GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A NOTICE TO PROCEED HAS BEEN ISSUED.
2. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE CITY OF SAN DIEGO DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, A LAND SURVEYOR SHALL REPLACE SUCH MONUMENTS WITH APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF SAN DIEGO FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
4. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TOLL FREE 1–800–422–4133, TWO DAYS BEFORE YOU DIG.
5. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT GRADING AND/OR CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD AND THE CITY OF SAN DIEGO MUNICIPAL CODE AND STORM WATER STANDARDS MANUAL.
6. "PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT–OF–WAY, SATISFACTORY TO THE PERMIT– ISSUING AUTHORITY.
7. ALL EXISTING AND/OR PROPOSED PUBLIC UTILITY SYSTEM AND SERVICE FACILITIES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH SECTION 144.0240 OF THE MUNICIPAL CODE.
8. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARK–OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE–CONSTRUCTION MEETING WITH THE CITY OF SAN DIEGO FIELD ENGINEERING DIVISION (858) 627–3200.
9. DEVIATIONS FROM THESE SIGNED PLANS WILL NOT BE ALLOWED UNLESS A CONSTRUCTION CHANGE IS APPROVED BY THE CITY ENGINEER OR THE CHANGE IS REQUIRED BY THE CITY INSPECTOR.
10. AS–BUILT DRAWINGS MUST BE SUBMITTED TO THE RESIDENT ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT BY THE CITY OF SAN DIEGO.
11. THE AREA WHICH IS DEFINED AS A NON GRADING AREA AND WHICH IS NOT TO BE DISTURBED SHALL BE STAKED PRIOR TO START OF THE WORK. THE PERMIT APPLICANT AND ALL OF THEIR REPRESENTATIVES OR CONTRACTORS SHALL COMPLY WITH THE REQUIREMENTS FOR PROTECTION OF THIS AREA AS REQUIRED BY ANY APPLICABLE AGENCY. ISSUANCE OF THE CITY'S GRADING PERMIT SHALL NOT RELIEVE THE APPLICANT OR ANY OF THEIR REPRESENTATIVES OR CONTRACTORS FROM COMPLYING WITH ANY STATE OR FEDERAL REQUIREMENTS BY AGENCIES INCLUDING BUT NOT LIMITED TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CALIFORNIA DEPARTMENT OF FISH AND GAME. COMPLIANCE MAY INCLUDE OBTAINING PERMITS, OTHER AUTHORIZATIONS, OR COMPLIANCE WITH MANDATES BY ANY APPLICABLE STATE OR FEDERAL AGENCY.

GROUND WATER DISCHARGE NOTES

1. ALL GROUND WATER EXTRACTION AND SIMILAR WASTE DISCHARGES TO SURFACE WATERS NOT TRIBUTARY TO THE SAN DIEGO BAY ARE PROHIBITED UNTIL IT CAN BE DEMONSTRATED THAT THE OWNER HAS APPLIED AND OBTAINED AUTHORIZATION FROM THE STATE OF CALIFORNIA VIA AN OFFICIAL "ENROLLMENT LETTER" FROM THE REGIONAL WATER QUALITY CONTROL BOARD IN ACCORDANCE WITH THE TERMS, PROVISIONS AND CONDITIONS OF STATE ORDER NO R9–2008–0002 NPDES CAG919002.
2. THE ESTIMATED MAXIMUM DISCHARGE RATES MUST NOT EXCEED THE LIMITS SET IN THE OFFICIAL "ENROLLMENT LETTER" FROM THE REGIONAL BOARD UNLESS PRIOR NOTIFICATION AND SUBSEQUENT AUTHORIZATION HAS BEEN OBTAINED, AND DISCHARGE OPERATIONS MODIFIED TO ACCOMMODATE THE INCREASED RATES.
3. ALL GROUND WATER EXTRACTIONS AND SIMILAR WASTE DISCHARGES TO SURFACE WATERS TRIBUTARY TO THE SAN DIEGO BAY ARE PROHIBITED UNTIL IT CAN BE DEMONSTRATED THAT THE OWNER HAS APPLIED AND OBTAINED AUTHORIZATION FROM THE STATE OF CALIFORNIA VIA AN OFFICIAL "ENROLLMENT LETTER" FROM THE REGIONAL WATER QUALITY CONTROL BOARD IN ACCORDANCE WITH THE TERMS, PROVISIONS AND CONDITIONS OF STATE ORDER NO R9–2007–0034 NPDES NO. CAG919001.

REFERENCE DRAWINGS

REFERENCE DRAWING DESCRIPTION	DRAWING NUMBER
CALTRANS (REACH 3)	CONTRACT # 022454
GRADING PLAN	14543–D
ROSELLE IMP. PLAN	15532–D

SHEET INDEX

TOPOGRAPHY SOURCE

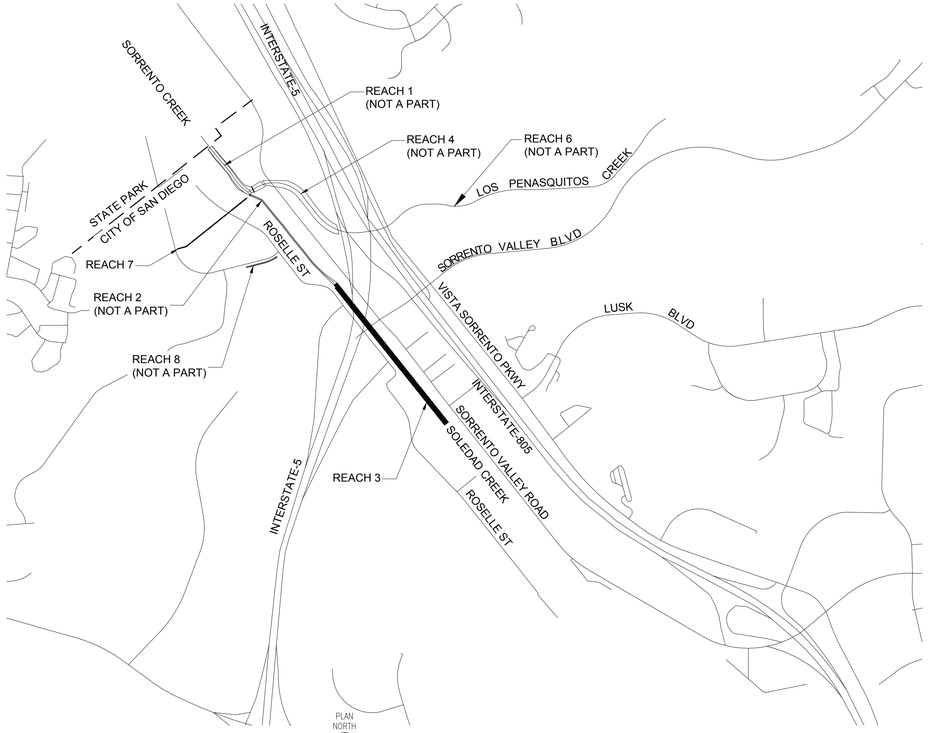
DATUM: NAD 1983 STATEPLANE CALIFORNIA VI FIPS 0406 FEET
TOPO ELEVATIONS FOR PICTORIAL PURPOSES ONLY
TOPOGRAPHY DATE: 1999

STORM WATER PROTECTION NOTES

1. THIS PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT ORDER NO. R9–2007–0001; AND RISK LEVEL/TYPE: CHECK ONE BELOW
   - ☒ WPCP
   - ☐ CGP RISK LEVEL 1 ☐ CGP LUP TYPE 1
   - ☐ CGP RISK LEVEL 2 ☐ CGP LUP TYPE 2
   - ☐ CGP RISK LEVEL 3 ☐ CGP LUP TYPE 3
2. CHECK ONE
   - ☐ THIS PROJECT WILL EXCEED THE MAXIMUM DISTURBED AREA LIMIT, THEREFORE A WEATHER TRIGGERED ACTION PLAN (WTAP) IS REQUIRED.
   - ☐ THIS PROJECT WILL FOLLOW PHASED GRADING NOT TO EXCEED FIVE (5) ACRES PER PHASE.
   - ☒ NOT APPLICABLE
3. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE WPCP OR SWPPP AS APPLICABLE.

MAINTENANCE PLANS FOR:

SORRENTO CHANNELS REACH 3 & 7



KEY MAP

1"=500'

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE SPECIFICATIONS AND STANDARD DRAWINGS OF THE CITY OF SAN DIEGO.

- MAINTENANCE OF CONCRETE CHANNELS TO REMOVE ACCUMULATED SEDIMENT AND OTHER DEBRIS

STANDARD SPECIFICATIONS:

DOCUMENT NO.	DESCRIPTION
PITS070112–01	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), 2012 EDITION
PITS070112–02	CITY OF SAN DIEGO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (WHITEBOOK), 2012 EDITION
PITS070112–04	CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2012 EDITION
PITS070112–06	CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S CUSTOMARY STANDARD SPECIFICATIONS, 2010 EDITION

STANDARD DRAWINGS:

DOCUMENT NO.	DESCRIPTION
PITS070112–03	CITY OF SAN DIEGO STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, 2012 EDITION
PITS070112–05	CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S CUSTOMARY STANDARD PLANS, 2010 EDITION

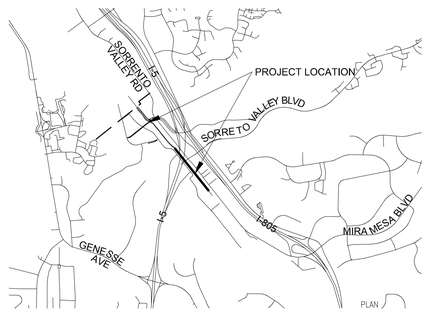
LEGEND

EXISTING IMPROVEMENTS

ITEM	SYMBOL
CHANNEL MAINTENANCE AREA	
STAGING AREAS	
ACCESS AREAS / ROUTES	
ENVIRONMENTAL SENSITIVE AREAS (ESA)	
EX WATER MAIN	W
EX STORM DRAIN	SD
EX SEWER MAIN	S
MAJOR CONTOUR	
MINOR CONTOUR	
PARCEL LINE	

MAINTENANCE BMPs

ITEM	SYMBOL
STABILIZED CONSTRUCTION ENTRANCE WITH SHAKER PLATES	
SILT CURTAIN	
TEMPORARY FLOW DIVERSION SET UP	
TEMPORARY FLOW DIVERSION HOSE LINE	



VICINITY MAP

NO SCALE

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

URS CORPORATION
4225 EXECUTIVE SQUARE, SUITE 1600
LA JOLLA, CA 92037
858–812–9292
858–812–9293

MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06–30–2013 DATE

ENGINEERING PERMIT NO: N/A
DISCRETIONARY PERMIT NO: _____
WDID NO: N/A
RETAINING WALL PROJECT NO: N/A
CONSTRUCTION SITE STORM WATER PRIORITY: LOW

MAINTENANCE PLANS FOR

SORRENTO CHANNELS

REACHES 3 AND 7

CITY OF SAN DIEGO, CALIFORNIA
SHEET 1 OF 12 SHEETS

I.O. NO. _____
PROJECT NO. _____
V.T.M. _____

FOR CITY ENGINEER _____ DATE _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	URS			
AS–BUILTS				

XXXX–XXXX NAD83 COORDINATES
XXX–XXXX LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-1-D

CONSTRUCTION CHANGE TABLE

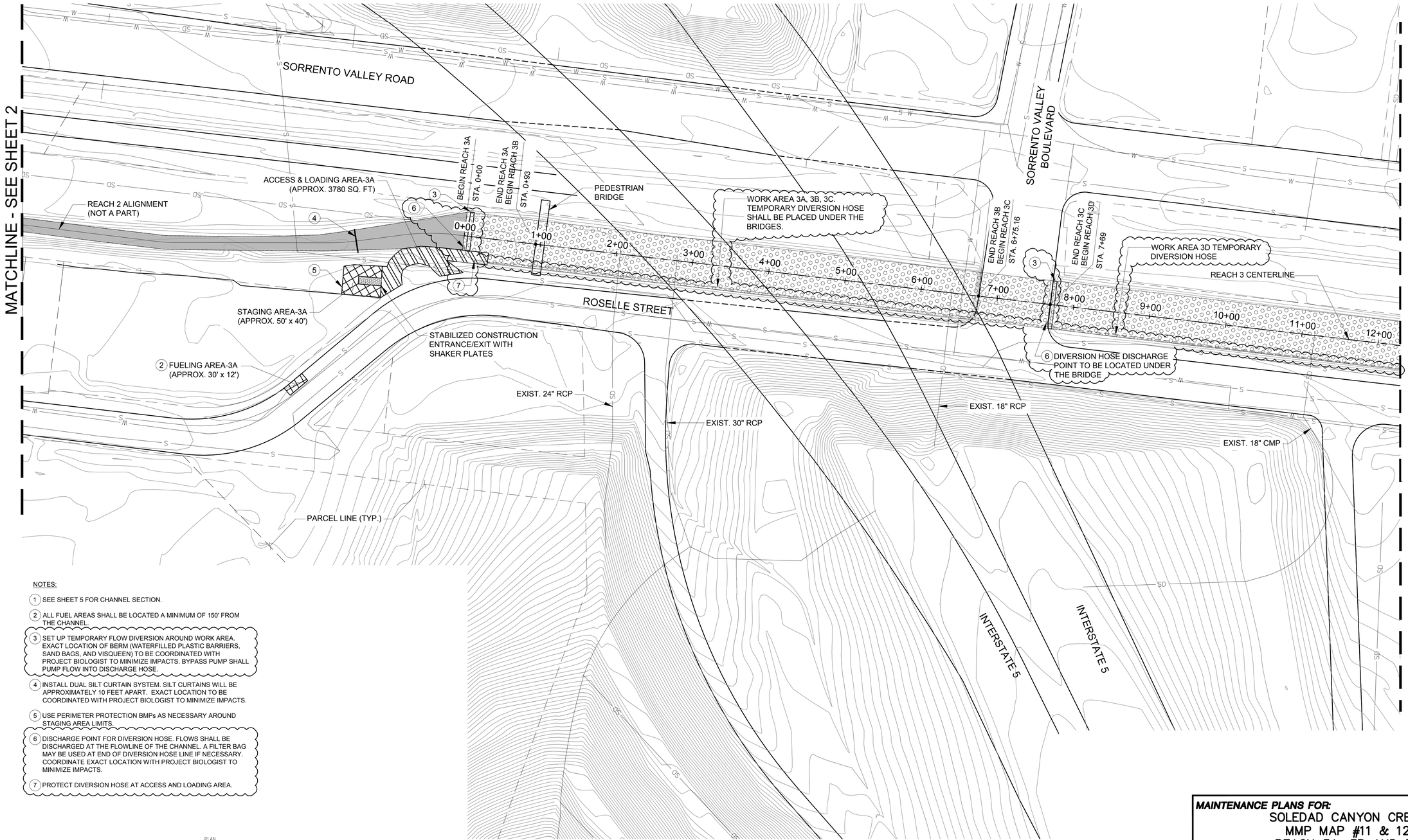
CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

CITY OF SAN DIEGO
DEVELOPMENT SERVICES DEPARTMENT

STREET DATA TABLE

STREET NAME	CLASSIFICATION	SPEED (MPH)	ADT (VEHICLES)	R/W (FT)



NOTES:

1. SEE SHEET 5 FOR CHANNEL SECTION.
2. ALL FUEL AREAS SHALL BE LOCATED A MINIMUM OF 150' FROM THE CHANNEL.
3. SET UP TEMPORARY FLOW DIVERSION AROUND WORK AREA. EXACT LOCATION OF BERM (WATERFILLED PLASTIC BARRIERS, SAND BAGS, AND VISQUEEN) TO BE COORDINATED WITH PROJECT BIOLOGIST TO MINIMIZE IMPACTS. BYPASS PUMP SHALL PUMP FLOW INTO DISCHARGE HOSE.
4. INSTALL DUAL SILT CURTAIN SYSTEM. SILT CURTAINS WILL BE APPROXIMATELY 10 FEET APART. EXACT LOCATION TO BE COORDINATED WITH PROJECT BIOLOGIST TO MINIMIZE IMPACTS.
5. USE PERIMETER PROTECTION BMPs AS NECESSARY AROUND STAGING AREA LIMITS.
6. DISCHARGE POINT FOR DIVERSION HOSE. FLOWS SHALL BE DISCHARGED AT THE FLOWLINE OF THE CHANNEL. A FILTER BAG MAY BE USED AT END OF DIVERSION HOSE LINE IF NECESSARY. COORDINATE EXACT LOCATION WITH PROJECT BIOLOGIST TO MINIMIZE IMPACTS.
7. PROTECT DIVERSION HOSE AT ACCESS AND LOADING AREA.

PLAN NORTH

60' 0' 30' 60' 120' 180'

GRAPHIC SCALE
1 INCH = 60 FT

URS CORPORATION
4225 EXECUTIVE SQUARE, SUITE 1600
LA JOLLA, CA 92037
858-812-9292
858-812-9293

MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:

SOLEDAD CANYON CREEK
MMP MAP #11 & 12
REACH 3A, 3B AND 3C

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 2 OF 12 SHEETS

I.O. NO.
PROJECT NO.

FOR CITY ENGINEER DATE

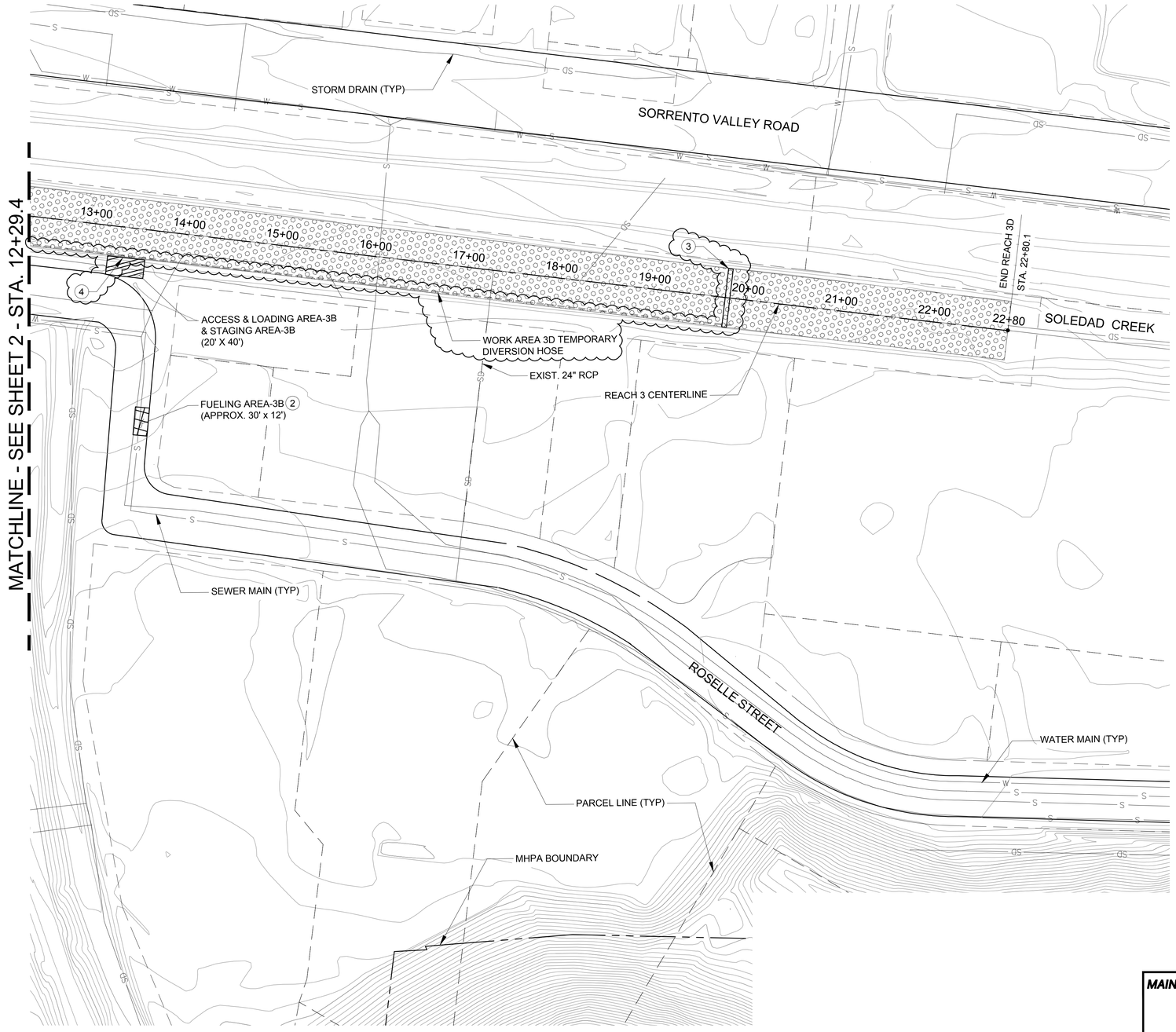
V.T.M.

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	URS			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES
XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

-2-D



NOTES:

1. SEE SHEET 2 FOR CHANNEL SECTION.
2. ALL FUEL AREAS SHALL BE LOCATED A MINIMUM OF 150' FROM THE CHANNEL.
3. SET UP TEMPORARY FLOW DIVERSION AROUND WORK AREA. EXACT LOCATION OF BERM (WATERFILLED PLASTIC BARRIERS, SAND BAGS, AND VISQUEEN) TO BE COORDINATED WITH PROJECT BIOLOGIST TO MINIMIZE IMPACTS. BYPASS PUMP SHALL PUMP FLOW INTO DISCHARGE HOSE.
4. PROTECT DIVERSION HOSE AT ACCESS AND LOADING AREA.

PLAN NORTH

60' 0' 30' 60' 120' 180'

GRAPHIC SCALE
1 INCH = 60 FT

URS CORPORATION
4225 EXECUTIVE SQUARE, SUITE 1600
LA JOLLA, CA 92037
858-812-9292
858-812-9293

MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:

SOLEDAD CANYON CREEK
MMP MAP #12
REACH 3C

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 3 OF 12 SHEETS

I.O. NO. _____
PROJECT NO. _____

FOR CITY ENGINEER _____ DATE _____

V.T.M. _____

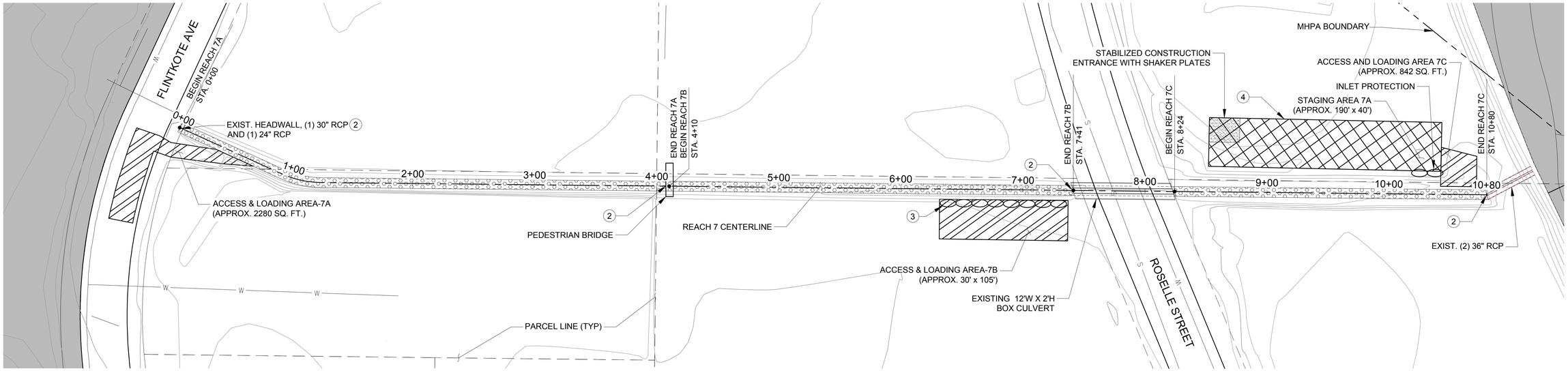
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	URS			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES

XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-3-D



NOTES:

1. SEE SHEET 5 FOR CHANNEL SECTION.
2. CONSTRUCT TEMPORARY GRAVEL BAG BERM. VACTOR TRUCK SHALL BE USED TO REMOVE ANY PONDED WATER.
3. GRAVEL BAGS SHALL BE USED AT GAPS IN THE BASE OF THE RETAINING WALL.
4. USE PERIMETER PROTECTION BMPs AS NECESSARY AROUND STAGING AREA LIMITS.

PLAN NORTH

40' 0' 20' 40' 80' 120'

GRAPHIC SCALE
1 INCH = 40' FT

URS CORPORATION
4225 EXECUTIVE SQUARE, SUITE 1600
LA JOLLA, CA 92037
858-812-9292
858-812-9293

MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:

FLINTKOTE CHANNEL
MMP MAP #9
REACH 7A, 7B & 7C

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 4 OF 12 SHEETS

I.O. NO. _____
PROJECT NO. _____

FOR CITY ENGINEER _____ DATE _____

V.T.M. _____

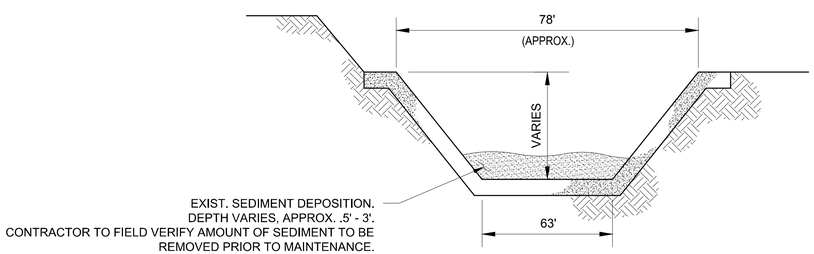
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	URS			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES

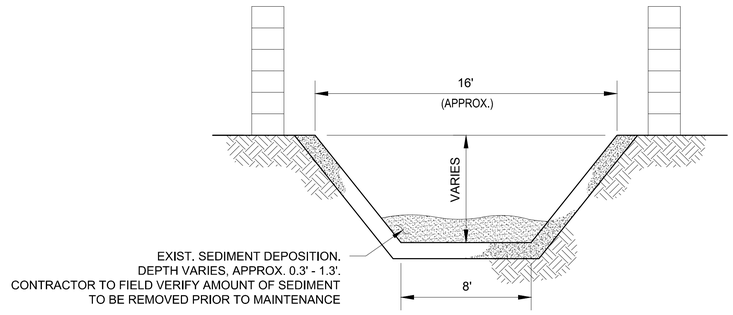
XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-4-D



REACH 3 CHANNEL SECTION (TYPICAL)
NOT TO SCALE



REACH 7 CHANNEL SECTION (TYPICAL)
NOT TO SCALE

URS CORPORATION
4225 EXECUTIVE SQUARE, SUITE 1600
LA JOLLA, CA 92037
858-812-9292
858-812-9293

MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:

SORRENTO CHANNELS
CHANNEL TYPICAL SECTION

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 5 OF 12 SHEETS

I.O. NO. _____
PROJECT NO. _____

FOR CITY ENGINEER _____ DATE _____

V.T.M. _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	URS			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES

XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-5-D

MAINTENANCE BMP NOTES:

1. ALL BEST MANAGEMENT PRACTICES (BMPs) WILL BE IMPLEMENTED PRIOR TO OR CONCURRENT WITH CONSTRUCTION AND MAINTAINED THROUGHOUT THE PROJECT. A QUALIFIED CONTACT PERSON WILL BE RESPONSIBLE FOR IMPLEMENTING THE WATER POLLUTION CONTROL PLAN (WPCP.) ALL WORK SHALL BE COMPLETED BETWEEN SEPTEMBER 15TH AND FEBRUARY 15TH UNLESS AN EXTENSION IS GRANTED IN CONFORMANCE WITH ALL APPLICABLE PERMITS.
2. CONTRACTOR WILL LIMIT ALL CONSTRUCTION RELATED ACTIVITIES TO THE PROJECT FOOTPRINT.
3. EXISTING VEGETATION TO BE PRESERVED IN PLACE SHALL BE CLEARLY MARKED WITH A BUFFER AREA FOLLOWING THE GUIDANCE OF BMP FACT SHEET EC-2.
4. REMOVAL OF VEGETATION MUST OCCUR BY HAND, MECHANICALLY, OR USING U.S. ENVIRONMENTAL PROTECTION AGENCY APPROVED HERBICIDES DEPLOYED WITH APPLICABLE BMPs TO PREVENT IMPACTS TO BENEFICIAL USES OF WATERS OF THE U.S. AND/OR STATE. USE OF AQUATIC PESTICIDES MUST BE DONE IN ACCORDANCE WITH STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER NO. 2004-0009-DWQ, AND ANY SUBSEQUENT REISSUANCE AS APPLICABLE. REMOVAL OF VEGETATION MUST OCCUR OUTSIDE OF THE AVIAN NESTING SEASON (MARCH 15-AUGUST 31).
5. REMOVAL AND DISPOSAL OF EXOTIC INVASIVE SPECIES SHALL BE DONE IN A MANNER THAT PREVENTS THE SPREAD OF EXOTIC INVASIVE SPECIES TO OTHER AREAS.
6. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ADEQUATE WIND EROSION CONTROL IS AVAILABLE ONSITE FOLLOWING BMP FACT SHEET WE-1.
7. STABILIZED CONSTRUCTION ROADWAYS AND ENTRANCE/EXITS WILL BE INSTALLED TO PREVENT TRACKING FOLLOWING THE GUIDANCE OF BMP FACT SHEET TC-1 AND TC-2.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON STREETS AND OTHER PAVED SURFACES DUE TO EXCAVATION AND STOCKPILING ACTIVITIES. STREET SWEEPING AND VACUUMING WILL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEET SE-7.
9. THE PERIMETER OF THE SITES SHALL BE PROTECTED AGAINST RUN-ON AND RUNOFF USING LINEAR SEDIMENT BARRIERS SUCH AS DRAINAGE SWALES, SILT FENCE, FIBER ROLLS, AND/OR GRAVEL BAG BERMS. THE SEDIMENT CONTROL BMPs MAY BE USED INTERCHANGEABLY BASED ON SITE CONDITIONS AND STORMWATER CONCENTRATION.
10. CONTRACTOR TO PLACE LINEAR SEDIMENT BARRIERS AROUND WORK ZONE FOLLOWING THE GUIDANCE OF BMP FACT SHEETS SC-1, SC-5, SC-6 AND/OR SC-8. SC-1 OR SC-5 SHALL BE USED WHERE APPROPRIATE IN CONJUNCTION WITH CONSTRUCTION FENCE, WHICH WILL BE USED AS SUPPORT. FIBER ROLLS MUST BE ADEQUATELY SECURED SO THAT STORMWATER CANNOT GET AROUND OR UNDER THEM.
11. GRAVEL BAG BERMS MAY BE USED TO FORM BARRIERS ACROSS SLOPES TO INTERCEPT RUNOFF AND RELEASE IT AS SHEET FLOW, PROVIDING SOME SEDIMENT REMOVAL. GRAVEL BAGS CAN BE USED WHERE FLOWS ARE MODERATELY CONCENTRATED, SUCH AS IN DITCHES AND SWALES. GRAVEL BAGS SHALL BE USED AS A LINEAR SEDIMENT BARRIER IF FLOW EXCEEDS THE ABILITY OF FIBER ROLLS TO CONTROL. GRAVEL BAG BERMS WILL BE IMPLEMENTED FOLLOWING THE GUIDANCE OF BMP FACT SHEET SE-6.
12. FIBER ROLLS SHALL ALSO BE USED IN VEGETATED AREAS, ON SLOPES, AND TO FORM BERMS AROUND STOCKPILES. FIBER ROLLS SHALL BE IMPLEMENTED FOLLOWING THE GUIDANCE OF BMP FACT SHEET SC-5. SILT FENCE MAY ALSO BE USED AT TOES OF STOCKPILES.
13. WEATHER TRIGGERED ACTION PLAN SHALL BE IMPLEMENTED WHEN THERE IS A FORECASTED 50% OR GREATER CHANCE OF LIKELY PRECIPITATION OF 0.1 INCH OR GREATER BY THE NATIONAL WEATHER SERVICE FORECAST.
14. SOIL ROUGHENING CAN BE USED IN CONJUNCTION WITH HYDRAULICALLY APPLIED STABILIZATION METHODS, GEOTEXTILES, FIBER ROLLS, OR MULCH TO PROTECT, TEMPORARY STOCKPILES, OR SWALES FOLLOWING THE GUIDANCE OF BMP FACT SHEETS EC-4, EC-5, & EC-7.
15. CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER AFTER EACH RUNOFF-PRODUCING RAINFALL.
16. TEMPORARY EROSION OR SEDIMENT CONTROL MEASURES WILL BE REMOVED UPON COMPLETION OF MAINTENANCE UNLESS THEIR REMOVAL WOULD RESULT IN GREATER ENVIRONMENTAL IMPACT THAN LEAVING THEM IN PLACE.
17. WASTE AND STOCKPILES SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEETS WM-3, WM-5, WM-6, WM-7, AND WM-10. COMPOSTABLE GREEN WASTE MATERIALS SHALL BE TRANSPORTED TO AN APPROVED COMPOSTING FACILITY WHEN FEASIBLE.
18. EXPOSED WASTE MATERIALS AND SOIL STOCKPILES SHALL BE TEMPORARILY STORED IN STAGING AREAS UNTIL REMOVAL TO A PERMITTED DISPOSAL FACILITY. EXPOSED WASTE MATERIALS AND SOIL STOCKPILES SHALL BE PROTECTED IN PLACE USING SILT FENCE, FIBER ROLLS, GRAVEL BAGS, PLASTIC COVERS, AND/OR DRAINAGE SWALES FOLLOWING THE GUIDANCE OF BMP FACT SHEETS SE-1, SE-5, SE-6, EC-7 AND/OR EC-9. MANAGEMENT OF STOCKPILES TEMPORARILY MUST ALSO COMPLY WITH R9-2007-0104, CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE SAN DIEGO REGION, CONDITIONAL WAIVER 8.
19. EXCAVATED MATERIALS FROM THE CHANNELS SHALL BE PROCESSED TO SEPARATE OUT SEDIMENT, VEGETATION, AND TRASH TO THE MEP.
20. WASTE TIRES SHALL BE SEPARATED FROM EXCAVATED MATERIALS AND TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY. IF MORE THAN NINE TIRES ARE IN A VEHICLE OR WASTE BIN AT ANY ONE TIME, THEY SHALL BE TRANSPORTED UNDER A COMPLETED COMPREHENSIVE TRIP LOG (CTL) TO DOCUMENT THAT THE TIRES WERE TAKEN TO AN APPROPRIATE DISPOSAL FACILITY.
21. EXCAVATED MATERIALS WILL BE REUSED, WHENEVER POSSIBLE, AS FILL MATERIAL, AGGREGATE, SAND REPLENISHMENT OR OTHER RAW MATERIAL USES. RE-USED MATERIAL (AGGREGATES, SOIL, SAND, OR SILT) SHALL BE DOCUMENTED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
22. HAZARDOUS MATERIALS USED DURING MAINTENANCE WILL NOT BE STORED WITHIN 50 FEET FROM STORM WATER FACILITIES. HAZARDOUS MATERIALS SHALL BE MANAGED AND STORED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. A REGISTERED FIRST-RESPONSE, PROFESSIONAL HAZARDOUS MATERIALS CLEAN-UP/REMEDIATION SERVICE SHALL BE LOCALLY AVAILABLE ON CALL.
23. MAINTENANCE-RELATED TRASH WILL BE STORED IN AN APPROPRIATE RECEPTACLE WITH A COVER IN THE STAGING AREAS AT LEAST 150 FEET FROM STORM WATER FACILITIES, AND TRASH RECEPTACLES WILL BE EMPTIED/REMOVED REGULARLY (AT LEAST ONCE PER WEEK).
24. THE TREATMENT, STORAGE, AND DISPOSAL OF WASTEWATER DURING THE LIFE OF THE PROJECT MUST BE DONE IN ACCORDANCE WITH WASTE DISCHARGE REQUIREMENTS ESTABLISHED BY THE SAN DIEGO WATER BOARD PURSUANT TO CWC 13260.
25. CONSTRUCTION DEWATERING OPERATIONS SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEET NS-2. GROUNDWATER DEWATERING SHALL BE MANAGED IN ACCORDANCE WITH THE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM TEMPORARY GROUNDWATER EXTRACTION AND SIMILAR WASTE DISCHARGES TO SAN DIEGO BAY, TRIBUTARIES THERETO UNDER TIDAL INFLUENCE, AND STORM DRAINS OR OTHER CONVEYANCE SYSTEMS TRIBUTARY THERETO (WDR) ORDER NO. R9-2007-0034, NPDES NO. CAG919001.
26. SANITARY FACILITIES WILL BE PROVIDED ONSITE FOR THE USE OF PERSONNEL AND WILL BE PROPERLY MAINTAINED, INCLUDING BEING EQUIPPED WITH SECONDARY CONTAINMENT FOLLOWING THE GUIDANCE OF BMP FACT SHEET WM-9
27. SPILLS SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEET WM-4. SPILL CLEANUP MATERIALS SHALL BE AVAILABLE ONSITE AT ALL TIMES.
28. MATERIAL USE, DELIVERY AND STORAGE SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEETS WM-1 AND WM-2.
29. WATER SHALL BE CONSERVED FOLLOWING THE GUIDANCE OF BMP FACT SHEET NS-1 SO AS NOT TO ALLOW UNAUTHORIZED NON-STORMWATER DISCHARGES.
30. BMP MATERIAL SHALL BE STORED ONSITE TO PROVIDE COMPLETE PROTECTION OF EXPOSED AREAS AND PREVENT OFFSITE SEDIMENT TRANSPORT.
31. VEHICLE AND EQUIPMENT FUELING/MAINTENANCE SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEETS NS-9 AND NS-10. THE FUELING AREA SHALL BE LOCATED AT LEAST 150 FEET AWAY FROM THE CHANNELS. NO ROUTINE MAINTENANCE AND NO STORAGE OF PETROLEUM PRODUCTS OR CHEMICALS ARE PREMITTED ONSITE. RE-FUELING WILL BE RESTRICTED TO HEAVY EARTH MOVING EQUIPMENT (NOT DUMP TRUCKS). EQUIPMENT WILL BE INSPECTED DAILY FOR FLUID LEAKS AND PROMPTLY CLEANED UP.
32. STATIONARY EQUIPMENT (CRANES, MOTORS, PUMPS, ETC.) LOCATED IN OR ADJACENT TO THE CHANNELS SHALL BE POSITIONED OVER DRIP PANS.
33. THE CONTRACTOR SHALL PROVIDE EQUIPMENT NECESSARY TO EXTINGUISH SMALL BRUSH FIRES (FROM SPARKING VEHICLES, ETC.) ON-SITE DURING ALL PHASES OF PROJECT ACTIVITIES, ALONG WITH TRAINED PERSONNEL FOR USE OF SUCH EQUIPMENT.
34. THE CONTRACTOR SHALL MONITOR THE 5 DAY WEATHER FORECAST. IF ANY PRECIPITATION IS FORECASTED, THE SITE SHALL BE SECURED TO PREVENT ANY CONSTRUCTION RELATED MATERIALS FROM LEAVING THE SITE AND ENTERING THE CHANNELS. STOCKPILES SHALL BE REMOVED FROM THE PROJECT SITE WITHIN 48 HOURS OF FORECASTED RAIN. NO CONSTRUCTION ACTIVITIES SHALL OCCUR DURING RAIN EVENTS.
35. SAMPLING AND ANALYSIS, MONITORING AND REPORTING, AND POST-MAINTENANCE MANAGEMENT OF THE PROJECT SHALL BE CONDUCTED AS DETERMINED NECESSARY BY THE CITY OF SAN DIEGO.
36. CHANNELS WILL BE INSPECTED WITHIN 72 HOURS OF THE FIRST 2-YEAR STORM FOLLOWING MAINTENANCE. IF SUBSTANTIAL EROSION HAS OCCURRED, EROSION CONTROL MEASURES RECOMMENDED BY THE FIELD ENGINEER WILL BE IMPLEMENTED TO REMEDIATE EROSION AREAS AND TO MINIMIZE FUTURE EROSION.
37. CONTRACTOR SHALL PROVIDE TRAINING FOR ALL PERSONNEL RESPONSIBLE FOR THE PROPER INSTALLATION, INSPECTION, AND MAINTENANCE OF ONSITE BMPs.
38. THE QUALIFIED CONTACT PERSON WILL ASSIGN A MONITOR FOR DAILY INSPECTION OF THE BMPs. EACH MORNING, THE MONITOR WILL CHECK THE NATIONAL WEATHER SERVICE FORECAST, COMPLETE BMP INSPECTION CHECKLIST, PERFORM ANY NECESSARY BMP MAINTENANCE/REPAIRS, AND REPORT THE RESULTS TO THE QUALIFIED CONTACT PERSON.COMPLETED INSPECTION CHECKLISTS WILL BE KEPT WITH THE WPCP.
39. PREVIOUSLY UNDISTURBED STAGING AREAS WILL BE REVEGETATED WITHIN 30 DAYS OF COMPLETION OF MAINTENANCE ACTIVITIES. THE REVEGETATED AREAS WILL BE MONITORED FOR A PERIOD OF NOT LESS THAN 25 MONTHS AFTER PLANTING.
40. FINAL LOCATION OF CHANNEL CENTERLINE WILL BE DETERMINED IN THE FIELD AND COORDINATED WITH NECESSARY PROJECT SPECIALISTS (BIOLOGIST, HISTORICAL MONITOR, ETC.).
41. FLOW DIVERSIONS SHALL BE GRAVITY SYSTEMS UNLESS OTHERWISE AUTHORIZED BY DFG. DIVERSIONS SHALL BE ENGINEERED, INSTALLED AND MAINTAINED TO ASSURE RESISTANCE TO WASHOUT AND EROSION OF THE STREAM BED AND BANKS. NORMAL FLOWS SHALL BE RESTORED TO THE AFFECTED STREAM IMMEDIATELY UPON COMPLETION OF THE WORK AT THAT LOCATION.

REACH 3 MAINTENANCE PROCEDURE:

PRE-MAINTENANCE ACTIVITIES:

1. PRECONSTRUCTION MEETING - CONDUCT A PRE-MAINTENANCE MEETING ON-SITE PRIOR TO THE START OF ANY MAINTENANCE ACTIVITY. QUALIFIED SPECIALISTS SHALL: INDICATE/IDENTIFY ANY SENSITIVE BIOLOGICAL/HISTORICAL/WATER QUALITY RESOURCES TO BE AVOIDED DURING MAINTENANCE, FLAG/DELINEATE SENSITIVE RESOURCES TO BE AVOIDED DURING MAINTENANCE, REVIEW SPECIFIC MEASURES TO BE IMPLEMENTED TO MINIMIZE DIRECT/INDIRECT IMPACTS, AND DIRECT CREWS OR OTHER PERSONNEL TO PROTECT SENSITIVE RESOURCES AS NECESSARY.
2. TRAINING - CONDUCT TRAINING FOR PERSONNEL RESPONSIBLE FOR THE PROPER INSTALLATION, INSPECTION, AND MAINTENANCE OF ON-SITE BMPs.
3. BMP INSTALLATION - INSTALL CONSTRUCTION BMPs (SEDIMENT, EROSION CONTROL, ETC.) IN ACCORDANCE WITH THE WATER POLLUTION CONTROL PLAN.
4. MOBILIZE EQUIPMENT AT STAGING AREAS.

CHANNEL SEQUENCE:

1. REACH 3A - STATION 0+00 TO 0+93 - ACCESS RAMP TO MTS PEDISTRIAN BRIDGE THAT CROSSES CHANNEL
2. REACH 3B - STATION 0+93 TO 6+75 - MTS PEDESTRIAN BRIDGE THAT CROSSES CHANNEL TO SORRENTO VALLEY BLVD (SVB) BRIDGE
3. REACH 3C - STATION 6+75 TO 7+69 - UNDERNEATH SORRENTO VALLEY BLVD (SVB) BRIDGE
4. REACH 3D - STATION 7+69 TO 22+80 - SOUTH OF SORRENTO VALLEY BLVD (SVB) BRIDGE TO END OF CONCRETE-LINED CHANNEL

METHODOLOGY:

REACH 3A:

1. DRY WEATHER FLOW DIVERSION BERM (WATER FILLED BARRIERS, SANDBAGS, AND VISQUEEN), PLACED AT NORTHERN LIMITS OF CHANNEL CLEANING.
2. SECOND DRY WEATHER FLOW DIVERSION BERM, DIVERSION PIPES, & PUMPS PLACED WITHIN CHANNEL IMMEDIATELY UPSTREAM OF SORRENTO VALLEY ROAD BRIDGE.
3. MAINTENANCE AREA BETWEEN THE FLOW DIVERSION BERMS DEWATERED AS NECESSARY
4. RUBBER TRACKED SKID-STEER(S), DUMP TRUCK & LOADER ENTER/EXIT(S) REACH 3A VIA PERMANENT ACCESS RAMP AT ACCESS & LOADING AREA-3A.
5. RUBBER TRACKED SKID-STEER(S) MOVE MATERIAL INTO PILES FOR LOADER.
6. LOADER LOADS MATERIAL INTO WAITING DUMP TRUCK.
7. DUMP TRUCK HAULS MATERIAL OUT OF CHANNEL VIA RAMP AT ACCESS & LOADING AREA-3A TO LEGAL DISPOSAL SITE.

REACH 3B:

1. EQUIPMENT ENTER/EXIT(S) REACH 3B FROM ACCESS & LOADING AREA-3A VIA REACH 3A.
2. EXCAVATOR SCOOPS MATERIAL & PLACES MATERIAL IN PILES FOR RUBBER TRACKED SKID-STEER(S).
3. RUBBER TRACKED SKID-STEER(S) MOVE MATERIAL FROM REACH 3B UNDER THE MTS PEDESTRIAN BRIDGE TO THE LOADER.
4. LOADER LOADS MATERIAL DEPOSITED BY RUBBER TRACKED SKID-STEER(S) INTO WAITING DUMP TRUCK.
5. DUMP TRUCK HAULS MATERIAL OUT OF CHANNEL VIA RAMP AT ACCESS & LOADING AREA-3A TO LEGAL DISPOSAL SITE.

REACH 3C:

1. SKID-STEER ENTERS/EXIT(S) REACH 3C FROM ACCESS & LOADING AREA-3A VIA REACHES 3A & 3B AND VIA ACCESS & LOADING AREA-3B VIA REACH 3D
2. SKID-STEER MOVES MATERIAL FROM REACH 3C (UNDER SVB BRIDGE INTO EITHER REACH 3B OR 3D DEPENDING ON WHICH IS CLOSER.)
3. ONCE MATERIAL IS IN REACH 3B OR 3D IT IS HANDLED IN THE MANNER DESCRIBED IN THOSE REACHES.
4. REMOVE DRY WEATHER DIVERSION BERM FROM NORTHERN LIMITS OF CHANNEL CLEARING.

REACH 3 MAINTENANCE PROCEDURE CONT.:

REACH 3D:

1. INSTALL DRY WEATHER FLOW DIVERSION BERM, DIVERSION PIPES, & PUMPS PLACED WITHIN CHANNEL UPSTREAM OF ACCESS & LOADING AREA-3B.
2. CREWS REMOVE GUARDRAILS, FENCE, &/OR BOLLARDS TO OPEN GATE FOR ACCESS & LOADING AREA-3B
3. LOADER & EXCAVATOR ENTER CHANNEL AT ACCESS & LOADING AREA-3B
4. LOADER CONSTRUCTS TEMPORARY RAMP WITH IN-CHANNEL MATERIAL TO BETTER FACILITATE ACCESS.
5. EXCAVATOR MOVES UPSTREAM OR DOWNSTREAM FROM ACCESS & LOADING AREA-3B & PLACES MATERIAL IN PILES FOR LOADER.
6. LOADER MOVES MATERIAL TO ACCESS & LOADING AREA-3D.
7. SECOND EXCAVATOR USES ONE OF THE OPTIONS BELOW TO SCOOP MATERIAL WITHIN CHANNEL & LOADS WAITING DUMP TRUCK STATIONED IN PUBLIC RIGHT-OF-WAY (ROSELLE ST).
   - 7.1. OPTION A: EXCAVATOR IS STATIONED OUTSIDE THE CHANNEL IN ACCESS & LOADING AREA-3D; OR
   - 7.2. OPTION B: TEMPORARY IN CHANNEL LOADING PAD AREA IS CONSTRUCTED WITH IN-CHANNEL MATERIAL, IF AVAILABLE.
8. DUMP TRUCK HAULS MATERIAL TO LEGAL DISPOSAL SITE.
9. REMOVE REMAINING DRY WEATHER DIVERSION BERMS.

POST-CONSTRUCTION:

1. DEMOBILIZE EQUIPMENT.
2. REPLACE FENCE, BOLLARDS, & GUARDRAILS AT ACCESS & LOADING AREA-3D.
3. RESTORE SITE, INCLUDING TEMPORARY ACCESS & LOADING AREA(S), TO PRE-MAINTENANCE OR AS-BUILT CONDITION.
4. REMOVE STANDING WATER (IF ANY) WITHIN DRAINAGE FACILITY WITH PUMPS OR VACTOR.
5. REMOVE TEMPORARY CONSTRUCTION BMPS.

URS CORPORATION
4225 EXECUTIVE SQUARE, SUITE 1600
LA JOLLA, CA 92037
858-812-9292
858-812-9293

MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:

SORRENTO CHANNELS
MAINTENANCE BMP NOTES

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 6 OF SHEETS

I.O. NO. _____
PROJECT NO. _____

FOR CITY ENGINEER _____ DATE _____

V.T.M. _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES

XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-6-D

ADDITIONAL MAINTENANCE REQUIREMENTS:

1. THE MASTER LIST OF BMPs, INCLUDED AS APPENDIX B IN THE WPCP, SHOULD BE CONSULTED FOR ADDITIONAL BIOLOGICAL, CULTURAL, AND WATER QUALITY RELATED REQUIREMENTS.

2. AN ONSITE PRE-MAINTENANCE MEETING SHOULD BE CONDUCTED PRIOR TO THE START OF THE PROJECT. IN ATTENDANCE AT THE MEETING SHOULD BE THE: MAINTENANCE CONTRACTOR, CITY STORM WATER DIVISION REPRESENTATIVES, MITIGATION MONITORING COORDINATOR, QUALIFIED WATER QUALITY SPECIALIST, PROJECT BIOLOGIST/MONITOR, QUALIFIED ARCHAEOLOGIST/HISTORICAL MONITOR/PALEONTOLOGICAL MONITOR, AND ANY OTHER KEY PERSONNEL. SENSITIVE HISTORICAL AND BIOLOGICAL RESOURCES SHOULD BE IDENTIFIED TO BE AVOIDED DURING THE MAINTENANCE ACTIVITIES AS WELL AS ANY CONDITIONS FOR POSSIBLE NIGHT AND/OR WEEKEND WORK. THE WATER QUALITY SPECIALIST SHOULD IDENTIFY MITIGATION MEASURES, PROTOCOLS AND BMPs TO BE CARRIED OUT DURING THE MAINTENANCE. THE MASTER LIST OF BMPs PROVIDES DETAILED INFORMATION ON PROCEDURES TO BE FOLLOWED.

3. THE CITY SHALL NOTIFY DFG, IN WRITING, AT LEAST FIVE DAYS PRIOR TO INITIATION OF CONSTRUCTION (PROJECT) ACTIVITIES AND AT LEAST FIVE DAYS PRIOR TO COMPLETION OF CONSTRUCTION (PROJECT) ACTIVITIES, EACH TIME PROJECT ACTIVITIES OCCUR. NOTIFICATION SHALL BE SENT TO DFG'S SOUTH COAST OFFICE, ATTN: STREAMBED ALTERATION PROGRAM - SM # 1600-2011-0271-R5.

4. AVOID THE INTRODUCTION OF INVASIVE PLANT SPECIES WITH PHYSICAL EROSION CONTROL MEASURES.

5. PRIOR TO COMMENCING ANY MAINTENANCE ACTIVITY WHICH MAY IMPACT SENSITIVE BIOLOGICAL RESOURCES, THE MONITORING BIOLOGIST SHALL VERIFY THAT THE FOLLOWING ACTIONS HAVE BEEN TAKEN, AS APPROPRIATE:
   - FENCING, FLAGGING, SIGNAGE, OR OTHER MEANS TO PROTECT SENSITIVE RESOURCES TO REMAIN AFTER MAINTENANCE HAS BEEN IMPLEMENTED;
   - NOISE ATTENUATION MEASURES NEEDED TO PROTECT SENSITIVE WILDLIFE ARE IN PLACE AND EFFECTIVE; AND/OR
   - NESTING RAPTORS HAVE BEEN IDENTIFIED AND NECESSARY MAINTENANCE SETBACKS HAVE BEEN ESTABLISHED IF MAINTENANCE IS TO OCCUR BETWEEN JANUARY 15 AND AUGUST 31. SEE THE MASTER LIST OF BMPs FOR ADDITIONAL INFORMATION.

6. A QUALIFIED BIOLOGICAL MONITOR THAT CAN RECOGNIZE CLAPPER RAILS AND THEIR VOCALIZATIONS SHALL BE PRESENT DURING ALL THE PROJECT MAINTENANCE ACTIVITY WITHIN THE CHANNELS, ENFORCE THE LIMITS OF MAINTENANCE AND ENSURE THAT NO HARM TO CLAPPER RAILS OCCURS. BEFORE EACH WORKDAY IN THE PILOT CHANNEL BEGINS, THE BIOLOGICAL MONITOR SHALL WALK UPSTREAM TO DOWNSTREAM ON EITHER SIDE OF THE CHANNEL TO EVALUATE IF CLAPPER RAILS HAVE ENTERED THE PROJECT AREA. THE BIOLOGICAL MONITOR WILL FOLLOW PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs.

7. CONTRACTOR SHALL HAVE A QUALIFIED BIOLOGIST ON SITE DAILY DURING PROJECT ACTIVITY TO ENSURE THAT AGREEMENT CONDITIONS ARE BEING MET AND MINIMIZE IMPACTS TO HABITAT. THE BIOLOGIST WILL BE KNOWLEDGEABLE OF VIREO BIOLOGY AND ECOLOGY. THE BIOLOGIST SHALL BE AUTHORIZED TO STOP CONSTRUCTION IF NECESSARY TO PROTECT FISH AND WILDLIFE RESOURCES. IF ANY PROTECTED SPECIES ARE FOUND THE BIOLOGIST SHALL INFORM DFG. IF THERE IS A THREAT OF HARM TO ANY PROTECTED SPECIES OR OTHER AQUATIC WILDLIFE THE BIOLOGIST SHALL HALT CONSTRUCTION AND NOTIFY DFG. CONSULTATION WITH DFG IS REQUIRED BEFORE RE-COMMENCING WORK. THE QUALIFIED BIOLOGIST WILL FOLLOW PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs.

8. IF ANY WILDLIFE IS ENCOUNTERED DURING THE COURSE OF MAINTENANCE, SAID WILDLIFE SHALL BE ALLOWED TO LEAVE THE MAINTENANCE AREA UNHARMED.

9. IF A LISTED SPECIES IS LOCATED WITHIN 500 FEET OF A PROPOSED MAINTENANCE ACTIVITY AND MAINTENANCE WOULD OCCUR DURING THE ASSOCIATED BREEDING SEASON, AN ANALYSIS OF THE NOISE GENERATED BY MAINTENANCE ACTIVITY SHALL BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE ADD ENVIRONMENTAL DESIGNEE. THE MASTER LIST OF BMPs PROVIDES DETAILED INFORMATION ON PROCEDURES TO BE FOLLOWED.

10. ALL LIGHTING ADJACENT TO, OR WITHIN, THE MHPA SHALL BE SHIELDED, UNIDIRECTIONAL, LOW PRESSURE SODIUM ILLUMINATION (OR SIMILAR) AND DIRECTED AWAY FROM SENSITIVE AREAS USING APPROPRIATE PLACEMENT AND SHIELDS. IF LIGHTING IS REQUIRED FOR NIGHTTIME MAINTENANCE, IT SHALL BE DIRECTED AWAY FROM THE PRESERVE AND THE TOPS OF ADJACENT TREES WITH POTENTIALLY NESTING RAPTORS, USING APPROPRIATE PLACEMENT AND SHIELDING.

MAINTENANCE PROTOCOL REQUIREMENTS:

1. WQ-2: PREVENT OFFSITE SEDIMENT TRANSPORT DURING MAINTENANCE THROUGH THE USE OF EROSION AND SEDIMENT CONTROLS WITHIN STORM WATER FACILITIES, ALONG ACCESS ROUTES AND AROUND THESTOCKPILE/STAGING AREAS. INSTALL BMPs SUCH AS SILT FENCES, FIBER ROLLS, GRAVEL BAGS, TEMPORARY SEDIMENT BASINS, STABILIZED MAINTENANCE ACCESS POINTS (E.G. SHAKE PLATES), CONTAINMENT BARRIERS (E.G. SILT FENCE, FIBER ROLLS, AND /OR BERMS), FOR MAINTENANCE STOCKPILES AND PROPERLY FITTED COVERS FOR MATERIAL TRANSPORT VEHICLES. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURE UPON COMPLETION OF MAINTENANCE UNLESS THEIR REMOVAL WOULD RESULT IN GREATER ENVIRONMENTAL IMPACT THAT LEAVING THEM IN PLACE.

2. WQ-3: STORE BMP MATERIALS ONSITE TO PROVE COMPLETE PROTECTION OF EXPOSED AREAS AND PREVENT OFFSITE SEDIMENT TRANSPORT.

3. WQ-4:PROVIDE TRAINING FOR PERSONNEL RESPONSIBLE FOR PROPER INSTALLATION, INSPECTION AND MAINTENANCE OF ONSITE BMPs.

4. WQ-5: REVEGETATE SPOIL AND STAGING AREAS WITHIN 30 DAYS OF COMPLETION OF MAINTENANCE ACTIVITIES. MONITOR AND MAINTAIN REVEGETATED AREAS FOR A PERIOD OF NOT LESS THAT 25 MONTHS FOLLOWING PLANTING.

5. WQ-6: IMPLEMENT SAMPLING AND ANALYSIS, MONITORING AND REPORTING, AND POST MAINTENANCE MANAGEMENT PROGRAMS PER NPDES AND/OR CITY REQUIREMENTS.

6. WQ-7: AVOID STORING HAZARDOUS MATERIAL USED DURING MAINTENANCE WITHIN 50 FEET FROM STORM WATER FACILITIES. HAZARDOUS MATERIALS SHALL BE MANAGED AND STORED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

7. WQ-8: STORM MAINTENANCE RELATED TRASH IN AREAS AT LEAST 50 FEET AWAY FROM STORM WATER FACILITIES AND REMOVE ANY TRASH RECEPTACLE REGULARLY (AT LEAST WEEKLY).

8. BIO-1: RESTRICT VEHICLES TO ACCESS DESIGNATED IN THE MASTER PROGRAM.

9. BIO-2: FLAG AND DELINEATE ALL SENSITIVE BIOLOGICAL RESOURCES TO REMAIN WITHIN OR ADJACENT TO MAINTENANCE AREA PRIOR TO INITIATION OF MAINTENANCE ACTIVITIES IN ACCORDANCE WITH THE SITE SPECIFIC IBA, IHHA, AND/OR IMP.

10. BIO-3: CONDUCT A PRE-MAINTENANCE ONSITE PRIOR TO THE START OF ANY MAINTENANCE ACTIVITY THAT OCCURS WITHIN OR ADJACENT TO SENSITIVE BIOLOGICAL RESOURCES. THE PREMAINTENANCE MEETING SHALL INCLUDE A QUALIFIED BIOLOGIST, FIELD ENGINEER.PLANNER, EQUIPMENT OPERATORS/SUPERINTENDENT AND OTHER KEY PERSONNEL CONDUCTING OR INVOLVED IN CHANNEL MAINTENANCE ACTIVITIES. THE QUALIFIED BIOLOGIST SHALL POINT OUT OR IDENTIFY SENSITIVE BIOLOGICAL RESOURCES TO BE AVOIDED DURING MAINTENANCE, FLAG/DELINEATE SENSITIVE RESOURCES TO BE AVOIDED, REVIEW SPECIFIC MEASURES TO PROTECT SENSITIVE BIOLOGICAL RESOURCES AS NECESSARY. THE BIOLOGIST SHALL ALOST REVIEW THE PROPOSED EROSION CONTROL METHODS TO CONFIRM THEY WILL NOT POSE RISK TO WILDLIFE (E.G., NON-BIODEGRAABLE BLANKETS MAY ENTANGLE WILDLIFE).

11. BIO-4: AVOID THE INTRODUCTION OF INVASIVE PLANT SPECIES WITH PHYSICAL EROSION CONTROL MEASURES.

12. BIO-5: CONDUCT APPROPRIATE PRE-MAINTENANCE PROTOCOL SURVEYS IF MAINTENANCE IS PROPOSED DURING THE BREEDING SEASON OF A SENSITIVE ANIMAL SPECIES. IF SENSITIVE ANIMAL SPECIES COVERED BY THE PEIR ARE IDENTIFIED, THEN APPLICABLE MEASURES FROM THE MMRP SHALL BE IMPLEMENTED UNDER THE DIRECTION OF A QUALIFIED BIOLOGIST TO AVOID SIGNIFICANT DIRECT AND/OR INDIRECT IMPACTS TO IDENTIFIED SENSITIVE ANIMAL SPECIES. IF SENSITIVE ANIMAL SPECIES ARE IDENTIFIED DURING PRE-MAINTENANCE SURVEYS THAT ARE NOT COVERED BY THE PEIR, SWD SHALL CONTACT THE APPROPRIATE WILDLIFE AGENCIES AND ADDITIONAL ENVIRONMENTAL REVIEW UNDER CEQA WILL BE REQUIRED.

13. BIO-6:REMOVE ARUNDO THROUGH ONE, OR A COMBINATION OF, THE FOLLOWING METHODS : (1) FOLIAR SPRAY (SPRAYING HERBICIDE ON LEAVES AND STEMS WITHOUT CUTTING FIRST) WHEN ARUNDO OCCURS IN MONOTYPIC STANDS, OR (2) CUT AND PAINT (CUTTING STEMS CLOSE TO THE GROUND AND SPRAYING OR PAINTING HERBICIDE ON CUT STEM SURFACE) WHEN ARUNDO IS INTERMIXED WITH NATIVE PLANTS. WHEN SEDIMENT SUPPORTING ARUNDO MUST BE REMOVED, THE SEDIMENT SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO REMOVE THE RHIZOMES, WHEREVER FEASIBLE. FOLLOWING REMOVAL OF SEDIMENT CONTAINING RHIZOMES, LOOSE RHIZOME MATERIAL SHALL BE REMOVED FROM THE CHANNEL AND DISPOSED OFFSITE. AFTER THE INITIAL TREATMENT, THE AREA OF REMOVAL SHALL BE INSPECTED ON A QUARTERLY BASIS FOR UP TWO YEARS, OR UNTIL NO RESPROUTING IS OBSERVED DURING AN INSPECTION. IF RESPROUTING IS OBSERVED, THE CUT AND PAINT METHOD SHALL BE APPLIED TO ALL RESPROUTS.

14. BIO-7:AVOID MECHANIZED MAINTENANCE WITHIN 300 FEET OF A COOPER'S HAWK NEST, 900 FEET OF A NORTHERN HARRIER'S NEST, OR 500 FEET OF ANY OTHER RAPTOR'S NEST UNTIL ANY FLEDGLINGS HAVE LEFT THE NEST.

15. WM-1: DISPOSE AND TRANSPORT COMPOSTABLE GREEN WASTE MATERIAL TO AN APPROVED COMPOSTING FACILITY, IF AVAILABLE.

16. WM-2: REUSE EXCAVATED MATERIAL, WHENEVER POSSIBLE, AS FILL MATERIAL, AGGREGATE, SAND REPLENISHMENT OR OTHER RAW MATERIAL USES. RE-USED MATERIAL (AGGREGATES, SOIL, SAND, OR SILT) SHALL BE DOCUMENTED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

17. WM-3: SEPARATE WASTE TIRES FROM EXCAVATED MATERIAL AND TRANSPORT THEM TO AN APPROPRIATE DISPOSAL FACILITY. IF MORE THAN NINE TIRES ARE IN A VEHICLE OR WASTE BIN AT ANY ONE TIME, THEY SHALL BE TRANSPORTED UNDER A COMPLETED COMPREHENSIVE TRIP LOG (CTL) TO DOCUMENT THAT THE TIRES WERE TAKEN TO AN APPROPRIATE DISPOSAL FACILITY.

18. WM-4: LOG AND TRANSPORT ANY HAZARDOUS MATERIALS ENCOUNTERED DURING MAINTENANCE UNDER A HAZARDOUS MATERIALS MANIFEST TO AN APPROVED HAZARDOUS WASTE STORAGE, RECYCLING, TREATMENT OR DISPOSAL FACILITY. PERSONNEL HANDLING HAZARDOUS MATERIALS SHALL HAVE THE APPROPRIATE TRAINING TO HANDLE, STORE, TRANSPORT AND/OR DISPOSE. HAZARDOUS MATERIALS (E.G., MACHINE OIL, MERCURY SWITCHES AND REFRIGERANT GASES) SHALL BE REMOVED FROM APPLIANCES AND DISPOSED IN ACCORDANCE WITH THIS PROTOCOL.

REACH 7 MAINTENANCE PROCEDURE:

PRE-MAINTENANCE ACTIVITIES:

1. PRECONSTRUCTION MEETING - CONDUCT A PRE-MAINTENANCE MEETING ON-SITE PRIOR TO THE START OF ANY MAINTENANCE ACTIVITY. QUALIFIED SPECIALISTS SHALL: INDICATE/IDENTIFY ANY SENSITIVE BIOLOGICAL/HISTORICAL/WATER QUALITY RESOURCES TO BE AVOIDED DURING MAINTENANCE, FLAG/DELINEATE SENSITIVE RESOURCES TO BE AVOIDED DURING MAINTENANCE, REVIEW SPECIFIC MEASURES TO BE IMPLEMENTED TO MINIMIZE DIRECT/INDIRECT IMPACTS, AND DIRECT CREWS OR OTHER PERSONNEL TO PROTECT SENSITIVE RESOURCES AS NECESSARY.
2. TRAINING - CONDUCT TRAINING FOR PERSONNEL RESPONSIBLE FOR THE PROPER INSTALLATION, INSPECTION, AND MAINTENANCE OF ON-SITE BMPs.
3. BMP INSTALLATION - INSTALL CONSTRUCTION BMPs IN ACCORDANCE WITH THE WATER POLLUTION CONTROL PLAN.
4. MOBILIZE EQUIPMENT AT STAGING AREAS.

CHANNEL SEQUENCE:

1. REACH 7A - STATION 0+00 TO 4+10 - CONCRETE ACCESS RAMP (FLINKOTE AVE) TO PEDESTRIAN BRIDGE ACROSS CHANNEL
2. REACH 7B - STATION 4+10 TO 7+41 - PEDISTRIAN BRIDGE ACROSS CHANNEL TO ROSELLE ST
3. REACH 7C - STATION 8+24 TO 10+80 - ROSELLE ST TO (2) 36" REINFORCED CONCRETE PIPES

METHODOLOGY:

REACH 7A:

1. VACTOR REMOVES STANDING WATER FROM CHANNEL & THEN IS POSITIONED AT UPSTREAM END TO CAPTURE ANY INCOMING FLOWS.
2. CREWS INSTALL TEMPORARY GRAVEL BAG CHECK DAM ACROSS CHANNEL AT DOWNSTREAM END OF REACH 7A.
3. SKID-STEER(S) ENTER/EXIT(S) CHANNEL FROM EXISTING ACCESS RAMP (ACCESS & LOADING AREA-7A).
4. SKID-STEER MOVES MATERIAL TO ACCESS & LOADING AREA-7A.
5. SKID-STEER LOADS WAITING DUMP TRUCK AT ACCESS & LOADING AREA-7A.
6. DUMP TRUCK(S) HAUL MATERIAL TO LEGAL DISPOSAL SITE.

REACH 7B:

1. CREWS INSTALL TEMPORARY GRAVEL BAG CHECK DAM ACROSS CHANNEL AT DOWNSTREAM END OF REACH 7B.
2. GRADALL LOWERS SKID-STEER INTO CHANNEL AT ACCESS & LOADING AREA-7B.
3. SKID-STEER MOVES MATERIAL FROM PEDESTRIAN BRIDGE TO ACCESS & LOADING AREA-7B.
4. GRADALL STATIONED OUTSIDE AND ABOVE CHANNEL BANK IN ACCESS & LOADING AREA-7B SCOOPS MATERIAL IN CHANNEL & LOADS INTO DUMP TRUCK.
5. DUMP TRUCK(S) HAUL MATERIAL TO LEGAL DISPOSAL SITE.

REACH 7C:

1. VACTOR REMOVES STANDING WATER FROM CHANNEL & THEN IS POSITIONED AT UPSTREAM END TO CAPTURE ANY INCOMING FLOWS.
2. CREWS REMOVE FENCE AT ACCESS & LOADING AREA-7C.
3. CREWS INSTALL TEMPORARY GRAVEL BAG CHECK DAM ACROSS CHANNEL AT DOWNSTREAM END OF REACH 7C.
4. SKID-STEER ENTER/EXIT(S) CHANNEL FROM ACCESS & LOADING AREA-7C.
5. SKID-STEER MOVES MATERIAL TO ACCESS & LOADING AREA-7C.
6. EXCAVATOR STATIONED OUTSIDE & ABOVE CHANNEL BANK IN ACCESS & LOADING AREA-7C EXCAVATES MATERIAL FROM CHANNEL.
7. EXCAVATOR LOADS MATERIAL INTO WAITING DUMP TRUCK IN STAGING AREA-7C.
8. DUMP TRUCK(S) HAULS MATERIAL TO A LEGAL DISPOSAL SITE.

OPTIONAL METHODOLOGY FOR REACH 7B & 7C IF PRIVATE PROPERTY ACCESS IS NOT GRANTED

1. VACTORS ARE PARKED IN ROSELLE ST NEAR STATION 7+41 AND 8+24.
2. CREWS MANUALLY PUSH MATERIAL WITH SHOVELS TO VACTOR TUBE.

VACTORS HAUL MATERIAL TO A LEGAL DISPOSAL SITE.

POST-CONSTRUCTION

1. DEMOBILIZE EQUIPMENT.
2. REPLACE FENCE AT ACCESS & LOADING AREA-7C.
3. RESTORE SITE, INCLUDING TEMPORARY ACCESS/LOADING AREA(S), TO PRE-MAINTENANCE OR AS-BUILT CONDITION.
4. REMOVE TEMPORARY CONSTRUCTION BMPS.

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MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:

SORRENTO CHANNELS MAINTENANCE NOTES

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 7 OF 12 SHEETS

I.O. NO. _____
PROJECT NO. _____

FOR CITY ENGINEER _____ DATE _____

V.T.M. _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES

XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-7-D

ENVIRONMENTAL MITIGATION REQUIREMENTS:

CHAPTER 11.0 MITIGATION MONITORING AND REPORTING PROGRAM

Section 21081.6 of the State of California Public Resources Code requires a Lead or Responsible Agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a "reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects." The City of San Diego is the lead Agency for the Master Program PEIR, and, therefore, is responsible for implementation of the MMRP. Because the PEIR recommends measures to mitigate these impacts, an MMRP is required to ensure that adopted mitigation measures are implemented.

As Lead Agency for the proposed project under CEQA, the City of San Diego will administer the MMRP for the following environmental issue areas: biological resources, historical resources, land use policies, paleontological resources, and water quality.

GENERAL

General Mitigation 1: Prior to commencement of work, the ADD Environmental Designee of the Entitlements Division shall verify that mitigation measures for impacts to biological resources (Mitigation Measures 4.3.1 through 4.3.20), historical resources (Mitigation Measures 4.4.1 and 4.4.2), land use policy (Mitigation Measures 4.1.1 through 4.1.13), paleontological resources (Mitigation Measure 4.7.1), and water quality (Mitigation Measures 4.8.1 through 4.8.3) have been included in entirety on the submitted maintenance documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Pre-maintenance Meeting shall be noted on all maintenance documents.

General Mitigation 2: Prior to the commencement of work, a Pre-maintenance Meeting shall be conducted and include, as appropriate, the MMC, SWD Project Manager, Biological Monitor, Historical Monitor, Paleontological Monitor, Water Quality Specialist, and Maintenance Contractor, and other parties of interest.

General Mitigation 3: Prior to the commencement of work, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

General Mitigation 4: Prior to commencement of work and pursuant to Section 1600 et seq. of the State of California Fish & Game Code, evidence of compliance with Section 1605 is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

BIOLOGICAL RESOURCES

Potential impacts to biological resources would be reduced to below a level of significance through implementation of the following mitigation measures as well as Mitigation Measures 4.1-1 through 4.1-25.

Mitigation Measure 4.3.1: Prior to commencement of any activity within a specific annual maintenance program, a qualified biologist shall prepare an IBA for each area proposed to be maintained. The IBA shall be prepared in accordance with the specifications included in the Master Program.

Mitigation Measure 4.3.2: No maintenance activities within a proposed annual maintenance program shall be initiated before the City's Assistant Deputy Director (ADD) Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IBAs including proposed mitigation for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall confirm that the appropriate maintenance protocols have been incorporated into each IMP.

Mitigation Measure 4.3.3: No maintenance activities within a proposed annual maintenance program shall be initiated until the City's ADD Environmental Designee and Mitigation Monitoring Coordinator (MMC) have approved the qualifications for biologist(s) who shall be responsible for monitoring maintenance activities which may impact sensitive biological resources.

Mitigation Measure 4.3.4: Prior to undertaking any maintenance activity included in an annual maintenance program, a mitigation account shall be established to provide sufficient funds to implement all biological mitigation associated with the proposed maintenance activities. The fund amount shall be determined by the ADD Environmental Designee. The account shall be managed by the City's SWD, with quarterly status reports submitted to DSD. The status reports shall separately identify upland and wetland account activity. Based upon the impacts identified in the IBAs, money shall be deposited into the account, as part of the project submittal, to ensure available funds for mitigation.

Mitigation Measure 4.3.5: Prior to commencing any activity that could impact wetlands, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

Mitigation Measure 4.3.6: Prior to commencing any activity where the IBA indicates significant impacts to biological resources may occur, a pre-maintenance meeting shall be held on site with the following in attendance: City's SWD Maintenance Manager (MM), MMC, and Maintenance Contractor (MC). The biologist selected to monitor the activities shall be present. At this meeting, the monitoring biologist shall identify and discuss the maintenance protocols that apply to the maintenance activities.

At the pre-maintenance meeting, the monitoring biologist shall submit to the MMC and MC a copy of the maintenance plan (reduced to 11"x17") that identifies areas to be protected, fenced, and monitored. This data shall include all planned locations and design of noise attenuation walls or other devices. The monitoring biologist also shall submit a maintenance schedule to the MMC and MC indicating when and where monitoring is to begin and shall notify the MMC of the start date for monitoring.

Mitigation Measure 4.3.7: Within three months following the completion of mitigation monitoring, two copies of a written draft report summarizing the monitoring shall be prepared by the monitoring biologist and submitted to the MMC for approval. The draft monitoring report shall describe the results including any remedial measures that were required. Within 90 days of receiving comments from the MMC on the draft monitoring report, the biologist shall submit one copy of the final monitoring report to the MMC.

Mitigation Measure 4.3.8: Within six months of the end of an annual storm water facility maintenance program, the monitoring biologist shall complete an annual report which shall be distributed to the following agencies: the City of San Diego DSD, CDFG, RWQCB, USFWS, and Corps. At a minimum, the report shall contain the following information:

- Tabular summary of the biological resources impacted during maintenance and the mitigation;
- Master table containing the following information for each individual storm water facility or segment which is regularly maintained;
- Date and type of most recent maintenance;
- Description of mitigation which has occurred; and
- Description of the status of mitigation which has been implemented for past maintenance activities.

Mitigation Measure 4.3.9: Wetland impacts resulting from maintenance shall be mitigated in one of the following ~~three~~ two ways: (1) habitat creation, restoration, and/or enhancement ~~concurrent with maintenance~~, (2) ~~habitat creation, restoration, and/or enhancement prior to maintenance~~, or (32) mitigation credits. The amount of mitigation ~~When mitigation is proposed to be accomplished through concurrent creation, restoration or enhancement, the amount of planting~~ shall be in accordance with ratios in Table 4.3-10 unless different mitigation ratios are required by state or federal agencies with jurisdiction over the impacted wetlands. In this event, the mitigation ratios required by these agencies will supersede, and not be in addition to, the ratios defined in Table 4.3-10. ~~When previously created, restored or enhanced wetland habitat is proposed to be used for mitigation, the ratio shall be 1:1, provided the habitat has been determined to be successfully established by the ADD Environmental Designee in consultation with the Resource Agencies prior to commencing the maintenance activity. Mitigation credits may be used at a ratio of 1:1, provided the mitigation credits are from a mitigation bank which has been approved by the Resource Agencies.~~ No maintenance shall commence until the ADD Environmental Designee has

determined that mitigation proposed for a specific maintenance activity meets one of these ~~three~~ two options.

Table 4.3-10
WETLAND MITIGATION RATIOS

WETLAND TYPE	MITIGATION RATIO[1]
Southern riparian forest	3:1
Southern sycamore riparian woodland	3:1
Riparian woodland	3:1
Coastal saltmarsh	4:1
Coastal brackish marsh	4:1
Southern willow scrub	2:1
Mule fat scrub	2:1
Riparian scrub[1]	2:1
Freshwater marsh[2]	~~1~~2:1
Cismontane alkali marsh	4:1
Disturbed wetland	~~1~~2:1
Streambed/natural flood channel	~~NA~~2:1

[1] Mitigation ratio within the Coastal Zone will be 3:1
[2] Mitigation ratio within the Coastal Zone will be 4:1~~Mitigation done in advance or through purchase of mitigation credits would be at a 1:1 ratio.~~

Mitigation locations for wetland impacts shall be selected using the following order of preference, based on the best mitigation value to be achieved.

1. Within impacted watershed, within City limits.
2. Within impacted watershed, outside City limits on City-owned or other publicly-owned land.
3. Outside impacted watershed, within City limits.
4. Outside impacted watershed, outside City limits on City-owned or other publically-owned land.

In order to mitigate for impacts in an area outside the limits of the watershed within which the impacts occur, the SWD must demonstrate to the satisfaction of the ADD Environmental Designee in consultation with the Resource Agencies that no suitable location exists within the impacted watershed.

Mitigation Measure 4.3.10: Whenever maintenance will impact wetland vegetation, a wetland mitigation plan shall be prepared in accordance with the Conceptual Wetland Restoration Plan contained in Appendix H of the Biological Technical Report, included as Appendix D.3 of the PEIR.

Mitigation which involves habitat enhancement, restoration or creation shall include a wetland mitigation plan containing the following information:

- Conceptual planting plan including planting zones, grading, and irrigation;
- Seed mix/planting palette;
- Planting specifications;
- Monitoring program including success criteria; and
- Long-term maintenance and preservation plan.

Mitigation which involves habitat acquisition and preservation shall include the following:

- Location of proposed acquisition;
- Description of the biological resources to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the mitigation area would be adequately preserved and maintained in perpetuity.

Mitigation which involves the use of mitigation credits shall include the following:

- Location of the mitigation bank;
- Description of the credits to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the credits are associated with a mitigation bank which has been approved by the appropriate Resource Agencies.

Mitigation Measure 4.3.11: Upland impacts shall be mitigated through payment into the City's Habitat Acquisition Fund, acquisition and preservation of specific land, or purchase of mitigation credits in accordance with the ratios identified in Table 4.3-11. Upland mitigation shall be completed within six months of the date the related maintenance has been completed.

Table 4.3-11
UPLAND HABITAT MITIGATION RATIOS[1]

Vegetation Type	Tier	Location of Impact with Respect to the MHPA	
		Inside	Outside
Coast live oak woodland	I	2:1	1:1
Scrub oak chaparral	I	2:1	1:1
Southern foredunes	I	2:1	1:1
Beach	I	2:1	1:1
Diegan coastal sage scrub	II	1:1	1:1
Coastal sage-chaparral scrub	II	1:1	1:1
Broom baccharis scrub	II	1:1	1:1
Southern mixed chaparral	IIA	1:1	0.5:1
Non-native grassland	IIIB	1:1	0.5:1
Eucalyptus woodland	IV	--	--
Non-native vegetation/ornamental	IV	--	--
Disturbed habitat/ruderal	IV	--	--
Developed	IV	--	--

[1]Assumes mitigation occurs within an MHPA

Mitigation Measure 4.3.12: Loss of habitat for the coastal California gnatcatcher shall be mitigated through the acquisition of suitable habitat or mitigation credits at a ratio of 1:1. Mitigation shall take place within the MHPA, and shall be accomplished within six months of the date maintenance is completed.

Mitigation Measure 4.3.13: Prior to commencing any maintenance activity which may impact sensitive biological resources, the monitoring biologist shall verify that the following actions have been taken, as appropriate:

- Fencing, flagging, signage, or other means to protect sensitive resources to remain after maintenance have been implemented;
- Noise attenuation measures needed to protect sensitive wildlife are in place and effective; and/or
- Nesting raptors have been identified and necessary maintenance setbacks have been established if maintenance is to occur between January 15 and August 31.

The designated biological monitor shall be present throughout the first full day of maintenance, whenever mandated by the associated IBA. Thereafter, through the duration of the maintenance activity, the monitoring biologist shall visit the site weekly to confirm that measures required to protect sensitive resources (e.g., flagging, fencing, noise barriers) continue to be effective. The monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the MM each month. The MM will forward copies to MMC.

Mitigation Measure 4.3.14: Whenever off-site mitigation would result in a physical disturbance to the proposed mitigation area, the City will conduct an environmental review of the proposed mitigation plan in accordance with CEQA. If the off-site mitigation would have a significant impact on biological resources associated with the mitigation site, mitigation measures will be identified and implemented in accordance with the MMRP resulting from that CEQA analysis.

Mitigation Measure 4.3.15: Impacts to listed or endemic sensitive plant species shall be offset through implementation of one or a combination of the following actions:

- Impacted plants would be salvaged and relocated;
- Seeds from impacted plants would be collected for use at an off-site location;
- Off-site habitat that supports the species impacted shall be enhanced and/or supplemented with seed collected on site; and/or
- Comparable habitat at an off-site location shall be preserved.

Mitigation which involves relocation, enhancement or transplanting sensitive plants shall include the following:

- Conceptual planting plan including grading and, if appropriate, temporary irrigation;
- Planting specifications;
- Monitoring Program including success criteria; and
- Long-term maintenance and preservation plan.

Mitigation Measure 4.3.16: Maintenance activities shall not occur within the following areas:

- 300 feet from any nesting site of Cooper's hawk (*Accipiter cooperii*);
- 1,500 feet from known locations of the southern pond turtle (*Clemmys marmorata pallida*);
- 900 feet from any nesting sites of northern harriers (*Circus cyaneus*);
- 4,000 feet from any nesting sites of golden eagles (*Aquila chrysaetos*); or
- 300 feet from any occupied burrow or burrowing owls (*Athene cunicularia*).

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MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:
SORRENTO CHANNELS
ENVIRONMENTAL MITIGATION REQUIREMENTS

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 8 OF 12 SHEETS

I.O. NO.
PROJECT NO.
V.T.M.

FOR CITY ENGINEER DATE

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES
XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

Mitigation Measure 4.3.17: If evidence indicates the potential is high for a listed species to be present, based on historical records or site conditions, then clearing, grubbing, or grading (inside and outside the MHPA) shall be restricted during the breeding season where development may impact the following species:

- Light-footed clapper rail (between February 15 and August 15);
- Western snowy plover (between March 1 and September 15);
- Least tern (between April 1 and September 15);
- Cactus wren (between February 15 and August 15); or
- Tricolored black bird (between March 1 and August 1.

When other sensitive species, including, but not limited to, the arroyo toad, burrowing owl, or Quino checkerspot butterfly are known or suspected to be present all appropriate protocol surveys and mitigation measures shall be implemented.

Mitigation Measure 4.3.18: If a subject species is not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the ADD Environmental Designee and an applicable resource agency which demonstrates whether or not mitigation measures such as noise walls are necessary between the dates stated above for each species. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

Mitigation Measure 4.3.19: If the SWD chooses not to do the required surveys, then it shall be assumed that the appropriate avian species are present and all necessary protection and mitigation measures shall be required as described in Mitigation Measure 4.3.21

Mitigation Measure 4.3.20: If no surveys are completed and no sound attenuation devices are installed, it will be assumed that the habitat in question is occupied by the appropriate species and that maintenance activities would generate more than 60dB(A) L_{eq} within the habitat requiring protection. All such activities adjacent to the protected habitat shall cease for the duration of the breeding season of the appropriate species and a qualified biologist shall establish a limit of work.

Mitigation Measure 4.3.21: If maintenance occurs during the raptor breeding season (January 15 to August 31), a pre-maintenance survey for active raptor nests shall be conducted in areas supporting suitable habitat. If active raptor nests are found, maintenance shall not occur within 300 feet of a Cooper's hawk nest, 900 feet of a northern harrier's nest, or 500 feet of any other raptor's nest until any fledglings have left the nest.

Mitigation Measure 4.3.22: If removal of any eucalyptus trees or other trees used by raptors for nesting within a maintenance area is proposed during the raptor breeding season (January 15 through August 31), a qualified biologist shall ensure that no raptors are nesting in such trees. If

maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 300 feet of any nesting site of Cooper's hawk or other nesting raptor until the young fledge. Should the biologist determine that raptors are nesting, the trees shall not be removed until after the breeding season. In addition, if removal of grassland or other habitat appropriate for nesting by northern harriers, a qualified biologist shall ensure that no harriers are nesting in such areas. If maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 900 feet of any nesting site of northern harrier until the young fledge.

Mitigation Measure 4.3.23: If maintenance activities would occur at known localities for listed fish species or within suitable habitat for other highly sensitive aquatic species (i.e., southwestern pond turtle), avoidance or minimization measures (i.e., exclusionary fencing, dewatering of the activity area, live-trapping, and translocation to suitable habitat) must be implemented.

Mitigation Measure 4.3.24: If maintenance activities will occur within areas supporting listed and/or narrow endemic plants, the boundaries of the plant populations designated sensitive by the resource agencies will be clearly delineated with flagging or temporary fencing that must remain in place for the duration of the activity.

Mitigation Measure 4.3.25: In order to avoid impacts to nesting avian species, including those species not covered by the MSCP, maintenance within or adjacent to avian nesting habitat shall occur outside of the avian breeding season (January 15 to August 31) unless postponing maintenance would result in a threat to human life or property.

HISTORICAL RESOURCES

Potential impacts to historical resources would be reduced to below a level of significance through implementation of the following mitigation measures.

Mitigation Measure 4.4.1: Prior to commencement of the first occurrence of maintenance activity within a drainage facility included in the Master Program, an archaeologist, meeting the qualifications specified by the City's HRG, shall determine the potential for significant historical resources to occur in the maintenance area. If the archaeologist determines that the potential is moderate to high, an IHA shall be prepared. Based on the IMP for the proposed maintenance activity, the archaeologist shall determine the APE, which shall include access, staging, and maintenance areas. The IHA shall include a field survey of the APE with a Native American monitor, using the standards of the City's HRG. In addition, the archaeologist shall request a record search from the SCIC. Based on the results of the field survey and record search, the archaeologist shall conduct an archaeological testing program for any identified historical resources, using the standards of the City's HRG. If significant historical resources are identified, they shall be taken to the Historical Resources Board for designation as Historic Sites. Avoidance or implementation of an Archaeological Data Recovery Program (ADRP) and Archaeological Monitoring Program shall be required to mitigate project impacts to significant historical resources. The archaeologist shall prepare a report in accordance with City guidelines. At a minimum, the IHA report shall include:

- Description of maintenance to be performed, including length, width, and depth;

- Prehistory and History Background Discussion;
- Results of Record Search;
- Survey Methods;
- Archaeological Testing Methods;
- Impact Analysis; and
- Mitigation Recommendations, including avoidance or implementation of an ADRP and archaeological monitoring program.

In the event that the IHA indicates that no significant historical resources occur within the APE, or have the potential to occur within the APE, no further action shall be required.

Mitigation Measure 4.4.2: Prior to initiating any maintenance activity where the IHA identifies existing significant historical resources within the APE, the following actions shall be taken.

4.4.2.1 The Storm Water Department shall select a Principal Investigator (PI), who shall be approved by the ADD Environmental Designee. The PI must meet the requirements of the City's HRG.

4.4.2.2 Mitigation recommendations from the IHA shall be incorporated into the IMP to the satisfaction of the PI and the ADD Environmental Designee. Typical mitigation measures shall include but not be limited to: delineating resource boundaries on maintenance plans; implementing protective measures such as fencing, signage or capping; and selective monitoring during maintenance activities.

4.4.2.3 If impacts to significant historical resources cannot be avoided, the PI shall prepare an Archaeological Research Design and Data Recovery Program (ARDDRP) for the affected resources, with input from a Native American consultant, and the ARDDRP shall be approved by the ADD Environmental Designee. Based on the approved research design, a phased excavation program shall be conducted, which will include the participation of a Native American. The sample size to be excavated shall be determined by the PI, in consultation with City staff. The sample size shall vary with the nature and size of the archaeological site, but need not exceed 15 percent of the overall resource area. The area involved in the ARDDRP shall be surveyed, staked and flagged by the archaeological monitor, prior to commencing maintenance activities which could affect the identified resources.

4.4.2.4 A pre-maintenance meeting shall be held on-site prior to commencing any maintenance that may impact a significant historical resource. The meeting shall include representatives from the PI, the Native American consultant, Storm Water Department, Mitigation Monitoring Coordinator (MMC), Resident Engineer (RE), and Maintenance

Contractor (MC). The PI shall explain mitigation measures which must be implemented during maintenance. The PI shall also confirm that all protective measures (e.g. fencing, signage or capping) are in place.

4.4.2.5 If human remains are discovered in the course of conducting the ARDDRP, work shall be halted in that area and the following procedures set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) will be taken:

- The PI shall notify the RE, and the MMC. The MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS).
- The PI shall notify the Medical Examiner, after consultation with the RE, either in person or via telephone.
- Work will be redirected away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner, in consultation with the PI, concerning the provenience of the remains.
- The Medical Examiner, in consultation with the PI, shall determine the need for a field examination to determine the provenience.
- If a field examination is not warranted, the Medical Examiner shall determine, with input from the PI, if the remains are or are most likely to be of Native American origin.
- If Human Remains are determined to be Native American, the Medical Examiner shall notify the Native American Heritage Commission (NAHC). The NAHC shall contact the PI within 24 hours after the Medical Examiner has completed coordination. The NAHC will identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information. The PI will coordinate with the MLD for additional coordination. If (1) the NAHC is unable to identify the MLD, or the MLD fails to make a recommendation within 24 hours after being notified by the Commission; or (2) the landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, then the landowner or their authorized representative shall re-inter the human remains and all associated grave goods with appropriate dignity, on the property in a location not subject to subsurface disturbance. Information on this process will be provided to the NAHC.
- If Human Remains are not Native American, the PI shall contact the Medical Examiner and notify them of the historic era context of the burial. The Medical Examiner shall determine the appropriate course of action with the PI and City staff (PRC 5097.98). If the remains are of historic origin, they shall be appropriately removed and conveyed to the Museum of Man for analysis. The decision for reinterment of the human remains shall be made in consultation with MMC, EAS, the landowner, and the Museum.

4.4.2.6 The PI shall be responsible for ensuring: (1) that all cultural materials collected are cleaned, catalogued and permanently curated with an appropriate institution; (2) that a letter of acceptance from the curation institution has been submitted to MMC; (3) that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; (4) that faunal material is identified as to species; and (5) that specialty studies are completed, as appropriate. Curation of artifacts associated with the survey, testing and/or data recovery for this project shall be completed in consultation with LDR and the Native American representative, as applicable.

4.4.2.7 The Archaeologist shall be responsible for updating the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B associated with the ARDDRP in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the SCIC with the Final Results Report.

4.4.2.8 The PI shall prepare a Draft Results Report (even if negative) that describes the results, analysis and conclusions of the ARDDRP (with appropriate graphics). The MMC shall return the Draft Results Report to the PI for revision or for preparation of the Final Report. The PI shall submit the revised Draft Results Report to MMC for approval. The MMC shall provide written verification to the PI of the approved report. The MMC shall notify the RE of receipt of all Draft Result Report submittals and approvals. The MMC shall notify the RE of receipt of the Final Results Report.

Mitigation Measure 4.4.3: Prior to initiating any maintenance activity where the IHA identifies a moderate to high potential for the occurrence of significant historical resources within the APE, the following actions shall be taken:

4.4.3.1 Prior to Permit Issuance or Bid Opening/Bid Award

A. Entitlements Plan Check
   1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable maintenance documents through the plan check process.

B. Letters of Qualification have been submitted to ADD
   1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
   2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.

   3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

4.4.3.2 Prior to Start of Maintenance

A. Verification of Records Search
   1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
   2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
   3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

B. PI Shall Attend Pre-maintenance Meetings
   1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Pre-maintenance Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Maintenance Manager (MM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Pre-maintenance Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Maintenance Manager and/or Grading Contractor.
      a. If the PI is unable to attend the Pre-maintenance Meeting, the Applicant shall schedule a focused Pre-maintenance Meeting with MMC, the PI, RE, MM or BI, if appropriate, prior to the start of any work that requires monitoring.
   2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
      The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.
   3. Identify Areas to be Monitored
      Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate maintenance documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
      The AME shall be based on the results of a site specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).
      MMC shall notify the PI that the AME has been approved.

   4. When Monitoring Will Occur
      a. Prior to the start of any work, the PI shall also submit a maintenance schedule to MMC through the RE indicating when and where monitoring will occur.
      b. The PI may submit a detailed letter to MMC prior to the start of work or during maintenance requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final maintenance documents which indicate conditions such as age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.
   5. Approval of AME and Maintenance Schedule
      After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Maintenance Schedule from the MM.

4.4.3.3 During Maintenance

A. Monitor Shall be Present During Grading/Excavation/Trenching
   1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Maintenance Manager is responsible for notifying the RE, PI, and MMC of changes to any maintenance activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
   2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Sections 4.4.3.3.B-C and 4.4.3.4-A-D shall commence.
   3. The PI may submit a detailed letter to MMC during maintenance requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
   4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the MM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.

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MAINTENANCE PLANS FOR:
SORRENTO CHANNELS
ENVIRONMENTAL MITIGATION REQUIREMENTS

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 9 OF 12 SHEETS

I.O. NO. _____
PROJECT NO. _____

FOR CITY ENGINEER _____ DATE _____

V.T.M. _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

XXXX-XXXX NAD83 COORDINATES

XXX-XXXX LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-9-D

B. Discovery Notification Process
1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance
1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section 4.4.3.4 below.
   a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
   b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, MM and RE. ADRP and any mitigation must be approved by MMC, RE and/or MM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
      (1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
   c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.
      (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
      (2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching and other Linear Projects in the Public Right-of-Way
The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:
1. Procedures for documentation, curation and reporting
   a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
   b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section 4.4.3.6-A.
   c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.
   d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

4.4.3.4 Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

A. Notification
1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate discovery site
1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.

3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

C. If Human Remains **ARE** determined to be Native American
1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
   a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
   b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN
   c. To protect these sites, the landowner shall do one or more of the following:
      (1) Record the site with the NAHC;
      (2) Record an open space or conservation easement; or
      (3) Record a document with the County.
   d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 4.4.3.5.c., above.

D. If Human Remains are **NOT** Native American
1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

4.4.3.5 Night and/or Weekend Work

A. If night and/or weekend work is included in the contract
1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Pre-maintenance meeting.
2. The following procedures shall be followed.
   a. No Discoveries
      In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.
   b. Discoveries
      All discoveries shall be processed and documented using the existing procedures detailed in Sections 4.4.3.3 - During Maintenance, and 4.4.3.4 – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
   c. Potentially Significant Discoveries
      If the PI determines that a potentially significant discovery has been made, the procedures detailed under Sections 4.4.3.3 During Maintenance and 4.4.3.4-Discovery of Human Remains shall be followed.
   d. The PI shall immediately contact the RE and MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section 4.4.3.3-B, unless other specific arrangements have been made.

B. If night and/or weekend work becomes necessary during the course of maintenance
1. The Maintenance Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

4.4.3.6 Post Maintenance

A. Submittal of Draft Monitoring Report
1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. **It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe as a result of delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.**

   a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
   b. Recording Sites with State of California Department of Parks and Recreation The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.
2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
4. MMC shall provide written verification to the PI of the approved report.
5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Artifacts
1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued.
2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.

C. Curation of artifacts: Accession Agreement and Acceptance Verification
1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section 4.4.3.4 – Discovery of Human Remains, Subsection C.
3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC of the approved report.
2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

LAND USE

Potential impacts to land use policies in the City's General Plan would be reduced to below a level of significance through implementation of the following mitigation measures.

Mitigation Measure 4.1.1: Prior to commencing maintenance on any storm water facility within, or immediately adjacent to, a Multi-Habitat Planning Area (MHPA), the ADD Environmental Designee shall verify that all MHPA boundaries and limits of work have been delineated on all maintenance documents.

Mitigation Measure 4.1.2: A qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) recovery permit) shall survey those habitat areas inside and outside the MHPA suspected to serve as habitat (based on historical records or site conditions) for the coastal California gnatcatcher, least Bell's vireo and/or other listed species. Surveys for the appropriate species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service. When other sensitive species, including, but not limited to, the arroyo toad, burrowing owl, or Quino checkerspot butterfly are known or suspected to be present all appropriate protocol surveys and mitigation measures identified in Subchapter 4.3, Biological Resources, required shall be implemented.

Mitigation Measure 4.1.3: If a listed species is located within 500 feet of a proposed maintenance activity and maintenance would occur during the associated breeding season, an analysis of the noise generated by maintenance activities shall be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the ADD Environmental Designee. The analysis shall identify the location of the 60 dB(A) L_{eq} noise contour on the maintenance plan. The report shall also identify measures to be undertaken during maintenance to reduce noise levels.

Mitigation Measure 4.1.4: Based on the location of the 60 dB(A) L_{eq} noise contour and the results of the protocol surveys, the Project Biologist shall determine if maintenance has the potential to impact breeding activities of listed species. If one or more of the following species are determined to be significantly impacted by maintenance, then maintenance (inside and outside the MHPA) shall avoid the following breeding seasons unless it is determined that maintenance is needed to protect life or property.

- Coastal California gnatcatcher (between March 1 and August 15 inside the MHPA only; no restrictions outside MHPA);

- Least Bell's vireo (between March 15 and September 15); and

- Southwestern willow flycatcher (between May 1 and September 1).

Mitigation Measure 4.1.5: If maintenance is required during the breeding season for a listed bird to protect life or property, then the following conditions must be met:

- At least two weeks prior to the commencement of maintenance activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from maintenance activities shall not exceed 60 dB(A) hourly average at the edge of occupied habitat. Concurrent with the commencement of maintenance activities and the maintenance of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated maintenance activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season of the subject species, as noted above.

- Maintenance noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the maintenance activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of maintenance equipment and the simultaneous use of equipment.

- Prior to the commencement of maintenance activities that would disturb sensitive resources during the breeding season, the biologist shall ensure that all fencing, staking and flagging identified as necessary on the ground have been installed properly in the areas restricted from such activities.

- If noise attenuation walls or other devices are required to assure protection to identified wildlife, then the biologist shall make sure such devices have been properly constructed, located and installed.

Mitigation Measure 4.1.6: A pre-maintenance meeting shall be held with the Maintenance Contractor, City representative and the Project Biologist. The Project Biologist shall discuss the sensitive nature of the adjacent habitat with the crew and subcontractor. Prior to the pre-maintenance meeting, the following shall be completed:

- The Storm Water Division (SWD) shall provide a letter of verification to the Mitigation Monitoring Coordination Section stating that a qualified biologist, as defined in the City of San Diego Biological Resources Guidelines, has been retained to implement the

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MAINTENANCE PLANS FOR:
SORRENTO CHANNELS
ENVIRONMENTAL MITIGATION REQUIREMENTS

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 10 OF 12 SHEETS

I.O. NO.
PROJECT NO.
V.T.M.

FOR CITY ENGINEER DATE

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES
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LAMBERT COORDINATES

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

-10-D

projects MSCP monitoring Program. The letter shall include the names and contact information of all persons involved in the Biological Monitoring of the project. At least thirty days prior to the pre-maintenance meeting, the qualified biologist shall submit all required documentation to MMC, verifying that any special reports, maps, plans and time lines, such as but not limited to, revegetation plans, plant relocation requirements and timing, MSCP requirements, avian or other wildlife protocol surveys, impact avoidance areas or other such information has been completed and updated.

- The limits of work shall be clearly delineated. The limits of work, as shown on the approved maintenance plan, shall be defined with orange maintenance fencing and checked by the biological monitor before initiation of maintenance. All native plants or species of special concern, as identified in the biological assessment, shall be staked, flagged and avoided within Brush Management Zone 2, if applicable.

Mitigation Measure 4.1.7: Maintenance plans shall be designed to accomplish the following.

- Invasive non-native plant species shall not be introduced into areas adjacent to the MHPA. Landscape plans shall contain non-invasive native species adjacent to sensitive biological areas, as shown on the approved maintenance plan.

- All lighting adjacent to, or within, the MHPA shall be shielded, unidirectional, low pressure sodium illumination (or similar) and directed away from sensitive areas using appropriate placement and shields. If lighting is required for nighttime maintenance, it shall be directed away from the preserve and the tops of adjacent trees with potentially nesting raptors, using appropriate placement and shielding.

- All maintenance activities (including staging areas and/or storage areas) shall be restricted to the disturbance areas shown on the approved maintenance plan. The project biologist shall monitor maintenance activities, as needed, to ensure that maintenance activities do not encroach into biologically sensitive areas beyond the limits of work as shown on the approved maintenance plan.

- No trash, oil, parking or other maintenance-related activities shall be allowed outside the established maintenance areas including staging areas and/or storage areas, as shown on the approved maintenance plan. All maintenance related debris shall be removed off-site to an approved disposal facility.

- Access roads through MHPA-designated areas shall comply with the applicable policies contained in the "Roads and Utilities Construction and Maintenance Policies" identified in Section 1.4.2 of the City's Subarea Plan.

Mitigation Measure 4.1.8: Prior to commencing any maintenance in, or within 500 feet of any area determined to support coastal California gnatcatchers, the ADD Environmental Designee shall verify that the MHPA boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the maintenance plans:

NO MAINTENANCE ACTIVITIES SHALL OCCUR BETWEEN MARCH 1 AND AUGUST 15, THE BREEDING SEASON OF THE COASTAL CALIFORNIA GNATCATCHER, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE ADD ENVIRONMENTAL DESIGNEE:

a. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE HABITAT AREAS WITHIN THE MHPA THAT WOULD BE SUBJECT TO MAINTENANCE NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE COASTAL CALIFORNIA GNATCATCHER. SURVEYS FOR THE COASTAL CALIFORNIA GNATCATCHER SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF ANY MAINTENANCE. IF GNATCATCHERS ARE PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

1. BETWEEN MARCH 1 AND AUGUST 15, MAINTENANCE OF OCCUPIED GNATCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

2. BETWEEN MARCH 1 AND AUGUST 15, NO MAINTENANCE ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE MAINTENANCE ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED GNATCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY MAINTENANCE ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES. PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR

3. AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF MAINTENANCE ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g.,

BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM MAINTENANCE ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE COASTAL CALIFORNIA GNATCATCHER. CONCURRENT WITH THE COMMENCEMENT OF MAINTENANCE ACTIVITIES AND THE MAINTENANCE OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED MAINTENANCE ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (AUGUST 16).

* Maintenance noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the maintenance activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD environmental designee, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of maintenance equipment and the simultaneous use of equipment.

b. IF COASTAL CALIFORNIA GNATCATCHERS ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 1 AND AUGUST 15 AS FOLLOWS:

1. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR COASTAL CALIFORNIA GNATCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.

2. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

PALEONTOLOGICAL RESOURCES

Potential impacts to paleontological resources would be reduced to below a level of significance through implementation of the following mitigation measures.

***Mitigation Measure* 4.7.1**: Prior to initiating any maintenance activity where significant paleontological resources may occur within the APE, the following actions shall be taken.

4.7.1.1 Prior to Permit Issuance or Bid Opening/Bid Award

A. Entitlements Plan Check
   1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate maintenance documents.

B. Letters of Qualification have been submitted to ADD
   1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.
   2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
   3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

4.7.1.2 Prior to Start of Maintenance

A. Verification of Records Search
   1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
   2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

B. PI Shall Attend Pre-maintenance Meetings
   1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Pre-maintenance Meeting that shall include the PI, Maintenance Manager (MM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Pre-maintenance Meetings to make comments and/or

suggestions concerning the Paleontological Monitoring program with the Maintenance Manager and/or Grading Contractor.
   a. If the PI is unable to attend the Pre-maintenance Meeting, the Applicant shall schedule a focused Pre-maintenance Meeting with MMC, the PI, RE, MM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
   The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
3. Identify Areas to be Monitored
   a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate maintenance documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.
   b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
   c. MMC shall notify the PI that the PME has been approved.
4. When Monitoring Will Occur
   a. Prior to the start of any work, the PI shall also submit a maintenance schedule to MMC through the RE indicating when and where monitoring will occur.
   b. The PI may submit a detailed letter to MMC prior to the start of work or during maintenance requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final maintenance documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.
5. Approval of PME and Maintenance Schedule
   After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Maintenance Schedule from the MM.

4.7.1.3 During Maintenance

A. Monitor Shall be Present During Grading/Excavation/Trenching
   1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, jacking and receiving pits, services and all other appurtenances associated with underground utilities as identified on the PME that could result in impacts to formations with high and/or moderate resource sensitivity. **The Maintenance Manager is responsible for notifying the RE, PI, and MMC of changes to any maintenance activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the PME.**

2. The PI may submit a detailed letter to MMC during maintenance requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.
3. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the MM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process
   1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
   2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
   3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

C. Determination of Significance
   1. The PI shall evaluate the significance of the resource.
      a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
      b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or MM before ground disturbing activities in the area of discovery will be allowed to resume.
         (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
      c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
      d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
         (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.

(2). Note, for Pipeline Trenching Projects Only: If significance cannot be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching Projects
   The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.
   1. Procedures for documentation, curation and reporting
      a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.
      b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section 4.7.1.1-A.
      c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.
      d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

4.7.1.4 Night and/or Weekend Work

A. If night and/or weekend work is included in the contract
   1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the Pre-maintenance meeting.
   2. The following procedures shall be followed.
      a. No Discoveries
         In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVR and submit to MMC via the RE via fax by 8AM on the next business day.
      b. Discoveries
         All discoveries shall be processed and documented using the existing procedures detailed in Section 4.7.1.3 - During Maintenance.
      c. Potentially Significant Discoveries
         If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section 4.7.1.3 - During Maintenance shall be followed.
      d. The PI shall immediately contact the RE and MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section 4.7.1.3-

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MATTHEW C. MOORE R.C.E. NO. 56780 EXP. 06-30-2013 DATE

MAINTENANCE PLANS FOR:
SORRENTO CHANNELS
ENVIRONMENTAL MITIGATION REQUIREMENTS

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 11 OF 12 SHEETS

I.O. NO. _____
PROJECT NO. _____

FOR CITY ENGINEER _____ DATE _____

V.T.M. _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

XXXX-XXXX
NAD83 COORDINATES

XXX-XXXX
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

-11-D

B, unless other specific arrangements have been made.

B. If night and/or weekend work becomes necessary during the course of maintenance
1. The Maintenance Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

4.7.1.5 Post Maintenance

A. Preparation and Submittal of Draft Monitoring Report
1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring,
   a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
   b. Recording Sites with the San Diego Natural History Museum
   The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
4. MMC shall provide written verification to the PI of the approved report.
5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Fossil Remains
1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.

C. Curation of artifacts: Deed of Gift and Acceptance Verification
1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall

return to PI with copy submitted to MMC.
4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

D. Final Monitoring Report(s)
1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

WATER QUALITY

Potential impacts to water quality would be reduced to below a level of significance through implementation of the following mitigation measures.

***Mitigation Measure 4.8.1*:** Prior to commencement of any activity within a specific annual maintenance program, a qualified water quality specialist shall prepare an IWQA for each area proposed to be maintained. The IWQA shall be prepared in accordance with the specifications included in the Master Program. If the IWQA indicates that maintenance would impact a water pollutant where the existing level for that pollutant exceeds or is within 25 percent of the standard established by the San Diego Basin Plan, mitigation measures identified in Table 4.8-8 shall be incorporated into the IMP to reduce the impact to within the established standard for that pollutant.

Table 4.8-8
MITIGATION MEASURES FOR REDUCED POLLUTANT REMOVAL CAPACITY

Mitigation Measure	Pollutant Type						
	Bacteria	Metals	Nutrients	Pesticides	Sediment	TDS/ Chloride Sulfates	Trash
Remove kelp on beaches					●	●	
Sweep streets	●	●	●	●	●	●	●
Retrofit residential landscaping to reduce runoff	●	●	●		●		
Install artificial turf	●	●	●	●	●		●
Install inlet devices on storm drains		●	●		●		
Replace impermeable surfaces with permeable surfaces		●	●		●		●

Table 4.8-8 (cont.)
MITIGATION MEASURES FOR REDUCED POLLUTANT REMOVAL CAPACITY

Mitigation Measure	Pollutant Type						
	Bacteria	Metals	Nutrients	Pesticides	Sediment	TDS/ Chloride Sulfates	Trash
Install modular storm water filtration systems		●	●	●	●	●	●
Install storm water retention basins		●	●	●	●	●	●
Install catch basin media filters		●	●		●	●	●
Create vegetated swales	●	●	●	●	●	●	●
Restore wetlands	●	●	●	●	●	●	●
Install check dams		●			●		●

Mitigation Measure 4.8.2: No maintenance activities within a proposed annual maintenance program shall be initiated before the City's ADD Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IWQAs including proposed mitigation and BMPs for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall also confirm that the appropriate maintenance protocols have been incorporated into each IMP.

Mitigation Measure 4.8.3: Prior to commencing any activity where the IWQA indicates significant water quality impacts may occur, a pre-maintenance meeting shall be held on site with following in attendance: City's SWD, MM, MMC, and MC. A qualified water quality specialist shall also be present. At this meeting, the water quality specialist shall identify and discuss mitigation measures, protocols and BMPs identified in the IWQA that must be carried out during maintenance. After the meeting, the water quality specialist shall provide DSD with a letter indicating that the applicable mitigation measures, protocols and BMPs identified in the IWQA have been appropriately implemented.

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