Appendix A – Site Plans

SAN BERNARDINO COUNTY
PUBLIC WORKS

SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS
SPECIAL DISTRICTS
REGIONAL PARKS DEPARTMENT
LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
24171 LAKE DR, CRESTLINE, CA 92325

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND TO THE LATEST EDITION OF THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A CURRENT AND APPROVED SET OF PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES. .
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ARRANGEMENTS FOR CONSTRUCTION INSPECTION AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE ITSELF WITH THE JOB SITE AND THE LOCATION OF ALL UNDERGROUND FACILITIES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ALL DIG ALERT REQUESTS AND EXPLORATORY EFFORTS NECESSARY TO VERIFY ANY UNDERGROUND OBSTRUCTIONS. THE CONTRACTOR WILL BE UNILATERALLY RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING UTILITIES THAT ARE SHOWN OR NOT SHOWN ON THESE PLANS.
5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE, COUNTY OR LOCAL PERMITS.
6. CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT AND ENCROACHMENT PERMIT OR OTHER REQUIRED PERMITS FROM THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS TRANSPORTATION, PRIOR TO ANY WORK WITHIN THE COUNTY RIGHT OF WAY BY CALLING (909) 387-7910.
7. THE CONTRACTOR SHALL NOTIFY ALL SERVING UTILITY COMPANIES 48 HOURS PRIOR WHEN WORK IS TO BE PERFORMED NEAR THEIR FACILITIES BY CALLING 811.
8. CONTRACTOR SHALL ENSURE THAT EASEMENTS HAVE BEEN RECORDED PRIOR TO START OF WORK.
9. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE UNDERSIGNED ENGINEER AND SAN BERNARDINO COUNTY SPECIAL DISTRICTS.
10. THE CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
11. ALL STATIONING IS BASED ON THE CENTER LINE OF THE STREET.
12. ALL EXCAVATIONS SHALL BE BACKFILLED AT THE END OF EACH WORKING DAY AND ROADS OPEN TO VEHICULAR TRAFFIC UNLESS OTHERWISE APPROVED BY SPECIAL DISTRICTS.
13. ALL WORK SHALL BE CONSTRUCTED ACCORDING TO THE VERTICAL AND HORIZONTAL MEASUREMENTS OF THESE PLANS AND EXISTING DESIGN STANDARDS. ADEQUATE STAKES SHALL BE SET UNDER THE DIRECTION OF A LICENSED SURVEYOR/ENGINEER FOR THE CONSTRUCTOR. ALL CONSTRUCTION SURVEYING SHALL BE PERFORMED IN ACCORDANCE TO THE SURVEYING PROCEDURES OF THE SURVEYOR/ENGINEER OF RECORD. IF THIRD PARTY SUBCONTRACTORS PERFORM THE CONSTRUCTION LAYOUT AND SURVEYING FOR THIS PROJECT WITHOUT THE COORDINATION OF THE SURVEYOR/ENGINEER OR RECORD, THEY HAVE ASSUMED THE POSITION OF SURVEYOR/ENGINEER OF RECORD. THE FINAL CHECK OF THIS DESIGN IS TO BE THE CONSTRUCTION STAKING AS THE DESIGN MEETS THE EXISTING CONTROL AND ELEVATIONS. ALL EXISTING DISCREPANCIES TO THE STANDARD DESIGN CRITERIA SHALL BE BROUGHT TO THE SURVEYOR/ENGINEER OF RECORD'S ATTENTION PRIOR TO PROCEEDING WITH CONSTRUCTION. IF CONSTRUCTION CONTINUES WITHOUT VERIFICATION THE CONSTRUCTOR ASSUMES THE RESPONSIBILITY OF THE CORRECTNESS OF THE INTENDED DESIGN.
14. ALL GRADING SHALL CONFORM TO THE LATEST CALIFORNIA BUILDING CODE (CBC) CHAPTERS 17, 18,APPENDIX-J AND ALL APPLICABLE SECTIONS.
15. A GRADING PERMIT SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF ANY WORK ON THE SITE.
16. ISSUANCE OF A GRADING PERMIT DOES NOT ELIMINATE THE NEED FOR PERMITS FROM OTHER REGULATORY AGENCIES WITH REGULATORY RESPONSIBILITIES FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK AUTHORIZED IN THIS PLAN.
17. ALL WORK UNDER THIS PERMIT SHALL BE LIMITED TO WORK WITHIN THE PROPERTY LINES. A SEPARATE CONSTRUCTION, EXCAVATION OR ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS MAY BE REQUIRED FOR ANY WORK WITHIN THE COUNTY RIGHT-OF-WAY.
18. APPROVAL OF THESE PLANS DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE EFFECTIVE PROPERTYOWNER ' S PERMISSION HAS BEEN OBTAINED AND VALID GRADING PERMIT HAS BEEN ISSUED.
19. THIS PLAN IS FOR GRADING PURPOSES ONLY AND IS NOT TO BE USED FOR THE PURPOSE OF CONSTRUCTING ONSITE OR OFFSITE IMPROVEMENTS. ISSUANCE OF A PERMIT BASED ON THIS PLAN DOES NOT CONSTITUTE APPROVAL OF DRIVEWAY LOCATIONS OR SIZES, PARKING LOT STRUCTURAL SECTIONS OR LAYOUT, ADA RELATED REQUIREMENTS, BUILDING LOCATIONS OR FOUNDATIONS, WALLS, CURBING, OFFSITE DRAINAGE FACILITIES OR OTHER ITEMS NOT RELATED DIRECTLY TO THE BASIC GRADING OPERATION. ONSITE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE APPROVED BUILDING PERMIT PLANS. OFFSITE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE TO PLANS APPROVED FOR THIS PURPOSE BY THE PUBLIC WORKS DEPARTMENT.
20. MAXIMUM CUT AND FILL SLOPE = 2: 1 (HORIZONTAL TO VERTICAL) AND MAXIMUM VERTICAL HEIGHT = 30 FEET, UNLESS AN APPROVED GEOTECHNICAL REPORT CAN JUSTIFY A STEEPER AND TALLER SLOPE.
21. NO FILL SHALL BE PLACED ON EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL AND OTHER DELETERIOUS MATERIAL.
22. FILL SLOPES SHALL NOT HAVE LESS THAN 90% RELATIVE COMPACTION, OR AS RECOMMENDED ON THE APPROVED GEOTECHNICAL REPORT.
23. IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ADEQUATE COMPACTION HAS BEEN ATTAINED ON THE ENTIRE GRADING SITE, INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES.
24. UNLESS OTHERWISE RECOMMENDED IN AN APPROVED GEOTECHNICAL REPORT, OVER-EXCAVATION SHALL BE AT LEAST 24 INCHES MINIMUM BELOW THE BOTTOM OF FOOTINGS OR TO COMPETENT NATIVE SOIL OR BEDROCK MATERIALS, WHICHEVER IS DEEPER, AS APPROVED BY THE PROJECT ' S GEOTECHNICAL ENGINEER OR GEOLOGIST.
25. EARTHWORK VOLUMES: CUT (CY), FILL _ (CY), TOTAL DISTURBED AREA _ (SF)
26. EARTHWORK QUANTITIES ARE SHOWN FOR GRADING PERMIT PURPOSES ONLY, AND SAN BERNARDINO COUNTY IS NOT RESPONSIBLE FOR THEIR ACCURACY.
27. A COPY OF THE GRADING PERMIT AND APPROVED GRADING PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE AT ALL TIMES.
28. ANY ONSITE RETAINING WALLS SHOWN ON THE GRADING PLANS THAT ARE OVER 4 ' IN HEIGHT, MEASURED FROM TOP OF WALL TO BOTTOM OF FOOTING, ARE FOR REFERENCE ONLY. RETAINING WALLS OVER 4 ' IN HEIGHT ARE NOT CHECKED, PERMITTED, OR INSPECTED PER THE GRADING PERMIT. A SEPARATE RETAINING WALL PERMIT IS REQUIRED FOR ALL RETAINING WALLS OVER 4 ' IN HEIGHT.
29. ANY WALLS, FENCES, STRUCTURES AND/OR APPURTENANCES ADJACENT TO THIS PROJECT ARE TO BE PROTECTED IN PLACE. IF GRADING OPERATIONS DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR AND/OR DEVELOPER IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).

EROSION CONTROL NOTES

1. IN CASE OF EMERGENCY, CALL (RESPONSIBLE PERSON) AT (24-HOUR TELEPHONE).
2. POLLUTION AND EROSION PREVENTION MEASURES, ALSO KNOWN AS BEST MANAGEMENT PRACTICES (BMPS), MUST BE INSTALLED PRIOR TO GRADING. THESE MEASURES, INCLUDING THE PREVENTION OF SEDIMENTATION OR FLOOD DAMAGE, TO OFFSITE PROPERTY SHALL BE ADEQUATE WHETHER OR NOT AN EROSION CONTROL PERMIT IS REQUIRED.
3. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ONSITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
4. EROSION CONTROL DEVICES SHALL BE FUNCTIONING AT ALL TIMES. IN CASE OF FAILURE, RAPID CONSTRUCTION OF EMERGENCY DEVICES SHALL BE IMPLEMENTED.
5. STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
6. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
7. EXCESS OR WASTE CONCRETE MUST BE CONTAINED ONSITE. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ONSITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
8. CONTRACTORS ARE RESPONSIBLE TO ENSURE ALL EROSION CONTROL DEVICES AND BMPS ARE INSTALLED AND FUNCTIONING PROPERLY PER PLAN AND PERMIT(S). PROPER PRECAUTION SHALL BE CONSIDERED WHEN 50% OR GREATER PROBABILITY OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL.
9. TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
10. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
11. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
12. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
13. ALL STORM WATER CAPTURE DEVICES SHALL BE PROTECTED AT ALL TIMES.

GEOTECHNICAL SEAL:

APPROVAL BY CONSULTANTS

THIS GRADING PLAN IS ACCEPTABLE IN REGARD TO SOILS (AND GEOLOGIC, IF APPLICABLE) CONDITIONS AND CONFORMS TO THE RECOMMENDATIONS OF THE SUPPORTIVE REPORTS DATED AS FOLLOWED:

SOILS ENGINEERING REPORTS: XX/XX/XXXX

BY _____ XXXXX
(SIGNATURE) SOILS ENGINEER REG. NO.
HASHMI QUASI
(PRINT NAME)

COMPANY CONVERSE

ENGINEERING GEOLOGY REPORTS: GEOTECHNICAL REPORT FOR MOUNTAIN VIEW BAPTIST CHURCH

BY _____ XXXX
(SIGNATURE) ENGINEERING GEOLOGIST C.E.G. NO.
HASHMI QUAZI
(PRINT NAME)

COMPANY CONVERSE

FINAL GRADING CERTIFICATION

ENGINEER OF RECORD

I CERTIFY TO THE SATISFACTORY COMPLETION OF GRADING IN ACCORDANCE WITH THE APPROVED PLANS. ALL DRAINAGE DEVICES REQUIRED BY THE GRADING PERMIT, GRADING PLANS, AND GRADING ORDINANCE HAVE BEEN INSTALLED. EROSION TREATMENT OF SLOPES AND IRRIGATION SYSTEMS (WHERE REQUIRED) HAVE BEEN INSTALLED. ADEQUATE PROVISION HAVE BEEN MADE FOR DRAINAGE OF SURFACE WATERS FROM EACH BUILDING SITE.

LOT NUMBERS _____
REMARKS _____

ENGINEER _____ REG. NO. _____ DATE _____
(SIGNATURE) EXP. DATE _____

GRADING CONTRACTOR CERTIFICATION

BY GRADING CONTRACTOR

I CERTIFY THAT THE GRADING WAS DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, THE GRADING ORDINANCE, AND THE RECOMMENDATIONS OF THE CIVIL ENGINEER, SOILS ENGINEER AND ENGINEERING GEOLOGIST. IT IS UNDERSTOOD THAT THIS CERTIFICATION INCLUDES ONLY THOSE ASPECTS OF THE WORK THAT CAN BE DETERMINED BY ME, AS A COMPETENT GRADING CONTRACTOR, WITHOUT SPECIAL EQUIPMENT OR PROFESSIONAL SKILLS.

GRADING CONTRACTOR _____ LICENSE NO. _____ DATE _____
(SIGNATURE)

INSTRUCTIONS: THE OWNER MAY SIGN IF GRADING WAS NOT DONE BY A LICENSED GRADING CONTRACTOR.

DECLARATION OF ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. I UNDERSTAND AND ACKNOWLEDGE THAT THE PLAN CHECK OF THESE PLANS BY SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS - SPECIAL DISTRICTS (SD) IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THAT THE PLANS COMPLY WITH SD PROCEDURES, APPLICABLE POLICES AND ORDINANCES. THE REVIEWS, RECOMMENDATIONS AND APPROVALS ARE NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH PLAN CHECK DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. AS ENGINEER OF RECORD, I AGREE TO INDEMNIFY AND HOLD SD, IT'S OFFICERS, AGENTS, AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITY, CLAIMS, DAMAGES OR INJURIES TO ANY PERSON OR PROPERTY WHICH MIGHT ARISE FROM THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE ENGINEER OF RECORD. I HAVE READ AND INFORMED THE PROJECT APPLICANT/DEVELOPER THAT APPROVAL OF THESE PLANS DO NOT RELIEVE THEM FROM THE REQUIREMENTS OF THE DESIGN CONDITIONS.

BY: NAME RCE NO. DATE

NOTIFICATIONS
AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL NOTIFY:
1. SPECIAL DISTRICTS - (XXX) XXX-XXXX
2. PERMIT AGENCY: CITY OF XXXXXX - (XXX) XXX-XXXX
3. UNDERGROUND SERVICE ALERT (USA): 811
4. ALL OTHER AFFECTED AGENCIES THAT ARE NOT MEMBERS OF USA ALERT

ABBREVIATIONS

BC	BEGINNING OF CURVE	N	NORTH
℄	CENTERLINE	NO.	NUMBER
CONC.	CONCRETE	PL	PROPERTY LINE
DIA	DIAMETER	PROP	PROPOSED
EC	END OF CURVE	RC	REINFORCED CONCRETE
ELEC	ELECTRICITY LINE	RCB	REINFORCED CONCRETE BOX
ELEV/EL	ELEVATION	RCE	REGISTERED CIVIL ENGINEER
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EX/EXIST	EXISTING	RIM	TOP ELEVATION
FG	FINISHED GRADE	RM	ROOM
FL	FLOW LINE ELEVATION	RW	RECYCLED WATER
HGL	HYDRAULIC GRADE LINE	R/W	RIGHT OF WAY
INT	INTERSECTION	SS	SANITARY SEWER
HGL	HYDRAULIC GRADE LINE	SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION
INT	INTERSECTION		
INV	INVERT	STA/STA.	STATION
IRR	IRRIGATION PIPE	STD	STANDARD
JS	JUNCTION STRUCTURE	TC	TOP OF CURB
LT	LEFT	TRANS	TRANSITION
LAT	LATERAL	TW	TOP OF WALL
LF/L.F.	LINEAR FEET	W/WTR	WATER OR DOMESTIC WATER
MH	MANHOLE	WW	WASTEWATER
MIN	MINIMUM		

LEGEND

SYMBOL	DESCRIPTION
	RIGHT-OF-WAY / PROPERTY LINE
	EXISTING SEWER MAIN
	EXISTING POTABLE WATER MAIN
	EXISTING GAS
	EXISTING TELEPHONE
	EXISTING ELECTRICAL
S	EXISTING SEWER LATERAL
W	EXIST POTABLE WATER LATERAL
	EXISTING MANHOLE FOR SEWER MAINS
	CIPP LINING OR WATER REPLACEMENT
W	WATER REPLACEMENT
120	CONTOUR LINE - MAJOR
	CONTOUR LINE - MINOR
	GRADE BREAK
R	RIDGE LINE
	FLOW LINE
X / XX	SECTION IDENTIFICATION AND LOCATION

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
ELEVATIONS SHOWN HEREON ARE EXPRESSED IN THE U.S. SURVEY FEET AND ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88) AND DEFINED LOCALLY USING THE ORTHOMETRIC HEIGHT FOR CORS STATION EWPP. SITE BENCHMARK AT POINT NO. 7000 DERIVED FROM STATIC OBSERVATIONS. ELEVATION = 4587.05'

BASIS OF BEARINGS:
BEARINGS SHOWN ON THIS MAP ARE REFERENCED TO THE CALIFORNIA COORDINATE SYSTEM, CCS83 (2011) EPOCH 2010.00, ZONE 05, DEFINED LOCALLY BY NGS PID'S EWPP, P598, & P470 ACCORDING TO THE GEODETIC POSITIONS AS PUBLISHED BY NGS. ALL DISTANCES AND COORDINATES ARE REFERENCED TO CCS83 ZONE 05 GRID AND ARE EXPRESSED IN US SURVEY FOOT UNITS.

J. SMITH & T. MULI
J&TM
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 · JSTMINC.COM
JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS						
MARK	DATE	INITIAL	DESCRIPTION		APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM, DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

TITLE SHEET

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 1 OF 16

C:\Users\tmuli\J. Smith & T. Muli, Inc\Jonis Smith - J&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-1_TITLE SHEET.dwg 02/04/24 - 7:53pm tmuli

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	4468.0	4471.0	
2	4471.0	4474.0	
3	4474.0	4477.0	
4	4477.0	4480.0	
5	4480.0	4483.0	
6	4483.0	4486.0	
7	4486.0	4489.0	
8	4489.0	4492.0	
9	4492.0	4495.0	
10	4495.0	4498.0	
11	4498.0	4501.0	
12	4501.0	4504.0	
13	4504.0	4507.0	
14	4507.0	4510.0	
15	4510.0	4513.0	
16	4513.0	4516.0	
17	4516.0	4519.0	
18	4519.0	4522.0	
19	4522.0	4525.0	
20	4525.0	4528.0	
21	4528.0	4531.0	
22	4531.0	4534.0	

NORTH

J. SMITH & T. MULI

120 60 0 120 240 360

SCALE: 1"=120'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

CALL BEFORE YOU DIG

Call: TOLL FREE
1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

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BASIS OF BEARINGS:

BEARINGS SHOWN ON THIS MAP ARE REFERENCED TO THE CALIFORNIA COORDINATE SYSTEM, CCS83 (2011) EPOCH 2010.00, ZONE 05, DEFINED LOCALLY BY NGS PID'S EWPP, P598, & P470 ACCORDING TO THE GEODETIC POSITIONS AS PUBLISHED BY NGS. ALL DISTANCES AND COORDINATES ARE REFERENCED TO CCS83 ZONE 05 GRID AND ARE EXPRESSED IN US SURVEY FOOT UNITS.

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Phone: (949) 329.3639 - JSTMINC.COM

JONIS C. SMITH — 058654 — 09/08/2023
PROFESSIONAL ENGINEER — R.C.E. No. — DATE

REVISIONS						
MARK	DATE	INITIAL	DESCRIPTION		APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM, DIVISION MANAGER		

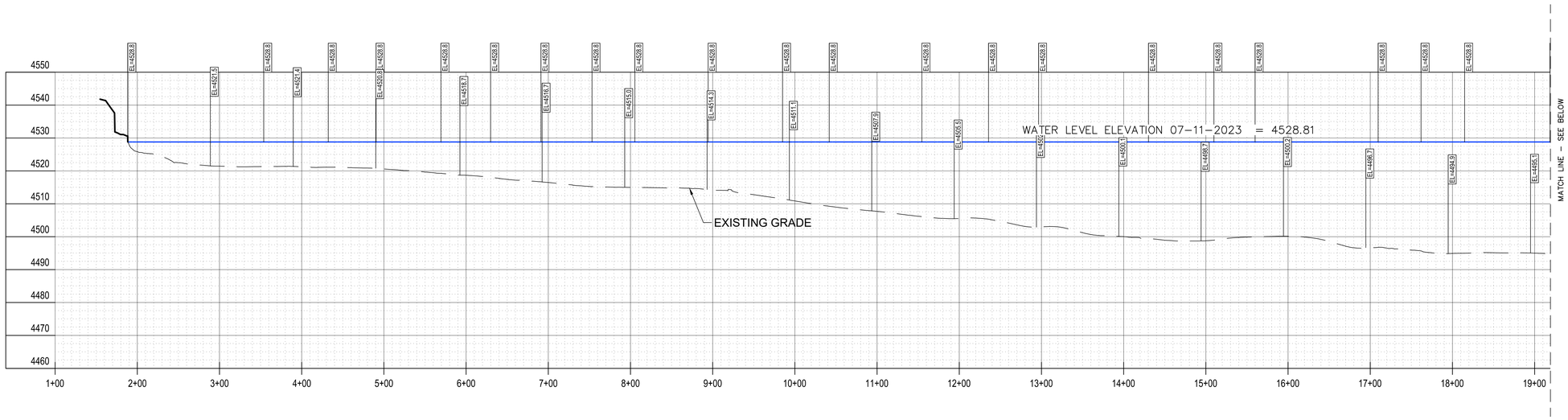
IMPROVEMENT PLANS

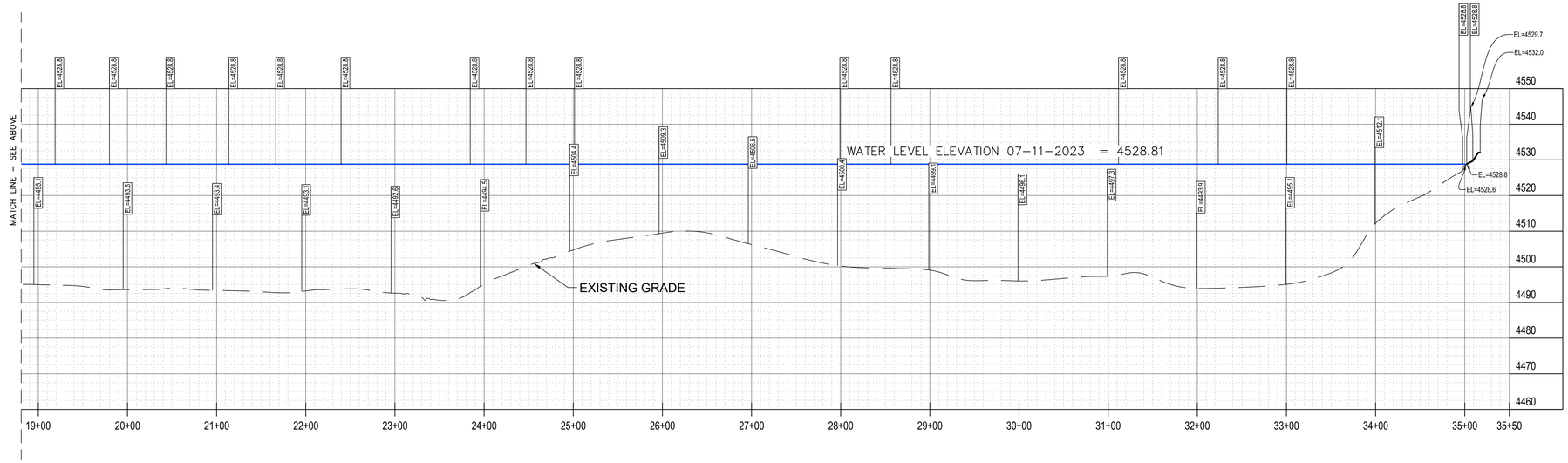
LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

EXISTING CONDITION LAYOUT

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 2 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Joni Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-2_EX LAKE LAYOUT.dwg 02/23/24 - 6:36pm Muli Tim





60 30 0 60 120 180

SCALE: 1"=60'

WEST - EAST PROFILE

SCALE: 1" = 60'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

DIG BEFORE YOU DIG

Call: TOLL FREE

1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:

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SITE BENCHMARK AT POINT NO. 7000
DERIVED FROM STATIC OBSERVATIONS.
ELEVATION = 4587.05'

BASIS OF BEARINGS:

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JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR ____ DATE ____

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

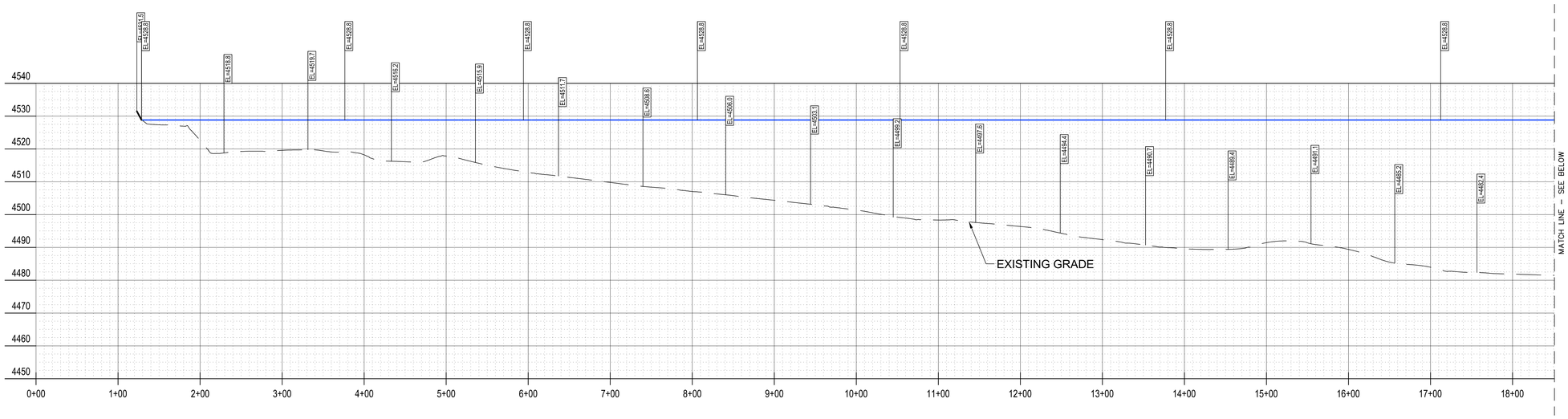
IMPROVEMENT PLANS

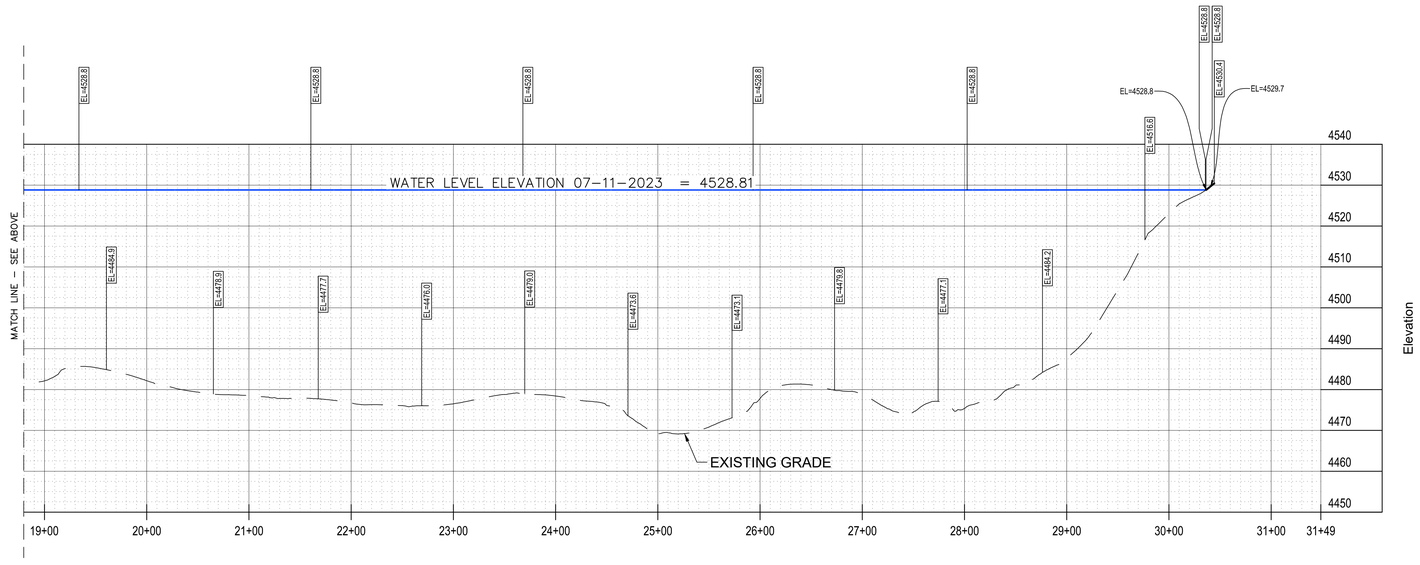
LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

EXISTING CONDITION: WEST-EAST PROFILE

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 3 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-3-4_EX LAKE CROSS SECTIONS.dwg 02/23/24 - 6:08pm Muli Tim





60 30 0 60 120 180

SCALE: 1"=60'

SOUTH - NORTH PROFILE

SCALE: 1" = 60'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

DIG ALERT — DIG BEFORE YOU DIG

Call: TOLL FREE

1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:

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SITE BENCHMARK AT POINT NO. 7000
DERIVED FROM STATIC OBSERVATIONS.
ELEVATION = 4587.05'

BASIS OF BEARINGS:

BEARINGS SHOWN ON THIS MAP ARE REFERENCED TO THE CALIFORNIA COORDINATE SYSTEM, CCS83 (2011) EPOCH 2010.00, ZONE 05, DEFINED LOCALLY BY NGS PID'S EWPP, P598, & P470 ACCORDING TO THE GEODETIC POSITIONS AS PUBLISHED BY NGS. ALL DISTANCES AND COORDINATES ARE REFERENCED TO CCS83 ZONE 05 GRID AND ARE EXPRESSED IN US SURVEY FOOT UNITS.

J. SMITH & T. MULI
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 · JSTMINC.COM

JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

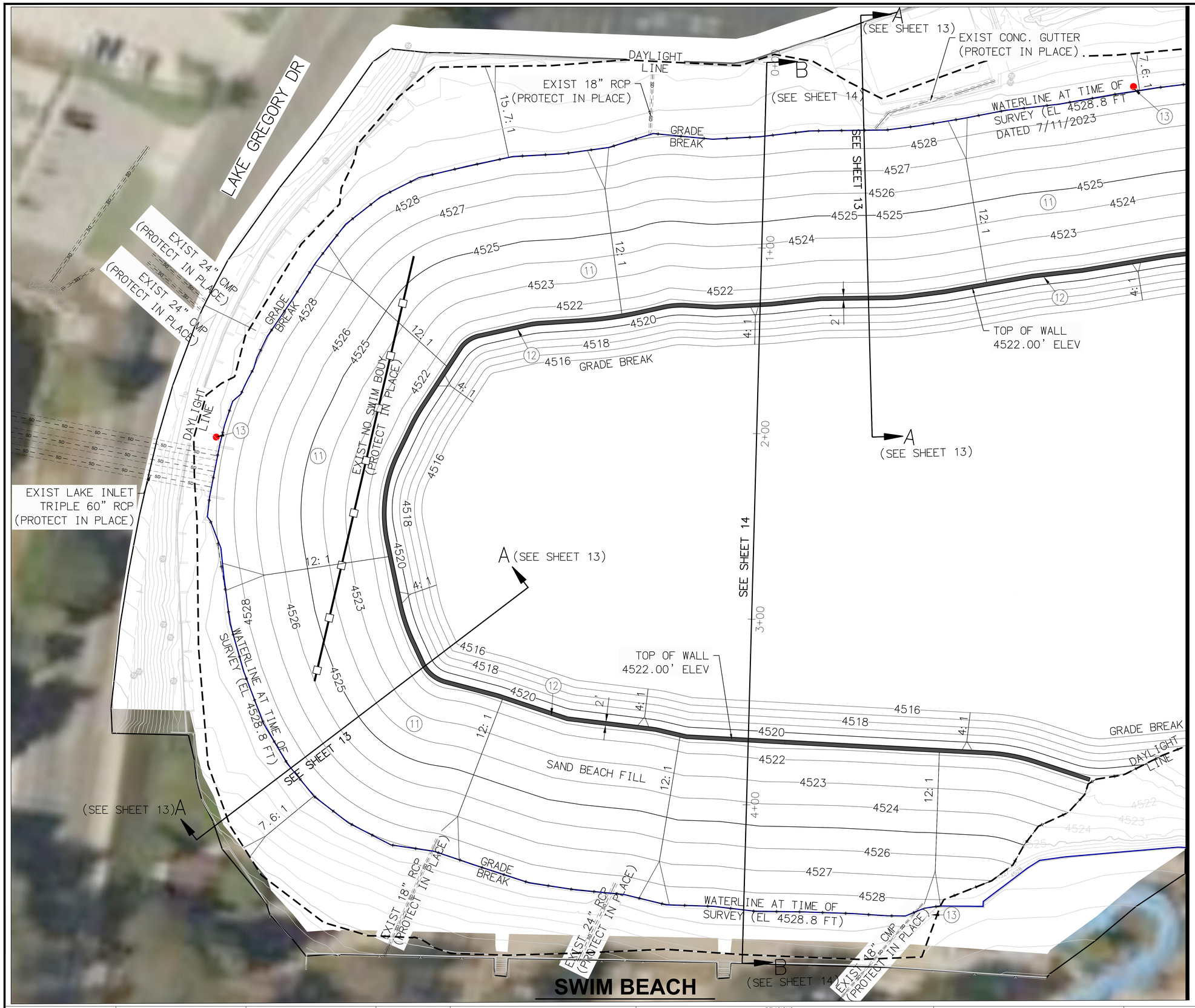
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

EXISTING CONDITION: SOUTH-NORTH PROFILE

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 4 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JSTM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-3-4_EX LAKE CROSS SECTIONS.dwg 02/23/24 - 6:11pm Muli Tim



LEGEND:

- DREDGING BOUNDARY/ DAYLIGHT LINE
- CUTOFF WALL LOCATION
- NO SWIM/NO BOAT BOUY LINE
- NO DIVING SIGN

CONSTRUCTION NOTES

(11) FURNISH AND INSTALL WHITE SAND BEACH FILL MATERIAL PER PLAN AND SPECIFICATIONS

(12) CONSTRUCT REINFORCED CONCRETE CUTOFF WALL PER PLAN AND DETAIL 19 ON SHEET 13

(13) FURNISH AND INSTALL SIGN PER COUNTY OF SAN BERNARDINO ENVIRONMENTAL HEALTH SCIENCES DEPARTMENT OF PUBLIC HELATH CONSTRUCTION GUIDE AND DETAIL 13 ON SHT 16

MATCHLINE - SEE SHEET 6

NOTES:

1. THE LOCATIONS OF EXISTING UTILITIES AND SURFACE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND DOCUMENT THE LOCATIONS OF EXISTING UTILITIES AND SURFACE FEATURES IN THE VICINITY OF THE WORK BEFORE COMMENCING EARTHWORK.
2. WATER SURFACE ELEVATION SHOWN ON PLANS IS APPROXIMATE. CONTRACTOR SHALL VERIFY WATER SURFACE ELEVATION BEFORE COMMENCING EARTHWORK.
3. AERIAL IMAGERY SHOWN ON PLANS MAY VARY FROM CURRENT EXISTING CONDITIONS AND TOPOGRAPHIC INFORMATION.
4. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING SURFACE IMPROVEMENTS AND UTILITIES.

NORTH
JSMITH & TMULI

20 10 0 20 40 60
SCALE: 1"=20'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
DIG ALERT IDENTIFICATION
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
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JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

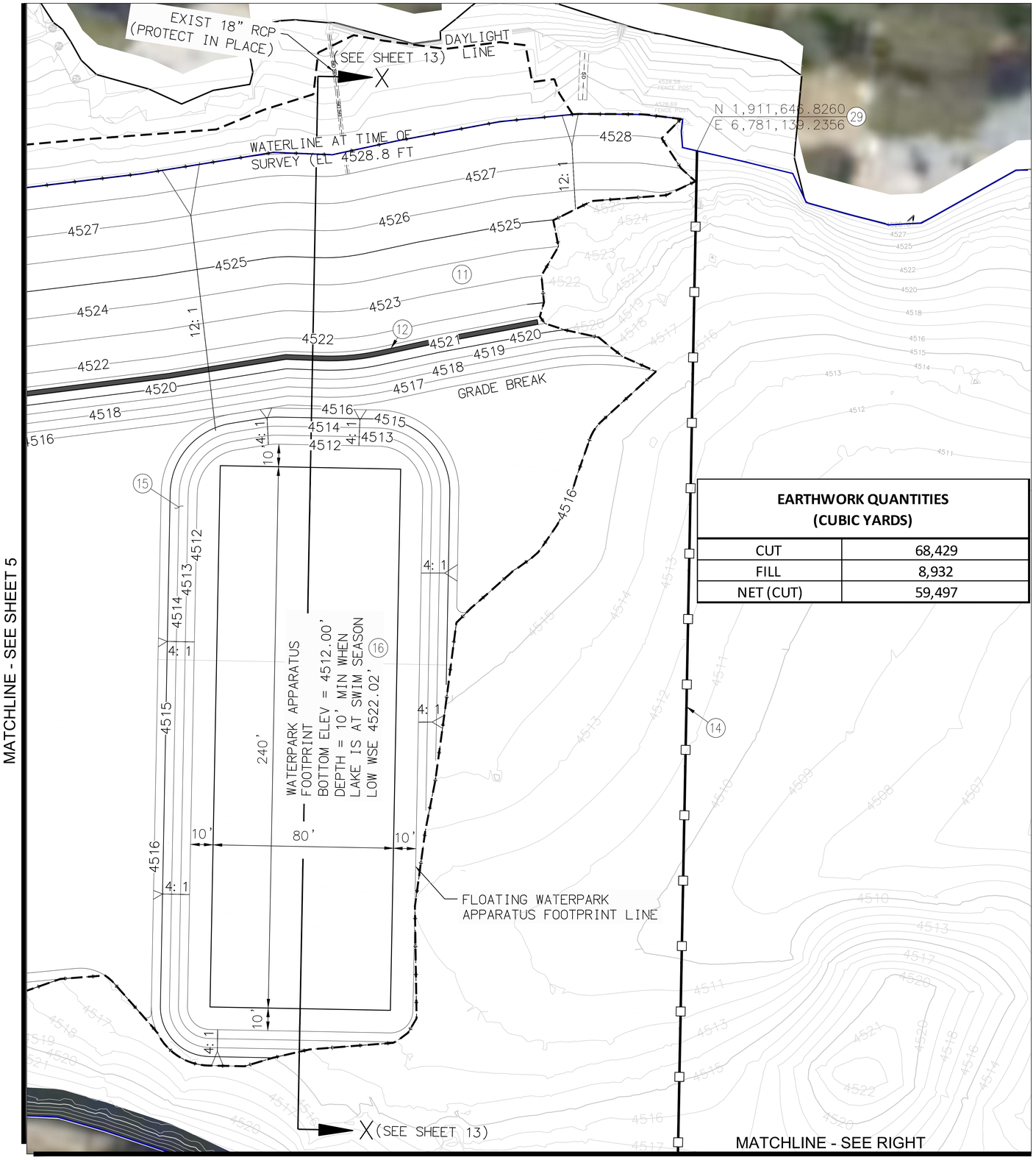
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED SWIM BEACH GRADING

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 5 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-5-6_PR GRADING.dwg 02/23/24 - 7:18pm Muli Tim



MATCHLINE - SEE LEFT



EARTHWORK QUANTITIES (CUBIC YARDS)	
CUT	68,429
FILL	8,932
NET (CUT)	59,497

LEGEND:

- DREDGING BOUNDARY/ DAYLIGHT LINE
- CUTOFF WALL LOCATION
- NO SWIM/NO BOAT BOUY LINE
- NO DIVING SIGN

CONSTRUCTION NOTES

(11) FURNISH AND INSTALL WHITE SAND BEACH FILL MATERIAL PER PLAN AND SPECIFICATIONS
(12) CONSTRUCT REINFORCED CONCRETE CUTOFF WALL PER PLAN AND DETAIL 19 ON SHEET 13
(14) FURNISH AND INSTALL MARINE RESCUE 3 STRAND 3/4" BLUE/WHITE POLYPRO ROPE BOUY LINE WITH 5"X9" ORANGE/WHITE LLF590 HANDI-LOCK FLOATS AT 5'-7" SPACING. 423 MARKER BOUY EVERY 200 FEET.
(15) WATER PARK GRADING PER PLAN AND DETAIL ON SHEET 13
(16) RELOCATE WATER PARK APPARATUS TO LOCATION SHOWN PER DIRECTION OF THE DISTRICT ENGINEER
(29) FURNISH AND INSTALL BOUY LINE ANCHOR PER DETAIL 30 ON SHEET 15

NOTES:

1. THE LOCATIONS OF EXISTING UTILITIES AND SURFACE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND DOCUMENT THE LOCATIONS OF EXISTING UTILITIES AND SURFACE FEATURES IN THE VICINITY OF THE WORK BEFORE COMMENCING EARTHWORK.
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3. AERIAL IMAGERY SHOWN ON PLANS MAY VARY FROM CURRENT EXISTING CONDITIONS AND TOPOGRAPHIC INFORMATION.
4. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING SURFACE IMPROVEMENTS AND UTILITIES.
5. ACCESS SHOWN SUBJECT TO CHANGE BASED ON CURRENT WATER SURFACE ELEVATION. CONTRACTOR TO VERIFY.

NORTH
J SMITH & T MULI

20 10 0 20 40 60
SCALE: 1"=20'

95% PROGRESS SET
NOT FOR CONSTRUCTION

SWIM BEACH

UNDERGROUND SERVICE ALERT
DIG ALERT BEFORE YOU DIG
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

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JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR			DATE
APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM, DIVISION MANAGER		

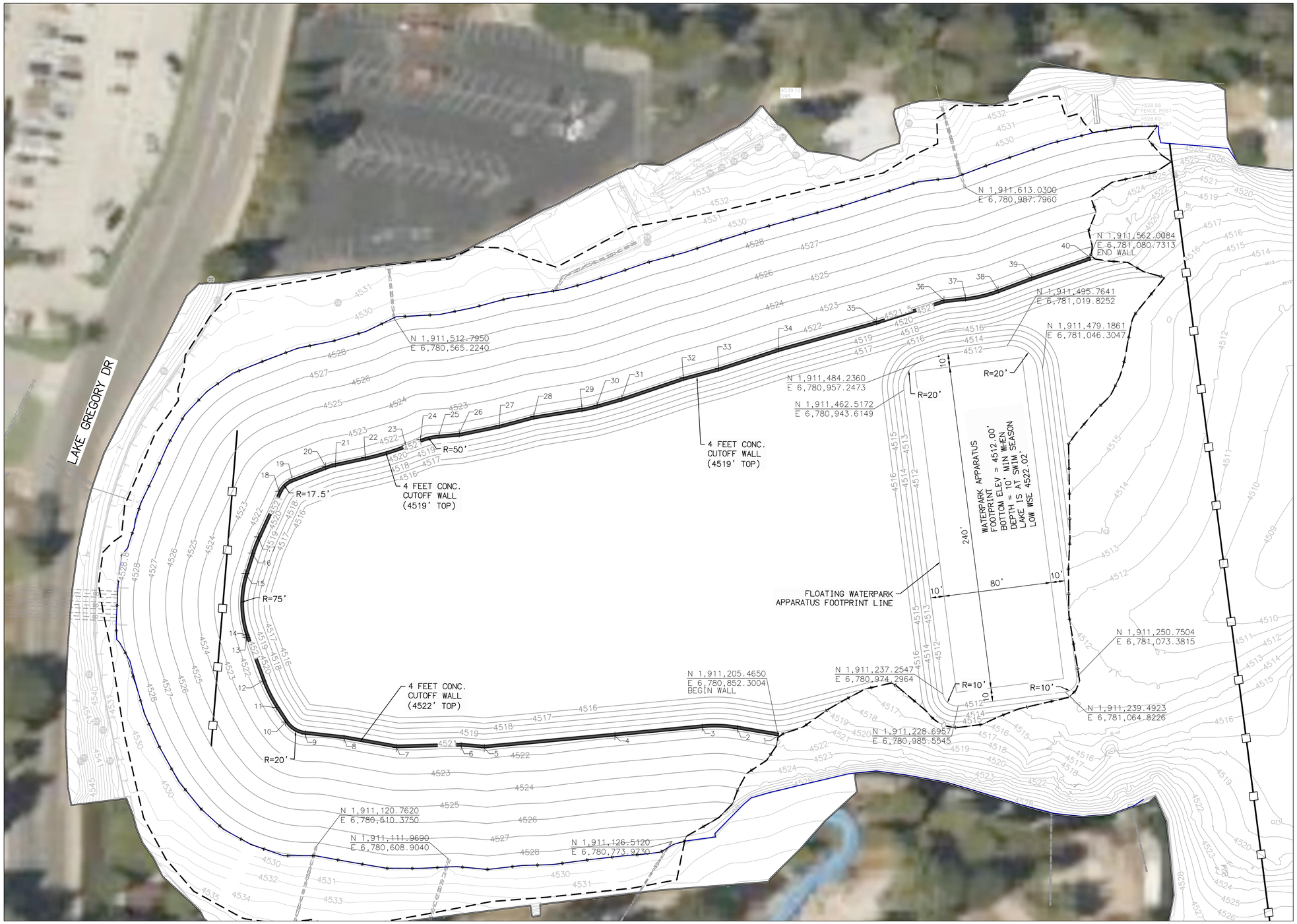
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED SWIM BEACH GRADING

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 6 OF 16

C:\Users\Muli Tim\o. Smith & T. Muli, Inc\Jonis Smith - JSTM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\1025-SHT-5-6_PR GRADING.dwg 02/23/24 - 7:19pm Muli Tim



POINT TABLE

POINT #	NORTHING	EASTING	ELEVATION
1	1911205.4650	6780852.3004	4522.00
2	1911210.3421	6780822.0216	4522.00
3	1911211.0890	6780795.8798	4522.00
4	1911204.4353	6780731.2403	4522.00
5	1911194.7809	6780634.4630	4522.00
6	1911196.0642	6780617.3299	4522.00
7	1911194.4635	6780569.5155	4522.00
8	1911201.0141	6780530.4133	4522.00
9	1911204.0001	6780501.6025	4522.00
10	1911212.8801	6780486.9699	4522.00
11	1911223.5382	6780479.9386	4522.00
12	1911243.2366	6780469.8745	4522.00
13	1911275.5550	6780457.6539	4522.00
14	1911277.2011	6780457.1022	4522.00
15	1911322.8775	6780456.4676	4522.00
16	1911338.0384	6780461.0838	4522.00
17	1911350.1258	6780465.6361	4522.00
18	1911383.9309	6780480.9282	4522.00
19	1911393.0156	6780490.4971	4522.00
20	1911402.7007	6780515.2540	4522.00
21	1911404.9510	6780522.6440	4522.00
22	1911409.8086	6780544.5467	4522.00
23	1911418.8876	6780574.3058	4522.00
24	1911423.2784	6780585.5058	4522.00
25	1911426.5121	6780599.1144	4522.00
26	1911427.9142	6780614.1552	4522.00
27	1911434.1922	6780643.8018	4522.00
28	1911441.1302	6780669.3169	4522.00
29	1911447.1595	6780704.9821	4522.00
30	1911449.7145	6780716.1437	4522.00
31	1911455.0294	6780734.4467	4522.00
32	1911470.6070	6780779.9549	4522.00
33	1911477.7984	6780806.0936	4522.00
34	1911492.5591	6780850.5251	4522.00
35	1911513.2978	6780922.9278	4522.00
36	1911529.5269	6780972.8379	4522.00
37	1911531.3624	6780988.6757	4522.00
38	1911537.3208	6781012.9514	4522.00
39	1911546.8512	6781037.8177	4522.00
40	1911562.0084	6781080.7313	4522.00



30 15 0 30 60 90

SCALE: 1"=30'

SWIM BEACH - HORIZONTAL CONTROL

SCALE: 1"=30'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

Call: TOLL FREE
1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

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JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR ____ DATE ____

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

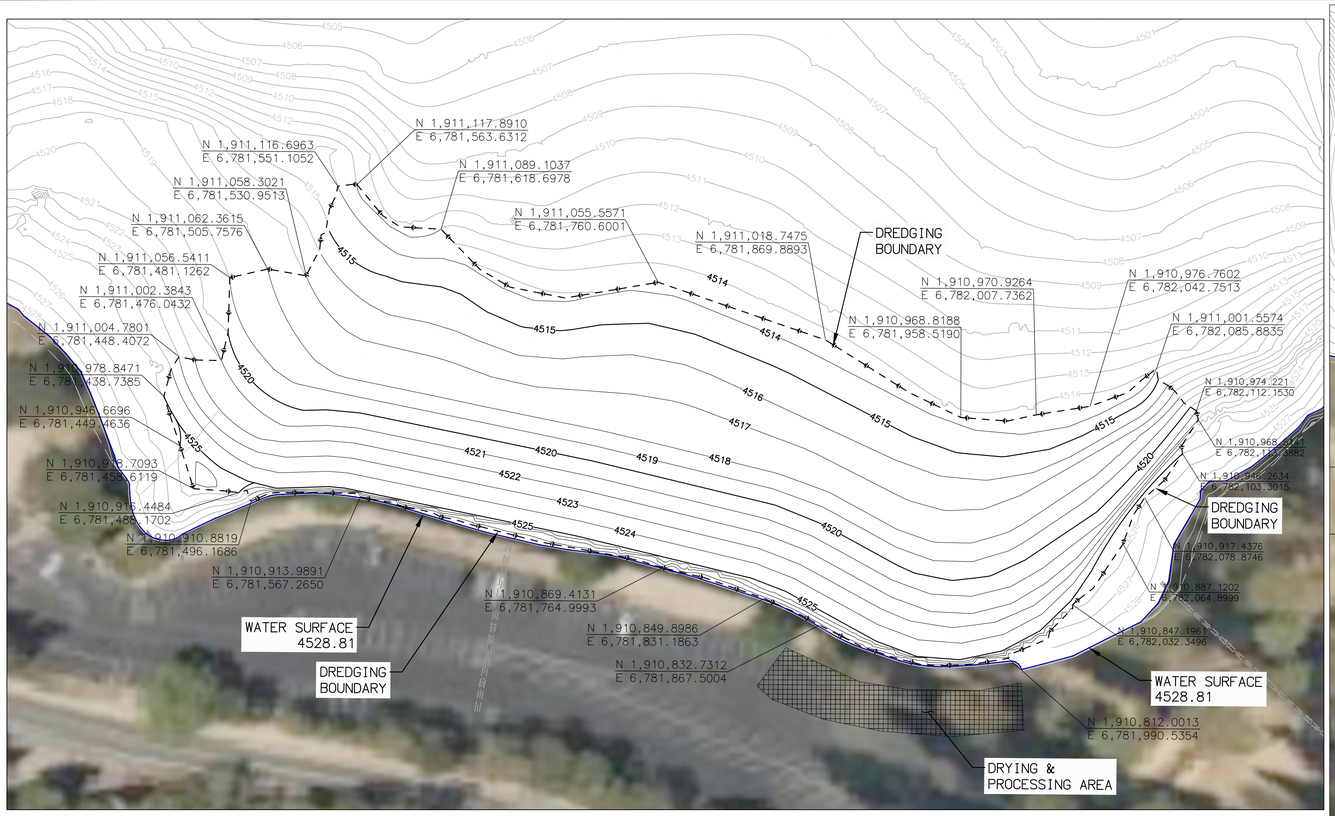
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED SWIM BEACH HORIZONTAL CONTROL

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 7 OF 16

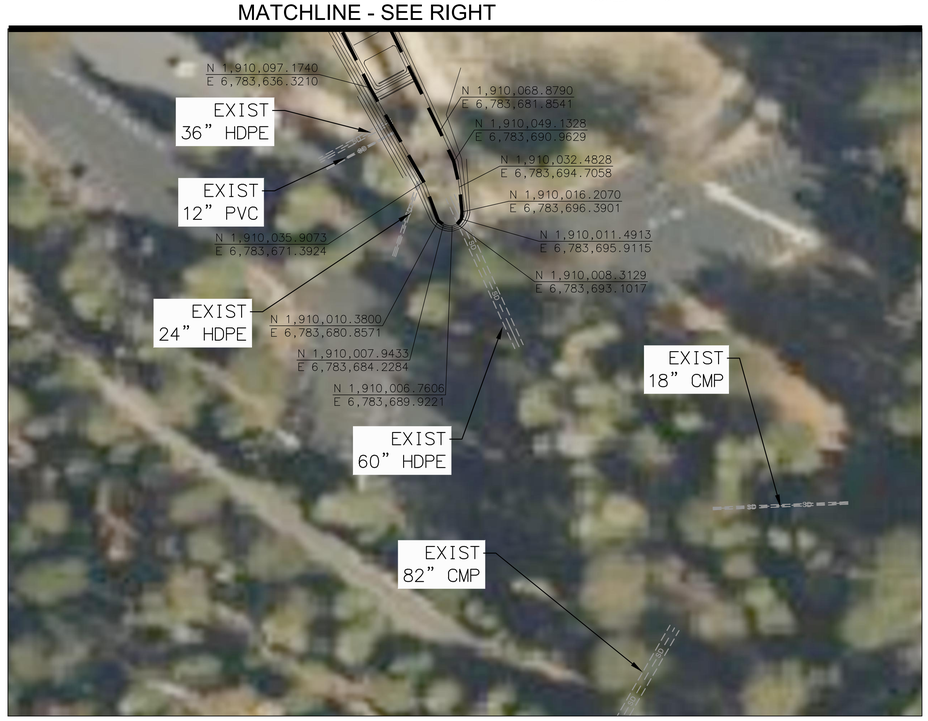
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SOUTH BEACH

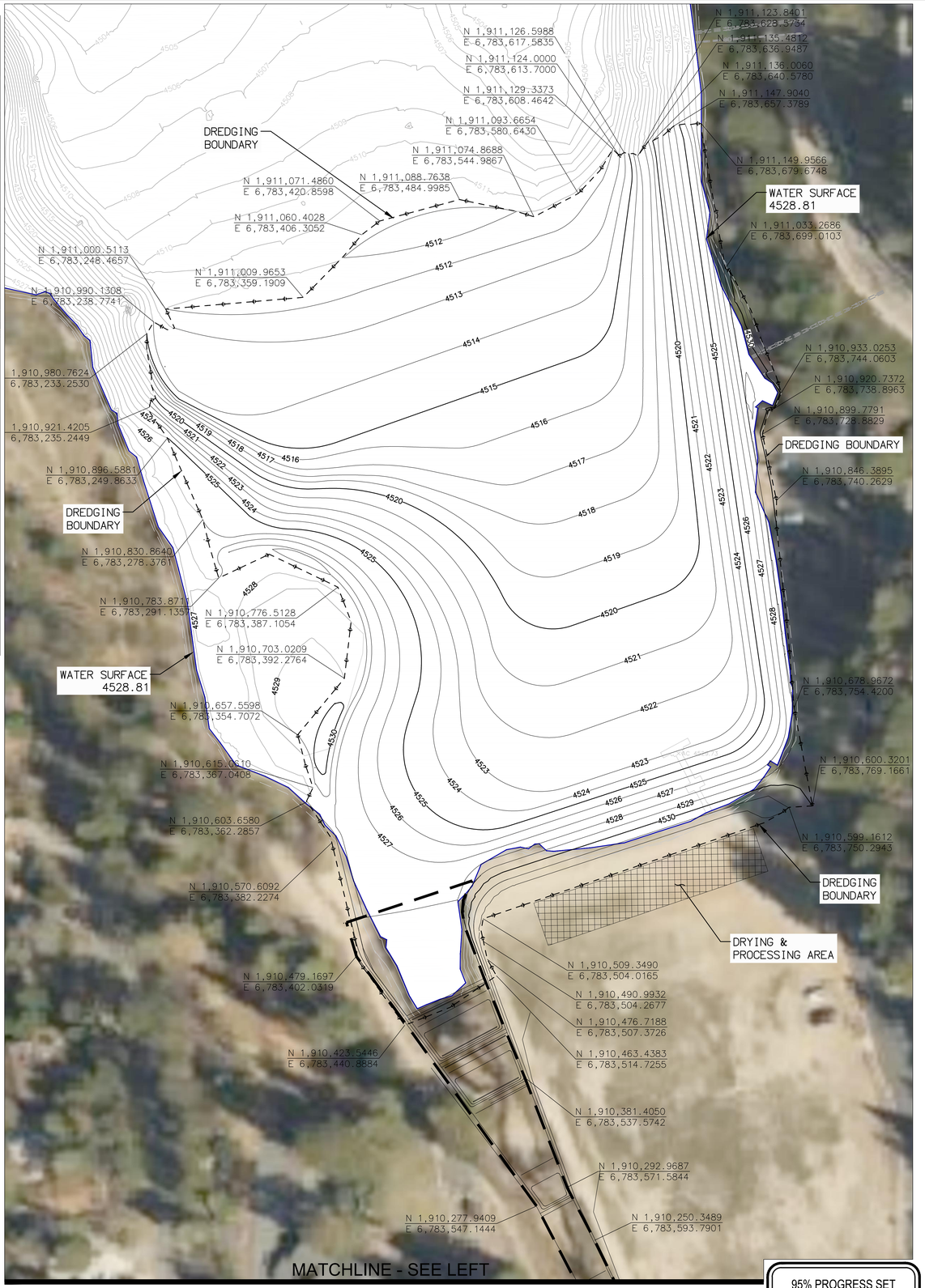
SCALE: 1"=40'

MATCHLINE - SEE RIGHT



SAN MORITZ CHANNEL/ BASINS

SCALE: 1"=40'



MATCHLINE - SEE LEFT

SOUTH LAKE AND SAN MORITZ CHANNEL/BASINS

SCALE: 1"=40'

NORTH
J:SMITH & T.MULI

40 20 0 40 80 120

SCALE: 1"=40'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
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JONIS C. SMITH | 056654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

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SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR ____ DATE ____

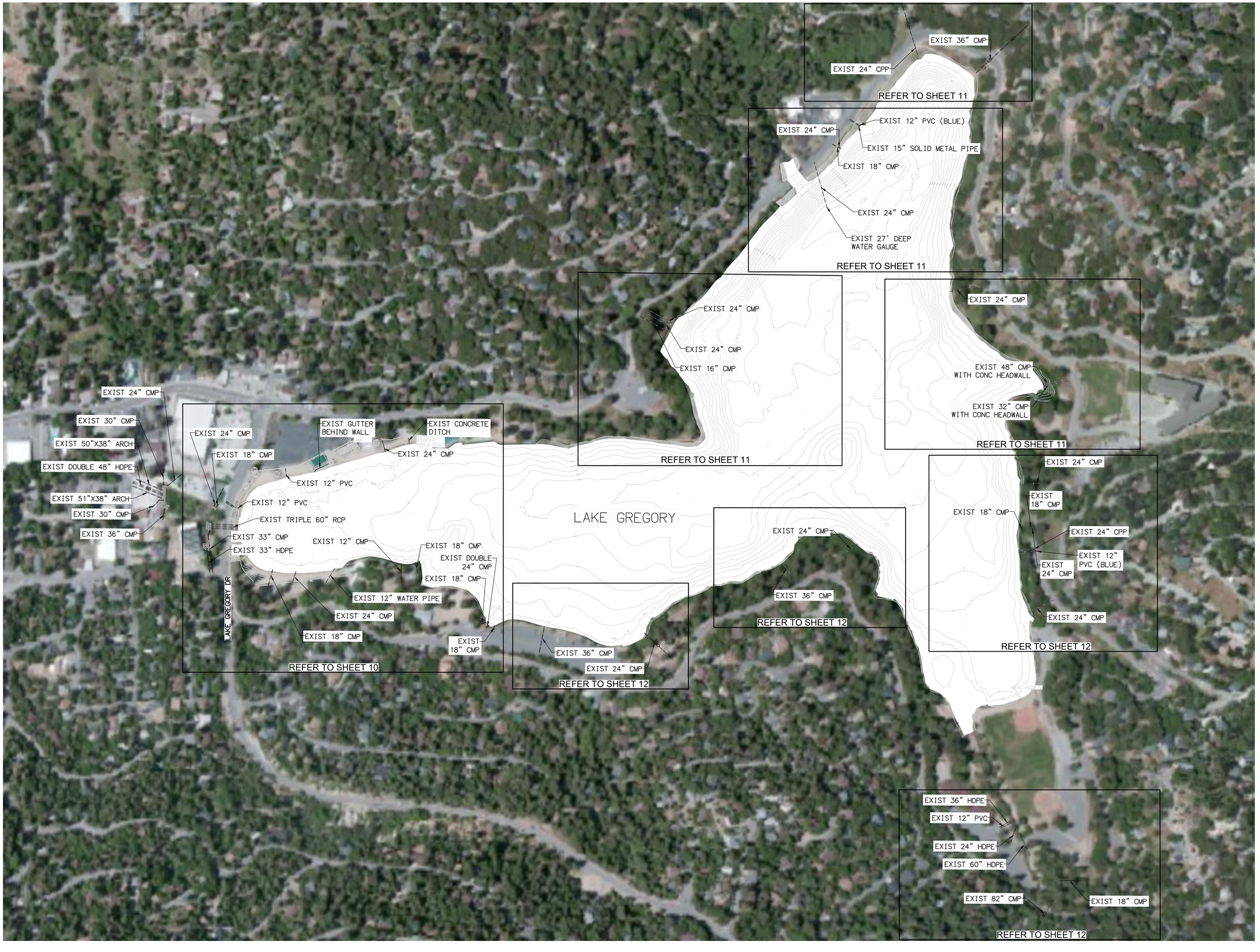
APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM, DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 8 OF 16

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SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR ____ DATE ____

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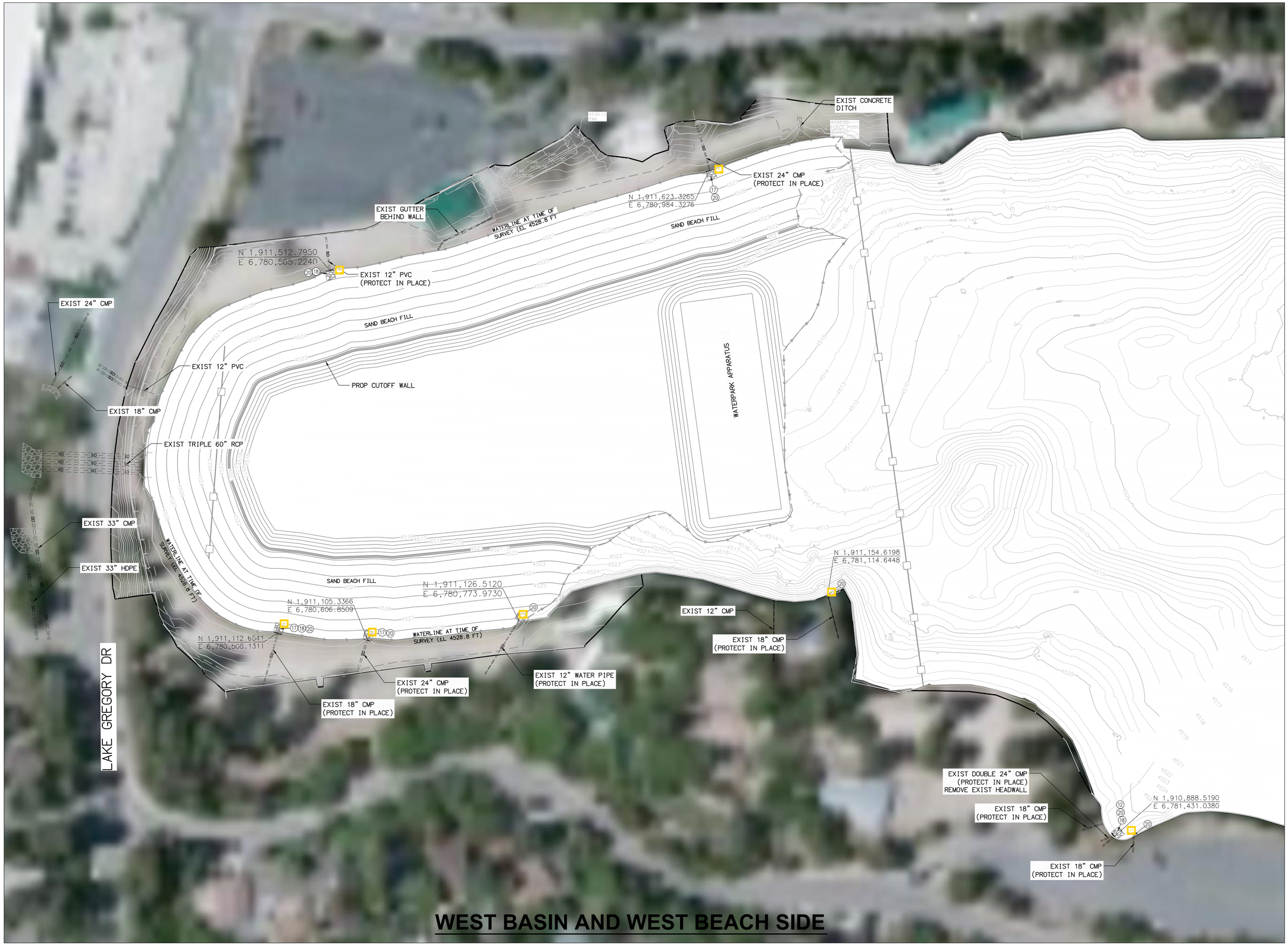
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

INLETS SHEET INDEX AND EXISTING LAKE INLETS LAYOUT

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 9 OF 16

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WEST BASIN AND WEST BEACH SIDE

CONSTRUCTION NOTES

(12) CONSTRUCT REINFORCED CONCRETE CUTOFF WALL PER PLAN AND DETAIL 19 ON SHEET 13

(17) SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL 18 ON SHEET 13

(18) SAWCUT EXISTING CMP SECTION, AND INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL ON SHEET 13

(20) CONSTRUCT 10'X10' RIPRAP ENERGY DISSIPATOR PER PLAN AND DETAIL 20 ON SHEET 14

NORTH

J.SMITH & T.MULI

40 20 0 40 80 120

SCALE: 1"=40'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

DIG BEFORE YOU DIG

Call: TOLL FREE
1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

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ASSISTANT DIRECTOR ____ DATE ____

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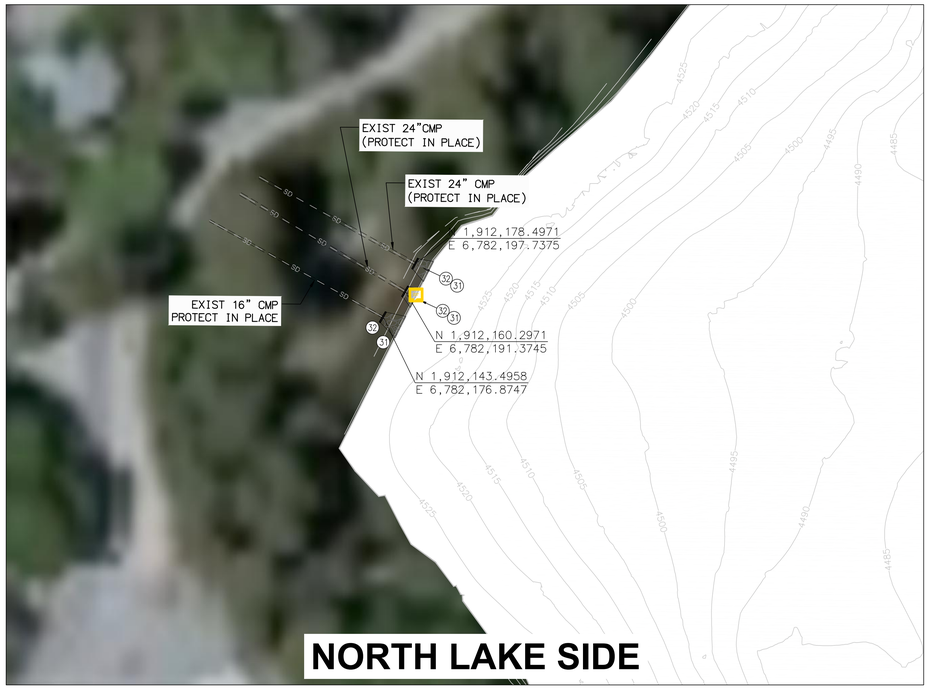
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LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

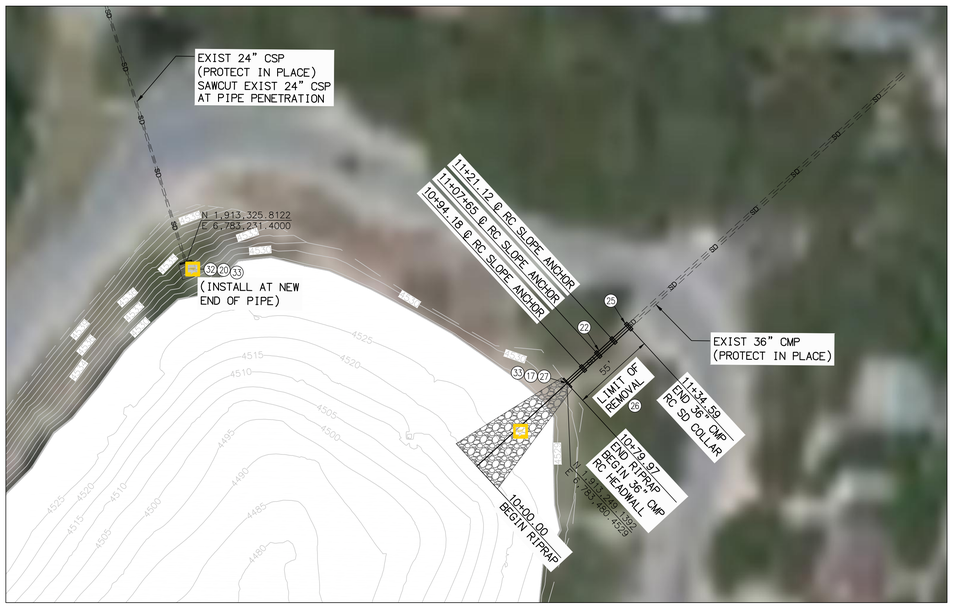
PROPOSED IMPROVEMENTS AT EXISTING LAKE INLETS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 10 OF 16

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NORTH LAKE SIDE



NORTH LAKE SIDE

CONSTRUCTION NOTES

(17) SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL 18 ON SHEET 13

(20) CONSTRUCT 10'X10' RIPRAP ENERGY DISSIPATOR PER PLAN AND DETAIL 20 ON SHEET 14

(22) CONSTRUCT CONCRETE COLLAR AT PIPE PENENTRATION AND EXTEND PIPE PER PLAN AND AND DETAIL 28 HEREON

(25) CONSTRUCT REINFORCED CONCRETE COLLAR PER SPPWC STD PLAN 380-4

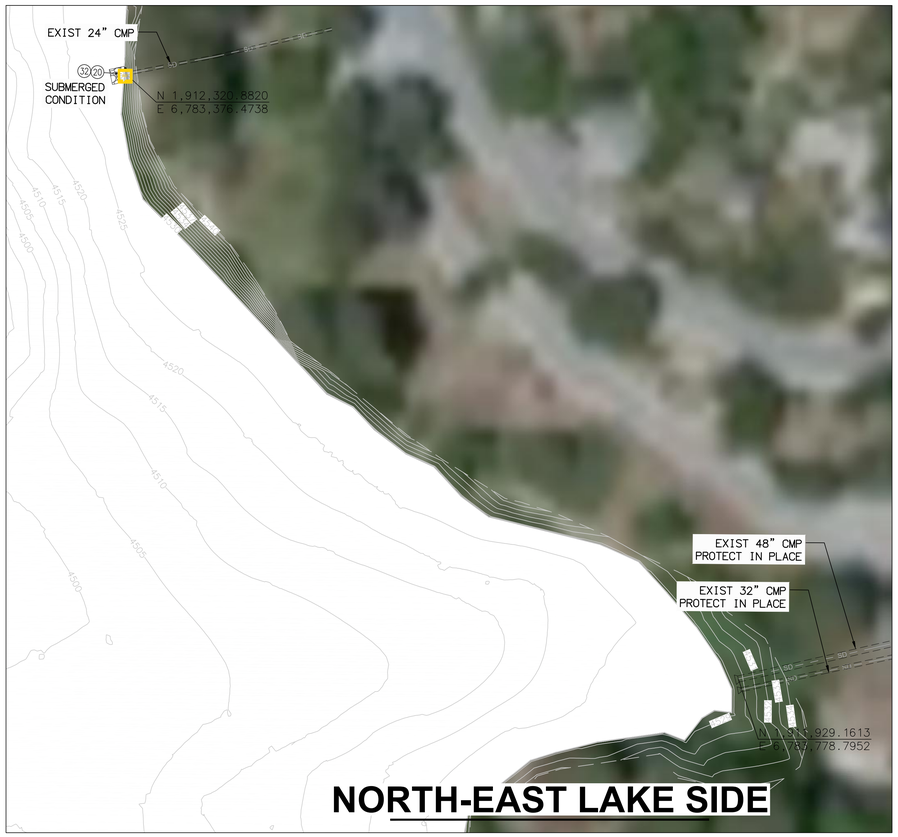
(26) ABANDON EXIST SD PIPE IN PLACE TO LIMITS SHOWN AND BACKFILL WITH CSLM PER SPPWC 306-12.3

(27) CONSTRUCT RIP-RAP EROSION CONTROL BLANKET PER DETAIL 27 ON SHEET 15

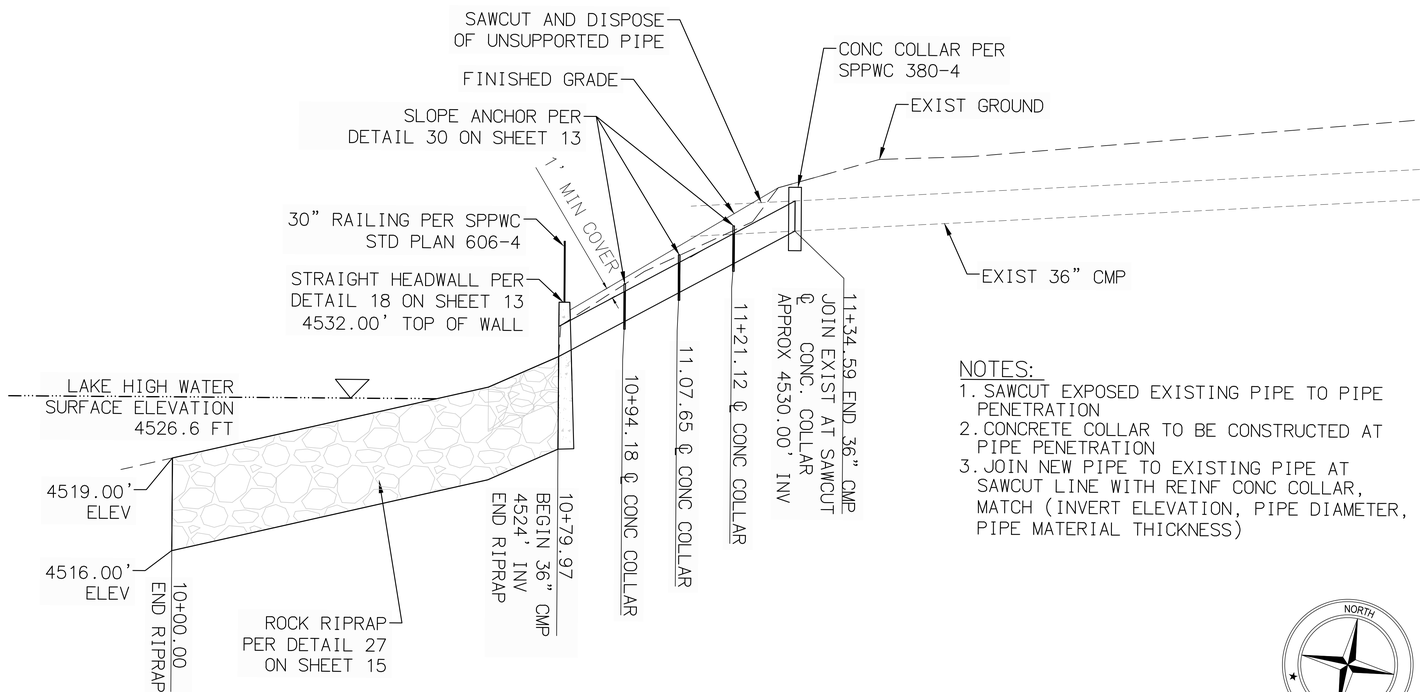
(31) CONSTRUCT RIP-RAP EROSION CONTROL BLANKET PER DETAIL 27 LAYOUT TYPE C ON SHEET 15

(32) CONSTRUCT TYPE-1 STRAIGHT HEADWALL WITH CUTOFF WALL PER DETAIL 17 ON SHEET 13

(33) CONSTRUCT PROTECTIVE RAILING PER SSPWC STD PLAN 606-4 AND DETAIL 18 ON SHEET 13



NORTH-EAST LAKE SIDE



NOTES:

1. SAWCUT EXPOSED EXISTING PIPE TO PIPE PENETRATION
2. CONCRETE COLLAR TO BE CONSTRUCTED AT PIPE PENETRATION
3. JOIN NEW PIPE TO EXISTING PIPE AT SAWCUT LINE WITH REINF CONC COLLAR, MATCH (INVERT ELEVATION, PIPE DIAMETER, PIPE MATERIAL THICKNESS)

(28) STORM DRAIN CONSTRUCTION DETAIL
NOT TO SCALE

NORTH
JSMITH & T.MULI

40 20 0 40 80 120
SCALE: 1"=40'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
DIG BEFORE YOU DIG
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
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SITE BENCHMARK AT POINT NO. 7000
DERIVED FROM STATIC OBSERVATIONS.
ELEVATION = 4587.05'

BASIS OF BEARINGS:
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J. SMITH & T. MULI
JS&TM
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 · JSTMINC.COM
JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS						
MARK	DATE	INITIAL	DESCRIPTION		APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR ____ DATE ____

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED IMPROVEMENTS AT EXISTING LAKE INLETS

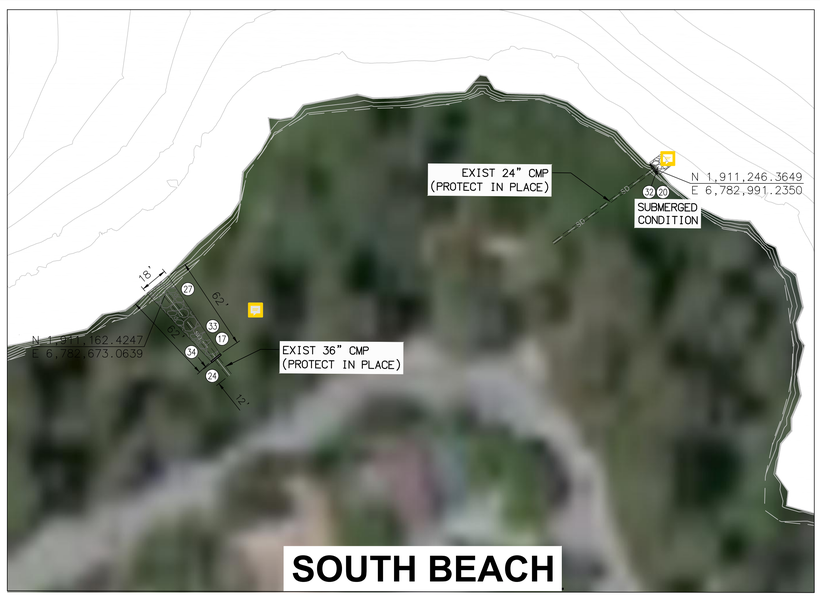
DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 11 OF 16

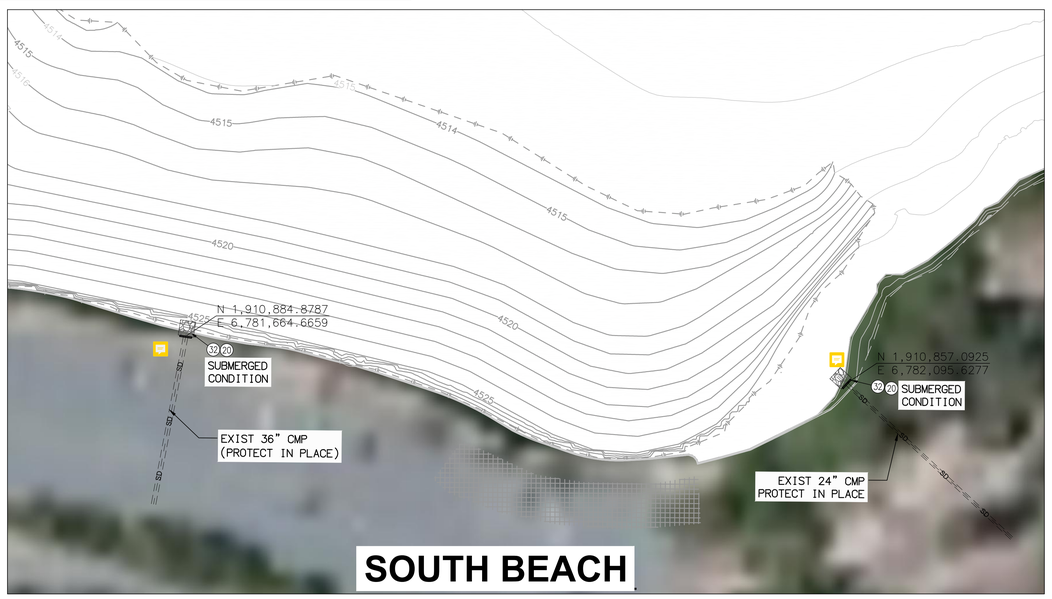
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SOUTH LAKE AND MORITZ CHANNEL/BASINS





CONSTRUCTION NOTES

(17) SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL 18 ON SHEET 13
(20) CONSTRUCT 10'X10' RIPRAP ENERGY DISSIPATOR PER PLAN AND DETAIL 20 ON SHEET 14
(21) REMOVE AND PROPERLY DISPOSE OF EXIST ABANDONED CMP SD
(23) CONSTRUCT NEW 24" CMP PER PLAN AND DETAIL 29 ON SHEET16
(24) REMOVE EXIST SD PIPE TO LIMITS SHOWN
(25) CONSTRUCT REINFORCED CONCRETE COLLAR PER SPPWC STD PLAN 380-4
(26) ABANDON EXIST SD PIPE IN PLACE TO LIMITS SHOWN AND BACKFILL WITH CSLM PER SPPWC 306-12.3
(27) CONSTRUCT RIP-RAP EROSION CONTROL BLANKET PER DETAIL 27 ON SHEET 15
(32) CONSTRUCT TYPE-1 STRAIGHT HEADWALL WITH CUTOFF WALL PER DETAIL 17 ON SHEET 13
(33) CONSTRUCT PROTECTIVE RAILING PER SSPWC STD PLAN 606-4 AND DETAIL 18 ON SHEET 13
(34) SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 1 STRAIGHT CONRETE HEADWALL PER DETAIL 17 ON SHEET 13 AND CONSTRUCTION DETAIL 32 ON SHEET 16

NORTH
JSMITH & TMULI

40 20 0 40 80 120
SCALE: 1"=40'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
DIG ALERT BEFORE YOU DIG
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
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SITE BENCHMARK AT POINT NO. 7000
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Phone: (949) 329.3639 · JSTMINC.COM
JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

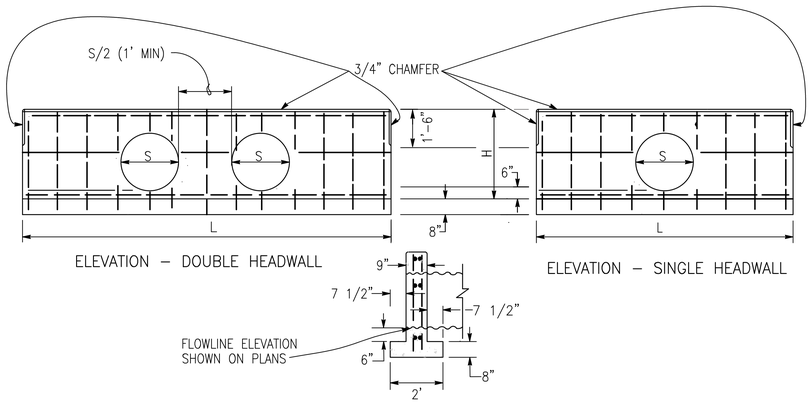
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED IMPROVEMENTS AT EXISTING LAKE INLETS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 12 OF 16

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ELEVATION – DOUBLE HEADWALL

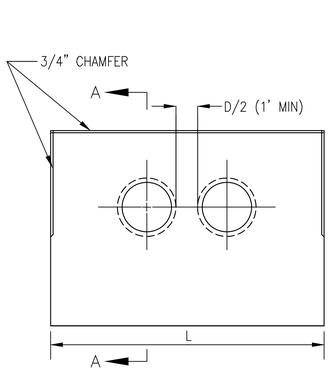
ELEVATION – SINGLE HEADWALL

SECTION, SINGLE & DOUBLE HEADWALLS

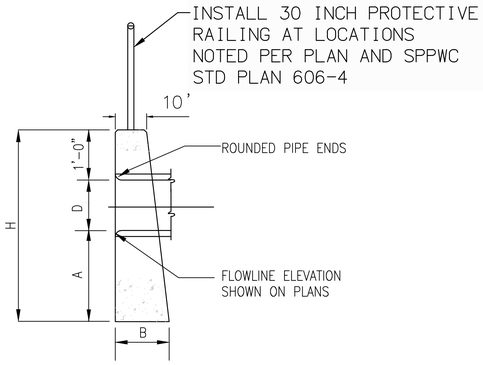
C.S.P. SIZE (INCHES)	SINGLE				DOUBLE		
	H (FT/IN)	L (FT/IN)	STEEL (POUNDS)	CONCRETE (C.Y.)	L (FT/IN)	STEEL (POUNDS)	CONCRETE (C.Y.)
18	2'-7"	5'-6"	37	0.64	8'	52	0.91
21	2'-11"	6'-6"	45	0.80	10'	60	1.22
24	3'-2"	7'-6"	50	0.96	11'-6"	70	1.45
28	3'-4"	8'-6"	60	1.12	13'-6"	90	1.76
35	3'-8"	10'-6"	85	1.47	15'-6"	120	2.16
42	4'-1"	12'-6"	110	1.76	18'	145	2.57
49	4'-5"	14'-6"	130	2.26	21'	170	3.13
57	4'-10"	17'	155	2.81	24'-6"	210	3.86
64	5'-3"	19'	175	3.31	27'	230	4.42
71	5'-7"	21'	195	3.81	30'	255	5.09

NOTES:
1. CONRETE SHALL BE 560-C-3250 WITH TYPE V PORTLAND CEMENT
2. ALL REINFORCING STEEL SHALL BE #4 BARS. ALL VERTICAL AND HORIZONTAL TIE BARS @18" MAXIMUM SPACING
3. EXPOSED CORNERS SHALL BE 3/4" CHAMFERED

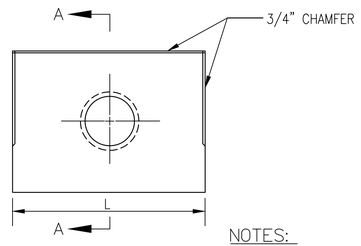
(17) STRAIGHT HEADWALL - TYPE 1
NOT TO SCALE



DOUBLE PIPE ELEVATION



SECTION A–A

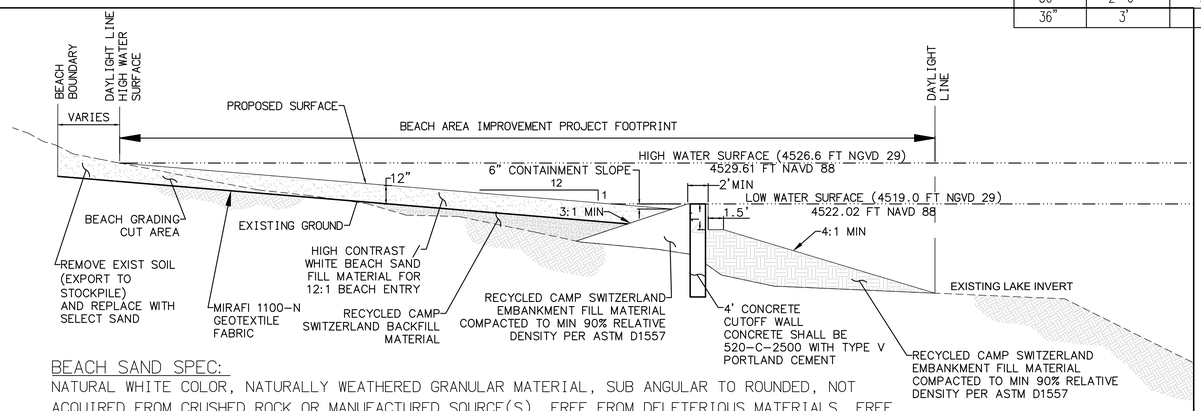


SINGLE PIPE ELEVATION

NOTES:
1. CONRETE SHALL BE 560-C-3250 WITH TYPE V PORTLAND CEMENT
2. EXPOSED CORNERS SHALL BE 3/4" CHAMFERED

D	A	B	H	SINGLE		DOUBLE	
				L	CONCRETE (C.Y.)	L	CONCRETE (C.Y.)
12"	2'	1'	4'	4'	0.45	5'-8"	.62
15"	2'	1'-1"	4'-3"	5'	0.63	7'-1"	.85
18"	2'	1'-2"	4'-6"	6'	0.83	8'-6"	1.12
24"	2'-6"	1'-5"	5'-6"	8'	1.54	11'-4"	2.09
30"	2'-6"	1'-9"	6'	10'	2.41	14'-2"	3.26
36"	3'	2'	7'	12'	3.74	17'	5.05

(18) STRAIGHT HEADWALL - TYPE 2
NOT TO SCALE

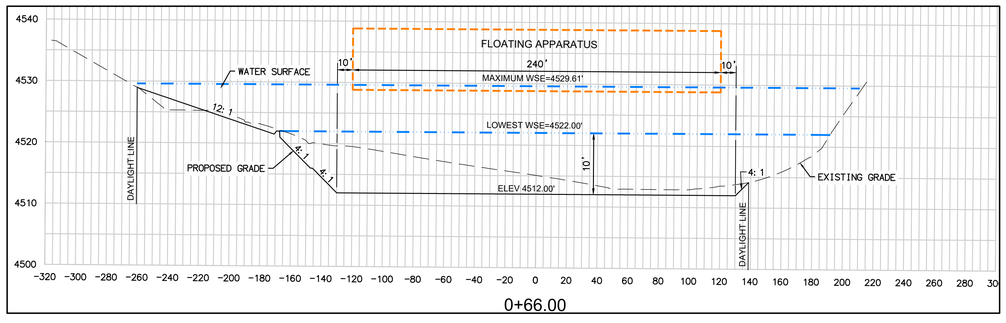


BEACH SAND SPEC:

NATURAL WHITE COLOR, NATURALLY WEATHERED GRANULAR MATERIAL, SUB ANGULAR TO ROUNDED, NOT ACQUIRED FROM CRUSHED ROCK OR MANUFACTURED SOURCE(S), FREE FROM DELETERIOUS MATERIALS, FREE OF ORGANIC MATERIAL, MICA, LOAM, CLAY, AND OTHER MATERIALS NOT SUITABLE FOR INTENDED USE.

Material Sizes (% retained)	Grade	Gravel	V. Course	Course	Medium	Fine	V. Fine	Pan (Clay+Silt <0.05
	Millimeter	2.0 mm	1.0 mm	0.5 mm	0.25 mm	0.15 mm	0.05 mm	
	Screen	#10	#18	#35	#60	#100	#270	
% By Weight		1-1.5%	8-10%	20-25%	25-30%	35-40%	0-3%	0-0.5%

(A) SECTION A-A: SAND BEACH ENTRY FILL SLOPE
(SEE SHEET 5)
NOT TO SCALE



(X) SECTION X-X: FLOATING APPARATUS
(SEE SHEET 5)
VERTICAL SCALE: 1"=4'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
DIG ALERT
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

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JS&TM
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 · JSTMINC.COM
JONIS C. SMITH — 058654 — 09/08/2023
PROFESSIONAL ENGINEER — R.C.E. No. — DATE

REVISIONS							
MARK	DATE	INITIAL	DESCRIPTION			APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

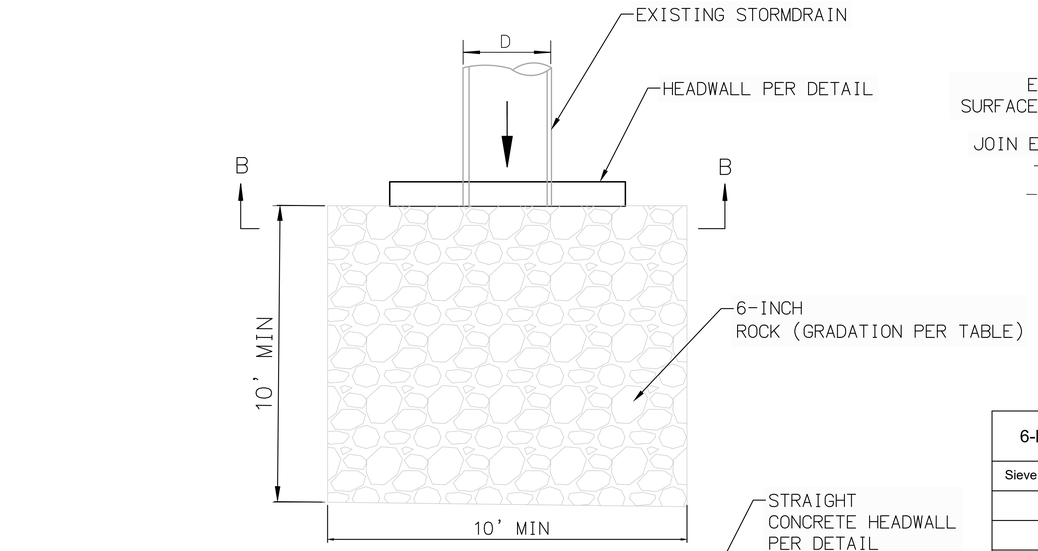
IMPROVEMENT PLANS

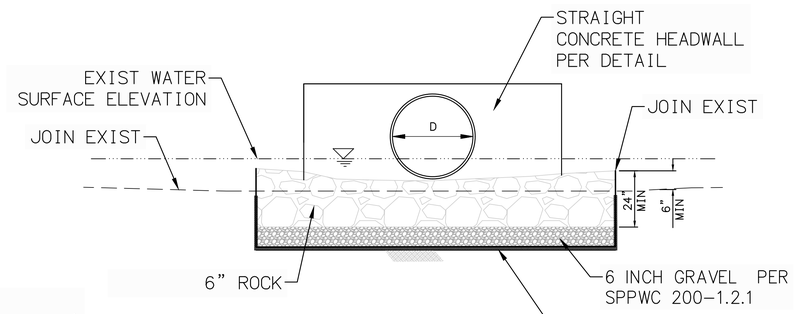
LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DETAILS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 13 OF 16

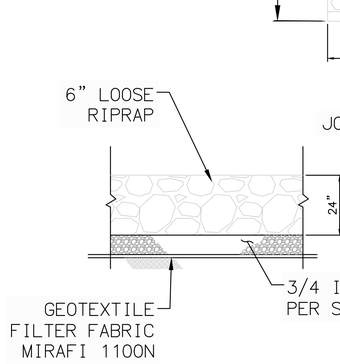
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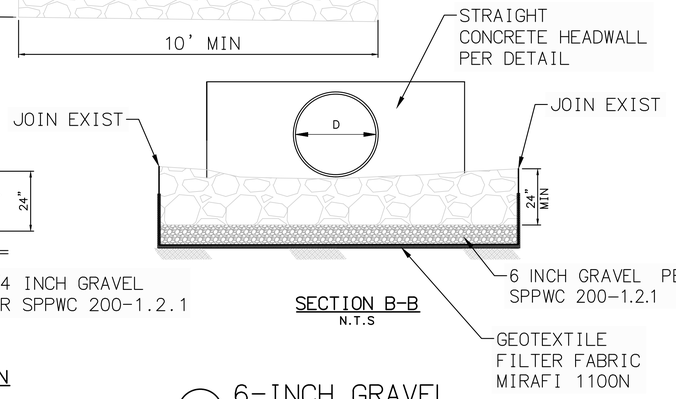


SECTION B-B
(SUBMERGED CONDITION)
N.T.S

6-INCH ROCK GRADATION	
Sieve Size (Inches)	Percent Passing
6	100
5	80-100
4	50-85
3	20-60
2	10-30
1	0-10
0.5	0-5

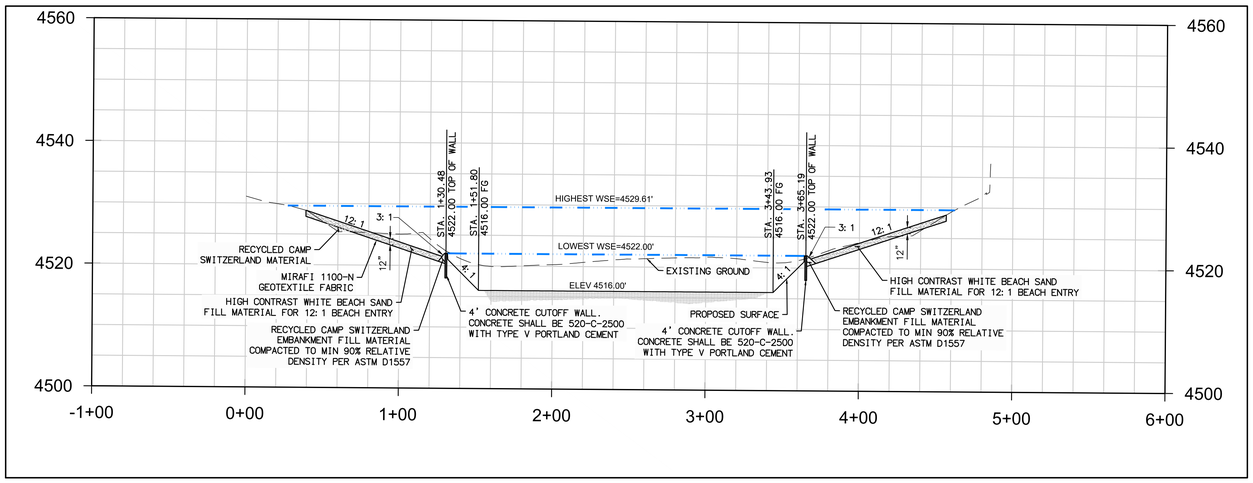


TYPICAL SECTION
N.T.S



SECTION B-B
N.T.S

20 6-INCH GRAVEL
NOT TO SCALE



B SECTION B-B: LAKE CROSS SECTION
(SEE SHEET 5)
VERTICAL SCALE: 1"=4'

95% PROGRESS SET
NOT FOR CONSTRUCTION

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Call: TOLL FREE
1-800-227-2600
OR
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SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

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	PM. DIVISION MANAGER		

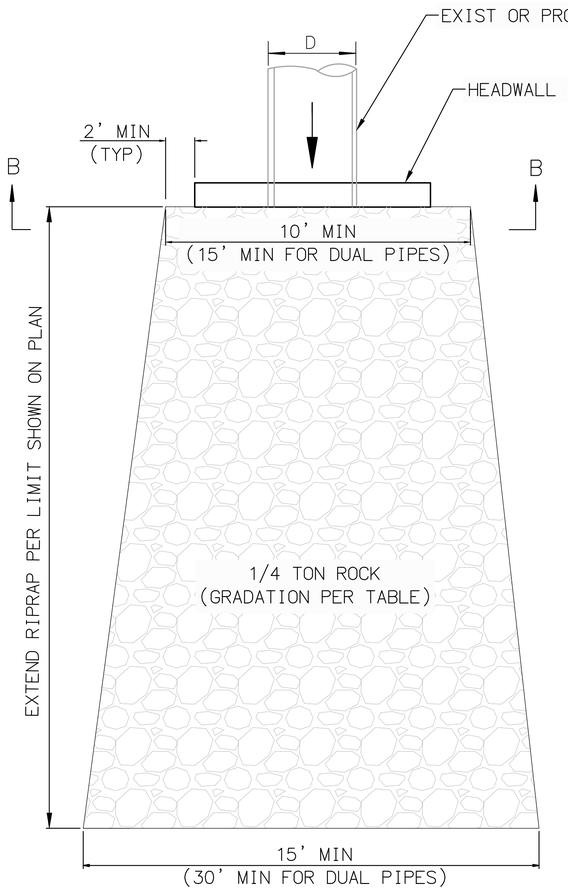
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LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

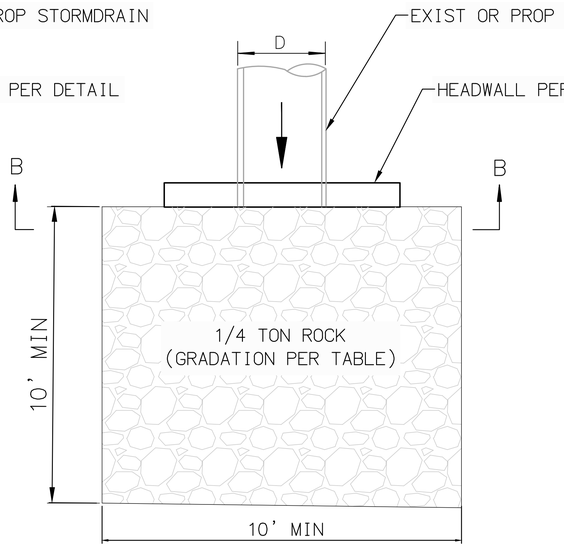
DETAILS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 14 OF 16

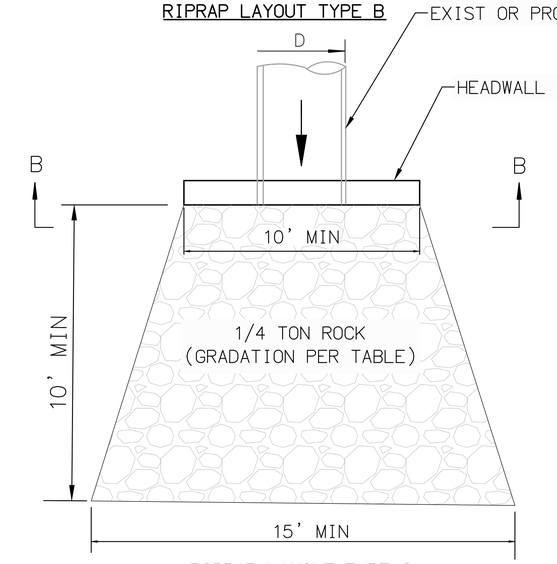
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RIPRAP LAYOUT TYPE A

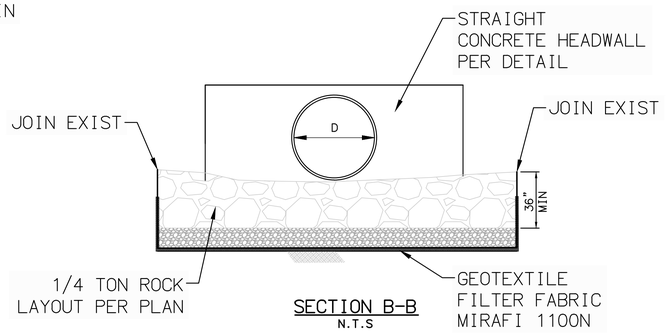


RIPRAP LAYOUT TYPE B

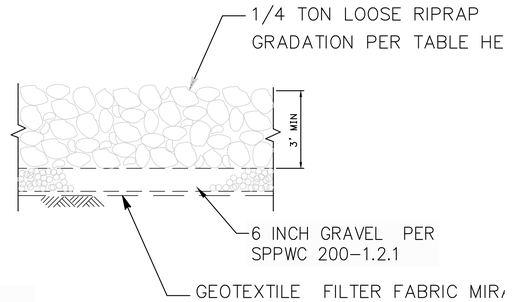


RIPRAP LAYOUT TYPE C

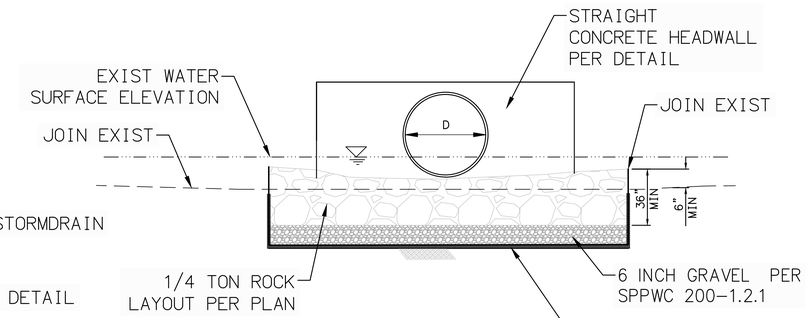
27 LOOSE RIPRAP
NOT TO SCALE



SECTION B-B
N.T.S



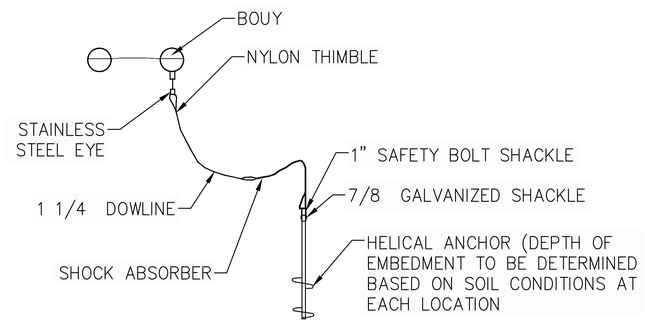
TYPICAL SECTION
N.T.S.



SECTION B-B
(SUBMERGED CONDITION)
N.T.S

1/4 TON ROCK GRADATION TABLE

WEIGHT	PERCENT LIGHTER THAN
1800#	100%
700	90 – 100
500	50 – 90
200	0 – 15



NOTES:
1. ANCHOR SYSTEMS MUST PROVIDE AT LEAST 500 POUNDS OF UPWARD LOAD PRESSURE
2. A ROCK-PENETRATING HELICAL EMBEDMENT ANCHOR (GALVANIZED STEEL) SHALL BE USED. ANCHOR SHALL BE EMBEDDED A MINIMUM OF 1' INTO ROCK SUBSTRATE.
3. MINIMUM ANCHOR LENGTH 5', MINIMUM HELICAL DISC SIZE 6", AND MINIMUM SHAFT DIAMETER OF 1-1/4"
4. THE ATTACHMENT EYE SHALL BE NO MORE THAN 6" ABOVE THE SUBSTRATE
5. EXTENSIONS MAY BE REQUIRED IN ORDER TO ACHIEVE 500 POUNDS OF RESISTING FORCE

30 BOUY LINE ANCHORAGE
NOT TO SCALE

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
ELEVATIONS SHOWN HEREON ARE EXPRESSED IN THE U.S. SURVEY FEET AND ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88) AND DEFINED LOCALLY USING THE ORTHOMETRIC HEIGHT FOR CORS STATION EWPP.
SITE BENCHMARK AT POINT NO. 7000
DERIVED FROM STATIC OBSERVATIONS.
ELEVATION = 4587.05'

BASIS OF BEARINGS:
BEARINGS SHOWN ON THIS MAP ARE REFERENCED TO THE CALIFORNIA COORDINATE SYSTEM, CCS83 (2011) EPOCH 2010.00, ZONE 05, DEFINED LOCALLY BY NGS PID'S EWPP, P598, & P470 ACCORDING TO THE GEODETIC POSITIONS AS PUBLISHED BY NGS. ALL DISTANCES AND COORDINATES ARE REFERENCED TO CCS83 ZONE 05 GRID AND ARE EXPRESSED IN US SURVEY FOOT UNITS.

J. SMITH & T. MULI
JS&TM
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 · JSTMINC.COM
JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

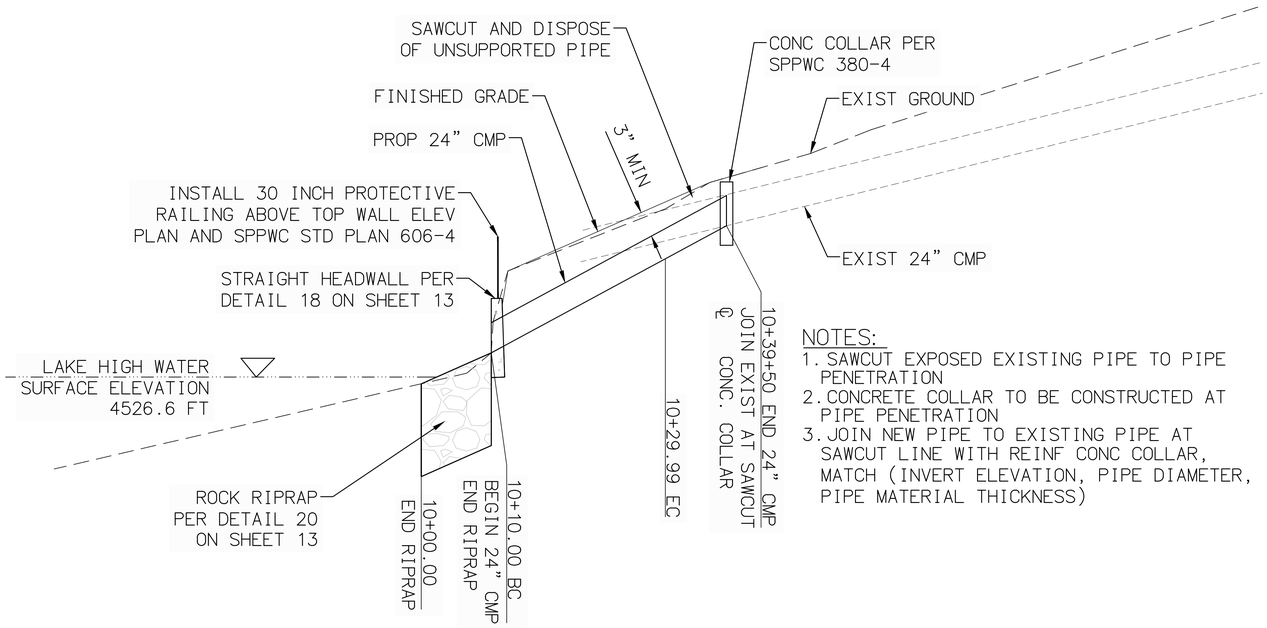
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DETAILS

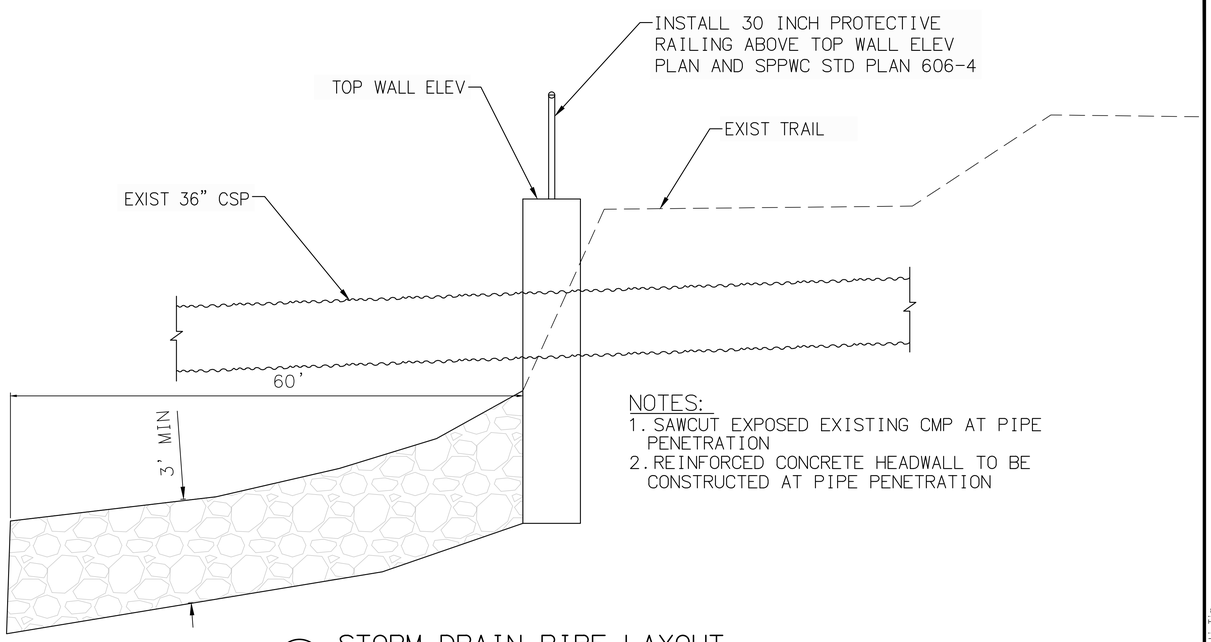
DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 15 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-13-15_DETAILS.dwg 02/23/24 - 5:52pm Muli Tim



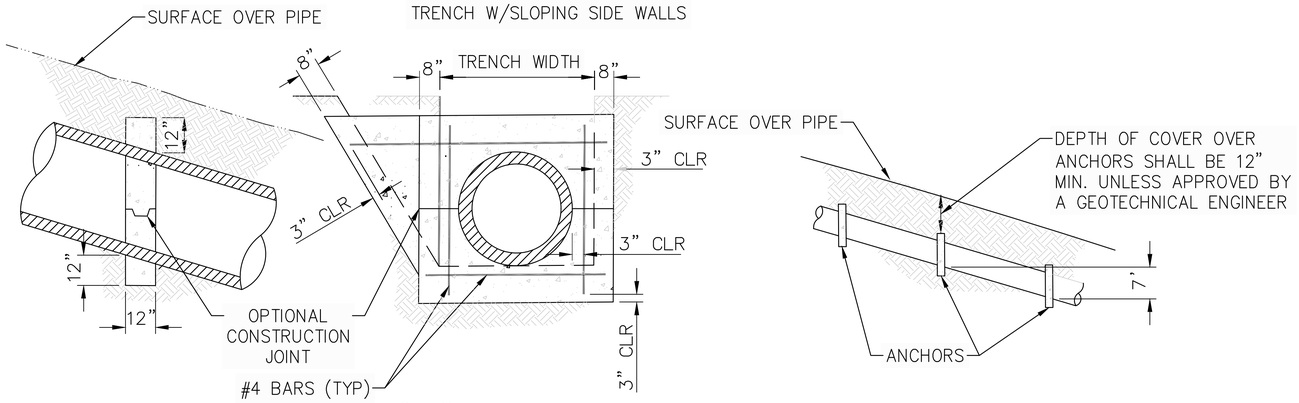
NOTES:
1. SAWCUT EXPOSED EXISTING PIPE TO PIPE PENETRATION
2. CONCRETE COLLAR TO BE CONSTRUCTED AT PIPE PENETRATION
3. JOIN NEW PIPE TO EXISTING PIPE AT SAWCUT LINE WITH REINF CONC COLLAR, MATCH (INVERT ELEVATION, PIPE DIAMETER, PIPE MATERIAL THICKNESS)

29 STORM DRAIN CONSTRUCTION DETAIL
NOT TO SCALE



NOTES:
1. SAWCUT EXPOSED EXISTING CMP AT PIPE PENETRATION
2. REINFORCED CONCRETE HEADWALL TO BE CONSTRUCTED AT PIPE PENETRATION

32 STORM DRAIN PIPE LAYOUT
NOT TO SCALE



NOTES:
1. PIPE ANCHORS SHALL BE CONSTRUCTED AT 7 FEET VERTICAL INTERVAL ON ALL SLOPES OF 5: 1 OR STEEPER.
2. ALL REINFORCING STEEL SHALL BE #4 BARS
3. CONCRETE STRENGTH AND TYPE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 201-1.1.2 AND SECTION 201-1.1.3 OF THE GREENBOOK. IN ADDITION, PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF SECTION 201-1 OF THE GREENBOOK

31 CONCRETE SLOPE ANCHOR
NOT TO SCALE



NOTES:
1. SIGN SHALL BE PER CALIFORNIA HEALTH & SAFETY CODE, TITLE 3 OF SAN BERNARDINO COUNTY CODE AND GUIDELINES
2. POST SHALL BE PER SAN BERNARDINO COUNTY ROAD DEPARTMENT STD PLAN 303a AND INSTALLATION PER 303b
3. SIGN SHALL BE INSTALLED IN ACCORDANCE WITH SAN BERNARDINO COUNTY ROAD DEPARTMENT STANDARD PLAN 303

13 NO DIVING SIGN
NOT TO SCALE

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
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1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

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REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR ____ DATE ____

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DETAILS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 16 OF 16

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