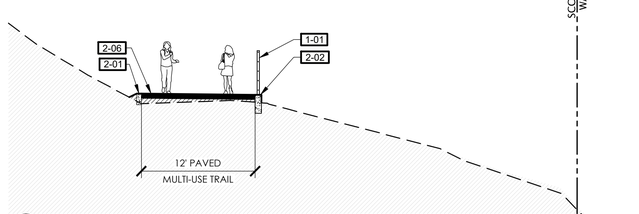


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



3 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	MMS		CP-1.17
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

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DIG ALERT
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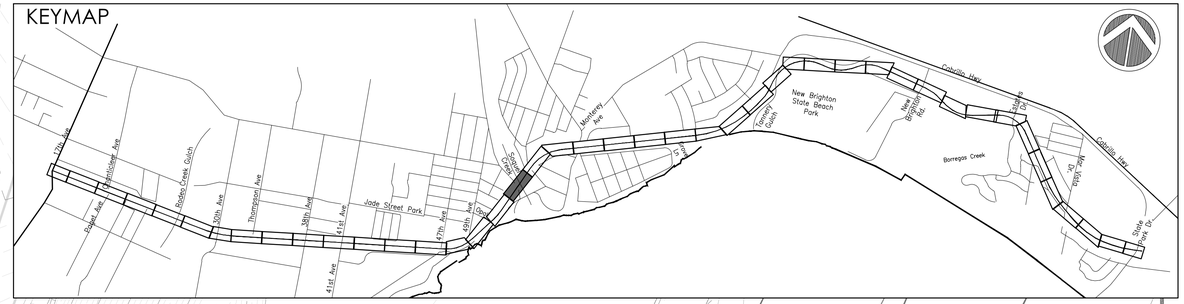
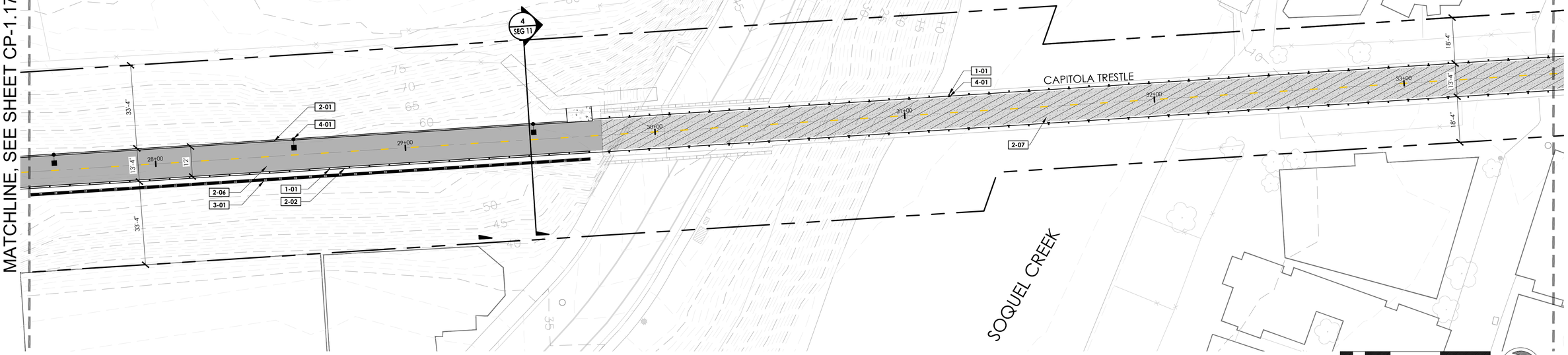
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.17

MATCHLINE, SEE SHEET CP-1.19

KEYMAP



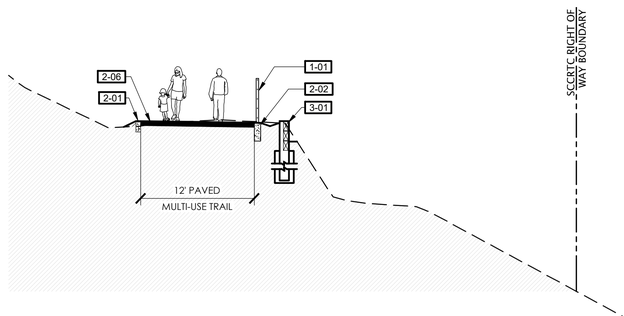


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



4 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

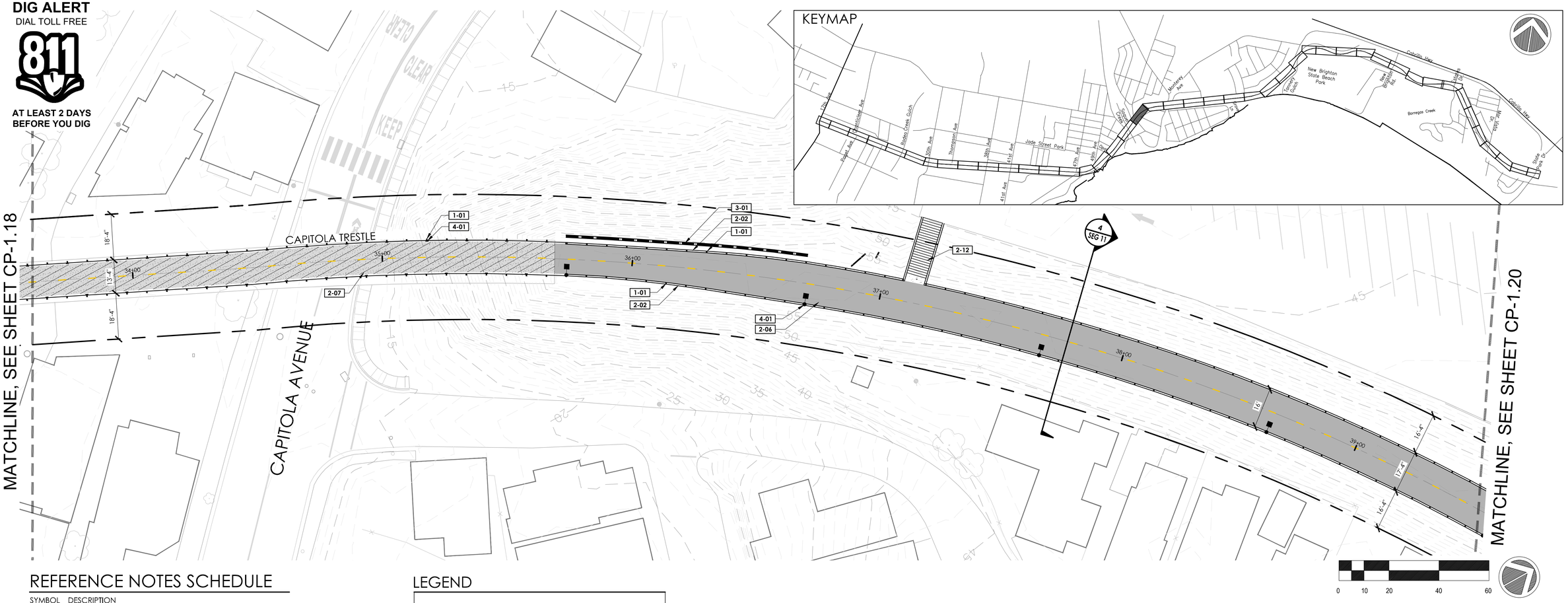
CP-1.18

VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.18, Images: county-logo-black-transparent.png; 07567-mid.dgn; Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, XSTAMP-0193-06-RR20.dwg, XH-0193-06-RBT-S11.dwg, XT-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, N:\000\0193-06-RR20-Santa Cruz Rail Trail-Seg 10-11\Bidbook with Tech\Landscape Architecture\Sec-B-Schematic Design\Sheet Files\Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: KMDoubleck, Plotted: Feb 11, 2023 - 10:05pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

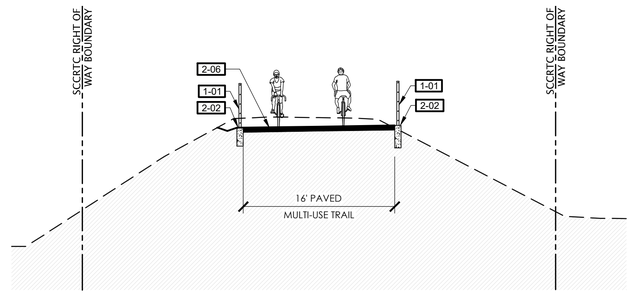


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



5 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.19
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab: 'Name': CP-1.19, Xrefs: county-hwys-black-transparent.png, 07093-mid.dgn, Xrefs: XTB-0193-06-RBT.dwg, XTB-0193-06-RBT-S11.dwg, XTB-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XC

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



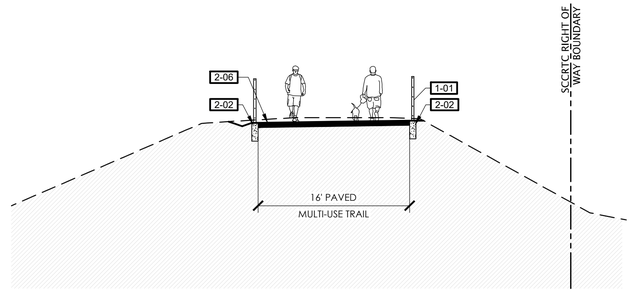


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



6 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.20
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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DIG ALERT
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811
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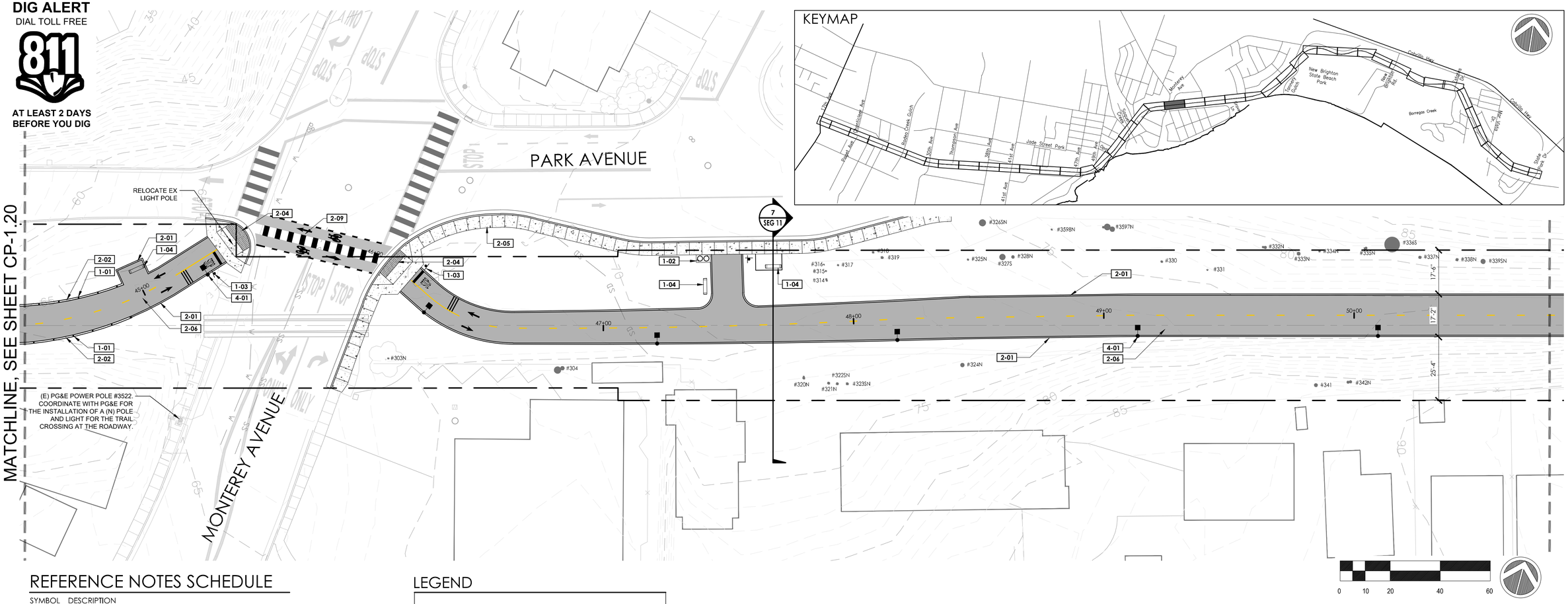
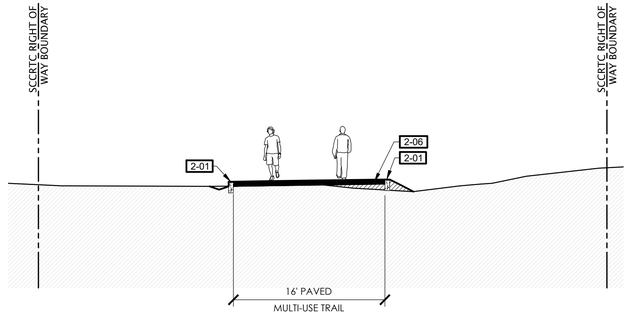


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



7 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN MMS	CP-1.21	
DRAWING #: CP-0193-06-RBT-S11	DESIGN KS/MS	VAULT NO.	
	CHECKED MS		

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.21, Images: county-logo-black-transparent.png, 075871-mid.jpg, Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, XDWMP-0193-06-RBDP.dwg, XH-0193-06-RBT-S11.dwg, XT-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XS-0193-06-RBT-S11.dwg, P:\DWG\0193-06-RCDP-Santa Cruz Rail Trail-Seg-10-11\Notebook with Trail\Landscape Architecture\Train B-Schematic Design\Sheet Files\Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: KMDaSilveira, Plotted: Feb 11, 2023 – 10:06pm

DIG ALERT
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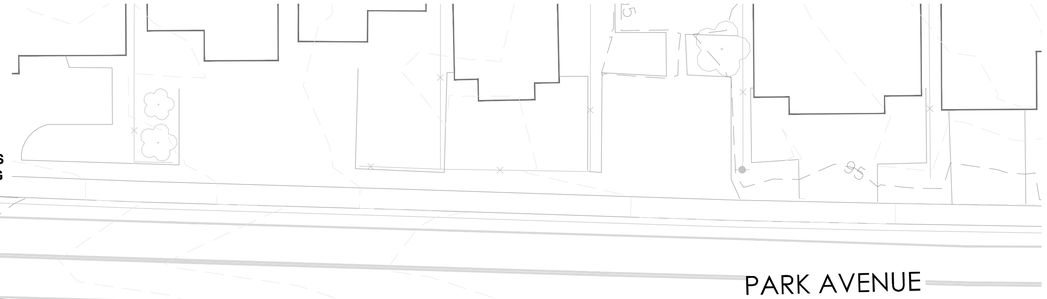
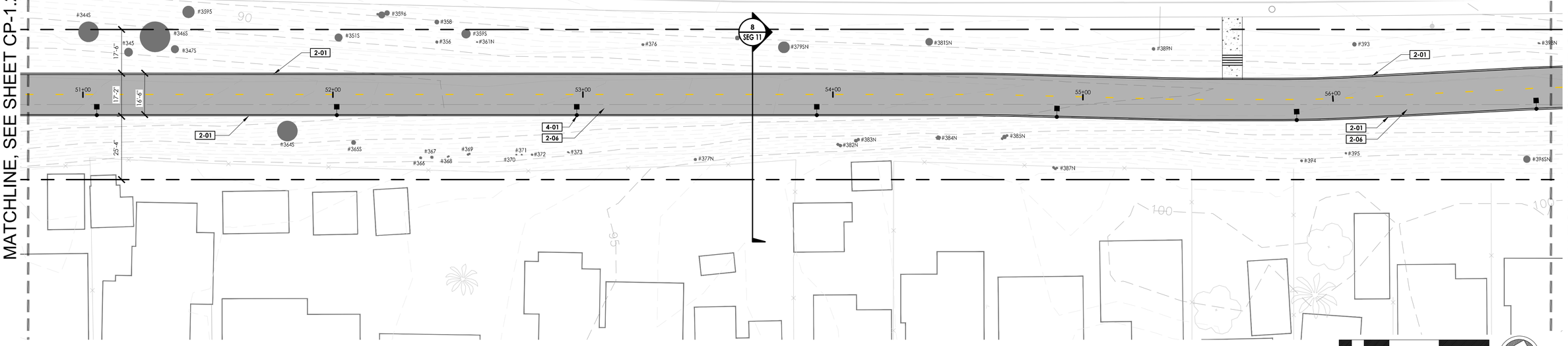


KEYMAP



MATCHLINE, SEE SHEET CP-1.21

MATCHLINE, SEE SHEET CP-1.23

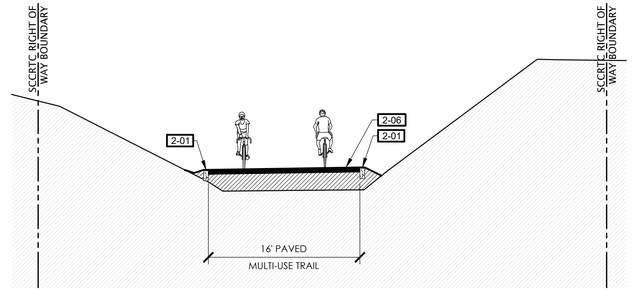


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



8 TYPICAL SECTION
SCALE 1/8"=1'-0"

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.22
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.22 Images: county-logo-black-transparent.png (75%).mod.jpg Xrefs: XTB-0193-06-RBT.dwg XSB-0193-06-RBT-S11.dwg XDWG-0193-06-RBDD.dwg XH-0193-06-RBT-S11.dwg XC-0193-06-RBT-S11.dwg XT-0193-06-RBT-S11.dwg
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DIG ALERT
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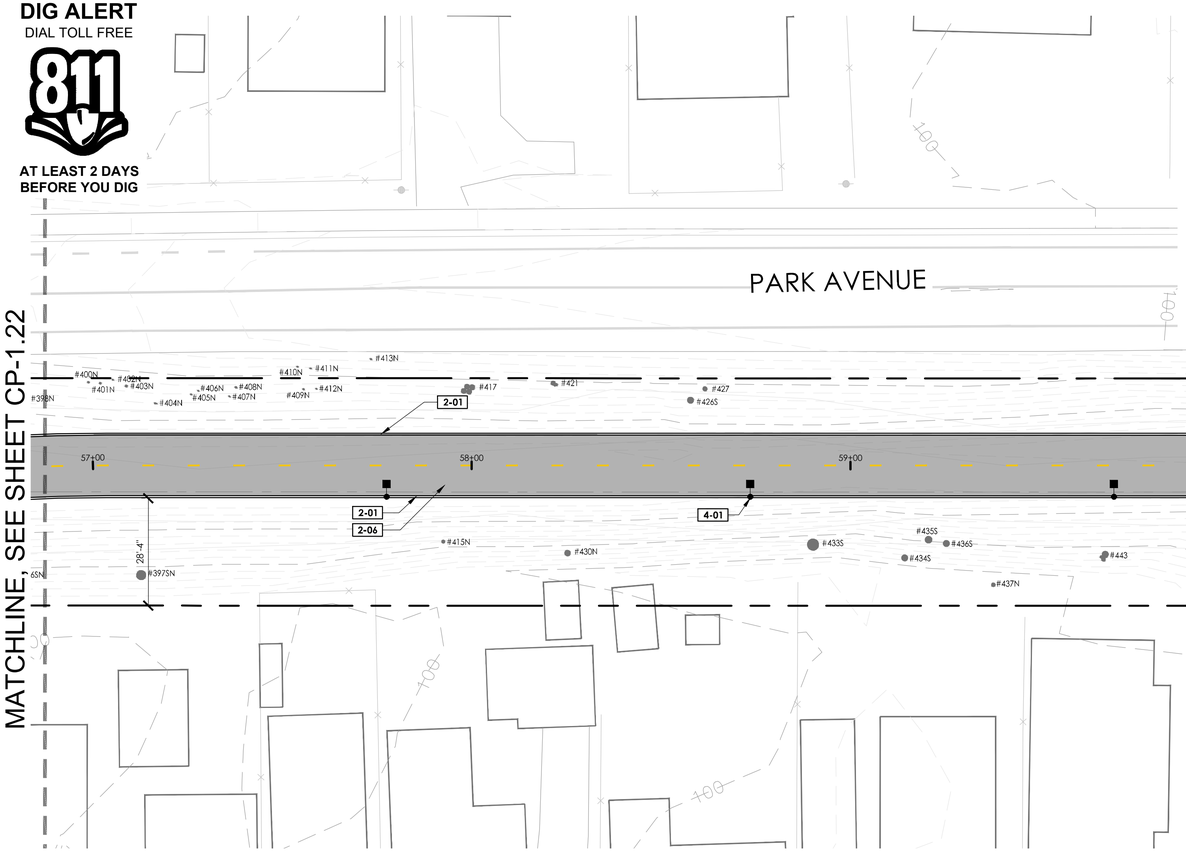
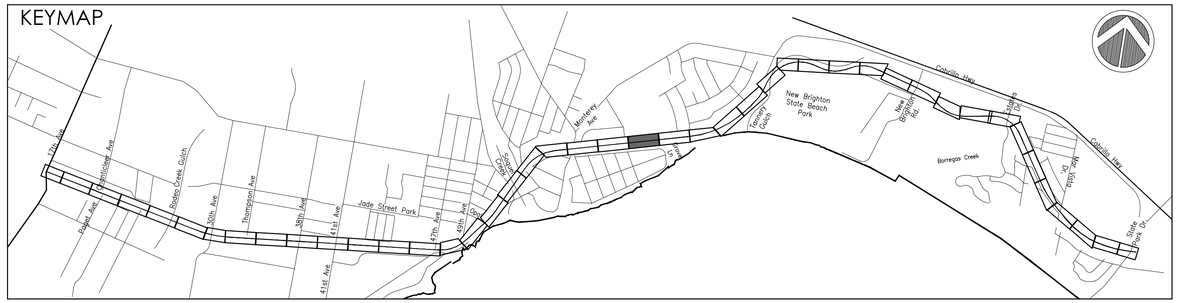




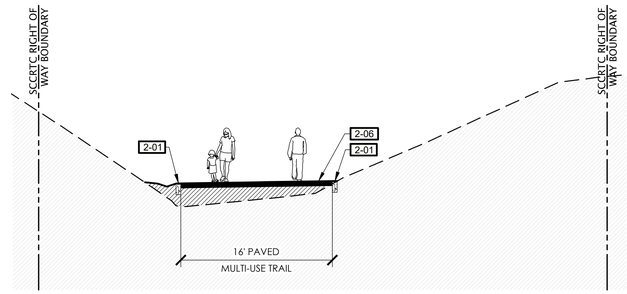
0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING RELOCATED PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



9 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.23
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.23, Images: county-logo-black-transparent.png, 07097-mid.jpg, Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XH-0193-06-RBT-S11.dwg, XT-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, N:\DOT\0193-06-RCZO-Santa Cruz-Rail-Trail-Seg-10-11\Roll Plot Files\Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: KMDoubleday, Plotted: Feb 11, 2023 - 10:06am

DIG ALERT
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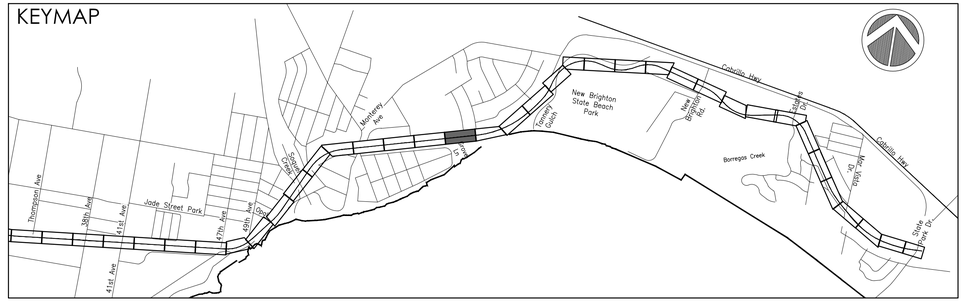
(E) STREET LIGHT AT CORNER OF PARK AVE. AND WESLEY ST. COORDINATE WITH PG&E CITY FOR EXTENSION OF POWER CIRCUIT TO (N) LIGHT AND POLE AT PARK AVE. AND GROVE LANE TRAIL CROSSING.

KEYMAP



PARK AVENUE

MATCHLINE, SEE SHEET CP-1.23

MATCHLINE, SEE SHEET CP-1.25

ESCALONA GULCH

GROVE LANE

STOP

10
SEG 11

63+00 64+00 65+00 66+00 67+00 68+00 69+00

21'-10" 21'-7" 23'-3" 49'-1" 12'-6" 14'-8"

2-01 2-06 4-01 1-02 2-05

0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

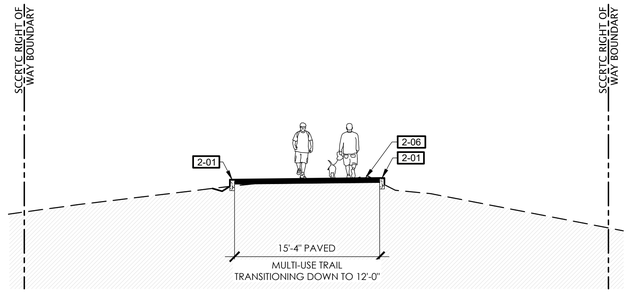
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING RELOCATED PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



10 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.24
VAULT NO.

Layout Tab Name: CP-1.24, Images: county-logo-black-transparent.png, 07097-mid.jpg, Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RCP.dwg, XH-0193-06-RBT-S11.dwg, XT-0193-06-RWY-S11.dwg, XC-0193-06-RCP-S11.dwg, N:\2000\0193-06-RCP-Santa Cruz-Rail-Trail-Eng-15-11\Working with Trail\Landscape-Architecture\Visio-06-Schematic Design\Sheet-Files\Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: MMSadeleke, Plotted: Feb 11, 2023 - 10:18pm

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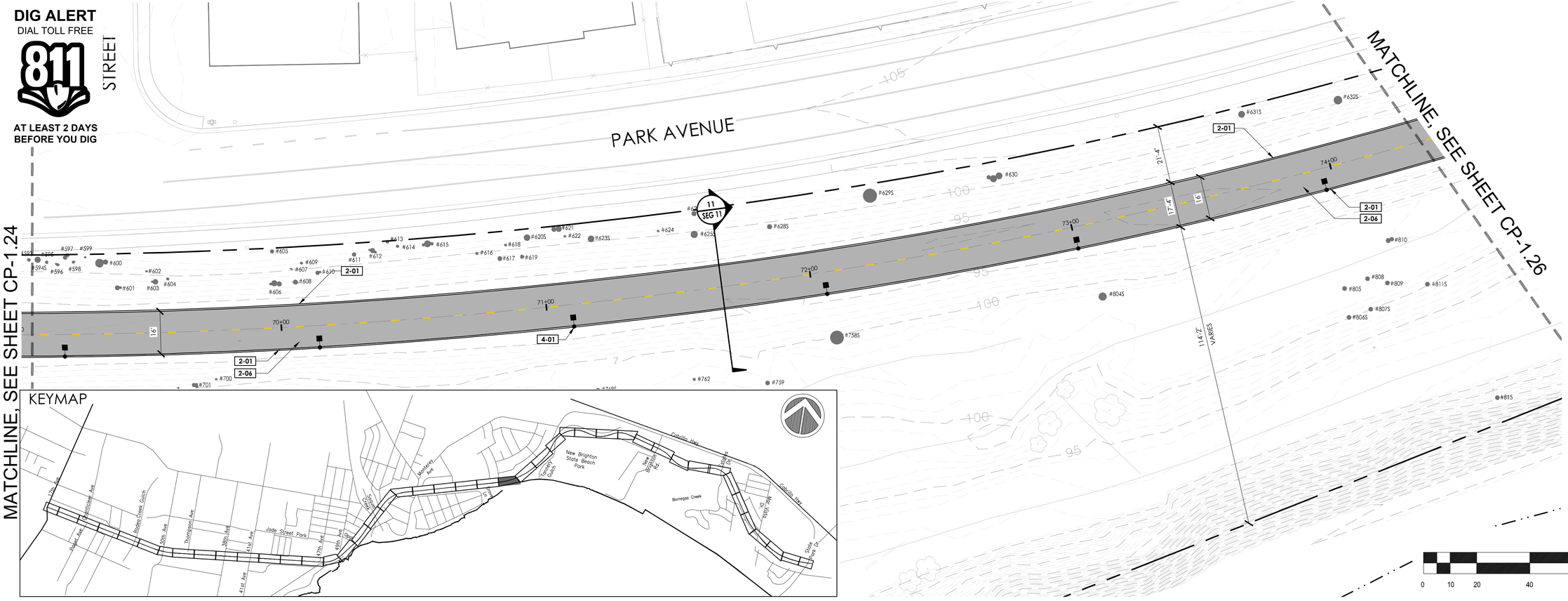

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
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- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

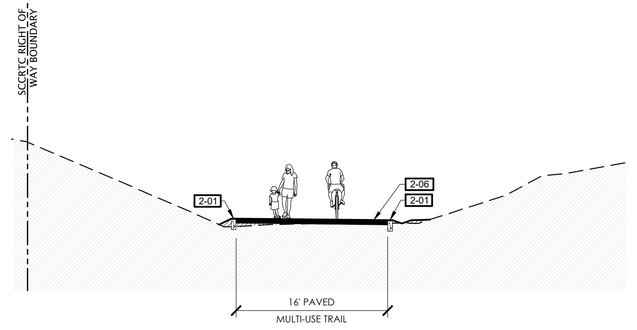
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



11 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.25
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.25, Images: county-logo-black-transparent.png; 270921-mrd.pgp; ; Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, XDWAR-0193-06-RBDR.dwg, XH-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XC-N:\2001\0193-06-RDS\Santa Cruz Rail\Trail Segs 10-11\Xrefdwgs, with Trail\Landscape Architecture\Task-8-Screens\5 Design\Sheet-Files\Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: MdEscalante, Plotted: Feb 11, 2023 - 10:07pm

DIG ALERT
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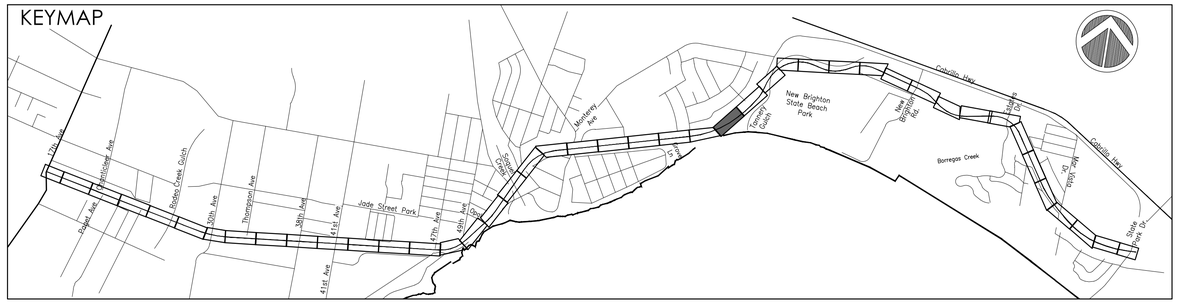
AT LEAST 2 DAYS BEFORE YOU DIG



REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
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2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

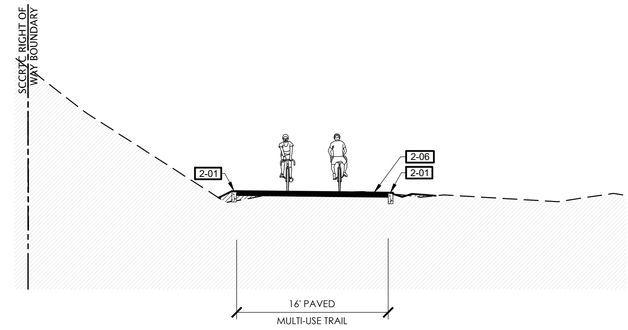
3-01	RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



12 TYPICAL SECTION
SCALE 1/8"=1'-0"

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COUNTY OF SANTA CRUZ
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701 Ocean Street, Room 410
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.26
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.26, Images: county-logo-black-transparent.png, 273971-mid.jpg>, Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XH-0193-06-RBT-S11.dwg, XT-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, SCC-0193-06-RBT-S11.dwg
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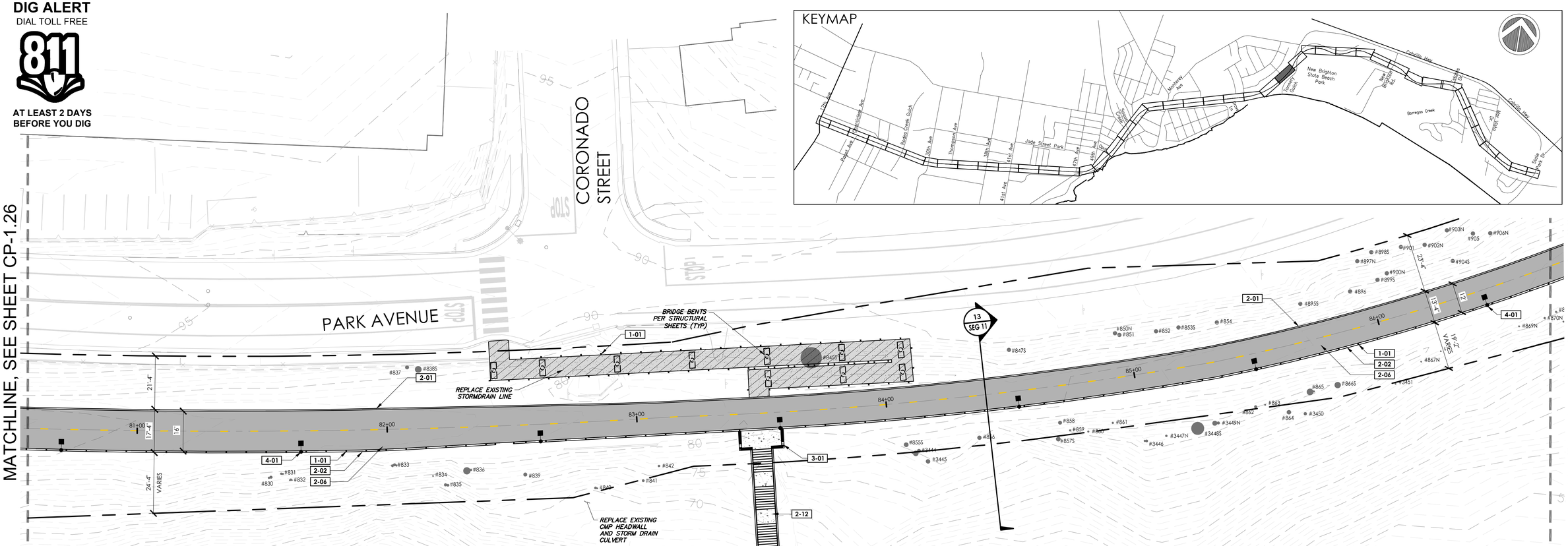
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

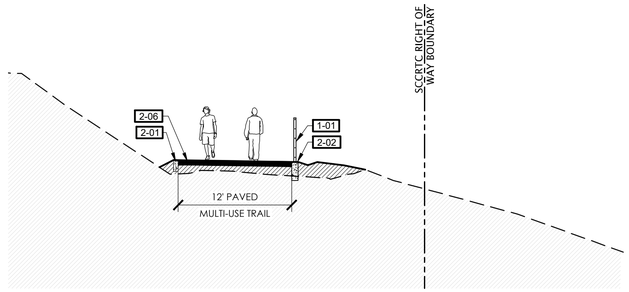
3-01	RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING RELOCATED PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



13 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.27
VAULT NO.	

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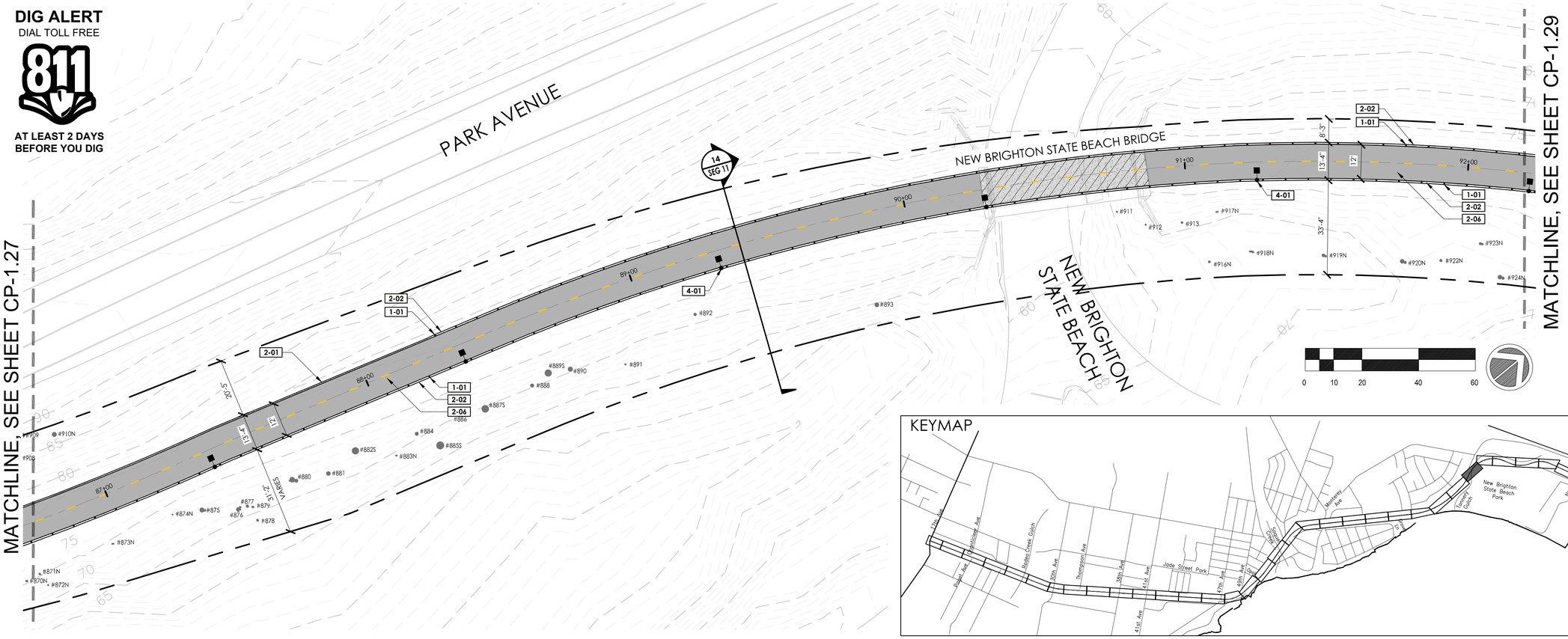
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

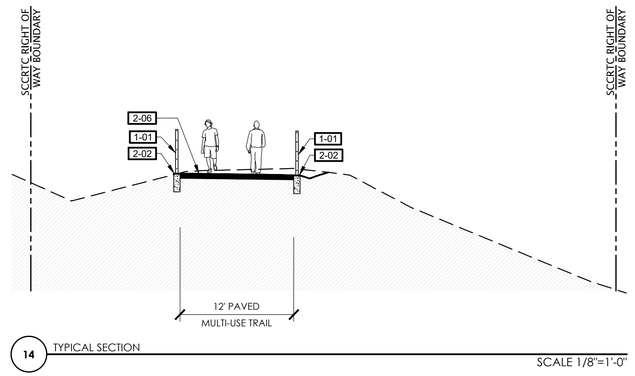
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



14 TYPICAL SECTION
SCALE 1/8"=1'-0"

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RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RBT-S11

DATE	02/10/2023
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DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.28
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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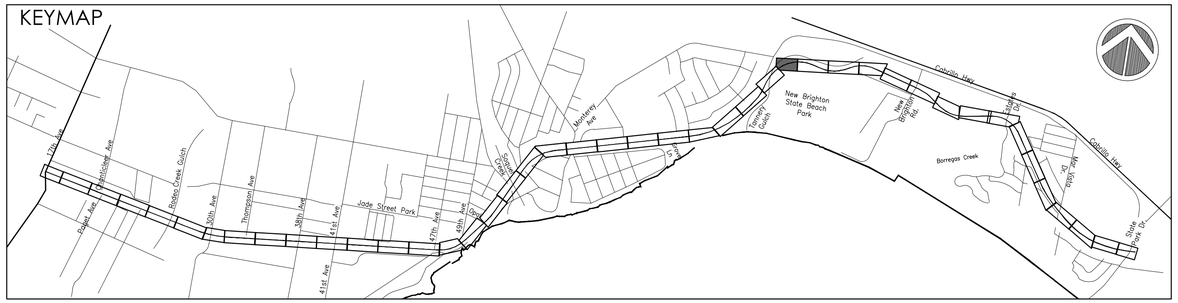
KEYMAP



REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

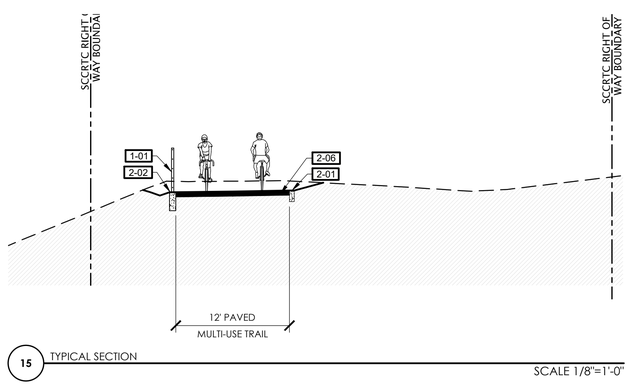
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



15 TYPICAL SECTION
SCALE 1/8"=1'-0"

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	KS		CP-1.29
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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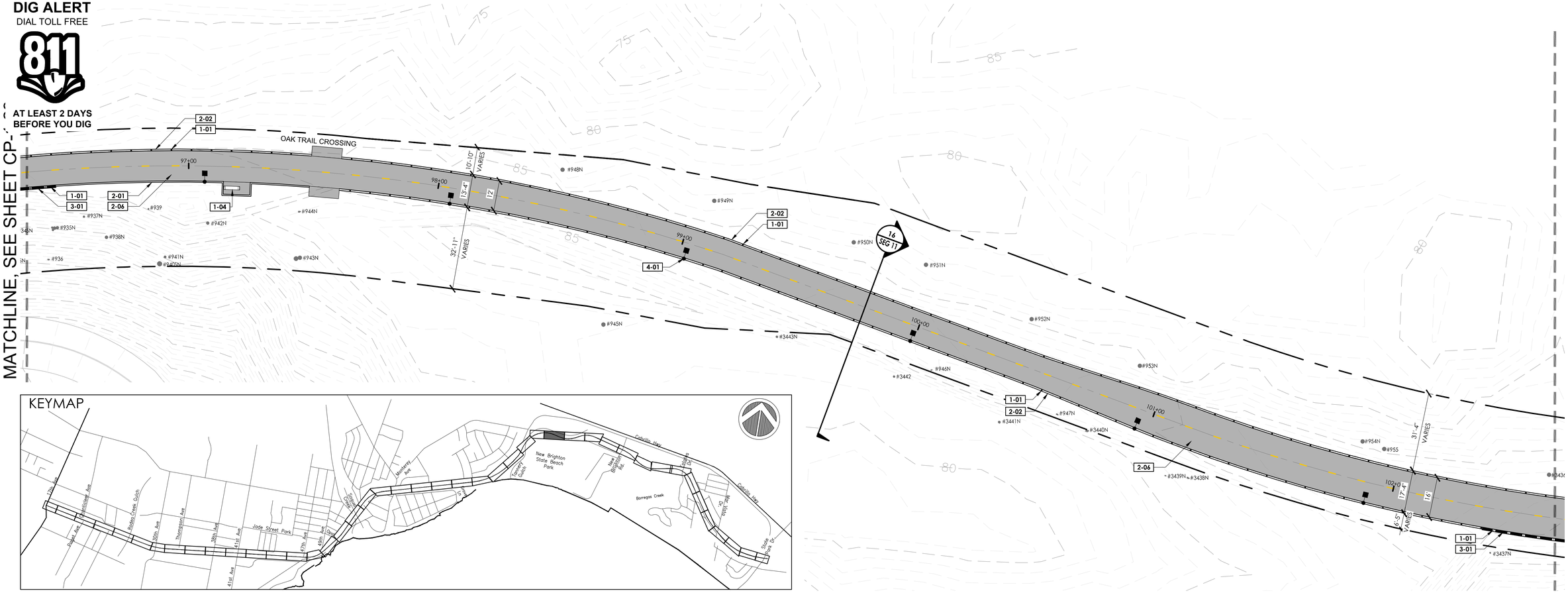
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-1.30



KEYMAP

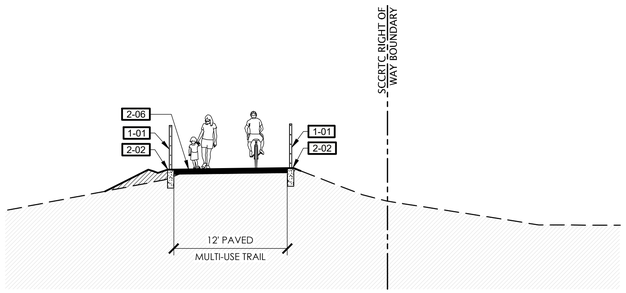
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING RELOCATED PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)

0 10 20 40 60



16 TYPICAL SECTION
SCALE 1/8"=1'-0"

MATCHLINE, SEE SHEET CP-1.31

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.30
VAULT NO.

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DIG ALERT
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811
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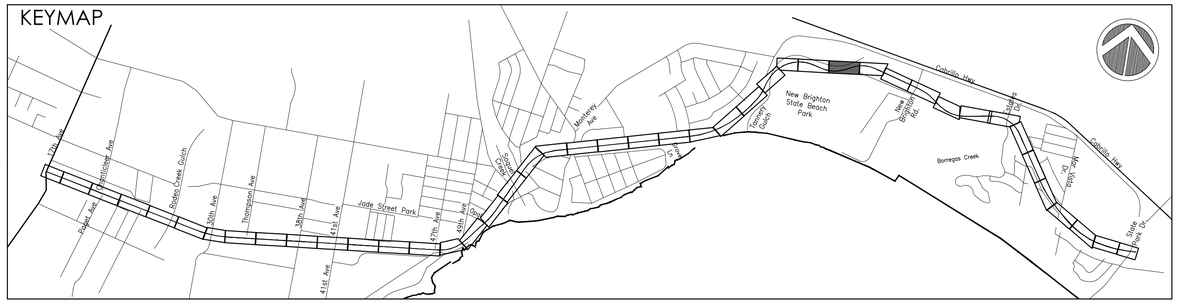
KEYMAP



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
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1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
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2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
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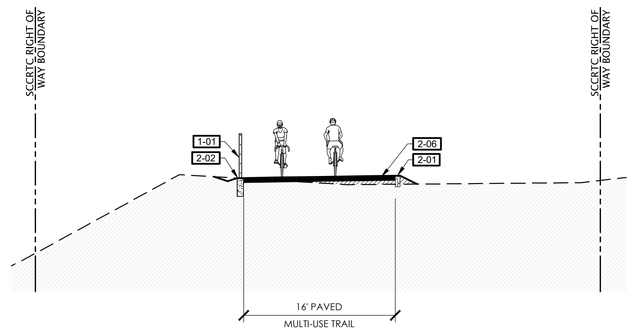

17 TYPICAL SECTION
SCALE 1/8"=1'-0"

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.31
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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DIG ALERT
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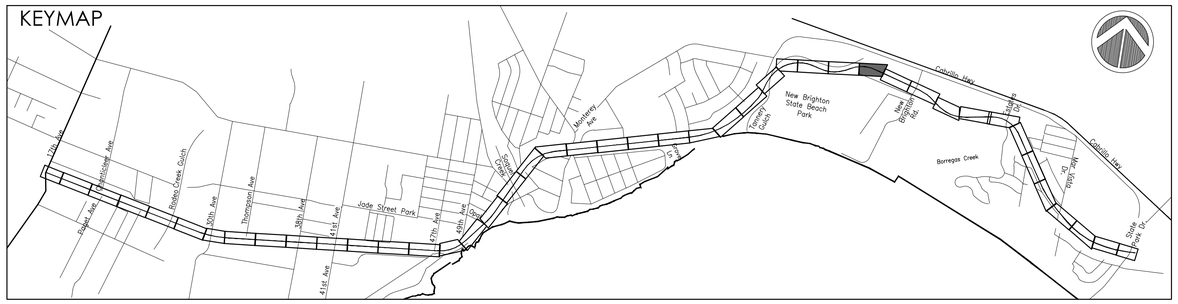
MATCHLINE, SEE SHEET CP-1.31

MATCHLINE, SEE SHEET CP-1.33



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
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2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
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	HMA PAVEMENT (TRAIL)
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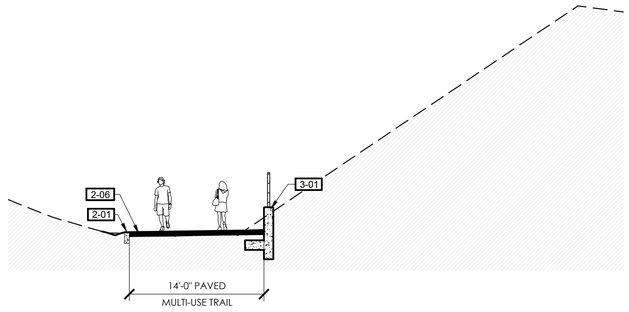

18 TYPICAL SECTION
SCALE 1/8"=1'-0"

0 10 20 40 60

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

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SCALE	AS SHOWN
	CP-1.32
VAULT NO.	

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DIG ALERT
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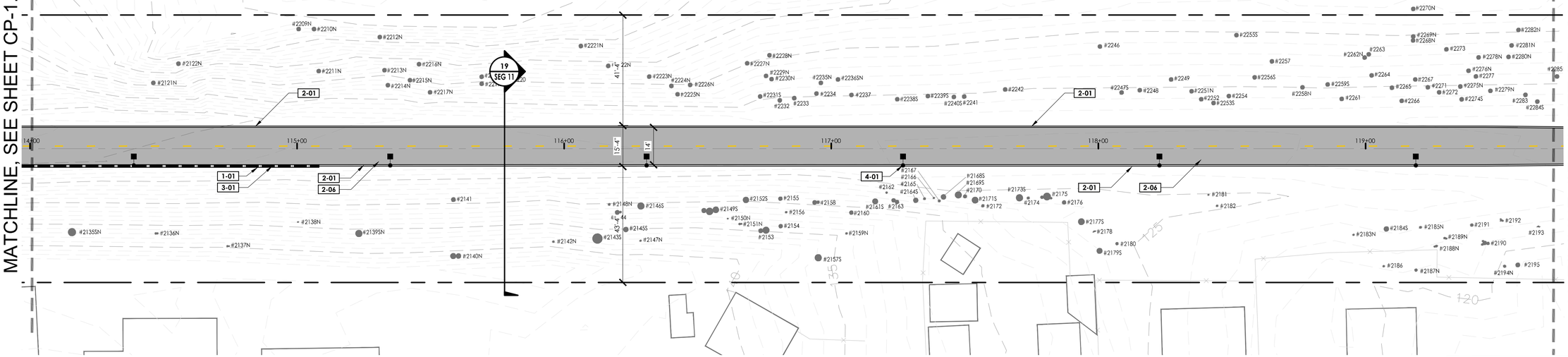
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



MATCHLINE, SEE SHEET CP-1.32



MATCHLINE, SEE SHEET CP-1.34

0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

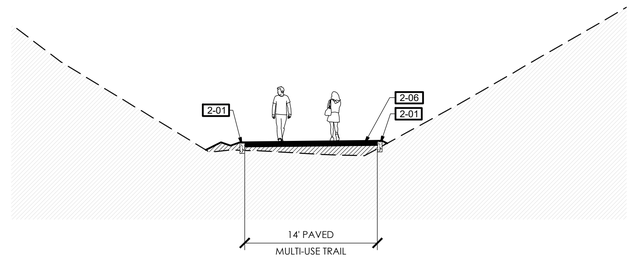
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



19 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.33
VAULT NO.

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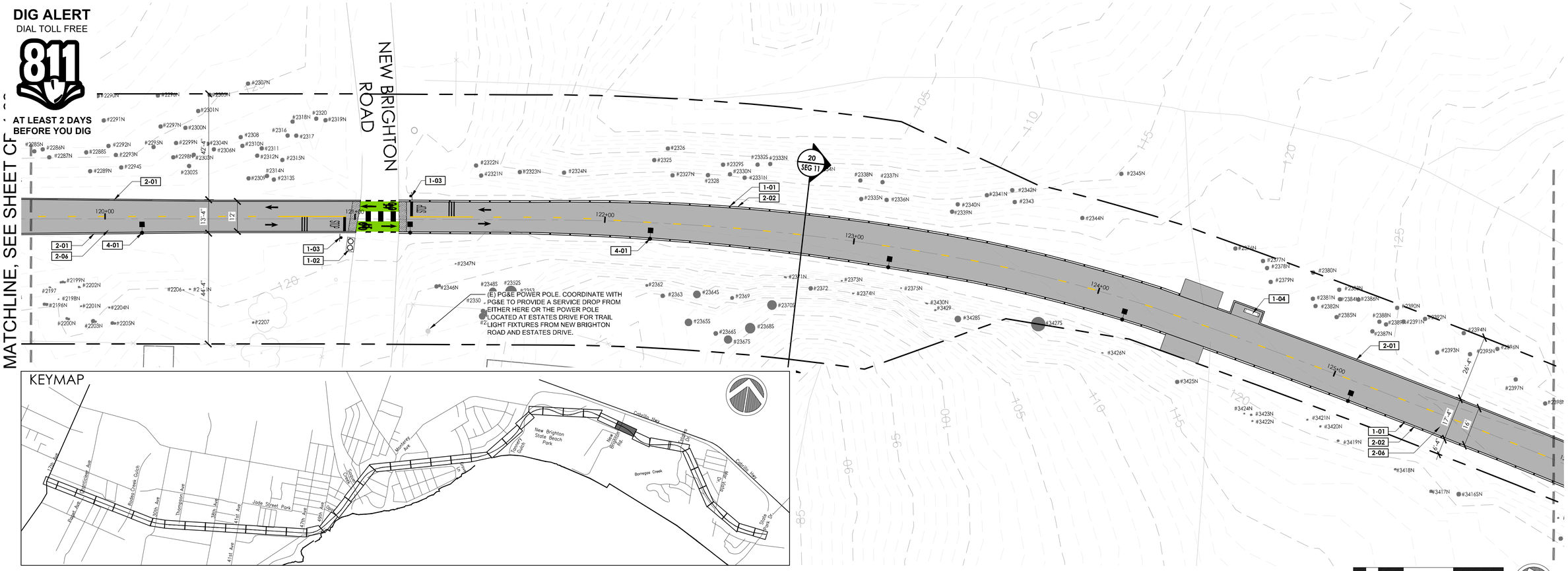


KEYMAP

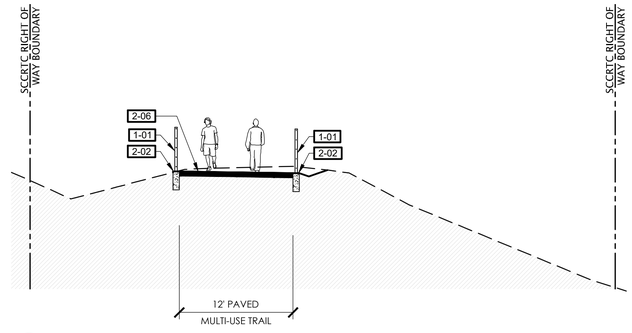
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE

0 10 20 40 60



20 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.34
VAULT NO.	

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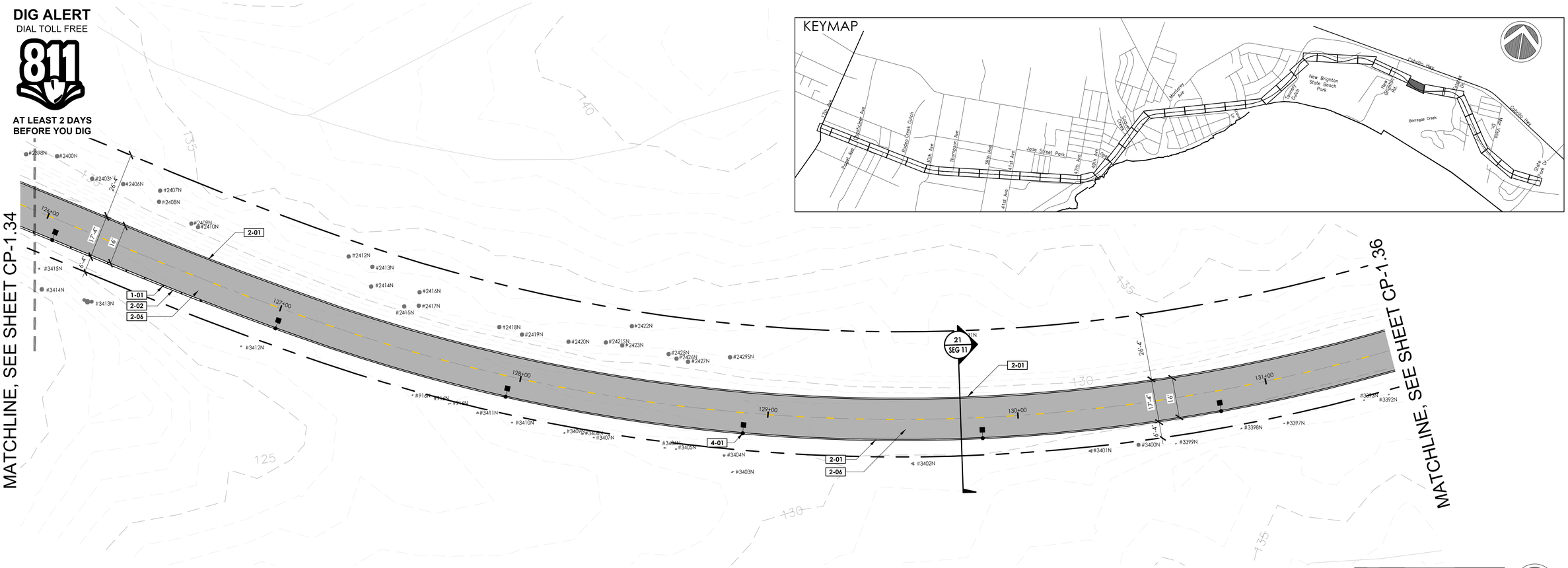
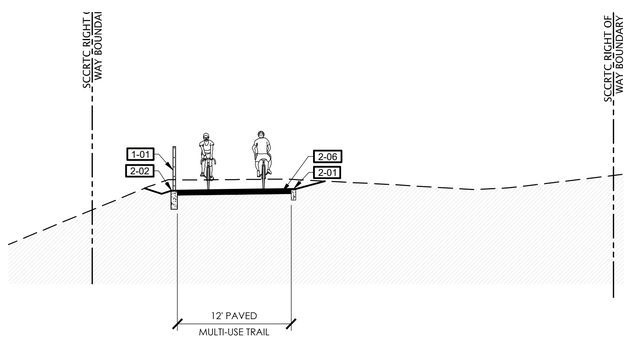


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



21 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.35
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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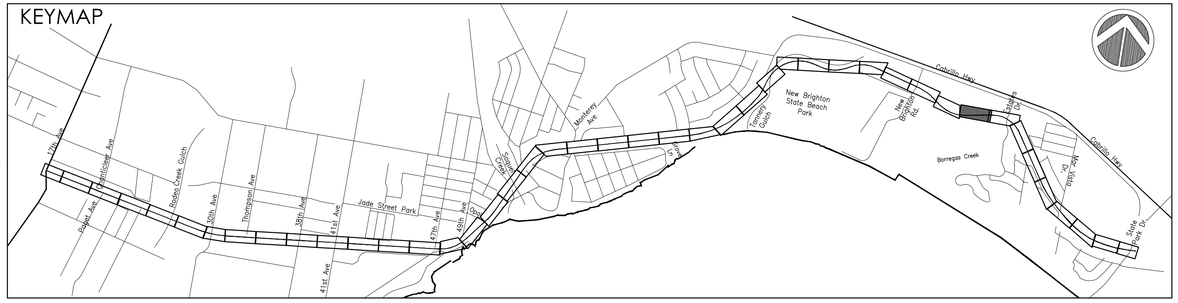
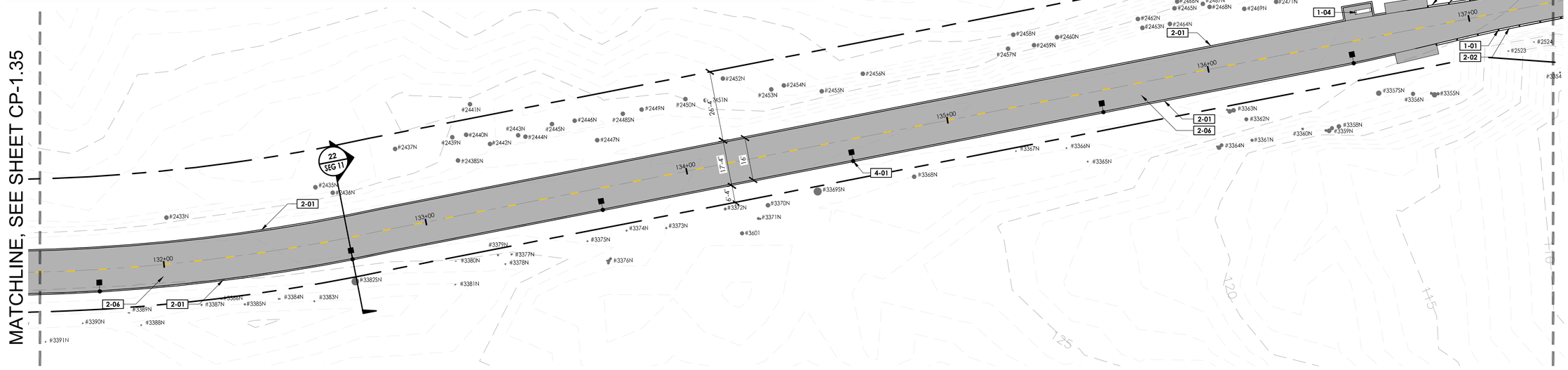
KEYMAP





REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
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2-01	6"-8" WIDE CURB
2-03	CURB RAMP
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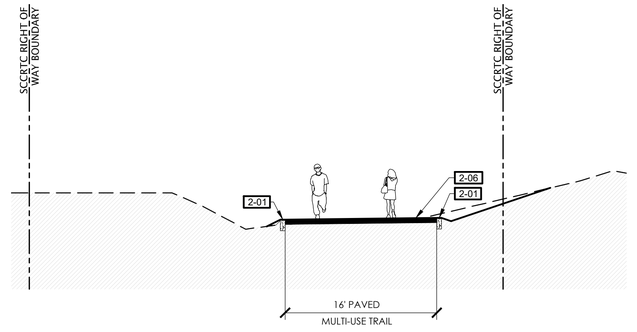
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE

0 10 20 40 60



22 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	KS		CP-1.36
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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MATCHLINE, SEE SHEET CP-1.36

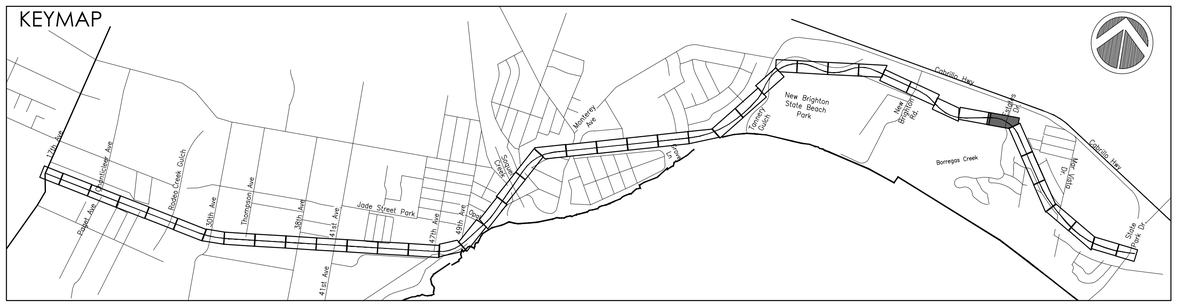
BORREGAS CREEK

ESTATES DRIVE

INSTALL HMA AND CONFORM TO EXISTING GRADES WHERE TRACK PLANS WERE REMOVED

MATCHLINE, SEE SHEET CP-1.38

KEYMAP



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
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STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
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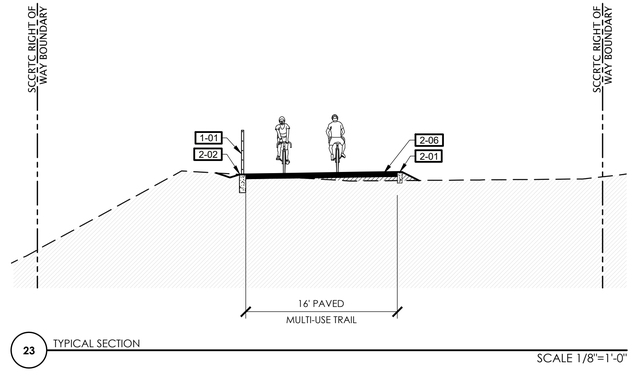
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



23 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
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DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.37
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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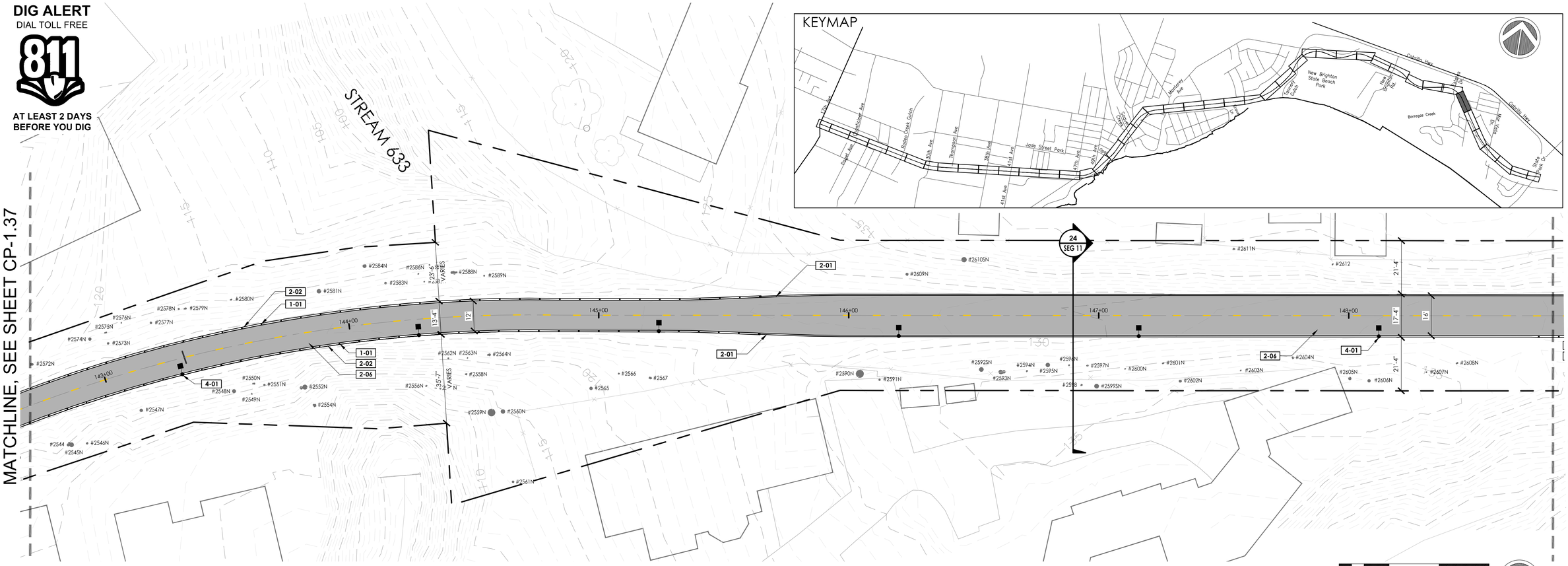
MATCHLINE, SEE SHEET CP-1.37

MATCHLINE, SEE SHEET CP-1.39



REFERENCE NOTES SCHEDULE

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1-01	FENCING OR GUARDRAIL
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STRUCTURAL	
4-01	PROPOSED LIGHT
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LEGEND

SYMBOL	DESCRIPTION
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	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
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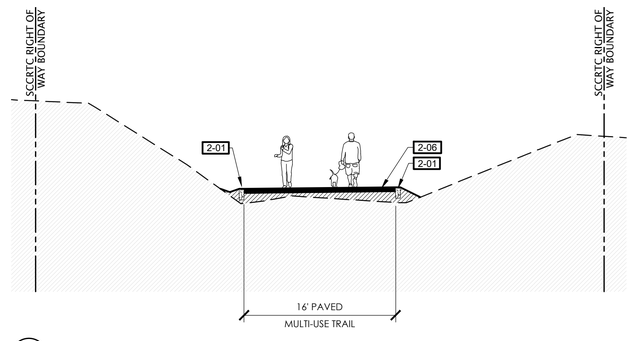
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



24 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
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DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.38
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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DIG ALERT
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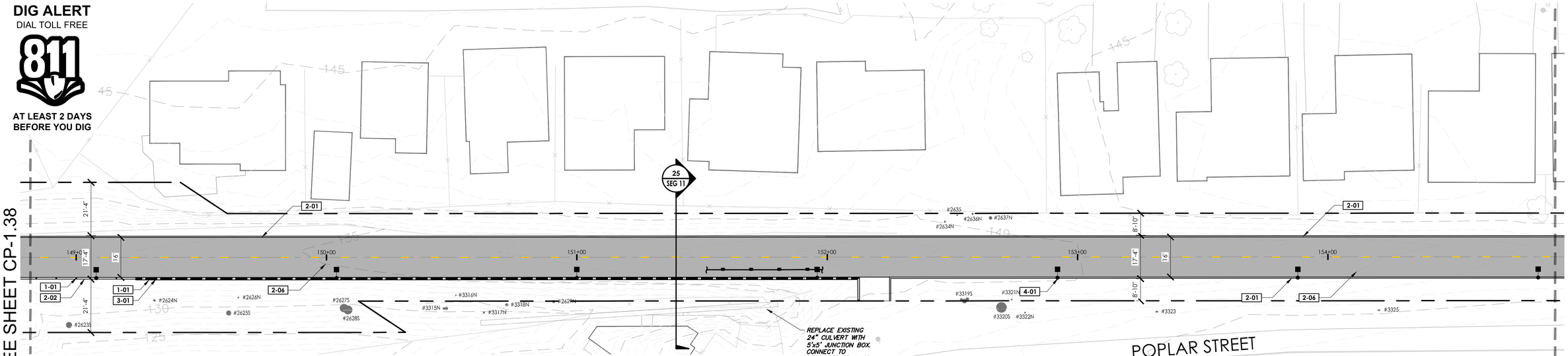
MATCHLINE, SEE SHEET CP-1.38

MATCHLINE, SEE SHEET CP-1.40





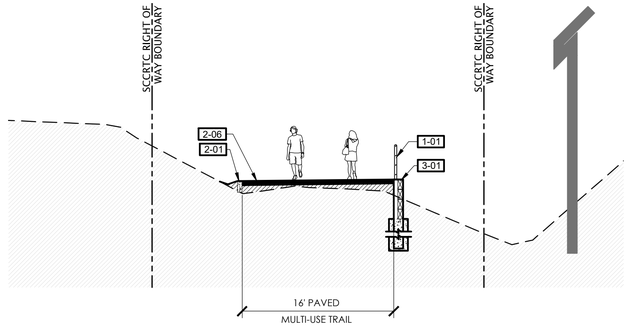
0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



25 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.39
VAULT NO.	

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KEYMAP

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

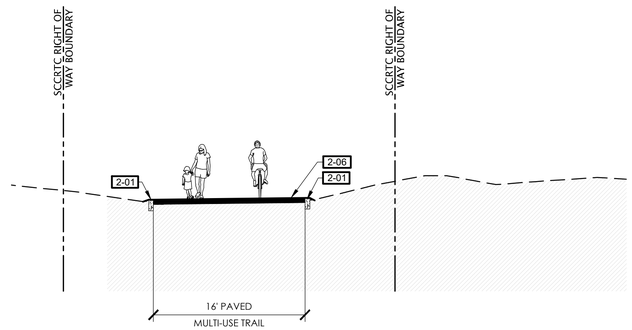
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



26 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-1.40
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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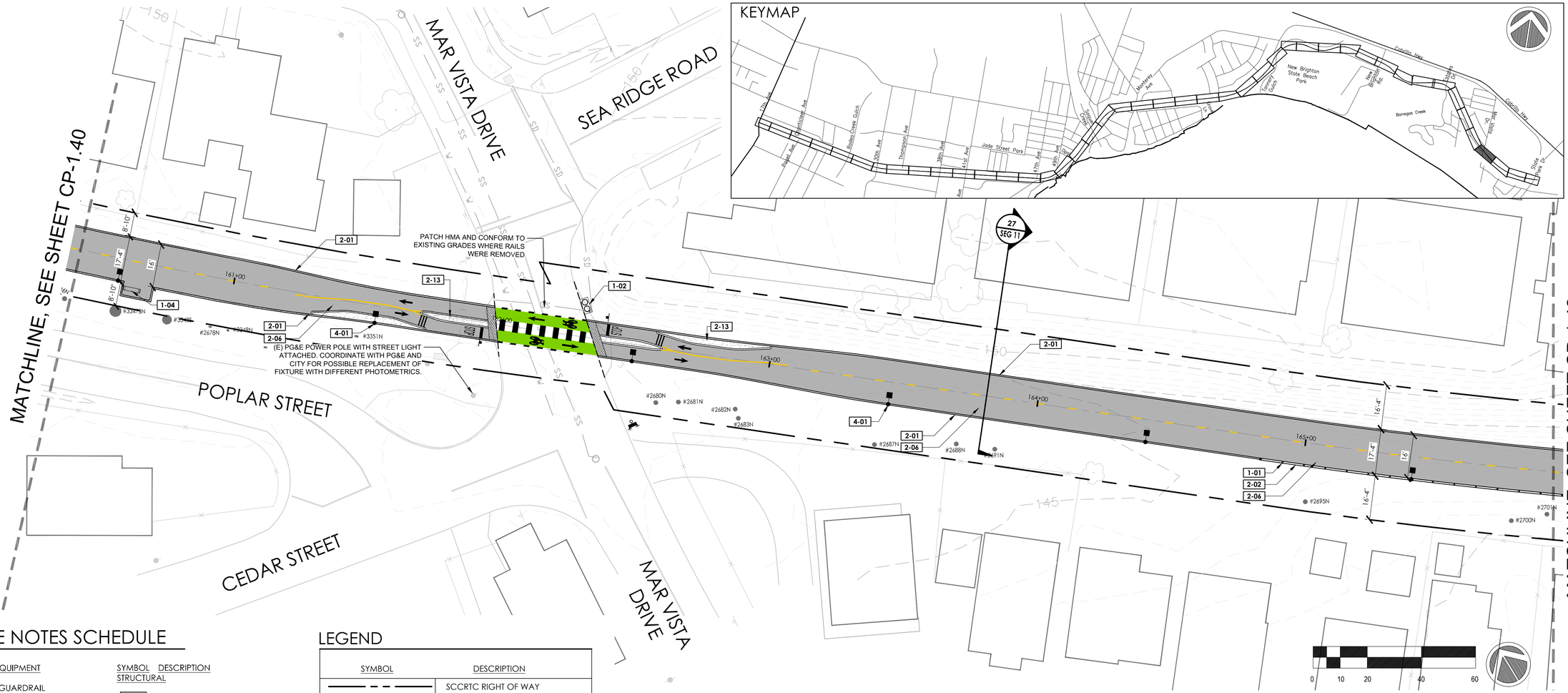
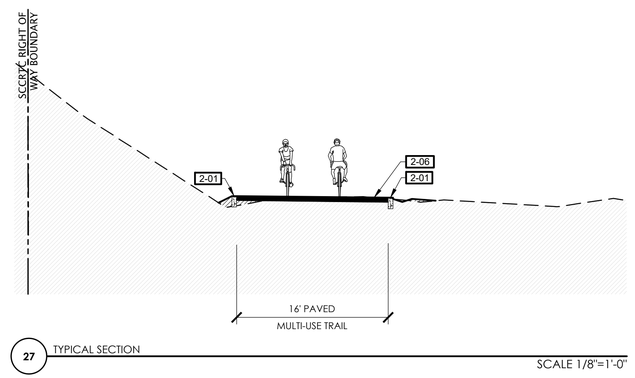


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



27 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

THE COUNTY OF SANTA CRUZ 1850

COUNTY OF
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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:
DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.41
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: CP-1.41 , Images , county-logo-Mono-transparent.png , CP2021-mod.stg , , Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, XDMAP-0193-06-RBT-S11.dwg, XH-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, SEC-0193-06-RBT-S11.dwg, N:\2020\10\193-06-RCDS-Santa-Cruz-Rail-Trail-Seg-10-11\Windows with Trail\Landscape-Architecture\Vase-to-Schematic Design\Sheet-Files\Segment 11\CP-0193-06-RBT-S11.dwg, Plotted By: MMDoolittle, Plotted: Feb 11, 2023 - 10:12am

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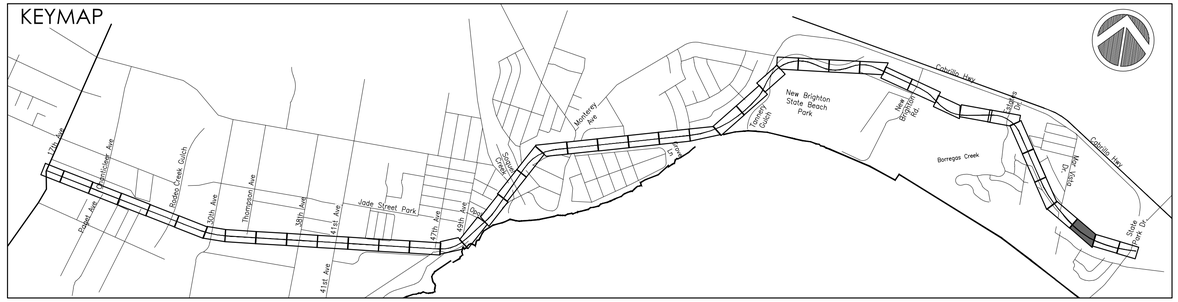
KEYMAP



MATCHLINE, SEE SHEET CP-1.41

MATCHLINE, SEE SHEET CP-1.43



0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

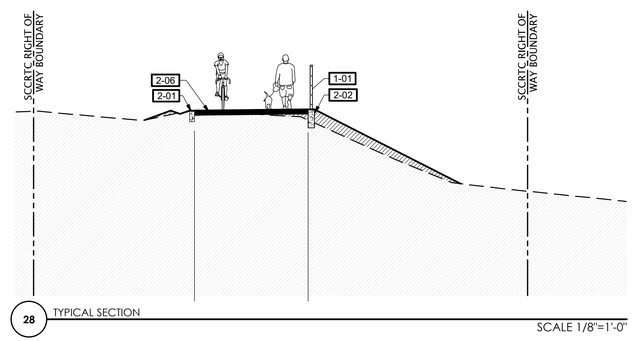
- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING RELOCATED PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



28 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	CP-1.42
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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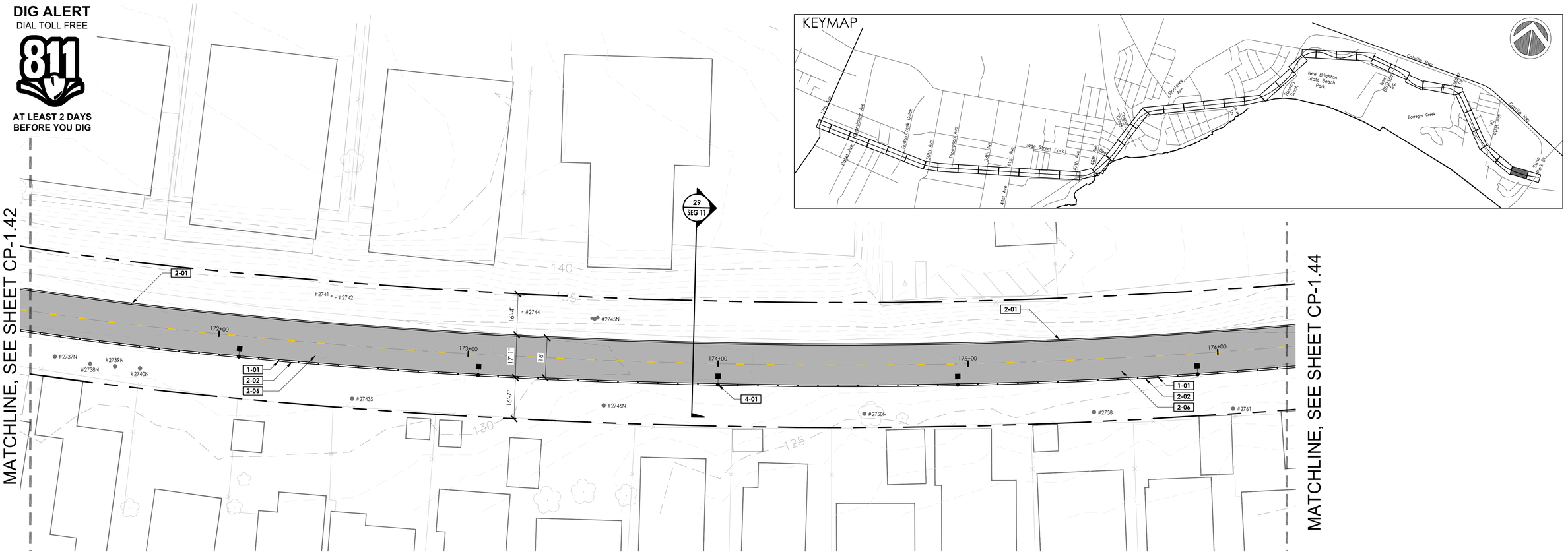

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
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EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE

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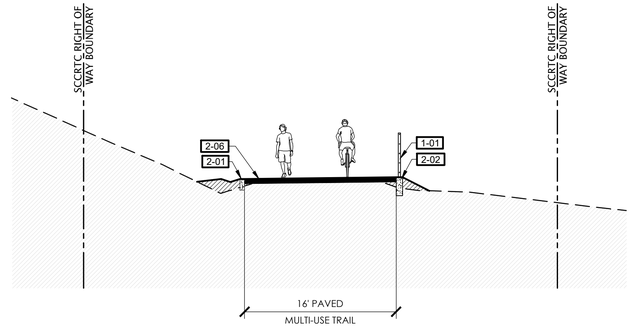

29 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
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VAULT NO.

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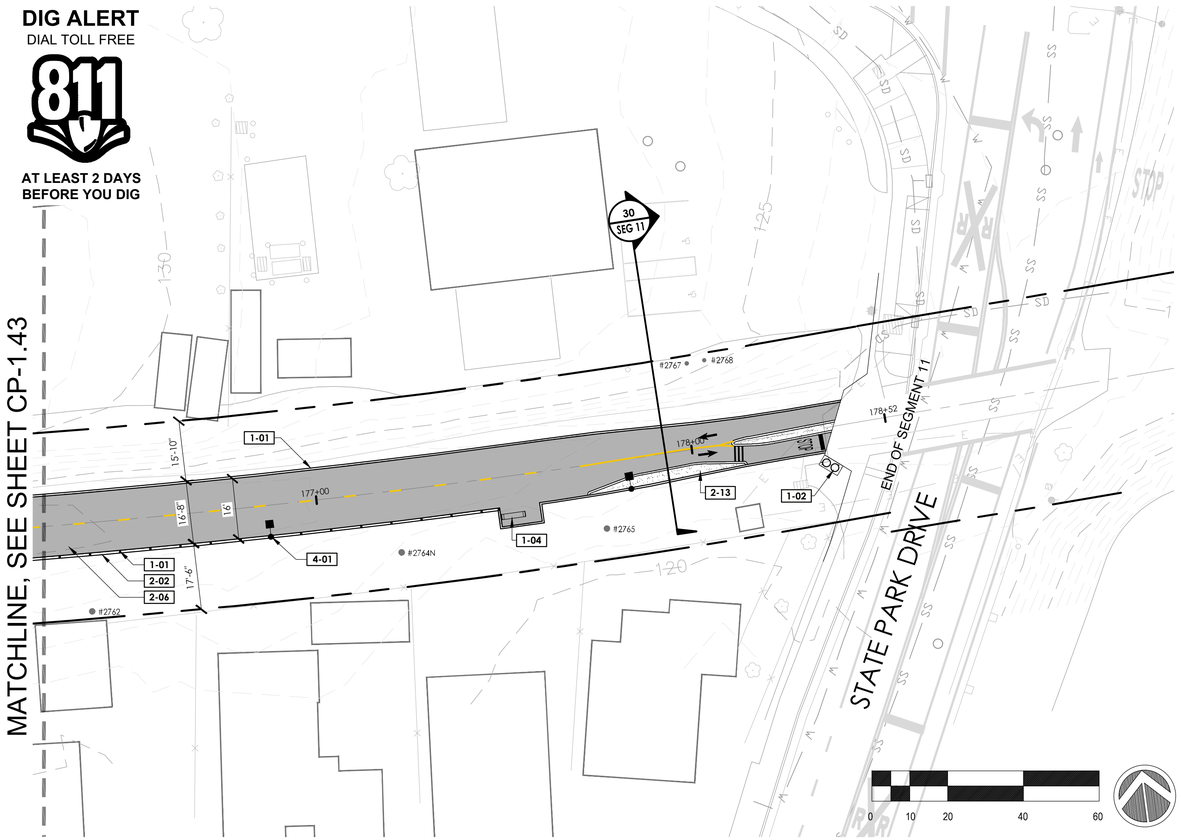
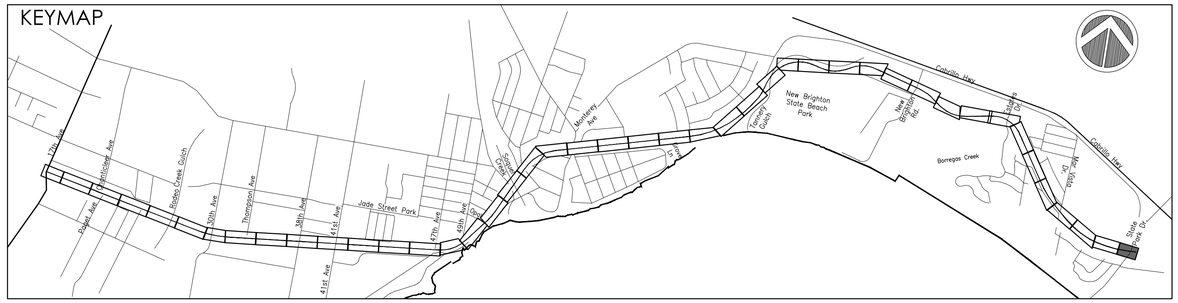
MATCHLINE, SEE SHEET CP-1.43



KEYMAP

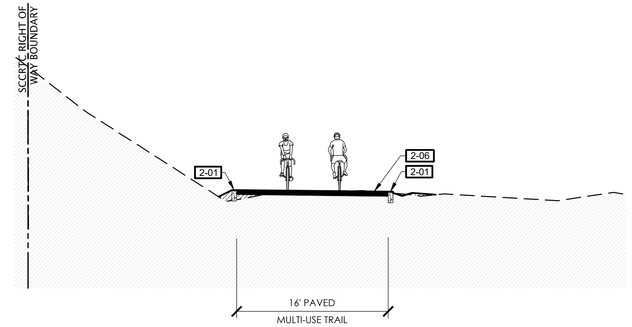


REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



30 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

CONSTRUCTION KEYNOTE PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-06-RBT-S11

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	KS		CP-1.44
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

Layout Tab Name: CP-1.44, Images: county-logo-black-transparent.png, 273093-mid.jpg, , Xrefs: XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XH-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XS-0193-06-RBT-S11.dwg, Plotted By: KMDubielski, Plotted: Feb 11, 2023 - 10:12pm
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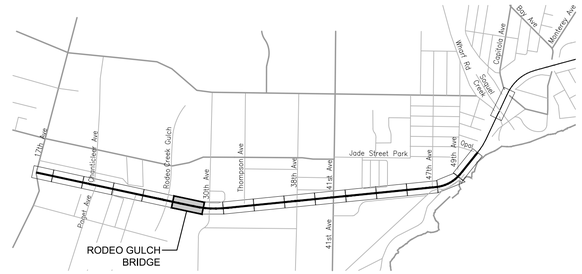
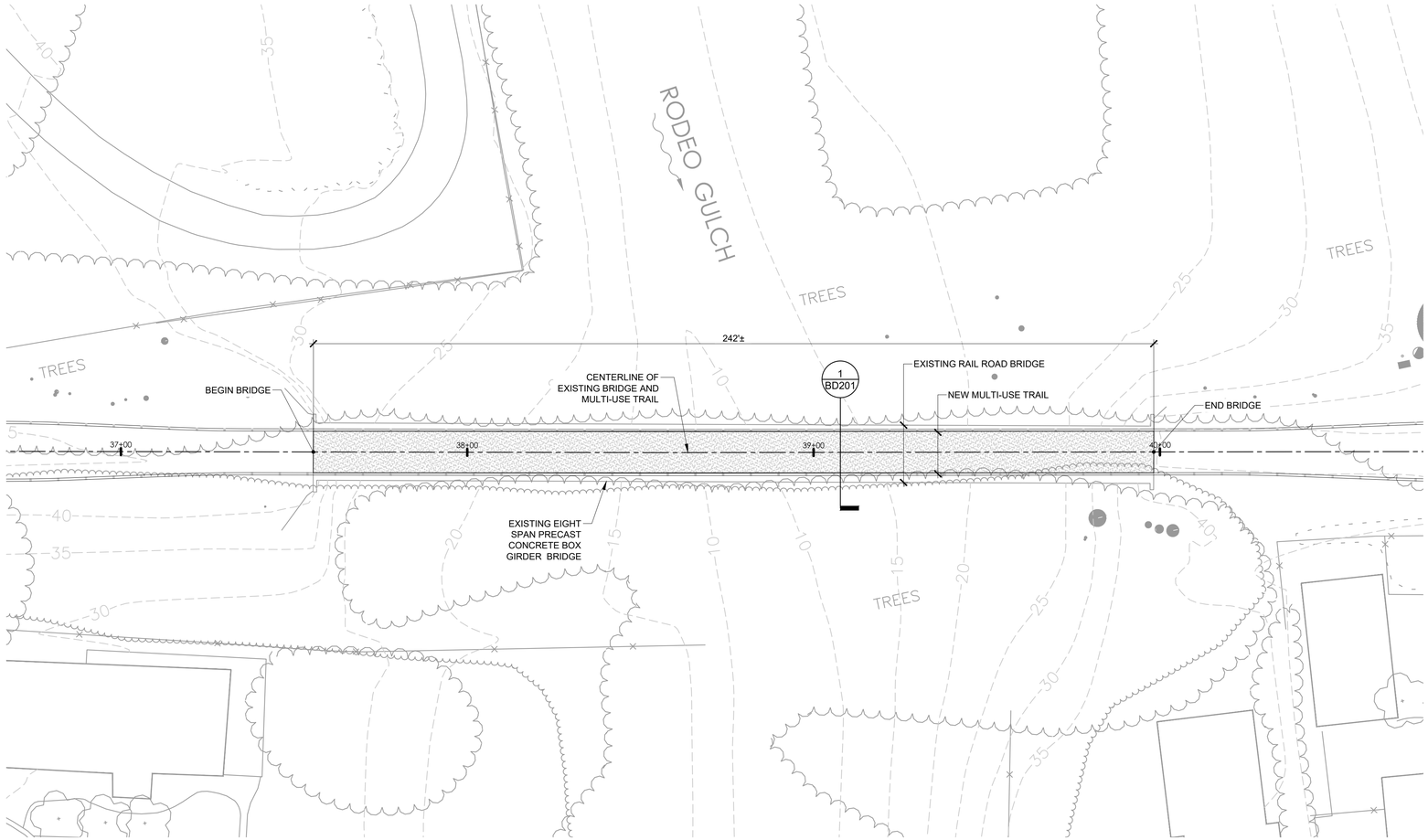
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



STRUCTURAL KEY MAP - SEGMENT 10

SCALE: NTS



BRIDGE PLAN

SCALE: 1" = 20'

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
RODEO GULCH BRIDGE GENERAL PLAN SHEET

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN EDD	BP-1.01
DRAWING #:	DESIGN PD	VAULT NO.
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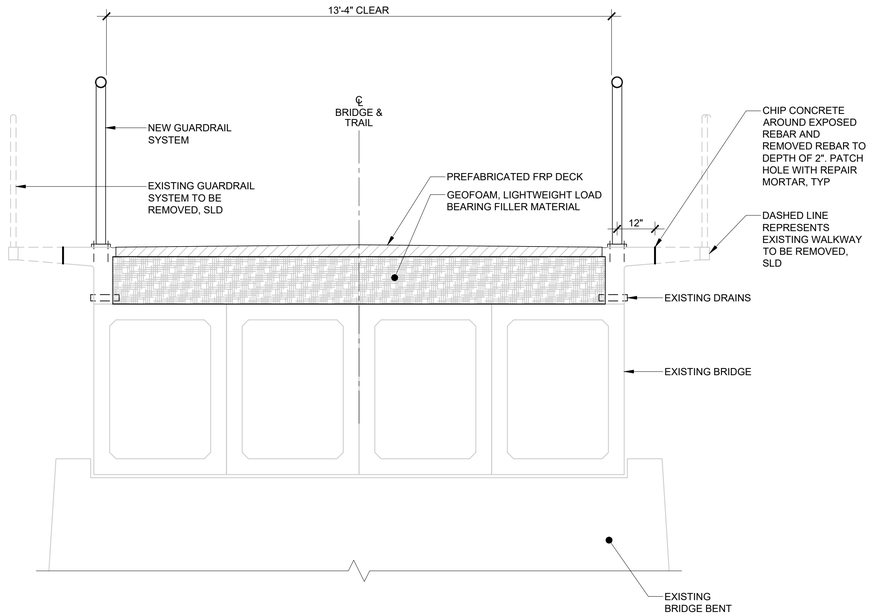
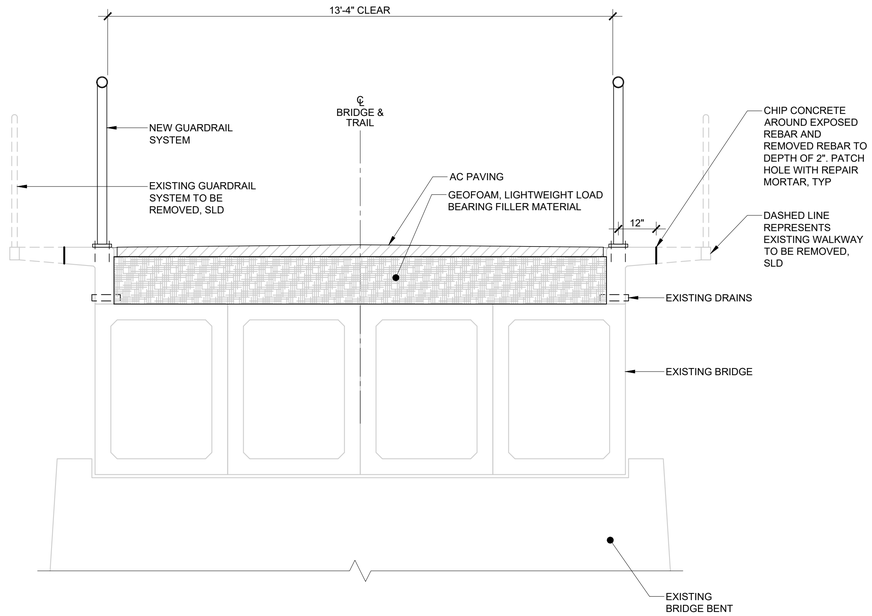
TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23



FRP DECK OPTION 2

SCALE: 1/2" = 1'-0"



AC PAVING OPTION 1

SCALE: 1/2" = 1'-0"

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
RODEO GULCH BRIDGE DETAILS

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	02/10/2023
DRAWN	EDD
DESIGN	PD
CHECKED	PD

SCALE AS SHOWN
BD-1.01
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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DIAL TOLL FREE
811
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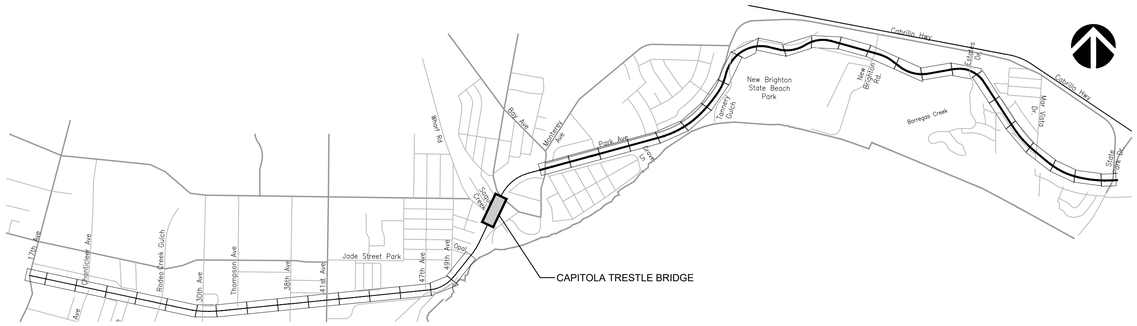
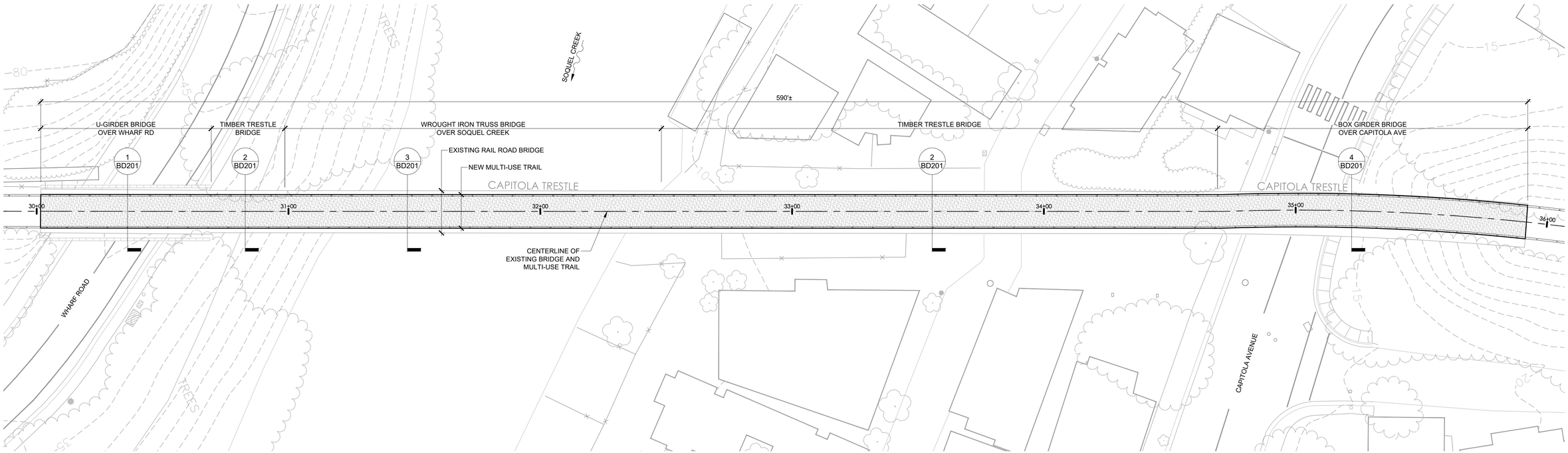


STRUCTURAL KEY MAP

SCALE: NTS



BRIDGE PLAN

SCALE: 1" = 10'

10' 0 5' 10' 20'
1" = 10'

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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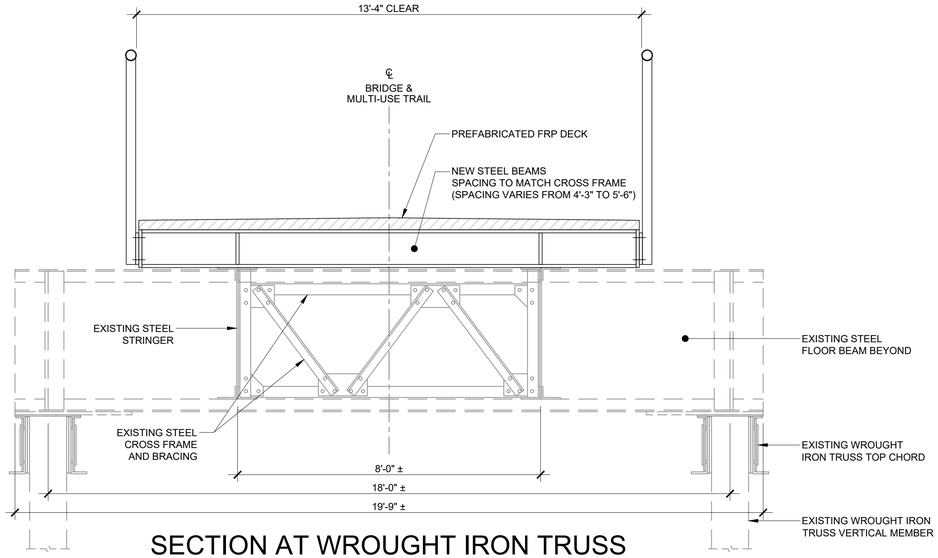
RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
CAPITOLA TRESTLE BRIDGE GENERAL PLAN SHEET

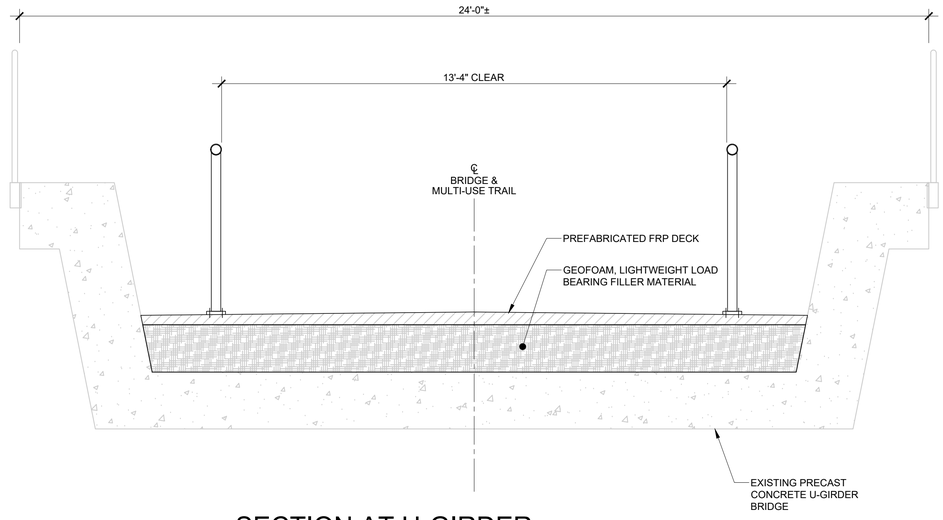
REFERENCES	DATE 02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN ED	BP-2.01
DRAWING #:	DESIGN PD	VAULT NO.
	CHECKED PD	



SECTION AT WROUGHT IRON TRUSS
SOQUEL CREEK BRIDGE

3

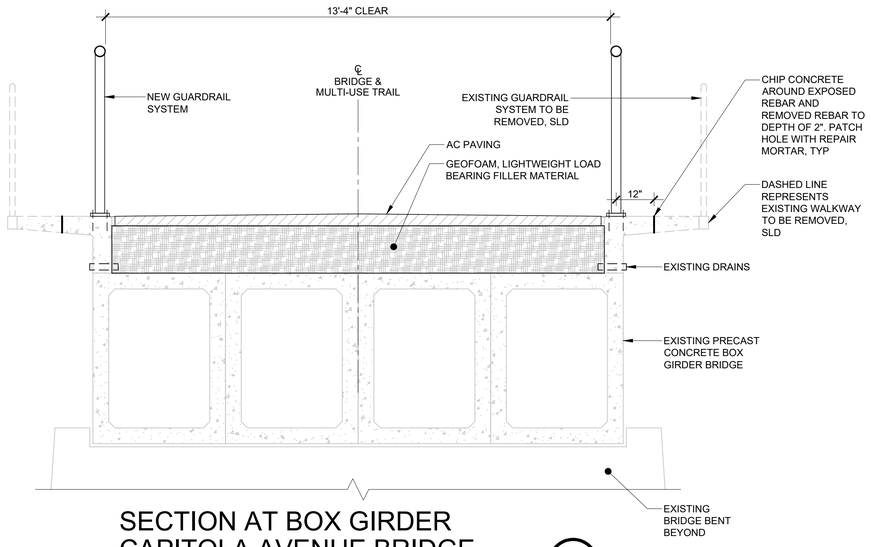
SCALE: 1/2" = 1'-0"



SECTION AT U-GIRDER
WHARF ROAD BRIDGE

1

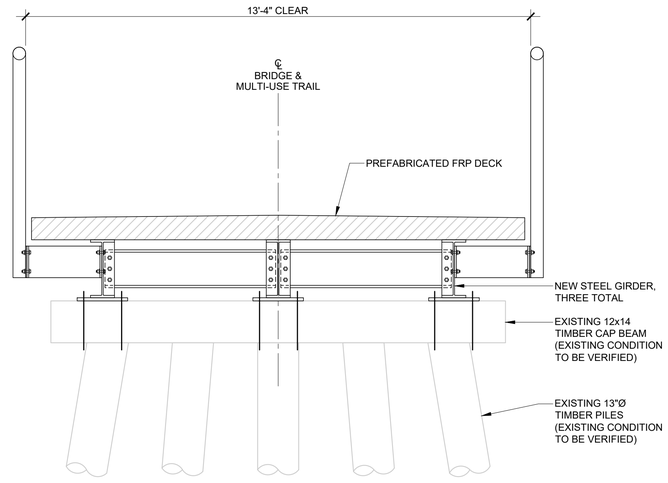
SCALE: 1/2" = 1'-0"



SECTION AT BOX GIRDER
CAPITOLA AVENUE BRIDGE

4

SCALE: 1/2" = 1'-0"



SECTION AT TIMBER TRESTLE

2

SCALE: 1/2" = 1'-0"

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
CAPITOLA TRESTLE BRIDGE DETAILS

REFERENCES	DATE	02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN	EDD	BD-2.01
DRAWING #:	DESIGN	PD	VAULT NO.
	CHECKED	PD	

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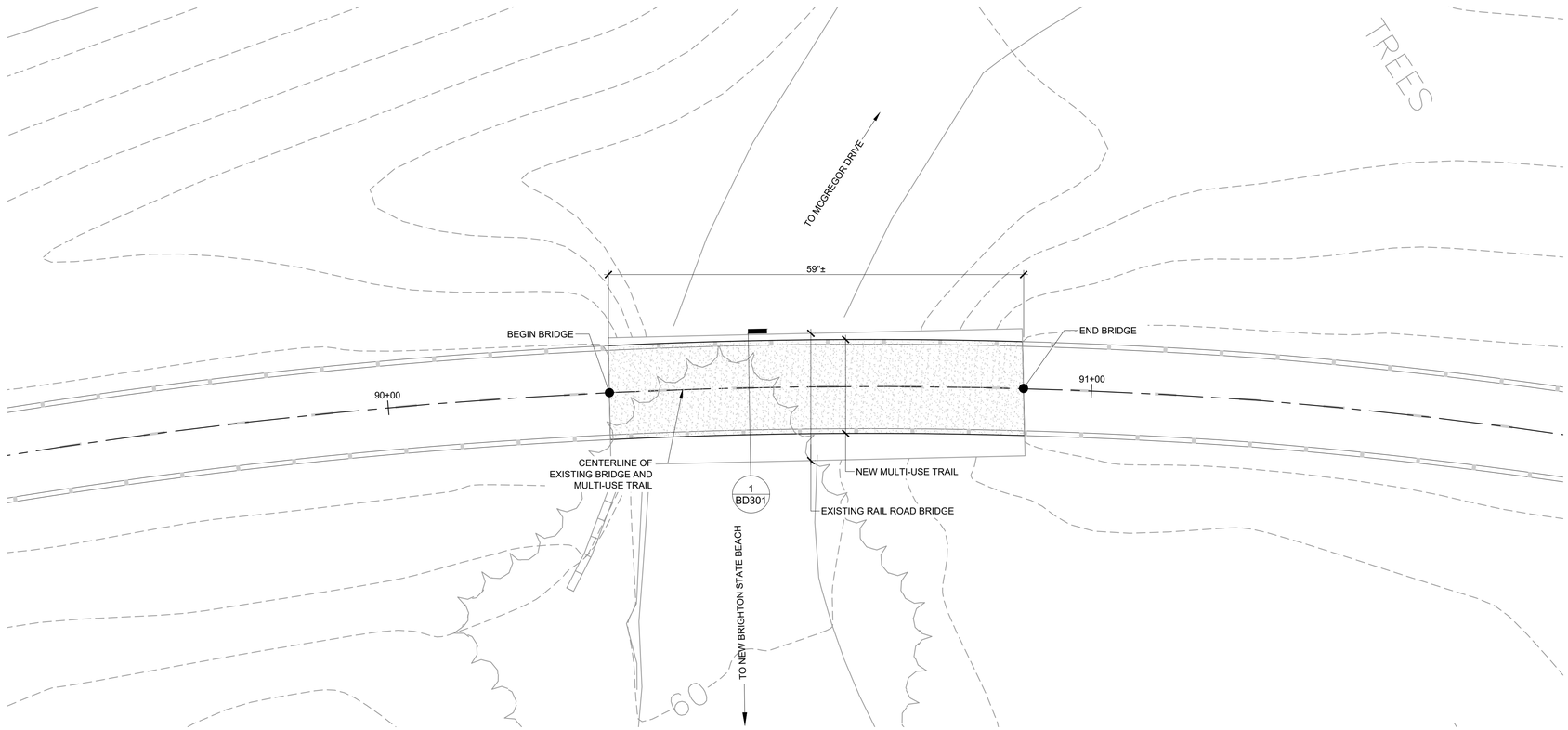
STRUCTURAL KEY MAP - SEGMENT 11

SCALE: NTS



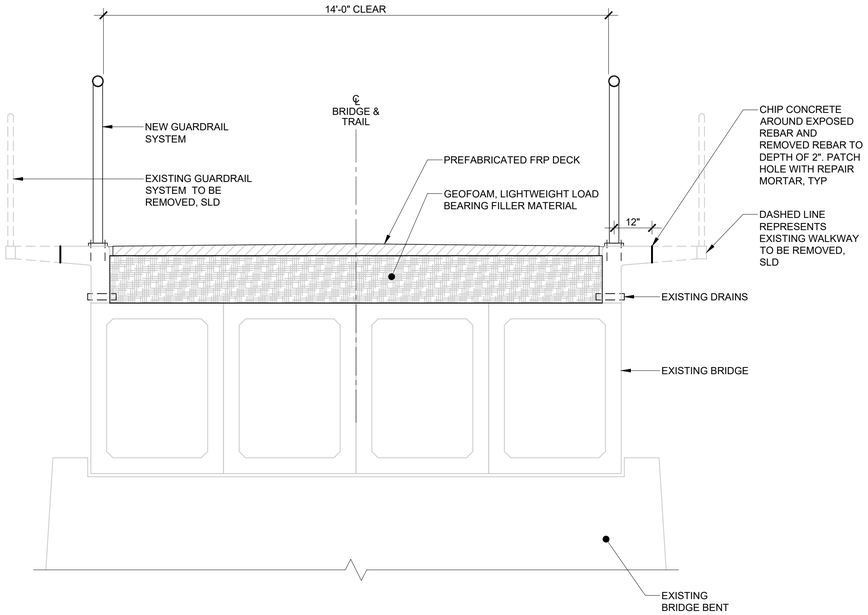
BRIDGE PLAN

SCALE: 1" = 10'

10' 0 5' 10' 20'
1" = 10'

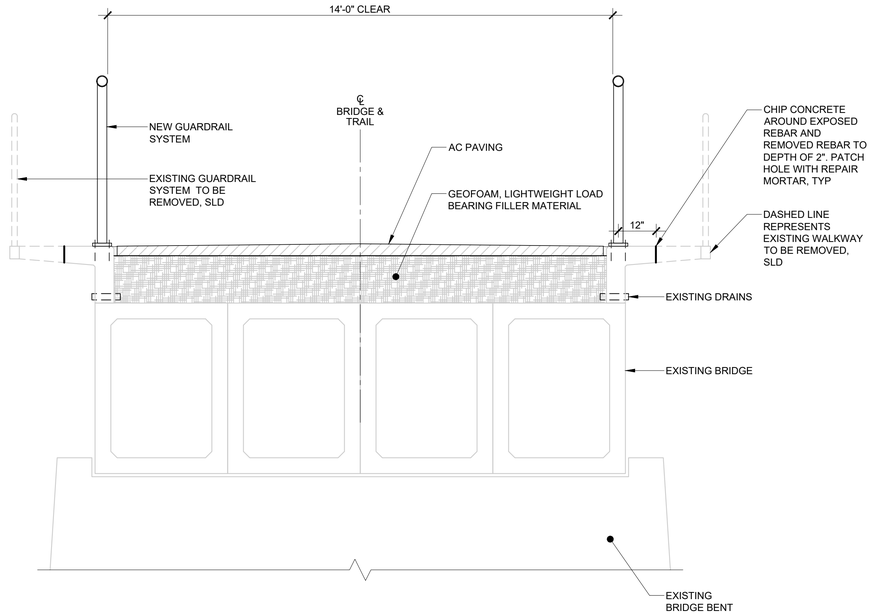
TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

MME CIVIL • STRUCTURAL ENGINEERING 224 Walnut Avenue • Suite B 831.426.3186 • www.m-me.com	REVISIONS	COUNTY OF SANTA CRUZ DEPARTMENT OF PUBLIC WORKS 701 Ocean Street, Room 410 Santa Cruz, CA 95060	RAIL TRAIL SEGMENTS 10 & 11 TRAIL ON THE RAIL LINE (INTERIM TRAIL) NEW BRIGHTON STATE BEACH BRIDGE GENERAL PLAN SHEET	REFERENCES FIELD BOOK: DRAWING #:	DATE 02/10/2023 DRAWN ED DESIGN PD CHECKED PD	SCALE AS SHOWN BP-3.01 VAULT NO.



FRP DECK OPTION 2

SCALE: 1/2" = 1'-0"



AC PAVING OPTION 1

SCALE: 1/2" = 1'-0"

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RAIL TRAIL SEGMENTS 10 & 11
TRAIL ON THE RAIL LINE (INTERIM TRAIL)
NEW BRIGHTON STATE PARK BRIDGE DETAILS

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN ED	BD-3.01	
DRAWING #:	DESIGN PD	VAULT NO.	
	CHECKED PD		

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

A.3, Design Option A: Interim Trail on Capitola Trestle



REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

- 1-01 FENCING OR GUARDRAIL
- 1-02 TRASH RECEPTACLE
- 1-03 PROPOSED SIGN
- 1-04 BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6"-8" WIDE CURB
- 2-03 CURB RAMP
- 2-04 DETECTABLE WARNING SURFACE
- 2-05 CONCRETE SIDEWALK
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 PREFABRICATED FRP DECKING
- 2-09 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED STAIRS
- 2-13 TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

- 3-01 RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

- 4-01 PROPOSED LIGHT
- 4-05 RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE

MATCHLINE, SEE SHEET OPT A - 1.02

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS

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RAIL TRAIL SEGMENTS 10 & 11
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL)
DESIGN OPTION A

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	05/15/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
OPT A - 1.01
VAULT NO.

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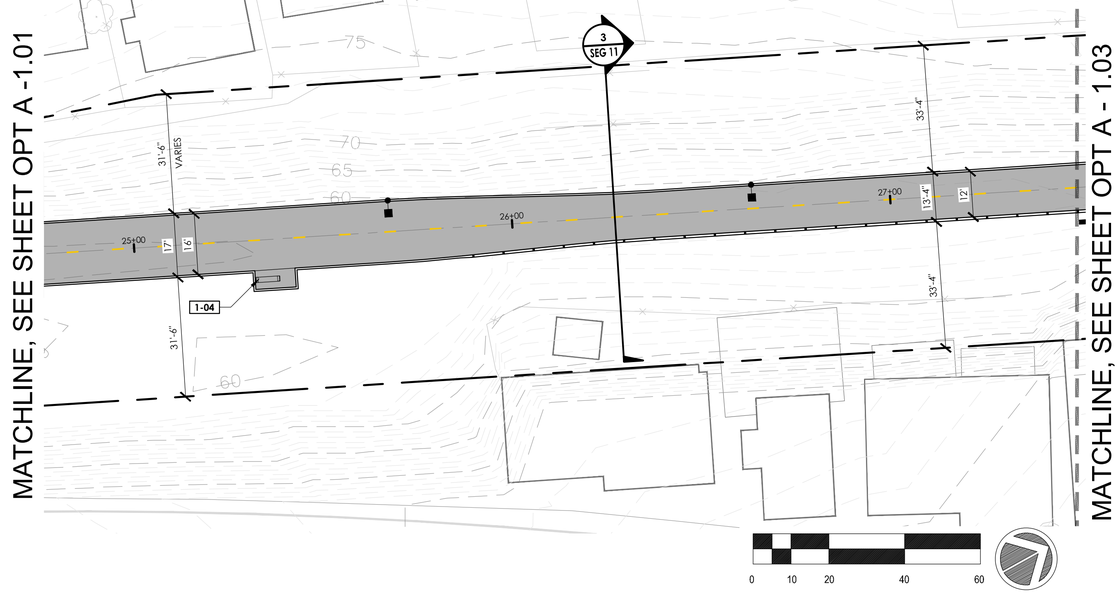


REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

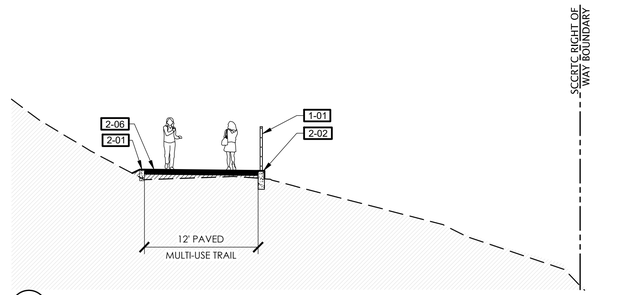
3-01	RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



3 TYPICAL SECTION
SCALE 1/8"=1'-0"

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL)

DESIGN OPTION A

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	05/15/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
OPT A - 1.02
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS

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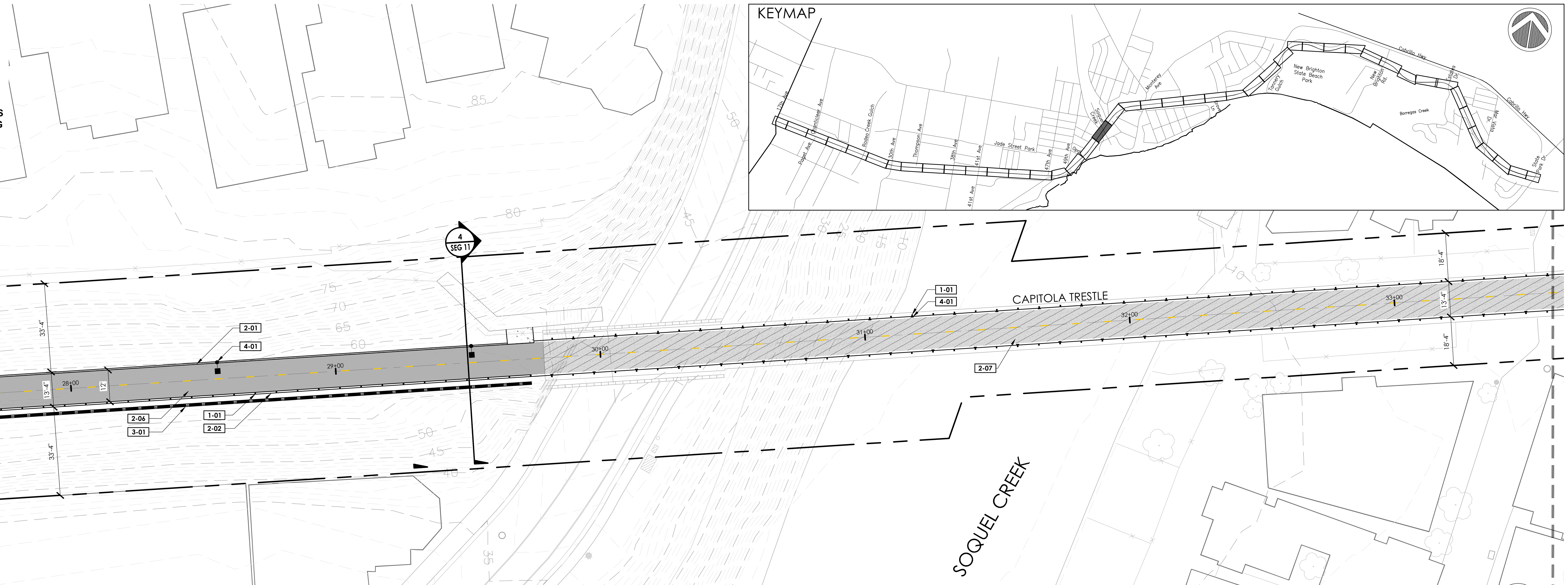
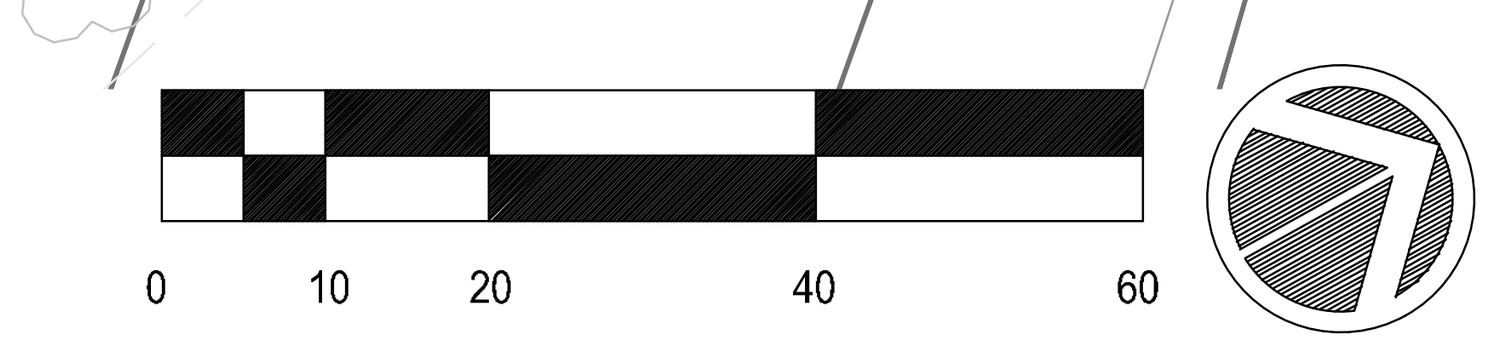
MATCHLINE, SEE SHEET OPT A - 1.02



MATCHLINE, SEE SHEET OPT A - 1.04



REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

SYMBOL	DESCRIPTION
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

SYMBOL	DESCRIPTION
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

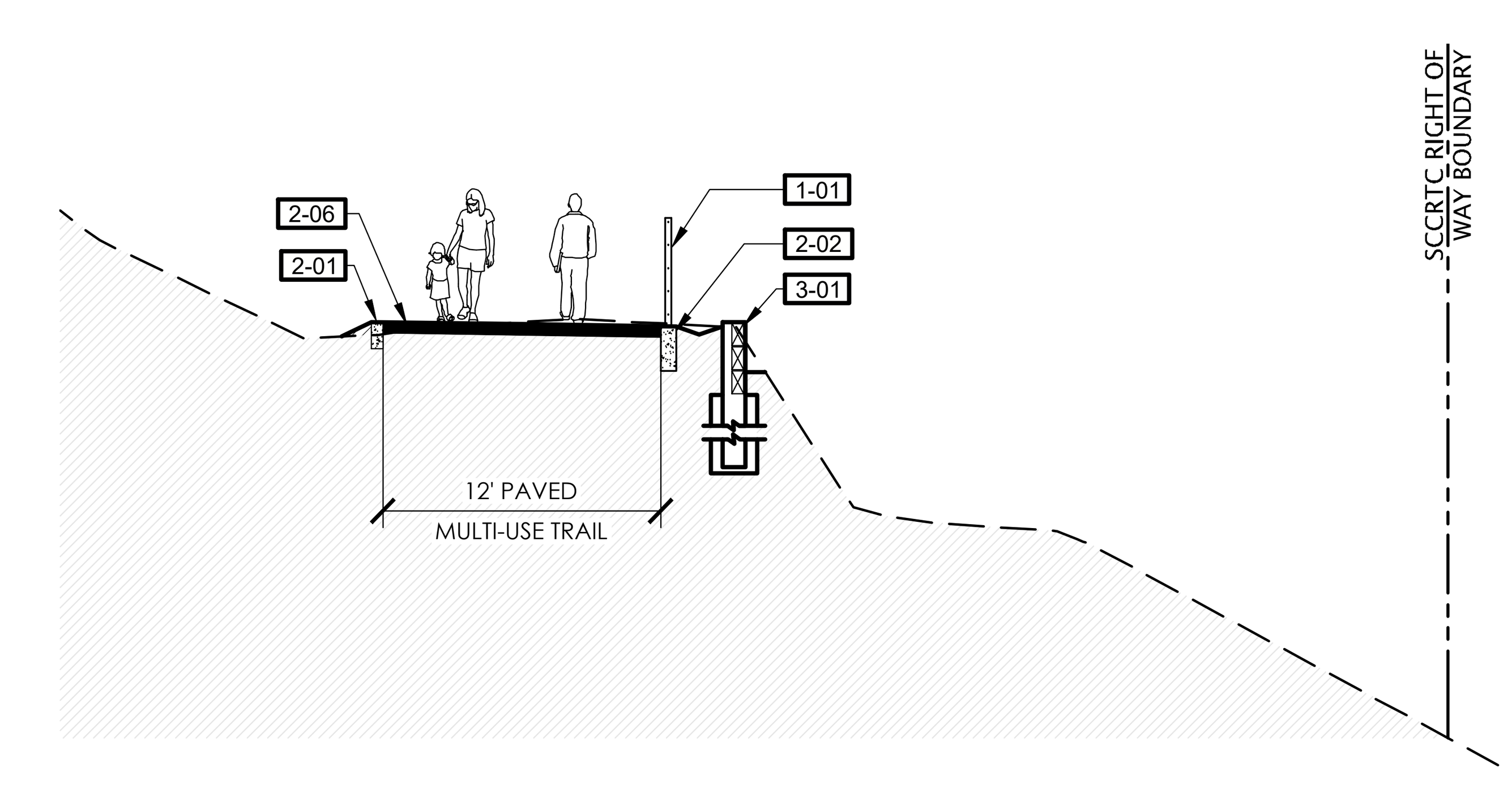
SYMBOL	DESCRIPTION
3-01	RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

SYMBOL	DESCRIPTION
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE ROADWAY LIGHT TRAIL LIGHT RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING RELOCATED PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



4 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL)

DESIGN OPTION A

REFERENCES			
FIELD BOOK:	DATE	05/15/2023	SCALE AS SHOWN
	DRAWN	MMS	OPT A - 1.03
DRAWING #:	DESIGN	KS/MS	VAULT NO.
	CHECKED	MS	

Layout Tab Name: CP-1.18, Images: county-logo-black-transparent.png; 07597-mid.jpg; , Xrefs: XTB-0193-06-RBT.dwg; XSB-0193-06-RBT-S11.dwg; KEYMAP-0193-06-RC20.dwg; XH-0193-06-RBT-S11.dwg; XT-0193-06-RWT-S11.dwg; XC-0193-06-RBT-S11.dwg; SEC-0193-06-RBT-S11.dwg
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MATCHLINE, SEE SHEET OPT A - 1.03

MATCHLINE, SEE SHEET OPT A - 1.05

CAPITOLA AVENUE

CAPITOLA TRESTLE

KEEP CLEAR

KEYMAP



1-01 FENCING OR GUARDRAIL
4-01 PROPOSED LIGHT
3-01 RETAINING WALL
2-02 6"-8" WIDE CURB
2-07 PREFABRICATED FRP DECKING
2-12 PROPOSED STAIRS

4 SEG 11

18'-4" 13'-4" 18'-4"

34+00 35+00 36+00 37+00 38+00 39+00

16' 16'-4" 17'-4" 16'-4"

0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
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2-04	DETECTABLE WARNING SURFACE
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2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
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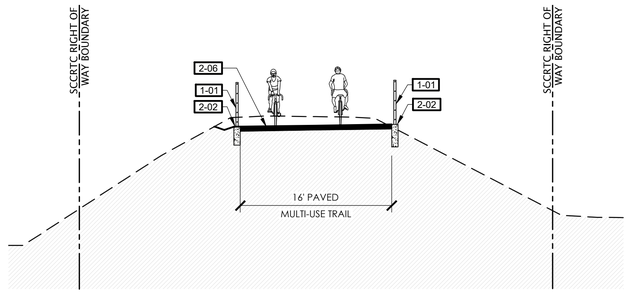
EXISTING RELOCATED PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



5 TYPICAL SECTION
SCALE 1/8"=1'-0"

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL)

DESIGN OPTION A

REFERENCES	DATE 05/15/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN MMS	OPT A - 1.04	
DRAWING #:	DESIGN KS/MS	VAULT NO.	
	CHECKED MS		

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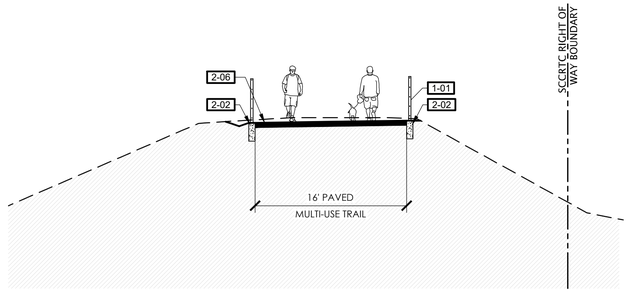
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
STRUCTURAL	
4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE



6 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL)

DESIGN OPTION A

REFERENCES	DATE 05/15/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN MMS	OPT A - 1.05
DRAWING #:	DESIGN KS/MS	VAULT NO.
	CHECKED MS	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS

Layout Tab: "Sheet - OP - 1.05" Image: county-logo-black-transparent.png, 07/07/-mm.dpz Xrefs: XTB-0193-D6-RBT.dwg, XSB-0193-D6-RBT.dwg, XTB-0193-D6-RBT-511.dwg, XTB-0193-D6-RBT-511.dwg, XT-0193-D6-RBT-511.dwg, XC-0193-D6-RBT-511.dwg, XC-0193-D6-RCZD-Santa Cruz-Rail-Trail-Segment 11\Layouts\Layout-Plan-10-11\Wallbook with Trail\Landscape-Architecture\1Sale-B-Sheets\E Design\Sheet-Files\Segment 11\OP-0193-D6-RBT-511.dwg, Plotted By: KMSzakmeis, Plotted: Feb 11, 2023 - 10:05pm
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DIG ALERT
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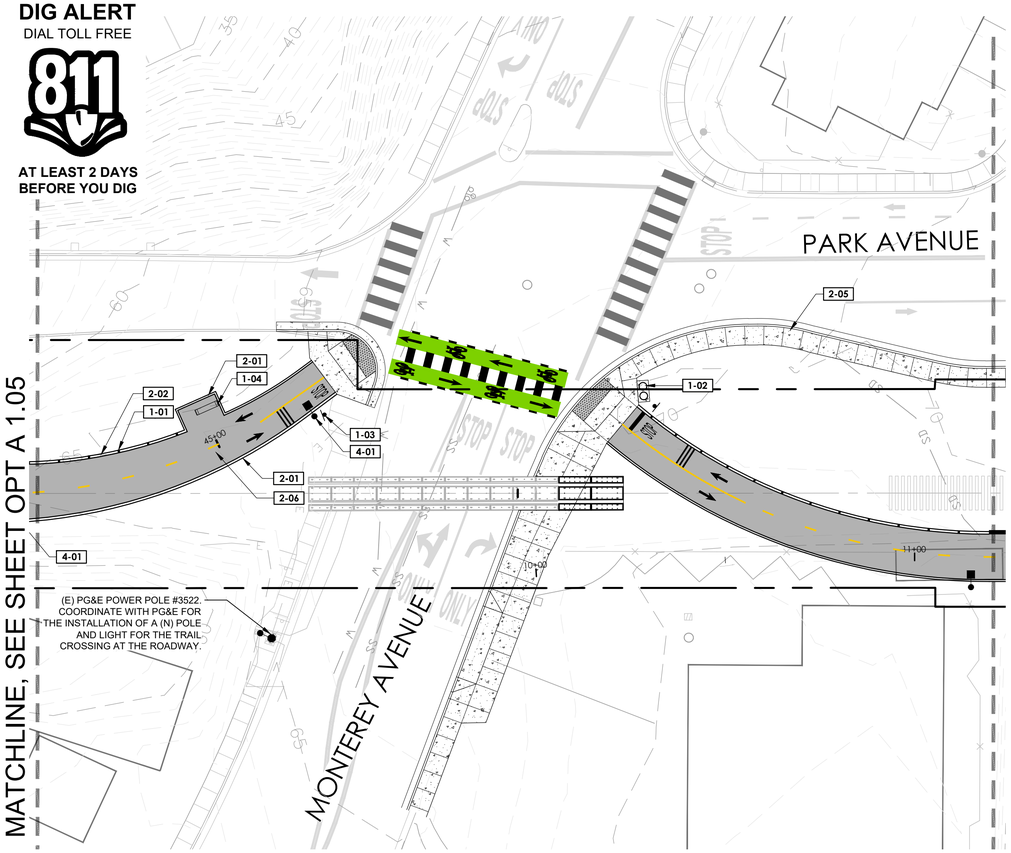
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYMAP



0 10 20 40 60

REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT

1-01	FENCING OR GUARDRAIL
1-02	TRASH RECEPTACLE
1-03	PROPOSED SIGN
1-04	BENCH

SYMBOL DESCRIPTION
PEDESTRIAN AND TRAFFIC CONTROL

2-01	6"-8" WIDE CURB
2-03	CURB RAMP
2-04	DETECTABLE WARNING SURFACE
2-05	CONCRETE SIDEWALK
2-06	HMA PAVEMENT (TRAIL)
2-07	PREFABRICATED FRP DECKING
2-09	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED STAIRS
2-13	TRAIL CHICANE

SYMBOL DESCRIPTION
STRUCTURAL

3-01	RETAINING WALL

SYMBOL DESCRIPTION
STRUCTURAL

4-01	PROPOSED LIGHT
4-05	RRFB (RECTANGULAR RAPID FLASHING BEACON)

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RRFB (RECTANGULAR RAPID FLASHING BEACON)
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
EXISTING; RELOCATED; PROPOSED	SIGNS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	FIBERGLASS REINFORCED POLYMER DECK ON EXISTING BRIDGE

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS

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San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL)

DESIGN OPTION A

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	05/15/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	OPT A - 1.06
VAULT NO.	

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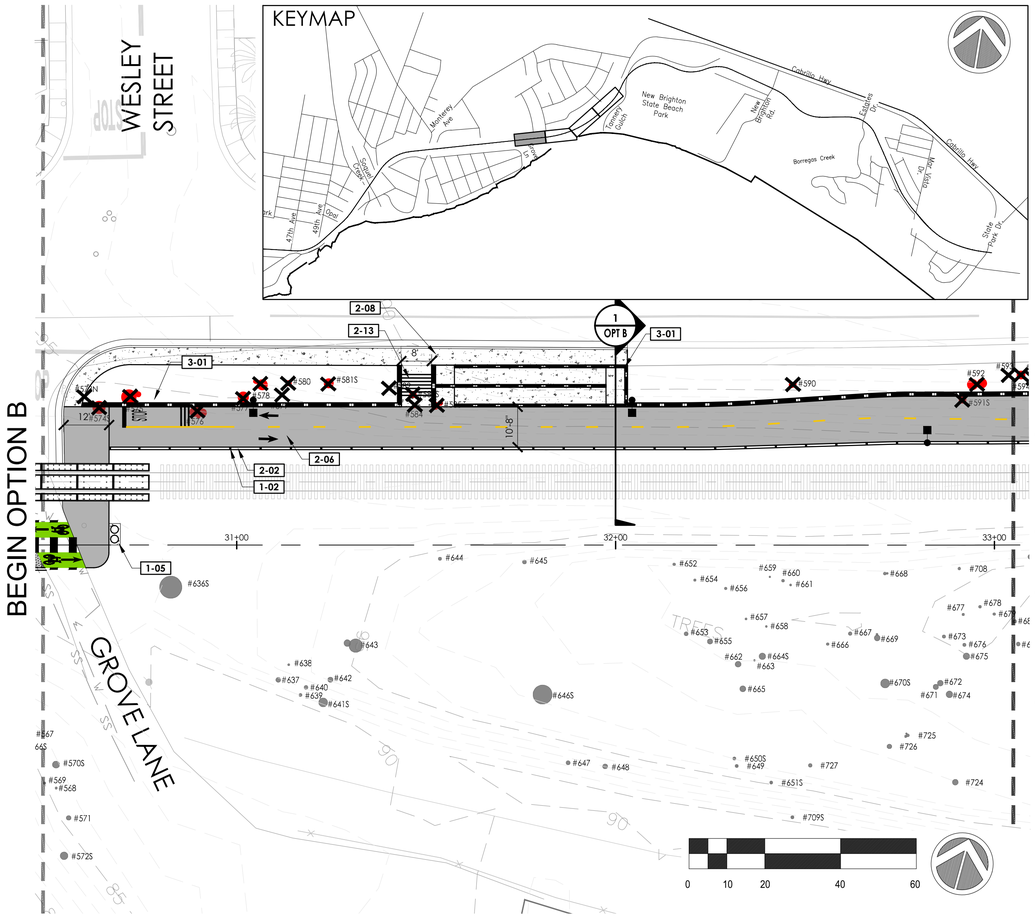
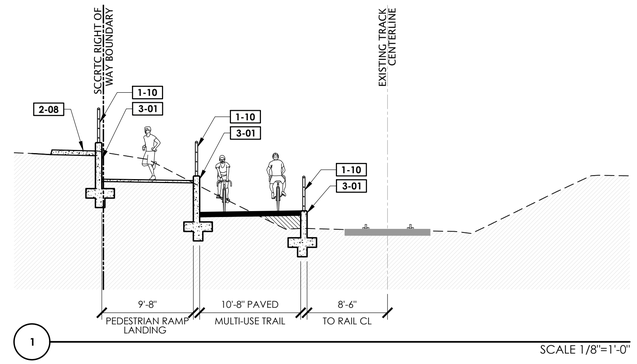
A.4, Design Option B: Inland Side Grove to Coronado





REFERENCE NOTES SCHEDULE

SYMBOL DESCRIPTION

SITE FURNISHINGS AND EQUIPMENT

- 1-01 CONCRETE TRACK PANEL
- 1-02 SEPARATION FENCING
- 1-03 PROPOSED SIGN
- 1-04 RELOCATED PAY STATION
- 1-05 TRASH RECEPTACLES
- 1-06 BENCH
- 1-07 CROSSWALK BARRIER
- 1-08 BIKE RACKS
- 1-09 FLEXIBLE BOLLARD
- 1-10 GUARDRAIL SYSTEM

PEDESTRIAN AND TRAFFIC CONTROL

- 2-01 6" WIDE CURB
- 2-02 8" WIDE CURB
- 2-03 6" CURB AND GUTTER
- 2-04 CURB RAMP
- 2-05 DETECTABLE WARNING SURFACE
- 2-06 HMA PAVEMENT (TRAIL)
- 2-07 HMA PAVEMENT (ROAD)
- 2-08 CONCRETE SIDEWALK
- 2-09 CONTINENTAL CROSSWALK STRIPING
- 2-10 CROSSBIKE MARKINGS
- 2-11 LADDER CROSSWALK STRIPING
- 2-12 PROPOSED AT-GRADE CROSSING
- 2-13 PROPOSED STAIRS
- 2-14 TRAIL CHICANE

STRUCTURAL

- 3-01 RETAINING WALL
- 3-02 VIADUCT
- 3-03 ABUTMENT
- 3-04 BRIDGE

UTILITIES

- 4-01 PIP EXISTING RAIL EQUIPMENT
- 4-02 PROPOSED LIGHT
- 4-03 NEW LIGHT FIXTURE ON EXISTING POLE
- 4-05 SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
#581S	TREE REMOVALS

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DESIGN OPTION B

REFERENCES
FIELD BOOK:
DRAWING #: CORONADO CP

DATE	05/15/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	OPT B-1.01
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 05/15/23

MATCHLINE, SEE SHEET OPT B-1.21

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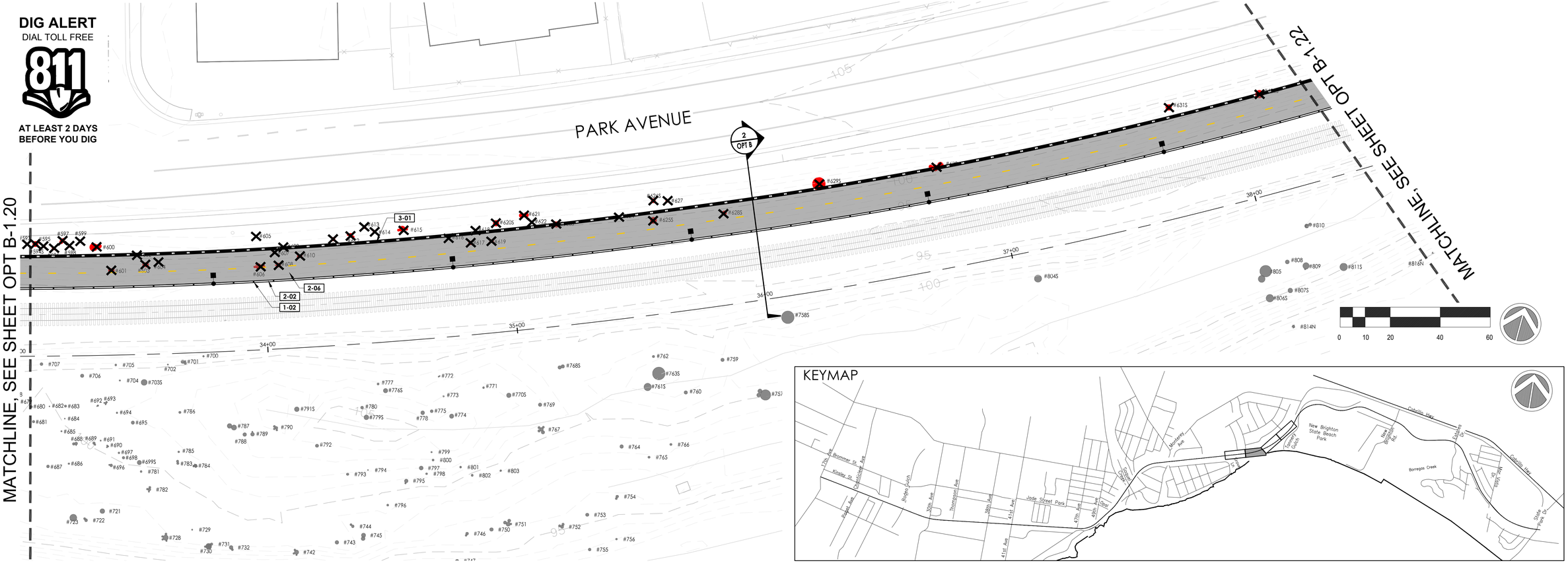
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



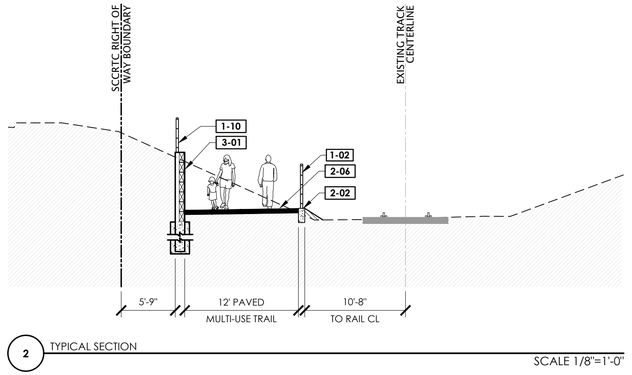
KEYMAP

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
#581S	TREE REMOVALS



2 TYPICAL SECTION
SCALE 1/8"=1'-0"

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DESIGN OPTION B

REFERENCES
FIELD BOOK:

DRAWING #:
CORONADO CP

DATE	05/15/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
OPT B-1.02
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 05/15/23

Layout Tab Name: OPT B-1.02, Images: county-logo-green-transparent.png, Xrefs: XTB Coronado-0193-06-RMT.dwg, KEYMAP-0193-06-RMT.dwg, RC Coronado-0193-06-RMT-511.dwg, XM Coronado-0193-06-RMT-511.dwg, XT Coronado-0193-06-RMT-511.dwg, XV Coronado-0193-06-RCZD.dwg, RC Coronado-0193-06-RMT-511.dwg, SEC-0193-06-RMT-511.dwg, XTB Coronado-0193-06-RMT.dwg, KEYMAP-0193-06-RCZD.dwg, XC Coronado CP.dwg, Plotted By: mmistovek, Plotted: Jun 14, 2023 - 6:05pm
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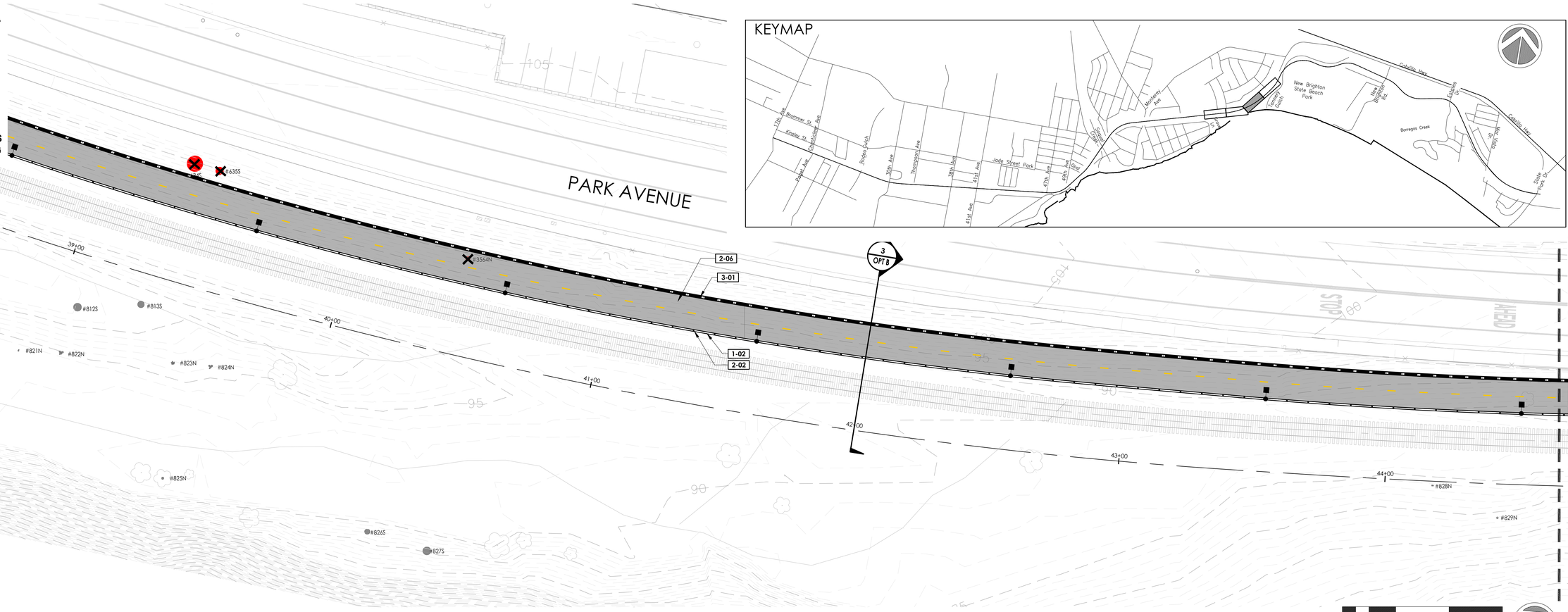
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



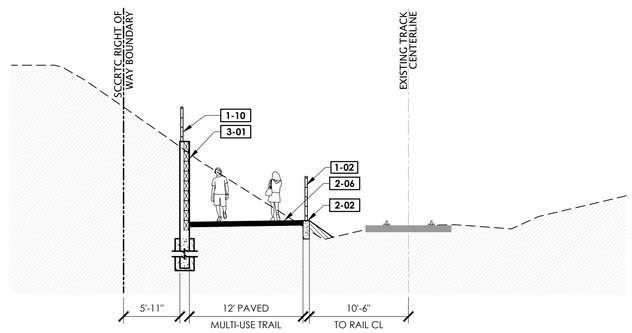
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
SITE FURNISHINGS AND EQUIPMENT	
1-01	CONCRETE TRACK PANEL
1-02	SEPARATION FENCING
1-03	PROPOSED SIGN
1-04	RELOCATED PAY STATION
1-05	TRASH RECEPTACLES
1-06	BENCH
1-07	CROSSWALK BARRIER
1-08	BIKE RACKS
1-09	FLEXIBLE BOLLARD
1-10	GUARDRAIL SYSTEM
PEDESTRIAN AND TRAFFIC CONTROL	
2-01	6" WIDE CURB
2-02	8" WIDE CURB
2-03	6" CURB AND GUTTER
2-04	CURB RAMP
2-05	DETECTABLE WARNING SURFACE
2-06	HMA PAVEMENT (TRAIL)
2-07	HMA PAVEMENT (ROAD)
2-08	CONCRETE SIDEWALK
2-09	CONTINENTAL CROSSWALK STRIPING
2-10	CROSSBIKE MARKINGS
2-11	LADDER CROSSWALK STRIPING
2-12	PROPOSED AT-GRADE CROSSING
2-13	PROPOSED STAIRS
2-14	TRAIL CHICANE
STRUCTURAL	
3-01	RETAINING WALL
3-02	VIADUCT
3-03	ABUTMENT
3-04	BRIDGE
UTILITIES	
4-01	PIP EXISTING RAIL EQUIPMENT
4-02	PROPOSED LIGHT
4-03	NEW LIGHT FIXTURE ON EXISTING POLE
4-05	SOLAR LED W11-15 CROSSING SIGN

LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	CITY LIMITS
	EXISTING FENCE
	FENCE OR GUARDRAIL ON CURB, WALL, VIADUCT OR BRIDGE
	RETAINING WALL, SEE WP SHEETS
LIGHT ON EX. FIXTURE; ROADWAY LIGHT; TRAIL LIGHT; RECESSED LIGHT IN POST	PROPOSED LIGHTS
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	VIADUCT WITH FIBERGLASS REINFORCED POLYMER DECK
	BRIDGE WITH FIBERGLASS REINFORCED POLYMER DECK
	DECOMPOSED GRANITE
#581S	TREE REMOVALS

0 10 20 40 60



3 TYPICAL SECTION
SCALE 1/8"=1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DESIGN OPTION B

REFERENCES
FIELD BOOK:
DRAWING #: CORONADO CP

DATE	05/15/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	OPT B-1.03
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 05/15/23

Layout Tab Name: OPT B-1.03 Images: county-logo-green-transparent.png , WHITE STR Coronado-0193-06-RMT.dwg , KEYMAP-0193-06-RMT.dwg , KEYMAP-0193-06-RDY.dwg , XC Coronado-0193-06-RMT-511.dwg , XR Coronado-0193-06-RMT-511.dwg , XT Coronado-0193-06-RMT-511.dwg , XH Coronado-0193-06-RMT-511.dwg , SEC-0193-06-RMT-511.dwg , SEC-0193-06-RMT-511-ZOOM1.dwg
C:\Users\mmassee\AppData\Local\Temp\AcPublish_14264\Coronado OPT.dwg Plotted By: mmassee, Plotted: Jun 14, 2023 – 7:20pm

A.5, Tree Removal for Ultimate Trail Configuration

DEPARTMENT OF PUBLIC WORKS
RAIL TRAIL SEGMENTS 10 - 11 TRAIL NEXT TO THE RAIL LINE
(ULTIMATE TRAIL CONFIGURATION)

17th Avenue to State Park Drive

PROJECT DESCRIPTION

SEGMENT 10 INCLUDES CONSTRUCTION OF A MULTI-USE TRAIL LOCATED ALONG THE SANTA CRUZ BRANCH RAIL LINE FROM THE EAST SIDE OF 17TH AVENUE TO THE EAST SIDE OF 47TH AVENUE. THIS SEGMENT ALSO INCLUDES RAIL OPERATIONS EQUIPMENT RELOCATION AND APPROXIMATELY ONE MILE OF TRACK REMOVAL AND RECONSTRUCTION.

SEGMENT 11 INCLUDES CONSTRUCTION OF A MULTI-USE TRAIL LOCATED ALONG THE SANTA CRUZ BRANCH RAIL LINE FROM THE EAST SIDE OF 47TH AVENUE TO OPAL STREET WHERE THE TRAIL DIVERTS ONTO EXISITNG BIKE AND PEDESTRIAN FACILITIES THROUGH CAPITOLA VILLAGE TO MONTEREY AVENUE. IMPROVEMENTS TO THE EXISITNG BIKE AND PEDESTRIAN FACILITIES THROUGH THE VILLAGE INCLUDE NEW DIRECTIONAL SIGNAGE AND PAVEMENT MARKINGS. CONSTRUCTION OF THE MULTI-USE TRAIL PICKS UP ON THE WEST SIDE OF MONTEREY AVENUE ALONG THE SANTA CRUZ BRANCH RAIL LINE AND CONTINUES TO THE WEST SIDE OF STATE PARK DRIVE.

PROJECT DIRECTORY

OWNER
SANTA CRUZ COUNTY REGIONAL
TRANSPORTATION COMMISSION
CONTACT: GRACE BLAKESLEE PHONE: (831) 460-3200
RAIL CONTACT: TOMMY TRAVERS FAX: (831) 460-6178

LANDSCAPE ARCHITECT
RRM DESIGN GROUP
3765 SOUTH HIGUERA, SUITE 102 PHONE: (949) 361-7950
SAN LUIS OBISPO, CA 93401 FAX: (949) 361-7955
CONTACT: MIKE SHERROD

CIVIL ENGINEER
RRM DESIGN GROUP
325 DAVIS STREET PHONE: (510) 751-4910
SAN LEANDRO, CA 94577 FAX: (510) 686-4910
CONTACT: DARREN CHOY

ELECTRICAL ENGINEER
THOMA ELECTRIC
3562 EMPLEO ST. PHONE: (805) 543-3850
SAN LUIS OBISPO, CA
CONTACT: CHRIS PATCHIN

GEOTECHNICAL ENGINEER
PACIFIC CREST ENGINEERING
444 AIRPORT BLVD PHONE: (831) 722-9446
WATSONVILLE, CA 95076
CONTACT: ELIZABETH MITCHELL

STRUCTURAL ENGINEER
MESITI-MILLER ENGINEERING
224 WALNUT ST, SUITE B PHONE: (831) 426-3186
SANTA CRUZ, CA 95060
CONTACT: DALE HENDSBEE

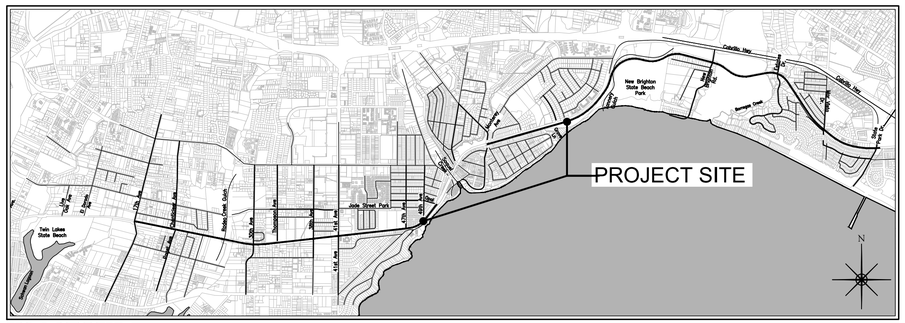
TRAFFIC ENGINEER
WHITLOCK & WEINBERGER (W-TRANS)
1276 LINCOLN AVE, SUITE 204 PHONE: (510) 444-2600
SAN JOSE, CA 9525
CONTACT: STEVE FITZSIMMONS

RAIL ENGINEER
ZEPHYR UAS/RAIL (ZUI)
725 W TOWN & COUNTRY RD, SUITE 550 PHONE: (714) 835-6355
ORANGE, CA 92868
CONTACT: ALFRED YALDA

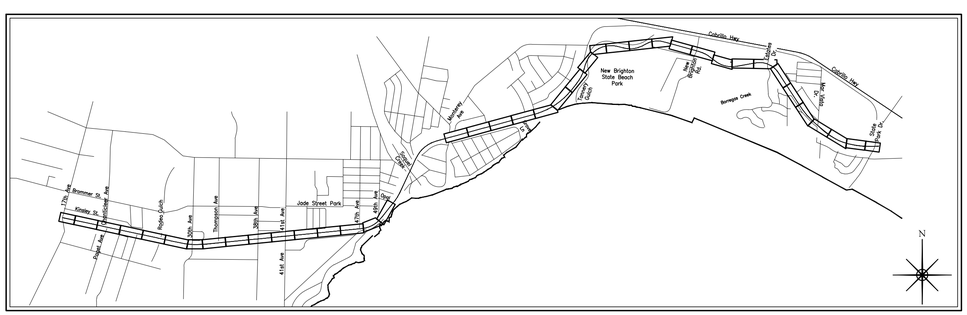
CLIENT
COUNTY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
CONTACT: ROB TIDMORE
PHONE: (831) 454-2160
FAX: (831) 454-2385

SECONDARY CLIENT
CITY OF CAPITOLA
PUBLIC WORKS DEPARTMENT
CONTACT: KAILASH MOZUMDER
PHONE: (831) 475-7300

VICINITY MAP



NOT TO SCALE



KEY MAP SCALE: 1"=2000'

SHEET INDEX

TS-1.01	TITLE SHEET
DM-1.01-1.14	SEGMENT 10 DEMOLITION PLANS
DM-1.15-1.40	SEGMENT 11 DEMOLITION PLANS
CP-1.01-1.14	SEGMENT 10 CONSTRUCTION KEYNOTE PLANS
CP-1.15-1.40	SEGMENT 11 CONSTRUCTION KEYNOTE PLANS
BP-1.01-10.01	BRIDGE + VIADUCTS GENERAL PLAN SHEETS
BD-1.01-1.04	VIADUCT ABUTMENT DETAILS
WD-1.01-1.02	SOLDIER BEAM RETAINING WALL DETAIL SHEETS
WD-3.01	CONCRETE SPREAD FOOTING RETAINING WALLS
WF-1.00	WAYFINDING SIGNAGE SCHEMATIC

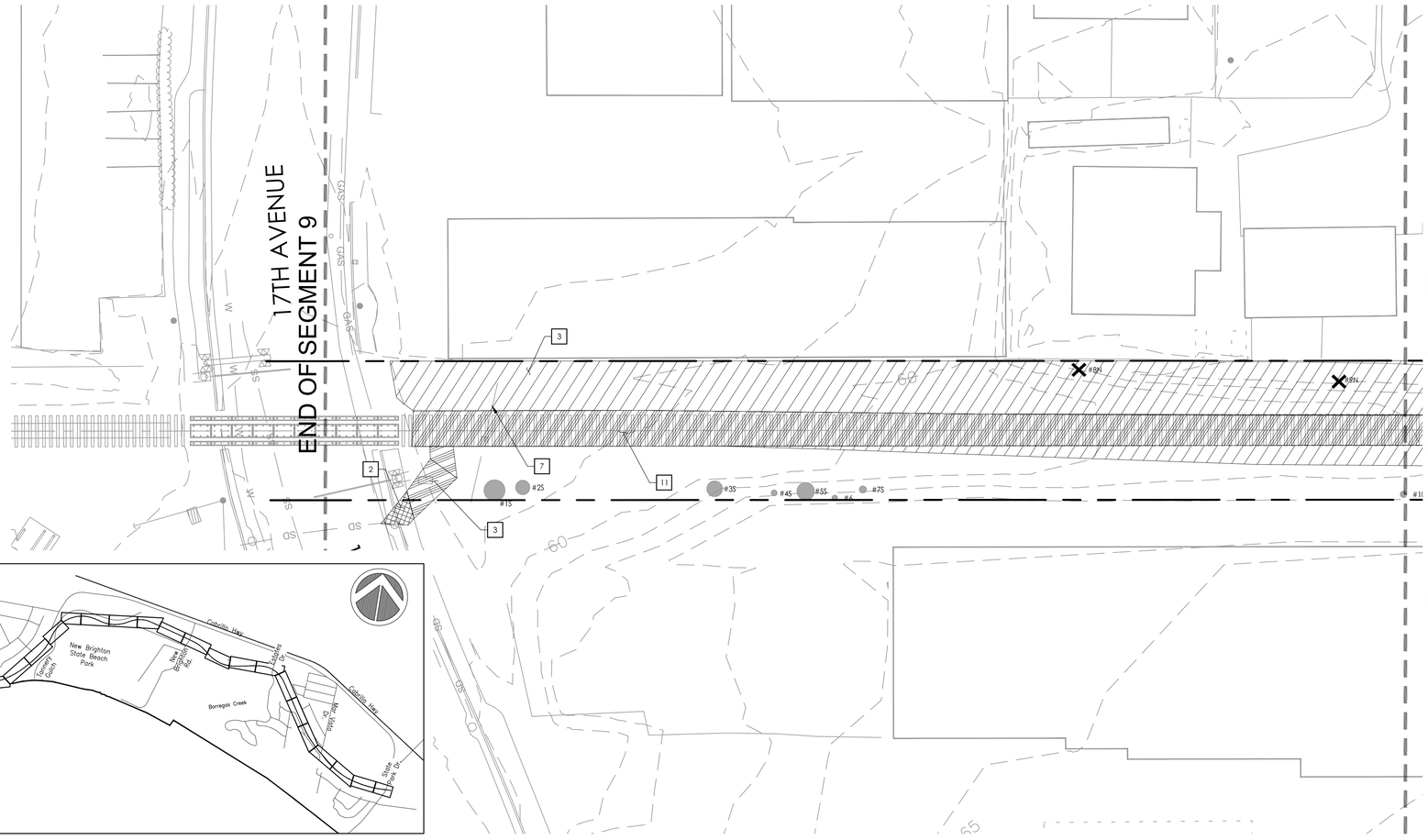
REFINED SCHEMATIC DESIGN SUBMITTAL

FEDERAL PROJECT NO.: ATPL-5936 (154)
STATE PROJECT NO.: 05-2300-0030
COUNTY PROJECT NO.:

REFERENCES	DATE	06/15/23	SCALE AS SHOWN
FIELD BOOK:	DRAWN	KS/EK/MMS	TS-1.01
DRAWING #:	DESIGN	KS/EK/MMS	VAULT NO.
	CHECKED	MS/KS	

Layout Tab Name: TS-1.01 | Layout: layout-tab-name-to-plot-as-pdf | Date: 2023-06-15T15:39:37 | Plotted: Jun 15, 2023 - 4:39pm
User Name: Mike Sherrod | Drawing: C:\Users\mike.sherrod\Desktop\Work Folder\Segment 10\Segment 10 Drawings\Segment 10 Sheets\TS-1.01.dwg

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC
SCALE	AS SHOWN
	DM-1.01
VAULT NO.	

Layout Tab Name: DM-1.01, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S10.dwg, XTR-0193-06-RWT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, \\corp\vm\vm-lab\2001\0193-06-RDDS-Santa Cruz Rail Trail-Seg 10-11\Rail with Trail\Engineering\DesDev\Sheet-Files\Segment 10\04-0193-06-RWT-S10.dwg, Plotted By: jolvanmeta, Plotted: Feb 14, 2023 - 9:28am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

CISCO LANE

MATCHLINE, SEE SHEET DM-1.01

MATCHLINE, SEE SHEET DM-1.03

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

SOIL REMOVAL NOTE:

CONTRACTOR SHALL REMOVE CONTAMINATED SOIL (IN ADDITION TO EXISTING BALLAST MATERIAL, RANGING FROM 2' TO 4' DEEP PER PROJECT GEOTECHNICAL REPORT) UNDER PROPOSED TRAIL PAVEMENT SECTION AS NECESSARY TO CONSTRUCT TRAIL. CONTAMINATED SOIL OUTSIDE OF THE TRAIL SECTION SHALL BE REMOVED TO A DEPTH AS NECESSARY TO PROVIDED 2' MINIMUM CLEAN FILL CAP PER SOIL MANAGEMENT PLAN.

CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOIL MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

0 10 20 40 60

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

SCALE AS SHOWN
DM-1.02
VAULT NO.

Layout Tab Name: DM-1.02, Image: county-logo-black-transparent.png, Xrefs: X1-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, XP-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RCZO.dwg, XH-0193-06-RWT-S10.dwg, SSC-0193-06-RWT-S10.dwg, XU1-0193-06-RWT-S10.dwg, XGB-0193-06-RWT-S10.dwg, XUT-0193-06-RWT-S10.dwg, Xref

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.02

MATCHLINE, SEE SHEET DM-1.04

CHANTICLEER AVENUE

PAGET AVENUE

PELLEGRINI STREET

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

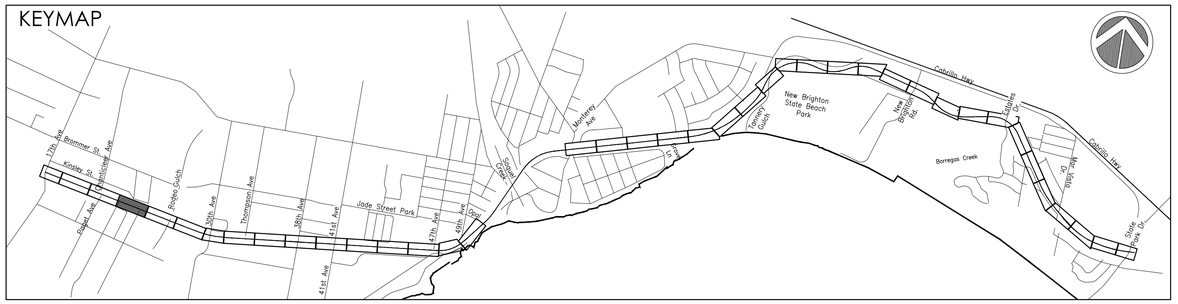
DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC
SCALE	AS SHOWN
	DM-1.03
VAULT NO.	

Layout Tab Name: DM-1.03, Images: county-logo-black-transparent.png, Xrefs: PT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XLP-0193-06-RWT-S10.dwg, SCC-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, KC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg
\\Corp\rmn\sn-lab\0001\0193-06-RWC20-Santa Cruz Rail-Trail-Seg-10-11\Rail with Trail\Engineering\DataDesk\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dsilvanheira, Plotted: Feb 14, 2023 - 9:28am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



MATCHLINE, SEE SHEET DM-1.03

MATCHLINE, SEE SHEET DM-1.05

CORCORAN AVENUE

SOQUEL DRIVE



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

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	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
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	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC
SCALE	AS SHOWN
	DM-1.04
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.04, Images: county-logo-black-transparent.png, Xrefs: X:\0193-06-RWT-S10.dwg, XTR-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg
\\corp\vm\vm-sbfs\0001\0193-06-RWT-S10\Rail with Trail\Engineering\DesDev\Sheet-Files\Segment 10\04-0193-06-RWT-S10.dwg, Plotted By: jolsonmeins, Plotted: Feb 14, 2023 - 9:28am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.04

MATCHLINE, SEE SHEET DM-1.06

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23


KEYMAP
17th Ave
Brommer St
Capitola Ave
Kinsley St
Stockton Ave
Rodeo Gulch
Bonita Dr
38th Ave
Thompson Ave
36th Ave
41st Ave
Jade Street Park
47th Ave
49th Ave
Opal Creek
Monterey Ave
New Brighton State Beach Park
Tanery Gulch
Capitola
Soquel
Borregas Creek
Cabrillo Hwy
Ave
Ave
Ave

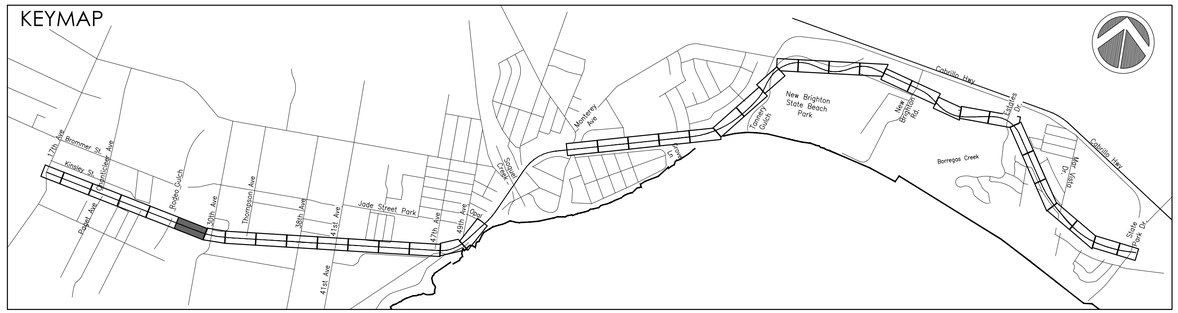
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

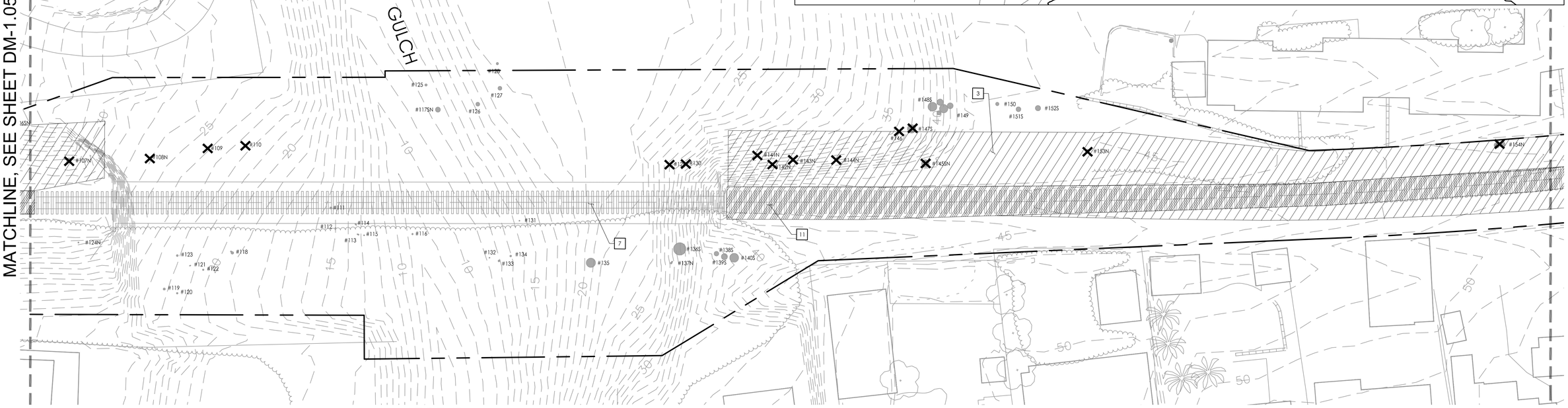
MATCHLINE, SEE SHEET DM-1.05

MATCHLINE, SEE SHEET DM-1.07

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

RODEO GULCH





KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTIING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

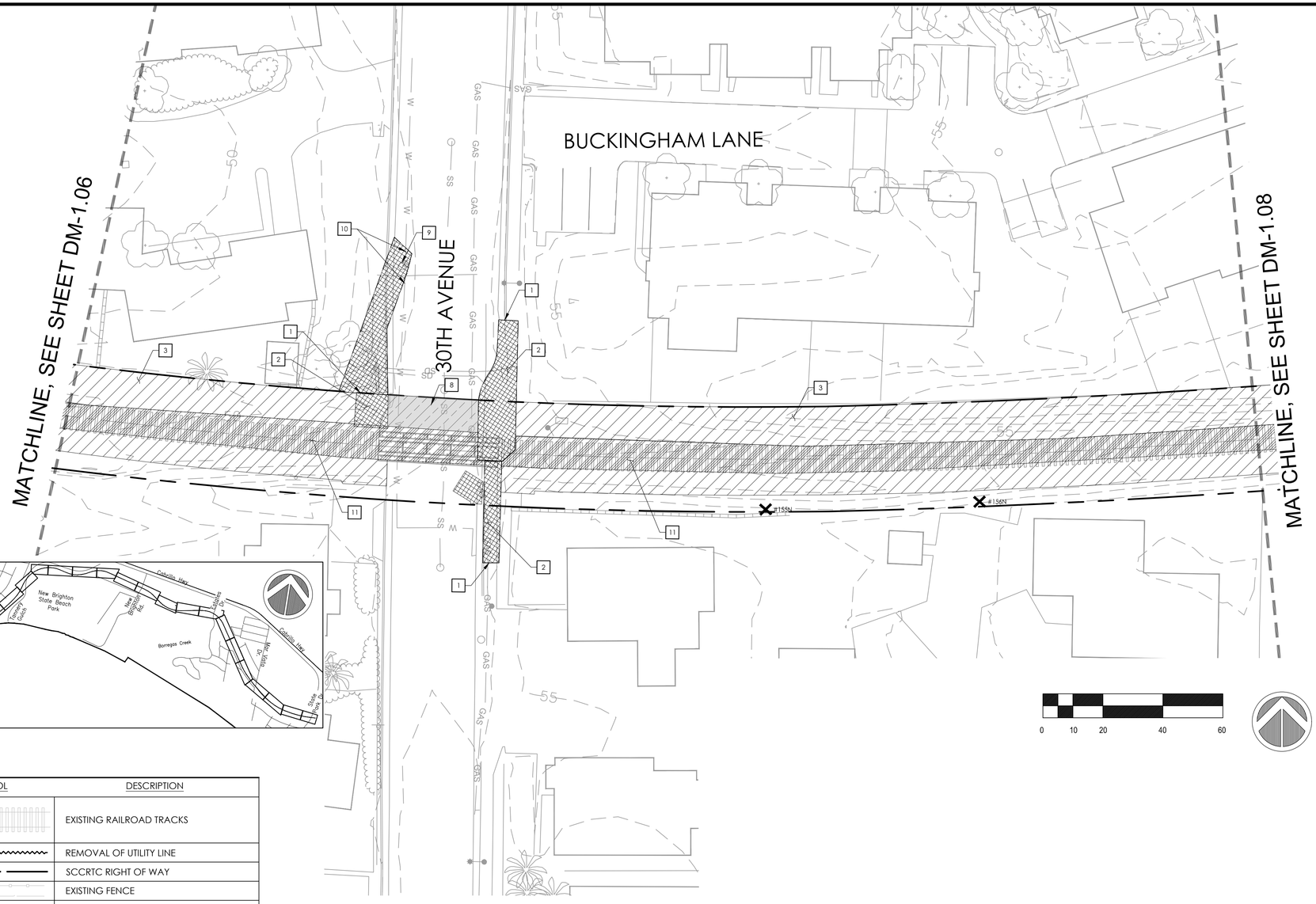
DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

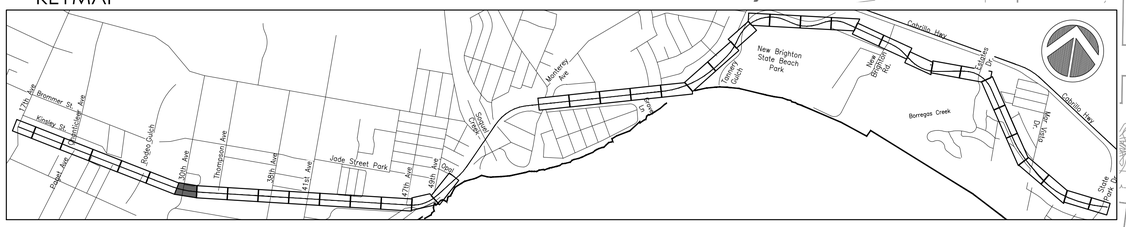
SCALE AS SHOWN
DM-1.06
VAULT NO.

Layout Tab: Name: DM-1.06, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT-S10.dwg, XBR-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, XCMAP-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XUT-0193-06-RWT-S10.dwg, \\corp\vm\on-site\2020\10\93-06-RCDC-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Design\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dnhothorne, Plotted: Feb 14, 2023 - 9:29am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYMAP



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KEYNOTE	DESCRIPTION
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	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.07, Image: county-logo-black-transparent.png, Xref: XT-0193-06-RWT-S10.dwg, XTR-0193-06-RWT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RCD1.dwg, SH-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RCD2.dwg, SEC-0193-06-RWT-S10.dwg, \\Corp\rmm\san-vols\2001\0193-06-RCD2-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Sheets\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dsilvestrini, Plotted: Feb 14, 2023 - 12:29pm

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32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #: DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

SCALE AS SHOWN
DM-1.07
VAULT NO.

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.07

MATCHLINE, SEE SHEET DM-1.09

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

KEYMAP



THOMPSON AVENUE

#158 #159PN #160N #161 #162 #163 #164 #165 #166 #167 #168 #169S #171 #172

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
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	SAWCUT PAVEMENT REMOVAL
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0 10 20 40 60

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

SCALE AS SHOWN
DM-1.08
VAULT NO.

Layout Tab: Name: DM-1.08, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, XUT-0193-06-RWT-S10.dwg
\\Corp\smb\sn-nas\2001\0193-06-RCDC-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Design\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dnolanhorna, Plotted: Apr 10, 2023 - 3:29pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.08

MATCHLINE, SEE SHEET DM-1.10



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

SOIL REMOVAL NOTE:

CONTRACTOR SHALL REMOVE CONTAMINATED SOIL (IN ADDITION TO EXISTING BALLAST MATERIAL, RANGING FROM 2' TO 4' DEEP PER PROJECT GEOTECHNICAL REPORT) UNDER PROPOSED TRAIL PAVEMENT SECTION AS NECESSARY TO CONSTRUCT TRAIL. CONTAMINATED SOIL OUTSIDE OF THE TRAIL SECTION SHALL BE REMOVED TO A DEPTH AS NECESSARY TO PROVIDED 2' MINIMUM CLEAN FILL CAP PER SOIL MANAGEMENT PLAN.

CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOIL MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

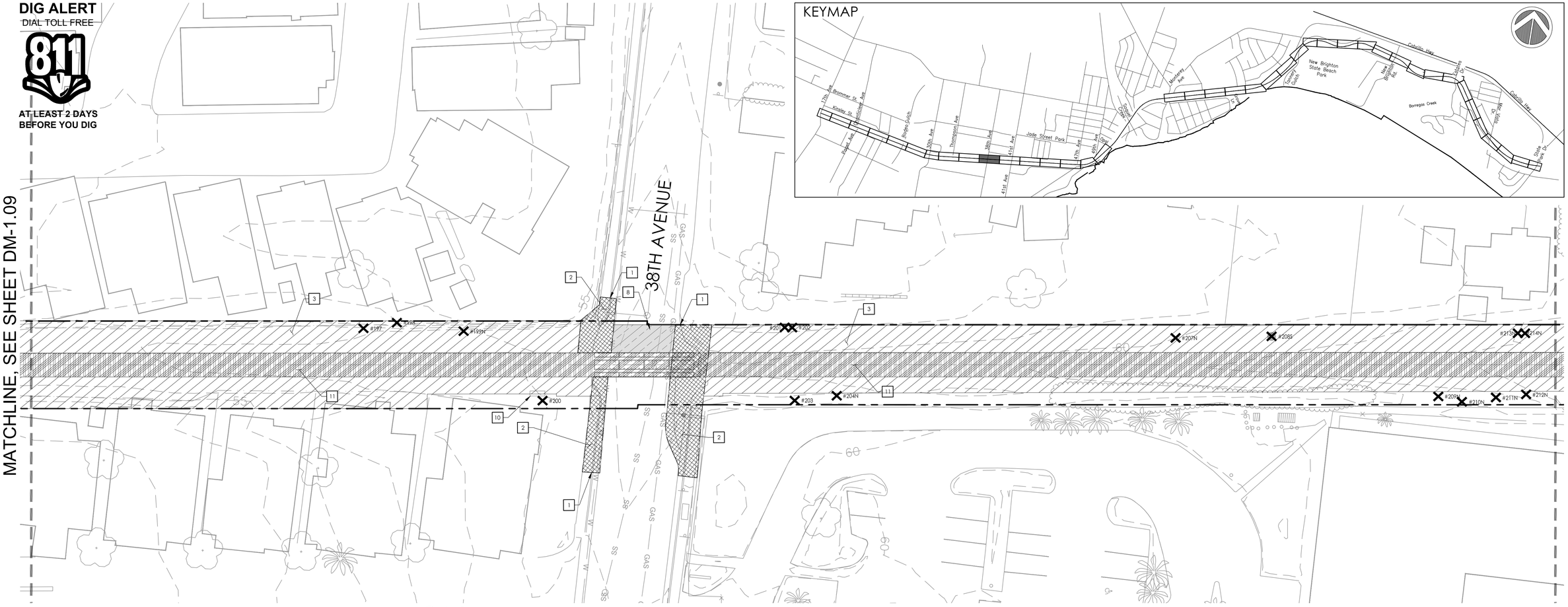
SCALE AS SHOWN
DM-1.09
VAULT NO.

Layout Tab Name: DM-1.09, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg, \\corp\rmm\san-mateo\2021\0193-06-RCDS-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Design\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dsivonhenna, Plotted: Apr 10, 2023 - 3:29pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.09

MATCHLINE, SEE SHEET DM-1.11



KEYMAP

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

SOIL REMOVAL NOTE:

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CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOIL MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

0 10 20 40 60

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC
SCALE	AS SHOWN
	DM-1.10
VAULT NO.	

Layout Tab Name: DM-1.10, Image: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWP.dwg, XH-0193-06-RWT-S10.dwg, XUT-0193-06-RWT-S10.dwg
\\Corp.\rrm\wc-ssa\2001\0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XSB-0193-06-RWT.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWP.dwg, XH-0193-06-RWT-S10.dwg
\\Corp.\rrm\wc-ssa\2001\0193-06-RWP-S10-Santa-Cruz-Rail-Trail-Seg-10-11.dwt with Tool\Engineering\DesDet\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dsilvaMena, Plotted: Apr 10, 2023 - 3:29pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



MATCHLINE, SEE SHEET DM-1.10

MATCHLINE, SEE SHEET DM-1.12

41ST AVENUE

#215N #217 #218 #220 #221 #222

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
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13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOIL MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

SCALE AS SHOWN
DM-1.11
VAULT NO.

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.11, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S10.dwg, XTR-0193-06-RWT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWD.dwg, XH-0193-06-RWT-S10.dwg, XLT-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, Plotted: Apr 10, 2023 - 3:29pm
\\corp\vm\vm-sb\2001\0193-06-RDZP-Santa-Cruz-Rail-Trail-Seg-10-11\Bid with Trail\Engineering\DesDev\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: jolvanmens, Plotted: Apr 10, 2023 - 3:29pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.11

MATCHLINE, SEE SHEET DM-1.13

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

rrm design group
rrmdesign.com | (949) 361-7950
30332 Corniny Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

SCALE AS SHOWN
DM-1.12
VAULT NO.

Layout Tab Name: DM-1.12, Images: county-logo-black-transparent.png, Xrefs: PT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, XUT-0193-06-RWT-S10.dwg, XLM-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, XSB-0193-06-RWT-S10.dwg, KC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWT-S10.dwg, XH-0193-06-RWT-S10.dwg
\\Corp\rmn\sn-lab\0001\0193-06-RCDC-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\DataDesk\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dsilvanheira, Plotted: Feb 14, 2023 – 9:30am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

CIRCLE DRIVE

KEYMAP



JADE STREET PARK

MATCHLINE, SEE SHEET DM-1.12

MATCHLINE, SEE SHEET DM-1.14

#238N #239N #240N #241 #242 #243 #244N #245N #246N #247

3 11

65

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
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10	REMOVE AND SALVAGE EXISTING UTILITY
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12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTIING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC

SCALE AS SHOWN
DM-1.13
VAULT NO.

Layout Tab: Name: DM-1.13, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RWT-S10.dwg, XBB-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-JADE.dwg, XH-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, \\corp\rmm\on-site\2021\0193-06-RCDC-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Design\Sheet-Files\Segment 10\DM-0193-06-RWT-S10.dwg, Plotted By: dnolanhorna, Plotted: Feb 14, 2023 - 9:23am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.13

JADE STREET PARK

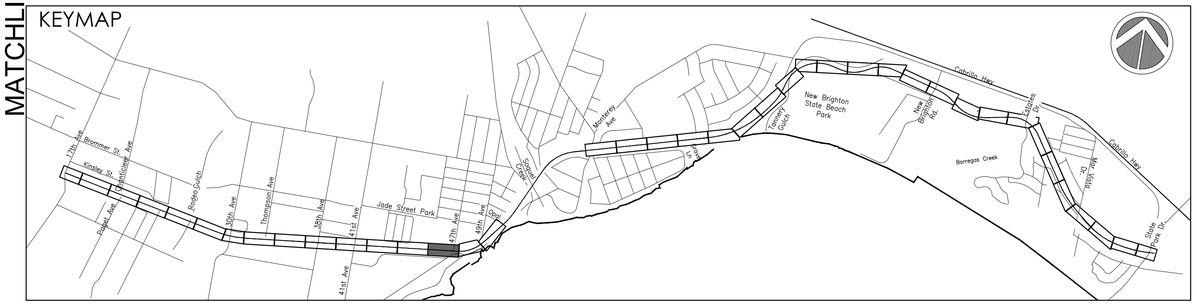
47TH AVENUE

PORTOLA DRIVE

MATCHLINE, SEE SHEET DM-1.15 (SEGMENT 11)

#247N #248N #249N #250N #251N

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
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	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
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	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S10

DATE	02/10/2023
DRAWN	RPE
DESIGN	DNH
CHECKED	DC
SCALE	AS SHOWN
	DM-1.14
VAULT NO.	

Layout Tab Name: DM-1.14, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S10.dwg, XTR-0193-06-RWT.dwg, XSR-0193-06-RWT-S10.dwg, XC-0193-06-RWT-S10.dwg, KEYMAP-0193-06-RWD.dwg, XH-0193-06-RWT-S10.dwg, SEC-0193-06-RWT-S10.dwg, \\corp\vm\sm-sbb\2001\0193-06-RDDS-Santa Cruz Rail Trail-Seg 10-11\Bid with Trail\Engineering\DesDev\Sheet Files\Segment 10\04-0193-06-RWT-S10.dwg, Plotted By: jsilvamena, Plotted: Feb 14, 2023 - 9:31am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.15

MATCHLINE, SEE SHEET DM-1.16

KEYMAP



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.15
VAULT NO.

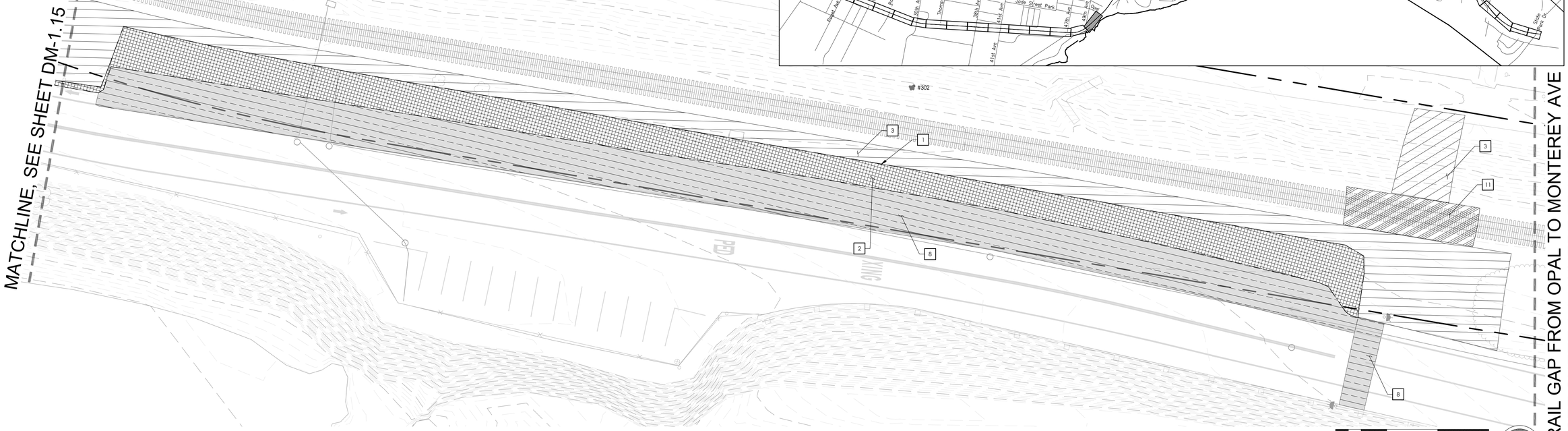
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.15, Images: county-logo-black-transparent.png; , Refs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RWT.dwg, XSR-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT.dwg, \\corp\vm\on-ssk\0001\0193-06-RCSC-Santa-Cruz-Rail-Trail-Seg-10-11\Wall mch Trail\Engineering\Dwgs\Dwgs\Sheet Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dnsonnens, Plotted: Feb 14, 2023 - 8:54am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.15





MATCHLINE, SEE SHEET DM-1.17

TRAIL GAP FROM OPAL TO MONTEREY AVE
SEE SHEET 1.17 WHERE TRAIL BEGINS

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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REVISIONS

COUNTY OF SANTA CRUZ
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701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.16
VAULT NO.

Layout Tab: Name: DM-1.16, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XTB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC20.dwg
\\corp\nm\on-site\2020\10\93-06-RC20-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Design\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dmontoma, Plotted: Feb 14, 2023 - 5:37pm

TRAIL GAP FROM OPAL TO MONTEREY AVE SEE SHEET 1.16 WHERE TRAIL PICKS UP AT OPAL

MATCHLINE, SEE SHEET DM-1.18

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
✕	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

Layout Tab Name: DM-1.17, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg; XTB-0193-06-RWT.dwg; XSB-0193-06-RWT-S11.dwg; XC-0193-06-RWT-S11.dwg; KEYMAP-0193-06-RC20.dwg
\\corp\rrm\on-site\0001\0193-06-RC20-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\DesDev\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dnixonhelms, Plotted: Feb 14, 2023 - 6:00pm

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN KS	DM-1.17	
DRAWING #: DM-0193-06-RWT-S11	DESIGN KS/MS	VAULT NO.	
	CHECKED MS		

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PARK AVENUE

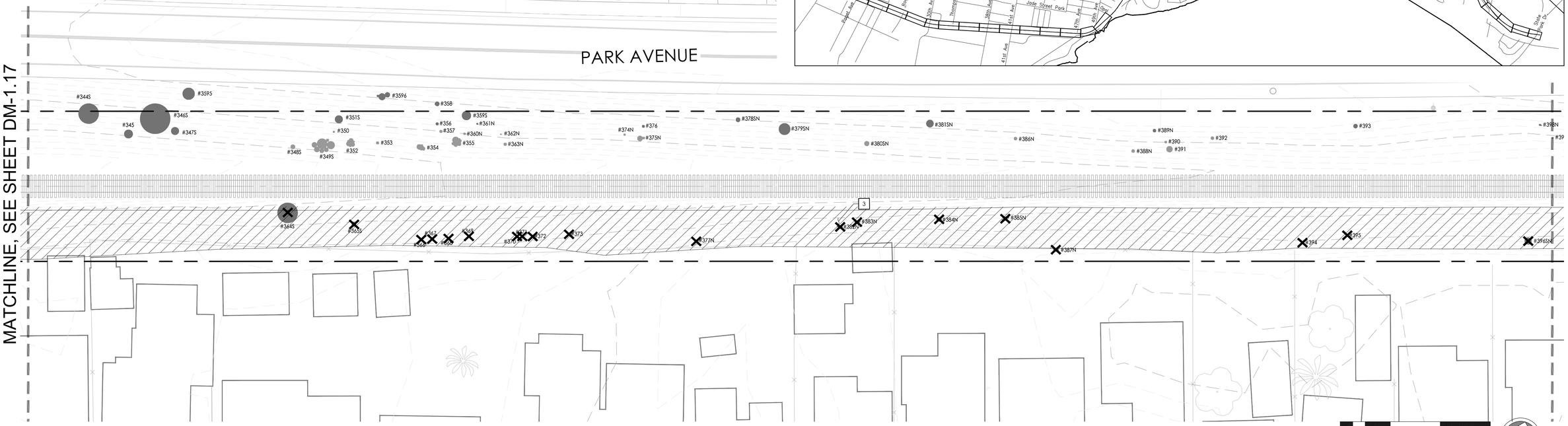
KEYMAP



MATCHLINE, SEE SHEET DM-1.17

MATCHLINE, SEE SHEET DM-1.19

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.18
VAULT NO.	

Layout Tab Name: DM-1.18, Images: county-logo-black-transparent.png, , Xrefs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RWT.dwg, XSR-P193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, XDWN-0193-06-RC20.dwg
\\corp\vm\un-isis\0001\0193-06-RC20-Santa Cruz Rail Trail-Seg 10-11\Bid sets Trail\Engineering\Sheets\Sheet Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dnsonmans, Plotted: Feb 14, 2023 - 6:03pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PARK AVENUE

KEYMAP



MATCHLINE, SEE SHEET DM-1.18

MATCHLINE, SEE SHEET DM-1.20

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

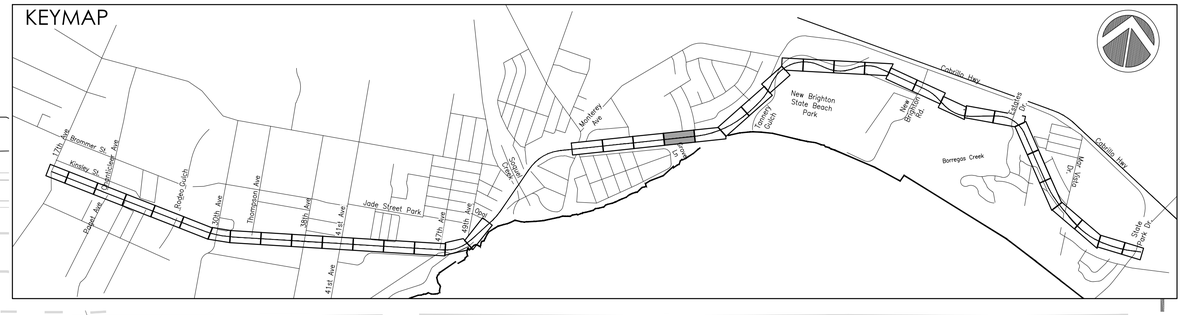
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.19
VAULT NO.	

Layout Tab Name: DM-1.19, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg; XTB-0193-06-RWT.dwg; XSB-0193-06-RWT-S11.dwg; XC-0193-06-RWT-S11.dwg; KEYMAP-0193-06-RWT-S11.dwg; KEYMAP-0193-06-RC20.dwg
\\Users\mm\on-site\2000\0193-06-RC20-Santa-Cruz-Rail-Trail-Seg-10-11\Bar arch Trail\Engineering\Design\Sheet Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dmoshemi, Plotted: Feb 14, 2023 - 8:06pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

(E) STREET LIGHT AT CORNER OF PARK AVE. AND WESLEY ST. COORDINATE WITH PG&E CITY FOR EXTENSION OF POWER CIRCUIT TO (N) LIGHT AND POLE AT PARK AVE. AND GROVE LANE TRAIL CROSSING.

KEYMAP



PARK AVENUE

ESCALONA GULCH

GROVE LANE

MATCHLINE, SEE SHEET DM-1.19

MATCHLINE, SEE SHEET DM-1.21

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

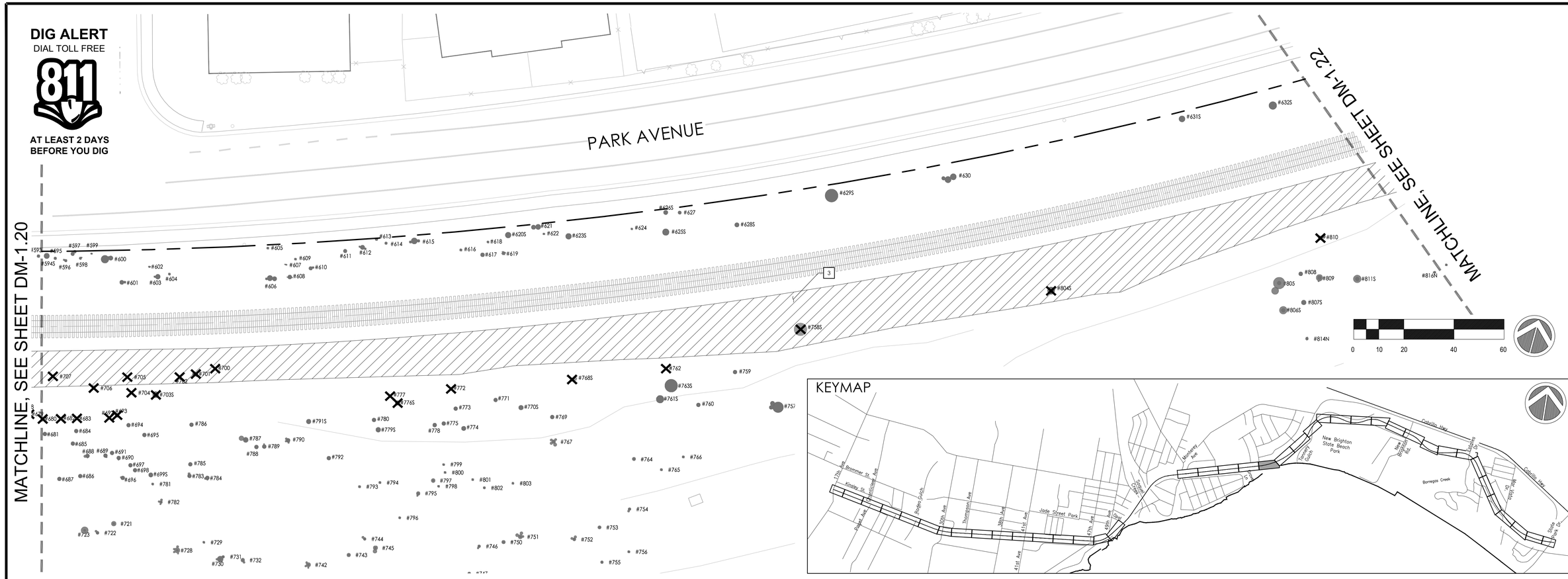
DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.20
VAULT NO.

Layout Tab Name: DM-1.20, Images: county-logo-black-transparent.png , XrefN: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCP.dwg
\\Corp\rmm\on-site\2020\10-193-06-RCDS-Santa-Cruz-Rail-Trail-Seg-10-11\Bid with Trail\Engineering\Detailed\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dshoshtema, Plotted: Apr 10, 2023 - 4:26pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

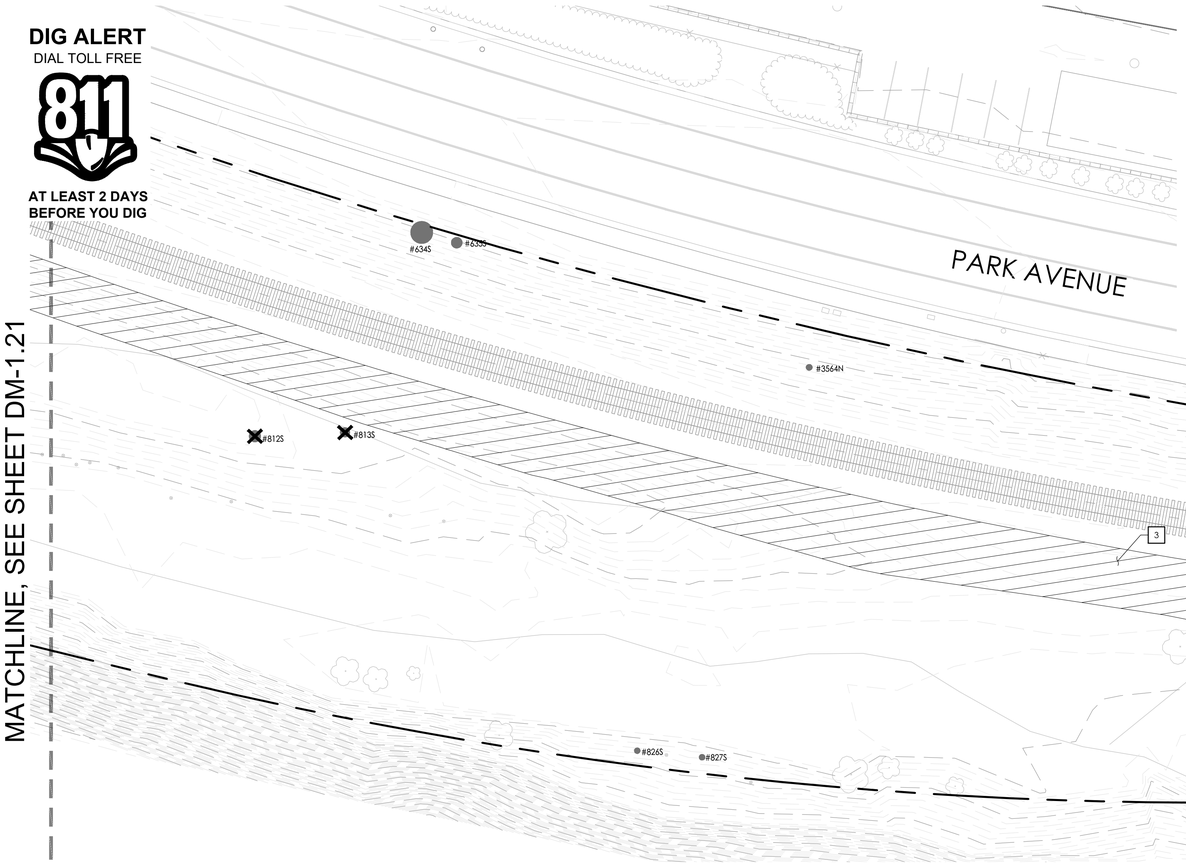
DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.21
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.21, Images: county-logo-black-transparent.png, Xrefs: PT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWP.dwg
\\Corp\vm\usr-ask\0001\0193-06-RCPD-Santa Cruz Rail Trail-Seg-10-11\Rail with Trail\Engineering\DataDesk\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dskvarkenis, Plotted: Apr 10, 2023 — 4:29pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





MATCHLINE, SEE SHEET DM-1.21

MATCHLINE, SEE SHEET DM-1.23

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.22
VAULT NO.

Layout Tab: Name: DM-1.22, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT-S11.dwg, K:\Corp\rrm\on-site\2020\10-916-06-RCDC-Santa-Cruz-Rail-Trail-Seg-10-11\Bar with Trail\Engineering\Design\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dwoolsenma, Plotted: Feb 14, 2023 - 6:15am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

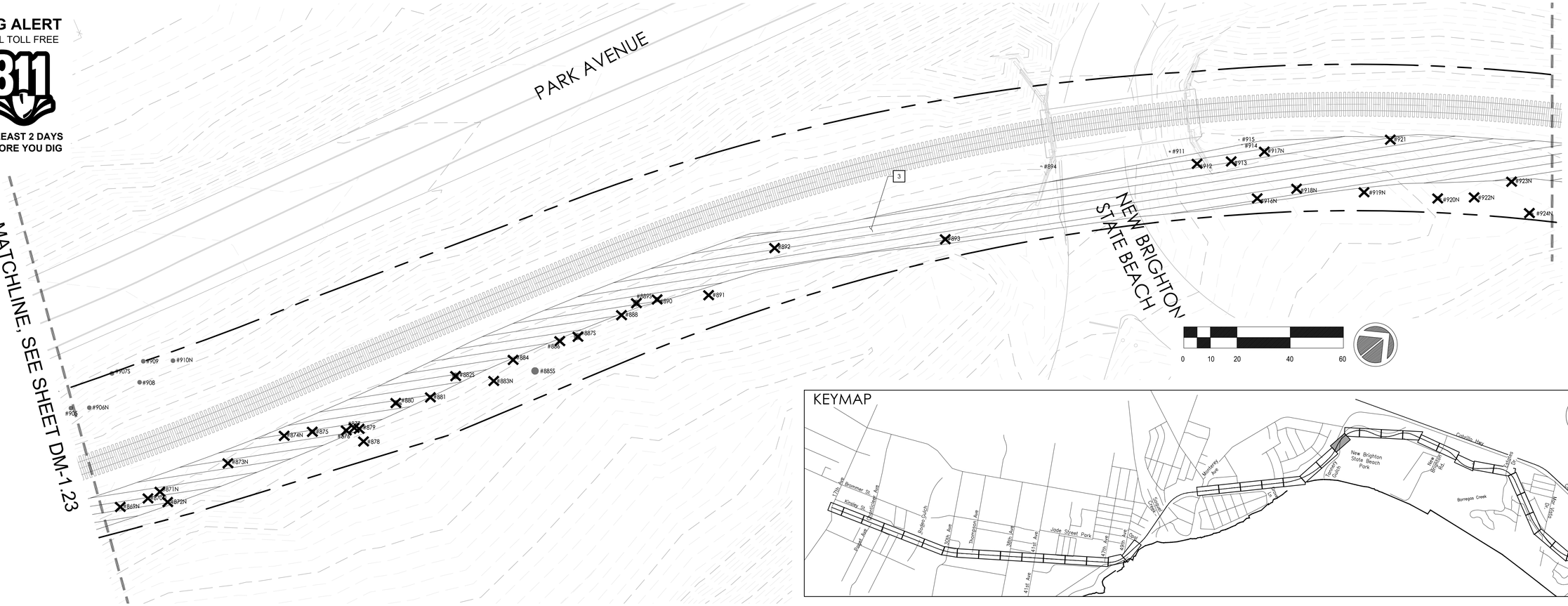
REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.23
VAULT NO.	

Layout Tab Name: DM-1.23, Images: county-logo-black-transparent.png, Xrefs: PT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RWT.dwg
\\Corp\vm\usr-sta\USR1\0193-06-RWT\Santa Cruz Rail-Trail-Seg-10-11\Rail with Trail\Engineering\DataDesk\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dsilvanteme, Plotted: Feb 14, 2023 - 6:18am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYMAP

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

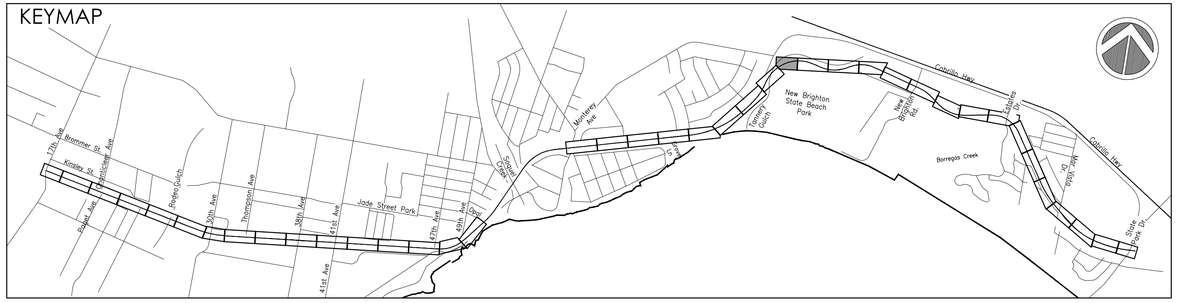
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.24
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.24, Images: county-logo-black-transparent.png, Xrefs: X:\0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, X:\0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCZO.dwg
Plotted: Feb 14, 2023 - 6:21pm By: dsivashenko, Plotted By: dsivashenko, Plotted: Feb 14, 2023 - 6:21pm
\\Corp\rrm\Jobs-wA\2021\0193-06-RCZO-Santa-Cruz-Rail-Trail-Segs-10-11\Bid with Trail\Engineering\DataDesk\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dsivashenko, Plotted: Feb 14, 2023 - 6:21pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

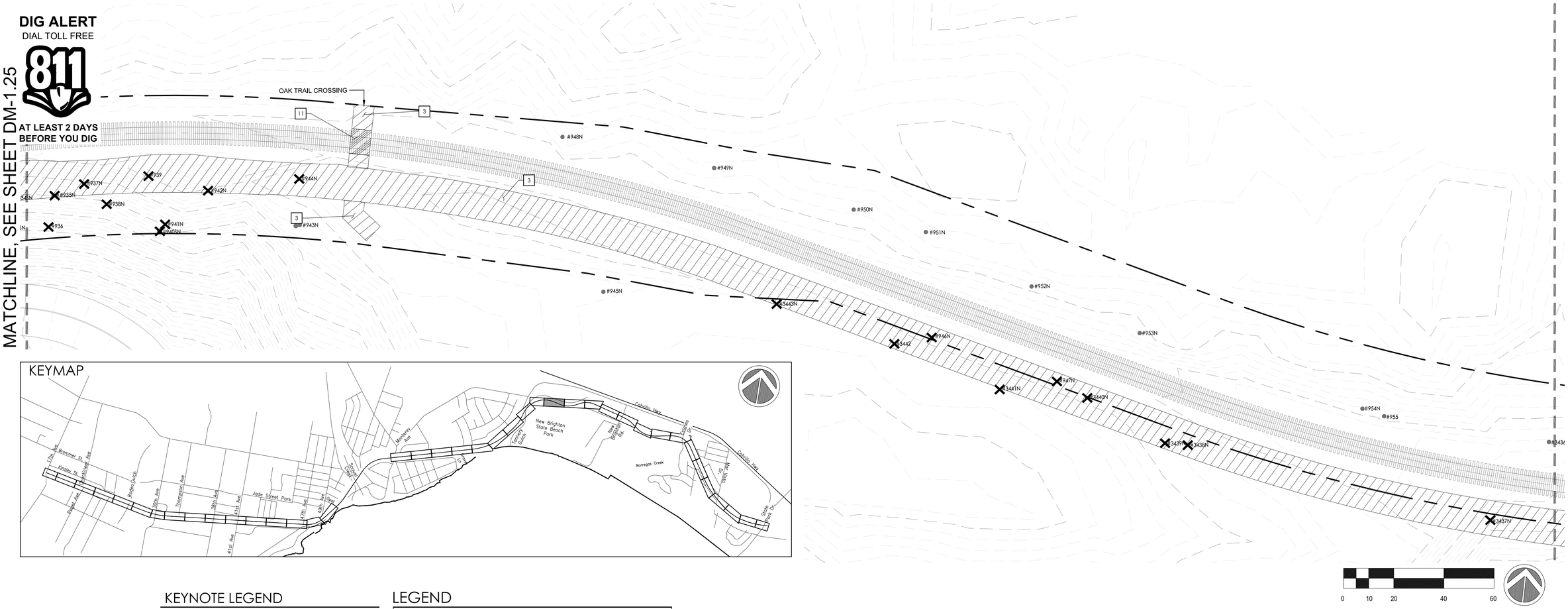
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.25
VAULT NO.

Layout Tab Name: DM-1.25, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg; XTB-0193-06-RWT-S11.dwg; XSB-0193-06-RWT-S11.dwg; XC-0193-06-RWT-S11.dwg; XCB-0193-06-RWT-S11.dwg; XDM-0193-06-RC20.dwg
\\corp\rmm\sn-sta\2001\0193-06-RC20-Santa-Cruz-Rail-Trail-Seg-10-11\Bar arm Trail\Engineering\Decker\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dnaumann, Plotted: Feb 14, 2023 - 6:24am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.25



KEYMAP

0 10 20 40 60

MATCHLINE, SEE SHEET DM-1.27
TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.26
VAULT NO.	

Layout Tab Name: DM-1.26, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, XD-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC20.dwg, \\corp\rmm\san-data\2021\0193-06-RC20-Santa-Cruz-Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Design\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dsvoboda, Plotted: Feb 14, 2023 - 6:27pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



MATCHLINE, SEE SHEET DM-1.26

MATCHLINE, SEE SHEET DM-1.28

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.27

VAULT NO.

Layout Tab Name: DM-1.27, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RP20.dwg
\\Corp\rmm\on-site\2001\0193-06-RCPD-Santa Cruz Rail Trail-Seg 10-11\Bid sets Trail\Engineering\Sheets\Sheet Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dsaunders, Plotted: Feb 14, 2023 - 6:30am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.27

MATCHLINE, SEE SHEET DM-1.29



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.28, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCD0.dwg
\\Cosrv\rrm\sm-sta\2001\0193-06-RCD0-Santa-Cruz-Rail-Trail-Seg-1-10-11\Mail auto Trail\Engineering\Civil4x\Sheet-Files\Segment 11\XM-0193-06-RWT-S11.dwg, Plotted By: ssouvannara, Plotted: Feb 14, 2023 - 6:23pm

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.28
VAULT NO.	

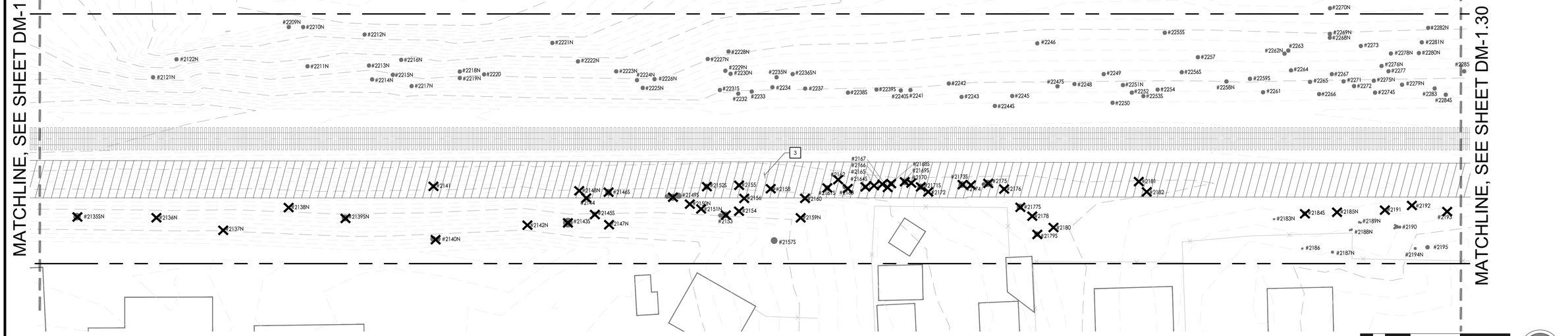
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



MATCHLINE, SEE SHEET DM-1.28

MATCHLINE, SEE SHEET DM-1.30



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.29, Image: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC20.dwg
I:\corp\rrm\on-site\2021\0193-06-RC20-Santa Cruz Rail-Trail-Seg-10-11\Rail with Trail\Engineering\Detail\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dsvoronkina, Plotted: Feb 14, 2023 - 6:35am

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.29
VAULT NO.

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.29

NEW BRIGHTON ROAD

MATCHLINE, SEE SHEET DM-1.21

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)



#2307N
#2290N
#2296N
#2305N
#2301N
#2291N
#2297N
#2300N
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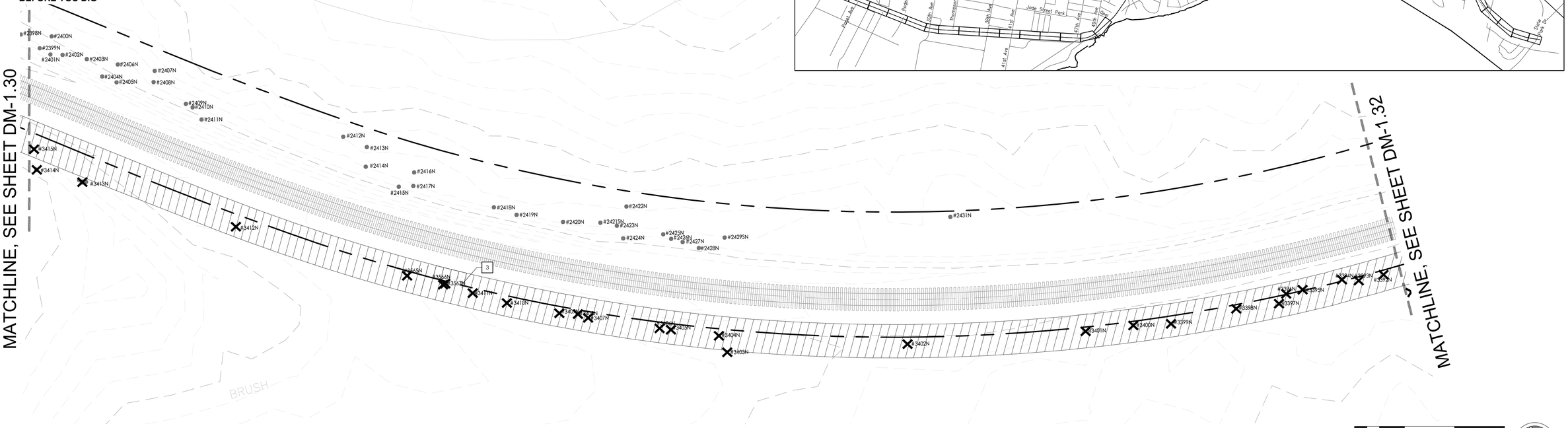
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.31, Images: county-logo-black-transparent.png; , Prefix XF: -0193-06-RWT-S11.dwg, XTP: -0193-06-RWT.dwg, XSR: -0193-06-RWT-S11.dwg, XC: -0193-06-RWT-S11.dwg, XD: -0193-06-RWT-S11.dwg, XEMAP: -0193-06-RCD0.dwg
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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

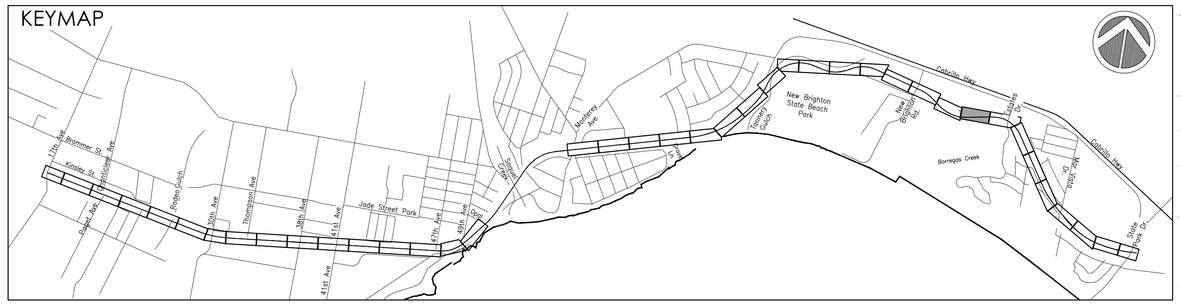
REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.31
VAULT NO.	

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



MATCHLINE, SEE SHEET DM-1.31

MATCHLINE, SEE SHEET DM-1.33

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

BRUSH

3

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
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DESIGN	KS/MS
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DM-1.32
VAULT NO.

Layout Tab Name: DM-1.32, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC20.dwg
\\Corp\rmm\on-site\2001\01\93-06-RC20-Santa Cruz-Rail-Trail-Seg-10-11\Dwl with Trail\Engineering\Sheets\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: dsoutomm, Plotted: Feb 14, 2023 - 6:43pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

BORREGAS CREEK

ESTATES DRIVE

MATCHLINE, SEE SHEET DM-1.32

MATCHLINE, SEE SHEET DM-1.34



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KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
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VAULT NO.	

Layout Tab Name: DM-1.33 Images: county-logo-black-transparent.png; Xrefs: XC-0193-06-RWT-S11.dwg; XTB-0193-06-RWT.dwg; XSB-0193-06-RWT-S11.dwg; XC-0193-06-RWT-S11.dwg; XCMAP-0193-06-RCD0.dwg; \\Corp\rm\sn-shr\2001\0193-06-RCD\Santa Cruz-Rail-Trail-Seg-1-10-11\Rail with Trail\Engineering\Civil\Xrefs\Street-Files\Segment 11\XM-0193-06-RWT-S11.dwg, Plotted By: snavarrete, Plotted: Feb 14, 2023 - 6:46pm

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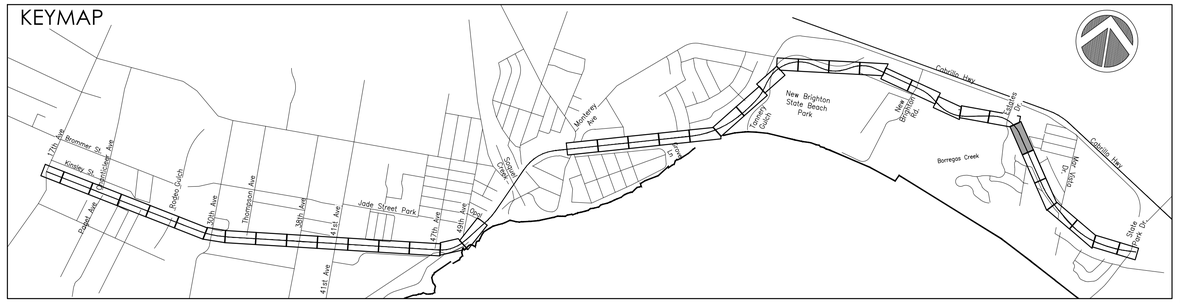
MATCHLINE, SEE SHEET DM-1.33

MATCHLINE, SEE SHEET DM-1.35

STREAM 633

KEYMAP



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
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	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
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SCALE	AS SHOWN
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VAULT NO.	

Layout Tab Name: DM-1.34, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCZD.dwg
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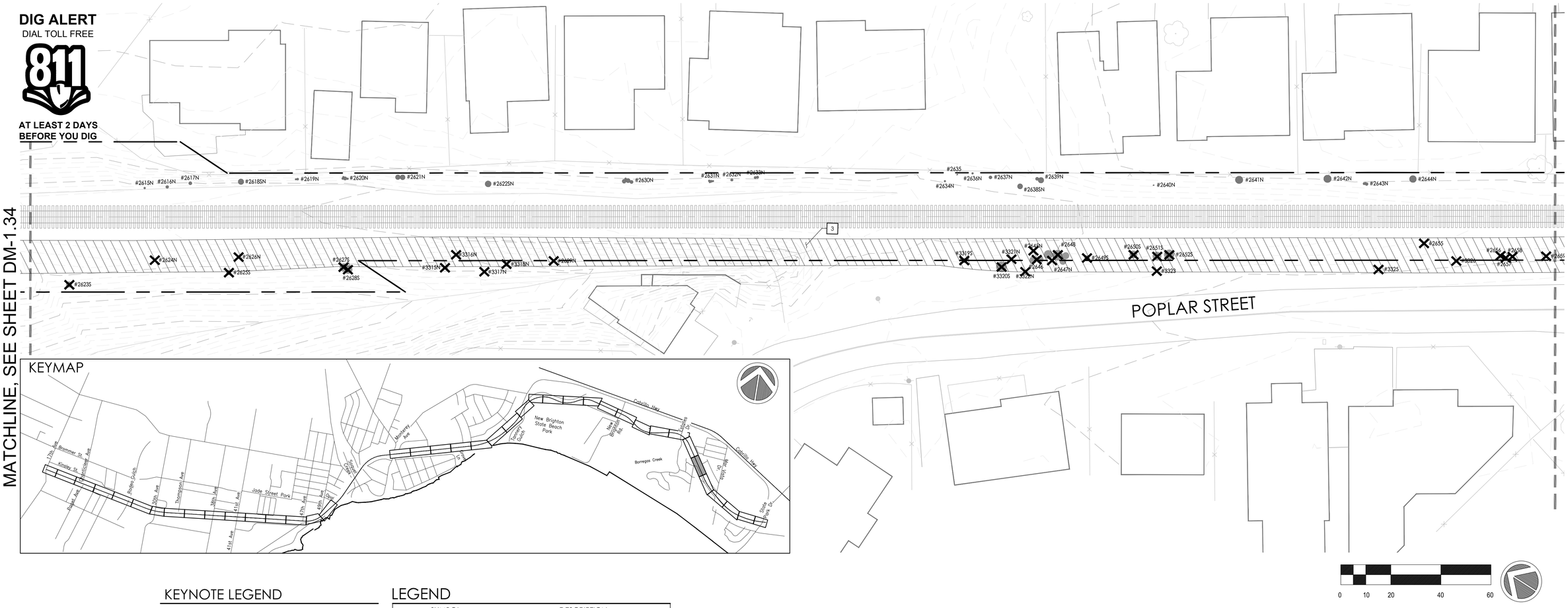
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.34



MATCHLINE, SEE SHEET DM-1.36

KEYMAP

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE AND SMOOTH EXISTING DIRT PILES TO ADJACENT AREA
6	PROTECT EXISTING RAILROAD SIGNAL IN PLACE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING OR SIGNAGE
9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.35, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RCD0.dwg
\\Corp\rmm\sm-sta\0001\0193-06-RCD0-Santa-Cruz-Rail-Trail-Seg-1-10-11\Bid with Trail\Engineering\Civil3d\Sheet-Files\Segment 11\DM-0193-06-RWT-S11.dwg, Plotted By: ksousmena, Plotted: Feb 14, 2023 - 6:52pm

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San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.35
VAULT NO.	

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG



KEYMAP

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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LEGEND

SYMBOL	DESCRIPTION
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	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.36
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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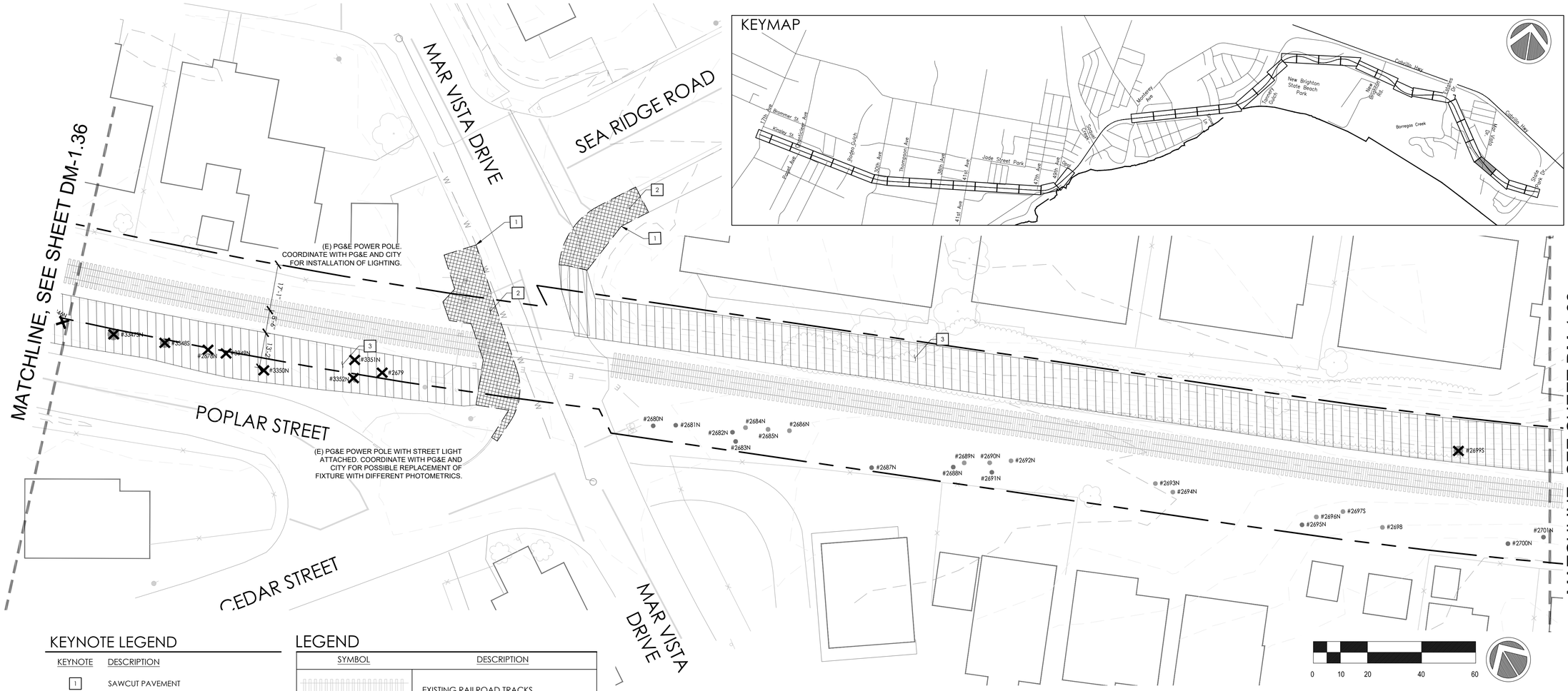
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
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9	REMOVE EXISTING UTILITY
10	RELOCATE EXISTING UTILITY
11	REMOVE RAILS, TIES, OTHER TRACK MATERIAL
12	ABANDON IN PLACE
13	REMOVE CONCRETE TRACK PANEL

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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REVISIONS

COUNTY OF SANTA CRUZ
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701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.37
VAULT NO.	

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
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TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

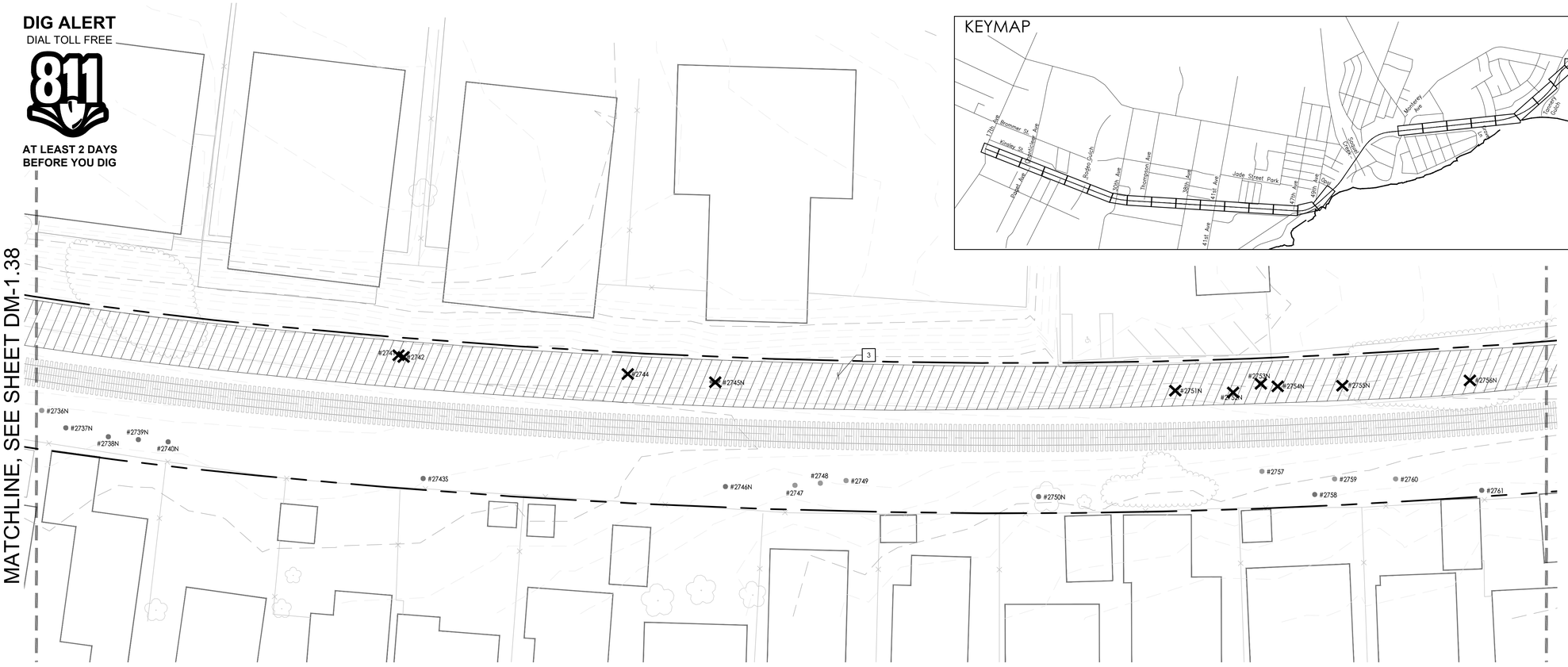
DRAWING #:
DM-0193-06-RWT-S11

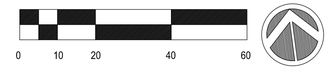
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.38
VAULT NO.	

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET DM-1.38

MATCHLINE, SEE SHEET DM-1.40





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TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.39, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, XT-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RK00.dwg, \\Corp\rmm\rmm-data\0001\0193-06-RK00-Santa Cruz-Rail-Trail-Seg-1b-11\Rail with Trail\Engineering\Details\Sheet-Files\Segment 11\dgn-0193-06-RWT-S11.dwg, Plotted By: dsouzamona, Plotted: Feb 14, 2023 - 7:24am

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

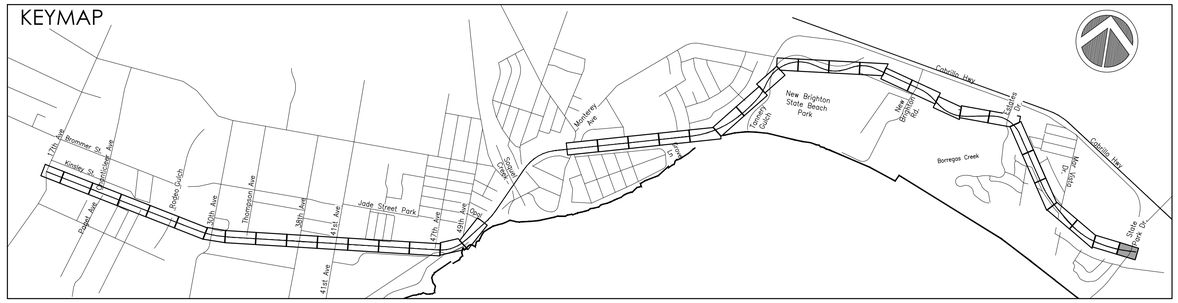
DRAWING #:
DM-0193-06-RWT-S11

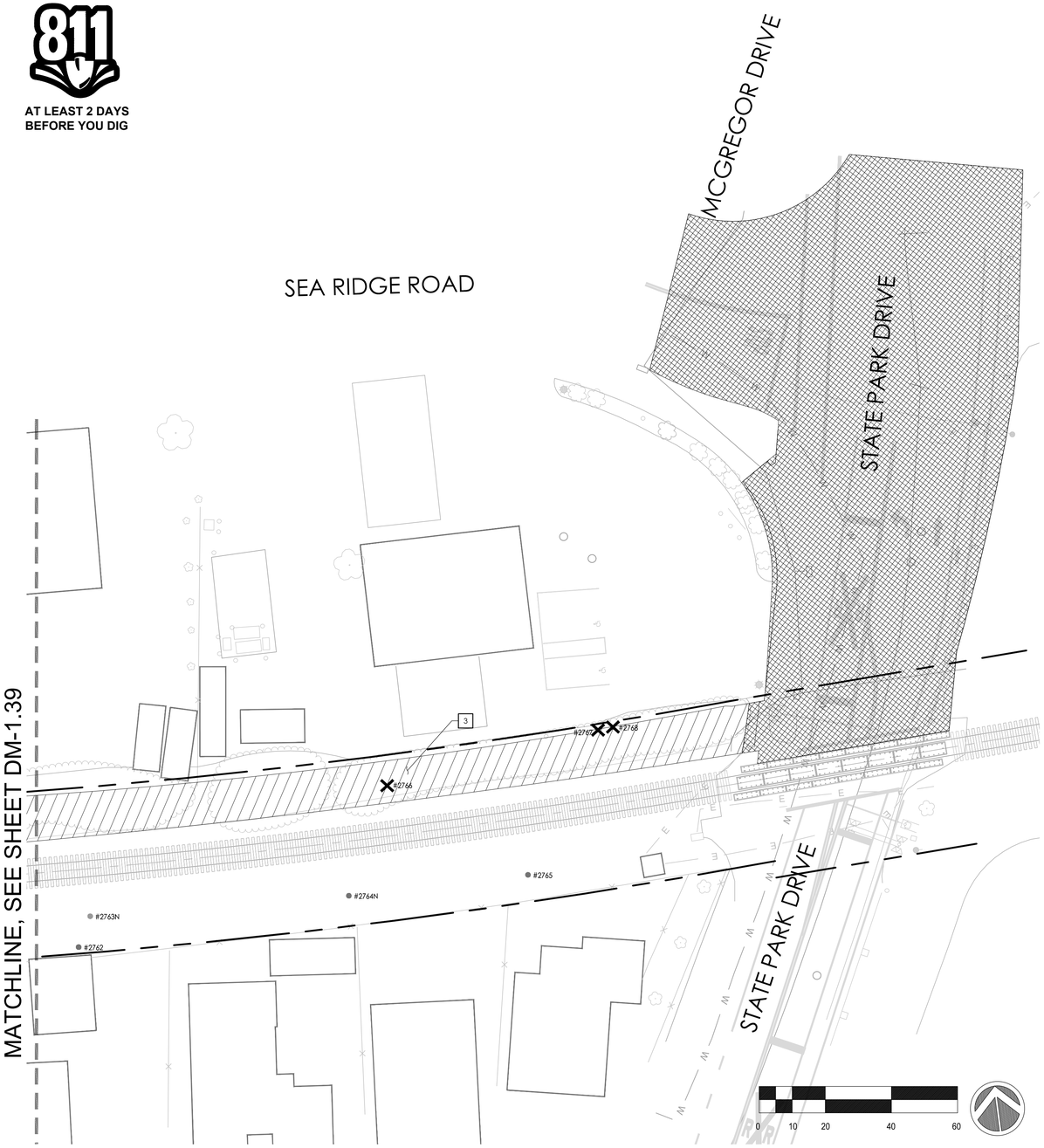
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.39
VAULT NO.

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

KEYMAP





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TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION) REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.40, Images: county-logo-black-transparent.png, Xrefs: SC-0193-06-RWT-S11.dwg, XTB-0193-06-RWT.dwg, XSB-0193-06-RWT-S11.dwg, SC-0193-06-RWT-S11.dwg, KEYMAP-0193-06-RC20.dwg
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San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL NEXT TO THE RAIL LINE (ULTIMATE TRAIL CONFIGURATION)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RWT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.40
VAULT NO.	

A.6, Tree Removal for Optional Interim Trail

DEPARTMENT OF PUBLIC WORKS

RAIL TRAIL SEGMENTS 10 - 11 TRAIL ON THE RAIL LINE (INTERIM TRAIL)

17th Avenue to State Park Drive

PROJECT DESCRIPTION

PICKING UP WHERE SEGMENT 9 TERMINATES, THE SEGMENTS 10 AND 11 PROJECT INCLUDES CONSTRUCTION OF A MULTI-USE TRAIL LOCATED GENERALLY ALONG THE SANTA CRUZ BRANCH RAILROAD CENTERLINE WITH THE REMOVAL OF EXISTING TRACKS AND TIES THROUGH THE PROCESS OF RAILBANKING FROM THE EAST SIDE OF THE 17TH AVENUE TO THE WEST SIDE OF STATE PARK DRIVE.

PROJECT DIRECTORY

OWNER
SANTA CRUZ COUNTY REGIONAL
TRANSPORTATION COMMISSION
CONTACT: GRACE BLAKESLEE PHONE: (831) 460-3200
RAIL CONTACT: TOMMY TRAVERS FAX: (831) 460-6178

LANDSCAPE ARCHITECT
RRM DESIGN GROUP
3765 SOUTH HIGUERA, SUITE 102 PHONE: (949) 361-7950
SAN LUIS OBISPO, CA 93401 FAX: (949) 361-7955
CONTACT: MIKE SHERROD

CIVIL ENGINEER
RRM DESIGN GROUP
325 DAVIS STREET PHONE: (510) 751-4910
SAN LEANDRO, CA 94577 FAX: (510) 686-4910
CONTACT: DARREN CHOY

ELECTRICAL ENGINEER
THOMA ELECTRIC
3562 EMPLEO ST. PHONE: (805) 543-3850
SAN LUIS OBISPO, CA
CONTACT: CHRIS PATCHIN

GEOTECHNICAL ENGINEER
PACIFIC CREST ENGINEERING
444 AIRPORT BLVD PHONE: (831) 722-9446
WATSONVILLE, CA 95076
CONTACT: CHRIS JOHNSON

STRUCTURAL ENGINEER
MESITI-MILLER ENGINEERING
224 WALNUT ST, SUITE B PHONE: (831) 426-3186
SANTA CRUZ, CA 95060
CONTACT: DALE HENDSBEE

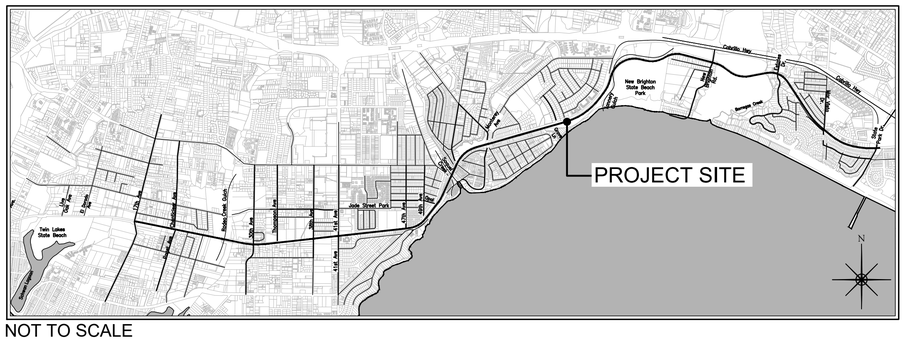
TRAFFIC ENGINEER
WHITLOCK & WEINBERGER (W-TRANS)
1276 LINCOLN AVE, SUITE 204 PHONE: (510) 444-2600
SAN JOSE, CA 9525
CONTACT: STEVE FITZSIMMONS

RAIL ENGINEER
ZEPHYR UAS/RAIL (ZUI)
725 W TOWN & COUNTRY RD, SUITE 550 PHONE: (714) 835-6355
ORANGE, CA 92868
CONTACT: ALFRED YALDA

CLIENT
COUNTY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
CONTACT: ROB TIDMORE
PHONE: (831) 454-2160
FAX: (831) 454-2385

SECONDARY CLIENT
CITY OF CAPITOLA
PUBLIC WORKS DEPARTMENT
CONTACT: KAILASH MOZUMDER
PHONE: (831) 475-7300

VICINITY MAP



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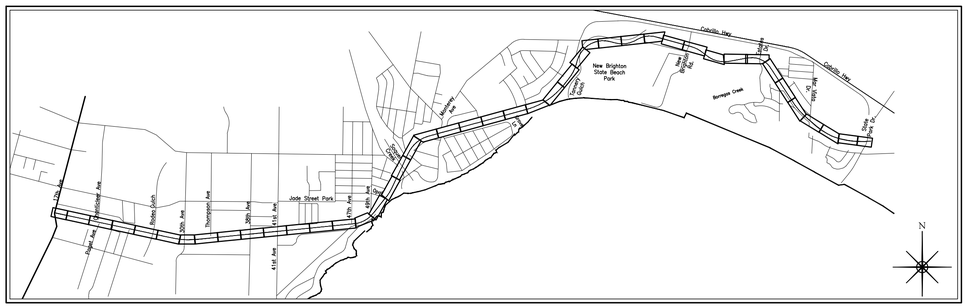

KEY MAP SCALE: 1"=2000'

SHEET INDEX

TS-1.01	TITLE SHEET
DM-1.01-1.14	SEGMENT 10 DEMOLITION PLANS
DM-1.15-1.44	SEGMENT 11 DEMOLITION PLANS
CP-1.01-1.14	SEGMENT 10 CONSTRUCTION KEYNOTE PLANS
CP-1.15-1.44	SEGMENT 11 CONSTRUCTION KEYNOTE PLANS
BP-1.01	RODEO GULCH BRIDGE PLAN
BD-1.01	RODEO GULCH BRIDGE DETAILS
BP-2.01	CAPITOLA TRESTLE BRIDGE PLAN
BD-2.01	CAPITOLA TRESTLE BRIDGE DETAILS
BP-3.01	NEW BRIGHTON STATE BEACH BRIDGE PLAN
BD-3.01	NEW BRIGHTON STATE BEACH DETAILS
WD-1.01-1.02	RETAINING WALL DETAIL SHEETS

REFINED SCHEMATIC DESIGN SUBMITTAL

FEDERAL PROJECT NO.: ATPL-5936 (154)
STATE PROJECT NO.: 05-2300-0030
COUNTY PROJECT NO.:

REFERENCES	DATE	06/15/23	SCALE AS SHOWN
FIELD BOOK:	DRAWN	KS/EK/MMS	TS-1.01
DRAWING #:	DESIGN	KS/EK/MMS	VAULT NO.
	CHECKED	MS/KS	

Issued for Bid Set - Addendum 1 - 2023-10-16 - Kailash Mozumder
Issued for Bid Set - 2023-10-04 - Kailash Mozumder
Issued for Bid Set - 2023-09-27 - Kailash Mozumder
Issued for Bid Set - 2023-09-20 - Kailash Mozumder
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Issued for Bid Set - 2015-10-28 - Kailash Mozumder
Issued for Bid Set - 2015-10-21 - Kailash Mozumder
Issued for Bid Set - 2015-10-14 - Kailash Mozumder
Issued for Bid Set - 2015-10-07 - Kailash Mozumder
Issued for Bid Set - 2015-09-30 - Kailash Mozumder
Issued for Bid Set - 2015-09-23 - Kailash Mozumder
Issued for Bid Set - 2015-09-16 - Kailash Mozumder
Issued for Bid Set - 2015-09-09 - Kailash Mozumder
Issued for Bid Set - 2015-09-02 - Kailash Mozumder
Issued for Bid Set - 2015-08-26 - Kailash Mozumder
Issued for Bid Set - 2015-08-19 - Kailash Mozumder
Issued for Bid Set - 2015-08-12 - Kailash Mozumder
Issued for Bid Set - 2015-08-05 - Kailash Mozumder
Issued for Bid Set - 2015-07-29 - Kailash Mozumder
Issued for Bid Set - 2015-07-22 - Kailash Mozumder
Issued for Bid Set - 2015-07-15 - Kailash Mozumder
Issued for Bid Set - 2015-07-08 - Kailash Mozumder
Issued for Bid Set - 2015-07-01 - Kailash Mozumder
Issued for Bid Set - 2015-06-24 - Kailash Mozumder
Issued for Bid Set - 2015-06-17 - Kailash Mozumder
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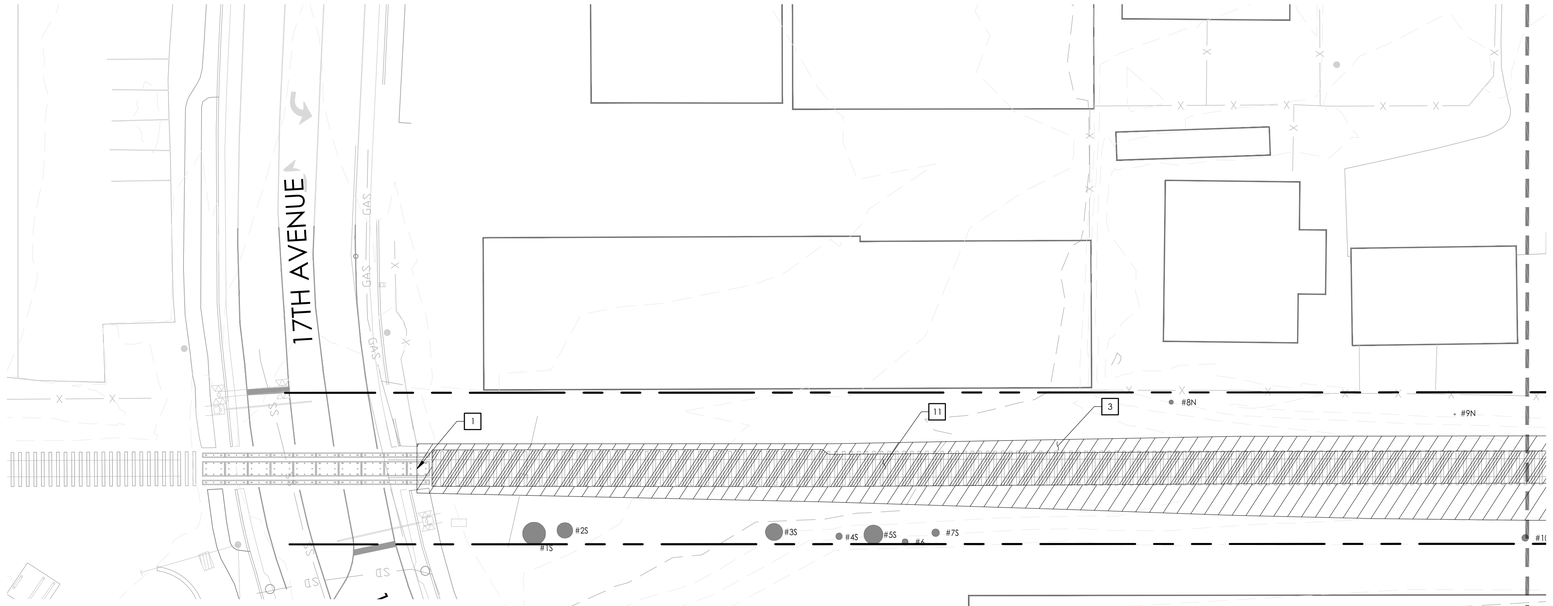

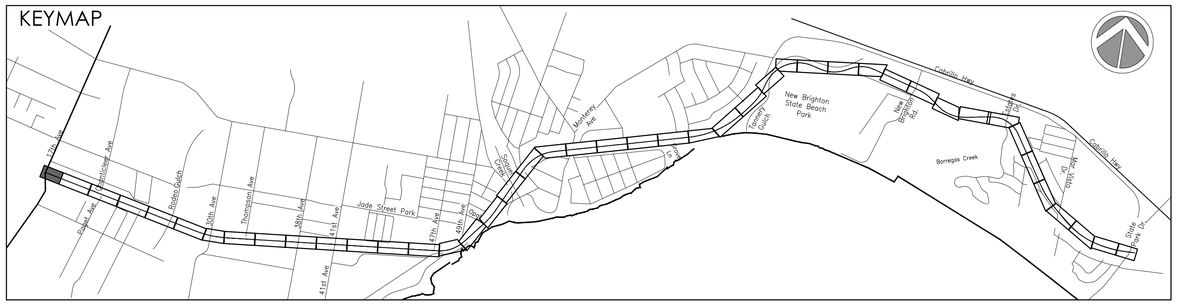



MATCHLINE, SEE SHEET DM-1.02

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE	02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN	MMS	DM-1.01
DRAWING #: DM-0193-06-RBT-S10	DESIGN	KS/MS	VAULT NO.
	CHECKED	MS	

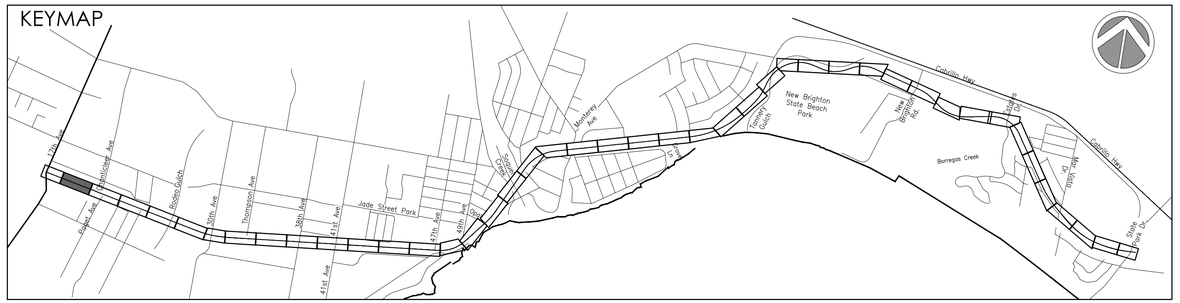
Layout Tab Name: DM-1.01, Images: county-logo-black-transparent.png, , Xrefs: XT-0193-06-RWY-S10.dwg, XTR-0193-06-RBT-S10.dwg, XSR-0193-06-RWY-S10.dwg, XC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10-Rev, KEYMAP-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg
\\Users\mm\on-site\2001\0193-06-RBT-S10.dwg, Plotted: Feb 11, 2023 - 1:32pm

CISCO LANE

MATCHLINE, SEE SHEET DM-1.01

MATCHLINE, SEE SHEET DM-1.03

KEYMAP



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#12
#14S
#15S
#16S
#17S
#18
#19S
#20S
#21S
#22S
#23S
#24N

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.02

VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.02, Images: county-logo-black-transparent.png, Xrefs: XC-0193-06-RWT-S10.dwg, XTB-0193-06-RBT.dwg, XSB-0193-06-RBT.dwg, XC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RCZD.dwg, XH-0193-06-RBT-S10.dwg, XC-0193-04-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg
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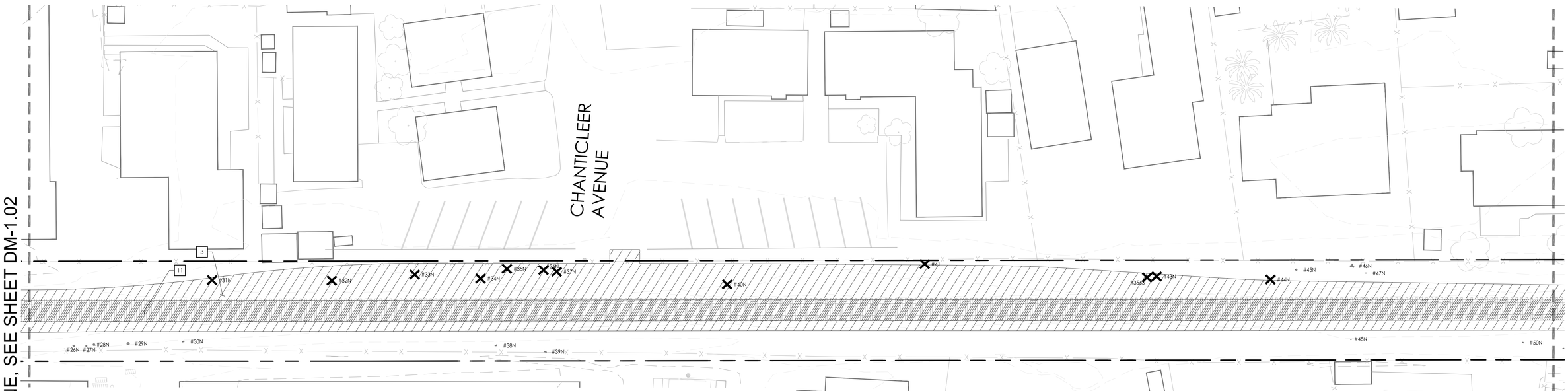
MATCHLINE, SEE SHEET DM-1.02

CHANTICLEER AVENUE



MATCHLINE, SEE SHEET DM-1.04

KEYMAP





KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
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12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.03
VAULT NO.

Layout Tab Name: DM-1.03 Images: county-logo-black-transparent.png Xrefs: XT-0193-06-RBT-S10.dwg XTB-0193-06-RBT.dwg XSB-0193-06-RBT-S10.dwg XC-0193-06-RBT-S10.dwg XC-0193-06-RBT-S10.dwg KEYMAP-0193-06-RCZ0.dwg XH-0193-06-RBT-S10.dwg SEC-0193-06-RBT-S10.dwg XC-0193-06-RBT-S10.dwg \\Corp\rmm\Jobs\2021\0193-06-RCZ0-Santa-Cruz-Rail-Trail-Seg-10-11\Wallbook with Trail\Engineering\Sheets\Sheet-Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: dmckay, Plotted: Feb 11, 2023 - 7:32pm

MATCHLINE, SEE SHEET DM-1.03

MATCHLINE, SEE SHEET DM-1.05

#56N
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#51N
#53N
#55N
#59N
#60
#61N
#63N
#65N
#66N
11
3

KEYMAP





KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
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13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.04

VAULT NO.

Layout Tab Name: DM-1.04, Images: county-logo-black-transparent.png, Xrefs: EC-0193-06-RWC-S10.dwg, RTB-0193-06-RBT.dwg, XSB-0193-06-RWC-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RCZ0.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S09.dwg, XT-0193-06-RBT-S10.dwg
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MATCHLINE, SEE SHEET DM-1.04

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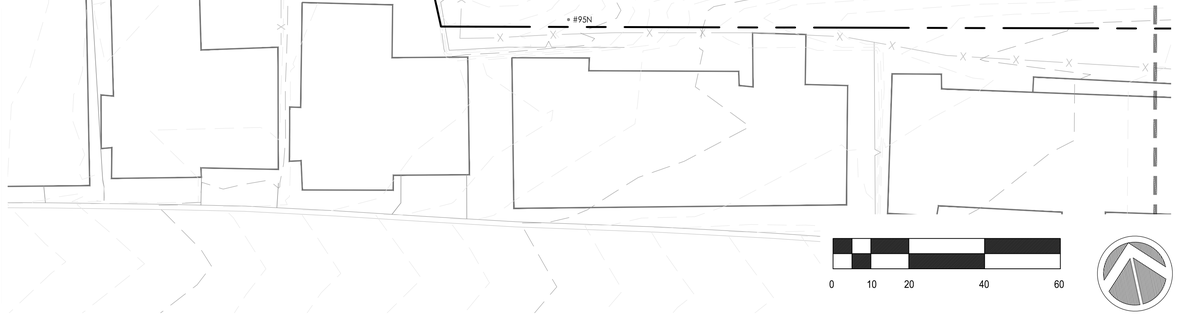
MATCHLINE, SEE SHEET DM-1.06

KEYMAP





KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN MMS	DM-1.05	
DRAWING #: DM-0193-06-RBT-S10	DESIGN KS/MS	VAULT NO.	
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MATCHLINE, SEE SHEET DM-1.05

RODEO GULCH

#107N #108N #109 #110 #111 #112 #113 #114 #115 #116 #117 #118 #119 #120 #121 #122 #123 #124N #125 #126 #127 #128 #1175N #129 #130 #131 #132 #133 #134 #135 #136S #137N #138S #139S #140S #140N #141N #142N #143N #144N #145SN #146 #147S #148S #149 #150 #151S #152S #153N #154N

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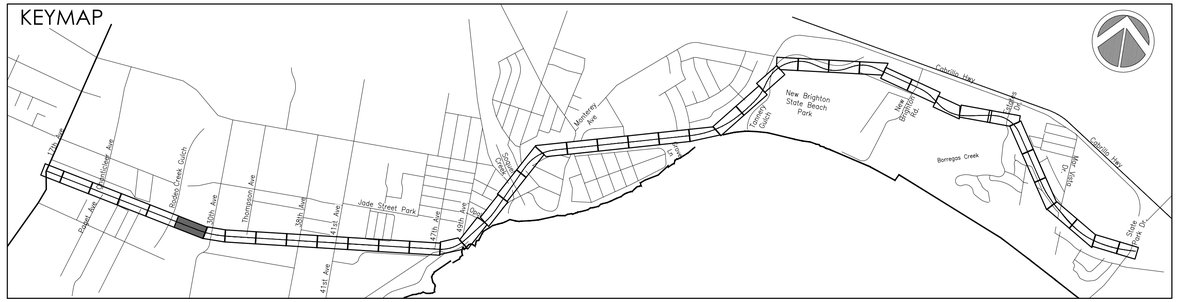
KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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SYMBOL	DESCRIPTION
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	REMOVAL OF UTILITY LINE
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	EXISTING FENCE
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	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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MATCHLINE, SEE SHEET DM-1.07

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE	02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN	MMS	DM-1.06
DRAWING #: DM-0193-06-RBT-S10	DESIGN	KS/MS	VAULT NO.
	CHECKED	MS	

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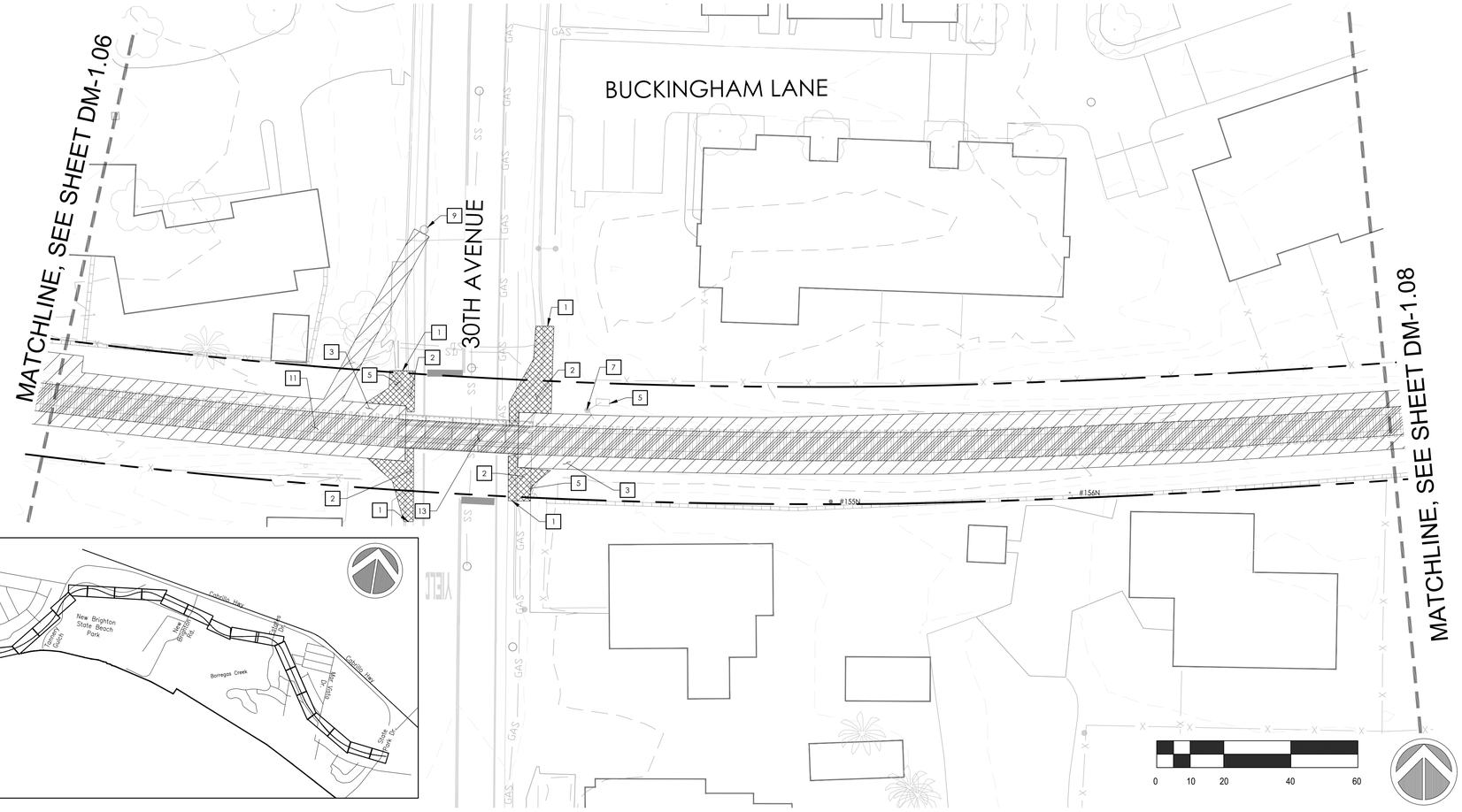
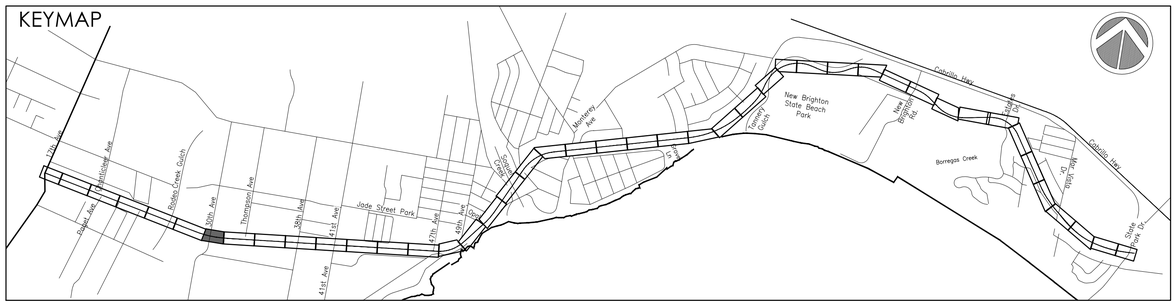


KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

DIG ALERT
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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.07
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.07, Images: county-logo-black-transparent.png; , Refs: XT-0193-06-RWT-S10.dwg; XTR-0193-06-RBT.dwg; XSB-0193-06-RBT.dwg; XC-0193-06-RBT-S10.dwg; KEYMAP-0193-06-RCSD.dwg; XH-0193-06-RBT-S10.dwg; SEC-0193-06-RBT-S10.dwg; \\corp\rmm\sm-sbk\2001\0193-06-RCSD-Santa-Cruz-Rail-Trail-Seg-1-10-11\Wetlands work files\Engineering\Sandbox\Sheet Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: dmckay, Plotted: Feb 11, 2023 - 12:32pm

MATCHLINE, SEE SHEET DM-1.07

MATCHLINE, SEE SHEET DM-1.09

THOMPSON AVENUE

#158 #159N #160N #161 #162 #163 #164 #165 #166 #167 #168 #169S #170 #171 #172

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.08

VAULT NO.

Layout Tab Name: DM-1.08, Images: county-logo-black-transparent.png, Xrefs: EC-0193-06-RBT-S10.dwg, XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RCZ0.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, Plotted By: dmckay, Plotted: Feb 11, 2023 - 7:53am
\\Corp\rmm\Jobs\2021\0193-06-RCZ0-Santa-Cruz-Rail-Trail-Seg-10-11\Wallace with Trail\Engineering\DesDev\Sheet-Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: dmckay, Plotted: Feb 11, 2023 - 7:53am

MATCHLINE, SEE SHEET DM-1.08



MATCHLINE, SEE SHEET DM-1.10

KEYMAP

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
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13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.09
VAULT NO.	

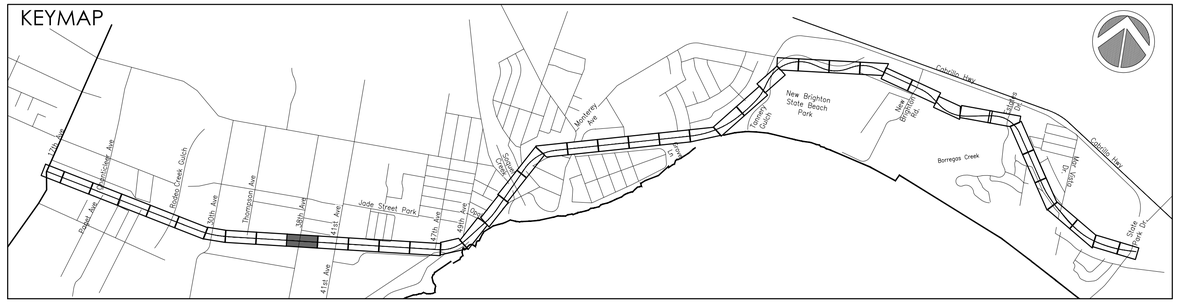
Layout Tab Name: DM-1.09, Images: county-logo-black-transparent.png, , Xrefs: XT-0193-06-RWT-S10.dwg, XTB-0193-06-RBT.dwg, XSB-0193-06-RWT-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RD20.dwg, XH-0193-06-RBT-S10.dwg, SSC-0193-06-RBT-S10.dwg, \\Cosnj\vm\sm-sfs\0001\0193-06-RD20-Santa-Cruz-Rail-Trail-Seg-1-10-11\Rollback with Trail\Engineering\Sandbox\Sheet-Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: dmckay, Plotted: Feb 11, 2023 - 7:34am

MATCHLINE, SEE SHEET DM-1.09

MATCHLINE, SEE SHEET DM-1.11

38TH AVENUE

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.10
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab: Name: DM-1.10, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWY-S10.dwg, XTR-0193-06-RBT.dwg, XSR-0193-06-RWY-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RK00.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XC-0193-04-RBT-S10.dwg, XT-0193-06-RBT-S10.dwg
\\Corp\vm\sm-sbfs\0001\0193-06-RK00-Santa Cruz Rail Trail\Eng\Engineering\Details\Sheet Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: jmckay, Plotted: Feb 11, 2023 - 3:24pm

MATCHLINE, SEE SHEET DM-1.10

MATCHLINE, SEE SHEET DM-1.12

#213N+ +#214N

#215N

#211N #212N

#216+ #217 #218

#219+ #220

#221+ #222

41ST AVENUE

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

DIG ALERT
DIAL TOLL FREE
811
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.11

VAULT NO.

Layout Tab Name: DM-1.11, Images: county-logo-black-transparent.png, Xrefs: EC-0193-06-RBT-S10.dwg, XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RCZO.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, XSB-0193-06-RBT-S10.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RCZO.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg
\\Corp\rmm\Jobs\2021\0193-06-RCZO-Santa-Cruz-Rail-Trail-Seg-10-11\Wallbook with Trail\Engineering\Sheets\Sheet-Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: dmckay, Plotted: Feb 11, 2023 - 7:24pm

MATCHLINE, SEE SHEET DM-1.11

CIRCLE DRIVE

#223N

#224N

#227

#228N

#229N

#230N

#233N

#234N

#235N

#239N

MATCHLINE, SEE SHEET DM-1.13

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
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13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023	SCALE	AS SHOWN
DRAWN	MMS		DM-1.12
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

Layout Tab Name: DM-1.12, Images: county-logo-black-transparent.png, Xrefs: XC-0193-06-RBT-S10.dwg, XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RCDP.dwg, XH-0193-06-RBT-S10.dwg, XEC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XC-0193-06-RCDP-Santa-Cruz-Rail-Trail-Seg-10-11.dwg, XC-0193-06-RBT-S10.dwg, Plotted By: dmcvay, Plotted: Feb 11, 2023 - 7:24am
I:\Corp\mm\Jobs-MM\0001\0193-06-RCDP-Santa-Cruz-Rail-Trail-Seg-10-11\Drawings\Sheet-Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: dmcvay, Plotted: Feb 11, 2023 - 7:24am



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
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13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.13
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.13, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RBT-S10.dwg, XTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RBQD.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XC-0193-04-RBT-S9.dwg, XT-0193-06-RBT-S10.dwg, \\Corp.vm\vm-ala\VOL01\0193-06-RBQD-Santa Cruz Rail-Trail-Seg-10-11\Bidbook with Trail\Engineering\Details\Sheet-Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: jmchoy, Plotted: Feb 11, 2023 -- 3:25pm

MATCHLINE, SEE SHEET DM-1.13

JADE STREET PARK

47TH AVENUE

SEGMENT 10 ENDS HERE
SEGMENT 11 BEGINS HERE

EX TRACK CONTINUES, DEMO DOES NOT FOR SEGMENT 10

#247N #248N #249N #250N #251N

PORTOLA DRIVE

STOP

XING

MATCHLINE, SEE SHEET DM-1.15

KEYMAP



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
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13	REMOVE CONCRETE TRACK PANELS
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15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

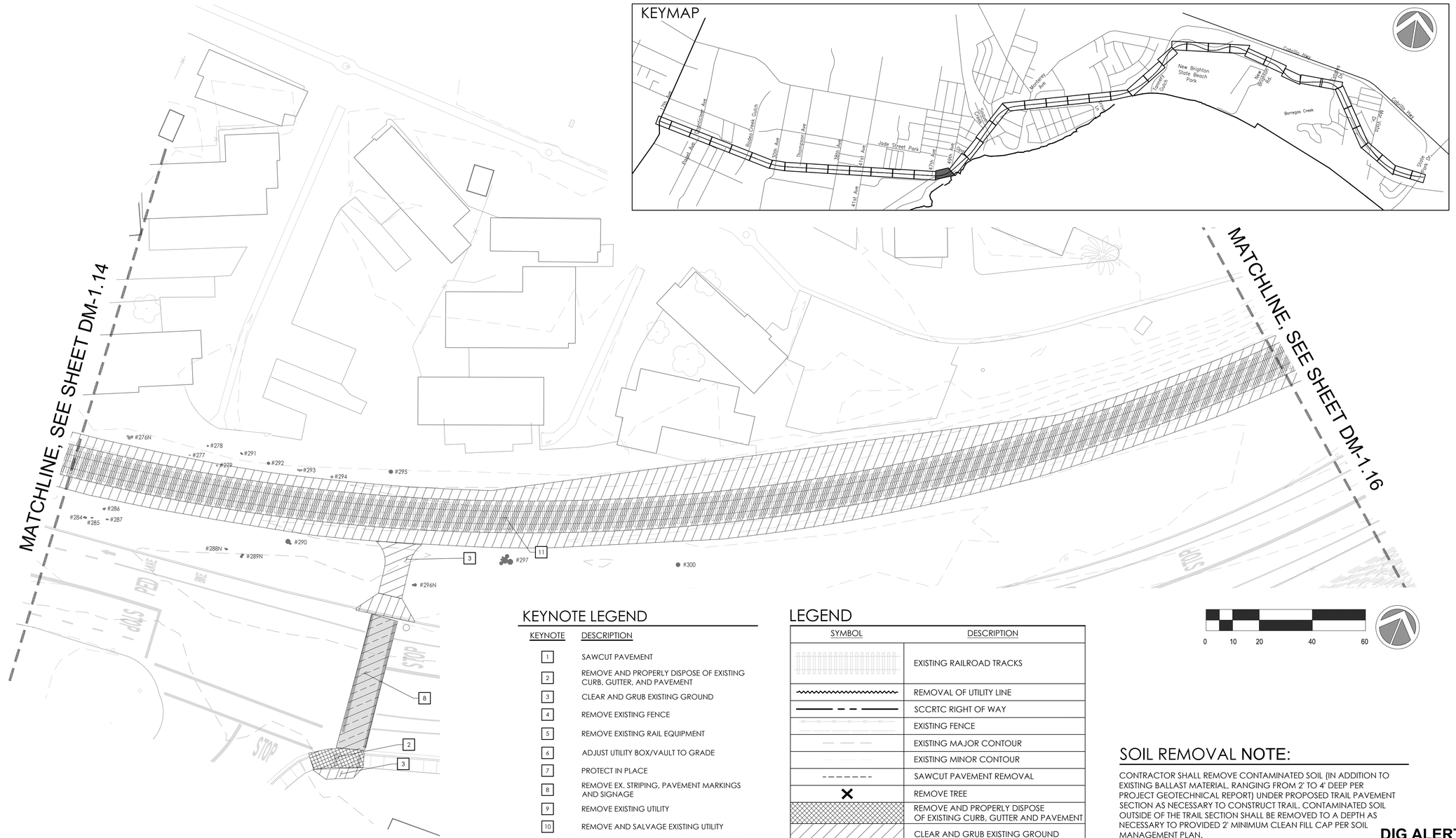
REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S10

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.14
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.14, Images: county-logo-black-transparent.png, Xrefs: EC-0193-06-RBT-S10.dwg, RTB-0193-06-RBT.dwg, XSB-0193-06-RBT-S10.dwg, XC-0193-06-RBT-S10.dwg, KEYMAP-0193-06-RBT-S10.dwg, XH-0193-06-RBT-S10.dwg, SEC-0193-06-RBT-S10.dwg, XC-0193-04-RBT-S9.dwg, XT-0193-06-RBT-S10.dwg
\\Corp\rmm\san-ark\2021\0193-06-RDS-Santa-Cruz-Rail-Trail-Seg-1-C-11\Bidbook with Trail\Engineering\Sheets\Sheet-Files\Segment 10\DM-0193-06-RBT-S10.dwg, Plotted By: dmckay, Plotted: Feb 11, 2023 - 7:35pm



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

0 10 20 40 60

SOIL REMOVAL NOTE:

CONTRACTOR SHALL REMOVE CONTAMINATED SOIL (IN ADDITION TO EXISTING BALLAST MATERIAL, RANGING FROM 2' TO 4' DEEP PER PROJECT GEOTECHNICAL REPORT) UNDER PROPOSED TRAIL PAVEMENT SECTION AS NECESSARY TO CONSTRUCT TRAIL. CONTAMINATED SOIL OUTSIDE OF THE TRAIL SECTION SHALL BE REMOVED TO A DEPTH AS NECESSARY TO PROVIDED 2' MINIMUM CLEAN FILL CAP PER SOIL MANAGEMENT PLAN.

CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOI MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE	02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN	MMS	DM-1.15
DRAWING #: DM-0193-06-RBT-S11	DESIGN	KS/MS	VAULT NO.
	CHECKED	MS	

Layout Tab Name: DM-1.15, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWF-S11.dwg, XTB-0193-06-RBT.dwg, XT-0193-06-RBT-S11.dwg, RETAIN-0193-06-RTA20.dwg, XSB-0193-06-RWF-S11.dwg
\\corp\nm\on-site\2007\0193-06-RCP\Santa Cruz-Rail-Trail-Seg-10-11\Redbank with Trail\Engineering\Detailed\Sheet Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmckay, Plotted: Feb 12, 2023 - 9:45am



MATCHLINE, SEE SHEET DM-1.15

MATCHLINE, SEE SHEET DM-1.17

#302

3

11

3

3

8

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE	02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN	MMS	DM-1.16
DRAWING #: DM-0193-06-RBT-S11	DESIGN	KS/MS	VAULT NO.
	CHECKED	MS	

Layout Tab Name: DM-1.16, Images: county-logo-black-transparent.png; , Refs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RBT-S11.dwg, XC-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RD20.dwg, XSB-0193-06-RBT-S11.dwg
\\corp\rmm\on-site\0001\0193-06-RD20-Santa-Cruz-Rail-Trail-Seg-10-11\Wallace with Trail\Engineering\Xrefs\Sheet Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmotley, Plotted: Feb 12, 2023 - 8:54am

MATCHLINE, SEE SHEET DM-1.16

MATCHLINE, SEE SHEET DM-1.18

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.17

VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.17, Images: county-logo-black-transparent.png, Xrefs: SC-0193-06-RBT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, XSTAMP-0193-06-RTOD.dwg, XSB-0193-06-RBT-S11.dwg, \\Corp\vm\san-sha\2001\0193-06-RCZO-Santa Cruz Rail Trail-Segs 1-11\Bidbook with Trail\Engineering\Dwfiles\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmcfoy, Plotted: Feb 12, 2023 - 8:55am

MATCHLINE, SEE SHEET DM-1.17

MATCHLINE, SEE SHEET DM-1.19



3

11

5

SOQUEL CREEK

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
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	EXISTING MINOR CONTOUR
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.18
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.18, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg, XTR-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RCZD.dwg, XSB-0193-06-RWT-S11.dwg, \\Corp\rmm\san-ark\2021\0193-06-RCZD-Santa-Cruz-Rail-Trail-Seg-1-10-11\Wallace with Trail\Engineering\SantaCruz\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmcfay, Plotted: Feb 12, 2023 - 8:57am



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE 02/10/2023	SCALE AS SHOWN	
FIELD BOOK:	DRAWN MMS	DM-1.19	
DRAWING #: DM-0193-06-RBT-S11	DESIGN KS/MS	VAULT NO.	
	CHECKED MS		

Layout Tab Name: DM-1.19, Images: county-logo-black-transparent.png, , Xrefs: XT-0193-06-RWY-S11.dwg, XTL-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RDD.dwg, XSB-0193-06-RWY-S11.dwg
\\corp\rmm-sta\2001\0193-06-RDD-Santa Cruz Rail Trail-Seg 10-11\Redlines with Trail\Engineering\Meadow\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmotley, Plotted: Feb 12, 2023 - 8:58am



MATCHLINE, SEE SHEET DM-1.19

MATCHLINE, SEE SHEET DM-1.21

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
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	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
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REVISIONS

COUNTY OF SANTA CRUZ
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

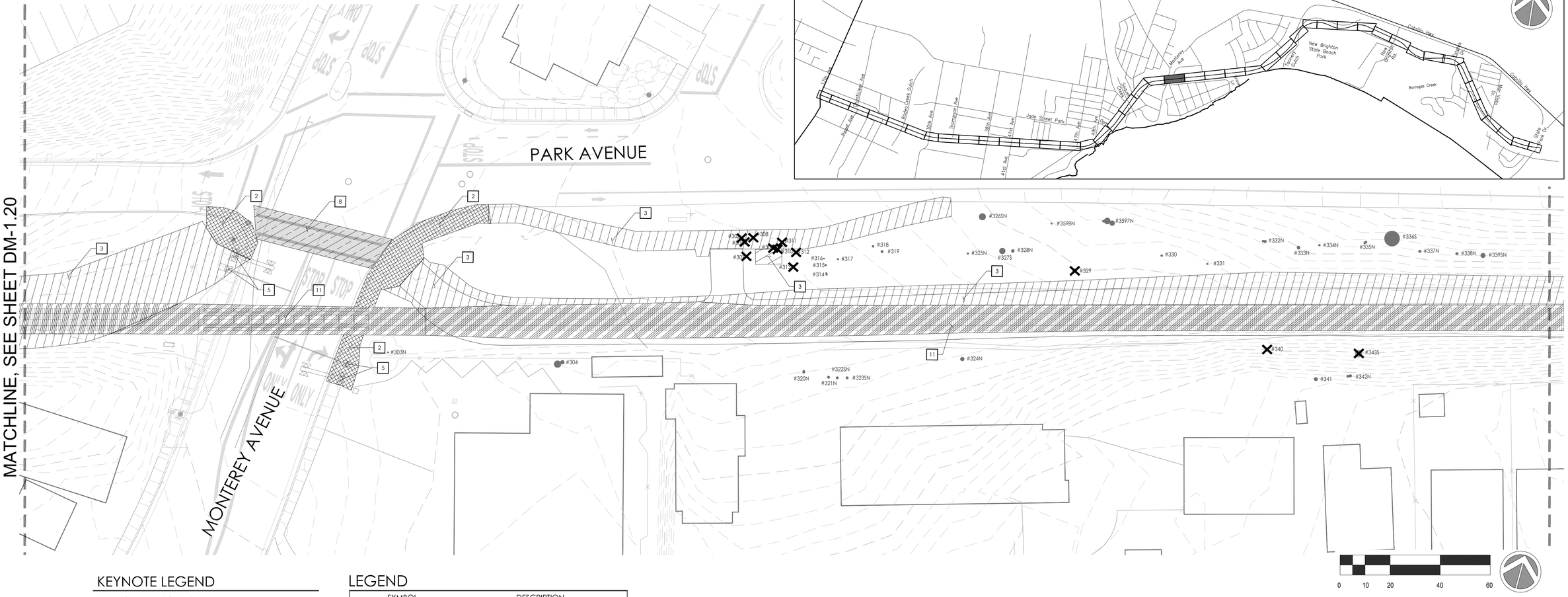
DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.20
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.20, Images: county-logo-black-transparent.png; , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RD20.dwg, XSB-0193-06-RWC-S11.dwg
\\corp\rmm\on-site\0001\0193-06-RD20-Santa-Cruz-Rail-Trail-Seg-10-11\Wallace with Trail\Engineering\Xrefs\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmotley, Plotted: Feb 12, 2023 - 9:00am



KEYNOTE LEGEND

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	EXISTING RAILROAD TRACKS
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
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SCALE	AS SHOWN
	DM-1.21
VAULT NO.	

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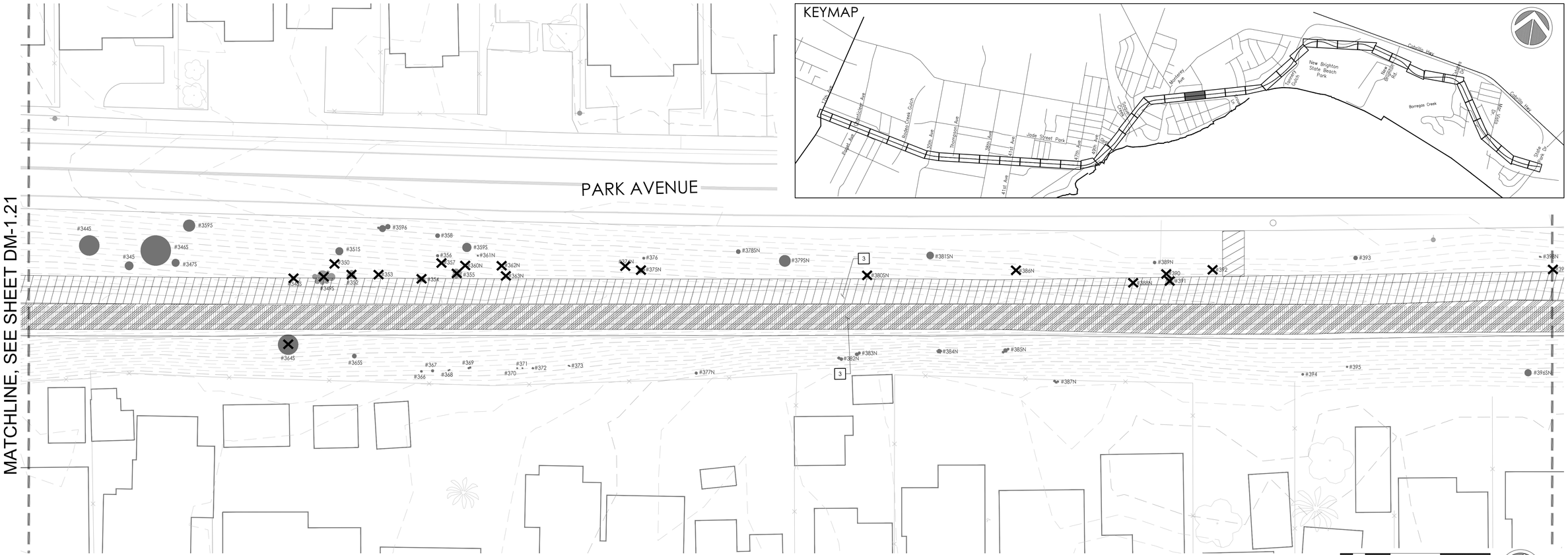

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

SOIL REMOVAL NOTE:

CONTRACTOR SHALL REMOVE CONTAMINATED SOIL (IN ADDITION TO EXISTING BALLAST MATERIAL, RANGING FROM 2' TO 4' DEEP PER PROJECT GEOTECHNICAL REPORT) UNDER PROPOSED TRAIL PAVEMENT SECTION AS NECESSARY TO CONSTRUCT TRAIL. CONTAMINATED SOIL OUTSIDE OF THE TRAIL SECTION SHALL BE REMOVED TO A DEPTH AS NECESSARY TO PROVIDED 2' MINIMUM CLEAN FILL CAP PER SOIL MANAGEMENT PLAN.

CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOIL MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

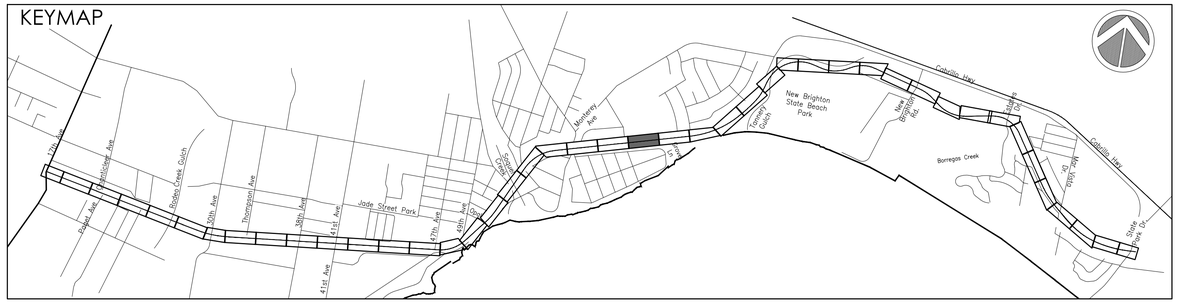
REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.22
VAULT NO.

Layout Tab Name: DM-1.22, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWF-S11.dwg, XTB-0193-06-RBT.dwg, XT-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XC-0193-06-RCD0.dwg, XSB-0193-06-RWF-S11.dwg
\\Corp\rmm\un-ceh\2020\10-93-06-RCDs-Santa Cruz-Rail-Trail-Seg-10-11\Bridges with Trail\Engineering\Sheets\Sheet Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmckay, Plotted: Feb 12, 2023 - 9:20am



MATCHLINE, SEE SHEET DM-1.22

PARK AVENUE

MATCHLINE, SEE SHEET DM-1.24

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE	02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN	MMS	DM-1.23
DRAWING #: DM-0193-06-RBT-S11	DESIGN	KS/MS	VAULT NO.
	CHECKED	MS	

Layout Tab Name: DM-1.23, Images: county-logo-black-transparent.png, , XrefN, XT-0193-06-RWT-S11.dwg, XTB-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XC-0193-06-RBT-S11.dwg, XSB-0193-06-RBT-S20.dwg, XSB-0193-06-RWT-S11.dwg
\\Users\mm\on-site\2001\0193-06-RCSD-Santa-Cruz-Rail-Trail-Seg-10-11\Bidtime with Trail\Engineering\Xrefs\Sheet Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmotley, Plotted: Feb 12, 2023 - 9:54am

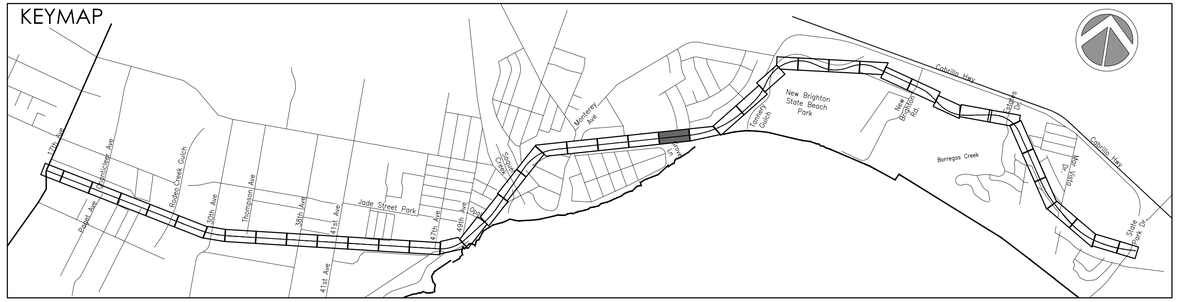
MATCHLINE, SEE SHEET DM-1.23

MATCHLINE, SEE SHEET DM-1.25

PARK AVENUE

ESCALONA GULCH

GROVE LANE



0 10 20 40 60

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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
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	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
✕	REMOVE TREE
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	MMS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.24

VAULT NO.

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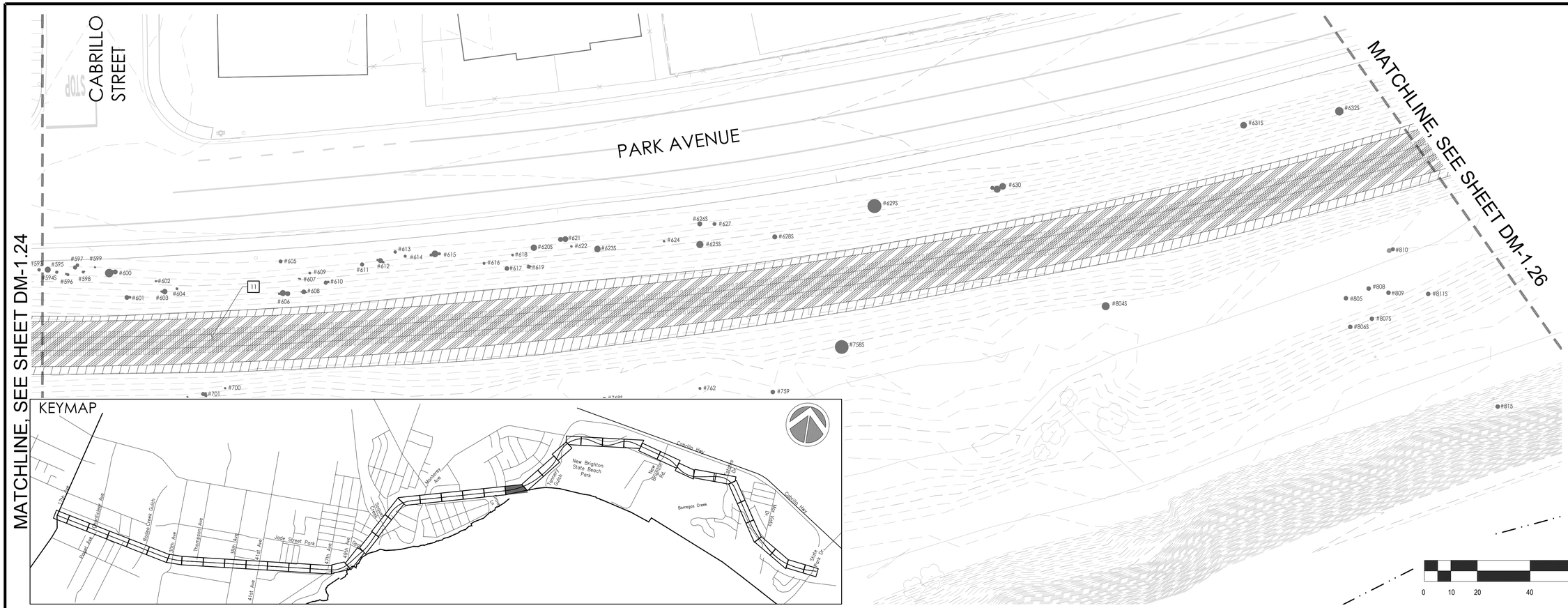

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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
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	SCCRTC RIGHT OF WAY
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	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.25
VAULT NO.	

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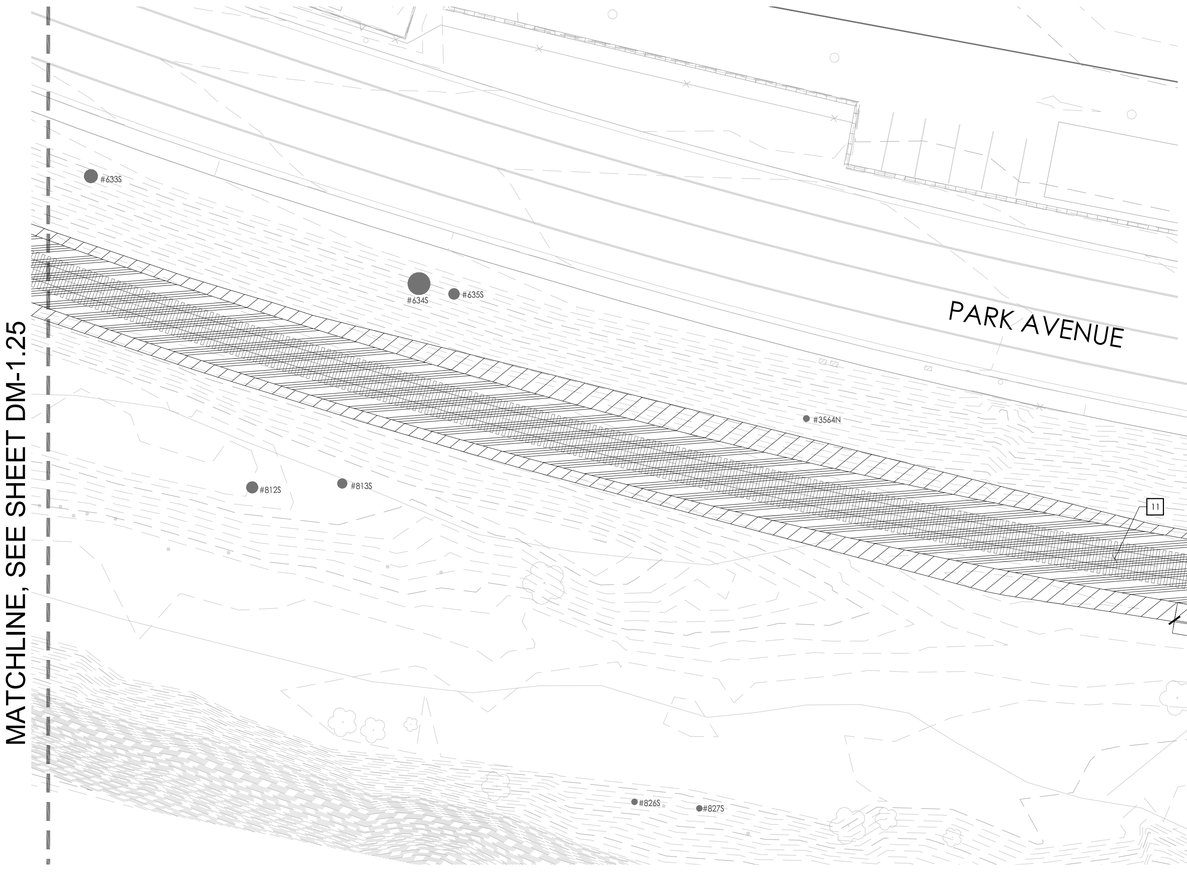

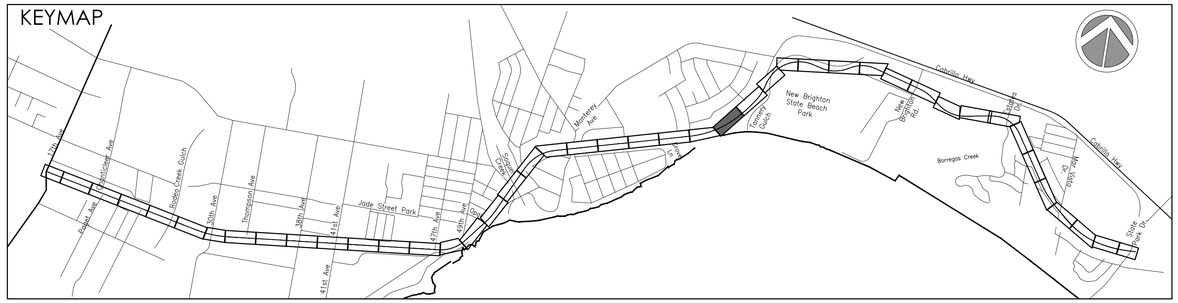

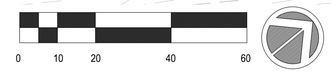

MATCHLINE, SEE SHEET DM-1.27

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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DIG ALERT
DIAL TOLL FREE
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

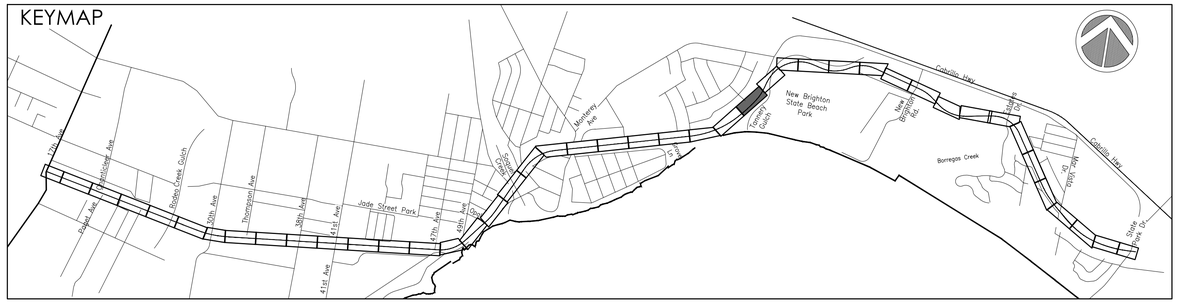
DM-1.26

VAULT NO.

Layout Tab Name: DM-1.26, Images: comfy-rope-black-transparent.png, , Xrefs: XT-0193-06-RWY-S11.dwg, XTs-0193-06-RWY-S11.dwg, XC-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XSB-0193-06-RBT-S11.dwg
\\Corp\rmm\un-ink\2007\0193-06-RCZC-Santa-Cruz-Rail-Trail-Seg-10-11\Redlines with Trail\Engineering\Mendes\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmotley, Plotted: Feb 12, 2023 - 8:08am

MATCHLINE, SEE SHEET DM-1.26

MATCHLINE, SEE SHEET DM-1.28



CORONADO STREET

PARK AVENUE

STOP

REPLACE EXISTING CMP HEADWALL AND STORM DRAIN CULVERT

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
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	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES	DATE	02/10/2023	SCALE AS SHOWN
FIELD BOOK:	DRAWN	KS	DM-1.27
DRAWING #: DM-0193-06-RBT-S11	DESIGN	KS/MS	VAULT NO.
	CHECKED	MS	

Layout Tab Name: DM-1.27, Images: county-logo-black-transparent.png, Xrefs: XT-0193-06-RBT-S11.dwg, XTA-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBDD.dwg, XSB-0193-06-RBT-S11.dwg
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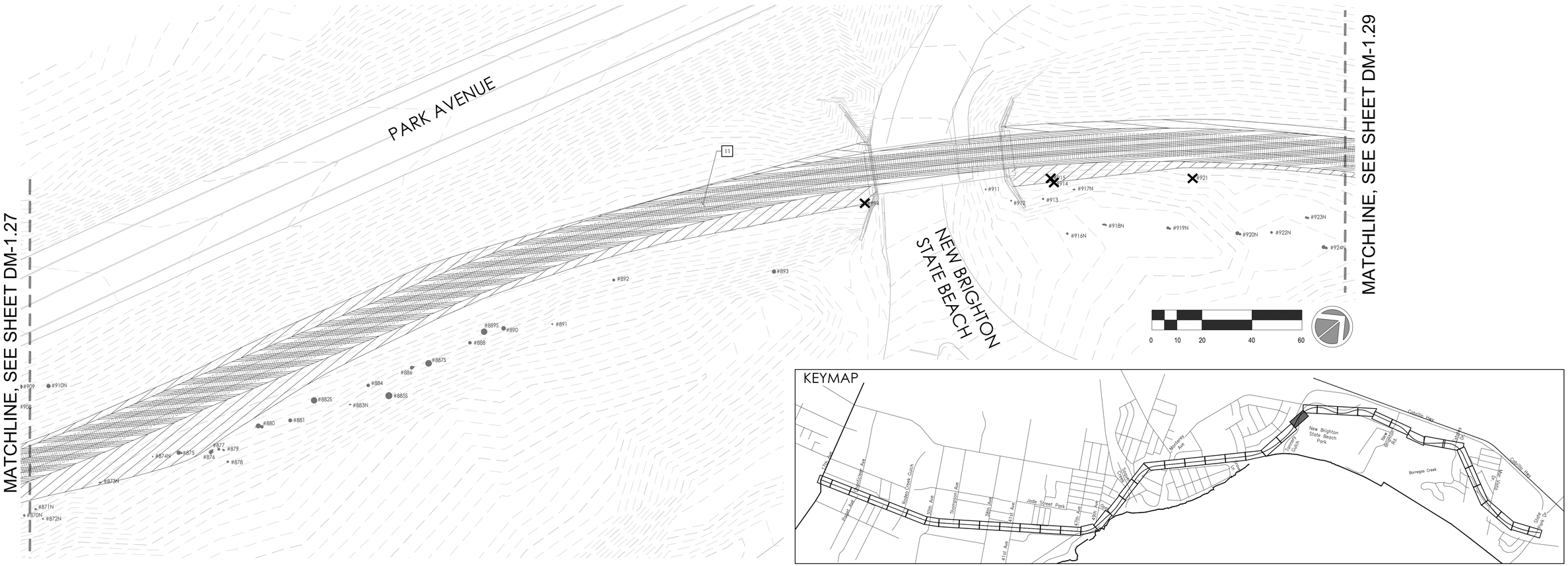

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
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15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

SOIL REMOVAL NOTE:

CONTRACTOR SHALL REMOVE CONTAMINATED SOIL (IN ADDITION TO EXISTING BALLAST MATERIAL, RANGING FROM 2' TO 4' DEEP PER PROJECT GEOTECHNICAL REPORT) UNDER PROPOSED TRAIL PAVEMENT SECTION AS NECESSARY TO CONSTRUCT TRAIL. CONTAMINATED SOIL OUTSIDE OF THE TRAIL SECTION SHALL BE REMOVED TO A DEPTH AS NECESSARY TO PROVIDED 2' MINIMUM CLEAN FILL CAP PER SOIL MANAGEMENT PLAN.

CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOIL MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.28
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.28, Images: county-logo-black-transparent.png, Xrefs: XC-0193-06-RBT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, XCMAP-0193-06-RC20.dwg, XSB-0193-06-RBT-S11.dwg
\\Corp\rmm\on-work\2021\0193-06-RC20-Santa-Cruz-Rail-Trail-Seg-10-11\Wallbook with Trail\Engineering\SheDev\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmcvay, Plotted: Feb 12, 2023 - 9:11am



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

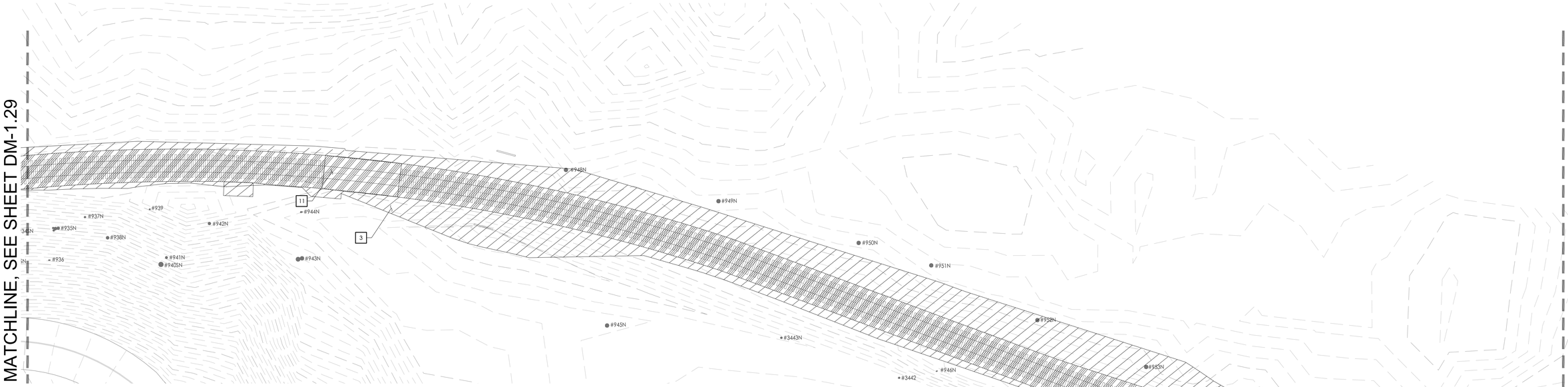
DM-1.29

VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

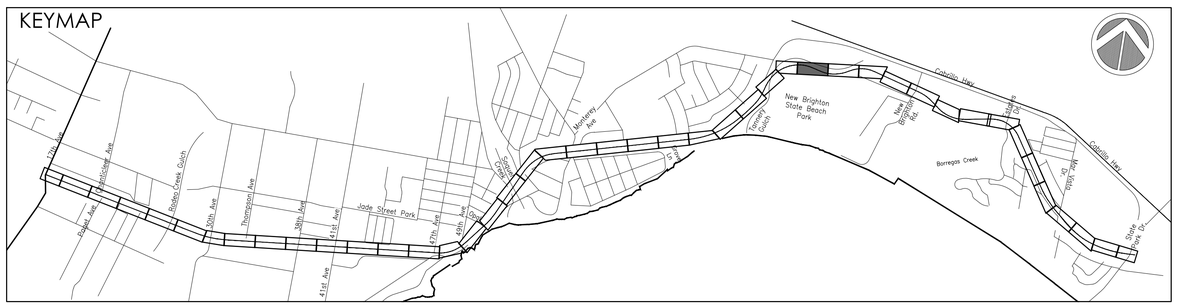
Layout Tab Name: DM-1.29, Images: county-logo-black-transparent.png, , Xrefs: XT-0193-06-RMT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RW20.dwg, XSB-0193-06-RMT-S11.dwg
I:\Corp\rrm\on-site\2001\01\93-06-RCZ0-Santa-Cruz-Rail-Trail-Seg-10-11\Working with Trail\Engineering\Sheets\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmistry, Plotted: Feb 12, 2023 - 9:13am

MATCHLINE, SEE SHEET DM-1.29



MATCHLINE, SEE SHEET DM-1.31

KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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10	REMOVE AND SALVAGE EXISTING UTILITY
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12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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0 10 20 40 60

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.30
VAULT NO.

Layout Tab Name: DM-1.30, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWF-S11.dwg, XTB-0193-06-RBF.dwg, XT-0193-06-RBT-S11.dwg, RETAIN-0193-06-RD20.dwg, XSB-0193-06-RWF-S11.dwg
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KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
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2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.31
VAULT NO.

Layout Tab Name: DM-1.31 Images: county-logo-black-transparent.png Xrefs: XT-0193-06-RWF-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RCD.dwg, XSB-0193-06-RBT-S11.dwg
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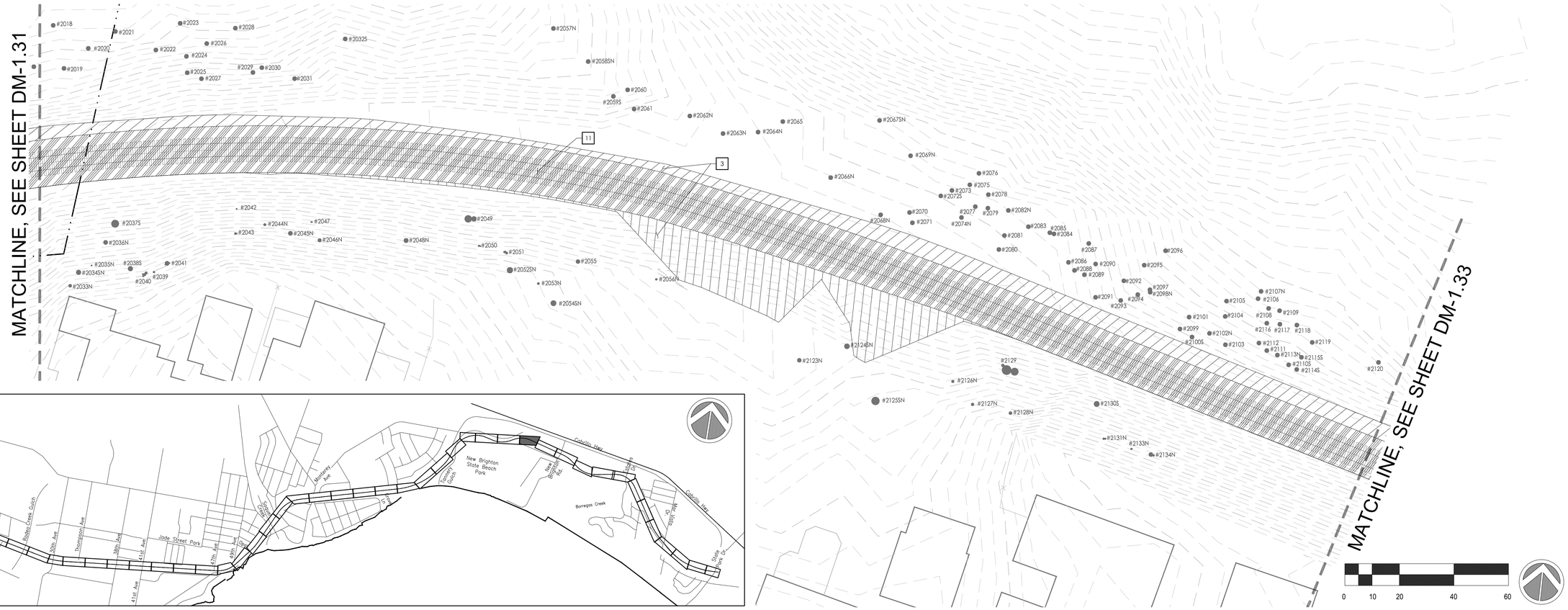

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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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REVISIONS

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

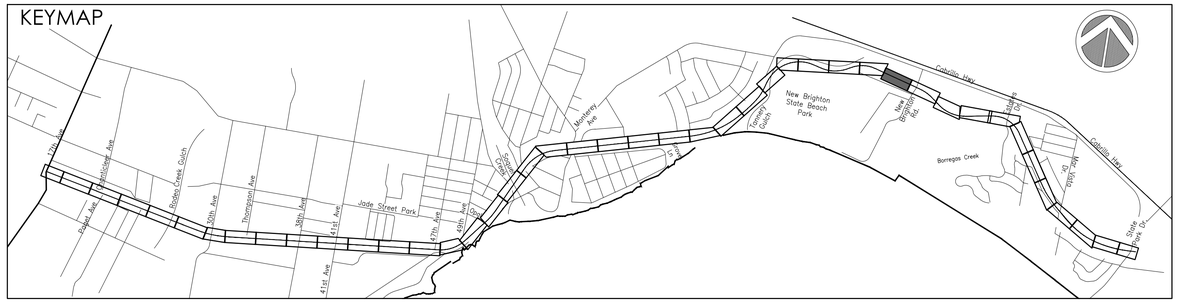
SCALE AS SHOWN
DM-1.32
VAULT NO.

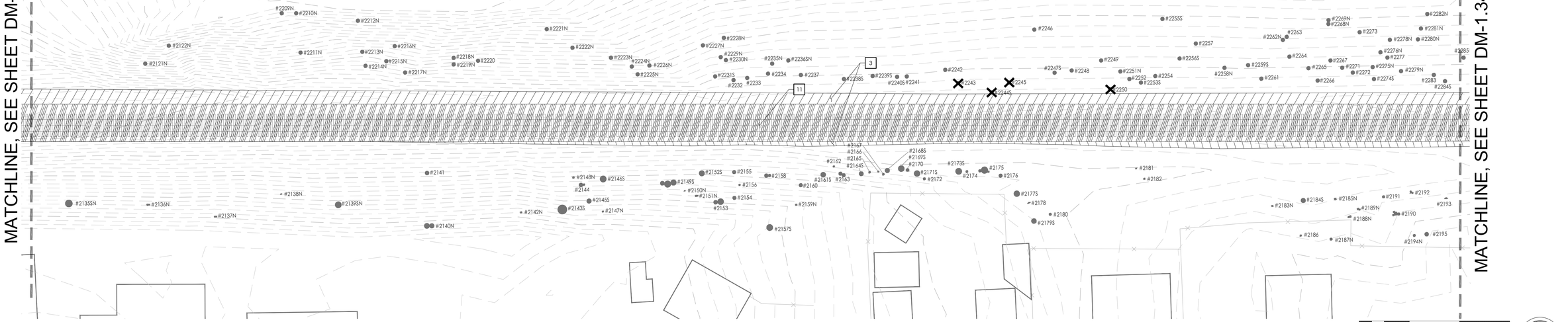
Layout Tab Name: DM-1.32, Images: county-logo-black-transparent.png, Xrefs: XC-0193-06-RBT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, XCMAP-0193-06-RTCD.dwg, XSB-0193-06-RBT-S11.dwg
I:\Corp\rrm\on-work\2021\0193-06-RCZS-Santa Cruz Rail-Trail-Seg-10-11\Wallaces with Trail\Engineering\SheDev\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmckoy, Plotted: Feb 13, 2023 - 9:17am

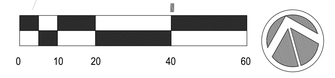
MATCHLINE, SEE SHEET DM-1.32

MATCHLINE, SEE SHEET DM-1.34

KEYMAP







KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
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12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.33

VAULT NO.

Layout Tab Name: DM-1.33, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWF-S11.dwg, XTB-0193-06-RBP.dwg, XC-0193-06-RBT-S11.dwg, XKEYMAP-0193-06-RCO0.dwg, XSB-0193-06-RWF-S11.dwg
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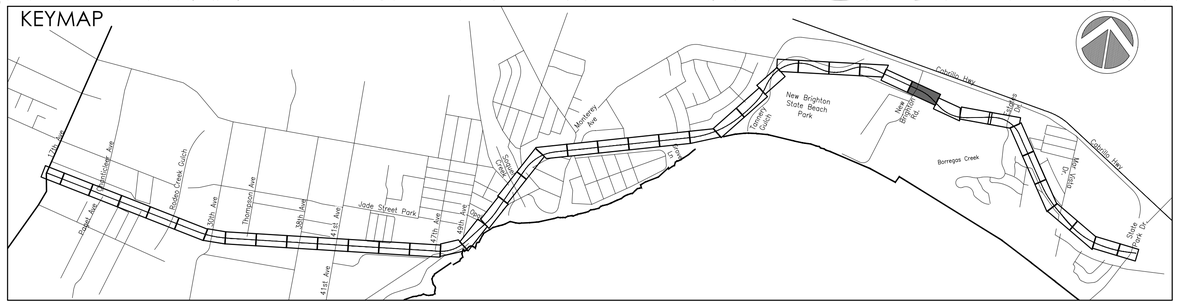
MATCHLINE, SEE SHEET DM-1.33

NEW BRIGHTON ROAD

MATCHLINE, SEE SHEET DM-1.35

KEYMAP



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
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2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
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REVISIONS

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DEPARTMENT OF PUBLIC WORKS
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
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DRAWING #:
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DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.34
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.34, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, XCNEW-0193-06-RCOS.dwg, XSB-0193-06-RWT-S11.dwg
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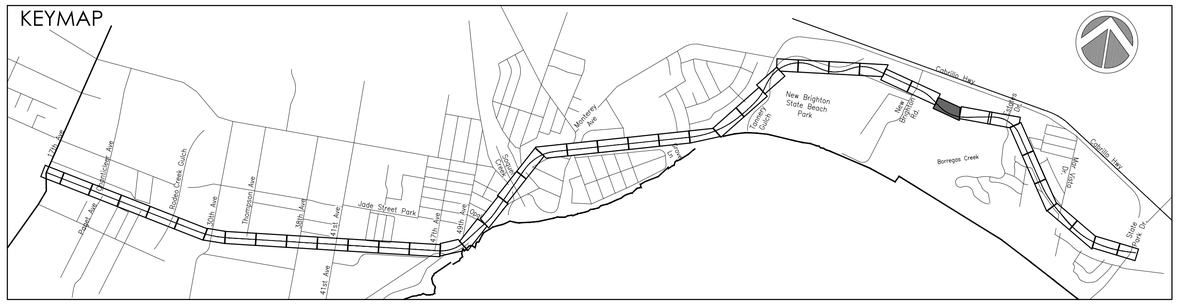
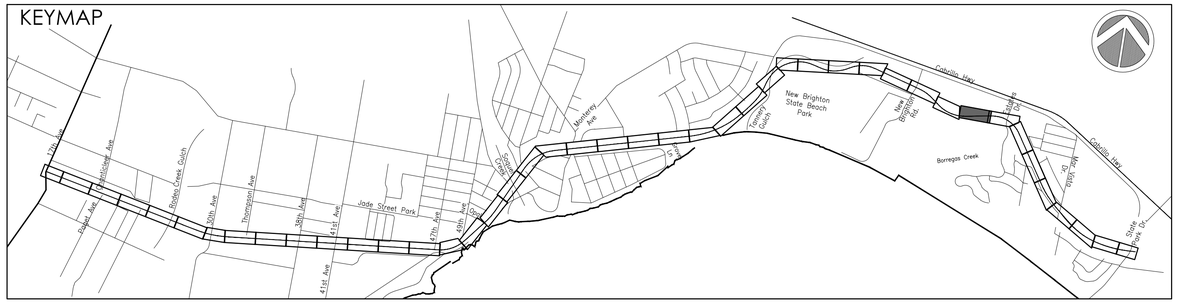

KEYMAP
17th Ave
Capitola Ave
Bridge Creek Gulch
20th Ave
Thompson Ave
38th Ave
41st Ave
Jade Street Park
47th Ave
49th Ave
Opal Cliffs
Capitola
Monterey Ave
Tannery Gulch
New Brighton State Beach Park
New Brighton Rd
Borregas Creek
Capitola Rd
Portola Dr
Cabrillo College
Coastal Trail
Coastal Trail
Coastal Trail


KEYMAP
17th Ave
Bonniebrae Ave
Rodeo Creek Gulch
30th Ave
Thompson Ave
38th Ave
41st Ave
Jade Street Park
47th Ave
49th Ave
Soquel Creek
Monterey Ave
Capitola Ave
Tributary Capitola
New Brighton State Beach Park
New Brighton Rd
Borregas Creek
Coastal Trail
Coastal Trail
Coastal Trail

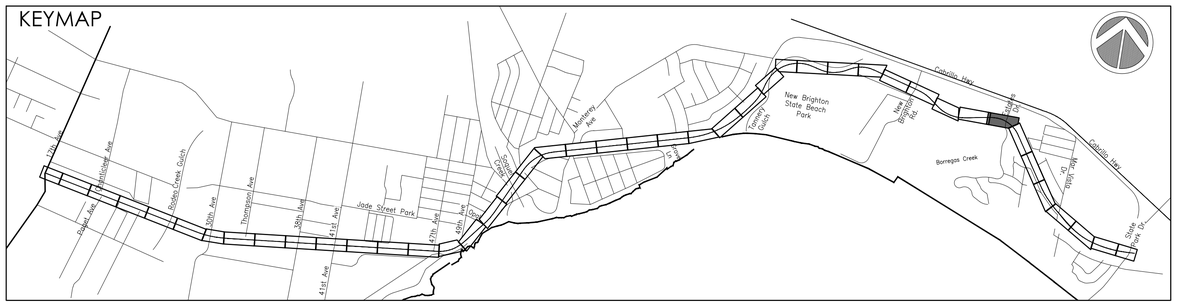
MATCHLINE, SEE SHEET DM-1.36

BORREGAS CREEK

ESTATES DRIVE

MATCHLINE, SEE SHEET DM-1.38

KEYMAP



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

SOIL REMOVAL NOTE:

CONTRACTOR SHALL REMOVE CONTAMINATED SOIL (IN ADDITION TO EXISTING BALLAST MATERIAL, RANGING FROM 2' TO 4' DEEP PER PROJECT GEOTECHNICAL REPORT) UNDER PROPOSED TRAIL PAVEMENT SECTION AS NECESSARY TO CONSTRUCT TRAIL. CONTAMINATED SOIL OUTSIDE OF THE TRAIL SECTION SHALL BE REMOVED TO A DEPTH AS NECESSARY TO PROVIDED 2' MINIMUM CLEAN FILL CAP PER SOIL MANAGEMENT PLAN.

CONTRACTOR SHALL COMPLY WITH THE COUNTY APPROVED SOIL MANAGEMENT PLAN AND PROJECT GEOTECHNICAL REPORT.

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REVISIONS

COUNTY OF SANTA CRUZ
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

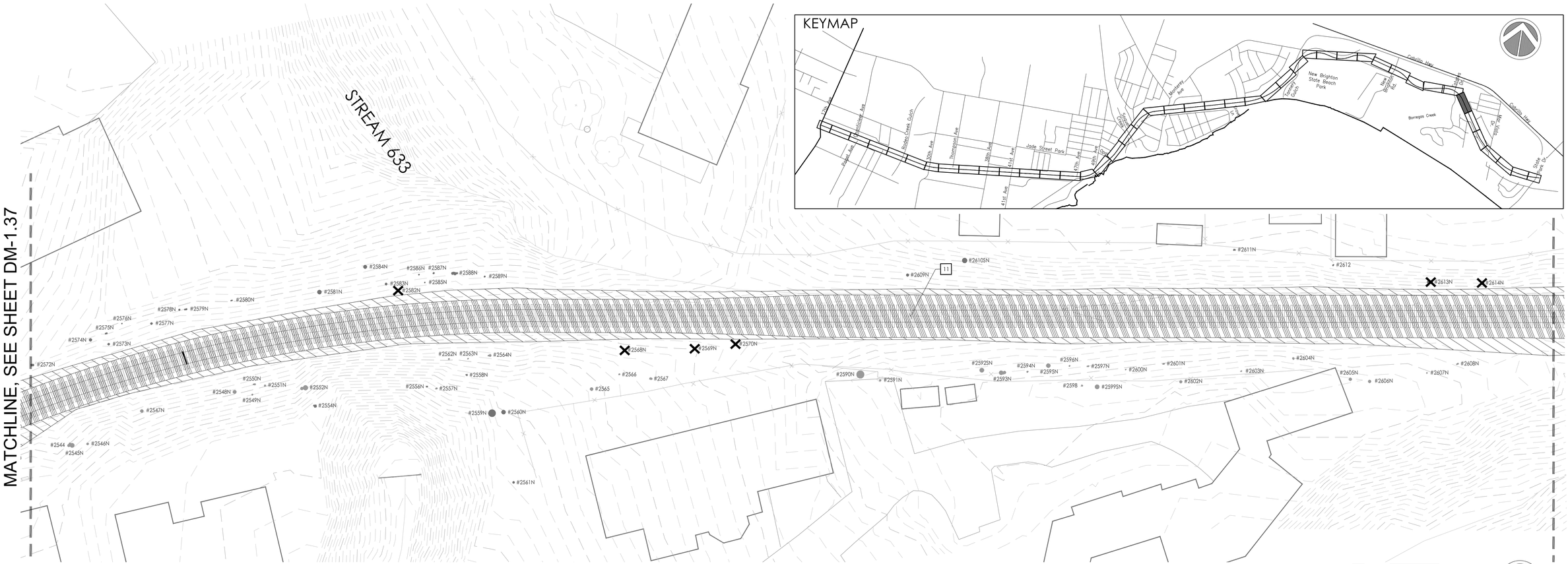
REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.37
VAULT NO.	

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.37, Images: county-logo-black-transparent.png; , Xrefs: X:\0193-06-RBT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XSB-0193-06-RBT-S11.dwg, \\corp\vm\vm-sta\2007\0193-06-RDS-Santa Cruz Rail-Trail-Seg 10-11\Bidbook with Trail\Engineering\DataDev\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmckay, Plotted: Feb 12, 2023 - 9:25am



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KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
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	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.38
VAULT NO.

Layout Tab Name: DM-1.38, Images: county-logo-black-transparent.png , Xrefs: XT-0193-06-RWF-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XSB-0193-06-RBT-S11.dwg
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MATCHLINE, SEE SHEET DM-1.38

MATCHLINE, SEE SHEET DM-1.40



KEYMAP



0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

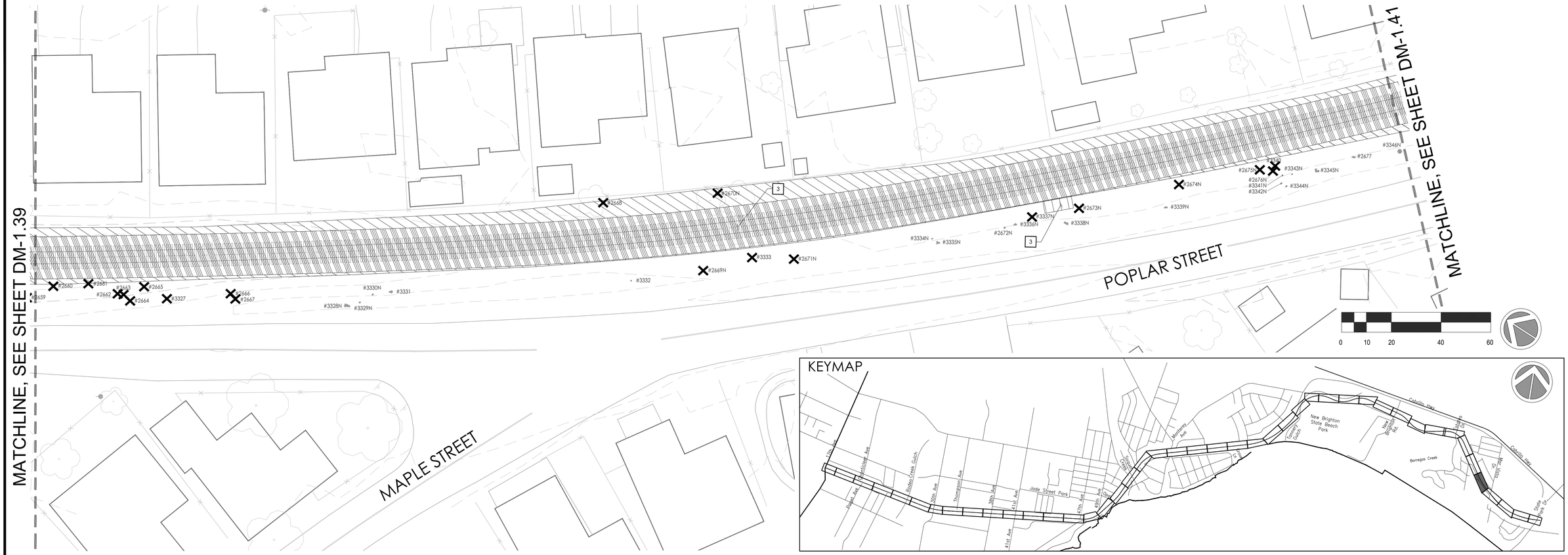
DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.39

VAULT NO.

Layout Tab Name: DM-1.39, Images: county-logo-black-transparent.png; , Xref: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT.dwg, XSB-0193-06-RBT.dwg, XSB-0193-06-RBT-S11.dwg
\\Users\rrm\on-site\2001\0193-06-RCSC-Santa-Cruz-Rail-Trail-Seg-10-11\Bidform with Trail\Engineering\Xrefs\Sheet-Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: dmotley, Plotted: Feb 12, 2023 - 9:28am



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
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14	REMOVE RUBBER TRACK PANELS
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
×	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.40
VAULT NO.

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.40, Images: county-logo-black-transparent.png, Xrefs: XC-0193-06-RBT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, XCMAP-0193-06-RTC01.dwg, XSB-0193-06-RBT-S11.dwg
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KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
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9	REMOVE EXISTING UTILITY
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12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
X	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
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	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
DM-1.41
VAULT NO.

Layout Tab Name: DM-1.41, Image: county-logo-black-transparent.png, Xrefs: XT-0193-06-RWT-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, XTWW-0193-06-RCDS.dwg, XSB-0193-06-RWT-S11.dwg
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KEYMAP

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
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15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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28 TYPICAL SECTION

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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

Layout Tab Name: DM-1.42, Images: county-logo-black-transparent.png; Xrefs: PT-0193-06-RWT-S11.dwg, RTB-0193-06-RBT.dwg, XC-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RCSD.dwg, RSB-0193-06-RWT-S11.dwg
N:\DOD\10193-06-RCDS-Santa-Cruz-Rail-Trail-Seg-10-11\Notebook with Trail\Engineering\Sheet Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: kmsabdeski, Plotted: Feb 15, 2023 - 11:16am

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RAIL TRAIL SEGMENTS 10 & 11

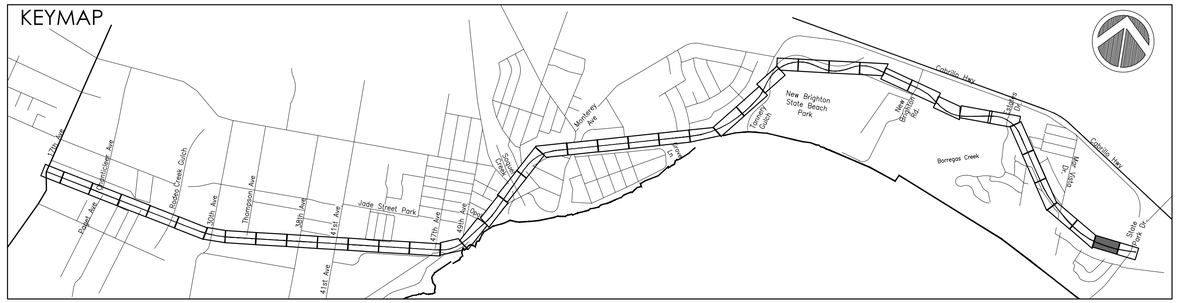
TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS
SCALE	AS SHOWN
	DM-1.42
VAULT NO.	



MATCHLINE, SEE SHEET DM-1.42

MATCHLINE, SEE SHEET DM-1.44

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11

0 10 20 40 60

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
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LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
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	SCCRTC RIGHT OF WAY
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	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

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MAN

29 TYPICAL SECTION

DIG ALERT
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TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

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RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

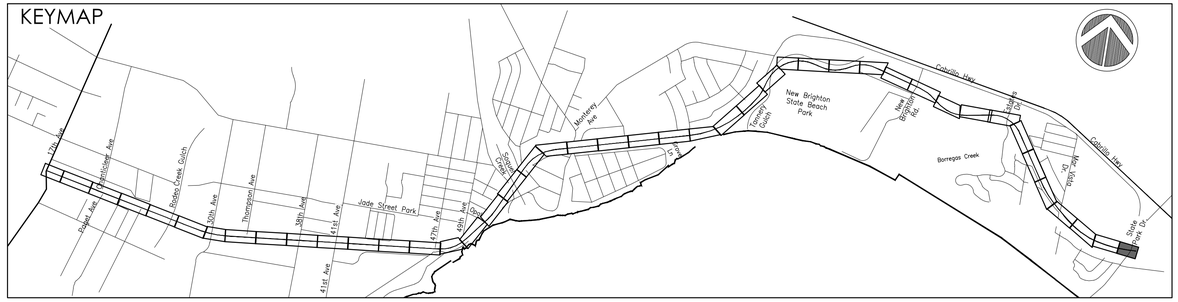
DM-1.43

VAULT NO.

Layout Tab Name: DM-1.43, Images: county-logo-black-transparent.png, Xrefs: ST-0193-06-RWF-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, KEYMAP-0193-06-RBT-S11.dwg, XSB-0193-06-RWF-S11.dwg
N:\2020\10193-06-RCDS-Santa Cruz-Rail Trail-Seg-10-11\Windows with Trail\Engineering\Jweber\Sheet Files\Segment 11\DM-0193-06-RBT-S11.dwg, Plotted By: kmolodecki, Plotted: Feb 13, 2023 - 11:17am



KEYMAP



KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
1	SAWCUT PAVEMENT
2	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER, AND PAVEMENT
3	CLEAR AND GRUB EXISTING GROUND
4	REMOVE EXISTING FENCE
5	REMOVE EXISTING RAIL EQUIPMENT
6	ADJUST UTILITY BOX/VAULT TO GRADE
7	PROTECT IN PLACE
8	REMOVE EX. STRIPING, PAVEMENT MARKINGS AND SIGNAGE
9	REMOVE EXISTING UTILITY
10	REMOVE AND SALVAGE EXISTING UTILITY
11	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
12	REMOVE AND SALVAGE EXISTING SIGNAGE
13	REMOVE CONCRETE TRACK PANELS
14	REMOVE RUBBER TRACK PANELS
15	REMOVE BALLAST ON EXISTING BRIDGE

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	REMOVAL OF UTILITY LINE
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SAWCUT PAVEMENT REMOVAL
	REMOVE TREE
	REMOVE AND PROPERLY DISPOSE OF EXISTING CURB, GUTTER AND PAVEMENT
	CLEAR AND GRUB EXISTING GROUND
	REMOVE EXISTING RAIL, TIES AND OTHER TRACK MATERIAL
	REMOVE EXISTING STRIPING AND PAVEMENT MARKINGS BY GRINDING

SC

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MAN

30 TYPICAL SECTION

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

TRAIL ON THE RAIL LINE REFINED SCHEMATIC PLANS - 02/10/23

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS
701 Ocean Street, Room 410
Santa Cruz, CA 95060

RAIL TRAIL SEGMENTS 10 & 11

TRAIL ON THE RAIL LINE (INTERIM TRAIL)

DEMOLITION PLANS

REFERENCES
FIELD BOOK:

DRAWING #:
DM-0193-06-RBT-S11

DATE	02/10/2023
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

DM-1.44

VAULT NO.

Layout Tab Name: DM-1.44 , Images: county-logo-Mono-transparent.png , Xrefs: XT-0193-06-RWC-S11.dwg, XTB-0193-06-RBT.dwg, XC-0193-06-RBT-S11.dwg, XYLINE-0193-06-RBT-S11.dwg, XYLINE-0193-06-RBT-S11.dwg, XTB-0193-06-RBT-S11.dwg, XC

A.7, Tree Quantity and Evaluation Summaries

Rail Trail Segments 10-11 Tree Quantity Summary

Tree Quantity by Species		
Species	**Quantity**	**% of Site**
Acacia dealbata	83	4.4%
Acacia melanoxylon	37	2.0%
Acer macropyllum	25	1.3%
Aesculus californica	1	0.1%
Arbutus "Marina"	1	0.1%
Arbutus menziesii	2	0.1%
Calocedrus decurrens	2	0.1%
Cinnamomum camphora	1	0.1%
Cotoneaster lucidus	1	0.1%
Cupaniopsis anacardioides	1	0.1%
Cupressus leylandii	9	0.5%
Dahlia imperialis	1	0.1%
Dracaena draco	7	0.4%
Eriobotrya deflexa	2	0.1%
Eucalyptus globulus	711	37.8%
Frangula californica	25	1.3%
Hesporocyparis macrocarpa	35	1.9%
Heteromeles arbutifolia	2	0.1%
Ilex aquifolium	2	0.1%
Juglans regia	1	0.1%
Juniperus chinensis	2	0.1%
Ligustrum japonicum	1	0.1%
Ligustrum lucidum	5	0.3%
Myoporum laetum	6	0.3%
Olea europaea	1	0.1%
Persea americana	1	0.1%
Pinus canariensis	1	0.1%
Pinus radiata	19	1.0%
Pinus thunbergii	1	0.1%
Pinus pinea	1	0.1%
Pittosporum crassifolium	1	0.1%
Pittosporum tenuifolium	1	0.1%
Pittosporum tobira	1	0.1%
Pittosporum undulatum	16	0.8%
Populus nigra	1	0.1%
Populus trichocarpa	1	0.1%
Prunus caroliniana	17	0.9%
Prunus cerasifera	8	0.4%
Prunus domestica	4	0.2%
Prunus ilicifolia	19	1.0%
Prunus laurocerasus	1	0.1%
Pseudotsuga menziesii	3	0.2%
Pyrus calleryana	2	0.1%
Quercus agrifolia	692	36.7%

Tree Quantity by Species Continued		
Species	**Quantity**	**% of Site**
Quercus virginiana	8	0.4%
Salix laevigata	10	0.5%
Salix lasiolepis	26	1.4%
Sambucus nigra	9	0.5%
Schinus terebinthifolius	1	0.1%
Sequoia sempervirens	21	1.1%
Syagrus romanzoffiana	8	0.4%
Syzygium paniculatum	26	1.4%
Taxus baccata	1	0.1%
Trachycarpus fortunei	4	0.2%
Ulmus minor	13	0.7%
Washingtonia robusta	2	0.1%
Total Trees	**1883**	**100%**

Tree Quantity by Protection Status	
DBH	**Quantity**
Non-protected (4-19.9")	946
Protected (20"+)	937
Total	**1883**

Tree Quantity by Nativity	
	Quantity
Non-native	1043
Regional Native	840
Total	**1883**

Rail Trail Segments 10-11 Tree Evaluation Summary

Prepared By: Jake Minnick, ISA Certified Arborist #WE-11830A

DBH Measurement Height: 54" - * denotes an estimated measurement

Date of Evaluation: 01/18/21-01/21/21, 03/01/21-03/05/21, 05/10/21, 10/01/2022, 01/11/2023

Health Rating:

Good - Trees with good health and structural stability that have the potential for longevity at the site.

Moderate - Trees in somewhat declining health and/or exhibits structural defects that cannot be abated with treatment. Trees will require more intense management and will have a shorter lifespan than those in the 'Good' category.

Poor - Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to decline, regardless of treatment.

Significant Tree:

Shall include any tree, sprout clump, or group of trees, as follows:
(A) Within the urban services line or rural services line, any tree which is equal to or greater than 20 inches d.b.h. (approximately five feet in circumference); any sprout clump of five or more stems each of which is greater than 12 inches d.b.h. (approximately three feet in circumference); or any group consisting of five or more trees on one parcel, each of which is greater than 12 inches d.b.h. (approximately three feet in circumference).
(B) Outside the urban services line or rural services line, where visible from a scenic road, any beach, or within a designated scenic resource area, any tree which is equal to or greater than 40 inches d.b.h. (approximately 10 feet in circumference); any sprout clump of five or more stems, each of which is greater than 20 inches d.b.h. (approximately five feet in circumference); or, any group consisting of 10 or more trees on one parcel, each greater than 20 inches d.b.h. (approximately five feet in circumference).
(C) Any tree located in a sensitive habitat as defined in Chapter 16.32 SCCC.

Regional Native:

Regional nativity is used to assess the nativity status of trees on a regional scale. A resource provided by the California Native Plant Society, Calscape.org, is utilized to understand the regional boundaries of which California native species are endemic to the area.

Capitola Trees:

All trees (except fruit trees) greater than 6" at DBH are protected and require a tree removal permit per the City of Capitola Community Tree and Management Ordinance.

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Significant Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#1S	*Hesperocyparis macrocarpa*	Monterey cypress	72.0		45'	X		PIP	PIP	PIP	
#2S	*Hesperocyparis macrocarpa*	Monterey cypress	48.5		45'	X		PIP	PIP	PIP	
#3S	*Hesperocyparis macrocarpa*	Monterey cypress	54.0		45'	X		PIP	PIP	PIP	
#4S	*Hesperocyparis macrocarpa*	Monterey cypress	20.0		25'	X		PIP	PIP	PIP	
#5S	*Hesperocyparis macrocarpa*	Monterey cypress	60.0		40'	X		PIP	PIP	PIP	
#6	*Hesperocyparis macrocarpa*	Monterey cypress	19.0		40'			PIP	PIP	PIP	
#7S	*Hesperocyparis macrocarpa*	Monterey cypress	24.0		35'	X		PIP	PIP	PIP	
#8N	*Quercus agrifolia*	coast live oak	13.0		18'		X	D	PIP	D	
#9N	*Quercus agrifolia*	coast live oak	4.0	4	10'		X	D	PIP	D	
#10SN	*Quercus agrifolia*	coast live oak	20.5		30'	X	X	PIP	PIP	PIP	
#11N	*Quercus agrifolia*	coast live oak	7.0		14'		X	D	PIP	D	
#12	*Prunus caroliniana*	Carolina laurelcherry	5.0	3, 2	14'			PIP	PIP	PIP	
#13	NOT USED										
#14S	*Hesperocyparis macrocarpa*	Monterey cypress	24.0 *		30'	X		D	PIP	D	
#15S	*Hesperocyparis macrocarpa*	Monterey cypress	28.0 *		45'	X		D	PIP	D	
#16S	*Hesperocyparis macrocarpa*	Monterey cypress	28.0 *		50'	X		D	PIP	D	
#17S	*Hesperocyparis macrocarpa*	Monterey cypress	38.0 *		45'	X		D	PIP	D	
#18	*Hesperocyparis macrocarpa*	Monterey cypress	16.0 *		40'			D	PIP	D	
#19S	*Hesperocyparis macrocarpa*	Monterey cypress	36.0 *		40'	X		D	PIP	D	
#20S	*Hesperocyparis macrocarpa*	Monterey cypress	30.0 *		40'	X		D	PIP	D	

#21S	*Hesperocyparis macrocarpa*	Monterey cypress	36.0 *		40'	X		D	PIP	D
#22S	*Hesperocyparis macrocarpa*	Monterey cypress	20.0 *		45'	X		D	PIP	D
#23S	*Hesperocyparis macrocarpa*	Monterey cypress	40.0 *		45'	X		D	PIP	D
#24N	*Quercus agrifolia*	coast live oak	17.0	6.5, 5, 5.5	20'		X	D	PIP	D
#25	NOT USED									
#26N	*Quercus agrifolia*	coast live oak	12.0	8.5, 3.5	12'		X	D	PIP	D
#27N	*Quercus agrifolia*	coast live oak	7.5		15'		X	D	PIP	D
#28N	*Quercus agrifolia*	coast live oak	13.5	10.5, 3	20'		X	D	PIP	D
#29N	*Quercus agrifolia*	coast live oak	13.0	10, 3	15'		X	D	PIP	D
#30N	*Quercus agrifolia*	coast live oak	10.0	6, 4	12'		X	D	PIP	D
#31N	*Quercus agrifolia*	coast live oak	7.5		15'		X	D	D	NA
#32N	*Quercus agrifolia*	coast live oak	12.0	6, 6	15'		X	D	D	NA
#33N	*Quercus agrifolia*	coast live oak	21.5	10, 7, 4.5	20'		X	D	D	NA
#34N	*Quercus agrifolia*	coast live oak	13.5	4.5, 3, 3, 2, 1	12'		X	D	D	NA
#35N	*Quercus agrifolia*	coast live oak	17.0	14, 3	25'		X	D	D	NA
#36N	*Quercus agrifolia*	coast live oak	14.0	8, 4, 2	14'		X	D	D	NA
#37N	*Quercus agrifolia*	coast live oak	4.0		12'		X	D	D	NA
#38N	*Quercus agrifolia*	coast live oak	11.0	5, 6	15'		X	D	PIP	D
#39N	*Quercus agrifolia*	coast live oak	11.0	6, 5	18'		X	D	PIP	D
#40N	*Quercus agrifolia*	coast live oak	22.0	15, 7	20'		X	D	D	NA
#41	*Ligustrum lucidum*	glossy privet	10.0		10'			D	D	NA
#42	NOT USED									
#43N	*Quercus agrifolia*	coast live oak	9.0	5.5, 3.5	14'		X	D	D	NA
#44N	*Quercus agrifolia*	coast live oak	39.0	8.5, 5.5, 12, 6, 4, 3	25'		X	D	D	NA
#45N	*Quercus agrifolia*	coast live oak	11.0	8, 3	25'		X	D	PIP	D
#46N	*Quercus agrifolia*	coast live oak	27.0	6, 6, 5, 10	20'		X	D	PIP	D
#47N	*Quercus agrifolia*	coast live oak	4.5		14'		X	D	PIP	D
#48N	*Quercus agrifolia*	coast live oak	4.0		14'		X	D	PIP	D
#49	NOT USED									
#50N	*Quercus agrifolia*	coast live oak	8.0	5, 3	12'		X	D	PIP	D
#51N	*Quercus agrifolia*	coast live oak	7.5	4.5, 3	12'		X	D	PIP	D
#52N	*Quercus agrifolia*	coast live oak	8.5	4, 2, 2.5	12'		X	D	PIP	D
#53N	*Quercus agrifolia*	coast live oak	7.0	3.5, 3.5	12'		X	D	PIP	D
#54	NOT USED									

#55N	*Quercus agrifolia*	coast live oak	16.0	5.5. 4.5, 3, 3	15'		X	D	PIP	D
#56N	*Quercus agrifolia*	coast live oak	4.0		8'		X	D	PIP	D
#57	NOT USED									
#58	NOT USED									
#59N	*Quercus agrifolia*	coast live oak	6.0		15'		X	D	PIP	D
#60	*Quercus virginiana*	southern live oak	4.0		12'			D	PIP	D
#61N	*Quercus agrifolia*	coast live oak	4.5		12'		X	D	D	NA
#62	NOT USED									
#63N	*Quercus agrifolia*	coast live oak	15.0	5, 5, 5	15'		X	D	PIP	D
#64	NOT USED									
#65N	*Quercus agrifolia*	coast live oak	10.5 *		20'		X	D	PIP	D
#66N	*Quercus agrifolia*	coast live oak	8.5	3, 3, 2.5	12'		X	D	PIP	D
#67N	*Quercus agrifolia*	coast live oak	34.0	11.5, 7.5, 6, 5, 4	20'		X	D	PIP	D
#68N	*Quercus agrifolia*	coast live oak	18.5	11.5, 7	20'		X	D	PIP	D
#69N	*Quercus agrifolia*	coast live oak	13.5	5, 5, 3.5	15'		X	D	D	NA
#70N	*Quercus agrifolia*	coast live oak	4.5	3, 1.5	12'		X	D	PIP	D
#71N	*Quercus agrifolia*	coast live oak	4.5		10'		X	D	PIP	D
#72N	*Quercus agrifolia*	coast live oak	4.0		12'		X	D	PIP	D
#73N	*Quercus agrifolia*	coast live oak	43.0	22, 5, 7, 6, 3	25'		X	D	PIP	D
#74N	*Quercus agrifolia*	coast live oak	5.5		12'		X	D	PIP	D
#75N	*Quercus agrifolia*	coast live oak	14.5	5.5, 3, 3, 3	15'		X	D	PIP	D
#76N	*Quercus agrifolia*	coast live oak	12.5	6, 6.5	15'		X	D	PIP	D
#77N	*Quercus agrifolia*	coast live oak	20.0	8, 6, 6	15'		X	D	PIP	D
#78N	*Quercus agrifolia*	coast live oak	5.5		15'		X	D	PIP	D
#79S	*Acacia melanoxylon*	Australian blackwood	27.5		30'	X		D	PIP	D
#80	NOT USED									
#81N	*Quercus agrifolia*	coast live oak	15.5	4, 4, 2, 5.5	15'		X	D	D	NA
#82	*Prunus caroliniana*	Carolina laurelcherry	12.0	6, 2, 2, 2	12'			D	PIP	D
#83N	*Quercus agrifolia*	coast live oak	6.0		15'		X	D	PIP	D
#84N	*Quercus agrifolia*	coast live oak	17.0	9, 8	15'		X	D	PIP	D
#85N	*Quercus agrifolia*	coast live oak	5.5		12'		X	D	PIP	D
#86N	*Quercus agrifolia*	coast live oak	5.0		12'		X	D	PIP	D
#87N	*Quercus agrifolia*	coast live oak	10.0	5.5, 4.5	15'		X	D	PIP	D
#88N	*Quercus agrifolia*	coast live oak	8.0		15'		X	D	PIP	D

#89N	*Quercus agrifolia*	coast live oak	10.5		15'		X	D	PIP	D
#90N	*Quercus agrifolia*	coast live oak	7.0		15'		X	D	PIP	D
#91SN	*Quercus agrifolia*	coast live oak	28.0		25'	X	X	D	PIP	D
#92N	*Quercus agrifolia*	coast live oak	9.0	3.5, 3, 2.5	12'		X	D	PIP	D
#93N	*Quercus agrifolia*	coast live oak	8.0		15'		X	PIP	PIP	PIP
#94N	*Quercus agrifolia*	coast live oak	8.5		12'		X	PIP	PIP	PIP
#95N	*Quercus agrifolia*	coast live oak	7.5		12'		X	PIP	PIP	PIP
#96	*Acacia dealbata*	silver wattle	8.0		20'			PIP	PIP	PIP
#97N	*Quercus agrifolia*	coast live oak	18.5	12, 6.5	25'		X	PIP	PIP	PIP
#98S	*Eucalyptus globulus*	southern blue gum	49.5		75'	X		PIP	PIP	PIP
#99N	*Quercus agrifolia*	coast live oak	15.5	6.5, 6, 3	15'		X	D	PIP	D
#100N	*Quercus agrifolia*	coast live oak	8.0		20'		X	D	PIP	D
#101N	*Quercus agrifolia*	coast live oak	23.0	13, 10	25'		X	D	PIP	D
#102N	*Frangula californica*	coffeeberry	7.5		10'		X	D	PIP	D
#103N	*Quercus agrifolia*	coast live oak	11.0		15'		X	D	PIP	D
#104N	*Quercus agrifolia*	coast live oak	7.5		15'		X	D	PIP	D
#105N	*Quercus agrifolia*	coast live oak	16.0		25'		X	D	PIP	D
#106SN	*Quercus agrifolia*	coast live oak	23.0		35'	X	X	D	PIP	D
#107N	*Quercus agrifolia*	coast live oak	35.0	23, 12	35'		X	D	PIP	D
#108N	*Quercus agrifolia*	coast live oak	6.0 *	3, 3 *	15'		X	D	PIP	D
#109	*Acacia dealbata*	silver wattle	13.0		40'			D	PIP	D
#110	*Acacia dealbata*	silver wattle	13.0		40'			D	PIP	D
#111	*Acacia dealbata*	silver wattle	10.0		30'			PIP	PIP	PIP
#112	*Acacia dealbata*	silver wattle	5.0		30'			PIP	PIP	PIP
#113	*Acacia dealbata*	silver wattle	9.5	5.5, 4	20'			PIP	PIP	PIP
#114	*Acacia dealbata*	silver wattle	10.0	5, 5	25'			PIP	PIP	PIP
#115	*Acacia dealbata*	silver wattle	5.0		25'			PIP	PIP	PIP
#116	*Acacia dealbata*	silver wattle	7.0		30'			PIP	PIP	PIP
#117SN	*Salix laevigata*	red willow	24.0		40'	X	X	PIP	PIP	PIP
#118N	*Quercus agrifolia*	coast live oak	18.0 *	12, 6 *	30'		X	PIP	PIP	PIP
#119	*Acacia dealbata*	silver wattle	10.0		35'			PIP	PIP	PIP
#120	*Acacia dealbata*	silver wattle	7.5		30'			PIP	PIP	PIP
#121	*Acacia dealbata*	silver wattle	7.0	4, 3	20'			PIP	PIP	PIP
#122	*Acacia dealbata*	silver wattle	6.5		15'			PIP	PIP	PIP

#123	*Acacia dealbata*	silver wattle	9.0		30'			PIP	PIP	PIP
#124N	*Quercus agrifolia*	coast live oak	5.0		15'		X	PIP	PIP	PIP
#125	*Acacia dealbata*	silver wattle	10.5 *		30'			PIP	PIP	PIP
#126N	*Salix laevigata*	red willow	18.0 *		35'		X	PIP	PIP	PIP
#127N	*Salix laevigata*	red willow	18.0 *		35'		X	PIP	PIP	PIP
#128N	*Salix laevigata*	red willow	11.0 *		25'		X	PIP	PIP	PIP
#129	*Eucalyptus globulus*	southern blue gum	15.0	8, 7	25'			D	PIP	D
#130	*Eucalyptus globulus*	southern blue gum	7.5		20'			D	PIP	D
#131	*Acacia dealbata*	silver wattle	4.5		20'			PIP	PIP	PIP
#132	*Acacia dealbata*	silver wattle	4.5		15'			PIP	PIP	PIP
#133	*Acacia dealbata*	silver wattle	8.5		25'			PIP	PIP	PIP
#134	*Acacia dealbata*	silver wattle	8.0		20'			PIP	PIP	PIP
#135S	*Eucalyptus globulus*	southern blue gum	44.0		60'	X		PIP	PIP	PIP
#136S	*Eucalyptus globulus*	southern blue gum	59.0		55'	X		PIP	PIP	PIP
#137N	*Quercus agrifolia*	coast live oak	14.5	8.5, 6	15'		X	PIP	PIP	PIP
#138S	*Eucalyptus globulus*	southern blue gum	22.0		60'	X		PIP	PIP	PIP
#139S	*Eucalyptus globulus*	southern blue gum	29.0		60'	X		PIP	PIP	PIP
#140S	*Eucalyptus globulus*	southern blue gum	42.0		70'	X		PIP	PIP	PIP
#141N	*Quercus agrifolia*	coast live oak	9.5 *		20'		X	D	PIP	D
#142N	*Quercus agrifolia*	coast live oak	6.0		15'		X	D	PIP	D
#143N	*Quercus agrifolia*	coast live oak	8.0 *		15'		X	D	PIP	D
#144N	*Quercus agrifolia*	coast live oak	16.0 *	10, 6 *	20'		X	D	PIP	D
#145SN	*Quercus agrifolia*	coast live oak	36.0		25'	X	X	D	PIP	D
#146	*Eucalyptus globulus*	southern blue gum	7.0		20'			D	PIP	D
#147S	*Eucalyptus globulus*	southern blue gum	40.0		75'	X		D	PIP	D
#148S	*Eucalyptus globulus*	southern blue gum	42.0		75'	X		PIP	PIP	PIP
#149	*Eucalyptus globulus*	southern blue gum	118.0	30, 40, 20, 28	75'			PIP	PIP	PIP
#150	*Hesperocyparis macrocarpa*	Monterey cypress	16.0		40'			PIP	PIP	PIP
#151S	*Hesperocyparis macrocarpa*	Monterey cypress	23.0		40'	X		PIP	PIP	PIP
#152S	*Hesperocyparis macrocarpa*	Monterey cypress	25.0		40'	X		PIP	PIP	PIP
#153N	*Quercus agrifolia*	coast live oak	26.0	5, 3, 6.5, 2, 3, 6.5	15'		X	D	PIP	D
#154N	*Quercus agrifolia*	coast live oak	52.5	26, 26.5	25'		X	D	PIP	D
#155N	*Sequoia sempervirens*	coast redwood	12.0		45'		X	D	PIP	D
#156N	*Quercus agrifolia*	coast live oak	6.0	3, 3	12'		X	D	PIP	D

#157	NOT USED										
#158	*Pinus canariensis*	Canary Island pine	4.0	2, 1, 1	10'			D	PIP	D	
#159N	*Quercus agrifolia*	coast live oak	11.0	6, 3, 2	15'		X	D	PIP	D	
#160N	*Quercus agrifolia*	coast live oak	5.5	4, 1.5	15'		X	D	PIP	D	
#161	*Prunus laurocerasus*	cherry laurel	8.0 *		12'			D	PIP	D	
#162	*Prunus caroliniana*	Carolina laurelcherry	8.0 *		12'			D	PIP	D	
#163	*Prunus caroliniana*	Carolina laurelcherry	6.0 *		12'			D	PIP	D	
#164	*Prunus caroliniana*	Carolina laurelcherry	8.0 *		12'			D	PIP	D	
#165	*Prunus caroliniana*	Carolina laurelcherry	8.0 *		12'			D	PIP	D	
#166	*Prunus caroliniana*	Carolina laurelcherry	10.0 *		12'			D	PIP	D	
#167	*Prunus caroliniana*	Carolina laurelcherry	9.0 *		12'			D	PIP	D	
#168	*Prunus caroliniana*	Carolina laurelcherry	12.0 *		12'			D	PIP	D	
#169S	*Eucalyptus globulus*	southern blue gum	144.0 *		55'	X		D	PIP	D	
#170	*Prunus cerasifera 'Atropurpurpea'*	purple-leaf cherry	7.0 *		20'			D	PIP	D	
#171	*Prunus cerasifera 'Atropurpurpea'*	purple-leaf cherry	5.0 *		15'			D	PIP	D	
#172	*Prunus cerasifera 'Atropurpurpea'*	purple-leaf cherry	8.0 *		20'			D	PIP	D	

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Capitola Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#173C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	12.0 *		20'	X		D	PIP	D	
#174C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	8.0 *		20'	X		D	PIP	D	
#175	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	5.0 *		20'			D	PIP	D	
#176C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	11.0 *		20'	X		D	PIP	D	
#177C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	12.0 *		20'	X		D	PIP	D	
#178C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	6.0 *		20'	X		D	PIP	D	
#179C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	18.0 *		25'	X		D	PIP	D	
#180C	*Syagrus romanzoffiana*	queen palm	10.0 *		20'	X		D	PIP	D	
#181C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	7.0 *		15'	X		D	PIP	D	
#182C	*Dracaena draco*	dragon tree	6.0 *		15'	X		D	PIP	D	
#183C	*Syagrus romanzoffiana*	queen palm	9.5 *		20'	X		D	PIP	D	
#184	*Eriobotrya deflexa*	bronze loquat	5.0		15'			D	PIP	D	
#185C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	16.5	4.5, 2, 2, 5, 3	20'	X		D	D	NA	
#186C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	12.0	5.5, 4.5, 2	20'	X		D	D	NA	
#187C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	17.0	5.5, 5, 4.5, 2	20'	X		D	D	NA	
#188C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	9.5	6.5, 3	20'	X		D	D	NA	
#189C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	22.0	6, 6, 2, 2, 2, 2, 2	20'	X		D	D	NA	

#190C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	11.0	7, 2, 2	20'	X		D	D	NA
#191C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	6.0		15'	X		D	D	NA
#192CN	*Quercus agrifolia*	coast live oak	6.0		15'	X	X	D	D	NA
#193	NOT USED									
#194C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	7.5	3, 2.5, 2	15'	X		D	D	NA
#195CN	*Quercus agrifolia*	coast live oak	6.0		15'	X	X	D	D	NA
#196CN	*Quercus agrifolia*	coast live oak	6.0		12'	X	X	D	D	NA
#197C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	26.0	6, 6, 4, 2, 2, 2, 2, 2	20'	X		D	PIP	D
#198C	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	10.0		20'	X		D	PIP	D
#199CN	*Quercus agrifolia*	coast live oak	14.0		20'	X	X	D	PIP	D
#200C	*Juniperus chinensis*	Chinese juniper	17.0	14, 3	25'	X		D	PIP	D
#201C	*Ligustrum lucidum*	glossy privet	17.0 *	5, 5, 7 *	20'	X		D	PIP	D
#202C	*Ligustrum lucidum*	glossy privet	19.0 *	11, 8 *	25'	X		D	PIP	D
#203	*Juglans regia*	English walnut	4.5		12'			D	PIP	D
#204CN	*Quercus agrifolia*	coast live oak	6.5		12'	X	X	D	PIP	D
#205	NOT USED									
#206	NOT USED									
#207CN	*Quercus agrifolia*	coast live oak	8.5		20'	X	X	D	PIP	D
#208C	*Hesperocyparis macrocarpa*	Monterey cypress	38.5		25'	X		D	PIP	D
#209CN	*Quercus agrifolia*	coast live oak	8.5		15'	X	X	D	D	NA
#210CN	*Quercus agrifolia*	coast live oak	16.0	9, 7	15'	X	X	D	PIP	D
#211CN	*Quercus agrifolia*	coast live oak	7.0		15'	X	X	D	PIP	D
#212CN	*Quercus agrifolia*	coast live oak	11.5	4.5, 4, 3	15'	X	X	D	D	NA
#213CN	*Quercus agrifolia*	coast live oak	7.0		15'	X	X	D	PIP	D
#214CN	*Quercus agrifolia*	coast live oak	7.0		15'	X	X	D	PIP	D
#215CN	*Quercus agrifolia*	coast live oak	32.0	16, 16	30'	X	X	D	D	NA
#216C	*Dracaena draco*	dragon tree	10.5		20'	X		D	PIP	D
#217C	*Dracaena draco*	dragon tree	9.5		20'	X		D	PIP	D
#218	*Cotoneaster lucidus*	hedge cotoneaster	4.5		10'			D	PIP	D
#219C	*Dracaena draco*	dragon tree	19.0		25'	X		D	PIP	D
#220C	*Dracaena draco*	dragon tree	10.0		20'	X		D	PIP	D
#221C	*Eriobotrya deflexa*	bronze loquat	8.0	3, 2, 3	20'	X		PIP	PIP	PIP
#222	*Pyrus calleryana*	Callery pear	4.0		18'			PIP	PIP	PIP
#223CN	*Quercus agrifolia*	coast live oak	6.0	6	25'	X	X	D	PIP	D

#224CN	*Quercus agrifolia*	coast live oak	12.0	6, 6	20	X	X	D	D	NA
#225	NOT USED									
#226	NOT USED									
#227	*Ilex aquifolium*	common holly	5.0	3, 2	15'			D	D	NA
#228N	*Quercus agrifolia*	coast live oak	5.0	5	12'		X	D	D	NA
#229N	*Quercus agrifolia*	coast live oak	5.0	5	15'		X	D	D	NA
#230CN	*Quercus agrifolia*	coast live oak	6.5		15'	X	X	D	D	NA
#231	NOT USED									
#232	NOT USED									
#233N	*Quercus agrifolia*	coast live oak	5.0	5	12'		X	D	D	NA
#234CN	*Quercus agrifolia*	coast live oak	7.5	5, 2.5	12'	X	X	D	D	NA
#235N	*Quercus agrifolia*	coast live oak	5.0		12'		X	D	D	NA
#236	NOT USED									
#237CN	*Quercus agrifolia*	coast live oak	44.5	7, 6, 6, 6, 5.5, 2, 2, 2, 2, 2	20'	X	X	D	D	NA
#238CN	*Quercus agrifolia*	coast live oak	32.5	6.5, 5.5, 5, 4.5, 4.5	20'	X	X	D	D	NA
#239N	*Quercus agrifolia*	coast live oak	5.0	5	12'		X	D	D	NA
#240CN	*Quercus agrifolia*	coast live oak	13.0		20'	X	X	D	D	NA
#241	*Syagrus romanzoffiana*	queen palm	5.0		10'			D	PIP	D
#242C	*Syagrus romanzoffiana*	queen palm	6.0		10'	X		D	PIP	D
#243C	*Syagrus romanzoffiana*	queen palm	7.5		10'	X		D	PIP	D
#244CN	*Quercus agrifolia*	coast live oak	22.0	11, 11	25'	X	X	D	D	NA
#245N	*Quercus agrifolia*	coast live oak	4.0		10'		X	D	PIP	D
#246CN	*Quercus agrifolia*	coast live oak	18.0		30'	X	X	D	PIP	D
#247CN	*Quercus agrifolia*	coast live oak	23.5	18.5, 5	30'	X	X	D	PIP	D
#248N	*Quercus agrifolia*	coast live oak	5.0	3, 2	12'		X	D	PIP	D
#249CN	*Quercus agrifolia*	coast live oak	15.5	6.5, 6, 3	15'	X	X	D	PIP	D
#250CN	*Quercus agrifolia*	coast live oak	52.0	12, 13, 16, 11	25'	X	X	D	PIP	D
#251CN	*Quercus agrifolia*	coast live oak	12.0	6, 6	20'	X	X	D	PIP	D
#252C	*Syzygium paniculatum*	brush cherry	10.5	3.5, 3, 2, 2	15'	X		D	D	NA
#253C	*Syzygium paniculatum*	brush cherry	12.5	3.5, 3, 2, 2, 2	15'	X		D	D	NA
#254C	*Syzygium paniculatum*	brush cherry	16.5	2, 2, 2, 2, 2, 2, 2, 2.5	15'	X		PIP	D	NA
#255	*Syzygium paniculatum*	brush cherry	5.5	3, 2.5	15'			PIP	D	NA
#256	*Syzygium paniculatum*	brush cherry	5.0	3.5, 1.5	15'			PIP	D	NA
#257C	*Syzygium paniculatum*	brush cherry	16.0	4.5, 3.5, 2, 2, 2, 2	15'	X		PIP	D	NA

#258C	*Syzygium paniculatum*	brush cherry	14.0	3.5, 3, 3, 1.5, 1.5, 1.5	15'	X		PIP	D	NA
#259C	*Syzygium paniculatum*	brush cherry	9.0	3, 2, 2, 1, 1	15'	X		PIP	D	NA
#260	*Syzygium paniculatum*	brush cherry	4.5	2.5, 2, 2	15'			PIP	D	NA
#261C	*Syzygium paniculatum*	brush cherry	11.0	3, 3, 2, 2, 1	15'	X		PIP	D	NA
#262C	*Syzygium paniculatum*	brush cherry	8.5	2.5, 2, 2, 2	15'	X		PIP	D	NA
#263C	*Syzygium paniculatum*	brush cherry	8.0	2, 1.5, 1.5, 1.5, 1.5	15'	X		PIP	D	NA
#264C	*Syzygium paniculatum*	brush cherry	7.0	3, 2, 1, 1	15'	X		PIP	D	NA
#265C	*Syzygium paniculatum*	brush cherry	6.5	3.5, 1.5, 1.5	15'	X		PIP	D	NA
#266C	*Syzygium paniculatum*	brush cherry	17.0	3, 2.5, 2.5, 2.5, 2.5, 2, 2	15'	X		PIP	D	NA
#267	*Syzygium paniculatum*	brush cherry	4.5	2.5, 2, 2	15'			PIP	D	NA
#268C	*Syzygium paniculatum*	brush cherry	16.5	3, 3, 2.5, 2, 2, 2, 2	15'	X		PIP	D	NA
#269C	*Syzygium paniculatum*	brush cherry	6.5	3.5, 3	15'	X		PIP	D	NA
#270C	*Syzygium paniculatum*	brush cherry	18.5	3, 3, 2.5, 2, 2, 2, 2, 2	15'	X		PIP	D	NA
#271C	*Syzygium paniculatum*	brush cherry	8.0	2, 2, 2, 2	15'	X		PIP	D	NA
#272C	*Syzygium paniculatum*	brush cherry	10.0	3, 3, 2.5, 1.5	15'	X		PIP	D	NA
#273C	*Syzygium paniculatum*	brush cherry	10.5	4.5, 4, 2	15'	X		PIP	D	NA
#274C	*Syzygium paniculatum*	brush cherry	22.5	7.5, 5.5, 4, 4, 1.5	15'	X		PIP	D	NA
#275C	*Ligustrum lucidum*	glossy privet	24.0	8, 6, 6, 4	20'	X		PIP	D	NA
#276CN	*Quercus agrifolia*	coast live oak	31.5	13.5, 11, 7	25'	X	X	PIP	D	NA
#277	*Syagrus romanzoffiana*	queen palm	4.0		12'			PIP	D	NA
#278C	*Syagrus romanzoffiana*	queen palm	6.0		12'	X		PIP	PIP	PIP
#279C	*Syagrus romanzoffiana*	queen palm	6.0		12'	X		PIP	D	NA
#280	*Quercus virginiana*	southern live oak	5.5		15'			D	PIP	D
#281C	*Quercus virginiana*	southern live oak	11.5	6.5, 5	15'	X		D	PIP	D
#282C	*Quercus virginiana*	southern live oak	22.5	4, 4, 4, 4, 4, 2.5	15'	X		D	D	NA
#283CN	*Quercus agrifolia*	coast live oak	15.0	6, 4.5, 4.5	15'	X	X	D	D	NA
#284C	*Quercus virginiana*	southern live oak	22.5	4, 4, 3.5, 3.5, 2.5, 2.5, 2.5	15'	X		D	PIP	D
#285C	*Quercus virginiana*	southern live oak	8.5	4, 2.5, 1, 1	15'	X		D	PIP	D
#286C	*Quercus virginiana*	southern live oak	13.5	5, 4.5, 2, 2	15'	X		D	PIP	D
#287C	*Quercus virginiana*	southern live oak	10.0	3.5, 3, 2, 1.5	15'	X		D	PIP	D
#288CN	*Quercus agrifolia*	coast live oak	13.0	8, 5	20'	X	X	D	PIP	D
#289CN	*Quercus agrifolia*	coast live oak	19.5	10, 9.5	20'	X	X	D	PIP	D
#290C	*Pinus pinea*	Italian stone pine	28.0	20.5, 7.5	15'	X		D	PIP	D
#291C	*Ilex aquifolium*	common holly	11.0	6, 5	15'	X		PIP	PIP	PIP

#292C	*Trachycarpus fortunei*	Chinese windmill palm	12.0		25'	X		PIP	PIP	PIP
#293C	*Taxus baccata 'Fastigiata'*	Irish yew	21.5	9, 6.5, 6	20'	X		PIP	D	NA
#294C	*Trachycarpus fortunei*	Chinese windmill palm	10.5		25'	X		PIP	D	NA
#295C	*Syzygium paniculatum*	brush cherry	40.0	7, 6, 6, 5, 4, 4, 4, 4	20'	X		PIP	PIP	PIP
#296CN	*Quercus agrifolia*	coast live oak	19.5	12, 7.5	20'	X	X	D	PIP	D
#297C	*Hesperocyparis macrocarpa*	Monterey cypress	95.0	26, 24, 17, 15, 7, 6	30'	X		D	PIP	D
#298CN	*Quercus agrifolia*	coast live oak	14.5		25'	X	X	PIP	PIP	PIP
#299CN	*Quercus agrifolia*	coast live oak	55.0	12, 12, 12, 9, 6, 4	25'	X	X	PIP	PIP	PIP
#300C	*Washingtonia robusta*	Mexican fan palm	18.0		15'	X		D	PIP	D
#301C	*Washingtonia robusta*	Mexican fan palm	19.0		15'	X		PIP	PIP	PIP
#302C	*Juniperus chinensis*	Chinese juniper	55.0	14, 12, 9, 4, 4, 4, 4, 4	12'	X		PIP	PIP	PIP
#303CN	*Pinus radiata*	Monterey pine	6.0		10'	X	X	D	PIP	D
#304C	*Hesperocyparis macrocarpa*	Monterey cypress	50.0 *	32, 18 *	35'	X		D	PIP	D
#305C	*Acacia dealbata*	silver wattle	9.0	4, 2.5, 2.5	20'	X		D	D	NA
#306C	*Acacia dealbata*	silver wattle	12.5	7, 5.5	20'	X		D	D	NA
#307C	*Acacia dealbata*	silver wattle	7.0		20'	X		D	D	NA
#308	*Acacia dealbata*	silver wattle	4.0		20'			D	D	NA
#309C	*Acacia dealbata*	silver wattle	6.0		20'	X		D	D	NA
#310	*Acacia dealbata*	silver wattle	5.0		20'			D	D	NA
#311C	*Acacia dealbata*	silver wattle	12.0		25'	X		D	D	NA
#312C	*Acacia dealbata*	silver wattle	6.0		25'	X		D	D	NA
#313C	*Acacia dealbata*	silver wattle	15.0	6, 5, 4	25'	X		D	D	NA
#314C	*Acacia dealbata*	silver wattle	14.0	7, 7	25'	X		PIP	PIP	PIP
#315C	*Acacia dealbata*	silver wattle	7.0		25'	X		PIP	PIP	PIP
#316	*Acacia dealbata*	silver wattle	5.0		25'			PIP	PIP	PIP
#317C	*Acacia dealbata*	silver wattle	7.0		25'	X		PIP	PIP	PIP
#318C	*Acacia dealbata*	silver wattle	9.0		25'	X		PIP	PIP	PIP
#319C	*Acacia dealbata*	silver wattle	11.0		25'	X		PIP	PIP	PIP
#320CN	*Quercus agrifolia*	coast live oak	16.0	11, 5	25'	X	X	D	PIP	D
#321CN	*Quercus agrifolia*	coast live oak	11.0	5, 6	30'	X	X	D	PIP	D
#322CN	*Quercus agrifolia*	coast live oak	22.0		30'	X	X	D	PIP	D
#323CN	*Quercus agrifolia*	coast live oak	24.0		30'	X	X	D	PIP	D
#324CN	*Quercus agrifolia*	coast live oak	18.0		30'	X	X	D	PIP	D
#325CN	*Quercus agrifolia*	coast live oak	8.0		20'	X	X	PIP	PIP	PIP

#326CN	*Sequoia sempervirens*	coast redwood	32.0		50'	X	X	PIP	PIP	PIP
#327C	*Hesperocyparis macrocarpa*	Monterey cypress	28.0		50'	X		PIP	PIP	PIP
#328CN	*Sequoia sempervirens*	coast redwood	14.0		55'	X	X	PIP	PIP	PIP
#329C	*Ligustrum lucidum*	glossy privet	22.0	7, 7, 4, 4	25'	X		PIP	D	NA
#330C	*Acacia dealbata*	silver wattle	8.5		25'	X		PIP	PIP	PIP
#331C	*Acacia dealbata*	silver wattle	12.0	5, 3, 2, 2	25'	X		PIP	PIP	PIP
#332CN	*Quercus agrifolia*	coast live oak	21.0	12, 9	25'	X	X	PIP	PIP	PIP
#333CN	*Quercus agrifolia*	coast live oak	15.0		25'	X	X	PIP	PIP	PIP
#334CN	*Quercus agrifolia*	coast live oak	8.0		12'	X	X	PIP	PIP	PIP
#335CN	*Quercus agrifolia*	coast live oak	21.0	10, 7, 4	20'	X	X	PIP	PIP	PIP
#336C	*Eucalyptus globulus*	southern blue gum	72.0 *		55'	X		PIP	PIP	PIP
#337CN	*Quercus agrifolia*	coast live oak	16.0		20'	X	X	PIP	PIP	PIP
#338CN	*Quercus agrifolia*	coast live oak	8.0		12'	X	X	PIP	PIP	PIP
#339CN	*Quercus agrifolia*	coast live oak	20.0		20'	X	X	PIP	PIP	PIP
#340C	*Acacia dealbata*	silver wattle	37.0	5, 5, 5, 5, 3, 3, 3, 3	25'	X		D	D	NA
#341C	*Acacia dealbata*	silver wattle	16.0 *		30'	X		D	PIP	D
#342CN	*Quercus agrifolia*	coast live oak	24.0 *	12, 12 *	30'	X	X	D	PIP	D
#343C	*Eucalyptus globulus*	southern blue gum	32.0		50'	X		D	D	NA
#344C	*Eucalyptus globulus*	southern blue gum	96.0		60'	X		PIP	PIP	PIP
#345C	*Eucalyptus globulus*	southern blue gum	40.0	16, 12, 12	40'	X		PIP	PIP	PIP
#346C	*Eucalyptus globulus*	southern blue gum	144.0		60'	X		PIP	PIP	PIP
#347C	*Eucalyptus globulus*	southern blue gum	36.0		55'	X		PIP	PIP	PIP
#348C	*Eucalyptus globulus*	southern blue gum	20.0		35'	X		PIP	D	NA
#349C	*Eucalyptus globulus*	southern blue gum	184.0	48, 24, 20, 36, 12, 20, 24	65'	X		PIP	D	NA
#350C	*Eucalyptus globulus*	southern blue gum	7.0		45'	X		PIP	D	NA
#351C	*Eucalyptus globulus*	southern blue gum	36.0		55'	X		PIP	PIP	PIP
#352C	*Eucalyptus globulus*	southern blue gum	74.0	20, 18, 18, 6, 6, 6	45'	X		PIP	D	NA
#353C	*Eucalyptus globulus*	southern blue gum	42.0 *	24, 18 *	60'	X		PIP	D	NA
#354C	*Eucalyptus globulus*	southern blue gum	58.0 *	24, 16, 6, 6, 6 *	60'	X		PIP	D	NA
#355C	*Eucalyptus globulus*	southern blue gum	94.0 *	18, 16, 12, 12, 30, 6 *	60'	X		PIP	D	NA
#356C	*Eucalyptus globulus*	southern blue gum	12.0 *		60'	X		PIP	PIP	PIP
#357C	*Eucalyptus globulus*	southern blue gum	12.0 *		60'	X		PIP	D	NA
#358C	*Eucalyptus globulus*	southern blue gum	18.0		60'	X		PIP	PIP	PIP
#359C	*Eucalyptus globulus*	southern blue gum	42.0		60'	X		PIP	PIP	PIP

#360CN	*Quercus agrifolia*	coast live oak	9.0		15'	X	X	PIP	D	NA
#361CN	*Quercus agrifolia*	coast live oak	6.0		15'	X	X	PIP	PIP	PIP
#362N	*Quercus agrifolia*	coast live oak	4.0		15'		X	PIP	D	NA
#363CN	*Quercus agrifolia*	coast live oak	13.0	5, 8	15'	X	X	PIP	D	NA
#364C	*Eucalyptus globulus*	southern blue gum	96.0		60'	X		D	D	NA
#365C	*Eucalyptus globulus*	southern blue gum	60.0		65'	X		D	PIP	D
#366C	*Prunus caroliniana*	Carolina laurelcherry	10.0 *	6, 2, 2 *	25'	X		D	PIP	D
#367C	*Prunus caroliniana*	Carolina laurelcherry	12.0 *	6, 6 *	25'	X		D	PIP	D
#368C	*Prunus caroliniana*	Carolina laurelcherry	11.0 *	5, 6 *	25'	X		D	PIP	D
#369C	*Prunus caroliniana*	Carolina laurelcherry	16.0 *	8, 8 *	25'	X		D	PIP	D
#370C	*Prunus caroliniana*	Carolina laurelcherry	6.0 *		25'	X		D	PIP	D
#371C	*Prunus caroliniana*	Carolina laurelcherry	6.0 *		25'	X		D	PIP	D
#372C	*Prunus caroliniana*	Carolina laurelcherry	8.0 *		25'	X		D	PIP	D
#373C	*Prunus caroliniana*	Carolina laurelcherry	10.0 *	6, 4 *	25'	X		D	PIP	D
#374CN	*Quercus agrifolia*	coast live oak	8.0		20'	X	X	PIP	D	NA
#375CN	*Quercus agrifolia*	coast live oak	34.0	24, 10	25'	X	X	PIP	D	NA
#376C	*Acacia dealbata*	silver wattle	11.0		20'	X		PIP	PIP	PIP
#377CN	*Quercus agrifolia*	coast live oak	10.0		20'	X	X	D	PIP	D
#378CN	*Quercus agrifolia*	coast live oak	20.0		30'	X	X	PIP	PIP	PIP
#379CN	*Quercus agrifolia*	coast live oak	54.0	20, 20, 28, 6	35'	X	X	PIP	PIP	PIP
#380CN	*Quercus agrifolia*	coast live oak	22.0		40'	X	X	PIP	D	NA
#381CN	*Pinus radiata*	Monterey pine	34.0		55'	X	X	PIP	PIP	PIP
#382CN	*Quercus agrifolia*	coast live oak	26.0 *	12, 14 *	35'	X	X	D	PIP	D
#383CN	*Quercus agrifolia*	coast live oak	27.0 *	15, 12 *	40'	X	X	D	PIP	D
#384CN	*Acer macrophyllum*	bigleaf maple	44.0 *	12, 8, 8, 6, 6, 4 *	35'	X	X	D	PIP	D
#385CN	*Acer macrophyllum*	bigleaf maple	38.0 *	18, 10, 10 *	35'	X	X	D	PIP	D
#386CN	*Acer macrophyllum*	bigleaf maple	14.0		25'	X	X	PIP	D	NA
#387CN	*Acer macrophyllum*	bigleaf maple	28.0	10, 10, 8	25'	X	X	D	PIP	D
#388N	*Quercus agrifolia*	coast live oak	4.5		15'		X	PIP	D	NA
#389CN	*Acer macrophyllum*	bigleaf maple	29.0	11, 6, 6, 6	25'	X	X	PIP	PIP	PIP
#390C	*Acacia dealbata*	silver wattle	9.5	6.5, 3	25'	X		PIP	D	NA
#391C	*Acacia dealbata*	silver wattle	28.0	9, 7, 3, 3, 3, 3	20'	X		PIP	D	NA
#392C	*Acacia dealbata*	silver wattle	14.0	5, 5, 4	20'	X		PIP	D	NA
#393C	*Acacia dealbata*	silver wattle	19.0	9, 4, 3, 3	20'	X		PIP	PIP	PIP

#394C	*Pseudotsuga menziesii*	Douglas fir	10.5 *		25'	X		D	PIP	D
#395C	*Calocedrus decurrens*	incense cedar	8.0 *		25'	X		D	PIP	D
#396CN	*Quercus agrifolia*	coast live oak	32.0 *		35'	X	X	D	PIP	D
#397CN	*Quercus agrifolia*	coast live oak	30.0 *		30'	X	X	D	PIP	D
#398CN	*Acer macrophyllum*	bigleaf maple	10.0 *	7, 3 *	25'	X	X	PIP	PIP	PIP
#399CN	*Acer macrophyllum*	bigleaf maple	6.0 *		30'	X	X	PIP	D	NA
#400CN	*Acer macrophyllum*	bigleaf maple	6.0 *		25'	X	X	PIP	PIP	PIP
#401CN	*Acer macrophyllum*	bigleaf maple	7.0 *		25'	X	X	PIP	PIP	PIP
#402N	*Acer macrophyllum*	bigleaf maple	4.5 *		25'		X	PIP	PIP	PIP
#403CN	*Acer macrophyllum*	bigleaf maple	7.0 *		25'	X	X	PIP	PIP	PIP
#404CN	*Acer macrophyllum*	bigleaf maple	8.0 *	5, 3 *	25'	X	X	PIP	PIP	PIP
#405N	*Acer macrophyllum*	bigleaf maple	4.0 *		25'		X	PIP	PIP	PIP
#406N	*Acer macrophyllum*	bigleaf maple	4.0 *		25'		X	PIP	PIP	PIP
#407N	*Acer macrophyllum*	bigleaf maple	4.0 *		25'		X	PIP	PIP	PIP
#408CN	*Acer macrophyllum*	bigleaf maple	6.0 *		25'	X	X	PIP	PIP	PIP
#409N	*Acer macrophyllum*	bigleaf maple	5.0 *		25'		X	PIP	PIP	PIP
#410N	*Acer macrophyllum*	bigleaf maple	4.0 *		25'		X	PIP	PIP	PIP
#411N	*Acer macrophyllum*	bigleaf maple	4.0 *		25'		X	PIP	PIP	PIP
#412N	*Acer macrophyllum*	bigleaf maple	4.0 *		25'		X	PIP	PIP	PIP
#413N	*Acer macrophyllum*	bigleaf maple	5.0 *		25'		X	PIP	PIP	PIP
#414C	*Eucalyptus globulus*	southern blue gum	30.0		60'	X		PIP	D	NA
#415CN	*Acer macrophyllum*	bigleaf maple	10.0 *		20'	X	X	D	PIP	D
#416C	*Eucalyptus globulus*	southern blue gum	84.0		75'	X		PIP	D	NA
#417C	*Eucalyptus globulus*	southern blue gum	72.0 *	30, 20, 12, 10 *	75'	X		PIP	PIP	PIP
#418C	*Eucalyptus globulus*	southern blue gum	64.0 *	16, 16, 16, 16 *	75'	X		PIP	D	NA
#419C	*Eucalyptus globulus*	southern blue gum	36.0 *	16, 12, 8 *	65'	X		PIP	D	NA
#420C	*Eucalyptus globulus*	southern blue gum	14.0 *	6, 4, 4 *	75'	X		PIP	D	NA
#421C	*Eucalyptus globulus*	southern blue gum	26.0 *	14, 8, 4 *	55'	X		PIP	PIP	PIP
#422C	*Eucalyptus globulus*	southern blue gum	11.0 *	8, 3 *	65'	X		PIP	D	NA
#423C	*Eucalyptus globulus*	southern blue gum	13.0 *	7, 6 *	65'	X		PIP	D	NA
#424C	*Eucalyptus globulus*	southern blue gum	51.0 *	18, 12, 12, 6, 3 *	65'	X		PIP	D	NA
#425C	*Eucalyptus globulus*	southern blue gum	20.0 *	12, 8 *	65'	X		PIP	D	NA
#426C	*Eucalyptus globulus*	southern blue gum	20.0 *		65'	X		PIP	PIP	PIP
#427C	*Eucalyptus globulus*	southern blue gum	14.0 *		65'	X		PIP	PIP	PIP

#428C	*Eucalyptus globulus*	southern blue gum	80.0 *	18, 18, 14, 14, 6, 6, 4 *	65'	X		PIP	D	NA
#429C	*Eucalyptus globulus*	southern blue gum	35.0 *	8, 8, 8, 7, 4 *	65'	X		PIP	D	NA
#430CN	*Quercus agrifolia*	coast live oak	10.0 *	6, 4 *	15'	X	X	D	PIP	D
#431C	*Eucalyptus globulus*	southern blue gum	60.0	32, 28	80'	X		D	D	NA
#432C	*Eucalyptus globulus*	southern blue gum	78.0	32, 20, 18, 8	80'	X		D	D	NA
#433C	*Eucalyptus globulus*	southern blue gum	36.0 *		70'	X		D	PIP	D
#434C	*Eucalyptus globulus*	southern blue gum	20.0 *		70'	X		D	PIP	D
#435C	*Eucalyptus globulus*	southern blue gum	22.0 *		70'	X		D	PIP	D
#436C	*Eucalyptus globulus*	southern blue gum	20.0 *		65'	X		D	PIP	D
#437CN	*Quercus agrifolia*	coast live oak	12.0 *		25'	X	X	D	PIP	D
#438C	*Eucalyptus globulus*	southern blue gum	132.0 *	42, 30, 24, 24, 12 *	80'	X		D	D	NA
#439C	*Eucalyptus globulus*	southern blue gum	68.0 *	24, 24, 10, 10 *	80'	X		D	D	NA
#440C	*Eucalyptus globulus*	southern blue gum	40.0 *	20, 12, 8 *	65'	X		D	D	NA
#441C	*Eucalyptus globulus*	southern blue gum	20.0 *		75'	X		D	D	NA
#442C	*Eucalyptus globulus*	southern blue gum	20.0 *		75'	X		D	D	NA
#443C	*Pittosporum undulatum*	Victorian box	26.0 *	10, 8, 8 *	20'	X		D	PIP	D
#444C	*Eucalyptus globulus*	southern blue gum	54.0 *	42, 12 *	75'	X		PIP	D	NA
#445C	*Eucalyptus globulus*	southern blue gum	54.0	48, 6	75'	X		PIP	D	NA
#446C	*Eucalyptus globulus*	southern blue gum	56.0	28, 12, 8, 8	60'	X		PIP	D	NA
#447C	*Eucalyptus globulus*	southern blue gum	130.0	30, 24, 20, 20, 18, 18	85'	X		PIP	D	NA
#448C	*Eucalyptus globulus*	southern blue gum	116.0 *	36, 32, 30, 18 *	85'	X		PIP	D	NA
#449C	*Eucalyptus globulus*	southern blue gum	36.0	18, 18	65'	X		PIP	D	NA
#450C	*Eucalyptus globulus*	southern blue gum	60.0 *	18, 18, 12, 12 *	80'	X		PIP	PIP	PIP
#451C	*Eucalyptus globulus*	southern blue gum	55.0 *		85'	X		PIP	PIP	PIP
#452C	*Eucalyptus globulus*	southern blue gum	60.0	48, 12	80'	X		PIP	PIP	PIP
#453C	*Eucalyptus globulus*	southern blue gum	74.0	24, 20, 18, 12	90'	X		PIP	D	NA
#454C	*Eucalyptus globulus*	southern blue gum	28.0		70'	X		PIP	PIP	PIP
#455C	*Eucalyptus globulus*	southern blue gum	21.0	12, 9	85'	X		PIP	PIP	PIP
#456C	*Eucalyptus globulus*	southern blue gum	54.0	24, 22, 8	90'	X		PIP	D	NA
#457C	*Eucalyptus globulus*	southern blue gum	22.0		90'	X		PIP	PIP	PIP
#458C	*Eucalyptus globulus*	southern blue gum	22.0	16, 6	50'	X		PIP	D	NA
#459C	*Eucalyptus globulus*	southern blue gum	19.0	14, 5	70'	X		PIP	PIP	PIP
#460C	*Eucalyptus globulus*	southern blue gum	38.0	20, 18	70'	X		PIP	D	NA
#461C	*Eucalyptus globulus*	southern blue gum	42.0		100'	X		PIP	D	NA

#462C	*Eucalyptus globulus*	southern blue gum	42.0		100'	X		PIP	PIP	PIP
#463C	*Eucalyptus globulus*	southern blue gum	30.0		80'	X		PIP	D	NA
#464C	*Pittosporum undulatum*	Victorian box	7.5	4.5, 1.5, 1.5	20'	X		D	PIP	D
#465C	*Pittosporum undulatum*	Victorian box	11.0	4, 3.5, 2.5, 1	20'	X		D	PIP	D
#466C	*Pittosporum undulatum*	Victorian box	12.0	3.5, 3.5, 2.5, 2.5	20'	X		D	PIP	D
#467C	*Pittosporum undulatum*	Victorian box	6.5	3, 2, 1.5	20'	X		D	PIP	D
#468C	*Pittosporum undulatum*	Victorian box	10.0	3.5, 3.5, 3	20'	X		D	PIP	D
#469C	*Pittosporum undulatum*	Victorian box	8.0	4.5, 3.5	20'	X		D	PIP	D
#470C	*Pittosporum undulatum*	Victorian box	9.0	3, 2, 2, 1, 1	20'	X		D	PIP	D
#471C	*Pittosporum undulatum*	Victorian box	6.0	2, 2, 1, 1	20'	X		D	PIP	D
#472C	*Pittosporum undulatum*	Victorian box	9.0	3, 2, 2, 1, 1	20'	X		D	PIP	D
#473	*Pittosporum undulatum*	Victorian box	4.0	2, 2	20'			D	PIP	D
#474C	*Pittosporum undulatum*	Victorian box	11.0		30'	X		D	PIP	D
#475C	*Ulmus minor*	English elm	18.0 *		40'	X		D	PIP	D
#476C	*Ulmus minor*	English elm	20.0 *	12, 8 *	50'	X		D	PIP	D
#477C	*Eucalyptus globulus*	southern blue gum	28.0 *	18, 6, 4 *	65'	X		D	PIP	D
#478C	*Eucalyptus globulus*	southern blue gum	32.0 *		75'	X		D	PIP	D
#479C	*Eucalyptus globulus*	southern blue gum	26.0 *	18, 8 *	65'	X		D	PIP	D
#480C	*Eucalyptus globulus*	southern blue gum	18.0		60'	X		D	PIP	D
#481C	*Eucalyptus globulus*	southern blue gum	7.0		50'	X		D	PIP	D
#482C	*Eucalyptus globulus*	southern blue gum	80.0		100'	X		PIP	D	NA
#483C	*Eucalyptus globulus*	southern blue gum	14.0		60'	X		PIP	D	NA
#484C	*Eucalyptus globulus*	southern blue gum	48.0	30, 18	70'	X		PIP	D	NA
#485C	*Eucalyptus globulus*	southern blue gum	36.0	28, 8	80'	X		PIP	PIP	PIP
#486C	*Eucalyptus globulus*	southern blue gum	32.0		100'	X		PIP	PIP	PIP
#487C	*Eucalyptus globulus*	southern blue gum	19.0		80'	X		PIP	PIP	PIP
#488C	*Eucalyptus globulus*	southern blue gum	30.0		100'	X		PIP	PIP	PIP
#489C	*Eucalyptus globulus*	southern blue gum	30.0		95'	X		PIP	PIP	PIP
#490C	*Eucalyptus globulus*	southern blue gum	66.0	24, 24, 18	90'	X		PIP	PIP	PIP
#491C	*Eucalyptus globulus*	southern blue gum	68.0	32, 18, 12, 6	100'	X		PIP	PIP	PIP
#492CN	*Pinus radiata*	Monterey pine	16.0		65'	X	X	PIP	PIP	PIP
#493C	*Eucalyptus globulus*	southern blue gum	13.0	10, 3	50'	X		PIP	PIP	PIP
#494C	*Eucalyptus globulus*	southern blue gum	24.0 *		90'	X		PIP	PIP	PIP
#495CN	*Pinus radiata*	Monterey pine	18.0 *		40'	X	X	PIP	PIP	PIP

#496C	*Eucalyptus globulus*	southern blue gum	12.0 *		50'	X		PIP	PIP	PIP
#497C	*Eucalyptus globulus*	southern blue gum	52.0 *		100'	X		PIP	PIP	PIP
#498C	*Eucalyptus globulus*	southern blue gum	92.0	40, 24, 16, 12	100'	X		PIP	PIP	PIP
#499C	*Eucalyptus globulus*	southern blue gum	28.0		100'	X		PIP	PIP	PIP
#500C	*Ulmus minor*	English elm	11.0		30'	X		PIP	PIP	PIP
#501C	*Ulmus minor*	English elm	12.0		30'	X		PIP	PIP	PIP
#502C	*Ulmus minor*	English elm	12.0		30'	X		PIP	PIP	PIP
#503C	*Eucalyptus globulus*	southern blue gum	80.0	48, 32	60'	X		PIP	D	NA
#504C	*Eucalyptus globulus*	southern blue gum	52.0	36, 8, 8	90'	X		PIP	PIP	PIP
#505C	*Eucalyptus globulus*	southern blue gum	42.0		100'	X		PIP	PIP	PIP
#506C	*Eucalyptus globulus*	southern blue gum	27.0		100'	X		PIP	PIP	PIP
#507C	*Eucalyptus globulus*	southern blue gum	35.0		100'	X		PIP	PIP	PIP
#508C	*Eucalyptus globulus*	southern blue gum	26.0		70'	X		PIP	PIP	PIP
#509C	*Eucalyptus globulus*	southern blue gum	58.0 *	40, 18 *	90'	X		PIP	PIP	PIP
#510C	*Eucalyptus globulus*	southern blue gum	38.0 *		100'	X		PIP	PIP	PIP
#511C	*Eucalyptus globulus*	southern blue gum	18.0 *		90'	X		PIP	PIP	PIP
#512C	*Eucalyptus globulus*	southern blue gum	20.0 *		60'	X		PIP	PIP	PIP
#513C	*Eucalyptus globulus*	southern blue gum	24.0 *		60'	X		PIP	PIP	PIP
#514C	*Ulmus minor*	English elm	48.0	20, 28	75'	X		D	PIP	D
#515	*Ulmus minor*	English elm	5.0		20'			D	PIP	D
#516C	*Ulmus minor*	English elm	7.0	4, 3	25'	X		D	PIP	D
#517	*Ulmus minor*	English elm	5.5		35'			D	PIP	D
#518C	*Ulmus minor*	English elm	7.0		35'	X		D	PIP	D
#519C	*Ulmus minor*	English elm	6.0		25'	X		D	PIP	D
#520	*Eucalyptus globulus*	southern blue gum	5.0 *		20'			D	PIP	D
#521C	*Eucalyptus globulus*	southern blue gum	36.0 *		100'	X		PIP	PIP	PIP
#522C	*Eucalyptus globulus*	southern blue gum	18.0 *		100'	X		PIP	PIP	PIP
#523C	*Eucalyptus globulus*	southern blue gum	36.0 *		100'	X		PIP	PIP	PIP
#524C	*Eucalyptus globulus*	southern blue gum	28.0 *		100'	X		PIP	PIP	PIP
#525C	*Eucalyptus globulus*	southern blue gum	32.0 *		100'	X		PIP	PIP	PIP
#526C	*Eucalyptus globulus*	southern blue gum	30.0 *		100'	X		PIP	PIP	PIP
#527C	*Eucalyptus globulus*	southern blue gum	8.0		60'	X		D	PIP	D
#528C	*Eucalyptus globulus*	southern blue gum	24.0 *		100'	X		PIP	PIP	PIP
#529C	*Eucalyptus globulus*	southern blue gum	36.0 *		120'	X		PIP	PIP	PIP

#530C	*Eucalyptus globulus*	southern blue gum	24.0 *		100'	X		PIP	PIP	PIP
#531C	*Eucalyptus globulus*	southern blue gum	12.0 *		60'	X		D	PIP	D
#532C	*Eucalyptus globulus*	southern blue gum	10.0 *		50'	X		PIP	PIP	PIP
#533C	*Eucalyptus globulus*	southern blue gum	36.0 *		120'	X		PIP	PIP	PIP
#534C	*Eucalyptus globulus*	southern blue gum	48.0 *		120'	X		PIP	PIP	PIP
#535C	*Eucalyptus globulus*	southern blue gum	18.0 *		70'	X		PIP	PIP	PIP
#536C	*Eucalyptus globulus*	southern blue gum	22.0 *		75'	X		PIP	PIP	PIP
#537C	*Ulmus minor*	English elm	6.0 *		25'	X		PIP	PIP	PIP
#538C	*Eucalyptus globulus*	southern blue gum	18.0 *		120'	X		PIP	PIP	PIP
#539C	*Eucalyptus globulus*	southern blue gum	18.0 *		110'	X		D	PIP	D
#540C	*Eucalyptus globulus*	southern blue gum	32.0 *		125'	X		PIP	PIP	PIP
#541C	*Eucalyptus globulus*	southern blue gum	18.0 *		90'	X		PIP	PIP	PIP
#542C	*Eucalyptus globulus*	southern blue gum	30.0 *	12, 10, 8 *	85'	X		PIP	PIP	PIP
#543C	*Eucalyptus globulus*	southern blue gum	34.0 *		130'	X		PIP	PIP	PIP
#544C	*Eucalyptus globulus*	southern blue gum	20.0 *		120'	X		PIP	PIP	PIP
#545C	*Eucalyptus globulus*	southern blue gum	20.0 *		80'	X		PIP	PIP	PIP
#546C	*Eucalyptus globulus*	southern blue gum	8.0 *		35'	X		PIP	PIP	PIP
#547C	*Eucalyptus globulus*	southern blue gum	18.0 *	8, 6, 4 *	35'	X		D	PIP	D
#548C	*Eucalyptus globulus*	southern blue gum	12.0 *		60'	X		D	PIP	D
#549C	*Eucalyptus globulus*	southern blue gum	10.0 *		40'	X		D	PIP	D
#550C	*Eucalyptus globulus*	southern blue gum	14.0 *		35'	X		D	PIP	D
#551C	*Eucalyptus globulus*	southern blue gum	15.0 *		30'	X		D	PIP	D
#552C	*Eucalyptus globulus*	southern blue gum	10.0 *		50'	X		PIP	PIP	PIP
#553C	*Eucalyptus globulus*	southern blue gum	20.0 *		100'	X		D	PIP	D
#554C	*Eucalyptus globulus*	southern blue gum	18.0 *		90'	X		PIP	PIP	PIP
#555C	*Eucalyptus globulus*	southern blue gum	9.0 *		55'	X		D	PIP	D
#556C	*Eucalyptus globulus*	southern blue gum	38.0 *	20, 18 *	85'	X		PIP	PIP	PIP
#557C	*Eucalyptus globulus*	southern blue gum	9.0 *		75'	X		PIP	PIP	PIP
#558C	*Eucalyptus globulus*	southern blue gum	24.0 *		120'	X		PIP	PIP	PIP
#559C	*Eucalyptus globulus*	southern blue gum	14.0 *		75'	X		PIP	PIP	PIP
#560C	*Eucalyptus globulus*	southern blue gum	12.0 *		65'	X		PIP	PIP	PIP
#561C	*Eucalyptus globulus*	southern blue gum	36.0 *		130'	X		PIP	PIP	PIP
#562C	*Eucalyptus globulus*	southern blue gum	30.0 *		130'	X		PIP	PIP	PIP
#563C	*Eucalyptus globulus*	southern blue gum	42.0 *		110'	X		PIP	PIP	PIP

#564C	*Eucalyptus globulus*	southern blue gum	6.0 *		30'	X		PIP	PIP	PIP		
#565C	*Eucalyptus globulus*	southern blue gum	12.0 *		30'	X		PIP	PIP	PIP		
#566C	*Eucalyptus globulus*	southern blue gum	30.0 *		70'	X		PIP	PIP	PIP		
#567C	*Eucalyptus globulus*	southern blue gum	12.0 *	6, 6 *	35'	X		PIP	PIP	PIP		
#568C	*Eucalyptus globulus*	southern blue gum	7.0 *		50'	X		PIP	PIP	PIP		
#569C	*Eucalyptus globulus*	southern blue gum	7.0 *		60'	X		PIP	PIP	PIP		
#570C	*Eucalyptus globulus*	southern blue gum	22.0 *		80'	X		PIP	PIP	PIP		
#571C	*Eucalyptus globulus*	southern blue gum	14.0 *	8, 6 *	45'	X		PIP	PIP	PIP		
#572C	*Eucalyptus globulus*	southern blue gum	24.0 *		110'	X		PIP	PIP	PIP		
#573CN	*Pinus radiata*	Monterey pine	8.5		30'	X	X	D	D	NA		D
#574C	*Eucalyptus globulus*	southern blue gum	39.0		120'	X		D	D	NA		D
#575C	*Eucalyptus globulus*	southern blue gum	62.0	46, 16	120'	X		D	D	NA		D
#576C	*Eucalyptus globulus*	southern blue gum	78.5	28, 24, 16, 10.5	100'	X		PIP	PIP	PIP		D
#577C	*Eucalyptus globulus*	southern blue gum	16.5		75'	X		PIP	PIP	PIP		D
#578C	*Eucalyptus globulus*	southern blue gum	46.0	32, 14	75'	X		D	D	NA		D
#579	*Eucalyptus globulus*	southern blue gum	5.0		30'			PIP	PIP	PIP		D
#580C	*Eucalyptus globulus*	southern blue gum	16.0		80'	X		D	D	NA		D
#581C	*Eucalyptus globulus*	southern blue gum	29.0		120'	X		D	D	NA		D
#582	*Eucalyptus globulus*	southern blue gum	5.5		25'			PIP	PIP	PIP		D
#583C	*Eucalyptus globulus*	southern blue gum	20.0		120'	X		PIP	PIP	PIP		D
#584C	*Eucalyptus globulus*	southern blue gum	10.5		65'	X		PIP	PIP	PIP		D
#585C	*Eucalyptus globulus*	southern blue gum	37.0	23, 14	100'	X		PIP	PIP	PIP		D
#586	NOT USED											
#587	NOT USED											
#588	NOT USED											
#589	NOT USED											
#590C	*Eucalyptus globulus*	southern blue gum	22.5	16.5, 6	75'	X		PIP	PIP	PIP		D
#591C	*Eucalyptus globulus*	southern blue gum	22.0		70'	X		PIP	PIP	PIP		D
#592C	*Eucalyptus globulus*	southern blue gum	61.0	32, 29	85'	X		PIP	PIP	PIP		D
#593C	*Eucalyptus globulus*	southern blue gum	13.0		75'	X		PIP	PIP	PIP		D
#594C	*Eucalyptus globulus*	southern blue gum	25.0		75'	X		PIP	PIP	PIP		D
#595C	*Eucalyptus globulus*	southern blue gum	12.0		75'	X		PIP	PIP	PIP		D
#596C	*Eucalyptus globulus*	southern blue gum	17.5	11, 6.5	65'	X		PIP	PIP	PIP		D
#597C	*Eucalyptus globulus*	southern blue gum	30.0	16.5, 13.5	65'	X		PIP	PIP	PIP		D

#598C	*Eucalyptus globulus*	southern blue gum	13.5	10.5, 3	65'	X		PIP	PIP	PIP	D
#599C	*Eucalyptus globulus*	southern blue gum	7.0		40'	X		PIP	PIP	PIP	D
#600C	*Eucalyptus globulus*	southern blue gum	60.0	36, 20, 4	100'	X		PIP	PIP	PIP	D
#601C	*Eucalyptus globulus*	southern blue gum	28.5	19, 9.5	90'	X		PIP	PIP	PIP	D
#602C	*Eucalyptus globulus*	southern blue gum	9.5	6.5, 3	20'	X		PIP	PIP	PIP	D
#603C	*Eucalyptus globulus*	southern blue gum	29.0	22, 7	80'	X		PIP	PIP	PIP	D
#604C	*Eucalyptus globulus*	southern blue gum	10.0		35'	X		PIP	PIP	PIP	D
#605C	*Eucalyptus globulus*	southern blue gum	15.0		75'	X		PIP	PIP	PIP	D
#606C	*Eucalyptus globulus*	southern blue gum	54.0	25, 20, 9	120'	X		PIP	PIP	PIP	D
#607C	*Eucalyptus globulus*	southern blue gum	9.0	5.5, 3.5	20'	X		PIP	PIP	PIP	D
#608C	*Eucalyptus globulus*	southern blue gum	25.0	19, 3, 3	100'	X		PIP	PIP	PIP	D
#609C	*Eucalyptus globulus*	southern blue gum	10.0		45'	X		PIP	PIP	PIP	D
#610C	*Eucalyptus globulus*	southern blue gum	24.0	16, 8	110'	X		PIP	PIP	PIP	D
#611C	*Eucalyptus globulus*	southern blue gum	16.0		120'	X		PIP	PIP	PIP	D
#612C	*Eucalyptus globulus*	southern blue gum	36.0	20, 9, 7	120'	X		PIP	PIP	PIP	D
#613C	*Eucalyptus globulus*	southern blue gum	12.5		70'	X		PIP	PIP	PIP	D
#614C	*Eucalyptus globulus*	southern blue gum	11.0		70'	X		PIP	PIP	PIP	D
#615C	*Eucalyptus globulus*	southern blue gum	50.0	28, 12, 10	100'	X		PIP	PIP	PIP	D
#616C	*Eucalyptus globulus*	southern blue gum	10.5		50'	X		PIP	PIP	PIP	D
#617C	*Eucalyptus globulus*	southern blue gum	18.0		85'	X		PIP	PIP	PIP	D
#618C	*Eucalyptus globulus*	southern blue gum	9.5		40'	X		PIP	PIP	PIP	D
#619C	*Eucalyptus globulus*	southern blue gum	27.0	13, 2, 2, 2, 2, 2, 2, 2	75'	X		PIP	PIP	PIP	D
#620C	*Eucalyptus globulus*	southern blue gum	26.5		100'	X		PIP	PIP	PIP	D
#621C	*Eucalyptus globulus*	southern blue gum	44.0	24, 20	120'	X		PIP	PIP	PIP	D
#622C	*Eucalyptus globulus*	southern blue gum	8.5		60'	X		PIP	PIP	PIP	D
#623C	*Eucalyptus globulus*	southern blue gum	27.0		120'	X		PIP	PIP	PIP	D
#624C	*Eucalyptus globulus*	southern blue gum	8.5		60'	X		PIP	PIP	PIP	D
#625C	*Eucalyptus globulus*	southern blue gum	30.0		100'	X		PIP	PIP	PIP	D
#626C	*Eucalyptus globulus*	southern blue gum	20.0		85'	X		PIP	PIP	PIP	D
#627C	*Eucalyptus globulus*	southern blue gum	15.0		85'	X		PIP	PIP	PIP	D
#628C	*Eucalyptus globulus*	southern blue gum	20.0		100'	X		PIP	PIP	PIP	D
#629C	*Eucalyptus globulus*	southern blue gum	61.0		85'	X		PIP	PIP	PIP	D
#630C	*Eucalyptus globulus*	southern blue gum	73.0	29, 28, 16	90'	X		PIP	PIP	PIP	D
#631C	*Eucalyptus globulus*	southern blue gum	28.0		80'	X		PIP	PIP	PIP	D

#632C	*Eucalyptus globulus*	southern blue gum	36.0		90'	X		PIP	PIP	PIP	D
#633C	*Eucalyptus globulus*	southern blue gum	42.0		90'	X		PIP	PIP	PIP	D
#634C	*Eucalyptus globulus*	southern blue gum	70.0		100'	X		PIP	PIP	PIP	D
#635C	*Eucalyptus globulus*	southern blue gum	34.0		100'	X		PIP	PIP	PIP	D
#636C	*Eucalyptus globulus*	southern blue gum	70.0		110'	X		D	PIP	D	PIP
#637C	*Eucalyptus globulus*	southern blue gum	15.0		55'	X		PIP	PIP	PIP	PIP
#638C	*Eucalyptus globulus*	southern blue gum	6.0		20'	X		PIP	PIP	PIP	PIP
#639C	*Eucalyptus globulus*	southern blue gum	9.0		30'	X		PIP	PIP	PIP	PIP
#640C	*Eucalyptus globulus*	southern blue gum	12.0 *		25'	X		PIP	PIP	PIP	PIP
#641C	*Eucalyptus globulus*	southern blue gum	28.0		85'	X		PIP	PIP	PIP	PIP
#642C	*Eucalyptus globulus*	southern blue gum	16.0 *		60'	X		PIP	PIP	PIP	PIP
#643C	*Eucalyptus globulus*	southern blue gum	62.0	42, 20	90'	X		PIP	PIP	PIP	PIP
#644C	*Eucalyptus globulus*	southern blue gum	9.5		60'	X		D	PIP	D	PIP
#645C	*Eucalyptus globulus*	southern blue gum	12.0		70'	X		D	PIP	D	PIP
#646C	*Eucalyptus globulus*	southern blue gum	60.0		75'	X		PIP	PIP	PIP	PIP
#647C	*Eucalyptus globulus*	southern blue gum	12.5		45'	X		PIP	PIP	PIP	PIP
#648C	*Eucalyptus globulus*	southern blue gum	15.0		50'	X		PIP	PIP	PIP	PIP
#649C	*Eucalyptus globulus*	southern blue gum	21.0	12, 9	70'	X		PIP	PIP	PIP	PIP
#650C	*Eucalyptus globulus*	southern blue gum	22.0		85'	X		PIP	PIP	PIP	PIP
#651C	*Eucalyptus globulus*	southern blue gum	26.0		80'	X		PIP	PIP	PIP	PIP
#652C	*Eucalyptus globulus*	southern blue gum	8.0 *		35'	X		D	PIP	D	PIP
#653C	*Eucalyptus globulus*	southern blue gum	12.0 *		50'	X		PIP	PIP	PIP	PIP
#654C	*Eucalyptus globulus*	southern blue gum	7.0 *		30'	X		D	PIP	D	PIP
#655C	*Eucalyptus globulus*	southern blue gum	16.0 *		55'	X		PIP	PIP	PIP	PIP
#656C	*Eucalyptus globulus*	southern blue gum	8.0 *		30'	X		D	PIP	D	PIP
#657C	*Eucalyptus globulus*	southern blue gum	6.0 *		35'	X		D	PIP	D	PIP
#658C	*Eucalyptus globulus*	southern blue gum	6.0 *		35'	X		D	PIP	D	PIP
#659	*Eucalyptus globulus*	southern blue gum	5.0 *		30'			D	PIP	D	PIP
#660C	*Eucalyptus globulus*	southern blue gum	8.0 *		50'	X		D	PIP	D	PIP
#661C	*Eucalyptus globulus*	southern blue gum	6.0 *		25'	X		D	PIP	D	PIP
#662C	*Eucalyptus globulus*	southern blue gum	18.0 *		65'	X		PIP	PIP	PIP	PIP
#663	*Eucalyptus globulus*	southern blue gum	5.0 *		45'			PIP	PIP	PIP	PIP
#664C	*Eucalyptus globulus*	southern blue gum	20.0 *		50'	X		PIP	PIP	PIP	PIP
#665C	*Eucalyptus globulus*	southern blue gum	9.0 *		35'	X		PIP	PIP	PIP	PIP

#666C	*Eucalyptus globulus*	southern blue gum	8.0		45'	X		PIP	PIP	PIP		PIP
#667C	*Eucalyptus globulus*	southern blue gum	11.0		55'	X		PIP	PIP	PIP		PIP
#668C	*Eucalyptus globulus*	southern blue gum	15.0	9,6	60'	X		D	PIP	D		PIP
#669C	*Eucalyptus globulus*	southern blue gum	26.0	18,8	70'	X		PIP	PIP	PIP		PIP
#670C	*Eucalyptus globulus*	southern blue gum	28.0		90'	X		PIP	PIP	PIP		PIP
#671C	*Eucalyptus globulus*	southern blue gum	16.0 *		70'	X		PIP	PIP	PIP		PIP
#672C	*Eucalyptus globulus*	southern blue gum	12.0 *	8, 4 *	50'	X		PIP	PIP	PIP		PIP
#673C	*Eucalyptus globulus*	southern blue gum	10.0 *		50'	X		PIP	PIP	PIP		PIP
#674C	*Eucalyptus globulus*	southern blue gum	20.0 *	8, 12 *	55'	X		PIP	PIP	PIP		PIP
#675C	*Eucalyptus globulus*	southern blue gum	20.0 *	6, 6, 8 *	50'	X		PIP	PIP	PIP		PIP
#676C	*Eucalyptus globulus*	southern blue gum	10.0 *		50'	X		PIP	PIP	PIP		PIP
#677C	*Eucalyptus globulus*	southern blue gum	7.0		45'	X		D	PIP	D		PIP
#678C	*Eucalyptus globulus*	southern blue gum	8.0		45'	X		D	PIP	D		PIP
#679C	*Eucalyptus globulus*	southern blue gum	8.0		40'	X		D	PIP	D		PIP
#680C	*Eucalyptus globulus*	southern blue gum	11.0 *		60'	X		D	PIP	D		PIP
#681C	*Eucalyptus globulus*	southern blue gum	12.0 *		60'	X		PIP	PIP	PIP		PIP
#682	*Eucalyptus globulus*	southern blue gum	4.5		35'			D	PIP	D		PIP
#683C	*Eucalyptus globulus*	southern blue gum	11.0		75'	X		D	PIP	D		PIP
#684	*Eucalyptus globulus*	southern blue gum	5.5 *		30'			PIP	PIP	PIP		PIP
#685C	*Eucalyptus globulus*	southern blue gum	6.5 *		45'	X		PIP	PIP	PIP		PIP
#686C	*Eucalyptus globulus*	southern blue gum	7.5 *		45'	X		PIP	PIP	PIP		PIP
#687C	*Eucalyptus globulus*	southern blue gum	13.0 *	8, 5 *	50'	X		PIP	PIP	PIP		PIP
#688C	*Eucalyptus globulus*	southern blue gum	30.0	14, 12, 4	60'	X		PIP	PIP	PIP		PIP
#689C	*Eucalyptus globulus*	southern blue gum	19.0	12, 7	60'	X		PIP	PIP	PIP		PIP
#690C	*Eucalyptus globulus*	southern blue gum	19.0	7, 6, 6	30'	X		PIP	PIP	PIP		PIP
#691C	*Eucalyptus globulus*	southern blue gum	6.0		30'	X		PIP	PIP	PIP		PIP
#692C	*Eucalyptus globulus*	southern blue gum	10.5	6.5, 4	40'	X		D	PIP	D		PIP
#693C	*Eucalyptus globulus*	southern blue gum	28.0	9, 6, 5, 4, 4	40'	X		D	PIP	D		PIP
#694	*Eucalyptus globulus*	southern blue gum	4.0		25'			PIP	PIP	PIP		PIP
#695C	*Eucalyptus globulus*	southern blue gum	16.0		75'	X		PIP	PIP	PIP		PIP
#696C	*Eucalyptus globulus*	southern blue gum	19.5	13, 6.5	75'	X		PIP	PIP	PIP		PIP
#697C	*Eucalyptus globulus*	southern blue gum	8.5		45'	X		PIP	PIP	PIP		PIP
#698C	*Eucalyptus globulus*	southern blue gum	12.0	6, 6	35'	X		PIP	PIP	PIP		PIP
#699C	*Eucalyptus globulus*	southern blue gum	20.0		65'	X		PIP	PIP	PIP		PIP

#700C	*Eucalyptus globulus*	southern blue gum	8.0		45'	X		D	PIP	D	PIP
#701C	*Eucalyptus globulus*	southern blue gum	36.0	16, 12, 8	70'	X		D	PIP	D	PIP
#702C	*Eucalyptus globulus*	southern blue gum	6.0		15'	X		D	PIP	D	PIP
#703C	*Eucalyptus globulus*	southern blue gum	28.0		70'	X		D	PIP	D	PIP
#704C	*Eucalyptus globulus*	southern blue gum	7.0		30'	X		D	PIP	D	PIP
#705C	*Eucalyptus globulus*	southern blue gum	9.5		35'	X		D	PIP	D	PIP
#706C	*Eucalyptus globulus*	southern blue gum	15.5		65'	X		D	PIP	D	PIP
#707C	*Eucalyptus globulus*	southern blue gum	14.0		60'	X		D	PIP	D	PIP
#708C	*Eucalyptus globulus*	southern blue gum	8.5		45'	X		D	PIP	D	PIP
#709C	*Eucalyptus globulus*	southern blue gum	28.0		75'	X		PIP	PIP	PIP	PIP
#710C	*Eucalyptus globulus*	southern blue gum	24.0		75'	X		PIP	PIP	PIP	PIP
#711C	*Eucalyptus globulus*	southern blue gum	32.0		80'	X		PIP	PIP	PIP	PIP
#712C	*Eucalyptus globulus*	southern blue gum	45.0	36, 9	85'	X		PIP	PIP	PIP	PIP
#713C	*Eucalyptus globulus*	southern blue gum	13.0	9, 4	40'	X		PIP	PIP	PIP	PIP
#714	*Eucalyptus globulus*	southern blue gum	5.0		25'			PIP	PIP	PIP	PIP
#715C	*Eucalyptus globulus*	southern blue gum	9.0		35'	X		PIP	PIP	PIP	PIP
#716C	*Eucalyptus globulus*	southern blue gum	36.0		90'	X		PIP	PIP	PIP	PIP
#717C	*Eucalyptus globulus*	southern blue gum	35.0		85'	X		PIP	PIP	PIP	PIP
#718C	*Eucalyptus globulus*	southern blue gum	11.5		35'	X		PIP	PIP	PIP	PIP
#719C	*Eucalyptus globulus*	southern blue gum	39.0	27, 12	50'	X		PIP	PIP	PIP	PIP
#720C	*Eucalyptus globulus*	southern blue gum	39.0		95'	X		PIP	PIP	PIP	PIP
#721C	*Eucalyptus globulus*	southern blue gum	22.0		75'	X		PIP	PIP	PIP	PIP
#722C	*Eucalyptus globulus*	southern blue gum	24.0	14, 10	65'	X		PIP	PIP	PIP	PIP
#723C	*Eucalyptus globulus*	southern blue gum	33.0		80'	X		PIP	PIP	PIP	PIP
#724C	*Eucalyptus globulus*	southern blue gum	18.0	12, 6	55'	X		PIP	PIP	PIP	PIP
#725C	*Eucalyptus globulus*	southern blue gum	21.0 *	9, 7, 5 *	55'	X		PIP	PIP	PIP	PIP
#726C	*Eucalyptus globulus*	southern blue gum	14.0 *		55'	X		PIP	PIP	PIP	PIP
#727C	*Eucalyptus globulus*	southern blue gum	11.0 *		55'	X		PIP	PIP	PIP	PIP
#728C	*Eucalyptus globulus*	southern blue gum	58.0	25, 10, 8, 8, 7	70'	X		PIP	PIP	PIP	PIP
#729C	*Eucalyptus globulus*	southern blue gum	6.0		40'	X		PIP	PIP	PIP	PIP
#730C	*Eucalyptus globulus*	southern blue gum	36.0	28, 8	70'	X		PIP	PIP	PIP	PIP
#731C	*Eucalyptus globulus*	southern blue gum	11.0		70'	X		PIP	PIP	PIP	PIP
#732C	*Eucalyptus globulus*	southern blue gum	27.5	18, 9.5	70'	X		PIP	PIP	PIP	PIP
#733C	*Eucalyptus globulus*	southern blue gum	18.0		55'	X		PIP	PIP	PIP	PIP

#734C	*Eucalyptus globulus*	southern blue gum	7.5		30'	X		PIP	PIP	PIP		PIP
#735C	*Eucalyptus globulus*	southern blue gum	9.0		20'	X		PIP	PIP	PIP		PIP
#736C	*Eucalyptus globulus*	southern blue gum	6.0		20'	X		PIP	PIP	PIP		PIP
#737C	*Eucalyptus globulus*	southern blue gum	7.0		20'	X		PIP	PIP	PIP		PIP
#738C	*Eucalyptus globulus*	southern blue gum	11.0		45'	X		PIP	PIP	PIP		PIP
#739C	*Eucalyptus globulus*	southern blue gum	15.5		40'	X		PIP	PIP	PIP		PIP
#740C	*Eucalyptus globulus*	southern blue gum	35.0	19, 16	40'	X		PIP	PIP	PIP		PIP
#741C	*Eucalyptus globulus*	southern blue gum	8.5		40'	X		PIP	PIP	PIP		PIP
#742C	*Eucalyptus globulus*	southern blue gum	44.0	20, 9, 8, 7	50'	X		PIP	PIP	PIP		PIP
#743C	*Eucalyptus globulus*	southern blue gum	17.5		50'	X		PIP	PIP	PIP		PIP
#744C	*Eucalyptus globulus*	southern blue gum	23.0	13, 10	50'	X		PIP	PIP	PIP		PIP
#745C	*Eucalyptus globulus*	southern blue gum	38.0	20, 18	50'	X		PIP	PIP	PIP		PIP
#746C	*Eucalyptus globulus*	southern blue gum	29.0	21, 8	55'	X		PIP	PIP	PIP		PIP
#747C	*Eucalyptus globulus*	southern blue gum	14.0		45'	X		PIP	PIP	PIP		PIP
#748C	*Eucalyptus globulus*	southern blue gum	12.0		35'	X		PIP	PIP	PIP		PIP
#749C	*Eucalyptus globulus*	southern blue gum	26.0	18, 8	55'	X		PIP	PIP	PIP		PIP
#750C	*Eucalyptus globulus*	southern blue gum	16.5		55'	X		PIP	PIP	PIP		PIP
#751C	*Eucalyptus globulus*	southern blue gum	57.0	20, 14, 14, 9	55'	X		PIP	PIP	PIP		PIP
#752C	*Eucalyptus globulus*	southern blue gum	37.0	14, 12, 11	60'	X		PIP	PIP	PIP		PIP
#753C	*Eucalyptus globulus*	southern blue gum	15.0		45'	X		PIP	PIP	PIP		PIP
#754C	*Eucalyptus globulus*	southern blue gum	23.0	13, 10	45'	X		PIP	PIP	PIP		PIP
#755C	*Eucalyptus globulus*	southern blue gum	14.0		45'	X		PIP	PIP	PIP		PIP
#756C	*Eucalyptus globulus*	southern blue gum	9.0	3, 2, 2, 1, 1	12'	X		PIP	PIP	PIP		PIP
#757C	*Eucalyptus globulus*	southern blue gum	88.0	50, 20, 18	70'	X		PIP	PIP	PIP		PIP
#758C	*Eucalyptus globulus*	southern blue gum	60.0		80'	X		D	PIP	D		PIP
#759C	*Eucalyptus globulus*	southern blue gum	15.0		65'	X		PIP	PIP	PIP		PIP
#760C	*Eucalyptus globulus*	southern blue gum	16.0		80'	X		PIP	PIP	PIP		PIP
#761C	*Eucalyptus globulus*	southern blue gum	35.0		80'	X		PIP	PIP	PIP		PIP
#762C	*Eucalyptus globulus*	southern blue gum	10.5		65'	X		D	PIP	D		PIP
#763C	*Eucalyptus globulus*	southern blue gum	60.0		70'	X		PIP	PIP	PIP		PIP
#764C	*Eucalyptus globulus*	southern blue gum	16.5		70'	X		PIP	PIP	PIP		PIP
#765C	*Eucalyptus globulus*	southern blue gum	9.0		55'	X		PIP	PIP	PIP		PIP
#766C	*Eucalyptus globulus*	southern blue gum	9.5		55'	X		PIP	PIP	PIP		PIP
#767C	*Eucalyptus globulus*	southern blue gum	66.0	17, 16, 12, 11, 10	70'	X		PIP	PIP	PIP		PIP

#768C	*Eucalyptus globulus*	southern blue gum	32.0 *	16, 16 *	70'	X		D	PIP	D		PIP
#769C	*Eucalyptus globulus*	southern blue gum	17.0		70'	X		PIP	PIP	PIP		PIP
#770C	*Eucalyptus globulus*	southern blue gum	22.0		65'	X		PIP	PIP	PIP		PIP
#771C	*Eucalyptus globulus*	southern blue gum	9.0		30'	X		PIP	PIP	PIP		PIP
#772C	*Eucalyptus globulus*	southern blue gum	11.0	6, 5	30'	X		D	PIP	D		PIP
#773C	*Eucalyptus globulus*	southern blue gum	7.5 *		30'	X		PIP	PIP	PIP		PIP
#774C	*Eucalyptus globulus*	southern blue gum	29.0 *	20, 9 *	55'	X		PIP	PIP	PIP		PIP
#775C	*Eucalyptus globulus*	southern blue gum	14.0 *	10, 4 *	35'	X		PIP	PIP	PIP		PIP
#776C	*Eucalyptus globulus*	southern blue gum	21.0		50'	X		D	PIP	D		PIP
#777C	*Eucalyptus globulus*	southern blue gum	10.0		50'	X		D	PIP	D		PIP
#778C	*Eucalyptus globulus*	southern blue gum	18.0		80'	X		PIP	PIP	PIP		PIP
#779C	*Eucalyptus globulus*	southern blue gum	23.0		75'	X		PIP	PIP	PIP		PIP
#780C	*Eucalyptus globulus*	southern blue gum	14.0		55'	X		PIP	PIP	PIP		PIP
#781C	*Eucalyptus globulus*	southern blue gum	9.5		40'	X		PIP	PIP	PIP		PIP
#782C	*Eucalyptus globulus*	southern blue gum	38.0	13, 10, 8, 7	45'	X		PIP	PIP	PIP		PIP
#783C	*Eucalyptus globulus*	southern blue gum	22.0	11, 11	55'	X		PIP	PIP	PIP		PIP
#784C	*Eucalyptus globulus*	southern blue gum	34.0	11, 10, 5, 4, 4	55'	X		PIP	PIP	PIP		PIP
#785C	*Eucalyptus globulus*	southern blue gum	8.5		55'	X		PIP	PIP	PIP		PIP
#786C	*Eucalyptus globulus*	southern blue gum	11.0		55'	X		PIP	PIP	PIP		PIP
#787C	*Eucalyptus globulus*	southern blue gum	46.0	24, 22	55'	X		PIP	PIP	PIP		PIP
#788C	*Eucalyptus globulus*	southern blue gum	17.0		60'	X		PIP	PIP	PIP		PIP
#789C	*Eucalyptus globulus*	southern blue gum	23.5	18, 5.5	55'	X		PIP	PIP	PIP		PIP
#790C	*Eucalyptus globulus*	southern blue gum	40.0	14, 10, 8, 8	60'	X		PIP	PIP	PIP		PIP
#791C	*Eucalyptus globulus*	southern blue gum	22.0		70'	X		PIP	PIP	PIP		PIP
#792C	*Eucalyptus globulus*	southern blue gum	15.0		55'	X		PIP	PIP	PIP		PIP
#793C	*Eucalyptus globulus*	southern blue gum	11.0		45'	X		PIP	PIP	PIP		PIP
#794	*Eucalyptus globulus*	southern blue gum	5.0		30'			PIP	PIP	PIP		PIP
#795C	*Eucalyptus globulus*	southern blue gum	24.0	17, 7	55'	X		PIP	PIP	PIP		PIP
#796C	*Eucalyptus globulus*	southern blue gum	9.5		35'	X		PIP	PIP	PIP		PIP
#797C	*Eucalyptus globulus*	southern blue gum	19.0		80'	X		PIP	PIP	PIP		PIP
#798C	*Eucalyptus globulus*	southern blue gum	9.0		70'	X		PIP	PIP	PIP		PIP
#799C	*Eucalyptus globulus*	southern blue gum	7.0		45'	X		PIP	PIP	PIP		PIP
#800C	*Eucalyptus globulus*	southern blue gum	9.5		45'	X		PIP	PIP	PIP		PIP
#801C	*Eucalyptus globulus*	southern blue gum	8.0		60'	X		PIP	PIP	PIP		PIP

#802C	*Eucalyptus globulus*	southern blue gum	10.5		60'	X		PIP	PIP	PIP	PIP
#803C	*Eucalyptus globulus*	southern blue gum	8.0		70'	X		PIP	PIP	PIP	PIP
#804C	*Eucalyptus globulus*	southern blue gum	34.0		60'	X		D	PIP	D	PIP
#805C	*Eucalyptus globulus*	southern blue gum	88.0	55, 33	85'	X		PIP	PIP	PIP	PIP
#806C	*Eucalyptus globulus*	southern blue gum	36.0		75'	X		PIP	PIP	PIP	PIP
#807C	*Eucalyptus globulus*	southern blue gum	22.0		75'	X		PIP	PIP	PIP	PIP
#808C	*Eucalyptus globulus*	southern blue gum	19.0		60'	X		PIP	PIP	PIP	PIP
#809C	*Eucalyptus globulus*	southern blue gum	38.0	30, 8	75'	X		PIP	PIP	PIP	PIP
#810C	*Eucalyptus globulus*	southern blue gum	35.0	19, 16	85'	X		D	PIP	D	PIP
#811C	*Eucalyptus globulus*	southern blue gum	32.0		85'	X		PIP	PIP	PIP	PIP
#812C	*Eucalyptus globulus*	southern blue gum	36.0		75'	X		D	PIP	D	PIP
#813C	*Eucalyptus globulus*	southern blue gum	30.0		75'	X		D	PIP	D	PIP
#814CN	*Quercus agrifolia*	coast live oak	30.5	7, 5, 4.5, 4, 4, 3, 3	12'	X	X	PIP	PIP	PIP	PIP
#815C	*Eucalyptus globulus*	southern blue gum	17.0 *	9, 8 *	20'	X		PIP	PIP	PIP	PIP
#816CN	*Quercus agrifolia*	coast live oak	13.5	5.5, 5, 3	12'	X	X	PIP	PIP	PIP	PIP
#817CN	*Quercus agrifolia*	coast live oak	12.0	3, 3, 3, 3	10'	X	X	PIP	PIP	PIP	PIP
#818CN	*Quercus agrifolia*	coast live oak	6.0	4, 2	12'	X	X	PIP	PIP	PIP	PIP
#819CN	*Quercus agrifolia*	coast live oak	20.0	6.5, 5, 4.5, 4	12'	X	X	PIP	PIP	PIP	PIP
#820CN	*Quercus agrifolia*	coast live oak	14.0	6, 6, 2	12'	X	X	PIP	PIP	PIP	PIP
#821CN	*Quercus agrifolia*	coast live oak	9.0	6, 3	12'	X	X	PIP	PIP	PIP	PIP
#822CN	*Quercus agrifolia*	coast live oak	30.0	10.5, 8.5, 7, 4	12'	X	X	PIP	PIP	PIP	PIP
#823CN	*Quercus agrifolia*	coast live oak	43.5	6.5, 5.5, 5, 5, 5, 4.5, 4, 4, 4	10'	X	X	PIP	PIP	PIP	PIP
#824CN	*Quercus agrifolia*	coast live oak	28.0	8, 8, 7, 5	10'	X	X	PIP	PIP	PIP	PIP
#825CN	*Quercus agrifolia*	coast live oak	10.5	3, 2, 2, 2, 1.5	8'	X	X	PIP	PIP	PIP	PIP
#826C	*Eucalyptus globulus*	southern blue gum	24.0 *		60'	X		PIP	PIP	PIP	PIP
#827C	*Eucalyptus globulus*	southern blue gum	36.0 *		75'	X		PIP	PIP	PIP	PIP
#828CN	*Salix lasiolepis*	arroyo willow	9.5 *	5, 4.5 *	25'	X	X	D	PIP	D	PIP
#829CN	*Quercus agrifolia*	coast live oak	8.5 *		20'	X	X	D	PIP	D	PIP
#830C	*Eucalyptus globulus*	southern blue gum	20.0	12, 8	65'	X		D	PIP	D	PIP
#831C	*Eucalyptus globulus*	southern blue gum	15.5	8.5, 7	65'	X		D	PIP	D	PIP
#832C	*Eucalyptus globulus*	southern blue gum	16.0	8, 5, 3	65'	X		D	PIP	D	PIP
#833C	*Eucalyptus globulus*	southern blue gum	29,5	12, 10.5, 7	65'	X		D	PIP	D	PIP
#834	*Eucalyptus globulus*	southern blue gum	5.0		65'			D	PIP	D	PIP
#835C	*Eucalyptus globulus*	southern blue gum	23.0	12, 11	75'	X		D	PIP	D	PIP

#836C	*Eucalyptus globulus*	southern blue gum	40.0	32, 8	75'	X		D	PIP	D	PIP
#837C	*Eucalyptus globulus*	southern blue gum	16.0		40'	X		PIP	PIP	PIP	D
#838C	*Eucalyptus globulus*	southern blue gum	30.0		45'	X		PIP	PIP	PIP	D
#839C	*Eucalyptus globulus*	southern blue gum	16.0		70'	X		D	PIP	D	PIP
#840C	*Eucalyptus globulus*	southern blue gum	16.5 *	10.5, 6 *	75'	X		D	PIP	D	PIP
#841C	*Eucalyptus globulus*	southern blue gum	11.0 *		70'	X		D	PIP	D	PIP
#842C	*Eucalyptus globulus*	southern blue gum	9.5 *		70'	X		D	PIP	D	PIP
#843C	*Eucalyptus globulus*	southern blue gum	6.0		30'	X		D	D	NA	D
#844C	*Eucalyptus globulus*	southern blue gum	14.0		50'	X		D	D	NA	D
#845C	*Eucalyptus globulus*	southern blue gum	100.0		90'	X		D	D	NA	D
#846C	*Eucalyptus globulus*	southern blue gum	19.5		90'	X		D	D	NA	D
#847C	*Eucalyptus globulus*	southern blue gum	24.0		85'	X		PIP	PIP	PIP	
#848C	*Eucalyptus globulus*	southern blue gum	26.0		90'	X		PIP	D	NA	
#849C	*Eucalyptus globulus*	southern blue gum	15.0		60'	X		PIP	D	NA	
#850CN	*Quercus agrifolia*	coast live oak	6.0		18'	X	X	PIP	PIP	PIP	
#851	*Eucalyptus globulus*	southern blue gum	5.0		30'			PIP	PIP	PIP	
#852C	*Eucalyptus globulus*	southern blue gum	62.0	28, 12, 11, 11	90'	X		PIP	PIP	PIP	
#853C	*Eucalyptus globulus*	southern blue gum	42.0		95'	X		PIP	PIP	PIP	
#854C	*Eucalyptus globulus*	southern blue gum	33.0	22, 11	90'	X		PIP	PIP	PIP	
#855C	*Eucalyptus globulus*	southern blue gum	20.0		90'	X		D	PIP	D	
#856C	*Eucalyptus globulus*	southern blue gum	18.0 *		90'	X		D	PIP	D	
#857C	*Eucalyptus globulus*	southern blue gum	20.0 *		90'	X		D	PIP	D	
#858C	*Eucalyptus globulus*	southern blue gum	16.0		90'	X		D	PIP	D	
#859C	*Eucalyptus globulus*	southern blue gum	7.5		65'	X		D	PIP	D	
#860C	*Eucalyptus globulus*	southern blue gum	7.0 *		40'	X		D	PIP	D	
#861C	*Eucalyptus globulus*	southern blue gum	7.5 *		45'	X		D	PIP	D	
#862C	*Eucalyptus globulus*	southern blue gum	12.0 *		55'	X		D	PIP	D	
#863C	*Eucalyptus globulus*	southern blue gum	6.0 *		35'	X		D	PIP	D	
#864C	*Eucalyptus globulus*	southern blue gum	19.0 *		70'	X		D	PIP	D	
#865C	*Eucalyptus globulus*	southern blue gum	37.0 *	30, 7 *	85'	X		D	PIP	D	
#866C	*Eucalyptus globulus*	southern blue gum	28.0		80'	X		D	PIP	D	
#867N	*Quercus agrifolia*	coast live oak	5.0 *		20'		X	D	PIP	D	
#868N	*Quercus agrifolia*	coast live oak	5.0		15'		X	D	PIP	D	
#869CN	*Quercus agrifolia*	coast live oak	6.0 *		20'	X	X	D	PIP	D	

#870CN	*Quercus agrifolia*	coast live oak	8.5		20'	X	X	D	PIP	D
#871CN	*Quercus agrifolia*	coast live oak	10.0	7.5, 2.5	20'	X	X	D	PIP	D
#872N	*Quercus agrifolia*	coast live oak	5.5		15'		X	D	PIP	D
#873CN	*Quercus agrifolia*	coast live oak	10.5	5, 4, 1.5	20'	X	X	D	PIP	D
#874N	*Quercus agrifolia*	coast live oak	4.5		15'		X	D	PIP	D
#875C	*Eucalyptus globulus*	southern blue gum	26.0	18, 8	70'	X		D	PIP	D
#876C	*Eucalyptus globulus*	southern blue gum	41.0 *	9, 8, 8, 7, 5, 4 *	50'	X		D	PIP	D
#877C	*Eucalyptus globulus*	southern blue gum	11.0 *		50'	X		D	PIP	D
#878C	*Eucalyptus globulus*	southern blue gum	9.0 *		50'	X		D	PIP	D
#879C	*Eucalyptus globulus*	southern blue gum	10.5 *	7.5, 3 *	35'	X		D	PIP	D
#880C	*Eucalyptus globulus*	southern blue gum	38.5 *	21, 14, 3.5 *	90'	X		D	PIP	D
#881C	*Eucalyptus globulus*	southern blue gum	16.0		80'	X		D	PIP	D
#882C	*Eucalyptus globulus*	southern blue gum	28.0		90'	X		D	PIP	D
#883CN	*Aesculus californica*	California buckeye	8.0 *	4.5, 3.5 *	25'	X	X	D	PIP	D
#884C	*Eucalyptus globulus*	southern blue gum	14.0 *		70'	X		D	PIP	D
#885C	*Eucalyptus globulus*	southern blue gum	31.0		110'	X		PIP	PIP	PIP
#886C	*Eucalyptus globulus*	southern blue gum	20.0	15, 5	70'	X		D	PIP	D
#887C	*Eucalyptus globulus*	southern blue gum	29.0		100'	X		D	PIP	D
#888C	*Eucalyptus globulus*	southern blue gum	14.0		60'	X		D	PIP	D
#889C	*Eucalyptus globulus*	southern blue gum	28.0		110'	X		D	PIP	D
#890C	*Eucalyptus globulus*	southern blue gum	19.0		80'	X		D	PIP	D
#891C	*Eucalyptus globulus*	southern blue gum	6.0 *		65'	X		D	PIP	D
#892C	*Eucalyptus globulus*	southern blue gum	11.0 *		70'	X		D	PIP	D
#893C	*Eucalyptus globulus*	southern blue gum	17.5 *		90'	X		D	PIP	D
#894C	*Eucalyptus globulus*	southern blue gum	10.0	5, 3, 2	30'	X		PIP	D	NA
#895C	*Eucalyptus globulus*	southern blue gum	22.0 *		80'	X		PIP	PIP	PIP
#896C	*Eucalyptus globulus*	southern blue gum	19.0 *		80'	X		PIP	PIP	PIP
#897CN	*Quercus agrifolia*	coast live oak	10.0		25'	X	X	PIP	PIP	PIP
#898C	*Eucalyptus globulus*	southern blue gum	23.0		80'	X		PIP	PIP	PIP
#899C	*Eucalyptus globulus*	southern blue gum	38.0 *		95'	X		PIP	PIP	PIP
#900N	*Quercus agrifolia*	coast live oak	4.0 *		15'		X	PIP	PIP	PIP
#901C	*Eucalyptus globulus*	southern blue gum	21.5	17, 4.5	70'	X		PIP	PIP	PIP
#902CN	*Quercus agrifolia*	coast live oak	8.0 *		25'	X	X	PIP	PIP	PIP
#903CN	*Quercus agrifolia*	coast live oak	6.5		20'	X	X	PIP	PIP	PIP

#904C	*Eucalyptus globulus*	southern blue gum	22.0		90'	X		PIP	PIP	PIP
#905C	*Eucalyptus globulus*	southern blue gum	48.0 *	14, 13, 13, 8 *	95'	X		PIP	PIP	PIP
#906CN	*Quercus agrifolia*	coast live oak	34.0	15, 9, 5, 5	25'	X	X	PIP	PIP	PIP
#907C	*Eucalyptus globulus*	southern blue gum	25.0		80'	X		PIP	PIP	PIP
#908C	*Eucalyptus globulus*	southern blue gum	40.0 *	30, 10 *	100'	X		PIP	PIP	PIP
#909	*Ulmus minor*	English elm	5.5 *		25'			PIP	PIP	PIP
#910CN	*Quercus agrifolia*	coast live oak	8.0 *	5, 3 *	20'	X	X	PIP	PIP	PIP
#911C	*Eucalyptus globulus*	southern blue gum	6.0		45'	X		PIP	PIP	PIP
#912C	*Eucalyptus globulus*	southern blue gum	6.0		45'	X		D	PIP	D
#913C	*Eucalyptus globulus*	southern blue gum	8.0		60'	X		D	PIP	D
#914	*Eucalyptus globulus*	southern blue gum	4.0		40'			PIP	D	NA
#915	*Eucalyptus globulus*	southern blue gum	4.0		40'			PIP	D	NA
#916CN	*Salix lasiolepis*	arroyo willow	9.0		30'	X	X	D	PIP	D
#917CN	*Quercus agrifolia*	coast live oak	11.0	4, 4, 3	15'	X	X	D	PIP	D
#918CN	*Salix lasiolepis*	arroyo willow	20.0	7, 7, 6	40'	X	X	D	PIP	D
#919CN	*Salix lasiolepis*	arroyo willow	20.0	12, 8	45'	X	X	D	PIP	D
#920CN	*Salix lasiolepis*	arroyo willow	26.0	16, 10	40'	X	X	D	PIP	D
#921	*Eucalyptus globulus*	southern blue gum	4.5		35'			D	D	NA
#922CN	*Salix lasiolepis*	arroyo willow	10.0		30'	X	X	D	PIP	D
#923CN	*Salix lasiolepis*	arroyo willow	17.5	9.5, 8	45'	X	X	D	PIP	D
#924CN	*Salix lasiolepis*	arroyo willow	27.0	16, 11	45'	X	X	D	PIP	D
#925C	*Prunus cerasifera*	cherry plum	6.0		25'	X		PIP	PIP	PIP
#926CN	*Quercus agrifolia*	coast live oak	36.0		45'	X	X	PIP	PIP	PIP
#927C	*Prunus cerasifera*	cherry plum	10.0	7, 3	15'	X		D	PIP	D
#928CN	*Quercus agrifolia*	coast live oak	20.0 *		35'	X	X	D	PIP	D
#929CN	*Quercus agrifolia*	coast live oak	11.0 *		25'	X	X	PIP	PIP	PIP
#930CN	*Quercus agrifolia*	coast live oak	23.0 *		35'	X	X	PIP	PIP	PIP
#931CN	*Quercus agrifolia*	coast live oak	36.0 *	18, 18 *	35'	X	X	D	PIP	D
#932CN	*Quercus agrifolia*	coast live oak	36.0 *		35'	X	X	D	PIP	D
#933CN	*Quercus agrifolia*	coast live oak	33.0 *		40'	X	X	D	PIP	D
#934CN	*Quercus agrifolia*	coast live oak	22.0 *		25'	X	X	D	PIP	D
#935CN	*Quercus agrifolia*	coast live oak	44.0 *	14, 13, 9, 8 *	35'	X	X	D	PIP	D
#936C	*Prunus cerasifera*	cherry plum	8.0 *	5, 3 *	20'	X		D	PIP	D
#937CN	*Quercus agrifolia*	coast live oak	8.0 *		15'	X	X	D	PIP	D

#938CN	*Quercus agrifolia*	coast live oak	14.0 *		35'	X	X	D	PIP	D
#939C	*Prunus cerasifera*	cherry plum	6.0 *		20'	X		D	PIP	D
#940CN	*Quercus agrifolia*	coast live oak	22.0 *		35'	X	X	D	PIP	D
#941CN	*Quercus agrifolia*	coast live oak	11.0		30'	X	X	D	PIP	D
#942CN	*Quercus agrifolia*	coast live oak	13.0		20'	X	X	D	PIP	D
#943CN	*Quercus agrifolia*	coast live oak	38.0	20, 18	35'	X	X	PIP	PIP	PIP
#944CN	*Salix lasiolepis*	arroyo willow	10.0	7, 3	15'	X	X	D	PIP	D
#945CN	*Salix lasiolepis*	arroyo willow	18.0		20'	X	X	PIP	PIP	PIP
#946CN	*Quercus agrifolia*	coast live oak	7.0	3, 2, 2	15'	X	X	D	PIP	D
#947CN	*Salix lasiolepis*	arroyo willow	9.0	5, 4	20'	X	X	D	PIP	D
#948CN	*Quercus agrifolia*	coast live oak	15.0	5, 4, 3, 3	20'	X	X	PIP	PIP	PIP
#949CN	*Salix lasiolepis*	arroyo willow	19.0		20'	X	X	PIP	PIP	PIP
#950CN	*Salix laevigata*	red willow	10.0	5, 5	25'	X	X	PIP	PIP	PIP
#951CN	*Salix laevigata*	red willow	13.5	5.5, 5, 3	25'	X	X	PIP	PIP	PIP
#952CN	*Salix lasiolepis*	arroyo willow	11.0 *	6, 5 *	25'	X	X	PIP	PIP	PIP
#953CN	*Salix lasiolepis*	arroyo willow	32.0	6, 6, 5, 5, 4, 3, 3	30'	X	X	PIP	PIP	PIP
#954CN	*Salix lasiolepis*	arroyo willow	53.0	10, 10, 10, 5, 5, 5, 5, 3	25'	X	X	PIP	PIP	PIP
#955C	*Eucalyptus globulus*	southern blue gum	65.0	24, 22, 19	70'	X		PIP	PIP	PIP
#956C	*Eucalyptus globulus*	southern blue gum	38.0		80'	X		PIP	PIP	PIP
#957C	*Eucalyptus globulus*	southern blue gum	18.0 *		75'	X		PIP	PIP	PIP
#958C	*Eucalyptus globulus*	southern blue gum	72.0 *	36, 20, 16 *	80'	X		PIP	PIP	PIP
#959CN	*Frangula californica*	coffeeberry	12.0	3, 3, 2, 2, 2	20'	X	X	PIP	PIP	PIP
#960CN	*Quercus agrifolia*	coast live oak	12.0		25'	X	X	PIP	PIP	PIP
#961CN	*Frangula californica*	coffeeberry	12.0	3, 2, 2, 2, 1, 1, 1	20'	X	X	PIP	PIP	PIP
#962CN	*Quercus agrifolia*	coast live oak	14.0		25'	X	X	PIP	PIP	PIP
#963C	*Eucalyptus globulus*	southern blue gum	48.0		90'	X		PIP	PIP	PIP
#964C	*Eucalyptus globulus*	southern blue gum	11.0		60'	X		PIP	PIP	PIP
#965CN	*Sambucus nigra ssp. caerulea*	blue elderberry	8.0 *		20'	X	X	PIP	PIP	PIP
#966CN	*Quercus agrifolia*	coast live oak	14.0		35'	X	X	PIP	PIP	PIP
#967C	*Eucalyptus globulus*	southern blue gum	42.0	29, 13	80'	X		PIP	PIP	PIP
#968C	*Eucalyptus globulus*	southern blue gum	19.0 *		70'	X		PIP	PIP	PIP
#969C	*Eucalyptus globulus*	southern blue gum	26.0	17, 9	65'	X		PIP	PIP	PIP
#970	*Eucalyptus globulus*	southern blue gum	5.0		55'			PIP	D	NA
#971C	*Eucalyptus globulus*	southern blue gum	12.0	7, 5	60'	X		PIP	D	NA

#972CN	*Quercus agrifolia*	coast live oak	10.0	6, 4	15'	X	X	PIP	PIP	PIP
#973CN	*Pinus radiata*	Monterey pine	32.0		65'	X	X	PIP	D	NA
#974N	*Quercus agrifolia*	coast live oak	4.5		15'		X	PIP	PIP	PIP
#975CN	*Quercus agrifolia*	coast live oak	8.5		25'	X	X	PIP	PIP	PIP
#976CN	*Quercus agrifolia*	coast live oak	19.0	10.5, 8.5	25'	X	X	PIP	PIP	PIP
#977CN	*Quercus agrifolia*	coast live oak	13.0		30'	X	X	PIP	PIP	PIP
#978CN	*Quercus agrifolia*	coast live oak	11.5		30'	X	X	PIP	PIP	PIP
#979CN	*Quercus agrifolia*	coast live oak	11.0		25'	X	X	PIP	PIP	PIP
#980CN	*Quercus agrifolia*	coast live oak	13.0		25'	X	X	PIP	PIP	PIP
#981CN	*Quercus agrifolia*	coast live oak	8.0		25'	X	X	PIP	PIP	PIP
#982CN	*Quercus agrifolia*	coast live oak	10.0		25'	X	X	PIP	PIP	PIP
#983CN	*Quercus agrifolia*	coast live oak	9.5		20'	X	X	PIP	PIP	PIP
#984CN	*Quercus agrifolia*	coast live oak	38.0	13, 13, 12	35'	X	X	D	PIP	D
#985CN	*Quercus agrifolia*	coast live oak	11.0		20'	X	X	D	D	NA
#986	*Eucalyptus globulus*	southern blue gum	4.5		30'			D	D	NA
#987C	*Eucalyptus globulus*	southern blue gum	85.0	34, 31, 20	90'	X		D	D	NA
#988C	*Eucalyptus globulus*	southern blue gum	50.0	32, 18	90'	X		D	D	NA
#989C	*Eucalyptus globulus*	southern blue gum	40.0		90'	X		D	PIP	D
#990C	*Eucalyptus globulus*	southern blue gum	41.0		100'	X		D	D	NA
#991C	*Eucalyptus globulus*	southern blue gum	38.0		90'	X		D	D	NA
#992C	*Eucalyptus globulus*	southern blue gum	44.0	25, 19	100'	X		D	D	NA
#993N	*Quercus agrifolia*	coast live oak	4.5		15'		X	D	PIP	D
#994C	*Eucalyptus globulus*	southern blue gum	15.5	9.5, 6	45'	X		D	D	NA
#995CN	*Salix lasiolepis*	arroyo willow	9.0		35'	X	X	D	PIP	D
#996C	*Eucalyptus globulus*	southern blue gum	23.0		75'	X		D	D	NA
#997CN	*Quercus agrifolia*	coast live oak	9.0		25'	X	X	D	PIP	D
#998C	*Eucalyptus globulus*	southern blue gum	16.5		75'	X		D	PIP	D
#999CN	*Quercus agrifolia*	coast live oak	21.5	9, 7.5, 5	25'	X	X	D	PIP	D
#1000N	*Salix lasiolepis*	arroyo willow	4.0		20'		X	PIP	PIP	PIP
Tree tags 1001-2000 were intentially omitted from this tree inventory.										
#2001C	*Eucalyptus globulus*	southern blue gum	18.0		75'	X		D	PIP	D
#2002CN	*Quercus agrifolia*	coast live oak	10.0		25'	X	X	D	PIP	D
#2003C	*Eucalyptus globulus*	southern blue gum	42.0	18, 17, 7	90'	X		D	PIP	D
#2004C	*Eucalyptus globulus*	southern blue gum	42.0		90'	X		D	PIP	D

#2005	*Eucalyptus globulus*	southern blue gum	4.5		25'			D	D	NA
#2006	*Eucalyptus globulus*	southern blue gum	4.5		30'			D	PIP	D
#2007C	*Eucalyptus globulus*	southern blue gum	42.0	37, 5	100'	X		D	PIP	D
#2008CN	*Quercus agrifolia*	coast live oak	6.5		25'	X	X	D	PIP	D
#2009C	*Eucalyptus globulus*	southern blue gum	7.0		55'	X		D	PIP	D
#2010C	*Eucalyptus globulus*	southern blue gum	23.0	15, 8	85'	X		D	PIP	D
#2011C	*Eucalyptus globulus*	southern blue gum	22.0	12, 10	75'	X		D	PIP	D
#2012C	*Eucalyptus globulus*	southern blue gum	9.0		60'	X		D	PIP	D
#2013CN	*Quercus agrifolia*	coast live oak	6.5	4.5, 2	15'	X	X	D	PIP	D
#2014C	*Eucalyptus globulus*	southern blue gum	9.0		65'	X		D	PIP	D
#2015C	*Eucalyptus globulus*	southern blue gum	22.0		70'	X		D	PIP	D
#2016C	*Eucalyptus globulus*	southern blue gum	8.5		75'	X		PIP	PIP	PIP
#2017C	*Eucalyptus globulus*	southern blue gum	26.0	15, 11	75'	X		PIP	PIP	PIP
#2018C	*Eucalyptus globulus*	southern blue gum	17.0	10, 7	75'	X		PIP	PIP	PIP
#2019C	*Eucalyptus globulus*	southern blue gum	44.0	23, 21	100'	X		PIP	PIP	PIP
#2020C	*Eucalyptus globulus*	southern blue gum	65.0	49, 8, 8	100'	X		PIP	PIP	PIP
#2021C	*Eucalyptus globulus*	southern blue gum	26.5	16, 10.5	75'	X		PIP	PIP	PIP

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Significant Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#2022	*Eucalyptus globulus*	southern blue gum	14.0	7, 7	65'			PIP	PIP	PIP	
#2023	*Eucalyptus globulus*	southern blue gum	4.0		35'			PIP	PIP	PIP	
#2024	*Eucalyptus globulus*	southern blue gum	4.5		30'			PIP	PIP	PIP	
#2025	*Eucalyptus globulus*	southern blue gum	7.0		45'			PIP	PIP	PIP	
#2026	*Eucalyptus globulus*	southern blue gum	62.0	54, 8	120'			PIP	PIP	PIP	
#2027	*Eucalyptus globulus*	southern blue gum	8.0		50'			PIP	PIP	PIP	
#2028	*Eucalyptus globulus*	southern blue gum	13.0 *		65'			PIP	PIP	PIP	
#2029	*Eucalyptus globulus*	southern blue gum	28.0 *	14, 4 *	65'			PIP	PIP	PIP	
#2030	*Eucalyptus globulus*	southern blue gum	16.0 *		65'			PIP	PIP	PIP	
#2031	*Eucalyptus globulus*	southern blue gum	17.0 *	10, 7 *	65'			PIP	PIP	PIP	
#2032S	*Eucalyptus globulus*	southern blue gum	34.0 *		100'	X		PIP	PIP	PIP	
#2033N	*Acer macrophyllum*	bigleaf maple	13.0 *		35'		X	PIP	PIP	PIP	
#2034SN	*Quercus agrifolia*	coast live oak	20.0 *		40'	X	X	PIP	PIP	PIP	
#2035N	*Quercus agrifolia*	coast live oak	5.0 *		15'		X	PIP	PIP	PIP	
#2036N	*Quercus agrifolia*	coast live oak	18.0 *		40'		X	D	PIP	D	
#2037S	*Eucalyptus globulus*	southern blue gum	32.0 *		100'	X		D	PIP	D	

#2038S	*Eucalyptus globulus*	southern blue gum	20.0 *		75'	X		PIP	PIP	PIP
#2039	*Eucalyptus globulus*	southern blue gum	7.5 *		45'			PIP	PIP	PIP
#2040	*Eucalyptus globulus*	southern blue gum	32.0 *	11, 10, 6, 5 *	50'			PIP	PIP	PIP
#2041	*Eucalyptus globulus*	southern blue gum	25.0 *	18, 4, 3 *	50'			PIP	PIP	PIP
#2042	*Eucalyptus globulus*	southern blue gum	4.5 *		45'			D	PIP	D
#2043	*Eucalyptus globulus*	southern blue gum	12.5 *	8.5, 4 *	50'			D	PIP	D
#2044N	*Quercus agrifolia*	coast live oak	10.0 *		25'		X	D	PIP	D
#2045N	*Quercus agrifolia*	coast live oak	18.0 *		35'		X	D	PIP	D
#2046N	*Quercus agrifolia*	coast live oak	15.0 *		30'		X	D	PIP	D
#2047	*Eucalyptus globulus*	southern blue gum	8.0 *	5, 3 *	35'			D	PIP	D
#2048N	*Quercus agrifolia*	coast live oak	19.0 *		30'		X	D	PIP	D
#2049	*Eucalyptus globulus*	southern blue gum	51.0 *	30, 21 *	80'			D	PIP	D
#2050	*Pittosporum undulatum*	Victorian box	12.0 *	7, 5 *	35'			D	PIP	D
#2051	*Pittosporum undulatum*	Victorian box	20.0 *	9, 9, 2 *	35'			D	PIP	D
#2052SN	*Sequoia sempervirens*	coast redwood	25.0 *		70'	X	X	D	PIP	D
#2053N	*Sequoia sempervirens*	coast redwood	9.0 *		30'		X	PIP	PIP	PIP
#2054SN	*Sequoia sempervirens*	coast redwood	23.0 *		65'	X	X	PIP	PIP	PIP
#2055	*Pittosporum undulatum*	Victorian box	17.0 *		40'			D	PIP	D
#2056N	*Sequoia sempervirens*	coast redwood	8.0		20'		X	D	PIP	D
#2057N	*Quercus agrifolia*	coast live oak	26.0	14, 12	40'		X	PIP	PIP	PIP
#2058SN	*Quercus agrifolia*	coast live oak	22.0		40'	X	X	PIP	PIP	PIP
#2059S	*Eucalyptus globulus*	southern blue gum	29.0		75'	X		PIP	PIP	PIP
#2060	*Eucalyptus globulus*	southern blue gum	66.0	41, 25	75'			PIP	PIP	PIP
#2061	*Eucalyptus globulus*	southern blue gum	80.0	57, 23	80'			PIP	PIP	PIP
#2062N	*Quercus agrifolia*	coast live oak	28.0	15, 13	40'		X	PIP	PIP	PIP
#2063N	*Quercus agrifolia*	coast live oak	15.0		20'		X	PIP	PIP	PIP
#2064N	*Quercus agrifolia*	coast live oak	14.0		25'		X	PIP	PIP	PIP
#2065	*Eucalyptus globulus*	southern blue gum	85.0	31, 28, 26	80'			PIP	PIP	PIP
#2066N	*Quercus agrifolia*	coast live oak	14.5	6, 5.5, 3	20'		X	PIP	PIP	PIP
#2067SN	*Quercus agrifolia*	coast live oak	28.0		30'	X	X	PIP	PIP	PIP
#2068N	*Quercus agrifolia*	coast live oak	13.0		20'		X	PIP	PIP	PIP
#2069N	*Quercus agrifolia*	coast live oak	16.0 *	9, 7 *	30'		X	PIP	PIP	PIP
#2070	*Eucalyptus globulus*	southern blue gum	8.0 *		30'			PIP	PIP	PIP
#2071	*Acacia melanoxylon*	Australian blackwood	4.5		30'			PIP	PIP	PIP

#2072S	*Eucalyptus globulus*	southern blue gum	38.0 *		80'	X		PIP	PIP	PIP
#2073	*Acacia melanoxylon*	Australian blackwood	16.0 *		65'			PIP	PIP	PIP
#2074N	*Quercus agrifolia*	coast live oak	9.0 *		20'		X	PIP	PIP	PIP
#2075	*Eucalyptus globulus*	southern blue gum	6.0 *		30'			PIP	PIP	PIP
#2076	*Eucalyptus globulus*	southern blue gum	11.0 *		50'			PIP	PIP	PIP
#2077	*Eucalyptus globulus*	southern blue gum	15.0 *		60'			PIP	PIP	PIP
#2078	*Eucalyptus globulus*	southern blue gum	7.0 *		30'			PIP	PIP	PIP
#2079	*Eucalyptus globulus*	southern blue gum	12.0 *	6, 6 *	40'			PIP	PIP	PIP
#2080	*Eucalyptus globulus*	southern blue gum	11.0		40'			PIP	PIP	PIP
#2081	*Eucalyptus globulus*	southern blue gum	15.0		65'			PIP	PIP	PIP
#2082N	*Quercus agrifolia*	coast live oak	4.0		20'		X	PIP	PIP	PIP
#2083	*Eucalyptus globulus*	southern blue gum	24.0 *	10, 7, 7 *	75'			PIP	PIP	PIP
#2084	*Eucalyptus globulus*	southern blue gum	29.0 *	18, 11 *	70'			PIP	PIP	PIP
#2085	*Eucalyptus globulus*	southern blue gum	21.0 *	12, 9 *	70'			PIP	PIP	PIP
#2086	*Eucalyptus globulus*	southern blue gum	7.0 *		60'			PIP	PIP	PIP
#2087	*Eucalyptus globulus*	southern blue gum	11.0 *		60'			PIP	PIP	PIP
#2088	*Eucalyptus globulus*	southern blue gum	7.0 *		60'			PIP	PIP	PIP
#2089	*Eucalyptus globulus*	southern blue gum	13.0 *		60'			PIP	PIP	PIP
#2090	*Eucalyptus globulus*	southern blue gum	46.0 *	19, 14, 13 *	75'			PIP	PIP	PIP
#2091	*Eucalyptus globulus*	southern blue gum	13.0	7, 3, 3	20'			PIP	PIP	PIP
#2092	*Eucalyptus globulus*	southern blue gum	8.0 *		45'			PIP	PIP	PIP
#2093	*Eucalyptus globulus*	southern blue gum	7.0 *		45'			PIP	PIP	PIP
#2094	*Eucalyptus globulus*	southern blue gum	16.0 *		70'			PIP	PIP	PIP
#2095	*Eucalyptus globulus*	southern blue gum	7.0 *		45'			PIP	PIP	PIP
#2096	*Eucalyptus globulus*	southern blue gum	11.0 *		60'			PIP	PIP	PIP
#2097	*Eucalyptus globulus*	southern blue gum	23.0 *	10, 7, 6 *	75'			PIP	PIP	PIP
#2098N	*Quercus agrifolia*	coast live oak	4.0 *		20'		X	PIP	PIP	PIP
#2099	*Eucalyptus globulus*	southern blue gum	17.0		60'			PIP	PIP	PIP
#2100S	*Eucalyptus globulus*	southern blue gum	21.0		60'	X		PIP	PIP	PIP
#2101	*Eucalyptus globulus*	southern blue gum	42.0	25, 8, 5, 4	90'			PIP	PIP	PIP
#2102N	*Pinus radiata*	Monterey pine	4.5		30'		X	PIP	PIP	PIP
#2103	*Eucalyptus globulus*	southern blue gum	42.0	34, 4, 4	90'			PIP	PIP	PIP
#2104	*Eucalyptus globulus*	southern blue gum	18.5	13, 5.5	70'			PIP	PIP	PIP
#2105	*Eucalyptus globulus*	southern blue gum	12.0	4, 4, 4	25'			PIP	PIP	PIP

#2106	*Eucalyptus globulus*	southern blue gum	6.0		45'			PIP	PIP	PIP
#2107N	*Pinus radiata*	Monterey pine	7.5		45'		X	PIP	PIP	PIP
#2108	*Eucalyptus globulus*	southern blue gum	9.0		40'			PIP	PIP	PIP
#2109	*Eucalyptus globulus*	southern blue gum	17.0 *	7, 6, 4 *	60'			PIP	PIP	PIP
#2110S	*Eucalyptus globulus*	southern blue gum	21.0		70'	X		PIP	PIP	PIP
#2111	*Eucalyptus globulus*	southern blue gum	19.0		75'			PIP	PIP	PIP
#2112	*Eucalyptus globulus*	southern blue gum	6.0		50'			PIP	PIP	PIP
#2113N	*Quercus agrifolia*	coast live oak	5.5		15'		X	PIP	PIP	PIP
#2114S	*Eucalyptus globulus*	southern blue gum	34.5		80'	X		PIP	PIP	PIP
#2115S	*Eucalyptus globulus*	southern blue gum	23.0		75'	X		PIP	PIP	PIP
#2116	*Eucalyptus globulus*	southern blue gum	9.0 *		55'			PIP	PIP	PIP
#2117	*Eucalyptus globulus*	southern blue gum	9.5 *		55'			PIP	PIP	PIP
#2118	*Eucalyptus globulus*	southern blue gum	9.0 *	6, 3 *	40'			PIP	PIP	PIP
#2119	*Eucalyptus globulus*	southern blue gum	12.0 *	6, 4, 2 *	55'			PIP	PIP	PIP
#2120	*Eucalyptus globulus*	southern blue gum	28.0 *	14, 4 *	55'			PIP	PIP	PIP
#2121N	*Quercus agrifolia*	coast live oak	5.5 *		25'		X	PIP	PIP	PIP
#2122N	*Quercus agrifolia*	coast live oak	7.0 *		20'		X	PIP	PIP	PIP
#2123N	*Sequoia sempervirens*	coast redwood	17.0 *		60'		X	PIP	PIP	PIP
#2124SN	*Sequoia sempervirens*	coast redwood	22.0 *		60'	X	X	D	PIP	D
#2125SN	*Quercus agrifolia*	coast live oak	34.0 *		50'	X	X	PIP	PIP	PIP
#2126N	*Sequoia sempervirens*	coast redwood	11.0 *		45'		X	D	PIP	D
#2127N	*Sequoia sempervirens*	coast redwood	12.0 *		40'		X	D	PIP	D
#2128N	*Sequoia sempervirens*	coast redwood	13.0 *		45'		X	D	PIP	D
#2129	*Eucalyptus globulus*	southern blue gum	84.0 *	40, 32, 12 *	75'			D	PIP	D
#2130S	*Eucalyptus globulus*	southern blue gum	23.0 *		75'	X		D	PIP	D
#2131N	*Quercus agrifolia*	coast live oak	14.0 *	8, 6 *	25'		X	D	PIP	D
#2132	NOT USED									
#2133N	*Quercus agrifolia*	coast live oak	7.5 *		20'		X	D	PIP	D
#2134N	*Quercus agrifolia*	coast live oak	25.0 *	17, 8 *	30'		X	D	PIP	D
#2135SN	*Quercus agrifolia*	coast live oak	34.0 *		40'	X	X	D	PIP	D
#2136N	*Quercus agrifolia*	coast live oak	15.0 *	8, 7 *	25'		X	D	PIP	D
#2137N	*Quercus agrifolia*	coast live oak	13.0 *	7, 6 *	25'		X	D	PIP	D
#2138N	*Salix laevigata*	red willow	5.0 *		20'		X	D	PIP	D
#2139SN	*Quercus agrifolia*	coast live oak	30.0 *		30'	X	X	D	PIP	D

#2140N	*Quercus agrifolia*	coast live oak	47.0 *	25, 22 *	40'		X	D	PIP	D
#2141	*Eucalyptus globulus*	southern blue gum	19.0		75'			D	PIP	D
#2142N	*Quercus agrifolia*	coast live oak	8.0 *		25'		X	D	PIP	D
#2143S	*Eucalyptus globulus*	southern blue gum	44.0 *		80'	X		D	PIP	D
#2144	*Eucalyptus globulus*	southern blue gum	28.0 *	19, 9 *	75'			D	PIP	D
#2145S	*Eucalyptus globulus*	southern blue gum	22.0 *		90'	X		D	PIP	D
#2146S	*Eucalyptus globulus*	southern blue gum	30.0 *		90'	X		D	PIP	D
#2147N	*Quercus agrifolia*	coast live oak	7.0 *		15'		X	D	PIP	D
#2148N	*Pinus radiata*	Monterey pine	9.5		45'		X	D	PIP	D
#2149S	*Eucalyptus globulus*	southern blue gum	78.0 *	31, 27, 20 *	75'	X		D	PIP	D
#2150N	*Pinus radiata*	Monterey pine	5.0 *		35'		X	D	PIP	D
#2151N	*Quercus agrifolia*	coast live oak	14.0 *	8, 6 *	20'		X	D	PIP	D
#2152S	*Eucalyptus globulus*	southern blue gum	26.0		80'	X		D	PIP	D
#2153	*Eucalyptus globulus*	southern blue gum	48.0 *	29, 19 *	80'			D	PIP	D
#2154	*Eucalyptus globulus*	southern blue gum	17.0 *		70'			D	PIP	D
#2155	*Eucalyptus globulus*	southern blue gum	17.0		80'			D	PIP	D
#2156	*Eucalyptus globulus*	southern blue gum	8.0 *		50'			D	PIP	D
#2157S	*Eucalyptus globulus*	southern blue gum	30.0 *		80'	X		PIP	PIP	PIP
#2158	*Eucalyptus globulus*	southern blue gum	31.0 *	18, 13 *	75'			D	PIP	D
#2159N	*Pinus radiata*	Monterey pine	8.0 *		35'		X	D	PIP	D
#2160	*Eucalyptus globulus*	southern blue gum	17.0 *		75'			D	PIP	D
#2161S	*Eucalyptus globulus*	southern blue gum	24.0 *		75'	X		D	PIP	D
#2162	*Eucalyptus globulus*	southern blue gum	8.0		45'			D	PIP	D
#2163	*Eucalyptus globulus*	southern blue gum	34.0 *	17, 17 *	65'			D	PIP	D
#2164S	*Eucalyptus globulus*	southern blue gum	21.0		75'	X		D	PIP	D
#2165	*Eucalyptus globulus*	southern blue gum	17.0		70'			D	PIP	D
#2166	*Eucalyptus globulus*	southern blue gum	7.0 *		25'			D	PIP	D
#2167	*Eucalyptus globulus*	southern blue gum	10.0 *		50'			D	PIP	D
#2168S	*Eucalyptus globulus*	southern blue gum	22.0 *		75'	X		D	PIP	D
#2169S	*Eucalyptus globulus*	southern blue gum	29.0 *		85'	X		D	PIP	D
#2170	*Eucalyptus globulus*	southern blue gum	15.0 *		70'			D	PIP	D
#2171S	*Eucalyptus globulus*	southern blue gum	28.0 *		85'	X		D	PIP	D
#2172	*Eucalyptus globulus*	southern blue gum	12.0 *		55'			D	PIP	D
#2173S	*Eucalyptus globulus*	southern blue gum	30.0		85'	X		D	PIP	D

#2174	*Eucalyptus globulus*	southern blue gum	11.0		35'			D	PIP	D
#2175	*Eucalyptus globulus*	southern blue gum	53.0	32, 13, 8	85'			D	PIP	D
#2176	*Hesperocyparis macrocarpa*	Monterey cypress	17.0		70'			D	PIP	D
#2177S	*Eucalyptus globulus*	southern blue gum	28.0		85'	X		D	PIP	D
#2178	*Eucalyptus globulus*	southern blue gum	12.0	5, 4, 3	45'			D	PIP	D
#2179S	*Eucalyptus globulus*	southern blue gum	24.0		45'	X		D	PIP	D
#2180	*Eucalyptus globulus*	southern blue gum	12.0		60'			D	PIP	D
#2181	*Hesperocyparis macrocarpa*	Monterey cypress	6.0		25'			D	PIP	D
#2182	*Eucalyptus globulus*	southern blue gum	8.0		40'			D	PIP	D
#2183N	*Quercus agrifolia*	coast live oak	7.5		20'		X	PIP	PIP	PIP
#2184S	*Acacia melanoxylon*	Australian blackwood	22.0		45'	X		D	PIP	D
#2185N	*Quercus agrifolia*	coast live oak	10.0		20'		X	D	PIP	D
#2186	*Acacia melanoxylon*	Australian blackwood	8.0 *		20'			PIP	PIP	PIP
#2187N	*Acer macrophyllum*	bigleaf maple	12.0 *		35'		X	PIP	PIP	PIP
#2188N	*Quercus agrifolia*	coast live oak	16.5	9.5, 7	35'		X	PIP	PIP	PIP
#2189N	*Quercus agrifolia*	coast live oak	15.5	8.5, 7	40'		X	PIP	PIP	PIP
#2190	*Acacia melanoxylon*	Australian blackwood	45.0	16.5, 12.5, 9, 7	35'			PIP	PIP	PIP
#2191	*Myoporum laetum*	ngaio	12.5		30'			D	PIP	D
#2192	*Myoporum laetum*	ngaio	20.5	8, 6.5, 4, 2	30'			D	PIP	D
#2193	*Myoporum laetum*	ngaio	12.5	6, 3.5, 3	30'			D	PIP	D
#2194N	*Quercus agrifolia*	coast live oak	11.5		20'		X	PIP	PIP	PIP
#2195	*Acacia melanoxylon*	Australian blackwood	19.0		40'			PIP	PIP	PIP
#2196N	*Quercus agrifolia*	coast live oak	24.5	12.5, 12	35'		X	PIP	PIP	PIP
#2197	*Myoporum laetum*	ngaio	10.5	5.5, 3, 2	20'			D	PIP	D
#2198N	*Quercus agrifolia*	coast live oak	4.0		15'		X	PIP	PIP	PIP
#2199N	*Quercus agrifolia*	coast live oak	26.5	10, 9, 7.5	30'		X	D	PIP	D
#2200N	*Quercus agrifolia*	coast live oak	19.5	10, 9.5	30'		X	PIP	PIP	PIP
#2201N	*Quercus agrifolia*	coast live oak	6.0		20'		X	PIP	PIP	PIP
#2202	*Myoporum laetum*	ngaio	11.5	8, 3.5	25'			D	PIP	D
#2203N	*Quercus agrifolia*	coast live oak	25.5	17.5, 8	30'		X	PIP	PIP	PIP
#2204N	*Quercus agrifolia*	coast live oak	7.5		15'		X	PIP	PIP	PIP
#2205N	*Quercus agrifolia*	coast live oak	24.5	15, 9.5	20'		X	PIP	PIP	PIP
#2206	*Prunus ilicifolia ssp. lyonii*	Catalina cherry	8.5	4, 2.5, 2	20'			D	PIP	D
#2207	*Arbutus* 'Marina'	Marina strawberry tree	9.0		25'			PIP	PIP	PIP

#2208N	*Frangula californica*	coffeeberry	12.5	3.5, 3, 2, 2, 2	15'		X	D	PIP	D
#2209N	*Quercus agrifolia*	coast live oak	4.5 *		15'		X	PIP	PIP	PIP
#2210N	*Arbutus menziesii*	Pacific madrone	4.0 *		15'		X	PIP	PIP	PIP
#2211N	*Salix laevigata*	red willow	10.0		15'		X	PIP	PIP	PIP
#2212N	*Quercus agrifolia*	coast live oak	11.5 *		25'		X	PIP	PIP	PIP
#2213N	*Quercus agrifolia*	coast live oak	7.5 *		25'		X	PIP	PIP	PIP
#2214N	*Quercus agrifolia*	coast live oak	6.0 *		20'		X	PIP	PIP	PIP
#2215N	*Quercus agrifolia*	coast live oak	6.0 *		25'		X	PIP	PIP	PIP
#2216N	*Quercus agrifolia*	coast live oak	7.0 *		20'		X	PIP	PIP	PIP
#2217N	*Quercus agrifolia*	coast live oak	5.5 *		20'		X	PIP	PIP	PIP
#2218N	*Quercus agrifolia*	coast live oak	11.0 *		35'		X	PIP	PIP	PIP
#2219N	*Quercus agrifolia*	coast live oak	6.0 *		25'		X	PIP	PIP	PIP
#2220	*Eucalyptus globulus*	southern blue gum	8.0 *		50'			PIP	PIP	PIP
#2221N	*Quercus agrifolia*	coast live oak	7.0 *		25'		X	PIP	PIP	PIP
#2222N	*Quercus agrifolia*	coast live oak	7.5 *		25'		X	PIP	PIP	PIP
#2223N	*Quercus agrifolia*	coast live oak	10.0 *		40'		X	PIP	PIP	PIP
#2224N	*Quercus agrifolia*	coast live oak	8.0		40'		X	PIP	PIP	PIP
#2225N	*Quercus agrifolia*	coast live oak	7.0		40'		X	PIP	PIP	PIP
#2226N	*Quercus agrifolia*	coast live oak	7.5		40'		X	PIP	PIP	PIP
#2227N	*Pinus radiata*	Monterey pine	14.0 *		55'		X	PIP	PIP	PIP
#2228N	*Pinus radiata*	Monterey pine	9.5 *		55'		X	PIP	PIP	PIP
#2229N	*Pinus radiata*	Monterey pine	6.0 *		45'		X	PIP	PIP	PIP
#2230N	*Quercus agrifolia*	coast live oak	7.0 *		45'		X	PIP	PIP	PIP
#2231S	*Eucalyptus globulus*	southern blue gum	23.0		90'	X		PIP	PIP	PIP
#2232	*Eucalyptus globulus*	southern blue gum	43.0	24, 19	90'			PIP	PIP	PIP
#2233	*Eucalyptus globulus*	southern blue gum	16.5 *		70'			PIP	PIP	PIP
#2234	*Eucalyptus globulus*	southern blue gum	8.0		70'			PIP	PIP	PIP
#2235N	*Quercus agrifolia*	coast live oak	5.0 *		30'		X	PIP	PIP	PIP
#2236SN	*Pinus radiata*	Monterey pine	29.0		70'	X	X	PIP	PIP	PIP
#2237	*Eucalyptus globulus*	southern blue gum	52.0	33, 10, 9	90'			PIP	PIP	PIP
#2238S	*Eucalyptus globulus*	southern blue gum	59.0		100'	X		PIP	PIP	PIP
#2239S	*Eucalyptus globulus*	southern blue gum	35.0		90'	X		PIP	PIP	PIP
#2240S	*Eucalyptus globulus*	southern blue gum	30.0		90'	X		PIP	PIP	PIP
#2241	*Eucalyptus globulus*	southern blue gum	9.0		70'			PIP	PIP	PIP

#2242	*Eucalyptus globulus*	southern blue gum	7.0 *		55'			PIP	PIP	PIP
#2243	*Eucalyptus globulus*	southern blue gum	17.0		75'			PIP	D	NA
#2244S	*Eucalyptus globulus*	southern blue gum	21.0		95'	X		PIP	D	NA
#2245	*Eucalyptus globulus*	southern blue gum	39.5	31, 8.5	95'			PIP	D	NA
#2246	*Eucalyptus globulus*	southern blue gum	31.0	24, 7	90'			PIP	PIP	PIP
#2247S	*Eucalyptus globulus*	southern blue gum	37.5		110'	X		PIP	PIP	PIP
#2248	*Eucalyptus globulus*	southern blue gum	95.5	27, 25.5, 18, 8, 6, 6, 5	120'			PIP	PIP	PIP
#2249	*Eucalyptus globulus*	southern blue gum	6.0		35'			PIP	PIP	PIP
#2250	*Eucalyptus globulus*	southern blue gum	60.0	51, 9	100'			PIP	D	NA
#2251N	*Quercus agrifolia*	coast live oak	7.0 *		20'		X	PIP	PIP	PIP
#2252	*Eucalyptus globulus*	southern blue gum	18.5	10.5, 8	75'			PIP	PIP	PIP
#2253S	*Eucalyptus globulus*	southern blue gum	26.0		90'	X		PIP	PIP	PIP
#2254	*Eucalyptus globulus*	southern blue gum	20.0	11, 9	70'			PIP	PIP	PIP
#2255S	*Eucalyptus globulus*	southern blue gum	29.0 *		75'	X		PIP	PIP	PIP
#2256S	*Eucalyptus globulus*	southern blue gum	23.0 *		90'	X		PIP	PIP	PIP
#2257	*Eucalyptus globulus*	southern blue gum	16.0 *	11, 5 *	55'			PIP	PIP	PIP
#2258N	*Quercus agrifolia*	coast live oak	10.0 *		25'		X	PIP	PIP	PIP
#2259S	*Eucalyptus globulus*	southern blue gum	25.0 *		100'	X		PIP	PIP	PIP
#2260	NOT USED									
#2261	*Eucalyptus globulus*	southern blue gum	22.0 *	6, 4, 4, 3, 3, 2 *	30'			PIP	PIP	PIP
#2262N	*Quercus agrifolia*	coast live oak	4.0 *		20'		X	PIP	PIP	PIP
#2263	*Eucalyptus globulus*	southern blue gum	8.0 *		50'			PIP	PIP	PIP
#2264	*Eucalyptus globulus*	southern blue gum	15.0 *		70'			PIP	PIP	PIP
#2265	*Eucalyptus globulus*	southern blue gum	47.0 *	28, 8, 5, 4, 2 *	100'			PIP	PIP	PIP
#2266	*Eucalyptus globulus*	southern blue gum	34.0	21, 13	90'			PIP	PIP	PIP
#2267	*Eucalyptus globulus*	southern blue gum	44.0 *	17, 8, 8, 6, 5 *	75'			PIP	PIP	PIP
#2268N	*Quercus agrifolia*	coast live oak	4.0 *		15'		X	PIP	PIP	PIP
#2269N	*Quercus agrifolia*	coast live oak	4.0 *		15'		X	PIP	PIP	PIP
#2270N	*Quercus agrifolia*	coast live oak	4.0 *		15'		X	PIP	PIP	PIP
#2271	*Eucalyptus globulus*	southern blue gum	25.0 *	19, 6 *	80'			PIP	PIP	PIP
#2272	*Eucalyptus globulus*	southern blue gum	38.0 *	14, 8, 7, 6, 3 *	70'			PIP	PIP	PIP
#2273	*Eucalyptus globulus*	southern blue gum	8.0 *		35'			PIP	PIP	PIP
#2274S	*Eucalyptus globulus*	southern blue gum	23.5		90'	X		PIP	PIP	PIP
#2275N	*Quercus agrifolia*	coast live oak	6.0		20'		X	PIP	PIP	PIP

#2276N	*Pinus radiata*	Monterey pine	4.0 *		25'		X	PIP	PIP	PIP
#2277	*Eucalyptus globulus*	southern blue gum	32.0 *	20, 12 *	85'			PIP	PIP	PIP
#2278N	*Quercus agrifolia*	coast live oak	5.0 *		20'		X	PIP	PIP	PIP
#2279N	*Quercus agrifolia*	coast live oak	12.0 *	7, 5 *	25'		X	PIP	PIP	PIP
#2280N	*Quercus agrifolia*	coast live oak	6.0 *	4, 2 *	20'		X	PIP	PIP	PIP
#2281N	*Pinus radiata*	Monterey pine	9.0 *		40'		X	PIP	PIP	PIP
#2282N	*Quercus agrifolia*	coast live oak	11.0 *	6, 5 *	40'		X	PIP	PIP	PIP
#2283	*Eucalyptus globulus*	southern blue gum	52.0 *	23, 21, 5, 3 *	95'			PIP	PIP	PIP
#2284S	*Eucalyptus globulus*	southern blue gum	21.0 *		75'	X		PIP	PIP	PIP
#2285N	*Quercus agrifolia*	coast live oak	5.5	3.5, 2	15'		X	PIP	PIP	PIP
#2286N	*Quercus agrifolia*	coast live oak	5.0 *		25'		X	PIP	PIP	PIP
#2287N	*Quercus agrifolia*	coast live oak	6.0 *		25'		X	PIP	PIP	PIP
#2288S	*Eucalyptus globulus*	southern blue gum	33.0 *		100'	X		PIP	PIP	PIP
#2289N	*Quercus agrifolia*	coast live oak	9.5	4, 3, 2.5	15'		X	PIP	PIP	PIP
#2290N	*Quercus agrifolia*	coast live oak	7.0 *		20'		X	PIP	PIP	PIP
#2291N	*Quercus agrifolia*	coast live oak	6.0 *	3, 3 *	20'		X	PIP	PIP	PIP
#2292N	*Quercus agrifolia*	coast live oak	4.0 *		20'		X	PIP	PIP	PIP
#2293N	*Quercus agrifolia*	coast live oak	4.0 *		20'		X	PIP	PIP	PIP
#2294S	*Eucalyptus globulus*	southern blue gum	34.0 *		100'	X		PIP	PIP	PIP
#2295N	*Quercus agrifolia*	coast live oak	7.0 *		20'		X	PIP	PIP	PIP
#2296N	*Quercus agrifolia*	coast live oak	6.0 *		20'		X	PIP	PIP	PIP
#2297N	*Quercus agrifolia*	coast live oak	6.0 *		20'		X	PIP	PIP	PIP
#2298N	*Quercus agrifolia*	coast live oak	4.0 *		15'		X	PIP	PIP	PIP
#2299N	*Quercus agrifolia*	coast live oak	4.0 *		15'		X	PIP	PIP	PIP
#2300N	*Quercus agrifolia*	coast live oak	5.0 *		20'		X	PIP	PIP	PIP
#2301N	*Quercus agrifolia*	coast live oak	6.5 *		15'		X	PIP	PIP	PIP
#2302S	*Eucalyptus globulus*	southern blue gum	30.0 *		100'	X		PIP	PIP	PIP
#2303N	*Quercus agrifolia*	coast live oak	11.0 *	6, 5 *	25'		X	PIP	PIP	PIP
#2304N	*Quercus agrifolia*	coast live oak	9.0 *		25'		X	PIP	PIP	PIP
#2305N	*Quercus agrifolia*	coast live oak	7.0 *		25'		X	PIP	PIP	PIP
#2306N	*Quercus agrifolia*	coast live oak	7.0 *		25'		X	PIP	PIP	PIP
#2307N	*Quercus agrifolia*	coast live oak	20.0 *	11, 9 *	25'		X	PIP	PIP	PIP
#2308	*Eucalyptus globulus*	southern blue gum	16.0 *		65'			PIP	PIP	PIP
#2309	*Eucalyptus globulus*	southern blue gum	18.5		65'			PIP	PIP	PIP

#2310N	*Quercus agrifolia*	coast live oak	7.0 *		25'		X	PIP	PIP	PIP
#2311	*Eucalyptus globulus*	southern blue gum	52.0 *	19, 16, 10, 7 *	90'			PIP	PIP	PIP
#2312N	*Quercus agrifolia*	coast live oak	9.0 *		25'		X	PIP	PIP	PIP
#2313S	*Eucalyptus globulus*	southern blue gum	21.0 *		80'	X		PIP	PIP	PIP
#2314N	*Quercus agrifolia*	coast live oak	6.0 *		20'		X	PIP	PIP	PIP
#2315N	*Quercus agrifolia*	coast live oak	7.0 *		20'		X	PIP	PIP	PIP
#2316	*Eucalyptus globulus*	southern blue gum	17.0 *		75'			PIP	PIP	PIP
#2317	*Eucalyptus globulus*	southern blue gum	19.0 *		90'			PIP	PIP	PIP
#2318N	*Quercus agrifolia*	coast live oak	6.0 *		20'		X	PIP	PIP	PIP
#2319N	*Quercus agrifolia*	coast live oak	6.0 *		20'		X	PIP	PIP	PIP
#2320	*Eucalyptus globulus*	southern blue gum	30.0 *	21, 9 *	90'			PIP	PIP	PIP
#2321N	*Quercus agrifolia*	coast live oak	15.0	8, 7	25'		X	PIP	PIP	PIP
#2322N	*Quercus agrifolia*	coast live oak	6.5		20'		X	PIP	PIP	PIP
#2323N	*Quercus agrifolia*	coast live oak	16.5 *	5, 5, 4.5, 2 *	25'		X	PIP	PIP	PIP
#2324N	*Frangula californica*	coffeeberry	5.5 *		20'		X	PIP	PIP	PIP
#2325	*Acacia melanoxylon*	Australian blackwood	9.0 *	5, 4 *	25'			PIP	PIP	PIP
#2326	*Eucalyptus globulus*	southern blue gum	61.0 *	36, 19, 6 *	80'			PIP	PIP	PIP
#2327N	*Frangula californica*	coffeeberry	6.5 *		20'		X	PIP	PIP	PIP
#2328	*Eucalyptus globulus*	southern blue gum	47.0	17.5, 11, 10, 8.5	75'			PIP	PIP	PIP
#2329S	*Eucalyptus globulus*	southern blue gum	43.0		90'	X		PIP	PIP	PIP
#2330N	*Quercus agrifolia*	coast live oak	13.0	7, 6	25'		X	PIP	PIP	PIP
#2331N	*Quercus agrifolia*	coast live oak	6.5		20'		X	PIP	PIP	PIP
#2332S	*Eucalyptus globulus*	southern blue gum	31.0		75'	X		PIP	PIP	PIP
#2333N	*Frangula californica*	coffeeberry	8.0	6, 2	25'		X	PIP	PIP	PIP
#2334N	*Frangula californica*	coffeeberry	4.0		25'		X	PIP	PIP	PIP
#2335N	*Quercus agrifolia*	coast live oak	6.0		20'		X	PIP	PIP	PIP
#2336N	*Quercus agrifolia*	coast live oak	13.5	7, 6.5	20'		X	PIP	PIP	PIP
#2337N	*Frangula californica*	coffeeberry	9.5 *	5, 4.5 *	25'		X	PIP	PIP	PIP
#2338N	*Quercus agrifolia*	coast live oak	7.0 *		25'		X	PIP	PIP	PIP
#2339N	*Quercus agrifolia*	coast live oak	6.5	3.5, 1.5, 1.5	20'		X	PIP	PIP	PIP
#2340N	*Frangula californica*	coffeeberry	7.0 *	4.5, 2.5 *	25'		X	PIP	PIP	PIP
#2341N	*Quercus agrifolia*	coast live oak	22.0 *	8, 7, 7 *	25'		X	PIP	PIP	PIP
#2342N	*Quercus agrifolia*	coast live oak	5.0 *		20'		X	PIP	PIP	PIP
#2343	*Eucalyptus globulus*	southern blue gum	5.0 *		30'			PIP	PIP	PIP

#2344N	*Quercus agrifolia*	coast live oak	9.0 *	6, 3 *	20'		X	PIP	PIP	PIP
#2345N	*Quercus agrifolia*	coast live oak	5.0 *	3, 2 *	15'		X	PIP	PIP	PIP
#2346N	*Quercus agrifolia*	coast live oak	30.0	18, 12	35'		X	D	PIP	D
#2347N	*Quercus agrifolia*	coast live oak	4.0		15'		X	D	PIP	D
#2348S	*Eucalyptus globulus*	southern blue gum	34.0		70'	X		D	PIP	D
#2349	*Eucalyptus globulus*	southern blue gum	116.0	35, 31, 30, 20	90'			D	PIP	D
#2350	*Prunus cerasifera*	cherry plum	4.0		15'			D	PIP	D
#2351N	*Quercus agrifolia*	coast live oak	10.5		25'		X	D	PIP	D
#2352S	*Eucalyptus globulus*	southern blue gum	54.0		100'	X		D	PIP	D
#2353	*Eucalyptus globulus*	southern blue gum	71.5	37, 23, 11.5	85'			D	PIP	D
#2354S	*Eucalyptus globulus*	southern blue gum	34.0		80'	X		D	PIP	D
#2355S	*Eucalyptus globulus*	southern blue gum	49.0		100'	X		D	PIP	D
#2356S	*Eucalyptus globulus*	southern blue gum	21.0 *		75'	X		PIP	PIP	PIP
#2357S	*Eucalyptus globulus*	southern blue gum	38.0 *		100'	X		PIP	PIP	PIP
#2358S	*Eucalyptus globulus*	southern blue gum	30.0 *		100'	X		PIP	PIP	PIP
#2359N	*Frangula californica*	coffeeberry	5.5 *		20'		X	PIP	PIP	PIP
#2360N	*Quercus agrifolia*	coast live oak	13.0 *		20'		X	PIP	PIP	PIP
#2361	NOT USED									
#2362	*Eucalyptus globulus*	southern blue gum	11.0 *		20'			D	PIP	D
#2363	*Eucalyptus globulus*	southern blue gum	19.0 *		45'			PIP	PIP	PIP
#2364S	*Eucalyptus globulus*	southern blue gum	34.0		100'	X		PIP	PIP	PIP
#2365S	*Eucalyptus globulus*	southern blue gum	34.0		100'	X		PIP	PIP	PIP
#2366S	*Eucalyptus globulus*	southern blue gum	20.0		75'	X		PIP	PIP	PIP
#2367S	*Eucalyptus globulus*	southern blue gum	38.0		80'	X		PIP	PIP	PIP
#2368S	*Eucalyptus globulus*	southern blue gum	48.0		150'	X		PIP	PIP	PIP
#2369	*Eucalyptus globulus*	southern blue gum	16.0		75'			PIP	PIP	PIP
#2370S	*Eucalyptus globulus*	southern blue gum	44.0		120'	X		PIP	PIP	PIP
#2371N	*Frangula californica*	coffeeberry	13.5	5, 4.5, 2, 2	25'		X	D	PIP	D
#2372	*Eucalyptus globulus*	southern blue gum	19.0		50'			D	PIP	D
#2373N	*Frangula californica*	coffeeberry	10.0 *	2, 2, 2, 2, 2 *	15'		X	D	PIP	D
#2374N	*Frangula californica*	coffeeberry	11.0 *	4, 3, 2, 2 *	25'		X	D	PIP	D
#2375N	*Frangula californica*	coffeeberry	8.0	2, 2, 2, 2	20'		X	D	PIP	D
#2376N	*Quercus agrifolia*	coast live oak	8.5		25'		X	D	D	NA
#2377N	*Quercus agrifolia*	coast live oak	11.0	6.5, 4.5	25'		X	D	PIP	D

#2378N	*Quercus agrifolia*	coast live oak	13.0		25'		X	D	PIP	D
#2379N	*Quercus agrifolia*	coast live oak	7.0	5.5, 1.5	20'		X	D	PIP	D
#2380N	*Quercus agrifolia*	coast live oak	7.5		25'		X	D	PIP	D
#2381N	*Quercus agrifolia*	coast live oak	10.5	7, 3.5	25'		X	D	PIP	D
#2382N	*Quercus agrifolia*	coast live oak	17.0	4, 3, 3, 3, 2, 2	20'		X	D	PIP	D
#2383N	*Quercus agrifolia*	coast live oak	6.0		20'		X	PIP	PIP	PIP
#2384N	*Quercus agrifolia*	coast live oak	5.0	3.5, 1.5	20'		X	PIP	PIP	PIP
#2385N	*Quercus agrifolia*	coast live oak	8.0	3, 3, 2	20'		X	PIP	PIP	PIP
#2386N	*Quercus agrifolia*	coast live oak	6.5		25'		X	PIP	PIP	PIP
#2387N	*Quercus agrifolia*	coast live oak	8.0	4.5, 3.5	20'		X	PIP	PIP	PIP
#2388N	*Quercus agrifolia*	coast live oak	10.0		25'		X	PIP	PIP	PIP
#2389N	*Quercus agrifolia*	coast live oak	5.5		25'		X	PIP	PIP	PIP
#2390N	*Quercus agrifolia*	coast live oak	12.0	8, 4	30'		X	PIP	PIP	PIP
#2391N	*Quercus agrifolia*	coast live oak	14.5	10.5, 4	30'		X	PIP	PIP	PIP
#2392N	*Quercus agrifolia*	coast live oak	15.5	9, 6.5	25'		X	PIP	PIP	PIP
#2393N	*Quercus agrifolia*	coast live oak	8.5	4.5, 4	15'		X	PIP	PIP	PIP
#2394N	*Quercus agrifolia*	coast live oak	6.0		25'		X	PIP	PIP	PIP
#2395N	*Quercus agrifolia*	coast live oak	31.0	11, 10, 10	25'		X	PIP	PIP	PIP
#2396N	*Quercus agrifolia*	coast live oak	7.5		25'		X	PIP	PIP	PIP
#2397N	*Quercus agrifolia*	coast live oak	18.5	10.5, 8	25'		X	PIP	PIP	PIP
#2398N	*Quercus agrifolia*	coast live oak	11.5	4, 3.5, 2, 2	20'		X	PIP	PIP	PIP
#2399N	*Quercus agrifolia*	coast live oak	4.5		15'		X	PIP	D	NA
#2400N	*Quercus agrifolia*	coast live oak	7.0		20'		X	PIP	PIP	PIP
#2401N	*Quercus agrifolia*	coast live oak	6.5		25'		X	PIP	D	NA
#2402N	*Quercus agrifolia*	coast live oak	10.0	7, 3	25'		X	PIP	D	NA
#2403N	*Quercus agrifolia*	coast live oak	8.5	5.5, 3	20'		X	PIP	PIP	PIP
#2404N	*Quercus agrifolia*	coast live oak	28.5	7.5, 6, 5, 4, 3, 3	20'		X	PIP	D	NA
#2405N	*Quercus agrifolia*	coast live oak	15.0	7.5, 7.5	20'		X	PIP	D	NA
#2406N	*Quercus agrifolia*	coast live oak	12.0		25'		X	PIP	PIP	PIP
#2407N	*Quercus agrifolia*	coast live oak	9.5	5, 2.5, 2	20'		X	PIP	PIP	PIP
#2408N	*Quercus agrifolia*	coast live oak	6.0	4, 2	20'		X	PIP	PIP	PIP
#2409N	*Quercus agrifolia*	coast live oak	7.0		20'		X	PIP	PIP	PIP
#2410N	*Quercus agrifolia*	coast live oak	6.5		20'		X	PIP	PIP	PIP
#2411N	*Quercus agrifolia*	coast live oak	21.0	13, 8	25'		X	PIP	D	NA

#2412N	*Quercus agrifolia*	coast live oak	39.5	17, 11.5, 11	25'		X	PIP	PIP	PIP
#2413N	*Quercus agrifolia*	coast live oak	9.5		25'		X	PIP	PIP	PIP
#2414N	*Quercus agrifolia*	coast live oak	11.0		25'		X	PIP	PIP	PIP
#2415N	*Quercus agrifolia*	coast live oak	7.0		20'		X	PIP	PIP	PIP
#2416N	*Quercus agrifolia*	coast live oak	4.0		20'		X	PIP	PIP	PIP
#2417N	*Quercus agrifolia*	coast live oak	9.0		25'		X	PIP	PIP	PIP
#2418N	*Quercus agrifolia*	coast live oak	35.0	14, 11, 10	25'		X	PIP	PIP	PIP
#2419N	*Quercus agrifolia*	coast live oak	9.0		20'		X	PIP	PIP	PIP
#2420N	*Quercus agrifolia*	coast live oak	15.0		25'		X	PIP	PIP	PIP
#2421SN	*Quercus agrifolia*	coast live oak	20.0		25'	X	X	PIP	PIP	PIP
#2422N	*Quercus agrifolia*	coast live oak	8.0		25'		X	PIP	PIP	PIP
#2423N	*Quercus agrifolia*	coast live oak	9.0		25'		X	PIP	PIP	PIP
#2424N	*Quercus agrifolia*	coast live oak	13.0		25'		X	PIP	D	NA
#2425N	*Quercus agrifolia*	coast live oak	38.0	22, 16	25'		X	PIP	PIP	PIP
#2426N	*Quercus agrifolia*	coast live oak	5.5	2.5, 1.5, 1.5	15'		X	PIP	PIP	PIP
#2427N	*Quercus agrifolia*	coast live oak	8.0	3, 3, 2	15'		X	PIP	PIP	PIP
#2428N	*Quercus agrifolia*	coast live oak	21.5	4.5, 4, 4, 3, 3, 3	15'		X	PIP	D	NA
#2429SN	*Quercus agrifolia*	coast live oak	29.0		25'	X	X	PIP	PIP	PIP
#2430	NOT USED									
#2431N	*Sambucus nigra ssp. caerulea*	blue elderberry	12.0		25'		X	PIP	PIP	PIP
#2432	NOT USED									
#2433N	*Quercus agrifolia*	coast live oak	5.0	3, 2	15'		X	PIP	PIP	PIP
#2434	NOT USED									
#2435N	*Quercus agrifolia*	coast live oak	6.0		20'		X	PIP	PIP	PIP
#2436N	*Quercus agrifolia*	coast live oak	7.0	4.5, 2.5	20'		X	PIP	PIP	PIP
#2437N	*Quercus agrifolia*	coast live oak	6.5 *		20'		X	PIP	PIP	PIP
#2438SN	*Quercus agrifolia*	coast live oak	21.0		30'	X	X	PIP	PIP	PIP
#2439N	*Quercus agrifolia*	coast live oak	5.0		15'		X	PIP	PIP	PIP
#2440N	*Quercus agrifolia*	coast live oak	6.0		15'		X	PIP	PIP	PIP
#2441N	*Arbutus menziesii*	Pacific madrone	7.5		25'		X	PIP	PIP	PIP
#2442N	*Quercus agrifolia*	coast live oak	25.0	15, 10	30'		X	PIP	PIP	PIP
#2443N	*Quercus agrifolia*	coast live oak	9.0		25'		X	PIP	PIP	PIP
#2444N	*Quercus agrifolia*	coast live oak	7.0		25'		X	PIP	PIP	PIP
#2445N	*Quercus agrifolia*	coast live oak	8.0		25'		X	PIP	PIP	PIP

#2446N	*Quercus agrifolia*	coast live oak	15.0		30'		X	PIP	PIP	PIP
#2447N	*Quercus agrifolia*	coast live oak	7.0		25'		X	PIP	PIP	PIP
#2448SN	*Quercus agrifolia*	coast live oak	20.0		30'	X	X	PIP	PIP	PIP
#2449N	*Quercus agrifolia*	coast live oak	33.5	22, 11.5	30'		X	PIP	PIP	PIP
#2450N	*Quercus agrifolia*	coast live oak	16.0		30'		X	PIP	PIP	PIP
#2451N	*Frangula californica*	coffeeberry	7.0	2.5, 2, 1.5, 1	15'		X	PIP	PIP	PIP
#2452N	*Frangula californica*	coffeeberry	8.0	3, 2.5, 2.5	20'		X	PIP	PIP	PIP
#2453N	*Quercus agrifolia*	coast live oak	15.0		25'		X	PIP	PIP	PIP
#2454N	*Quercus agrifolia*	coast live oak	7.0		25'		X	PIP	PIP	PIP
#2455N	*Quercus agrifolia*	coast live oak	33.0	14, 12, 7	35'		X	PIP	PIP	PIP
#2456N	*Quercus agrifolia*	coast live oak	19.0		30'		X	PIP	PIP	PIP
#2457N	*Quercus agrifolia*	coast live oak	13.0		25'		X	PIP	PIP	PIP
#2458N	*Frangula californica*	coffeeberry	4.5		15'		X	PIP	PIP	PIP
#2459N	*Quercus agrifolia*	coast live oak	19.0	12, 7	25'		X	PIP	PIP	PIP
#2460N	*Quercus agrifolia*	coast live oak	22.0	12, 10	25'		X	PIP	PIP	PIP
#2461N	*Quercus agrifolia*	coast live oak	22.0	13, 9	25'		X	PIP	D	NA
#2462N	*Quercus agrifolia*	coast live oak	6.5		20'		X	PIP	PIP	PIP
#2463N	*Quercus agrifolia*	coast live oak	10.0		25'		X	PIP	PIP	PIP
#2464N	*Quercus agrifolia*	coast live oak	28.0	10, 9, 9	25'		X	PIP	PIP	PIP
#2465N	*Quercus agrifolia*	coast live oak	13.0 *		25'		X	PIP	PIP	PIP
#2466N	*Quercus agrifolia*	coast live oak	12.5 *		25'		X	PIP	PIP	PIP
#2467N	*Quercus agrifolia*	coast live oak	6.0 *		25'		X	PIP	PIP	PIP
#2468N	*Quercus agrifolia*	coast live oak	8.0 *		25'		X	PIP	PIP	PIP
#2469N	*Quercus agrifolia*	coast live oak	21.0	7, 7, 7	25'		X	PIP	PIP	PIP
#2470N	*Quercus agrifolia*	coast live oak	9.5		25'		X	PIP	PIP	PIP
#2471N	*Quercus agrifolia*	coast live oak	17.5	9, 8.5	25'		X	PIP	PIP	PIP
#2472N	*Quercus agrifolia*	coast live oak	6.0		15'		X	PIP	PIP	PIP
#2473N	*Quercus agrifolia*	coast live oak	14.5		25'		X	PIP	D	NA
#2474N	*Quercus agrifolia*	coast live oak	17.0 *		25'		X	PIP	PIP	PIP
#2475	*Acacia melanoxylon*	Australian blackwood	5.5		20'			PIP	D	NA
#2476N	*Quercus agrifolia*	coast live oak	5.0		15'		X	PIP	PIP	PIP
#2477N	*Quercus agrifolia*	coast live oak	8.0		20'		X	PIP	PIP	PIP
#2478N	*Quercus agrifolia*	coast live oak	6.0		20'		X	PIP	PIP	PIP
#2479N	*Quercus agrifolia*	coast live oak	8.5		25'		X	PIP	PIP	PIP

#2480N	*Quercus agrifolia*	coast live oak	13.0		25'		X	PIP	D	NA
#2481N	*Quercus agrifolia*	coast live oak	16.0	9, 7	25'		X	PIP	D	NA
#2482N	*Quercus agrifolia*	coast live oak	9.0		25'		X	PIP	D	NA
#2483N	*Populus trichocarpa*	black cottonwood	18.0 *		75'		X	PIP	PIP	PIP
#2484	*Acacia melanoxylon*	Australian blackwood	6.5		25'			PIP	PIP	PIP
#2485	*Acacia dealbata*	silver wattle	4.0		25'			PIP	PIP	PIP
#2486	*Acacia dealbata*	silver wattle	8.0		25'			PIP	PIP	PIP
#2487	*Acacia dealbata*	silver wattle	8.0		25'			PIP	PIP	PIP
#2488	*Acacia dealbata*	silver wattle	6.0		25'			PIP	PIP	PIP
#2489	*Acacia dealbata*	silver wattle	5.0		25'			PIP	PIP	PIP
#2490	*Acacia dealbata*	silver wattle	15.0	10, 5	25'			PIP	PIP	PIP
#2491	*Acacia dealbata*	silver wattle	9.5	4, 3.5, 2	25'			PIP	PIP	PIP
#2492	*Acacia dealbata*	silver wattle	5.5		25'			PIP	PIP	PIP
#2493	*Acacia dealbata*	silver wattle	4.5		25'			PIP	PIP	PIP
#2494	*Acacia dealbata*	silver wattle	7.0		25'			PIP	PIP	PIP
#2495	*Acacia dealbata*	silver wattle	4.5		25'			PIP	PIP	PIP
#2496	*Acacia dealbata*	silver wattle	6.5		25'			PIP	PIP	PIP
#2497	*Acacia dealbata*	silver wattle	10.0		25'			PIP	PIP	PIP
#2498	*Acacia dealbata*	silver wattle	5.0		25'			PIP	PIP	PIP
#2499	*Acacia dealbata*	silver wattle	4.5		25'			PIP	PIP	PIP
#2500	*Acacia dealbata*	silver wattle	9.0		25'			PIP	PIP	PIP
#2501	*Acacia dealbata*	silver wattle	5.5		25'			PIP	PIP	PIP
#2502	*Acacia melanoxylon*	Australian blackwood	4.5		25'			PIP	PIP	PIP
#2503	*Acacia dealbata*	silver wattle	6.0		20'			PIP	PIP	PIP
#2504	*Hesperocyparis macrocarpa*	Monterey cypress	4.5		15'			PIP	PIP	PIP
#2505S	*Hesperocyparis macrocarpa*	Monterey cypress	39.0		45'	X		PIP	PIP	PIP
#2506N	*Quercus agrifolia*	coast live oak	29.0 *	19, 10 *	25'		X	PIP	PIP	PIP
#2507N	*Quercus agrifolia*	coast live oak	52.0	22, 18, 12	30'		X	PIP	PIP	PIP
#2508	*Acacia melanoxylon*	Australian blackwood	20.0	9, 7, 4	30'			PIP	PIP	PIP
#2509N	*Quercus agrifolia*	coast live oak	9.5		25'		X	PIP	PIP	PIP
#2510	*Syzygium paniculatum*	brush cherry	8.0		25'			PIP	PIP	PIP
#2511	*Syzygium paniculatum*	brush cherry	5.0		25'			PIP	PIP	PIP
#2512N	*Quercus agrifolia*	coast live oak	8.0		20'		X	PIP	PIP	PIP
#2513N	*Quercus agrifolia*	coast live oak	26.0	19, 7	40'		X	PIP	PIP	PIP

#2514	*Acacia melanoxylon*	Australian blackwood	8.0	5, 3	20'			PIP	D	NA
#2515	*Acacia melanoxylon*	Australian blackwood	5.5		20'			PIP	D	NA
#2516	*Acacia melanoxylon*	Australian blackwood	10.0		30'			PIP	PIP	PIP
#2517	*Acacia melanoxylon*	Australian blackwood	6.5	4, 2.5	20'			PIP	PIP	PIP
#2518	*Acacia melanoxylon*	Australian blackwood	4.5		20'			PIP	D	NA
#2519	*Pyrus calleryana*	Callery pear	11.0	2.5, 2.5, 2.5, 2, 1.5	20'			PIP	PIP	PIP
#2520	*Acacia melanoxylon*	Australian blackwood	4.5		20'			PIP	PIP	PIP
#2521	*Acacia melanoxylon*	Australian blackwood	23.0	4.5, 4.5, 3.5, 3.5, 2.5, 2.5, 2	25'			PIP	PIP	PIP
#2522N	*Quercus agrifolia*	coast live oak	14.0		30'		X	PIP	PIP	PIP
#2523	*Acacia melanoxylon*	Australian blackwood	4.0		20'			D	PIP	D
#2524	*Acacia melanoxylon*	Australian blackwood	5.0	2.5, 2.5	20'			D	PIP	D
#2525N	*Frangula californica*	coffeeberry	19.5	5, 4.5, 4.5, 3, 2.5	20'		X	D	PIP	D
#2526N	*Quercus agrifolia*	coast live oak	28.0	13, 10, 5	30'		X	D	PIP	D
#2527	*Acacia melanoxylon*	Australian blackwood	4.5 *		25'			PIP	PIP	PIP
#2528	*Acacia melanoxylon*	Australian blackwood	5.0 *		25'			D	PIP	D
#2529SN	*Quercus agrifolia*	coast live oak	28.0		25'	X	X	D	PIP	D
#2530N	*Quercus agrifolia*	coast live oak	11.0		25'		X	D	D	NA
#2531	*Acacia melanoxylon*	Australian blackwood	7.0		25'			D	PIP	D
#2532	*Acacia melanoxylon*	Australian blackwood	5.0		25'			D	PIP	D
#2533	*Acacia melanoxylon*	Australian blackwood	6.0		25'			D	PIP	D
#2534N	*Quercus agrifolia*	coast live oak	18.0 *		30'		X	D	PIP	D
#2535N	*Heteromeles arbutifolia*	Toyon	21.0 *	8, 6, 3, 2, 2 *	20'		X	D	PIP	D
#2536N	*Quercus agrifolia*	coast live oak	10.0 *		30'		X	D	PIP	D
#2537N	*Quercus agrifolia*	coast live oak	54.0	20, 18, 16	30'		X	D	PIP	D
#2538N	*Heteromeles arbutifolia*	Toyon	9.0	4, 2, 2, 1	15'		X	D	PIP	D
#2539	*Prunus domestica*	European plum	9.5	5, 4.5	15'			D	PIP	D
#2540	*Populus nigra 'Italica'*	Lombardy poplar	25.5	13, 12.5	50'			D	PIP	D
#2541N	*Sequoia sempervirens*	coast redwood	51.0	39, 12	60'		X	D	PIP	D
#2542N	*Quercus agrifolia*	coast live oak	40.0	22, 18	35'		X	D	PIP	D
#2543N	*Quercus agrifolia*	coast live oak	28.0	17, 11	30'		X	D	PIP	D
#2544	*Persea americana*	Avocado	8.0		20'			D	PIP	D
#2545N	*Quercus agrifolia*	coast live oak	40.0	20, 12, 8	30'		X	D	PIP	D
#2546N	*Quercus agrifolia*	coast live oak	9.5		25'		X	D	PIP	D
#2547N	*Quercus agrifolia*	coast live oak	14.0		25'		X	D	PIP	D

#2548N	*Quercus agrifolia*	coast live oak	16.0		25'		X	D	PIP	D
#2549N	*Quercus agrifolia*	coast live oak	6.0		20'		X	D	PIP	D
#2550N	*Quercus agrifolia*	coast live oak	12.0	7, 5	20'		X	D	PIP	D
#2551N	*Quercus agrifolia*	coast live oak	8.0		20'		X	D	PIP	D
#2552N	*Quercus agrifolia*	coast live oak	35.0	22, 13	30'		X	D	PIP	D
#2553	NOT USED									
#2554N	*Salix laevigata*	red willow	24.5	7, 7, 6.5, 4	20'		X	PIP	PIP	PIP
#2555	NOT USED									
#2556N	*Frangula californica*	coffeeberry	11.0	2.5, 2.5, 2, 2, 2	20'		X	D	PIP	D
#2557N	*Frangula californica*	coffeeberry	10.0	6, 2, 2	20'		X	D	PIP	D
#2558N	*Frangula californica*	coffeeberry	11.5	4, 2.5, 2.5, 2.5	20'		X	D	PIP	D
#2559SN	*Quercus agrifolia*	coast live oak	34.0		40'	X	X	PIP	PIP	PIP
#2560N	*Quercus agrifolia*	coast live oak	19.0		35'		X	PIP	PIP	PIP
#2561N	*Quercus agrifolia*	coast live oak	9.5		25'		X	PIP	PIP	PIP
#2562N	*Quercus agrifolia*	coast live oak	6.0		20'		X	D	PIP	D
#2563N	*Quercus agrifolia*	coast live oak	4.5		20'		X	D	PIP	D
#2564N	*Quercus agrifolia*	coast live oak	15.0	10, 5	25'		X	D	PIP	D
#2565	*Myoporum laetum*	ngaio	14.0		30'			D	PIP	D
#2566	*Ligustrum japonicum*	Japanese privet	9.5	4, 2.5, 2, 1	25'			D	PIP	D
#2567	*Pittosporum tenuifolium*	Kohuhu	23.5	6, 5, 3, 2.5, 2.5, 2.5, 2	30'			D	PIP	D
#2568N	*Quercus agrifolia*	coast live oak	6.0		25'		X	D	D	NA
#2569N	*Quercus agrifolia*	coast live oak	10.5		25'		X	D	D	NA
#2570N	*Quercus agrifolia*	coast live oak	14.0		25'		X	D	D	NA
#2571	*Acacia dealbata*	silver wattle	36.0	20, 9.5, 6.5	25'			PIP	PIP	PIP
#2572N	*Quercus agrifolia*	coast live oak	20.0	9.5, 5.5, 5	25'		X	PIP	PIP	PIP
#2573N	*Quercus agrifolia*	coast live oak	4.5		10'		X	PIP	PIP	PIP
#2574N	*Quercus agrifolia*	coast live oak	13.0		25'		X	PIP	PIP	PIP
#2575N	*Quercus agrifolia*	coast live oak	11.5	6, 5.5	20'		X	PIP	PIP	PIP
#2576N	*Quercus agrifolia*	coast live oak	4.0		15'		X	PIP	PIP	PIP
#2577N	*Quercus agrifolia*	coast live oak	9.5		20'		X	PIP	PIP	PIP
#2578N	*Quercus agrifolia*	coast live oak	7.0		15'		X	PIP	PIP	PIP
#2579N	*Quercus agrifolia*	coast live oak	13.0	7, 6	20'		X	PIP	PIP	PIP
#2580N	*Quercus agrifolia*	coast live oak	8.5	5, 3.5	15'		X	PIP	PIP	PIP
#2581N	*Quercus agrifolia*	coast live oak	19.0		30'		X	PIP	PIP	PIP

#2582N	*Sambucus nigra ssp. caerulea*	blue elderberry	11.0	5, 3, 2, 1	25'		X	PIP	D	NA
#2583N	*Quercus agrifolia*	coast live oak	10.0		25'		X	PIP	PIP	PIP
#2584N	*Quercus agrifolia*	coast live oak	16.0		25'		X	PIP	PIP	PIP
#2585N	*Quercus agrifolia*	coast live oak	4.5		15'		X	PIP	PIP	PIP
#2586N	*Quercus agrifolia*	coast live oak	5.0		15'		X	PIP	PIP	PIP
#2587N	*Quercus agrifolia*	coast live oak	7.0		20'		X	PIP	PIP	PIP
#2588N	*Quercus agrifolia*	coast live oak	34.5	13, 10.5, 7, 4	25'		X	PIP	PIP	PIP
#2589N	*Sambucus nigra ssp. caerulea*	blue elderberry	6.0		15'		X	PIP	PIP	PIP
#2590SN	*Quercus agrifolia*	coast live oak	36.0 *		45'	X	X	D	PIP	D
#2591N	*Quercus agrifolia*	coast live oak	8.0 *		20'		X	D	PIP	D
#2592N	*Quercus agrifolia*	coast live oak	20.0		45'		X	D	PIP	D
#2593N	*Quercus agrifolia*	coast live oak	36.0	4, 13, 19	45'		X	D	PIP	D
#2594N	*Quercus agrifolia*	coast live oak	10.0	4, 3, 3	20'		X	D	PIP	D
#2595N	*Quercus agrifolia*	coast live oak	19.0		45'		X	D	PIP	D
#2596N	*Quercus agrifolia*	coast live oak	5.5		20'		X	D	PIP	D
#2597N	*Quercus agrifolia*	coast live oak	10.0	4, 6	20'		X	D	PIP	D
#2598	*Dracaena draco*	dragon tree	11.0 *	5, 3, 3 *	20'			D	PIP	D
#2599SN	*Quercus agrifolia*	coast live oak	20.0 *		40'	X	X	D	PIP	D
#2600N	*Quercus agrifolia*	coast live oak	5.0	3, 2	12'		X	D	PIP	D
#2601N	*Quercus agrifolia*	coast live oak	9.0	5, 4	20'		X	D	PIP	D
#2602N	*Quercus agrifolia*	coast live oak	12.0 *		40'		X	D	PIP	D
#2603N	*Quercus agrifolia*	coast live oak	5.0 *		20'		X	D	PIP	D
#2604N	*Quercus agrifolia*	coast live oak	13.0	7, 3, 3	25'		X	D	PIP	D
#2605N	*Quercus agrifolia*	coast live oak	13.0 *		35'		X	D	PIP	D
#2606N	*Quercus agrifolia*	coast live oak	13.0 *		35'		X	D	PIP	D
#2607N	*Quercus agrifolia*	coast live oak	5.0		15'		X	D	PIP	D
#2608N	*Quercus agrifolia*	coast live oak	10.5	6, 4.5	25'		X	D	PIP	D
#2609N	*Quercus agrifolia*	coast live oak	12.0		25'		X	PIP	PIP	PIP
#2610SN	*Quercus agrifolia*	coast live oak	23.0		35'	X	X	PIP	PIP	PIP
#2611N	*Sambucus nigra ssp. caerulea*	blue elderberry	14.0	3, 2, 4, 5	20'		X	PIP	PIP	PIP
#2612	*Dahlia imperialis*	tree dahlia	13.0	3, 3, 2, 2, 2, 1	15'			PIP	PIP	PIP
#2613N	*Quercus agrifolia*	coast live oak	26.0	12, 14	30'		X	PIP	D	NA
#2614N	*Quercus agrifolia*	coast live oak	16.0		35'		X	PIP	D	NA
#2615N	*Quercus agrifolia*	coast live oak	8.0		25'		X	PIP	D	NA

#2616N	*Quercus agrifolia*	coast live oak	13.0		35'		X	PIP	D	NA
#2617N	*Quercus agrifolia*	coast live oak	15.0		35'		X	PIP	D	NA
#2618SN	*Quercus agrifolia*	coast live oak	26.0		35'	X	X	PIP	D	NA
#2619N	*Quercus agrifolia*	coast live oak	16.5	9.5, 7	20'		X	PIP	D	NA
#2620N	*Quercus agrifolia*	coast live oak	39.0	8.5, 15.5, 7, 8	20'		X	PIP	D	NA
#2621N	*Quercus agrifolia*	coast live oak	45.0	23, 22	50'		X	PIP	D	NA
#2622SN	*Quercus agrifolia*	coast live oak	28.0		50'	X	X	PIP	D	NA
#2623S	*Eucalyptus globulus*	southern blue gum	27.0 *		60'	X		D	PIP	D
#2624N	*Frangula californica*	coffeeberry	15.0	3, 3, 2, 2, 5	20'		X	D	PIP	D
#2625S	*Eucalyptus globulus*	southern blue gum	22.0		55'	X		D	PIP	D
#2626N	*Quercus agrifolia*	coast live oak	5.0		15'		X	D	PIP	D
#2627S	*Eucalyptus globulus*	southern blue gum	38.0		90'	X		D	PIP	D
#2628S	*Eucalyptus globulus*	southern blue gum	40.0		90'	X		D	PIP	D
#2629N	*Quercus agrifolia*	coast live oak	11.5		25'		X	D	PIP	D
#2630N	*Quercus agrifolia*	coast live oak	62.0	15, 18, 20, 9	35'		X	PIP	D	NA
#2631N	*Quercus agrifolia*	coast live oak	32.0	9, 7, 10, 6	20'		X	PIP	D	NA
#2632N	*Quercus agrifolia*	coast live oak	11.0		20'		X	PIP	D	NA
#2633N	*Quercus agrifolia*	coast live oak	22.0	11, 11	20'		X	PIP	D	NA
#2634N	*Quercus agrifolia*	coast live oak	7.0		15'		X	PIP	PIP	PIP
#2635	*Pittosporum tobira*	mock orange	5.5	3, 2.5	15'			PIP	PIP	PIP
#2636N	*Quercus agrifolia*	coast live oak	7.5		20'		X	PIP	PIP	PIP
#2637N	*Quercus agrifolia*	coast live oak	14.0		40'		X	PIP	PIP	PIP
#2638SN	*Quercus agrifolia*	coast live oak	24.0		45'	X	X	PIP	D	NA
#2639N	*Quercus agrifolia*	coast live oak	41.0	15, 26	50'		X	PIP	D	NA
#2640N	*Quercus agrifolia*	coast live oak	5.5	3, 2.5	15'		X	PIP	D	NA
#2641N	*Quercus agrifolia*	coast live oak	13.5	3, 2.5, 2, 2, 2, 2	1		X	PIP	D	NA
#2642N	*Quercus agrifolia*	coast live oak	12.0	12	10'		X	PIP	D	NA
#2643N	*Quercus agrifolia*	coast live oak	28.0	13, 11, 4	40'		X	PIP	D	NA
#2644N	*Quercus agrifolia*	coast live oak	32.0		50'		X	PIP	D	NA
#2645N	*Quercus agrifolia*	coast live oak	13.5		25'		X	D	D	NA
#2646	*Eucalyptus globulus*	southern blue gum	65.0	33, 32	100'			D	D	NA
#2647N	*Quercus agrifolia*	coast live oak	13.0	6, 7	25'		X	D	D	NA
#2648	*Eucalyptus globulus*	southern blue gum	149.0	48, 40, 31, 30	100'			D	D	NA
#2649S	*Eucalyptus globulus*	southern blue gum	23.5		50'	X		D	D	NA

#2650S	*Eucalyptus globulus*	southern blue gum	35.0		90'	X		D	D	NA
#2651S	*Eucalyptus globulus*	southern blue gum	40.0		90'	X		D	D	NA
#2652S	*Eucalyptus globulus*	southern blue gum	47.0		75	X		D	D	NA
#2653	NOT USED									
#2654	NOT USED									
#2655	*Acacia dealbata*	silver wattle	5.0		25'			D	D	NA
#2656	*Acacia dealbata*	silver wattle	8.0		25'			D	D	NA
#2657	*Acacia dealbata*	silver wattle	14.0	7, 7	25'			D	D	NA
#2658	*Acacia dealbata*	silver wattle	10.0	7, 3	25'			D	D	NA
#2659	*Acacia dealbata*	silver wattle	10.0		20'			D	D	NA
#2660	*Acacia dealbata*	silver wattle	19.0	3, 3, 3, 2, 2, 2, 2, 2	20'			D	D	NA
#2661	*Acacia dealbata*	silver wattle	7.0		20'			D	D	NA
#2662	*Acacia dealbata*	silver wattle	9.0		20'			D	D	NA
#2663	*Acacia dealbata*	silver wattle	6.0		20'			D	D	NA
#2664	*Acacia dealbata*	silver wattle	12.0		20'			D	D	NA
#2665	*Acacia dealbata*	silver wattle	4.0		20'			D	D	NA
#2666	*Acacia dealbata*	silver wattle	29.0	6, 5, 4, 4, 4, 3, 3	20'			D	D	NA
#2667	*Acacia dealbata*	silver wattle	6.0		20'			D	D	NA
#2668	*Prunus domestica*	European plum	29.0	7, 7, 5, 4, 3, 3	20'			PIP	D	NA
#2669N	*Quercus agrifolia*	coast live oak	16.0	8, 5, 3	20'		X	D	D	NA
#2670N	*Quercus agrifolia*	coast live oak	27.5	8.5, 5.5, 5.5, 5, 3	20'		X	PIP	D	NA
#2671N	*Quercus agrifolia*	coast live oak	10.5	4.5, 3, 3	10'		X	D	D	NA
#2672N	*Quercus agrifolia*	coast live oak	12.0	5, 4, 3	15'		X	D	PIP	D
#2673N	*Quercus agrifolia*	coast live oak	9.5	4.5, 2.5, 2.5	15'		X	D	D	NA
#2674N	*Quercus agrifolia*	coast live oak	11.5	5.5, 3, 3	15'		X	D	PIP	D
#2675N	*Quercus agrifolia*	coast live oak	4.0		15'		X	D	D	NA
#2676N	*Quercus agrifolia*	coast live oak	4.5		15'		X	D	D	NA
#2677	*Calocedrus decurrens*	incense cedar	16.5	7, 6.5, 3	15'			D	PIP	D
#2678N	*Quercus agrifolia*	coast live oak	11.4	6.4, 5	15'		X	D	PIP	D
#2679	*Dracaena draco*	dragon tree	12.5	3.5, 3.5, 3.5, 2	10'			D	PIP	D
#2680N	*Quercus agrifolia*	coast live oak	16.0	6, 4, 4, 2	20'		X	PIP	PIP	PIP
#2681N	*Quercus agrifolia*	coast live oak	19.0	3.5, 3.5, 3.5, 2.5, 2, 2, 2	20'		X	PIP	PIP	PIP
#2682N	*Quercus agrifolia*	coast live oak	6.0		20'		X	PIP	PIP	PIP
#2683N	*Quercus agrifolia*	coast live oak	11.0	5, 3, 3	20'		X	PIP	PIP	PIP

#2684N	*Quercus agrifolia*	coast live oak	8.0	5, 3	20'		X	PIP	D	NA
#2685N	*Quercus agrifolia*	coast live oak	9.5	4.5, 2.5, 2.5	20'		X	PIP	D	NA
#2686N	*Quercus agrifolia*	coast live oak	8.5	4.5, 4	20'		X	PIP	D	NA
#2687N	*Quercus agrifolia*	coast live oak	54.0	34, 20	45'		X	PIP	PIP	PIP
#2688N	*Quercus agrifolia*	coast live oak	19.5	10.5, 9	30'		X	PIP	PIP	PIP
#2689N	*Quercus agrifolia*	coast live oak	32.5	10.5, 9, 6, 7	30'		X	PIP	D	NA
#2690N	*Quercus agrifolia*	coast live oak	8.0		20'		X	PIP	D	NA
#2691N	*Quercus agrifolia*	coast live oak	9.0		20'		X	PIP	PIP	PIP
#2692N	*Quercus agrifolia*	coast live oak	9.5	5, 4.5	20'		X	PIP	D	NA
#2693N	*Quercus agrifolia*	coast live oak	10.0	7, 3	20'		X	PIP	D	NA
#2694N	*Quercus agrifolia*	coast live oak	16.0	6, 4, 3, 3	20'		X	PIP	D	NA
#2695N	*Sequoia sempervirens*	coast redwood	41.0	33, 8	50'		X	PIP	PIP	PIP
#2696N	*Sequoia sempervirens*	coast redwood	16.0	6, 4, 3, 3	15'		X	PIP	D	NA
#2697S	*Hesperocyparis macrocarpa*	Monterey cypress	30.5		50'	X		PIP	D	NA
#2698	*Schinus terebinthifolius*	Brazilian pepper	15.5	3.5, 3.5, 4.5, 4	20'			PIP	D	NA
#2699S	*Hesperocyparis macrocarpa*	Monterey cypress	40.0		90'	X		D	D	NA
#2700N	*Quercus agrifolia*	coast live oak	11.0		25'		X	PIP	PIP	PIP
#2701N	*Quercus agrifolia*	coast live oak	22.0	10, 12	25'		X	PIP	PIP	PIP
#2702N	*Quercus agrifolia*	coast live oak	36.0	7, 6, 6, 5, 4, 4, 4	20'		X	D	PIP	D
#2703N	*Quercus agrifolia*	coast live oak	23.5	9.5, 6, 5, 3	20'		X	D	PIP	D
#2704	*Cupressus leylandii*	Leyland cypress	5.5		15'			PIP	PIP	PIP
#2705	*Cupressus leylandii*	Leyland cypress	4.0		15'			PIP	PIP	PIP
#2706	*Cupressus leylandii*	Leyland cypress	5.0		15'			PIP	PIP	PIP
#2707	*Cupressus leylandii*	Leyland cypress	4.0		15'			PIP	PIP	PIP
#2708	*Cupressus leylandii*	Leyland cypress	5.0		15'			PIP	PIP	PIP
#2709	*Cupressus leylandii*	Leyland cypress	4.0		15'			PIP	PIP	PIP
#2710	*Cupressus leylandii*	Leyland cypress	5.0		15'			PIP	PIP	PIP
#2711	*Cupressus leylandii*	Leyland cypress	5.0		15'			PIP	PIP	PIP
#2712	*Cupressus leylandii*	Leyland cypress	5.0		15'			PIP	PIP	PIP
#2713	*Cupaniopsis anacardioides*	carrot wood	14.0		25'			PIP	PIP	PIP
#2714	*Cinnamomum camphora*	camphor tree	8.0		25'			PIP	PIP	PIP
#2715N	*Quercus agrifolia*	coast live oak	16.5	10, 6.5	20'		X	D	PIP	D
#2716N	*Quercus agrifolia*	coast live oak	33.5	6.5, 6, 6, 4, 5, 6	15'		X	D	PIP	D
#2717N	*Quercus agrifolia*	coast live oak	10.0		20'		X	PIP	PIP	PIP

#2718N	*Quercus agrifolia*	coast live oak	8.0		20"		X	PIP	PIP	PIP
#2719N	*Quercus agrifolia*	coast live oak	11.0		30'		X	PIP	PIP	PIP
#2720N	*Quercus agrifolia*	coast live oak	29.0	10, 11, 8	25'		X	PIP	PIP	PIP
#2721N	*Quercus agrifolia*	coast live oak	16.5		20'		X	D	PIP	PIP
#2722N	*Quercus agrifolia*	coast live oak	15.5		25'		X	PIP	D	NA
#2723N	*Quercus agrifolia*	coast live oak	14.0		25'		X	PIP	D	NA
#2724N	*Quercus agrifolia*	coast live oak	10.0		25'		X	PIP	D	NA
#2725N	*Salix laevigata*	red willow	11.0		20'		X	PIP	PIP	PIP
#2726	*Hesperocyparis macrocarpa*	Monterey cypress	10.5		30'			PIP	PIP	PIP
#2727	*Prunus domestica*	European plum	14.0	3, 2, 4, 3, 2	15'			PIP	PIP	PIP
#2728N	*Quercus agrifolia*	coast live oak	8.0		25'		X	PIP	D	NA
#2729N	*Quercus agrifolia*	coast live oak	12.0		25'		X	PIP	D	NA
#2730N	*Quercus agrifolia*	coast live oak	10.5		25'		X	PIP	D	NA
#2731	*Acacia dealbata*	silver wattle	9.0		30'			PIP	PIP	PIP
#2732	*Acacia dealbata*	silver wattle	10.0		30'			PIP	PIP	PIP
#2733	*Acacia dealbata*	silver wattle	9.5	5.5, 4	25'			PIP	PIP	PIP
#2734N	*Quercus agrifolia*	coast live oak	10.0		20'		X	PIP	D	NA
#2735N	*Quercus agrifolia*	coast live oak	30.5	21.5, 9	30'		X	PIP	D	NA
#2736N	*Quercus agrifolia*	coast live oak	12.5		20'		X	PIP	D	NA
#2737N	*Sequoia sempervirens*	coast redwood	17.0		20'		X	PIP	PIP	PIP
#2738N	*Sequoia sempervirens*	coast redwood	19.0		20'		X	PIP	PIP	PIP
#2739N	*Sequoia sempervirens*	coast redwood	18.0		20'		X	PIP	PIP	PIP
#2740N	*Sequoia sempervirens*	coast redwood	20.0		20'		X	PIP	PIP	PIP
#2741	*Acacia melanoxylon*	Australian blackwood	8.0	2, 2, 2, 2				D	PIP	D
#2742	*Acacia melanoxylon*	Australian blackwood	10.0	3, 3, 2, 2	15'			D	PIP	D
#2743S	*Hesperocyparis macrocarpa*	Monterey cypress	34.0		20'	X		PIP	PIP	PIP
#2744	*Acacia melanoxylon*	Australian blackwood	5.0	3, 2	15'			D	PIP	D
#2745N	*Quercus agrifolia*	coast live oak	43.5	15, 16, 12.5	30'		X	D	PIP	D
#2746N	*Quercus agrifolia*	coast live oak	34.0	25, 9	30'		X	PIP	PIP	PIP
#2747	*Acacia melanoxylon*	Australian blackwood	10.0		20'			PIP	D	NA
#2748	*Acacia melanoxylon*	Australian blackwood	16.0	8.5, 7.5	20'			PIP	D	NA
#2749	*Acacia melanoxylon*	Australian blackwood	26.0	8, 7, 6, 5	20'			PIP	D	NA
#2750N	*Quercus agrifolia*	coast live oak	9.0	5, 4	15'		X	PIP	PIP	PIP
#2751N	*Quercus agrifolia*	coast live oak	15.5	7, 6, 2.5	15'		X	D	D	NA

#2752N	*Quercus agrifolia*	coast live oak	7.0	2.5, 2, 2.5	10'		X	D	D	NA	
#2753N	*Quercus agrifolia*	coast live oak	38.5	10.5, 10, 8, 5, 5	20'		X	D	D	NA	
#2754N	*Quercus agrifolia*	coast live oak	10.5		20'		X	D	D	NA	
#2755N	*Quercus agrifolia*	coast live oak	9.0	6, 3	15'		X	D	D	NA	
#2756N	*Quercus agrifolia*	coast live oak	4.5		15'		X	D	D	NA	
#2757	*Acacia melanoxylon*	Australian blackwood	10.0	4, 3, 3	15'			PIP	D	NA	
#2758	*Acacia melanoxylon*	Australian blackwood	15.0	4, 3, 2, 2, 2, 2	15'			PIP	PIP	PIP	
#2759	*Acacia melanoxylon*	Australian blackwood	8.0	5, 3	15'			PIP	D	NA	
#2760	*Acacia melanoxylon*	Australian blackwood	8.5	5.5, 3	15'			PIP	D	NA	
#2761	*Pseudotsuga menziesii*	Douglas-fir	15.0		25'			PIP	PIP	PIP	
#2762	*Pseudotsuga menziesii*	Douglas-fir	14.0		25'			PIP	PIP	PIP	
#2763N	*Quercus agrifolia*	coast live oak	6.0		12'		X	PIP	D	NA	
#2764N	*Quercus agrifolia*	coast live oak	4.5		12'		X	PIP	PIP	PIP	
#2765	*Hesperocyparis macrocarpa*	Monterey cypress	4.5		15'			PIP	PIP	PIP	
#2766	*Pinus thunbergii*	Japanese black pine	4.5		10'			D	D	NA	
#2767	*Trachycarpus fortunei*	windmill palm	11.5		15'			D	PIP	D	
#2768	*Trachycarpus fortunei*	windmill palm	11.0		15'			D	PIP	D	

SUPPLEMENTAL INVENTORY

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Significant Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#3315N	*Quercus agrifolia*	coast live oak	23.0	13, 10	30'		X	D	PIP	D	
#3316N	*Quercus agrifolia*	coast live oak	4.5		25'		X	D	PIP	D	
#3317N	*Quercus agrifolia*	coast live oak	7.5		20'		X	D	PIP	D	
#3318N	*Quercus agrifolia*	coast live oak	13.5		30'		X	D	PIP	D	
#3319N	*Quercus agrifolia*	coast live oak	45.0	20, 13, 12	30'		X	D	PIP	D	
#3320S	*Eucalyptus globulus*	southern blue gum	48.0		95'	X		D	PIP	D	
#3321N	*Quercus agrifolia*	coast live oak	6.0		20'		X	D	PIP	D	
#3322N	*Quercus agrifolia*	coast live oak	6.0		30'		X	D	PIP	D	
#3323	*Acacia dealbata*	silver wattle	11.0	5.5, 3.5, 2	25'			D	PIP	D	
#3324	NOT USED										
#3325	*Pittosporum undulatum*	Victorian box	9.0 *	5, 4 *	15'			D	PIP	D	
#3326	*Acacia dealbata*	silver wattle	28.0	10, 6, 6, 3, 3	25'			D	D	NA	
#3327	*Acacia dealbata*	silver wattle	16.0	7, 5, 4	20'			D	D	NA	
#3328N	*Quercus agrifolia*	coast live oak	35.0	12, 8, 8, 7	30'		X	D	PIP	D	
#3329N	*Quercus agrifolia*	coast live oak	7.0 *		30'		X	D	PIP	D	

#3330N	*Quercus agrifolia*	coast live oak	7.0 *		30'		X	D	PIP	D
#3331	*Acacia melanoxylon*	Australian blackwood	17.0	11, 6	35'			D	PIP	D
#3332	*Hesperocyparis macrocarpa*	Monterey Cypress	5.0		15'			D	PIP	D
#3333	*Pittosporum crassifolium*	Karo	5.5	3, 2.5	15'			D	D	NA
#3334N	*Quercus agrifolia*	coast live oak	7.5	4, 3.5	15'		X	D	PIP	D
#3335N	*Quercus agrifolia*	coast live oak	23.0	7, 6, 5, 5	15'		X	D	PIP	D
#3336N	*Quercus agrifolia*	coast live oak	15.0	8, 4, 3	20'		X	D	PIP	D
#3337N	*Quercus agrifolia*	coast live oak	18.0	3, 3, 3, 3, 2, 2, 2	15'		X	D	D	NA
#3338N	*Quercus agrifolia*	coast live oak	25.5	8, 7.5, 6, 4	20'		X	D	PIP	D
#3339N	*Quercus agrifolia*	coast live oak	16.0	7, 5, 4	15'		X	D	PIP	D
#3340	*Olea europaea*	common olive	11.5	3, 2.5, 2, 2, 2	15'			D	D	NA
#3341N	*Quercus agrifolia*	coast live oak	4.5		15'		X	D	PIP	D
#3342N	*Quercus agrifolia*	coast live oak	8.0	4, 4	15'		X	D	PIP	D
#3343N	*Quercus agrifolia*	coast live oak	4.0		15'		X	D	PIP	D
#3344N	*Quercus agrifolia*	coast live oak	6.5	4.5, 2	15'		X	D	PIP	D
#3345N	*Quercus agrifolia*	coast live oak	26.0	10, 9, 7	20'		X	D	PIP	D
#3346N	*Sequoia sempervirens*	coast redwood	19.5		40'		X	D	PIP	D
#3347SN	*Pinus radiata*	Monterey pine	50.0		45'	X	X	D	PIP	D
#3348S	*Hesperocyparis macrocarpa*	Monterey Cypress	40.0		40'	X		D	PIP	D
#3349N	*Quercus agrifolia*	coast live oak	12.5	7, 3, 2.5	15'		X	D	PIP	D
#3350N	*Quercus agrifolia*	coast live oak	12.5	6.5, 6	20'		X	D	PIP	D
#3351N	*Quercus agrifolia*	coast live oak	16.0	8.5, 7.5	25'		X	D	PIP	D
#3352N	*Sequoia sempervirens*	coast redwood	33.0	17, 16	30'		X	D	PIP	D
#3353	*Acacia dealbata*	silver wattle	9.0 *		40'			D	PIP	D
#3354	*Acacia dealbata*	silver wattle	6.5 *		40'			D	PIP	D
#3355N	*Quercus agrifolia*	coast live oak	44.0	22, 12, 10	50'		X	D	PIP	D
#3356N	*Quercus agrifolia*	coast live oak	17.0		40'		X	D	PIP	D
#3357SN	*Quercus agrifolia*	coast live oak	22.0		40'	X	X	D	PIP	D
#3358N	*Quercus agrifolia*	coast live oak	18.0		45'		X	PIP	PIP	PIP
#3359N	*Quercus agrifolia*	coast live oak	45.0	19, 16, 10	45'		X	PIP	PIP	PIP
#3360N	*Quercus agrifolia*	coast live oak	9.0		40'		X	PIP	PIP	PIP
#3361N	*Quercus agrifolia*	coast live oak	12.0		35'		X	PIP	PIP	PIP
#3362N	*Quercus agrifolia*	coast live oak	15.5		40'		X	D	PIP	D
#3363N	*Quercus agrifolia*	coast live oak	44.5	18.5, 18, 8	45'		X	D	PIP	D

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#3364N	*Quercus agrifolia*	coast live oak	37.5	18, 14.5, 5	45'		X	PIP	PIP	PIP
#3365N	*Quercus agrifolia*	coast live oak	5.5		20'		X	D	PIP	D
#3366N	*Quercus agrifolia*	coast live oak	5.0		15'		X	D	PIP	D
#3367N	*Quercus agrifolia*	coast live oak	4.5		15'		X	D	PIP	D
#3368N	*Quercus agrifolia*	coast live oak	18.0		25'		X	D	PIP	D
#3369SN	*Quercus agrifolia*	coast live oak	34.0		35'	X	X	D	PIP	D
#3370N	*Quercus agrifolia*	coast live oak	18.0		35'		X	D	PIP	D
#3371N	*Quercus agrifolia*	coast live oak	17.5	10.5, 7	30'		X	D	PIP	D
#3372N	*Quercus agrifolia*	coast live oak	11.0		25'		X	D	PIP	D
#3373N	*Quercus agrifolia*	coast live oak	7.0		25'		X	D	PIP	D
#3374N	*Quercus agrifolia*	coast live oak	7.0		25'		X	D	PIP	D
#3375N	*Quercus agrifolia*	coast live oak	6.0		15'		X	D	PIP	D
#3376N	*Sambucus nigra ssp. caerulea*	blue elderberry	38.0	12, 10, 10, 6	20'		X	D	PIP	D
#3377N	*Quercus agrifolia*	coast live oak	9.0	7, 2	25'		X	D	PIP	D
#3378N	*Quercus agrifolia*	coast live oak	6.0		20'		X	D	PIP	D
#3379N	*Quercus agrifolia*	coast live oak	7.0		20'		X	D	PIP	D
#3380N	*Quercus agrifolia*	coast live oak	4.0	2, 2	15'		X	D	PIP	D
#3381N	*Frangula californica*	coffeeberry	6.5	2.5, 2, 2	15'		X	D	PIP	D
#3382SN	*Quercus agrifolia*	coast live oak	32.0		40'	X	X	D	PIP	D
#3383N	*Quercus agrifolia*	coast live oak	6.0		20'		X	D	PIP	D
#3384N	*Quercus agrifolia*	coast live oak	9.5	6, 3.5	20'		X	D	PIP	D
#3385N	*Quercus agrifolia*	coast live oak	7.0		20'		X	D	PIP	D
#3386N	*Quercus agrifolia*	coast live oak	9.5	3, 2.5, 2, 2	15'		X	D	PIP	D
#3387N	*Quercus agrifolia*	coast live oak	7.0		15'		X	D	PIP	D
#3388N	*Quercus agrifolia*	coast live oak	5.0		15'		X	D	PIP	D
#3389N	*Quercus agrifolia*	coast live oak	7.0	3.5, 3.5	15'		X	D	PIP	D
#3390N	*Sambucus nigra ssp. caerulea*	blue elderberry	4.5		12'		X	D	PIP	D
#3391N	*Sambucus nigra ssp. caerulea*	blue elderberry	4.5		12'		X	D	PIP	D
#3392N	*Quercus agrifolia*	coast live oak	4.0		12'		X	D	PIP	D
#3393N	*Quercus agrifolia*	coast live oak	4.5		15'		X	D	PIP	D
#3394N	*Quercus agrifolia*	coast live oak	8.0	2.5, 2, 2, 1.5	15'		X	D	D	NA
#3395N	*Quercus agrifolia*	coast live oak	6.0	3, 3	15'		X	D	D	NA
#3396N	*Quercus agrifolia*	coast live oak	5.0		15'		X	D	D	NA
#3397N	*Quercus agrifolia*	coast live oak	6.0	4, 2	15'		X	D	PIP	D

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Capitola Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#3398N	*Quercus agrifolia*	coast live oak	7.0	5, 2	15'		X	D	PIP	D	
#3399N	*Quercus agrifolia*	coast live oak	4.5 *		15'		X	D	PIP	D	
#3400N	*Pinus radiata*	Monterey pine	16.0		30'		X	D	PIP	D	
#3401N	*Quercus agrifolia*	coast live oak	25.0	7, 5, 5, 5, 3	20'		X	D	PIP	D	
#3402N	*Quercus agrifolia*	coast live oak	19.0	6.5, 5.5, 4, 3	20'		X	D	PIP	D	
#3403N	*Sambucus nigra ssp. caerulea*	blue elderberry	11.0	5, 3, 3	15'		X	D	PIP	D	
#3404N	*Quercus agrifolia*	coast live oak	17.5	6, 3, 2.5, 2, 2, 2	20'		X	D	PIP	D	
#3405N	*Quercus agrifolia*	coast live oak	5.5		20'		X	D	PIP	D	
#3406N	*Quercus agrifolia*	coast live oak	8.0	5, 3	20'		X	D	PIP	D	
#3407N	*Quercus agrifolia*	coast live oak	6.0	3, 3	15'		X	D	PIP	D	
#3408N	*Quercus agrifolia*	coast live oak	10.5	6, 4.5	15'		X	D	PIP	D	
#3409N	*Quercus agrifolia*	coast live oak	6.0		15'		X	D	PIP	D	
#3410N	*Quercus agrifolia*	coast live oak	6.0		15'		X	D	PIP	D	
#3411N	*Quercus agrifolia*	coast live oak	14.5	5, 4, 3, 2.5	15'		X	D	PIP	D	
#3412N	*Quercus agrifolia*	coast live oak	5.0		15'		X	D	PIP	D	
#3413N	*Quercus agrifolia*	coast live oak	53.0	23, 16, 14	35'		X	D	PIP	D	
#3414N	*Quercus agrifolia*	coast live oak	19.0 *		30'		X	D	PIP	D	
#3415N	*Quercus agrifolia*	coast live oak	6.5		12'		X	D	PIP	D	
#3416SN	*Quercus agrifolia*	coast live oak	20.0 *		35'	X	X	D	PIP	D	
#3417N	*Quercus agrifolia*	coast live oak	14.0 *		35'		X	D	PIP	D	
#3418N	*Quercus agrifolia*	coast live oak	9.0 *		35'		X	D	PIP	D	
#3419N	*Quercus agrifolia*	coast live oak	10.0 *		25'		X	D	PIP	D	
#3420N	*Quercus agrifolia*	coast live oak	8.0		25'		X	D	PIP	D	
#3421N	*Quercus agrifolia*	coast live oak	7.5 *		25'		X	D	PIP	D	
#3422N	*Quercus agrifolia*	coast live oak	6.5		20'		X	D	PIP	D	
#3423N	*Quercus agrifolia*	coast live oak	9.0		20'		X	D	PIP	D	
#3424N	*Quercus agrifolia*	coast live oak	5.5		20'		X	D	PIP	D	
#3425N	*Quercus agrifolia*	coast live oak	18.0		30'		X	D	PIP	D	
#3426N	*Quercus agrifolia*	coast live oak	7.0 *	4, 3 *	20'		X	D	PIP	D	
#3427S	*Eucalyptus globulus*	southern blue gum	67.0		150'	X		D	PIP	D	
#3428S	*Eucalyptus globulus*	southern blue gum	29.0		120'	X		D	PIP	D	
#3429	*Eucalyptus globulus*	southern blue gum	9.0	7, 2	70'			D	PIP	D	
#3430N	*Frangula californica*	coffeeberry	11.0 *	6, 5 *	25'		X	D	PIP	D	

#3431N	*Salix lasiolepis*	arroyo willow	4.0		20'		X	D	PIP	D	
#3432CN	*Salix lasiolepis*	arroyo willow	10.0	6, 4	20'	X	X	D	PIP	D	
#3433CN	*Salix lasiolepis*	arroyo willow	8.0		25'	X	X	D	PIP	D	
#3434CN	*Salix lasiolepis*	arroyo willow	9.0 *	5, 4 *	20'	X	X	D	PIP	D	
#3435CN	*Salix lasiolepis*	arroyo willow	16.0		35'	X	X	D	PIP	D	
#3436C	*Eucalyptus globulus*	southern blue gum	96.0	54, 32, 10	150'	X		PIP	PIP	PIP	
#3437N	*Quercus agrifolia*	coast live oak	5.0 *		15'		X	D	PIP	D	
#3438CN	*Salix lasiolepis*	arroyo willow	12.0 *	7, 5 *	25'	X	X	D	PIP	D	
#3439CN	*Salix lasiolepis*	arroyo willow	6.0 *	4, 2 *	25'	X	X	D	PIP	D	
#3440CN	*Salix lasiolepis*	arroyo willow	22.0	6, 5, 4, 4, 3	25'	X	X	D	PIP	D	
#3441CN	*Salix lasiolepis*	arroyo willow	10.0		20'	X	X	D	PIP	D	
#3442C	*Prunus domestica*	European plum	8.0 *		25'	X		D	PIP	D	
#3443CN	*Quercus agrifolia*	coast live oak	9.0		25'	X	X	D	PIP	D	
#3444C	*Eucalyptus globulus*	southern blue gum	47.0	24, 16, 7	120'	X		D	PIP	D	
#3445C	*Eucalyptus globulus*	southern blue gum	19.0		100'	X		D	PIP	D	
#3446C	*Eucalyptus globulus*	southern blue gum	18.0 *	10, 8 *	75'	X		D	PIP	D	
#3447CN	*Quercus agrifolia*	coast live oak	9.0 *		30'	X	X	D	PIP	D	
#3448C	*Eucalyptus globulus*	southern blue gum	60.0 *		120'	X		D	PIP	D	
#3449CN	*Quercus agrifolia*	coast live oak	34.0 *	22, 12 *	30'	X	X	D	PIP	D	
#3450C	*Eucalyptus globulus*	southern blue gum	13.0 *		70'	X		D	PIP	D	
#3451C	*Eucalyptus globulus*	southern blue gum	6.0 *		25'	X		D	PIP	D	

SUPPLEMENTAL INVENTORY

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Significant Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#3563N	*Quercus agrifolia*	coast live oak	5.5	3, 2.5	15'		X	D	D	NA	
#3565N	*Quercus agrifolia*	coast live oak	9.0	2, 2, 1.5, 1.5, 1, 1	10'		X	D	PIP	D	
#3566N	*Quercus agrifolia*	coast live oak	4.5	2.5, 2	15'		X	D	PIP	D	
#3567N	*Quercus agrifolia*	coast live oak	5.0	3, 2	15'		X	D	PIP	D	

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Capitola Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#3564CN	*Quercus agrifolia*	coast live oak	19.0	5, 5, 4, 3, 2	15'	X	X	PIP	PIP	PIP	D

SUPPLEMENTAL INVENTORY

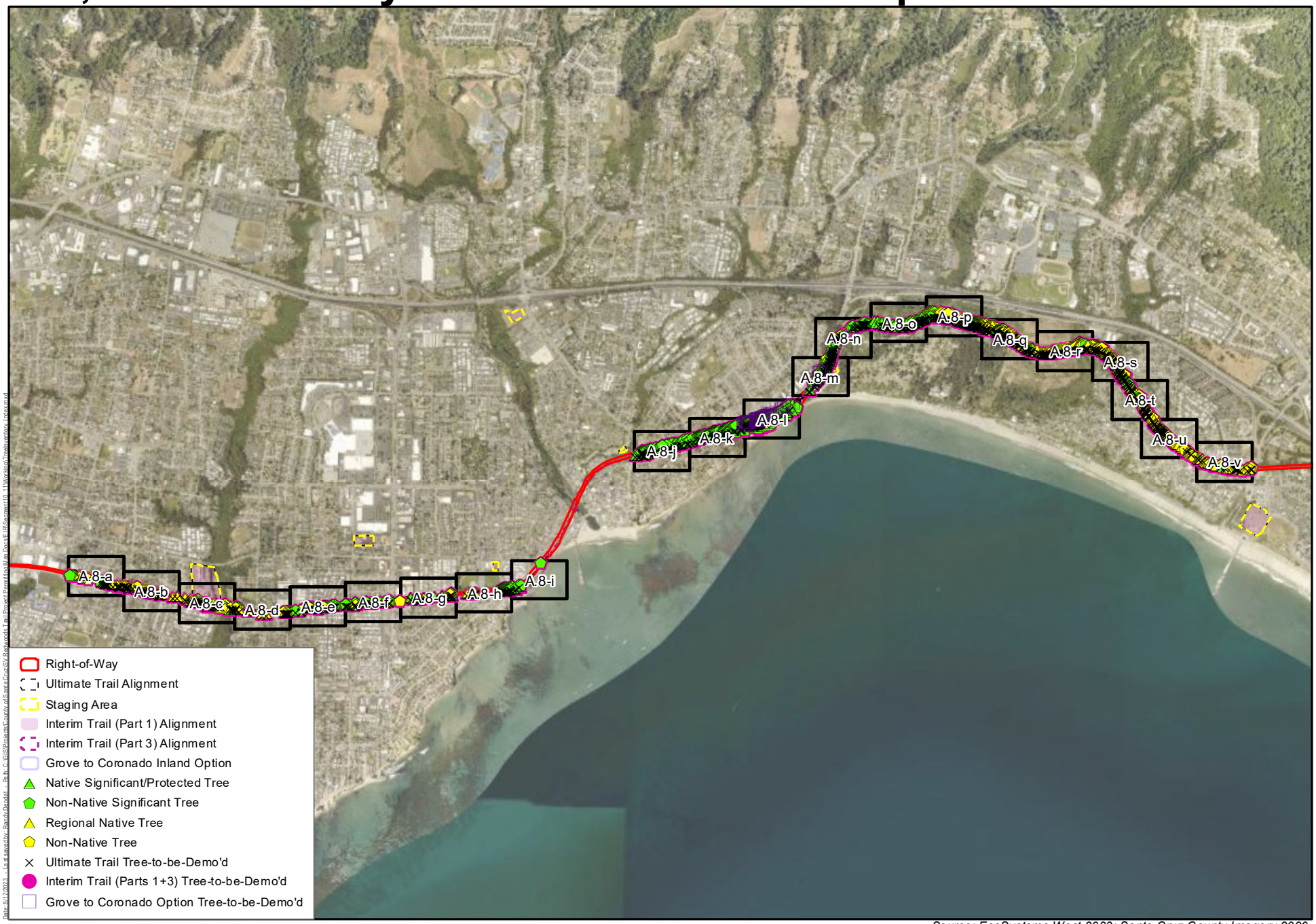
Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi-leader Individual DBH (in.)	Tree Height	Capitola Tree (X=YES)	Regional Native (X=YES)	Ultimate (No phase)	Interim (Phase 1)	Ultimate (Phase 3)	Ultimate Option B (No phase)
#3595C	*Eucalyptus globulus*	southern blue gum	56.0		120'	X		PIP	PIP	PIP	
#3596C	*Eucalyptus globulus*	southern blue gum	63.0	9, 23, 31	100'	X		PIP	PIP	PIP	

#3597CN	*Quercus agrifolia*	coast live oak	61.0	9, 23, 29	40'	X	X	PIP	PIP	PIP	
#3598CN	*Quercus agrifolia*	coast live oak	7.0		15'	X	X	PIP	PIP	PIP	
#3599C	*Acer macrophyllum*	big leaf maple	7.0		35'	X		PIP	PIP	PIP	
#3600C	*Eucalyptus globulus*	southern blue gum	22.0	7, 8, 7	60'	X		PIP	PIP	PIP	
Tree Tag	**Botanical Name**	**Common Name**	**Diameter at Breast Height (in.)**	**Multi-leader Individual DBH (in.)**	**Tree Height**	**Significant Tree (X=YES)**	**Regional Native (X=YES)**	**Ultimate (No phase)**	**Interim (Phase 1)**	**Ultimate (Phase 3)**	**Ultimate Option B (No phase)**
#3601N	*Quercus agrifolia*	coast live oak	16.0		25'		X	D	PIP	D	

DEMO	803	288	669	66
PIP	1080	1595	926	205

TOTAL TREE COUNT	1883	1883	

A.8, Tree Inventory for Ultimate Trail and Optional Interim Trail



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 1,000 2,000

Feet

Figure A.8

Tree Inventory - Index

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-a

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-b

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-c

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-d

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

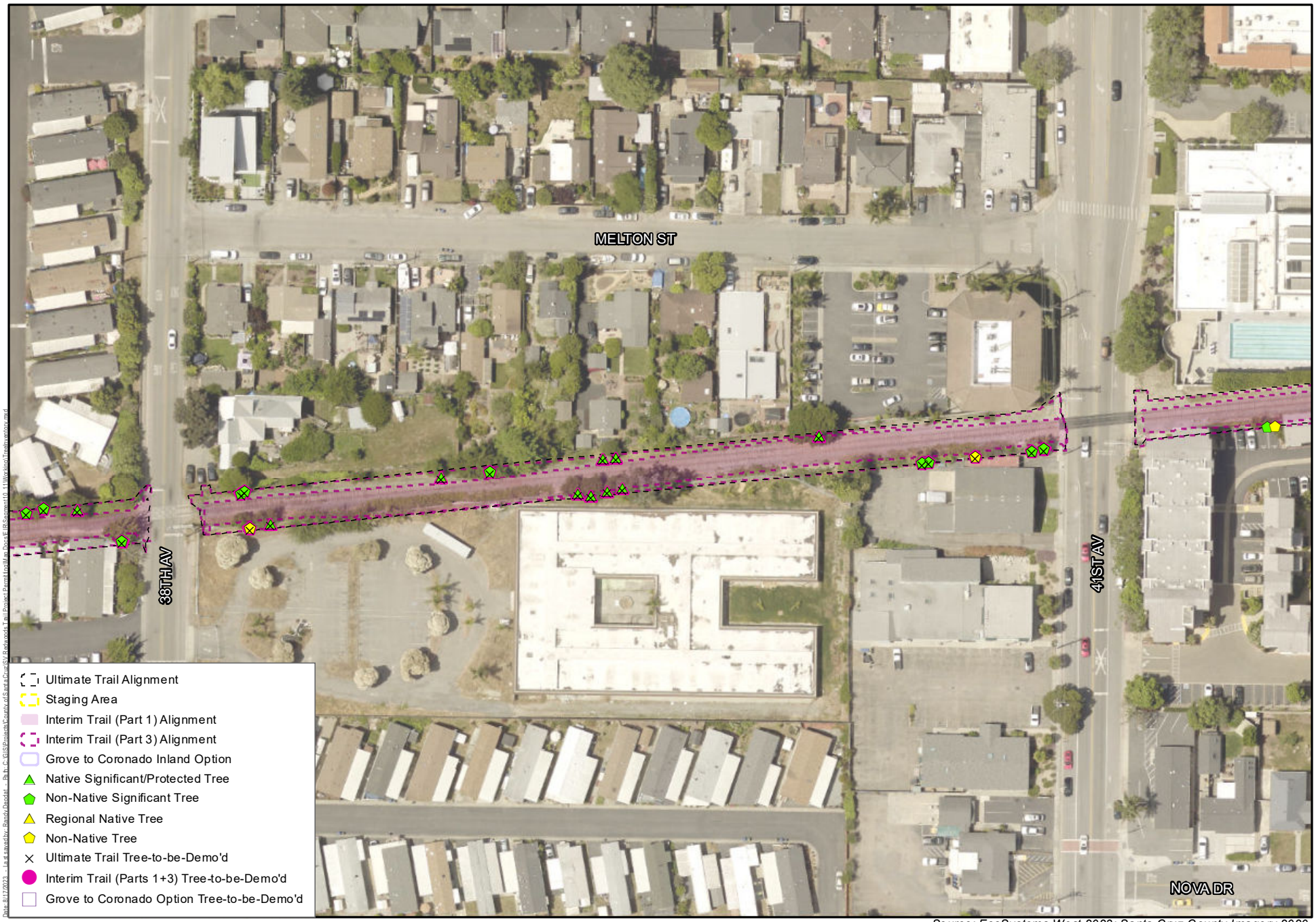
0 50 100

Feet

Figure A.8-e

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-f

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-g

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-h

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-i

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-j

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-k

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

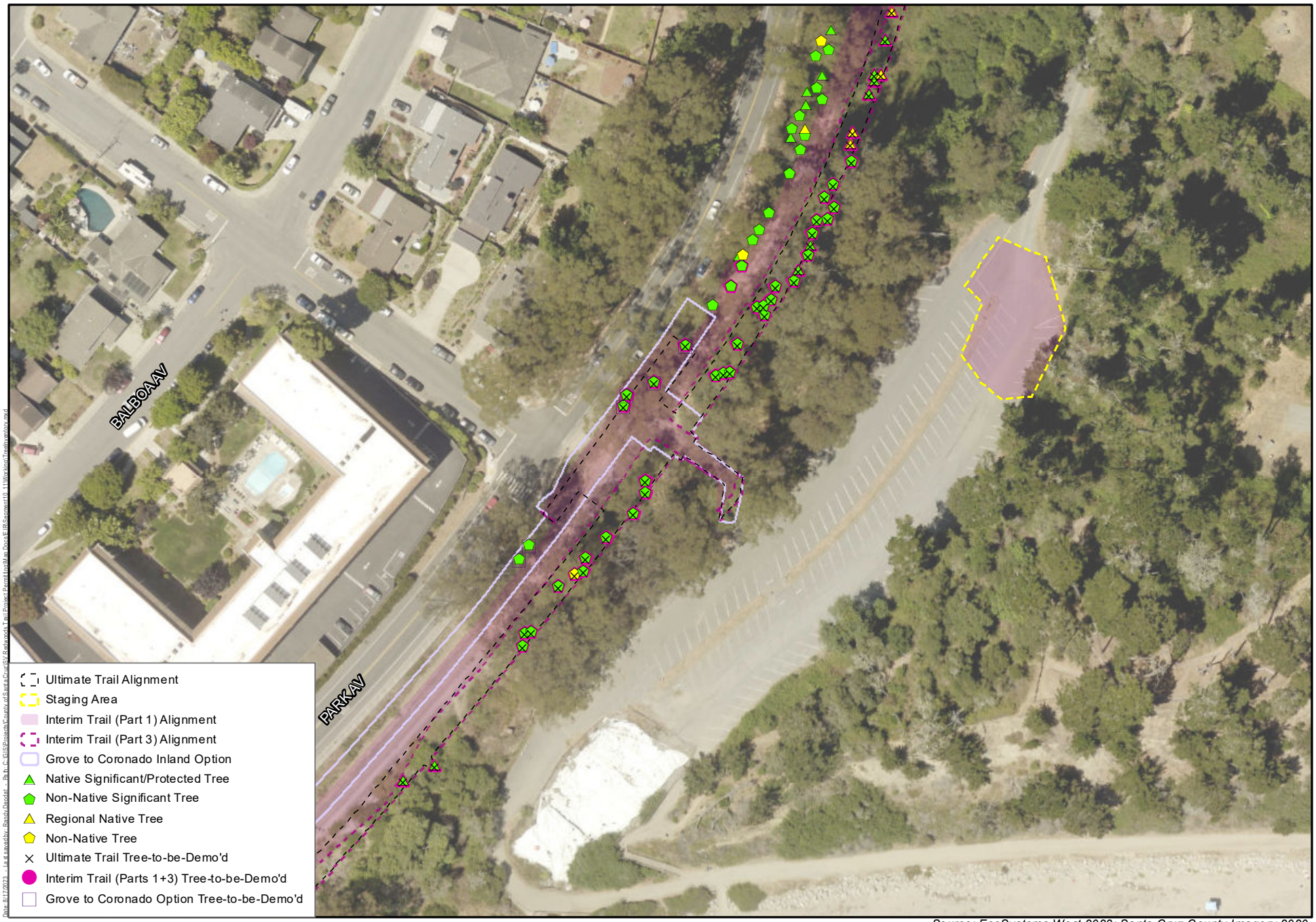
0 50 100

Feet

Figure A.8-I

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

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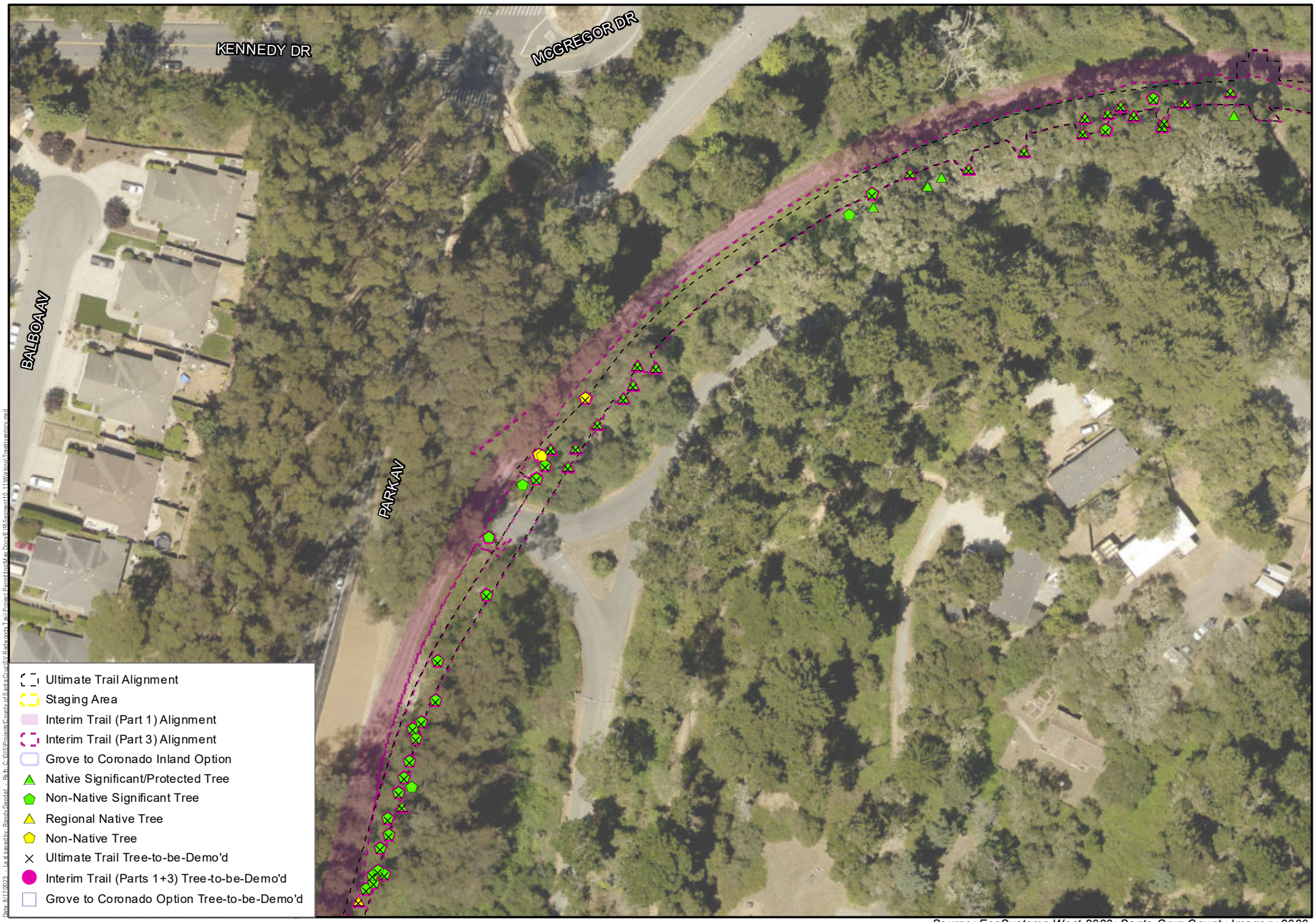
Feet

Figure A.8-m

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

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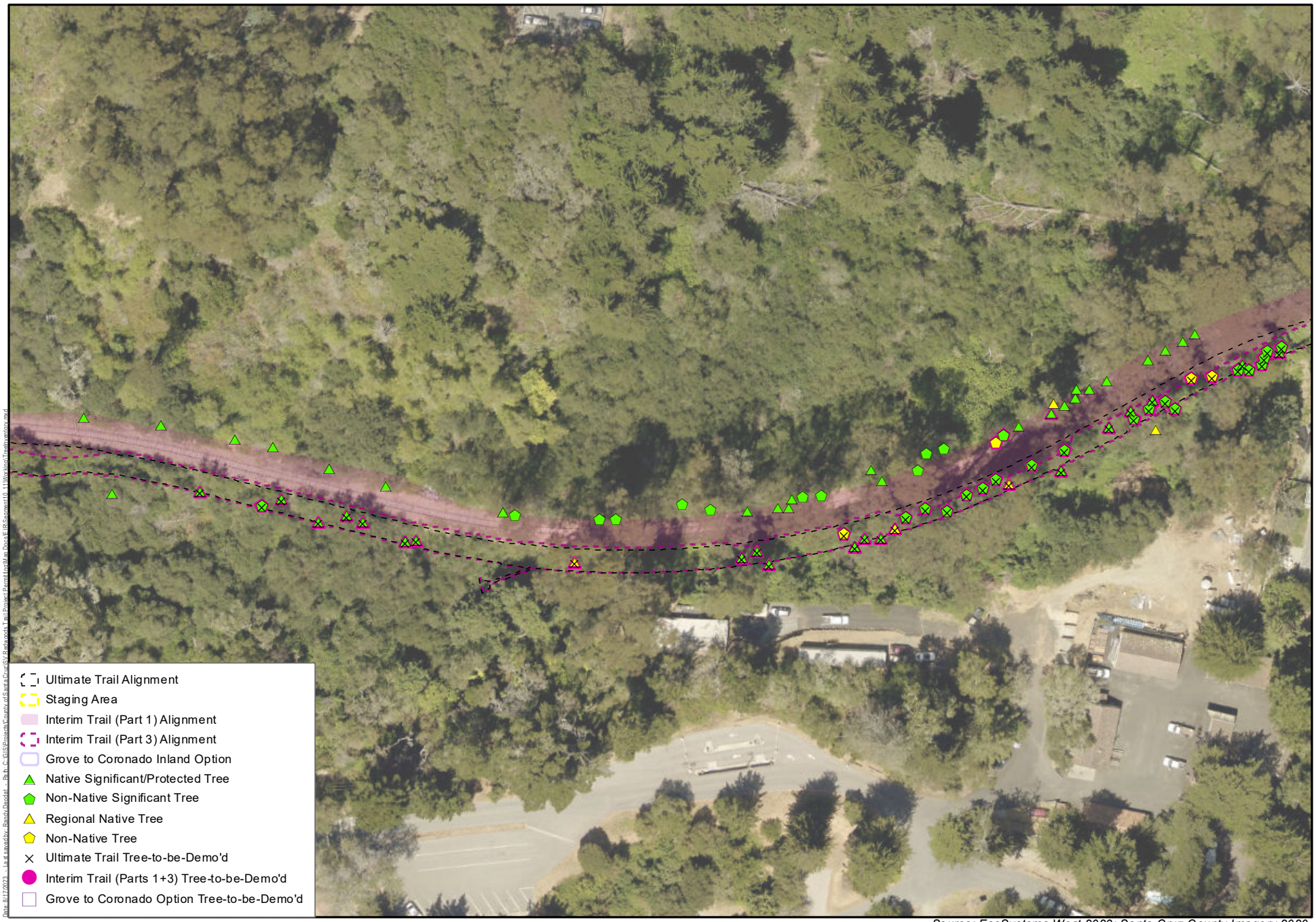
Feet

Figure A.8-n

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

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0 50 100

Feet

Figure A.8-o

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

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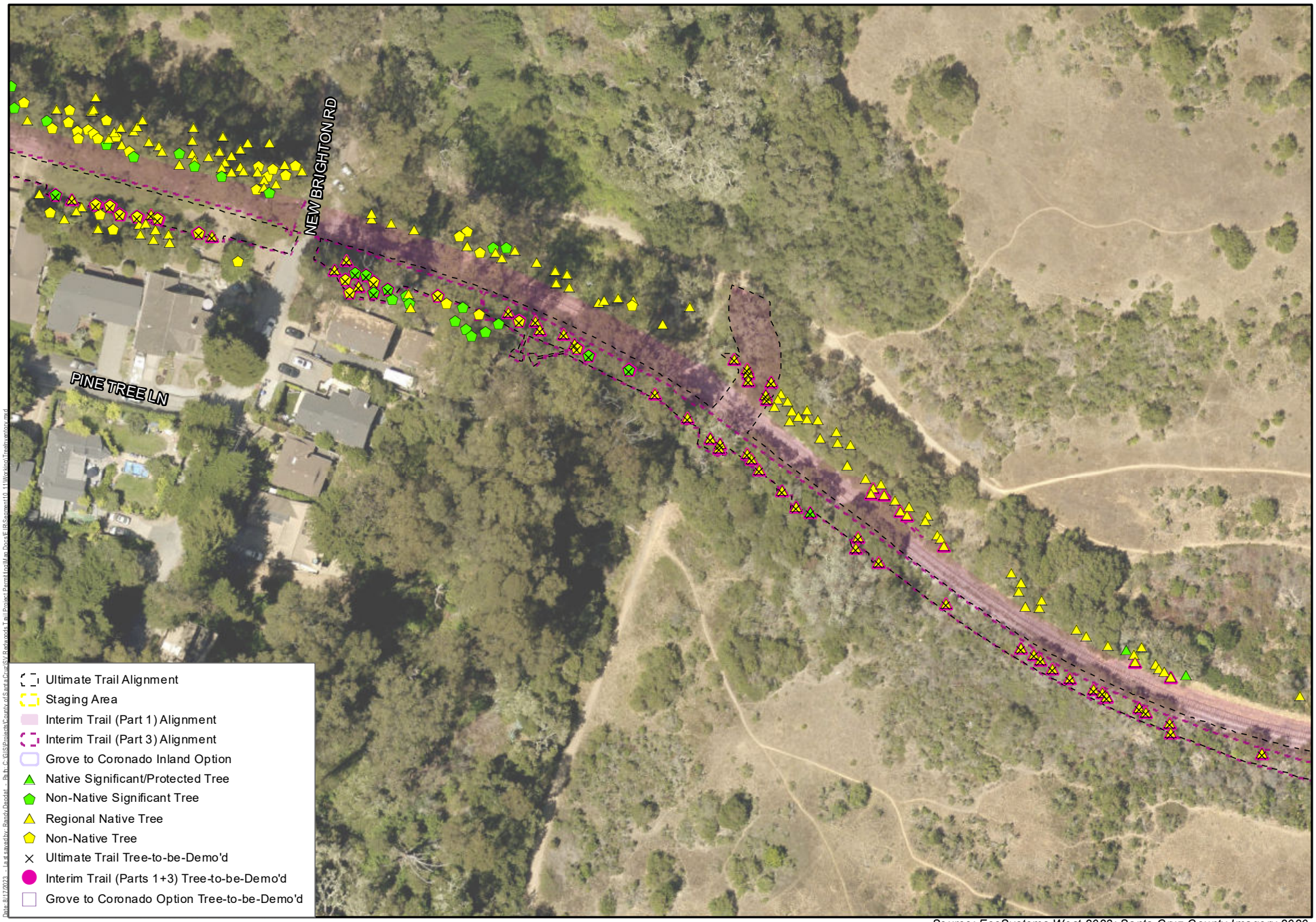
Feet

Figure A.8-p

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

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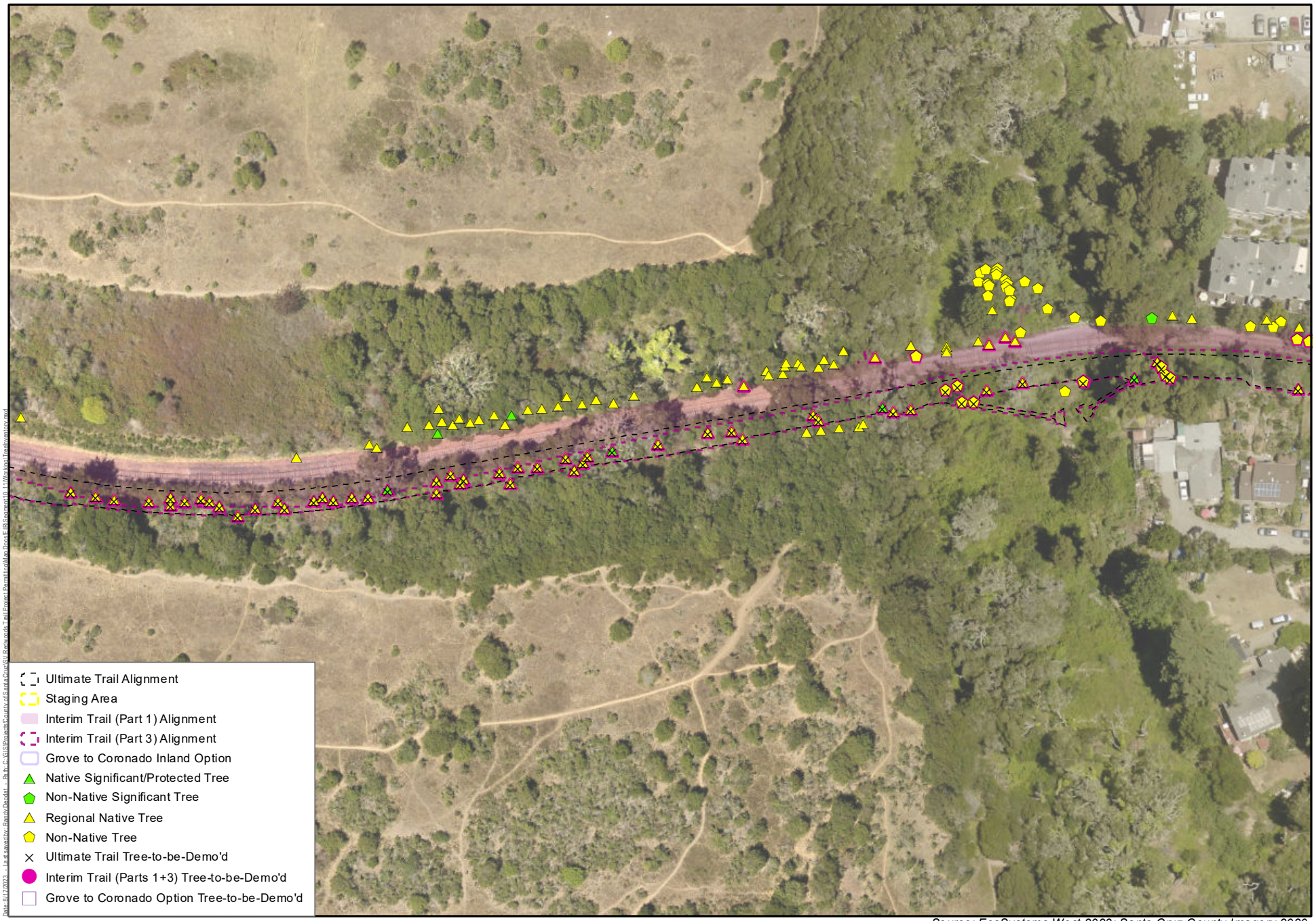
0 50 100

Feet

Figure A.8-q

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-r

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-s

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-t

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-u

Tree Inventory

Coastal Rail Trail Segments 10 and 11



Source: EcoSystems West 2023; Santa Cruz County Imagery 2020.

Harris & Associates

N

0 50 100

Feet

Figure A.8-v

Tree Inventory

Coastal Rail Trail Segments 10 and 11

Appendix B. NOP and Scoping Comments

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County of Santa Cruz

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR , SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: 711
PAIA LEVINE, ACTING PLANNING DIRECTOR
www.sccoplanning.com

NOTICE

Date:	November 5, 2021
To:	Interested Parties All Recipients on the Distribution List
Lead Agency:	County of Santa Cruz
Contact:	Rob Tidmore, Project Manager 701 Ocean Street, Room 410, Santa Cruz, CA 95060 (831) 454-2340, Robert.Tidmore@santacruzcounty.us
Subject:	Notice of Preparation of an EIR and Scoping Meeting
Project Title:	Rail Trail Segments 10 and 11 Project

NOTICE IS HEREBY GIVEN THAT the County of Santa Cruz (County) will be the Lead Agency and will host a scoping meeting and prepare an Environmental Impact Report (EIR) to assess the potential project impacts of the project described below on the environment, pursuant to the requirements of the California Environmental Quality Act (CEQA).

THE PURPOSE OF THIS NOTICE IS to solicit public input on environmental concerns and alternatives to be evaluated in the EIR for the Rail Trail Segments 10 and 11 Project. Responsible agencies may need to use the EIR when considering permits or other approvals for the project, and trustee agencies should plan to review and comment on the EIR with respect to trust resources within their jurisdiction.

The focus of this notice and the scoping meeting is specifically to gather input on potential environmental issues and project alternatives to be evaluated in the environmental review process, not the merits of the project itself or the project design. There will be future opportunities for community input on the schematic plans.

THE PURPOSE OF THIS PROJECT IS to provide an accessible bicycle/pedestrian path for active transportation, recreation, and environmental and cultural education along the existing Santa Cruz Branch Rail Line (SCBRL) rail corridor, consistent with the Monterey Bay Sanctuary Scenic Trail (MBSST) Network Master Plan.

PUBLIC INPUT DUE DATE: Written comments should be submitted or postmarked within 30 days of the receipt of this Notice, as provided by State law, and thus should be received no later than **5:00 p.m. on TUESDAY, DECEMBER 7, 2021**. Please submit your comments in writing to the contact person's name and address below. Please include the commenter's name, agency or organization (if applicable), phone number, and email (typed or written legibly) in your response. The focus of the NOP and your comments is specifically to gather input on potential environmental issues and project alternatives to be evaluated in the EIR, not the merits of the project itself or the project design. There will be future opportunities for community input on the design.

County of Santa Cruz Project website
https://www.dpw.santacruzcounty.us/RailTrail

or

Rob Tidmore, Project Manager
County of Santa Cruz, Department of Public Works
701 Ocean Street, Room 410
Santa Cruz, California 95060
RailTrail@santacruzcounty.us

PROJECT LOCATION AND DESCRIPTION:

The **Rail Trail Segments 10 and 11 Project** is an approximately 4.5-mile bicycle and pedestrian system that generally extends along the SCBRL corridor, from the eastern side of 17th Avenue to the western side of State Park Drive in unincorporated Santa Cruz County (**Figure 1**).

The project is part of the larger MBSST Network, for which a Master Plan was adopted and a programmatic EIR was certified in 2013 by the Santa Cruz County Regional Transportation Commission (SCCRTC). In 2014, the SCCRTC made minor revisions to the Master Plan and prepared an EIR addendum. The Master Plan was prepared to establish a continuous alignment, including a bicycle and pedestrian trail, along the SCCRTC-owned SCBRL extending the length of Santa Cruz County. Information from the Master Plan EIR will be used as appropriate in the EIR for Segments 10 and 11.

The EIR for Segments 10 and 11 will evaluate the proposed project, called *Rail with Trail*, as well as a *Railbank with Trail* alternative, at an equal level of detail. When an alternative is evaluated at an equal level of detail, CEQA requires that the lead agency identify a preferred alternative. The County considers the proposed project, *Rail with Trail*, the preferred alternative for purposes of environmental review.

- **Proposed Project: Rail with Trail**. The multi-use trail would be located alongside the railroad tracks. The trail would be 10-12 feet wide (but may be reduced to 8 feet in areas with existing constrained conditions). The Project may include shifting of the tracks within the right-of-way as necessary to accommodate the trail.
- **Alternative 1: Railbank with Trail**. The multi-use trail would be located generally along the rail centerline, and the existing tracks and ties would be removed to enable construction of

the trail. The trail width would be determined during preliminary design, with the goal of reducing significant project effects in accordance with CEQA Guidelines (Sec 15126.6). This railbanking alternative allows for future installation of tracks and relocation of the trail alongside the tracks.

As required by CEQA, the County will also consider other project alternatives, which must meet most of the project objectives while substantially lessening or avoiding any of the significant impacts of the proposed project. As part of this scoping process, the County is soliciting input from agencies and the public on additional alternatives that should be considered for evaluation within the alternatives section of the EIR. Comments regarding suggested alternatives should include a clear description in narrative and graphic formats to the extent possible. Comments on this subject will be most helpful if they include the author's thoughts regarding how well they might meet the requirements of CEQA.

PROBABLE ENVIRONMENTAL EFFECTS:

Although, at this very early stage of the environmental review process, it is impossible to know with certainty the precise nature and extent of the environmental effects that will be identified as preparation of the Draft EIR gets underway, it is possible to identify key categories of environmental effects that the proposed project may affect. These include Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions/Climate Change, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Recreation, Transportation/Circulation, and Tribal Cultural Resources.

SCOPING MEETING:

Pursuant to the public participation goals of CEQA, as set forth in particular in Public Resources Code section 21083.9, subdivision (a), the County will host an EIR Scoping Meeting at the date, time and location indicated below to gather additional input on the scope of the EIR analysis. The meeting will be held virtually due to public health concerns.

Wednesday, November 17, 2021 5:00-6:30 PM

Click the link below to join the webinar:
https://rrmdesign.zoom.us/j/83193208360
Webinar ID: 831 9320 8360
Call-in Options via Telephone: +1 408 638 0968 or +1 669 900 6833

ACCOMMODATIONS FOR PERSONS WITH DISABILITIES

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs, or activities. If you are a person with a disability, specifically a communication disability, and you would like to request a reasonable modification or accommodation to fully participate in the meeting via videoconference or telephone, please contact the Department of Public Works at (831) 454-2160 or robert.tidmore@santacruzcounty.us at least 24 hours in advance of the meeting to discuss your accessibility needs. Persons with disabilities may request a copy of the agenda and presentation in an alternative format.

Figure 1. Rail Trail Segments 10 and 11 Project Location Map

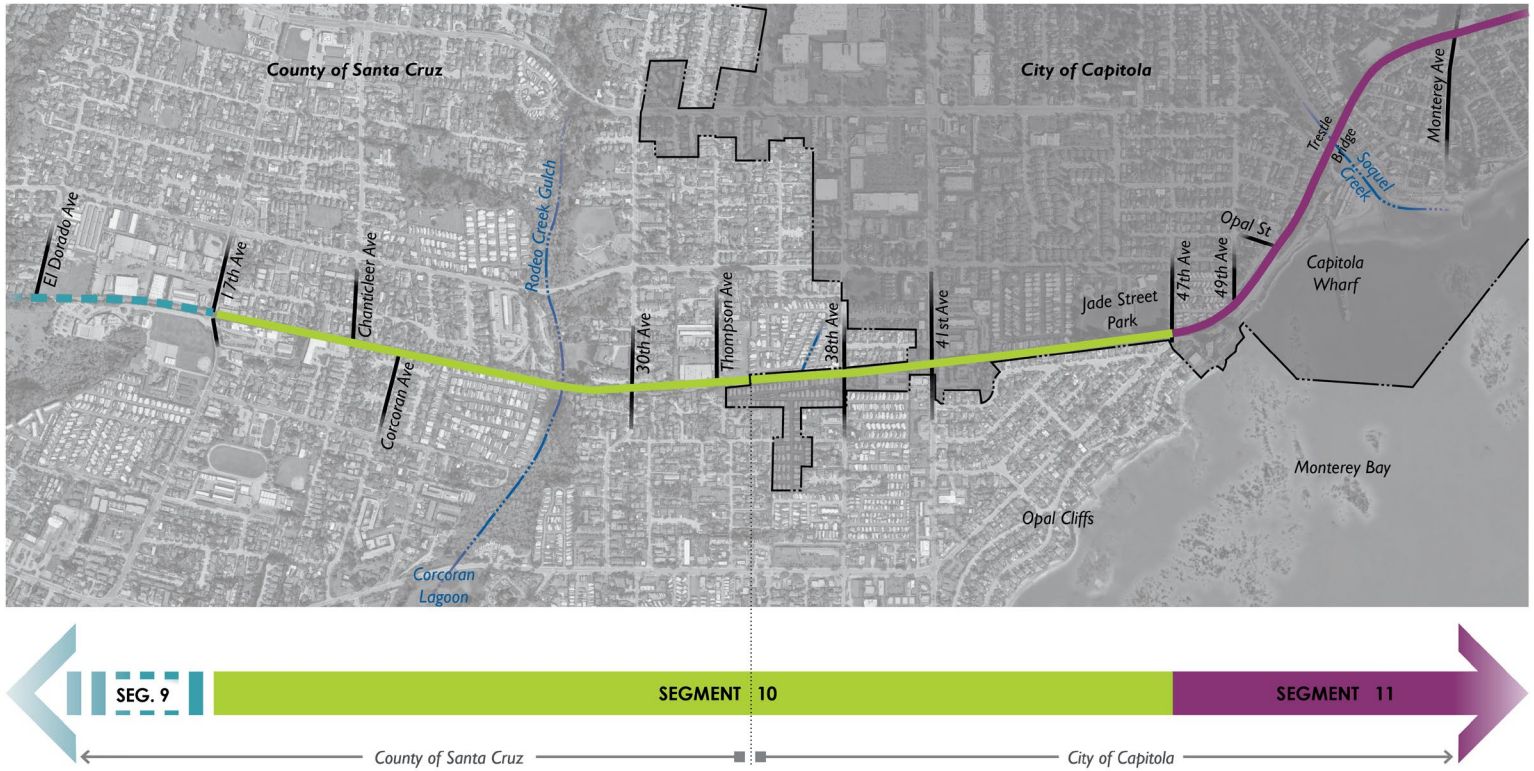
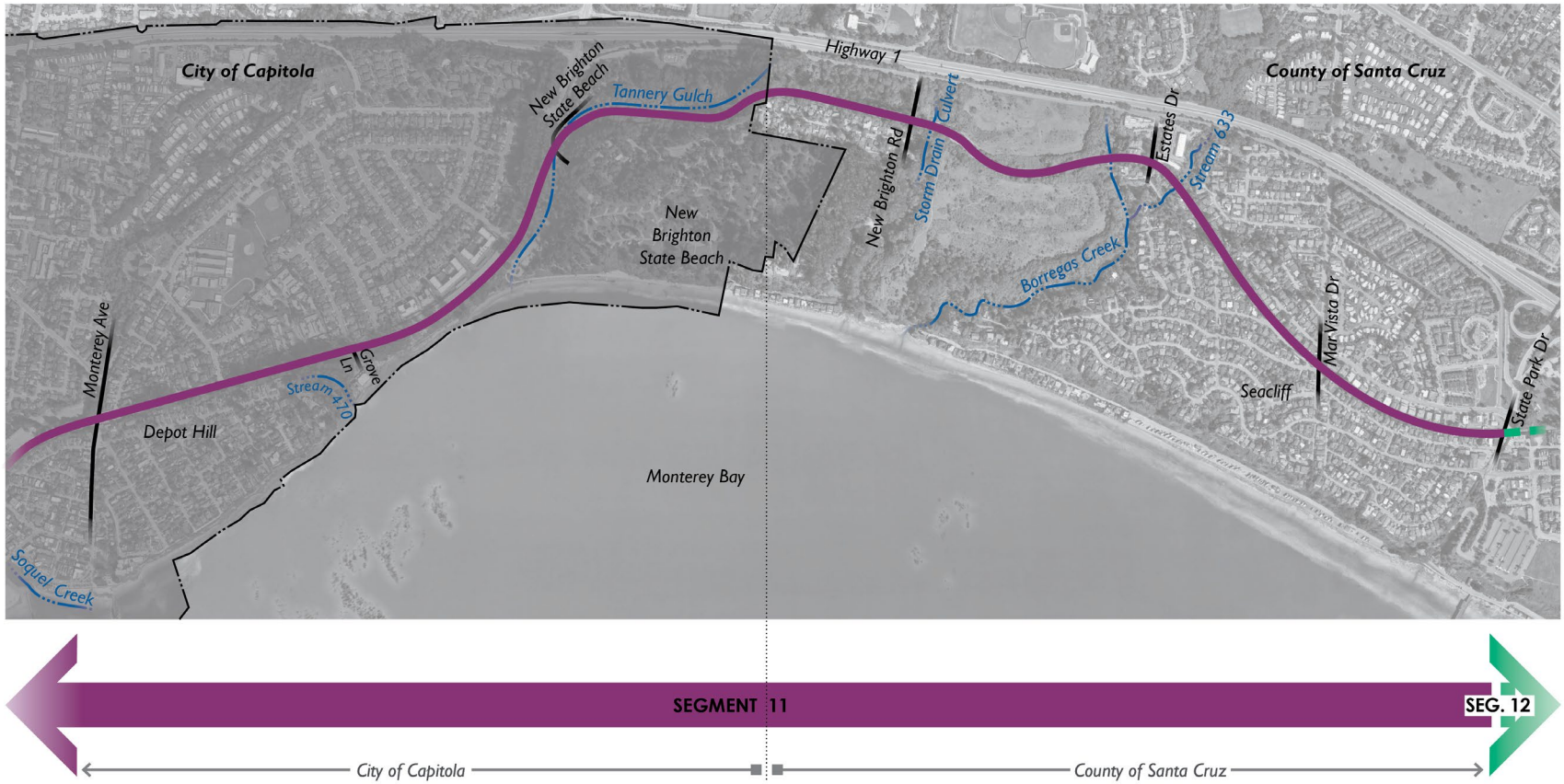


Figure 2. Rail Trail Segments 10 and 11 Project Location Map (continued)



Rail Trail Segments 10/11 – Summary of Notice of Preparation (Scoping) Comments Received

Commenter	Date	Comment	EIR Section, Topic, General Response
Agencies and Organizations			
California Coastal Commission (Rainey Graeven)	12/7/2021 Letter	Supports Monterey Bay Sanctuary Scenic Trail (MBSST) as a critical component of the California Coastal Trail (CCT).	Comment noted
		Analyzing alternatives and opportunities should be approached within the larger context of alternative transportation opportunities along the Santa Cruz Branch Line (SCBL) corridor. A "no project" alternative is not a viable alternative because the MBSST is a critical component of the CCT.	Alternatives
		Segments 10 and 11 and the broader MBSST can help advance state and local sustainability measures of improved coastal access, recreation, mobility, environmental conditions, safety, and economic vitality and health.	Comment noted Land Use Recreation Transportation
		The corridor should be used to its full sustainable transportation potential. Accordingly, the evaluation of railbanking or similar alternatives should document potential impacts to the long-term development of complete multi-modal transit options.	Land Use Transportation
		The DEIR will need to evaluate in detail how the "Railbank with Trail" alternative will affect the feasibility of reintroducing rail along this corridor at a future date, so that reviewers can better understand the implications of the decisions being made now.	Land Use Transportation
		Clearly describe "railbanking" including scenarios that may trigger future trail relocation to accommodate rail/transit use and the various steps required, and including an explanation of the legal requirements from the Surface Transportation Board.	Introduction Project Description
		DEIR should clearly explain the implications of Capitola's Measure L, including whether signage, striping, or other improvements through Capitola Village would be included as part of the preferred alternative.	Introduction Project Description
		A formal boundary determination will inform whether any project components extend into the Commission's CDP permitting. Any portions of the Project located within the Coastal Zone boundary should be identified and noticed as such in all supporting materials, including the DEIR.	Biological Resources Land Use

Rail Trail Segments 10/11 – Summary of Notice of Preparation (Scoping) Comments Received

Commenter	Date	Comment	EIR Section, Topic, General Response
		The DEIR should explain why a secondary or expanded/cantilevered path off the trestle is not a financially viable alternative.	Alternatives
		DEIR should evaluate alternatives for on-street improvements through Capitola Village.	Alternatives
		DEIR alternatives analysis should allow for easy comparisons in trail utility, opportunities, local transportation dynamics and trail user experience.	Transportation Alternatives
		The DEIR should identify the preferred alternative that is most protective of coastal resources, complies with other Coastal Act policies such as minimizing VMT, and provides for a continuous, safe, and scenic trail system.	Alternatives
		Any overwater crossing should also make use of appropriate bridge coloration and railing design to minimize impacts to public views and the character of the area; employ appropriate best management practices during construction including to protect water quality and sensitive marine and terrestrial/avian species; and consider potential tsunami events.	Project Description Aesthetics Biological Resources Hydrology/WQ
		The DEIR should identify: 1) the corridor's width throughout Segments 10 and 11 including the ROW or other public lands width on either side of the existing tracks; 2) the estimated width of the trail and the width on either side of the trail in all alternatives considered; and 3) what will happen at pinch points, whether man-made (e.g., trestles), natural (e.g., slopes and habitat areas), or rail/transit-related.	Project Description Land Use Alternatives
		The DEIR should clearly identify the locations where the proposed trail would cross pedestrian/vehicular intersections. The DEIR should also evaluate the various alternatives to maximize pedestrian and bicycle connectivity to coastal destinations throughout Segments 10 and 11, including beaches.	Project Description Alternatives
		The DEIR needs to evaluate the project against the applicable LCP and Coastal Act standards. CDP applications that span the commission CDP jurisdiction and that of local government can be consolidated (see footnote 8 on page 3)	Biological Resources Land Use
		The proposed project would have the potential to result in habitat impacts, primarily because the project would be adjacent to and would cross over a number of creeks, lagoons, and tidally-influenced waters. The DEIR should	Biological Resources Hydrology/WQ

Rail Trail Segments 10/11 – Summary of Notice of Preparation (Scoping) Comments Received

Commenter	Date	Comment	EIR Section, Topic, General Response
		identify these resources and avoid impacts to them. Where impacts are unavoidable, the DEIR should identify adequate mitigation for the impacts. The DEIR should pay special attention to wetlands and environmentally sensitive habitat areas (ESHA).	
California Department of Fish and Wildlife (Stephanie Fong)	12/6/2021 Letter	DEIR should include reasonably foreseeable future phases of the Project, and that contains sufficient information to evaluate and review the Project's environmental impact, including: - Footprint of permanent project features - Type of trail base (asphalt, concrete, gravel, or dirt) - New light sources along trail - Location, type, length, and height of fencing - Habitat encroachment caused by widening trail into riparian habitat or other sensitive area Habitat descriptions and species profiles should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB).	Project Description Aesthetics Biological Resources
		DEIR should discuss all direct and indirect impacts (temporary and permanent) including 'take' of special species, loss of habitat, permanent and temporary habitat disturbances, and obstruction of wildlife corridor use. Early consultation with CDFW is encouraged.	Biological Resources
		Because the project has potential to impact water resources, notification is required through CDFW's Lake and Streambed Alteration (LSA) program.	Biological Resources Hydrology/WQ
		Prior to Project implementation, surveys should be conducted for special-status species and plants that have the potential to occur within the Project area.	Biological Resources
		The DEIR should specify proposed fencing plans and identify current wildlife trails throughout the Project Area. The Project should install wildlife-friendly fencing at these locations to make it easier for wildlife species to traverse, thereby decreasing wildlife entanglement and mortality. (See A Landowner's Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind, link on page 5).	Project Description Biological Resources
		Map areas with creeks, drainages, culverts, and where there is potential for concentrated runoff to occur. Incorporate permeable surfaces throughout the Project to allow stormwater to percolate in the ground and prevent stream hydromodification (see link on page 5).	Hydrology/WQ

Rail Trail Segments 10/11 – Summary of Notice of Preparation (Scoping) Comments Received

Commenter	Date	Comment	EIR Section, Topic, General Response
		Eliminate non-essential artificial lighting. Avoid or limit the use of artificial lights during the hours of dawn and dusk, when many wildlife species are most active. CDFW also recommends that outdoor lighting be shielded, cast downward, and not spill over onto other properties or upwards into the night sky (see the International Dark-Sky Association standards).	Project Description Aesthetics Biological Resources
California State Parks (Linda Hitchcock)	11/22/2021 Email	Notes riparian willow habit on both sides of trail through New Brighton State Beach and Porter Senson property.	Biological Resources
		If trail goes outside right-of-way onto State Parks property, operating agreement will be necessary. Prefers project stay within the right-of-way or moves to public streets, if necessary.	Land Use Section 4f
		Trail crossing needed in New Brighton State Beach from entrance kiosk to campground.	Comment noted Project Description
		Trail crossing needed at Porter Senson area to accommodate people accessing the beach.	Comment noted Project Description
Santa Cruz County Regional Transportation Commission (Guy Preston)	11/30/2021 Letter	Supports Rail with Trail design as well as analysis of alternative alignments. Urges County to develop Project.	Comment noted
City of Santa Cruz Water Department (Heidi Luckenbach)	12/7/2021 Letter	Plan, design and construct the Project to appropriately avoid any impacts to the existing raw and treated water pipelines within the project vicinity that cross the trail alignment.	Hydrology/WQ Utilities
Native American Heritage Commission (Katy Sanchez)	11/12/2021 Letter	Consult with Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project, according to requirements of AB 52 and SB 18.	Cultural Resources Tribal Resources
		Contact the regional California Historical Research Information Center for an archaeological records search. Complete a Cultural Resources Assessment for the proposed project alignment.	Cultural Resources Tribal Resources
		Lead Agencies (County of Santa Cruz) should include provisions for proper treatment and disposition of inadvertently discovered archaeological resources and human remains. In identified sensitive areas, a qualified archaeologist and a culturally affiliated Native American should monitor all ground-disturbing activities.	Cultural Resources Tribal Resources

Rail Trail Segments 10/11 – Summary of Notice of Preparation (Scoping) Comments Received

Commenter	Date	Comment	EIR Section, Topic, General Response
Manu Koenig (First District Supervisor, County of Santa Cruz)	11/10/2021 Email	Sections of Segments 10 and 11 appear to require railbanking in any scenario in order to avoid lawsuits. Suggesting that Alternative 1 is dependent on railbanking but that the proposed project could happen either way is therefore not accurate.	Comment noted
	11/18/2021 Email	Planning studies done in the past have not adequately reflected all potential environmental impacts. The DEIR should be an objective study that considers all sources of information. Santa Cruz County Coastal Climate Change Vulnerability Report is one example of a resource that should be considered.	Comment noted GHG
Equity Transit (Organization - Lani Faulkner)	11/21/2021 Letter	Supports Rail with Trail project because it will preserve the ability to provide robust public transportation benefits to the community.	Comment noted
		Does not support Railbank with Trail alternative because it would require greater investment of time, money, human resources, material use and waste, and a concomitant increase in GHGs and toxins.	Comment noted GHG
		Proposed trail would minimize disturbance to rail beds and soils, while alternative plan would release toxic chemicals from rail bed into the air.	Air Quality Hazardous Materials
		A trail only scenario will increase auto traffic, vehicle collisions, and GHG emissions and decrease use of public transit. The alternative plan puts ability to implement rail quickly and efficiently at risk.	Comment noted Air Quality GHG Transportation
		Tearing up the rails is inconsistent with the County General Plan. Preserving the rail line for light rail use is of critical importance. There are no examples of railbanking working to restore rail service after replacement with a paved trail.	Comment noted
		Removing the rail line, building a temporary trail, and later removing the trail to rebuild the rail line would create greater noise impacts than preserving the rail line alongside the trail.	Noise
		Preserving the rail maximizes access and recreation opportunities.	Recreation Transportation
Friends of Rail and Trail (Faina Segal)	12/7/2021 Letter	"Railbank with Trail" alternative should be renamed as "Railbank with INTERIM Trail" in DEIR.	Project Description

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		DEIR should include the full environmental impact of an Interim trail, including demolition of the existing rail line, handling and disposal of hazardous waste, increased GHG emissions and VMT, implementation of an interim trail, discontinuing the interim trail use, restoring the rail line, and constructing a permanent trail alongside the rail so that this alternative can be fully evaluated and understood by the community and decision makers.	All sections
		DEIR should include the full environmental benefits of the project as documented in the RTC's Unified Corridor Investment Study (UCIS) and the *Transit Corridor Alternatives Analysis / Rail Network Integraton Study* (TCAA/RNIS), including reduction in VMT and GHG emissions, increased access, and a reduction in the release of hazardous materials.	Air Quality GHG Hazardous Materials Land Use Transportation
		The DEIR should analyze timelines for the proposed project and all alternatives. What would be the impact of delaying implementation of passenger rail transit?	All Sections Passenger rail transit is not being analyzed
		Ensure that Alternative 1: "Railbank with Interim Trail" conforms with the "Trail Only" use as described in *Appendix B, Table B-13: Trail Only of the UCIS* in terms of width, length and other specified characteristics.	Comment noted
Anchor West Homeowners Association (Alexis Pursley)	12/6/2021 Email	Board expresses need to ensure ongoing maintenance to Eucalyptus grove on ocean side of Park Avenue. Overgrowth would create fire and safety hazards.	Hazardous Materials Public Safety Wildfire
Individuals			
Sara Allshouse	12/12/2021 Email	Opposed to trail because of noise, trash, dumping, weed control materials, fire hazard, crime, aesthetics, and cost.	Comment noted Aesthetics Noise Public Safety Wildfire
Marianne Cohn	12/3/2021 Email	HOA performs semiannual tree trimming along portion of trail near Park and Balboa Avenues. Access must be preserved to ensure trimming takes place and overgrowth does not create fire and safety hazards.	Comment noted Hazardous Materials Public Safety
Bud Colligan	11/17/2021 Email	List of topics to be studied in DEIR appears comprehensive.	Comment noted

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		Rail and trail are not possible on the same corridor and would result in extensive environmental damage, including extensive cutting of heritage oaks and other mature trees, movement of tons of earth to excavate for retaining walls, tons of new concrete for bridges and walls, displacement of sensitive wildlife and plants, and emission of GHGs.	Comment noted All sections
		Rail trail option would force users onto streets in Capitola Village, dramatically lowering usage of the trail for active transportation and recreation purposes.	Comment noted
		The practical width of the trail is more important than the so-called right-of-way. Hillsides, trees, low income housing, and steep embankments and gulches prevent a reasonable-cost trail from being built.	Comment noted
		For context, review studies performed by Alta Planning and Design and Nelson Nygaard, linked within the email.	Comment noted
		Analyze traffic estimates for actual ridership versus light rail ridership forecasts against actual experience in other communities like Sonoma/Marin and San Jose.	Comment noted Not analyzing rail use
		Consistent with the Santa Cruz County Coastal Climate Change Vulnerability Report, heavy infrastructure such as trains should be moved inland to preserve coastal bluffs, marshes, and estuaries. The rail trail option is inconsistent with this recommendation.	GHG Land Use
		Consider social equity concerns. Light rail would benefit mostly high income individuals, while the associated costs (tax burden, health impacts, displacement) would be borne primarily by low income individuals and marginalized communities.	Comment noted Not analyzing socioeconomic impacts
		Graphics in the DEIR should be true to corridor measurements and topography so as not to mislead the public.	Comment noted
Pete Haworth	12/22/2021 Email	DEIR should include environmental impacts of bringing the Capitola Trestle Bridge into condition where it can support both rail and trail so that a fair comparison can be made between the proposed project and the alternative project.	Comment noted Alternatives
		DEIR should make clear that it is unlikely rail would need to be replaced if the railbank-and-trail alternative is selected.	Comment noted

Rail Trail Segments 10/11 – Summary of Notice of Preparation (Scoping) Comments Received

Commenter	Date	Comment	EIR Section, Topic, General Response
Dan Holdren	11/24/2021 Email	Requested to be on information distribution list	Comment noted
Rick Hyman	12/1/2021 Email	DEIR should include one or more additional alternatives, in the event that RTC decides against pursuing railbanking before the EIR is complete.	Alternatives
		One possible alternative could be to analyze a trail on the opposing side of the tracks from the preferred alternative.	Alternatives
		Another possible alternative could be a wider or narrower pathway along all or part of the route.	Alternatives
Kim (BKG)	11/25/2021 Email	DEIR should address impacts to monarch butterflies and other sensitive and endangered species along the proposed project alignment.	Biological Resources
Jean Mahoney	11/6/2021 Email	Requested physical copy of EIR. Requested to be added to ongoing announcements list.	Comment noted
Ken Maus	12/7/2021 Email	Passenger rail was shown to be possible between Santa Cruz and Capitola in November 2021. Extension of transit to Watsonville would be possible with completion of Segments 10 and 11.	Comment noted
		Periodic “car stop” signs should be placed near the track.	Project Description Public Safety Transportation
Deborah Secrest and Dean Price	11/12/2021 Email	Concerned with noise and other impacts associated with reduced distance between home at Tradewinds Mobile Home Park and rail right-of-way.	Noise
		Proposed a detour around this stretch of right-of-way so that the trail is not so close to homes.	Comment noted
Barry Scott	11/17/2021 Email	Supports proposed project Rail with Trail.	Comment noted
		Concerned with long-term environmental and collective impacts of Alternative project	Comment noted

Rail Trail Segments 10/11 – Summary of Notice of Preparation (Scoping) Comments Received

Commenter	Date	Comment	EIR Section, Topic, General Response
		Alternative schematic would interfere with plans to reduce GHG and lower VMT via rail.	GHG Transportation
		Alternative schematic would be inconsistent with County General Plan, local general plans, and County Regional Transit Plan, which all support preservation of existing rail infrastructure for passenger rail transit.	Land Use
		Alternative schematic would be inconsistent with Local Coastal Plan, which calls for preservation of rail infrastructure to protect and expand public access.	Land Use
		Alternative schematic introduces potential to generate toxic and hazardous materials if rail line is replaced and trail is rebuilt.	Hazardous Materials
		Alternative schematic removes capacity to provide public transit to the County.	Comment noted
Rob Stuart	11/27/2021 Email	Supports Railbanking with Trail alternative. Opposed to Rail Trail because of expense.	Comment noted
		Concerns about noise impacts in neighborhoods.	Noise
		Project should include more parking lots at stops.	Transportation
Richard & Kim Underwood	Not dated Letter	Opposed to any train running through the corridor, including light rail or trolley.	Comment noted
		Support Alternative 1 (Railbank with Trail).	Comment noted
		Major concerns that must be addressed in the EIR include aesthetics, biological resources, noise, and land use and planning.	Aesthetics Biological Resources Noise Land Use
		Proximity of trail to homes creates concerns about trash, illegal dumping and camping, and security.	Public Safety Utilities

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		Trail segments should be complementary to the Monterey Bay Sanctuary and provide a way for humans, flora, and fauna to coexist within a unique ecosystem.	Comment noted Biological Resources
Gillian Worsey	11/18/2021	Requested video recording of scoping meeting.	Comment noted

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December 7, 2021

Rob Tidmore, Project Manager
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RailTrail@santacruzcounty.us

Subject: Notice of Preparation (NOP) *o*f a Draft Environmental Impact Report (DEIR) for Rail Trail Segments 10 and 11

Dear Mr. Tidmore:

Thank you for the opportunity to provide comments on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the proposed Rail Trail Segments 10 and 11 Project. As a preliminary matter, we would like to emphasize that we continue to be very supportive of the development of the Monterey Bay Sanctuary Scenic Trail (MBSST) as a critical component and central "spine" of the California Coastal Trail (CCT) network and for expanding multi-modal transportation opportunities in the region. We see this upcoming DEIR as another step in the process of ensuring that the MBSST/CCT are appropriately integrated into the preservation and implementation of a full suite of short- and long-term multi-modal opportunities for Santa Cruz County and the greater Monterey Bay area. The MBSST/CCT are envisioned as key ingredients of a sustainable and interlinked transportation system in the coastal zone, a goal echoed in federal, state, and local policies and programs alike, including the California Coastal Act and the respective Local Coastal Programs (LCPs) that the proposed system crosses. As we have stated in the past, we see the CEQA process, including the forthcoming DEIR, as an important opportunity to thoroughly evaluate the pros, cons, and environmental impacts of all the alternatives, and, particularly, to address questions that will invariably arise as the permitting process proceeds for any selected projects.

We believe that analyzing the alternatives and opportunities of this trail system should be approached within the larger context of alternative transportation opportunities along Santa Cruz Branch Line (SCBL) corridor and other interconnections throughout Santa Cruz County. Improving transportation in Santa Cruz County by offering safer, greener, and healthier options for bicycling, walking, and public transit in ways that connect residential areas with employment areas, schools, parks, beaches, and community centers along the coast would provide many benefits. Designed with these factors in mind, the MBSST/CCT can also help advance the state and local sustainability measures of improved coastal access and recreation, mobility, environmental conditions, safety, economic vitality and health, as well as to reduce vehicle miles traveled (VMTs) and greenhouse gas (GHG) emissions.

At the same time, we also recognize that a project of this nature invariably raises some questions and issues, and we appreciate that the CEQA process can help identify and address such questions and issues, provide a forum for public discussion, and develop materials to help facilitate the forthcoming coastal development permit (CDP) processes. With that in mind, we offer the following comments to consider in the development of the DEIR.

Project Description

Per the NOP, the purpose of the project is to provide an accessible bicycle and pedestrian path for active transportation, recreation, and environmental and cultural education along the existing SCBL corridor. Specifically, the Rail Trail Segments 10 and 11 Project (Project) is a 4.5-mile bicycle and pedestrian path that would extend along the SCBL corridor from the eastern side of 17th Avenue near Shoreline Middle School and the Simpkins Swim Center to the western side of State Park Drive near Seacliff State Beach in unincorporated Santa Cruz County. In addition to unincorporated County areas, Segments 10 and 11 would also traverse through the City of Capitola. Specifically, Segment 10 between 17th Avenue and roughly the midpoint between Thompson Avenue and 38th Avenue is located within Santa Cruz County, and City of Capitola jurisdiction begins roughly at that midpoint and continues to the downcoast property line of New Brighton State Beach, with Segment 11 beginning in the City of Capitola at the corner of Jade Street Park and 47th Avenue. County jurisdiction resumes from New Brighton State Beach to the end of Segment 11 at the intersection of State Park Drive in Aptos near Seacliff State Beach.

The proposed Project would comprise 10-to-12-foot wide[1] multi-use bicycle and pedestrian trail, and it would be aligned on the inland side of the tracks between 17th Avenue and 47th Avenue; on the seaward side of the tracks between 47th Avenue and Mar Vista; and on the inland side of the tracks between Mar Vista and State Park Drive. Between Opal Street and Monterey Avenue in the City of Capitola, no improvements are proposed at this time due to perceived challenges with funding a new or expanded trestle over Soquel Creek,[2] and the City's passage of Measure L, which prohibited the City from allocating any funds to re-route bicyclists, pedestrians, and other human-powered transportation from the rail corridor to Capitola streets and sidewalks.[3] Trail users would be directed onto Cliff Drive, through Capitola Village, and up Monterey Avenue where the trail would resume adjacent to the tracks adjacent to Monterey

[1] Per the NOP and under the preferred alternative, the trail would be 10 to 12 feet wide, but it could be reduced to 8 feet in width where the width of the trail area is constrained. Per the NOP, the preferred alternative may require the tracks to be shifted within the right-of-way as necessary to accommodate the trail. The estimated trail width for the "Railbank with Trail" alternative has not yet been determined.

[2] The DEIR should explain why a secondary or expanded/cantilevered path off the trestle are not financially viable alternatives.

[3] At this time, it is not clear that Measure L would affect this project, particularly if funding is available for this project through the RTC or elsewhere. Accordingly, we recommend the DEIR evaluate alternatives for on-street improvements through Capitola Village (in addition to trestle improvements as described in Footnote 2).

Avenue's intersection with Park Avenue.[4] Overall, the proposed project alternative preserves existing railroad infrastructure and space for potential future development.

CDP Jurisdictions and Permitting

In terms of coastal permitting, the proposed project would extend across the County of Santa Cruz and the City of Capitola's CDP jurisdictions.[5] Portions of Segment 10 appear to be located landward of the Coastal Zone boundary. Any portions landward of the Coastal Zone boundary would not be subject to coastal permitting requirements. At this time, the proposed project does not appear to include any components located within the Commission's retained CDP jurisdiction[6]; however, as the project develops and the proposed alignment and associated project plans are finalized, a formal boundary determination will inform whether any project components extend into the Commission's CDP permitting jurisdiction. In the event that CDPs are issued by the respective local governments, we note that LCPs derive their regulatory authority from the Coastal Act, and thus the City's and County's LCPs share many similarities to the Coastal Act related to development requirements and coastal resource protection. There are, however, standards unique to the Coastal Act and the respective LCPs, and thus it will be important that the DEIR evaluates each of the project components against the respective applicable LCP and Coastal Act standards. In addition, if there are project components located within the Commission's retained jurisdiction[7], it is possible that the project proponents may decide to pursue a consolidated CDP application,[8] for

[4] For the "Railbank with Trail" alternative, the trail alignment would remain along the rail line through Capitola including by way of the Capitola Trestle, which crosses over Soquel Creek.

[5] The Project would likely qualify as a "Major Public Works Project," and thus in the event a consolidated CDP is not pursued for this project, any portions of the Project located within the Coastal Zone boundary would be appealable to the Commission for this and other reasons (e.g., portions of the trail are located within geographically appealable areas) and should be identified and noticed as such in all supporting materials, including the DEIR.

[6] We would note that the Commission retains jurisdiction over portions of Soquel Creek, and thus if improvements to the Capitola Trestle or the Stockton Avenue Bridge in Capitola are proposed as a part of this project (i.e., safety/stability improvements to the trestle or new striping, widening, or reconfigured pedestrian/bicycle travel lanes over/on the Stockton Avenue Bridge in Capitola), the portions of the Project located within the Coastal Zone may be eligible for a consolidated CDP subject to the parameters identified in Footnote 8 below.

[7] For example, if improvements to the Capitola Trestle are proposed as a part of the Project or if the Project is combined with the Segment 8 & 9 Project under a consolidated CDP (i.e., a single consolidated CDP is pursued for Segments 8, 9, 10, and 11), etc.

[8] Pursuant to Coastal Act Section 30601.3, CDP applications that span the Commission's CDP jurisdiction and that of local governments can be consolidated if the project applicant, the Coastal Commission's Executive Director, and the affected local governments (here the City and the County) agree to such a consolidated process. Consolidation is only allowed if doing so (i.e., assigning all discretionary CDP decisions to the Commission and the Commission's once monthly agenda cycle at various venues up and down the state (or virtual hearings during the current pandemic crisis)) would not substantially impair public participation. If not so consolidated, then three separate CDP processes and three separate CDP decisions (where the City and County CDP decisions could be appealed to the Commission) will be required.

which the standard of review would be the Coastal Act, and thus, in anticipation of that case, all of the project components should be evaluated against Coastal Act provisions to help facilitate potential permit consolidation decisions.

SCBL Corridor Alternative Options

The NOP indicates that the DEIR will evaluate the proposed project alternative (which would generally align the trail adjacent to the tracks and maintain existing rail infrastructure in place) as well as a "Railbank with Trail" (i.e., "transit banking") alternative. The proposed project alternative would reduce the size of the trail in a few segments to preserve existing rail infrastructure. The "Railbank with Trail" alternative would entail removal of the entire existing railroad tracks and related development to allow trail construction as desired anywhere within the corridor, with the notion that a future rail-reliant system could be built in the corridor in the future.

We recommend that the DEIR clearly describe the term "railbanking" as it is used here, including the various scenarios that may trigger future trail relocation/rebuilding to accommodate future rail/transit use,[9] and that the DEIR outline the various required steps (including decision-making agencies and permitting processes) that would be part of any such future process. This discussion would also benefit from an explanation of railbanking's legal requirements from the Surface Transportation Board and how they apply to the SCBL situation. The DEIR should also explain, to the extent feasible, how under that alternative existing rail-related development would be removed now in the banking alternative, how the area would be treated to prepare it for a trail, and how rail/transit subsequently could be accommodated in the future. The DEIR should evaluate the various ramifications of this approach in detail, including how the "Railbank with Trail" alternative will affect the feasibility of reintroducing rail (and/or some other form of public transit) along this corridor at a future date, so that reviewers can better understand the implications of the decisions being made now. The NOP also indicates that other project alternatives may also be considered, and those alternatives may be appropriate for further information gathering.[10] Of course, all alternatives considered should include an evaluation of potential impacts to environmental resource factors and project feasibility as well as consistency with LCPs and other relevant documents (e.g., the California State Rail Plan, etc.).

From our perspective, the SCBL is an incredibly important public resource that connects the various cities and the County in a way that would be next to impossible to create today through the relatively built out communities. It therefore is extremely important that it is utilized to its full sustainable transportation potential. In that evaluation, it is

[9] As we understand it, the term is better understood in terms of banking the possibility that there could be a future transit option in the corridor, whether that were to be rail, buses, or other forms of transit. The DEIR would benefit from better clarity on this point, but our comments here are written with that understanding.

[10] Alternatives that should be evaluated include both a rail-and-trail option or a trail along with another type of transit option (e.g., a dedicated trolley or bus lanes), or a trail-alone option. As above, these alternatives should consider their trail benefits along with any impacts to the feasibility of reintroducing rail and/or adding transit-related options along this corridor.

important to discuss various alternatives and the CEQA process provides an important tool towards providing decision-makers and the community with the information needed to make informed decisions about how best to proceed. In that regard, evaluation of railbanking as an alternative in the DEIR seems appropriate, though as discussed below railbanking or similar alternatives should document the array of potential impacts to the long-term development of complete multi-modal transit options.

However, at the very least, we do not see how a viable alternative would be one without a trail component (i.e., the no project scenario). In fact, and importantly, when the MBSST network is fully developed, it will offer one of the most significant and valuable pedestrian and bicycle transportation networks in the country. The MBSST will also be an important link in the statewide CCT system, a high priority trail system along the shoreline and more inland coastal areas extending from Oregon to Mexico that is currently about 60 percent complete.[11] Thus, it will constitute a continuous critical spine of the CCT through this region, a vision shared by the Commission, the State Coastal Conservancy, Caltrans, and the California Department of Parks and Recreation, with various private and public (including federal and state) partners. This trail system is one part of a potential larger multi-modal system and will provide both locals and the many visitors to the Santa Cruz area a sustainable transportation option for accessing some of the most stunning beaches, shorelines, coastal terraces, hills, redwood forests, and other resource areas in the state, and connect the more densely urbanized stretches of the County with the North Coast and South County areas, including the City of Watsonville.

SCBL Corridor Alternatives' Specific Needs

In working through the various analyses, the DEIR should be structured to allow for easy comparisons in trail utility and transit opportunities across all studied alternatives, both now and in the future (e.g., where a trail segment may need to be modified to accommodate rail/transit at a current or future date or how a trail segment may facilitate or inhibit potential rail/transit opportunities down the road). This analysis should extend to each alternative's respective effects on local transportation dynamics, trail user experience, costs/funding, legal requirements and environmental/coastal resource impacts to ensure that the public and decisionmakers understand the full picture. More specifically, it is important that the DEIR identify: 1) the corridor's width throughout Segments 10 and 11 including the ROW or other public lands width on either side of the existing tracks; 2) the estimated width of the trail and the width on either side of the trail in all alternatives considered; and 3) what will happen at pinch points, whether man-made (e.g., trestles), natural (e.g., slopes and habitat areas), or rail/transit-related. To the extent possible, the benefits and negatives for the timing and configuration of trail and potential future rail/transit should be clearly analyzed for each alternative. Trail

[11] A continuous trail along California's shoreline has long been a collective objective for California's coastal zone, including as articulated in 1972's Proposition 20 (the "Coastal Initiative") and 1976's Coastal Act. Further details on CCT alignment principles, including continuity and proximity to the sea, may be found in the document "Completing the California Coastal Trail" prepared by the State Coastal Conservancy in 2001 and on the Commission's Coastal Access Program webpage at https://www.coastal.ca.gov/ access/ctrail-access.html.

alignment options should also be thoroughly evaluated for each alternative. For example, with rail/transit banking, there may be more options for how to site and design a trail now (e.g., centered on the corridor, directly over the existing tracks, etc.); however, it is also likely that future alignment changes might become necessary to accommodate rail/transit or that it may preemptively inhibit this corridor from being used in other transportation capacities in the future. Such considerations will, of course, need to include the legal requirements and their consequences that must be met by the RTC.

Further, the DEIR should detail and compare the alternatives' applicable project-related details, including: how the trail will be distinguished/separated from current rail and/or future rail/transit; whether any of the narrow/constrained areas may trigger additional planning/funding needs in order to safely/legally allow for rail/transit; whether/how any adjacent road right-of-way is planned to be used; reasons for the trail being on one or the other side of the tracks/transit options, and necessary crossovers, etc. And, to the extent feasible, the DEIR should also explain the types of improvements that would be expected and/or anticipated to provide rail/transit options in the future (e.g., track/trestle upgrades, grading, filling, etc.) for all evaluated alternatives.

Possible Environmental Impacts

The NOP indicates that the proposed project will require DEIR evaluation of impacts in the following key environmental categories: aesthetics, air quality, biological resources, cultural resources, geology/soils, VMTs, GHG emissions and climate change related impacts, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, recreation, transportation/circulation, and tribal cultural resources. The list identified appears encompassing enough to frame project related impacts and appropriate mitigations, including in terms of potential alternatives to avoid identified impacts. We offer the following additional comments for DEIR consideration on these points.

Although Segments 10 and 11 would span relatively urbanized areas of Santa Cruz County and the City of Capitola, the proposed project will nevertheless have the potential to result in habitat impacts, primarily because the project would be adjacent to and would cross through/over a number of creeks, lagoons, gulches and tidally-influenced waters (including Rodeo Creek Gulch (which leads into Corcoran Lagoon), potential improvements in/over Soquel Creek, as well as Escalona Gulch, Tannery Gulch, and Borregas Creek). We note that there also may be habitat resources within the SCBL corridor itself that need to be addressed.[12] In all cases, it is incumbent on the DEIR to appropriately identify such resources, and consistent with the Coastal Act and the LCPs, to avoid impacts to them and, where impacts are unavoidable, to provide adequate mitigation for those impacts. Certain resources may also qualify as

[12] Past trail alignments thorough relatively urbanized segments of the MBSST (e.g., in the City of Santa Cruz) have encountered such resources within the actual corridor including in and/or directly adjacent to the proposed trail alignment, causing siting and design difficulties.

environmentally sensitive habitat areas (ESHA)[13] or wetlands,[14] and such resources are governed by very specific allowed uses and allowed impact requirements. As a general rule, impacts are required to be avoided in such areas (if uses are allowed in the first place) and their required buffers, and the DEIR should evaluate options to do so.

Other Specific Locational and Multi-Modal Public Access Issues
Broadly, the DEIR should clearly identify the locations where the proposed trail would cross pedestrian/vehicular intersections. The DEIR should evaluate alternatives at those locations to facilitate safe use/crossings including because these crossings have raised significant community concerns to date. In particular, the proposed crossings at 38th Avenue and 41st Avenue in Segment 10 are very busy commercial corridors with direct beach access, and thus would likely warrant additional site-specific improvements to facilitate safe crossings for bicyclists, pedestrians, and vehicles alike both along the trail corridor and traveling along 38th and 41st avenues and to facilitate beach access consistent with Coastal Act and LCP requirements.

The DEIR should also evaluate the various alternatives to maximize pedestrian and bicycle connectivity to coastal destinations throughout Segments 10 and 11 including the Live Oak beaches (Sunny Cove, Santa Maria's, 26th Avenue, Pleasure Point) as well as Privates Beach/Opal Cliff Park, Hooper Beach, Capitola Beach/Village, New Brighton State Beach, and Seacliff State Beach), while maintaining/improving visual access and protecting habitat/water quality, consistent with the Coastal Act and LCP directives. Relatedly, the DEIR should identify the preferred alternative that is most protective of coastal resources overall, complies with other Coastal Act policies such as minimizing VMT, and provides for a continuous, safe, and scenic trail system.

The DEIR should also clearly explain the implications of Capitola's Measure L, including whether signage, striping, or other improvements through Capitola Village would be included as part of the preferred alternative or if signs would be limited to areas where corridor improvements are proposed (i.e., at the trail's intersection with Cliff Drive and where it would resume at Park/Monterey avenues) and whether the City of Capitola intends to pursue any bike/pedestrian improvements or mechanisms to reduce vehicular traffic through Capitola Village in the foreseeable future as a separate effort to meet General Plan/LCP objectives and/or to reduce congestion, GHG emissions, etc.

In closing, we look forward to working with you on this important public infrastructure project, and we thank you for your consideration of these comments. If there are any questions, we are available for discussion should the County, the RTC and/or the DEIR team need clarification from us. Please do not hesitate to contact me about these comments or to discuss the project further.

[13] Defined by the Coastal Act and the LCPs to include "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

[14] Pursuant to the Coastal Act and LCP's one-parameter definition, as opposed to the U.S. Army Corps of Engineers' three-parameter definition.

Sincerely,

DocuSigned by:
Rainey Graeven
AFE4284CFEB54EA...

Rainey Graeven
Senior Coastal Transportation Planner
Central Coast District
California Coastal Commission

cc (sent electronically):
Katie Herlihy, City of Capitola Planning Department
Paia Levine, Santa Cruz County Planning Department
Matt Machado, Santa Cruz County Public Works Department
Jeff Gaffney, Santa Cruz County Parks Department
Guy Preston, Regional Transportation Commission
Chris Spohrer, California Department of Parks and Recreation

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State of California – Natural Resources Agency
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

December 6, 2021

Rob Tidmore
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701 Ocean Street, Room 410
Santa Cruz, CA 95060
Robert.Tidmore@santacruzcounty.us

Subject: Rail Trail Segments 10 and 11, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2021110080, Santa Cruz County

Dear Mr. Tidmore:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) prepared by the County of Santa Cruz (County) for the Rail Trail Segments 10 and 11 (Project), located in Santa Cruz County. CDFW is submitting comments on the NOP regarding potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines §15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

California Endangered Species Act

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA §§ 21001(c), 21083, and CEQA Guidelines §§ 15380, 15064, 15065). Impacts must be avoided or mitigated to less-

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than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code § 2080.

Lake and Streambed Alteration Program

The Project has the potential to impact resources including but not limited to Rodeo Gulch Creek, Soquel Creek, Tannery Gulch, and Borregas Creek. Notification is required, pursuant to CDFW's LSA Program (Fish and Game Code, § 1600 et. seq.) for any Project-related activities that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. CDFW considers work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute a final LSA Agreement until it has complied with CEQA (Public Resources Code § 21000 et seq.) as the responsible agency.

PROJECT DESCRIPTION

The proposed Project consists of an approximately 4.5-mile bicycle and pedestrian system, that generally extends along the Santa Cruz Branch Rail Line (SCBRL) corridor. The two segments, Segment 10 and Segment 11, extend from the eastern side of 17th Avenue to the western side of State Park Drive in unincorporated Santa Cruz County. The proposed Project, Rail with Trail, includes a multi-use trail, approximately 10-12 feet wide, located alongside the railroad tracks. The Project may include shifting of the tracks within the right-of-way as necessary to accommodate the trail. The proposed Alternative 1: Railbank with Trail, would locate the multi-use trail along the rail centerline, and the existing tracks and ties would be removed to enable construction.

The CEQA Guidelines (§§15124 &15378) require that the draft EIR incorporate a full project description, including reasonably foreseeable future phases of the Project, and that contains sufficient information to evaluate and review the Project's environmental impact. The draft EIR should include a complete description, with maps and figures as appropriate, of the following Project components:

- Footprints of permanent project features with the length and width of the proposed trail and temporarily impacted areas such as staging areas;
- The type of trail base such as asphalt, concrete, gravel, or dirt;
- Introduction of new light sources along the trail;

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- Location, type, length, and height of all fencing, including whether it will be permanent or temporary;

- Encroachment by widening the trail into riparian habitat or other sensitive area.

ENVIRONMENTAL SETTING AND LOCATION

Sufficient information regarding the environmental setting is necessary to understand the Project's, and its alternative's (if applicable), significant impacts on the environment (CEQA Guidelines, §§15125 & 15360). CDFW recommends that the CEQA document prepared for the Project provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, or endangered species (CEQA Guidelines, §15380). Fully protected, threatened or endangered, candidate, and other special-status species that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to:

Common Name	**Scientific Name**	**Status**
Santa Cruz black salamander	*Aneides niger*	SSC
Santa Cruz long-toed salamander	*Ambystoma macrodactylum croceum*	FP
Steelhead - central California coast DPS	*Oncorhynchus mykiss irideus* pop. 8	FT
Tidewater Goby	*Eucyclogobius newberryi*	FE
Western pond turtle	*Emys marmorata*	SSC
Monarch butterfly	*Danaus plexippus* pop. 1	FC
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC
Pallid bat	*Antrozous pallidus*	SSC
Santa Cruz tarplant	*Holocarpha macradenia*	FT, SE
Perennial goldfields	*Lasthenia californica* ssp. *macrantha*	CNPS 1B.2
Nesting Birds		
Notes: FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate for listing; FP = State Fully Protected; SE = State Endangered; SSC = State Species of Special Concern; DPS = Distinct Population Segment; CNPS = California Native Plant Society Rare Plant Rank		

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Habitat descriptions and species profiles should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Based on the data and information from the habitat assessment, the CEQA document can then adequately assess which special-status species are likely to occur in the Project vicinity.

CDFW recommends that prior to Project implementation, surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocol.

Botanical surveys for special-status plant species, including those listed by the California Native Plant Society (http://www.cnps.org/cnps/rareplants/inventory/), must be conducted during the blooming period for all sensitive plant species potentially occurring within the Project area and require the identification of reference populations. Please refer to CDFW protocols for surveying and evaluating impacts to rare plants available at: https://www.wildlife.ca.gov/Conservation/Plants.

COMMENTS AND RECOMMENDATIONS

The CEQA Guidelines (§15126.2) necessitate that the draft EIR discuss all direct and indirect impacts (temporary and permanent) that may occur with implementation of the Project. This includes evaluating and describing impacts from any of the following :

- Potential for "take" of special-status species;
- Loss or modification of breeding, nesting, dispersal and foraging habitat, including vegetation removal and alternation of soils;
- Permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic or human presence; and;
- Obstruction of movement corridors or access to water sources and other core habitat features.

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on biological resources.

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COMMENT 1: Fencing

Issue: The Project has the potential to disrupt wildlife movement if safety fencing is installed between the trail and tracks to prevent pedestrians form entering the railroad tracks with the Proposed Project, Rail with Trail.

Evidence the impact would be significant: Fencing can be a hazard to wildlife resulting in entanglement and mortality (van der Ree 1999, Stuart et al. 2001, Harrington and Conover 2006). Fencing can also cause a connectivity barrier by preventing movement resulting in habitat loss and fragmentation (Jakes et al, 2018, Harrington and Conover, 2006).

Recommendations for Fencing to minimize significant impacts: CDFW recommends that the Project specify proposed fencing plans and identify current wildlife trails throughout the Project Area to install wildlife friendly fencing at these locations that make it easier for wildlife species to traverse. To decrease wildlife entanglement and mortality, CDFW recommends that the top wire of fences are no more than 40-inches above the ground, the space between the top two wires are at least 12-inches apart, the bottom wire of fences are 18-inches above the ground, the fences does not include vertical wires, fence posts are installed at 16.5-foot intervals, and fence wires are visible to animals and birds (see A Landowner's Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind found online at https://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download/?cid=nrcseprd1080608&ext=pdf).

COMMENT 2: Impervious Surfaces

Issue: The Project has the potential to create impervious surfaces at the Project site with the widening or creation of a paved trail. Impervious surfaces have the potential to significantly affect fish and wildlife resources by altering runoff hydrograph and natural streamflow patterns.

Evidence the impact would be significant: Adding impervious surfaces, through the installation of hardscape materials, can modify natural streamflow patterns by increasing the magnitude and frequency of high flow events and storm flows (Hollis 1975, Konrad and Booth 2005).

Recommendations to minimize significant impacts: CDFW recommends mapping areas with creeks, drainages, culverts or the potential for runoff to occur and incorporating permeable surfaces throughout the Project to allow stormwater to percolate in the ground and prevent stream hydromodification (see https://www.usgs.gov/science/evaluating-potential-benefits-permeable-pavement-quantity-and-quality-stormwater-runoff?qt-science_center_objects=0#qt-science_center_objects).

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COMMENT 3: Artificial Lighting

Issue: The Project has the potential to increase artificial lighting if new sources of light are installed along the trail. Artificial lighting often results in light pollution, which has the potential to significantly and adversely affect fish and wildlife.

Evidence the impact would be significant: Night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication such as bird song (Miller, 2006), determining when to begin foraging (Stone et al., 2009), behavior thermoregulation (Beiswenger, 1977), and migration (Longcore and Rich, 2004).

Recommendations to minimize significant impacts: CDFW recommends eliminating all non-essential artificial lighting. If artificial lighting is necessary, CDFW recommends avoiding or limiting the use of artificial lights during the hours of dawn and dusk, when many wildlife species are most active. CDFW also recommends that outdoor lighting be shielded, cast downward, and does not spill over onto other properties or upwards into the night sky (see the International Dark-Sky Association standards at http://darksky.org/) and limited to warm light colors with an output temperature of 2700 kelvin or less.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, section 711.4; Pub. Resources Code, §21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

Thank you for the opportunity to comment on the Project's NOP. If you have any questions regarding this letter or for further coordination with CDFW, please contact Ms. Serena Stumpf, Environmental Scientist, at (707) 337-1364 or Serena.Stumpf@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Stephanie Fong
CF047D7F8D234E1...

Stephanie Fong
Acting Regional Manager
Bay Delta Region

ec: State Clearinghouse # 2021110080

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REFERENCES

Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. Ecology 58:98–108.

Harrington, J. L., and M. R. Conover. 2006. Characteristics of ungulate behabior and mortality associated with fences. Wildlife Society Bulletin 34:1295–1305.

Hollis, G. 1975. The effect of urbanization on floods of different recurrence interval. Water Resources Research 11:431-435.

Jakes, A. F., Jones, P. F., Paige, C., Sidler, R. G., and M. P. Huijser. 2018. A fence runs through it: A call for greater attention to the influence of fences on wildlife and ecosystems. Biological Conservation 227: 310-318.

Konrad, C.P. and D.B. Booth. 2005. Hydrologic changes in urban streams and their ecological significance, paper presented at American Fisheries Society Symposium, American Fisheries Society

Longcore, T., and C. Rich. 2004. Ecological light pollution - Review. Frontiers in Ecology and the Environment 2:191–198.

Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. The Condor 108:130–139.

Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. Current Biology 19:1123–1127. Elsevier Ltd.

Stuart, J. N., M. L. Watson, T. L. Brown, and C. Eustice. 2001. Plastic netting: An entanglement hazard to snakes and other wildlife. Herpetological Review 32:162–164.

Van der Ree, R. 1999. Barbed wire fencing as a hazard for wildlife. The Victorian Naturalist 116:210–217.

From: Hitchcock, Linda@Parks
To: RailTrail
Subject: Ca State Park Comments Section 11 - New Brighton State Beach
Date: Monday, November 22, 2021 10:03:33 AM
Attachments: image001.png

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Hello – We wanted to submit the following comments for section 11 thru New Brighton State Beach and Porter Sesnon property

1. There is riparian willow habitat on both sides of the trail as it goes thru the park
2. If the trail goes outside of the Right of Way and on to state parks property we will need an operating agreement that takes at least a year if at all possible it is best to stay on the right of way or even route outside the park on city roads in the creek area
3. The trail will need a crossing inside New Brighton state beach as there is a trail from the campground to the entrance kiosk that crosses the rail line area this needs to be kept open
4. We would need a crossing at the Porter Sesnon area as people access the beach and park in this area

Thx Linda

Linda Hitchcock
Senior Park and Recreation Specialist
California State Parks
Santa Cruz District

SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION
1523 Pacific Ave., Santa Cruz, CA 95060-3911 • (831) 460-3200 FAX (831) 460-3215 EMAIL info@sccrtc.org

Rob Tidmore
County of Santa Cruz
809 Center Street, Room 201
Santa Cruz, California, 95060

November 30, 2021

RE: Notice of Preparation of an EIR for Rail Trail Segments 10 & 11

Dear Mr. Tidmore,

RTC is owner of the Santa Cruz Branch Rail Line and is the Regional Transportation Planning Agency for Santa Cruz County. In these capacities, RTC is coordinating with the County of Santa Cruz to construct the Coastal Rail Trail Project from 17th Avenue to State Park Drive.

RTC supports the County of Santa Cruz's environmental review of a rail and trail alignment on the Santa Cruz Branch Rail Line from 17th Avenue to State Park Drive, referred to as Rail with Trail.

RTC also supports an analysis of alternative alignments as required under the California Environmental Quality Act. Although the alternative, referred to as Railbank with Trail, is contingent upon railbanking the Santa Cruz Branch Rail Line, it should be noted that railbanking would allow either alternative to proceed to construction.

RTC encourages the County of Santa Cruz to continue to develop the Coastal Rail Trail Project from 17th Avenue to State Park Drive and to complete the environmental analysis of the Proposed Project and other project alternatives.

Sincerely,

Guy Preston
Executive Director

CITY OF SANTA CRUZ

WATER DEPARTMENT
212 Locust Street, Suite C, Santa Cruz, CA 95060 • Ph: 831-420-5210

December 7, 2021

Rob Tidmore
Project Manager
County of Santa Cruz, Department of Public Works
RailTrail@santacruzcounty.us

RE: Notice of Preparation for the Rail Trail Segments 10 and 11

Dear Ms. Tidmore:

The City of Santa Cruz Water Department has received and reviewed your Notice of Preparation of a Draft Environmental Impact Report (EIR) for the Rail Trail Segments 10 and 11. We understand that the County of Santa Cruz is the lead agency in the preparation of an EIR for this project which includes a 4.5- bicycle and pedestrian system that generally extends along the Santa Cruz Branch Rail Line corridor, from the eastern side of 17th Avenue to the western side of State Park Drive in unincorporated Santa Cruz County. The project is part of the Monterey Bay Sanctuary Scenic Trail (MBSST) and is consistent with MBSST Network Master Plan.

The City of Santa Cruz Water Department owns and operates existing raw and treated water pipelines in the project vicinity that cross the proposed project alignment. These pipelines and associated appurtenances are part of a municipal drinking water system which serves approximately 100,000 customers in the City of Santa Cruz and adjacent communities. While we believe that the operation and maintenance of drinking water infrastructure can be compatible with a multi-use bicycle and pedestrian system, we urge you to plan, design and construct your project appropriately to avoid any impacts to our water supply system. If any temporary or permanent impacts to our facilities are anticipated, we request your early coordination with the Water Department.

If you require any additional information about our facilities, please do not hesitate to contact Ms. Sarah Easley Perez of my staff at 831-420-5327 or seasleyperez@cityofsantacruz.com. We appreciate the opportunity to comment on this Notice of Preparation.

Sincerely,

Heidi R Luckenbach

Heidi Luckenbach
Interim Water Director
City of Santa Cruz Water Department

cc: Sarah Easley Perez

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
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NATIVE AMERICAN HERITAGE COMMISSION

November 12, 2021

Rob Tidmore, Project Manager
County of Santa Cruz
701 Ocean Street, Room 410
Santa Cruz, CA 95060

Re: 2021110080, Rail Trail Segments 10 and 11 Project, Santa Cruz County

Dear Mr. Tidmore:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Environmental Planner

cc: State Clearinghouse

From: Manu Koenig
To: Robert Tidmore
Cc: Matt Machado
Subject: Segments 10 & 11 EIR "Railbank with Trail"
Date: Wednesday, November 10, 2021 12:06:08 PM

Hi Rob,

In reviewing the NOP for Segments 10 & 11 of the Rail Trail, the alternative name "Railbank with Trail" jumped out at me. The RTC has been calling it the "Interim Trail" option in our documentation.

There are segments where it looks increasingly likely that rail banking will be necessary for *any* trail to be constructed in order to avoid lawsuits. So suggesting that Alternative 1 is dependent on rail banking but the Proposed Project is can happen either way, is not really accurate. I'm sure that RTC Executive Director Preston could help clarify this.

In fact, it looks like the same day this NOP came out, the RTC approved a letter from Director Preston to the City taking a first step at clarifying the language: https://sccrtc.org/wp-content/uploads/2021/10/11-04-2021-agenda-packet.pdf

Let me know if you have questions or if this would be better suited as an official comment via the railtrail@ email address.

Manu

Manu Koenig
Supervisor, First District
County of Santa Cruz
701 Ocean St, Room 500
Santa Cruz, CA 95060
(831) 454-2200
manu.koenig@santacruzcounty.us

From:	Matt Machado
To:	Robert Tidmore
Subject:	FW: input on EIR for Segments 10 & 11
Date:	Thursday, November 18, 2021 4:49:12 PM
Attachments:	SC County Coastal Climate Change Vulnerability Report Final (2).pdf

fyi

Matt Machado, PE, LS
Deputy County Administrative Officer
Public Works Director
701 Ocean Street, Room 410
Santa Cruz, CA 95060
Phone: 831-454-2368

From: Manu Koenig <Manu.Koenig@santacruzcounty.us>
Sent: Thursday, November 18, 2021 11:41 AM
To: Matt Machado <Matt.Machado@santacruzcounty.us>
Subject: Fw: input on EIR for Segments 10 & 11

Hi Matt,

I got bcced on the email below. I think it's worth noting that the planning studies done in the past have not adequately reflected all the potential environmental impacts. It's important that we get this one right and do an objective study that considers all sources of information available to us. The attached Santa Cruz County Coastal Climate Change Vulnerability Report is an example of such a resource.

Best,
Manu

Manu Koenig

Supervisor, First District

County of Santa Cruz

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November 21, 2021

Rob Tidmore, Project Manager County of Santa Cruz
Department of Public Works
701 Ocean Street, Room 401
Santa Cruz, California 95060

Dear Mr. Tidmore:

Thank you for your work towards implementing our future Rail-Trail while considering the important environmental impacts in alignment with CEQA as you prepare an Environmental Impact Report (EIR) for segments 10 and 11 of the Rail-Trail Project. I attended the EIR and scoping meeting on November 11, 2021.

I am a local mom, woman of color, and medical professional. I served 7 years as a middle school and high school mountain biking coach for a local Santa Cruz school. I was a competitive triathlete for many years and I am an active NOLS Wilderness First Responder (since 2007) and have led youth wilderness hikes and mountain biking trips. The trail will be a great asset for the health and well-being of our community and our youth as we create safe passage for our kids to bike, walk, and run.

I write in support of the Proposed Project: Rail with trail.

I strongly advocate for environmentally wise robust equitable public transportation systems and electric light rail is an important component of such a system, at a time when we are recognizing our long battle with transit justice and our environmental crisis. Robust public transportation benefits our entire community and electric light rail is the most energy efficient and least environmentally destructive form of transportation to move larger numbers of people distances ever invested.

I do not advocate for the Alternative: Railbank with trail, which is a proposed interim trail, for the reasons indicated below.

I support both rail and trail in our community, not just because the decision to bring rail to this community was initiated and sustained with a majority vote, but also because it is the environmentally wise and equitable thing to do. Although I made mention of some of a few considerations during the November 5, 2021 EIR Scoping Meeting, I understand that official considerations must be made in writing. I appreciate the opportunity to participate in our democratic public process. I have provided a list of considerations I feel are important regarding CEQA for formal submission.

Considerations for Proposed Project: Rail with Trail are discussed with respect to the following source: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2016_CEQA_Statutes_and_Guidelines_Appendix_G.pdf

Regarding the 20 CEQA categories, it is important to keep in mind that the alternate, railbank with interim trail, would require significantly greater investment of time, money, human resources, material

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use and waste along with a concomitant increase in GHGs and toxins released into the environment as well as tons of materials and asphalt that would need to be added to our landfills.

CEQA item Air Quality:
The impact of implementing the proposed project will be far less harmful on the air quality versus the alternative plan (interim trail) for a number of reasons.

1. Constructing the proposed trail as planned and then implementing rail as funds are made available ensures a stepwise process that minimizes disturbances to the rail beds and soils. The alternative plan would disrupt the rail bed releasing toxic chemicals from the rail bed into the air. An interim trail that then is later removed for a future implementation of rail would once again create huge amounts of release of noxious substances into the air.

2. According to the 2019 Unified Corridor Investment Study, using the rail corridor for a trail only will increase auto traffic, increase vehicle collisions, increase GHG emissions, and decrease use of public transit all which will increase our impact on our air quality. Building the trail as initially planned leaves our rails open to implement light rail service as soon as funding can be secured. We know that rail could be implemented in stages and segments along the rail line in fewer than 5-10 years. Not only would the alternate proposal require excessive additional labor and waste production but an 'interim' trail would need to be re-engineered to accommodate our train in the future, the overall production of GHGs will not be mitigated if light rail in not implemented as quickly as possible. The alternate interim trail will ensure more vehicles remain on the roads longer, preventing people from using an all-electric light rail system as an alternative to getting to work, school, shopping and restaurants. As a mountain biker, I look forward to being able to hop on the train in Live Oak where I live and take my bike to Wilder or Nicene-Marks without having to drive across town to hit the trail heads.

Biological Resources CEQA Guidelines
Please consider the adverse effects the alternate plan will have on the forested and wetland areas especially in Live Oak. The alternate plan, Alternative 1, requires extensive removal of valuable infrastructure and toxic materials for grading for an 'interim' trail. Once rail is deemed ready to implement, which could be sooner rather than later, the interim trail Alternative would then need to be destroyed and extensive regrading done to return the usability of the tracks back to light rail ready. The alternate plan would then result in a second release of toxins into the surrounding areas such as the Schwann Lake area that would be dramatically and negatively impacted as implementing an interim trail that would later be replaced by rail in the future would require a doubling of the impact on the surrounding environment. Rail must be preserved to preserve our environment and reduce impact on the surrounding highly sensitive biological systems.

Green House Gas Emissions/Climate Change CEQA Guidelines

According to the 2019 Unified Corridor Investment Study, using the rail corridor for trail only will increase auto traffic, increase vehicle collisions, increase GHG emissions, and decrease use of public transit all which will increase our impact on our air quality. The alternate plan puts at risk the implementation of our future rail system not only with greater financial and labor costs involved to 1- destroy the rails, 2- build a temporary trail, 3- destroy the temporary trail, 4- rebuild the tracks, 5-build the intended trail per the MBSST as intended, but the emissions that will be produced to do the extra

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work. Specifically, the proposed alternative, railbanking with trail puts at risk our ability to implement rail quickly and efficiently once funding is available resulting in further increases in greenhouse gas emissions due to continuing excess automobile use that will be offset by the implementation of electric light rail.

Hazardous Materials CEQA Guidelines (and potentially Mandatory Findings of Significance)
To what extent has analyses been done to determine the level of hazardous materials and toxins that would be released from the rail beds as a results of removal of rails and ties and regrading and disruption of the rail beds to implement a temporary trail and then later regarding and reestablishing the rail bed to return segments 10 and 11 back to rail ready use? The alternate plan ensures there will be excessive amounts of hazardous and other toxic materials disrupted from the rail bed requiring disposal if the rails are pulled up and grading is done to build an interim trail followed later by a regrading of the rail line back for rail use.

The extensive use of raw materials and waste produced for an alternative 'interim trail' option is extravagant and extremely negatively impactful on the environment. From my understanding, the degree to which toxins would be disrupted from the rail beds and enter the watershed and delicate riparian system leading into our Monterey Bay would be substantially higher for the alternate plan. The alternate plan ensures a much higher introduction of toxins into the air, soils, water, impacting human and animal life in the densely populated and forested areas surrounding segments 10 and 11 of the tracks.

In addition to the toxins that are emitted from the exhaust of road vehicles, the degree of toxins released into the air, water, and soils from rubber tires alone is shocking. My graduate degree specialized in biochemical endocrinology and the implications the toxic load of billions of tires have on our physiological systems are astounding, including contributing to increases in Alzheimers, autism, cancers, hormone dysruption, gut dysbiosis, and many serious diseases we've seen rise with the advent of the automobile and tire industries. We need to do whatever we can to remove single use vehicles, and their tires, from the roads. Here are just a few articles to consider:

> Pollution from tire wear 1,000 times worse than exhaust emissions
> https://www.tiretechnologyinternational.com/news/regulations/pollution-from-tire-wear-1000-times-worse-than-exhaust-emissions.html

> EPA rubber TIRES Rubber Tire Manufacturing: National Emission Standards for Hazardous Air Pollutants (NESHAP)
> https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous-air#:~:text=The%20EPA%20has%20identified%20rubber,air%20pollutants%20(HAP)%20emissions.&text=The%20final%20NESHAP%20reduces%20air,by%20approximately%201%2C100%20tons%20annually

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Car Tire Crumb Rubber: Does Leaching Produce a Toxic Chemical Cocktail in Coastal Marine Systems?
https://www.frontiersin.org/articles/10.3389/fenvs.2020.00125/full

E-CARS: California's electric car revolution, designed to save the planet, also unleashes a toll on it
https://www.latimes.com/politics/story/2021-07-21/californias-electric-car-revolution-designed-to-save-the-planet-inflicts-a-big-toll-on-it?fbclid=IwAR1bauVLTjyY0j_zH4rfWVxsIPiMrpseUNtBBKchBei5n-zSFao5HtWNNGk

Rubber tires are toxic,
Why TRAINS are best
The Climate Emergency: Trains-An Effective Response
https://www.youtube.com/watch?v=_hTzf2L2Pzo

DISCOVERY OF TOXIC CHEMICAL IN TIRES SPURS SCIENTIFIC AND REGULATORY INTEREST
https://www.pugetsoundinstitute.org/2020/12/discovery-of-toxic-chemical-in-tires-spurs-scientific-and-regulatory-interest/#:~:text=Discovery%20of%20toxic%20chemical%20in%20tires%20spurs%20scientific%20and%20regulatory%20interest,-by%20Christopher%20Dunagan&text=The%20chemical%20reaction%20produces%206,parent%20compound%2C%206%2DPPD

Land use and Planning CEQA Guidelines

In recent SCCRTC meetings, several commissioners indicated the highly risky nature of railbanking and tearing up tracks for the purpose of replacing with a temporary 'interim' trail as the alternate plan proposes. Tearing up the rails is inconsistent with the county's General Plan as well as the considerable work done prior to our purchase of the rail in 2012 through February of 2021 when electric light rail was voted as the **preferred choice** for our rail system.

Given the worsening environmental crisis and our goals to remove more vehicles from our roads, destroying portions of our rails for a temporary trail proposed in the alternative plan would most certainly hinder and stall our timeline to remediate and activate our rail system for electric light rail use as soon as possible. Electric light rail is the most energy efficient and least environmentally damaging form of transportation that moves people distances **ever invented** and we are fortunate to have infrastructure for rail already in place.

Alternative1 in not in alignment with our General Plan, our extensive planning and processes completed over the past decades through the RTC and in good faith per the voter's majority of Proposition 116 which allowed us to purchase the SC Branchline in 2012 for the purpose of implementing passenger rail and a trail. The alternative plan is not in alignment with the RTC approved TCAA Plan which clearly shows that Rail with Trail, not trail alone, is the best use of the Santa Cruz rail corridor and meet the goals set forth by our voting majority to implement passenger rail as per our plans.

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Noise CEQA Guidelines
There will be far more noise required for the alternate plan versus the current Rail with Trai plan, both immediately and over the duration of the project. The construction activity required over time to remove the rail line, build a temporary trail, and later remove the trail to rebuild the rail line and to rebuild the trail represent far more disruption and noise than the Proposed Project: Rail with Trail" and these impacts cannot be mitigated.

Public Services CEQA Guidelines
The current Rail with Trail plan ensures that a trail will be implemented relatively quickly and allows for the rails to be activated as soon as possible in service to public benefit, including safe access to schools, work, parks, shopping and more. The alternative plan, railbanking the trail, definitively adds more time to, if not precludes, our ability to bring back our active rail service and implement passenger light rail in our community, a vital public service. The current plan ensures more services will be available to the public, Trail and Rail, more quickly. We have a great public need for green all electric public transit along the densely populated rail line. The proposed alternative plan definitively removes the capacity for us to use the Rail line for passenger service in the near future, thus potentially stalling or preventing a vital public service, and adds more time to our timeline in ensuring the public service could be rebuilt. The alternate plan would also result in added delays and additional expenses to our public interests that would then further impact our community negatively. Since a large percentage of our workers commute into Santa Cruz from Watsonville and outside of Santa Cruz, provide the valuable service of public rail transit will meet the needs of so many who currently do not drive. Ensuring that rail can be implemented as quickly as possible will serve the important goal of building a robust public transit system. Currently, for example, for a person who does not drive, it takes 2.5 hours one way to take the bus from the West side to Capitola, whereas it would take 20 minutes or less by light rail trolley. Many of our residents experience excessively long waits to board a bus and then sit in traffic to get to work, school, medical appointments, and leisure.

There are no examples of railbanking working to restore rail service after replacement with a paved trail. RTC FAQ page, 2018:
"The RTC is unaware of any paved trails that have been converted back to rail once it has been railbanked."

https://sccrtc.org/wp-content/uploads/2018/11/01_FAQs_for-20181128.pdf

Recreation CEQA Guidelines
The current Rail with Trail Plan ensures maximum recreation possibilities, sooner, for a much greater percentage of our community compared to the alternative plan. As a mountain biker, I can choose to ride my bike along the trail to access our amazing parks such as Wilder Ranch and Nicene-Marks, or I can, in the future, take rail to the trail heads. For our elderly and disabled population and for people who do not feel safe riding bikes or hiking long distances from their homes to a park, light rail will provide portions of our population with access to our many parks along the route that they would not have access to if there was only a trail. For example, many of our blind members of our community take public transit and seek independence. For them, a trail would be far less value to them than rail. This is also the case for many people in wheel chairs who would extensively use rail to access our recreation centers, such as Simpkins Swim Center, as well as our parks, but would not have easy independent access to those places by the alternative ‘interim’ trail. The alternative proposed ‘interim’ trail would

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exclude a great percentage of our population who cannot use the trail given the distances they would need to travel, to access recreation. The alternative plan is far less equitable that the current Rail with Trail plan which ensures that people of all abilities will be able to access resources and recreation once light rail is implemented.

Transportation/Traffic CEQA Guidelines

The current Rail with Trail plan was developed with the TCAA study which indicates this plan will result in a substantial reduction in cars and traffic as people will have greater more consistent and dependable access to public rail transit once the rail is implemented. Given the density of the population in the areas along the rail line, the future light rail would serve far more people than a trail alone and serve to reduce traffic as people can use rail to access their local schools, parks, shopping, recreation, and more. Our ability to mitigate our environmental crisis includes our ability to ensure people can walk or bike to nearby public rail transit and metro and take public transit regularly, similar to how people can access BART in the North and East Bay areas.

Even more exciting, once Monterey has built their rail system to Watsonville which is in the early stages now, our county residents will be able to take the rails all the way to Monterey from Santa Cruz, thus alleviating a substantial load of vehicles on Highway 1 southbound to enjoy work and recreation in Monterey. For many of us who are environmentally progressive, we are willing to commit to driving less and taking rail over other forms of transportation. Having a rail option in our county which will soon connect to other segments of the California Rail Network will demonstrably decrease traffic while mitigating climate change locally.

Thank you for your time and efforts in reviewing our public input regarding the environmental impact of the two plants. The Alternative 1, railbank with trail would have unmitigable impacts across multiple criteria. The impacts related to the Proposed Project: Rail with Trail are not significant and we recommend preparation of a Mitigated Negative Declaration on behalf of the Proposed Porject: Rail with Trail.

Best regards,

Lani Faulkner, Director, Equity Transit

December 7, 2021

Rob Tidmore, Project Manager
County of Santa Cruz, Department of Public Works
701 Ocean Street, Room 401
Santa Cruz, California 95060

Re: Rail Trail Segments 10 & 11 Project - EIR Scoping Scoping

Santa Cruz County Friends of the Rail and Trail (FORT) has the following comments regarding the scope of environmental issues and project alternatives to be evaluated in the EIR for the Rail Trail Segments 10 & 11 Project.

1. **The Alternative 1 "Railbank with Trail" project should be renamed and analyzed as a "Railbank with INTERIM Trail"**. As of today, neither the City of Santa Cruz, the Regional Transportation Commission (RTC) nor the County of Santa Cruz has adopted a policy which supports railbanking the Santa Cruz Branch Rail Line (SCBRL), nor a "Railbank with Trail" use of the rail corridor. In fact, the RTC and the City Councils of Santa Cruz and Watsonville have recently adopted resolutions confirming their support for implementing passenger rail transit on the SCBRL. Accordingly, a "Railbank with Trail" alternative for this section of the trail would necessarily be an INTERIM TRAIL use.

   The "Railbank with INTERIM Trail" alternative should include all environmental impacts of this changing use over time, so it is fully understood by the community and decision makers. These should include: demolition of the existing rail line, handling and disposal of hazardous waste associated with demolishing the existing rail line, implementation of an interim trail, discontinuing the interim trail use, restoring the rail line, and constructing a permanent trail alongside the rail.

2. **The Alternate 1 "Railbank with Interim Trail" Project should include the negative environmental impacts of significantly delaying implementation of the Proposed Rail with Trail Project and permanent loss of its environmental benefits**.

   Since "railbanking" was created by an Act of Congress in 1983, there has not been ONE case of railroad tracks being removed, a paved interim trail being constructed where the tracks were, the paved interim trail being removed, the railroad tracks reinstalled, and rail transit service resuming operation (as noted in the RTC's *Unified Corridor Investment Study FAQ's*). Given this fact, an interim trail will effectively preclude the SCBRL from being used for rail transit, or any other type of high-capacity public transit, in the reasonably foreseeable future.

   The Alternative 1 "Railbank with Interim Trail" Project should, therefore, account for the loss of the environmental benefits that would otherwise have accrued had passenger rail transit, as described in the RTC's *Transit Corridor Alternatives Analysis / Rail Network Integration Study* (TCAA/RNIS), been implemented including, but not limited to:
   a. A substantial increase in county-wide public transit use from about 5 million to about 12.5 million rides every year

b. A substantial decrease in Vehicle Miles Traveled (VMT) and Greenhouse Gas (GHG) emissions and criteria pollutants
c. A more robust and equitable public transit system serving the people of Santa Cruz County and the State of CA
d. A more complete statewide rail network as delineated in the State Rail Plan (SRP) of which the SCBRL is an integral part
e. A more complete Monterey Bay Area Regional Passenger Rail Network as described in the Transit Agency of Monterey County's *Rail Network Integration Study* including but not limited to "Around-the-Bay" passenger rail service linking Santa Cruz with Monterey and all points between and beyond
f. All the other benefits summarized in Chapter 6 of the TCAA/RNIS

3. **The Proposed "Rail with Trail" Project should include the environmental benefits of the project as documented in the RTC's *Unified Corridor Investment Study* (UCIS)** including, but not limited to:
   a. A substantial decrease in Vehicle Miles Traveled (VMT) and Greenhouse Gas (GHG) Emissions and criteria pollutants
   b. A substantial decrease in the number of crashes with annual savings of millions of dollars and immeasurable reduction of human pain and suffering
   c. A substantial increase in the mode share of people using public transit county-wide

4. **The Proposed "Rail with Trail" Project should account for all the benefits that will be realized when passenger rail transit as described in the RTC's *Transit Corridor Alternatives Analysis / Rail Network Integration Study* (TCAA/RNIS) is implemented** including, but not limited to:
   a. A substantial increase in county-wide public transit use from about 5 million to about 12.5 million rides every year,
   b. A more robust and equitable public transit system serving the people of Santa Cruz County and the State of CA,
   c. A more complete statewide rail network as delineated in the SRP of which the SCBRL is an integral part,
   d. A seamless rail-to-rail connection to the state rail network as delineated in the SRP at the Watsonville Junction including, but not limited to, the reduction in automobile trips and VMT by people traveling to and from Santa Cruz County from the rest of California,
   e. A more complete Monterey Bay Area Regional Passenger Rail Network as described in the Transit Agency of Monterey County's *Rail Network Integration Study* including but not limited to "Around-the-Bay" passenger rail service linking Santa Cruz with Monterey and all points in between and beyond,
   f. All the other benefits summarized in Chapter 6 of the TCAA/RNIS.

5. **The proposed project and all alternatives should consider the following categories of environmental effects**: impacts on greenhouse gas emissions and climate change impacts, reduction of VMT, Transportation/Circulation impacts, and the impact of the release or creation of environmental hazards and hazardous materials.

6. **The proposed project and all alternatives should consider the environmental impacts of the implementation timelines involved for each project**, including the fact that the Regional Transportation Commission (RTC) has chosen electric light rail passenger transit on the Branch Line ROW as the locally preferred alternative. Questions to be considered should include, but are not limited to the following. How would the speed at which our county could implement rail service and affect our collective VMT and GHG emissions be impacted? What would be the environmental impact of delaying implementation of passenger rail transit for 20 years, 30 years, or 40 years? What would be the positive environmental benefits if the Proposed Rail with Trail Project encourages more people to take transit?

7. **Please ensure that Alternative 1: "Railbank with Interim Trail" conforms with the "Trail Only" use as described in *Appendix B, Table B-13: Trail Only of the UCIS* in terms of width, length and other specified characteristics.** If it does not conform with same, then an additional alternative should be considered which does substantially conform with the "Trail-Only" use of the corridor as described in the UCIS.

8. **Cumulative Project Impacts: Given the incremental nature of the proposed "Rail with Trail" project and the alternative "Railbank with Interim Trail" project, the environmental impacts of realizing the total and full implementation of these projects within the SCBRL corridor must be considered.** In the case of the alternative "Railbank with Interim Trail", the impacts of incrementally converting a substantial portion of the SCBRL to a "Railbank with Interim Trail" project should be compared to the proposed "Rail with Trail" project.

Thank you for your consideration of our comments and all your work to bring the Rail Trail to life in Santa Cruz County.

Respectfully submitted,

Faina Segal, Board Chair
Santa Cruz County Friends of the Rail & Trail
Email: executive@railandtrail.org

From: Alexis Pursley
To: RailTrail
Subject: Rail Trail Segments 10 and 11
Date: Monday, December 6, 2021 10:51:03 AM
Attachments: image001.png
Importance: High

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Dear Rob,

As Association Manager for Anchor West Homeowners Association located at 815 Balboa Avenue, I am reaching out to you regarding the above segments of the Rail Trail project. Each year the association trims the trees in the Eucalyptus grove on the ocean side of Park Avenue. The Board wants to express their need to ensure ongoing maintenance and access to this area. It is a fire and safety concern if this area becomes overgrown. Please confirm that access to this area to complete this maintenance will be continued to be available.

Regards,

Alexis Pursley

ALEXIS PURSLEY
ALEXIS@ACOMGT.COM || 831.688.1090 EXT.106
783 RIO DEL MAR BLVD #59 APTOS, CA. 95003 ACOMGT.COM

ANDERSON & COMPANY

From: sara allshouse
To: RailTrail
Subject: Rail Trail input
Date: Friday, November 12, 2021 6:14:36 PM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Hello Rob Tidmore, The property that I own backs up to the Corridor. I pay Ungodly Taxes on my property and I hope you all will care about us Tax payers opinion. I hate the idea of a bike trail for these reasons; 1) Noise pollution from people that have no concern for the people that live along the corridor, 2)Trash, 3)Continued spraying by the county of poisons(which they've done for years and never notified anybody. Even though now they say they're using "good" poison) 4)Fire hazard(smokers etc)…. 5) Crime/Drug Use 6)There has been so little concern for the aesthetics of the corridor by the rail transit. -7)They come and cut some of the trees/shrubs and leave the debris all along the fencing.(Fire Hazard). —I've called numerous times with no results! They've sprayed Poison (Round Up?) for at least 18 years and never let anybody know. Now they say they're using a poison that doesn't really hurt anything. That is a joke! So I have no trust for the county or the Rail Transit or anybody that's running the show. I would think the train would be much more desirable solution to deal with the Corridor. I think this last year with the pandemic has shown how selfish and rude and careless people really are. So the thought of large groups of people coming over to Santa Cruz and dump whatever they want along the corridor is a very strong possibility & feels irresponsible.
There are plenty of places for people to ride their bikes now that aren't putting people next to trains on bikes. Ps: $100's of millions of dollars? Really? Sara Allshouse 831-464-6711 — 4413 Nova Drive SC 95062 saraallshouse@sbcglobal.net
Sent from my iPhone

From: Marianne Cohn
To: Alexis Pursley; FIGEIRA STEPHANIE
Cc: RailTrail
Subject: EIR Input for railtrail segments 10/11
Date: Friday, December 3, 2021 11:42:38 AM

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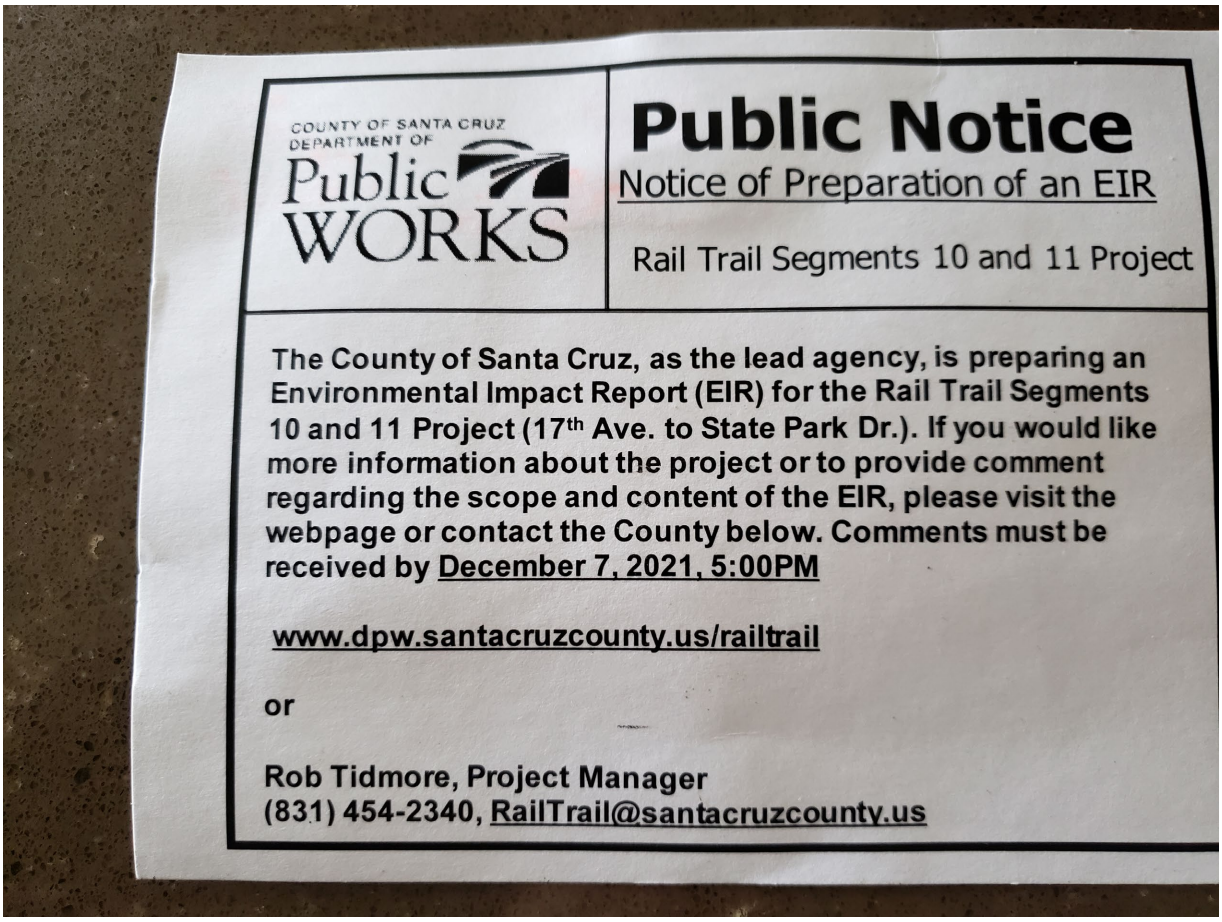
Hi Alexis, here is the request for comments on the Environmental Impact Report Due by December 7.

Please inform the project manager of our semiannual tree trimming funded by our HOA, and the need to ensure ongoing maintenance and access to this area. It is a fire and safety concern if this area becomes overgrown. I understand our HOA shares the expense with the other condos on Park/Balboa Avenues. Please send details to the project manager.



Best Regards,
Marianne Cohn

Sent from Yahoo Mail on Android

---------- Forwarded message ---------
From: **Bud Colligan** <bud@colligans.com>
Date: Wed, Nov 17, 2021 at 7:42 PM
Subject: input on EIR
To: <railtrail@santacruzcounty.us>

Dear Rod,

Thank you for conducting the EIR on Segments 10 and 11 of the rail corridor. The list of areas to be studied in the EIR seems to be comprehensive.

I'm writing to provide commentary to what is often missed in EIR studies. It's clear that the concept of rail and trail, first articulated in the Monterey Bay Sanctuary Scenic Trail Study (MBSST), grossly misled the public that both rail and trail were possible on the same corridor. We now know that extensive environmental damage will occur with rail and trail which was not documented in the MBSST. We also know that many of the graphics depicting rail and trail were misleading and did not follow the topography, width or geography of the corridor. I would hope that any graphics in the EIR are true to the actual measurements and topography of the corridor.

Areas that were not considered in the MBSST or subsequent

studies for any rail and trail implementation include:

- Extensive tree cutting of heritage oaks and other mature trees

- Movement of tons of earth to excavate for huge retaining walls, concrete supports and other construction to make the corridor wide enough to support both rail and trail.

- Tons of concrete poured for new bridges, walls and other supports.

- Displacement of many different types of wildlife and plants in the corridor, potentially forever.

- Greenhouse gases emitted as the result of manufacturing and construction processes for steel, cement and other manufactured building materials.

- Dramatically lower usage for active transportation and recreation from a discontinuous trail (e.g. detour into Capitola Village and onto San Andreas Rd/West Beach St). Alta Planning and Design, the preeminent trail designer in the U.S., has done extensive research on this topic: https://sccgreenway.org/greenway-capacity.

- Greenhouse gases emitted as a result of no train being

implemented. Several studies have measured greenhouse gases as if plans considered are concurrent, but the savings from a continuous interim trail built in 3 - 5 years vs. an industrialized corridor with a narrow trail not suitable for active transportation commuting and a train that never arrives due to no funding/no local tax passed cannot be compared apples to apples with something that is funded and doable in a short period of time. How does time get considered in the EIR analysis?

- The practical width of the trail is more important than the so-called "right of way" when hillsides, trees, low income housing and steep embankments/gulches prevent a reasonable cost trail from being built. Please look at the practical engineering reality. https://sccgreenway.org/trail-width-matters

- There is much important information in the Nelson Nygaard study done in 2016 regarding many of the issues to be studied in the EIR, particularly relating to impediments to rail and trail. Nelson Nygaard is also a highly regarded transportation consulting organization used by the RTC in the past. https://files.sccgreenway.org/2016-The-Great-Santa-Cruz-Trail-Study-Web.pdf

- Traffic estimates or displacements for a train need to be thoroughly analyzed against actual experience in other

communities like Sonoma/Marin (SMART train) or the VTA in San Jose. Both are running dramatically below any ridership forecasts done by transportation consultants. How will past historical examples of actual ridership vs. forecast on light rail systems be considered?

- The Santa Cruz County Coastal Climate Change Vulnerability Report (attached) makes it clear that any heavy infrastructure like a train should be moved inland to preserve our coastal bluffs, marshes, and estuaries threatened by erosion and flooding. The bluff is already collapsing at Manresa Beach and there are other low lying areas along the corridor. In San Diego, Metrolink and Amtrak (43 trains per day) have been suspended for two weeks recently due to the tracks being vulnerable to active coastal bluff erosion (https://apnews.com/article/business-california-amtrak-841610d08d153f2e4086642914acbf40?fbclid=IwAR2usBdfl5IcT_yd3ikw9wvbRJo1kTpDIQsWAmq1VU18qLYYphNE3UquMCM). This is real. Why would we put more heavy infrastructure along the coast in areas that are clearly unsuitable?

- Social equity in public transit is covered extensively in the literature in areas around access, who bears the tax burden, health, displacement in marginalized communities and other factors. Train systems nationwide also carry mostly high income individuals while buses serve the lower income

communities. Again, lots of articles documenting this phenomena can be found with a simple Google search.

Rod, thank you for your attention to a truly holistic approach to the Segment 10 & 11 EIR.

Regards,

Bud Colligan

From: Pete Haworth
To: RailTrail
Subject: Comments on Trail Segments 10 & 11 Preparation Of EIR
Date: Monday, November 22, 2021 5:38:44 PM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

I attended the preliminary Zoom meeting regarding this project on November 17th 2021 and would like to submit the following comments

- I understand that the rail-with-trail option will not use the Capitola trestle but the railbank-and-trail option will, presumably because the trestle in its current form is not capable of handling rail locomotives and a trail for both load and width issues

  I would like to see the EIR include the environmental impacts of bringing the trestle into a condition where it can carry both rail and trail so that a fair comparison can be made between the two alternatives being studied.

- During the Zoom meeting, there were requests that the EIR include the impact of replacing the rails if the railbank-and-trail option is selected and the right of way be returned to rail service at some future date.

  It's my understanding from statements made by RTC commissioners and staff, and by Friends Of The Rail Trail that, to date, none of the hundreds of railbanked rights-of-way have ever been returned to rail service.

  With that in mind, I hope the EIR will make it clear that it is extremely unlikely that the rails would ever need to be replaced should the railbank-and-trail alternative be selected.

  Thank you for your time.

--
Pete

From: dan holdren
To: RailTrail
Subject: Rail Trail
Date: Wednesday, November 24, 2021 3:01:31 PM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Please let me know by sending me information.
danrholdren@sbcglobal.net

Sent from my iPhone

From: bikerick@att.net
To: RailTrail
Cc: ttravers
Subject: NOP for EIR for the Rail Trail Segments 10 and 11 Project
Date: Wednesday, December 1, 2021 9:00:17 AM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Hi: Regarding the alternatives that the EIR will review, one or more additional alternatives need to be reviewed. The reason is that if the RTC decides against pursuing railbanking before the EIR is completed, then it would no longer be considered a feasible alternative. Since CEQA requires at least one feasible alternative be evaluated in the EIR, it would thus be likely that the EIR process would have to open up again and delay the project. The NOP thus states, "the County will also consider other project alternatives, which must meet most of the project objectives while substantially lessening or avoiding any of the significant impacts of the proposed project." The scoping document is not detailed enough for me to suggest a specific additional alternative but it could be to analyze a trail on the opposing side of the tracks from the preferred alternative along all or part of the route. Another possible alternative, depending on the preferred planned width, is a wider or narrower pathway, again along all or part of the route.

Similarly, a study is underway to determine the feasibility of using the Trestle bridges in Capitola for the trail. Again, if they are not found feasible, or feasible for only a limited period of time (due to either future use for a railroad or eventual deterioration or taking an extra amount of time to become usable), then an alternative route(s) through or around Capitola needs to be evaluated.

Rick Hyman

From: B K G
To: RailTrail
Subject: Monarch Butterfly / Rail Trail impacts
Date: Thursday, November 25, 2021 10:01:21 AM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

The many tree's (eucalyptus, cypress, etc) along the proposed rail trail are the home of Monarch butterfly's and other identified sensitive & endangered species. How will the project impact the natural flora and fauna? How will any negative impacts be addressed? As you are aware the number of Monarchs in general has diminished, don't we have a responsibility in the Monterey Bay Sanctuary not to contribute to the extinction of any species?

These concerns have been contributed before, but I have not been personally notified as to how they are being addressed.

Thank you for your response.

Sent from Kim's iPhone

From: Jean Mahoney
To: RailTrail
Subject: Copy of EIR report in mail
Date: Saturday, November 6, 2021 7:31:54 PM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Hello Rob,

Please mail me a physical copy of the current EIR report for rail segments 10 and 11 Project (17th Ave to State Park Drive). Add me to your ongoing announcements list.

Thank you,

Jean Mahoney
3035 Buckingham Lane
Santa Cruz, CA 95062

From: Ken Maus
To: RailTrail
Date: Tuesday, December 7, 2021 2:10:55 PM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

My Comments: Passenger Rail transit was shown to be possible between Santa Cruz and Capitola last month.
Tickets were gone quickly for rides using lightweight battery powered cars on rails accommodating 32 passengers.
These cars stopped only when passengers wanted on or off.
Transportation trials between Watsonville and Santa Cruz would be possible using these cars.
Placing a few signs announcing 'Car Stop" next to the track. Trail built near the right of way.
Please reply with your thoughts.
Thank you.
Ken Maus
kenrrjo@gmail.com

From: Deborah Secrest
To: RailTrail
Subject: Comments regarding proposed EIR due before 12-7-21
Date: Friday, November 12, 2021 4:47:29 PM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Dear Mr. Tidmore,

We live in the Jade Street corridor (at the Tradewinds Mobile Home Park). Our bedroom is separated from the tracks by approximately 13 feet or so. If there's a trail there, the distance would be even less, approximately 5 feet. We're really concerned about the proposed usage of this rail corridor for a trail.

Specifically we're very concerned with the **noise of the trail** so close to the houses on either side. Recently, the Coast Futura train went by, and it was fairly quiet, and came and went. I can see that the neighbors affected would soon get used to that noise. However, with a trail, the people who live along that stretch of railroad tracks would have to endure **possible 24 hour, 7 day a week random noise from travelers biking, walking, talking and traveling through.**

The value of our property, and the quality of our life will be reduced if we have to endure a few thousand people a day traveling by our window barely 10 feet away. We read that there was an approximate estimation of 6,000 people per day using the trail.

We hope that if there is a trail built that it would be **detoured around this particular stretch** and picked up on the part of the tracks where it isn't so close to people's homes.

Right now, there is peace and quiet in the back of our home. With a trail, that peace will be gone. We like the idea of the trail, but we hope that there can be places where a **detour will exist to create space between so many proposed users of a trail,** and neighbors who have no choice but to listen to whatever goes by.

Sincerely,
Deborah Secrest & Dean Price
4160 Jade Street #17, Capitola, CA 95010
(831) 476-5438

NOP_Segs10-11_County_v4_FINAL

- **Proposed Project: Rail with Trail**. The multi-use trail would be located alongside the railroad tracks. The trail would be 10-12 feet wide (but may be reduced to 8 feet in areas with existing constrained conditions). The Project may include shifting of the tracks within the right-of-way as necessary to accommodate the trail.

From: Barry Scott
To: RailTrail
Cc: Robert Tidmore
Subject: Comments: NOP Rail Trail Segments 10 + 11
Date: Wednesday, November 17, 2021 1:22:45 PM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Dear planners,

I write in support of the "Proposed Project: Rail with Trail".
I wish to express the following concerns with "Alternative 1: Railbank with Trail":

Evaluation of the Alternative 1: Railbank with Trail must take into account the full long-term scope of the project and related impacts.
As an "Interim Trail" with railbanking, the assumption must be that at some future time the rail would or could be rebuilt.
Failure, therefore, to consider the collective impacts over the long term would constitute a failure to faithfully assess this "temporary" trail project.

GHG Emissions:
The recent TCAA and USIC studies provide evidence of significant GHG reductions and lowered VMT for the Proposed Project which would be lost if Alternative 1: Railbank with Trail is pursued. The effects of the Alternative on our ability to lower GHG emissions are unmitigable.

Land Use/Planning:
The County General Plan, City plans, and the County Regional Transit Plans as well as other County Regional Transit Plans all include language supporting the preservation of existing rail infrastructure and expanded use thereof, especially for future passenger rail transit.
Alternative 1: Railbank with Trail removes or impedes these options and this constitutes unmitigable impacts.

Removal of the rail line as required by Alternative 1: Railbank with Trail is inconsistent with the Local Coastal Plan and in direct conflict with statements made by the California Coastal Commission, which calls for preservation and expanded use of our region's rail infrastructure in order to protect and expand public access to coastal features, and to reduce congestion and the resultant harm to the environment by reducing miles driven by trucks and automobiles.
Coastal Commission letter here: http://tiny.cc/CCCMMM

Transportation/Traffic:
Our County, Region, and State governments all have Transportation Plans which include strategies for expanding public transit while reducing VMT, Vehicle Miles Traveled. The Santa Cruz Branch Rail Line is a critical part of the regional network

and the removal of even a part of threatens our capacity to meet well-defined goals and constitute unmitigable impacts.

Hazards and Hazardous Materials:
Removal of the tracks and ties and regrading the land in the rail corridor to create a trail, only to have to later replace the rail line and rebuild the trail, would generate the release of toxic and hazardous materials to a far greater degree than simply building the trail adjacent to the tracks and improving the rail line for public transit and occasional freight. We should build the project correctly and in a way that reduces impacts over time, looking at the whole of work to be done in the rail corridor and not just a temporary project.

Public Services:
By removing the rail line, we remove the capacity to provide public transit to the entire county independent of the highway and surface streets. Removal for a temporary trail serves a few small neighborhoods while ignoring others, especially those south of Aptos who badly need an alternative to congestion on the highway. There are no examples of railbanking working to restore rail service after replacement with a paved trail.
RTC FAQ page, 2018:
"The RTC is unaware of any paved trails that have been converted back to rail once it has been railbanked."
https://sccrtc.org/wp-content/uploads/2018/11/01_FAQs_for-20181128.pdf

Noise:
The additional construction activity required over time to remove the rail line, build a temporary trail, and later remove the trail to rebuild the rail line and to rebuild the trail represent far more disruption and noise than the Proposed Project: Rail with Trail" and these impacts can not be mitigated.

Recreation:
Removal of the rail transit option effectively restricts access to recreational features by people from outside the immediate neighborhoods where Alternative 1: Railbank with Trail is proposed to be implemented. There are no ways to mitigate excluding or restricting access to recreational features alone our rail line and coastline.

Please follow the science and CEQA guidelines and find Alternative 1: Railbank with Trail to have unmitigable impacts across multiple criteria.
Please also find that impacts related to the Proposed Project: Rail with Trail to not be significant and prepare a Mitigated Negative Declaration

Many thanks,

Barry Scott

--
Barry Scott
Office: 831.612.6574

Mobile: 209.482.5663

From: Rob Stuart
To: RailTrail
Subject: Rail trail
Date: Saturday, November 27, 2021 8:33:18 AM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Hi

I am dead set against the rail trail and all for the greenway path only for numerous reasons:

Too expensive to up grade all of the bridges

Not enough users to justify the expense

Would not work with rail and trail in many locations

With E bike technology to have a pedestrian and bike bath would serve the purpose of getting people out of their cars

No enough parking lots at all of the stops so people can transition to their desired destination

Negative noise impact in neighborhoods

Look how few people use the buses it would be similar to the tourist train

Just the one bridge over Capitola has a huge price tag to rebuild

Rob Stuart

As long-time property owners directly adjacent to what is termed Segment 11, we would like to comment briefly on what needs to be included in the E.I.R. as pertains to segments 10 and 11 of the Rail Trail.

We are against a train of any kind running through the corridor, especially what is considered a light rail or a trolley system.

We are in support of Alternative 1, known as the “Railbank with Trail.”

Aesthetics and Biological Resources top our list of concerns along with noise and land use and planning. Since our home is so close to the trail, public safety and security measures as a way to ensure the proper uses of this resource are important to us as well, and should be included in any E.I.R. Another issue could well be trash and illegal dumping, so please do address these in the report. Finally, illegal camping is on the rise in the area and a hard trail will make this even easier, so let me emphasize security, trash, and dumping once again.

This corridor as a greenway needs to mirror the notion of The Monterey Bay Sanctuary as a way for humans and the flora and fauna to coexist to mutual benefit—there are at least three known groups of mule deer, monarch butterflies, bobcats, raptors of all kinds, and quail, among several others, that frequent the space directly behind our home.

Transportation and recreation needs notwithstanding, the wildlife and habitat to our minds—and the tranquility that is part of this unique ecosystem—weigh in as our prime concerns along with safety, security, trash, and dumping.

Thank you for allowing us to comment .

Sincerely,

Richard and Kim Underwood

From: Gillian Worsey
To: RailTrail
Subject: Scoping meeting
Date: Thursday, November 18, 2021 9:04:58 AM

****CAUTION:This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.****

Rob,
Something came up and I was unable to attend the scoping meeting. Is it possible to view a recording of the meeting?
Thank you,
GillianWorsey

Appendix C. Initial Study

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Initial Study

Coastal Rail Trail Segments 10 and 11

June 2023

Prepared for:

County of Santa Cruz
701 Ocean Street, Room 410
Santa Cruz, California 95060

Prepared by:

Harris & Associates

450 Lincoln Avenue, Suite 103
Salinas, California 93901

Document Overview

This Initial Study has been prepared in accordance with California Environmental Quality Act (CEQA) and the CEQA Guidelines for the proposed Coastal Rail Trail Segments 10 and 11 Project (Project).

In accordance with CEQA, projects that have the potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment must undergo analysis to disclose potential significant effects. The provisions of CEQA apply to California governmental agencies at all levels, including local agencies, regional agencies, state agencies, boards, commissions, and special districts. CEQA requires preparation of an Initial Study for a discretionary project to determine the range of potential environmental impacts of that project and to define the scope of the environment review document.

Therefore, the primary intent of an Initial Study is to determine if the project may have a significant effect on the environment. However, if the lead agency can determine that an Environmental Impact Report (EIR) will clearly be required for the project, an Initial Study is not required but may still be desirable.

As the CEQA lead agency for the Project, the County of Santa Cruz (County) decided to prepare an EIR because of potentially significant impacts to aesthetics and biological resources, and to provide a more robust analysis and public involvement process. Therefore, the purpose of this Initial Study is to identify the potential environmental effects of the Project that clearly would not be significant, and to focus the EIR analysis on the effects determined to be potentially significant and to provide additional information. Because the County is preparing an EIR for the Project, this Initial Study has not been circulated for public review and will not be certified by the County.

This Initial Study is organized as follows:

- **Section 1: Project Description.** This section introduces the document and discusses the project description including location, setting, and specifics of the lead agency and contacts.
- **Section 2: Initial Study Checklist.** This section identifies the environmental topics, checklist questions from Appendix G of the CEQA Guidelines, and identifies the potential for significant impacts based on identified thresholds.
- **Section 3: List of Preparers.** This section lists the organizations and individuals who were consulted and/or prepared this Initial Study.
- **Section 4: References.** This section presents a list of reference materials consulted during preparation of this Initial Study.

Section 1 Project Description

1.1 Overview

The County of Santa Cruz (County), in coordination with the City of Capitola (City) and the Santa Cruz County Regional Transportation Commission (RTC), is proposing the **Coastal Rail Trail Segments 10 and 11 Project** (Project) to be developed along the RTC-owned rail corridor that generally parallels the coastline in central Santa Cruz County (**Figure 1**, Regional Location). The County is serving as the CEQA lead agency.

The Project is an approximately 4.5-mile new multi-use bicycle and pedestrian trail proposed to extend along the RTC-owned railroad corridor from the east side of 17th Avenue on the west to the west side of State Park Drive on the east, extending through unincorporated County and the City of Capitola (**Figures 2a** and **2b**, Project Location). Segment 10 extends from 17th Avenue to 47th Avenue, and Segment 11 extends from 47th Avenue to State Park Drive.

The project purpose is to provide an accessible bicycle/pedestrian path for active transportation, recreation, and environmental and cultural education along the rail corridor, consistent with the Monterey Bay Sanctuary Scenic Trail (MBSST) Network Master Plan.

The County's *Proposed Project: Trail next to Rail line (Ultimate Trail Configuration)* includes an *Optional First Phase: Trail on the Rail line (Interim Trail)*, as described below.

Proposed Project: Trail next to Rail line (Ultimate Trail Configuration). The trail would be 4.2 miles long. In Segment 10 (1.5 miles), the trail would be constructed on the inland side of the railroad tracks. In Segment 11 (2.7 miles), the trail would be constructed on the coastal side of the railroad tracks from 47th Avenue to Mar Vista Drive and on the inland side of the tracks from Mar Vista Drive to State Park Drive. Fencing would be installed between the trail and tracks as necessary in accordance with the MBSST Network Master Plan. In Segment 11, the trail would not include an approximately 0.5-mile section of the rail corridor, from Opal Street to Monterey Avenue (which encompasses the Capitola Trestle Bridge), in the City of Capitola. Instead, trail users would be directed to use the existing on-street bicycle lanes and pedestrian sidewalks extending through Capitola Village.

Optional First Phase: Trail on the Rail line (Interim Trail). The trail would be 4.7 miles long. The trail in Segments 10 (1.5 miles) and 11 (3.2 miles) would be constructed in approximately the same location of the railroad tracks by removal of the rails and ties. The Interim Trail includes the additional 0.5-mile section between Opal Street and Monterey Avenue (across the Capitola Trestle Bridge) in Segment 11. Upon completion of this first phase, the Interim Trail would be removed,

the rail would be reinstated, and the Ultimate Trail Configuration would be constructed as described above.

1.2 Project Location

The 4.7-mile-long Project area limits extend along the RTC-owned Santa Cruz Branch Rail Line (SCBRL) corridor in central Santa Cruz County, within the California Coastal Zone (**Figure 1**).

The Project alignment generally runs in the east–west direction and extends from the eastern side of 17th Avenue on the west to the western side of State Park Drive on the east (**Figures 2a** and **2b**), between State Route 1 (SR-1 or Highway 1) and the Monterey Bay coastline. For the Ultimate Trail Configuration (4.2 miles long), there would be a 0.5-mile section or gap from Opal Street to Monterey Avenue in the City of Capitola, and trail users would be directed to the existing on-street bicycle lanes and pedestrian sidewalks through Capitola Village. For the Interim Trail (4.7 miles long), trail users would continue along the rail corridor and Capitola Trestle Bridge. Therefore, the trail alignment is approximately 4.5 miles long, and the area limits for analysis are 4.7 miles along the rail corridor from 17th Avenue on the west to State Park Drive on the east.

The Project alignment extends through developed portions of the County and City, including residential, commercial, industrial, and recreational land uses, as well as New Brighton State Beach open space.



Source: SCCRTC 2019; ESRI Basemap 2022

Harris & Associates

N

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Miles

Figure 1

Regional Location

Coastal Rail Trail Segments 10 and 11

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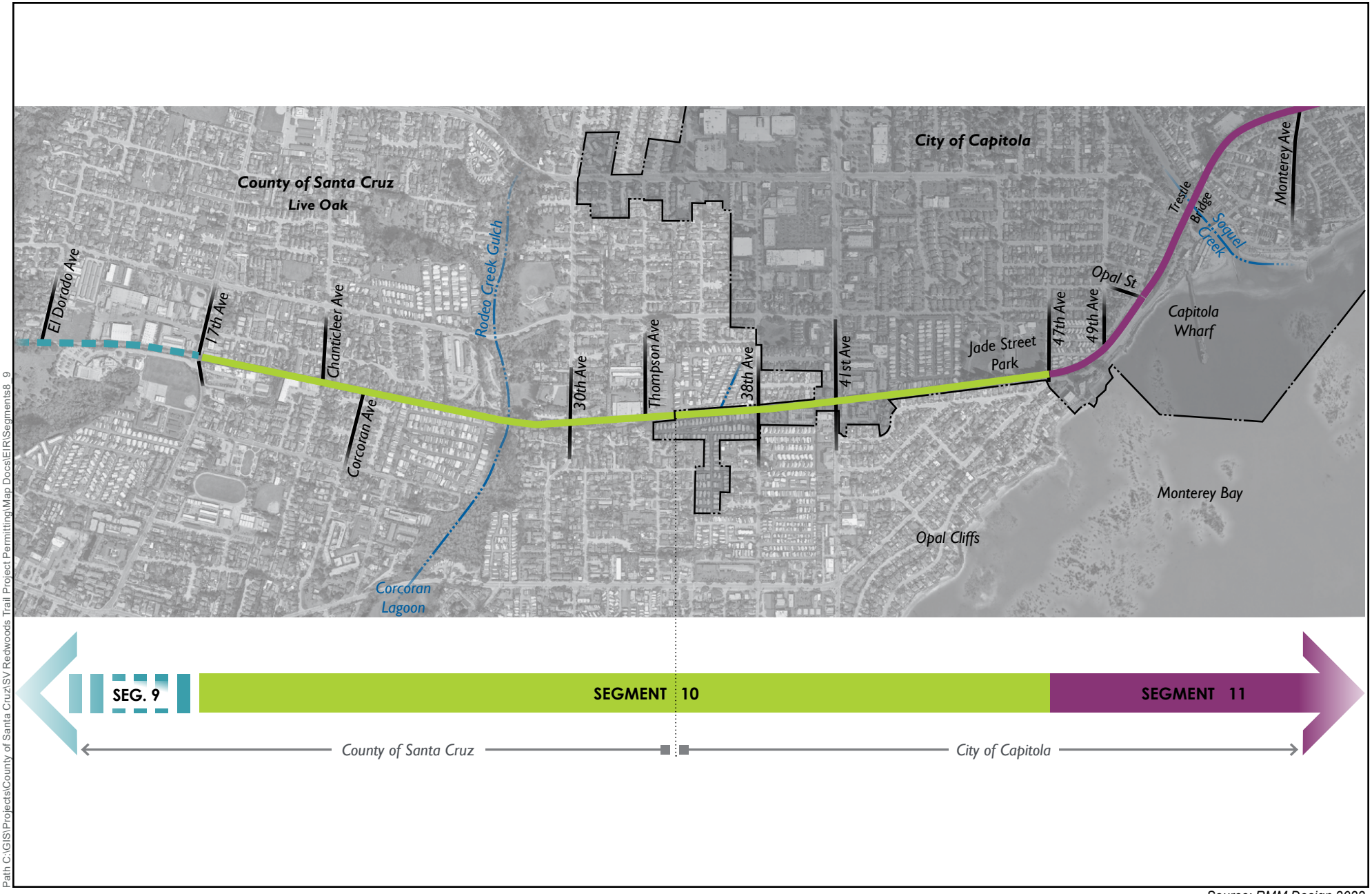

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Source: RMM Design 2022.

Harris & Associates

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Figure 2a

Project Location

Coastal Rail Trail Segments 10 and 11

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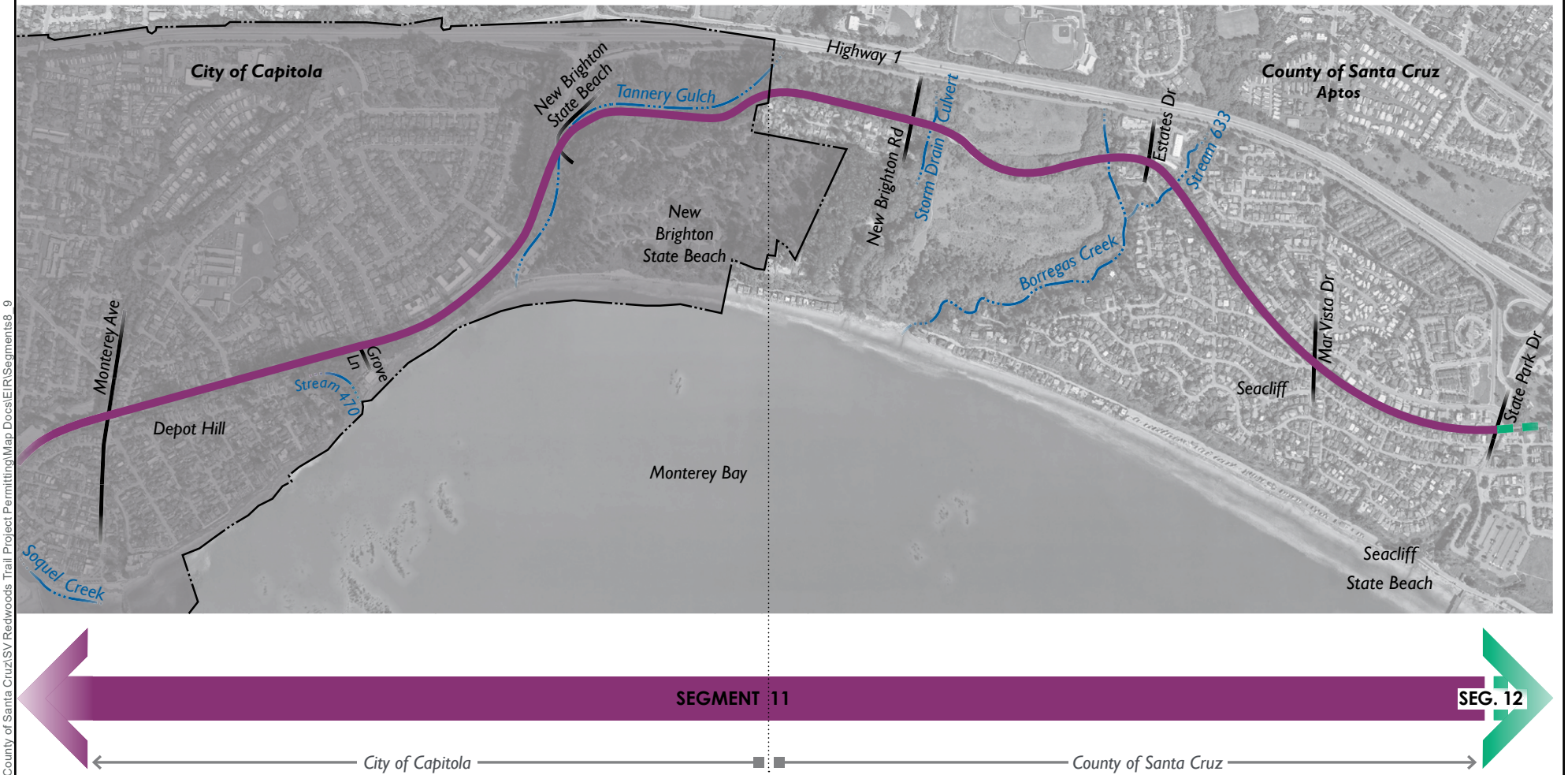

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Source: RMM Design 2022.

Harris & Associates

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0 800 1600

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Figure 2b

Project Location

Coastal Rail Trail Segments 10 and 11

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Section 2 Initial Study Checklist

The following discussion of potential environmental effects was completed in accordance with Section 15063 of the CEQA Guidelines to determine if the Project may have a significant effect on the environment.

2.1 Project Information

1. Project title:	Coastal Rail Trail Segments 10 and 11
2. Lead agency name and address:	County of Santa Cruz 701 Ocean Street, Room 410 Santa Cruz, California 95060
3. Contact person name, address, and phone number:	Rob Tidmore, Project Manager County of Santa Cruz 701 Ocean Street, Room 410 Santa Cruz, California 95060 Robert.Tidmore@santacruzcounty.us
4. Project location:	The approximately 4.5-mile-long linear Project is located along the existing rail corridor in central Santa Cruz County. The Project alignment extends from the eastern side of 17th Avenue on the west to the western side of State Park Drive (**Figures 2a** and **2b**).
5 Project sponsor's name and address:	County of Santa Cruz 701 Ocean Street, Room 401 Santa Cruz, California 95060
6. General plan designation:	County General Plan (1994): The Project corridor has a County land use designation of Public Facilities. Capitola General Plan (2019): The Project corridor has a City land use designation of Public/Quasi-Public.

7. Zoning:	County Municipal Code: The Project corridor is zoned as Public and Community Facilities. Capitola Municipal Code: The Project corridor is zoned as Community Facility.
8. Description of Project:	Refer to Section 1 of this Initial Study.
9. Surrounding land uses and setting:	Refer to Section 1 of this Initial Study.
10. Other public agencies whose approval is required:	City of Capitola, RTC, California Department of Transportation (Caltrans), California Public Utilities Commission, State Water Resources Control Board, Regional Water Quality Control Board, California Department of Fish and Wildlife.
11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	No consultation has been requested. Refer to Section 2.4.18, Tribal Cultural Resources, of this Initial Study for details.

2.2 Environmental Factors Potentially Affected

The environmental factors checked below could be potentially affected by the Project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation" as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology and Soils	☒ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☒ Noise	☐ Population and Housing	☒ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☒ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

2.3 Lead Agency Determination

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent, including implementation of the mitigation measures identified herein. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature
Robert Tidmore, Project Manager
County of Santa Cruz

Date

2.4 Evaluation of Environmental Impacts

This section documents the screening process used to identify and focus on environmental impacts that could result from the Project. The checklist portion of the Initial Study begins below and includes explanations of each CEQA issue topic. CEQA requires that an explanation of all answers be provided along with this checklist, including a discussion of ways to mitigate any significant effects identified.

The following terminology is used to describe the potential level of significance of impacts:

- **No Impact.** The analysis concludes that the Project would not affect the particular resource in any way.
- **Less than Significant.** The analysis concludes that the Project would not cause substantial adverse change to the environment without the incorporation of mitigation.
- **Less than Significant with Mitigation Incorporated**. The analysis concludes that it would not cause substantial adverse change to the environment with the inclusion of mitigation agreed upon by the applicant.
- **Potentially Significant.** The analysis concludes that the Project could result a substantial adverse effect or significant effect on the environment, even if mitigation is incorporated. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Because the County has decided to prepare an EIR, the detailed analyses providing substantial evidence and identifying required mitigation will be included in the EIR. Accordingly, the discussions may indicate that mitigation is likely required to reduce an impact to a less than significant level, without identifying the specific mitigation measure. Further, impact determinations of "potentially significant" and "less than significant with mitigation incorporated" are preliminary pending further analysis in the EIR.

The terms "Project," "trail alignment," and "Project impacts" are used when talking about the Coastal Rail Trail Segments 10 and 11 Project in general, regardless of the Ultimate Trail Configuration or the optional Interim Trail alignment.

The discussions apply to both of the following trail alignments and distinguish between the two alignments as necessary to describe notable differences in the potential impacts.

- *Proposed Project: Trail next to Rail line (Ultimate Trail Configuration),* whereby the trail would be adjacent to the existing tracks
- *Optional First Phase: Trail on the Rail line (Interim Trail),* whereby the existing tracks would be removed and replaced by the trail, and the Ultimate Trail Configuration would be constructed at a future point in time

2.4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Environmental Setting

The Project is part of the central reach portion of the MBSST Network. The central reach portion is visually characterized by densely populated coastal urban areas with views of the coast, waterways, residential, and commercial areas. As the trail alignments run adjacent to existing roadways, adjacent urban lighting from roadways and crossings illuminates portions of the trail alignments.

There are no designated state scenic highways near either trail alignment. The nearest eligible state scenic highway is State Route 1 (SR-1 or Highway 1), approximately 0.1 mile north of Segment 11 from the closest point, where Segment 11 crosses through open space land east of New Brighton State Beach (Caltrans 2023). No local roadways within the vicinity of the trail alignment are designated as scenic by the County of Santa Cruz or the City of Capitola. The County of Santa Cruz identifies ocean vistas, open beaches, wooded forests, open meadows, and mountain hillside views as visual resources to be protected (County of Santa Cruz 1994). The City of Capitola identifies the Capitola Village, Capitola Wharf, Capitola Beach, historic structures, and natural features as scenic resources (City of Capitola 2019).

The trail alignment would provide views of multiple scenic resources. Along Segment 10, trail users would experience views of the Santa Cruz Mountains and wooded forest along Rodeo Gulch. Along Segment 11, trail users would experience views of the Capitola Village, Capitola Beach, Capitola Wharf, Monterey Bay, and New Brighton State Beach.

Impact Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

A scenic vista is a view that possesses visual and aesthetic qualities of high value to the community. In this context, prominent scenic views are those oriented toward Monterey Bay, the Santa Cruz Mountains, or other scenic resources identified by the County of Santa Cruz or City of Capitola (City of Capitola 2019; County of Santa Cruz 1994). The trail alignment would run adjacent to several features identified as significant contributors to the aesthetic and visual character of the Project area including the Capitola Village, Capitola Wharf, Monterey Bay, and Capitola Beach. The Project would install a multi-use trail at-grade with the existing railroad alignment. However, Project components would involve retaining wall construction, bridge/viaduct construction, and tree removal, which could degrade scenic vistas experienced from roadways or other publicly accessible vantage points along the trail alignment, particularly substantial tree removal. Therefore, the Project could have a substantial adverse effect on a scenic vista and thus a **potentially significant impact**. This issue will be analyzed further in the EIR.

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The trail alignment would be located 0.1 mile from SR 1, the nearest eligible state scenic highway; and views of the trail would not be visible from SR 1. Therefore, the Project would not damage scenic resources within a state scenic highway, and there would be **no impact**.

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The trail would be located in an urbanized area. Trail alignment would not conflict with applicable zoning; as discussed in Chapter 13.11 of the County Municipal Code and Chapter 17.120 of the Capitola Municipal Code, the trail alignments would be required to undergo design review to ensure the visual character of the area would not be degraded. However, considering the Project would have a potentially significant impact to scenic vistas, the Project could conflict with applicable policies pertaining to tree removal and preservation of scenic vistas from the County General Plan and Capitola General Plan. Therefore, potential Project impacts due to conflict with applicable zoning and other regulations governing scenic quality would be **potentially significant**. This issue will be analyzed further in the EIR.

d. Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Project construction would occur between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. Construction could also start at 7:00 a.m., Monday through Friday, or occur on Saturdays or Sundays with written approval from the City or County. There would be no construction on national holidays. Although the windows and metal on construction equipment during construction could increase glare, this effect would be minimal relative to existing glare from vehicles traveling on roadways along the Project corridor. In the portions of the corridor away from roadways, such as through New Brighton State Beach, there are fewer adjacent land uses that could be adversely affected by construction-related glare. However, because construction activities would occur during the daytime, construction would not necessitate lighting. Construction lighting impacts would be **less than significant**.

Segments 10 and 11 would be built in a predominately urbanized area that has existing street lighting and light emitted from existing buildings. The Project would include new lighting sources for the safety of trail users. The potential impact of increased light adversely affecting adjacent land uses could be reduced if the new lighting is "dark sky compliant," minimizes light pollution and offensive glare by directing light downward to reduce spillage. Therefore, the operational lighting impact would be **less than significant with mitigation incorporated**. This issue will be analyzed further in the EIR.

2.4.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided. Would the project:	Preliminary Determination			
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Setting

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) has mapped the Project area as Urban and Build-Up Land. The Urban and Build-Up Land classification is defined as "land that is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel" (DOC 2023a). The Project area does not contain any parcels that are under a Williamson Act contract (DOC 2023b). Additionally, the Project area is not zoned for agricultural use or timberland use, and no forest land or resources have been identified within the County General Plan.

Impact Analysis

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The Project area is classified as Urban and Build-Up Land, pursuant to the California Department of Conservation FMMP Map. Therefore, there would be **no impact** to any Farmland resources.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project is not zoned for agricultural use and does not conflict with any Williamson Act contracts. Therefore, there would be **no impact**.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The Project corridor limits are within a developed urban, commercial, and residential environment under the jurisdiction of the Santa Cruz County. Therefore, the Project would not conflict with existing zoning for forest land, timberland, or timberland production, nor result in the loss or conversion of forest land, and there is **no impact**.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The Project would not involve any changes to the existing environment that would impact the conversion of Farmland or forest land to non-agriculture or non-forest use. The Project includes minimal ground disturbance to the existing environment to install the trail, which is already heavily urban. Additionally, the Project would not induce population growth; thus, no impact would occur by converting land to non-agricultural or non-forest use. Therefore, there is **no impact**.

2.4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Preliminary Determination			
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard)?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Setting

The Project area is located within the North Central Coast Air Basin (NCCAB), which includes the City and County, and within the jurisdiction of the Monterey Bay Air Resources District (MBARD). Air quality standards have been set by the State of California and the federal government, and within the NCCAB include ambient air quality standards for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10}, $PM_{2.5}$), and lead (Pb). As of January 2013, the NCCAB is under non-attainment status for ozone and PM_{10} and under attainment for PM 2.5, NO_2, SO_2, and Pb for state standards.

The primary sources of ozone (reactive organic gases [ROGs]) within the air basin are on- and off-road motor vehicles and prescribed burning. The primary sources of nitrogen oxides (NO_x) are on- and off-road motor vehicles and stationary source fuel combustion. In addition, the region is "NO_x sensitive," meaning that ozone formation due to local emissions is more limited by the availability of NO_x as opposed to the availability of ROGs (MBARD 2017). PM_{10} is the other major pollutant of concern for the NCCAB. In the NCCAB, the highest particulate levels and most frequent violations occur in the coastal corridor. In this area, fugitive dust from various geological and human-made sources combines to exceed the standard. The majority of NCCAB exceedances occur at coastal sites, where sea salt is often the main factor causing exceedance.

Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

In compliance with the California Clean Air Act, MBARD prepared an Air Quality Management Plan (AQMP) in 1991, with subsequent updates every 3 years to show how the state ambient air

quality standards would be met in the NCCAB. The NCCAB does not meet state standards for ozone (ROGs and NO_x) and fine particulate matter (PM_{10}).

The MBARD AQMP includes an emission inventory with general estimated basin-wide construction-related emissions, which are not expected to prevent long-term attainment or maintenance of the ozone and particulate matter standards within the NCCAB. The construction activities required for constructing Segments 10 and 11 would result in short-term emissions generated by activities and equipment and would not require unusual construction practices or intensities. After the completion of construction, the Project would not generate any new pollution or result in an increase in emissions. Therefore, temporary construction impacts related to air quality plans for these pollutants from the Project would be less than significant.

The Project does not propose any new development or growth that would conflict with vehicle miles traveled (VMT) and emissions assumptions of the MBARD AQMP. Rather, the Project would support increased sustainability in modes of transportation and would not impact planned growth. The goal of the rail would be to reduce VMT and expand use of alternative modes of transportation (i.e., bicycle) and, in turn, reduce regional criteria pollutant emissions.

The Project is anticipated to be a net benefit to air quality in the NCCAB and is consistent with the MBARD AQMP. Therefore, impacts to regional air quality due to construction associated with implementing the Project would not result in obstructing the MBARD AQMP; therefore, impacts would be **less than significant**.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard)?

The U.S. Environmental Protection Agency has classified air basins as being in "attainment," "non-attainment," or "unclassified" for each criteria air pollutant. As stated above, the Project is located within the NCCAB, which is currently in "non-attainment status" for not meeting state standards for ozone (ROGs and NO_x) and PM_{10}. Therefore, the regional pollutants of concern that would be emitted by the Project are ozone precursors and PM_{10}.

Implementation of the Project requires construction activities and equipment, which would result in temporary air quality impacts. Short-term emissions associated with construction activities and operation of equipment are finite and include fugitive dust, grading and equipment exhaust, and hauling materials to and from the site.

Construction of the trail would use typical construction equipment, such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders.

This equipment would temporarily emit precursors of ozone (i.e., ROG or NO_x) during Project construction. Construction activities and equipment would result in localized exhaust emissions. However, these emissions would be temporary in nature, and would be reduced to a less than significant with mitigation incorporated, such as implementing MBARD's recommended construction best management practices (BMPs) would reduce the potential impact to less than significant. MBARD's recommended BMPs include prohibit all grading activities during periods of high wind (over 15 mph), water all active construction areas as needed based on the activity, soil and wind exposure, apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro seed area, cover all trucks hauling dirt, sand, or loose materials, cover inactive storage piles, sweep streets if visible soil material is carried out from the construction site, plant vegetative ground cover in disturbed areas as soon as possible, and post a publicly visible sign with the telephone number and person to contact regarding dust complaints. Therefore, the impact would be **less than significant with mitigation incorporated**, and this issue will be analyzed in the EIR.

Implementation of the Project would reduce use of fossil fuels and natural gas through providing an alternative mode of transportation within the City and the County and is expected to result a net benefit to regional criteria pollutant emissions.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Portions of the proposed trail are located adjacent to the residential properties. Project construction could result in temporary increases in air pollutants (e.g., fugitive dust and exhaust from equipment), exposing the surrounding land uses to airborne particles and a small quantity of emissions. The amount of emissions would be estimated as part of the EIR analysis, but it is anticipated that the impact would be less than significant or **less than significant with mitigation incorporated**, based on similar projects. Once constructed, trail operation (bicyclists and pedestrians using the trail) would not expose sensitive receptors to emissions.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The emissions from the operation of diesel-powered construction equipment and asphalt paving would create odors during the trail construction period. However, these odors would be limited to the specific area under construction and would be short term. Therefore, these odors would not adversely affect a substantial number of people, and the impact is considered **less than significant**.

2.4.4 Biological Resources

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e. Conflict with any applicable policies protecting biological resources?	☒	☐	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?	☐	☐	☐	☒

Environmental Setting

EcoSystems West Consulting Group prepared a list of sensitive species that could occur in the Project area, based on the biological resources identified from the following databases, and conducted field surveys for special-status species, vegetation communities, sensitive habitats, and any potential jurisdictional waters of the U.S. along the Project alignment of Segment 10 and 11:

- California Department of Fish and Wildlife's California Natural Diversity Database (CDFW 2021)
- U.S. Fish and Wildlife Service Listed Species Quad Search (USFWS 2021)
- California Native Plant Society Inventory of Rare and Endangered Plants (2022)
- Information for Planning and Consultation (IPaC)

There are no critical habitats within the Project area. However, there are sensitive habitats that exist within the Project area that have the potential to support sensitive species including aquatic and riparian habitat along creeks and drainages and the eucalyptus grove in Escalona Gulch along Park Avenue.

Wildlife Species. Common wildlife species that could be found within the Project area include the following: monarch butterfly (*Danaus plexippus*), tidewater goby (*Eucyclogobius newberryi*), Central California Coast coho salmon (*Oncorhynchus kisutch*), Central California Coast steelhead (*Oncorhynchus mykiss irideus*), American peregrine falcon (*Falco peregrinus anatum*), western snowy plover (*Charadrius nivosus nivosus*), olive-sided flycatcher (Contopus cooperi), oak titmouse (Baeolophus inornatus), western red bat (Lasiurus blossevillii), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), and southern sea otter (*Enhydra lutris nereis*).

Vegetation Species. There is no known occurrence of the endangered plant species, such as the Santa Cruz Tarplant (*Holocarpha macradenia*), that would be impacted by Project activities.

Additional field surveys and analysis will be conducted as part of the EIR analysis. The following discussion and potential impacts are based on preliminary analysis and similar projects.

Impact Analysis

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

There were no special-status species documented along the Project alignments. However, there is habitat that could support special-status species, as well as the monarch butterfly which is eligible for listing under the Federal Endangered Species Act, along the trail alignment. Most Project activities along the trail alignment would occur in areas that are already highly disturbed and located within the built urban environment. The Segment 11 trail alignment extends through a eucalyptus grove along Park Avenue, which could support monarch butterflies. Potential direct or indirect impacts to special-status species would be minimized by requiring pre-construction wildlife and bird surveys throughout the Project area before the start of construction, environmental awareness training for construction workers, and implement BMPs. However, substantial tree removal could result in impacts that may not be mitigated to a less than significant level. This will be further analyzed in the EIR. Therefore, impacts to any sensitive wildlife species that would potentially occur within the Project area would be **potentially significant**.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

The Project would require construction of retaining walls that could occur in riparian habitat or other sensitive natural communities. It is anticipated that potential impacts could be reduced to a less than significant level with implementation of mitigation or BMPs to protect sensitive wildlife and habitat. These include an environmental awareness program given to construction workers, preparation of an erosion and sediment control plan and implementation of a Storm Water Pollution Prevention Plan as part of the National Pollutant Discharge Elimination System Permit and a General Construction Activity Storm Water Permit to minimize the potential for sediments or contaminants to be discharged into adjacent creeks and drainages. This will be further analyzed in the EIR. Therefore, impacts to riparian habitat or sensitive natural communities within the Project area are anticipated to be **less than significant with mitigation**.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The trail alignments along Segment 10 and Segment 11 would not have a significant adverse effect on protected wetlands within the Project area. However, there are sensitive habitats that are within the vicinity of the Project area that include aquatic, riparian, and a potential seep wetland. The sensitive wildlife species and habitats would be subject to the mitigation or BMPs discussed above and would not include any direct removal filling or hydrological interruption. Therefore, impacts resulting from the Project activities would be **less than significant with mitigation**.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Project would not interfere substantially with the movement of native resident or migratory fish species because there would be no work in waterways that support such species. However, substantial tree removal could interfere with the movement of wildlife species that use the corridor for foraging and cover provided by the trees, as wildlife movement travels between open space. This will be further analyzed in the EIR. Because substantial tree removal may not be mitigated to a less than significant level, impacts to wildlife species that use the rail corridor for wildlife movement would be **potentially significant**.

e. Would the project conflict with any applicable policies protecting biological resources?

The Project would be subject to applicable policies protecting biological resources in the Project area. These include but are not limited to the County's riparian and tree ordinances. Compliance with the policies protecting biological resources may require implementation of mitigation

measures or BMPs to ensure the Project would not conflict with local policies protecting biological resources. This will be further evaluated in the EIR analysis. However, because there could be substantial tree removal that would conflict with applicable tree protection policies, the impact would be **potentially significant**.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?

The trail alignment is not located in an area that is managed by a Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable Habitat Conservation Plan. Therefore, the Project activities would not conflict with any of these plans, and there would be **no impact**.

2.4.5 Cultural Resources

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the prehistory or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

The approximately 4.5-mile linear Project area is along the SCBRL, which extends along the County coastline near areas with identified resources. Archaeological sites dating to the Paleoindian and Millingstone periods (3500 B.C. or earlier) in the Monterey Bay Area are rare, and archaeological evidence from the Late and Protohistoric periods (A.D. 1200–1769) is poorly represented, although sites dating to these periods have been identified. Much of Santa Cruz County is located in potentially archaeological sensitive areas, especially undeveloped coastal areas, slopes, and drainages that may occur on the trail alignments (RTC 2014).

Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Project construction could potentially damage unidentified existing archaeological resources and historical resources along the trail alignment including, but not limited, to areas near waterways and Capitola Village. Additional field surveys based on the records search will be conducted as part of the EIR analysis. It is anticipated that potential impacts to known or unknown archaeological and historical resources from construction and excavation activities could be

reduced with construction monitoring and implementation of required measures if resources are discovered. Therefore, the impact would be **less than significant with mitigation incorporated**.

c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Cultural resources, and related human remains, are likely to occur along water courses, near rock outcroppings, oak strands, and along historic slough margins. Construction of the project would involve ground disturbance and would thus have the potential to disturb human remains. If human remains are found, the California Health and Safety Code, Section 7050.5, states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code, Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a most likely descendant. The most likely descendant has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the most likely descendant does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. Because there are specific procedures and requirements to follow in the event that human remains are discovered, impacts to human remains would be **less than significant with mitigation incorporated**.

2.4.6 Energy

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Environmental Setting

Impact Analysis

a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Project construction would use fossil fuels. The California Airborne Toxics Control Measure (Title 13, Section 2485, of the California Code of Regulations) limits construction equipment operators idle time to 5 minutes (BAAQMD 2017), which would minimize inefficient fossil fuel use. Following construction, operation of the Project would be an active transportation and recreation corridor for bicycles and pedestrians. It would increase the feasibility of non-motorized transportation and would contribute to a regional net decrease in fuel consumption from vehicle trips. Minimal new lighting would be required and would be solar-powered where feasible. Lighting connected to the electrical grid would be energy-efficient light-emitting diodes (LEDs). Therefore, neither construction nor operation of the trail would result in wasteful or inefficient use of energy, and the impact would be **less than significant**.

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The RTC prepares a County-specific Regional Transportation Plan (RTP) in conformance with the latest Association of Monterey Bay Area Governments Metropolitan Transportation Plan/Sustainable Communities Strategy. The 2040 RTP establishes targets to implement statewide policies at the local level, such as reducing VMT and improving speed consistency to reduce fuel consumption. In 2013, Santa Cruz County adopted a Climate Action Strategy focused on reducing the emission of greenhouse gases (GHGs), which is dependent on increasing energy efficiency and the use of renewable energy. The strategy intends to reduce energy consumption and GHG emissions by implementing a number of measures such as reducing VMT through County and

regional long-range planning efforts, increasing energy efficiency in new and existing buildings and facilities, increasing local renewable energy generation, improving the Green Building Program by exceeding minimum state standards, reducing energy use for water supply through water conservation strategies, and providing infrastructure to support zero and low emission vehicles that reduce gasoline and diesel consumption, such as plug in electric and hybrid plug in vehicles. In addition, the County General Plan has historically placed a priority on "smart growth" by focusing growth in the urban areas through the creation and maintenance of an urban services line. Objective 2.1 (Urban/Rural Distinction) directs most residential development to the urban areas, limits growth, supports compact development, and helps reduce sprawl. The Circulation Element of the General Plan further establishes a more efficient transportation system through goals that promote the wise use of energy resources, reducing VMT, and transit and active transportation options. The Project would be an active transportation and recreation corridor for bicycles and pedestrians. It would increase the feasibility of non-motorized transportation and would contribute to a regional net decrease in vehicle trips. Therefore, implementation of the Project would have **no impact** on goals set forth by the RTC RTP, Climate Action Strategy, General Plan, or any local renewable energy plan.

2.4.7 Geology and Soils

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv. Landslides?	☐	☒	☐	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Setting

The Project area is located southwest of the Santa Cruz Mountains, a tectonically active region that was formed through thrust-faulting of the San Andreas Fault. The Project region is dominated by marine terraces, which incrementally increase in elevation from sea level at the Pacific Ocean up toward the Santa Cruz Mountains (approximately 2,000 feet in elevation). Segments 10 and 11 traverse four distinctive geologic units: basin deposits, lowest emergent coastal terrace deposits, alluvial deposits, and Purisima Formation bedrock (Brabb 1997).

Basin deposits are mapped within the base of the drainage at Rodeo Gulch, with Purisima Formation underlying the sides of the Gulch. Basin deposits typically consist of unconsolidated, plastic clay and silty clay that is rich in organic materials and can locally contain thin interbedded layers of silt and silty sand (Brabb 1997). The basin deposits were deposited in a variety of environments, including estuaries, lagoons, marsh filled sloughs, flood basins and lakes, and are mapped as having a very high potential for liquefaction (Pacific Crest 2021).

Impact Analysis

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Strong seismic ground shaking?

The Project area is located outside the limits of the State Alquist-Priolo Special Studies Zone (County of Santa Cruz 2020; California Division of Mines and Geology 1997). However, the Project area is located approximately 5 miles east of the Ben Lomond Fault, 5.5 miles west of the Zayante Fault Zone, and 8.5 miles west of the San Andreas Fault Zone. In addition to these major fault zones, the Monterey Bay-Tularcitos and Sargent Faults are located approximately 6.5 miles and 10.5 miles from the Project area, respectively (Pacific Crest 2021). Although the Ben Lomond Fault is proximal to the Project area, there is little evidence of earthquakes, and no evidence of geologically recent (within the past 100,000 years) offset along this fault (Pacific Crest 2021). Due to the proximity of the trail alignment to active and potentially active faults, the trail would be subject to high intensity ground shaking during the lifetime of the Project.

The trail and other Project features, such as retaining walls and viaducts, would be subject to the California Building Code seismic design force standards, as well as applicable City and County building codes, which would reduce potential damage from seismic groundshaking to the extent practicable and feasible. Therefore, the impact would be **less than significant**.

iii. Seismic-related ground failure, including liquefaction?

Portions of the trail alignment are mapped as an area with very high susceptibility for liquefaction, as shown on the Santa Cruz County GIS Hazard Map (County of Santa Cruz 2020). Portions of Segments 10 and 11 are underlain by saturated alluvial or basin deposit materials could be subject to liquefaction during a seismic event. Portions of the trail could therefore be subject to seismically induced settlement and may need to be repaired or replaced following a seismic event.

In order to offset potential impacts to Project structures through the presence of geologic features that are susceptible to liquefaction, the Project would be subject to Chapter 15.28 of the Capitola Municipal Code and Chapter 12.10.215, Section 14.1.4, in the Building Code of the County of Santa Cruz. Bridges and other structures in these areas should be supported by pile foundations designed in accordance with the recommendations of the Geotechnical Investigation Report.

These requirements would ensure the stability of all Project structures based on the geologic features present within the Project area. This issue will be analyzed further in the EIR Therefore, the impact could be **less than significant with mitigation incorporated**.

iv. Landslides?

The majority of the proposed trail alignment would be situated within areas of relatively level to gently sloping topography, and there are no mapped landslide hazards within the proposed trail route. However, portions of the trail would cross infilled drainages, especially in the area of New Brighton State Beach, as well as the infilled drainages at Borregas Creek and Stream 633 east and west of Estates Drive where as much as 35 feet of fill was noted. The outer slopes of these fills are moderately steep and do not appear to be composed of compacted engineered fill. Therefore, these slopes are subject to a landslide hazard that could potentially undermine the trail. Surface water runoff along infilled drainage areas would be controlled by the installation of catch basins, sidewalk underdrains, V ditches, French drains, and/or swales to reduce the potential for undermining of the trail once constructed. Design features or mitigation measures would be required to reduce potential impacts. This issue will be analyzed further in the EIR. Therefore, the impact could be **less than significant with mitigation incorporated**.

b. Would the project result in substantial soil erosion or the loss of topsoil?

The majority of the trail alignment is located within topographically low and flat to gently sloping areas. There is some potential for surface soil erosion to occur during Project construction activities due to the presence of terrace deposits that have a moderate potential for erosion (Brabb 1997). However, the flat nature of the Project area would minimize the potential for erosion related impacts.

In general, construction activities for Segments 10 and 11 would include excavation of material sources, clearing and grubbing, and tree removal; grading, rail realignment, retaining wall and abutment construction, viaduct and bridge construction, drainage improvements, and placement of crushed aggregate base and paved surface; and revegetation, installation of fencing, signs, lighting, and other trail and safety-related features.

Potential impacts associated with soil erosion and loss of topsoil could be reduced by implementing mitigation measures or BMPs during construction. These could include but would not be limited to the following: surplus asphalt and rubble would be removed from the Project area

and transported to the local landfill, all disturbed areas within the area would be stabilized, and erosion control measures would be implemented, modified, and replaced.

In addition, a portion of the trail runs within 100 feet of the top of a coastal bluff located on the Pacific Coast in Capitola, adjacent to Park Avenue and just west of New Brighton. This portion of the trail would be susceptible to erosion. The proposed trail alignment could result in substantial erosion or loss of topsoil. This issue will be analyzed further in the EIR, as well as a coastal bluff erosion study being commissioned by the RTC. Therefore, the impact could be **less than significant with mitigation incorporated**.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The Project area is located on stiff clays, loose to medium dense sand, and very dense Purisima Bedrock. Human-made fill was encountered in several of the borings. The Project corridor is underlain by varying areas of low to moderately expansive clay soils resulting in the area being sensitive to lateral spreading, liquefaction and landslides.

In order to offset the potential impacts that may occur to the trail facilities through the presence of geologic features that are susceptible to potential collapse, lateral spreading, subsidence, liquefaction and landslides, bridges and other required structures should be supported by pile foundations. This issue will be further analyzed in the EIR. Therefore, this impact could be **potentially less than significant with mitigation incorporated**.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The trail alignment route is underlain by varying areas of low to moderately expansive clay soils. Expansive soils are composed of expanding clays, which are consistent with the marine terrace deposits found in the Project area. When expansive clay soils become saturated with water, they expand and then contract when conditions are dry. Thus, the Project area is susceptible to shrink/swell potential throughout the year, particularly during the rainy season from October through May. The Geotechnical Report recommends that pavements and structural foundations bear upon non-expansive engineered fill. This issue will be analyzed further in the EIR. Therefore, this impact would be **less than significant with mitigation incorporated.**

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Project does not include the use of septic tanks or alternative wastewater disposal systems. Therefore, there would be **no impact**.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There are five mapped geologic units underlying the Project corridor: Quaternary basin deposits, Quaternary alluvium, Quaternary alluvial fan deposits, Quaternary marine terrace deposits, and the Purisima Formation (Brabb 1997; Wagner et al. 2002). Holocene-aged Quaternary basin deposits and Holocene-aged Quaternary alluvium are generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources and therefore have low paleontological sensitivity. However, Quaternary marine terrace deposits, Quaternary alluvial fan deposits, and the Purisima Formation that underlie the Project alignment have high paleontological sensitivity. Due to the high sensitivity of deposits underlying the Project alignment, ground disturbance during construction could have the potential to encounter paleontological resources. This issue will be analyzed further in the EIR, but it is anticipated that this impact could be mitigated by implementing paleontological protection measures during construction in high sensitivity areas. Therefore, the Project would have a **less than significant impact with mitigation incorporated**.

2.4.8 Greenhouse Gas Emissions

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Environmental Setting

GHG emissions are primarily caused by carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) emitted from both natural and anthropogenic activities. The increase in GHG emissions is correlated with causing the observed increase in the average temperature of the Earth's surface and atmosphere caused by which can contribute to changes in global climate patterns resulting in global climate change.

The State of California passed the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), which requires reductions of GHG emissions generated within California. The Governor's Executive Order (S-3-05) and AB 32 (California Health and Safety Code, Section 38501 et seq.) seek to achieve 1990 emissions levels by the year 2020. The California Air Resources Board is the lead agency for implementing AB 32. In accordance with requirements of AB 32, a scoping plan was adopted by the California Air Resources Board in December 2008 and updated in 2017. This most recent scoping plan lays out the framework for achieving the 2030 reductions as established in Senate Bill 32, described below.

The City adopted a Climate Action Plan (CAP) in 2015 with the GHG reduction goal of reducing community-wide GHG emissions by 5% from 2010 levels by 2020 and by 81% from 2010 levels by 2050 (City of Capitola 2015). Programs to achieve this goal include VMT reduction measures that include increased bicycle ridership. Although the plan did not identify quantifiable GHG reductions from open space measures, enhancing urban forests is identified as a CAP measure.

In 2022, the County approved the Climate Action and Adaptation Plan (CAAP), which strives to meet the Senate Bill 32 target of reducing GHG emissions 40% below 1990 levels before 2030, while simultaneously establishing a policy framework to achieve the longer-term target of net negative GHG emissions by 2045 (AB 1279). The CAAP includes 29 strategies in seven sectors to achieve these goals. Relevant strategies include increasing the use of public transportation, walking,

or bicycling for commute trips by 15%. Natural and working lands strategies include conservation of natural habitat and increasing the urban canopy.

Impact Analysis

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Project construction activities would generate GHG emissions caused by emissions from construction equipment. The construction-related emissions would be short term, and there would not be long-term GHG emissions generated, due to the nature of the trail alignment being for the explicit purpose of pedestrian and bicycle use. Long-term effects of the Project would result in a net benefit regarding GHG emissions in the City and County, because providing a non-vehicular option for travel would reduce VMT. Therefore, there would be no long-term adverse impact on the environment.

The short-term GHG emissions generated from the Project would be produced in the form of emissions from the operation of various construction equipment and worker supply vehicles, both of which use fossil fuels to operate. The Project would implement a goal of the MTP/SCS to increase active transportation opportunities. GHG emissions are ultimately anticipated to decrease under operation of the Project as area vehicle trips are replaced by active transportation and use of the trail. Therefore, the contribution of GHG emissions resulting from the Project would be **less than significant**.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As described under (a) above, the Project would not result in any ongoing annual GHG emissions that would impact the state, City's or County's ability to meet emissions reduction targets. However, the 2022 Scoping Plan and County CAAP also include carbon sequestration components as part of achieving statewide carbon neutrality. Specifically, the CAAP includes Natural/Working Lands Strategies 17 and 18 that include enhancing carbon sequestration through conservation of natural habitats and increasing the urban tree canopy. The Project proposed tree removal that would potentially interfere with implementation of the County CAAP Natural/Working Lands strategies. According to the Biological Resources discussion above, substantial tree removal could result in impacts that may not be mitigated to a less than significant level. Therefore, the Project could conflict with the goals and strategies of the applicable plans. This issue will be further discussed in the EIR. Therefore, the impact could be **potentially significant**.

2.4.9 Hazards and Hazardous Materials

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the Project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Environmental Setting

The trail alignment would primarily be located along the existing SCBRL. Historically, herbicides were commonly used to control weeds along railroad corridors; and creosote, a substance known to contain carcinogenic poly-nuclear aromatic hydrocarbons, was used to protect wooden railroad ties from decay. The use of these substances on and adjacent to the railroad increases the possibility of soil contamination along the trail alignments. The rail line historically transported lumber, quarried material, agricultural products, coal, and gypsum. There is the possibility that an accidental spill of hazardous materials occurred in the past when the rail line was more active (RTC 2013). In addition, hazards materials could be used at the existing industrial, commercial, and residential uses that are adjacent to the trail alignment.

A Phase I Initial Site Assessment (ISA) was conducted by Weber, Hayes & Associates in April 2023 for Segments 10 and 11. The Phase I ISA included a review of the Phase I Environmental Site Assessment that was performed for the entirety of the Santa Cruz Branch Line by Geomatrix in 1996 and the Phase II Soil Sampling conducted by AMEC Geomatrix in 2009. The soil sampling included drilling of 21 exploratory borings within the Segment 10 and 11 footprint and laboratory analysis of 55 discrete soil samples from those borings. The sampling revealed elevated concentrations of arsenic attributed to arsenical herbicides to control weed growth. The 2023 Phase I ISA concurred the persistence of elevated concentrations of arsenic and did not find evidence of any additional Recognized Environmental Conditions or Activity and Use Limitations. The Phase I ISA notes that the overseeing health agency of the Project, Santa Cruz Health Services Agency, has previously approved an impervious paved rail trail as an acceptable cap to protect the public from direct exposure to underlying arsenic-impacted soil.

A Radius Report conducted by Environmental Data Resources on May 9, 2022, and GeoTracker and EnviroStor search by Weber, Hayes, and Associates conducted in September 2022 did not reveal hazardous sites on the Project corridor. While the record search identified eight hazardous material sites within 1/8-mile of the Project corridor, the Phase I ISA (WHA 2023) concluded that these sites do not have the potential to pose a risk to the Project area.

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Routine construction-related hazardous materials would be used, transported, and disposed of during construction. However, the use, transport, and disposal of hazardous materials would be subject to federal, state, and local regulations pertaining to the transport, use, storage, and disposal of hazardous materials. The Toxic Substances Control Act and the Resource Conversation and Recovery Act, Hazardous Waste Control Act, and the City of Capitola Local Hazard Mitigation Plan would minimize risks associated with the storage, disposal, and transport of hazardous materials. The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, regulates the transportation of hazardous materials, as described in Title 49 of the Code of Federal Regulations and Title 13 of the California Code of Regulations. This provides additional regulation for the transportation of hazardous materials by designating appropriate hazard labels shipping preparation, vehicle loading, and hazardous materials registration, among other requirements. Documentation of compliance with hazardous materials regulations codified in Titles 8, 22, and 26 of the California Code of Regulations is required for all hazardous materials and hazardous waste transport. Additionally, the California Building and Fire Code requirements detail standards for the safe management of materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable federal, state, and local requirements related to the routine transport, use, or disposal of hazardous materials would maximize containment through safe handling and storage practices and provide for prompt and

effective cleanup if an accidental release occurs. Additionally, impacts of moving hazardous materials would be limited via compliance with applicable California Department of Toxic Substance Control and California Occupational Safety and Health Administration regulations. Therefore, this impact related to routine use, transport, and disposal of hazardous materials during construction would be **less than significant**.

Once constructed, the trail would be utilized by pedestrians and bicyclists for active recreation and transportation. Standard recreational and transportation uses that would take place along the trail would not involve the routine transport, use, or disposal of hazardous materials. Therefore, the Project would not cause a significant hazard to the public. This impact would be **less than significant.**

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

During ground-disturbing activities associated with construction, existing soil contaminants may be released. This could expose construction workers to soil contaminants due to former railroad operation along the alignment. In addition, construction equipment may include hazardous materials such as lubricants and fuels. Therefore, both construction activity and construction equipment could involve the release of hazardous materials which would create a possible hazard to the public or environment. As such, construction of the trail could create a significant hazard through releasing hazardous materials during construction. This impact will be discussed further in the EIR. However, it is anticipated that this potential impact could be reduced to a less than significant level by conducting soil sampling and implementing necessary remediation. Therefore, the impact would be **less than significant with mitigation incorporated.**

Once constructed, the trail would be used for active recreation and alternative (pedestrian/bicycle) transportation, and there would be no storing, transporting, or otherwise interacting with hazardous materials. Therefore, the risk of accidental release of hazardous materials during operation would be minimal, and the impact would be **less than significant**.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

In both segments, there are several portions of the trail alignment that are located within 0.25 mile of a school. The western terminus of Segment 10 is located approximately 150 feet northeast of Shoreline Middle School and approximately 1,000 feet north of Del Mar Elementary School and Cypress High School. Additionally, Early Learning Preschool is located approximately 750 feet north of Segment 10 where it passes Chanticleer Avenue. At the joining of Segment 10 and Segment 11, Opal Cliff Elementary School is adjacent to the Project corridor to the north. New Brighton Middle School is 500 feet north of Segment 11 where it crosses Washburn Avenue. Wavecrest Junior High School is approximately 1,000 feet north of Segment 11 where it turns east

into New Brighton State Beach. Both Twin Lakes Christian School and Cabrillo College are approximately 1,000 feet north of Segment 11 where it crosses New Brighton Road.

As discussed under criterion (b) above, there is potential for hazardous materials to exist along the rail line corridor that could be exposed during construction, which could require disturbance and movement of contaminated soil or other site remediation techniques within 0.25 mile of a school during trail construction. However, this will be analyzed further in the EIR, and it is anticipated that it could be reduced to a less than significant level by conducting soil sampling and implementing necessary remediation. Therefore, this impact would be **less than significant with mitigation incorporated**.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

According to the Cortese list pursuant to California Government Code, Section 65962.5, the trail alignment is not listed hazardous materials sites (DTSC 2022; State Water Resources Control Board 2022). As such, the trail alignment would not create a significant hazard to the public or the environment beyond the impacts discussed under other criterion within this section. In addition, there are eight sites within 1/8 mile of the Project corridor that are on a list of hazardous materials sites. However, the Phase I ISA (WHA 2023) concluded that these sites do not appear to have the potential to have resulted in hazardous contamination on the Project area. Because the trail alignment is not located on a site that is included on a list of hazardous materials sites compiled pursuant to California Government Code, Section 65962.5, **no impact** would occur.

e. Would the project for a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the Project area?

The closest airport to the trail alignment would be the Monterey Bay Academy Airport, a private airport, approximately 6 miles southeast of the eastern portion of Segment 11, in southern Santa Cruz County near the City of Watsonville. The Monterey Bay Academy Airport does not have an adopted Airport Land Use Plan. The closest public airport to the trail alignment is the Watsonville Municipal Airport, located approximately 7 miles southeast of the eastern portion of Segment 11, in southern Santa Cruz County in the City of Watsonville. The trail alignment would not be located within the Watsonville Municipal Airport Master Plan area (Watsonville Municipal Airport 2003), nor within 2 miles of a public airport or public use airport. Therefore, construction personnel and trail users associated with the Project would not experience safety hazards or excessive noise related to proximity to an airport, and there would be **no impact**.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The County Operational Area Emergency Management Plan addresses the planned response to large-scale emergencies affecting the unincorporated area of Santa Cruz County (County of Santa Cruz 2015). Emergencies in the City of Capitola are covered under the County Operational Area Emergency Management Plan.

The trail alignment would not impair implementation of or physically interfere with either of these existing emergency plans, as the trail alignments would not alter existing transportation facilities which have been identified as emergency routes, have been otherwise identified for use during an emergency, or existing emergency plan routes. The trail alignments would intersect existing roadways (e.g., 30th Avenue, 38th Avenue, 41st Avenue, 47th Avenue, New Brighton State Beach roadway, New Brighton Road, Estates Drive, and Mar Vista Drive); however, neither trail alignment proposes adding any physical elements that would block any existing emergency plan routes. Therefore, the impact would be **less than significant**.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The trail would be located within Incorporated and Unincorporated Local Responsibility Areas of Santa Cruz County that are not designated as Very High Fire Hazard Severity Zones (FHSZs) (CAL FIRE 2007a). None of the trail would be located in a State Responsible Area (SRA) but would be less than 0.25 mile to High and Moderate FHSZs (CAL FIRE 2007b; CAL FIRE 2022). However, the trail would be separated from the SRA FHSZs by SR-1.

Because the trail alignment would not be located in a FHSZ and separated from nearby FHSZs by State Route 1, Project implementation would not expose trail users to impacts from wildland fire. This impact would be **less than significant**. For further discussion of wildfire impacts related to the Project, refer to Section 2.4.20, Wildfire.

2.4.10 Hydrology and Water Quality

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☒	☐	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
iv. Impede or redirect flood flows?	☐	☒	☐	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Environmental Setting

The Project area is located within the Arundo Gulch-Rodeo and Soquel Creek watershed. The Soquel Creek watershed drains an area of 42 square miles. Major tributaries include the West Branch (Burns, Laurel, Hester Creek, Amaya Creek, Fern Gulch, Ashbury Gulch, Hinkley Creek, and numerous unnamed waterways) and the Main Branch (fed by Moore's Gulch, Grover Gulch, Love Creek and Bate's Creek). Smaller tributaries include Noble Gulch, Porter Gulch, Tannery Gulch, and Borregas Creek. Principal land use in the watershed includes urban development, rural residential development, agriculture, parks and recreation, and mining and timber harvesting. Sedimentation and impairment of important fish habitat have been identified as principal resource concerns in this watershed. Soquel Lagoon is listed on the Clean Water Act, Section 303(d), List of Water Quality Limited Segments, for nutrients, pathogens, and sedimentation/siltation.

The Arana Gulch-Rodeo watershed drains a 3.5 square-mile area at the outer (eastern) edges of the City of Santa Cruz. Major waterways and water bodies in this watershed include Arana Gulch, Leona Creek, Schwann Lake, Rodeo Gulch, and several unnamed waterways.

Additionally, the Project area is located adjacent to the Pacific Ocean and is within the Mid-County Groundwater Basin. The geotechnical investigation showed that groundwater was encountered at depths of 21 feet to 40 feet below surface, with the potential for groundwater to be present at other depths, which could be encountered through construction activities (Pacific Crest 2021).

Impact Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

Project construction activities would involve construction equipment that uses fuels and activities that would disturb the soil and create dust, both of which could result in contaminants entering the storm drainage system, which could have an adverse effect on surface or groundwater quality and potential violate water quality standards.

Trail construction includes excavation that could result in erosion of topsoil and thus impact surface water quality. Proposed construction activities would also require the use of petroleum products and other chemicals that could result impacts to water quality. Although construction activities are relatively minor, they could still result in contaminants entering the stormwater drainage system, which could have an adverse effect on water quality. Potential water quality impacts along the proposed trail alignment could be reduced through the implementation of construction BMPs. Therefore, the impact would be **less than significant with mitigation incorporated** and will be discussed further in the EIR.

For the *Proposed Project: Trail next to Rail line (Ultimate Trail Configuration)*, construction activities include the installation of several retaining walls along the trail alignment and the realignment of 1.45 miles of rail, which requires the removal of existing tires and tracks. For the *Optional First Phase: Trail on the Rail line (Interim Trail)*, construction activities would include the removal of all rail, which could also require more extensive excavation if remediation actions are required. Additionally, the Interim Trail would include construction of the Ultimate Trail Configuration as Part 3 of Interim Trail implementation, requiring substantial additional construction activities to re-install the tracks/ties and construct the trail and associated retaining walls alongside the tracks.

Construction activities for the Project could expose the surrounding soil to pollutants associated with construction equipment, such as fuels, oils, or solvents. However, Project activities would be

limited to dry summer months to reduce the potential for stormwater runoff and soil contamination. Implementation of the Project would result in a small increase in impermeable surfaces, which would result in a small increase in the volume of stormwater runoff from the Project area.

Implementation of BMPs would be identified to address hazardous waste by requiring emergency procedures before the start of construction, in the event of a hazardous materials spill. Throughout construction and Project implementation, BMPs would be implemented to control on-site erosion and sedimentation and surface water runoff in compliance with the Caltrans Storm Water Management Plan and with the Caltrans National Pollutant Discharge Elimination System Statewide Stormwater Permit and Construction General Permit.

As described above, to protect water quality against construction-related impacts and reduce potential impacts to a less than significant level, BMPs described in the County Construction Site Stormwater Pollution Control BMP Manual would need to be implemented throughout the duration of Project construction to protect water quality. This will be discussed further in the EIR. Therefore, the impact is anticipated to be **less than significant with mitigation incorporated.**

Operation

Once constructed, the Project would not likely have adverse effects on water quality. The Project would result in new impervious surface that could result in a minor increase in stormwater runoff into adjacent drainages. Because the trail would be used by pedestrians and bicyclists (and not used by motor vehicles), there is the potential for an increase in contaminants from stormwater runoff would be low and less than significant. Refer to the discussions below for potential effects of increased impervious surface on drainage and groundwater.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Trail operation would not require or generate demand for water use that could decrease groundwater supplies or interfere substantially with groundwater recharge. Trail construction could require a small amount of water for dust control, and some construction activities (e.g., installing viaduct piers) could encounter groundwater, but no adverse effects on groundwater are anticipated.

As stated above, groundwater was encountered at depths ranged from 21 feet to 40 feet below surface along the trail alignment, with the potential for groundwater to be present at other depths (Pacific Crest 2021). Groundwater recharge occurs primarily from stormwater runoff that percolates into the ground.

Project construction generally requires excavation up to 6 feet deep for the trail and utility relocations, but trail facilities such as the retaining walls and viaducts would require greater excavation depth which could reach groundwater.

Additionally, construction of Segments 10 and 11 would result in 26,690 square yards of new impervious surface. The surface flow of rainwater across the trail would drain alongside the trail and permeate into the ground, and in some cases would be directed to existing or new drainage facilities included as part of the Project. The increased amount of surface flow would result in minor drainage patterns and would not be significant enough to inhibit groundwater recharge. Further, although the project would slightly increase impermeable surfaces, the trail alignment is not located in an area that has any significant impact on the local groundwater basin.

The Project would also be required to comply with any additional permit requirements from the Regional Water Quality Control Board. For example, if groundwater is encountered during construction a dewatering plan would be required. Any potential groundwater discharge would be consistent with Water Board requirements and as such would not result in a violation of water quality standards or waste discharge requirements.

Therefore, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin; this impact would be **less than significant**.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

iv. Impede or redirect flood flows?

The Project is not anticipated to substantially alter the existing drainage pattern of the Project area by altering a stream or river. However, the Project could result in minor changes to localized drainage patterns from the new impervious paved trail surface. As described under (b) above, construction of Segments 10 and 11 would result in 26,690 square yards of new impervious surfaces compared to existing conditions, which would increase amount of surface flow and could result in minor alterations to localized drainage patterns.

This will be addressed in the EIR. It is anticipated that the potential impact could be reduced to a less than significant level through Project design and incorporation of recommendations from the hydrology/water quality study and geotechnical investigation to minimize impacts to drainage patterns, water quality and surface and groundwater resources. Therefore, the impact is anticipated to be **less than significant with mitigation incorporated**.

d. Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The Project is largely located in Zone X, which is an area of minimal flood hazard, based on the Federal Emergency Management Area delineated Flood Insurance Rate Map Panel Numbers 06087C0352F, 0687C0353F, 0687C0354F, and 0687C0356F dated September 29, 2017. However, the Project would be located over and adjacent to Rodeo Gulch, which is mapped in a Federal Emergency Management Area Special Flood Hazard Area as Zone AE, as well as a defined floodplain. Although located within the mapped 100-year floodplain, the trail would be located outside the 100-year storm event water surface elevation (FEMA 2021).

Based on the review of the California Geologic Survey Tsunami Hazard Area Map, the portions Segment 11 are mapped within a tsunami inundation area and is susceptible to tsunami inundation. There are semi-enclosed bodies of water within the Project area, and thus the Project is not located in a seiche zone.

However, pursuant to the Supreme Court case decision in the California Building Industry Association vs. Bay Area Air Quality Management District case, CEQA does not require an analysis of how the existing environmental conditions would affect a project's residents or users, unless the project would exacerbate those conditions. Since the Project would not exacerbate the existing conditions that could expose people or structures to a significant risk due to flooding, tsunami, or seiche zones.

Further, should the trail be inundated by water from such an event, the risk of pollutants being released is minimal to none because the trail would be used by pedestrians and bicyclists (not motor vehicles) and would not require the use or storage of pollutants that could be released. This impact will be analyzed in the EIR, but it is anticipated that the impact would be **less than significant**.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project would not conflict with the Water Quality Control Plan for the Central Coastal Basin (Regional Water Quality Control Board) or the Santa Cruz Mid-County Groundwater Basin Management Plan (2019). The Project would not result in any significant and unavoidable impacts to water quality or groundwater due to the reasons described in the sections above. In the event that groundwater is encountered during construction activities, the contractor would halt work and the appropriate methods would be determined by a qualified engineer and implemented (Pacific Crest 2021). This impact will be analyzed in the EIR, but it is anticipated that the impact would be **less than significant**.

2.4.11 Land Use and Planning

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☒	☐
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Environmental Setting

The rail corridor extends through primarily urban/suburban portions of the City of Capitola and Santa Cruz County. Land uses along the Project area (SCBRL rail corridor) include commercial, industrial, residential, natural areas, public facilities, and parks and recreation (County of Santa Cruz 1994; City of Capitola 2019). Zoning districts along the trail alignments include industrial, residential, commercial, mixed-use, and recreational designations (County of Santa Cruz 2023; City of Capitola 2021).

Impact Analysis

a. Would the project physically divide an established community?

Project construction is anticipated to begin in 2026 and would last approximately 48 months. Construction staging would take place on existing disturbed or paved areas along the rail corridor within the RTC-owned right-of-way (ROW) or at the designated staging areas. All equipment and materials would be stored, maintained, and refueled in clearly defined and designated portions of the staging areas in accordance with permit requirements. Construction activities and staging would be temporary in nature, and any equipment used during construction would be removed after completion of the Project. There are no existing communities within the Project corridor and rail line ROW. The railroad ROW is an existing feature that is surrounded by developed communities, and construction activities within the railroad ROW would not physically divide communities along the Project corridor. Therefore, Project construction would not physically divide an established community, and impacts would be **less than significant**.

Once constructed, the trail alignments would not physically divide established communities, as neither the *Proposed Project: Trail next to Rail line (Ultimate Trail Configuration)* nor the *Optional First Phase: Trail on the Rail line (Interim Trail)* alignment would be physically large enough to divide a community. Because both trail alignments would follow the existing rail line, the alignments would not act as a new dividing element that was not already introduced by the

SCBRL. It is estimated an average of 2,000 people could use the trail per day for transportation and recreation. Additionally, the trail would require intermittent maintenance, including but not limited to vegetation management, pavement sealing and repair, trash and recycling disposal, and fence repair and replacement. These trail use and maintenance activities would not result in the physical division of communities located along the Project corridor. The Project would create a multi-modal bicycle/pedestrian trail, which would encourage connections along the trail itself rather than create physical divisions. The trail would extend through established communities via the existing railroad ROW; the proposed improvements within the Project corridor would increase connectivity and access to surrounding communities by allowing formal use of the corridor for transportation and recreation purposes. As such, the Project would not physically divide an established community and would have a beneficial effect of increasing connectivity within the community. Therefore, the operational impact would be **less than significant**.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The new trail would be located in a predominately urban/suburban area around industrial, commercial, residential, natural areas, public facilities, and parks and recreational uses. In general, the new trail would not conflict with the permitted uses detailed in the County or Capitola General Plan, Santa Cruz County Zoning Regulations, or Capitola Municipal Code Zoning Ordinance. In addition, as mentioned in the County Municipal Code, Chapter 13.11, and Capitola Municipal Code, Chapter 17.120, the trail would be required to undergo design review that would ensure the trail complies with jurisdictional land use plans and policies.

However, the optional Interim Trail alignment could conflict with policies concerning rail facilities and supporting the preservation of the rails. For example, County General Plan Policy 3.7.3 supports development of the RTC-owned rail corridor for passenger transit, recreational, and goods movement, as well as the MBSST. Additionally, the RTC's MBSST Network Master Plan (RTC 2014) and Transit Corridor Alternatives Analysis (2021) support retaining the rail. However, the optional Interim Trail includes future rebuilding of the rail line and constructing the Ultimate Trail Configuration alongside the rail. The potential impact will be addressed in the EIR, but it is anticipated that the impact would be **less than significant**.

2.4.12 Mineral Resources

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Setting

The Project area is located within developed urban/suburban areas of the County. The California Board of Mining and Geology prepared a map (1982) and report (1986/87) titled Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area, which did not indicate that any designated resources or resources of statewide/regional significance are within this portion of Santa Cruz County. Further, locally important mineral resources were not identified in the Santa Cruz County GIS Mineral Resources layer for this area (County of Santa Cruz 2023).

Impact Analysis

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

As described above, there are no mapped or designated mineral resources within the Project area; therefore, there would be no loss of availability to any mineral resources and thus **no impact**.

2.4.13 Noise

Would the project result in:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

Environmental Setting

The Project alignment extends through developed portions of the County of Santa Cruz and the City of Capitola, including residential, commercial, industrial, and recreational land uses, as well as New Brighton State Beach open space. The existing noise sources include typical noise associated with those land uses and vehicular traffic.

Noise-sensitive receptors are generally defined as locations where people reside or where the presence of unwanted sound may adversely affect the use of the land. Noise-sensitive receptors typically include residences, hospitals, schools, guest lodging, and libraries. The nearest noise-sensitive receptors are the residences located adjacent to the Project corridor in Segments 10 and 11 and the Inn at Depot Hill at the Park Avenue/Monterey Avenue intersection in Segment 11. There are also residences and hotels along Cliff Drive and Monterey Avenue, where trail users are directed through Capitola Village.

Noise is based on adverse or unwanted sound that may interfere with communication, work, sleep or recreation. Both the Capitola and County Municipal Codes include noise ordinances. Construction activities required for the Project are prohibited between the hours of 9:00 p.m. and 7:30 a.m., pursuant to the Capitola Municipal Code (Chapter 9.12), and 10:00 p.m. and 8:00 a.m., pursuant to the County Municipal Code (Chapter 8.30).

Impact Analysis

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Project construction would temporarily increase noise levels adjacent to the construction site in the Project area. Additionally, the Project (Ultimate Trail Configuration) would require drilling for retaining wall and viaduct or bridge installation, but there would be no pile driving. The optional first phase (Interim Trail) would also include track and tie removal, as well as the future construction when the trail is removed the tracks and ties are re-installed (Part 2 of Interim Trail), and when the Ultimate Trail Configuration is constructed alongside the tracks, requiring retaining walls and viaducts (Part 3 of Interim Trail).

Construction noise levels would have the potential to exceed the County Noise Ordinance standard of 75 A-weighted decibels (dBA) for offensive noise. Noise levels from the anticipated construction fleet will be determined based on typical equipment noise levels determined by the Federal Highway Administration Roadway Construction Noise Model (RCNM) as part of the EIR analysis. The Project would be required to comply with the Capitola Noise Ordinance, Chapter 9.12, of its Municipal Code and the County Municipal Code, Section 8.30.010, that both prohibit offensive noise between the hours of 10:00 p.m. and 8:00 a.m. Additional mitigation would likely include preparation and implementation of a Noise Control Plan for construction activities. Therefore, the impact would be **potentially less than significant with mitigation**.

b. Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Project construction could require use of equipment, such as a jackhammer, that could potentially generate groundborne vibration. Use of pile driving equipment is not anticipated. This will be evaluated in the EIR, and potential mitigation could include providing notification to adjacent land uses. Therefore, the impact would be **less than significant with mitigation incorporated**.

c. Would the project, for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels?

The Project is not located within the vicinity of a private airstrip or an Airport Land Use Plan or within 2 miles of a public airport. Therefore, there would be **no impact** caused by the Project.

2.4.14 Population and Housing

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Environmental Setting

The Project area includes the SCBRL extending through urban/suburban areas that are primarily developed with commercial, industrial, recreational, and residential land uses in the unincorporated County.

Impact Analysis

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The Project would not induce unplanned population growth, either directly by constructing new homes or businesses or indirectly by extending roads or other infrastructure that would support further population growth in the area. Constructing a new trail would not promote growth in the surrounding Project area, and there would be **no impact**.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project would be located primarily within the RTC-owned rail corridor ROW, City road ROW, or County road ROW. Temporary or permanent easements may be needed for construction, maintenance, and Project features such as trail connections and drainage improvements. These temporary and permanent easements would not result in the permanent displacement or relocation of people.

Of note is the mobile home park between Thompson Avenue and 38th Avenue where portions of approximately 10 mobile homes and 10 accessory structures (on both sides of the RTC-owned rail corridor) encroach into the RTC ROW. These unauthorized encroachments will be resolved by the RTC per their Encroachment Policy, regardless of the Project, as part of a separate process prior to trail construction in this area. As part of that process, property owner options include but are not

limited to physically moving the mobile homes several feet outside the RTC-owned rail corridor ROW and within the same mobile home park. If adequate space is not available to physically move an individual mobile home, property owners could modify or replace the mobile home with a slightly smaller structure that fits within the respective lot in the mobile home park or elsewhere on the owner's property, or they could move the mobile home to another nearby mobile home park that has space to accommodate it. Because the encroachments are unauthorized, residents would not be considered "displacees" as defined by the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act. However, the RTC would implement avoidance and minimization measure in accordance with their Encroachment Policy to reduce impacts to property owners and residents.

In summary, the Project would not result in the displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The impact would be **less than significant**. No mitigation is required.

2.4.15 Public Services

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☒	☐	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Environmental Setting

The Project extends through both the jurisdiction of the City and the County (**Figure 1**).

The portion of Segment 10 located in the County of Santa Cruz would be served by the Central Fire District (CFD) for fire protection services, the Santa Cruz County Sherriff's Office for police protection services, and American Medical Response (AMR) for emergency medical services. Segment 10 is approximately 250 feet north of the CFD Station 1, approximately 1.1 miles south of the Santa Cruz County Sherriff's Office Headquarters, and approximately 0.2 mile south of the nearest AMR station.

Segment 11 and the portion of Segment 10 located in the City would be served by the CFD for fire protection services, the Capitola Police Department for police protection services, and AMR for emergency medical services. The closest fire stations in Capitola are Stations 4 and 5, both located approximately 250 feet north of Segments 10 and 11, respectively. The closest police station is the Capitola Police Department Headquarters, approximately 200 feet north of Segment 11. The closest AMR station to Segment 11, which is the same AMR station within proximity to Segment 10, is approximately 0.5 mile northwest.

Table 1, General Emergency Services and Response Times to the Trail Alignment, provides the estimated response times of emergency service providers to the trail alignment, as reported in the Final EIR for the MBSST Network Project (RTC 2013).

Table 1. General Emergency Services and Response Times to the Trail Alignment

Service Provider	Existing Response Time (minutes)	Expected Response Time to Project (minutes)	Within Average Response Time?
CFD	5	5	Yes
Santa Cruz County Sherriff's Office	8–9 (priority 1)	Not Provided	N/D
City of Capitola Police Department	3–5	2–5	Yes
AMR	18–30	16–30	Yes

Source: RTC 2013.

Notes: CFD = Central Fire District

Not Provided = for these service providers, response time estimates were not provided. However, response times would be expected to vary depending on the location of the incident.

N/D = no data (response time estimates not provided by service provider; therefore, it is unknown whether future response times would meet or exceed current average response times).

Impact Analysis

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?
Police protection?
Schools?
Parks?
Other public facilities

The new trail would not directly or indirectly generate additional residents or employees that would require new or physically altered public facilities, including those listed above and other public facilities such as healthcare facilities and libraries. Once constructed and in use, the new trail would provide an additional travel option for residents or employees in the community to access public facilities, such as schools, parks, libraries, and healthcare facilities. However, any additional use of these facilities is not expected to result in the need to expand or physically alter these facilities, the construction of which could cause environmental impacts. Therefore, potential impacts to these facilities would be less than significant.

The new trail would result in increased use of the Project corridor by bicyclists and pedestrians. In addition to people using the trail for recreation and transportation, the trail corridor could be used by transient or unhoused people resting or loitering. The increased human activity along the trail could result in additional calls for fire, police, and healthcare services to the Project corridor. Potential impacts to fire, police, and healthcare services will be analyzed further in the EIR. Any potential impacts are anticipated to be less than significant or **less than significant with mitigation incorporated**.

2.4.16 Recreation

	Preliminary Determination			
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Setting

The City and County have existing networks of parks and recreation facilities, as described in the County General Plan (County of Santa Cruz 1994) and Capitola General Plan (City of Capitola 2019). There are several parks and recreation facilities within 0.25 mile of the trail alignment, including the Simpkins Family Swim Center, Felt Street County Park, Brommer Street County Park, Jade Street Park and Community Center, Soquel Creek Park, McGregor Park, and New Brighton State Beach and State Park.

Impact Analysis

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Project with or without the optional Interim Trail would enhance recreation opportunities by providing new facilities (multi-use trail) along Segments 10 and 11. The new trail along Segments 10 and 11 would provide additional bicycle and pedestrian access to existing neighborhood and regional parks and recreational facilities along the Project corridor, including Simpkins Family Swim Center, Jade Street Park, Capitola Beach and other beaches, and New Brighton State Beach. Therefore, County and City residents and visitors currently using these parks and recreation facilities would have an additional non-vehicular means for traveling to and accessing these facilities. Although improved access could result in a minor increase in the use of these recreation facilities, it is not expected to be a substantial increase, such that it could create or accelerate physical deterioration of these facilities. Additionally, as described in Section 2.4.14, Population and Housing, the Project would not result in additional population that would increase the demand on existing facilities. Therefore, the impact of the Project with or without the optional Interim Trail on existing recreational facilities would be **less than significant**. No mitigation is required.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The Project involves construction of a new recreational facility, as well as an alternative (non-vehicular) transportation facility for bicyclists and pedestrians, and the potential impacts of the new facility will be addressed in the EIR. The Project does not include additional recreational facilities or require the construction or expansion of additional recreational facilities that could result in adverse physical effects on the environment. Therefore, the impact of the Project with or without the optional Interim Trail would be **less than significant**. No mitigation is required.

2.4.17 Transportation

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

Environmental Setting

The County General Plan Circulation Element includes policies and objectives to encourage bicycle use (Objective 3.8), coordinate regional continuity of bikeways (Policy 3.8.5), and encourage pedestrian travel as a viable means of transportation by increasing and improving pedestrian facilities (Objective 3.10) (County of Santa Cruz 1994).

The Capitola General Plan includes goals, policies, and actions to support projects, programs, policies, and regulations to maintain a balanced multi-modal transportation network (Policy MO-2.), to support opportunities to repurpose existing rights-of-way or create new rights-of-way to enhance connectivity for pedestrians, bicyclists, and transit (Policy MO-2.5), to enhance bicycle and pedestrian connections to the Capitola Village from surrounding residential neighborhoods and commercial areas (Policy MO-6.6), and to ensure that the bikeways in Capitola are well integrated with existing and proposed regional bikeways in Santa Cruz County (Policy MO-8.2) (City of Capitola 2019). The Capitola Bicycle Transportation Plan contains goals and objectives to improve bicycle circulation, connectivity, and access (Goal 1) and to coordinate with other jurisdictions to adopt a system of bikeways that complements the County system (Objective 1.3) (City of Capitola 2011).

The RTC's 2045 Santa Cruz County RTP includes Policy 1.3 to improve multi-modal access to and within key destinations and Policy 1.4 to ensure network connectivity by closing gaps in the bicycle, pedestrian, and transit networks (RTC 2022).

The trail alignment is primarily located within the RTC-owned ROW but extends alongside vehicular roads through Capitola Village where users would be directed to use the existing on-street bicycle lanes and pedestrian sidewalks. Segment 10 includes trail connections to Chanticleer

Avenue, Corcoran Avenue, and Thompson Avenue with additional roadway crossings at 30th Avenue, 38th Avenue, 41st Avenue, and 47th Avenue. Segment 11 includes trail connections to Portola Drive, Opal Cliff Drive, Cliff Drive, Prospect Avenue, Park Avenue, Coronado Street, and Poplar Street. Segment 11 includes additional roadway crossings at Grove Lane, New Brighton Road, Estates Drive, and Mar Vista Drive. Segment 11 would also include a clear span bridge over New Brighton State Beach roadway.

The trail alignment crosses multiple roadways that have existing sidewalks and Class II or Class III bicycle lanes/routes. As such, bicycle activity occurs along various parts of the Project corridor, most notably use of bike lanes at the intersections of major cross streets. There are formal bike lanes within the Project corridor along 17th Avenue, 30th Avenue, 41st Avenue, 47th Avenue, Cliff Drive, Stockton Avenue, Capitola Avenue, Monterey Avenue, and State Park Drive. Cyclists may also use informal bicycle paths within New Brighton State Beach and other roadways without bicycle infrastructure that the Project corridor intersects.

Beginning at a point on Cliff Drive approximately 0.15 mile southwest of Wharf Road, the trail alignment follows existing on-street bicycle lanes and pedestrian sidewalks through Capitola Village along Cliff Drive, the Stockton Avenue bridge, Capitola Avenue, and Monterey Avenue. Currently, most pedestrian activity near the Project corridor occurs in Capitola near Cliff Drive and through Capitola Village (Wharf Road, Stockton Avenue, Capitola Avenue, and Monterey Avenue) where pedestrians may access Capitola Beach or surrounding commercial uses and along Park Avenue and New Brighton State Beach where pedestrians may access recreational features associated with the beach and campground.

Impact Analysis

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Project would implement or conform to all of the goals, policies, and objectives, as it would include a formal multi-modal trail that would facilitate alternative transportation modes such as walking and bicycling along Segments 10 and 11. The trail alignments would expand existing alternative transportation networks by connecting the surrounding neighborhoods to the Coastal Rail Trail. In addition, as discussed under criterion (c) below, the Project would implement safety design features which would enhance the safety along the trail. As shown through the goals, policies, and objectives included in relevant plans and policies addressing the circulation system, the Project would not conflict with the current relevant plans and policies of the County of Santa Cruz or the City of Capitola. Therefore, there would be **no impact**.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The Project could increase vehicle trips during construction due to large construction equipment, machinery, worker vehicles, and truck deliveries accessing the Project corridor. However, operation of the Project would not likely generate new vehicle trips because it is anticipated that trail users would travel from their home to the trail on foot or bike (rather than drive) because most use would be local and there are no planned new parking areas. The EIR will quantitatively analyze construction trips associated with the Project, and qualitatively analyze the Project's consistency with the Office of Planning and Research, County, and City VMT screening thresholds. It is anticipated that the impacts would be **less than significant**.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The trail would follow a relatively straight alignment except for the proposed Americans with Disabilities Act (ADA)-compliant ramp connecting the trail to the Park Avenue/Coronado Street intersection and at Mar Vista Drive where the trail crosses from the coastal side of the tracks to the inland side of the tracks. Both areas would introduce sharp turns. While overall the Project is anticipated to reduce traffic related hazards and conflicts (e.g., between vehicles and bicyclists) by providing a separate trail, the Project would increase hazards associated with bicycle/pedestrian and vehicular interactions through Capitola Village and where the trail crosses a heavily traveled roadway. This issue will be addressed in the EIR. However, the impact is anticipated to be **less than significant** because overall the hazards (e.g., dangerous intersections) and the potential conflicts between uses (vehicles, bicycles, pedestrians) would be reduced with Project implementation.

d. Would the project result in inadequate emergency access?

Minimum trail widths would be required to accommodate emergency vehicles. According to the 2021 International Fire Code Appendix D, fire apparatus access roads shall be a minimum width of 20 feet (ICC 2021). Under the *Proposed Project: Trail next to Rail line (Ultimate Trail Configuration)* alignment, the typical width of the paved trail would be 12 to 14 feet. However, the trail width could be reduced to as little as 8 feet approaching the eastern side of Monterey Avenue to slow trail users and improve safety at the intersection. Under the *Optional First Phase: Trail on the Rail line (Interim Trail)* alignment, the width of the trail would typically be 16 feet but could be reduced to 12 feet at some locations. The CFD indicated that 8 feet is the minimum sufficient width for ambulances to access an area, and ambulances can navigate 7-foot-wide chokepoints when necessary and if approved by the department. When an ambulance cannot reach a certain area, foot access with a wheeled gurney is an acceptable access method (Mack 2022). Therefore, adequate emergency access would be provided, and this impact is **less than significant**.

2.4.18 Tribal Cultural Resources

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

Environmental Setting

The Project corridor lies within an area traditionally occupied by the Ohlone (or Costanoan) people. Ohlone territory extends along the California coast from the point where the San Joaquin and Sacramento Rivers merge into the San Francisco Bay to Point Sur. Their inland boundary was limited to the interior California Coast Ranges (Kroeber 1925). The Ohlone language belongs to the Penutian family, with several distinct dialects throughout the region (Kroeber 1925). It is divided into eight regional dialects: Karkin, Chochenyo, Ramaytush, Awaswas, Taymen, Mutsun, Rumsen, and Chalon (Jones 2015), with the Project corridor being located within the areas of Awaswas-speaking Uypi tribes (Kroeber 1925; Milliken et al. 2009).

Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**

ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

During construction ground disturbance activities, there always is potential for encountering previously undiscovered cultural resources of Native American origin that could be considered tribal cultural resources. Ground-disturbing activities would include excavation of material sources, grading, and installation of piles for viaducts. This will be evaluated in the EIR. Because of the potential to encounter previously undiscovered tribal cultural resources during ground-disturbing activities, construction monitoring will likely be required. Therefore, the impact would be **less than significant with mitigation incorporated** and will be discussed further in the EIR.

2.4.19 Utilities and Service Systems

Would the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☒	☐	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☒	☐	☐

Environmental Setting

Due to the cross-jurisdictional nature of the trail alignment, some utilities and service systems would differ depending on the segment (i.e., whether the segment is located in the County or City of Capitola). Both Segments 10 and 11 are located partially in the County and partially in the City of Capitola and would be served by the utilities and services that serve both the County and the City of Capitola. Some services are also provided by the City of Santa Cruz, as discussed below.

The Santa Cruz Water Department supplies potable water to the City of Santa Cruz as well as adjoining unincorporated areas of the County and a portion of the City of Capitola. The portion of Segment 10 between 17th Avenue to the west and 41st Avenue to the east falls within the Santa Cruz Water Department service area. Soquel Creek Water District supplies potable water to approximately 40,600 people throughout portions of the City of Capitola and unincorporated Santa Cruz County, including Aptos, La Selva Beach, Opal Cliffs, Rio Del Mar, Seascape, and Soquel (SqCWD 2023). The portion of Segment 10 east of 41st Avenue and all of Segment 11 falls within the Soquel Creek Water District service area.

The Santa Cruz Wastewater Treatment Facility, a regional facility operated by the City of Santa Cruz, would serve the entire Project corridor. The Santa Cruz County Sanitation District provides wastewater collection, treatment, and disposal services to the City of Capitola and unincorporated communities, including Live Oak, Soquel, and Aptos, through a system of wastewater infrastructure that includes approximately 234 miles of sanitary sewer lines and 35 pump stations (SCCSD 2021). The stormwater drainage service within the County would also be under the jurisdiction of the Santa Cruz County Sanitation District, and stormwater drainage within the City of Capitola would be under the jurisdiction of the City of Capitola Public Works Department.

Segments 10 and 11 would be both be served by the following utilities and service systems: Pacific Gas and Electric (PG&E) for natural gas and electricity service and Green Waste Recovery for solid waste services.

Solid waste generated along the entire Project alignment during construction and operation would be disposed of at the Buena Vista Landfill, which is expected to close by 2031 (CalRecycle 2023). Therefore, the County is in the process of developing transfer facilities at Buena Vista Landfill, so the solid waste can be transported to the Monterey Peninsula Landfill, which has capacity to accept solid waste for approximately 100 years (Steel, pers. comm. 2022).

Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Construction of the Project would necessitate the relocation, modification, and/or replacement of existing water, wastewater, stormwater drainage, electricity, and telecommunications facilities infrastructure, the construction or relocation of which could cause significant environmental effects. This potential impact will be analyzed in the EIR, and mitigation could be required but is unknown at this time. Therefore, impacts would **less than significant with mitigation incorporated**.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The Project could require a minor amount of water usage during construction for dust suppression and revegetation of disturbed areas. Once constructed, the trail would not require water supply because there would be no restrooms, irrigation, or other water needs. This impact will be evaluated in the EIR, but it is anticipated to be **less than significant**.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Construction of the Project could generate wastewater through the use of portable toilets by construction workers. The Project does not include building new restrooms or other wastewater generating features. However, it would be expected that trail users would use existing public restrooms and thus contribute to wastewater production. The potential impact will be evaluated in the EIR, but it is anticipated to be **less than significant**.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Project would generate construction waste, which would be disposed of at Buena Vista Landfill or the Monterey Peninsula Landfill. Additionally, the Project includes trash and recycling bins along the trail alignment. The increase in trail users could result in an increase in solid waste disposed of along the trail alignment during Project operation. This impact will be evaluated in the EIR. The impact is anticipated to be less than significant or **less than significant with mitigation incorporated**.

2.4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Preliminary Determination		Less Than Significant Impact	No Impact
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated		
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Environmental Setting

The Project area is a 4.5-mile portion of the SCBRL extending through the built-up urban area of the County. The Project is not located in or near mapped State Responsibility Areas or lands classified as Very High FHSZ.

Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. The trail would be located within Incorporated and Unincorporated Local Responsibility Area of Santa Cruz County that are not designated as Very High FHSZ (CAL FIRE 2007a). None of the trail would be located in an SRA but would be less than 0.25 miles to High and Moderate FHSZs (CAL FIRE 2007b, 2022). The Project corridor is along the RTC-owned rail corridor, which is routinely maintained including vegetation trimming and removal.

The Project with or without the optional Interim Trail would not impair the County of Santa Cruz Operational Area Emergency Management Plan. The trail alignment would not alter existing transportation facilities that have been identified as emergency routes, have been otherwise

identified for use during an emergency, or existing emergency plan routes. The Project corridor would intersect existing roadways at 30th Avenue, 38th Avenue, 41st Avenue, 47th Avenue, New Brighton State Beach roadway, New Brighton Road, Estates Drive, and Mar Vista Drive; however, neither trail alignment proposes adding any physical elements that would block any existing emergency plan routes. Therefore, the impact of the Project with or without the optional Interim Trail relative to emergency response plan and evacuation plan would be **less than significant**. No mitigation is required.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Project is an approximately 4.5-mile new multi-use bicycle and pedestrian trail proposed to extend along the RTC-owned railroad corridor from the east side of 17th Avenue at the western limits of the Project to the western side of State Park Drive at the eastern limits of the Project. A portion of the trail extends through New Brighton State Beach, which includes dense vegetation. The Project does not include housing or other structures that would result in permanent occupants along the Project corridor. There is ongoing vegetation trimming and removal along the RTC-owned rail corridor, which would continue. Once the trail is constructed, there would be additional routine maintenance of vegetated portions of the trail, including weed removal, tree/shrub trimming and fallen tree removal, that would prevent overgrowth that could potentially fuel wildfire. Therefore, the Project with or without the optional Interim Trail would not expose Project occupants to pollutant concentrations from a wildfire, and the impact would be **less than significant**. No mitigation is required.

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Project would not require the installation or maintenance of infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that would exacerbate the fire risk or impact the environment. In addition, as described above, trail maintenance activities would involve routine maintenance of vegetated portions of the trail, including weed removal, tree/shrub trimming, and fallen tree removal, that would prevent overgrowth that could potentially fuel wildfire. Therefore, the Project with or without the optional Interim Trail would not result in additional Project elements that would exacerbate wildfire risks, and the impact would be **less than significant**. No mitigation is required.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Project area is not located within a State Responsibility Area, a Very High FHSZ, or a County-mapped Critical Fire Hazard Area (CAL FIRE 2022). The Project area is relatively flat in nature and is far from any elevated features. Therefore, it is unlikely that any downslope or downstream impacts associated with wildfires would result from the Project. Therefore, the potential impact would be **less than significant**.

The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes for the following reasons. The Project does not include permanent structures that would be occupied by people, and trail users would be transient with short-term exposure to any risks. As described above in Section 2.4.9, Hazards and Hazardous Materials, the impact related to exposure of people or structures to loss, injury, or death involving wildland fires (Threshold G) would be less than significant. Therefore, the Project with or without the optional Interim Trail would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The impact would be **less than significant**. No mitigation is required.

2.4.21 Mandatory Findings of Significance

Does the project:	Preliminary Determination: Potentially Significant Impact	Preliminary Determination: Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino,(1988) 202 Cal.App.3 d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3 d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

Impact Analysis

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The Project area is located within an urban/suburban environment that is predominately developed with commercial, industrial, recreational, and residential land uses along SCBRL. The EIR will evaluate if the Project could not substantially degrade the quality of the environment, cause adverse impacts to wildlife species or sensitive habitats, or eliminate important examples of California prehistory. It is anticipated that the impacts would be **less than significant with mitigation incorporated**.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The Project is generally consistent with the policies set forth in the County General Plan 1994 and Capitola General Plan would not include impacts that are considered cumulatively considerable. The General Plan EIR identifies population, traffic and noise to be potentially significant due to the growth in population resulting from a proposed development project throughout the City. With respect to these cumulative impacts, the Project is anticipated to contribute to a potential net decrease of traffic and associated noise, due to creating the availability of an alternative transportation method by a pedestrian and bike path throughout the County of Santa Cruz. However, the Project could increase impacts to biological resources due to tree removal, which will be evaluated in the EIR. It is anticipated that Project impacts would be **less than significant with mitigation incorporated**.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Implementation of the Project could cause temporary construction-related impacts to noise, air quality and hazardous materials. However, these would be temporary in nature and would not continue past the construction phase of the Project. Therefore, the Project would not cause any substantial adverse effects on human beings, and the impacts would be **less than significant with mitigation incorporated**.

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Section 4 References

BAAQMD (Bay Area Air Quality Management District). 2017. "Air Quality Standards and Attainment Status." Last updated January 5, 2017. Accessed June 2023. https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status.

Brabb, E.E. 1997. Geologic map of Santa Cruz County, California: a digital database. [map.] United States Geological Survey, Open-File Report OF-97-489, scale 1:62,500.

CalRecycle (California Department of Resources Recycling and Recovery). 2023. Solid Waste Information System Facility/Site Activity Details: Buena Vista Drive Sanitary Landfill (44-AA-0004). Accessed June 2023. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1397?siteID=3420.

CAL FIRE (California Department of Forestry and Fire Protection). 2007a. "Santa Cruz County Draft Fire Hazard Severity Zones in LRA." Last updated June 2007. Accessed June 2023. https://osfm.fire.ca.gov/media/6770/fhszl06_1_map44.pdf.

CAL FIRE. 2007b. "Santa Cruz County Fire Hazard Severity Zones in SRA." Last updated November 2007. Accessed June 2023. https://osfm.fire.ca.gov/media/6768/fhszs_map44.pdf.

CAL FIRE. 2022. Fire Hazard Severity Zone Maps. Last updated November 2022. Accessed June 2023. https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/.

Caltrans (California Department of Transportation). 2023. California State Scenic Highway System Map. Accessed June 2023. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

California Board of Mining and Geology. 1982. Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area Map.

California Board of Mining and Geology. 1986/87. Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area.

California Division of Mines and Geology. 1997. Fault-Rupture Hazard Zones in California: Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zone Maps. Special publication, California Department of Conservation. Revised by Earl W. Hart and Bryant. Sacramento, CA.

California Native Plant Society. 2022. Rare Plant Program. Rare Plant Inventory (online edition, v9-01 1.5). Accessed June 2023. https://www.rareplants.cnps.org.

CCRWQCB (Central Coast Regional Water Quality Control Board). 2019. Water Quality Control Plan for the Central Coast Basin, June 2019 Edition. California Environmental Protection Agency. Sacramento, California. June 2019.

CDFW (California Department of Fish and Wildlife). 2022. Natural Diversity Database (CNDDB). Special Animals List. Periodic publication. 66 pp. July 2022. Accessed June 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline.

City of Capitola. 2011. City of Capitola Bicycle Transportation Plan. February 10, 2011. Accessed June 2023. https://bicycleinfrastructuremanuals.com/manuals6/City-of-Capitola-City-of-Capitola-Bicycle-Transportation-Plan-2011.pdf.

City of Capitola. 2015. Climate Action Plan for the City of Capitola. October 22, 2015.

City of Capitola. 2019. Capitola General Plan. Adopted June 26, 2014. Last Updated March 13, 2019. Accessed June 2023. https://www.cityofcapitola.org/communitydevelopment/page/capitola-general-plan#:~:text=The%20General%20Plan%20is%20the,an%20optional%2C%20Economic%20Development%20Element.

City of Capitola. 2021. Land Use Map. Accessed June 2023. https://www.cityofcapitola.org/sites/default/files/fileattachments/community_development/page/1464/figure_lu-4_landusemap_0512_2021.pdf.

County of Santa Cruz. 1994. General Plan and Local Coastal Program for the County of Santa Cruz, California. December 19, 1994.

County of Santa Cruz. 2015. Operational Area Emergency Management Plan. Last updated October 2015. Accessed June 2023. http://www.co.santa-cruz.ca.us/Portals/0/County/OES/pdfs/DRAFTOPERATIONAL%20AREA%20EMERGENCY%20MANAGEMENT%20PLAN%20%28EMP%29%202015pdf.pdf.

County of Santa Cruz. 2020. Santa Cruz County GIS Hazard Map.

County of Santa Cruz. 2023. Land Use Map. Accessed June 2023. https://gis.santacruzcounty.us/gisweb/.

DOC (California Department of Conservation). 2023. "Important Farmland Categories." Accessed June 2023. https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx.

DOC. 2023b. California Farmland Mapping and Monitoring Program. Accessed June 2023. https://maps.conservation.ca.gov/agriculture/DataViewer/index.html

DTSC (California Department of Toxic Substances Control). 2023. "EnviroStor." Accessed June 2023. https://www.envirostor.dtsc.ca.gov/public/.

FEMA (Federal Emergency Management Agency). 2021. Flood Map Service Center.

ICC (International Code Council). 2021. 2021 International Fire Code Appendix D.

Jones, Doug. 2015. "Ritual and Religion in the Ohlone Cultural Area of Central California." Master's Thesis, Department of Anthropology, San José State University.

Kroeber, Alfred J. 1925. Handbook of the Indians of California. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York.

Mack, Marco. Deputy Fire Marshal, CMF CBO, Central Fire District. Conversation regarding fire response services with representatives from Harris & Associates and Rincon Consultants, Inc. on May 12, 2022.

MBARD (Monterey Bay Air Resources District). 2017. 2012–2015 Air Quality Management Plan. Monterey, CA. March 15, 2017.

Milliken, Randall, Laurence Shoup, and Beverly Ortiz. 2009. "Ohlone/Costanoan Indians of the San Francisco Peninsula and their Neighbors, Yesterday and Today." Government Documents and Publications 6.

Pacific Crest Engineering, Inc. (Pacific Crest Engineering). 2021. Draft Geotechnical Investigation – Design Phase, Monterey Bay Sanctuary Scenic Trail (MBSST) – Segments 10 and 11, Santa Cruz, California. Project No. 2120-SZ69-F11, October 22, 2021.

RTC (Santa Cruz County Regional Transportation Commission). 2013. Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report. Santa Cruz, CA. November 7, 2013.

RTC. 2014. Monterey Bay Sanctuary Scenic Trail Network Master Plan. Santa Cruz, CA. February 6, 2014.

RTC. 2021. Transit Corridor Alternatives Analysis.

RTC. 2022. 2045 Regional Transportation Plan. Accessed June 2023.https://sccrtc.org/funding-planning/long-range-plans/2045-regional-transportation-plan/.

SCCSD (Santa Cruz County Sanitation District). 2021. Sewer System Management Plan Audit. Accessed June 2023. https://dpw.co.santacruz.ca.us/Portals/19/pdfs/Sanitation/pdf/SSMP_AUDIT_2021_FINAL%20SIGNED.pdf?ver=yjBLQDpYY5_Uejt-SY6oKw%3 D%3 D.

SWRCB (State Water Resources Control Board). 2023. "GeoTracker." https://geotracker.waterboards.ca.gov/. Accessed June 2023.

Soquel Creek Water District (SqCWD). 2023. "Facts, Figures & Maps." Accessed June 2023. https://www.soquelcreekwater.org/242/Facts-Figures-Maps.

Steel. 2022. Project Manager, Capital Projects, County of Santa Cruz Community Development and Infrastructure Department. Telephone conversation. August 4, 2022.

USFWS (U.S. Fish and Wildlife Service). 2021. Listed Species Quad Search.

Wagner, D.L., H.G. Greene, G.J. Saucedo, and C.L. Pridmore. 2002. Geologic map of the Monterey 30' x 60' quadrangle and adjacent areas, California. [map.] California Geological Survey, Regional Geologic Mapp RGM-1, scale 1:100,000.

Watsonville Municipal Airport. 2003. "Watsonville Municipal Airport Master Plan." Accessed June 2023. https://www.cityofwatsonville.org/DocumentCenter/View/987/CM-Resolution-179-03-Airport-Master-Plan-PDF.

WHA (Weber, Hayes & Associates). 2023. Initial Site Assessment Coastal Rail Trail Project Segments 10 & 11. April 13, 2023.

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Appendix D. ~~Draft~~ Mitigation Monitoring and Reporting Program

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Summary of Mitigation Measures Identified for Proposed Project and Project Alternatives in the Draft Environmental Impact Report

Mitigation Measure	Proposed Project		Project Alternatives		
	Ultimate Trail Configuration (Trail Next to Rail Line) [1]	Optional Interim Trail (Trail on the Rail Line)	Alternative 1 (Trail Only)	Alternative 2 (Rail with Trail on Opposite Side of Tracks)	Alternative 3 (No Project)
Note: Most of the mitigation measures are required for the Ultimate Trail Configuration, Optional Interim Trail, and Alternatives 1 and 2. The shaded rows indicate for which impacts the mitigation requirements are different.					
BIO-1a. Conduct Biological Monitoring for Sensitive Wildlife Species	Yes	Yes	Yes	Yes	No
BIO-1b. Enhance Monarch Roost Habitat along Rail Corridor (Escalona Gulch, New Brighton State Beach, Borregas Creek)	Yes	Yes	Yes	Yes	No
BIO-4. Conduct Breeding Bird Surveys and Identify Protective Buffers prior to Construction, if Construction occurs between February 1 and August 31	Yes	Yes	Yes	Yes	No
BIO-5. Conduct Bat Surveys and Implement Measures to Protect Roosting Bats during Construction	Yes	Yes	Yes	Yes	No
BIO-6. Implement San Francisco Dusky-Footed Woodrat Protection Measures during Construction	Yes	Yes	Yes	Yes	No
BIO-7a. Minimize Construction in Sensitive Habitats and Install Temporary Protective Fencing	Yes	Yes	Yes	Yes	No
BIO-7b. Develop Project-specific Biological Resources Mitigation and Management Plan for Impacts to Biological Resources Resulting from Trail Construction and Operation	Yes	Yes	Yes	Yes	No
BIO-7c. Implement Best Management Practices to Protect Biological Resources during Construction	Yes	Yes	Yes	Yes	No
BIO-8a. Minimize Construction-related Activities in Palustrine Emergent Wetlands and Aquatic/Riverine Habitats	Yes	Yes	Yes	Yes	No
BIO-8b. Develop and Implement Aquatic Resources Mitigation and Monitoring Plan	Yes	Yes	Yes	Yes	No
CR-1. Standards Design Review for Capitola Trestle Bridge Rehabilitation ~~Review~~	No[2]	Yes	Yes	No	No
CR-2a. Worker's Environmental Awareness Program	Yes	Yes	Yes	Yes	No
CR-2b. Archaeological Monitoring	Yes	Yes	Yes	Yes	No
CR-2c. Native American Monitoring	Yes	Yes	Yes	Yes	No
CR-2d. Implementation of Protocol for Unanticipated Discovery of Cultural Resources	Yes	Yes	Yes	Yes	No
GEO-5. Implement Paleontological Resources Protection	Yes	Yes	Yes	Yes	No
HAZ-1a. Conduct Soil Sampling and Implement Necessary Remediations	Yes	Yes	Yes	Yes	No
HAZ-1b. Prepare and Implement Soils Management Plan	Yes	Yes	Yes	Yes	No
HAZ-1c. Evaluate and Cap Contaminated Subgrade Soil and Ballast	No[2]	Yes[3]	Yes	No	No
N-1. Implement Noise-Reducing Measures for Construction Equipment Used within 275 Feet of Residences/Hotels	Yes	Yes	Yes	Yes	No
N-3. Provide Notification of Construction Vibration to Residential Units and Manufacturing Operations within 235 Feet	Yes	Yes	Yes	Yes	No
TCR-1a. Conduct Native American Monitoring During Construction in Previously Undisturbed Native Soils	Yes	Yes	Yes	Yes	No
TCR-1b. Implement Protocol for Unanticipated Discovery of Tribal Cultural Resources if Monitor Not Present	Yes	Yes	Yes	Yes	No

[1] The Ultimate Trail Configuration includes the following design options. The mitigation measures would apply to both design options, unless otherwise indicated.

Ultimate Trail Configuration Design Option A: Interim Trail on Capitola Trestle over Soquel Creek

Ultimate Trail Configuration Design Option B: Inland Side of Track between Grove Lane and Coronado Street in Capitola

[2] This mitigation measure would be required for Design Option A, but not for Design Option B.

[3] This mitigation measure is required for Optional Interim Trail Part 1 only, not Part 2 (interim trail removal and rail reconstruction) or Part 3 (Ultimate Trail Configuration construction).

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
Biological Resources					
	BIO-1. The Project would adversely affect monarch butterfly and autumnal and/or wintering roost sites. *BIO-2. The Project could adversely affect sensitive fish species.*[1] *BIO-3. The Project could adversely affect Santa Cruz black salamander, if present.* *BIO-4. The Project would adversely affect sensitive and native nesting avian species during construction and operation.* *BIO-5. Project construction could adversely affect sensitive and common roosting bat species that use coast live oak, riparian, and other trees along the alignment.* *BIO-6. The Project would adversely affect San Francisco Dusky-footed woodrat .*	**BIO-1a: Conduct Biological Monitoring for Sensitive Wildlife Species** During Project construction ~~of the Ultimate Trail~~, the County of Santa Cruz (with approval from the City of Capitola and the RTC) and the construction contractor shall implement biological monitoring measures for sensitive wildlife species, as specified below: ▪ Prior to initiation of construction activities, a USFWS- and/or CDFW-approved biologist shall prepare a construction monitoring plan that identifies all areas to be protected with exclusion fencing, and all areas requiring monitoring by an agency - approved biologist or trained construction monitor. ▪ Prior to initiation of construction activities, an agency-approved biologist shall conduct an environmental training for all construction personnel. The training shall include a description of the sensitive wildlife species known or with potential to occur in the Project alignment and surroundings (monarch butterfly, sensitive fish species, potential Santa Cruz black salamander, sensitive and common native nesting avian species, sensitive and common roosting bats species, and San Francisco dusky-footed woodrat). ▪ Prior to initiation of construction activities, the construction contractor shall install temporary exclusion fencing (solid silt fencing) in specified areas along the Project boundaries, approximately 6 inches below grade and 3.0 feet above grade, with wooden stakes at intervals of not more than 8.0 feet. Breaks in the exclusion fencing at minimum intervals of 0.25 miles shall allow for wildlife passage across the alignment. The fence shall be maintained in working order for the duration of construction activities. The agency-approved biologist or trained construction monitor shall inspect the fence daily and notify the construction foreman when fence maintenance is required. ▪ Construction activities shall be timed to minimize impacts to sensitive biological resources, as shown in **Table 3.3-9 [**included at the end of this MMRP]. ▪ The agency-approved biologist shall be present on site, to direct and inspect all ground disturbing activities (including but not	County Construction Contractor	Compliance monitored by USFWS-, NOAA Fisheries-, and CDFW-approved biologist	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		limited to tree removal, vegetation removal, grading, grubbing, exclusion fence installation and removal, and for construction activities located in or near sensitive wildlife resources). Any vegetation removed shall be placed directly into a disposal vehicle. Vegetation shall not be piled on the ground unless later transferred, piece by piece, under the direct supervision of an approved biologist. ▪ The approved biologist shall train a designated construction monitor who shall oversee implementation of all protective mitigation measures when the biologist is not present. This representative shall be trained in the identification of special-status wildlife. This representative shall not have the authority to handle special-status species. ▪ Once ground disturbance activities have been completed, the approved biologist or trained construction monitor shall conduct regular inspections of the work area. Prior to the start of work each day, the biologist or monitor shall check for wildlife underneath any vehicle or heavy equipment within the construction site. ▪ The biologist will remain on call. In the event that the construction monitor identifies a sensitive wildlife species in or near the Project area, the approved biologist will be available to confirm the identification and, depending on the species and with agency authorization, relocate the animal out of harm's way. Suitable relocation sites shall be identified in advance with the approval of the relevant agencies. ▪ The approved biologist and construction monitor shall have the authority to stop work that may result in the "take" of a special-status species. ▪ At the end of each workday, excavations (i.e., trenches, holes) shall be secured with a cover (preferably) or a ramp to prevent wildlife entrapment. ▪ All trenches, pipes, culverts, or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. ▪ With agency approval, the approved biologist shall remove invasive aquatic species such as bullfrogs and crayfish from suitable aquatic habitat in and near the construction impact area, if present.			
	BIO-1. The Project would adversely affect monarch butterfly and autumnal and/or wintering roost sites.	**BIO-1b: Enhance Monarch Roost Habitat along the Rail Corridor (Escalona Gulch, New Brighton State Beach, and Borregas Creek)** As a discreet component of Mitigation Measure BIO-7b [described under Impact BIO-7 (Sensitive Habitats)], the County of Santa Cruz shall work with property owners, including CDFW (Escalona Gulch) and State Parks (New Brighton State Beach and Borregas Creek) to develop a Monarch Roost Site Enhancement Plan for monarch roost	County Construction Contractor	Payment of in-lieu fees to CDFW, State Parks, and/or mitigation contractor	To be implemented to prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		sites near the rail corridor. Enhancement may include but is not limited to: ▪ Protecting and maintaining the eucalyptus grove to support monarch roosting through maintenance of roost trees and wind buffer trees; ▪ Topping, thinning, and/or limbing of the grove, removal of downed wood, and/or management of understory vegetation, as needed, to allow sun penetration while preserving wind buffers and variable roost site conditions within the grove (i.e., sun, shade, and insulation from heat and cold), reduce fuel loads (to prevent catastrophic wildfire) and manage hazard trees; ▪ Planting of saplings [to develop wind buffers (which may include locally native trees[1]) and promote growth of future roost trees (avoid senescence[2])]; ~~and~~ ▪ Cultivating fall- and winter-blooming nectar plants, including native or non-invasive forbs and shrubs~~.~~; ▪ Grove monitoring (in partnership with Western Monarch Count, as applicable) during fall (end of November) and winter (beginning of January) monitoring periods and to record and report monarch arrival and departure dates; and ▪ Continued coordination with CDFW and other resource agencies and organizations, as applicable for site specific mitigation measures and adaptive management, as needed.			
	BIO-4. The Project would adversely affect sensitive and native nesting avian species during construction and operation.	**BIO-4: Conduct Breeding Bird Surveys and Identify Protective Buffers prior to Construction, if Construction occurs between February 1 and August 31** During construction, the County of Santa Cruz (with approval from the City of Capitola and the RTC) and the construction contractor shall implement the following measures: ▪ The avian breeding season occurs from February 1 through August 31 with a peak in breeding/nesting activity between April and June for most birds. ▪ If feasible, Project activities will be initiated outside the breeding season in order to avoid impacts to breeding birds. Should Project activities be initiated between September and February, no avian breeding surveys would be required. ▪ If Project activities are to be initiated during breeding season, or if Project activities lapse for 1 week or more during breeding bird season, prior to construction/resumption of construction activities, an agency-approved biologist will conduct avian breeding surveys for all	County Construction Contractor	Agency-approved biologist to conduct surveys	To be implemented prior to and during project construction

[1] The following trees are locally native to the rail corridor and may be planted to serve as buffer trees when suitable habitat is present respective of each species' habitat requirements: coast live oak, California bay laurel, California buckeye, willow species, elderberry species, and/or dogwood.

[2] "Senescence" is the age-related declines in woody plant communities that may be affected by physiological changes (e.g. reduced stem sap flow) in individual trees as well as the growing environment (e.g. drought) and interactions between these factors.

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		birds (and their nests) protected under the MBTA. According to current CDFW permit conditions, the survey area will encompass tree stands and structures within the Project corridor and the following buffers (where accessible): □ 250 feet for passerines/non-raptors; □ 500 feet for small raptors such as accipiters; and □ 1,000 feet for larger raptors such as buteos. Per current CDFW permit conditions, surveys will be conducted within 1 week of the initiation or resumption of Project activities including, but not limited to, staging equipment, tree removal, vegetation clearing, and/or ground disturbing activities. ▪ In the event nesting avian species are observed, postpone Project activities until a qualified biologist has determined young birds have fledged or implement buffers appropriate to the construction activity and the species, such as those recommended in PG&E's Nesting Bird Management Plan (PG&E et al. 2015)[3]: □ Raptors (platform nesting): 300 feet (90 meters) □ Cavity-nesters (depending on species): 50 feet (15 meters) □ Bridge/building, tree, and ground/understory nesters: 75 feet (23 meters) ▪ Sensitive avian species, if nesting in or near the Project corridor, will be given special consideration and may require additional protective measures as determined through consultation with the relevant agency (USFWS or CDFW). The standard protective buffers recommended in PG&E et al. (2015) for sensitive birds that are known to nest or have potential to nest in or near the corridor are as follows: □ Allen's hummingbird – standard buffer: 50 feet (15 meters) □ Wrentit – standard buffer: 75 feet (23 meters) □ Olive-sided flycatcher – standard buffer: 75 feet (23 meters) □ Oak titmouse – standard buffer: 50 feet (15 meters) □ Nuttal's woodpecker – standard buffer: 50 feet (15 meters) □ Yellow warbler – standard buffer: 75 feet (23 meters) □ Peregrine falcon – standard buffer: 500 feet (152 meters) □ White-tailed kite – standard buffer: 300 feet (91 meters) □ Bald eagle – consultation required [standard buffer: 1320 feet (402 meters)]. ▪ Protective buffers will be clearly marked for avoidance by construction activities. ▪ The approved biologist will document pre-construction baseline monitoring of the nest to characterize "normal" behavior. If approved by the agencies, the biologist may have the discretion to reduce the buffer and monitor the nest for disturbance. If the birds show signs of			

[3] PG&E et al.'s Nesting Bird Management Plan (2015) was based on a review of the effects of nest disturbance on reproductive success and consultation with subject experts and takes into account the nesting habits of the bird and the bird's sensitivity to disturbance, as well as the type of activity, duration, and noise level of disturbance (including direct and indirect effects), to develop disturbance categories (low, medium, or high) and associated buffers.

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		abnormal behaviors (e.g., defensive flights/vocalizations, standing up from brooding, and flying away from the nest) that are associated with construction activity, the biologist will reinstate the larger buffer. Work within the setback will be delayed until after the young have fledged. ▪ The biologist will have the authority to stop work if breeding birds exhibit behaviors that may cause nest abandonment or failure. ▪ If postponing Project activities and/or installing buffers are not feasible, further discussions with the appropriate resource agencies (USFWS and/or CDFW) will be necessary to develop alternative requirements.			
	BIO-5. Project construction could adversely affect sensitive and common roosting bat species that use coast live oak, riparian, and other trees along the alignment.	**BIO-5: Conduct Bat Surveys and Implement Measures to Protect Roosting Bats during Construction** The County of Santa Cruz (with the approval from the City of Capitola and the RTC) and the construction contractor shall implement the following measures. To avoid impacts to individual roosts, winter hibernacula, and maternity roosts, during all months, throughout the Project corridor and especially in mature coast live oak woodland and riparian habitats, prior to limbing/tree removal, an agency-approved biologist shall conduct a pre-construction survey for bats to determine if cavity, crevice or foliage-roosting bats are present, as follows: ▪ Bat maternity roosting occurs typically between May 1 and August 31, and winter hibernacula (shelter occupied during the winter by a dormant animal) for many bat species are found between November 1 and February 15. ▪ All trees and limbs proposed for removal, topping or pruning should be marked in the field by the Project proponent in advance of the Project start date. ▪ A qualified biologist shall determine if bats are using the Project corridor for roosting. For any trees/snags/structures (bridges) that could provide roosting habitat for cavity, crevice, or foliage-roosting bats, potential bat roost features shall be thoroughly evaluated to determine if bats are present. Visual inspection, emergence, and/or acoustic surveys shall be utilized as initial techniques. □ If established maternity colonies are found, in coordination with CDFW, a buffer shall be established around the colony to protect pre-volant young from construction disturbances until the young can fly; or implement other measures acceptable to CDFW. □ If individual roosting bats or winter hibernacula[4] are found, in consultation with CDFW or based on CDFW recommendations, the qualified biologist shall develop and implement acceptable passive exclusion methods. If	County Construction Contractor	Qualified biologist to conduct surveys	To be implemented prior to and during project construction

[4] "Hibernacula" are shelters occupied during the winter by a bat or group of bats in torpor (slowed heart rate and slowed breathing). Hibernacula are typically removed from predators and possess the right environmental conditions (temperatures between zero and 15 degrees Celsius and humid). Bats use up energy stores call "brown fat" in winter hibernacula but are vulnerable to disturbance (such as construction) which can cause repeated waking, and in turn, starvation and mortality.

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		feasible, exclusion shall take place during the appropriate windows (between September 1 and November 1) (Authorization from CDFW is required to evict winter hibernacula for bats). ▪ If a tree is determined not to be an active roost site for cavity-roosting bats, it may be immediately limbed or removed as follows: □ If foliage-roosting bats are determined to be present, limbs shall be lowered, inspected for bats by a bat biologist, and chipped immediately or moved to a dump site. Alternately, limbs may be lowered and left on the ground until the following day, when they can be chipped or moved to a dump site. No logs or tree sections shall be dropped on downed limbs or limb piles that have not been in place since the previous day. □ If the tree is not limbed or removed within 4 days of the survey, the survey efforts shall be repeated.			
	BIO-6. The Project would adversely affect San Francisco dusky-footed woodrat.	**BIO-6: Implement San Francisco Dusky-Footed Woodrat Protection Measures During Construction** During construction of the Project, the County of Santa Cruz (with approval from the City of Capitola and the RTC) and the construction contractor shall implement the following measures. Prior to construction, a qualified biologist shall conduct a pre-construction survey for woodrat houses, and clearly flag all houses within the construction impact area and immediate surroundings. The construction contractor shall avoid woodrat houses to the extent feasible by installing a minimum 10-foot (preferably 25-foot) buffer with silt fencing or other material that shall prohibit encroachment. If this buffer and avoidance is not feasible, the qualified biologist shall allow encroachment into the buffer, but preserve microhabitat conditions such as shade, cover and adjacent food sources. Additionally, if avoidance is not possible, a qualified biologist shall develop and implement a Woodrat Relocation Plan, in consultation with CDFW, that allows for the relocation of woodrats and their houses. The plan shall include the following (or similar and CDFW-approved) criteria: ▪ Relocation will occur when vulnerable young are least likely to be present in the woodrat houses (ideally between August 1 and October 30). ▪ During dismantling of woodrat houses, woody debris, food caches, and nesting materials will be retained and relocated to reconstructed or artificial shelters.	County Construction Contractor	CDFW-approved biologist to conduct surveys	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		▪ Relocation sites will be in the nearest suitable habitat outside the Project footprint. ▪ Sites for artificial shelters shall be located in proximity to the original house location and no closer than 20 feet from existing woodrat houses and other artificial shelters. Choose the best available microhabitat, ideally in a location with sun and shade and, if possible, under the same species of tree or shrub as was present at the original house location. Relocation sites shall contain biologically suitable habitat features (e.g., stands of poison oak, coast live oaks, and dense native brush). ▪ Monitoring shall be conducted for 30 days after relocation is completed and include infrared and motion activated cameras and an occupancy assessment. ▪ A report on San Francisco dusky-footed woodrat house monitoring shall be provided to CDFW, within 30 days following the end of the monitoring period, and shall include the methods and results of relocation, occupancy determinations, and discussion of any remedies that may be needed.			
	AES-1. The Project would have an adverse effect on scenic resources and vistas through the removal of mature trees. *AES-2. The Project would be inconsistent with policies that pertain to tree and vegetation removal.* *BIO-1. The Project would adversely affect monarch butterfly and autumnal and/or wintering roost sites.* *BIO-2. The Project could adversely affect sensitive fish species.*[1] *BIO-3. The Project could adversely affect Santa Cruz black salamander, if present.* *BIO-4. The Project would adversely affect sensitive and native nesting avian species during construction and operation.* *BIO-5. Project construction could adversely affect sensitive and common roosting bat species that may use coast*	**BIO-7a: Minimize Construction in Sensitive Habitats and Install Temporary Protective Fencing** The County of Santa Cruz (with approval from the City of Capitola and the RTC) and the construction contractor shall implement the following measures: ▪ To the extent feasible, all trail construction activities, including access routes, staging areas, stockpile areas, and equipment maintenance are to be located outside the limits of mapped sensitive habitats. Sensitive habitat areas shall be mapped by a qualified biologist and clearly shown on construction plans. Sensitive habitat areas include, but may not be limited to: monarch butterfly roost habitat near Rodeo Gulch, Escalona Gulch, Tannery Gulch, New Brighton State Beach, and Flatiron Creek; coastal scrub adjacent to the Porter-Sesnon open space element of New Brighton State Beach; mixed riparian forest, and coast live oak woodland and forest along the rail corridor. ▪ During construction, temporary fencing (e.g., silt fencing[5]) shall be installed at the outermost edge of sensitive habitats and shall not be disturbed except as required for trail construction. Vegetation removal shall be limited to the minimum extent necessary to achieve Project objectives. ▪ Areas designated as environmentally sensitive (i.e., ESHA, County sensitive habitats, and CDFW sensitive natural communities) will be avoided. No work-related activity including equipment staging, vehicular parking, etc., shall be allowed	County Construction Contractor	Qualified biologist to map sensitive habitats	To be implemented prior to and during project construction

[5] See also Mitigation Measure BIO-1a: Conduct Biological Monitoring for Sensitive Wildlife Species, Bullet 3, regarding exclusion fencing.

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
	live oak, riparian, and other trees along the alignment. *BIO-6. The Project would adversely affect San Francisco dusky-footed woodrat.* *BIO-7. The Project would result in adverse effects to riparian habitat, other sensitive natural communities, and Coastal Act ESHA.* *BIO-8. The Project would result in adverse effects to palustrine scrub-shrub and forested wetlands and aquatic/riverine habitats.* *BIO-9. The Project would interfere with wildlife movement.* *BIO-10. The Project would conflict with policies and ordinances protecting trees, including the <u>County of Santa Cruz Significant Tree Ordinance and City of Capitola Community Tree Protection and Management Ordinance</u>~~City of Capitola Community Tree Management Ordinance and County of Santa Cruz Significant Tree Ordinance~~.* *GHG-2. The Project would not be consistent with applicable GHG reduction plans related to tree removal.*	outside the limits of designated work areas when within or adjacent to sensitive habitats including the dripline of trees to be protected. ▪ Mature trees will be retained wherever feasible and limbing of trees and shrubs in mixed riparian forest, coast live oak woodland and forest, coastal scrub, and potential and/or known monarch roost habitat should be favored in lieu of removal. When possible, in temporary impact areas, stumps and burls of native coast live oaks, coast redwoods, and arroyo willows shall be retained to allow for re-sprouting following Project completion. ▪ Limbing and removal of coast live oak trees located in coast live oak woodland and forest habitat shall be minimized to maintain canopy cover, nesting and roosting habitat for bird and bat species, and understory habitat for wildlife, including woodrats and other small mammals.			
		BIO-7b: Develop Project-Specific Biological Resources Mitigation and Management Plan for Impacts to Biological Resources Resulting from Trail Construction and Operation The County of Santa Cruz (with approval from the City of Capitola and the RTC) and the construction contractor shall implement the following measures. A qualified (USFWS- and CDFW-approved) biologist shall prepare a Project-specific Biological Resources Mitigation and Management Plan (MMP) to compensate for direct and indirect impacts to sensitive habitats, including ESHA, and other sensitive biological resources resulting from trail construction and operation. The MMP shall compensate for permanent loss of sensitive habitats, through the creation, restoration, and enhancement of in-kind sensitive habitat, as close to impacted areas as possible. Out-of-kind mitigation will be incorporated into the MMP where it contributes to the overall ecological integrity of mitigation habitat. The MMP will be prepared based on EIR-certified Design Plans (typically 60% or higher) during Project permitting. The MMP will be implemented during and after Project construction, typically within one year of Project completion. The Biological Resources MMP shall include the following: ▪ Description of the trail alignment including as-built acreage of temporary and permanent impacts to mixed riparian forest, coast live oak woodland and forest, coastal scrub, and monarch butterfly roost sites, including the number and type of trees slated for removal with City of Capitola and County status as Protected or Significant trees, respectively.	County (in coordination with the City, CCC, CDFW, RWQCB, USACE and USFWS) Construction Contractor	Agency-approved biologist to prepare Project-specific Biological Resources Mitigation and Management Plan (MMP)	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		▪ Ecological functions and values assessment of sensitive habitats, including monarch butterfly habitat to determine suitable mitigation ratios (at a minimum, no net loss) in consultation with USFWS, CDFW, California Coastal Commission (CCC), the County, and the City. ▪ Goals of compensatory mitigation, including types and areas of sensitive habitat to be created, restored, enhanced and/or preserved; number and type of trees to be replaced, specific functions and values of mitigation habitat types, mitigation ratios (created/restored/enhanced/preserved: impacted), and performance criteria, including: □ Conservation of functions and values of monarch autumnal and overwintering roost habitat and nectaring sites (including maintaining suitable grove structure, wind protection, and water sources)[6]; □ Conservation of edge habitats; and □ Conservation of functions and values for wildlife movement including habitat mosaics, links between creeks, open spaces and safe passage across the proposed alignment, with perennial water sources, diverse food sources, cover, and shelter. ▪ Such compensatory mitigation must occur as close to impacted areas as feasible and result in no net loss (minimum 1:1 replacement ratio) of sensitive habitat types, or their functions and values. In the Coastal Zone, mitigation ratios for ESHA typically start at 3:1 (creation/substantial restoration: impact) ~~for ESHA~~. This ratio is doubled for enhancement (6:1) and tripled for preservation (9:1); however, a minimum of 1:1 must include creation of in-kind ESHA habitat for any mitigation strategy. ▪ Location and acreage of sensitive habitat, including monarch roost habitat, mitigation areas including ownership status, and existing functions and values of restored and/or enhanced sensitive habitats. ▪ Project stakeholders including the County, City of Capitola, and RTC shall identify undeveloped public and private properties as potential mitigation areas. Acquisition could include direct purchase or placement of conservation easements on portions of parcels that are in close proximity to the impacted areas, that share similar ecological value with the impacted areas, that are otherwise constrained from development due to existing conditions (such as County aquatic and riparian setbacks, ESHA, steep slopes, etc.) and currently do not but could support native sensitive habitats (habitat creation) or would benefit from restoration, enhancement, or preservation, as needed to fulfill			

[6] See also Mitigation Measure BIO-1b: Enhance Monarch Roost Habitat along the Rail Corridor (Escalona Gulch, New Brighton State Beach, and Borregas Creek).

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		mitigation acreage and proximity requirements. On-site (immediately adjacent to the trail) mitigation may occur at Rodeo Gulch and within New Brighton State Beach, including the Porter-Sesnon open space element of New Brighton State Beach. ▪ All County Significant trees, Capitola Protected trees, and native trees will be replaced at a minimum 1:1 ratio ("in kind" for native trees) at a location and ratio to be determined by the County Environmental Coordinator, City Community Development Department, and/or other responsible regulatory agencies. Wherever feasible, tree replacement plantings will be situated to promote ecosystems benefits and services by replacing displaced habitat functions and values and/or enhancing remaining habitat. Where tree replacement plantings exceed a minimum 1:1 replacement ratio, tree replacement plantings may be situated to enhance the urban streetscape with the design goals of beautifying neighborhoods (especially those with a disproportionate paucity of trees), reducing the urban heat island, and improving carbon sequestration. Limited tree replacement plantings (in combination with enhancement and/or restoration of oak savannah, native grassland, and ecotones[7]) may occur on site (immediately adjacent to the trail) where there is adequate space. These locations may include where the trail crosses Rodeo Gulch, extends along Jade Street Park, and along New Brighton State Beach, including within the Porter-Sesnon open space element of New Brighton State Beach. Urban streetscape features such as public or private greenbelts, medians, parking strips, and/or other similar available spaces with sufficient space may be used for replacement tree planting. Urban streetscape species composition may include coast redwood, coast live oak, tanoak, and buckeye in upland areas and white alder, box elder, blue elderberry, big leaf maple, and western sycamore in riparian habitats. ▪ Detailed sensitive habitat creation and/or restoration construction and planting techniques. ▪ Description and design of habitat requirements for sensitive wildlife known to occur in the study area and immediate surroundings (including monarch roost sites, sensitive fish species, potential Santa Cruz black salamander, sensitive and common native nesting avian species, sensitive and common roosting bat species, and/or San Francisco dusky-footed woodrat). ▪ Maintenance activities during operation shall include replanting native vegetation found within similar habitats within the same watershed and weed eradication that avoids take of sensitive wildlife species (e.g., woodrat, breeding birds). Trail maintenance			

[7] Ecotones or edge habitats occur when two or more habitat types abut one another.

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		activities would employ hand-tools only. The use of pesticides or herbicides would be prohibited. ▪ Strategies to protect remaining sensitive habitats along the trail corridor and surroundings from direct and indirect impacts from trail users and illegal camping, such as: □ Split-rail and wire fencing □ Interpretive signage including specific information about sensitive habitats and species and "leave no trace" content □ "Green fencing" (dense vegetative buffers consisting of woody and plant species that deter human passage such as poison oak, Pacific blackberry, and stinging nettle) ▪ Strategies to protect wildlife movement, both across and along the trail corridor, as well as north and/or south of the corridor to connect open spaces, supported by complex and mature sensitive habitat mosaics, including perennial water sources. ▪ Long-term quantitative and qualitative monitoring and reporting, including consideration of carrying capacity analysis and alternative approaches, and documenting the ability to meet or surpass performance criteria. ▪ Adaptive management strategies to: □ Identify shortcomings in meeting performance standards; □ Ensure long-term viability of existing, enhanced, restored, and/or newly created sensitive biological resources; □ Enhance ecological functions and values of sensitive habitat mitigation areas, including monarch butterfly habitat and habitat for wildlife movement; □ Ascertain the sufficiency of trail access, facilities development and management, and interpretive design features associated with the Project to protect biological resources. Mitigation area locations and final replacement ratios (e.g., potentially above the minimum "no net loss" ratio set here) shall be determined in consultation with the relevant agencies, as follows. ▪ **U.S. Fish and Wildlife Service (USFWS).** Monarch butterfly (presently federal ESA Candidate species, likely Threatened or Endangered by 2024). ▪ **California Department of Fish and Wildlife (CDFW).** Sensitive habitats, work below the break in bank of stream corridors, riparian habitat, CESA Endangered species, Fully Protected species, and Species of Special Concern. ▪ **California Coastal Commission (CCC).** Environmentally sensitive habitat areas (ESHA). ▪ **California State Parks.** Sensitive resources and habitats on New Brighton State Beach property.			

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		▪ **Regional Water Quality Control Board (RWQCB).** Non-wetland riparian habitat. ▪ **County of Santa Cruz (County).** Sensitive habitats, including ESHA, aquatic features and riparian habitat, and Significant trees. ▪ **City of Capitola (City).** Riparian habitat and sensitive habitats, including ESHA, and Protected trees. The Draft MMP shall be submitted to USFWS, CDFW, CCC, California State Parks, County, and City of Capitola for review prior to formal adoption. Monitoring reports will be provided to relevant agencies.			
		BIO-7c: Implement Best Management Practices to Protect Biological Resources during Construction During construction of the Project, the County of Santa Cruz (with approval from the City of Capitola and the RTC) and the construction contractor shall ensure the following best management practices to protect water quality and biological resources during Project construction activities are included in the construction specifications and implemented during Project construction: ▪ Minimize removal or disturbance of existing vegetation outside the footprint of Project construction activities. ▪ Limit site access and parking, equipment storage and stationary construction activities to the designated staging areas. ▪ Prior to staging any equipment or vehicles within or adjacent to the rail corridor, clean all equipment caked with mud, soils, or debris from off-site sources or previous Project sites to avoid introducing or spreading invasive exotic plant species. Remove invasive exotic plants from the Project area. All equipment used on the site should be cleaned prior to leaving the site for other projects. ▪ Position all stationary equipment such as motors, pumps, generators, and/or compressors over drip pans. At the end of each day, move vehicles and equipment as far away as possible from any water body adjacent to the Project area in a level staging area. Position parked equipment also over drip pans or absorbent material. ▪ Check under all equipment for wildlife before use. If any listed or special-status wildlife is observed under equipment or in the work area, do not disturb or handle it. Cease Project activities and contact the biological monitor or resource agencies for further guidance if the animal continues to be encountered in the Project area. ▪ During construction activities, if security fencing is installed around the construction site, allow for passage of wildlife to maintain a link	County Construction Contractor	Best Management Practices (BMPs) to be implemented for duration of Project construction	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		between inland and coastal habitats including stream corridors[8]. Prohibit the use of plastic mesh safety fencing to prevent wildlife entrapment. ▪ Avoid working at night or during rain events when special-status amphibians and mammals are generally more active. Consult weather forecasts from the National Weather Service at least 72 hours prior to performing work. ▪ Properly contain and remove all food trash that may attract predators into the work area and construction debris and trash from the work site on a regular basis. ▪ Refuel and perform all vehicle and/or equipment maintenance off site at a facility approved for such activities. ▪ Stabilize all exposed or disturbed areas in the Project area. Install erosion control measures as necessary such as silt fences, jute matting, weed-free straw bales, plywood, straw wattles, and water check bars, and broadcasting weed-free straw wherever silt-laden water has the potential to leave the work site and enter the nearby streams. Prohibit the use of monofilament erosion control matting to prevent wildlife entanglement. Modify, repair, and/or replace erosion control measures as needed. ▪ Revegetate with native vegetation found within similar habitats within the same watershed to minimize erosion, prevent the establishment of invasive weeds, and accelerate the recovery of native vegetation communities. ▪ Whenever feasible, certain construction activities will be timed to avoid impacts to sensitive habitats and wildlife species, as presented in **Table 3.3-9**. Ideally, most if not all vegetation clearing will be done in the fall.			
	BIO-2. The Project could adversely affect sensitive fish species.[1] *BIO-3. The Project could adversely affect Santa Cruz black salamander, if present.* *BIO-8. The Project would result in adverse effects to palustrine scrub-shrub and forested wetlands and aquatic/riverine habitats.* *BIO-9. The Project would interfere with wildlife movement.*	**BIO-8a: Minimize Construction-related Activities in Palustrine Emergent Wetlands and Aquatic/Riverine Habitats** The County of Santa Cruz (with approval from the City of Capitola and RTC) and the construction contractor shall minimize construction-related activities including, but not limited to, access routes, staging areas, stockpile areas, and equipment maintenance, within or adjacent to the limits of palustrine scrub-shrub and forested wetlands and aquatic/riverine habitats, to the extent feasible. Wetlands and aquatic/riverine areas shall be clearly shown on construction plans. In coordination with a qualified biologist, temporary fencing (e.g., silt fencing) shall be installed at the outermost edge of all features not directly affected by trail construction.	County Contractor	Qualified biologist to identify areas require temporary protective fencing	To be implemented prior to and during project construction

[8] See also Mitigation Measure BIO-1a: Conduct Biological Monitoring for Sensitive Wildlife Species, Bullet 3, regarding exclusion fencing.

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		BIO-8b: Develop and Implement Aquatic Resources Mitigation and Monitoring Plan The County of Santa Cruz (with approval from the City of Capitola and the RTC) and the construction contractor shall implement the following measures. A qualified biologist shall be retained to prepare an Aquatic Resources Mitigation and Monitoring Plan (MMP) for all direct and indirect impacts to wetlands and aquatic/riverine habitats resulting from trail construction, resulting in no net loss (minimum 1:1 replacement) of these sensitive habitat types. The mitigation area locations and replacement ratios shall be determined in consultation with the USFWS, USACE, Central Coast RWQCB, California Coastal Commission, and/or California Department of Fish and Wildlife. It is expected that mitigation requirements shall be based on the determination by the California Coastal Commission that the trail is a resource-dependent use by providing safe pedestrian and bicycle access to the recreation (e.g., beaches, open spaces, scenic viewpoints) along the central Santa Cruz coast and based on its capacity for "nature study" pursuant to Section 30233(a)(7) of the Coastal Act. The Wetland MMP shall include the following: ▪ Description of the Project including acreage of temporary and permanent impacts to palustrine wetlands, Coastal Act wetlands, and aquatic/riverine features as identified in a forthcoming formal delineation of jurisdictional wetlands and other non-wetland Waters of the U.S. ▪ Ecological functions and values assessment of wetlands, including a determination of regulatory status and permitting requirements to determine suitable mitigation ratios. ▪ Goals of compensatory mitigation Project including types and areas of wetland and aquatic/riverine habitat to be created, restored, and/or enhanced; specific functions and values of mitigation habitat types; and mitigation ratios (created/restored/enhanced/preserved: impacted). Based on a recent memo by the Coastal Commission for a project at Gleason Beach in Sonoma County, mitigation ratios for permanent wetland impacts will likely begin at 4:1 for creation or substantial restoration. For wetland enhancement, this ratio is doubled (8:1) and tripled for habitat preservation (12:1). For all mitigation	County (in coordination with the City, CCC, CDFW, RWQCB, USACE and USFWS)	Qualified biologist to prepare Aquatic Resources Mitigation and Monitoring Plan (MMP)	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		strategies, at least 1:1 must include creation of new sensitive habitat. ▪ Location and acreage of wetland and riparian mitigation areas including size, ownership status, and existing functions and values of restored and/or enhanced sensitive habitats. ▪ Detailed wetland and aquatic/riverine construction and planting techniques. ▪ Description and design of habitat requirements for special-status plants and wildlife potentially occupying wetland and aquatic/riverine habitats. ▪ Maintenance activities during the monitoring period, including replanting native wetland and riparian vegetation and weed removal, that will not result in take of aquatic wildlife species. ▪ Long-term quantitative and qualitative monitoring and reporting, documenting ability to meet or surpass performance criteria. ▪ Adaptive management strategies to ensure long-term viability and enhance ecological functions and values of sensitive habitat mitigation areas. ▪ Strategies to protect remaining wetland and aquatic/riverine habitats along the trail alignment from direct and indirect impacts from trail users. Strategies may include split-rail fencing, interpretive signage, and green fencing (dense vegetative buffers). The Draft MMP shall be submitted to USACE, USFWS, RWQCB, CDFW, CCC, California State Parks, County, and City of Capitola for review.			
Cultural Resources					
	CR-1. The Project may adversely affect historical resources, including the SCBRL (Ultimate Trail Configuration and Optional Interim Trail) and the Capitola Trestle Bridge (Optional Interim Trail and Design Option A).	**CR-1: Standards Design Review for Capitola Trestle Bridge Rehabilitation (Only Required for Optional Interim Trail and Design Option A)** During design of the Capitola Trestle Bridge rehabilitation and improvements for the Optional Interim Trail, as well as Design Option A of the Ultimate Trail Configuration, the County of Santa Cruz, City of Capitola, and/or RTC shall retain a qualified historic preservation professional, who meets the Secretary of the Interior's Professional Qualifications Standards in Architecture or Architectural History, to provide input on Project plans specifically relating to the Capitola Trestle Bridge. The input from the qualified historic preservation professional shall take place from conceptual and schematic phases through design development to identify and implement design elements for the Capitola Trestle Bridge that shall facilitate compliance with the Secretary of the Interior's Standards. The qualified historic preservation professional shall consider the character-defining features as outlined in the National Park Service's	County, City, and/or RTC	Qualified historic preservation professional to provide input on Project plans specifically relating to Capitola Trestle Bridge	During design phase of Capitola Trestle Bridge rehabilitation and trail improvements

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		Preservation Brief 17: Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character and provide treatment recommendations as appropriate. The qualified historic preservation professional shall review the 60% and 90% plans for the Capitola Trestle Bridge and provide recommendations as needed, which shall be incorporated into the final design. Prior to the issuance of construction permits, the qualified historic preservation professional shall prepare a Secretary of the Interior's Standards Project Review Memorandum to document the rehabilitation and Interim Trail improvement's compliance with the standards. This memorandum shall be submitted to the County, City, and/or RTC for review and approval and included in the administrative record upon acceptance.			
	CR-2. Ground-disturbing activities during project construction may unearth or adversely impact subsurface archaeological resources.	**CR-2a: Worker's Environmental Awareness Program** The County of Santa Cruz shall retain a qualified archaeologist to conduct Worker's Environmental Awareness Program training on archaeological sensitivity for all construction personnel prior to the commencement of any ground-disturbing activities. Training shall be provided periodically throughout ground-disturbing activities as new construction personnel are added to the Project. The training shall be conducted by an archaeologist who meets or exceeds the Secretary of Interior's Professional Qualifications Standards for Archeology. Archaeological sensitivity training shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find. Training shall be documented on a sign-in sheet to be provided to the County .	County	Qualified archaeologist to conduct Worker's Environmental Awareness Program	To be implemented prior to and during project construction
		CR-2b: Archaeological Monitoring For construction activities occurring within the boundaries of previously recorded archaeological resources and a 300-foot buffer around each resource, the County of Santa Cruz shall retain a qualified archaeologist to delineate these locations and to monitor project-related ground-disturbing activities. Archaeological monitoring shall be performed under the direction of an archaeologist meeting or exceeding the Secretary of the Interior's Professional Qualifications Standards for Archeology. Monitors shall have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt, and Mitigation Measure CR-2d, Implementation of Protocol for Unanticipated Discovery of Cultural Resources, shall be implemented. Archaeological monitoring may be reduced or halted at the discretion of the monitor, in consultation with the lead agency, as warranted by conditions such as encountering bedrock, sediments that are planned	County	Qualified archaeologist to monitor Project-related ground-disturbing activities	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		to be excavated are comprised of fill, or negative findings during the first 50% of ground disturbance. If monitoring is reduced to spot-checking, spot-checking shall occur when ground disturbance moves to a new location within the Project corridor and when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock). Furthermore, monitoring may be terminated in the event that it is determined that the soils within the Project corridor do not have the potential to contain cultural resources. The monitor shall submit a report within 30 days of completion of all ground-disturbing activities to the County to document compliance.			
		CR-2c: Native American Monitoring For construction activities occurring within the boundaries of previously recorded archaeological resources and a 300-foot buffer around each resource, the County of Santa Cruz shall retain a Native American monitor from a locally affiliated Tribal member(s). Native American monitor(s) shall have the authority to halt and redirect work should any archaeological or Tribal Cultural Resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt, and Mitigation Measure CR-2d, Implementation of Protocol for Unanticipated Discovery of Cultural Resources, shall be implemented. Native American monitoring may be reduced or halted at the discretion of the monitors, in consultation with the lead agency, as warranted by conditions such as encountering bedrock, sediments that are planned to be excavated are comprised of fill, or negative findings during the first 50% of ground disturbance. If monitoring is reduced to spot-checking, spot-checking shall occur when ground disturbance moves to a new location in the Project corridor and when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock). Furthermore, monitoring may be terminated in the event that it is determined that the soils within the Project corridor do not have the potential to contain cultural resources.	County	Native American monitor from locally affiliated tribe to monitor Project-related ground-disturbing activities	To be implemented prior to and during project construction
		CR-2d: Implementation of Protocol for Unanticipated Discovery of Cultural Resources In the event that archaeological resources are unexpectedly encountered during ground-disturbing construction activities, the construction contractor shall halt work within 200 feet of the find, and the County of Santa Cruz shall contact an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology to immediately evaluate the find if an archaeological monitor is not already present. If the find is determined by the qualified archaeologist to be prehistoric and a Native American monitor is not already present, then the County shall contact a Native	County Construction Contractor	Contractor to halt work within 200 feet of any archaeological resources encountered during ground-disturbing activities	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		American representative to participate in the evaluation of the find. If necessary, archaeological testing for California Register of Historical Resources eligibility shall be completed by the qualified archaeologist. If the discovery proves to be eligible for the California Register of Historical Resources and impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the deposit, per the requirements of California Public Resources Code, Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The County, in coordination with the City, shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per California Public Resources Code, Section 15126.4(b)(3)(C).			
Geology and Soils					
	GEO-5. Ground-disturbing activities during Project construction may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**GEO-5: Implement Paleontological Resources Protection Measures during Construction in High Sensitivity Areas** The following measures shall be implemented by the County of Santa Cruz during Project excavation activities exceeding 1 foot in depth in Segments 10 and 11 in areas mapped as geologic units with high paleontological sensitivity (i.e., Quaternary marine terrace deposits, Quaternary alluvial fan deposits, and Purisima Formation). Areas along Segments 10 and 11 that do not have high sensitivity for paleontological resources, including the areas mapped as geologic units with low paleontological sensitivity, do not require the following measures. 1. **Retain a Qualified Professional Paleontologist.** Prior to excavation, the County shall retain a qualified professional paleontologist who is defined by the Society of Vertebrate Paleontology (2010) as an individual, preferably with an MS or PhD in paleontology or geology, who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for at least 2 years. The qualified professional paleontologist shall direct all mitigation measures related to paleontological resources. 2. **Prepare a Paleontological Worker Environmental Awareness Program.** Prior to the start of construction, the qualified	County	Retain qualified professional paleontologist to implement mitigation	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		professional paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. 3. **Monitor for Paleontological Resources during Construction.** As determined appropriate by the qualified professional paleontologist, paleontological monitoring shall be conducted during initial excavations within sediments assigned high paleontological sensitivity (i.e., Quaternary marine terrace deposits, Quaternary alluvial fan deposits, and Purisima Formation). Paleontological monitoring shall be conducted by a paleontological monitor with experience with collection and salvage of paleontological resources and who meets the minimum standards of the Society of Vertebrate Paleontology (2010) for a paleontological resources monitor. The duration and timing of the monitoring shall be determined by the qualified professional paleontologist based on the observation of the geologic setting from initial ground disturbance and subject to the review and approval by the County. The qualified professional paleontologist may determine that full-time monitoring is not warranted based on the specific geologic conditions once the full depth of excavations has been reached and may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. The qualified professional paleontologist may determine that monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the qualified professional paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease, and a qualified professional paleontologist shall evaluate the find before construction activity in the area resumes. If it is determined that the fossil is scientifically significant, the qualified professional paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources: A. **Fossil Salvage.** If fossils are discovered, the paleontological monitor shall have the authority to halt or temporarily divert construction equipment within 50 feet of the find until the paleontological monitor and/or qualified professional paleontologist evaluate the discovery and determine if the fossil may be considered significant. Typically, fossils can be safely salvaged quickly by a single paleontological monitor and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically sensitive deposits.			

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		B. **Fossil Preparation and Curation**. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photographs, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the qualified professional paleontologist. 4. **Prepare a Final Paleontological Mitigation Report.** Upon completion of ground-disturbing activity (and curation of fossils if necessary), the qualified professional paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts associated with the Project. The report shall include a summary of the field and laboratory methods, an overview of the Project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the County. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.			
Hazards and Hazardous Materials					
	HAZ-1. Demolition activities, ground disturbance, or accidental spills during construction could release contaminants, including within a 0.25 mile of schools.	**Mitigation Measure HAZ-1a: Conduct Soil Sampling and Implement Necessary Remediations** Prior to Project construction, the County of Santa Cruz, in coordination with the RTC, shall prepare and submit Work Plans for a Supplemental Soils Investigation to Santa Cruz County Environmental Health. The Supplemental Soils Investigation shall include an evaluation of near-surface materials (soil and ballast) within the Project area. Following notification that Santa Cruz County Environmental Health has received, reviewed, and accepted these Work Plan(s), the County shall conduct a Supplemental Soils Investigation, which shall include near-surface materials sampling at selected locations within the limits of the Project corridor under the supervision of a professional geologist or professional civil engineer to identify the concentrations of anticipated contaminants, which may include arsenic, pesticides, herbicides, heavy metals, creosote, PAHs, and other reasonably anticipated contaminants of concern associated with prior rail use. The County shall coordinate with Santa Cruz County Environmental Health to develop and implement a program to remediate or manage known contaminated materials during construction. If necessary, any additional information gathered from a Supplemental Soil Investigation shall be used to identify locations along the Project corridor that may require remedial action in order to prevent exposure of construction	County in coordination with RTC and Santa Cruz County Environmental Health	Prepare and submit Work Plans for Supplemental Soils Investigation	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		workers, school attendees, and the public to these contaminants. The environmental data collected shall also be used to identify the appropriate disposal options for those materials that require off-site disposal. Disposal shall occur at an appropriate facility licensed to handle such contaminants, and remedial excavation shall proceed under the supervision of an environmental consultant licensed to oversee such activities. The remediation/disposal program shall be approved by Santa Cruz County Environmental Health. The County shall submit any required correspondence to Santa Cruz County Environmental Health prior to issuance of grading permits. All proper waste handling and disposal procedures shall be followed in accordance with applicable DTSC and CalOSHA regulations. Upon completion of the Supplemental Site Investigation, the environmental consultant shall prepare a report presenting the findings of the additional assessment. The report shall be submitted to Santa Cruz County Environmental Health and include figures depicting the boring locations, summary tables of analytical data, conclusions, and recommendations.			
		Mitigation Measure HAZ-1b: Prepare and Implement Soils Management Plan The County of Santa Cruz shall ensure a Soils Management Plan is developed by a qualified engineer. The plan shall be implemented to protect workers and persons at nearby schools during ground-disturbing activities and to remove and/or mitigate exposure to hazardous materials (soil and/or ballast), where present in the Project corridor. Laboratory data for the Supplemental Soils Investigation conducted under Mitigation Measure HAZ-1a shall be used to profile excavated materials prior to transport, treatment, recycling, capping, or disposal at a licensed treatment facility. Additional profiling of the export materials shall be performed as needed to satisfy requirements of the receiving facility. Removal, transportation, and disposal of contaminated materials shall be performed in accordance with applicable DTSC and CalOSHA laws, regulations, and ordinances. The Soils Management Plan shall include health and safety information for workers and the general public with an emphasis on potential adverse health effects and how to seek proper help if an accident is suspected and inform the various contractors and workers of the presence of contaminated shallow materials and the appropriate measures to avoid exposure to contaminants. These measures may include but would not be limited to the following: 1. Installing temporary security fencing around the construction site and flag/cone off the areas of contaminated soils (hotspots) until the contaminants are removed	County in coordination with RTC and Santa Cruz County Environmental Health	Retain qualified engineer to develop Soils Management Plan	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		2. Providing all personnel entering a hotspot with site-specific awareness training 3. Requiring that all personnel whose work will involve the excavation or disturbance of soils in and around the hotspot must have successfully completed 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training 4. Requiring a HAZWOPER supervisor to be on-site at all times during the excavation or disturbance of soils in a hotspot 5. Prohibiting personnel who cannot prove that they are authorized to enter a hotspot or do not have the appropriate personal protective equipment from entering a hotspot 6. Prohibiting eating, drinking, smoking, chewing gum or tobacco in hotspots, and requiring consumable items and activities be confined to designated worker break areas In the event that contaminated materials and/or groundwater is identified where not previously anticipated during construction, the Soils Management Plan shall also require that construction cease and that appropriate handling and disposal procedures be implemented. Contaminated materials and/or groundwater can be identified by discoloration or stains, distinctive odors, absence of plants and animals, subsequent erosion from the absence of plant life, or the presence of paint chips or other materials known to contaminate near-surface materials. Procedures for properly handling, storing, and disposing of contaminated soils may include but are not limited to the following: 1. Placing contaminated materials in properly labeled drums or lined hazardous waste storage/transportation conveyance units (i.e., roll-off waste boxes) in preparation of transportation and disposal 2. Avoiding temporary stockpiling of hazardous materials 3. If temporary stockpiling is necessary: a. Covering the stockpile with plastic sheeting or tarps b. Installing a berm around the stockpile to prevent runoff from leaving the area c. Avoiding stockpiling in or near storm drains or watercourses 4. Monitoring the air quality during excavation operations at locations potentially exhibiting elevated concentrations of hazardous material 5. Collecting water from decontamination procedures and treating and/or disposing of it at an appropriate disposal site 6. Collecting non-reusable protective equipment and disposing of the equipment at an appropriate disposal site			

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		Mitigation Measure HAZ-1c: Evaluate and Cap Contaminated Subgrade Soil and Ballast (Only Required for Optional Interim Trail Part 1 and Design Option A) In locations where the trail pavement would be placed on the existing rail ballast during construction of the Optional Interim Trail (Part 1) and Design Option A for the Ultimate Trail Configuration, the County of Santa Cruz, in coordination with the RTC, shall evaluate and cap the subgrade materials (soil and ballast) as follows. Prior to the finalization of pavement design for the Optional Interim Trail and prior to removal of the rail and construction of the Optional Interim Trail (Part 1), as well as Design Option A, the structural quality of the subgrade materials shall be evaluated to ensure that it has adequate strength to carry the predicted loads during the design life of the pavement and to avoid exposure of trail users to hazardous materials. The Optional Interim Trail pavement shall also be engineered to limit the expansion and loss of density of the subgrade soil. The existing ballast material shall serve as the base rock layer to support the base material and asphalt layer of the cover. The ballast material shall be leveled to establish a base rock layer at a depth to be determined following evaluation of hazardous materials. Residual materials disturbed by construction (on which the trail would be placed) would be capped (e.g., covered with asphalt) to avoid exposure of trail users to hazardous materials. To ensure that the asphalt cap is maintained as designed, a regulatory oversight agreement between the owner or their designee and Santa Cruz County Environmental Health shall be required. This Post-Construction Site Management Plan shall include procedures and requirements for ongoing maintenance of the asphalt cap to ensure the cap is maintained in good condition so that it remains protective of public health and the environment. The Accountable Care Organization Agreement shall include the following elements: ▪ **Inspections.** The cap shall be regularly inspected to ensure that it is functioning as intended. These inspections shall be conducted on a routine basis as well as after unplanned events (e.g., earthquake, on-site construction activity) that may have affected the integrity of the asphalt cap. ▪ **Repairs and Maintenance.** The cap shall be maintained in a manner that ensures it is functioning as intended. Examples of cap maintenance include vegetation control and repairs due to cover erosion, asphalt cracking, settlement, and subsidence. For asphalt and concrete caps, periodic sealing of the cap surface will be necessary. Repairs and maintenance of the cap shall be performed according to the procedures and timeframes specified in the Accountable Care Organization Agreement.	County in coordination with RTC and Santa Cruz County Environmental Health	Develop regulatory oversight agreement to ensure asphalt cap is maintained as designed	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		▪ **Reporting, Recordkeeping, and Notification.** The Accountable Care Organization Agreement shall outline the recordkeeping requirements, provide for submittal of periodic inspection summary reports, identify the site activities or conditions that require notification of the regulatory agencies, and identify the time frame and mechanism (e.g., verbal, written) for the required notifications.			
Noise					
	N-1. Construction may result in a substantial temporary increase in noise levels.	**Mitigation Measure N-1: Implement Noise-Reducing Measures for Construction Equipment Used within 275 Feet of Residences or Hotels** The County of Santa Cruz shall include the following in the construction specifications. During construction, the construction contractor shall employ the following noise-reducing measures where use of construction equipment occurs within 275 feet of residences or hotels: ▪ Use acoustical shelters around any air compressors, generators, and any other stationary construction equipment not fitted with baffled enclosures ▪ Use baffling around stationary construction equipment to reduce noise and vibration levels ▪ Properly muffle and maintain all construction equipment powered by internal combustion engines ▪ Prohibit unnecessary idling of internal combustion engines ▪ Whenever feasible, use electrical power to run air compressors and similar power tools	County Construction Contractor	Employ noise-reducing measures within 275 feet of residences or hotels	During construction
	N-3. Construction would potentially expose persons to or generate excessive groundborne vibration or groundborne noise levels.	**Mitigation Measure N-3: Provide Notification of Construction Vibration to Residential Units and Manufacturing Operations within 235 Feet** The County of Santa Cruz shall ensure that the construction specifications include the following noticing requirement. The construction contractor shall provide written notification at least 1 week prior to the start of any construction activities involving the use of vibratory equipment to all residential units located within 50 feet or manufacturing uses within 235 feet of the construction area that would produce the vibration. The notice shall inform residents of the estimated start date and duration of daytime vibration-generating construction activities and provide a point of contact for vibration exposure complaints.	County Construction Contractor	Notify all residential units within 50 feet and/or manufacturing uses within 235 feet at least 1 week prior to start of construction activities	Prior to and during construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
Tribal Cultural Resources					
	TCR-1. The Project may cause a substantial adverse change in the significance of a tribal cultural resource.	**Mitigation Measure TCR-1a: Conduct Native American Monitoring during Construction in Previously Undisturbed Native Soils** The County of Santa Cruz and/or their construction contractor shall retain a Native American monitor to be present during excavation activities within previously undisturbed native soils. In the event that cultural resources of Native American origin are identified during construction, the Native American monitor shall have the authority to halt and redirect ground disturbance away from the find. The County and/or tribal liaison, as appropriate, shall consult with a qualified archaeologist and begin or continue Native American consultation procedures. If the County and/or tribal liaison, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under the California Environmental Quality Act, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The mitigation plan may include but would not be limited to avoidance, capping in place, excavation and removal of the resource, interpretive displays, sensitive area signage, or other mutually agreed upon measure. **Mitigation Measure TCR-1b: Implement Protocol for Unanticipated Discovery of Tribal Cultural Resources if Native American Monitor is Not Present** If cultural resources of Native American origin are identified during project construction while the Native American monitor is not present, the County of Santa Cruz and/or their construction contractor shall cease all earth-disturbing work within 50 feet of the find and desist until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. Staking of the area of discovery shall be implemented with stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery. If the County, in consultation with local Native American tribes, determines that the resource is a tribal cultural resource and thus significant under the California Environmental Quality Act, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with local Native American groups. The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include but are not limited to protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, and/or performing heritage recovery.	County Construction Contractor	Retain Native American monitor to be present during excavation activities Contractor to halt work within 50 feet of any cultural resources encountered during project construction	During construction

[1] Sensitive fish species include tidewater goby (and its critical habitat), central California coast steelhead (and its critical habitat), and Pacific lamprey.
CalOSHA = California Occupational Safety and Health Administration; CCC = California Coastal Commission; CDFW = California Department of Fish and Wildlife; CESA = California Endangered Species Act; DTSC = California Department of Toxic Substance Control; ESHA = Environmental Sensitive Habitat Area; FESA = federal Endangered Species Act; HAZWOPER = Hazardous Waste Operations and Emergency Response; MBTA = Migratory Bird Treaty Act; MMP = Mitigation and Management Plan; MMRP = Mitigation Monitoring and Reporting Program; NOAA = National Oceanic and Atmospheric Administration; PG&E = Pacific Gas & Electric; RTC = Santa Cruz County Regional Transportation Commission; RWQCB = Regional Water Quality Control Board; SCBRL = Santa Cruz Branch Rail Line; USACE = U.S. Army Corps of Engineers; USFWS = U.S. Fish and Wildlife Service

Sources:

Pacific Gas & Electric Company (PG&E), ICF International, and H. T. Harvey & Associates. 2015. *Nesting Bird Management Plan: Biologists Guidelines for PG&E Utility Operations, Maintenance, and Projects*. August 2015.

Society of Vertebrate Paleontology (SVP). 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.

Santa Cruz County Regional Transportation Commission (RTC). 2013. *Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report*. Santa Cruz, CA. November 7, 2013. Accessed October 2023. https://sccrtc.org/projects/multi-modal/monterey-bay-sanctuary-scenic-trail/final-environmental-impact-report-on-the-monterey-bay-santucary-scenic-trail-mbsst/.

Weber, Hayes & Associates (WHA). 2023. *Initial Site Assessment Coastal Rail Trail Project Segments 10 & 11*. April 13, 2023.

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1.1. Basic Project Information

Data Field	Value
Project Name	Rail Trail 10/11 Ultimate
Construction Start Date	1/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	0.60
Location	36.96393876369363, -121.9656080602527
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3138
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	4.20	Mile	10.7	0.00	—	—	—	—

Bridge/Overpass Construction	2.00	Mile	2.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.3	9.47	76.9	92.2	0.19	3.32	4.90	8.22	3.06	0.65	3.70	—	21,340	21,340	0.91	0.28	4.33	21,452
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.3	9.47	77.1	92.2	0.19	3.32	4.90	8.22	3.06	0.65	3.70	—	21,306	21,306	0.92	0.28	0.11	21,413
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.71	6.49	51.2	65.2	0.14	2.16	3.50	5.66	1.99	0.46	2.45	—	15,201	15,201	0.65	0.20	1.24	15,278
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.41	1.18	9.34	11.9	0.02	0.39	0.64	1.03	0.36	0.08	0.45	—	2,517	2,517	0.11	0.03	0.21	2,530

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.3	9.47	76.9	92.2	0.19	3.32	4.90	8.22	3.06	0.65	3.70	—	21,340	21,340	0.91	0.28	4.33	21,452
2027	10.8	9.10	71.6	91.6	0.19	3.02	4.90	7.92	2.78	0.65	3.43	—	21,315	21,315	0.90	0.28	4.02	21,426
2028	7.83	6.59	51.7	66.2	0.15	1.98	4.30	6.28	1.82	0.55	2.37	—	16,842	16,842	0.70	0.18	2.59	16,918
2029	7.56	6.36	48.3	65.3	0.15	1.82	4.30	6.12	1.68	0.55	2.22	—	16,824	16,824	0.70	0.18	2.38	16,899
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.3	9.47	77.1	92.2	0.19	3.32	4.90	8.22	3.06	0.65	3.70	—	21,306	21,306	0.92	0.28	0.11	21,413
2027	10.8	9.10	71.7	91.5	0.19	3.02	4.90	7.92	2.78	0.65	3.43	—	21,281	21,281	0.91	0.28	0.10	21,388
2028	10.4	8.71	66.9	90.8	0.19	2.75	4.90	7.65	2.53	0.65	3.17	—	21,255	21,255	0.91	0.28	0.10	21,361
2029	7.56	6.36	48.3	65.2	0.15	1.82	4.30	6.12	1.68	0.55	2.22	—	16,797	16,797	0.69	0.19	0.06	16,870
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	5.24	4.41	35.6	42.8	0.09	1.55	2.45	4.00	1.42	0.33	1.75	—	9,611	9,611	0.41	0.13	0.97	9,660
2027	7.71	6.49	51.2	65.2	0.14	2.16	3.50	5.66	1.99	0.46	2.45	—	15,201	15,201	0.65	0.20	1.24	15,278
2028	5.96	5.01	39.2	50.7	0.12	1.53	3.17	4.69	1.41	0.40	1.81	—	12,678	12,678	0.53	0.15	0.87	12,736
2029	3.15	2.66	20.1	29.3	0.06	0.72	1.65	2.37	0.66	0.23	0.89	—	6,762	6,762	0.29	0.09	0.62	6,796
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.96	0.80	6.50	7.82	0.02	0.28	0.45	0.73	0.26	0.06	0.32	—	1,591	1,591	0.07	0.02	0.16	1,599
2027	1.41	1.18	9.34	11.9	0.02	0.39	0.64	1.03	0.36	0.08	0.45	—	2,517	2,517	0.11	0.03	0.21	2,530
2028	1.09	0.91	7.15	9.26	0.02	0.28	0.58	0.86	0.26	0.07	0.33	—	2,099	2,099	0.09	0.02	0.14	2,109
2029	0.58	0.48	3.66	5.35	0.01	0.13	0.30	0.43	0.12	0.04	0.16	—	1,120	1,120	0.05	0.01	0.10	1,125

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.09	9.50	10.7	0.02	0.46	—	0.46	0.42	—	0.42	—	1,489	1,489	0.06	0.01	—	1,494
Dust From Material Movemen	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.09	9.50	10.7	0.02	0.46	—	0.46	0.42	—	0.42	—	1,489	1,489	0.06	0.01	—	1,494
Dust From Material Movemen	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.71	3.05	< 0.005	0.13	—	0.13	0.12	—	0.12	—	424	424	0.02	< 0.005	—	426
Dust From Material Movemen	—	—	—	—	—	—	0.12	0.12	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.49

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.49	0.56	< 0.005	0.02	—	0.02	0.02	—	0.02	—	70.2	70.2	< 0.005	< 0.005	—	70.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.15	2.20	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	345	345	0.02	0.01	1.41	351
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.20	2.18	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	330	330	0.02	0.01	0.04	335
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.58	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	94.1	94.1	0.01	< 0.005	0.17	95.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.49
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.03	15.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.6	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	7.44	7.44	< 0.005	< 0.005	0.01	7.85
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.6	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	7.44	7.44	< 0.005	< 0.005	< 0.005	7.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.54	3.81	32.3	37.0	0.08	1.41	—	1.41	1.30	—	1.30	—	8,520	8,520	0.35	0.07	—	8,549
Dust From Material Movemen	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	3.17	3.17	< 0.005	< 0.005	< 0.005	3.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.90	6.75	0.01	0.26	—	0.26	0.24	—	0.24	—	1,411	1,411	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.55
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.53	0.36	5.20	0.00	0.00	0.77	0.77	0.00	0.18	0.18	—	817	817	0.05	0.03	3.35	831
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	0.10	43.7
Hauling	0.06	0.01	0.75	0.30	0.01	0.01	0.12	0.13	0.01	0.03	0.04	—	504	504	0.05	0.08	0.88	530
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.53	0.47	5.15	0.00	0.00	0.77	0.77	0.00	0.18	0.18	—	782	782	0.06	0.03	0.09	794
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	< 0.005	43.6
Hauling	0.06	0.01	0.78	0.30	0.01	0.01	0.12	0.13	0.01	0.03	0.04	—	504	504	0.05	0.08	0.02	529
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.22	0.18	2.07	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	334	334	0.02	0.01	0.62	339
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.02	18.6
Hauling	0.02	< 0.005	0.33	0.13	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	215	215	0.02	0.03	0.16	226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.3	55.3	< 0.005	< 0.005	0.10	56.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.94	2.94	< 0.005	< 0.005	< 0.005	3.08

Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.6	35.6	< 0.005	0.01	0.03	37.4

3.5. Linear, Grading & Excavation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.2	8.57	70.4	86.3	0.18	3.02	—	3.02	2.77	—	2.77	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	7.32	7.32	< 0.005	< 0.005	< 0.005	7.73
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.2	8.57	70.4	86.3	0.18	3.02	—	3.02	2.77	—	2.77	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	7.33	7.33	< 0.005	< 0.005	< 0.005	7.73
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.29	6.12	50.3	61.6	0.13	2.15	—	2.15	1.98	—	1.98	—	14,265	14,265	0.58	0.12	—	14,314

Dust From Material Movemen	—	—	—	—	—	—	2.66	2.66	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.20	0.20	< 0.005	0.02	0.02	—	5.23	5.23	< 0.005	< 0.005	< 0.005	5.52
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.12	9.18	11.3	0.02	0.39	—	0.39	0.36	—	0.36	—	2,362	2,362	0.10	0.02	—	2,370
Dust From Material Movemen	—	—	—	—	—	—	0.49	0.49	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.91
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.51	0.35	4.90	0.00	0.00	0.77	0.77	0.00	0.18	0.18	—	803	803	0.05	0.03	3.11	817
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.9	40.9	< 0.005	0.01	0.09	42.9
Hauling	0.05	0.01	0.71	0.29	0.01	0.01	0.12	0.12	0.01	0.03	0.04	—	493	493	0.04	0.08	0.82	519
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.51	0.44	4.85	0.00	0.00	0.77	0.77	0.00	0.18	0.18	—	769	769	0.05	0.03	0.08	780
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.9	40.9	< 0.005	0.01	< 0.005	42.8
Hauling	0.05	0.01	0.74	0.29	0.01	0.01	0.12	0.12	0.01	0.03	0.04	—	493	493	0.04	0.08	0.02	518
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.36	0.28	3.27	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	549	549	0.04	0.02	0.96	558
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.2	29.2	< 0.005	< 0.005	0.03	30.6
Hauling	0.04	0.01	0.52	0.21	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	352	352	0.03	0.06	0.25	370

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.60	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	90.9	90.9	0.01	< 0.005	0.16	92.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.83	4.83	< 0.005	< 0.005	< 0.005	5.06
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	58.4	58.4	0.01	0.01	0.04	61.3

3.7. Linear, Grading & Excavation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.80	8.23	65.7	85.9	0.18	2.74	—	2.74	2.52	—	2.52	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movement	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	7.21	7.21	< 0.005	< 0.005	< 0.005	7.60
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.40	1.18	9.39	12.3	0.03	0.39	—	0.39	0.36	—	0.36	—	2,853	2,853	0.12	0.02	—	2,863
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	1.03	1.03	< 0.005	< 0.005	< 0.005	1.09

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.21	1.71	2.24	< 0.005	0.07	—	0.07	0.07	—	0.07	—	472	472	0.02	< 0.005	—	474
Dust From Material Movemen	—	—	—	—	—	—	0.10	0.10	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.47	0.39	4.57	0.00	0.00	0.77	0.77	0.00	0.18	0.18	—	756	756	0.05	0.03	0.07	767
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.9	39.9	< 0.005	0.01	< 0.005	41.7
Hauling	0.05	0.01	0.70	0.28	0.01	0.01	0.12	0.12	0.01	0.03	0.04	—	481	481	0.04	0.08	0.02	505
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.62	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	108	108	0.01	< 0.005	0.18	110
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.70	5.70	< 0.005	< 0.005	< 0.005	5.97
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	68.8	68.8	0.01	0.01	0.05	72.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.03	18.2
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.99
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	12.0

3.9. Linear, Drainage, Utilities, & Sub-Grade (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.38	6.19	51.1	62.3	0.15	1.98	—	1.98	1.82	—	1.82	—	16,024	16,024	0.65	0.13	—	16,079
Dust From Material Movemen	—	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.80	4.80	< 0.005	< 0.005	< 0.005	5.06
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.38	6.19	51.1	62.3	0.15	1.98	—	1.98	1.82	—	1.82	—	16,024	16,024	0.65	0.13	—	16,079
Dust From Material Movemen	—	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.81	4.81	< 0.005	< 0.005	< 0.005	5.07
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.23	3.55	29.3	35.7	0.09	1.13	—	1.13	1.04	—	1.04	—	9,188	9,188	0.37	0.07	—	9,220
Dust From Material Movemen	—	—	—	—	—	—	1.78	1.78	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.77	0.65	5.35	6.52	0.02	0.21	—	0.21	0.19	—	0.19	—	1,521	1,521	0.06	0.01	—	1,526
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.46	0.46	< 0.005	< 0.005	< 0.005	0.48
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.40	0.26	3.70	0.00	0.00	0.62	0.62	0.00	0.14	0.14	—	631	631	0.04	0.03	2.31	642
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.80	4.80	< 0.005	< 0.005	< 0.005	5.06
Hauling	0.02	< 0.005	0.26	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	177	177	0.02	0.03	0.27	186
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	0.31	3.66	0.00	0.00	0.62	0.62	0.00	0.14	0.14	—	605	605	0.04	0.03	0.06	614
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.81	4.81	< 0.005	< 0.005	< 0.005	5.07
Hauling	0.02	< 0.005	0.27	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	177	177	0.02	0.03	0.01	185
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.16	1.98	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	347	347	0.02	0.02	0.57	353
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.20	0.20	< 0.005	0.02	0.02	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.90
Hauling	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	101	101	0.01	0.02	0.07	106
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.36	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	57.4	57.4	< 0.005	< 0.005	0.09	58.4
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.46	0.46	< 0.005	< 0.005	< 0.005	0.48
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.8	16.8	< 0.005	< 0.005	0.01	17.6

3.11. Linear, Drainage, Utilities, & Sub-Grade (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.14	5.99	47.7	61.7	0.15	1.82	—	1.82	1.67	—	1.67	—	16,021	16,021	0.65	0.13	—	16,076
Dust From Material Movemen	—	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.71	4.71	< 0.005	< 0.005	< 0.005	4.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.14	5.99	47.7	61.7	0.15	1.82	—	1.82	1.67	—	1.67	—	16,021	16,021	0.65	0.13	—	16,076
Dust From Material Movemen	—	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.73	4.73	< 0.005	< 0.005	< 0.005	4.99
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.01	1.69	13.4	17.4	0.04	0.51	—	0.51	0.47	—	0.47	—	4,515	4,515	0.18	0.04	—	4,530
Dust From Material Movemen	—	—	—	—	—	—	0.87	0.87	—	0.09	0.09	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.45	3.17	0.01	0.09	—	0.09	0.09	—	0.09	—	747	747	0.03	0.01	—	750
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.37	0.24	3.49	0.00	0.00	0.62	0.62	0.00	0.14	0.14	—	621	621	0.04	0.03	2.13	632
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.71	4.71	< 0.005	< 0.005	< 0.005	4.98
Hauling	0.02	< 0.005	0.25	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	172	172	0.01	0.03	0.25	181
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.36	0.29	3.43	0.00	0.00	0.62	0.62	0.00	0.14	0.14	—	595	595	0.02	0.03	0.06	603
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.73	4.73	< 0.005	< 0.005	< 0.005	4.99
Hauling	0.02	< 0.005	0.26	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	172	172	0.01	0.03	0.01	181
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.07	0.91	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	0.01	0.01	0.26	170
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.40
Hauling	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.5	48.5	< 0.005	0.01	0.03	50.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	0.04	28.2
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23

Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.03	8.03	< 0.005	< 0.005	0.01	8.44

3.13. Linear, Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.09	1.75	14.7	23.2	0.04	0.48	—	0.48	0.44	—	0.44	—	4,153	4,153	0.17	0.03	—	4,167
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.71	4.71	< 0.005	< 0.005	< 0.005	4.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.09	1.75	14.7	23.2	0.04	0.48	—	0.48	0.44	—	0.44	—	4,153	4,153	0.17	0.03	—	4,167
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.73	4.73	< 0.005	< 0.005	< 0.005	4.99
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	0.75	6.26	9.92	0.02	0.20	—	0.20	0.19	—	0.19	—	1,775	1,775	0.07	0.01	—	1,781

Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.14	1.81	< 0.005	0.04	—	0.04	0.03	—	0.03	—	294	294	0.01	< 0.005	—	295
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.27	0.18	2.61	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	466	466	0.03	0.02	1.60	474
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.71	4.71	< 0.005	< 0.005	< 0.005	4.98
Hauling	0.01	< 0.005	0.20	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	137	137	0.01	0.02	0.20	145
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.27	0.22	2.58	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	446	446	0.02	0.02	0.04	453
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	—	4.73	4.73	< 0.005	< 0.005	< 0.005	4.99
Hauling	0.01	< 0.005	0.21	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	137	137	0.01	0.02	0.01	144
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	1.04	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	191	191	0.01	0.01	0.29	194
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.15	0.15	< 0.005	0.02	0.02	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.13
Hauling	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	58.7	58.7	< 0.005	0.01	0.04	61.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	0.05	32.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.35
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.72	9.72	< 0.005	< 0.005	0.01	10.2

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/2/2026	5/27/2026	5.00	104	—
Linear, Grading & Excavation	Linear, Grading & Excavation	5/28/2026	3/13/2028	5.00	468	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	3/14/2028	5/24/2029	5.00	312	—
Linear, Paving	Linear, Paving	5/25/2029	12/29/2029	5.00	156	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	12.0	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	2.00	6.00	33.0	0.73
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	7.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	3.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	5.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	4.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	12.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Grading & Excavation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	3.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	2.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	12.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Linear, Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	12.0	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Linear, Paving	Off-Highway Trucks	Diesel	Average	1.00	6.00	376	0.38
Linear, Paving	Welders	Diesel	Average	1.00	6.00	46.0	0.45

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	47.5	9.71	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	2.00	0.25	HHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	2.00	0.25	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	113	9.71	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	6.06	HHDT,MHDT
Linear, Grading & Excavation	Hauling	3.16	40.0	HHDT
Linear, Grading & Excavation	Onsite truck	3.00	0.25	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	90.0	9.71	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	2.00	0.25	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	2.29	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	2.00	0.25	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	67.5	9.71	LDA,LDT1,LDT2
Linear, Paving	Vendor	2.00	0.25	HHDT
Linear, Paving	Hauling	1.83	20.0	HHDT
Linear, Paving	Onsite truck	2.00	0.25	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction

Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00	0.00	12.7	0.00	—
Linear, Grading & Excavation	0.00	11,811	12.7	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	5,728	0.00	12.7	0.00	—
Linear, Paving	2,287	0.00	12.7	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	10.7	100%
Bridge/Overpass Construction	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	704	204	0.03	< 0.005
2027	352	204	0.03	< 0.005
2028	704	204	0.03	< 0.005
2029	704	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	4.53	annual days of extreme heat
Extreme Precipitation	11.3	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.29	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	13.6

AQ-PM	3.62
AQ-DPM	16.4
Drinking Water	43.1
Lead Risk Housing	56.0
Pesticides	0.00
Toxic Releases	16.0
Traffic	19.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	28.1
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	72.2
Solid Waste	0.00
Sensitive Population	—
Asthma	25.4
Cardio-vascular	25.5
Low Birth Weights	7.66
Socioeconomic Factor Indicators	—
Education	48.3
Housing	66.1
Linguistic	24.8
Poverty	48.4
Unemployment	2.29

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract

Economic	—
Above Poverty	57.35916848
Employed	70.51199795
Median HI	40.78018735
Education	—
Bachelor's or higher	76.26074682
High school enrollment	100
Preschool enrollment	70.47350186
Transportation	—
Auto Access	30.23225972
Active commuting	79.5072501
Social	—
2-parent households	31.01501347
Voting	70.25535737
Neighborhood	—
Alcohol availability	16.50198896
Park access	81.35506224
Retail density	34.65930964
Supermarket access	39.90760939
Tree canopy	76.4275632
Housing	—
Homeownership	44.28333119
Housing habitability	56.21711793
Low-inc homeowner severe housing cost burden	74.22045425
Low-inc renter severe housing cost burden	30.87386116
Uncrowded housing	46.38778391
Health Outcomes	—

Insured adults	67.2783267
Arthritis	0.0
Asthma ER Admissions	75.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	39.1
Cognitively Disabled	22.1
Physically Disabled	22.7
Heart Attack ER Admissions	84.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	80.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	32.5
Children	47.4

Elderly	48.0
English Speaking	76.4
Foreign-born	27.9
Outdoor Workers	47.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	40.9
Traffic Density	30.6
Traffic Access	0.0
Other Indices	—
Hardship	28.3
Other Decision Support	—
2016 Voting	86.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	9.00
Healthy Places Index Score for Project Location (b)	65.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction would tak
Construction: Off-Road Equipment	Added additional equipment listed in Project Description
Construction: Trips and VMT	Assume 50% of excavated material requires hazardous disposal, Added two onsite water trucks, made one a vendor trip in all but excavation to avoid empty cells
Construction: On-Road Fugitive Dust	Project accessible by paved roadways
Construction: Dust From Material Movement	Added paving for import of materials

10/11 Ultimate Both Design Options Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	10/11 Ultimate Both Design Options
Construction Start Date	1/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	0.60
Location	36.96393876369363, -121.9656080602527
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3138
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	4.70	Mile	12.0	0.00	—	—	—	—

Bridge/Overpass Construction	2.00	Mile	2.00	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.49	77.0	92.4	0.19	3.33	6.12	9.45	3.06	0.77	3.83	—	21,413	21,413	0.91	0.29	4.50	21,528
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.49	77.2	92.3	0.19	3.33	6.12	9.45	3.06	0.77	3.83	—	21,377	21,377	0.92	0.29	0.12	21,488
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.50	51.2	65.3	0.14	2.16	4.37	6.53	1.99	0.55	2.54	—	15,251	15,251	0.65	0.21	1.29	15,331
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.19	9.35	11.9	0.02	0.39	0.80	1.19	0.36	0.10	0.46	—	2,525	2,525	0.11	0.03	0.21	2,538

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.49	77.0	92.4	0.19	3.33	6.12	9.45	3.06	0.77	3.83	—	21,413	21,413	0.91	0.29	4.50	21,528
2027	9.11	71.7	91.7	0.19	3.02	6.12	9.14	2.78	0.77	3.55	—	21,386	21,386	0.91	0.29	4.18	21,500
2028	8.75	66.9	91.0	0.19	2.75	6.12	8.87	2.53	0.77	3.30	—	21,358	21,358	0.91	0.29	3.87	21,470
2029	6.37	48.3	65.4	0.15	1.82	4.33	6.15	1.68	0.55	2.23	—	16,849	16,849	0.70	0.19	2.46	16,925
2030	1.97	14.7	25.8	0.04	0.45	1.06	1.51	0.41	0.18	0.59	—	4,780	4,780	0.19	0.08	1.72	4,810
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.49	77.2	92.3	0.19	3.33	6.12	9.45	3.06	0.77	3.83	—	21,377	21,377	0.92	0.29	0.12	21,488
2027	9.11	71.8	91.6	0.19	3.02	6.12	9.14	2.78	0.77	3.55	—	21,351	21,351	0.92	0.29	0.11	21,461
2028	8.73	67.0	90.9	0.19	2.75	6.12	8.87	2.53	0.77	3.30	—	21,324	21,324	0.91	0.29	0.10	21,432
2029	6.37	48.3	65.3	0.15	1.82	4.33	6.15	1.68	0.55	2.23	—	16,822	16,822	0.69	0.19	0.06	16,895
2030	1.97	14.8	25.8	0.04	0.45	1.06	1.51	0.41	0.18	0.59	—	4,760	4,760	0.20	0.08	0.04	4,788
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.04	32.5	39.2	0.08	1.42	2.78	4.20	1.31	0.35	1.66	—	8,776	8,776	0.38	0.12	0.95	8,823
2027	6.50	51.2	65.3	0.14	2.16	4.37	6.53	1.99	0.55	2.54	—	15,251	15,251	0.65	0.21	1.29	15,331
2028	5.50	42.7	56.4	0.12	1.70	3.76	5.46	1.57	0.48	2.04	—	13,720	13,720	0.58	0.17	1.02	13,787
2029	4.20	31.9	43.4	0.10	1.20	2.83	4.03	1.10	0.36	1.46	—	11,072	11,072	0.47	0.13	0.74	11,122
2030	0.81	6.08	10.6	0.02	0.18	0.44	0.62	0.17	0.07	0.24	—	1,965	1,965	0.08	0.03	0.31	1,978
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.74	5.94	7.15	0.01	0.26	0.51	0.77	0.24	0.06	0.30	—	1,453	1,453	0.06	0.02	0.16	1,461
2027	1.19	9.35	11.9	0.02	0.39	0.80	1.19	0.36	0.10	0.46	—	2,525	2,525	0.11	0.03	0.21	2,538
2028	1.00	7.79	10.3	0.02	0.31	0.69	1.00	0.29	0.09	0.37	—	2,272	2,272	0.10	0.03	0.17	2,283
2029	0.77	5.82	7.93	0.02	0.22	0.52	0.74	0.20	0.07	0.27	—	1,833	1,833	0.08	0.02	0.12	1,841
2030	0.15	1.11	1.93	< 0.005	0.03	0.08	0.11	0.03	0.01	0.04	—	325	325	0.01	0.01	0.05	327

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	8.38	9.35	0.01	0.43	—	0.43	0.39	—	0.39	—	1,306	1,306	0.05	0.01	—	1,310
Dust From Material Movement	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.48	2.48	< 0.005	< 0.005	< 0.005	2.62
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	8.38	9.35	0.01	0.43	—	0.43	0.39	—	0.39	—	1,306	1,306	0.05	0.01	—	1,310
Dust From Material Movement	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.48	2.48	< 0.005	< 0.005	< 0.005	2.61
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.73	3.05	< 0.005	0.14	—	0.14	0.13	—	0.13	—	426	426	0.02	< 0.005	—	427

Dust From Material Movement	—	—	—	—	—	0.13	0.13	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.81	0.81	< 0.005	< 0.005	< 0.005	0.85
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.50	0.56	< 0.005	0.03	—	0.03	0.02	—	0.02	—	70.5	70.5	< 0.005	< 0.005	—	70.7
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.15	2.20	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	345	345	0.02	0.01	1.41	351
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	2.18	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	330	330	0.02	0.01	0.04	335
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.67	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	108	108	0.01	< 0.005	0.20	109
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.03	18.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movement	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.04	0.02	< 0.005	< 0.005	1.47	1.47	< 0.005	0.15	0.15	—	6.94	6.94	< 0.005	< 0.005	0.01	7.31
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movement	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.04	0.02	< 0.005	< 0.005	1.47	1.47	< 0.005	0.15	0.15	—	6.93	6.93	< 0.005	< 0.005	< 0.005	7.30
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.44	29.2	33.4	0.07	1.28	—	1.28	1.18	—	1.18	—	7,699	7,699	0.31	0.06	—	7,725
Dust From Material Movement	—	—	—	—	—	1.44	1.44	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	0.01	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	2.67	2.67	< 0.005	< 0.005	< 0.005	2.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.33	6.10	0.01	0.23	—	0.23	0.21	—	0.21	—	1,275	1,275	0.05	0.01	—	1,279
Dust From Material Movement	—	—	—	—	—	0.26	0.26	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.47
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.36	5.32	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	835	835	0.05	0.03	3.42	850
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	0.10	43.7
Hauling	0.01	0.83	0.33	0.01	0.01	0.13	0.14	0.01	0.04	0.04	—	558	558	0.05	0.09	0.97	587
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.48	5.27	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	800	800	0.06	0.03	0.09	811
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	< 0.005	43.6
Hauling	0.01	0.87	0.33	0.01	0.01	0.13	0.14	0.01	0.04	0.04	—	558	558	0.05	0.09	0.03	586
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.16	1.91	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	308	308	0.02	0.01	0.57	313

Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.8
Hauling	< 0.005	0.33	0.13	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	215	215	0.02	0.03	0.16	226
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.35	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	51.0	51.0	< 0.005	< 0.005	0.09	51.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.66	2.66	< 0.005	< 0.005	< 0.005	2.78
Hauling	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.6	35.6	< 0.005	0.01	0.03	37.5

3.5. Linear, Grading & Excavation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.57	70.4	86.3	0.18	3.02	—	3.02	2.77	—	2.77	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movement	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.04	0.02	< 0.005	< 0.005	1.47	1.47	< 0.005	0.15	0.15	—	6.82	6.82	< 0.005	< 0.005	0.01	7.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.57	70.4	86.3	0.18	3.02	—	3.02	2.77	—	2.77	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movement	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—

Onsite truck	< 0.005	0.04	0.02	< 0.005	< 0.005	1.47	1.47	< 0.005	0.15	0.15	—	6.82	6.82	< 0.005	< 0.005	< 0.005	7.18
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.12	50.3	61.6	0.13	2.15	—	2.15	1.98	—	1.98	—	14,265	14,265	0.58	0.12	—	14,314
Dust From Material Movement	—	—	—	—	—	2.66	2.66	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.03	0.01	< 0.005	< 0.005	1.05	1.05	< 0.005	0.11	0.11	—	4.87	4.87	< 0.005	< 0.005	< 0.005	5.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	9.18	11.3	0.02	0.39	—	0.39	0.36	—	0.36	—	2,362	2,362	0.10	0.02	—	2,370
Dust From Material Movement	—	—	—	—	—	0.49	0.49	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	0.81	0.81	< 0.005	< 0.005	< 0.005	0.85
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.36	5.01	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	821	821	0.05	0.03	3.18	835
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.9	40.9	< 0.005	0.01	0.09	42.9
Hauling	0.01	0.78	0.32	0.01	0.01	0.13	0.14	0.01	0.04	0.04	—	547	547	0.05	0.09	0.90	575
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.45	4.96	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	786	786	0.06	0.03	0.08	798
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.9	40.9	< 0.005	0.01	< 0.005	42.8

Hauling	0.01	0.82	0.32	0.01	0.01	0.13	0.14	0.01	0.04	0.04	—	547	547	0.05	0.09	0.02	574
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.28	3.35	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	561	561	0.04	0.02	0.98	571
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.2	29.2	< 0.005	< 0.005	0.03	30.6
Hauling	0.01	0.58	0.23	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	391	391	0.03	0.06	0.28	410
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.61	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	92.9	92.9	0.01	< 0.005	0.16	94.5
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.83	4.83	< 0.005	< 0.005	< 0.005	5.06
Hauling	< 0.005	0.11	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.7	64.7	0.01	0.01	0.05	67.9

3.7. Linear, Grading & Excavation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.23	65.7	85.9	0.18	2.74	—	2.74	2.52	—	2.52	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movement	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.03	0.02	< 0.005	< 0.005	1.47	1.47	< 0.005	0.15	0.15	—	6.69	6.69	< 0.005	< 0.005	0.01	7.05
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.23	65.7	85.9	0.18	2.74	—	2.74	2.52	—	2.52	—	19,970	19,970	0.81	0.16	—	20,039

Dust From Material Movement	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.04	0.02	< 0.005	< 0.005	1.47	1.47	< 0.005	0.15	0.15	—	6.70	6.70	< 0.005	< 0.005	< 0.005	7.05
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.04	24.3	31.8	0.07	1.01	—	1.01	0.93	—	0.93	—	7,386	7,386	0.30	0.06	—	7,412
Dust From Material Movement	—	—	—	—	—	1.38	1.38	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	0.01	< 0.005	< 0.005	0.54	0.54	< 0.005	0.05	0.05	—	2.47	2.47	< 0.005	< 0.005	< 0.005	2.61
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	4.44	5.80	0.01	0.19	—	0.19	0.17	—	0.17	—	1,223	1,223	0.05	0.01	—	1,227
Dust From Material Movement	—	—	—	—	—	0.25	0.25	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	0.41	0.41	< 0.005	< 0.005	< 0.005	0.43
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.33	4.73	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	807	807	0.05	0.03	2.95	821
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.9	39.9	< 0.005	0.01	0.08	41.8
Hauling	0.01	0.74	0.31	0.01	0.01	0.13	0.14	0.01	0.04	0.04	—	534	534	0.04	0.08	0.83	561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.48	0.40	4.67	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	773	773	0.05	0.03	0.08	784
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.9	39.9	< 0.005	0.01	< 0.005	41.7
Hauling	0.01	0.77	0.31	0.01	0.01	0.13	0.14	0.01	0.04	0.04	—	534	534	0.04	0.08	0.02	560
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	1.63	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	286	286	0.02	0.01	0.47	291
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.8	14.8	< 0.005	< 0.005	0.01	15.4
Hauling	< 0.005	0.28	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	197	197	0.02	0.03	0.13	207
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.3	47.3	< 0.005	< 0.005	0.08	48.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.56
Hauling	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.7	32.7	< 0.005	0.01	0.02	34.3

3.9. Linear, Drainage, Utilities, & Sub-Grade (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.19	51.1	62.3	0.15	1.98	—	1.98	1.82	—	1.82	—	16,024	16,024	0.65	0.13	—	16,079
Dust From Material Movement	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	6.19	51.1	62.3	0.15	1.98	—	1.98	1.82	—	1.82	—	16,024	16,024	0.65	0.13	—	16,079
Dust From Material Movement	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.53
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.14	17.7	21.6	0.05	0.68	—	0.68	0.63	—	0.63	—	5,550	5,550	0.23	0.05	—	5,569
Dust From Material Movement	—	—	—	—	—	1.07	1.07	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.13	0.13	< 0.005	0.01	0.01	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	3.23	3.94	0.01	0.12	—	0.12	0.11	—	0.11	—	919	919	0.04	0.01	—	922
Dust From Material Movement	—	—	—	—	—	0.20	0.20	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.27	3.81	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	649	649	0.04	0.03	2.37	660
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.73	1.73	< 0.005	< 0.005	< 0.005	1.82
Hauling	< 0.005	0.28	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	190	190	0.02	0.03	0.29	200

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.32	3.76	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	621	621	0.04	0.03	0.06	631
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.82
Hauling	< 0.005	0.29	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	190	190	0.02	0.03	0.01	200
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.10	1.23	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	215	215	0.01	0.01	0.36	219
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.63
Hauling	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	65.9	65.9	0.01	0.01	0.04	69.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.6	35.6	< 0.005	< 0.005	0.06	36.2
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5

3.11. Linear, Drainage, Utilities, & Sub-Grade (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.99	47.7	61.7	0.15	1.82	—	1.82	1.67	—	1.67	—	16,021	16,021	0.65	0.13	—	16,076
Dust From Material Movement	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.36	2.36	< 0.005	< 0.005	< 0.005	2.49

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.99	47.7	61.7	0.15	1.82	—	1.82	1.67	—	1.67	—	16,021	16,021	0.65	0.13	—	16,076
Dust From Material Movement	—	—	—	—	—	3.10	3.10	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.36	2.36	< 0.005	< 0.005	< 0.005	2.49
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.81	30.4	39.2	0.10	1.16	—	1.16	1.06	—	1.06	—	10,189	10,189	0.41	0.08	—	10,224
Dust From Material Movement	—	—	—	—	—	1.97	1.97	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	0.01	< 0.005	< 0.005	0.23	0.23	< 0.005	0.02	0.02	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.58
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	5.54	7.16	0.02	0.21	—	0.21	0.19	—	0.19	—	1,687	1,687	0.07	0.01	—	1,693
Dust From Material Movement	—	—	—	—	—	0.36	0.36	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.24	3.58	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	638	638	0.04	0.03	2.19	649

Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	0.27	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	185	185	0.02	0.03	0.27	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.30	3.53	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	611	611	0.02	0.03	0.06	620
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	0.28	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	185	185	0.02	0.03	0.01	195
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.17	2.12	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	389	389	0.03	0.02	0.60	395
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	1.08	1.08	< 0.005	< 0.005	< 0.005	1.14
Hauling	< 0.005	0.17	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	118	118	0.01	0.02	0.07	124
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.39	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.4	64.4	< 0.005	< 0.005	0.10	65.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.5	19.5	< 0.005	< 0.005	0.01	20.5

3.13. Linear, Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75	14.7	23.2	0.04	0.48	—	0.48	0.44	—	0.44	—	4,153	4,153	0.17	0.03	—	4,167

Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.36	2.36	< 0.005	< 0.005	< 0.005	2.49
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.15	1.82	< 0.005	0.04	—	0.04	0.03	—	0.03	—	325	325	0.01	< 0.005	—	326
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.21	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.8	53.8	< 0.005	< 0.005	—	54.0
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.23	2.67	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	463	463	0.02	0.02	0.04	469
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	0.23	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	152	152	0.01	0.02	0.01	159

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.2	36.2	< 0.005	< 0.005	0.06	36.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.14
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.00	6.00	< 0.005	< 0.005	0.01	6.10
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.06

3.15. Linear, Paving (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	14.3	23.1	0.04	0.44	—	0.44	0.41	—	0.41	—	4,153	4,153	0.17	0.03	—	4,167
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.31	2.31	< 0.005	< 0.005	< 0.005	2.44
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	14.3	23.1	0.04	0.44	—	0.44	0.41	—	0.41	—	4,153	4,153	0.17	0.03	—	4,167

Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.37	0.37	< 0.005	0.04	0.04	—	2.32	2.32	< 0.005	< 0.005	< 0.005	2.45
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	5.91	9.56	0.02	0.18	—	0.18	0.17	—	0.17	—	1,715	1,715	0.07	0.01	—	1,721
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.15	0.15	< 0.005	0.02	0.02	—	0.96	0.96	< 0.005	< 0.005	< 0.005	1.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.08	1.74	< 0.005	0.03	—	0.03	0.03	—	0.03	—	284	284	0.01	< 0.005	—	285
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.17
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.17	2.56	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	475	475	0.01	0.02	1.52	483
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.75
Hauling	< 0.005	0.21	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	147	147	0.01	0.02	0.20	155
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.27	0.21	2.51	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	455	455	0.02	0.02	0.04	462
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.67	1.67	< 0.005	< 0.005	< 0.005	1.76
Hauling	< 0.005	0.22	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	147	147	0.01	0.02	0.01	155
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.98	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	188	188	0.01	0.01	0.27	191
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.72
Hauling	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	60.8	60.8	< 0.005	0.01	0.04	63.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.1	31.1	< 0.005	< 0.005	0.04	31.6
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.12
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.6

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/2/2026	6/17/2026	5.00	119	—
Linear, Grading & Excavation	Linear, Grading & Excavation	6/18/2026	7/7/2028	5.00	536	—

Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	7/8/2028	11/21/2029	5.00	358	—
Linear, Paving	Linear, Paving	11/22/2029	7/30/2030	5.00	179	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	13.0	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	1.00	6.00	33.0	0.73
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	7.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	3.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	5.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	4.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	13.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Linear, Grading & Excavation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	3.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	2.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	13.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Linear, Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	13.0	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Linear, Paving	Off-Highway Trucks	Diesel	Average	1.00	6.00	376	0.38
Linear, Paving	Welders	Diesel	Average	1.00	6.00	46.0	0.45

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	47.5	9.71	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	1.00	0.25	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	1.00	0.25	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	115	9.71	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	6.06	HHDT,MHDT
Linear, Grading & Excavation	Hauling	3.50	40.0	HHDT
Linear, Grading & Excavation	Onsite truck	2.00	0.50	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	92.5	9.71	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	1.00	0.25	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	2.47	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	1.00	0.25	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	70.0	9.71	LDA,LDT1,LDT2
Linear, Paving	Vendor	1.00	0.25	HHDT,MHDT
Linear, Paving	Hauling	2.02	20.0	HHDT
Linear, Paving	Onsite truck	1.00	0.25	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00	0.00	14.0	0.00	—
Linear, Grading & Excavation	0.00	14,998	14.0	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	7,076	0.00	14.0	0.00	—
Linear, Paving	2,896	0.00	14.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	12.0	100%
Bridge/Overpass Construction	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	763	204	0.03	< 0.005
2027	382	204	0.03	< 0.005
2028	763	204	0.03	< 0.005
2029	763	204	0.03	< 0.005
2030	382	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	4.53	annual days of extreme heat
Extreme Precipitation	11.3	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.29	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract

Exposure Indicators	—
AQ-Ozone	13.6
AQ-PM	3.62
AQ-DPM	16.4
Drinking Water	43.1
Lead Risk Housing	56.0
Pesticides	0.00
Toxic Releases	16.0
Traffic	19.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	28.1
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	72.2
Solid Waste	0.00
Sensitive Population	—
Asthma	25.4
Cardio-vascular	25.5
Low Birth Weights	7.66
Socioeconomic Factor Indicators	—
Education	48.3
Housing	66.1
Linguistic	24.8
Poverty	48.4
Unemployment	2.29

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	57.35916848
Employed	70.51199795
Median HI	40.78018735
Education	—
Bachelor's or higher	76.26074682
High school enrollment	100
Preschool enrollment	70.47350186
Transportation	—
Auto Access	30.23225972
Active commuting	79.5072501
Social	—
2-parent households	31.01501347
Voting	70.25535737
Neighborhood	—
Alcohol availability	16.50198896
Park access	81.35506224
Retail density	34.65930964
Supermarket access	39.90760939
Tree canopy	76.4275632
Housing	—
Homeownership	44.28333119
Housing habitability	56.21711793
Low-inc homeowner severe housing cost burden	74.22045425
Low-inc renter severe housing cost burden	30.87386116
Uncrowded housing	46.38778391

Health Outcomes	—
Insured adults	67.2783267
Arthritis	0.0
Asthma ER Admissions	75.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	39.1
Cognitively Disabled	22.1
Physically Disabled	22.7
Heart Attack ER Admissions	84.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	80.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	32.5

Children	47.4
Elderly	48.0
English Speaking	76.4
Foreign-born	27.9
Outdoor Workers	47.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	40.9
Traffic Density	30.6
Traffic Access	0.0
Other Indices	—
Hardship	28.3
Other Decision Support	—
2016 Voting	86.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	9.00
Healthy Places Index Score for Project Location (b)	65.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Off-Road Equipment	Added equipment per project description
Construction: Dust From Material Movement	Added paving for asphalt
Construction: Trips and VMT	Adjusted haul length for hazardous materials, added water truck to vendor to avoid empty cells
Construction: On-Road Fugitive Dust	Site accessible by paved roads

Segments 10 and 11 Interim Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Segments 10 and 11 Interim
Construction Start Date	1/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	0.60
Location	36.96393876369363, -121.9656080602527
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3138
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	4.70	Mile	13.2	0.00	—	—	—	—

Bridge/Overpass Construction	1.00	Mile	1.00	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.5	9.51	80.8	93.7	0.22	3.37	5.40	8.77	3.09	0.80	3.88	—	23,942	23,942	1.15	0.71	8.83	24,191
Mit.	11.5	9.51	80.8	93.7	0.22	3.37	5.40	8.77	3.09	0.80	3.88	—	23,942	23,942	1.15	0.71	8.83	24,191
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.5	9.51	81.1	93.6	0.22	3.37	5.40	8.77	3.09	0.80	3.89	—	23,908	23,908	1.16	0.71	0.23	24,148
Mit.	11.5	9.51	81.1	93.6	0.22	3.37	5.40	8.77	3.09	0.80	3.89	—	23,908	23,908	1.16	0.71	0.23	24,148
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.76	5.58	47.4	54.7	0.13	1.98	3.21	5.19	1.81	0.48	2.29	—	13,844	13,844	0.67	0.41	2.25	13,984

Mit.	6.76	5.58	47.4	54.7	0.13	1.98	3.21	5.19	1.81	0.48	2.29	—	13,844	13,844	0.67	0.41	2.25	13,984
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.23	1.02	8.64	9.99	0.02	0.36	0.59	0.95	0.33	0.09	0.42	—	2,292	2,292	0.11	0.07	0.37	2,315
Mit.	1.23	1.02	8.64	9.99	0.02	0.36	0.59	0.95	0.33	0.09	0.42	—	2,292	2,292	0.11	0.07	0.37	2,315
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.5	9.51	80.8	93.7	0.22	3.37	5.40	8.77	3.09	0.80	3.88	—	23,942	23,942	1.15	0.71	8.83	24,191
2027	8.09	6.79	55.5	66.9	0.16	2.14	4.09	6.23	1.97	0.53	2.50	—	17,154	17,154	0.73	0.24	3.24	17,246
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.5	9.51	81.1	93.6	0.22	3.37	5.40	8.77	3.09	0.80	3.89	—	23,908	23,908	1.16	0.71	0.23	24,148
2027	11.1	9.14	75.6	92.9	0.22	3.05	5.40	8.45	2.81	0.80	3.61	—	23,832	23,832	1.14	0.69	0.21	24,066
2028	2.49	2.07	16.0	26.1	0.04	0.52	0.82	1.34	0.48	0.16	0.64	—	5,106	5,106	0.25	0.12	0.06	5,149
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.76	5.58	47.4	54.7	0.13	1.98	3.21	5.19	1.81	0.48	2.29	—	13,844	13,844	0.67	0.41	2.25	13,984
2027	4.81	4.02	32.8	40.8	0.09	1.26	2.31	3.57	1.16	0.32	1.48	—	10,119	10,119	0.45	0.18	1.08	10,184
2028	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.99	9.99	< 0.005	< 0.005	< 0.005	10.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	1.23	1.02	8.64	9.99	0.02	0.36	0.59	0.95	0.33	0.09	0.42	—	2,292	2,292	0.11	0.07	0.37	2,315
2027	0.88	0.73	5.98	7.44	0.02	0.23	0.42	0.65	0.21	0.06	0.27	—	1,675	1,675	0.07	0.03	0.18	1,686
2028	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.5	9.51	80.8	93.7	0.22	3.37	5.40	8.77	3.09	0.80	3.88	—	23,942	23,942	1.15	0.71	8.83	24,191
2027	8.09	6.79	55.5	66.9	0.16	2.14	4.09	6.23	1.97	0.53	2.50	—	17,154	17,154	0.73	0.24	3.24	17,246
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	11.5	9.51	81.1	93.6	0.22	3.37	5.40	8.77	3.09	0.80	3.89	—	23,908	23,908	1.16	0.71	0.23	24,148
2027	11.1	9.14	75.6	92.9	0.22	3.05	5.40	8.45	2.81	0.80	3.61	—	23,832	23,832	1.14	0.69	0.21	24,066
2028	2.49	2.07	16.0	26.1	0.04	0.52	0.82	1.34	0.48	0.16	0.64	—	5,106	5,106	0.25	0.12	0.06	5,149
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.76	5.58	47.4	54.7	0.13	1.98	3.21	5.19	1.81	0.48	2.29	—	13,844	13,844	0.67	0.41	2.25	13,984
2027	4.81	4.02	32.8	40.8	0.09	1.26	2.31	3.57	1.16	0.32	1.48	—	10,119	10,119	0.45	0.18	1.08	10,184
2028	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.99	9.99	< 0.005	< 0.005	< 0.005	10.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.23	1.02	8.64	9.99	0.02	0.36	0.59	0.95	0.33	0.09	0.42	—	2,292	2,292	0.11	0.07	0.37	2,315
2027	0.88	0.73	5.98	7.44	0.02	0.23	0.42	0.65	0.21	0.06	0.27	—	1,675	1,675	0.07	0.03	0.18	1,686
2028	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.96	8.38	9.35	0.01	0.43	—	0.43	0.39	—	0.39	—	1,306	1,306	0.05	0.01	—	1,310
Dust From Material Movemen	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.48	2.48	< 0.005	< 0.005	< 0.005	2.61
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.19	1.33	< 0.005	0.06	—	0.06	0.06	—	0.06	—	186	186	0.01	< 0.005	—	187
Dust From Material Movemen	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.8	30.8	< 0.005	< 0.005	—	30.9

Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.18	1.95	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	295	295	0.02	0.01	0.03	300
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.26	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.1	42.1	< 0.005	< 0.005	0.08	42.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.27
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.97	6.97	< 0.005	< 0.005	0.01	7.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Linear, Grubbing & Land Clearing (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.96	8.38	9.35	0.01	0.43	—	0.43	0.39	—	0.39	—	1,306	1,306	0.05	0.01	—	1,310
Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.48	2.48	< 0.005	< 0.005	< 0.005	2.61
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.19	1.33	< 0.005	0.06	—	0.06	0.06	—	0.06	—	186	186	0.01	< 0.005	—	187
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.8	30.8	< 0.005	< 0.005	—	30.9
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.18	1.95	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	295	295	0.02	0.01	0.03	300
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.26	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.1	42.1	< 0.005	< 0.005	0.08	42.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.27
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.97	6.97	< 0.005	< 0.005	0.01	7.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.6	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039

Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.6	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.05	5.09	43.1	49.4	0.11	1.89	—	1.89	1.74	—	1.74	—	11,372	11,372	0.46	0.09	—	11,411
Dust From Material Movemen	—	—	—	—	—	—	2.12	2.12	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	2.82	2.82	< 0.005	< 0.005	< 0.005	2.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.93	7.87	9.01	0.02	0.34	—	0.34	0.32	—	0.32	—	1,883	1,883	0.08	0.02	—	1,889
Dust From Material Movemen	—	—	—	—	—	—	0.39	0.39	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.49

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.51	0.35	5.08	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	799	799	0.05	0.03	3.27	813
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	0.10	43.7
Hauling	0.35	0.06	4.64	1.86	0.03	0.05	0.73	0.78	0.03	0.20	0.23	—	3,126	3,126	0.29	0.51	5.46	3,290
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.51	0.46	5.04	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	765	765	0.06	0.03	0.08	776
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	< 0.005	43.6
Hauling	0.35	0.06	4.85	1.85	0.03	0.05	0.73	0.78	0.03	0.20	0.23	—	3,126	3,126	0.29	0.51	0.14	3,284
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.29	0.23	2.70	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	436	436	0.03	0.02	0.81	443
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.8
Hauling	0.20	0.04	2.73	1.06	0.02	0.03	0.41	0.44	0.02	0.11	0.13	—	1,780	1,780	0.16	0.29	1.34	1,872
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.49	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.1	72.1	< 0.005	< 0.005	0.13	73.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	< 0.005	4.11
Hauling	0.04	0.01	0.50	0.19	< 0.005	0.01	0.08	0.08	< 0.005	0.02	0.02	—	295	295	0.03	0.05	0.22	310

3.4. Linear, Grading & Excavation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	10.6	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.6	8.93	75.7	86.7	0.18	3.32	—	3.32	3.05	—	3.05	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.05	5.09	43.1	49.4	0.11	1.89	—	1.89	1.74	—	1.74	—	11,372	11,372	0.46	0.09	—	11,411
Dust From Material Movemen	—	—	—	—	—	—	2.12	2.12	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	2.82	2.82	< 0.005	< 0.005	< 0.005	2.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.93	7.87	9.01	0.02	0.34	—	0.34	0.32	—	0.32	—	1,883	1,883	0.08	0.02	—	1,889
Dust From Material Movemen	—	—	—	—	—	—	0.39	0.39	—	0.04	0.04	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.49
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.51	0.35	5.08	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	799	799	0.05	0.03	3.27	813
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	0.10	43.7
Hauling	0.35	0.06	4.64	1.86	0.03	0.05	0.73	0.78	0.03	0.20	0.23	—	3,126	3,126	0.29	0.51	5.46	3,290
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.51	0.46	5.04	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	765	765	0.06	0.03	0.08	776
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.7	41.7	< 0.005	0.01	< 0.005	43.6
Hauling	0.35	0.06	4.85	1.85	0.03	0.05	0.73	0.78	0.03	0.20	0.23	—	3,126	3,126	0.29	0.51	0.14	3,284
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.29	0.23	2.70	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	436	436	0.03	0.02	0.81	443
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.8
Hauling	0.20	0.04	2.73	1.06	0.02	0.03	0.41	0.44	0.02	0.11	0.13	—	1,780	1,780	0.16	0.29	1.34	1,872
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.49	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.1	72.1	< 0.005	< 0.005	0.13	73.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	< 0.005	4.11
Hauling	0.04	0.01	0.50	0.19	< 0.005	0.01	0.08	0.08	< 0.005	0.02	0.02	—	295	295	0.03	0.05	0.22	310

3.5. Linear, Grading & Excavation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.2	8.57	70.4	86.3	0.18	3.02	—	3.02	2.77	—	2.77	—	19,970	19,970	0.81	0.16	—	20,039
Dust From Material Movement	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.89	4.89	< 0.005	< 0.005	< 0.005	5.15
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.10	6.25	0.01	0.22	—	0.22	0.20	—	0.20	—	1,446	1,446	0.06	0.01	—	1,451
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.93	1.14	< 0.005	0.04	—	0.04	0.04	—	0.04	—	239	239	0.01	< 0.005	—	240
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.50	0.43	4.74	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	752	752	0.05	0.03	0.08	763
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.9	40.9	< 0.005	0.01	< 0.005	42.8
Hauling	0.33	0.06	4.59	1.80	0.03	0.03	0.73	0.76	0.03	0.20	0.23	—	3,063	3,063	0.27	0.49	0.13	3,216
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.32	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.10	55.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.96	2.96	< 0.005	< 0.005	< 0.005	3.10
Hauling	0.02	< 0.005	0.33	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	222	222	0.02	0.04	0.16	233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.01	9.01	< 0.005	< 0.005	0.02	9.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.51
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.7	36.7	< 0.005	0.01	0.03	38.6

3.6. Linear, Grading & Excavation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.2	8.57	70.4	86.3	0.18	3.02	—	3.02	2.77	—	2.77	—	19,970	19,970	0.81	0.16	—	20,039

Dust From Material Movemen	—	—	—	—	—	—	3.72	3.72	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	4.89	4.89	< 0.005	< 0.005	< 0.005	5.15
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.10	6.25	0.01	0.22	—	0.22	0.20	—	0.20	—	1,446	1,446	0.06	0.01	—	1,451
Dust From Material Movemen	—	—	—	—	—	—	0.27	0.27	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.93	1.14	< 0.005	0.04	—	0.04	0.04	—	0.04	—	239	239	0.01	< 0.005	—	240
Dust From Material Movemen	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.50	0.43	4.74	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	752	752	0.05	0.03	0.08	763
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.9	40.9	< 0.005	0.01	< 0.005	42.8
Hauling	0.33	0.06	4.59	1.80	0.03	0.03	0.73	0.76	0.03	0.20	0.23	—	3,063	3,063	0.27	0.49	0.13	3,216

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.32	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.10	55.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.96	2.96	< 0.005	< 0.005	< 0.005	3.10
Hauling	0.02	< 0.005	0.33	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	222	222	0.02	0.04	0.16	233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.01	9.01	< 0.005	< 0.005	0.02	9.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.51
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.7	36.7	< 0.005	0.01	0.03	38.6

3.7. Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.61	6.38	54.5	62.8	0.15	2.13	—	2.13	1.96	—	1.96	—	16,026	16,026	0.65	0.13	—	16,081
Dust From Material Movement	—	—	—	—	—	—	3.10	3.10	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.61	6.38	54.5	62.8	0.15	2.13	—	2.13	1.96	—	1.96	—	16,026	16,026	0.65	0.13	—	16,081

Dust From Material Movemen	—	—	—	—	—	—	3.10	3.10	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.25	2.73	23.3	26.8	0.06	0.91	—	0.91	0.84	—	0.84	—	6,850	6,850	0.28	0.06	—	6,873
Dust From Material Movemen	—	—	—	—	—	—	1.33	1.33	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	1.04	1.04	< 0.005	< 0.005	< 0.005	1.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.25	4.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,134	1,134	0.05	0.01	—	1,138
Dust From Material Movemen	—	—	—	—	—	—	0.24	0.24	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.40	0.27	3.81	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	624	624	0.04	0.03	2.42	636
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.06	0.01	0.76	0.32	0.01	0.01	0.12	0.12	0.01	0.03	0.04	—	498	498	0.04	0.08	0.82	524
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.43	0.40	0.35	3.77	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	598	598	0.04	0.03	0.06	607
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.06	0.01	0.79	0.32	0.01	0.01	0.12	0.12	0.01	0.03	0.04	—	498	498	0.04	0.08	0.02	523
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.13	1.52	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	256	256	0.02	0.01	0.45	260
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.79
Hauling	0.02	0.01	0.33	0.14	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	213	213	0.02	0.03	0.15	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	42.3	42.3	< 0.005	< 0.005	0.07	43.0
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.3	35.3	< 0.005	0.01	0.02	37.0

3.8. Linear, Drainage, Utilities, & Sub-Grade (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.61	6.38	54.5	62.8	0.15	2.13	—	2.13	1.96	—	1.96	—	16,026	16,026	0.65	0.13	—	16,081
Dust From Material Movement	—	—	—	—	—	—	3.10	3.10	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	7.61	6.38	54.5	62.8	0.15	2.13	—	2.13	1.96	—	1.96	—	16,026	16,026	0.65	0.13	—	16,081
Dust From Material Movement	—	—	—	—	—	—	3.10	3.10	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.25	2.73	23.3	26.8	0.06	0.91	—	0.91	0.84	—	0.84	—	6,850	6,850	0.28	0.06	—	6,873
Dust From Material Movement	—	—	—	—	—	—	1.33	1.33	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	1.04	1.04	< 0.005	< 0.005	< 0.005	1.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.25	4.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,134	1,134	0.05	0.01	—	1,138
Dust From Material Movement	—	—	—	—	—	—	0.24	0.24	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.40	0.27	3.81	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	624	624	0.04	0.03	2.42	636
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.06	0.01	0.76	0.32	0.01	0.01	0.12	0.12	0.01	0.03	0.04	—	498	498	0.04	0.08	0.82	524

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.40	0.35	3.77	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	598	598	0.04	0.03	0.06	607
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.06	0.01	0.79	0.32	0.01	0.01	0.12	0.12	0.01	0.03	0.04	—	498	498	0.04	0.08	0.02	523
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.13	1.52	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	256	256	0.02	0.01	0.45	260
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.79
Hauling	0.02	0.01	0.33	0.14	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	213	213	0.02	0.03	0.15	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	42.3	42.3	< 0.005	< 0.005	0.07	43.0
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.3	35.3	< 0.005	0.01	0.02	37.0

3.9. Linear, Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	15.7	23.3	0.04	0.59	—	0.59	0.54	—	0.54	—	4,153	4,153	0.17	0.03	—	4,168
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	15.7	23.3	0.04	0.59	—	0.59	0.54	—	0.54	—	4,153	4,153	0.17	0.03	—	4,168
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.40	3.35	4.96	0.01	0.13	—	0.13	0.12	—	0.12	—	886	886	0.04	0.01	—	889
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.55
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.61	0.91	< 0.005	0.02	—	0.02	0.02	—	0.02	—	147	147	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.30	0.20	2.83	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	464	464	0.03	0.02	1.80	472

Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.05	0.01	0.65	0.27	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	430	430	0.04	0.07	0.70	452
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	0.26	2.80	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	444	444	0.03	0.02	0.05	451
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.05	0.01	0.68	0.27	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	430	430	0.04	0.07	0.02	451
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.56	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	94.8	94.8	0.01	< 0.005	0.17	96.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.38	0.38	< 0.005	< 0.005	< 0.005	0.40
Hauling	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	91.7	91.7	0.01	0.01	0.06	96.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	0.03	15.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.07
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	0.01	16.0

3.10. Linear, Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	15.7	23.3	0.04	0.59	—	0.59	0.54	—	0.54	—	4,153	4,153	0.17	0.03	—	4,168

Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	15.7	23.3	0.04	0.59	—	0.59	0.54	—	0.54	—	4,153	4,153	0.17	0.03	—	4,168
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.44	2.44	< 0.005	< 0.005	< 0.005	2.58
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.40	3.35	4.96	0.01	0.13	—	0.13	0.12	—	0.12	—	886	886	0.04	0.01	—	889
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.55
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.61	0.91	< 0.005	0.02	—	0.02	0.02	—	0.02	—	147	147	0.01	< 0.005	—	147
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.30	0.20	2.83	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	464	464	0.03	0.02	1.80	472
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.05	0.01	0.65	0.27	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	430	430	0.04	0.07	0.70	452
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	0.26	2.80	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	444	444	0.03	0.02	0.05	451
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.85
Hauling	0.05	0.01	0.68	0.27	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	430	430	0.04	0.07	0.02	451
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.56	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	94.8	94.8	0.01	< 0.005	0.17	96.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.38	0.38	< 0.005	< 0.005	< 0.005	0.40
Hauling	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	91.7	91.7	0.01	0.01	0.06	96.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	0.03	15.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.07
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	0.01	16.0

3.11. Linear, Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	1.79	15.1	23.2	0.04	0.51	—	0.51	0.47	—	0.47	—	4,154	4,154	0.17	0.03	—	4,168
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.53
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.13	8.13	< 0.005	< 0.005	—	8.16
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.35	1.35	< 0.005	< 0.005	—	1.35
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.23	2.64	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	437	437	0.03	0.02	0.04	443
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.82
Hauling	0.05	0.01	0.64	0.27	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	420	420	0.04	0.07	0.02	440
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.87
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.86
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14

3.12. Linear, Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	1.79	15.1	23.2	0.04	0.51	—	0.51	0.47	—	0.47	—	4,154	4,154	0.17	0.03	—	4,168

Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.53
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.13	8.13	< 0.005	< 0.005	—	8.16
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.35	1.35	< 0.005	< 0.005	—	1.35
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.23	2.64	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	437	437	0.03	0.02	0.04	443
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.82
Hauling	0.05	0.01	0.64	0.27	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	420	420	0.04	0.07	0.02	440

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.87
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.86
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/2/2026	3/15/2026	5.00	52.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	3/16/2026	2/6/2027	5.00	234	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	2/7/2027	9/13/2027	5.00	156	—
Linear, Paving	Linear, Paving	9/14/2027	1/1/2028	5.00	78.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	1.00	6.00	33.0	0.73
Linear, Grading & Excavation	Excavators	Diesel	Average	7.00	8.00	36.0	0.38
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Linear, Grading & Excavation	Graders	Diesel	Average	3.00	8.00	148	0.41

Linear, Grading & Excavation	Rollers	Diesel	Average	5.00	8.00	36.0	0.38
Linear, Grading & Excavation	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	4.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Grading & Excavation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	3.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	2.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Linear, Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38

Linear, Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Linear, Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Paving	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82
Linear, Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Linear, Paving	Off-Highway Trucks	Diesel	Average	1.00	6.00	376	0.38
Linear, Paving	Welders	Diesel	Average	1.00	6.00	46.0	0.45

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	1.00	6.00	33.0	0.73
Linear, Grading & Excavation	Excavators	Diesel	Average	7.00	8.00	36.0	0.38
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Linear, Grading & Excavation	Graders	Diesel	Average	3.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	5.00	8.00	36.0	0.38
Linear, Grading & Excavation	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	4.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Grading & Excavation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	3.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	2.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Linear, Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Linear, Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Linear, Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Paving	Signal Boards	Electric	Average	11.0	8.00	6.00	0.82

Linear, Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Linear, Paving	Off-Highway Trucks	Diesel	Average	1.00	6.00	376	0.38
Linear, Paving	Welders	Diesel	Average	1.00	6.00	46.0	0.45

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	42.5	9.71	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	1.00	0.25	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	1.00	0.25	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	110	9.71	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	6.06	HHDT,MHDT
Linear, Grading & Excavation	Hauling	19.6	40.0	HHDT
Linear, Grading & Excavation	Onsite truck	2.00	0.25	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	87.5	9.71	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	1.00	0.25	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	6.31	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	1.00	0.25	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	65.0	9.71	LDA,LDT1,LDT2
Linear, Paving	Vendor	1.00	0.25	HHDT,MHDT
Linear, Paving	Hauling	5.45	20.0	HHDT

Linear, Paving	Onsite truck	1.00	0.25	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	42.5	9.71	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	1.00	0.25	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	1.00	0.25	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	110	9.71	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	6.06	HHDT,MHDT
Linear, Grading & Excavation	Hauling	19.6	40.0	HHDT
Linear, Grading & Excavation	Onsite truck	2.00	0.25	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	87.5	9.71	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	1.00	0.25	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	6.31	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	1.00	0.25	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	65.0	9.71	LDA,LDT1,LDT2
Linear, Paving	Vendor	1.00	0.25	HHDT,MHDT
Linear, Paving	Hauling	5.45	20.0	HHDT
Linear, Paving	Onsite truck	1.00	0.25	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00	0.00	13.2	0.00	—
Linear, Grading & Excavation	0.00	36,670	13.2	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	7,878	0.00	13.2	0.00	—
Linear, Paving	3,397	0.00	13.2	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	13.2	100%
Bridge/Overpass Construction	1.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	646	204	0.03	< 0.005
2027	969	204	0.03	< 0.005
2028	323	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	4.53	annual days of extreme heat
Extreme Precipitation	11.3	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.29	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	13.6
AQ-PM	3.62
AQ-DPM	16.4
Drinking Water	43.1
Lead Risk Housing	56.0
Pesticides	0.00
Toxic Releases	16.0
Traffic	19.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	28.1
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	72.2
Solid Waste	0.00

Sensitive Population	—
Asthma	25.4
Cardio-vascular	25.5
Low Birth Weights	7.66
Socioeconomic Factor Indicators	—
Education	48.3
Housing	66.1
Linguistic	24.8
Poverty	48.4
Unemployment	2.29

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	57.35916848
Employed	70.51199795
Median HI	40.78018735
Education	—
Bachelor's or higher	76.26074682
High school enrollment	100
Preschool enrollment	70.47350186
Transportation	—
Auto Access	30.23225972
Active commuting	79.5072501
Social	—
2-parent households	31.01501347

Voting	70.25535737
Neighborhood	—
Alcohol availability	16.50198896
Park access	81.35506224
Retail density	34.65930964
Supermarket access	39.90760939
Tree canopy	76.4275632
Housing	—
Homeownership	44.28333119
Housing habitability	56.21711793
Low-inc homeowner severe housing cost burden	74.22045425
Low-inc renter severe housing cost burden	30.87386116
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	67.2783267
Arthritis	0.0
Asthma ER Admissions	75.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	39.1
Cognitively Disabled	22.1
Physically Disabled	22.7
Heart Attack ER Admissions	84.0

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	80.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	32.5
Children	47.4
Elderly	48.0
English Speaking	76.4
Foreign-born	27.9
Outdoor Workers	47.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	40.9
Traffic Density	30.6
Traffic Access	0.0
Other Indices	—
Hardship	28.3
Other Decision Support	—
2016 Voting	86.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	9.00
Healthy Places Index Score for Project Location (b)	65.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Off-Road Equipment	Added equipment per Project Description
Construction: Dust From Material Movement	Added paving for material import
Construction: Trips and VMT	One vendor truck assumed to be water truck in all but excavation phase to avoid empty cells
Construction: On-Road Fugitive Dust	Project site is accessible from paved roads

Rail Trail 10/11 Interim Demo Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Rail Trail 10/11 Interim Demo
Construction Start Date	1/2/2046
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	0.60
Location	36.96393876369363, -121.9656080602527
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3138
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	4.70	Mile	13.2	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.35	1.95	12.9	27.1	0.07	0.33	2.19	2.52	0.29	0.35	0.64	—	7,821	7,821	0.30	0.27	0.42	7,893
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.35	1.95	13.0	27.1	0.07	0.33	2.19	2.52	0.29	0.35	0.64	—	7,808	7,808	0.30	0.27	0.01	7,880
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.65	1.37	9.06	19.2	0.05	0.22	1.57	1.79	0.20	0.25	0.45	—	5,566	5,566	0.21	0.15	0.11	5,617
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.25	1.65	3.51	0.01	0.04	0.29	0.33	0.04	0.05	0.08	—	921	921	0.04	0.03	0.02	930

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2046	2.35	1.95	12.9	27.1	0.07	0.33	2.19	2.52	0.29	0.35	0.64	—	7,821	7,821	0.30	0.22	0.42	7,893
2047	2.32	1.92	12.6	27.0	0.07	0.31	2.19	2.51	0.28	0.35	0.63	—	7,805	7,805	0.30	0.22	0.36	7,877
2048	2.09	1.75	10.7	22.5	0.06	0.29	1.70	1.99	0.27	0.23	0.50	—	6,402	6,402	0.25	0.07	0.13	6,430
2049	2.08	1.74	10.6	22.5	0.06	0.29	1.70	1.99	0.26	0.27	0.50	—	6,400	6,400	0.25	0.27	0.37	6,428
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2046	2.35	1.95	13.0	27.1	0.07	0.33	2.19	2.52	0.29	0.35	0.64	—	7,808	7,808	0.30	0.22	0.01	7,880
2047	2.32	1.92	12.7	26.9	0.07	0.31	2.19	2.51	0.28	0.35	0.63	—	7,792	7,792	0.30	0.22	0.01	7,864
2048	2.27	1.89	12.4	26.7	0.07	0.30	2.19	2.49	0.27	0.35	0.61	—	7,779	7,779	0.30	0.22	0.01	7,851
2049	2.08	1.74	10.6	22.5	0.06	0.29	1.70	1.99	0.26	0.27	0.50	—	6,388	6,388	0.25	0.27	0.01	6,416
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2046	1.12	0.93	6.37	13.0	0.03	0.15	1.13	1.28	0.14	0.18	0.31	—	3,571	3,571	0.14	0.09	0.09	3,603
2047	1.65	1.37	9.06	19.2	0.05	0.22	1.57	1.79	0.20	0.25	0.45	—	5,566	5,566	0.21	0.15	0.11	5,617
2048	1.52	1.27	7.91	16.7	0.04	0.21	1.29	1.50	0.19	0.18	0.38	—	4,775	4,775	0.19	0.07	0.05	4,802
2049	1.11	0.92	6.80	12.9	0.03	0.14	0.99	1.13	0.12	0.18	0.30	—	3,749	3,749	0.14	0.14	0.08	3,793
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2046	0.20	0.17	1.16	2.38	0.01	0.03	0.21	0.23	0.02	0.03	0.06	—	591	591	0.02	0.02	0.01	597
2047	0.30	0.25	1.65	3.51	0.01	0.04	0.29	0.33	0.04	0.05	0.08	—	921	921	0.04	0.03	0.02	930
2048	0.28	0.23	1.44	3.05	0.01	0.04	0.24	0.27	0.04	0.03	0.07	—	791	791	0.03	0.01	0.01	795
2049	0.20	0.17	1.24	2.36	0.01	0.02	0.18	0.21	0.02	0.03	0.06	—	621	621	0.02	0.02	0.01	628

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.91	4.70	0.01	0.04	—	0.04	0.04	—	0.04	—	673	673	0.03	0.01	—	676
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.90	1.90	< 0.005	< 0.005	< 0.005	1.99
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.91	4.70	0.01	0.04	—	0.04	0.04	—	0.04	—	673	673	0.03	0.01	—	676
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.93	1.93	< 0.005	< 0.005	< 0.005	2.03
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.83	1.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	192	192	0.01	< 0.005	—	193
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.57
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.15	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.8	31.8	< 0.005	< 0.005	—	31.9
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.02	0.51	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	174	174	< 0.005	< 0.005	0.08	175
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.49	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	167	167	< 0.005	< 0.005	< 0.005	167
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.13	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	47.5	47.5	< 0.005	< 0.005	0.01	47.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.87	7.87	< 0.005	< 0.005	< 0.005	7.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.19	1.84	11.9	25.8	0.06	0.31	—	0.31	0.28	—	0.28	—	6,494	6,494	0.26	0.05	—	6,516
Dust From Material Movemen	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	3.79	3.79	< 0.005	< 0.005	< 0.005	3.99
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.19	1.84	11.9	25.8	0.06	0.31	—	0.31	0.28	—	0.28	—	6,494	6,494	0.26	0.05	—	6,516
Dust From Material Movemen	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	3.85	3.85	< 0.005	< 0.005	< 0.005	4.05
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	5.07	11.0	0.03	0.13	—	0.13	0.12	—	0.12	—	2,770	2,770	0.11	0.02	—	2,780
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.92	2.01	< 0.005	0.02	—	0.02	0.02	—	0.02	—	459	459	0.02	< 0.005	—	460
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.04	0.89	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	305	305	< 0.005	< 0.005	0.14	306
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.8
Hauling	0.05	0.02	0.98	0.43	0.01	0.02	0.40	0.42	0.01	0.11	0.12	—	1,006	1,006	0.03	0.16	0.28	1,055
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	0.86	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	292	292	< 0.005	< 0.005	< 0.005	293
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.8
Hauling	0.05	0.02	1.03	0.43	0.01	0.02	0.40	0.42	0.01	0.11	0.12	—	1,007	1,007	0.03	0.16	0.01	1,055
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.35	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	125	125	< 0.005	< 0.005	0.03	125
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.82	4.82	< 0.005	< 0.005	< 0.005	5.04
Hauling	0.02	0.01	0.43	0.18	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	429	429	0.01	0.07	0.05	450
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.6	20.6	< 0.005	< 0.005	< 0.005	20.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.84

Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	71.1	71.1	< 0.005	0.01	0.01	74.5

3.5. Linear, Grading & Excavation (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.6	25.7	0.06	0.29	—	0.29	0.27	—	0.27	—	6,494	6,494	0.26	0.05	—	6,516
Dust From Material Movement	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	3.78	3.78	< 0.005	< 0.005	< 0.005	3.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.6	25.7	0.06	0.29	—	0.29	0.27	—	0.27	—	6,494	6,494	0.26	0.05	—	6,516
Dust From Material Movement	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	3.84	3.84	< 0.005	< 0.005	< 0.005	4.04
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	8.30	18.3	0.04	0.21	—	0.21	0.19	—	0.19	—	4,639	4,639	0.19	0.04	—	4,654

Dust From Material Movemen	—	—	—	—	—	—	0.89	0.89	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.13	0.13	< 0.005	0.01	0.01	—	2.72	2.72	< 0.005	< 0.005	< 0.005	2.86
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.24	1.51	3.34	0.01	0.04	—	0.04	0.04	—	0.04	—	768	768	0.03	0.01	—	771
Dust From Material Movemen	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.04	0.88	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	303	303	< 0.005	< 0.005	0.12	305
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	< 0.005	11.6
Hauling	0.05	0.02	0.95	0.42	0.01	0.02	0.40	0.42	0.01	0.11	0.12	—	992	992	0.03	0.16	0.24	1,040
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.05	0.84	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	291	291	< 0.005	< 0.005	< 0.005	292
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	< 0.005	11.6
Hauling	0.05	0.02	1.00	0.42	0.01	0.02	0.40	0.42	0.01	0.11	0.12	—	992	992	0.03	0.16	0.01	1,040
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.03	0.58	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	208	208	< 0.005	< 0.005	0.04	209
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.93	7.93	< 0.005	< 0.005	< 0.005	8.31
Hauling	0.03	0.01	0.70	0.30	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	709	709	0.02	0.11	0.08	743

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	34.4	34.4	< 0.005	< 0.005	0.01	34.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.38
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	117	117	< 0.005	0.02	0.01	123

3.7. Linear, Grading & Excavation (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.12	1.78	11.3	25.4	0.06	0.28	—	0.28	0.25	—	0.25	—	6,494	6,494	0.26	0.05	—	6,516
Dust From Material Movement	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	3.83	3.83	< 0.005	< 0.005	< 0.005	4.03
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.62	3.62	0.01	0.04	—	0.04	0.04	—	0.04	—	928	928	0.04	0.01	—	931
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.57

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.29	0.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	154	154	0.01	< 0.005	—	154
Dust From Material Movemen	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.05	0.84	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	290	290	< 0.005	< 0.005	< 0.005	291
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	< 0.005	11.5
Hauling	0.05	0.02	0.98	0.41	0.01	0.02	0.40	0.42	0.01	0.11	0.12	—	980	980	0.03	0.16	0.01	1,028
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.4	41.4	< 0.005	< 0.005	0.01	41.6
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.64
Hauling	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	140	140	< 0.005	0.02	0.01	147
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.86	6.86	< 0.005	< 0.005	< 0.005	6.88
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.2	23.2	< 0.005	< 0.005	< 0.005	24.3

3.9. Linear, Drainage, Utilities, & Sub-Grade (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.67	10.5	21.6	0.06	0.29	—	0.29	0.27	—	0.27	—	5,977	5,977	0.24	0.05	—	5,998
Dust From Material Movemen	—	—	—	—	—	—	1.03	1.03	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.67	10.5	21.6	0.06	0.29	—	0.29	0.27	—	0.27	—	5,977	5,977	0.24	0.05	—	5,998
Dust From Material Movemen	—	—	—	—	—	—	1.03	1.03	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.91	1.91	< 0.005	< 0.005	< 0.005	2.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	6.02	12.4	0.03	0.17	—	0.17	0.15	—	0.15	—	3,427	3,427	0.14	0.03	—	3,439
Dust From Material Movemen	—	—	—	—	—	—	0.59	0.59	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.21	0.17	1.10	2.26	0.01	0.03	—	0.03	0.03	—	0.03	—	567	567	0.02	< 0.005	—	569
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.04	0.83	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	288	288	< 0.005	< 0.005	0.10	289
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.33
Hauling	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	133	133	< 0.005	0.02	0.03	140
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.04	0.80	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	276	276	< 0.005	< 0.005	< 0.005	277
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.36
Hauling	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	133	133	< 0.005	0.02	< 0.005	140
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.44	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	158	158	< 0.005	< 0.005	0.02	159
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.77
Hauling	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	76.3	76.3	< 0.005	0.01	0.01	80.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	26.2	26.2	< 0.005	< 0.005	< 0.005	26.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	< 0.005	13.3

3.11. Linear, Drainage, Utilities, & Sub-Grade (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.98	1.66	10.4	21.6	0.06	0.29	—	0.29	0.26	—	0.26	—	5,977	5,977	0.24	0.05	—	5,998
Dust From Material Movemen	—	—	—	—	—	—	1.03	1.03	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.98	1.66	10.4	21.6	0.06	0.29	—	0.29	0.26	—	0.26	—	5,977	5,977	0.24	0.05	—	5,998
Dust From Material Movemen	—	—	—	—	—	—	1.03	1.03	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.91	1.91	< 0.005	< 0.005	< 0.005	2.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	2.93	6.08	0.02	0.08	—	0.08	0.07	—	0.07	—	1,684	1,684	0.07	0.01	—	1,690
Dust From Material Movemen	—	—	—	—	—	—	0.29	0.29	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.53	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	279	279	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.04	0.83	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	287	287	< 0.005	< 0.005	0.09	289
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.33
Hauling	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	132	132	< 0.005	0.02	0.03	138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.04	0.80	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	275	275	< 0.005	< 0.005	< 0.005	276
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Hauling	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	132	132	< 0.005	0.02	< 0.005	138
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	77.6	77.6	< 0.005	< 0.005	0.01	77.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.38
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	37.1	37.1	< 0.005	0.01	< 0.005	39.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	< 0.005	12.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06

Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.15	6.15	< 0.005	< 0.005	< 0.005	6.45

3.13. Linear, Paving (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.25	14.0	0.03	0.10	—	0.10	0.09	—	0.09	—	2,817	2,817	0.11	0.02	—	2,827
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.25	14.0	0.03	0.10	—	0.10	0.09	—	0.09	—	2,817	2,817	0.11	0.02	—	2,827
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.91	1.91	< 0.005	< 0.005	< 0.005	2.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.38	3.10	5.98	0.01	0.04	—	0.04	0.04	—	0.04	—	1,204	1,204	0.05	0.01	—	1,208

Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.81	0.81	< 0.005	< 0.005	< 0.005	0.85
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.57	1.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	199	199	0.01	< 0.005	—	200
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.04	0.78	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	273	273	< 0.005	< 0.005	0.08	274
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.33
Hauling	0.07	0.04	1.56	0.76	0.02	0.03	0.60	0.63	0.01	0.17	0.18	—	1,476	1,476	0.04	0.24	0.29	1,549
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.04	0.76	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	261	261	< 0.005	< 0.005	< 0.005	263
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Hauling	0.07	0.03	1.65	0.77	0.02	0.03	0.60	0.63	0.01	0.17	0.18	—	1,478	1,478	0.04	0.24	0.01	1,550
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.31	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.02	112
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.57
Hauling	0.03	0.01	0.69	0.33	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	631	631	0.02	0.10	0.05	662

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	18.5	18.5	< 0.005	< 0.005	< 0.005	18.6
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	105	105	< 0.005	0.02	0.01	110

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/2/2046	5/27/2046	5.00	104	—
Linear, Grading & Excavation	Linear, Grading & Excavation	5/28/2046	3/13/2048	5.00	468	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	3/14/2048	5/24/2049	5.00	312	—
Linear, Paving	Linear, Paving	5/25/2049	12/29/2049	5.00	156	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	9.00	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	1.00	6.00	33.0	0.73
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Signal Boards	Electric	Average	9.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40

Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	9.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Linear, Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Paving	Signal Boards	Electric	Average	9.00	8.00	6.00	0.82
Linear, Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Linear, Paving	Off-Highway Trucks	Diesel	Average	1.00	6.00	376	0.38
Linear, Paving	Welders	Diesel	Average	1.00	6.00	46.0	0.45

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	30.0	9.71	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	1.00	0.25	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	1.00	0.25	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	52.5	9.71	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	6.06	HHDT,MHDT
Linear, Grading & Excavation	Hauling	11.0	40.0	HHDT
Linear, Grading & Excavation	Onsite truck	2.00	0.25	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	50.0	9.71	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	1.00	0.25	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	2.95	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	1.00	0.25	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	47.5	9.71	LDA,LDT1,LDT2
Linear, Paving	Vendor	1.00	0.25	HHDT,MHDT
Linear, Paving	Hauling	33.1	20.0	HHDT
Linear, Paving	Onsite truck	1.00	0.25	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00	0.00	13.2	0.00	—
Linear, Grading & Excavation	0.00	41,295	13.2	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	7,363	0.00	13.2	0.00	—
Linear, Paving	41,295	0.00	13.2	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	13.2	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2047	264	204	0.03	< 0.005
2048	528	204	0.03	< 0.005
2049	528	204	0.03	< 0.005
2046	528	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	4.53	annual days of extreme heat
Extreme Precipitation	11.3	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.29	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	13.6
AQ-PM	3.62
AQ-DPM	16.4
Drinking Water	43.1

Lead Risk Housing	56.0
Pesticides	0.00
Toxic Releases	16.0
Traffic	19.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	28.1
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	72.2
Solid Waste	0.00
Sensitive Population	—
Asthma	25.4
Cardio-vascular	25.5
Low Birth Weights	7.66
Socioeconomic Factor Indicators	—
Education	48.3
Housing	66.1
Linguistic	24.8
Poverty	48.4
Unemployment	2.29

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	57.35916848
Employed	70.51199795

Median HI	40.78018735
Education	—
Bachelor's or higher	76.26074682
High school enrollment	100
Preschool enrollment	70.47350186
Transportation	—
Auto Access	30.23225972
Active commuting	79.5072501
Social	—
2-parent households	31.01501347
Voting	70.25535737
Neighborhood	—
Alcohol availability	16.50198896
Park access	81.35506224
Retail density	34.65930964
Supermarket access	39.90760939
Tree canopy	76.4275632
Housing	—
Homeownership	44.28333119
Housing habitability	56.21711793
Low-inc homeowner severe housing cost burden	74.22045425
Low-inc renter severe housing cost burden	30.87386116
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	67.2783267
Arthritis	0.0
Asthma ER Admissions	75.0

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	39.1
Cognitively Disabled	22.1
Physically Disabled	22.7
Heart Attack ER Admissions	84.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	80.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	32.5
Children	47.4
Elderly	48.0
English Speaking	76.4
Foreign-born	27.9

Outdoor Workers	47.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	40.9
Traffic Density	30.6
Traffic Access	0.0
Other Indices	—
Hardship	28.3
Other Decision Support	—
2016 Voting	86.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	9.00
Healthy Places Index Score for Project Location (b)	65.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Off-Road Equipment	Updated construction fleet per Project Description
Construction: Dust From Material Movement	Added paving for material import
Construction: Trips and VMT	One vendor truck represents a water truck in phases other than excavation to avoid empty cells
Construction: On-Road Fugitive Dust	Project site accessible from paved roads

Appendix F. Biological Resources

- F.1, Special-Status Plants and Wildlife Species with Potential to Occur
- F.2, U.S. Fish and Wildlife Service Official Species List
- F.3, Observed Plant Species
- F.4, Avian Species Detected

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Appendix F.1-1 Potential special-status plant species: conservation status, habitat types, and potential for occurrence in the vicinity of the proposed Santa Cruz Rail Trail Project Segments 10 and 11, Santa Cruz County, California.

Species Common Name[1]	Federal Status[2]	State Status[3]	CNPS Status[4]	Habitat Type[5]	Distribution by County[6]	Flowering Period[7]	Potential for Occurrence
Arenaria paludicola marsh sandwort	FE	SE	List 1B.1	Freshwater marshes	LAX*, SBD*, SCR*, SFO*, SLO, Washington*	May-August	**A** Marsh sandwort has been reintroduced in several areas north of Santa Cruz in Wilder Ranch State Park including Baldwin Creek. However, natural occurrences of this species are considered extirpated from Santa Cruz County and have never been observed in the vicinity of the study area. Moreover, freshwater marsh habitat is not present within the BSA.
Chorizanthe robusta var. hartwegii Scotts Valley spineflower	FE	None	List 1B.1	Meadows and seeps (sandy), valley and foothill grassland (mudstone, Purisima outcrops)	SCR	April-July	**A** Known to occur in small populations in mesic, sandy soils in Scott's Valley and Felton. There is no potential to occur in the study area.
Chorizanthe robusta var. *robusta* robust spineflower	FE	None	List 1B.1	Coastal dunes, coastal scrub, openings in cismontane woodland, in sandy or gravelly soil	ALA*, MNT, MRN, SCL*, SCR, SFO, SMT*	April-September	**A** Grassland in the study area is limited to the Porter-Sesnon Open Space of New Brighton State Beach south of Hwy 1 and does not support sandy or gravelly soils. This species has never been observed at this location despite past floristic surveys by California State Parks biologists. Robust spineflower was not observed during April 2023 floristic survey of the study area.
Erysimum teretifolium Ben Lomond wallflower	FE	SE	List 1B.1	Maritime chapparal, lower montane coniferous (Ponderosa pine) forest; inland marine sands	SCR	March-July	**A** Known to occur in small populations in sandy openings in Scott's Valley, Ben Lomond, Felton, and Bonny Doon. This species is entirely restricted to the Santa Cruz sandhills and there is no potential to occur in the study area.
Gilia tenuiflora ssp. arenaria Monterey gillia	FE	FT	List 1B.2	Maritime chapparal, cismontane woodland, coastal dunes, coastal scrub; sandy openings	MNT, SCR	April-June	**A** Known to occur in primarily in aeolian sand dunes near the coast in openings in maritime chapparal and coastal scrub. The nearest known occurrences are on coastal hind dunes extending from the Pajaro River Mouth to the Moss Landing harbor. There is no potential for this species to occur in the study area.
Holocarpha macradenia Santa Cruz tarplant	FT	SE	List 1B.1	Coastal prairie, valley and foothill grassland, coastal scrub, often in clay or sandy soils	ALA*, CCA*, MNT, MRN*, SCR, SON*	June-October	**HP** Santa Cruz tarplant is located west of the study area in Twin Lakes State Beach in degraded coastal prairie grassland north of Schwan Lagoon. South of the Study Area, numerous extant occurrences are present in Watsonville near the sloughs and municipal airport. Although degraded coastal prairie grassland supports suitable Watsonville loam soils, Santa Cruz tarplant has never been observed at this location despite past floristic surveys by California State Parks staff. A subsequent June/July 2023 survey visit will target this species during the blooming to confirm absence in the study area.

Species Common Name[1]	Federal Status[2]	State Status[3]	CNPS Status[4]	Habitat Type[5]	Distribution by County[6]	Flowering Period[7]	Potential for Occurrence
Perideridia gairdneri ssp. *gairdneri* Gairdner's yampah	None	None	List 4.2	Moist sites in coastal prairie, broadleaved upland forest, chaparral, valley and foothill grassland, vernal pools	CCA, DNT, KRN, LAX*, MEN, MNT, MRN, NAP, ORA*, SBT, SCL, SCR, SDG*, SLO, SMT(*?), SOL, SON	June-October	**HP** Gairdner's yampah is typically located in semi- mesic grasslands and may be associated with disturbance similar to that which occurs at New Brighton State Beach. However, this species has never been documented as occurring at this location despite past floristic surveys by California State Parks biologists. The nearest known extant occurrences are approximately 3.5 miles northwest of the Study Area in the UCSC West Marshall Field. This species was not observed during the April 2023 floristic surveys which were outside of the blooming period and will be targeted during the June/July 2023 survey visit.
Plagiobothrys diffusus San Francisco popcorn flower	None	SE	List 1B.1	Coastal prairie, valley and foothill grassland	ALA, SCR, SFO*, SMT	March-June	**A** Grasslands in the study area associated with the Porter Sesnon Open Space element of New Brighton State Beach are significantly disturbed and support invasive species including French broom, jubata grass, and extensive annual grasses. The nearest extant occurrence is approximately 3 miles west of the study area in Moore Creek Preserve. This species was not observed during the April 2023 floristic survey of the study area.
Polygonum hickmanii Scotts Valley polygonum	FE	SE	List 1B.1	Valley and foothill grassland; sandstone	SCR	May-August	**A** This sandstone specific species is known only from two small populations in Scotts Valley in sandstone substrate. There is no potential to occur in the study area.
Trifolium buckwestiorum Santa Cruz clover	None	None	List 1B.1	Coastal prairie; margins of broadleaved upland forest, cismontane woodland	MEN, MNT, SCL, SCR, SMT, SON	April-October	**A** Santa Cruz clover typically occurs in relatively intact coastal prairie grasslands dominated by *Stipa* species and other native forbs not occurring the disturbed coastal prairie grasslands of New Brighton State Beach. This species has never been documented as occurring at this location despite past floristic surveys by California State Parks biologists. The nearest known extant occurrence is approximately 3 miles northwest of the study area in Pogonip Park. This species was not observed during the April 2023 floristic survey of the study area.

NOTES:

[1]Nomenclature follows Hickman (1993); Tibor (2001); California Native Plant Society (2023).

[2]U.S. Fish and Wildlife Service (2023a, b, c).

[3]Section 1904, California Fish and Game Code (California Department of Fish and Game 2023a).

[4]Tibor (2001); California Native Plant Society (2023).

CNPS Lists: List 1A: Presumed extinct in California. List 1B: Rare, Threatened, or Endangered in California and elsewhere. List 2: Rare, Threatened, or Endangered in California, more common elsewhere. List 3: Plants about which more information is needed. List 4: Plants of limited distribution: a watch list.

Threat Code extensions: .1: Seriously endangered in California. .2: Fairly endangered in California. .3 Not very endangered in California.

[5]Thomas (1961); Munz and Keck (1973); Hickman (1993); Baldwin et al (2012); Tibor (2001); California Native Plant Society (2023); and unpublished information.

[6]Tibor (2001); California Native Plant Society (2023); and unpublished information; counties abbreviated by a three-letter code (below); occurrence in other states as indicated.

[7]Munz and Keck (1973); Tibor (2001); California Native Plant Society (2023)

***** Presumed extinct in these counties or states.

? Uncertainty about distribution or identity

ALA: Alameda
AMA: Amador
BUT: Butte
CCA: Contra Costa
COL: Colusa
DNT: Del Norte
FRE: Fresno
GLE: Glenn
HUM: Humboldt
KRN: Kern
LAK: Lake
LAX: Los Angeles
MAD: Madera
MEN: Mendocino
MER: Merced
MNT: Monterey
MOD: Modoc
MPA: Mariposa
MRN: Marin
NAP: Napa
NEV: Nevada
ORA: Orange
PLA: Placer
PLU: Plumas
RIV: Riverside
SAC: Sacramento
SBA: Santa Barbara
SBD: San Bernardino
SBT: San Benito
SCL: Santa Clara
SCR: Santa Cruz
SCZ: Santa Cruz Island (SBA Co.)
SDG: San Diego
SFO: San Francisco
SHA: Shasta
SIE: Sierra
SIS: Siskiyou
SJQ: San Joaquin
SLO: San Luis Obispo
SMT: San Mateo
SOL: Solano
SON: Sonoma
SRO: Santa Rosa Island (SBA Co.)
STA: Stanislaus
SUT: Sutter
TEH: Tehama
TRI: Trinity
TUL: Tulare
TUO: Tuolumne
VEN: Ventura
YOL: Yolo
YUB: Yuba

Occurrence Potential

A = Absent - no habitat present and no further work needed.

HP = Habitat Present - habitat is, or may be present. The species may be present.

P = Present - the species is present.

CH = Critical Habitat - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present.

Appendix F.1-2 Potential sensitive wildlife species: conservation status, habitat requirements, and potential for occurrence in the vicinity of the proposed Santa Cruz Rail Trail Project Segments 10 and 11, Santa Cruz County, California.

Common Name *Scientific Name*	Status Federal/State/Other			Habitat Requirements	Potential to Occur in Project Site
Invertebrates					
monarch butterfly *Danaus plexippus* (overwintering population)	FC	-	E-IUCN S2S3 L	The wintering monarch butterfly occupies a narrow band of habitat close to (typically within 1.5 miles of) the ocean. Eucalyptus groves (*Eucalyptus globulus*) and conifer groves are commonly utilized as overwintering sites in California. Abiotic and biotic factors including southeast aspect, wind protection and proximity to nectaries determine habitat suitability (Dayton and Bell 1992).	**P** Known from Capitola along Park Avenue at Escalona Gulch (Xerces Site 2985), New Brighton State Beach (Xerces Site 2986), and along Borregas Creek (Xerces Site 2987). Potential habitat in eucalyptus groves along the corridor.
Fish					
tidewater goby *Eucyclogobius newberryi*	FE	SSC	S3 AFS-E	Coastal lagoons and creeks; found up to 3 miles upstream in slow-moving water (USFWS 2005).	**P** Reported in Corcoran Lagoon/Rodeo Gulch up to one mile upstream from the mouth. Known to occur in Soquel Creek between Capitola State Beach and Highway 1. Considered an "intermittent" population in this location (CNDDB 2023).
Central California Coast coho salmon *Oncorhynchus kisutch*	FE	SE	S2? AFS-E	Spawns in loose silt-free coarse gravel; requires sufficient fall stream flow for spawning (NOAA Fisheries 2012).	**A** Not known to occur in creeks that intersect the alignment. Closest occurrence is from the San Lorenzo River and tributaries approximately 1.5 miles west of the western terminus of the alignment.
Central California Coast steelhead *Oncorhynchus mykiss irideus*	FT	-	S2S3 AFS-TH	Requires silt-free gravel for spawning; spends the first few years of its life in fresh water before migrating to the ocean. Adults later return to breed in the same freshwater locations where they were spawned (CalFish 2011, NOAA 2006, NOAA Fisheries 2005).	**P, CH** Present in Soquel Creek. Surveys conducted annually.
Pacific lamprey *Entosphenus tridentatus*	-	SSC	S3	Perennial creeks and rivers with ocean access and gravel present for spawning (Alley 2023).	**P** Known to occur in Soquel Creek (Alley 2023).
Amphibians and Reptiles					
California red-legged frog (CRLF) *Rana draytonii*	FT	SSC	S2S3	Requires the presence of surface water until mid to late summer for reproduction; occupies ephemeral and/or perennial water with standing or slow-moving flows. Upland habitat includes leaf litter, dense grassland, small mammal burrows, irrigated agricultural fields, and greenhouses. Adults are known to travel up to 2 miles overland between aquatic sites (USFWS 2002, Fellers and Kleeman 2007, USFWS 2010).	**A** The alignment lacks suitable aquatic habitat for this species. The closest historic (1978) record is from Valencia Lagoon along Highway 1 in Aptos (CNDDB 2023); however, extensive research by expert herpetologists has been done at this location since and no CRLF have been observed. Other occurrence records are from the west side of Santa Cruz and, further away, from Larkin Valley and La Selva Beach.
foothill yellow-legged frog (FYLF) *Rana boylii*	-	SE	S3	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats; needs at least some cobble-sized substrate for egg-laying (CNDDB 2023a, CNDDB2023b).	**A** The alignment lacks suitable habitat for this species. This species is known to occur upstream (approximately 1.0 river mile or 0.85 miles north) of the alignment in Soquel Creek.

Common Name *Scientific Name*	Status Federal/State/Other			Habitat Requirements	Potential to Occur in Project Site
California giant salamander *Dicamptodon ensatus*	-	SSC	S2S3	Wet coastal forests near cool streams and seeps. Aquatic larvae are found in streams and occasionally lakes and ponds (Stebbins and McGinnis 2012, Nafis 2023).	**A** The alignment lacks the wet forests this species occupies. Nearest record are from Arana Gulch near Paul Sweet Road, and upper Aptos Creek, both 2 miles north of the alignment (CNDDB 2021).
Santa Cruz black salamander *Aneides niger*	-	SSC	S3	Mixed deciduous woodland, coniferous forests, and coastal grasslands. Found under rocks near streams, in talus, under damp logs, and other objects. In Santa Cruz, found near water under rocks near streams, seeps, and springs (Stebbins and McGinnis 2012, CDFW CWHR 2014, 2016, Nafis 2023).	**HP** May occur along the creeks/drainages adjacent to the alignment. Known occurrences are from Pogonip Park, University of Santa Cruz quarry, 3.5 miles northwest and Aptos Creek 2.5 miles north from eastern terminus of the alignment (CNDDB 2023).
western pond turtle (WPT) *Emys marmorata*	-	SSC	S3	Found in ponds, marshes, rivers, streams, and irrigation ditches containing aquatic vegetation; usually seen sunning on logs, banks, or rocks. Moves up to 3-4 miles within a creek system, especially during "walk-abouts" before a female lays eggs; nests up to several hundred feet from aquatic habitat, in woodlands, grasslands, or open forest (Holland and Bury 1998).	**A** This species does not occur within the alignment or within dispersal distance of the BSA. Closest occurrences are from Soquel Creek, upstream of Hwy 1, approximately 1.1 river miles upstream of the proposed trail (Alley 2022, CNDDB 2023) and historically, in Schwan Lagoon within Twin Lakes State Beach, approximately 0.75 river miles downstream (southwest) of the proposed trail for Segment 9 (CNDDB 2023).
Birds (Nesting and/or Wintering)					
nesting birds of prey (various species)	MBTA	CFGC 3503.5	-	Variety of woodland and savanna habitats.	**P**
native nesting birds/rookeries	MBTA	CFGC 3503		Various habitats.	**P**
golden eagle *Aquila chrysaetos*	-	FP	S3	Resident in open mountains, foothills, canyons, or plains near open spaces for hunting. Nests in a mass of sticks on cliffs or in trees (Katzner et al., 2020).	**A** These segments lack the open grasslands that this species typically favors. Ebird (2022) documents three (rare) occurrences in the vicinity of the alignment at Twin Lakes State Beach open space (2014), along Rodeo Gulch 2 miles north of the rail corridor (2022), and the Porter-Sesnon open space in New Brighton State Beach (2016).
bald eagle *Haliaeetus leucocephalus* (nesting and wintering)	BCC	SE/FP	S3	Occupies forested areas next to large bodies of water with diverse, abundant, and vulnerable prey base. Nests are typically in mature or old growth trees with edge habitat and within 2 kilometers of the water. Roosts in large trees with an open and accessible canopy (Buehler 2020).	**HP** Adult and juvenile eagles have been observed in the vicinity of the alignment at the Twin Lakes State Beach open space (2023) a known nesting site, and within the New Brighton State Beach open space (2023), during nesting season (ebird 2023).
northern harrier *Circus cyaneus* (nesting)	BCC	SSC	S3	Ground nester; grasslands, sloughs, wet meadows, savanna, prairies and marshes (Brekenridge 1935, Simmons 1988, Smith et al. 2020).	**A** ebird (2022) documents only rare occurrences in the vicinity of the alignment. Twin Lakes State Beach open space (2016, 2022) and New Brighton State Beach open space (2017, 2018) provide limited nesting and foraging habitat.

Common Name *Scientific Name*	Status Federal/State/Other			Habitat Requirements	Potential to Occur in Project Site
white-tailed kite *Elanus leucurus*	-	FP	S3S4	Nests in trees on the margins of open areas including grasslands and sloughs containing a high abundance of small mammals and lizards (Dunk 2020) .	**HP** Tree stands within and adjacent to the alignment provide potential nesting habitat. Uncommon sightings are primarily from the New Brighton State Beach open space (2017) outside of breeding bird season (ebird 2023).
American peregrine falcon *Falco peregrinus anatum*	BCC	FP	S3S4	Inhabits open wetlands near cliffs, also occurs in some cities where nests on buildings and bridges (White et al. 2020).	**HP** Ebird (2023) documents sightings along the alignment, including recent sightings near New Brighton State Beach. The Capitola bluffs south of Park Avenue and west of New Brighton State Beach provide potential nesting habitat near the alignment.
western snowy plover *Charadrius nivosus nivosus* (nesting)	FT, BCC	SSC	S2S3	Coastal beaches and open sandy coastal areas, sparsely vegetated dues, salt pans at lagoons and salt-evaporation ponds, estuaries, levees, and some sand/cobble river bars up to 7 miles from the beach (Page et al. 2020).	**A** The alignment lacks suitable nesting habitat. Winter sightings are from the open space at Twin Lakes State Beach, Corcoran Lagoon, Capitola Beach, and New Brighton Beach (ebird 2023).
western gull (*Larus occidentalis*) (nesting)	BCC	-	-	Breeding habitat is predominantly islands and urban rooftops; typically forages and roosts away from nesting habitat, e.g..,at sea, intertidal zones, harbors, beaches, refuse dumps and other open urban environments (Pierotti and Annett 2020).	**A** The alignment lacks suitable nesting, foraging, and roosting habitat that would be directly impacted by the project. This species is opportunistic and habituated to human activity.
California least tern *Sternula antillarum browni* (nesting colony)	FE	SE/FP	S2	Forms colonies near a lagoon, estuary, river, or on the coast; on bare or sparsely vegetated sand, dried mudflats, shell islands, gravel or sand pits, or sometimes on stones; more recently, occasionally in human-influenced environments such as agricultural fields, airports, and flat, graveled rooftops.	**A** Rare observations of individuals in Santa Cruz County. Historical colonies on the Pajaro River. Closest current colonies are from southernmost San Francisco Bay approximately 31 miles north of the alignment.
marbled murrelet *Brachyramphus marmoratus* (nesting)	FT	SE	S2	Nests in coastal mature and old growth coniferous forests that have large limbs or platforms; moss, thick needle layer, or other nesting substrate; and multilayered canopies (Nelson 2020).	**A** The alignment lacks the mature coniferous forest this species utilizes for breeding. The closest known occurrences of breeding are from the North Coast old growth forests of Santa Cruz County.
long-eared owl *Asio otus* (nesting)	BCC	SSC	S3?	Utilizes abandoned stick nests of other large birds or squirrel nests in a variety of wooded areas, including orchards and usually near aquatic and open areas for foraging; forages mostly on rodents (Marks et al. 2020).	**A** Ebird March 2013 records document a rare owl at the Twin Lakes State Beach open space (ebird 2021). Not known to nest in Santa Cruz County (Suddjian 2013).
burrowing owl *Athene cunicularia* (nesting/wintering)	BCC	SSC	S3	Found in open areas with low-growing vegetation including annual and perennial grasslands, deserts, open scrub habitats, and agricultural fields with suitable burrows. Burrows of fossorial mammals are an essential component of their nesting and wintering habitat, but they may also use artificial structures such as culverts, openings in asphalt pavement, woody debris/rock piles, and crevices in stacks of straw bales (Poulin et al. 2020).	**A** Closest wintering records are from the meadows at UCSC. Breeding activities are extirpated from Santa Cruz County (CBD et al. 2003; Townsend and Lenihan 2007; Trulio 2018); the most recent breeding record is from 1987 at UCSC (CBD et al. 2003; Santa Cruz Bird Club 2013). Sightings are limited throughout the county.

Common Name *Scientific Name*	Status Federal/State/Other			Habitat Requirements	Potential to Occur in Project Site
Nuttall's woodpecker *Dryobates nuttallii* (nesting)	BCC	-	-	Occurs primarily in oak woodlands; also observed in riparian woodlands and rarely in conifer forests (Lowtherand Patten 2020).	**P** Observed in suitable habitat at various locations along the alignment.
Least Bell's vireo *Vireo bellii pusillus* (nesting)	FE/BCC	SE	S1S2	Uses shrubs and small trees (dense, low shrubby vegetation characteristic of early successional stages in riparian areas, brushy fields, scrub oak woodland, and coastal chaparral) for habitat and nest building.	**A** Extirpated from its historical distribution in the vicinity. This subspecies currently breeds from Ventura County south. Rare northernmost nesting pairs are from Gilroy in Santa Clara County from 1997 (Kus 2002) and the San Joaquin River in Stanislaus County from 2009 (Kus 2020). Only rare observations of individuals on the Pajaro River (1996) (ebird 2023).
Vaux's swift *Chaetura vauxi* (nesting)	BCC	SSC	S2S3	Nests in large tree hollows in forested environments. Nests made of conifer needles or small twigs are glued together with salvia and attached to inside wall of hallow tree usually near the bottom. Post breeding flocks up to several hundred may roost together in chimney like tree hollows. Also known to use manmade chimneys (Schwitters et al., 2021).	**A** Rare observations of solitary birds near the alignment are from Twin Lakes State Beach open space (August 2021), Corcoran Lagoon (May 2022), and a migrant detected along Soquel Creek upstream of the alignment (May 2020) (ebird 2023).
black swift *Cypseloides niger* (nesting)	BCC	SSC	S2	Nests sites include seacliff crevices along coastal areas and behind inland waterfalls in mountain regions. Feeds primarily on flying insects (Gunn et al., 2023).	**A** No recent sightings near the alignment or suitably moist nesting habitat. Closest recent nesting records are from the North Coast of Santa Cruz (Rinkert 2022).
olive-sided flycatcher *Contopus cooperi* (nesting)	BCC	SSC	-	Inhabits woodland and forest habitats. Nests in tall trees, generally near the edges and openings to meadows, grasslands, wetlands, and ponds (Altman and Sallabanks 2020).	**P** Observed within New Brighton State Beach and along New Brighton Creek in the Porter Sesnon open space.
Southwestern willow flycatcher *Empidonax traillii extimus* (nesting)	FE/BCC	SE	-	Willow riparian forest for nesting and foraging (Sedgwick 2020).	**A** No breeding records in Santa Cruz County.
wrentit *Chamaea fasciata* (nesting)	BCC	-	-	Abundant in shrublands, especially coastal scrub and chaparral; and a variety of other habitats with adequate cover such as timber and riparian forests, oak woodland, and urbanized areas (Geupel and Ballard 2020).	**P** Observed in suitable habitat at various locations along the alignment.
loggerhead shrike *Lanius ludovicianus* (nesting)	BCC	SSC	-	Grassland, agricultural fields, and shrub habitats with small reptiles and insects. Nests in dense trees or shrubs adjacent to open areas. Known to impale prey items on barbed wire fences (Yosef 2020).	**A** Uncommon observations near New Brighton State Beach and Seacliff State Beach outside of breeding season (eBird 2023). No recent breeding records in Santa Cruz County.
bank swallow *Riparia riparia* (nesting)	-	ST	-	Nests in erodible soils on vertical or near-vertical banks and bluffs of rivers and streams. Also found in sand and gravel quarries (Garrison and Turner 2020).	**A** Considered extirpated as a breeding species in Santa Cruz County. Closest known breeding colony is from Ano Nuevo (Rinkert 2018).
oak titmouse *Baeolophus inornatus* (nesting)	BCC	-	-	Nests in tree stands with natural cavities and old woodpecker holes, artificial nest boxes from mid-March through April. Inhabits oak woodlands along the Pacific Slope. Requires elevated perches for foraging and eating (Cicero 2020).	**P** Observed at Tannery Gulch and near the unnamed creek (herein New Brighton Creek) within the Porter Sesnon open space, both within New Brighton State Beach. Also known to nest along the alignment near Soquel Creek (ebird 2023).

Common Name *Scientific Name*	Status Federal/State/Other			Habitat Requirements	Potential to Occur in Project Site
yellow-breasted chat *Icteria virens* (nesting)	-	SSC	S3	Dense riparian vegetation 1-8 ft. above the ground, with a well-developed understory (Thompson and Eckerle 2022).	**A** No expected to breed on the coast. Only rare records from the vicinity of the alignment are documented (ebird 2023).
yellow warbler *Setophaga petechia* (nesting)	BCC	SSC	S3S4	Nests in deciduous riparian woodland with open canopy along streams or other watercourses; forages in dense understory of riparian woodland (Lowther et al. 2020).	**HP** Observed in New Brighton State Beach and along Soquel Creek during 2023 breeding season. Confirmed nesting records along the San Lorenzo River and Pajaro River. Also observed during breeding season at Moran Lake.
grasshopper sparrow *Ammodramus savannarum* (nesting)	-	SSC	S3	Associated with short to medium-height grasslands with little or no shrub cover. May be found in pastures and agricultural fields. Feeds on insects and seeds. Nest on ground in grassland habitats between April and May (Vickery 2020).	**A** Rare recent (2018) occurrence near the alignment in the open space adjacent New Brighton State Beach outside of the breeding season (ebird 2023). Closest recent potential breeding records are from UCSC (ebird 2023).
tricolored blackbird *Agelaius tricolor*	BCC	ST	S1S2	Colonial breeders. Breeding sites require nearby water, suitable nesting substrate, and open-range foraging habitat of natural grassland, shrubland, or agricultural cropland (Meese and Beedy 2015, Meese 2017, Beedy et al. 2017).	**A** Fall migrants observed at Capitola Beach and New Brighton State Beach open space (ebird 2023). No confirmed breeding in Santa Cruz County since 2008 (Meese 2017).
Lawrence's goldfinch *Spinus lawrencei* (nesting)	BCC	-	S3S4	Typically occupies arid and open woodlands within the near vicinity of three habitat components: chaparral or other brushy areas; tall annual weed fields; and water source such as stream, small lake, or farm pond (Watt et al. 2020).	**A** An uncommon breeder on the coast. Ebird (2023) records near the alignment are rare and during fall migration.
Allen's Hummingbird *Selasphorus sasin* (nesting)	BCC	-	-	Migrates along coastal slopes in shrub, chaparral, riparian woodland and eucalyptus groves. Breeds in coastal best affected by summer fog, where males set up territories in coastal scrub, riparian shrubs, and mixed evergreen and nonnative forests; females selecting the thicker riparian vegetation for nesting (Clark and Mitchell 2020).	**P** Observed in suitable habitat at various locations along the alignment.
Mammals					
roosting bat species	-	CFGC	-	Variable	**P** Tree stands, woodland, forest, and riparian habitats within the BSA support roosting bat species.
Townsend's big-eared bat *Corynorhinus [Plecotus] townsendii*	-	SSC	HP S2	Roost sites are highly associated w/ caves and mines; buildings must offer "cave-like" features; known to roost in large tree hollows and under bridges (WBWG 2017).	**A** The alignment lacks preferred roosting features. Nearest recent roost records are from a burnt (hollowed out) redwood tree at UCSC (EcoSystems West 1999).
pallid bat *Antrozous pallidus*	-	SSC	HP S3	Roost sites are primarily associated with oak, redwood, ponderosa pine, and giant Sequoia forests. Will also roost under bridges and in buildings and rock outcrops (WBWG 2017).	**A** Although mature trees adjacent to the project site may provide suitable habitat, the closest record (2003) for the species is from upper Soquel Creek approximately 5 miles from the alignment (CDFW 2023c,d).
western mastiff bat *Eumops perotis*	-	SSC	HP S3S4	Roosts are generally under exfoliating rock slabs associated with cliffs but are also known to utilize crevices in boulders and buildings. Oak woodland, chapparal, floodplains, grassland, and agricultural fields are used for foraging in this region (WBWG 2017).	**A** Although this species was detected during surveys of the BSA, no roost habitat is present in or near the impact area, and the bat has an extensive range for foraging (WBWG 2017).

Common Name *Scientific Name*	Status Federal/State/Other			Habitat Requirements	Potential to Occur in Project Site
hoary bat *Lasiurus cinereus*	-	-	MP S4	Roosts primarily in foliage of coniferous and deciduous trees near the ends of branches, which are usually at the edges of clearings but also known to have roosted in caves, under rock ledges, woodpecker holes, grey squirrel nests, and clinging to the sides of a buildings; foraging is associated with forested areas (WBWG 2017).	**P** Acoustically detected at Tannery Gulch, Rodeo Gulch, and Borregas Creek.
silver-haired bat *Lasionycteris noctivagans*	-	-	MP S3S4	Roosts, including maternity roosts in hollows and cavities of trees or loose bark of large-diameter snags, using multiple roosts in limited areas; forages above the canopy, over open meadows, and riparian zones along water courses (WBWG 2017).	**P** Acoustically detected at Tannery Gulch, Rodeo Gulch, and Borregas Creek.
western red bat *Lasiurus blossevillii*	-	SSC	HP S3	Roosts in foliage primarily in riparian and wooded habitats (WBWG 2017, Harvey et al.1999, Pierson et al. 1997).	**HP** Tree canopies provide potential roosting habitat. Nearest detection record is from Leona Creek at the Twin Lakes State Beach open space (EcoSystems West 2022).
long-legged myotis *Myotis volans*	-	-	HP S3	Roosts primarily in large hollow tree snags, or live trees with exfoliating bark; also uses rock crevices, mines, and buildings (Warner and Czaplewski 1984).	**HP** Mature trees adjacent to the rail corridor provide potential habitat. Occurs on Moore Creek Preserve (EcoSystems West 2004, Heady 2018).
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	-	SC	S2S3	Associated with riparian, oak woodland and redwood forest habitats and edge habitats. Builds houses from sticks and leaves under or in buildings and trees, in hollow trees, or in tree canopy (Sakai and Noon 1993).	**P** The open spaces adjacent to the alignment provide potential habitat for the woodrat. Significant number of stick houses observed along the alignment in the open space near New Brighton State Beach.
American badger *Taxidea taxus*	-	SSC	-	Occurs in open, uncultivated grasslands and meadows, and open stages of shrub and forest habitats with dry with friable soils. Forages on burrowing rodents, insects, and ground nesting birds (Quinn 2015).	**A** The fragmented open spaces adjacent to the alignment are isolated from the larger contiguous open spaces this shy species utilizes. Nearest record is from UCSC campus lands approximately 4 miles northwest of alignment (EcoSystems West 2004).

NOTES:

Federal Status

FE = Endangered: Any species which is in danger of extinction throughout all, or a significant portion of its range (USFWS 2023a).

FT = Threatened: Any species, which is likely to become an endangered species within the foreseeable future throughout all, or a significant portion of its range (USFWS 2023a).

FC = Candidate: Candidate species are plants and animals for which the U.S. Fish and Wildlife Service (FWS) has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities (USFWS 2023c).

BCC = Species of migratory nongame birds that are of concern in the United States because of (1) documented or apparent population declines, (2) small or restricted populations, (3) dependence on restricted or vulnerable habitats (USFWS 2021).

State Status

SE Endangered: A native species or subspecies of animal which is in serious danger of becoming extinct throughout all, or a significant portion of its range, due to loss of habitat, change in habitat, over exploitation, predation, competition and/or disease (CDFW 2023b).

ST Threatened: A native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Fish & G. Code, §2067 (CDFW 2023b).

SSC = CDFW Species of Special Concern: Designated because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction (CDFW 2023d, CDFW CNDDB 2023).

FP = Fully Protected[1]: State's initial protection for animals that were rare or faced possible extinction. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock (CDFW 2023e).

CFGC = California Fish and Game Code:
3503 - Protects active nests and eggs of birds from take, possession, or needless destruction
3503.5. - Protects birds of prey (Orders Falcinoformes and Strigiformes)
Section 86; 2000; 2014; 3007; 4150, and Title 14 CCR - Protects non-listed bat species and their roosting habitat, including individual roosts and maternity colonies.

Other (CDFW CNDDB 2023)

NatureServe Ranking[2]: S1 = Critically Imperiled—Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled—Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable—Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.

AFS = American Fisheries Society; E = Endangered; T = Threatened

L = Locally unique and protected by City and County ordinances

HP = Considered “High Priority” on the Western Bat Working Group’s (WBWG) Western Bat Species Regional Priority Matrix (2017)

MP= Considered “Medium Priority” on the WBWG’s Western Bat Species Regional Priority Matrix (2017)

Occurrence Potential

A = Absent - no habitat present and no further work needed.

HP = Habitat Present - habitat is or may be present. The species may be present.

P = Present - the species is present.

CH = Critical Habitat - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present.

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[1] More information on Fully Protected species and the take provisions can be found in the Fish and Game Code, (birds at §3511, mammals at §4700, reptiles and amphibians at §5050, and fish at §5515). Additional information on Fully Protected fish can be found in the California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 2, Article 4, §5.93 (CDFW 2023e).

[2] Originally developed by The Nature Conservancy and now maintained and recently revised by NatureServe. Includes a **Global rank** (G-rank), over the taxon’s entire distribution, and a **State rank** (S-rank), over its state distribution. For subspecies and varieties, there is also a “T” rank describing the global rank for the infraspecific taxon. Criteria are used to assign element ranks, from G1 to G5 for the Global rank and from S1 to S5 for the State rank, taking into account rarity, threats, and trends (CDFW CNDDB 2023).

Appendix F.1-3 Species Narratives for Special-Status Wildlife Species Known or With Potential to Occur in or Near the Santa Cruz Rail Trail Segments 10 and 11, Santa Cruz County, California.

Monarch Butterfly (overwintering population)

The life history of the monarch butterfly can be divided into two temporally defined periods: a spring/summer reproductive period and a fall/winter non-reproductive (wintering) period. During the spring and summer, monarchs exploit the widely distributed North American milkweed flora (*Asclepias* spp.) as food for their larvae. In the fall, the adult butterflies that are produced during the latter part of summer migrate to wintering habitats in coastal California or central Mexico to spend the winter months. Monarchs spend from 1 to 9 months as adults, depending on when they become reproductive. If they become reproductive immediately, they live 1-2 months as adults. Monarch adults that emerge from August through October typically migrate and overwinter before becoming reproductive the following spring. These monarchs live approximately 8-9 months as adults.

Monarchs arrive at overwintering sites in September and the first half of October to form fall aggregations. By mid-November they form more stable aggregations, which persist through January or February (Pelton et al. 2016). The monarch butterfly utilizes eucalyptus, Monterey pine, or Monterey cypress tree groves for winter roost sites, typically within 1.5 miles (2.4 kilometers) of the Pacific Ocean. Monarchs form aggregations on the underside of peripheral branches. The suitability of the stand is determined by both abiotic and biotic factors including:

- periodic exposure to (dappled) sunlight (often southeast aspect);
- cool shady roost areas for periods of warm weather;
- primary and secondary wind protection;
- proximity to nectaries (fall or winter blooming flowers);
- humidity; and
- water sources.

Monarchs typically emerge from a state of nocturnal torpor and begin to fly at temperatures around 55° F. Below this temperature, monarchs are unable to fly and are often killed or injured if dislodged from their roosts. Winter roost sites are sufficiently heterogeneous to permit shifts of roost location in accordance with prevailing weather conditions and seasonal variation in insulation. The roost site consists of the trees upon which the butterflies cluster, as well as the surrounding trees that provide wind protection. In addition, overwintering habitat includes nectar plants and water sources surrounding the roost site, since monarchs may fly some distance to obtain these resources (Pelton et al. 2016, Griffiths and Villablanca 2015).

Tidewater Goby

The tidewater goby is a small fish that inhabits coastal brackish water habitats entirely within California, ranging from the Smith River in Del Norte County south to Agua Hedionda Lagoon in San Diego County. The tidewater goby is uniquely adapted to coastal lagoons and the uppermost brackish zone of larger estuaries. The goby is typically found in water less than 1 meter (3.3 feet) deep and salinities of less than 12 parts per thousand. During spring floods that scour the lagoons and breach the sandbar barriers, the tidewater goby utilizes muddy backwater habitats. The goby may migrate upstream from the estuaries a distance of 0.5 miles to 3.5 miles. Upstream locations may be used for reproduction which occurs year-round with peaks in April-May, after the lagoons close, and in summer (USFWS 2005).

Santa Cruz Black Salamander

The Santa Cruz black salamander (*Aneides flavipunctatus niger*) occurs in Santa Cruz County and San Mateo County; this population is disjunct from the northern California population *A. f. flavipunctatus*. The Santa Cruz black salamander can be found near streams, seeps, and springs, under damp logs, rocks, and other objects in mixed deciduous woodland, coniferous forests, and coastal grasslands (Stebbins and McGinnis 2012, CDFW 2014, CDFW 2016, Nafis 2023).

Bald Eagle

The bald eagle is a large bird of prey typically observed in the winter throughout most of California at lakes, reservoirs, rivers, rangelands, and coastal wetlands. They are opportunistic foragers preying upon a variety of small animals, with a preference for fish over other types. The species often scavenges, pirating food from other species, and catching its own only as a last resort. Breeding habitats throughout the state are primarily mountain and foothill forests and woodlands adjacent to water bodies. Breeding pairs remain together for life, or until the death of one individual at which time the surviving bird may seek a new mate. Large stick nests frequently built in the upper canopy of the tallest trees in the area. Breeding adults will reuse previous nests, repairing and expanding previous nests each year, or build new ones. The pair's territory typically includes several nests. Migratory bald eagles arrive in California during the fall and early winter before the breeding season which occurs from January through July or August. One to three eggs are laid in the winter or early spring, and chicks fledge when they are about 11 or 12 weeks old. Soon after leaving the nest, many young birds will migrate north (Buehler 2020).

White-tailed Kite

The white-tailed kite (*Elanus leucurus*) inhabits agricultural fields, open grasslands, savannah-like habitats, and riparian and oak woodlands in a relatively narrow band on the west coast of the U.S. and Canada and over large parts of Mexico. An abundance of prey is a requisite habitat feature. The white-tailed kite feeds on rodents, lizards, birds, and insects. Nests sites are variable, and may be located in herbaceous open stages of most habitats from large scrub to trees. The kite makes a stick nest near the top of its nest site, camouflaged from below but open on top. Some nest site fidelity has been observed. Kites may nest semi-colonially. Breeding season occurs from late February to early August. Occasionally kites will double brood in a single season (Dunk 2020).

American Peregrine Falcon

Habitat for the American peregrine falcon (*Falco peregrinus anatum*) is variable. Most commonly occupied habitats contain cliffs open to the air for nesting and open landscapes for foraging. The peregrine is known to use towers and buildings in urban environments for nesting. Typically the peregrine falcon breeds February through July with replacement clutches only after nest failure. The peregrine predominantly captures its prey, mainly birds, in the air, but may also feed on mammals and pirated foods from other raptors (White et al. 2020).

Nuttall's Woodpecker

The Nuttall's woodpecker (*Dryobates nuttallii*) occurs primarily in California's oak woodlands but may also be observed in riparian woodlands and, rarely, in conifer forests. Its distribution stretches from northernmost California to northern Baja California. The Nuttall's woodpecker forages in the crevices of oaks and willows, gleaning insects primarily. Breeding occurs between April and July. Nest sites are cavities in soft wood, with the male typically excavating the cavity prior to egg laying and the both the male and female refining the cavity during egg-laying (Lowther and Patten 2020).

Olive-sided flycatcher

The olive-sided flycatcher (*Contopus cooperi*) breeds in woodlands and forests, at edges and openings, such as meadows, grasslands, wetlands and ponds, near open water from Alaska through Canada into California. This bird builds a cup nest of twigs, rootlets, and lichens, placed near the tip on a horizontal branch of a tree. Tall, prominent trees and snags are used for perching, singing and from foraging. The olive-sided flycatcher winters primarily in Panama and the Andes Mountains of South America (Altman and Sallabanks 2020).

Wrentit

The wrentit (*Chamaea fasciata)* occurs along the west coast (west of the Cascades and the Sierra Nevada) from the Columbia River to Baja California. The wrentit is abundant in shrublands, especially coastal scrub and chaparral; and a variety of other habitats with adequate cover such as timber and riparian forests, oak woodland, and urban and suburban areas. Wrentits typically mate for life and both the male and the female defend their territory yearlong. Breeding occurs from mid-March to early August. Nest sites are often in dense scrub such as California sage, California blackberry, poison oak or coffeeberry, but may also be situated in trees. Nests are constructed of strips of bark, twigs, cobwebs, and are lined with grasses, and other softer materials and decorated with lichen along with materials gleaned from humans. The wrentit eats insects, spiders, fruit, and seeds (Geupel and Ballard 2020).

Oak Titmouse

The oak titmouse (*Baeolophus inornatus*) is a common year-round resident of warm, dry woodlands, restricted almost entirely to California, but ranging from southwest Oregon to northwest Baja California. The oak titmouse occupies predominantly oak or mixed oak-pine forests but has also adapted to other similar habitats such as open pine forests in central California. This bird species has a varied diet that is composed of plant parts including seeds and berries, as well as invertebrates. The oak titmouse pair bonds during the first breeding season, and the pair mates for life. The oak titmouse is a solitary nester that defends its territory year-round. The breeding pair builds a nest of grass, moss, mud, hair, feathers, and fur in a woodpecker hole, natural cavity, or nest box and may partially excavate their own cavities. In central California, breeding activity typically occurs between late February and the end of June; late nest-building (June) indicates a replacement nest or a second clutch (Cicero 2020).

Allen's Hummingbird

The Allen's hummingbird (*Selasphorus sasin*) migrates from Mexico to arrive in coastal California midwinter. This species breeds from southwest Oregon to southern California, including on some of the Channel Islands. The breeding period is from February 1 to mid-July, with most breeding occurring March – June. In anticipation of the arrival of the females, males squabble to defend food sources and territory in shrub, chaparral, riparian woodland, mixed evergreen, and eucalyptus groves in the fog belt. Females typically select thicker riparian vegetation for nesting. Females build the nest from downy material such as from willows mixed with spider webs and with decorated with moss and lichen. The female provides all the care at the nest. The Allen's hummingbird feeds on floral nectar and small insects (Clark and Mitchell 2020).

Bat Species

The hoary bat (*Lasiurus cinereus)* roosts primarily in foliage of coniferous and deciduous trees near the ends of branches, usually at the edges of clearings. This species is also known to roost in caves, under rock ledges, in woodpecker holes, grey squirrel nests, and clinging to the sides of buildings. The hoary bat forages in forested areas (WBWG 2017).

The silver-haired bat (*Lasionycteris noctivagans)* roosts in hollows and cavities of trees or loose bark of large-diameter snags. Maternity roosts are also in cavities and may consist of multiple roosts in areas with limited habitat features. This species forages above the canopy, over open meadows, and riparian zones along water courses (WBWG 2017).

The western red bat roosts in foliage, primarily in riparian and wooded habitats, along streams and in edge habitats or habitat mosaics that provide open areas for foraging. The western red bat prefers roost sites that are protected from above and open below and located above dark ground cover (Harvey et al. 1999, Pierson et al. 1997). Young are born between late May and July and volant 3-6 weeks later. The western red bat begins foraging 1 - 2 hours after sunset and again several hours before sunrise, corresponding to periods of insect activity. This species may migrate a short distance between summer and winter ranges (WBWG 2017).

The long-legged myotis roosts primarily in large hollow tree snags, or live trees with exfoliating bark; but also uses rock crevices, mines, and buildings. This species is most common in woodland and forest habitats but also occupies chaparral and coastal scrub. The long-legged myotis forages in and around the forest canopy, over water and open habitats and is associated with short-lived patches of high insect density. The long-legged myotis forms maternity colonies with young born in June and July and volant 3-6 weeks later. The long-legged myotis is most active 3-4 hours after sunset. This species probably makes short migrations to winter hibernacula (Warner and Czaplewski 1984).

San Francisco Dusky-footed Woodrat

The San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) is associated with riparian, oak woodland, redwood forest, and chaparral or other scrub habitats. The woodrat builds houses on the ground or in trees, utilizing understory, woody debris, human debris, structures or buildings. Houses range in size from 3 to 8 feet across at the base, up to 6 feet tall, and up to approximately 30 feet above the ground in tree canopies. The woodrat tends to live in colonies of 3 to 15 or more houses, with the inhabitants often representing multiple generations. Houses have food caches, latrines, and often *Peromyscus* sp. nests and/or amphibians within. The woodrat is mostly nocturnal, leaving its house to forage on different parts of the same woody plant seasonally including leaves, bark, seeds and fruit of coast live oak, coffeeberry, poison oak, elderberry, but also grasses, flowers, and fungi. The woodrat breeds from December to September with a peak in mid-spring (Sakai and Noon 1993).

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958
Email Address: FW8VenturaSection7@FWS.Gov

In Reply Refer To: August 31, 2023
Project Code: 2022-0082555
Project Name: Segment 10/11 Rail Trail

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

Attachment(s):

- Official Species List
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

PROJECT SUMMARY

Project Code: 2022-0082555
Project Name: Segment 10/11 Rail Trail
Project Type: Recreation - New Construction
Project Description: Construct a bicycle/pedestrian trail within the existing rail corridor adjacent to the railroad tracks.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.97497475,-121.95192318109062,14z



Counties: Santa Cruz County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 23 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

REPTILES

NAME	STATUS
San Francisco Garter Snake *Thamnophis sirtalis tetrataenia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5956	Endangered

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Foothill Yellow-legged Frog *Rana boylii* Population: Central Coast Distinct Population Segment (Central Coast DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Proposed Threatened

FISHES

NAME	STATUS
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Mount Hermon June Beetle *Polyphylla barbata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3982	Endangered
Ohlone Tiger Beetle *Cicindela ohlone* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8271	Endangered
Zayante Band-winged Grasshopper *Trimerotropis infantilis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1036	Endangered

FLOWERING PLANTS

NAME	STATUS
Ben Lomond Spineflower *Chorizanthe pungens var. hartwegiana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7498	Endangered
Ben Lomond Wallflower *Erysimum teretifolium* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7429	Endangered
Marsh Sandwort *Arenaria paludicola* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Monterey Gilia *Gilia tenuiflora ssp. arenaria* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/856	Endangered
Santa Cruz Tarplant *Holocarpha macradenia* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6832	Threatened
Scotts Valley Polygonum *Polygonum hickmanii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3222	Endangered
Scotts Valley Spineflower *Chorizanthe robusta var. hartwegii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7108	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Oystercatcher *Haematopus bachmani* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Skimmer *Rynchops niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10

NAME	BREEDING SEASON
Black Tern *Chlidonias niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Black Turnstone *Arenaria melanocephala* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch *Carduelis lawrencei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Marbled Godwit *Limosa fedoa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker *Picoides nuttallii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20

NAME	BREEDING SEASON
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Tricolored Blackbird *Agelaius tricolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet *Tringa semipalmata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit *Chamaea fasciata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

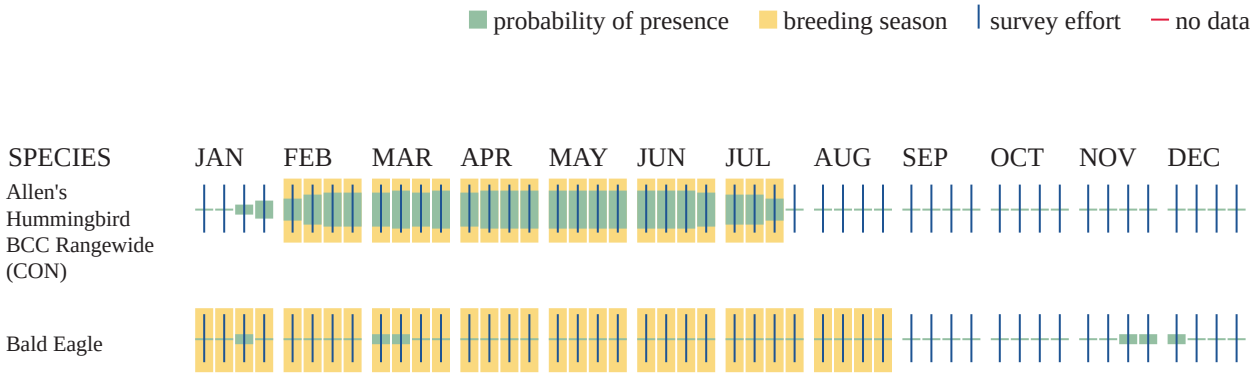
1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

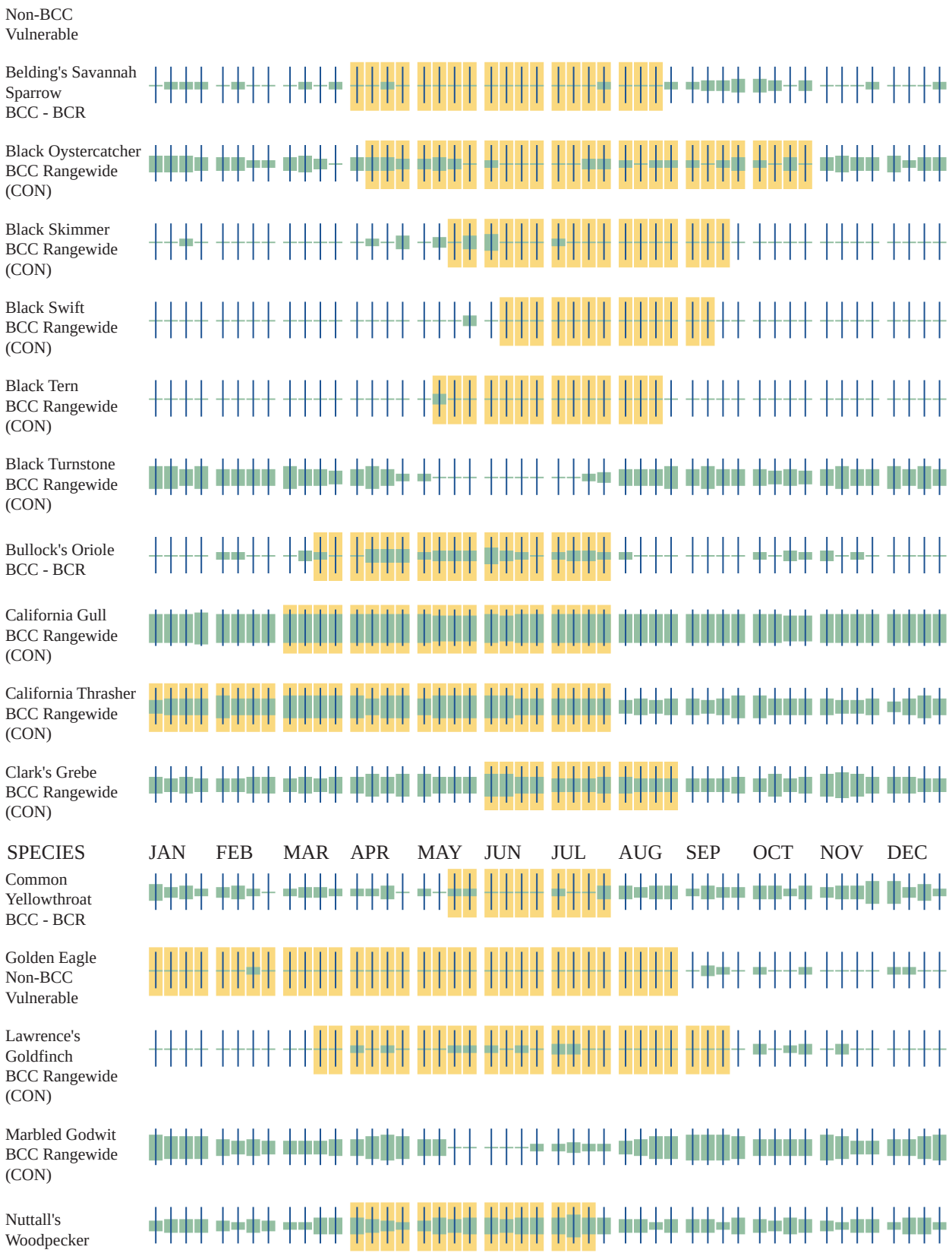
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

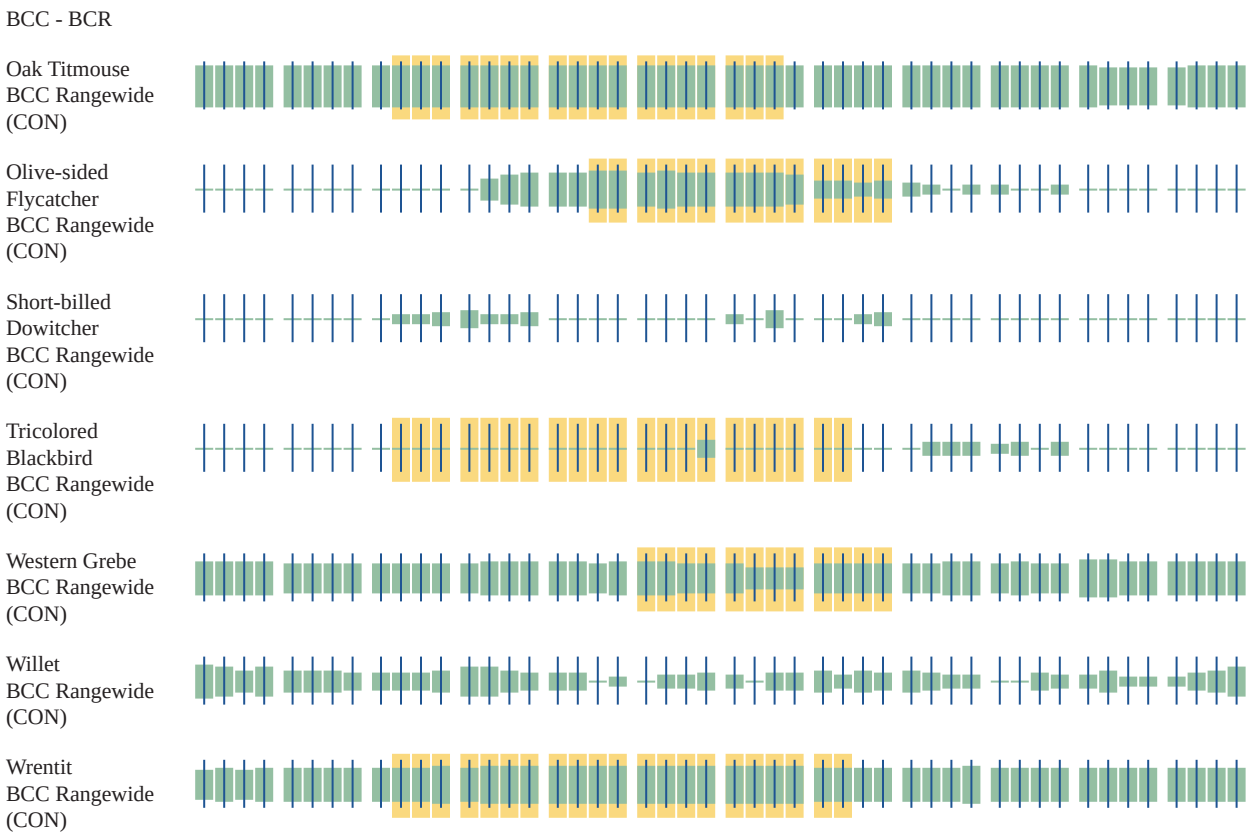
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.




Non-BCC Vulnerable
Belding's Savannah Sparrow BCC - BCR
Black Oystercatcher BCC Rangewide (CON)
Black Skimmer BCC Rangewide (CON)
Black Swift BCC Rangewide (CON)
Black Tern BCC Rangewide (CON)
Black Turnstone BCC Rangewide (CON)
Bullock's Oriole BCC - BCR
California Gull BCC Rangewide (CON)
California Thrasher BCC Rangewide (CON)
Clark's Grebe BCC Rangewide (CON)
SPECIES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
Common Yellowthroat BCC - BCR
Golden Eagle Non-BCC Vulnerable
Lawrence's Goldfinch BCC Rangewide (CON)
Marbled Godwit BCC Rangewide (CON)
Nuttall's Woodpecker



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?
The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell

me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

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LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Santa Cruz

Appendix F.3 List of Plants Observed during 2023 floristic surveys of the Santa Cruz Rail Trail Segments 10 and 11 Study Area, Santa Cruz County, California.

Scientific Name	Common Name	Status	Duration/Life Strategy
	AGAVACEAE		
Agave americana ssp. americana	American century plant	non-native	Shrub
	AIZOACEAE		
Carpobrotus chilensis	Sea fig	• invasive non-native	Perennial herb
Carpobrotus edulis	Iceplant	• invasive non-native	Perennial herb
	ALLIACEAE		
Allium triquetrum	White flowered onion	non-native	Perennial herb (bulb)
	ANACARDIACEAE		
Schinus terebinthifolius	Brazilian pepper tree	non-native	Tree, Shrub
Toxicodendron diversilobum	Poison oak	native	Vine, Shrub
	APIACEAE		
Conium maculatum	Poison hemlock	• invasive non-native	Perennial herb
Foeniculum vulgare	Fennel	• invasive non-native	Perennial herb
Oenanthe sarmentosa	Water parsley	native	Perennial herb
Sanicula crassicaulis	Pacific sanicle	native	Perennial herb
Torilis arvensis	Field hedge parsley	• invasive non-native	Annual herb
	APOCYNACEAE		
Vinca major	Periwinkle	• invasive non-native	Perennial herb
	AQUIFOLIACEAE		
Ilex aquifolium	Holly	• invasive non-native	Tree, Shrub
	ARACEAE		
Zantedeschia aethiopica	Callalily	non-native	Perennial herb
	ARALIACEAE		
Hedera canariensis	Canary ivy	• invasive non-native	Vine
Hedera helix	English ivy	• invasive non-native	Vine, Shrub
	ARECACEAE		
Syagrus romanzoffiana	Queen palm	non-native	Tree
Washingtonia robusta	Mexican fan palm	• invasive non-native	Tree
	ASPHODELACEAE		
Kniphofia uvaria	Redhot poker	non-native	Perennial herb
	ASTERACEAE		
Achillea millefolium	Yarrow	native	Perennial herb
Ageratina adenophora	Sticky snakewort	• invasive non-native	Perennial herb
Baccharis pilularis	Coyote brush	native	Shrub
Calendula arvensis	Field marigold	non-native	Annual herb
Carduus pycnocephalus	Italian thistle	• invasive non-native	Annual herb
Cirsium brevistylum	Indian thistle	native	Perennial herb
Cirsium vulgare	Bullthistle	• invasive non-native	Perennial herb
Crepis capillaris	Smooth hawksbeard	non-native	Annual, Perennial herb
Delairea odorata	Cape ivy	• invasive non-native	Perennial herb
Erigeron bonariensis	Flax-leaved horseweed	non-native	Annual herb
Erigeron canadensis	Canada horseweed	native	Annual herb
Gerbera jamesonii	Barberton daisy	non-native	Perennial herb
Gnaphalium palustre	Lowland cudweed	native	Annual herb
Hypochaeris radicata	Hairy cat's ear	• invasive non-native	Perennial herb
Lactuca saligna	Willow lettuce	non-native	Annual herb
Lactuca serriola	Prickly lettuce	non-native	Annual herb
Matricaria discoidea	Pineapple weed	native	Annual herb
Pseudognaphalium luteoalbum	Jersey cudweed	non-native	Annual herb
Silybum marianum	Milk thistle	• invasive non-native	Annual, Perennial herb

Sonchus asper	Spiny sowthistle	non-native	Annual herb
Sonchus oleraceus	Sow thistle	non-native	Annual herb
Taraxacum officinale ssp. officinale	Common dandelion	non-native	Perennial herb
BETULACEAE			
Corylus cornuta ssp. californica	Beaked hazelnut	native	Shrub
BORAGINACEAE			
Adelinia grandis	Adelinia	native	Perennial herb
Echium candicans	Pride of madeira	non-native	Shrub
Echium pininana	Pine echium	non-native	Shrub
Myosotis latifolia	Wide leaved forget me not	non-native	Perennial herb
BRASSICACEAE			
Brassica nigra	Black mustard	• invasive non-native	Annual herb
Cardamine oligosperma	Idaho bittercress	native	Annual, Perennial herb
Hirschfeldia incana	Mustard	• invasive non-native	Perennial herb
Lunaria annua	Annual moonwort	non-native	Annual, Perennial herb
Nasturtium officinale	Watercress	native	Perennial herb (aquatic)
Raphanus sativus	Wild radish	non-native	Annual, Biennial herb
Rorippa palustris	Bog yellow cress	native	Annual, Perennial herb
CAPRIFOLIACEAE			
Lonicera hispidula	Pink honeysuckle	native	Vine, Shrub
Lonicera involucrata	Coast twinberry	native	Shrub
Lonicera involucrata var. involucrata	Twinberry	native	Shrub
Lonicera involucrata var. ledebourii	Coast twinberry	native	Shrub
CARYOPHYLLACEAE			
Cerastium glomeratum	Large mouse ears	non-native	Annual herb
Polycarpon tetraphyllum	Four leaved allseed	non-native	Annual herb
Spergularia rubra	Purple sand spurry	non-native	Annual, Perennial herb
Stellaria media	Chickweed	non-native	Annual herb
CORNACEAE			
Cornus sericea ssp. occidentalis	Western dogwood	native	Shrub
CRASSULACEAE			
Crassula connata	Sand pygmy weed	native	Annual herb
Crassula ovata	Jade plant	non-native	Shrub
Sedum praealtum	Green cockscomb	non-native	Perennial herb
CUCURBITACEAE			
Marah fabacea	California man-root	native	Perennial herb, Vine
CUPRESSACEAE			
Calocedrus decurrens	Incense cedar	native	Tree
Hesperocyparis macrocarpa	Monterey cypress	native	Tree
Juniperus chinensis	Chinese juniper	non-native	Tree
Sequoia sempervirens	Coast redwood	native	Tree
CYPERACEAE			
Carex densa	Sedge	native	Perennial grasslike herb
Carex subbracteata	Small bract sedge	native	Perennial grasslike herb
Carex tumulicola	Split awn sedge	native	Perennial grasslike herb
Cyperus eragrostis	Tall cyperus	native	Perennial grasslike herb
DENNSTAEDTIACEAE			
Pteridium aquilinum var. pubescens	Western bracken fern	native	Fern
DRYOPTERIDACEAE			
Dryopteris arguta	Wood fern	native	Fern
Polystichum munitum	Western sword fern	native	Fern
EQUISETACEAE			
Equisetum arvense	Common horsetail	native	Fern

Equisetum telmateia	Giant horsetail	native	Fern
ERICACEAE			
Arbutus menziesii	Madrono	native	Tree
EUPHORBIACEAE			
Euphorbia lathyris	Gopher plant	non-native	Annual, Perennial herb
Euphorbia oblongata	Eggleaf spurge	non-native	Perennial herb
Euphorbia peplus	Petty spurge	non-native	Annual herb
FABACEAE			
Acacia dealbata	Silver wattle	• invasive non-native	Tree, Shrub
Acacia melanoxylon	Blackwood acacia	• invasive non-native	Tree
Acmispon glaber var. glaber	Deerweed	native	Perennial herb
Genista monspessulana	French broom	• invasive non-native	Shrub
Lathyrus sativus	White pea	non-native	Annual herb, Vine
Lathyrus vestitus	Common pacific pea	native	Perennial herb
Lupinus arboreus	Coastal bush lupine	native	Shrub
Medicago polymorpha	California burclover	non-native	Annual herb
Trifolium dubium	Shamrock	non-native	Annual herb
Trifolium incarnatum	Crimson clover	non-native	Annual herb
Vicia sativa ssp. sativa	Common vetch	non-native	Annual herb, Vine
Vicia villosa ssp. varia	Smooth vetch	non-native	Annual herb, Vine
Wisteria sinensis	Chinese wisteria	non-native	Perennial herb
FAGACEAE			
Quercus agrifolia	Coast live oak	native	Tree
Quercus virginiana	Live oak	non-native	Tree
GERANIACEAE			
Erodium botrys	Big heron bill	non-native	Annual herb
Erodium moschatum	Whitestem filaree	non-native	Annual herb
Erodium cicutarium	Redstem filaree	non-native	Annual herb
Geranium dissectum	Cutleaf geranium	non-native	Annual herb
Geranium robertianum	Robert's geranium	non-native	Annual herb
GROSSULARIACEAE			
Ribes sanguineum	Flowering currant	native	Shrub
IRIDACEAE			
Sisyrinchium bellum	Blue eyed grass	native	Perennial herb
JUGLANDACEAE			
Juglans regia	English walnut	non-native	Tree
JUNCACEAE			
Juncus effusus ssp. pacificus	Pacific rush	native	Perennial grasslike herb
Juncus patens	Rush	native	Perennial grasslike herb
Juncus phaeocephalus	Brown headed rush	native	Perennial grasslike herb
LAMIACEAE			
Clinopodium douglasii	Yerba buena	native	Perennial herb
Lavandula stoechas	French lavender	non-native	Shrub
Stachys bullata	Southern hedge nettle	native	Perennial herb
LAURACEAE			
Cinnamomum camphora	Camphortree	non-native	Tree
Persea americana	Avocado	non-native	Tree
LYTHRACEAE			
Lythrum hyssopifolia	Hyssop loosestrife	non-native	Annual, Perennial herb
MALVACEAE			
Malva parviflora	Cheeseweed	non-native	Annual herb
MONTIACEAE			
Claytonia perfoliata	Miner's lettuce	native	Annual herb

MORACEAE			
Ficus pumila	Climbingfig	non-native	Shrub
MYRSINACEAE			
Lysimachia arvensis	Scarlet pimpernel	non-native	Annual herb
MYRTACEAE			
Eucalyptus camaldulensis	Red gum	non-native	Tree
Eucalyptus globulus	Blue gum	• invasive non-native	Tree
Syzygium paniculatum	Brush cherry	non-native	Tree
OLEACEAE			
Ligustrum japonicum	Japanese privet	non-native	Tree, Shrub
Ligustrum lucidum	Glossy privet	non-native	Tree, Shrub
Olea europaea	Olive	non-native	Tree, Shrub
ONAGRACEAE			
Epilobium brachycarpum	Willow herb	native	Annual herb
Oenothera elata ssp. hooker i	Evening primrose	native	Perennial herb
Taraxia ovata	Sun cup	native	Perennial herb
OXALIDACEAE			
Oxalis corniculata	Creeping wood sorrel	non-native	Perennial herb
Oxalis incarnata	Crimson woodsorrel	non-native	Perennial herb
Oxalis pes-caprae	Bermuda buttercup	• invasive non-native	Perennial herb
PAPAVERACEAE			
Dicentra formosa	Pacific bleedinghearts	native	Perennial herb
Eschscholzia californica	California poppy	native	Annual, Perennial herb
Fumaria capreolata	White ramping fumitory	non-native	Perennial herb
PINACEAE			
Pinus canariensis	Canary island pine	non-native	Tree
Pinus pinea	Italian stone pine	non-native	Tree
Pinus radiata	Monterey pine	native	Tree
Pinus thunbergiana	Japanese black pine	non-native	Tree
Pseudotsuga menziesii var. menziesii	Douglas fir	native	Tree
PITTOSPORACEAE			
Pittosporum crassifolium	Thick leaf box	non-native	Tree, Shrub
Pittosporum tenuifolium	Short leaf box	non-native	Tree
Pittosporum tobira	Mock orange	non-native	Tree, Shrub
Pittosporum undulatum	Victorian box	non-native	Tree, Shrub
PLANTAGINACEAE			
Plantago coronopus	Cutleaf plantain	non-native	Annual herb
Plantago lanceolata	Ribwort	non-native	Perennial herb
PLUMBAGINACEAE			
Limonium sinuatum	Statice	non-native	Perennial herb
POACEAE			
Avena barbata	Slim oat	• invasive non-native	Annual grass
Bromus catharticus	Rescue grass	non-native	Annual, Perennial grass
Bromus diandrus	Ripgut brome	• invasive non-native	Annual grass
Bromus hordeaceus	Soft chess	non-native	Annual grass
Bromus laevipes	Narrow flowered brome	native	Perennial grass
Bromus sitchensis var. carinatus	California brome	native	Perennial grass
Cortaderia jubata	Andean pampas grass	• invasive non-native	Perennial grass
Cynodon dactylon	Bermuda grass	• invasive non-native	Perennial grass
Dactylis glomerata	Orchardgrass	non-native	Perennial grass
Danthonia californica	California oatgrass	native	Perennial grass
Ehrharta erecta	Upright veldt grass	• invasive non-native	Perennial grass
Elymus glaucus ssp. glaucus	Blue wild rye	native	Perennial grass

Festuca arundinacea	Reed fescue	• invasive non-native	Perennial grass
Festuca bromoides	Brome fescue	non-native	Annual grass
Festuca myuros	Rattail sixweeks grass	• invasive non-native	Annual grass
Festuca perennis	Italian rye grass	• invasive non-native	Annual, Perennial grass
Holcus lanatus	Common velvetgrass	• invasive non-native	Perennial grass
Hordeum murinum ssp. leporinum	Farmer's foxtail	non-native	Annual grass
Nassella tenuissima	Mexican feathergrass	non-native	Perennial grass
Pennisetum clandestinum	Kikuyu grass	non-native	Perennial grass
Pennisetum setaceum	Fountaingrass	• invasive non-native	Perennial grass
Poa annua	Annual blue grass	non-native	Annual grass
Polypogon monspeliensis	Annual beard grass	non-native	Annual grass
Pseudosasa japonica	Arrow bamboo	non-native	Shrub
Stipa pulchra	Purple needle grass	native	Perennial grass
PODOCARPACEAE			
Podocarpus macrophyllus	Yew plum pine	non-native	Shrub
POLYGONACEAE			
Persicaria maculosa	Spotted ladysthumb	non-native	Annual herb
Polygonum aviculare ssp. depressum	Prostrate knotweed	non-native	Annual, Perennial herb
Rumex acetosella	Sheep sorrel	• invasive non-native	Perennial herb
Rumex crispus	Curly dock	non-native	Perennial herb
Rumex obtusifolius	Broadleaf dock	non-native	Perennial herb
Rumex pulcher	Fiddleleaf dock	non-native	Perennial herb
RHAMNACEAE			
Frangula californica	California coffeeberry	native	Shrub
ROSACEAE			
Cotoneaster pannosus	Woolly cotoneaster	• invasive non-native	Shrub
Heteromeles arbutifolia	Toyon	native	Shrub
Prunus caroliniana	Carolina laurelcherry	non-native	Tree
Prunus cerasifera	Cherry plum	non-native	Tree
Prunus domestica	European plum	non-native	Tree
Prunus ilicifolia ssp. ilicifolia	Holly leaf cherry	native	Tree, Shrub
Prunus laurocerasus	Cherry laurel	non-native	Tree, Shrub
Pyrus calleryana	Callery pear	non-native	Tree
Rubus armeniacus	Himalayan blackberry	• invasive non-native	Shrub
Rubus ursinus	California blackberry	native	Vine, Shrub
RUBIACEAE			
Galium aparine	Cleavers	native	Annual herb
SALICACEAE			
Populus nigra	Lombardy poplar	non-native	Tree
Populus trichocarpa	Black cottonwood	native	Tree
Salix laevigata	Polished willow	native	Tree
Salix lasiolepis	Arroyo willow	native	Tree, Shrub
SAPINDACEAE			
Acer macrophyllum	Bigleaf maple	native	Tree
Acer negundo	Boxelder	native	Tree
Aesculus californica	Buckeye	native	Tree
Cupaniopsis anacardioides	Carrotwood	non-native	Tree
SCROPHULARIACEAE			
Myoporum laetum	Ngaio tree	• invasive non-native	Tree, Shrub
Scrophularia californica	California bee plant	native	Perennial herb
SOLANACEAE			
Solanum nigrum	Black nightshade	non-native	Annual herb
TROPAEOLACEAE			

Tropaeolum majus	Garden nasturtium	non-native	Annual herb, Vine
TYPHACEAE			
Typha latifolia	Broadleaf cattail	native	Perennial herb (aquatic)
ULMACEAE			
Ulmus minor	English elm	non-native	Tree
URTICACEAE			
Urtica dioica	Stinging nettle	native	Perennial herb
VALERIANACEAE			
Centranthus ruber	Jupiter's beard	non-native	Annual, Perennial herb
VIBURNACEAE			
Sambucus nigra	Black elderberry	native	Shrub

Appendix F.4 Avian species detected and associated potential habitat type along the Coastal Rail Trail - Segments 10 and 11, Santa Cruz County, CA.

	Conservation Status	Non-Native Grassland	Degraded Coastal Terrace Prairie	Oak Woodland/ Forest	Coastal Scrub	Arroyo Willow/ Mixed Riparian Forest	Aquatic	Sandy Beach	Mudstone Cliff	Non-Native Forest	Ornamental/ Landscaped	Ruderal/ Developed
Anatidae												
Mallard *Anas Platyrhynchos*							X	X				
Trochilidae												
Allen's Hummingbird *Selasphorus sasin*	BCC		X	X	X	X				X	X	X
Anna's Hummingbird *Calypte anna*		X	X	X	X	X				X	X	X
Columbidae												
Band-tailed Pigeon *Patagioenas fasciata*				X							X	X
Eurasian Collared-Dove *Streptopelia decaocto**				X		X				X	X	X
Mourning Dove *Zenaida macroura*		X	X	X	X	X				X	X	X
Rock Pigeon *Columba livia**									X		X	X
Cathartidae												
Turkey Vulture *Cathartes aura*		X	X	X	X			X				X
Accipitridae												
Cooper's Hawk *Accipiter cooperii*				X		X				X	X	X
Red-tailed Hawk *(Buteo jamaicensis)*		X	X	X	X					X		X
Red-shouldered Hawk (*Buteo lineatus)*				X		X				X	X	X
Strigidae												
Great Horned Owl *Bubo virginianus*		X	X	X	X	X				X	X	X
Odontophoridae												
California Quail *Callipepla californica*			X	X	X						X	X
Laridae												

	Conservation Status	Non-Native Grassland	Degraded Coastal Terrace Prairie	Oak Woodland/ Forest	Coastal Scrub	Arroyo Willow/ Mixed Riparian Forest	Aquatic	Sandy Beach	Mudstone Cliff	Non-Native Forest	Ornamental/ Landscaped	Ruderal/ Developed
Western Gull *Larus occidentalis*	BCC						X	X				X
Ardeidae												
Great Blue Heron *Ardea Herodias*		X	X		X		X	X				
Picidae												
Acorn Woodpecker *Melanerpes formicivorus*				X		X					X	X
Downy Woodpecker *Dryobates pubescens*				X		X				X	X	X
Hairy Woodpecker *Dryobates villosus*				X		X				X	X	X
Nuttall's Woodpecker *Dryobates nuttallii*	BCC			X		X				X	X	X
Tyrannidae												
Black Phoebe *Sayornis nigricans*			X	X	X	X	X	X		X	X	X
Pacific-slope Flycatcher *Empidonax difficilis*				X		X				X		
Olive-sided Flycatcher *Contopus cooperi*	BCC SSC											
Vireonidae												
Hutton's Vireo *Vireo huttoni*				X	X	X				X	X	
Warbling Vireo *Vireo gilvus*				X		X				X		
Corvidae												
American Crow *Corvus brachyrhynchos*				X		X				X	X	X
California Scrub-Jay *Aphelocoma californica*			X	X	X	X					X	X
Common Raven *Corvus corax*		X		X	X	X					X	X
Steller's Jay *Cyanocitta stelleri*				X		X				X		
Hirudinidae												

	Conservation Status	Non-Native Grassland	Degraded Coastal Terrace Prairie	Oak Woodland/ Forest	Coastal Scrub	Arroyo Willow/ Mixed Riparian Forest	Aquatic	Sandy Beach	Mudstone Cliff	Non-Native Forest	Ornamental/ Landscaped	Ruderal/ Developed
Barn Swallow *Hirundo rustica*		X	X	X	X	X		X			X	X
Paridae												
Chestnut-backed Chickadee *Poecile rufenscens*				X	X	X				X	X	X
Oak Titmouse *Baeolophus inornatus*	BCC S4			X		X				X	X	X
Aegithalidae												
Bushtit *Psaltriparus minimus*			X	X	X	X				X	X	X
Sittidae												
Pygmy Nuthatch *Sitta pygmaea*				X		X				X		X
Certhiidae												
Brown Creeper *Certhia americana*				X		X				X	X	
Sylviidae												
Wrentit *Chamaea fasciata*	BCC		X	X	X	X					X	
Troglodytidae												
Bewick's Wren *Thryomanes bewickii*			X	X	X	X				X	X	X
Sturnidae												
European Starling *Sturnus vulgaris**		X		X		X				X	X	X
Turdidae												
American robin *Turdus migratorius*				X		X				X	X	X
Swainson's Thrush *Catharus ustulatus*				X		X				X		
Mimidae												
Northern Mockingbird *Mimus polyglottos*			X		X						X	X
Bombycillidae												
Cedar Waxwing *Bombycilla cedrorum*+				X		X				X	X	

	Conservation Status	Non-Native Grassland	Degraded Coastal Terrace Prairie	Oak Woodland/ Forest	Coastal Scrub	Arroyo Willow/ Mixed Riparian Forest	Aquatic	Sandy Beach	Mudstone Cliff	Non-Native Forest	Ornamental/ Landscaped	Ruderal/ Developed
Parulidae												
Common Yellowthroat *Geothlypis trichas*						X						
Orange-crowned Warbler Oreothlypis celata				X	X	X				X	X	
Townsend's Warbler *Setophaga townsendi*+				X		X				X	X	
Yellow-rumped Warbler *Setophaga coronata*				X		X				X	X	
Wilson's Warbler *Cardellina pusilla*				X		X				X		
Cardinalidae												
Black-headed Grosbeak *Pheucticus melanocephalus*				X		X				X		
Passerellidae												
California Towhee *Melozone crissalis*			X	X	X	X				X	X	X
Dark-eyed Junco *Junco hyemalis*				X		X				X	X	X
House Sparrow* *Passer domesticus*						X					X	X
Golden-crowned Sparrow *Zonotrichia atricapilla*+		X	X		X	X					X	X
Spotted Towhee *Pipilo maculatus*			X	X	X	X				X	X	
Song Sparrow *Melospiza melodia*			X	X	X	X				X	X	X
Icteridae												
Brewer's Blackbird *Euphagus cyanocephalus*		X									X	X
Fringillidae												
House Finch *Haemorhous mexicanus*		X	X	X	X	X				X	X	X
Lesser Goldfinch *Spinus psaltria*		X	X	X		X				X	X	X

NOTES:

* Non-native Species
+Wintering/Nonbreeding Only

Federal Status (USFWS 2021)

BCC = Species of migratory nongame birds that are considered to be of concern in the United States because of (1) documented or apparent population declines, (2) small or restricted populations, (3) dependence on restricted or vulnerable habitats.

State Status (CDFW 2023d)

SSC = CDFW Species of Special Concern: Designated because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Other (CDFW CNDDB 2023)

NatureServe Ranking[1]:

S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - At fairly low risk of extirpation in the state due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

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1 Originally developed by The Nature Conservancy and now maintained by NatureServe. Includes a Global rank (G-rank), over the taxon's entire distribution, and a State rank (S-rank), over its state distribution. For subspecies and varieties, there is also a "T" rank describing the global rank for the infraspecific taxon. Criteria are used to assign element ranks, from G1 to G5 for the Global rank and from S1 to S5 for the State rank, taking into account rarity, threats, and trends (CDFW CNDDB 2023).

Appendix G. Traffic Technical Memorandum

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Rincon Consultants, Inc.
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Monterey, California 93940
831-333-0310

May 4, 2023
Project No.: 20-10372
Federal Project No.: ATPL-5936 (154)
Caltrans ID No.: 05-2300-0030

Kelso Vidal
California Department of Transportation, District 5
50 Higuera Street
San Luis Obispo, California 93401
Via email: kelso.vidal@dot.ca.gov

Subject: Coastal Rail Trail Segments 10 and 11, Traffic Technical Memorandum

Dear Mr. Vidal:

Rincon Consultants, Inc. is pleased to submit this Traffic Technical Memorandum for the proposed Coastal Rail Trail Segments 10 and 11 in Santa Cruz County on behalf of the County of Santa Cruz (project proponent and California Environmental Quality Act [CEQA] lead agency). The purpose of this memorandum is to detail transportation impacts associated with construction and operation of the proposed trail.

Project Description

The County of Santa Cruz (County), in coordination with the City of Capitola and the Santa Cruz County Regional Transportation Commission (RTC), is proposing the Coastal Rail Trail Segments 10 and 11 Project (Project) to be developed along RTC-owned rail corridor right-of-way (ROW) that generally parallels the coastline in central Santa Cruz County (regional location is shown in Figure 1). This memorandum evaluates the Proposed Project: Trail Next to Rail line (Ultimate Trail Configuration).[1]

The Project is a 4.2-mile bicycle and pedestrian system proposed to extend along the RTC-owned railroad corridor from 17th Avenue on the west to State Park Drive on the east, extending through unincorporated County and the City of Capitola. Segment 10 (1.5 miles) extends from 17th Avenue to 47th Avenue, and Segment 11 (2.7 miles) extends from 47th Avenue to State Park Drive (segments and Project location are shown in Figure 2. Both segments are comprised of a separated multi-use bicycle and pedestrian trail (graphic rendering shown in Figure 3). The new multi-use trail would not include an approximately 0.5-mile section of the rail corridor, from Opal Street to Monterey Avenue (which encompasses the Capitola Trestle Bridge), in the City of Capitola. Instead, trail users would be directed to the existing on-street bicycle lanes and pedestrian sidewalk extending through Capitola Village.

The trail would be Americans with Disabilities Act (ADA)-accessible and intended for pedestrians and bicyclists only. Although electric bicycles with a rating limited to 20 miles per hour would be allowed in accordance with California law (Assembly Bill 1096),[2] motorized vehicles would not be allowed (excluding emergency vehicles). Electronic skateboards with a rating limited to 20 miles per hour would

[1] The Environmental Impact Report for this Project analyzes two options—the Ultimate Trail Configuration (the Project, which is solely discussed in this Traffic Technical Memorandum) and an optional first phase called the Interim Trail Configuration. The proposed project described in this memorandum is consistent with the proposed project described in the Active Transportation Program grant application.
[2] According to Assembly Bill 1096, which took effect in January 2016, electric bicycles (e-bikes) are no longer regulated like mopeds, and the same rules of the road apply to both e-bikes and human-powered bicycles. Class 3 E-bikes go up to 28 mph and are not allowed on paths. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1096

be allowed as well. Depending on the volume of users, other speed limits may be imposed and indicated on posted signage. Flexible bollards would be installed at some roadway crossings to keep unauthorized motorists off the trail. The Project would not include installation of parking lots or other parking improvements, except for the reconfiguration of the existing diagonal parking along Cliff Drive to parallel parking (reducing the delineated spaces from 46 to 34 spaces) and the addition of a staircase for access to the New Brighton State Beach parking lot.

The Project would include eight at-grade roadway crossings at 30th Avenue, 38th Avenue, 41st Avenue, 47th Avenue, Grove Lane, New Brighton Road, Estates Drive, and Mar Vista Drive. Improvements at these roadway crossings include trail chicanes[3] to slow users before intersections, new sidewalks, ADA-compliant curb ramps, concrete track panels, grading and drainage improvements, roadway lighting, signage, and striping improvements on the roadway and trail. Additional improvements relevant to safety and unique to several crossings are identified below.

- **30th Avenue**
  - Light-emitting diode (LED) W11-15 flashing pedestrian/bicycle signs or rectangular rapid-flashing beacon placed in advance of the crossing in each direction to warn drivers
  - Bulb-out on east side
- **38th Avenue**
  - LED W11-15 flashing pedestrian/bicycle signs or rectangular rapid-flashing beacon placed in advance of the crossing in each direction to warn drivers
  - Relocated rail crossing equipment
  - Bulb-out on east side
- **41st Avenue**
  - LED W11-15 flashing pedestrian/bicycle signs or rectangular rapid-flashing beacon placed in advance of the crossing in each direction to warn drivers
  - Relocated rail crossing equipment
  - Extension of sidewalk north to Melton Street
  - Bulb-outs
- **47th Avenue**
  - Bulb-out at southeast corner
  - Relocated rail crossing equipment
  - Crosswalk striping across 47th Avenue and Portola Drive on coastal side of tracks
- **New Brighton Road**
  - Regrading of roadway
- **Estates Drive**
  - Regrading of roadway
- **Mar Vista Drive**
  - LED W11-15 flashing pedestrian/bicycle signs placed in advance of the crossing in each direction to warn drivers
  - Concrete track panels
  - Trail chicanes

[3] Curves added by design

- New crosswalk across Mar Vista Drive, north side of the rail, to facilitate trail switching from coastal side to inland side of the tracks

The Project would cross New Brighton State Beach roadway via a clear span bridge with fiberglass reinforced polymer deck. This roadway crossing would not interfere with existing users.

The Project would include a 0.5-mile section between Opal Street and Monterey Avenue where trail users would be directed from the rail corridor and onto existing on-street bicycle lanes and pedestrian sidewalks. Where the trail along the rail corridor transitions to on-street bicycle and pedestrian facilities at Cliff Drive, there would be a plaza area with decorative pavers. Chicanes would be used along the trail approaching the plaza to slow bicycle and pedestrian traffic. The plaza area would include benches, bike racks, trash receptacles, concrete track panels across the rail line, and improved stairs to Prospect Avenue at Opal Street on the inland side. From the plaza area, bicyclists and pedestrians using the trail would be directed with signage and trail markings to the on-street bicycle lanes and sidewalks through Capitola Village. From Cliff Drive, bicyclists and pedestrians would cross Soquel Creek via the Stockton Avenue bridge, and continue through the village on Capitola Avenue and Monterey Avenue. At the Monterey Avenue/Park Avenue intersection, the off-street multipurpose trail would continue on the coastal side of the rail along Park Avenue.

Design Option

The Project would include one design option, which includes laying the trail on the inland side of the rail corridor from Grove Lane to Coronado Street. This design option would not impact roadway safety during construction or operation; as such, they are considered as part of the entire Project and are not discussed separately in the environmental consequence analysis below.

Purpose and Need

The purpose of the Project is to provide an ADA-accessible bicycle/pedestrian path for active transportation, recreation, and environmental and cultural education along the rail corridor, consistent with the Monterey Bay Sanctuary Scenic Trail Network Master Plan. The Project objectives include the following:

1. Provide a continuous public trail with continuity in design along the Santa Cruz Branch Line railroad corridor and connecting spur trails in Santa Cruz County.
2. Develop the trail so future rail transportation service along the corridor is not precluded.
3. Maximize ocean views and scenic coastal vistas along a coastal alignment for experiencing and interpreting the Monterey Bay National Marine Sanctuary (sanctuary), and historical and agricultural landscapes.
4. Maximize safety and serenity for experiencing and interpreting the sanctuary and landscapes by providing a trail separate from roadway vehicle traffic.
5. Minimize trail impacts to private lands, including agricultural, residential, and other land uses.
6. Minimize trail impacts to sensitive habitat areas and special-status plant and animal species.
7. Comply with requirements of local, state, and federal agencies with jurisdiction.

Affected Environment

The Project corridor is located in unincorporated Santa Cruz County and the City of Capitola, approximately 75 miles south of San Francisco and 340 miles north of Los Angeles (Figure 1). The western portion of Segment 10 and eastern portion of Segment 11 are in the County, while the eastern portion of Segment 10 and western portion of Segment 11 are in the City of Capitola (Figure 2). Largely built out, this portion of the County and Capitola are on the northern edge of Monterey Bay and are bounded on the southwest by the Pacific Ocean and on the inland side by the forested Santa Cruz Mountains. The central portion of Segment 11 extends through the New Brighton State Beach, which is under the jurisdiction of California State Parks, and is in both unincorporated Santa Cruz County and the City of Capitola.

None of the rail line along the Project corridor is active with train usage. Although the RTC owns the rail ROW, the RTC does not own the freight rail operation rights. Currently, freight service is only provided in the City of Watsonville, approximately 10 miles south of the Project corridor. Additionally, recreational passenger service is provided by Roaring Camp between the Santa Cruz Boardwalk and Felton, approximately three miles north of the Project corridor.

From west to east, the Project corridor extends along the rail corridor from 17th Avenue to 47th Avenue. From there the Project corridor stays within the rail corridor adjacent to Cliff Drive until reaching Opal Street. After Opal Street the Project corridor would utilize existing bicycle and pedestrian infrastructure along Cliff Drive, across the Stockton Avenue bridge over Soquel Creek, east on Capitola Avenue, and north on Monterey Avenue towards Park Avenue. At Park Avenue the Project corridor would continue along the rail corridor through New Brighton State Beach, extending to its terminus at State Park Drive. The Project corridor is adjacent to residential and commercial uses and is lined with vegetation and trees throughout.

Roadway Network and Traffic Circulation

Several local roads lead to, terminate at, and intersect with the Project corridor, including (from west to east): 17th Avenue, Chanticleer Avenue, Corcoran Avenue, 30th Avenue, Thompson Avenue, 38th Avenue, 41st Avenue, 47th Avenue, Cliff Drive, Wharf Road, Stockton Avenue, Esplanade, Capitola Avenue, San Jose Avenue, Monterey Avenue, Park Place, Cherry Avenue, El Camino Medio, Fanmar Way, Escalona Drive, Central Avenue, Park Avenue, Grove Lane, New Brighton Road, Estates Drive, Mar Vista Drive, Cedar Street, and State Park Drive.

Existing user conflicts near the Project corridor primarily occur in Capitola Village on roadways, sidewalks, and crossings where pedestrian, bicycle, and vehicular traffic is intermixed. Conflicts may also occur at roadway crossings at 30th Avenue, 38th Avenue, 41st Avenue, 47th Avenue, Grove Lane, New Brighton Road, Estates Drive, and Mar Vista Drive. Further, conflicts may occur at Park Avenue where pedestrians and bicyclists cross from residential neighborhoods in the west to New Brighton State Beach in the east. According to data from the Statewide Integrated Traffic Record System, collisions involving bicyclists or pedestrians are common along roadways that would be crossed by pedestrians utilizing the rail trail (University of California [UC] Berkeley 2023). Along 17th Avenue, between Capitola Road and Portola Drive, six collisions involving bicyclists or pedestrians occurred between 2017 and 2021 (UC Berkeley 2023). One collision involving bicyclists or pedestrians occurred between 2017 and 2021 at the intersection of 41st Avenue and Portola Drive, south of the Project corridor (UC Berkeley 2023). Two collisions involving bicyclists or pedestrians occurred between 2017 and 2021 at the intersection of Stockton Avenue and Capitola Avenue, where the Project corridor would be directed from the rail corridor (UC Berkeley 2023). Few user conflicts occurred east of

Monterey Avenue, except for five collisions involving bicyclists or pedestrians occurred between 2017 and 2021 along State Park Drive between the Project corridor and Soquel Drive (UC Berkeley 2023).

Bicycle and Pedestrian Network

Most of the Project corridor is along the RTC-owned rail corridor, which crosses roadways that have existing sidewalks and Class II or Class III bicycle lanes/routes. In the portion of the Project corridor that extends outside the rail corridor through Capitola Village, trail users would be directed to the existing bicycle and pedestrian network.

Currently, most pedestrian activity near the Project corridor occurs in Capitola near Cliff Drive and through Capitola Village (Wharf Road, Stockton Avenue, Capitola Avenue and Monterey Avenue) where pedestrians may access Capitola Beach or surrounding commercial uses, and along Park Avenue and New Brighton State Beach, where pedestrians may access recreational features associated with the beach and campground.

Bicycle activity occurs along various parts of the Project corridor, most notably using bike lanes at the intersections of major cross streets (RTC 2023). There are bike lanes within the Project corridor along 17th Avenue, 30th Avenue, 41st Avenue, 47th Avenue, Cliff Drive, Stockton Avenue, Capitola Avenue, Monterey Avenue, and State Park Drive (RTC 2023). Cyclists may also utilize informal bicycle paths within New Brighton State Beach and other roadways without bicycle infrastructure that the Project corridor intersects.

Environmental Consequences

Project Construction

Construction of the Project could introduce a temporary hazard where trail construction within the rail corridor crosses existing roadways due to the potential for conflict between construction vehicles and existing traffic (vehicular, bicycle, pedestrian) along the roadways, and due to potential temporary lane closures that could occur periodically during construction (e.g., constructing the trail's roadway crossings). Where construction necessitates sidewalk closures at roadway crossings or where the Project corridor diverts from the rail corridor, pedestrian traffic would be detoured to the opposite side of the roadway. In most cases, construction-related roadway closures would not result in vehicle detours or require closure of one lane and temporary one-way traffic or narrowed roadways; instead, directional signage would be utilized. Bicycle and vehicle traffic would co-exist in these areas with "Share the Road" and/or "Bike May Use Full Lane" signs. Vehicle lane closures and bicyclist and pedestrian detours are anticipated to result in a minor time delay.

Construction activities are not anticipated to result in any long-term road or lane closures. Any road closures would be short-term and alternative access or detours would be provided. Construction and equipment staging, and stockpiling would take place on existing disturbed or paved areas within the rail corridor or nearby vacant land (including at 2700 Brommer Street, 835 Bay Avenue, 4510 Jade Street, and 1500 Park Avenue). Construction staging would be temporary in nature and any equipment utilized during construction would be removed after completion of the Project.

Project Operation

One of the Project objectives is to improve safety by providing a trail that is separate from vehicular traffic. Therefore, as a project that introduces a Class I transportation corridor, the Project would have no significant permanent transportation impacts. Rather, the Project would result in net benefits by providing active transportation opportunities, removing vehicles from area roadways, reducing greenhouse gas emissions, and reducing potential conflicts between vehicles and pedestrians and bicyclists. The proposed trail is anticipated to reduce vehicle trips by providing the opportunity to ride bicycles or walk instead of driving. This improved public access to the Pacific coast and important community destinations for bicycle users and pedestrians would reduce the need for vehicle parking, such as the twelve spaces that would be removed along Cliff Drive. Further, the Project integrates improvements that would reduce user conflicts, such as implementation of more high visibility striping and surface improvements for the existing bike lanes and crosswalks.

The Project would include other safety features for trail users. Retaining walls would be located in several locations along the alignment to provide the required safety distance between the trail and existing rail line. Safety fencing would be installed to separate trail users from the rail, and fencing and guardrails would be installed along the sides of bridges and other areas along the trail alignment for safety and security, as needed. Operation of the Project would improve vehicular, bicycle, and pedestrian safety at roadway crossings with the introduction of new and safer roadway crossings.

Additionally, a variety of design features have been incorporated into the Project for safety and to reduce the potential for user conflicts at roadway crossings. Specifically, most roadway crossings would include chicanes to slow trail users before the intersection and ensure safety for users approaching the intersection. LED-W11-15 flashing pedestrian/bicycle signs or rectangular rapid-flashing beacons would be placed in advance of the trail crossing in each direction on 30th Avenue, 38th Avenue, 41st Avenue, and Mar Vista Drive to warn vehicular drivers of the potential for bicyclist and pedestrian crossings. In addition, bulb-outs would be located along 30th Avenue, 41st Avenue, and 47th Avenue to extend the sidewalk into the parking lane to provide additional pedestrian space and visibility and reduce crossing distance for trail users. The New Brighton State Beach roadway would be traversed utilizing a clear span bridge to avoid user conflicts. Pedestrian infrastructure, such as crosswalk striping and sidewalk extensions, would be improved along 41st Avenue (sidewalk extension to Melton Street), 47th Avenue (crosswalk striping), Park Avenue (sidewalk extension from Grove Lane to Park Ave) and Mar Vista Drive (new crosswalk) to improve pedestrian safety.

Avoidance and Minimization Measures

The following avoidance and minimization measures would be implemented during construction as part of the Project.

Construction Measures

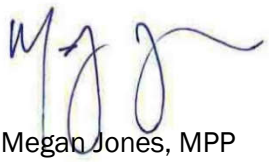
- Emergency personnel shall be notified in advance of construction-related lane closures to ensure that alternative emergency response measures could be taken, if necessary.
- To avoid and minimize traffic impacts, truck activity and haul routes shall be limited to arterial and collector roads where feasible.
- Construction signage and a flagger (as needed) shall be present at the location of any lane closure or substantial construction equipment or activity, which would maintain public safety while facilitating the necessary equipment and vehicular access to the Project corridor.

- To minimize impacts from construction equipment staging, all equipment and materials shall be stored, maintained, and refueled in clearly defined and designated portions of the staging areas in accordance with permit requirements.
- A traffic control plan shall be prepared and implemented to minimize traffic delays and detour motorists, bicycles and pedestrians when appropriate.

Sincerely,
Rincon Consultants, Inc.



Jesse Voremberg
Environmental Planner



Megan Jones, MPP
Managing Principal/Principal-in-Charge

Attachments

Figure 1 Regional Location
Figure 2 Coastal Rail Trail Segments 10 and 11
Figure 3 Graphic Representation of Coastal Rail Trail Segments 10 and 11

References

Santa Cruz County Regional Transportation Commission. 2023. Signed Bicycle Routes & Other Bikeways of Santa Cruz County. https://sccrtc.maps.arcgis.com/apps/StoryMapBasic/index.html?appid=dc90c3b75f3b4bd191277f7099cca3ff&extent=-122.2023,36.8662,-121.7773,37.0681 (accessed March 2023).

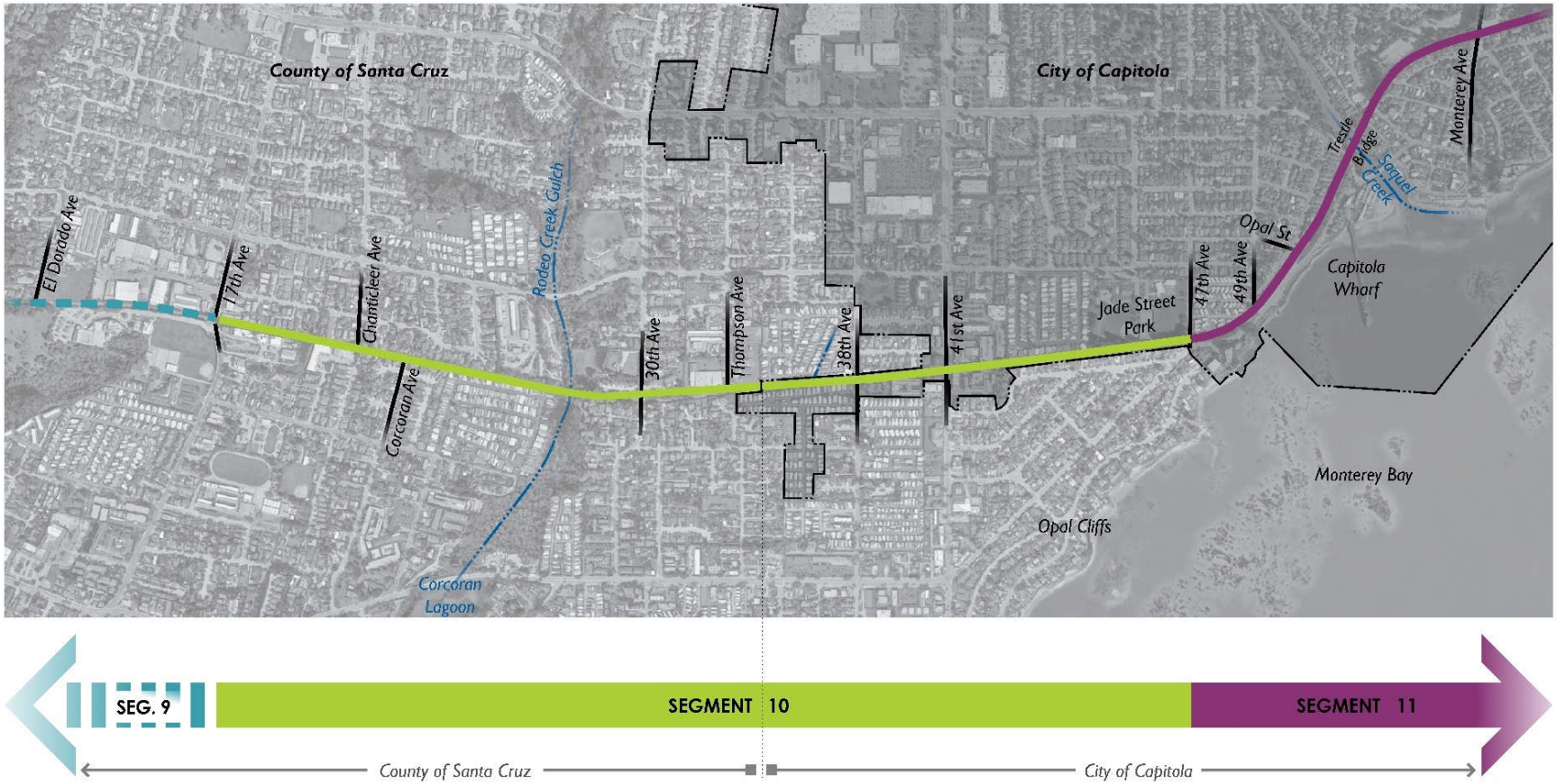
University of California at Berkley (UC Berkley). 2023. Transportation Injury Mapping System. *SWITRS GIS Map.* https://tims.berkeley.edu/tools/gismap/ (accessed March 2023).

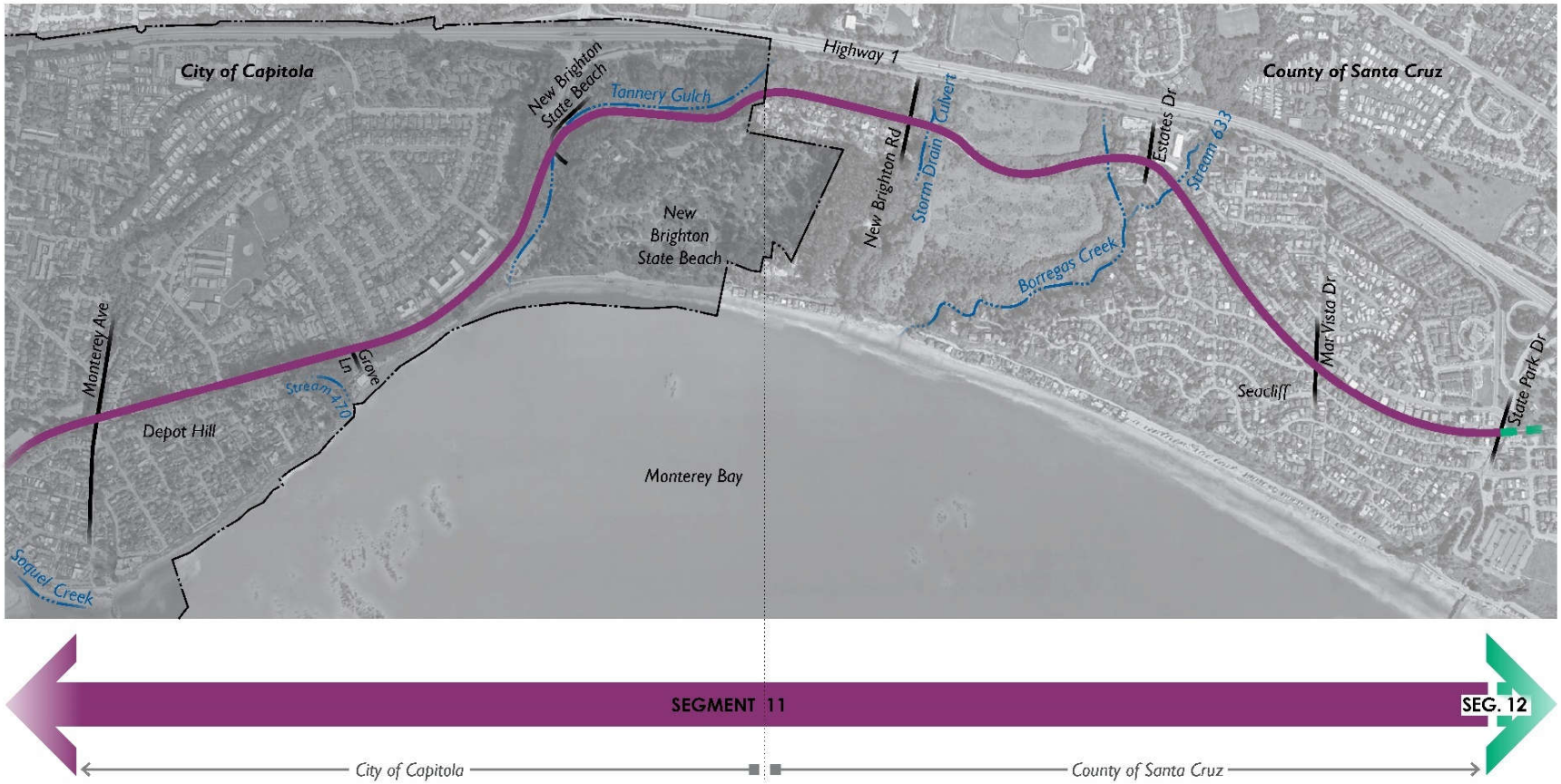
Figures

Figure 1 Regional Location



Figure 2 Coastal Rail Trail Segments 10 and 11

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New Brighton State Beach
Tannery Gulch
Highway 1
County of Santa Cruz
New Brighton Rd
Storm Drain Culvert
Estates Dr
Stream 633
New Brighton State Beach
Borregas Creek
Mar Vista Dr
Monterey Ave
Grove Ln
Stream 470
Depot Hill
Seacliff
State Park Dr
Monterey Bay
Soquel Creek
SEGMENT 11
SEG. 12
City of Capitola
County of Santa Cruz

Figure 3 Graphic Representation of Coastal Rail Trail Segments 10 and 11

