



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: November 18, 2013

TO: Distribution

FROM: Anne B. Jarque, Senior Planner, Transportation & Storm Water Department

SUBJECT: City of San Diego Master Storm Water System Maintenance Program (MMP)
Substantial Conformance Review for Murphy Canyon Creek Channel
Maintenance Project; MMP Map 58

The Transportation & Storm Water Department (T&SWD) formally requests your Department's expedited review and written approval to conduct maintenance and mitigation activities associated with concrete and earthen channel facilities located near 9355 Friars Road (Qualcomm Stadium) in the Murphy Canyon / Mission Valley area. In conformance with the City's modified Master Storm Water System Maintenance Program's (Master Maintenance Program or MMP), amended Site Development Permit (SDP) No. 1134892 and Program Environmental Impact Report (PEIR) Project No. 42891/SCH No. 2004101032, the following Substantial Conformance Review (SCR) documents have been included for your review:

- Application (Form DS-3032)
- Individual Maintenance Plan (IMP) Maintenance Methodology Table
- SCR checklist
- Individual Maintenance Plan (IMP)
- Individual Biology Assessment (IBA)
- Individual Hydraulic and Hydrology Assessment (IHHA)
- Individual Historical Assessment (IHA)
- Individual Water Quality Assessment (IWQA)
- Individual Noise Assessment (INA)

As indicated on the submitted Storm Water Applicability Checklist (Form DS-530); a Water Pollution Control Plan (WPCP) has been prepared and included to ensure appropriate construction-related Best Management Practices (BMPs) would be implemented during maintenance.

In addition, a Conceptual Stadium Wetlands Mitigation Plan (Helix 2012) and the Amendments to the Stadium Mitigation Plan Memo (URS 2013) have been included with the IBA as Attachment 6, for your review to ensure compensatory wetland mitigation is planned.

The site-specific individual assessments have been prepared in conformance with the Master Maintenance Program and associated PEIR, as verified in the SCR Checklist (Attachment 2).

The supporting documents do *not* identify new potentially significant environmental impacts that have not already been identified, addressed and/or mitigated by the required conditions set forth in the associated SDP and PEIR. Therefore the proposed maintenance would substantially conform to the existing permit and environmental document.

Scope of Work

Consistent with the Master Maintenance Program, the Murphy Canyon Creek Channel Maintenance Project (Project) includes the mechanized removal of sediment, vegetation and trash and debris from Murphy Canyon Creek (Map 58) using heavy equipment. As supported by the site-specific IHHA (Appendix D), the prescribed maintenance will restore the original conveyance capacity of these channels to provide flood control for the protection of life and property. Since the facilities included in this SCR consist of a concrete-lined and a constructed earthen channel with rip-rap sides; the prescribed maintenance would not include any modification that would change the character, scope, or size of the original fill design and does not increase the conveyance capacity of the channels beyond their as-built condition. The periodic maintenance of this priority channel is necessary to provide flood protection to surrounding properties and to protect the San Diego River from impacts due to downstream transport of accumulated sediment, trash and debris from the project area.

As identified in the City's Master Maintenance Program, the four major drainage facilities that serve this area of Murphy Canyon/Mission Valley include:

- MMP Maps 58 - Murphy Canyon Creek Channel (commonly known as the Murphy Creek or Stadium channel) *Reaches 1 & 2*; and
- MMP 58a - Murphy Canyon Creek Channel, *Reaches 3 & 4*.

To better describe and assess the channels in the general project area (Figure 1), the channel segments were also assigned reach numbers. There are four channel reaches in the general project area (Figure 2). However, for this SCR submittal (Project), the T&SWD has narrowed the project scope to the two facilities identified on **MMP Map 58 – Murphy Canyon Creek, Reaches 1 & 2** only. Based on the analysis described in the IHHA (Appendix D), Reaches 3 & 4 do not require maintenance at this time. Therefore, for the purpose of this submittal, only the maintenance of Reaches 1 & 2 will be authorized.

Project Location and Regional Setting

The project area occupies an estimated 2.68 acres in the City of San Diego, California (Figure 1). It is located on the U.S. Geological Survey (USGS) 7.5 minute series, La Mesa quadrangle, Section 17, Township 16 South, and Range 2 West (Figure 2). The project area is located within Murphy Canyon, between the Qualcomm Stadium parking lot to the west, Interstate-15 (I-15) to the east, Interstate-8 (I-8) and San Diego River to the south, and San

Diego Mission Road to the north (Figure 2). Reaches 1 & 2 and the adjacent stadium parking lot area are within the FEMA Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood (100-year floodplain) designated Zone A. However, Reaches 1 & 2 do not contain the 100-year storm event.

This section of Murphy Creek is mapped by USGS as an intermittent blue-line stream on the La Mesa quadrangle map. However, due to extensive urbanization, the proximity of adjacent development, and attendant year-round runoff, the creek at this location is likely perennial.

The current land use on site is undeveloped, vegetated channel as part of the San Diego watershed and lower San Diego Hydrological Unit. Surrounding land uses include Qualcomm Stadium and a Kinder Morgan tank farm facility to the west; I-15 and a combination of residential and commercial development to the east; the I-8, San Diego River and commercial uses directly south; and industrial/commercial facilities and additional stretches of Murphy Creek to the north.

The project area is located in the Mission Valley Planned District (MVPD) within the City's Municipal Code and specific land-use designations are described in the Mission Valley Community Plan. The potential maintenance areas associated with Reaches 1 & 2 are zoned MV-CV (Mission Valley Commercial Visitor) and MV-I (Industrial), which is designated for commercial businesses and professional offices. The potential maintenance areas associated with Reaches 3 and 4 are zoned MV-I (Industrial) and IL-2-I (Industrial-Light), which are designated for industrial businesses and mixed professional office uses.

While the project area is not located within the City's Multiple Species Conservation Program's (MSCP) Multi-Habitat Planning Area (MHPA); the nearest MHPA boundary is located immediately south (approximately 125 feet) of the Reach 1 maintenance area associated with the San Diego River corridor.

As mentioned above, the Project covers two of the four reaches within the Murphy Creek drainage area. Description of these two drainage facility, or reaches, is further described below:

Reach 1

Murphy Creek – earthen (rip-rap sides) channel (MMP Map 58): This channel segment extends from approximately 150 feet north of the confluence to the San Diego River, upstream approximately 1,662 feet to Reach 2. This proposed maintenance area footprint is approximately 1,662 feet (length) x 50 feet (top width) to 20 feet (bottom width) x 10 feet (depth), occupying approximately 2.57 acres. Initial channel construction was performed in 1965 and redesign as-built drawings were approved in 1978. As prescribed by the MMP's IHHA requirements, this segment of Murphy Creek requires dredging and vegetation removal to retain the as-built storm water conveyance capacity.

Reach 2

Murphy Creek – concrete channel (MMP Map 58): Starting at the upstream end of Reach 1, this segment of Murphy Creek was constructed as a concrete-lined (bed and banks) trapezoidal channel, and extends approximately 206 feet northward through Murphy Canyon. The proposed maintenance of this channel segment includes approximately 206 feet (length) x 40 feet (top-width) to 20 feet (bottom width) x 8 feet (depth), occupying approximately 0.09 acre. Please note that the northern (upstream) portion of Reach 2 is located in Caltrans right-of-way and is not included in the proposed maintenance area. As prescribed by the MMP's IHHA requirements, this segment of Murphy Creek requires dredging and vegetation removal to retain the as-built storm water conveyance capacity.

Access, Loading, and Staging Areas

Four Access/Loading Areas for the proposed maintenance would be proposed along the existing western berm, as identified on the IMP (Appendix A). Access into the channel will occur via a bulldozer and loader at one location (i.e., Access/Loading Area D) and three additional areas (i.e., Access/Loading Areas A, B, and C) will be utilized by an excavator for loading of removed material. Although Access/Loading Area D is the only area designated with an earthen ramp, all four access areas may be used for foot-traffic egress/regress from the maintenance area. Access/Loading Areas A, B, and C do not include access ramps into the channel as an excavator will be positioned atop of the existing berm (i.e., outside of the channel). Access/Loading Areas A, B, C, and D would measure approximately 30 feet wide by 60-75 feet long.

One temporary Staging & Stockpile Area is proposed and located in the northwest corner of the paved Stadium parking lot. This area would be approximately 200 feet (wide) x 250 feet (long), measuring approximately 50,000 square feet (1.15 acres). Appropriate BMPs would be installed within and around the stockpile area to contain the material within this designated area and prevent runoff to downstream areas as shown on IMP (Appendix A) and identified in the WPCP (Appendix G).

Maintenance Methodology

A site-specific IMP and abbreviated IMP Maintenance Methodology Table (Attachment 1) for both channels have been prepared to identify the scope of work, maintenance methodology and procedures, equipment, and duration for maintenance activities planned. The IMP also includes a list of BMPs, maintenance protocols and mitigation measures derived from applicable permits and regulations that will be implemented with the intent to avoid, minimize, and/or mitigate potential environmental effects to sensitive resources, such as water quality, biological and historical resources.

The following summary highlights key components of the IMP and IMP Maintenance Methodology Table:

The proposed project involves the periodic removal of trash, debris, vegetation and accumulated sediment from Reaches 1 & 2 of Murphy Creek. Specifically, the proposed maintenance includes the mechanized removal of sediment and vegetation from the channel using heavy equipment. Heavy equipment includes equipment equivalent or smaller in size/type to the following: bulldozer, excavator, skid steer, dump truck(s), street sweeper(s), loader(s), vactor(s), and trash pump(s) (for dry weather flow diversion). The periodic maintenance of this channel is required to provide flood protection to surrounding properties due to downstream transport of accumulated sediment and trash and debris from the project area. The project incorporates removal of approximately 7,000–10,000 cubic yards of material at a depth of five to seven feet from the earthen channel (Reach 1); and approximately 1,000–1,500 cubic yards of material at a depth of one to four feet of sediment from the concrete channel (Reach 2).

A temporary diversion structure (berm with visqueen) and pumps would be installed at the northern limits of the channel maintenance area to divert dry weather flows downstream prior to and during maintenance activities. The diverted dry weather flows would be conveyed through hoses that run adjacent to the channel within the parking lot to be discharged south of the maintenance area near the confluence of Murphy Creek and San Diego River.

To get access to Reach 2, City crews would need to start maintenance within the upstream portion of Reach 1 to dredge the channel north of Access & Loading Area D. Crews would then work within Reach 2 and continue to get access in and out of the channel from Access & Loading Area D within Reach 1. Once this upstream portion of Murphy Creek is maintained, crews would then dredge the remaining portion of Reach 1 towards the San Diego River confluence. Equipment, such as the bulldozer and loader that enter the channel would push accumulated material to the closest access & loading area, where an excavator would be stationed on top of the berm. The excavator would scoop material from the channel and load material into a dump truck waiting along the paved parking lot adjacent to the channel. The dump truck would then short-haul the material to a stockpile area within the Stadium parking lot until the stockpile material can be hauled to an approved disposal site (e.g. Miramar landfill).

The T&SWD staff will notify affected asset-managing City Departments (e.g. Real Estate Assets, Public Utilities) to coordinate project schedules and receive appropriate letters of permissions or a Memorandum of Understanding between departments.

Project Duration

Proposed channel maintenance would take approximately six to eight weeks (7 days a week) with an additional six to eight weeks to remove the stockpile material. A City crew, comprised of 12 to 18 people are planned to conduct the proposed channel maintenance, with additional truck drivers available to haul material on weekends. The project would be conducted outside the sensitive bird breeding season; however, it may be necessary to conduct the necessary bird and nesting surveys to determine presence and/or absence if authorizations are issued this winter (December 2013 – March 2014). Furthermore, if seasonal restrictions (e.g. bird-breeding, raptor nesting, and rainy weather) preclude maintenance to be conducted this winter, the T&SWD would request your authorization to begin channel maintenance approved in this SCR in the Fall 2014 after the bird breeding seasons end (typically September 15). Appropriate PEIR protocols, mitigation and conservation measures would be implemented to avoid and minimize impacts to sensitive resources. In addition, T&SWD is required to coordinate with the City's Development Services Department (DSD) Mitigation, Monitoring and Coordination (MMC) Section to conduct a pre-maintenance meeting and ensure all conditions and requirements set forth in the SDP and PEIR are complied with prior to, during, and after maintenance is conducted.

Consistent with the modified MMP and PEIR, the IMP and individual assessments have been reviewed internally and evaluated against the SCR checklist. The SCR documents meet the requirements for your authorization to conduct maintenance activities and determination of substantial conformance.

Should you have any questions or need additional information, please contact me by e-mail at ajarque@sanidiego.gov or phone at (619) 527-3131.



Anne B. Jarque
Senior Planner, Transportation & Storm Water Department

Attachments:

1. Individual Maintenance Methodology Table for Reach 1 & 2 – MMP Map No. 58
2. Substantial Conformance Review Checklist
 - Appendix A: Individual Maintenance Plan (IMP)
 - Appendix B: Individual Biological Assessment (IBA)
 - Appendix C: Individual Historical Assessment (IHA)
 - Appendix D: Individual Hydrology & Hydraulic Assessment (IHHA)
 - Appendix E: Individual Water Quality Assessment (IWQA)
 - Appendix F: Individual Noise Assessment (INA)

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Appendix G: Water Pollution Control Plan (WPCP)

3. Master Storm Water System Maintenance Program, July 2013 (on file)
4. Program Environmental Impact Report (PEIR) Project No. 42891/SCH No. 2004101032 (on file)
5. Site Development Permit (SDP) No. 1134892 (on file)

Figure 1: Project Vicinity Map

Figure 2: Project Area by Reaches

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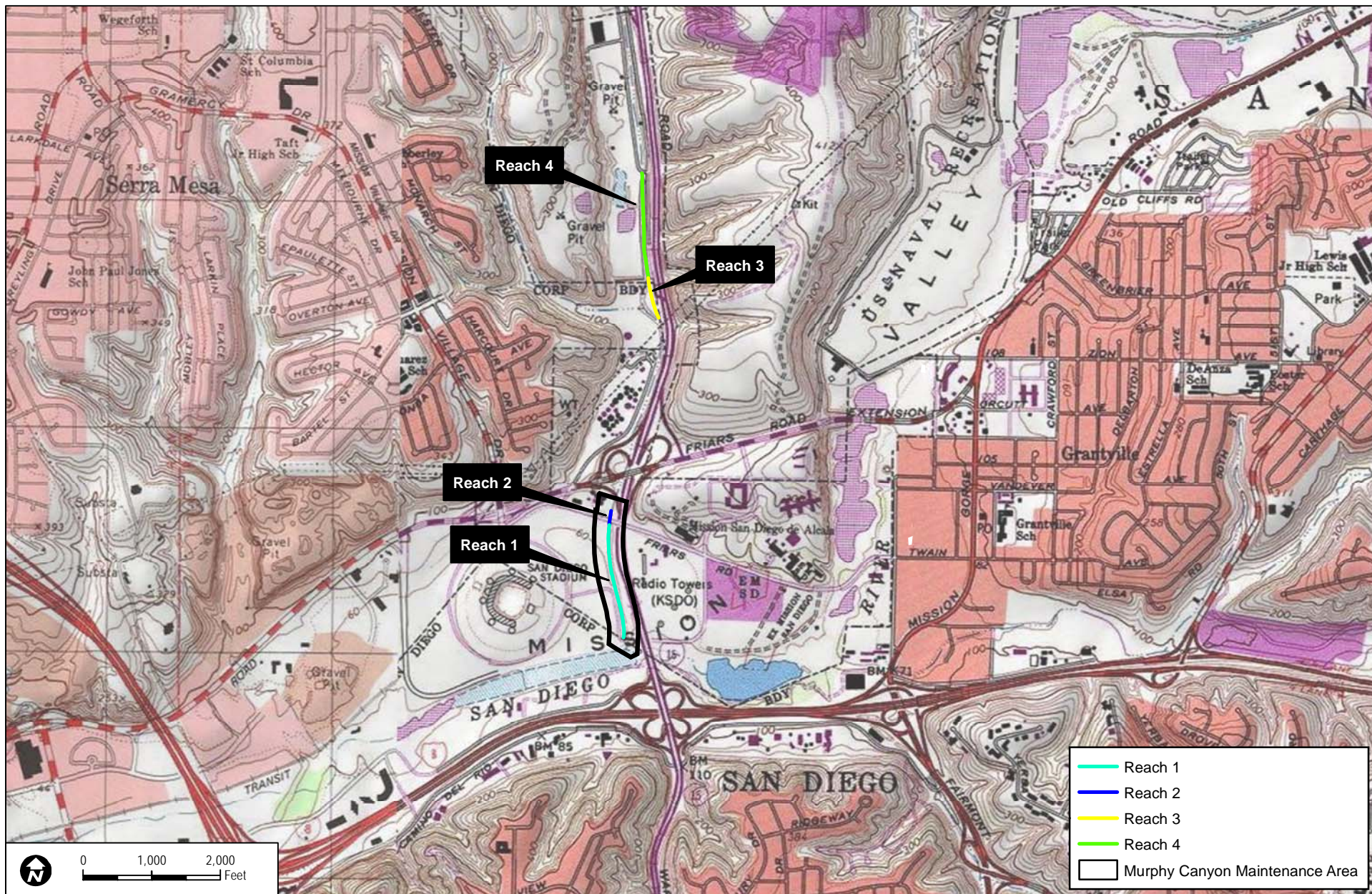


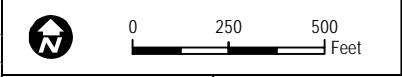
FIGURE 1
Vicinity Map

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SOURCE: URS 2012; USGS 7.5-Minute Series La Mesa Quadrangle.

MURPHY CANYON CHANNEL MAINTENANCE PROJECT



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

FIGURE 2
Project Area

Murphy Canyon Channels – Reach 1 & 2 – MMP MAP No. 58

Attachment 1 – IMP Maintenance Methodology

FACILITY/CHANNEL		MURPHY CANYON CREEK (REACH 1 & 2)	
DIMENSIONS		REACH 1 EARTHEN (RIP-RAP SIDES) CHANNEL: 1,662' LENGTH APPROX. 50' TOP WIDTH 20' BOTTOM WIDTH 10' IN DEPTH 5-7' OF SEDIMENT 7,000-10,000 CUBIC YARDS MAXIMUM CUBIC YARDS: 12,000	REACH 2 TRAPAZOIDAL CONCRETE CHANNEL: 206' LENGTH APPROX. 40' TOP WIDTH 20' BOTTOM WIDTH 8' IN DEPTH 1-4' OF SEDIMENT 1,000-1,500 CUBIC YARDS MAXIMUM CUBIC YARDS: 3,000
		MECHANIZED SEDIMENT & VEGETATION REMOVAL	
EQUIPMENT (EQUIPMENT WILL BE EQUIVALENT OR SMALLER IN SIZE/TYPE)		<ul style="list-style-type: none"> • BULLDOZER (CAT D-8) • EXCAVATOR(S) (CAT 320 WITH THUMB) • SKID STEER (BOBCAT S650) • DUMP TRUCK(S) & PUP TRAILER (20 YD) 	<ul style="list-style-type: none"> • SWEEPER (JOHNSON 4000 OR TYMCO 500X) • LOADER (S) (CAT 950) • VACTOR (2100 PLUS PD) • 4" OR 6" TRASH PUMPS (WACKER OR GODWIN - FOR DRY WEATHER FLOW DIVERSION)
SCHEDULE: IN CHANNEL WORK WILL TAKE 6-8 WEEKS – 7 DAYS A WEEK; 6 AM TO 6 PM; ADDITIONAL 6-8 WEEKS TO REMOVE STOCKPILE STAFFING: MON-FRI – 12 TO 14 PEOPLE; SA-SUN – 14 TO 18 PEOPLE (ADDITIONAL TRUCK DRIVERS MAY BE AVAILABLE)			
MAINTENANCE PROCEDURE			
CHANNEL SEQUENCE		<ol style="list-style-type: none"> 1. PORTION OF REACH 1 – STATION 15+78 TO 16+61 – ACCESS & LOADING AREA-1D TO CONCRETE LINED CHANNEL 2. REACH 2 – STATION 16+61 TO 18+68 - CONCRETE LINED CHANNEL FROM END OF EARTHEN CHANNEL TO CALTRANS ROW 206' NORTH 3. REMAINDER OF REACH 1 – STATION 0+00 TO 15+78 - EARTHEN CHANNEL FROM ACCESS & LOADING AREA-1D SOUTH TO APPROXIMATELY RANCHO MISSION ROAD BRIDGE (1,662') 	
ACCESS & LOADING AREA(S)		ACCESS INTO & OUT OF CHANNEL WILL BE THROUGH EACH ACCESS & LOADING AREA. ALL ARE 30' WIDE & 60' LONG AND EQUIPMENT WILL TAKE ACCESS INTO THE EARTHEN CHANNEL FROM WEST SIDE. ACCESS & LOADING AREA-1A FOR REACH 1 - STATION 3+15 – APPROX 215' NORTH OF RANCHO MISSION ROAD BRIDGE ACCESS & LOADING AREA-1B FOR REACH 1 - STATION 7+78 - APPROX 678' NORTH OF RANCHO MISSION ROAD BRIDGE ACCESS & LOADING AREA-1C FOR REACH 1 - STATION 10+89 - APPROX 989' NORTH OF RANCHO MISSION ROAD BRIDGE ACCESS & LOADING AREA-1D FOR REACH 1 - STATION 15+78 - APPROX 1,478' NORTH OF RANCHO MISSION ROAD BRIDGE	

Murphy Canyon Channels – Reach 1 & 2 – MMP MAP No. 58

Attachment 1 – IMP Maintenance Methodology

	EXCAVATOR WILL BE STATIONED ON TOP OF CHANNEL BERM, REACH INTO CHANNEL, SCOOP MATERIAL, & THEN LOAD MATERIAL INTO WAITING DUMP TRUCKS WITHIN STADIUM PARKING LOT. THESE AREA(S) MAY ALSO BE NEEDED AS ACCESS POINTS.
STAGING & STOCKPILE AREA	<p>STAGING & STOCKPILE AREA: LOCATED APPROXIMATELY 150' WEST OF STATION 15+78 IS 200' WIDE AND 250' DEEP</p> <ol style="list-style-type: none"> 1. BMPS INSTALLED IN STAGING AREA TO ALLOW EXCAVATED MATERIALS TO DRY 2. RUBBER TIRED LOADERS ARE USED TO MAINTAIN STOCKPILE & LOAD DUMP TRUCKS 3. DUMP TRUCK HAULS MATERIAL TO APPROPRIATE DISPOSAL FACILITY.
METHODOLOGY	<p><u>PORTION OF REACH 1</u></p> <ol style="list-style-type: none"> 1. DRY WEATHER FLOW DIVERSION BERM (SANDBAGS AND VISQUEEN), DIVERSION PIPES, & PUMPS WILL BE PLACED AT NORTHERN LIMITS OF CHANNEL CLEANING. 2. BULLDOZER ENTER/EXIT(S) CHANNEL AT ACCESS & LOADING AREA-1D. 3. BULLDOZER WILL BEGIN CLEANING EARTHEN CHANNEL NORTH OF ACCESS & LOADING AREA-1D & PUSHES MATERIAL TO ACCESS & LOADING AREA-1D. 4. EXCAVATOR STATIONED AT ACCESS & LOADING AREA-1D SCOOPS MATERIAL FROM CHANNEL & LOADS MATERIAL INTO WAITING DUMP TRUCK LOCATED WITHIN STADIUM PARKING LOT. 5. DUMP TRUCK SHORT-HAULS LOADS TO STAGING & STOCKPILE AREA. 6. BULLDOZER EXITS CHANNEL. <p><u>REACH 2:</u></p> <ol style="list-style-type: none"> 7. LOADER ENTER/EXIT(S) CHANNEL ONCE REACH 1 NORTH OF ACCESS & LOADING AREA-1D IS CLEARED. 8. LOADER PUSHES MATERIAL IN CONCRETE CHANNEL TO EXCAVATOR AT ACCESS & LOADING AREA-1D UNTIL IT REACHES NORTHERN LIMIT OF WORK. 9. EXCAVATOR CONTINUES TO LOAD EXCAVATED MATERIALS INTO DUMP TRUCK. 10. DUMP TRUCK SHORT-HAULS LOADS TO STAGING & STOCKPILE AREA. <p><u>REMAINDER OF REACH 1:</u></p> <ol style="list-style-type: none"> 1. BULLDOZER RE-ENTER/EXIT(S) CHANNEL AT ACCESS/LOADING AREA(S) & PUSHES MATERIAL TO EXCAVATOR LOCATED AT ACCESS & LOADING AREA(S) TO MINIMIZE DISTANCES MATERIAL IS PUSHED.

Murphy Canyon Channels – Reach 1 & 2 – MMP MAP No. 58

Attachment 1 – IMP Maintenance Methodology

	<ol style="list-style-type: none">2. EXCAVATOR LOADS MATERIAL INTO WAITING DUMP TRUCK LOCATED WITHIN STADIUM PARKING LOT.3. DUMP TRUCK SHORT-HAULS LOAD TO STAGING & STOCKPILE AREA.4. DRY WEATHER DIVERSION BERM, DIVERSION PIPES, & PUMPS REMOVED.5. DUMP TRUCKS HAUL STOCKPILE TO LEGAL DISPOSAL SITE.
POST-MAINTENANCE	<p>DEMOBILIZE EQUIPMENT.</p> <p>RESTORE SITE, INCLUDING TEMPORARY ACCESS & LOADING AREA(S), TO PRE-MAINTENANCE OR AS-BUILT CONDITION (INCLUDING THE REPLACEMENT OF K-RAILS AND FENCE).</p> <p>REMOVE TEMPORARY CONSTRUCTION BMPS.</p>
OTHER NOTES	<p>SWEEPERS WILL SWEEP ALL STAGING AREAS, ADJACENT PUBLIC RIGHTS OF WAY, & TRUCK ROUTES NIGHTLY.</p> <p>REMOVE STANDING WATER (IF ANY) WITHIN DRAINAGE FACILITY WITH PUMPS OR VACTOR.</p> <p>EQUIPMENT FUELED OUTSIDE CHANNEL & LOCATED AT LEAST 150' FROM WATERS OF US/STATE.</p> <p>BICYCLE/PEDESTRIAN PATH TO BE CLOSED DURING MAINTENANCE ACTIVITIES.</p>