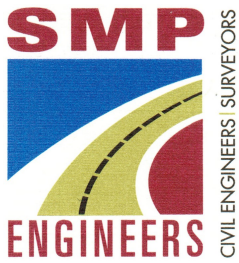


A P P E N D I X F

HYDROLOGY AND WATER QUALITY

APPENDIX F1:
PRELIMINARY HYDROLOGY AND
HYDRAULIC CALCULATION



**Preliminary Hydrology and Hydraulic calculation
FOR PLANING PURPOSES**

**HOTEL INDIGO
501 INDUSTRIAL ROAD,
SAN CARLOS, CA 94070
March 2020**

**BY
SMP ENGINEERS
1534 CAROB LANE
LOS ALTOS, CA 94024**



STORM DRAIN CALCULATION TO SIZE PROPOSED STORM DRAINAGE PIPE

3/9/2020

HOTEL INDIGO

501 INDUSTRIAL ROAD, SAN CARLOS, CA 94070

Prepared by: V.G.

Checked by: S.R.

SMP ENGINEERS

CALCULATION METHOD AND ASSUMPTIONS:

PURPOSE OF CALCULATION IS TO SIZE PROPOSED ON-SITE STORM DRAIN MAIN PIPE FOR THE PLANING PURPOSES, AS SHOWN ON ACCOMPONIED PRELIMINARY IMPROVEMENT PLANS, UTILITY PLAN. POST CONSTRUCTION CONDITION IS SHOWN ON STORMWATER MANAGEMENT PLAN FOR PROJECT.

PEAK FLOW CALCULATION IS DONE FOR A 10 YEAR STORM EVENT, 5 MINUTES Minimum Time of Concentration , USING RATOINAL METHOD AND PER " Sam Mateo County Drainage Manual"

Rainfall Intensity (I) in in.:

F (intensity factor) =

1

For Site Location, San Carlos

I (10 yr., 10 minutes) =

2.45 in./hr

Per San Meteo County Drainage Manual, Rainfall Data

1- SIZE PROJECT STORM DRAIN LATERAL

POST-CONSTRUCTION WATER SHED, TOTAL SITE

DESCRIPTION, SEE STORMWATER CONTROL PLAN FOR AREAS	AREA (SQFT.)	AREA (ACRES)	MATERIAL	C	C x AREA
PROPOSED IMPERVIOUS AREAS	44,559	1.02	NEW ROOFS,PATIOS, stalls & WLKWAYS	0.95	42,331
PERVIOUS PAVEMENT	36,461	0.84	PERVIOUS PAVEMENT	0.3	10,938
LANDSCAPE AREAS	10,044	0.23	LANDSCAPE	0.3	3,013
TOTAL	91,064	2.09	-		56,283

Coefficient Factor:

WEIGHTED AVERAGE $C = \sum (C \times A) / \sum A =$ 0.62

Post-construction Peak Flow calculation

C =

0.62

A =

2.09 ACRES

I (10 yr., 10 minutes) =

2.45 in./hr

F (intensity factor) =

1.00

for site location, San Carlos

Q (10 yr. POST-construction) = I.C.A =

3.17 CFS

Peak flow To size last on-site SD pipe

Size last On-site (private) SD pipe, Existing 24" RCP @ 0.5% slope to remain, Connects to Industrial Road Storm Drain System:

Hydraflow Express INPUT data: (attached Worksheet-1)

Q=

3.17 QFS

n=

0.013 For RCP

Slope (S) =

0.5 %

Diameter (D) =

2.00 FT

Invert =

3.58 FT, Project Datum, see utility plan

Hydraflow Express OUTPUT data:

Depth of flow in (E) 24" RCP:

0.61 FT

Velocity:

3.87 FT/SEC

OK, Should be between 1 FT/SEC and 10 FT/SEC

Ratio of depth to Diameter:

0.31

OK, Should be less than 2/3rd of Diameter

CONCLUSION: Existing 24" RCP IS SUFFICIENT

2- SIZE PROJECT ON-SITE STORMDRAIN PIPE

POST-CONSTRUCTION WATER SHED, TRIBUTARY OF PROPOSED 18" RCP

Tributary of Southerly proposed 18" RCP On-site SD pipe is DMA 1, 2, 4, 5, 6 and approximatly half of DMA 7

DESCRIPTION, SEE STORMWATER CONTROL PLAN FOR AREAS	AREA (SQFT.)	AREA (ACRES)	MATERIAL	C	C x AREA
PROPOSED IMPERVIOUS AREAS	38,278	0.88	NEW ROOFS,PATIOS, stalls & WLKWAYS	0.95	36,364
PERVIOUS PAVEMENT	18,231	0.42	PERVIOUS PAVEMENT	0.3	5,469
LANDSCAPE AREAS	4,535	0.10	LANDSCAPE	0.3	1,361
TOTAL	61,043	1.40	-		43,193

Coefficient Factor:

WEIGHTED AVERAGE C = $\sum (C \times A) / \sum A = 0.71$

Post-construction Peak Flow calculation

C = 0.71
 A = 1.40 ACRES
 I (10 yr., 10 minutes) = 2.45 in./hr
 F (intensity factor) = 1.0
Q (10 yr. POST-construction) = I.C.A = 2.43 CFS **Peak flow To size last on-site new SD pipe**

Size last On-site (private) SD pipe, proposed 18" RCP @ 0.3% slope, Connects to last On-site SD junction box

Hydraflow Express INPUT data: (attached Worksheet-2)

Q= 2.43 QFS
 n= 0.013 For RCP
 Slope (S) = 0.3 %
 Diameter (D) = 1.50 FT
 Invert = 3.95 FT, Project Datum, see utility plan

Hydraflow Express OUTPUT data:

Depth of flow in (E) 24" RCP: 0.68 FT
 Velocity: 3.11 FT/SEC OK, Should be between 1 FT/SEC and 10 FT/SEC
 Ratio of depth to Diameter: 0.45 OK, Should be less than 2/3rd of Diameter

CONCLUSION: Proposed 18" RCP IS SUFFICIENT

End of Calculation

Attachments:
 Worksheet 1 & 2

Channel Report

Worksheet 1

Circular

Diameter (ft) = 2.00

Invert Elev (ft) = 3.58

Slope (%) = 0.50

N-Value = 0.013

Calculations

Compute by: Known Q

Known Q (cfs) = 3.17

Highlighted

Depth (ft) = 0.61

Q (cfs) = 3.170

Area (sqft) = 0.82

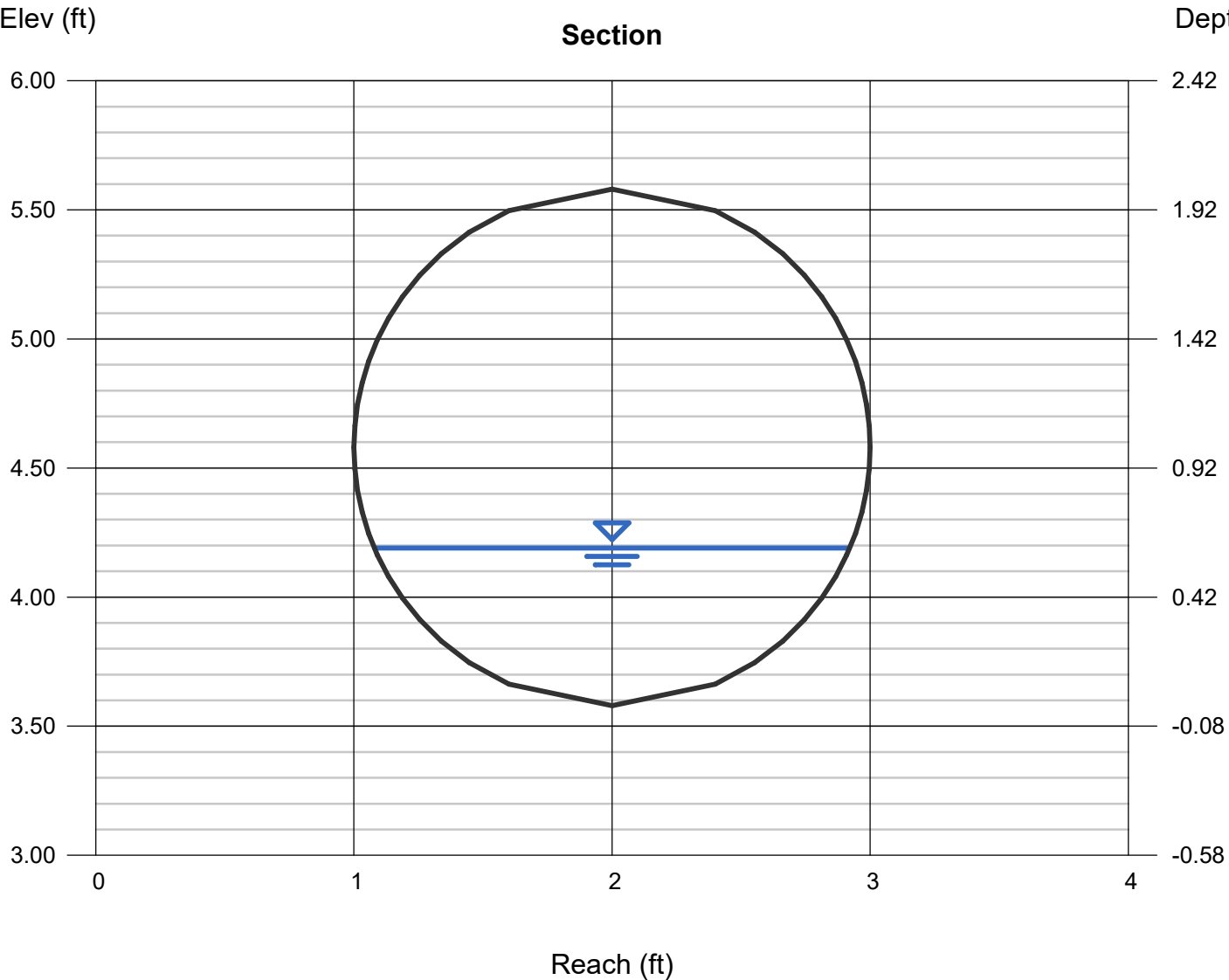
Velocity (ft/s) = 3.87

Wetted Perim (ft) = 2.35

Crit Depth, Yc (ft) = 0.62

Top Width (ft) = 1.85

EGL (ft) = 0.84



Channel Report

Worksheet 2

Circular

Diameter (ft) = 1.50

Invert Elev (ft) = 3.95

Slope (%) = 0.30

N-Value = 0.013

Calculations

Compute by: Known Q

Known Q (cfs) = 2.43

Highlighted

Depth (ft) = 0.68

Q (cfs) = 2.430

Area (sqft) = 0.78

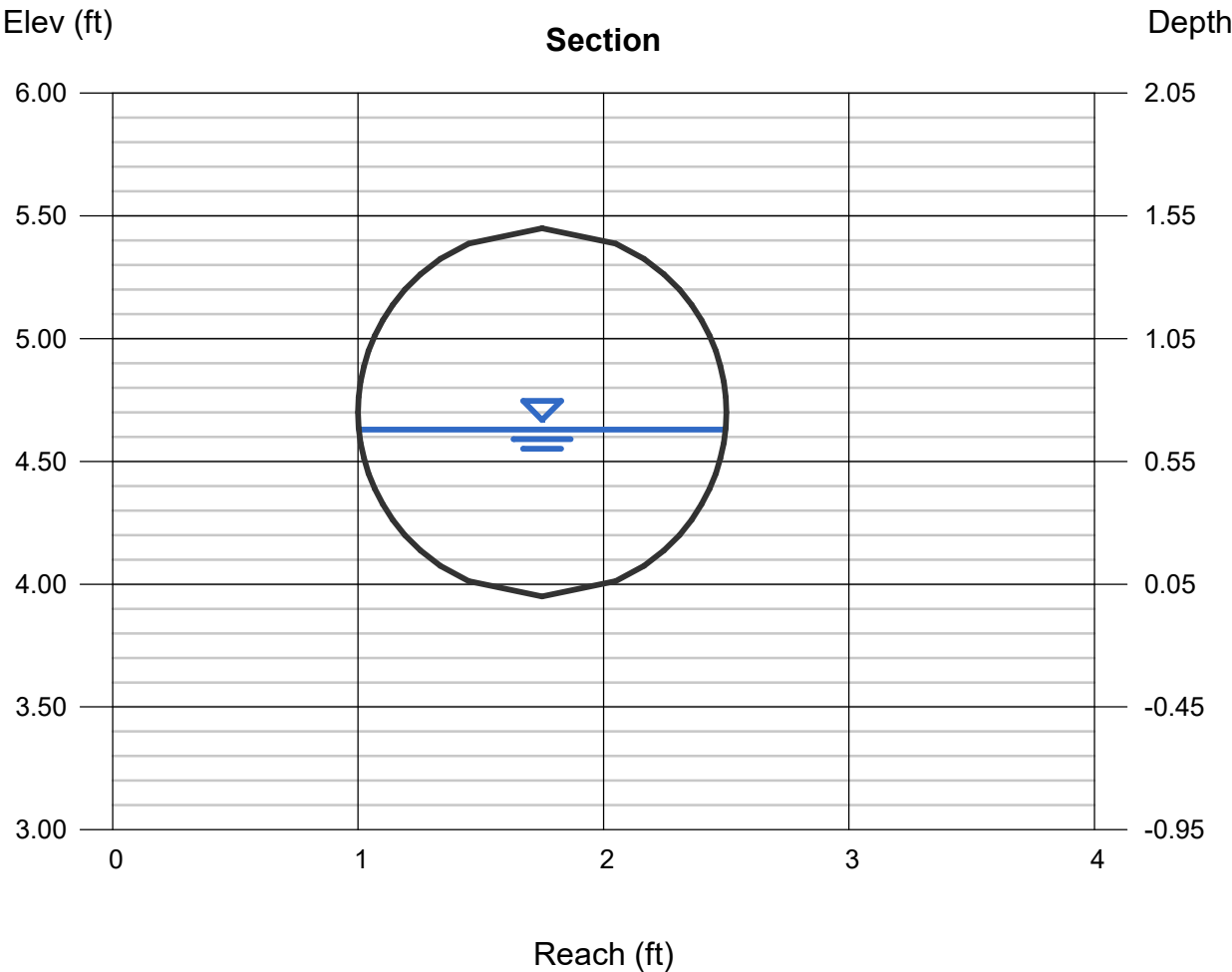
Velocity (ft/s) = 3.11

Wetted Perim (ft) = 2.22

Crit Depth, Yc (ft) = 0.59

Top Width (ft) = 1.49

EGL (ft) = 0.83



F2:
HOTEL INDIGO FLOODPLAIN
IMPACTS REVIEW MEMORANDUM

MEMORANDUM

DATE: July 27, 2022
TO: E.C. Liu, Faustus Capital
FROM: Daniel J. Schaaf, PE
SUBJECT: Hotel Indigo Floodplain Impacts Review

Introduction

Schaaf & Wheeler has been contracted by Faustus Capital to assess the potential impacts from their proposed development at 501 Industrial Road in San Carlos. The project is within the Pulgas Creek watershed and within the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (i.e., 100-year floodplain). The project is completely outside the regulatory floodway. The location of the property is shown in Figure 1. The proposed buildings would be elevated with fill above the FEMA 100-year base flood elevation (BFE).

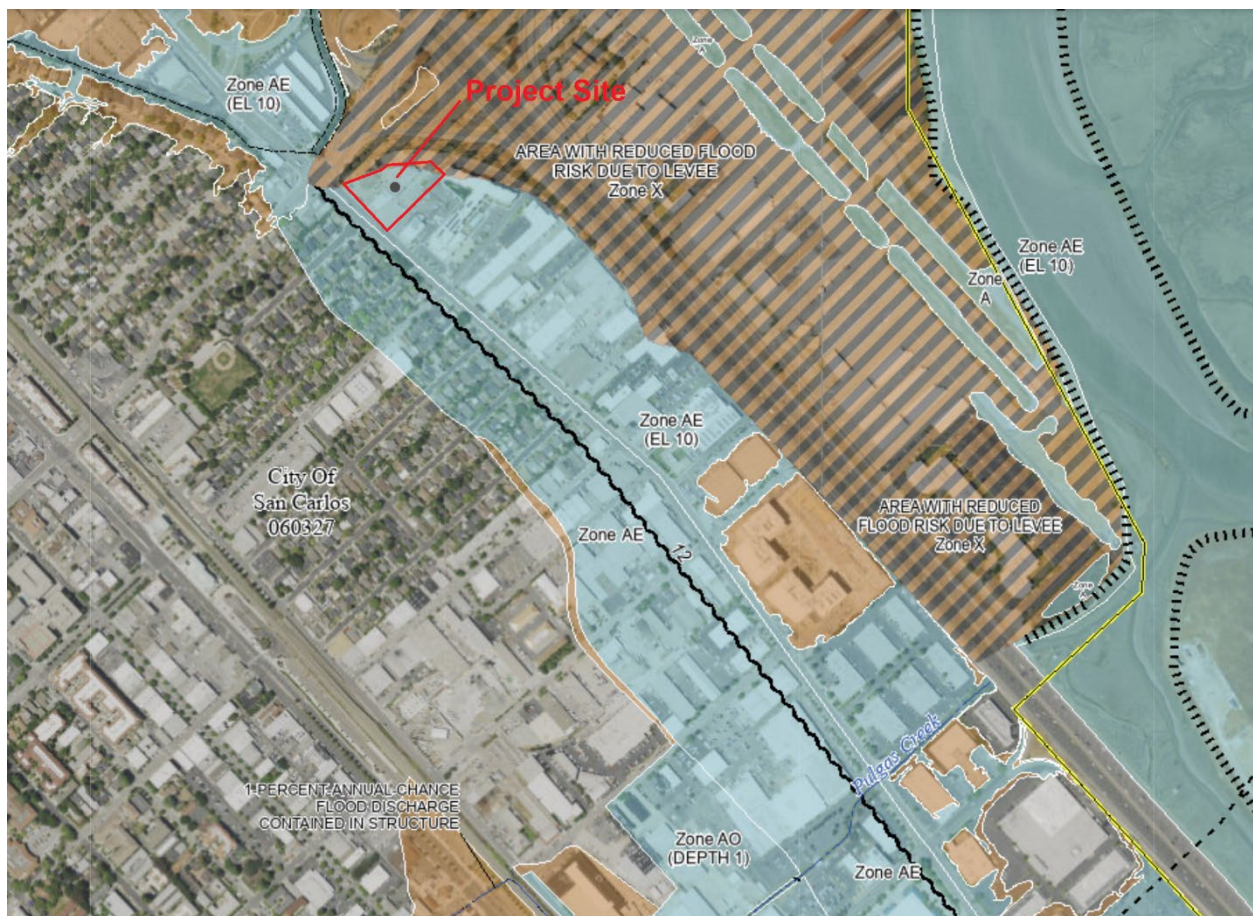


Figure 1. Study Area

Hydraulic Impacts

The proposed buildings and fill are partially within the 100-year FEMA floodplain and subject to City ordinances. Raising a building's foundation and floor elevation with fill is typical in San Mateo County and allowed by the National Flood Insurance Program (NFIP). Furthermore, the buildings can be removed from the FEMA floodplain with a Letter of Map Revision (LOMR-F) once the fill is placed. Buildings outside of Zone A (100-year floodplain) are not required to be elevated.

FEMA has not established a regulatory floodway on Pulgas Creek. This zone was established to preserve the most effective hydraulic conveyance areas by restricting blockages by development. Development outside of the floodway is not subject to the no-rise criteria since these areas do not convey flood flows as effectively as the floodway. Figure 2 is from "Guidance for Flood Risk Analysis and Mapping" (FEMA, 2019) and illustrates the various portions of the floodplain.

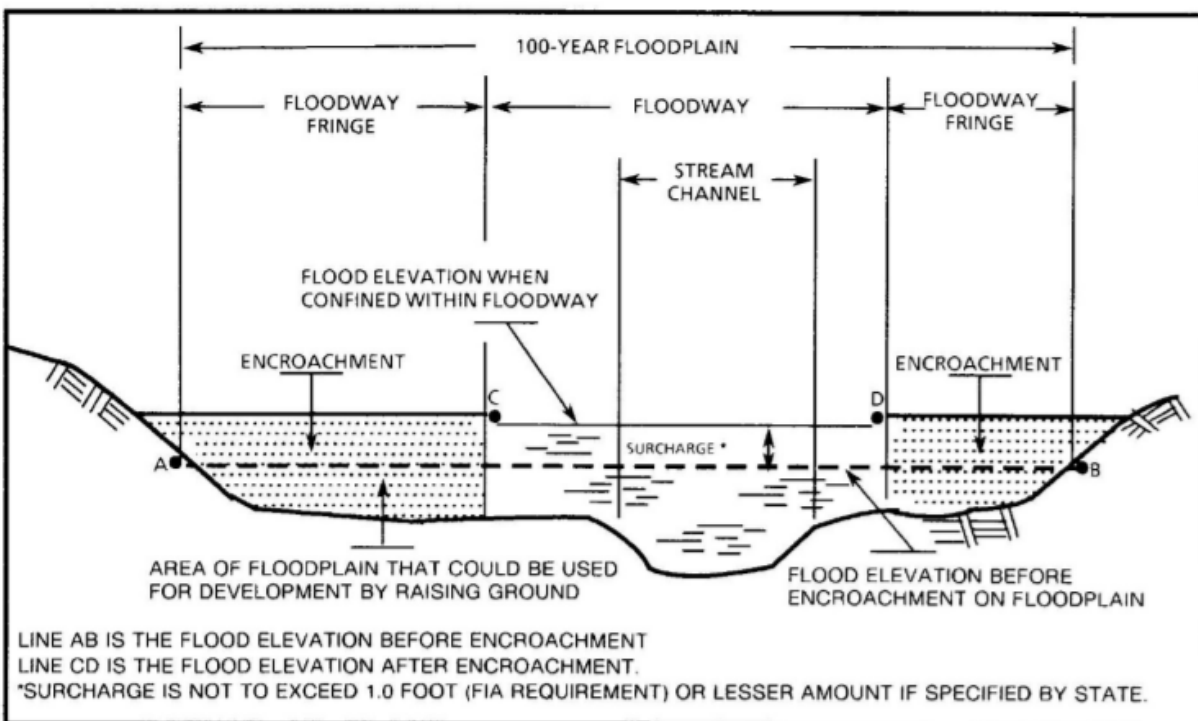


Figure 2. FEMA Cross Section Components

The proposed project is completely outside of the effective flow area of Pulgas Creek. Though this area is inundated by the San Francisco Bay, it does not actively convey water downstream. Therefore, fill from this project does not raise the BFE from the Bay or Pulgas Creek. Figure 2 also illustrates the floodplain and ineffective flow areas. The BFE (10 feet NAVD) for this site is based on 100-year San Francisco Bay tides as shown in Figure 3.

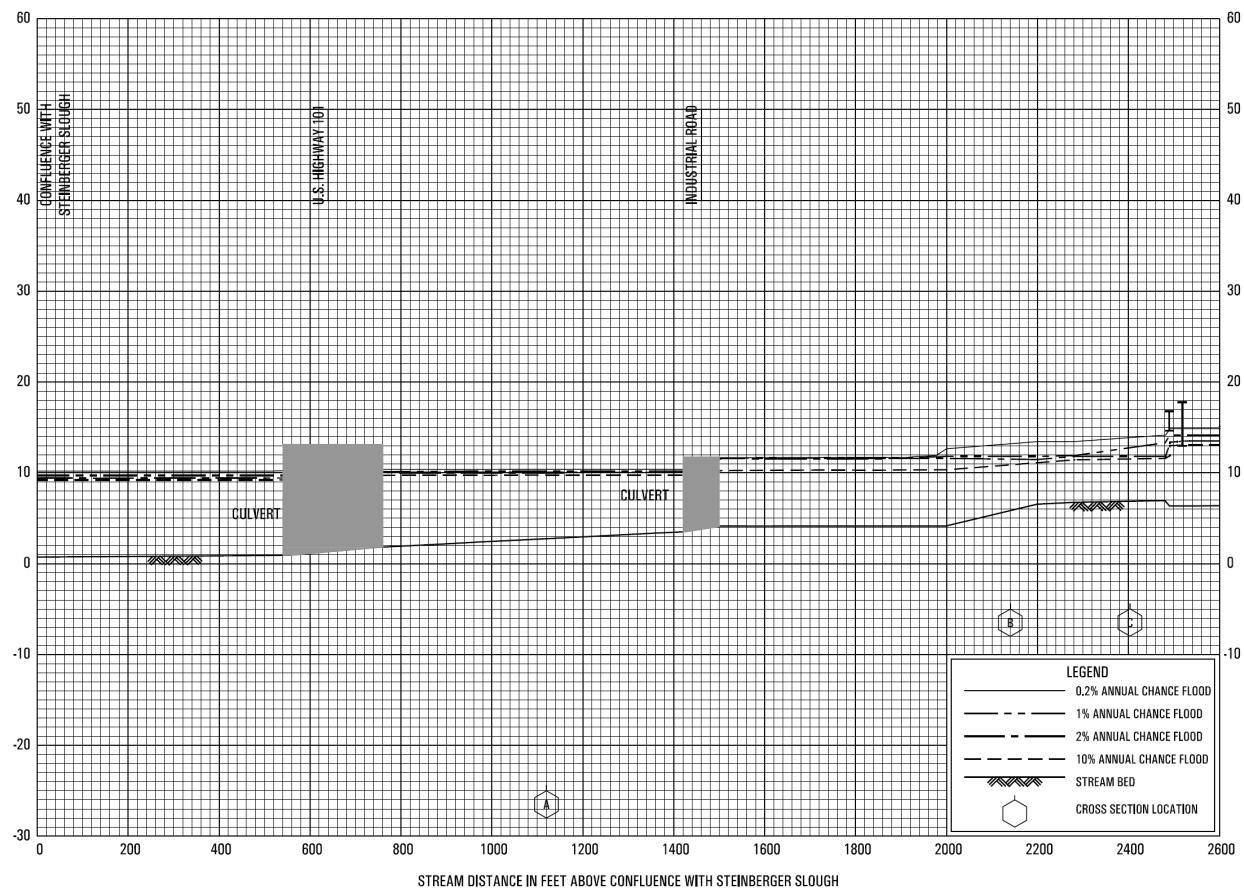


Figure 3. FEMA Profile of Pulgas Creek

Floodplain Storage Impacts

The proposed project would place fill within the effective 100-year floodplain. However, this fill would not displace enough storage volume to have an impact on the San Francisco Bay tides or the Pulgas Creek floodplain.

Conclusion

This memorandum addresses the City's concerns with regards to the proposed project's impacts on the neighboring floodplain. The site is nearly 3,400 feet from the effective flow of Pulgas Creek and would not impact peak water levels in the San Francisco Bay or the Pulgas Creek floodplain. The volume of floodplain fill does not displace enough volume to have a significant impact on the region's hydrology.

FEMA and City policies are designed to prevent development from adversely impacting neighboring properties. If this project adheres to those guidelines and policies, it will not create any additional flood risk to the neighboring or downstream properties.

F 3 :
S T O R M W A T E R M A N A G E M E N T
P L A N

NEW HOTEL DEVELOPMENT

HOTEL INDIGO

**501 Industrial Road
San Carlos, CA 94070**

APN: 046-090-430

Stormwater Management Plan

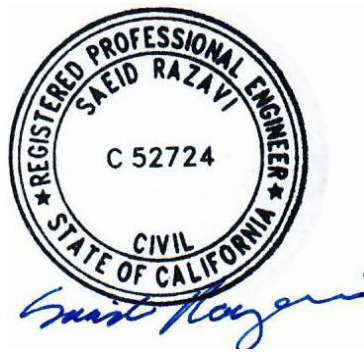
July 14, 2021

Prepared by:

SMP ENGINEERS

1534 Carob Lane

Los Altos, CA 94024



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Appendices

- Appendix A – Vicinity Map
- Appendix B – Existing Condition/Demolition Plan - Sheet C-2
- Appendix C – Site Plan/Preliminary Grading and Drainage Plan – Sheet C-3
- Appendix D – C.3 and C.6 Development Review Checklist
- Appendix
- Appendix E:
 - Table 1 – treatment Control Measures Summary
 - Sheet C-7 – Preliminary Stormwater Control Plan
 - Sheet C-8 – Stormwater Management Plan
 - Sheet C-10 – Erosion Control Plan
 - Sheet C-12 – Construction BMPs

I. Introduction and Project Setting

The following Stormwater Management Plan (SWMP) documents the proposed post-construction Best Management Practices (BMPs) necessary to support the proposed site development, a proposed hotel, Hotel Indigo. The site is located at 501 Industrial Road in San Carlos, California (APN: 046-090-430). The purpose of this SWMP is to outline the proposed preliminary stormwater treatment measures designed to treat runoff from small storm events. The project must comply with the San Mateo Countywide Water Pollution Prevention Program (Program), which requires post-construction stormwater controls under Provision C.3 of the countywide municipal stormwater NPDES permit.

A. Existing Conditions

The subject site is located southwest of Highway 101 at the eastern corner of the intersection of Holly Street and Industrial Road, with a street address of 501 Industrial Road in San Carlos, California. It is located within a commercial and residential area.

See Appendix A – Vicinity Map: Project Site Location.

The region around the site in general has a gentle slope toward the northeast (toward the San Francisco Bay), however; the subject site is relatively level. The site elevations obtained from our site field survey range from 9 to 10 ft above mean sea level, NAVD88 Datum, as depicted on topographic map of the subject site.

The site is an irregular-shaped property with a gross area of land of approximately 2.2 acres. Currently, the subject property is improved with one one-story vacant building that was used as the sales floor for Bayshore Supply and a small stock room. This building is 14,125 square feet in size. There are also two warehouses on the subject property that measure 14,145 and 1,613 square feet. The current buildings are currently unoccupied, but there is still some equipment/supplies in each of the buildings. The subject property is currently being used by Peninsula Hauling & Demo as an equipment yard. The site has limited landscaping and both unpaved and asphalt-paved parking and drive areas. The pavements are in general fair to poor condition.

Runoff from the project existing area flows untreated to the existing 24" RCP storm drain system in Industrial Road on the west side of the property through a system of storm drain inlets and underground pipes. Also, a portion of the runoff from the property flows overland and untreated to the adjacent property along the east corner of the property. The receiving body of water is the San Francisco Bay, through Phelps Slough.

See Appendix B – Existing Condition Plan of the project site.

B. Proposed Conditions

The project proposes to demolish all the existing structures within the subject property and to construct a new multi-story structure of about 27,000 square feet (sf) in plan area for use as a hotel with 188 rooms, a lobby area, and other amenities.

The structure will be surrounded by grade-level parking and landscaped areas. The south wing of the building measuring about 10,000 sf is planned to be 3 stories, while the north wing about 17,000 sf is planned to have 6 stories. Footprint of building at ground level is approximately 32,000 sf, and total of building with roof overhangs and balcony areas is about 35,000 sf.

The structure will consist of a reinforced concrete podium (expected 18 ft. high) on the ground level, with wood-framed construction on the upper stories. A grade level parking (expected concrete pavement) is being below the 6-story portion of the hotel. Other improvements include a court yard, site driveway and at grade parking stalls and landscaping, utilities, concrete flatwork, trash enclosure and a perimeter retaining wall along the southeast and northerly property lines.

See Appendix C – Site Plan/Preliminary Grading and Drainage Plan

In the proposed condition, previously untreated runoff from the site will be directed to new control measures to provide the required water quality treatment. Any runoff overflow will be directed to the existing public storm drain system in Industrial Road through a new storm drain system, inlets, and pipes. The existing pipe connecting the public storm drain system and the site will remain.

See Appendix C - Preliminary Grading and Drainage Plan for proposed post-construction drainage conditions.

In the proposed condition, the project intends to convey runoff areas to bio-retention areas along the north and east property lines as well as some flow-through planters located around the building. These BMPs function as soil and plant-based filtration measures to remove pollutants. Treatment BMPs are sized to treat runoff using flow-based sizing method 2.c.(4% rule). By implementing this design approach through landscape features that utilize the site gravity, the general runoff flow will be away from the proposed building towards the treatment measures.

The proposed project will consist of the following planned impervious and pervious surfaces:

IMPERVIOUS AND PERVIOUS SURFACES

Type of Impervious ⁵ Surface	I.B.1.a	I.B.1.b	I.B.1.c	I.B.1.d	I.B.1.e
	Pre-Project Impervious ⁵ Surface (sq.ft.)	Existing Impervious ⁵ Surface to be Retained ⁶ (sq.ft.)	Existing Impervious ⁵ Surface to be Replaced ⁶ (sq.ft.)	New Impervious ⁵ Surface to be Created ⁵ (sq.ft.)	Post-Project Impervious ⁵ Surface (sq.ft.) (=b+c+d)
Roof area(s)	32878	0	35304	0	35304
Impervious ⁵ sidewalks, patios, paths, driveways, streets	47627	0	33864	3322	37186
Impervious ⁵ uncovered parking ⁷	4006	0	10154	2587	12741
Totals of Impervious Surfaces:	84511	0	79322	5909	85231
I.B.1.f - Total Impervious⁵ Surface Replaced and Created (sum of totals for columns I.B.1.c and I.B.1.d):				85231	
Type of Pervious Surface	Pre-Project Pervious Surface (sq.ft.)				Post-project Pervious Surface (sq.ft.)
Landscaping	6553				5833
Pervious Paving	0				0
Green Roof	0				0
Totals of Pervious Surfaces:	6553				5833
Total Site Area (Total Impervious ⁵ +Total Pervious=I.A.2)	91064				91064

The new development will have slightly larger impervious area which will result in a net increase in the runoff volume leaving the site.

See Appendix D – C.3 and C.6 Development Review Checklist.

Due to the area of land disturbance, the project triggers the implementation of source control measures or permanent best management practices (BMPs), as required under the STOPPP's NPDES. However, according to the San Mateo County C.3 Stormwater Technical Guide, and project location, the site is not subject to Hydromodification Management (HM) measures.

C. Special Design Considerations

The project site is partially located in "Flood Zone X with Levee & AE", Panel No. 06081C0169G.

The following protection measures have been incorporated into the site design:

1. The proposed parking lot and driveway are set at a higher elevation than the adjacent street, Industrial Road. Access from this street to the site will be via a driveway opening and an entry drive with a gentle slope up. The parking lot has an average finish grade

elevation ranging from 9.5 to 10.5 feet which is slightly higher than the existing average elevation by 0.5 feet to 1 foot.

2. All on-site curb & gutters have a maximum overland release flow line elevation of 9.94 feet. The finish floor elevation of living areas has been set at 11.50 feet (top of slab), to protect living areas in case of flooding. The project also proposes the construction of a perimeter site retaining wall along the north property line, facing the freeway on-ramp, and along the southeast property line. This retaining wall will protect the adjacent properties in case of flooding or accidental obstruction of the site's storm drain systems.
3. The project Soil Report indicates a possible presence of contamination of the soil and groundwater. Also, indicates a groundwater depth of 5 to 7 feet below the existing ground at high table. Therefore, an impermeable liner has been placed below the bio-retention areas to avoid infiltration into the possible contaminated ground. Please, refer to the Project Environmental Report for additional information about the possible soil contamination and mitigation measures.

II. Selection and Preliminary Design of Stormwater Treatment BMPs

The SWMP has identified 21 distinct drainage areas (Drainage Management Areas) that will treat the stormwater runoff. These drainage areas have been identified as follows:

Impervious Drainage Management Areas DMA 1 thru DMA 5 are roof areas, they will be treated by TCM 1 thru TCM 5, Flow-Through Planters. TCM 1 and TCM 2 are located on the second-floor balcony, per Detail 3, plan sheet C-8. TCM 4 is located in the courtyard. TCM 3 and TCM 5 are located on landscaped areas between the building and parking stalls/driveway, per Detail 4, plan sheet C-8.

Drainage Management Area DMA 6 is the courtyard landscape/hardscape. It will be treated by TCM 6, adjacent to the courtyard and close to the parking stalls, per Detail 5, plan sheet C-8.

Drainage Management Areas DMA 7 thru DMA 20 are the parking lot/driveway, site walkways, and the site perimeter landscaping. Portions of the building's lower roof, trash enclosure roof, and equipment concrete pads also drain to DMA 7 to DMA 20. This runoff will be treated by TCMs 7 to 20, bio-retention areas located along the perimeter of the site, in landscaped areas between parking stalls and property lines. These bio-retention areas have an impermeable liner at the bottom of the basin. See Detail 6, plan sheet C-8.

DMA 21 is a strip of landscape fronting Industrial Road, with a small ADA walkway connecting the site to the public sidewalk. Its runoff will be treated by interceptor trees along the frontage, TCM 21.

See Appendix E - Table 1 for a Summary of Treatment Control Measures.

See Appendix E - Sheet C-7 for Drainage Management Areas (DMA) and Treatment Control Measures (TCM) location on the project site.

Treatment Control Measures (TCM) – Flow Through Planter and Bio-Retention Areas

Runoff from the building roofs, balconies, decks and at-grade hardscape will be directed to 5 separate flow-through planters (TCM). These are level areas contained within a planter box, open, installed adjacent to the buildings and with a relative small footprint. The flow-through planters contain vegetation that allows the stormwater runoff to be distributed evenly across the area of the planter.

See Appendix E, Sheet C-8, Detail 3 for Flow-Through Planters above grade or above podium. The sizing method is flow-based with a required treatment area equal to 4% of the effective impervious areas of the drainage area.

See Appendix E, Sheet C-8, Detail 4 for Flow-Through Planters below grade or at ground level. The sizing method is a combination flow and volume based.

Bio-retention areas, or “rain gardens,” function as soil and plant-based filtration measures that removes pollutants through a variety of physical, biological and chemical treatment processes. See Appendix E, Sheet C-8, Details 5 and 6 for Bio-Retention Basins proposed in this project.

Refer to Section 6.1 of the San Mateo Countywide Water Pollution Prevention Program for additional information.

Stormwater Treatment Area Sizing Summary

Notes

- (1) Sizing guideline for Flow based treatment is 4% per County of San Mateo standards.
- (2) 0.04 Sizing Factor based on 0.2 in/hour rainfall intensity divided by 5 in/hour soil infiltration rate.
- (3) 0.04 Sizing Factor based on effective impervious areas. Use 0.1 factor to convert pervious landscaped areas to equivalent impervious areas.

III. Selected Method of Design for Treatment Facilities

Different types of development result in different type of stormwater pollution. To effectively protect water quality, the BMP(s) selected for a project must treat each of the project's identified pollutant. The following is a list of potential pollutants for the proposed residential project:

- Sediment/Turbidity: Drainage systems can tolerate a certain amount of sediment, since sediment transport occurs naturally, but excessive sediment resulting from construction, irrigation, and disturbed drainage patterns can reduce water quality and impact the health of aquatic organisms.
 - Oil and Equipment Fluids: Any stationary or mobile equipment or vehicle located where rain or surface runoff can wash oil, fuel, grease, antifreeze, and transmission fluid into the storm drain system is a potential source of pollution.
 - Nutrients: Phosphorous, nitrogen, and other plant nutrients are generated naturally due to organic activities in the soil, biological and chemical decomposition, etc. Streams and other natural channels have a limited ability to moderate and adjust to large amounts of manmade nutrients such as fertilizers.
 - Pesticides: Herbicides, insecticides and rodenticides (collectively termed pesticides) are commonly used on lawns, yards, landscaped areas, etc. Unnecessary, excessive, or improper application of these pesticides may result in direct stormwater contamination.
 - Trash and Debris: Floatable waste materials have the potential to be easily carried downstream. Floatable waste materials will often clog drainage structures, and should be prevented from reaching the stormwater drainage system. This project proposes the use of inlet filter inserts on all storm drain inlets and area drains the eliminate/minimize the potential contamination.
- a. Method of treatment used: The proposed project will include flow-through planters and bio-retention areas throughout the project.
 - b. Numeric sizing calculation: See project plans for sizing calculations
 - c. Landscape treatment facilities used:
 - i. Content of amended soils. Bio-treatment soil shall consist of 60%-70% sand and 30%-40% Compost.
 - ii. Plant List and Planting Guidance for Landscape-Based Stormwater Measures

Refer to the San Mateo County Water Pollution Prevention Program, C.3 Regulated Projects Guide, Appendix A, dated January 2020.

Plants play an important role in the function of landscape-based stormwater treatment measures:

- Infiltration and evapotranspiration. Plants aid in the reduction of stormwater runoff by both increasing infiltration, and by returning water to the atmosphere through evapotranspiration.
- Pollutant trapping. Vegetation helps to prevent the resuspension of pollutants associated with sediment particles. It is essential that pollutants removed during small storms are not remobilized during large storms.
- Phytoremediation. Plants for stormwater treatment measures are important for their role in phytoremediation, the uptake of nutrients and the ability to neutralize pollutants.
- Soil stabilization. As in any landscaped area, established plantings help control soil erosion. This is important both to keep sediment out of stormwater and to retain the surface soils, which help to remove pollutants from infiltrated runoff.
- Aesthetic benefits. Plants within or adjacent to stormwater facilities provide an aesthetic benefit. Plants suitable for use in stormwater treatment measures are organized according to the following categories:
 - Grasses refer to those species that are monocotyledonous plants with slender-leaved herbage found in the in the Family Poaceae.
 - Perennials and groundcovers are typically herbaceous plants with soft upper growth rather than woody growth. Some species will die back to the roots at the end of the growing season and grow again at the start of the next season.
 - Shrub is a horticultural distinction that refers to those species of woody plants which are distinguished from trees by their multiple stems and lower height. A large number of plants can be either shrubs or trees, depending on the growing conditions they experience.
 - Tree refers to those species of woody plants with one main trunk and a rather distinct and elevated head. Plants suitable for use in stormwater treatment measures are listed in the San Mateo County C.3 Regulated Projects Guide, Appendix A, Table A-1.

iii. Ways to limit irrigation and pesticide use

Drip irrigation is used throughout the site. The 85% efficiency of subsurface drip irrigation is a 35-50% reduction in water-use compared to traditional overhead irrigation with an efficiency of 50-65% due to evapotranspiration, wind and distribution uniformity. A pallet of low water-use and drought tolerant plants limit the need for irrigation. The native plant materials are also more resistant to pests and diseases, lessening the pesticide use on-site. A 3" mulch layer will reduce the amount of weed herbicide used, as well as maintenance.

IV. Source Control Measures

The project will incorporate all applicable source control measures as required by the City of San Carlos and County of San Mateo. Best Management Practices (BMPs) that will be implemented to further reduce the potential for pollutants to enter runoff or the storm drain system include but are not limited to the following:

Potential Source	Permanent BMPS	Operational BMPs
On-site drain inlets.	Inlets that could be accessed from sidewalks and driveways will be marked with A “ No dumping - Drains to Creek ” or similar message.	• Inlet markings will be inspected annually and replaced or renewed as needed. • Drain Inlets and related structures will be inspected and maintained as specified in the BMP Operation and Maintenance Plan (to be developed and submitted for approval).
Interior parking garages (in residential areas).	Any floor drains in covered parking areas are to be plumbed to the sanitary sewer.	Drains will be periodically inspected to avoid blockages and overflow.
Need for future indoor and structural pest control.	Standard building design minimizes potential needs for future pest control.	Residents will receive integrated pest management information.
Vehicle and equipment cleaning	Vehicle and equipment cleaning areas are not planned for this site.	No car washing will be permitted on-site.
Fire sprinkler test water	Fire sprinkler test valves will be equipped with a means to divert test water to the sanitary sewer.	

Landscape/outdoor pesticide use.	- Any native trees, shrubs, and ground cover on the site will be preserved to the maximum extent possible. - Landscaping will be designed to minimize required irrigation and runoff, to promote surface infiltration, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. - Where possible, pest-resistant plants will be selected, especially for locations adjacent to hardscape. - Plants will be selected appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	- All open space landscaping is to be maintained by a professional landscaping contractor. - Residents will receive integrated pest management information.
Restaurant in Building and any future tenants providing food service.	All facilities approved for food service uses will be required to have interior map sink suitably sized for washing any floor mats, containers, or equipment per City of San Carlos use permit requirements	Lessees will receive brochure regarding water pollution prevention tips and food service facility.
Refuse areas	- Site refuse and recycled materials areas will be sized and detailed per the City of San Carlos requirements. - Other refuse areas to be indoors, floors will be sloped to prevent drainage to exterior. Any floor drains must connect to sanitary sewer. - Any and all dumpsters (if applicable) will be marked with a do not dump hazardous materials here or similar.	- Receptacles shall remain covered and be inspected regularly for leaks. Leaks shall be repaired. - Spills will be cleaned up using dry methods

V. **BMP Operation and Maintenance**

Proper maintenance and operation of stormwater treatment facilities will be the responsibility of the ownership group. All necessary operation and maintenance agreements will be established between the City and the owner prior to issuance of building permits.

Flow-Through Planter Maintenance Plan for
501 Industrial Rd., San Carlos, CA – Hotel Indigo
6/11/2021



Flow-through planters are designed to treat and temporarily detain runoff without allowing seepage into the underlying soil. They typically receive runoff via downspouts leading from the roofs of adjacent buildings.

Project Address and Cross Streets:

501 Industrial Rd., San Carlos, CA.

Cross St.: Holly Street

Assessor's Parcel No. 046-090-430

Property Owner: HOLLY HOTEL GROUP, LLC

Phone No.: (415) 341-4098

Designated Contact: E. C. Liu

Mailing Address:

Holly Hotel Group, LLC

991 West Hedding St.,

San Jose, CA 95126

The property contains 5 flow-through planters, located as described below:

- **Flow-Through Planter No. TCM 1** is located at 2nd floor balcony.
- **Flow-Through Planter No. TCM 2** is located at 2nd floor balcony.
- **Flow-Through Planter No. TCM 3** is located on landscaped area.
- **Flow-Through Planter No. TCM 4** is located in courtyard.
- **Flow-Through Planter No. TCM 5** is located on landscaped area.

I. Routine Maintenance Activities

The principal maintenance objectives are to ensure that water flows unimpeded into the flow-through planter and landscaping remains attractive in appearance. Table 1 shows the routine maintenance activities, and the frequency at which they will be conducted.

Table A Routine Maintenance Activities for Flow-Through Planters		
No.	Maintenance Task	Frequency of Task
1	Evaluate health of trees and groundcover. Remove and replace all dead and diseased vegetation.	Twice a year
2	Maintain vegetation and the irrigation system. Prune and weed to keep flow-through planter neat and orderly in appearance.	As needed
3	Check that mulch is 3" deep and replenish as necessary. It is recommended that composted arbor mulch be applied once per year to maintain the 3" depth in all bare soil areas except within six inches of tree trunks.	As needed
4	Check that soil is at appropriate depth. Till or replace soil with the approved biotreatment soil mix as necessary to maintain a minimum of 6 inches between top of mulch and overflow weir.	Before wet season and as necessary
5	Remove accumulated sediment, litter and debris from flow-through planter and dispose of properly. Confirm that no clogging will occur and that the box will drain within three to four hours.	Before wet season and as necessary
6	Inspect flow-through planter to ensure that there are no clogs. Test with garden hose to confirm that the planter will drain within three to four hours.	Monthly during the wet season, and as needed after storm events
7	Inspect downspouts from rooftops and sheet flow from paved areas to ensure flow to planter box is unimpeded. Remove debris and repair damaged pipes. Check splash blocks or rocks and repair, replace and replenish as necessary.	Monthly during the wet season, and as needed after storm events
8	Inspect overflow pipe to ensure that it will safely convey excess flows to storm drain. Repair or replace any damaged or disconnected piping.	Before the wet season, and as necessary
9	Inspect flow-through planter to ensure that box is structurally sound (no cracks or leaks). Repair as necessary.	Annually
10	Inspect flow-through planter using the attached inspection checklist.	Monthly, or after large storm events, and after removal of accumulated debris or material

II. Prohibitions

Do not use pesticides or other chemical applications to treat diseased plants, control weeds or removed unwanted growth. Employ non-chemical controls (biological, physical and cultural controls) to treat a pest problem. Prune plants properly and at the appropriate time of year. Provide adequate irrigation for landscape plants. Do not over water.

III. Mosquito Abatement

Standing water shall not remain in the treatment measures for more than five days, to prevent mosquito generation. Should any mosquito issues arise, contact the San Mateo County Mosquito Abatement District (SMCMAD), as needed for assistance. Mosquito larvicides shall be applied only when absolutely necessary, as indicated by the SMCMAD, and then only by a licensed professional or contractor. Contact information for SMCMAD is provided below.

San Mateo County Mosquito Abatement District
1351 Rollins Road
Burlingame, CA 94010
PH: (650) 344-8592
FAX: (650) 344-3843
[Email: info@smcmad.org](mailto:info@smcmad.org)

IV. Inspections

The attached Flow-Through Planter Inspection and Maintenance Checklist shall be used to conduct inspections monthly (or as needed), identify needed maintenance, and record maintenance that is conducted.

1351 Rollins Road
Burlingame, CA 94010
PH: (650) 344-8592
FAX: (650) 344-3843
[Email: info@smcmad.org](mailto:info@smcmad.org)

Flow-Through Planter Inspection and Maintenance Checklist

Property Address: _____ Property Owner: _____

Treatment Measure No.: __ Date of Inspection: _____ Type of Inspection: ☐ Monthly ☐ Pre-Wet Season ☐ After heavy runoff ☐ End of Wet Season
Inspector(s): _____ ☐ Other: _____

Defect	Conditions When Maintenance Is Needed	Maintenance Needed? (Y/N)	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)	Results Expected When Maintenance Is Performed
1. Vegetation	Vegetation is dead, diseased and/or overgrown.			Vegetation is healthy and attractive in appearance.
2. Soil	Soil too deep or too shallow.			Soil is at proper depth (per soil specifications) for optimum filtration and flow.
3. Mulch	Mulch is missing or patchy in appearance. Areas of bare earth are exposed, or mulch layer is less than 3 inches in depth.			All bare earth is covered, except mulch is kept 6 inches away from trunks of trees and shrubs. Mulch is even in appearance, at a depth of 3 inches.
4. Sediment, Trash and Debris Accumulation	Sediment, trash and debris accumulated in the flow-through planter. Planter does not drain as specified.			Sediment, trash and debris removed from flow-through planter and disposed of properly. Planter drains within 3-4 hours.
5. Clogs	Soil too deep or too shallow. Sediment, trash and debris accumulated in the flow-through planter. Planter does not drain within five days after rainfall.			Planter drains per design specifications.
6. Downspouts and Sheet Flow	Flow to planter is impeded. Downspouts are clogged or pipes are damaged. Splash blocks and rocks in need of repair, replacement or replenishment.			Downspouts and sheet flow is conveyed efficiently to the planter.
7. Overflow Pipe	Does not safely convey excess flows to storm drain. Piping damaged or disconnected.			Overflow pipe conveys excess flow to storm drain efficiently.
8. Structural Soundness	Planter is cracked, leaking or falling apart.			Cracks and leaks are repaired and planter is structurally sound.
9. Miscellaneous	Any condition not covered above that needs attention in order for the flow-through planter to function as designed.			Meet the design specifications.

Bioretention Area Maintenance Plan for 501 Industrial Rd., San Carlos, CA – Hotel Indigo

6/11/2021



Bioretention areas function as soil and plant-based filtration devices that remove pollutants through a variety of physical, biological, and chemical treatment processes. These facilities normally consist of a ponding area, mulch layer, vegetation and biotreatment soil mix.

Project Address and Cross Streets:

501 Industrial Rd., San Carlos, CA,

Cross St.: Holly Street

Assessor's Parcel No. 046-090-430

Property Owner: HOLLY HOTEL GROUP, LLC

Phone No.: (415) 341-4098

Designated Contact: E. C. Liu

Mailing Address:

Holly Hotel Group, LLC

991 West Hedding St., San Jose, CA 95126

The property contains 15 bioretention areas, located as described below and as shown in the attached site plan, Appendix C.

- **Bioretention Area No. TCM 6** is located adjacent to the courtyard and close to the parking stalls.
- **Bioretention Areas No. TCM 7 to TCM 20** are located along the perimeter of the site, in landscaped areas between parking stalls and property lines. These bio-retention areas have an impermeable liner at the bottom of the basin

I. Routine Maintenance Activities

The principal maintenance objective is to prevent sediment buildup and clogging, which reduces pollutant removal efficiency and may lead to bioretention area failure. Routine maintenance activities, and the frequency at which they will be conducted, are shown in Table B.

Table B Routine Maintenance Activities for Bioretention Areas		
No.	Maintenance Task	Frequency of Task
1	Remove obstructions, debris and trash from bioretention area and dispose of properly.	Monthly, or as needed after storm events
2	Inspect bioretention area to ensure that it drains between storms and within five days after rainfall. If ponded water does not drain within five days, check if drains are clogged or consider removing the surface biotreatment soil and replacing with the approved soil mix and replant	Monthly, or as needed after storm events

Table B Routine Maintenance Activities for Bioretention Areas		
3	Inspect inlets for channels, soil exposure or other evidence of erosion. Clear obstructions and remove sediment.	Monthly, or as needed after storm events
4	Remove and replace all dead and diseased vegetation.	Twice a year
5	Maintain vegetation and the irrigation system. Prune and weed to keep bioretention area neat and orderly in appearance.	Before wet season begins, or as needed
6	Inspect and, if needed, add mulch before the wet season begins. It is recommended that composted arbor mulch be applied once a year to maintain a 3" depth of mulch over all bare soil areas except within six inches of tree trunks.	Before wet season begins, or as needed
7	Inspect bioretention area using the attached inspection checklist.	Monthly, or after large storm events, and after removal of accumulated debris or material

II. Prohibitions

Do not use pesticides or other chemical applications to treat diseased plants, control weeds or removed unwanted growth. Employ non-chemical controls (biological, physical and cultural controls) to treat a pest problem. Prune plants properly and at the appropriate time of year. Provide adequate irrigation for landscape plants. Do not over water.

III. Mosquito Abatement

Standing water should not remain in the treatment measures for more than five days, to prevent mosquito generation. Should any mosquito issues arise, contact the San Mateo County Mosquito Abatement District (SMCMAD), as needed for assistance. Mosquito larvicides should be applied only when absolutely necessary, as indicated by the SMCMAD, and then only by a licensed professional or contractor. Contact information for SMCMAD is provided below.

San Mateo County Mosquito Abatement District
 1351 Rollins Road
 Burlingame, CA 94010
 PH: (650) 344-8592
 FAX: (650) 344-3843
[Email: info@smcmad.org](mailto:info@smcmad.org)

IV. Inspections

The attached Bioretention Area Inspection and Maintenance Checklist should be used to conduct inspections monthly (or as needed), identify needed maintenance, and record maintenance that is conducted.

Bioretention Area Inspection and Maintenance Checklist

Property Address: _____

Property Owner: _____

Treatment Measure No.: _____ Date of Inspection: _____ Type of Inspection: ☐ Monthly ☐ Pre-Wet Season
☐ After heavy runoff ☐ End of Wet Season
☐ Other: _____

Inspector(s): _____

Defect	Conditions When Maintenance Is Needed	Maintenance Needed? (Y/N)	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)	Results Expected When Maintenance Is Performed
1. Standing Water	When water stands in the bioretention area between storms and does not drain within five days after rainfall.			There should be no areas of standing water once inflow has ceased. Any of the following may apply: sediment or trash blockages removed, improved grade from head to foot of bioretention area, or added underdrains.
2. Trash and Debris Accumulation	Trash and debris accumulated in the bioretention area.			Trash and debris removed from bioretention area and disposed of properly.
3. Sediment	Evidence of sedimentation in bioretention area.			Material removed so that there is no clogging or blockage. Material is disposed of properly.
4. Erosion	Channels have formed around inlets, there are areas of bare soil, and/or other evidence of erosion.			Obstructions and sediment removed so that water flows freely and disperses over a wide area. Obstructions and sediment are disposed of properly.
5. Vegetation	Vegetation is dead, diseased and/or overgrown.			Vegetation is healthy and attractive in appearance.
6. Mulch	Mulch is missing or patchy in appearance. Areas of bare earth are exposed, or mulch layer is less than 3 inches in depth.			All bare earth is covered, except mulch is kept 6 inches away from trunks of trees and shrubs. Mulch is even in appearance, at a depth of 3 inches.
7. Miscellaneous	Any condition not covered above that needs attention in order for the bioretention area to function as designed.			Meet the design specifications.

VI. Certification

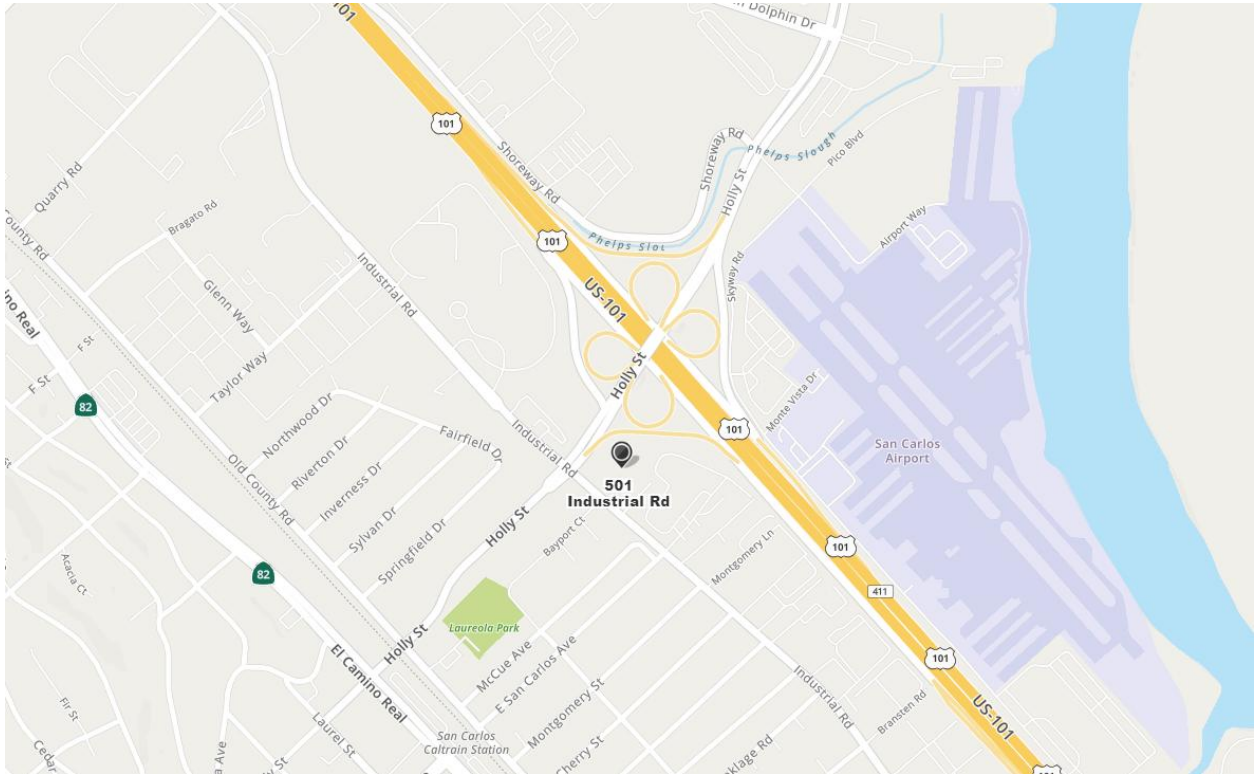
Engineer's Certification

I certify that all stormwater treatment Best Management Practices described in this Stormwater Management Plan have been designed to meet the City of San Carlos and County of San Mateo's stormwater quality requirements. This document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted.

Signature:

Civil Engineer: Saeid Razavi
 SMP ENGINEERS
 RCE 52724

APPENDIX A – VICINITY MAP



501 INDUSTRIAL ROAD
SAN CARLOS, CA 94070

APPENDIX B

SHEET C-2: EXISTING CONDITION PLAN/ DEMOLITION PLAN

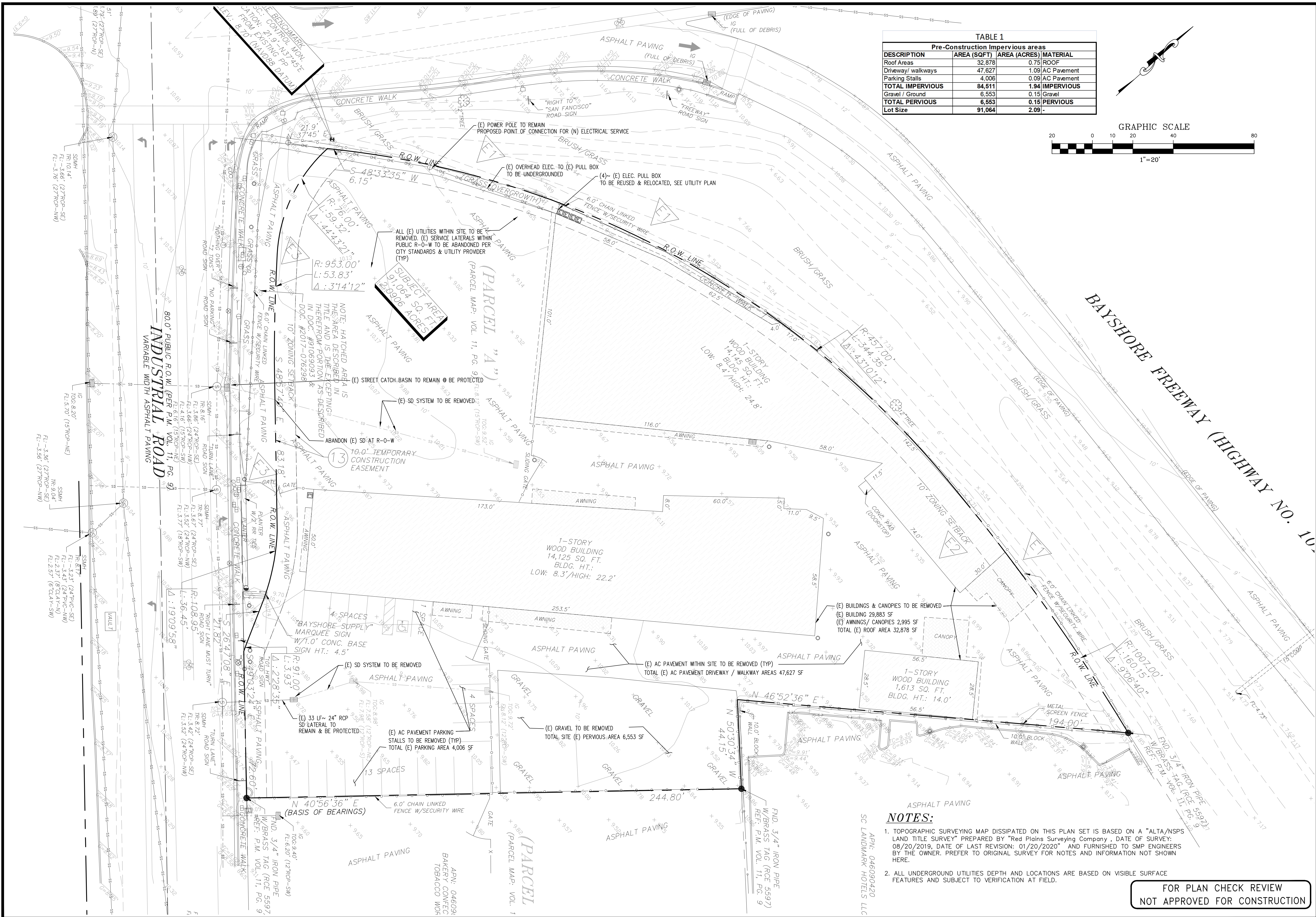
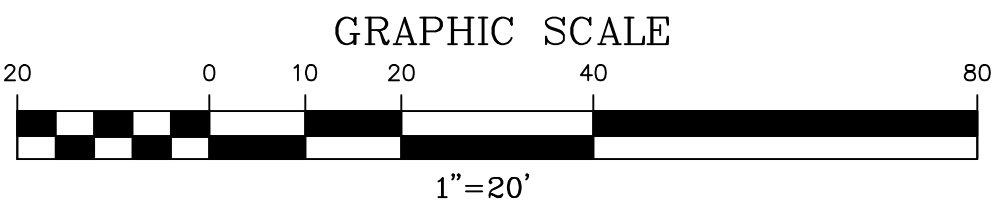


TABLE 1 Pre-Construction Impervious areas			
DESCRIPTION	AREA (SQFT)	AREA (ACRES)	MATERIAL
Roof Areas	32,878	0.75	ROOF
Driveway/ walkways	47,627	1.09	AC Pavement
Parking Stalls	4,006	0.09	AC Pavement
TOTAL IMPERVIOUS	84,511	1.94	IMPERVIOUS
Gravel / Ground	6,553	0.15	Gravel
TOTAL PERVIOUS	6,553	0.15	PERVIOUS
Lot Size	91,064	2.09	-



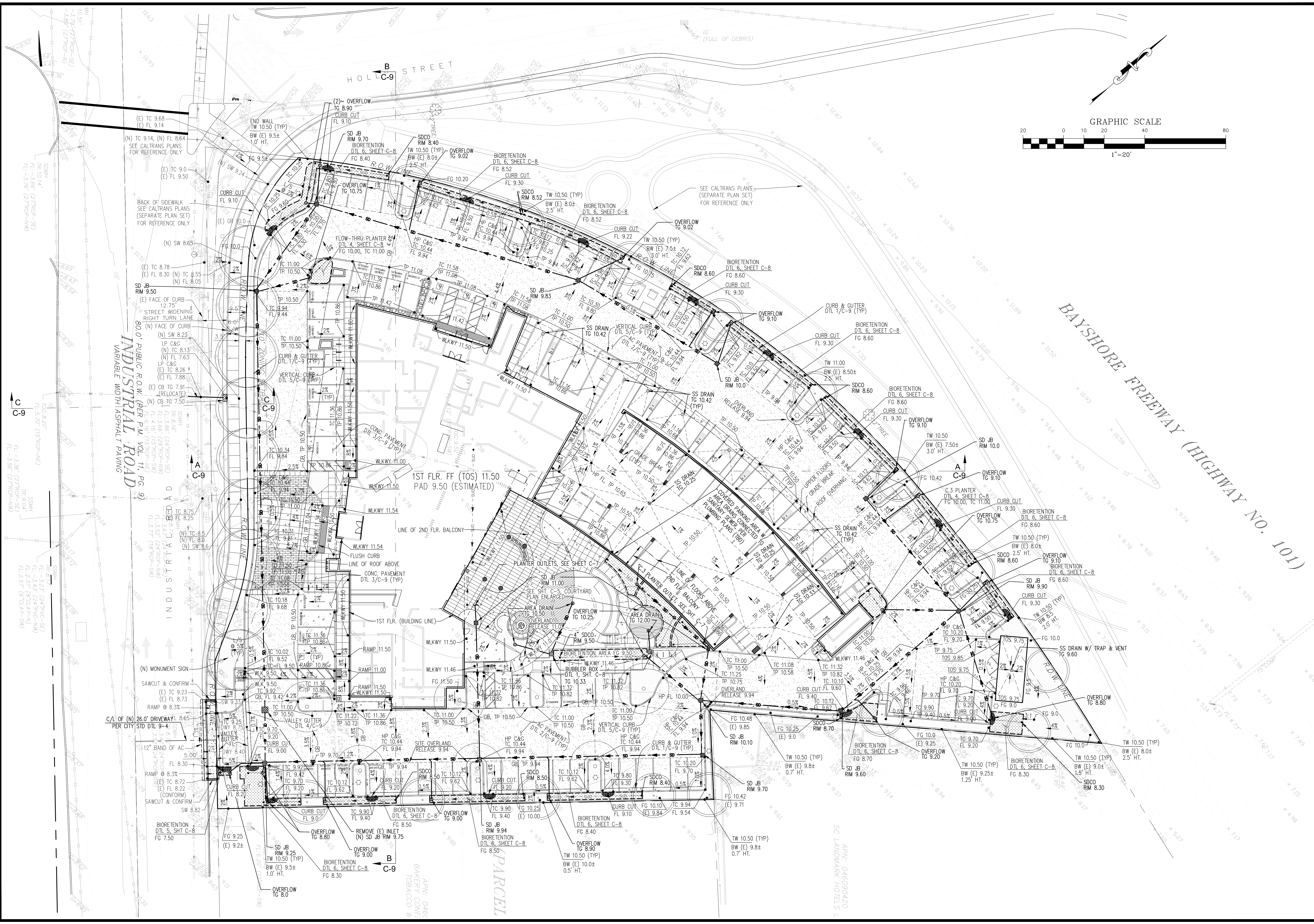
NOTES:

1. TOPOGRAPHIC SURVEYING MAP DISSIPATED ON THIS PLAN SET IS BASED ON A "ALTA/NSPS LAND TITLE SURVEY" PREPARED BY "Red Plains Surveying Company", DATE OF SURVEY: 08/20/2019, DATE OF LAST REVISION: 01/20/2020" AND FURNISHED TO SMP ENGINEERS BY THE OWNER. PREFER TO ORIGINAL SURVEY FOR NOTES AND INFORMATION NOT SHOWN HERE.
2. ALL UNDERGROUND UTILITIES DEPTH AND LOCATIONS ARE BASED ON VISIBLE SURFACE FEATURES AND SUBJECT TO VERIFICATION AT FIELD.

FOR PLAN CHECK REVIEW
NOT APPROVED FOR CONSTRUCTION

APPENDIX C

SHEET 3 - SITE PLAN/ PRELIMINARY GRADING AND DRAINAGE PLAN



ENGINEERS
CIVIL ENGINEERS

1534 CAROL LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
FAX: (650) 941-8755

OWNER/ DEVELOPER:
Holly Hotel Group, LLC
991 W. Hedding Street,
Suite 103
San Jose, California 95126

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SMP ENGINEERS
CIVIL ENGINEERS

PRELIMINARY IMPROVEMENT PLANS
FOR PROPOSED HOTEL INDIGO
Planning Submittal 10-09-2020
501 INDUSTRIAL ROAD, SAN CARLOS, CA 94070
PRELIMINARY GRADING AND DRAINAGE PLAN

Revisions:



Date: 7/14/2021
Scale: 1" = 20'
Prepared by: V.G.
Checked by: S.R.
Job #: 220007

APPENDIX D

C.3 AND C.6 DEVELOPMENT REVIEW CHECKLIST

C.3 and C.6 Development Review Checklist

Municipal Regional Stormwater Permit (MRP)
Stormwater Controls for Development Projects

Applicants: This form should be filled out by the Project Civil Engineer, if one is associated with the project.

Project Information

I.A Enter Project Data (For "C.3 Regulated Projects," data will be reported in the municipality's stormwater Annual Report.)

Project Name: HOTEL INDIGO Case Number: _____

Project Address & Cross St.: 501 INDUSTRIAL ROAD, SAN CARLOS, CA 94070 Cross St.: HOLLY ST.

Project APN: 046-090-430 Project Watershed: PHELPS SLOUGH, FOLLOWS TO BAY

Applicant Name: E.C. LIU I.A.4 Slope on Site: 4 %

Applicant Phone: (408) 244 0802 Applicant Email Address: EC.LIU@FAUSTUSCAPITAL.COM

- Development type: (check all that apply)
- ☐ Single Family Residential: A stand-alone home that is not part of a larger project.
- ☐ Single Family Residential: Two or more lot residential development.¹ # of units: _____
- ☐ Multi-Family Residential # of units: _____
- ☒ Commercial
- ☐ Industrial, Manufacturing
- ☐ Mixed-Use # of units: _____
- ☐ Streets, Roads², etc.
- ☒ 'Redevelopment' as defined by MRP: creating, adding and/or replacing exterior existing impervious surface on a site where past development has occurred.
- ☐ 'Special land use categories' as defined by MRP: (1) auto service facilities³, (2) retail gasoline outlets, (3) restaurants, (4) uncovered parking area (stand-alone or part of a larger project)
- ☐ Institutions: schools, libraries, jails, etc.
- ☐ Parks and trails, camp grounds, other recreational
- ☐ Agricultural, wineries
- ☐ Kennels, Ranches
- ☐ Other, Please specify _____

I.A.1

Project Description⁴: Remove existing Commercial use Buildings on a 2.09 Acres land and construct new Hotel building and it's site improvements.

(Also note any past or future phases of the project.)

I.A.2 Total Area of Site: 2.09 acres

I.A.3 Total Area of land disturbed during construction (include clearing, grading, excavating and stockpile area): 2.09 acres.

I.A.5 Certification:

Name of person completing the form: Saied Razavi, PE. Title: Project Engineer

Phone number: (650) 941-8055 Email address: srazavi@smpengineers.com

- ☒ By checking this box, I certify that the information provided on this form is correct and acknowledge that, should the project exceed the amount of new and/or replaced impervious surface provided in this form, the as-built project may be subject to additional improvements. Initials: S.R. Date: 5/20/2021

I have attached the following: ☐ Preliminary Calculations ☐ Final Calculations ☒ A copy of site plan showing areas

¹ Common Plans of Development (subdivisions or contiguous, commonly owned lots, for the construction of two or more homes developed within 1 year of each other) are not considered single family projects by the MRP.

² Roadway projects creating 10,000 sq.ft. or more of contiguous impervious surface are subject to C.3 requirements if the roadway is new or being widened with additional traffic lanes.

³ See Standard Industrial Classification (SIC) codes [here](#)

⁴ Project description examples: 5-story office building, industrial warehouse, residential with five 4-story buildings for 200 condominiums, etc.

I.B Is the project a “C.3 Regulated Project” per MRP Provision C.3.b?**I.B.1 Enter the amount of impervious surface⁵ Retained, Replaced and/or Created by the project:****Table I.B.1 Impervious⁵ and Pervious Surfaces**

Type of Impervious ⁵ Surface	I.B.1.a	I.B.1.b	I.B.1.c	I.B.1.d	I.B.1.e
	Pre-Project Impervious ⁵ Surface (sq.ft.)	Existing Impervious ⁵ Surface to be Retained ⁶ (sq.ft.)	Existing Impervious ⁵ Surface to be Replaced ⁶ (sq.ft.)	New Impervious ⁵ Surface to be Created ⁶ (sq.ft.)	Post-Project Impervious ⁵ Surface (sq.ft.) (=b+c+d)
Roof area(s)	32878	0	35304	0	35304
Impervious ⁵ sidewalks, patios, paths, driveways, streets	47627	0	33864	3322	37186
Impervious ⁵ uncovered parking ⁷	4006	0	10154	2587	12741
Totals of Impervious Surfaces:	84511	0	79322	5909	85231
I.B.1.f - Total Impervious⁵ Surface Replaced and Created (sum of totals for columns I.B.1.c and I.B.1.d):				85231	
Type of Pervious Surface	Pre-Project Pervious Surface (sq.ft.)				Post-project Pervious Surface (sq.ft.)
Landscaping	6553				5833
Pervious Paving	0				I.B.1.e.1: 0
Green Roof	0				0
Totals of Pervious Surfaces:	6553				5833
Total Site Area (Total Impervious ⁵ +Total Pervious=I.A.2)	91064				91064

I.B.2 Please review and attach additional worksheets as required below using the Total Impervious Surface (IS) Replaced and Created in cell I.B.1.f from Table I.B.1 above and other factors:

	Check all that apply:	Check One		Attach Worksheet
		Yes	No	
I.B.2.a	Does this project involve any earthwork? If YES, then Check Yes, and Complete Worksheet A. If NO, then go to I.B.2.b	☒	☐	A
I.B.2.b	Is I.B.1.f greater than or equal to 2,500 sq.ft? If YES, then the Project is subject to Provision C.3.i. - complete Worksheets B, C & go to I.B.2.c. If NO, then Stop here - go to I.A.5 and complete Certification.	☒	☐	B, C
I.B.2.c	Is the total Existing IS to be Replaced (column I.B.1.c) 50 percent or more of the total Pre-Project IS (column I.B.1.a)? If YES, site design, source control and treatment requirements apply to the whole site. Continue to I.B.2.d If NO, these requirements apply only to the impervious surface created and/or replaced. Continue to I.B.2.d	☒	☐	
I.B.2.d	Is this project a Special Land Use Category (I.A.1) and is I.B.1.f greater than or equal to 5,000 sq.ft? If YES, project is a Regulated Project. Fill out Worksheet D. Go to I.B.2.f. If NO, go to I.B.2.e	☐	☒	D
I.B.2.e	Is I.B.1.f greater than or equal to 10,000 sq.ft? If YES, project is a C.3 Regulated Project - complete Worksheet D. Then continue to I.B.2.f. If NO, then skip to I.B.2.g.	☒	☐	D
I.B.2.f	Is I.B.1.f greater than or equal to 43,560 sq.ft? If YES, project may be subject to Hydromodification Management requirements - complete Worksheet E then continue to I.B.2.g. If NO, then go to I.B.2.g.	☒	☐	E
I.B.2.g	Is I.A.3 greater than or equal to 1 acre? If YES, check box, obtain coverage under the CA Const. General Permit & submit Notice of Intent to municipality - go to I.B.2.h. If NO, then go to I.B.2.h. For more information see: www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml	☒	☐	
I.B.2.h	Is this a Special Project or does it have the potential to be a Special Project? If YES, attach completed Worksheet F - then continue to I.B.2.i. If NO, go to I.B.2.i.	☐	☒	F
I.B.2.i	Is project a Construction Stormwater Regulated Site (SWRS) ? 1) Sites that disturb 1 acre or more of land; 2) where the project requires a Grading Permit; 3) Sites with a) Residential new construction or a 50% or greater remodel, or b) Commercial/ Industrial construction of a new building or additions of 3,000 sq. ft. or greater, and with one or both of the following: (1) Sites where development will occur on a slope greater than or equal to 5:1 (20%), and/or (2) Sites where development will occur within 100 feet of a creek, wetland, or coastline; 4) Any public or private project involving work within a waterway; and 5) Sites within the ASBS watershed that involve soil disturbance. <i>If NO, then go to I.B.2.j</i>	☐	☒	G
I.B.2.j	For Municipal Staff Use Only: Are you using Alternative Certification for the project review? If YES, then fill out section G-1 on Worksheet G. Fill out other sections of Worksheet G as appropriate. See cell I.B.1.e.1 above - Is the project installing 3,000 square feet or more of pervious paving? If YES, then fill out section G-3 on Worksheet G. Add to Municipal Inspection Lists (C.3.h)	☐ ☐	☐ ☐	G

⁵ Per the MRP, pavement that meets the following definition of pervious pavement is NOT an impervious surface. Pervious pavement is defined as pavement that stores and infiltrates rainfall at a rate equal to immediately surrounding unpaved, landscaped areas, or that stores and infiltrates the rainfall runoff volume described in Provision C.3.

⁶ “Retained” means to leave existing impervious surfaces in place, unchanged; “Replaced” means to install new impervious surface where existing impervious surface is removed anywhere on the same property; and “Created” means the amount of new impervious surface being proposed which exceeds the total existing amount of impervious surface at the property.

⁷ Uncovered parking includes the top level of a parking structure.

Worksheet A

C6 – Construction Stormwater BMPs

Include the following Construction BMPs on the Erosion Control Plan:

(Applies to all projects with earthwork)

Yes	Plan Sheet	Best Management Practice (BMP) Notes
☒	C-11	Erosion Control Point of Contact. <i>(Provide an Erosion Control Point of Contact including name, title/qualification, email, and phone number. The EC Point of Contact will be the County's main point of contact if Erosion Control or Tree Protection corrections are required).</i>
☒	C-11	Perform clearing and earth-moving activities only during dry weather. Measures to ensure adequate erosion and sediment control shall be installed prior to earth-moving activities and construction.
☒	C-11	Measures to ensure adequate erosion and sediment control are required year-round. Stabilize all denuded areas and maintain erosion control measures continuously between October 1 and April 30.
☒	C-12	Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
☒	C-12	Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
☐		Use sediment controls or filtration to remove sediment when dewatering site and obtain Regional Water Quality Control Board (RWQCB) permit(s) as necessary.
☒	C-12	Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
☒	C-6	Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
☒	C-10	Limit construction access routes to stabilized, designated access points.
☒	C-11	Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.
☒	C-12	Train and provide instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and Construction Best Management Practices.
☐		Placement of erosion materials at these locations are required on weekends and during rain events: <i>(List locations)</i>
☐		The areas delineated on the plans for parking, grubbing, storage, etc., shall not be enlarged or "run over."
☐		Construction sites are required to have erosion control materials on-site during the "off-season."
☐		Dust control is required year-round.
☒	C-11	Erosion control materials shall be stored on-site.
☒	C-11	Use of plastic sheeting between October 1 and April 30 is not acceptable, unless for use on stockpiles where the stockpile is also protected with fiber rolls containing the base of the stockpile.
☐		Tree protection shall be in place before any demolition, grading, excavating or grubbing is started.

Worksheet B

C3 - Source Controls

Select appropriate source controls and identify the detail/plan sheet where these elements are shown.

Yes	Detail/Plan Sheet No., or "N/A"	Features that require source control measures	Source Control Measures (Refer to Local Source Control List for detailed requirements)
☒	C-8	Storm Drain (street/road projects)	Mark on-site inlets with the words "No Dumping! Flows to Bay" or equivalent.
☐		Floor Drains (non-residential)	Plumb interior floor drains to sanitary sewer ⁸ [or prohibit].
☒	C-5	Parking garage (non-single-family residential)	Plumb interior parking garage floor drains to sanitary sewer. ⁸
☒	C-6	Landscaping (all project types)	- Retain existing vegetation as practicable. - Select diverse species appropriate to the site. Include plants that are pest- and/or disease-resistant, drought-tolerant, and/or attract beneficial insects. - Minimize use of pesticides and quick-release fertilizers. - Use efficient irrigation system; design to minimize runoff.
☐		Pool/Spa/Fountain (all project types)	Provide connection to the sanitary sewer to facilitate draining. ⁸
☐		Food Service Equipment (non-residential)	Provide sink or other area for equipment cleaning, which is: - Connected to a grease interceptor prior to sanitary sewer discharge.⁸ - Large enough for the largest mat or piece of equipment to be cleaned. - Indoors or in an outdoor roofed area designed to prevent stormwater run-on and run-off, and signed to require equipment washing in this area.
☒	C-6	Refuse Areas (non-single-family residential)	- Provide a roofed and enclosed area for dumpsters, recycling containers, etc., designed to prevent stormwater run-on and runoff. - Connect any drains in or beneath dumpsters, compactors, and tallow bin areas serving food service facilities to the sanitary sewer.⁸
☐		Outdoor Process Activities ⁹ (non-residential)	Perform process activities either indoors or in roofed outdoor area, designed to prevent stormwater run-on and runoff, and to drain to the sanitary sewer. ⁸
☐		Outdoor Equipment/ Materials Storage (non-residential)	- Cover the area or design to avoid pollutant contact with stormwater runoff. - Locate area only on paved and contained areas. - Roof storage areas that will contain non-hazardous liquids, drain to sanitary sewer⁸, and contain by berms or similar.
☐		Vehicle/ Equipment Cleaning (non-single-family residential)	- Roofed, pave and berm wash area to prevent stormwater run-on and runoff, plumb to the sanitary sewer⁸, and sign as a designated wash area. - Commercial car wash facilities shall discharge to the sanitary sewer.⁸
☐		Vehicle/ Equipment Repair and Maintenance (non-single-family residential)	- Designate repair/maintenance area indoors, or an outdoors area designed to prevent stormwater run-on and runoff and provide secondary containment. Do not install drains in the secondary containment areas. - No floor drains unless pretreated prior to discharge to the sanitary sewer.⁸ - Connect containers or sinks used for parts cleaning to the sanitary sewer.⁸
☐		Fuel Dispensing Areas (non-residential)	- Fueling areas shall have impermeable surface that is a) minimally graded to prevent ponding and b) separated from the rest of the site by a grade break. - Canopy shall extend at least 10 ft. in each direction from each pump and drain away from fueling area.
☐		Loading Docks (non-residential)	- Cover and/or grade to minimize run-on to and runoff from the loading area. - Position downspouts to direct stormwater away from the loading area. - Drain water from loading dock areas to the sanitary sewer.⁸ - Install door skirts between the trailers and the building.
☐		Fire Sprinklers (all project types)	Design for discharge of fire sprinkler test water to landscape or sanitary sewer. ⁸
☐		Miscellaneous Drain or Wash Water (all project types)	- Drain condensate of air conditioning units to landscaping. Large air conditioning units may connect to the sanitary sewer.⁸ - Roof drains from equipment drain to landscaped area where practicable. - Drain boiler drain lines, roof top equipment, all wash water to sanitary sewer.⁸
☐		Architectural Copper Rinse Water (all project types)	Drain rinse water to landscaping, discharge to sanitary sewer ⁸ , or collect and dispose properly offsite. See flyer "Requirements for Architectural Copper."

⁸ Any connection to the sanitary sewer system is subject to sanitary district approval.

⁹ Businesses that may have outdoor process activities/equipment include machine shops, auto repair, industries with pretreatment facilities.

Worksheet C

Low Impact Development – Site Design Measures
--

Select Appropriate Site Design Measures (Required for C.3 Regulated Projects; all other projects are encouraged to implement site design measures, which may be required at municipality discretion.) Projects that create and/or replace 2,500 – 10,000 sq.ft. of impervious surface, and stand-alone single family homes that create/replace 2,500 sq.ft. or more of impervious surface, must include **one of Site Design Measures a through f** (Provision C.3.i requirements).¹⁰ Larger projects must also include applicable Site Design Measures g through i. Consult with municipal staff about requirements for your project.

Select appropriate site design measures and Identify the Plan Sheet where these elements are shown.

Yes	Plan Sheet Number	
☐		a. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.
☒	C-6	b. Direct roof runoff onto vegetated areas.
☐		c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
☒	C-6	d. Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.
☐		e. Construct sidewalks, walkways, and/or patios with pervious or permeable surfaces. Use the specifications in the C3 Technical Guidance (Version 4.1) downloadable at www.flowstobay.org/newdevelopment .
☐		f. Construct bike lanes, driveways, and/or uncovered parking lots with pervious surfaces. Use the specifications in the C3 Technical Guidance (Version 4.1) downloadable at www.flowstobay.org/newdevelopment .
☐		g. Limit disturbance of natural water bodies and drainage systems; minimize compaction of highly permeable soils; protect slopes and channels; and minimize impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies.
☐		h. Conserve natural areas, including existing trees, other vegetation and soils.
☐		i. Minimize impervious surfaces.

Regulated Projects can also consider the following site design measures to reduce treatment system sizing:

Yes	Plan Sheet Number	
☐		j. Self-treating area (see Section 4.2 of the C.3 Technical Guidance)
☐		k. Self-retaining area (see Section 4.3 of the C.3 Technical Guidance)
☒	C-6	l. Plant or preserve interceptor trees (Section 4.1, C.3 Technical Guidance)

¹⁰ See MRP Provision C.3.a.i.(6) for non-C.3 Regulated Projects, C.3.c.i.(2)(a) for Regulated Projects, C.3.i for projects that create/replace 2,500 to 10,000 sq.ft. of impervious surface and stand-alone single family homes that create/replace 2,500 sq.ft. or more of impervious surface.

Worksheet D

C3 Regulated Project - Stormwater Treatment Measures

Check all applicable boxes and indicate the treatment measure(s) included in the project.

Yes											
☐ Attach Worksheet F and Calculations	Is the project a Special Project?¹¹ If yes, consult with municipal staff about the need to evaluate the feasibility and infeasibility of 100% LID treatment. Indicate the type of non-LID treatment to be used, the hydraulic sizing method¹², and percentage of the amount of runoff specified in Provision C.3.d that is treated: <table border="0"> <thead> <tr> <th><u>Non-LID Treatment Measures:</u></th> <th><u>Hydraulic sizing</u></th> <th><u>% of C.3.d amount of runoff treated</u></th> </tr> </thead> <tbody> <tr> <td>☐ Media filter</td> <td>☐ 2.a ☐ 2.b ☐ 2.c</td> <td>____ %</td> </tr> <tr> <td>☐ Tree well filter</td> <td>☐ 2.a ☐ 2.b ☐ 2.c</td> <td>____ %</td> </tr> </tbody> </table>	<u>Non-LID Treatment Measures:</u>	<u>Hydraulic sizing</u>	<u>% of C.3.d amount of runoff treated</u>	☐ Media filter	☐ 2.a ☐ 2.b ☐ 2.c	____ %	☐ Tree well filter	☐ 2.a ☐ 2.b ☐ 2.c	____ %	
<u>Non-LID Treatment Measures:</u>	<u>Hydraulic sizing</u>	<u>% of C.3.d amount of runoff treated</u>									
☐ Media filter	☐ 2.a ☐ 2.b ☐ 2.c	____ %									
☐ Tree well filter	☐ 2.a ☐ 2.b ☐ 2.c	____ %									
☐	Is the project using infiltration systems? The MRP no longer requires the use or analysis of the feasibility of infiltration, but infiltration systems are encouraged and may be beneficial depending on the project. Indicate the infiltration measures to be used, and hydraulic sizing method: <table border="0"> <thead> <tr> <th><u>Infiltration Measures:</u></th> <th><u>Hydraulic sizing method</u>¹²</th> </tr> </thead> <tbody> <tr> <td>☐ Bioinfiltration¹³</td> <td>☐ 1.a ☐ 1.b ☐ 2.c ☐ 3</td> </tr> <tr> <td>☐ Pervious Pavement</td> <td>☐ 1.a ☐ 1.b</td> </tr> <tr> <td>☐ Infiltration trench</td> <td>☐ 1.a ☐ 1.b</td> </tr> <tr> <td colspan="2">Other (specify): _____</td> </tr> </tbody> </table>	<u>Infiltration Measures:</u>	<u>Hydraulic sizing method</u> ¹²	☐ Bioinfiltration ¹³	☐ 1.a ☐ 1.b ☐ 2.c ☐ 3	☐ Pervious Pavement	☐ 1.a ☐ 1.b	☐ Infiltration trench	☐ 1.a ☐ 1.b	Other (specify): _____	
<u>Infiltration Measures:</u>	<u>Hydraulic sizing method</u> ¹²										
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☐ Pervious Pavement	☐ 1.a ☐ 1.b										
☐ Infiltration trench	☐ 1.a ☐ 1.b										
Other (specify): _____											
☐	Is the project harvesting and using rainwater? The MRP no longer requires the use or analysis of the feasibility of rainwater harvesting, but it rainwater harvesting and use is encouraged and may be beneficial depending on the project." <table border="0"> <thead> <tr> <th><u>Rainwater Harvesting/Use Measures:</u></th> <th><u>Hydraulic sizing method</u>¹²</th> </tr> </thead> <tbody> <tr> <td>☐ Rainwater Harvesting for indoor non-potable water use</td> <td>☐ 1.a ☐ 1.b</td> </tr> <tr> <td>☐ Rainwater Harvesting for landscape irrigation use</td> <td>☐ 1.a ☐ 1.b</td> </tr> </tbody> </table>	<u>Rainwater Harvesting/Use Measures:</u>	<u>Hydraulic sizing method</u> ¹²	☐ Rainwater Harvesting for indoor non-potable water use	☐ 1.a ☐ 1.b	☐ Rainwater Harvesting for landscape irrigation use	☐ 1.a ☐ 1.b				
<u>Rainwater Harvesting/Use Measures:</u>	<u>Hydraulic sizing method</u> ¹²										
☐ Rainwater Harvesting for indoor non-potable water use	☐ 1.a ☐ 1.b										
☐ Rainwater Harvesting for landscape irrigation use	☐ 1.a ☐ 1.b										
☒	Is the project installing biotreatment measures? Indicate the biotreatment measures to be used, and the hydraulic sizing method: <table border="0"> <thead> <tr> <th><u>Biotreatment Measures:</u></th> <th><u>Hydraulic sizing method</u>¹²</th> </tr> </thead> <tbody> <tr> <td>☒ Bioretention area</td> <td>☒ 2.c ☐ 3</td> </tr> <tr> <td>☒ Flow-through planter</td> <td>☒ 2.c ☐ 3</td> </tr> <tr> <td colspan="2">☐ Other (specify): _____</td> </tr> </tbody> </table>	<u>Biotreatment Measures:</u>	<u>Hydraulic sizing method</u> ¹²	☒ Bioretention area	☒ 2.c ☐ 3	☒ Flow-through planter	☒ 2.c ☐ 3	☐ Other (specify): _____			
<u>Biotreatment Measures:</u>	<u>Hydraulic sizing method</u> ¹²										
☒ Bioretention area	☒ 2.c ☐ 3										
☒ Flow-through planter	☒ 2.c ☐ 3										
☐ Other (specify): _____											

A copy of the long term Operations and Maintenance (O&M) Agreement and Plan for this project will be required. Please contact the NPDES Representative of the applicable municipality for an agreement template and consult the C.3 Technical Guidance at www.flowstobay.org for maintenance plan templates for specific facility types.

¹¹ Special Projects are smart growth, high density, or transit-oriented developments with the criteria defined in Provision C.3.e.ii.(2), (3) or (4) (see Worksheet F).

¹² Indicate which of the following Provision C.3.d.i hydraulic sizing methods were used. Volume based approaches: 1(a) Urban Runoff Quality Management approach, or 1(b) 80% capture approach (recommended volume-based approach). Flow-based approaches: 2(a) 10% of 50-year peak flow approach, 2(b) 2 times the 85th percentile rainfall intensity approach, or 2(c) 0.2-Inch-per-hour intensity approach (recommended flow-based approach – also known as the 4% rule). Combination flow and volume-based approach: 3.

¹³ See Section 6.1 of the C.3 Technical Guidance for conditions in which bioretention areas provide bioinfiltration.

Worksheet E

Hydromodification Management

E-1 Is the project a Hydromodification Management¹⁴ (HM) Project?

E-1.1 Is the total impervious area increased over the pre-project condition?

- ☒ Yes. Continue to E-1.2
- ☐ No. The project is NOT required to incorporate HM Measures.
Go to Item E-1.4 and check "No."

E-1.2 Is the site located in an HM Control Area per the HM Control Areas map (Appendix H of the C.3 Technical Guidance)?

- ☐ Yes. Continue to E-1.3
- ☒ No. Attach map, indicating project location. The project is NOT required to incorporate HM Measures.
Skip to Item E-1.3 and check "No."

E-1.3 Is the project a Hydromodification Management Project?

- ☐ Yes. The project is subject to HM requirements in Provision C.3.g of the Municipal Regional Stormwater Permit.
- ☒ No. The project is EXEMPT from HM requirements.
- If the project is subject to the HM requirements, incorporate in the project flow duration control measures designed such that post-project discharge rates and durations match pre-project discharge rates and durations.
- The Bay Area Hydrology Model (BAHM) has been developed to help size flow duration controls. See www.bayareahydrologymodel.org. Guidance is provided in Chapter 7 of the C.3 Technical Guidance.

E-2 Incorporate HM Controls (if required)

Are the applicable items provided with the Plans?

Yes	No	NA	
☐	☐	☐	Site plans with pre- and post-project impervious surface areas, surface flow directions of entire site, locations of flow duration controls and site design measures per HM site design requirement
☐	☐	☐	Soils report or other site-specific document showing soil type(s) on site
☐	☐	☐	If project uses the Bay Area Hydrology Model (BAHM), a list of model inputs and outputs.
☐	☐	☐	If project uses custom modeling, a summary of the modeling calculations with corresponding graph showing curve matching (existing, post-project, and post-project with HM controls curves), goodness of fit, and (allowable) low flow rate.
☐	☐	☐	If project uses the Impracticability Provision, a listing of all applicable costs and a brief description of the alternative HM project (name, location, date of start up, and entity responsible for maintenance).
☐	☐	☐	If the project uses alternatives to the default BAHM approach or settings, a written description and rationale.

¹⁴ Hydromodification is the change in a site's runoff hydrograph, including increases in flows and durations that results when land is developed (made more impervious). The effects of hydromodification include, but are not limited to, increased bed and bank erosion of receiving streams, loss of habitat, increased sediment transport and/or deposition, and increased flooding. Hydromodification control measures are designed to reduce these effects.

Worksheet F Special Projects

Complete this worksheet for projects that appear to meet the definition of "Special Project", per Provision C.3.e.ii of the Municipal Regional Stormwater Permit (MRP). The form assists in determining whether a project meets Special Project criteria, and the percentage of low impact development (LID) treatment reduction credit. Special Projects that implement less than 100% LID treatment must provide a narrative discussion of the feasibility or infeasibility of 100% LID treatment. See Appendix J of the C.3 Technical Guidance Handbook (download at www.flowstobay.org) for more information.

F.1 "Special Project" Determination (Check the boxes to determine if the project meets any of the following categories.)

Special Project Category "A"

Does the project have ALL of the following characteristics?

- ☐ Located in a municipality's designated central business district, downtown core area or downtown core zoning district, neighborhood business district or comparable pedestrian-oriented commercial district, or historic preservation site and/or district¹⁵;
- ☐ Creates and/or replaces 0.5 acres or less of impervious surface;
- ☐ Includes no surface parking, except for incidental parking for emergency vehicle access, ADA access, and passenger or freight loading zones;
- ☐ Has at least 85% coverage of the entire site by permanent structures. The remaining 15% portion of the site may be used for safety access, parking structure entrances, trash and recycling service, utility access, pedestrian connections, public uses, landscaping and stormwater treatment.

☒ No (continue) ☐ Yes – Complete Section F.2 below

Special Project Category "B"

Does the project have ALL of the following characteristics?

- ☐ Located in a municipality's designated central business district, downtown core area or downtown core zoning district, neighborhood business district or comparable pedestrian-oriented commercial district, or historic preservation site and/or district²⁰;
- ☐ Creates and/or replaces more than 0.5 acres of impervious area and less than 2.0 acres;
- ☐ Includes no surface parking, except for incidental parking for emergency access, ADA access, and passenger or freight loading zones;
- ☐ Has at least 85% coverage of the entire site by permanent structures. The remaining 15% portion of the site may be used for safety access, parking structure entrances, trash and recycling service, utility access, pedestrian connections, public uses, landscaping and stormwater treatment;
- ☐ Minimum density of either 50 dwelling units per acre (for residential projects) or a Floor Area Ratio (FAR) of 2:1 (for commercial projects) - mixed use projects may use either criterion. **Note Change on 7/1/16¹⁶**

☒ No (continue) ☐ Yes – Complete Section F-2 below

Special Project Category "C"

Does the project have ALL of the following characteristics?

- ☐ At least 50% of the project area is within 1/2 mile of an existing or planned transit hub¹⁷ or 100% within a planned Priority Development Area¹⁸;
- ☐ The project is characterized as a non-auto-related use¹⁹; and
- ☐ Minimum density of either 25 dwelling units per acre (for residential projects) or a Floor Area Ratio (FAR) of 2:1 (for commercial projects) - mixed use projects may use either criterion. **Note Change on 7/1/16¹⁶**

☒ No (continue) ☐ Yes – Complete Section F-2 below

¹⁵ And built as part of a municipality's stated objective to preserve/enhance a pedestrian-oriented type of urban design.

¹⁶ **Effective 7/1/16**, the MRP establishes definitions for "Gross Density"(GD) & FAR. GD is defined as, "the total number of residential units divided by the acreage of the entire site area, including land occupied by public right-of-ways, recreational, civic, commercial and other non-residential uses." FAR is defined as, "the Ratio of the total floor area on all floors of all buildings at a project site (except structures, floors, or floor areas dedicated to parking) to the total project site area."

¹⁷ "Transit hub" is defined as a rail, light rail, or commuter rail station, ferry terminal, or bus transfer station served by three or more bus routes. (A bus stop with no supporting services does not qualify.)

¹⁸ A "planned Priority Development Area" is an infill development area formally designated by the Association of Bay Area Government's / Metropolitan Transportation Commission's FOCUS regional planning program.

¹⁹ Category C specifically excludes stand-alone surface parking lots; car dealerships; auto and truck rental facilities with onsite surface storage; fast-food restaurants, banks or pharmacies with drive-through lanes; gas stations; car washes; auto repair and service facilities; or other auto-related project unrelated to the concept of transit oriented development.

F.2 LID Treatment Reduction Credit Calculation

(If more than one category applies, choose only one of the applicable categories and fill out the table for that category.)

Category	Impervious Area Created/Replaced (sq. ft.)	Site Coverage (%)	Project Density ¹⁶ or FAR ¹⁶	Density/Criteria	Allowable Credit (%)	Applied Credit (%)
A			N.A.	N.A.	100%	
B				Res ≥ 50 DU/ac or FAR ≥ 2:1	50%	
				Res ≥ 75 DU/ac or FAR ≥ 3:1	75%	
				Res ≥ 100 DU/ac or FAR ≥ 4:1	100%	
C				Location credit (select one)²⁰:		
				Within ¼ mile of transit hub	50%	
				Within ½ mile of transit hub	25%	
				Within a planned PDA	25%	
				Density credit (select one):		
				Res ≥ 30 DU/ac or FAR ≥ 2:1	10%	
				Res ≥ 60 DU/ac or FAR ≥ 4:1	20%	
				Res ≥ 100 DU/ac or FAR ≥ 6:1	30%	
				Parking credit (select one):		
				≤ 10% at-grade surface parking ²¹	10%	
				No surface parking	20%	
				TOTAL TOD CREDIT =		

F.3 Narrative Discussion of the Feasibility/Infeasibility of 100% LID Treatment:

If project will implement less than 100% LID, prepare a discussion of the feasibility or infeasibility of 100% LID treatment, as described in Appendix K of the C.3 Technical Guidance.

F.4 Select Certified Non-LID Treatment Measures:

If the project will include non-LID treatment measures, select a treatment measure certified for “Basic” General Use Level Designation (GULD) by the Washington State Department of Ecology’s Technical Assessment Protocol – Ecology (TAPE). Guidance is provided in Appendix K of the C.3 Technical Guidance (download at www.flowstobay.org).²²

²⁰ To qualify for the location credit, at least 50% of the project’s site must be located within the ¼ mile or ½ mile radius of an existing or planned transit hub, as defined on page 1, footnote 2. A planned transit hub is a station on the MTC’s Regional Transit Expansion Program list, per MTC’s Resolution 3434 (revised April 2006), which is a regional priority funding plan for future transit stations in the San Francisco Bay Area. To qualify for the PDA location credit, 100% of the project site must be located within a PDA, as defined on page 1, footnote 3.

²¹ The at-grade surface parking must be treated with LID treatment measures.

²² TAPE certification is used in order to satisfy Special Project’s reporting requirements in the MRP.

Worksheet G (For municipal staff use only)

G-1 Alternative Certification: Were the treatment and/or HM control sizing and design reviewed by a qualified third-party professional that is not a member of the project team or agency staff?

☐ Yes ☐ No Name of Reviewer _____

G-2 High Priority Site: 1) Sites that disturb 1 acre or more of land; 2) where the project requires a Grading Permit; 3) Sites with a) Residential new construction or a 50% or greater remodel, or b) Commercial/ Industrial construction of a new building or additions of 3,000 sq. ft. or greater, and with one or both of the following: (1) Sites where development will occur on a slope greater than or equal to 5:1 (20%), and/or (2) Sites where development will occur within 100 feet of a creek, wetland, or coastline; 4) Any public or private project involving work within a waterway; and 5) Sites within the ASBS watershed that involve soil disturbance. These sites are subject to monthly inspections from October 1 to April 30. See MRP Provision C.6.e.11.(2).

☐ Yes ☐ No If yes, then add site to Staff's Monthly Rainy Season Construction Site Inspection List

G-3 Inspections of Sites with Pervious Paving: Starting 7/1/16, Regulated projects that are installing 3,000 sq.ft. or more of pervious paving (see cell **I.B.1.e.1**) (excluding private-use patios in single family homes, townhomes, or condominiums) must have the paving system inspected by the jurisdiction upon completion of the installation and the site must be added to the jurisdiction's list of sites needing inspections at least once every five years – see provision C.3.h. Pervious pavement systems include pervious concrete, pervious asphalt, pervious pavers and grid pavers etc. and are described in the C3 Technical Guidance (Version 4.1) downloadable at: www.flowstobay.org/newdevelopment.

☐ Yes ☐ No

Operations and Maintenance (O&M) Submittals

G-4 Stormwater Treatment Measure and/HM Control Owner or Operator's Information:

Name: E.C. LIU

Address: HOLLY HOTEL GROUP, LLC, 991 WEST HEDDING ST, SUITE 103, SAN JOSE, CA 95126

Phone: (415) 341-4098 Email: EC.LIU@FAUSTUSCAPITAL.COM

- *Applicant must call for inspection and receive inspection within 45 days of installation of treatment measures and/or hydromodification management controls.*

The following questions apply to C.3 Regulated Projects and Hydromodification Management Projects.

	Yes	No	N/A
G-4.1 Was maintenance plan submitted?	☐	☒	☐
G-4.2 Was maintenance plan approved?	☐	☒	☐
G-4.3 Was maintenance agreement submitted? (Date executed: _____)	☐	☒	☐

- *Attach the executed maintenance agreement as an appendix to this checklist.*

G-5 Annual Operations and Maintenance (O&M) Submittals (for municipal staff use only):

For C.3 Regulated Projects and Hydromodification Management Projects, indicate the dates on which the Applicant submitted annual reports for project O&M:

G-6 Comments (for municipal staff use only):

G-7 NOTES (for municipal staff use only):

Section I Notes: _____

Worksheet A Notes: _____

Worksheet B Notes: _____

Worksheet C Notes: _____

Worksheet D Notes: _____

Worksheet E Notes: _____

Worksheet F Notes: _____

G-8 Project Close-Out (for municipal staff use only):

	Yes	No	NA
8.1 Were final Conditions of Approval met?	☐	☐	
8.2 Was initial inspection of the completed treatment/HM measure(s) conducted? (Date of inspection:_____)	☐	☐	☐
8.3 Was maintenance plan submitted? (Date executed:_____)	☐	☐	☐
8.4 Was project information provided to staff responsible for O&M verification inspections? (Date provided to inspection staff:_____)	☐	☐	☐

G-9 Project Close-Out (Continued -- for municipal staff use only):

Name of staff confirming project is closed out: _____

Signature: _____ Date: _____

Name of O&M staff receiving information: _____

Signature: _____ Date: _____

APPENDIX E

TABLE 1 – TREATMENT CONTROL MEASURES SUMMARY

SHEET C-7 – PRELIMINARY STORMWATER CONTROL PLAN

SHEET C-8 –STORMWATER MANAGEMENT PLAN

SHEET C-10 – EROSION CONTROL PLAN

SHEET C-12 – CONSTRUCTION BMPs

TABLE 1 - TREATMENT CONTROL MEASURE SUMMARY

DMA #	TCM #	Location	Treatment Type	Per Detail / Sheet No.	LID or Non-LID	Sizing Method	Drainage Area (s.f.)	Impervious Area (s.f.)	Pervious Area (L/S) (s.f.)	Pervious Area Equevalent Impervious Area (s.f.)	DMA Total Efective Impervious Area (s.f.)	% Onsite Area Treated by LID or Non-LID TCM	**Teatment Area Required (s.f.)	Teatment Area Provided (s.f.)	Overflow Riser Height (in)	No. of Interceptor Trees Provided (Qty.)	Area of Tree Credit Require d (s.f.)	Area of Tree Credit Provide d (s.f.)
1	1	Onsite	Flow-Through planter lined*	DTL 3 / C-8	LID	2C. Flow: 4% Method **	3,057	3,057	0	0	3,057	3.36%	122	123	6			
2	2	Onsite	Flow-Through planter lined*	DTL 3 / C-8	LID	2C. Flow: 4% Method **	12,981	12,981	0	0	12,981	14.25%	519	1,130	6			
3	3	Onsite	Flow-Through planter lined*	DTL 4 / C-8	LID	2C. Flow: 4% Method **	1,624	1,624	0	0	1,624	1.78%	65	107	6			
4	4	Onsite	Flow-Through planter lined*	DTL 4 / C-8	LID	2C. Flow: 4% Method **	9,675	9,675	0	0	9,675	10.62%	387	552	6			
5	5	Onsite	Flow-Through planter lined*	DTL 4 / C-8	LID	2C. Flow: 4% Method **	2,988	2,988	0	0	2,988	3.28%	120	140	6			
6	6	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	6,148	5,588	560	56	5,644	6.75%	226	234	6			
7	7	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	685	449	236	24	473	0.75%	19	24	6			
8	8	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	7,256	7,100	156	16	7,116	7.97%	285	295	6			
9	9	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	2,982	2,711	271	27	2,738	3.27%	110	120	6			
10	10	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	4,091	3,855	236	24	3,879	4.49%	155	156	6			
11	11	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	4,027	3,628	399	40	3,668	4.42%	147	156	6			
12	12	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	2,841	2,591	250	25	2,616	3.12%	105	117	6			
13	13	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	4,754	3,580	1,174	117	3,697	5.22%	148	160	6			
14	14	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	1,533	1,338	195	20	1,358	1.68%	54	60	6			
15	15	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	2,707	2,587	120	12	2,599	2.97%	104	110	6			
16	16	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	2,926	2,834	92	9	2,843	3.21%	114	121	6			
17	17	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	2,922	2,830	92	9	2,839	3.21%	114	123	6			
18	18	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	1,470	1,424	46	5	1,429	1.61%	57	57	6			
19	19	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	7,260	6,771	489	49	6,820	7.97%	273	298	6			
20	20	Onsite	Bioretention lined* w/ underdrain	DTL 6 / C-8	LID	2C. Flow: 4% Method **	7,564	7,498	66	7	7,505	8.31%	300	325	6			
21	21	Onsite	Interceptor trees	N/A	LID	N/A	1,573	122	1,451	145	267	1.73%				9	267	900
TOTALS							Totals:	91,064	85,231	5,833		85,814	100.00%		3,785			

Footnotes:

* “Lined” refers to an impermeable liner placed on the bottom of a Bioretention basin or a concrete Flow-Through Planter, such that no infiltration into native soil occurs.

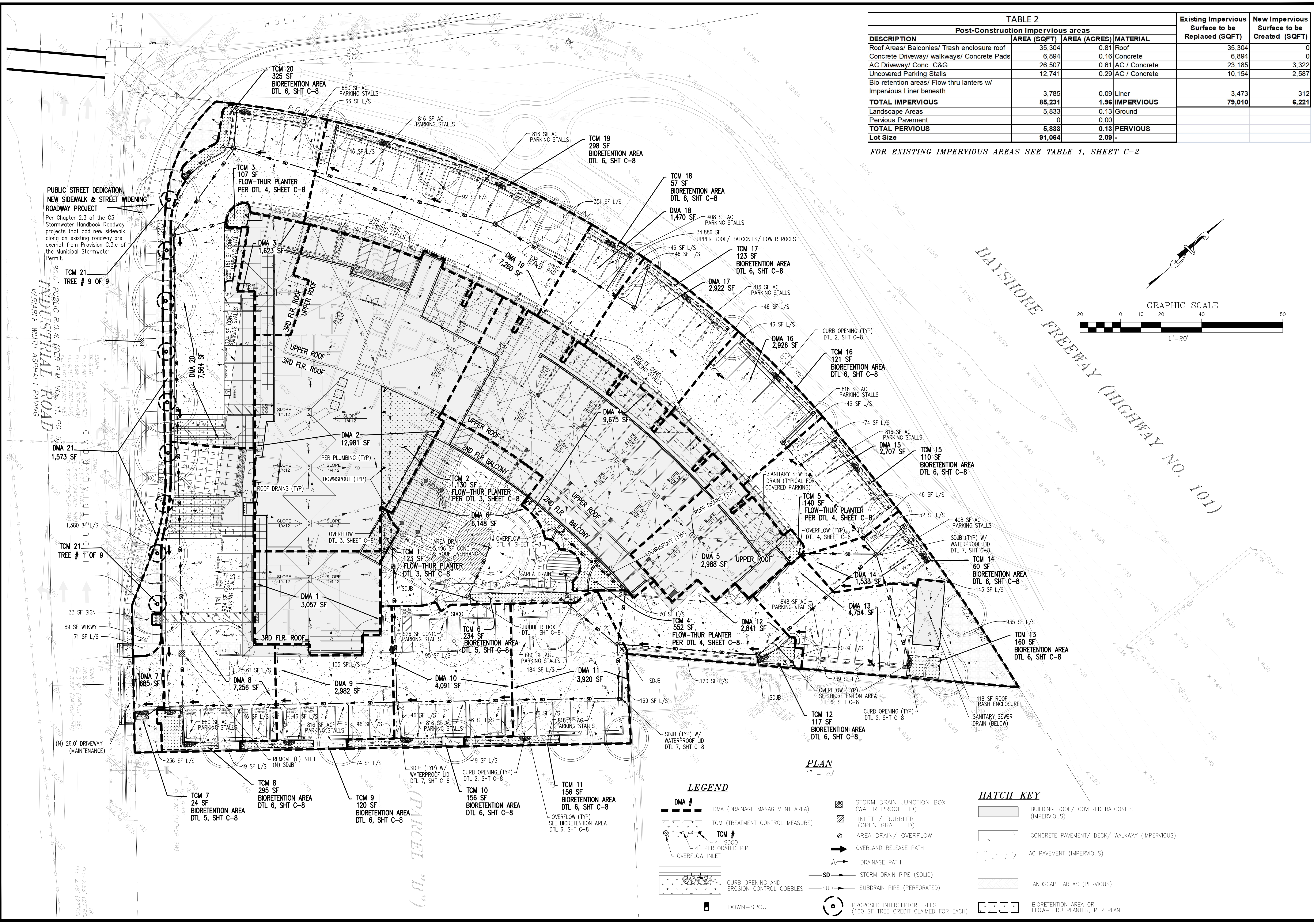


TABLE 2				Existing Impervious Surface to be Replaced (SQFT)	New Impervious Surface to be Created (SQFT)
Post-Construction Impervious areas					
DESCRIPTION	AREA (SQFT)	AREA (ACRES)	MATERIAL		
Roof Areas/ Balconies/ Trash enclosure roof	35,304	0.81	Roof	35,304	0
Concrete Driveway/ walkways/ Concrete Pads	6,894	0.16	Concrete	6,894	0
AC Driveway/ Conc. C&G	26,507	0.61	AC / Concrete	23,185	3,322
Uncovered Parking Stalls	12,741	0.29	AC / Concrete	10,154	2,587
Bio-retention areas/ Flow-thru planters w/ Impervious Liner beneath	3,785	0.09	Liner	3,473	312
TOTAL IMPERVIOUS	85,231	1.96	IMPERVIOUS	79,010	6,221
Landscape Areas	5,833	0.13	Ground		
Pervious Pavement	0	0.00			
TOTAL PERVIOUS	5,833	0.13	PERVIOUS		
Lot Size	91,064	2.09	-		

FOR EXISTING IMPERVIOUS AREAS SEE TABLE 1, SHEET C-2



ENGINEERS
CIVIL ENGINEERS

1534 CAROB LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
FAX: (650) 941-8755

OWNER/ DEVELOPER:
Holly Hotel Group, LLC
991 W. Hedding Street,
Suite 103
San Jose, California 95126

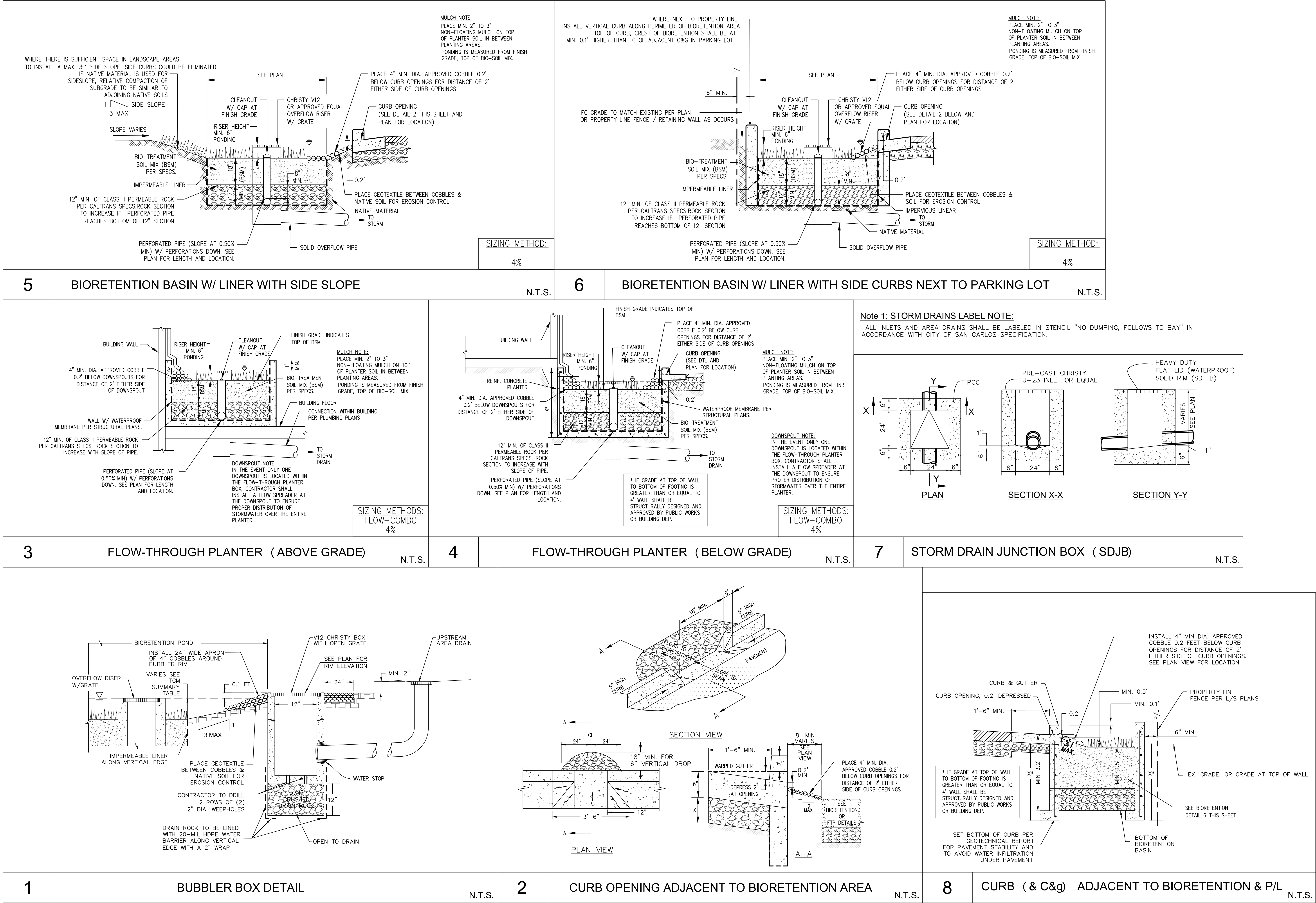
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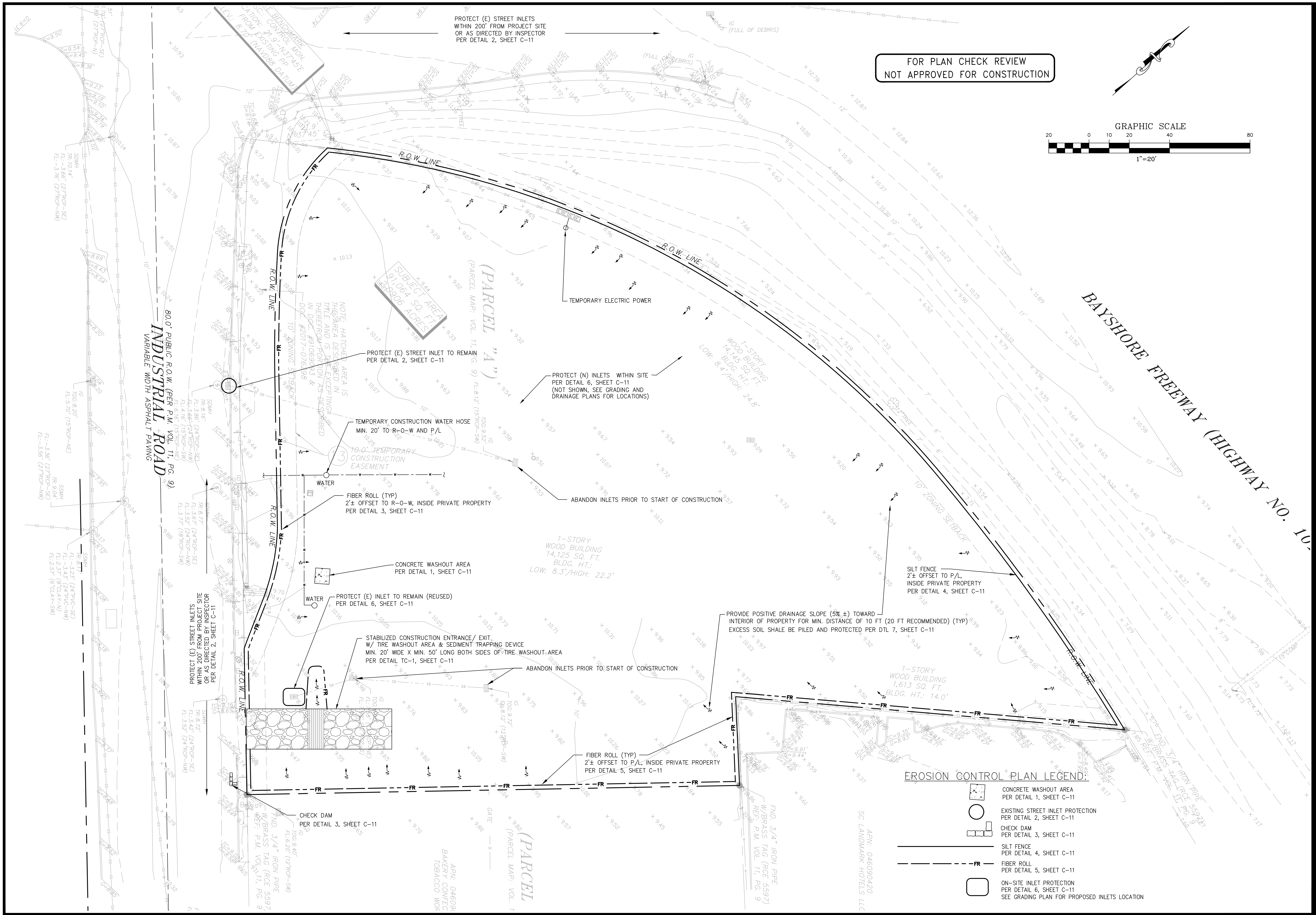
PRELIMINARY IMPROVEMENT PLANS
FOR PROPOSED HOTEL INDIGO
Planning Submittal 10-09-2020
501 INDUSTRIAL ROAD, SAN CARLOS, CA 94070
PRELIMINARY STORMWATER CONTROL PLAN

Revisions:



Date: 7/14/2021
Scale: 1" = 20'
Prepared by: V.G.
Checked by: S.R.
Job #: 220007







ENGINEERS
CIVIL ENGINEERS

1534 CAROB LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
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OWNER/ DEVELOPER:
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PRELIMINARY IMPROVEMENT PLANS
FOR PROPOSED HOTEL INDIGO
Planning Submittal 10-09-2020

501 INDUSTRIAL ROAD, SAN CARLOS, CA 94070

EROSION CONTROL PLAN

Revisions:

Date: 5/18/2021
Scale: 1" = 30'
Prepared by: V.G.
Checked by: S.R.
Job #: 220007

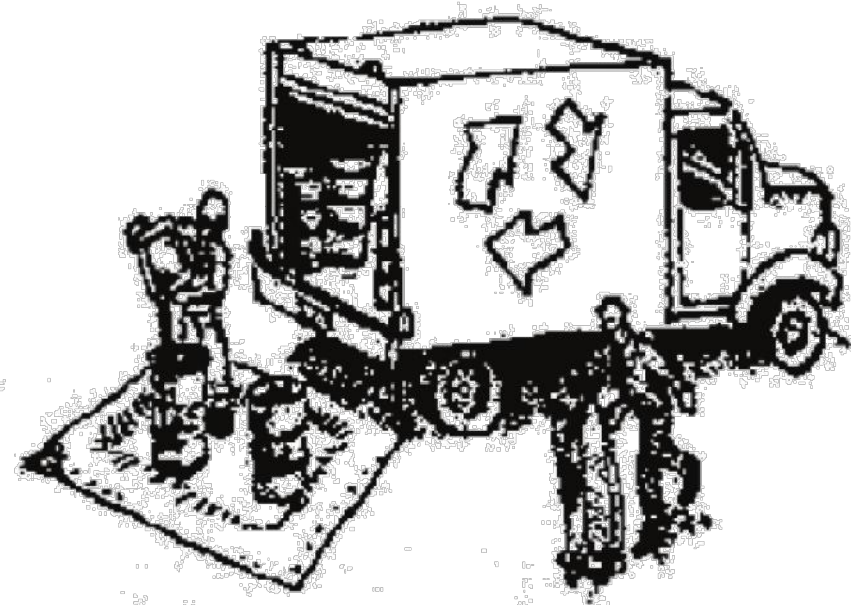
C-10

Sheet 10

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



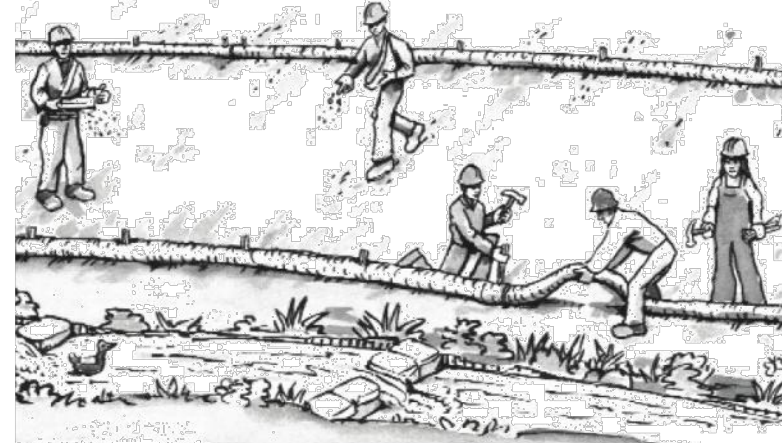
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving

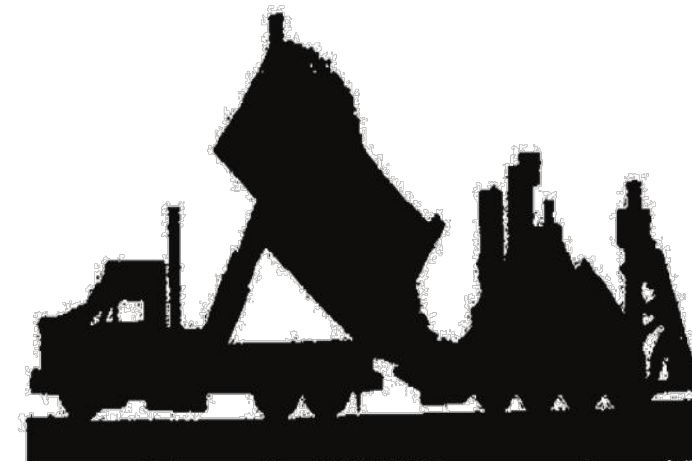


- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work

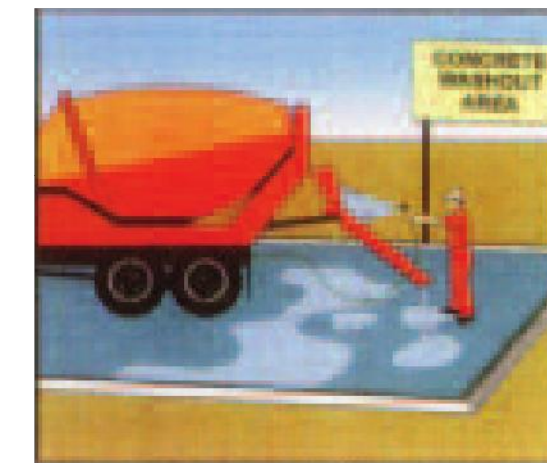


- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

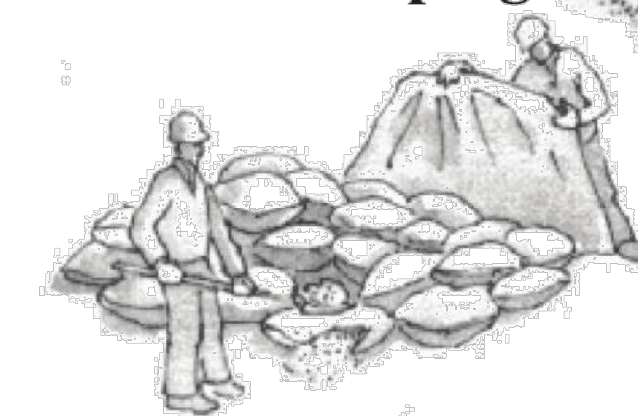
- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



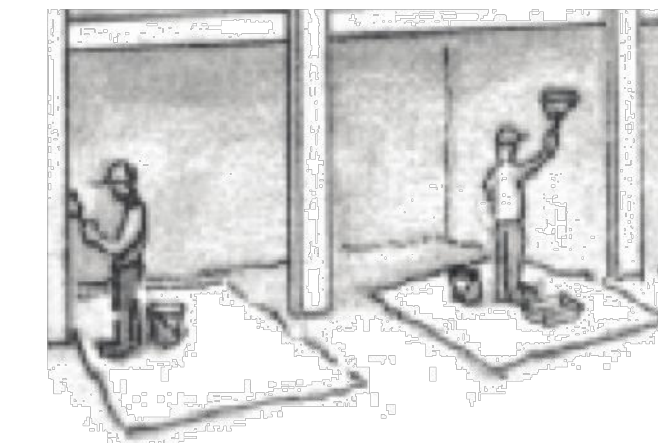
- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

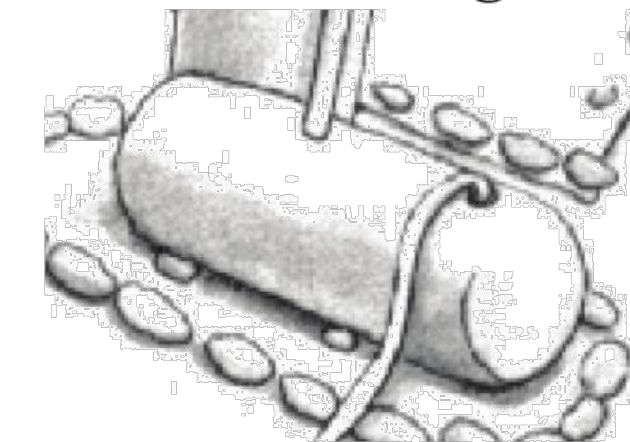
Painting & Paint Removal



Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to \$10,000 per day!