COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: May 28, 2014

TO: Planning Commission

FROM: Planning Staff

SUBJECT: EXECUTIVE SUMMARY: Consideration of a Coastal Development Permit to implement a "Green Streets Improvement Project" on Carlos Street in the unincorporated Moss Beach area of San Mateo County. This project is appealable to the California Coastal Commission.

County File Number: PLN 2014-00144
(San Mateo County Department of Public Works)

PROPOSAL

The proposed Green Streets Improvement Project involves construction of bioretention swales, parking, bicycle, and pedestrian safety improvements. The swales (approximately 340 linear feet total) will be constructed immediately adjacent to the existing sidewalk. Signage will be added for education and public demonstration. The swales will be constructed in two segments, one north of the post office driveway, and one south of the post office driveway. Paver walkways within the swales will be constructed for pedestrian access across them. The walkways will be placed near the existing entrances for the adjacent businesses.

To maintain the standard travel way width in each direction and to allow for continued roadside parking along the eastern side of Carlos Street, the proposed bioswale will be approximately 5 feet wide along the northern segment from Etheldore Street to the post office driveway and approximately 2 feet wide along the southern segment beginning in front of 2350 Carlos Street and extending toward California Avenue.

Proposed safety improvements include striping to formalize parking, the addition of a new segment of sidewalk for improved walkability, and the installation of sharrows (shared bicycle lane markings) to improve bicycle safety by alerting drivers to the presence of bicyclists along this frontage road. The areas immediately adjacent to the swales will be striped for 45 degree diagonal parking. A new section of concrete sidewalk (approximately 50 linear feet) will be constructed from 2355 Carlos Street to the existing sidewalk at 2385 Carlos Street. Currently, the sidewalk area at this location is an unpaved gravel and dirt walkway.

RECOMMENDATION

Approve the Coastal Development Permit, County File Number PLN 2014-00144, by adopting the required findings and conditions of approval.

SUMMARY

As a County agency, the Department of Public Works is exempt from local building regulations (Government Code 53091); however, a Coastal Development Permit, in compliance with the County's Local Coastal Program, must be approved by the Planning Commission. For the purposes of compliance with CEQA, the County is the lead agency and the Department of Public Works has assumed the role of lead department. As such, they are prepared to file a Notice of Categorical Exemption with the County Recorder, as required by the State Code.

The proposed project is part of the second phase of the James V. Fitzgerald Area of Special Biological Significance (ASBS) Pollution Reduction Program, which involves the implementation of storm drain Best Management Practices (BMPs) at multiple locations throughout the MidCoast and ASBS watershed. The proposed project is consistent with many of the goals identified in the Highway 1 Safety and Mobility Improvement Study: Phase 2 (Mobility Study), such as improved pedestrian, bicycle, and vehicle safety and improved circulation along MidCoast frontage roads. Currently, there is no formalized roadside parking along the Carlos Street frontage road, and vehicles are parked along the roadway in varying configurations. The project would add a segment of sidewalk to improve walkability in the area, formalize parking for safety, and provide swales for water quality treatment, public education and improved aesthetics. The project would also incorporate sharrows to improve bicycle safety by alerting drivers to the presence of bicyclists along this frontage road. The alignment of the permanent features proposed for this Carlos Street project (swales and new segment of sidewalk) do not conflict with the design options that were presented in the Mobility Study.

The proposed work by the Department of Public Works (DPW) will reduce the amount of sediment and other pollutants that are entering the Fitzgerald Marine Reserve, Areas of Special Biological Significance (ASBS). Staff has reviewed this project and found that DPW is proposing measures that will, as conditioned by staff, comply with the County's Local Coastal Program and minimize impacts to coastal resources.

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COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: May 28, 2014

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, to implement a "Green Streets Improvement Project" on Carlos Street in the unincorporated Moss Beach area of San Mateo County. This project is appealable to the California Coastal Commission.

County File Number: PLN 2014-00144
(San Mateo County Department of Public Works)

PROPOSAL

The proposed Green Streets Improvement Project involves construction of bioretention swales, parking, bicycle, and pedestrian safety improvements. The swales (approximately 340 linear feet total) will be constructed immediately adjacent to the existing sidewalk. Signage will be added for education and public demonstration. The swales will be constructed in two segments, one north of the post office driveway, and one south of the post office driveway. Paver walkways within the swales will be constructed for pedestrian access across them. The walkways will be placed near the existing entrances for the adjacent businesses.

The use of bioretention swales requires that a portion of the existing roadway width be removed to place the swale. To maintain the standard travel way width in each direction and to allow for continued roadside parking along the eastern side of Carlos Street, the proposed bioswale will be approximately 5 feet wide (including the swale invert and side slopes) along the northern segment from Etheldore Street to the post office driveway and approximately 2 feet wide along the southern segment beginning in front of 2350 Carlos Street and extending toward California Avenue. To convey underdrain flows, a perforated plastic pipe will be trenched along the length of Carlos Street, connecting the underdrain flows between swales and ultimately connecting to the storm drain manhole at the Carlos Street and Etheldore Street intersection. The planting scheme for the bioretention swales will incorporate locally sourced native plants and will comply with the standards stated in the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) C.3 Technical Guidance.

Proposed safety improvements include striping to formalize parking, the addition of a new segment of sidewalk for improved walkability, and the installation of sharrows (shared bicycle lane markings) to improve bicycle safety by alerting drivers to the

presence of bicyclists along this frontage road. The areas immediately adjacent to the swales will be striped for 45 degree diagonal parking. Currently, there is no formalized roadside parking, and vehicles generally park diagonally or perpendicular. A new section of concrete sidewalk (approximately 50 linear feet) will be constructed from 2355 Carlos Street to the existing sidewalk at 2385 Carlos Street. Currently, the sidewalk area at this location is an unpaved gravel and dirt walkway.

RECOMMENDATION

Approve the Coastal Development Permit, County File Number PLN 2014-00144, by adopting the required findings and conditions of approval identified in Attachment A.

BACKGROUND

Report Prepared By: Michael Schaller, Senior Planner, Telephone 650/363-1849

Applicant: San Mateo County Department of Public Works (DPW)

Owner: San Mateo County

APNs: Public right-of-way adjacent to 037-097-010, -240, -250, -160, -210 and -200

Existing Zoning: R-1/S-17 (Single-Family Residential/5,000 sq. ft. minimum parcel size), C-1/S-3 (Neighborhood Commercial/5,000 sq. ft. minimum parcel size) and PUD-121 (Planned Unit Development 121)

General Plan Designation: Neighborhood Commercial

Existing Land Use: Public Roadway. Adjacent land uses are commercial in nature.

Flood Zone: The project site is located in an area of minimal flooding (Zone X), per FEMA Panel 06081C0119E, effective date October 16, 2012.

Environmental Evaluation: The County is the lead agency and DPW has assumed the role of lead department, per the California Environmental Quality Act (CEQA) Guidelines. Upon project approval, DPW will file a Categorical Exemption under Section 15301 (Repair, Maintenance, and Rehabilitation of Existing Facilities) of the California Environmental Quality Act.

Setting: The project site is located immediately east of Highway 1 along the eastern side of Carlos Street. The proposed project will extend from Etheldore Street south to California Avenue. Currently, stormwater in this area drains via the roadway gutter to two existing catch basins, one at the corner of Carlos Street and Etheldore Street and one at the corner of Carlos Street and California Avenue. Drainage from the California Avenue catch basin is then piped to the upstream end of a roadside ditch (within the CalTrans right-of-way) that parallels Highway 1. Drainage from the Etheldore Street catch basin is piped to the downstream end of the CalTrans ditch. Flow from the CalTrans ditch is then piped beneath Highway 1 to the ditch and storm drain system

that runs along Wienke Way on the west side of Highway 1. The Wienke Way drainage discharges, via a storm drain pipe, directly to the Areas of Special Biological Significance (ASBS), and is listed as a high threat discharge by the State Water Resources Control Board.

The primary land use along Carlos Street is light commercial. Beyond Carlos Street, the primary land use in the area is residential. Vegetation impacts will be minimal and will be limited to the areas for the new section of sidewalk and the permeable pathway. The majority of construction will take place within the existing paved area. Vegetation is sparse in the area of the proposed sidewalk and permeable pathway.

Dominant plant species observed in this area included ruderal and non-native species such as garden nasturtium, cut-leaved plantain, bristly ox-tongue, Bermuda buttercup, California burclover, dandelion/cat's ear, and non-native grasses. Only vegetation within the footprint of the proposed sidewalk and pathway will be removed. The adjacent CalTrans drainage ditch contains wetland habitat but will not be impacted by the proposed project as work will be limited to the opposite side of the roadway. Freshwater wetland habitat is scattered throughout the ditch as indicated by the presence of wetland indicator species such as watercress, horsetail, cat-tail, rush, and Pacific silverweed. The roadside drainage ditch appears to be spring fed as water is present year-round, even in dry years. Three Monterey cypress trees are present within the private parcels that are adjacent to the work area and may provide potential bird nesting habitat. No trees or nesting birds will be impacted by this work.

Special status species that have been previously documented within a 1/2-mile radius of the project site include rose leptosiphon, coast yellow leptosiphon, Hickman's cinquefoil, beach strawberry, and California red-legged frog (CRLF). The biological survey was conducted on April 3, 2014, during the typical blooming period for many of the local special status plant species. With the exception of beach strawberry, which is listed in the Local Coastal Program as a unique species within San Mateo County, no special status plant species were detected near the work area. Beach strawberries are present in two of the adjacent landscaped areas and within the adjacent CalTrans ditch. However, work will not extend into these areas. Areas with beach strawberries will be flagged for protection. Any additional sensitive plant species identified during the pre-construction surveys shall be clearly marked to establish an exclusionary zone. Although the project site is not located within United States Fish and Wildlife Service (USFWS), designated critical habitat for CRLF, CRLF have been observed on multiple occasions within the adjacent CalTrans ditch. There are also documented occurrences within 2 miles of the project site.

DISCUSSION

A. KEY ISSUES

1. Conformance with the County General Plan and Zoning Regulations

Pursuant to Section 53091 of the California Government Code, projects undertaken by the Department of Public Works are exempt from review

under the County's Zoning Regulations. However, the project is subject to the policies of the General Plan.

Vegetative, Water, Fish and Wildlife Resources Policies

Policy 1.27 (*Regulate Development to Protect Sensitive Habitats*). As discussed above, California red-legged frog (CRLF) have been observed in the nearby CalTrans drainage ditch (other side of Carlos Street, adjacent to Highway 1). No work or other site disturbance is proposed in or immediately adjacent to the ditch. However, there is the potential for CRLF to disperse into the project's proposed work area. If that were to occur, then there is the potential for an individual CRLF to be killed.

In addition, there is the potential for birds to be nesting in the adjacent Monterey cypress trees. Nesting birds could be impacted by the noise of construction activities causing abandonment of nests. Also, beach strawberry, a locally designated sensitive plant species, is present in two of the adjacent landscaped areas and within the adjacent CalTrans ditch. Particularly in the landscaped areas, workers could inadvertently step on these plants if they are not made aware of their presence.

To minimize the above potential impacts, the applicant is proposing to implement their Best Management Practices (BMPs) including:

a. Project timing when rainfall is not predicted for the region in order to prevent erosion and water quality impacts. All work shall be completed in late summer and early fall. Work shall not occur unless a zero precipitation forecast is obtained for the planned work period.

b. If work is scheduled to begin prior to August 15, a qualified biologist shall conduct a pre-construction nesting bird survey. If nesting birds are observed near the project site, a 250-foot exclusion zone for songbirds (500- to 1,000-foot for raptors) will be established for protection. If the exclusion zone is located within the immediate work area, construction will be delayed until the young have fledged and left the nest.

c. Pre-construction plant and wildlife surveys by a qualified biologist:

    (1) If sensitive semi-aquatic species (i.e., CRLF) are observed at the project site, work shall not commence and the appropriate agencies, California Department of Fish and Wildlife (CDFW) and USFWS, will be notified immediately. Construction shall not take place in any area in which listed species are present.

    (2) Any special status plants (i.e., beach strawberry) observed near the project site will be clearly marked/flagged to delineate the areas to be avoided.

d. Pre-construction briefing of all personnel involved in construction activities by a qualified biologist including sensitive species training, avoidance measures, and BMPs implementation.

e. On-site monitoring of construction activities by a qualified biologist. Any vehicle parked on site for more than 15 minutes shall be inspected by the biological monitor before it is moved to ensure that wildlife has not moved under the vehicle.

f. Sensitive habitat along the adjacent CalTrans ditch shall be clearly marked with orange plastic fencing by the contractor as directed by a qualified biologist to establish an exclusionary zone. All personnel and equipment shall be prohibited from entering this area.

g. Fueling and maintenance of vehicles shall take place at least 65 feet away from the adjacent drainage ditch and storm drain inlets.

h. Erosion control and containment BMPs (i.e., catch basin protection, street sweeping) shall be implemented to prevent the delivery of pollutants into the storm drain system; adjacent drainage ditch; and Areas of Special Biological Significance.

i. Vegetation, sediment, debris, and trash will not be stockpiled on-site and shall be removed from the site at the end of each workday.

Implementation of these measures, as well as the other measures contained as conditions of approval in Attachment A should reduce the potential of impact to these sensitive biotic resources to a negligible level.

2. Conformance with the San Mateo County Local Coastal Program (LCP)

A Coastal Development Permit is required pursuant to San Mateo County Local Coastal Program Policy 2.1, which mandates compliance with the California Coastal Act for all Public Works projects to be undertaken in the Coastal Zone. "Public Works" includes all transmission facilities for water, sewerage, or other similar utilities owned or operated by any public agency (Policy 2.2). Summarized below are the following sections of the LCP that are relevant to this project:

a. Public Works Component

Policy 2.50 (*Improvements for Bicycle and Pedestrian Trails)*. Subsection H of this policy requires all roadway repair or maintenance projects be designed to avoid blocking or damaging any existing or formally planned public trail segment. In designing this project, the Department of Public Works consulted with the County Planning Department to ensure that the proposed improvements will not conflict with the recently adopted Mid-Coast Mobility Study. At this time, there

are several different routing options under consideration for the segment of the study that includes the project site. Staff and DPW has concluded that there is sufficient room within the right-of-way along the east side of Highway 1 and Carlos Street to accommodate a proposed pedestrian/bicycle path and this project, if a trail on the east side of Highway 1 is chosen.

b. Sensitive Habitats Component

Policy 7.1 (*Definition of Sensitive Habitats)*. This policy defines sensitive habitats as including wetland habitat. As discussed above, the adjacent CalTrans drainage ditch (on the west side of Carlos Street) contains some scattered wetland vegetation.

Policy 7.3 (*Protection of Sensitive Habitats)*. This policy requires that development in areas adjacent to sensitive habitats be sited and designed to prevent impacts that could significantly degrade these resources. The goal of the project is to control non-point source pollution, which has been entering the ASBS through the road drainage system. To protect the wetland habitat discussed above, the applicant is proposing to place orange plastic fencing around the ditch in order to establish an exclusionary zone. All equipment and personnel shall be prohibited from entering this area.

Policy 7.12 (*Permitted Uses in Wetland Buffer Zones)*. The LCP requires a 100-foot buffer around all wetland areas. The LCP also defines certain permitted uses within these buffer zones. The proposed project lies within the required 100-foot buffer zone around the CalTrans drainage ditch. However, “incidental public service purposes” is included as an allowed use in buffer zones. The goal of the project is to reduce the amount of polluted stormwater entering into the ASBS. To ensure that there will be no impact on the adjacent wetland vegetation, the applicant is proposing to establish an exclusionary zone around the ditch, and to implement their standard BMPs, which include project timing requirements and the implementation of erosion control BMPs.

Policy 7.49 (*California Wild Strawberry)*. This policy calls for the protection of wild strawberry plants or, if that is not possible, then their transplanting to an area that will not be disturbed by proposed development. Beach strawberries are present in two of the adjacent landscaped areas and within the adjacent CalTrans ditch. However, work will not extend into these areas. Areas with beach strawberries will be flagged for protection.

B. ENVIRONMENTAL REVIEW

The County is the lead agency and DPW has assumed the role of lead department, per the CEQA Guidelines. Upon project approval, DPW will file a Categorical Exemption under Section 15301 (Repair, Maintenance, and Rehabilitation of Existing Facilities) of the California Environmental Quality Act.

C. REVIEWING AGENCY

California Coastal Commission

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Location Maps
C. Project Plans
D. Biotic Report

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Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2014-00144 Hearing Date: May 28, 2014

Prepared By: Michael Schaller
Senior Planner

For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That this project is categorically exempt pursuant to Section 15301 of the California Environmental Quality Act, consisting of the repair of existing public or private structures involving negligible or no expansion of use.

Regarding the Coastal Development Permit, Find:

2. That the project, as described in the application and accompanying materials required by Zoning Regulations Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms with the plans, policies, requirements and standards of the San Mateo County Local Coastal Program as discussed in the staff report under Section A.2, including protection of biological resources.

3. That the project conforms to the specific findings required by policies of the San Mateo County Local Coastal Program as discussed in the staff report under Section A.2, the applicant has agreed to implement the mitigation measures identified in the biological report in order to minimize any potential impact to biological resources to a less than significant level.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. This approval applies only to the proposal as described in this report and plans as reviewed by the Planning Commission on May 28, 2014. Minor adjustments to the project may be approved by the Community Development Director if they are consistent with the intent of and in substantial conformance with this approval.

2. The applicant shall implement their construction best management practices as necessary. Said practices shall conform to the San Mateo Countywide

Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines" and include, but not be limited to:

a. Using filtration materials on storm drain covers to remove sediment from dewatering effluent.

b. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 1 and April 30.

c. Removing spoils promptly, and avoiding stockpiling of fill materials when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.

d. Storing, handling, and disposing of construction materials and wastes so as to avoid their entry to a local storm drain system or water body.

e. Avoiding cleaning, fueling or maintaining vehicles on-site, except in an area designated to contain and treat runoff.

The applicant is responsible for ensuring that all contractors minimize the transport and discharge of pollutants from the project site into existing drainage systems and water bodies and adhere to the above referenced practices.

3. The applicant shall train and provide instruction to all employees and subcontractors regarding the construction best management practices (as listed above).

4. This permit shall be valid for one year in which time construction shall commence. Any extension of this permit shall require submittal of an application for permit extension and payment of applicable permit extension fees 60 days prior to expiration.

5. The applicant shall time their project to occur when rainfall is not predicted for the region in order to prevent erosion and water quality impacts. Work shall not occur unless a zero precipitation forecast is obtained for the planned workdays.

6. If work is scheduled to begin prior to August 15, a qualified biologist shall conduct a pre-construction nesting bird survey. If nesting birds are detected near the project sites, a 250-foot exclusion zone for passerines (500- to 1,000-foot for raptors) shall be established for protection. If the exclusion zone is located within the immediate work area, construction will be delayed until the young have fledged and left the nest.

7. The applicant shall have a qualified biologist perform pre-construction plant and wildlife surveys.

8. If sensitive semi-aquatic species (i.e., California red-legged frog (CRLF)) are observed at the project site, work shall not commence and the appropriate

agencies, California Department of Fish and Wildlife and United States Fish and Wildlife Service, will be notified immediately. Construction shall not take place in any area in which listed species are present.

9. Any special status plants (i.e., beach strawberry) observed near the project site shall be clearly marked/flagged to delineate the areas to be avoided.

10. The applicant shall have a qualified biologist present worker awareness training for construction personnel describing the species, their protected status, their ecology, and measures to be taken to avoid impacts prior to any construction.

11. The applicant shall have a qualified biologist on the site to monitor construction activities. The monitoring biologist shall inspect the work area for wildlife each day prior to the start of construction activities. Work will not take place in any area in which CRLF are present. If this species is detected within the active work area, construction activities shall stop until a permitted biologist relocates the animal or it leaves on its own. The monitoring biologist shall inspect beneath all vehicles that have been parked for more than 15 minutes before they are moved to ensure that wildlife has not moved under the vehicle.

12. Sensitive habitat along the adjacent CalTrans ditch shall be clearly marked with orange plastic exclusionary fencing by the contractor as directed by a qualified biologist to establish an exclusionary zone. This fencing shall be designed to create a movement barrier that will prevent CRLF from entering the project work site. All personnel and equipment shall be prohibited from entering this area.

13. Fueling and maintenance of vehicles shall take place at least 65 feet away from the adjacent drainage ditch and storm drain inlets.

14. The applicant shall implement erosion control and containment best management practices (e.g., installation of silt fencing, natural fiber tightly woven straw rolls, catch basin protection, street sweeping, etc.) to prevent delivery of pollutants into the storm drain system and Areas of Special Biological Significance.

15. Access to adjacent public and private properties will be maintained during construction.

16. Vegetation, sediment, debris, and trash will not be stockpiled on-site and shall be removed from the site at the end of each workday

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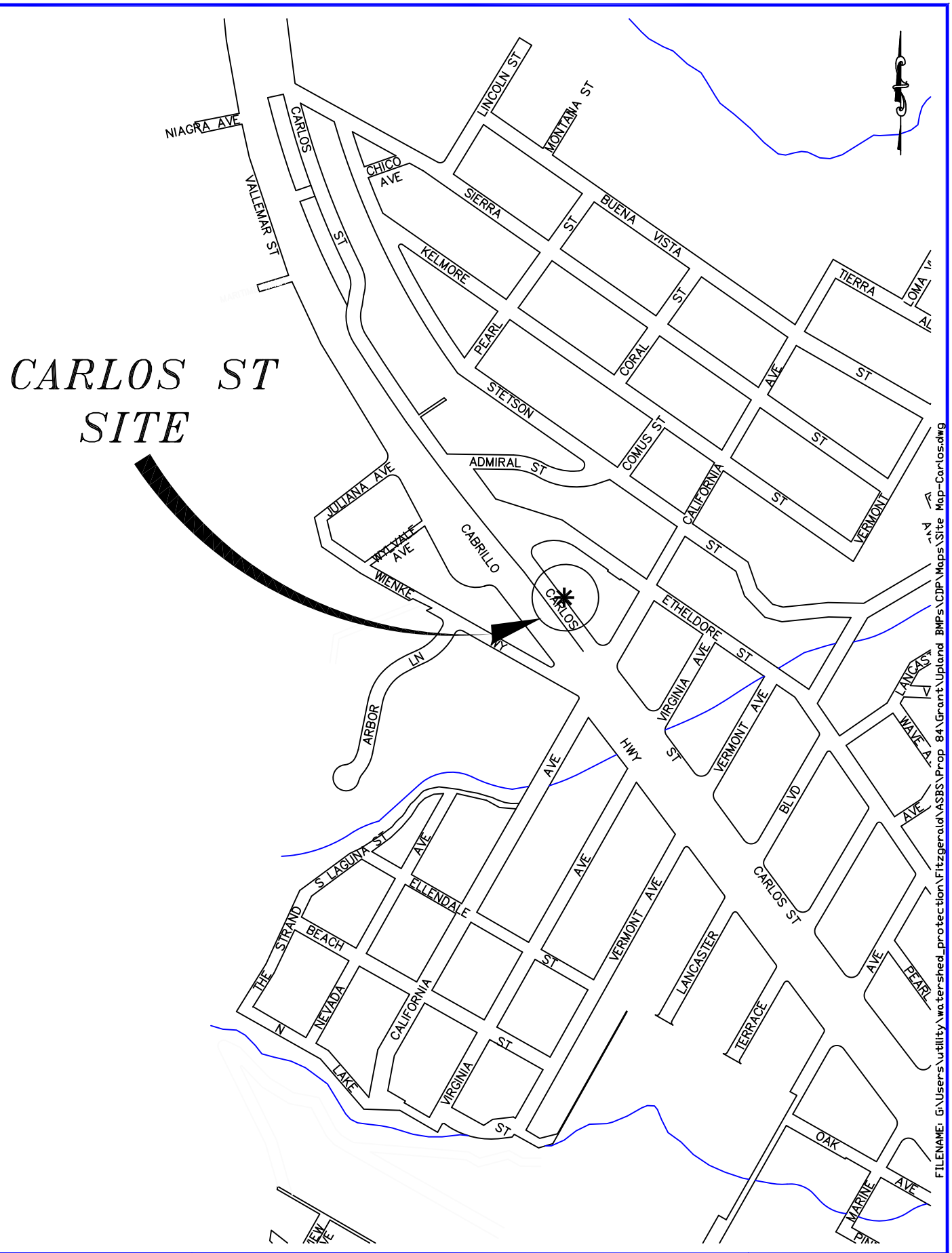
County of San Mateo - Planning and Building Department

ATTACHMENT B



COUNTY OF SAN MATEO PUBLIC WORKS	DESIGNED BY:	**JAMES V. FITZGERALD ASBS STORM DRAIN BMP PROJECT**	SCALE: NONE
	CHECKED BY: EG	**CARLOS STREET SITE**	DATE: APRIL 2014
	DRAWN BY: JC		FILE NO: 1/XXXX

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5TH FLOOR
REDWOOD CITY, CALIFORNIA 94063-1665

County of San Mateo - Planning and Building Department

ATTACHMENT C

SAN MATEO COUNTY

GREEN STREETS IMPROVEMENT PROJECT ON CARLOS STREET

BETWEEN ETHELDORE STREET AND CALIFORNIA AVENUE IN THE MOSS BEACH AREA

TO BE SUPPLEMENTED BY STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS
DATED MAY 2006 AND ADOPTED BY SAN MATEO COUNTY, NOVEMBER 14, 2006, BY RESOLUTION NO. 068389

APPROVED:

DATE: ______________________

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2015

REGISTERED PROFESSIONAL ENGINEER — JAMES C. PORTER — C 48056 — EXPIRES 12/31/13 — CIVIL — STATE OF CALIFORNIA

GENERAL NOTES:

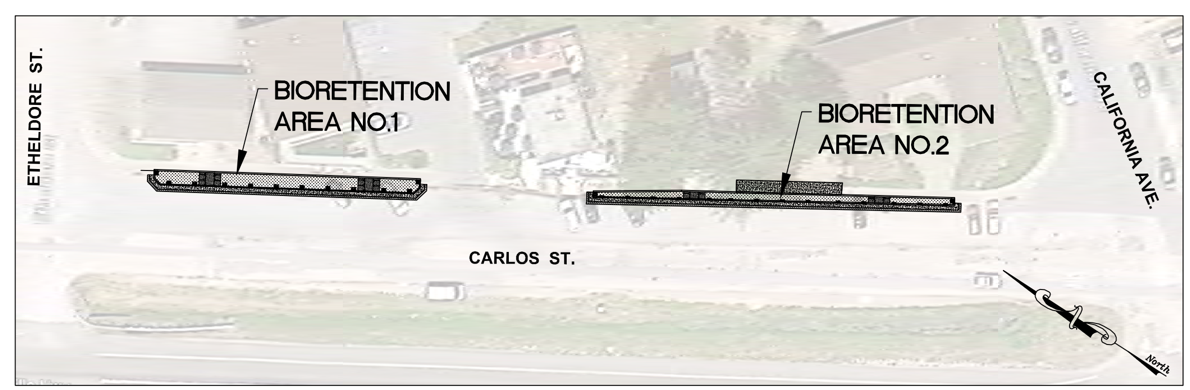
1. THE CONTRACTOR IS RESPONSIBLE FOR THE INTENT OF THESE PLANS AND SHALL REPORT ANY DISCREPANCIES FOUND IN THEM TO THE ENGINEER PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR MUST VERIFY ALL FIELD DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS AND MUST NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOR CORRECTIVE ACTION PRIOR TO PROCEEDING WITH WORK.
3. THE SPECIFICATIONS FOR THIS PROJECT, WHICH ARE A SEPARATE DOCUMENT, ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. SEE SPECIFICATIONS FOR INFORMATION NOT GIVEN IN THESE GENERAL NOTES OR SHOWN ON THESE PLANS.
4. THE CONTRACTOR MUST COMPARE ALL PLANS FOR CONFORMANCE AS TO THE LAYOUT OF DIMENSIONS AND ELEVATIONS. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. IF DISCREPANCIES BETWEEN THE PLANS AND THE SPECIFICATIONS OCCUR, THE ENGINEER MUST BY NOTIFIED PRIOR TO PROCEEDING WITH WORK.
5. THE ENGINEER MUST BE NOTIFIED OF ANY UNANTICIPATED CONDITIONS THAT ARE ENCOUNTERED AND THE ENGINEER WILL DETERMINE WHETHER DESIGN CHANGES WILL BE REQUIRED.
6. THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE AT ALL TIMES, INCLUDING SAFETY OF PERSONS AND PROPERTY

UNDERGROUND AND UTILITY NOTES:

1. IT IS CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES WITH THE APPROPRIATE UTILITY AGENCIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY OWNERS 48 HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY. CONTACT SERVICE ALERT (USA) AT 800-642-2444 OR 811.
2. NO GUARANTEE IS INTENDED THAT UNDERGROUND OBSTRUCTIONS, NOT SHOWN ON THESE PLANS, WILL NOT BE ENCOUNTERED. THOSE SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE AND THE CONTRACTOR IS CAUTIONED THAT THE OWNER, THE ENGINEER, AND THE COUNTY OF SAN MATEO ASSUME NO RESPONSIBILITY FOR ANY OBSTRUCTIONS EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR MUST COORDINATE WITH ALL UTILITY COMPANIES IN REGARDS TO WORK WITHIN THE LIMITS OF THIS PROJECT.
3. THE CONTRACTOR MUST NOT USE A BACKHOE OR EXCAVATOR FOR POTHOLING OR TO IDENTIFY THE LOCATIONS AND DEPTHS OF UTILITIES. THE CONTRACTOR MUST USE HAND METHODS FOR POTHOLING OR GROUND PENETRATING RADAR SYSTEMS TO IDENTIFY UTILITY LOCATIONS.

LEGEND:

Symbol	Description
— SS —	EXISTING SANITARY SEWER LINE
— W —	EXISTING WATER LINE
— e —	EXISTING ELECTRICAL LINE
	BIORETENTION AREA
	ASPHALT CONCRETE (TYPE B)
	CLASS 3 CONCRETE
	AB, SB CLASS 2 PERMEABLE MATERIAL STREAMBED COBBLES
	BENCHMARK LOCATION
	EDUCATIONAL SIGN
	CLEANOUT
	POTHOLE #
	PLANTS



PLAN

SCALE: 1"=40'

SHEET INDEX:

FIELD BOOKS:

CONTACT RESIDENT ENGINEER FOR FIELD BOOKS.

BASIS OF BEARING:

CONTACT RESIDENT ENGINEER FOR BASIS OF BEARING.

BENCH MARK LOCATION and ELEVATION (NGVD DATUM):

△ "C" 0+32.57, 44.62' RT, ELEV. 60.74'
N=5977572, E=2021252

ABBREVIATIONS:

AB	AGGREGATE BASE	N	NORTHING
AC	ASPHALT CONCRETE	NO.	NUMBER
CLR	CLEARANCE	O.C.	ON CENTER
CONC	CONCRETE	OG	ORIGINAL GRADE
DI	DRAINAGE INLET	PH	POTHOLE
DIA	DIAMETER	PP	PLASTIC PIPE
DWY	DRIVEWAY	R	RADIUS
E	EASTING	RT	RIGHT
FG	FINISH GRADE	SB	SUBBASE
FL	FLOWLINE	SD	STORM DRAIN
INV	INVERT	ST.	STREET
LT	LEFT	TG	TOP OF GRATE
LG	LIP OF GUTTER	TYP	TYPICAL
MAX	MAXIMUM	UD	UNDERDRAIN
MH	MANHOLE	VAR	VARIES
MIN	MINIMUM		

FILENAME: G:\PROJECTS\Y2012\P1280 SAN MATEO CO ON-CALL FLOOD CONTROL\TO 08\DWG\TITLE AND LOCATION MAP.DWG (LAYOUT1)

APPROVED DATE:	
ANALETTE OCHOA, P.E	
WRECO	
R.C.E. # 55279 / EXPIRES 12-31-2014	DATE:

REGISTERED PROFESSIONAL ENGINEER — ANALETTE A. OCHOA — No. 55279 — Exp. 12/31/14 — CIVIL — STATE OF CALIFORNIA

COUNTY OF SAN MATEO PUBLIC WORKS

REVISION	DATE				
65%	04-18-2014	DESIGNED BY: AC	TITLE SHEET	SCALE: AS SHOWN
		CHECKED BY: AO	NOTES, ABBREVIATIONS, AND LEGEND	DATE: 05-07-2014
		DRAWN BY: PY	CARLOS STREET GREEN STREET	FILE NO.: 1/4924
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	

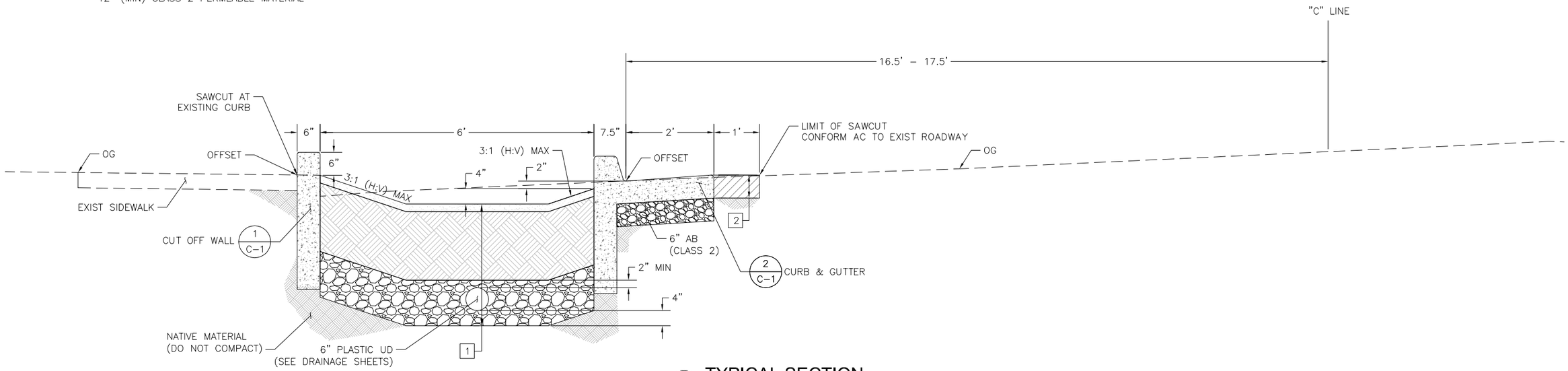
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

T-1
SHEET 1 OF 17

PAVEMENT AND BIORETENTION SECTIONS

1 — 2" MULCH
18" BIORETENTION SOIL
12" (MIN) CLASS 2 PERMEABLE MATERIAL

2 — 6" DEEP AC (TYPE B)



1 X-1 TYPICAL SECTION

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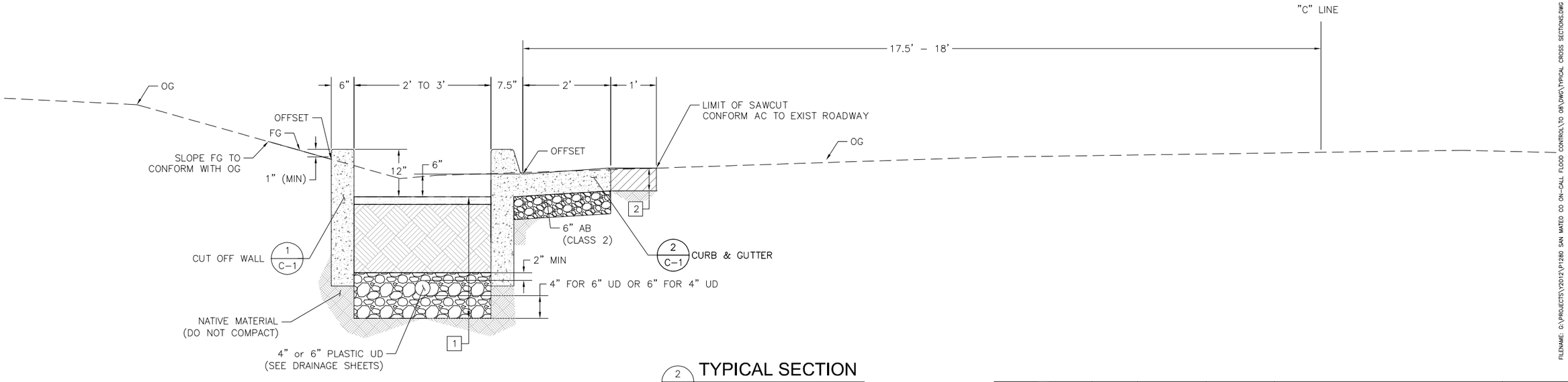
BIORETENTION AREA NO. 1
SCALE: 1" = 1'



2 X-1 TYPICAL SECTION

"C" 2+48.00 TO "C" 3+15.00
BIORETENTION AREA NO. 2
SCALE: 1" = 1'

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2015

FILENAME: G:\PROJECTS\2012\P1280 SAN MATEO CO ON-CALL FLOOD CONTROL\TO 08\DWG\TYPICAL CROSS SECTIONS.DWG (X-1)

COUNTY OF SAN MATEO PUBLIC WORKS

65%	04-18-2014	DESIGNED BY: AC	TYPICAL CROSS SECTIONS
		CHECKED BY: AO	CARLOS STREET GREEN STREET
		DRAWN BY: PY	
REVISION	DATE	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS, SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR, REDWOOD CITY, CALIFORNIA 94063

SCALE: AS SHOWN
DATE: 05-07-2014
FILE NO.: 1/4924

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

X-1
SHEET 2 OF 17

NOTES:

1. SEE X SHEETS FOR LOCATION OF STATION OFFSETS.
2. FOR GENERAL NOTES AND UNDERGROUND AND UTILITY NOTES, SEE SHEET T–1.
3. CONTRACTOR TO ALLOW DRIVEWAY ACCESS AT ALL TIMES DURING CONSTRUCTION.
4. FOR DRAINAGE IMPROVEMENTS, SEE D SHEETS. FOR PLANTING, SEE P SHEETS.

POTHOLE INFORMATION

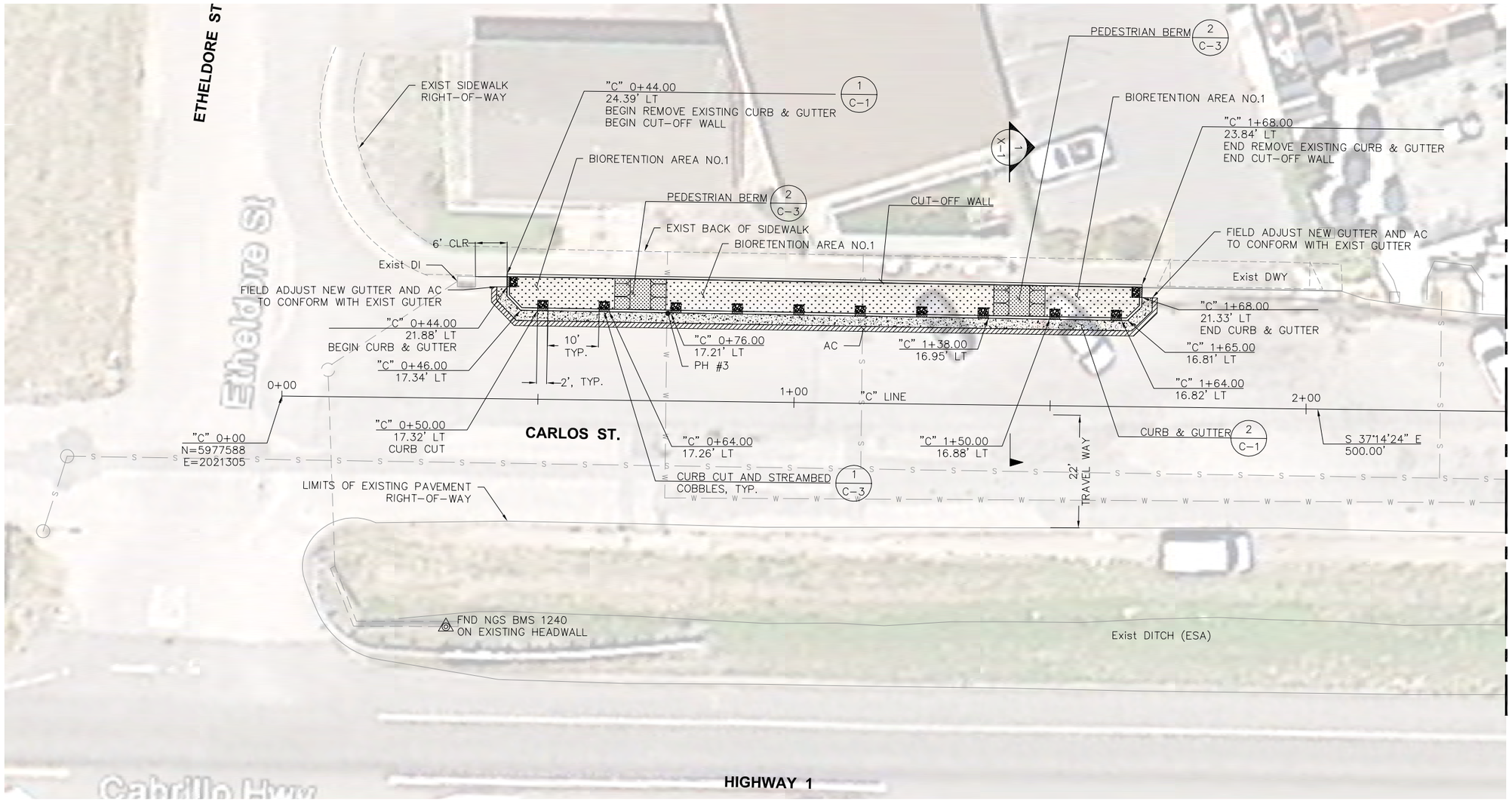
POTHOLE #	UTILITY	GROUND ELEVATION	DEPTH TO TOP OF UTILITY	NOTE
POTHOLE #3	1/2" WATER SERVICE	71.28	38"	

REGISTERED PROFESSIONAL ENGINEER JAMES C. PORTER C 48056 EXPIRES 12/31/13 CIVIL STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12–31–2015



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		CHECKED BY: AO			DATE: 05–06–2014
		DRAWN BY: PY	CARLOS STREET GREEN STREET		FILE NO.: 1/4924
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	
REVISION	DATE	FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4			L-1 SHEET 4 OF 17

POTHOLE INFORMATION

POTHOLE #	UTILITY	GROUND ELEVATION	DEPTH TO TOP OF UTILITY	NOTE
POTHOLE #1	3/4" WATER SERVICE	70.96	31"	
	2" GAS	70.96	36"	
POTHOLE #2	1" GAS SEVICE	70.93	36"	
	2" GAS	70.93	38"	
POTHOLE #4	2-4" ATT CONDUIT	–	26"	IN SIDEWALK, NOT IN STREET
POTHOLE #4A	ATT	–	–	NOT LOCATED, CLEARED TO 5'

POTHOLE INFORMATION (CONTINUED)

POTHOLE #	UTILITY	GROUND ELEVATION	DEPTH TO TOP OF UTILITY	NOTE
POTHOLE #5	1" GAS SEVICE	70.58	40"	
	2" GAS	70.58	42"	
POTHOLE #6	1/2" WATER SERVICE	70.57	19.5"	
POTHOLE #6A	WATER SERVICE	–	–	NOT LOCATED, CLEARED TO 5'
POTHOLE #7	2" GAS	70.14	36"	

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
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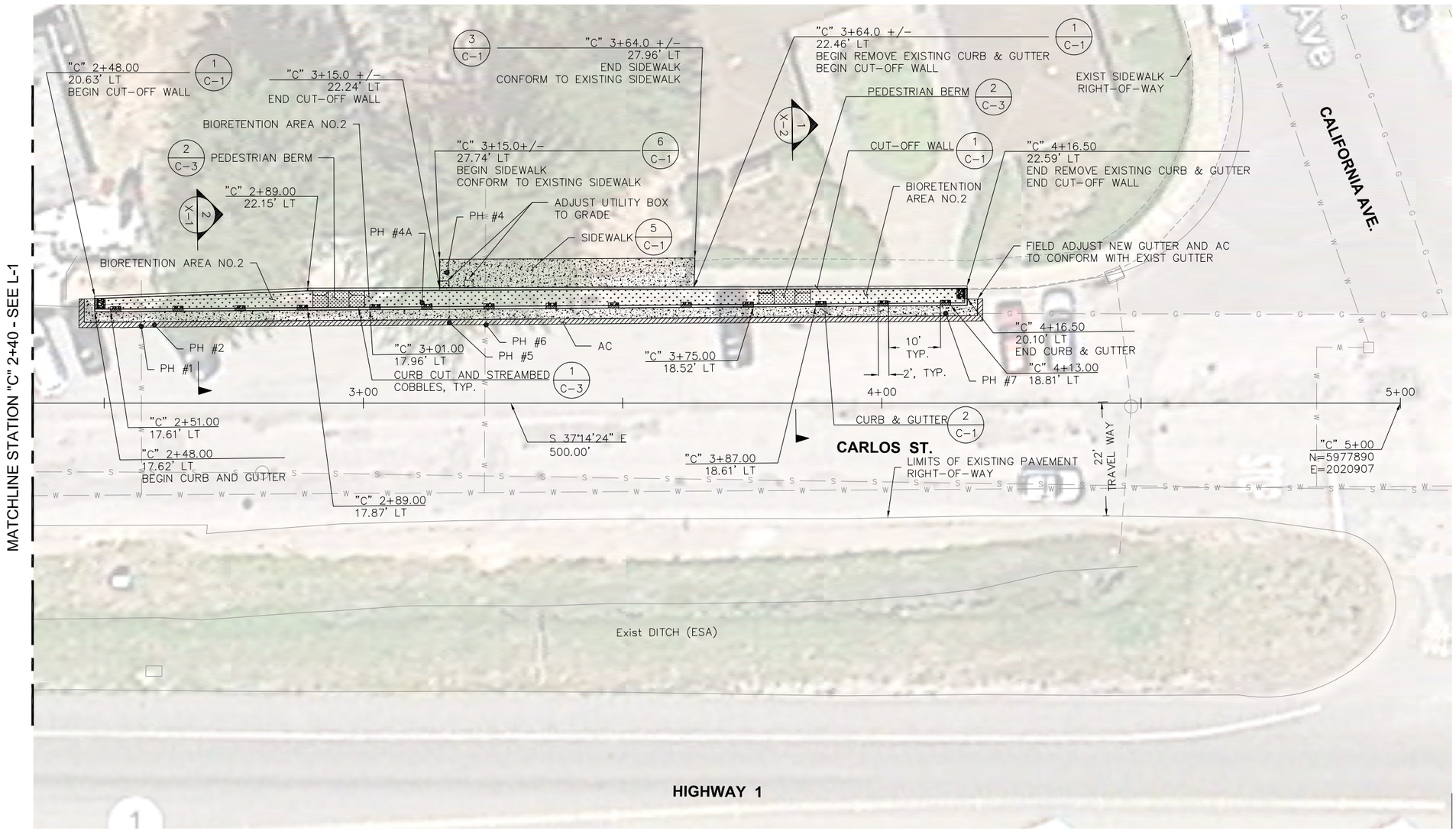
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2015

North



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		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	
REVISION	DATE				
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4					L-2 SHEET 5 OF 17

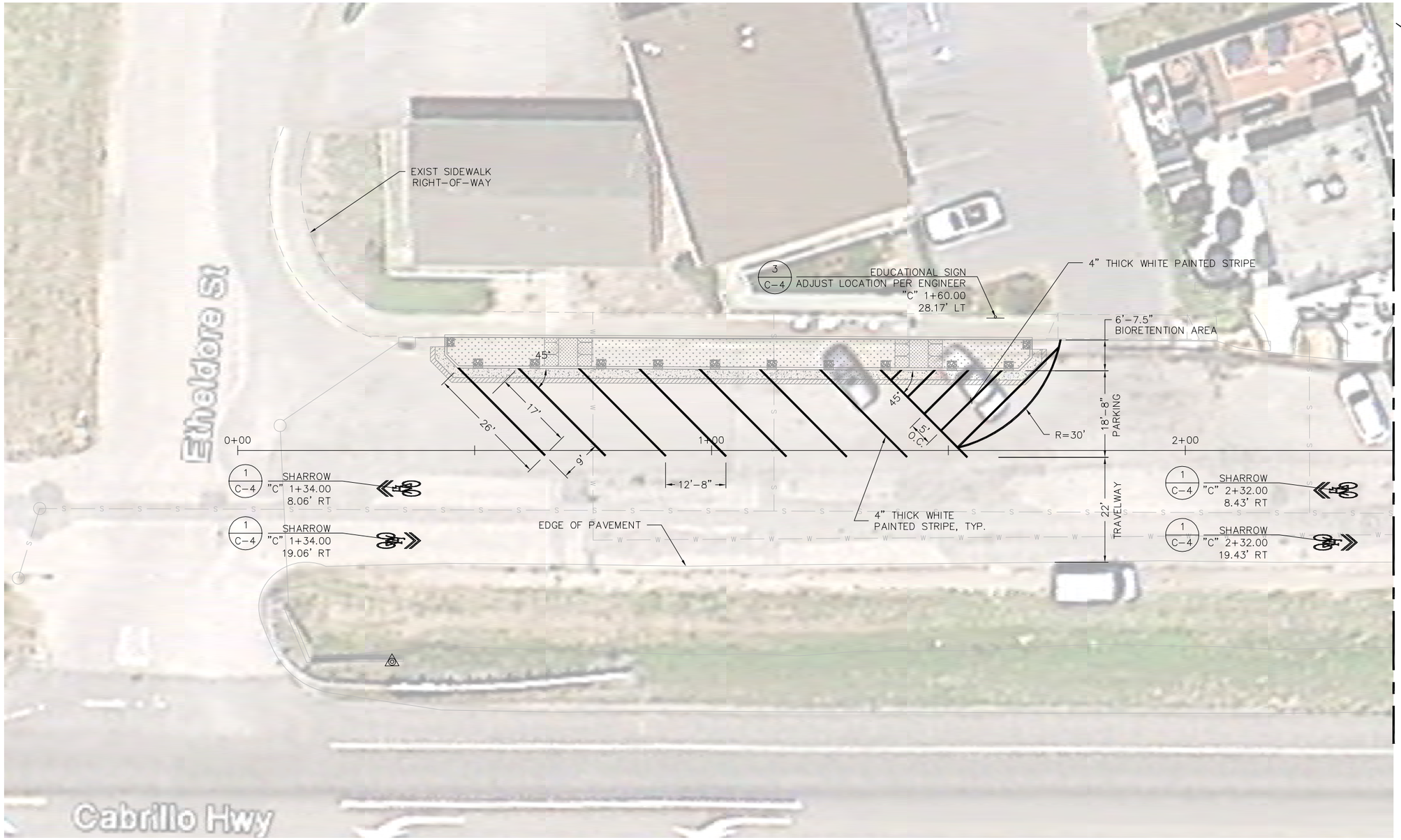
COUNTY OF SAN MATEO PUBLIC WORKS

REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2015



MATCHLINE STATION "C" 2+50 - SEE PD-2

FILENAME: C:\PROJECTS\Y2012\P1280 SAN MATEO CO ON-CALL FLOOD CONTROL\TO 08\DWG\PAVEMENT DELINEATION.DWG (PD-1)

COUNTY OF SAN MATEO PUBLIC WORKS

65%	04-18-2014	DESIGNED BY: AC	PAVEMENT DELINEATION AND SIGN PLAN		SCALE: 1"=10'
		CHECKED BY: AO			DATE: 05-06-2014
		DRAWN BY: PY	CARLOS STREET GREEN STREET		FILE NO.: 1/4924
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	
REVISION	DATE				
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4					PD-1 SHEET 9 OF 17

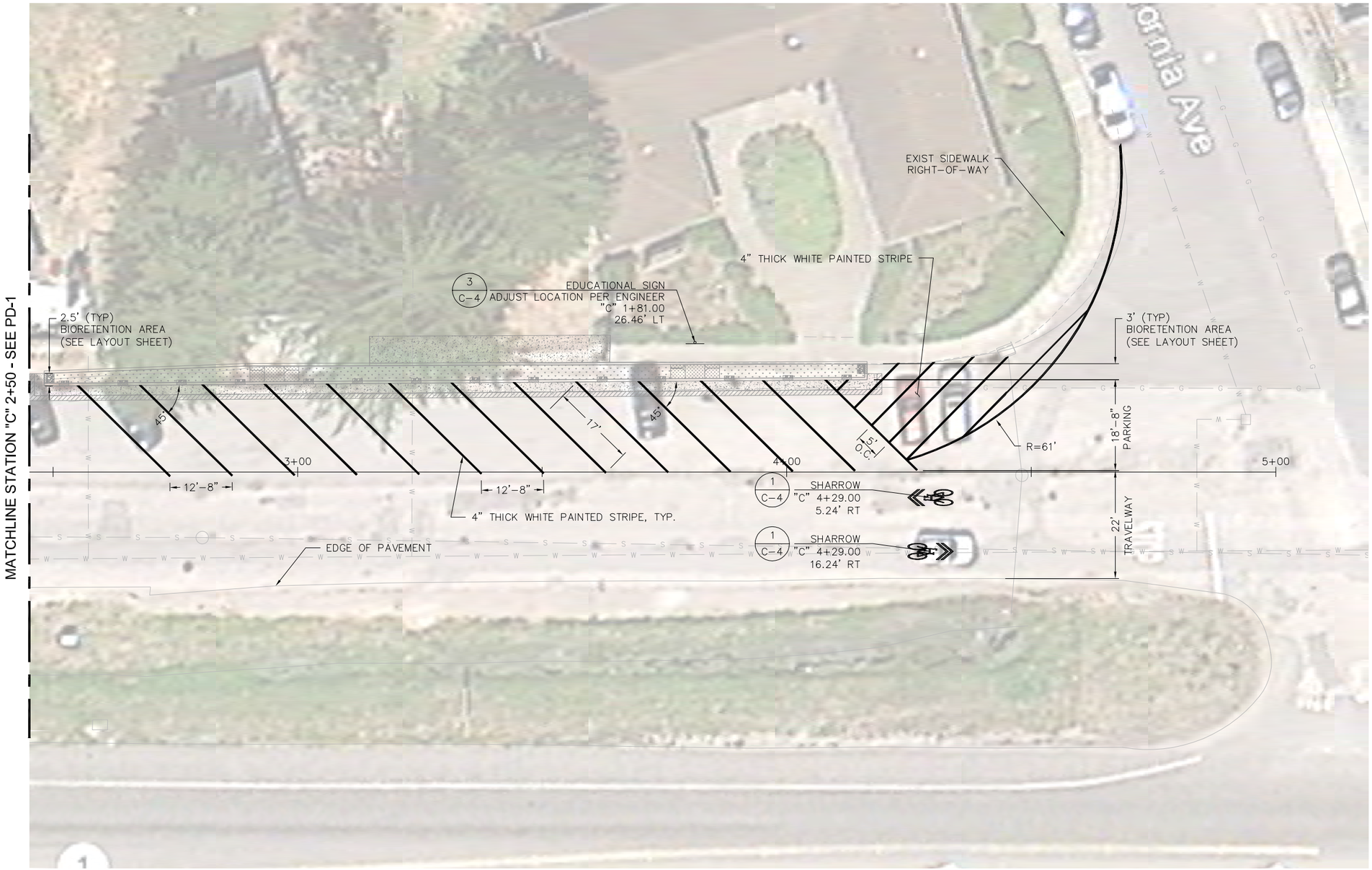
REGISTERED PROFESSIONAL ENGINEER
JAMES C. PORTER
C 48056
EXPIRES 12/31/13
CIVIL
STATE OF CALIFORNIA

APPROVED:

DATE: _____

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2015

North



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REVISION	DATE		
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		CHECKED BY: AO	CARLOS STREET GREEN STREET
		DRAWN BY: PY	

SCALE: 1"=10'
DATE: 05-06-2014
FILE NO.: 1/4924

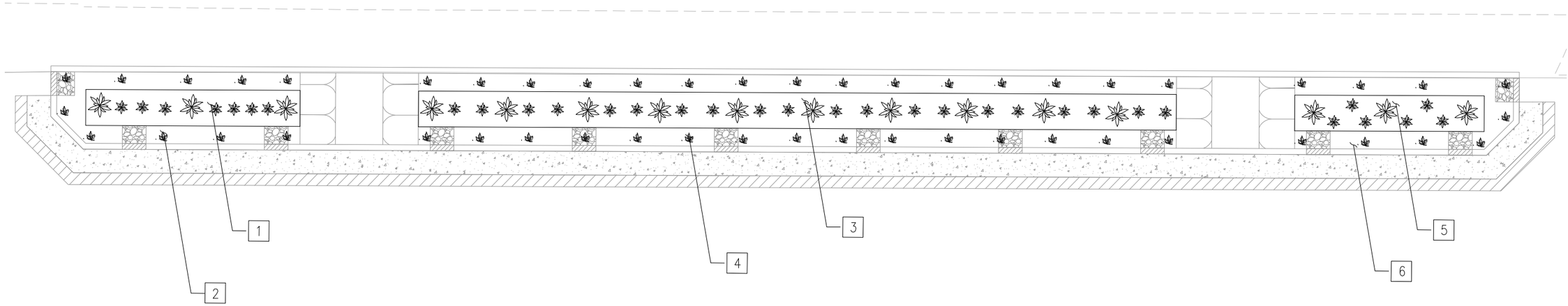
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5th FLOOR
REDWOOD CITY, CALIFORNIA 94063

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2 3 4

PD-2
SHEET 10 OF 17

1	4	ACHILLEA MILLEFOLIUM
	3	CAREX PRAEGRACILIS
	3	JUNCUS PATENS
2	3	CLINOPODIUM DOUGLASII
	3	FRAGARIA CHILOENSIS
	4	SISYRINCHIUM BELLUM
3	10	ACHILLEA MILLEFOLIUM
	10	CAREX PRAEGRACILIS
	10	JUNCUS PATENS
4	10	CLINOPODIUM DOUGLASII
	10	FRAGARIA CHILOENSIS
	10	SISYRINCHIUM BELLUM
5	3	ACHILLEA MILLEFOLIUM
	3	CAREX PRAEGRACILIS
	3	JUNCUS PATENS
6	3	CLINOPODIUM DOUGLASII
	3	FRAGARIA CHILOENSIS
	3	SISYRINCHIUM BELLUM



PLANTING LAYOUT FOR BIORETENTION AREA NO.1

SCALE: 1"=4'

PLANT LIST

SPECIES BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING	TOTAL NUMBER
Achillea millefolium	Yarrow	D19	10" O.C.	17
Carex praegracilis	Sedge	D19	10" O.C.	16
Clinopodium douglasii	Yerba buena	D19	10" O.C.	16
Fragaria chiloensis	Beach Strawberry	Flat	10" O.C.	16
Juncus patens	Rush	1 gal	15" O.C.	16
Sisyrinchium bellum	Blue-eyed grass	D19	10" O.C.	17

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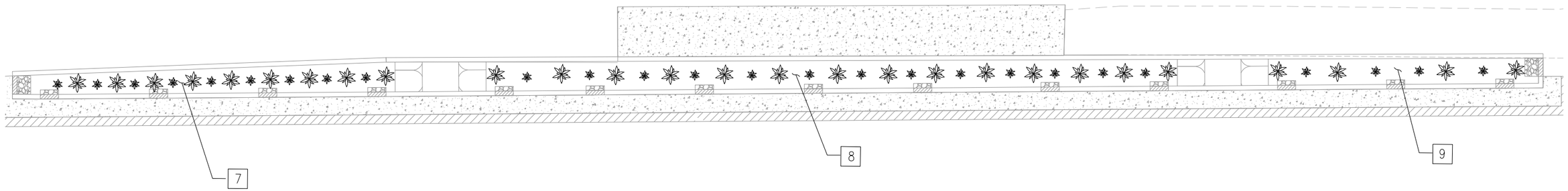
COUNTY OF SAN MATEO PUBLIC WORKS

65%	04-18-2014	DESIGNED BY: AC	PLANTING PLAN	SCALE: 1"=4'
		CHECKED BY: AO		DATE: 05-06-2014
		DRAWN BY: PY	CARLOS STREET GREEN STREET	FILE NO.: 1/4924
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	
REVISION	DATE			
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4				P-1 SHEET 16 OF 17

7 — 9 JUNCUS PATENS
9 CAREX PRAEGRACILIS

8 — 14 JUNCUS PATENS
13 CAREX PRAEGRACILIS

9 — 4 JUNCUS PATENS
4 CAREX PRAEGRACILIS



PLANTING LAYOUT FOR BIORETENTION AREA NO.2

SCALE: 1"=5'

PLANT LIST

SPECIES BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING	TOTAL NUMBER
Carex praegracilis	Sedge	D19	10" O.C.	26
Juncus patens	Rush	1 gal	15" O.C.	27

FILENAME: G:\PROJECTS\Y2012\P1280 SAN MATEO CO ON-CALL FLOOD CONTROL\TO 08\DWG\PLANTING_NEW.DWG (P-2)

COUNTY OF SAN MATEO PUBLIC WORKS

65%	04-18-2014	DESIGNED BY: AC	PLANTING PLAN	SCALE: 1"=5'
		CHECKED BY: AO		DATE: 05-07-2014
		DRAWN BY: PY	CARLOS STREET GREEN STREET	FILE NO.: 1/4924
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063	
REVISION	DATE			
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4				P-2 SHEET 17 OF 17

County of San Mateo - Planning and Building Department

ATTACHMENT D

San Mateo County Planning Division
Department of Environmental Management
455 County Center, 4th Floor
Redwood City, CA 94063
Phone: (650) 363-4161

JAMES V. FITZGERALD AREA OF SPECIAL BIOLOGICAL SIGNIFICANCE POLLUTION REDUCTION PROGRAM STORM DRAIN BEST MANAGEMENT PRACTICES PROJECT

ADDENDUM TO BIOLOGICAL IMPACT FORM

For compliance with:

LOCAL COASTAL PROGRAM POLICY 7.5

Filing Date:
Public Hearing:
Approval Date:

Project Background:

The proposed Green Streets Improvement Project on Carlos Street between Etheldore Street and California Avenue in the Moss Beach area involves construction of bioretention swales and parking, bicycle, and pedestrian safety improvements. The project is part of the James V. Fitzgerald Area of Special Biological Significance Pollution Reduction Program (Pollution Reduction Program) and is funded, in part, by a Proposition 84 grant from the State Water Resources Control Board. The goals of the Pollution Reduction Program are to protect beneficial uses, improve water quality at MidCoast public beaches and the James V. Fitzgerald ASBS, achieve the water quality objectives outlined in the California Ocean Plan, and comply with the ASBS General Exception and Special Protections. The Pollution Reduction Program involves implementation of targeted stormwater BMPs, water quality studies, BMP effectiveness monitoring, and education and outreach. The first phase, which was implemented in 2011 and 2012, was a pilot effort to install and test effectiveness of several types of stormwater BMPs including vegetated swales and storm drain structural devices. The proposed project is part of the second phase of the Pollution Prevention Program, which involves implementation of similar storm drain BMPs at multiple locations throughout the MidCoast and ASBS watershed. Fourteen locations were permitted under Coastal Development Permit File Number PLN2013-00188, which was approved by the San Mateo County Planning Commission on July 24, 2013. The proposed project is an additional site for the second phase of the Pollution Prevention Program.

The proposed project is consistent with many of the goals identified in the Highway 1 Safety and

Mobility Improvement Study: Phase 2 (Mobility Study), such as improved pedestrian, bicycle, and vehicle safety and improved circulation along MidCoast frontage roads. Currently, there is no formalized roadside parking along the Carlos Street frontage road, and vehicles are parked along the roadway in varying configurations. The project would add a segment of sidewalk to improve walkability in the area, formalize parking for safety, and provide swales for water quality treatment, public education and improved aesthetics. The project would also incorporate shared lane markings ("sharrows") to improve bicycle safety by alerting drivers to the presence of bicyclists along this frontage road. This would provide for improved safety until the necessary additional studies and analysis for the Mobility Study are completed, the final route for a parallel trail or formal bike path is selected, and the final recommended improvements are implemented. The alignment of the permanent features proposed for this Carlos Street project (swales and new segment of sidewalk) do not conflict with the design options that were presented in the Mobility Study.

The County of San Mateo Department of Public Works proposes to conduct the work during the 2014 construction season prior to the State Water Resources Control Proposition 84 Grant Agreement end date in May 2015.

Assessor's Parcel Number and Any Applicable Planning Permit Numbers:

The Carlos Street project site is located within the County right-of-way and is adjacent to the following parcels:

- Carlos Street: 037097010, 037097240, 037097250, 037097160, 037097210, 037097200

The proposed project is an additional site for the second phase of the Pollution Prevention Program Storm Drain Best Management Practices Project - Coastal Development Permit File Number PLN2013-00188.

Owner/Applicant: County of San Mateo, Department of Public Works

c/o Edelzar Garcia, Senior Civil Engineer, Utilities-Flood Control-Watershed Protection

Address: 555 County Center, 5th Floor, Redwood City, Ca. 94063-1665

Phone: (650) 599-1436

Principal Investigator: Julie Casagrande, Biologist, Utilities-Flood Control-Watershed Protection

Address: 555 County Center, 5th Floor, Redwood City, Ca. 94063-1665

Phone: (650) 599-1457

Fax: (650) 361-8220

Project Location and Description:

The project site is located immediately east of Highway 1 along the eastern side of Carlos Street in the unincorporated community of Moss Beach (Figure 1). The proposed project will extend from Etheldore Street south to California Avenue. Currently, stormwater in this area drains via the roadway gutter to two existing catch basins, one at the corner of Carlos Street and Etheldore Street (Figure 2) and one at the

corner of Carlos Street and California Avenue (Figure 3). Drainage from the California Avenue catch basin is then piped to the upstream end of a roadside ditch (within the CalTrans right-of-way) that parallels Highway 1 (Figure 3). Drainage from the Etheldore Street catch basin is piped to the downstream end of the CalTrans ditch (Figure 4). Flow from the CalTrans ditch is then piped beneath Highway 1 to the ditch and storm drain system that runs along Wienke Way on the west side of Highway 1 (Figure 4). The Wienke Way drainage discharges, via a storm drain pipe, directly to the ASBS and is listed as a high threat discharge by the State Water Resources Control Board.

In addition to providing stormwater treatment and infiltration prior to discharge into the ASBS, the proposed project was designed to provide public education and demonstration of green streets and water quality improvements. The Carlos Street project site was selected as the preferred location for a green streets/low impact development (LID) demonstration project based on the feasibility and geotechnical work that was performed, it's location within one of the high priority ASBS discharge watersheds, and because it is located in a central location in Moss Beach (i.e., post office, pizza shop, and several other businesses) that would provide good education and demonstration potential for the community.

Prior to completion of the conceptual design, a detailed geotechnical study was conducted. The study was based on four exploratory borings with maximum depths of approximately five feet below the existing ground surface. Infiltration testing determined that the average infiltration rate of the soils was in the range of 0.0147 to 0.0412 inches per hour. These findings confirmed general soil information from the Natural Resources Conservation Service's Web Soil Survey, which identified the existing soils as within the hydrologic soil group (HSG) D, which is classified as having very slow infiltration rates when thoroughly wet. Based on the low infiltration rates, the geotechnical study recommended that an underdrain system be installed.

The proposed LID project will include construction of bioretention swales (approximately 340 linear feet total) immediately adjacent to the existing sidewalk. Signage will be added for education and public demonstration. The bioretention swales will be constructed in two segments, one north of the post office driveway, and one south of the post office driveway. Paver walkways within the bioretention swales will be constructed for pedestrian access across the bioretention swales. The walkways will be placed near the existing entrances for the adjacent businesses. The use of bioretention swales requires that a portion of the existing roadway width be removed to place the bioretention swale. To maintain the standard travel way width in each direction and to allow for continued roadside parking along the eastern side of Carlos Street, the proposed bioswale will be approximately five feet wide (including the swale invert and side slopes) along the northern segment from Etheldore Street to the post office driveway and approximately two feet wide along the southern segment beginning in front of 2350 Carlos Street and extending towards California Avenue.

To convey underdrain flows, a perforated plastic pipe will be trenched along the length of Carlos Street, connecting the underdrain flows between swales and ultimately connecting to the storm drain manhole at the Carlos Street and Etheldore Street intersection. Therefore, no new drainage inlets or culverts will be necessary as part of this design.

The bioretention swales are flow-through systems designed to infiltrate only low flows or "first flush" rain events. For larger rain events with rainfall depths greater than the ponding depth, flow will exit the bioretention system into the newly constructed gutter and enter into the existing catch basins.

The planting scheme for the bioretention swales will incorporate locally sourced native plants and will comply with the standards stated in the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) C.3 technical guidance. The guidance provides a list of acceptable plants for use within bioretention swales. A combination of drought tolerant and emergent plant species will be used to avoid

the need for an irrigation system during the non-rainy season, while conversely allowing for survival in saturated environments where water will be ponded during the rainy season. A landscape specialist has been consulted to determine which native plants are best suited for the project area.

As recommended by the geotechnical findings, a layer of imported soil will be used to promote filtration. The imported soil used will comply with County standards for bioretention soil; the specification is included in Appendix K of the SMCWPPP C.3 technical guidance document. The soil is required to have a minimum infiltration rate of five inches per hour.

The impervious watershed area to be treated is approximately 37,000 square feet (0.85 acres). Carlos Street is crowned in this area, therefore only a portion of the roadway drains towards the existing gutter and catch basins and will be treated. Other impervious areas to be treated include the existing sidewalk, roof runoff from the adjacent and upslope commercial parcels, the post office parking lot, and a small parking area located behind 2385 Carlos Street.

Proposed safety improvements include striping to formalize parking, the addition of a new segment of sidewalk for improved walkability, and the installation of sharrows to improve bicycle safety by alerting drivers to the presence of bicyclists along this frontage road. The areas immediately adjacent to the swales will be striped for 45 degree diagonal parking. Currently, there is no formalized roadside parking, and vehicles generally park diagonally or perpendicular. A new section of concrete sidewalk (approximately 50 linear feet) will be constructed from 2355 Carlos Street to the existing sidewalk at 2385 Carlos Street. Currently, the sidewalk area at this location is an unpaved gravel and dirt walkway.

Biological Survey Results:

Multiple site visits were conducted during the feasibility analysis and development of the conceptual plans. A biological survey was conducted in April 2014 to characterize habitat, document the presence of sensitive species, and to determine potential project-related impacts. The California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) was also queried to determine if sensitive species have been documented near the project site.

The primary land use along Carlos Street is light commercial. Beyond Carlos Street, the primary land use in the area is residential. Vegetation along the margin of the roadway is ruderal and landscaping for the adjacent businesses. Vegetation impacts will be minimal and will be limited to the areas for the new section of sidewalk and the permeable pathway. The majority of construction will take place within the existing paved area. Vegetation is sparse in the area of the proposed sidewalk and permeable pathway. Dominant plant species observed in this area included ruderal and non-native species such as garden nasturtium (*Tropaeolum majus*), cut-leaved plantain (*Plantago coronopus*), bristly ox-tongue (*Picris echioides*), bermuda buttercup (*Oxalis pes-caprae*), California burclover (*Medicago polymorpha*), dandelion/cat's ear (not identified), and non-native grasses. Only vegetation within the footprint of the proposed sidewalk and pathway will be removed. In general, the quality of vegetation and habitat in the area will be improved by the native plant species that are incorporated into the bioretention swales.

The adjacent Caltrans drainage ditch contains wetland habitat but will not be impacted by the proposed project as work will be limited to the opposite side of the roadway. Freshwater wetland habitat is scattered throughout the ditch as indicated by the presence of wetland indicator species such as watercress (*Nasturtium officinale*), horsetail (*Equisetum* sp.), cat-tail (*Typha* sp.), rush (*Juncus* sp.), and Pacific silverweed (*Potentilla anserina*). The roadside drainage ditch appears to be spring fed as water is present year-round, even in dry years. An exclusionary zone will be established to protect this habitat.

Three Monterey cypress (*Cupressus macrocarpa*) are present within the private parcels that are adjacent to the work area and may provide potential bird nesting habitat. To ensure that nesting birds are not impacted, if work is scheduled to begin prior to August 15, a qualified biologist shall conduct a pre-construction nesting bird survey. No trees or nesting birds will be impacted by this work.

The results of the CNDDB query are shown in the attached Special Status Species Occurrences Map. Special status species that have been previously documented within a ½ mile radius of the project site include rose leptosiphon (*Leptosiphon rosaceus*), coast yellow leptosiphon (*Leptosiphon croceus*), Hickman's cinquefoil (*Potentilla hickmanii*), beach strawberry (*Fragaria chiloensis*), and California red-legged frog (CRLF) (*Rana aurora draytonii*).

The biological survey was conducted on April 3, 2014, during the typical bloom period for many of the local special status plant species. With the exception of beach strawberry, which is listed in the Local Coastal Program (1998) as a unique species within San Mateo County, no special status plant species were detected near the work area. Beach strawberries are present in two of the adjacent landscaped areas and within the adjacent Caltrans ditch. However, work will not extend into these areas. Areas with beach strawberries will be flagged for protection. Any additional sensitive plant species identified during the pre-construction surveys shall be clearly marked to establish an exclusionary zone.

Although the project site is not located within United States Fish and Wildlife Service (USFWS) designated critical habitat for CRLF, CRLF have been observed on multiple occasions within the adjacent Caltrans ditch. There are also documented CNDDB occurrences within two miles of the project site (CNDDB 2014). The closest CNDDB occurrence is approximately 1 mile south of the project site in the Pillar Point Marsh watershed. There is also known distribution throughout several MidCoast watershed including Kanoff Creek, Montara Creek, and San Vicente Creek. CRLF will not be impacted by the proposed project. Work will be limited to the existing paved area and existing gravel walkway along the eastern side of Carlos Street. An exclusionary zone will be established along the entire length of the adjacent drainage ditch. Other avoidance and conservation measures will include personnel training on sensitive species identification and avoidance measures; preconstruction surveys and on-site monitoring by a qualified biologist including inspection beneath vehicles parked on site for more than 15 minutes prior to being moved; and project timing during the dry season erosion control and containment BMPs to prevent delivery of pollutants into the storm drain system and drainage ditch.

Figure 1. Project site looking south along Carlos Street.

Figure 2. Existing storm drain catch basin at intersection of Carlos Street and Etheldore Street (looking north).

Figure 3. Existing catch basin at intersection of Carlos Street and California Avenue (location indicated by yellow arrow). Storm drain pipe crosses beneath Carlos Street and discharges to upstream end of Caltrans ditch that parallels Highway 1 (flow direction indicated by dotted arrow).

Figure 4. Caltrans ditch that parallels Highway 1 looking north (flow direction indicated by dotted arrow).

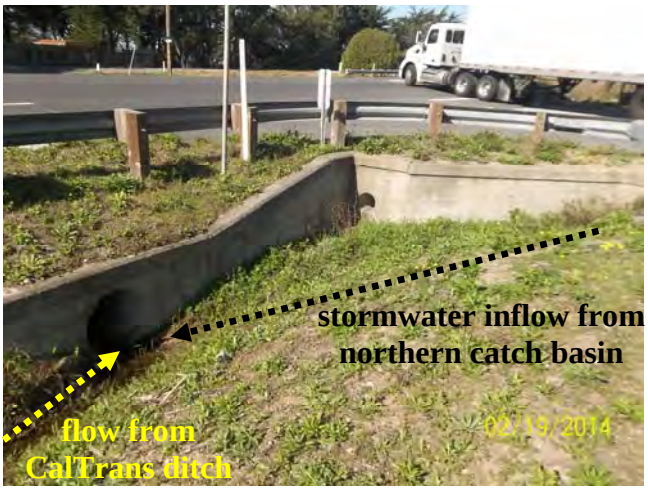


Figure 5. Pipe inlet for storm drain system outflow beneath Highway 1.

Figure 6. Proposed location for northern bioretention swale (looking south).

Figure 7. Proposed location for northern bioretention swale (looking south).

Figure 8. Proposed location for southern bioretention swale (looking south).

Figure 9 Proposed location for southern bioretention swale (looking south).

Figure 10. Proposed location for new sidewalk and southern bioretention swale (looking south).

Figure 11. Proposed location for southern bioretention swale.

Figure 12. Runoff from post office roof and parking lot will be treated.

Figure 13. Runoff from roof and small parking lot at 2385 Carlos Street will be treated.

Figure 14. Stormwater pollutants from current parking.

Best Management Practices and Conservation Measures:

Potential impacts to beneficial uses and biological resources at the project site will be prevented by the use of the following BMPs and conservation measures:

- Project timing when rainfall is not predicted for the region in order to prevent erosion and water quality impacts. All work shall be completed in late summer and early fall. Work shall not occur unless a zero precipitation forecast is obtained for the planned work period.

- If work is scheduled to begin prior to August 15, a qualified biologist shall conduct a pre-construction nesting bird survey.
    - If nesting birds are observed near the project site, a 250-foot exclusion zone for passerines (500- to 1,000-foot for raptors) will be established for protection. If the exclusion zone is located within the immediate work area, construction will be delayed until the young have fledged and left the nest.
- Pre-construction plant and wildlife surveys by a qualified biologist.
    - If sensitive semi-aquatic species (i.e., CRLF) are observed at the project site, work shall not commence and the appropriate agencies, CDFW and USFWS, will be notified immediately. Construction shall not take place in any area in which listed species are present.
    - Any special status plants (i.e., beach strawberry) observed near the project site will be clearly marked/flagged to delineate the areas to be avoided.
- Pre-construction briefing of all personnel involved in construction activities by a qualified biologist including sensitive species training, avoidance measures, and BMP implementation.
- On-site monitoring of construction activities by a qualified biologist. Any

vehicle parked on site for more than 15 minutes shall be inspected by the biological monitor before it is moved to ensure that wildlife has not moved under the vehicle.

- Sensitive habitat along the adjacent ditch shall be clearly marked with orange plastic fencing by the contractor as directed by a qualified biologist to establish an exclusionary zone. All personnel and equipment shall be prohibited from entering this area.
- Fueling and maintenance of vehicles shall take place at least 65 feet away from the adjacent drainage ditch and storm drain inlets.
- Erosion control and containment BMPs (i.e., catch basin protection, street sweeping) shall be implemented to prevent the delivery of pollutants into the storm drain system, adjacent drainage ditch, and ASBS.
- Access to adjacent properties will be maintained during construction.
- Vegetation, sediment, debris, and trash will not be stockpiled on-site and shall be removed from the sites at the end of each workday.

Use of preventative measures and standard construction practices such as these are an integral part of the maintenance procedures followed by the County, as outlined in the County Watershed Protection Program's *Maintenance Standards* (2004). Incorporation of these practices into the proposed project will prevent potential project-related impacts and eliminates the need for mitigation measures.

CERTIFICATION:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: 4/25/14

SIGNED: Julie Casagrande