

000114

COMMITTEE ACTION SHEET

102
10/23

COUNCIL DOCKET OF _____

Supplemental Adoption Consent Unanimous Consent Rules Committee Consultant Review

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O -

Otay Mesa Trunk Sewer Department of Transportation (CalTrans) Utility Agreements 31766 and 31768 and Certification of Otay Mesa Trunk Sewer Environmental Impact Report

Reviewed Initiated By NR&C On 9/26/07 Item No. 1b

RECOMMENDATION TO:

Approve.

VOTED YEA: Frye, Hueso, Maienschein, Faulconer

VOTED NAY:

NOT PRESENT:

CITY CLERK: Please reference the following reports on the City Council Docket:

REPORT TO THE CITY COUNCIL NO.

COUNCIL COMMITTEE CONSULTANT ANALYSIS NO.

OTHER:

Metropolitan Wastewater Department's July 25, 2007, Executive Summary Sheet; CD containing Environmental Impact Report

COUNCIL COMMITTEE CONSULTANT _____



EXECUTIVE SUMMARY SHEET

000113
DATE REPORT ISSUED: July 25, 2007 **REPORT NO.:**
ATTENTION: Council President and City Council
ORIGINATING DEPARTMENT: Metropolitan Wastewater Department
SUBJECT: Otay Mesa Trunk Sewer Dept. of Transportation (Caltrans) Utility Agreements 31766 and 31768
COUNCIL DISTRICT(S): Eight (8)
STAFF CONTACT: Allan Navarro (858)292-6459, Craig Whittmore (858)292-6471

REQUESTED ACTION:

Enter into the California Department of Transportation (Caltrans) Utility Agreement Numbers 31766 and 31768, for a total amount not to exceed \$3,904,918, for the construction of the City of San Diego's new sewer facilities and the relocation of existing sewer facilities in the Otay Mesa area.

Authorize the expenditure of \$3,904,918 from Sewer Fund 41506, CIP 40-933.0, Annual Allocation - MWWD Trunk Sewers, for the Caltrans Utility Agreements, contingency, and related costs.

STAFF RECOMMENDATION:

Adopt the resolutions.

EXECUTIVE SUMMARY:

In order to provide adequate sewage conveyance capacity and accommodate future growth in the Otay Mesa community, the City Council approved a participation agreement with Pardee Homes (Pardee) on December 3, 2001, Resolution No. RR-295816, for the Otay Mesa Trunk Sewer (OMTS) project. During the design of the OMTS it was noted that the new State Route 905 (SR-905) alignment would impact the construction of the OMTS at Old Otay Mesa Road and at Cactus Road. During the project coordination between the City and the California Department of Transportation (Caltrans), it was agreed that it would be more cost effective if Caltrans would build the portions of the sewer crossing SR-905 at Old Otay Mesa Road and Cactus Road.

Utility Agreement No. 31768 obligates Caltrans to build a 42-inch sewer pipe inside a 72-inch steel casing crossing under SR-905 along Old Otay Mesa Road and a 16-inch sewer pipe inside a 72-inch steel casing (the casing size will accommodate the anticipated future sewer pipe improvements) under SR-905 at the Cactus Road crossing for an estimated cost of \$3,704,918. Caltrans will reimburse the City up to \$178,899 for inspection services. In addition, SR-905 will impact other City sewers east of Cactus Road.

Utility Agreement No. 31766 obligates Caltrans to relocate all other sewer facilities impacted by the SR-905 construction at no cost to the City and Caltrans will reimburse the City up to \$42,049 for additional inspection services.

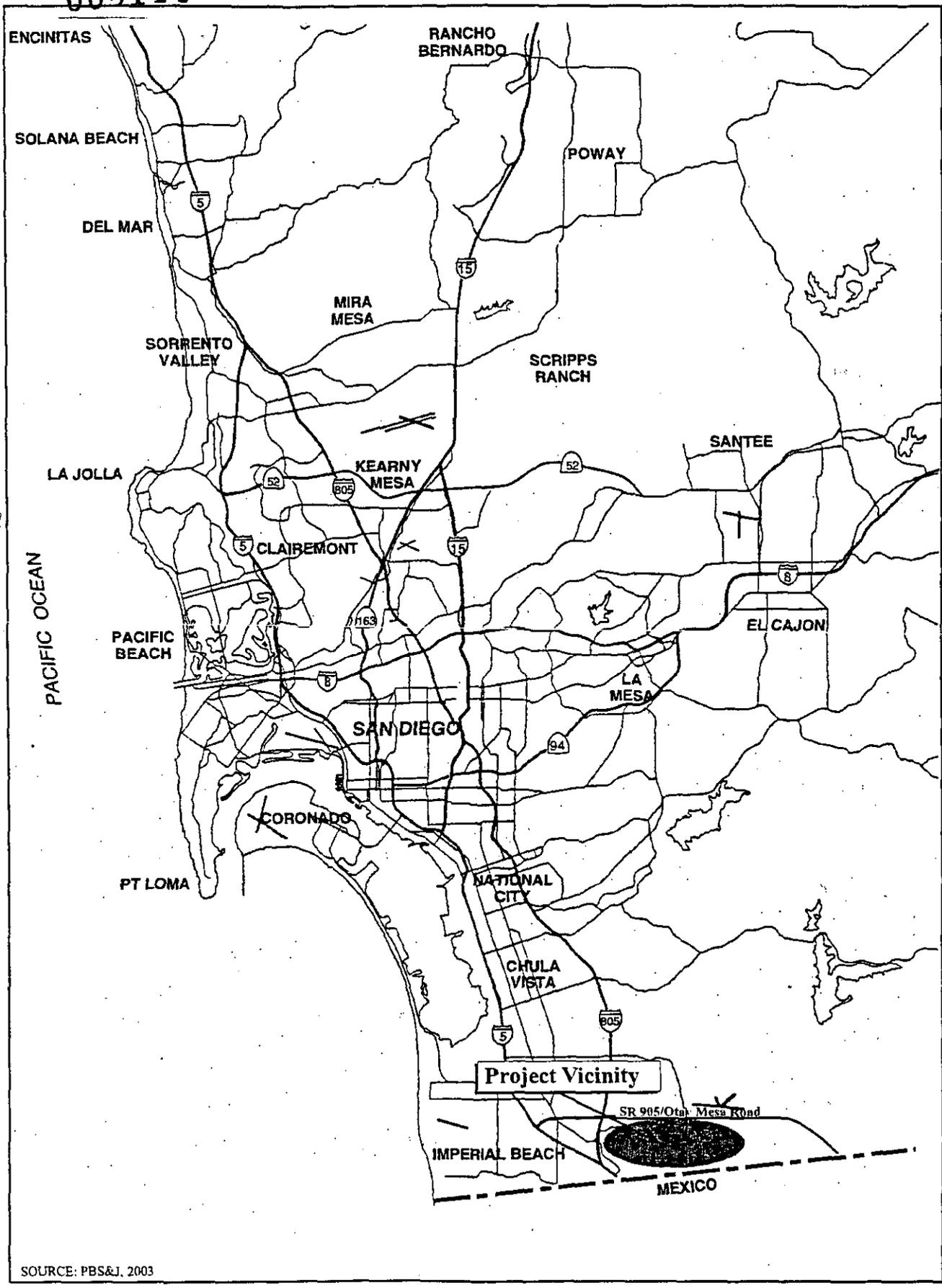
The sewer work described in Utility Agreement No. 31768 is budgeted in FY 2009 in CIP 40-930.0, Otay Mesa Trunk Sewer. With the passage of the Transportation Bonds in November 2006 Caltrans accelerated the construction of SR-905 and will be advertising the project by the end of 2007. It is therefore necessary to accelerate the construction of these sewer pipeline crossings.

In addition, this action will certify the Environmental Impact Report (EIR) for the Otay Mesa Trunk Sewer, Project No. 420246, and adopt the Mitigation Monitoring, and Reporting Program.

FISCAL CONSIDERATIONS:

The total amount of this request is \$3,904,918 and is available in Sewer Fund 41506, CIP 40-933.0, Annual Allocation - MWWD Trunk Sewers. In addition, Caltrans will reimburse the City up to \$220,948 for City's inspection costs. The project costs may be bond reimbursed approximately 80% by current or future debt financings.

000114



REGIONAL LOCATION MAP

FIGURE 2.1-1



Land Development
Review Division
(619) 446-5460

Environmental Impact Report

Project No. 40246
SCH No. 2004071167

SUBJECT: Otay Mesa Trunk Sewer. CITY COUNCIL APPROVAL FOR A SEWER SURCHARGE FEE, CONSTRUCTION FUNDING, ACQUISITION OF LAND FOR THE PUMP STATION A1 SITE AND SITE DEVELOPMENT PERMIT (FOR PUMP STATION A1). The project would allow for the implementation of the Otay Mesa Trunk Sewer project. The project proposes the construction of approximately 14.7 miles (or 77,850 feet) of new and/or replacement/upgrade sewer line in the Otay Mesa area. The project would construct Phases 2 and 3 as described in the 2004 Otay Mesa Sewer Master Plan and Alignment Study, which outlines a strategy for the provision of sewer infrastructure to serve the future build-out of the Otay Mesa region. Phase 2 facilities would be divided into sub-phases to provide infrastructure to accommodate sewer flows as development of Otay Mesa proceeds. These sub-phases may be concurrent or sequential depending on the rate of development in the project area. Phase 2 facilities would include construction of pipelines, construction of a trunk sewer diversion structure, construction of a force main to gravity line sewer transition structure, an upgrade to existing temporary pump station 23T, and the construction of new pump station A1 with a capacity up to 12 million gallons per day (MGD). Phase 3 improvements include additional facilities that may be needed to serve the projected ultimate build out of Otay Mesa, including the upgrade of pump station A1 to a maximum capacity of 34 MGD. The need for these facilities would be reassessed based on actual growth over the next 20 years. The project would be located within roadway rights-of-way in the Otay Mesa and San Ysidro communities of the City of San Diego. The proposed pump station A1 would be constructed adjacent to the existing temporary pump station 23T at the southwest corner of Cactus Road and Siempre Viva Road. Applicant: City of San Diego, Metropolitan Wastewater Department.

This document has been prepared by the City of San Diego's Environmental Analysis Section under the direction of the Assistant Deputy Director (ADD) of the Development Services Department (DSD) and is based on the City's independent analysis and determinations made pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA) and Section 128.0103(a) and (b) of the San Diego Municipal Code.

FINAL DOCUMENT SEPTEMBER 12, 2005

Subsequent to the distribution of the draft Program Environmental Impact Report (PEIR) and as a result of public review, minor revisions, clarifications or additions have been made to the final PEIR. These revisions, clarifications or additions are denoted by ~~strikeout~~ and underline. These revisions, clarifications or additions to the document do not change the conclusions of this final PEIR regarding the project's potential impacts and required mitigation. Responses to comments have been included in this final document and are located after Page 11 of this final PEIR.

CONCLUSIONS:

This Draft EIR (DEIR) analyzes the environmental impacts of the proposed Otay Mesa Trunk Sewer project, which proposes the construction of approximately 14.7 miles of new and/or replacement/upgraded sewer line in the Otay Mesa and San Ysidro areas. The project would be constructed in multiple phases. Implementation of each phase would occur only when future development demands in Otay Mesa generate a need for it.

SIGNIFICANT UNMITIGATED IMPACTS:

The proposed project would not result in any significant unmitigated impacts. All significant impacts associated with implementation of the proposed project, including land use, noise, paleontological resources, historic resources, air quality, biological resources, hazards and hazardous materials, visual quality/aesthetics, and energy, would be mitigated to a less than significant level.

As discussed below, approval of the No Project Alternative, Canyon Ridge Alternative, and Deep Sewer Alternative would further reduce some significant but mitigable impacts associated with the proposed project. However, approval of the Canyon Ridge or Deep Sewer Alternatives would also result in new and/or increased significant impacts in several issue areas as compared to the proposed project.

ALTERNATIVES FOR REDUCING SIGNIFICANT IMPACTS:

No Project Alternative: Under this alternative, the proposed project would not be implemented. The significant impacts that may be avoided with this alternative include impacts to land use, noise, paleontological resources, historic resources, air quality, biological resources, hazards and hazardous materials, visual quality/aesthetics, and energy.

Canyon Ridge Alternative: This alternative is a gravity alternative alignment that would be located in the west mesa area. This alternative would eliminate the need for existing Pump Station 23T and proposed Pump Station A1. Existing Pump Station 31T would still be required and existing Pump Station 48T may still be required. The eastern portions of the alternative alignment along La Media and Siempre Viva Roads would be the same as the proposed project. At the site of existing Pump Station 23T, the Canyon Ridge Alternative would implement a deep sewer pipeline north under Cactus Road for approximately 650 feet. The alignment would then turn west under proposed future roads to Spring Canyon. This alternative alignment would require the construction of a bridge over a portion of Spring Canyon. After crossing the canyon, the alignment would be located in the ROW of the proposed Airway Road extension. Thereafter, the alignment would continue west under Airway Road to Old Otay Mesa Road. Once under Old Otay Mesa Road, the alignment would be the same as the proposed project.

Under this alternative, impacts associated with air quality, hazards and hazardous materials, noise, and energy resources would be reduced as compared to the proposed project. Similar to the proposed project, the Canyon Ridge Alternative would be designed to avoid significant impacts to utilities and geotechnical conditions. Impacts associated with paleontological resources would be similar to the proposed project and could be mitigated with measures similar to those identified for the proposed project. Under this alternative, new and/or increased potential impacts associated with land use, paleontological resources, historical resources, biological resources, hydrology/water quality, and aesthetics/visual quality may occur as compared to the proposed project. However, it is likely that most of these new and/or increased impacts would be mitigable to below a level of significance, with the possible exception of land use and aesthetics/visual quality impacts.

Deep Sewer Alternative: This alternative is a gravity sewer alternative in which the proposed pipeline would be located along a similar alignment as the proposed project but at increased depth. This alternative would eliminate the need for existing Pump Station 23T and proposed Pump Station A1. Existing temporary Pump Stations 31T and 48T would still be required. The eastern portions of the alternative alignment along La Media and Siempre Viva Roads and the western portions of the alignment along Old Otay Mesa Road, East Beyer Boulevard, Center Road, San Ysidro Boulevard, and Via de San Ysidro Boulevard would be the same as the proposed project. At the site of existing Pump Station 23T, the Deep Sewer Alternative would implement a sewer pipeline at a depth of 30-feet under Cactus Road and transition to a deep sewer (from 30 to 140 feet deep) approximately 400 feet north of Pump Station 23T. The deep sewer pipeline alignment would follow Cactus Road to the north and then to the west under Camino Maquiladora. The alignment would follow Camino Maquiladora in a westerly direction to the proposed Heritage Road under-crossing of SR-905. After this under-crossing, the alignment would continue west under Otay Mesa Road to Caliente Road. The alignment would be located under Caliente Road to Airway Road, and would continue west under Airway Road to Old Otay Mesa Road. At this point, the alignment would be similar to the proposed project alignment and would become shallower and flow by gravity to the San Ysidro Interceptor.

This alternative would reduce significant impacts associated with land use, operational noise, air quality, biological resources, and energy resources as compared to the proposed project. Similar to the proposed project, the Deep Sewer Alternative would be designed to avoid significant impacts to

utilities and geotechnical conditions. Impacts associated with construction noise, historical resources, paleontological resources, hazards and hazardous materials, and visual quality/aesthetics would be similar to the proposed project and could be mitigated with measures similar to those identified for the proposed project. However, under the Deep Sewer Alternative, new significant and mitigable impacts associated with hydrology/water quality may occur.

MITIGATION MONITORING AND REPORTING PROGRAM INCORPORATED INTO THE PROJECT (See attached DEIR for a detailed description of mitigation measures that have been incorporated into the project):

Land Use (Indirect)

The proposed project would result in an inconsistency with the City's MSCP if it would extend outside of the right-of-way and impact sensitive habitats, animal or plant species located within the City's MHPA. In addition, the project would result in potentially significant indirect impacts to sensitive habitats, animal and plant species covered by the City's MSCP, including decreases in water and air quality, and increases in night lighting, noise, and errant construction impacts. Mitigation measures to reduce these impacts would include construction of sound attenuation devices during nocturnal operation of dewatering pumps, placement of construction equipment and staging areas away from sensitive receptors, require new outdoor pump station lighting to be shielded in areas adjacent to the MHPA, require that during night construction lighting is shielded or directed away from the MHPA. In addition, if any construction phase would occur adjacent to the MHPA and within the breeding season of a sensitive bird species, protocol surveys must be conducted to determine the presence or absence of active nests. If determined to be present, construction activities must remain at least 500 feet from the active nest at all times (with the exception of active Cooper's hawk nests, for which construction activities must maintain a distance of at least 300 feet). See Section 4.1 of the DEIR.

Biological Resources (Direct, Indirect and Cumulative)

Based on the results of a biological survey conducted along the proposed project corridor, it was determined that implementation of the OMTS project, those areas not confined to the public Right-of-Way (ROW), specifically the expansion of Pump Station 23T and the construction at Pump Station A1, would have the potential to result in direct and indirect impacts to sensitive biological resources. The Phase 2C corridor was not surveyed or included as part of the biological study corridor because pipeline alignments and pump station locations have not yet been determined. Construction of Pump Station A1 would result in direct impacts to 2.8 acres of non-native grassland and would be mitigated to below a level of significance in accordance with the City's Biology Guidelines mitigation ratio of 0.5:1 for non-native grassland located outside the MHPA. However, because the proposed Pump Station A1 site is not under City ownership, the site was not thoroughly surveyed. Therefore, prior to construction of proposed Pump Station A1, focused surveys for sensitive species would be conducted at the pump station A1 site to determine if any additional sensitive species are present onsite. Impacts to any newly-identified sensitive species shall be evaluated in a second tier document in compliance with CEQA and any significant impacts shall be mitigated to below a level of significance.

In addition to the impacts associated with construction of Pump Station A1, the proposed project would have the potential to impact sensitive biological habitat, plant and animal species during the construction of Phase 2C. This phase of the proposed project has not been designed yet and, therefore, the location of sewer pipeline and pump station facilities have not been determined at this time. However, immediately after the pipeline and pump station locations have been determined for Phase 2C, a comprehensive biological resources survey and analysis shall be prepared to determine if construction and/or operation of Phase 2C facilities would result in significant impacts to sensitive biological resources. Any direct or indirect impacts to biological resources as a result of Phase 2C facilities shall be mitigated to below a level of significance in accordance with the City's Biology Guidelines (City 2002). See Section 4.7 of the DEIR.

Historical Resources (Direct, Indirect and Cumulative)

Project related excavation and trenching activities associated with the construction of Phase 2 facilities would have the potential to result in significant impacts to nine archaeological sites identified during the archaeological resources record search, literature review and site survey, which include one site identified as significant, three untested sites, and five sites that were identified as not significant but may still contain unknown archaeological resources. Therefore, prior to the start of any construction related activities, the applicant would be required to conduct a testing program for sites SDI-10,963, SDI-14,083 and SDI-14,084 in order to determine significance; conduct an Archaeological Data Recovery Program in order to mitigate direct impacts to significant site SDI-11,424, and implement a monitoring program during project trenching, excavation and grading activities for the remaining sites determined not significant, but may still have the potential contain unknown resources. Implementation of the above programs would reduce potential impacts to archaeological resources to below a level of significance. See Section 4.5 of the DEIR.

Paleontological Resources (Direct, Indirect and Cumulative)

Implementation of the proposed project would have the potential to significantly impact paleontological resources during construction from trenching activities occurring within the Quaternary Stream-Terrace Deposits, Lindavista Formation, San Diego Formation, Bay Point Formation, and Otay Formation. Implementation of a Paleontological Resources Monitoring Program during project trenching, excavation and grading activities would reduce potential impacts associated with paleontological resources to below a level of significance. See Section 4.3 of the DEIR.

Noise (Direct and Indirect)

The proposed project would result in significant direct noise impacts associated with the operation of proposed pump station. Interior noise at the pump station would potentially exceed the 85 dB standard for interior noise levels averaged over 8 hours and exterior noise standards if they were to exceed 75 dB at the property line. In addition, operational noise from pump stations constructed during Phase 2C would also have the potential to result in significant impacts to nearby sensitive receptors including residences and schools. These impacts would be mitigated to below a level of significance through the installation of sound absorption panels and the implementation of noise attenuation features identified in a future acoustical noise analyses at proposed Pump Station A1 and any pump stations constructed during Phase 2C to ensure that they don't exceed applicable noise standards.

The proposed project would also result in potentially significant temporary noise impacts to nearby residents, schools and learning institutions during construction activities. Mitigation measures have been identified which would reduce these potentially significant impacts to below a level of significance, which include measures the contractor shall implement to reduce impulse noise levels at residences and within 280 feet of any school classrooms. (See Section 4.2 of the DEIR).

Air Quality/Odor (Direct and Cumulative)

Construction and operation of the proposed project would have the potential to result in air pollutant emissions that exceed significance thresholds for Phase 2C and Phase 3. Mitigation measures would be implemented to reduce air quality impacts to below a level of significance which require the preparation of air quality technical reports when pipeline alignments and pump station locations have been determined for Phase 2C and prior to the City's first pre-construction meeting for the construction of Phase 3. The air quality technical reports would be prepared in order to determine if the construction and operation of Phase 2C and the construction of Phase 3 would generate pollutant emissions that exceed significance thresholds. If significance thresholds would be exceeded, pollutant emission reduction measures shall be implemented to reduce impacts to below a level of significance.

The proposed project would also result in a potentially significant impact if the emergency generators for the 35 MGD pump station were to operate for longer than 2.4 hours per day. An air quality analysis would be conducted prior to the City's first preconstruction meeting for the construction of the 35 MGD pump station in order to determine if the emergency generators proposed for the pump station backup power would exceed allowable emission thresholds. If an exceedance would occur, mitigation measures, such as implementation of pollutant emission reduction measures, would be implemented to reduce impacts to below a level of significance.

Grading, trenching and excavation activities during all phases of construction would generate air quality pollutants. Although construction of project phases 2A1, 2A2, 2B1, 2B2, 2D, 2E and 2F would not result in a significant air quality impact, a mitigation measure is proposed which would further reduce pollutant emissions during construction which requires implementation of air quality Best Management Practices (BMPs). See Section 4.6 of the DEIR.

Human Health/Public Safety/Hazardous Materials

Construction of the proposed project would have the potential to result in significant hazardous materials impacts during the implementation of Phases 2A2, 2B1, 2B2, 2D, 2E, 2F, and 3 due to known or unknown contaminated soils and groundwater which may exist along the proposed project alignment. To mitigate for these potential impacts to below a level of significance, mitigation measures would be implemented which include the performance of a soil monitoring program during project excavation and trenching of specific alignment areas, preparation of a Community Health and Safety Plan in the vicinity of the Tripp Landfill, performance of environmental monitoring as part of dewatering plans and operations, evaluation and handling of any undocumented underground storage tanks encountered during construction in accordance with all applicable laws and regulations, obtain permission for the destruction of any groundwater monitoring wells from the appropriate responsible parties and regulatory agencies, provide proof of all necessary licenses and certifications to perform excavation and other construction

operations, and performance of soil sampling at the proposed Pump Station A1 site.

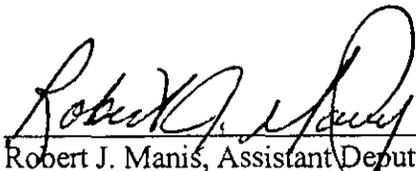
In addition, the construction of Phase 2C would have the potential to result in a significant hazard to the public through the presence of unknown hazards and hazardous materials in this area. Therefore, when pipeline alignments and pump station locations for Phase 2C have been determined, a comprehensive Phase I site assessment shall be conducted in order to determine if Phase 2C would have the potential to result in significant hazardous materials impacts due to known or unknown contaminated soils and groundwater. For potentially significant impacts, the Phase I shall include recommendations for remediation of impacts to a level below significance. See Section 4.10 of the DEIR.

Visual Quality

The proposed project would have the potential to result in a significant impact associated with the creation of a negative aesthetic site or project from the construction of Phase 2C pump stations. This impact would be mitigated to below a level of significance by requiring that the architectural style and materials used in the proposed Phase 2C pump station buildings be designed to blend with the surrounding uses of the area. See Section 4.11 of the DEIR.

Energy

The proposed project would have the potential to result in the use of excessive amounts of fuel or energy during operation of proposed Phase 2C pump stations. This impact would be mitigated to below a level of significance by requiring that the proposed pump stations be designed to incorporate energy-efficient components such as soft start motors, high efficiency motors, energy-efficient interior, and exterior lighting and skylights in order to avoid the excessive use of fuel or energy. See Section 4.12 of the DEIR.


Robert J. Manis, Assistant Deputy Director
Development Services Department

May 2, 2005
Date of Draft Report

September 12, 2005
Date of Final Report

Analyst: Myra Herrmann

PUBLIC REVIEW:

The following individuals, organizations, and agencies received a copy or Notice (*) of the DEIR and were invited to comment on its accuracy and sufficiency:

Federal Government

U.S. Fish & Wildlife Service (23)
Army Corps of Engineers (26)
Border Patrol (22)
Environmental Protection Agency (EPA) (19)

Department of Agriculture - Natural Resources Conservation Services (25)
Department of Transportation, Region 9 (2)
Jennifer Weilbacher, Naval Facilities Engineering Command, Southwest Division (8a)
Department of Homeland Security -Adele Fasano

State of California

State Clearinghouse (46A)
Department of Fish & Game (32A)
Regional Water Quality Control, Region 9 (44)
Caltrans Planning, District 11 (31)
Resources Agency (43)
Native American Heritage Commission (56)
Office of Historic Preservation (41)
California Air Resources Board (49)
Caltrans, Division of Aeronautics (51)
Integrated Waste Management Board (35)
CAL EPA (37A)
Highway Patrol (58)
Department of Parks & Recreation, Tijuana River National Estuary (229)

County of San Diego

Agriculture Department (64)
Air Pollution Control District (65)
Water Authority (73)
Hazardous Materials Management Division (75)
Land & Water Division (76)
Planning and Land Use (68)

City of San Diego

Tom Story, Mayor's Office (91)
Councilmember Inzunza, District 8
Development Services Department
Economic Development Department
Office of Binational Affairs – Elsa Saxod (MS 615T)
Office of the City Attorney – Karen Heumann (MS 59)
Fire and Life Safety (79)
Bob Ferrier (80)
Library Department – Gov't Documents (81)
San Ysidro Branch Library (MS 17)
Police Research & Analysis (84)
Real Estate Assets Department (85)
Engineering & Capitol Projects Department (86)
Historical Resources Board (87)
Park and Recreation – Open Space Division (89)
General Services Department (92)
Environmental Services Department (93A)

Water Department

Metropolitan Wastewater Department - Allan Navarro (MS 908)

Planning Department - Long Range Planning and MSCP (MS 4A/5A)

Transportation Department – Larry Van Wey (MS 609)

Government Relations – Andrew Poat (MS 51M)

San Ysidro Community Service Center (435)

Consulting Team

PBS&J – Craig Close, Kim Howlett, Diane Catalano

Others

Otay Mesa Nestor Planning Committee (228)

Otay Mesa Chamber of Commerce (231A)

Otay Mesa Planning Committee (235)

San Ysidro Planning and Development Group (433)

United Border Community Town Council (434)

SANDAG (108)

San Diego Regional Airport Authority (110)

San Diego Transit (112)

San Diego Gas & Electric (114)

MTDB (115)

San Ysidro School District (127)

Sweetwater Union High School District (131)

Sierra Club, San Diego Chapter (165/165A)

San Diego Natural History Museum (166)

San Diego Audubon Society (167/167A)

California Native Plant Society (170)

Center for Biological Diversity (176)

Endangered Habitats League (182)

Community Planning Group Chair (194)

Jerry Schaeffer, Ph.D. (209)

South Coastal Information Center (210)

San Diego Historical Society (211)

San Diego Archaeological Center (212)

Save Our Heritage Organization (214)

Ron Christman (215)

Louie Guassac (215A)

San Diego County Archaeological Society (218)

Kumeyaay Cultural Repatriation Committee (225)

Congressman Bob Filner

Otay Water District – Robert Scholl

Alejandra Mier y Teran

Jimmy Ayala

Dave Nielsen, MNA Consulting

John Ponder, Sheppard Mullin

Lee Sherwood, RECON

Danielle Putnam, RBF Consulting

Gregory Shields, ProjectDesign Consultants

Rich Miller, ProjectDesign Consultants
Dave Gatzke, McMillan Communities
Dan Feldman, Sunroad
Sondra Netzer, Centex Homes
James Greco, T&B Planning
Lance Waite, Integral Partners, LLC
Rikki McClintock Alberson, RMA Consultants
International Boundary & Water Commission

Others - Notice of Availability Only

City of Chula Vista (94)
City of Imperial Beach (98)
Chula Vista School District (118)
San Diego Unified School District (125)
South Bay Unified School District (130)
San Diego City Schools (132)
San Diego Community College District (133)
Union-Tribune City Desk (140)
CALPIRG (154)
Building Industry Federation (158)
Environmental Health Coalition (169)
Citizen's Coordinate for Century III (179)
EC Allison Research Center (181)
League of Women Voters (192)
Native American Distribution (225A-R)
 Barona Group of El Capitan Grande Band of Mission Indians
 Campo Band of Mission Indians
 Cuayapaipe Band of Mission Indians
 Inaja and Cosmit Band of Mission Indians
 Jamul Indian Village
 La Posta Band of Mission Indians
 Manzanita Band of Mission Indians
 Sycuan Band of Mission Indians
 Viejas Group of Capitan Grande Band of Mission Indians
 Mesa Grande Band of Mission Indians
 San Pasqual Band of Mission Indians
 Santa Ysabel Band of Diegueno Indians
 La Jolla Band of Mission Indians
 Pala Band of Mission Indians
 Pauma Band of Mission Indians
 Pechanga Band of Mission Indians
 Rincon Band of Mission Indians
 Los Coyotes Band of Mission Indians
Michael A. Vogt (232)
Janay Kruger (233)
BNB Environmental Consulting (227)
Genevieve Blalock

Pepper Coffey
Dan Kittredge
Eric Rivera
Ruth Schneider
Bertha Gonzalez
Mike Reynolds
Joe Street
Tom Tomlinson
Ron Nelson

Others - Notice of Availability Only

Mel Ingalls
Emil Wohl
Robin Casey
Rob Hixon, CB Richard Ellis
Judd Halenza
Mike Murphy
Dave Bieber

Copies of the DEIR, the Mitigation, Monitoring and Reporting Program and any technical appendices may be reviewed in the office of the Land Development Review Division, or purchased for the cost of reproduction.

RESULTS OF PUBLIC REVIEW

- () No comments were received during the public input period.
- () Comments were received but did not address the draft Environmental Impact Report finding or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.
- (X) Comments addressing the findings of the draft Environmental Impact Report and/or accuracy or completeness of the Initial Study were received during the public input period. The letters and responses follow.

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RESPONSE TO PUBLIC COMMENTS

Comment letters on the Draft Environmental Impact Report (DEIR) were received from the federal, State and local agencies listed in the Commenter's Index below. Some comment letters received during the EIR public review period contained comments that resulted in changes to the Final EIR (FEIR) text. These changes to the text are indicated by strikeout (deleted) and underline (inserted) markings and can be found on the pages identified after each of the sections listed below.

TABLE OF CONTENTS: N/A

ACRONYMS AND ABBREVIATIONS: N/A

EXECUTIVE SUMMARY: Pages S-2, S-4, S-7 through S-12, S-20, S-21

1.0 INTRODUCTION: N/A

2.0 ENVIRONMENTAL SETTING: N/A

3.0 PROJECT DESCRIPTION: Pages 3-1, 3-2

4.0 ENVIRONMENTAL ANALYSIS

4.1 Land Use: Page 4.1-19

4.2 Noise: N/A

4.3 Paleontological Resources: Pages 4.3-5 through 4.3-9

4.4 Utilities: Pages 4.4-6, 4.4-8

4.5 Historical Resources: N/A

4.6 Air Quality: Page 4.6-12

4.7 Biological Resources: Pages 4.7-38, 4.7-39

4.8 Hydrology/Water Quality: N/A

4.9 Geotechnical Conditions: N/A

4.10 Hazardous Materials: N/A

4.11 Visual Quality/Aesthetics: N/A

4.12 Energy: N/A

5.0 CUMULATIVE IMPACTS: N/A

- 6.0 GROWTH INDUCEMENT: N/A
- 7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT: N/A
- 8.0 UNAVOIDABLE AND IRREVERSIBLE SIGNIFICANT ENVIRONMENTAL EFFECTS: N/A
- 9.0 ALTERNATIVES: Pages 9-13, 9-14
- 10.0 REFERENCES: N/A
- 11.0 PERSONS AND ORGANIZATIONS CONTACTED: N/A
- 12.0 CERTIFICATION PAGE: N/A

COMMENTER'S INDEX

Federal Agencies (F)

US Fish and Wildlife Service F-1 through F-8

State Agencies (S)

Native American Heritage Commission S-1 through S-3

Department of Toxic Substances Control S-4 through S-6

State Clearinghouse S-7 through S-8

Local Agencies (L)

County of San Diego Department of Public Works..... L-1 through L-1

COMMENTS

RESPONSES



United States Department of the Interior



FISH AND WILDLIFE SERVICE
 Ecological Services
 Carlsbad Fish and Wildlife Office
 6010 Hidden Valley Road
 Carlsbad, California 92009

In Reply Refer To:
 FWS-SDG-4179.2

Mr. Chris Zirkle, Assistant Deputy Director
 Development Services Department
 Land Development Review Division
 1222 First Avenue, Mail Station 501
 San Diego, California 92101

JUN 15 2005

Attn: Ms. Myra Herrmann

Re: Draft Environmental Impact Report for the Otay Mesa Trunk Sewer Project. City of San Diego, California.

Dear Mr. Zirkle:

RTC-1

F-1

The U.S. Fish and Wildlife Service (Service) has reviewed the draft Environmental Impact Report (DEIR) and supporting documents for the proposed Otay Mesa Trunk Sewer Project No. 40246, San Diego County, California. The project proposes the construction of approximately 14.7 miles of new and/or replacement/upgrade sewer line in the Otay Mesa area. The project includes construction of Phase 2 and 3 facilities as described in the 2004 Otay Mesa Sewer Master Plan and Alignment Study. Phase 2 facilities include an upgrade of the existing temporary pump station 23T, and construction of pipelines, a trunk sewer diversion structure, a force main to gravity line sewer transition structure, and new pump station A1 with a capacity up to 12 million gallons per day (MGD). Phase 3 improvements include additional facilities that may be needed to serve the projected ultimate build out of Otay Mesa, including the upgrade of pump station A1 to a maximum capacity of 34 MGD. The need for these facilities would be reassessed based on actual growth over the next 20 years.

The project would be located within roadway rights-of-way (ROW) in the Otay Mesa and San Ysidro communities, with the exception of the expansion of Pump Station 23T and the construction of Pump Station A1. Pump station A1 would be constructed adjacent to the existing temporary pump station 23T at the southwest corner of Cactus Road and Siempre Viva Road. It is possible that conflicts with existing utilities could result in the pipeline alignment occurring outside of the ROW in some locations. Furthermore, Phase 2C of the project has not yet been designed and thus could not be fully addressed in the DEIR. Therefore, Phase 2C will require subsequent environmental review once the locations of those facilities are determined.

F-2

It is unclear as to whether construction will occur outside the existing footprint of the roadways because the extent of the ROW is not clearly defined in the DEIR. We recommend that the

F-1

This comment is consistent with information provided in the Draft EIR. No further response is required.

F-2

The EIR has been revised to include a definition of right-of-way (ROW) in the Executive Summary and Project Description (Chapter 3.0). As identified in these EIR sections, for the purposes of this project, ROW is defined as the roadway alignment footprint and consists only of the paved roadway alignment. Any areas extending outside of the existing paved roadway footprint are not considered to be ROW. Therefore, project construction would have no potential to impact sensitive biological resources within the ROW, because it is paved and does not contain any sensitive biological species.

Mitigation measure *Biological Resources – 2* has been revised so that “ROW” is replaced with “paved roadway alignment footprint” in three places in this mitigation measure. Therefore, this mitigation measure would apply to unpaved areas of project construction that are adjacent to the paved roadway alignment footprint or ROW. In addition, the text has been revised to include that “if the construction activities extend outside of the existing roadway footprint, an appropriately timed field survey shall be conducted to determine if any sensitive habitats, animal or plant species would be impacted during construction.” Consistent with this comment,

COMMENTS

RESPONSES

Mr. Zirkle (FWS-SDG-4179.2)

2

F-2
(cont.)

DEIR clarify the extent of the ROW in relation to the roadway footprint and whether impacts within the ROW could result in impacts to sensitive biological habitats and species outside the existing roadway footprint. If project construction occurs outside of the footprint of the roadway, there is the potential for impacts to sensitive biological resources within the ROW, including vernal pools and federally listed species. Mitigation Measure: Biological Resources (MMBR) 2 states that:

"...a qualified biologist shall review the proposed pipeline alignment to determine any areas where the alignment would be located outside the ROW. If no areas would be located outside of the ROW, no further action shall be required. If the alignment would be located outside of the ROW, [Mitigation Measures:] Biological Resources 2a, 2b, and 2c shall be followed."

We could concur that no further action to address direct impacts would be required if all construction activities occur within the existing road alignment footprint provided project construction does not alter the hydrology in the surrounding habitats. However, if construction activities occur outside the existing road alignment footprint, impacts to sensitive resource may result from the proposed project. Therefore, we recommend that MMBR 2 and MMBR 2a be revised so that no further action to address direct impacts would be required if the construction activities are limited to the existing roadway footprint (MMBR 2), but that if the construction activities extend outside the existing roadway footprint, an appropriately timed field survey will be conducted to determine if any sensitive habitat(s), animal or plant species would be impacted during construction (MMBR 2a).

F-3

The DEIR indicates that it is possible for construction to occur outside the ROW and impact sensitive biological resources. The City will mitigate for impacts to sensitive habitats that cannot be avoided (MMBR 2b). If impacts to sensitive animal or plant species cannot be avoided, the significance of those impacts will be evaluated in a second tier document in compliance with California Environmental Quality Act (CEQA) and any significant impacts mitigated (MMBR 2c).

F-4

The DEIR indicates that biological surveys for the DEIR were conducted on July 29, 30 and August 13, 2003. This is not the appropriate time of year to detect spring blooming annuals or vernal pools. Surveys for vernal pools should occur after a significant rain event or during the rainy season. Surveys for rare and endemic plants should be conducted during the appropriate time of year. As such, we recommend that the pre-construction surveys conducted by a qualified biologist per MMBR 2a be appropriately timed to verify that impacts to sensitive resources, particularly for which the City does not have take authority (e.g., federally listed species that occur in vernal pools), are avoided.

F-5

Because the City does not have take authorization under their Multiple Species Conservation Program (MSCP) Subarea Plan for impacts to federally listed species that occur in vernal pools [e.g., San Diego fairy shrimp (*Branchinecta sandiegonensis*), Riverside fairy shrimp (*Streptocephalus wootoni*), Otay mesa mint (*Pogogyne nudiuscula*), San Diego button celery (*Eryngium aristulatum* var. *parishii*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*)] or the federally listed as endangered Ouino checkerspot

the mitigation measure identifies that no further action to address direct impacts to biological resources would be required if project construction activities are limited to the existing roadway alignment footprint.

F-3

This comment is consistent with information provided in the Draft EIR. No further response is required.

F-4

Mitigation measure *Biological Resources – 2a* has been revised to include that "Appropriately-timed preconstruction surveys shall be conducted by a qualified biologist pursuant to state and federal protocols to determine if sensitive species are present in the sensitive habitat areas. If only sensitive habitat is impacted, and no sensitive animal or plant species are determined to be present onsite, then the sensitive habitat shall be mitigated in accordance with Table 4.7-4. If sensitive species are detected onsite, then mitigation measure *Biological Resources – 2c* would be implemented."

F-5

Comment noted. Because the project would be located within the paved roadway alignment footprint, it is not anticipated to impact federally listed species. However, if the project alignment *Biological Resources – 4, 4a, 4b and 4c* should extend outside of the paved roadway alignment footprint, mitigation measures would ensure that potential impacts would be mitigated in conformance with applicable federal, state and local regulations.

It is identified in Section 4.7.4 of the EIR that the pump station A1 site has the potential to impact unknown sensitive plant and animal species. Mitigation measures *Biological Resources – 3, 4, 4a, 4b, and 4c* require focused surveys for both plants and animals on the pump station A1 site. These mitigation measures also acknowledge that if habitat suitable for federally-listed species occur on the pump station A1 site, an Endangered Species Act Section 10(a) permit would be required. Please refer to mitigation measures *Biological Resources – 3, 4, 4a, 4b, and 4c*.

RTC-2

COMMENTS

RESPONSES

Mr. Zirkle (FWS-SDG-4179.2)

3

F-6

A new mitigation measure, *Biological Resources – 2b*, has been included which requires that “If construction activities would extend outside of the existing roadway alignment footprint, and sensitive habitats would be impacted, as determined in mitigation measure *Biological Resources – 2a*, then a qualified biologist shall temporarily flag sensitive habitat areas with orange construction fencing and silt fencing or fiber rolls to minimize impacts to the habitat. Fencing shall be installed in a manner that does not impact habitats to be avoided. A qualified biologist shall conduct regular monitoring visits during construction to assure that construction personnel and equipment do not encroach into any sensitive areas. The schedule for biological monitoring visits shall be determined at the pre-construction meeting for each project construction phase. To the extent feasible, construction work near vernal pool areas shall be conducted outside the rainy season and construction work near habitats of sensitive species shall be conducted outside the breeding season of those species.”

Mitigation measure *Land Use – 2* requires all construction and staging area limits be clearly delineated with orange construction fencing and silt fencing or fiber rolls to ensure that construction activity remains within the defined construction limits. It also requires that qualified biologist inspect the fencing prior to the start of construction and monitor activities during construction to avoid unauthorized impacts. This mitigation measure has been revised to include that “The schedule for the biological monitoring visits during construction shall be determined at the pre-construction meeting for each phase of project construction.”

F-7

Please refer to mitigation measures *Biological Resources – 4, 4a, 4b, and 4c* for potential impacts to sensitive habitat, plant and animal species located at the proposed pump station A1 site, including impacts to vernal pool species and the Quino checkerspot butterfly. This comment is consistent with information provided in the Draft EIR. No further response is required.

F-8

Construction of Phase 2C would be associated with the development of Neighborhood 1 of the Otay Mesa Community Plan (OMCP), as identified on the Notice of Preparation for the OMCP Update Project. Because Phase 2C would be constructed only to serve this proposed neighborhood, the environmental effects of Phase 2C would be covered as part of the environmental review conducted for that project, which would undergo public review, consistent with CEQA. However, should Neighborhood 1 of the OMCP not be developed, Phase 2C would not be constructed, and therefore would not be required to undergo environmental review under CEQA.

F-5 (cont.) butterfly (*Euphydryas editha quino*), take authorization may need to be obtained through section 10 or section 7 (provided there is a Federal nexus) of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.) if any of these species are affected by the proposed project.

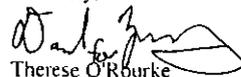
F-6 We are particularly concerned regarding construction activities in proximity to sensitive biological habitats and species, including vernal (0.5 acre) and road (0.03 acre) pools and their watersheds. In areas where construction will be in close proximity to sensitive biological habitats and species, we recommend that the extent of the sensitive biological resources be flagged by a qualified biologist. We also recommend that work near vernal pools and/or habitats of sensitive species be done outside the rainy season and/or the breeding season of the sensitive species, respectively. In addition, the limits of construction (including construction staging areas and access routes) should be temporarily fenced (with silt fencing) to prevent impacts outside the project footprint, such as the spread of silt from the construction zone into any adjacent sensitive habitats or species. Fencing should be installed in a manner that does not impact habitats to be avoided. No construction activities, materials, or equipment should be permitted outside the project footprint. During grading and construction, a qualified biologist should conduct regular monitoring visits to assure that construction personnel and equipment do not encroach upon any sensitive areas.

F-7 The preferred site for Pump Station A1, located at the southwest corner of Cactus and Siempre Viva Roads, has not received a sensitive plant survey and was not surveyed during the appropriate time of year to detect vernal pools. We concur that appropriately timed surveys for sensitive plant species, habitat and species that occur in vernal pools, and habitat for the Quino checkerspot butterfly should be conducted at the proposed Pump Station A1 prior to construction. If any federally listed species for which the City does not have take authorization are detected and potentially impacted by the construction and operation of Pump Station A1, the City may have to obtain take authorization through section 10 or section 7 (provided there is a Federal nexus) of the Act.

F-8 The Mitigation Measures: Biological Resources section indicates that if impacts to sensitive biological resources are anticipated, impacts will be addressed with a “second tier document in compliance with CEQA.” It is not clear whether a “second tier document” would be circulated for public review. As such, we request a minimum 30-day review period for any subsequent biological data and/or CEQA documents for the proposed project.

The Service appreciates the opportunity to comment on the DEIR. Please contact Carolyn Lieberman at (760) 431-9440 extension 240 if you have any questions or comments concerning this letter.

Sincerely,



Therese O'Rourke
Assistant Field Supervisor

RTC-3

COMMENTS

RESPONSES

Mr. Zirkle (FWS-SDG-4179.2)

4

cc: California Department of Fish and Game
San Diego Regional Water Quality Control Board
U.S. Army Corps of Engineers

RTC-4

COMMENTS

RESPONSES

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5300 - Fax



June 16, 2005

Ms. Myra Hermann
City of San Diego
1222 1st St., MS 501
San Diego, CA 92101

Re: Otay Mesa Trunk Sewer
SCH# 2004071167

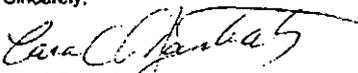
Dear Myra:

S-1 Thank you for the opportunity to comment on the above-mentioned document. The Commission was able to perform a record search of its Sacred Lands File for the project area, which failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the Sacred Lands File does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

S-2 Early consultation with tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed is a list of Native Americans individuals/organizations that may have knowledge of cultural resources in the project area. The Commission makes no recommendation of a single individual or group over another. Please contact all those listed; if they cannot supply you with specific information, they may be able to recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If you have not received a response within two weeks' time, we recommend that you follow-up with a telephone call to make sure that the information was received.

S-3 Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should consider avoidance, as defined in Section 15370 of the CEQA Guidelines, when significant cultural resources could be affected by a project. Provisions should also be included for accidentally discovered archeological resources during construction per California Environmental Quality Act (CEQA), Public Resources Code §15064.5 (f), Health and Safety Code §7050.5; and Public Resources Code §5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery and should be included in all environmental documents. If you have any questions, please contact me at (916) 653-6251.

Sincerely,


Carol Gaubatz
Program Analyst

Cc: State Clearinghouse

RTC-5

S-1 Eighteen Native American groups were sent the Notice of Preparation (NOP) for the proposed Otay Mesa Trunk Sewer EIR dated July 29, 2004 and the Notice of Availability (NOA) for review the Draft Otay Mesa Trunk Sewer EIR dated May 2, 2005, as indicated on the distribution lists for each of these notices. In addition, the NOP and NOA were distributed to the Kumeyaay Cultural Repatriation Committee (KCRC) as well as Louie Guassac and Ron Christman, representing the interests of the Kumeyaay Nation. The City of San Diego did not receive comments from any of the Native American groups listed below or the other individuals noted above regarding the NOP or NOA for the proposed project.

- Barona Group of El Capitan Grande Band of Mission Indians
- Campo Band of Mission Indians
- Cuayapaibe Band of Mission Indians
- Inaja and Cosmit Band of Mission Indians
- Jamul Indian Village
- La Posta Band of Mission Indians
- Manzanita Band of Mission Indians
- Sycuan Band of Mission Indians
- Viejas Group of Capitan Grande Band of Mission Indians
- Mesa Grande Band of Mission Indians
- San Pasqual Band of Mission Indians
- Santa Ysabel Band of Diegueno Indians
- La Jolla Band of Mission Indians
- Pala Band of Mission Indians
- Pauma Band of Mission Indians
- Pechanga Band of Mission Indians
- Rincon Band of Mission Indians
- Los Coyotes Band of Mission Indians

S-2 See the response to comment S-1 provided above.

S-3 Mitigation measure *Historical Resources - 2* requires that an archaeological construction monitoring program be implemented for all 10 known archaeological sites located within the project alignment of Phase 2. The monitoring program identifies provisions for unanticipated discoveries including specific protocol for the treatment of human remains pursuant to California state law.

COMMENTS

RESPONSES

Native American Contacts
San Diego County
June 16, 2005

Barona Group of the Capitan Grande
Funda Welch-Scalco, Chairperson
1095 Barona Road Diegueno
Lakeside , CA 92040
sue@barona.org
(619) 443-6612

Coastal Gabrielino Diegueno
Jim Velasques
5776 42nd Street
Riverside , CA 92509
(909) 784-6660
Gabrielino
Kumeyaay

Barona Group of the Capitan Grande
ATTN: David Baron
1095 Barona Road Diegueno
Lakeside , CA 92040
(619) 443-6612

Ewiiapaayp EPA Office
James Robertson, Cultural Resources Coordinator
4208 Willows Road Kumeyaay
Alpine , CA 91903-2250
jhrhut@sctdv.net
(619) 445-6315 - voice
(619) 72206134 - fax

Barona Group of the Capitan Grande
ATTN: EPA Specialist
1095 Barona Road Diegueno
Lakeside , CA 92040
sue@barona.org
(619) 443-6612

Ewiiapaayp Tribal Office
Harlan Pinto, Sr., Chairperson
PO Box 2250 Kumeyaay
Alpine , CA 91903-2250
wmicklin@leaningrock.net
(619) 445-6315 - voice
(619) 445-9126 - fax

Campo Band of Mission Indians
H. Paul Cuero, Jr., Chairperson
36190 Church Road, Suite 1 Kumeyaay
Campo , CA 91906
chairgoff@aol.com
(619) 478-9046
(619) 478-5818 Fax

Ewiiapaayp Tribal Office
Will Micklin, Executive Director
PO Box 2250 Kumeyaay
Alpine , CA 91903-2250
wmicklin@leaningrock.net
(619) 445-6315 - voice
(619) 445-9126 - fax

Campo Band of Mission Indians
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36190 Church Road, Suite 1 Kumeyaay
Campo , CA 91906
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(619) 478-5818 Fax

Ewiiapaayp Tribal Office
Michael Garcia, EPA Director
PO Box 2250 Kumeyaay
Alpine , CA 91903-2250
michaalg@leaningrock.net
(619) 445-6315 - voice
(619) 445-9126 - fax

RTC-6

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resource assessment for the proposed Otay Mesa Trunk Sewer, SC# 2004071167, San Diego County.

COMMENTS

RESPONSES

Native American Contacts
San Diego County
June 16, 2005

Inaja Band of Mission Indians
Rebecca Osuna, Spokesperson
309 S. Maple Street Diegueno
Escondido CA 92025
inaja_cosmite@hotmail.com
(760) 737-7628
(760) 747-8568 Fax

La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson
PO Box 1120 Diegueno
Boulevard CA 91905
laposta1@aol.com
(619) 478-2113

Jamul Indian Village
Leon Acevedo, Chairperson
P.O. Box 612 Diegueno/Kumeyaay
Jamul CA 91935
jamulrez@pacbell.net
(619) 669-4785
Fax: (619) 669-4817

La Posta Band of Mission Indians
ATTN: EPA Director
PO Box 1120 Diegueno
Boulevard CA 91905
(619) 478-2113

Kumeyaay Cultural Heritage Preservation
Paul Cuero
36190 Church Road, Suite 5 Diegueno/ Kumeyaay
Campo CA 91906
(619) 478-9046
(619) 478-9505
(619) 478-5818 Fax

Manzanita Band of Mission Indians
Leroy J. Elliott, Chairperson
PO Box 1302 Kumeyaay
Boulevard CA 91905
(619) 766-4930
(619) 766-4957 Fax

Kumeyaay Cultural Historic Committee
Ron Christman
56 Viejas Grade Road Diegueno/Kumeyaay
Alpine CA 92001
(619) 445-0385

Manzanita Band of Mission Indians
ATTN: EPA Director
PO Box 1302 Kumeyaay
Boulevard CA 91905
(619) 766-4930
(619) 766-4957 Fax

Kumeyaay Cultural Repatriation Committee
Steve Banegas, Spokesperson
1095 Barona Road Diegueno/Kumeyaay
Lakeside CA 92040
(619) 443-6612
(619) 443-0681 FAX

Mesa Grande Band of Mission Indians
Mike Linton, Chairperson
P.O. Box 270 Diegueno
Santa Ysabel CA 92070
mesagrandeband@msn.com
(760) 782-3818
(760) 782-9092 Fax

RTC-7

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resource assessment for the proposed Otay Mesa Trunk Sewer, SCH# 2004071167, San Diego County.

COMMENTS

RESPONSES

Native American Contacts
San Diego County
June 16, 2005

San Pasqual Band of Mission Indians
A. E. Lawson, Chairperson
PO Box 365 Diegueno
Valley Center, CA 92082
(760) 749-3200
(760) 749-3876 Fax

Sycuan Band of Mission Indians
Danny Tucker, Chairperson
5459 Dehesa Road Diegueno/Kumeyaay
El Cajon, CA 92021
sycuan.com
619 445-2613
619 445-1927 Fax

Santa Ysabel Band of Diegueno Indians
Johnny Hernandez, Spokesman
PO Box 130 Diegueno
Santa Ysabel, CA 92070
brandietaylor@yahoo.com
(760) 765-0845
(760) 785-0320 Fax

Viejas Band of Mission Indians
Anthony Pico, Chairperson
PO Box 908 Diegueno/Kumeyaay
Alpine, CA 91903
daquilar@viejas-nsn.gov
(619) 445-3810
(619) 445-5337 Fax

Santa Ysabel Band of Diegueno Indians
Brandie Taylor, Tribal Administrator
PO Box 130 Diegueno
Santa Ysabel, CA 92070
brandietaylor@yahoo.com
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(760) 765-0320 Fax

Santa Ysabel Band of Diegueno Indians
Bernice Paipa, Cultural Resources Coordinator
PO Box 937 Diegueno
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bjpaipa@hotmail.com
619-478-2113

Santa Ysabel Band of Diegueno Indians
Rodney Kephart, Environmental Coordinator
PO Box 130 Diegueno
Santa Ysabel, CA 92070
syrod@aol.com
(760) 765-2903

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7060.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resource assessment for the proposed Otay Mesa Trunk Sewer, SCH# 2004071167, San Diego County.

COMMENTS

RESPONSES



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

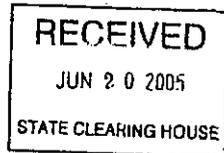
5798 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

June 15, 2005

Ms. Myra Herrmann
City of San Diego Development Services Center
1222 First Avenue, MS 501,
San Diego, California 92101



clear
6-17-05
late

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT
(EIR) FOR THE OTAY MESA POWER TRUNK SEWER PROJECT NUMBER 40246
(SCH#2004071167)

Dear Ms. Herrmann:

RTC-9

- S-4 The Department of Toxic Substances Control (DTSC) has received your submitted *Environmental Impact Report (EIR) for the above-mentioned project*. Your document states: "The project would allow for the implementation of the Otay Mesa Trunk Sewer project. The project proposes the construction of approximately 14.7 miles of new and /or replacement/upgrade sewer line in the Otay Mesa area. The project would construct Phases 2 and 3 as described in the 2004 Otay Mesa Sewer Master Plan and Alignment Study, which outlines a strategy for the provision of sewer infrastructure to serve the future build-out of the Otay Mesa region."
- S-5 Most of the comments sent by DTSC to the City of San Diego on 8/24/2004 have been *addressed in this document*.
- S-6 DTSC provides guidance for cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov.

- S-4 This comment is consistent with information provided in the Draft EIR. No further response is required.
- S-5 This comment is consistent with information provided in the Draft EIR. No further response is required.
- S-6 Comment noted.

COMMENTS

RESPONSES

Ms. Myra Herrmann
June 15, 2005
Page 2

If you have any questions regarding this letter, please contact Ms. Teresa Hom, Project Manager, at (714) 484-5477 or email at thom@dtsc.ca.gov.

Sincerely,



Greg Holmes
Unit Chief
Southern California Cleanup Operations Branch - Cypress Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

CEQA# 1129

RTC-10

COMMENTS

RESPONSES



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Sean Walsh
Director

August 16, 2005

Myra Herrmann
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

Subject: Otay Mesa Trunk Sewer
SCH#: 2004071167

Dear Myra Herrmann:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on June 17, 2005, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Director, State Clearinghouse

S-7 This comment is consistent with information provided in the Draft EIR. No further response is required.

RTC-11

COMMENTS

RESPONSES



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Sean Walsh
Director

August 16, 2005

Myra Herrmann
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

Subject: Otay Mesa Trunk Sewer
SCH#: 2004071167

Dear Myra Herrmann:

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on June 17, 2005. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

S-8

This comment is consistent with information provided in the Draft EIR. The comments referred to in the letter have been addressed in Responses to Comments S-1 through S-6 above.

S-8

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2004071167) when contacting this office.

Sincerely,

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency

RTC-12

COMMENTS

RESPONSES

From: Williams, Dave [mailto:Dave.Williams@sdcounty.ca.gov]
Sent: Wednesday, June 15, 2005 2:59 PM
To: DSDEAS@san Diego.gov
Cc: Eslambolchi, Marty
Subject: Otay Mesa Trunk Sewer Project - Project Number (40246)

L-1 Myra Herrmann,
County, Department of Public Works, Wastewater Management (East Otay Mesa Sewer Maintenance District) has reviewed the Draft Environmental Impact Report for Otay Mesa Trunk Sewer Project and has no comments at this time. If there are any revisions to the Draft Environmental Impact Report for Otay Mesa Trunk Sewer Project please forward a copy to East Otay Mesa Sewer Maintenance District for review.

L-1 This comment is consistent with information provided in the Draft EIR. No further response is required.

David Williams
DPW Wastewater Management
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THE CITY OF SAN DIEGO

**FINAL
ENVIRONMENTAL IMPACT REPORT**

for the

OTAY MESA TRUNK SEWER PROJECT

**Project No. 40246
SCH No. 2004071167**

September 2005

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City of San Diego
1222 First Avenue
San Diego, CA 92101

September 2005

EXECUTIVE SUMMARY

This summary provides a brief synopsis of the project description and results of the environmental analysis contained within the Otay Mesa Trunk Sewer (OMTS) Environmental Impact Report (EIR) prepared by the City of San Diego (City). By necessity, this summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the proposed project and its environmental consequences.

PROJECT LOCATION AND DESCRIPTION

The proposed OMTS project would be located in the southernmost portion of the City of San Diego in the communities of Otay Mesa and San Ysidro. The proposed pipeline alignment would extend from Siempre Viva Road in east Otay Mesa to a connection with the San Ysidro Interceptor Sewer in the community of San Ysidro to the west. The pipelines would be located under existing and future roadways. Both gravity and force mains would be constructed, depending upon topography and location.

The proposed project is the implementation of Phases 2 and 3 of the 2004 OMTS Master Plan Update and Alignment Study, which outlines a strategy for the provision of sewer infrastructure to serve the future build out of the Otay Mesa region. Phase 1 of the OMTS Master Plan was completed with the construction of the Otay International Center (OIC). Implementation of Phases 2 and 3 of the proposed project would include the construction and/or expansion of the following types of sewer infrastructure:

- Sewer pipelines (gravity and force mains) and manholes
- Sewer pump stations
- Diversion structure
- Transition structure

The need for the proposed project is largely based upon future sewer demand in the Otay Mesa area. Therefore, the project would be constructed in phases, so that the new sewer facilities would be built only when the actual sewer flows reach designated thresholds that trigger construction of the next phase. The construction of the project phases is anticipated to be sequential, although a few phases could be constructed concurrently, depending on the rate of development in the project service area. Phase 2 of the OMTS Master Plan Update and Alignment Study has been divided into sub phases 2A1, 2A2, 2B1, 2B2, 2B3, 2C, 2D, 2E, and 2F. Phases 2A1, 2A2 and Phase 2B1 are currently being constructed concurrent with the Princess Park Sewer project, which is addressed in the California Terraces EIR Addendum (Project No. 23866, December

18, 2003). However, to provide a comprehensive analysis of the entire project, these phases are included as part of this EIR.

PROJECT PHASING

A brief description of each project phase is provided below. For the purposes of this project, ROW is defined as the roadway alignment footprint and consists only of the paved portion of the roadway alignment.

Phase 2A1: This phase includes pipeline installation under Old Otay Mesa Road near the Princess Park residential subdivision (construction completed November 2004).

Phase 2A2: This phase includes pipeline installation under Old Otay Mesa Road near the Remington Hills residential subdivision (under construction).

Phase 2B1: This phase includes pipeline installation under Old Otay Mesa Road from the southwest endpoint of Phase 2A2 to the San Ysidro Interceptor Sewer.

Phase 2B2: This phase includes several components that are physically separated from one another. Gravity pipeline would be installed under Airway Road from Old Otay Mesa Road to Caliente Road near San Ysidro High School. Gravity pipeline would also be constructed to the north of the Otay Mesa Road/Heritage Road intersection, under Heritage Road, Datsun Street, and Otay Valley Road. Force mains would be installed from pump station 23T at the Cactus Road/Siempre Viva intersection to the intersection of Otay Mesa Road/Heritage Road. The force mains would be located under Cactus Road, Camino Maquiladora, and Heritage Road.

Phase 2B3: This phase would involve the acquisition of land by the City of San Diego on which to construct new Pump Station A1, as well as the preliminary engineering for the design of this 8 million gallons per day (MGD) pump station.

Phase 2C: Phase 2C would provide sewer service to currently undeveloped areas of Otay Mesa located to the south of Caliente Road on the west mesa and to the east and west of Cactus Road on the east mesa. Backbone gravity collection pipelines, redundant force mains, and pump stations are anticipated to be constructed as part of this phase.

Phase 2D: This phase would involve the installation of a sewer diversion structure within the intersection ROW of Otay Mesa Road and Heritage Road and the installation of a pumped-to-gravity transition structure under Otay Mesa Road. Force mains and gravity pipelines would also be installed under Otay Mesa Road.

Phase 2E: New sewer pump station A1 would be constructed with an initial design capacity of 8 MGD. Temporary pump station 23T would be removed from service. Pipeline would be installed under Cactus Road, Camino Maquiladora, Heritage Road, and Otay Mesa Road.

Phase 2F: Pump Station A1 would be expanded to 12 MGD design capacity as part of this phase.

Phase 3: This phase would include pipeline installation in the east Otay Mesa area under La Media Road, Siempre Viva Road, and an unnamed road to the north of Brown Field. Pipelines would also be installed in the west Otay Mesa area under Cactus Road and Otay Mesa Road. Sewer Pump Station A1 would be expanded up to a 35 MGD design capacity.

AREAS OF CONTROVERSY KNOWN TO THE LEAD AGENCY

CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the Lead Agency (the City of San Diego) be stated in the EIR summary. The proposed project would be located in existing and future roadways in order to avoid areas of controversy related to impacts to biological resources in Spring Canyon. Therefore, there are no known areas of controversy associated with the proposed project.

ISSUES TO BE RESOLVED BY THE DECISION MAKING BODY

The issues to be resolved by the decision making body include whether and how to mitigate the significant effects of the proposed project; consideration of the various mitigation measures and alternatives recommended in the EIR by City staff and interested persons and organizations; whether the benefits of the proposed project outweigh its unavoidable environmental risk; and whether the discretionary approvals required to implement the proposed project and its development components should be granted.

IMPACT AND ALTERNATIVES SUMMARY

Table S-1 summarizes the impacts associated with the proposed project and the mitigation measures required to reduce the impacts to below significant levels. Table S-2 provides a summary of the project alternatives analysis. Table S-3 provides a summary of the impacts that were found not to be significant.

Table S-1. Summary of Impacts and Mitigation Measures

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
4.1 Land Use	<p>The proposed project would have the potential to conflict with the policies for Construction/Maintenance of Utilities and Land Use Adjacency Guidelines identified in the City's MSCP. Potentially significant indirect impacts that may result from construction of the proposed project include errant construction impacts, night lighting, and noise to areas within and adjacent to the MSCP.</p>	<p>Land Use – 1: All staging areas shall be located in existing disturbed or developed areas outside the MHPA and drainage areas. All equipment and/or materials related to construction shall be stored in designated and properly maintained staging areas. The location of the staging areas shall be reviewed and approved by the City Manager. A responsible party (i.e., superintendent, resident engineer) shall be identified to ensure that all construction crews and/or field workers comply with these measures.</p> <p>Land Use – 2: Prior to the City's first pre-construction meeting, all construction and staging area limits shall be clearly delineated with orange construction fencing and silt fencing or fiber rolls to ensure that construction activity remains within the defined construction limits. A qualified biologist shall inspect the fencing prior to the start of construction and shall monitor activities during construction to avoid unauthorized impacts. <u>The schedule for the biological monitoring visits during construction shall be determined at the pre-construction meeting for each phase of project construction.</u> In addition, an educational brochure shall be developed for distribution to construction and maintenance personnel to minimize the occurrence of unauthorized activities. The qualified biologist shall provide direction to construction personnel regarding the need to avoid impacts adjacent sensitive areas.</p> <p>Land Use – 3: Prior to the City's final construction inspection of the expansion of Pump Station 23T and the construction and/or expansion of Pump Station A1, all new lighting installed at the pump stations shall be shielded to prevent light spillover to adjacent MHPA areas, in conformance with the City's MSCP Adjacency Guidelines. The shielding shall consist of fixtures that physically direct light away from adjacent MHPA areas.</p> <p>Land Use – 4: If construction is planned within or adjacent to the MHPA during nighttime hours, lighting shall be directed and/or shielded to prevent light spillover to adjacent MHPA areas, in conformance with the City's MSCP Adjacency Guidelines. The shielding shall consist of fixtures that physically direct light away from adjacent MHPA areas.</p> <p>Land Use – 5: During nocturnal operation of any dewatering pumps the construction contractor shall require temporary berms or sound walls, or the relocation of the dewatering pumps outside the 160-foot noise "envelope" of any sensitive receptor.</p> <p>Land Use – 6: The project contractor shall place all stationary construction equipment so that emitted noise is directed away from identified sensitive receptors.</p> <p>Land Use – 7: The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction related noise sources and noise sensitive receptors. Construction staging areas shall not be located adjacent to residential land uses.</p>	<p>Mitigated to below a level of significance.</p>

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation				
<i>Land Use (continued)</i>	<p><i>Land Use – 8:</i> If construction is planned within or adjacent to the MHPA during the breeding season of sensitive avian species, it shall only occur subject to the City’s Mitigation, Monitoring, and Reporting Conditions for Potential Impacts to Habitats Occupied by Sensitive Avian Species. Nesting avians are susceptible to disturbance from construction activity. Any construction activity within 500 feet of an active raptor nest, or within 300 feet of a Cooper’s hawk nest, shall be considered significant. Five hundred feet has been recognized by biologists and agencies as a conservative distance to use in addressing potential indirect nesting impacts for most raptor species. All phases of construction for the proposed project that are located adjacent to the MHPA shall be required to comply with the mitigation measures <i>Land Use – 8a, 8b,</i> and <i>8c,</i> described below, to reduce potential indirect construction noise impacts to sensitive bird species to below a level of significance.</p>	<p><i>Land Use – 8a:</i> Pre-construction protocol surveys, conducted by a qualified biologist, shall be required for the following species if any phase of project construction would occur adjacent to the MHPA between the identified species’ breeding seasons:</p> <ul style="list-style-type: none"> • March 1 to August 15 (Coastal California gnatcatcher) • February 1 to August 31 (Burrowing owl) • February 1 to July 30 (Raptors - tall trees) • February 15 to August 15 (Cactus Wren) 	<p>If it is determined that construction activities would occur during the raptor breeding season, one pre-construction nest survey shall be conducted within 500 feet of the impact area to look for active raptor nests. If no active nests are found, no further mitigation shall be required.</p>				
	<p><i>Land Use – 8b:</i> If one or more active nests are found, monitoring shall be conducted throughout construction by a qualified biologist to ensure that all construction activities remain at least 500 feet from the active nest, with the exception of Cooper’s hawk nest, for which construction activities shall remain 300 feet away from the nest. The biologist shall also determine when the nest becomes inactive and construction can move closer to the nest site. If construction activities are conducted within the MHPA, additional raptor impact avoidance shall occur, as listed below:</p>	<table border="0"> <tr> <td style="padding-right: 20px;">Golden Eagle</td> <td>4,000 feet from nesting, and</td> </tr> <tr> <td>Northern Harrier</td> <td>900 feet from nesting site.</td> </tr> </table>	Golden Eagle	4,000 feet from nesting, and	Northern Harrier	900 feet from nesting site.	
Golden Eagle	4,000 feet from nesting, and						
Northern Harrier	900 feet from nesting site.						
	<p><i>Land Use – 8c:</i> Any removal of potential raptor nesting trees or other structures should occur during the non-breeding season (i.e., between August 1 and January 31st).</p>						

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
4.2 Noise			
Increase in Ambient Noise Levels	Noise generated from operation of proposed Pump Station A1 would potentially exceed the 85 dB standard for interior noise levels averaged over 8 hours and would result in a significant noise impact. Noise from operation of the pump station would have the potential to impact nearby sensitive receptors if it were to exceed the 75 dB Leq property line noise standard. Operational noise from pump station(s) constructed as a part of Phase 2C would have the potential to result in significant impacts to nearby sensitive receptors, including residences and schools.	<p><i>Noise – 1:</i> Prior to the operation of Pump Station A1, sound absorption panels shall be installed inside the pump room on the walls and ceiling.</p> <p><i>Noise – 2:</i> Prior to the operation of Pump Station A1, a final acoustical performance test shall be conducted at the pump station by a qualified acoustician within ninety (90) days after project completion. The test shall verify compliance with the recommended 75 dB Leq property line noise standard. Any violation of standards shall require pump station modification and retesting within ninety (90) days. Standard test protocols as to equipment selected, proper exposure and test duration, calibration, and monitoring parameters shall be used and documented in the final acoustical test report.</p> <p><i>Noise – 3:</i> For any pump station(s) constructed as part of Phase 2C, an acoustical noise analysis shall be prepared by a qualified individual to determine if the proposed pump station(s) would have a significant operational impact on nearby sensitive receptors. If a significant operational noise impact would occur, noise abatement measures shall be implemented to reduce noise to below a level of significance, and/or the pump station shall be relocated to an area where noise impacts to sensitive receptors would be below a level of significance.</p>	Mitigated to below a level of significance.
Temporary Construction Noise	Staging areas constructed adjacent to residential uses would result in potentially significant short-term noise impacts to nearby residents. Impulse noise from construction equipment would also result in potentially significant impacts to residents living along the following project roadways: Siempre Viva Road, Cactus Road, Old Otay Mesa Road, and Beyer Boulevard. Impulse noise levels at schools and learning institutions located along project roadways would also result in potentially significant noise impacts.	<p><i>Noise – 4:</i> Along project roadways, including Siempre Viva Road, Cactus Road, Old Otay Mesa Road, and Beyer Boulevard, where impulse noise levels at adjacent residences would exceed the 75 dB Leq noise threshold, the construction contractor shall implement one or more of the following measures to reduce noise impacts to impacted residents:</p> <ol style="list-style-type: none"> 1. Erect temporary barriers to separate the noise-generating equipment from adjacent residences. The temporary barriers shall be constructed of either 3/4-inch plywood or steel-framed canvas batts. 2. Limit the total hours per day working near any individual receiver. 3. Utilize smaller, quieter equipment and limit the use of jackhammers (shielded, if necessary) to break up reinforced concrete only. 4. Reimburse affected stay-at-home residents to spend a day or two at a recreational amenity away from the job site until the pavement breaking is completed. <p><i>Noise – 5:</i> The construction contractor shall implement the following measures whenever any major impulsive noise source is operating within 280 feet of any project-area classroom.</p> <ol style="list-style-type: none"> 1. Perform the activity when school is not in session; 2. Shield the activity with a solid barrier to break the line-of-sight; and 3. Perform the activity only during small fractions of any hour. 	Mitigated to below a level of significance.

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
4.3 Paleontological Resources	Implementation of the proposed project could have significant adverse effects on paleontological resources with trenching activities within the Quaternary Stream-Terrace Deposits, Lindavista Formation, San Diego Formation, Bay Point Formation and Otay Formation.	<p><i>Paleontological Resources – 1:</i> Prior to the City’s first pre-construction meeting, or the issuance of a building or grading permit, whichever is applicable, the project builder shall provide a letter of verification to the Assistant Deputy Director (ADD) of Land Development Review (LDR) stating that a qualified paleontologist has been retained to implement the monitoring program. A qualified paleontologist is defined as an individual with a Ph.D. or M.S. degree in paleontology or geology who is a recognized expert in the application of paleontological procedures and techniques such as screen washing of materials and identification of fossil deposits. The following conditions apply to the implementation of mitigation measure <i>Paleontological Resources – 1:</i></p> <p>I. Prior to Permit Issuance, or Bid Opening/Bid Award of Contract or First Preconstruction Meeting</p> <p>A. Land Development Review (LDR) Plan Check</p> <ol style="list-style-type: none"> 1. Prior to permit issuance, or after Bid Opening/Bid Award of the contract, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents. <p>B. Letters of Qualification have been submitted to ADD</p> <ol style="list-style-type: none"> 1. Prior to the 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 must obtain approval from MMC for any personnel changes associated with the monitoring program. <p>II. Prior to Start of Construction</p> <p>A. Verification of Records Search</p> <ol style="list-style-type: none"> 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. <p>B. PI Shall Attend Precon Meetings</p> <ol style="list-style-type: none"> 1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation-related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor. 	Mitigated to below a level of significance.

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<p><i>Paleontological Resources</i> <i>(continued)</i></p>		<ul style="list-style-type: none"> a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM 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 <ul style="list-style-type: none"> a. <u>Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits.</u> b. <u>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).</u> c. <u>MMC shall notify the PI that the PME has been approved.</u> 4. When Monitoring Will Occur <ul style="list-style-type: none"> a. Prior to the start of any work, the PI shall also submit a construction 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 construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as: depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which that may reduce or increase the potential for resources to be present. 5. <u>Approval of PME and Construction Schedule</u> <u>After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Construction Schedule from the CM.</u> 	
		<p>III. During Construction</p>	
		<p>A. Monitor Shall be Present During Grading/Excavation/Trenching</p>	
		<ul style="list-style-type: none"> 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 and as authorized by the CM that could result in impacts to formations with high and moderate resource sensitivity at depths of 10 feet or greater and as authorized by the Construction Manager. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities. 2. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly, (notification of monitoring completion), <u>monthly</u>, and in the case of ANY discoveries. The RE shall forward copies to MMC. 	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<p><i>Paleontological Resources</i> (continued)</p>		<p>3. The PI may submit a detailed letter to <u>the CM and/or RE for concurrence and forwarding to MMC during construction 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.</u></p> <p>B. Discovery Notification Process</p> <p>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.</p> <p>2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.</p> <p>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.</p> <p>C. Determination of Significance</p> <p>1. The PI shall evaluate the significance of the resource.</p> <p>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.</p> <p>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. <u>PRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.</u></p> <p>(1) Note: For Pipeline Trenching Projects Only, The PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D." Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume.</p> <p>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.</p> <p>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.</p> <p>(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.</p> <p>(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.</p>	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<p><i>Paleontological Resources</i> <i>(continued)</i></p>	<p>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.</p> <ol style="list-style-type: none"> 1. Procedures for documentation, curation and reporting <ol style="list-style-type: none"> 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 VI-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. 	<p>IV. Night Work</p> <ol style="list-style-type: none"> A. If night work is included in the contract <ol style="list-style-type: none"> 1. When night work is included in the contract package, the extent and timing shall be presented and discussed at the preconstruction meeting. 2. The following procedures shall be followed. <ol style="list-style-type: none"> a. No Discoveries In the event that no discoveries were encountered during night work, the PI shall record the information on the CSV and submit to MMC via the RE via fax by 9 AM the following morning, if possible. b. Discoveries All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction. c. Potentially Significant Discoveries If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed. d. The PI shall immediately contact the RE and MMC, or by 8 AM the following morning to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made. 	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<p><i>Paleontological Resources (continued)</i></p>	<p>B. If night work becomes necessary during the course of construction</p> <ol style="list-style-type: none"> 1. The Construction 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. <p>C. All other procedures described above shall apply, as appropriate.</p>		
	<p>V. Post Construction</p>	<p>A. <u>Submittal of Draft Monitoring Report</u> Completion of Monitoring Program and Submittal of Draft Monitoring Report</p> <ol style="list-style-type: none"> 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative) which describes the results, analysis, and conclusions of all phases of the Archaeological Paleontological Monitoring Program (with appropriate graphics) to MMC <u>via the RE</u> for review and approval <u>within 90-days following the completion of monitoring.</u> <ol style="list-style-type: none"> a. For significant archaeological paleontological resources encountered during monitoring, the Archaeological Data-Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report. b. <u>Recording Sites with the San Diego Natural History Museum</u> 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 <u>via the RE</u> for revision or, for preparation of the Final Report. 3. <u>The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.</u> 4. <u>MMC shall provide written verification to the PI of the approved report.</u> e. 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. 5. d. MMC shall notify the RE or BI, as appropriate, of receipt of the Draft Monitoring Report. <p>B. <u>Handling of Fossil Remains</u>2. Handling of Artifacts</p> <ol style="list-style-type: none"> a. The PI shall be responsible for ensuring that all cultural <u>fossil</u> remains collected are cleaned and catalogued. <p>C. <u>Curation of Artifacts: Deed of Gift and Acceptance Verification</u></p> <ol style="list-style-type: none"> 1. <u>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.</u> 2. <u>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.</u> 	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation	
<p><i>Paleontological Resources</i> (continued)</p>		<p>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.</p> <p>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.</p> <p>b. 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.</p> <p>3. Curation of artifacts: Deed of Gift and Acceptance Verification</p> <p>a. 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 EAS and the Native American representative, as applicable.</p> <p>b. The PI shall submit the Deed of Gift and catalogue record(s) to MMC for signature by the RE or BI, as appropriate.</p> <p>c. The RE or BI, as appropriate shall obtain signature on Deed of Gift and shall return to MMC.</p> <p>d. MMC shall return the signed Deed of Gift to the PI.</p> <p>e. The PI shall include the Acceptance Verification from the curation institution to MMC with submittal of the Final Monitoring Report.</p> <p>DB. Final Monitoring Report(s)</p> <p>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, approval of the draft report, which describes the results, analysis, and conclusions of the Paleontological Monitoring Program (with appropriate graphics).</p> <p>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.</p>		
<p>4.5 Historical Resources</p>	<p>Prehistoric and Historic Archaeological Sites</p>	<p>Project excavation and trenching during the construction of Phase 2 facilities would have the potential to impact all sites identified during the record search, literature review and site survey, which include one site identified as significant (CA-SDI-11424), three untested sites (CA-SDI-10963, CA-SDI-14083, and CA-SDI-14084), and five sites that were identified as not significant but may still contain unknown archaeological resources (CA-SDI-6941, CA-SDI-7208, CA-SDI-10188, CA-SDI-10197, CA-SDI-10511).</p>	<p><i>Historical Resources - 1:</i> Prior to the City's first preconstruction meeting, a testing and mitigation program for site CA-SDI-11424 shall be implemented to determine the western site boundary, based on CEQA, City of San Diego Historical Resource Guidelines, and the Otay Mesa Management Plan. For the portions of this site located within undeveloped land, surface collection should be used to determine the surface site boundaries and areas of artifact concentration in order to ascertain placement of test units and/or shovel test pits (STPs) and/or backhoe trenches. Excavation units (1x1-m) should be placed in those areas where ground stone, fire-altered rock, or a concentration of flaked material occurs. Backhoe trenching should be used at those sites where deep subsurface deposits (i.e., historic privies or dumps or subsurface prehistoric deposits) are possible. For any portion of this site located within developed land, a field visit to spot check the area, collection of surface artifacts, and a construction monitoring program shall be implemented. The test program shall include a literature/historic files review, mapping of any remaining structures, and backhoe trenching when applicable for determining the location of historical dumps.</p>	<p>Mitigated to below a level of significance.</p>

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<p><i>Historical Resources</i> (continued)</p>	<p><i>Historical Resources – 2:</i> Prior to the City’s first pre-construction meeting a construction monitoring program shall be implemented for all known archeological sites located within the Phase 2 project alignment. These sites include CA-SDI 10185, CA-SDI-10963, CA-SDI-11424, CA-SDI-14083, CA-SDI-14084, CA-SDI-6941, CA-SDI-7208, CA-SDI-10188, CA-SDI-10197, and CA-SDI-10511. The following monitoring program shall be implemented:</p>	<p>I. Prior to Permit Issuance, Award of Contract or First Preconstruction Meeting</p> <p>A. Land Development Review (LDR) Plan Check</p> <ol style="list-style-type: none"> 1. Prior to permit issuance, or after award of the contract, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archeological Monitoring and Native American monitoring, if applicable, have been noted on the appropriate construction documents. <p>B. Letters of Qualification have been submitted to ADD</p> <ol style="list-style-type: none"> 1. 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. 3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the monitoring program. <p>II. Prior to Start of Construction</p> <p>A. Verification of Records Search</p> <ol style="list-style-type: none"> 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 Coast 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. <p>B. PI Shall Attend Precon Meetings</p> <ol style="list-style-type: none"> 1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor. 	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Historical Resources</i> <i>(continued)</i>		<ol style="list-style-type: none"> a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM 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 <i>Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.</i> 4. 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). 5. When Monitoring Will Occur <ol style="list-style-type: none"> a. Prior to the start of any work, the PI shall also submit a construction 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 construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as: age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., that may reduce or increase the potential for resources to be present. 	
		<p>III. During Construction</p>	
		<p>A. Monitor Shall be Present During Grading/Excavation/Trenching</p> <ol style="list-style-type: none"> 1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, services and all other appurtenances associated with underground utilities as identified on the AME. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities. 2. The monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the CM 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. 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous trenching activities, presence of fossil formations, or when native soils are encountered may reduce or increase the potential for resources to be present. 	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Historical Resources (continued)</i>		<p>B. Discovery Notification Process</p> <ol style="list-style-type: none"> 1. In the event of a discovery, the Archaeological 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. <p>C. Determination of Significance</p> <ol style="list-style-type: none"> 1. The PI and Native American representative, if applicable, shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below. <ol style="list-style-type: none"> 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 from MMC. For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D." Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. c. If 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. <ol style="list-style-type: none"> (1) Note: For Pipeline Trenching Projects Only. 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 Projects Only: If significance can not be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant. <p>D. Discovery Process for Significant Resources - Pipeline Trenching Projects</p> <p>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:</p> <ol style="list-style-type: none"> 1. Procedures for documentation, curation and reporting <ol style="list-style-type: none"> 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 as indicated in Section VI-A. 	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Historical Resources (continued)</i>		<ul style="list-style-type: none"> 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. 	
	<p>IV. Discovery of Human Remains If human remains are discovered, work shall halt 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) shall be undertaken:</p> <ul style="list-style-type: none"> A. Notification <ul style="list-style-type: none"> 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). 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone. B. Isolate discovery site <ul style="list-style-type: none"> 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, shall determine the need for a field examination to determine the provenience. 3. 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. C. If Human Remains ARE determined to be Native American <ul style="list-style-type: none"> 1. The Medical Examiner shall notify the Native American Heritage Commission (NAHC). By law, ONLY the Medical Examiner can make this call. 2. The NAHC shall contact the PI within 24 hours or sooner, after Medical Examiner has completed coordination. 3. NAHC shall identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.. 4. The PI shall coordinate with the MLD for additional consultation. 5. Disposition of Native American Human Remains shall be determined between the MLD and the PI, IF: <ul style="list-style-type: none"> a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 24 hours after being notified by the Commission; OR; 		

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Historical Resources (continued)</i>		<p>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.</p> <p>D. If Human Remains are NOT Native American</p> <ol style="list-style-type: none"> 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 Museum of Man for analysis. The decision for interment of the human remains shall be made in consultation with MMC, EAS, the applicant department and/or Real Estate Assets Department (READ) and the Museum of Man. 	
		<p>V. Night Work</p> <p>A. If night work is included in the contract</p> <ol style="list-style-type: none"> 1. When night work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting. 2. The following procedures shall be followed. <ol style="list-style-type: none"> a. No Discoveries In the event that no discoveries were encountered during night work, The PI shall record the information on the CSVr and submit to MMC via fax by 9am the following morning, if possible. b. Discoveries All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. c. Potentially Significant Discoveries If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed. d. The PI shall immediately contact MMC, or by 8AM the following morning to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made. <p>B. If night work becomes necessary during the course of construction</p> <ol style="list-style-type: none"> 1. The Construction 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. <p>C. All other procedures described above shall apply, as appropriate.</p>	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Historical Resources (continued)</i>		<p>VI. Post Construction</p> <p>A. Completion of Monitoring Program and Submittal of Draft Monitoring Report</p> <ol style="list-style-type: none"> 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90-days following the completion of monitoring. <ol style="list-style-type: none"> 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. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report. c. 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. d. MMC shall notify the RE or BI, as appropriate, of receipt of the Draft Monitoring Report. 2. Handling of Artifacts <ol style="list-style-type: none"> a. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued b. 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. 3. Curation of artifacts: Deed of Gift and Acceptance Verification <ol style="list-style-type: none"> a. 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 EAS and the Native American representative, as applicable. b. The PI shall submit the Deed of Gift and catalogue record(s) to MMC for signature by the RE or BI, as appropriate. c. The RE or BI, as appropriate shall obtain signature on Deed of Gift and shall return to MMC. d. MMC shall return the signed Deed of Gift to the PI. e. The PI shall include the Acceptance Verification from the curation institution to MMC with submittal of the Final Monitoring Report. <p>B. Final Monitoring Report(s)</p> <ol style="list-style-type: none"> 1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90-days after approval of the draft report, which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics). 	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Historical Resources (continued)</i>		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.	
<i>4.6 Air Quality</i>			
Pollutant Emissions	Construction and operation of Phase 2C, and construction of Phase 3, would also have the potential to result in air pollutant emissions that exceed significance thresholds. A potentially significant impact may occur if the emergency generators for the 35 MGD pump station were to operate for longer than 2.4 hours per day. Although phases 2A1, 2A2, 2B1, 2B2, 2D, 2E and 2F of the proposed project would not result in a significant air quality impact from project construction, a mitigation measure is proposed to further reduce pollutant emissions during construction.	<p><i>Air Quality – 1:</i> When pipeline alignments and pump station location(s) have been determined for Phase 2C, an air quality technical report shall be prepared by a qualified individual that identifies whether construction or operational activities associated with Phase 2C pipelines and pump stations would generate pollutant emissions which exceed significance thresholds. If significance thresholds would be exceeded, pollutant emission reduction measures shall be implemented to reduce impacts to below a level of significance.</p> <p><i>Air Quality – 2:</i> Prior to the City’s first preconstruction meeting for the construction of Phase 3, an air quality technical report shall be prepared by a qualified individual that identifies whether construction activities associated with Phase 3 pipeline installation would generate pollutant emissions which exceed significance thresholds. If significance thresholds would be exceeded for construction activities, pollutant emission reduction measures shall be implemented to reduce impacts to below a level of significance.</p> <p><i>Air Quality – 3:</i> Prior to the City’s first preconstruction meeting for the construction of the 35 MGD pump station, an air quality emissions analysis shall be conducted by a qualified individual to determine if the emergency generators proposed for the pump station backup power would exceed allowable emissions thresholds. If such an exceedance would occur, measures shall be implemented to reduce impacts to below a level of significance.</p> <p><i>Air Quality – 4:</i> Prior to the City’s first preconstruction meeting, the project engineer shall identify one or more of the following mitigation measures on the appropriate grading plans which shall be implemented during all phases of construction for the proposed project:</p> <ol style="list-style-type: none"> 1. Limit the disturbance “footprint” to as small an area as practical. 2. Water all active construction areas at least twice daily. 3. Cover all off-site haul trucks or maintain at least two feet of freeboard. 4. Pave or apply water four times daily to all unpaved parking or staging areas. 5. Sweep or wash any site access points within 30 minutes of any visible dirt deposition on any public roadway. 6. Cover or water twice daily any on-site stockpiles of debris, dirt or other dusty material. 7. Suspend all operations on any unpaved surface if winds exceed 25 mph. 8. Hydroseed or otherwise stabilize any cleared area which is to remain inactive for more than 96 hours after clearing is completed. 9. Require 90-day low-NOx tune-ups for off-road equipment. 10. Encourage car pooling for construction workers. 11. Limit lane closures to off-peak travel periods. 	Mitigated to below a level of significance

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Air Quality (continued)</i>		12. Park construction vehicles off traveled roadways. 13. Wet down or cover dirt hauled off site. 14. Wash or sweep access points daily. 15. Encourage receipt of materials during non-peak traffic hours. 16. Sandbag construction sites for erosion control.	
4.7 Biological Resources			
Impacts to Sensitive Habitat and Animal and Plant Species	The construction of Pump Station A1 would result in a direct significant impact to 2.8 acres of non-native grassland and would have the potential to impact unknown sensitive plant and animal species on the pump station site. In addition, direct impacts to habitats and sensitive animal and plant species would have the potential to occur if the proposed pipeline alignment were to extend outside of the public right-of-way (ROW). In addition, Phase 2C has not been surveyed for biological resources, and would be located in a currently undeveloped area of Otay Mesa; therefore, this phase would have the potential to result in significant direct impacts to sensitive habitats, plants, and animals.	<p>Biological Resources – 1: Prior to the City’s first pre-construction meeting, direct impacts to non-native grassland located at the site of proposed Pump Station A1 shall be mitigated in accordance with the City’s Biology Guidelines mitigation ratio for non-native grassland located outside of the MHPA as listed in Table 4.7-4. According to this table, mitigation for an impact to 2.8 acres of non-native grassland would consist of the purchase or dedication of 1.4 acres of land from a mitigation bank or an area within the MHPA.</p> <p>Biological Resources – 2: Prior to the City’s first pre-construction meeting for each phase of construction of the pipeline alignment, a qualified biologist shall review the proposed pipeline alignment to determine any areas where the alignment would be located outside of the paved roadway alignment footprint. <u>If no areas would be located outside of the paved roadway alignment footprint, no further action shall be required. If construction activities would extend outside of the existing roadway alignment footprint, an appropriately timed field survey shall be conducted to determine if any sensitive habitats, animal or plant species would be impacted during construction. If the alignment would be located outside of the paved roadway alignment footprint and would impact sensitive habitats, animal or plant species, then <i>Biological Resources – 2a</i> and <i>2b</i> shall be followed.</u> ROW. If no areas would be located outside of the ROW, no further action shall be required. If the alignment would be located outside of the ROW, Biological Resources – 2a, 2b and 2c shall be followed.</p> <p>Biological Resources – 2a: If the alignment would be located outside of the ROW, the biologist shall identify the area(s) and conduct a field survey to determine if any sensitive habitat(s), animal or plant species would be impacted during construction. If the qualified biologist determines that no sensitive habitat(s), animal or plant species would be impacted, no further action shall be required.</p> <p>Biological Resources – 2ab: If sensitive habitat would be impacted by the proposed project, the qualified biologist shall determine whether the habitat is located inside or outside of the MHPA and in what level of the City’s tier system the habitat is located. Impacts to each type of habitat shall be mitigated in accordance with the City’s Biology Guidelines mitigation ratios listed in Table 4.7-4. According to this table, mitigation for impacts to sensitive habitats would consist of the purchase or dedication of land at a ratio between 0.5:1 to 4:1 from a mitigation bank or an area within the MHPA. <u>In addition, appropriately-timed pre-construction surveys shall be conducted by a qualified biologist pursuant to state and federal protocols to determine if sensitive species are present within the sensitive habitat areas. If only sensitive habitat is impacted, and no sensitive animal or plant species are determined to be present onsite, then the sensitive habitat shall be mitigated in accordance with Table 4.7-4. If sensitive species are detected onsite, then mitigation measure <i>Biological Resources – 2c</i> would be implemented. If sensitive habitat is impacted, but no sensitive animal or plant species are determined to be present onsite, then the sensitive habitat shall be mitigated in accordance with Table 4.7-4, and no further action shall be required.</u></p>	Mitigated to below a level of significance.

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Biological Resources (continued)</i>		<p><u><i>Biological Resources – 2b:</i> If construction activities would extend outside of the existing roadway alignment footprint, and sensitive habitats would be impacted, as determined in mitigation measure <i>Biological Resources – 2a</i>, then a qualified biologist shall conduct regular monitoring visits during construction to assure that construction personnel and equipment do not encroach into any sensitive areas. The schedule for biological monitoring visits shall be determined at the pre-construction meeting for each project construction phase. To the extent feasible, construction work near vernal pool areas shall be conducted outside the rainy season and construction work near habitats of sensitive species shall be conducted outside the breeding season of those species.</u></p> <p><u><i>Biological Resources – 2c:</i> If sensitive animal or plant species are observed, based on a protocol surveys performed by a qualified biologist, they shall be avoided when possible. If impacts cannot be avoided, the significance of the impacts to those species must be evaluated in a second tier document in compliance with CEQA and any significant impacts shall be mitigated based on the recommendations of the qualified biologist. The recommended mitigation ratios in Table 4.7-4 shall be subject to change based on the project's impact on federally listed species, including (potentially) the San Diego button-celery, Otay Mesa mint, California orcutt grass, Otay tarplant, spreading navarretia, Riverside fairy shrimp, San Diego fairy shrimp, coastal California gnatcatcher, and quino checkerspot butterfly in accordance with the City's <u>Biological Guidelines</u>.</u></p> <p><u><i>Biological Resources – 3:</i> Prior to first preconstruction meeting for the construction of Pump Station A1, focused surveys for sensitive plant species shall be conducted at the Pump Station A1 site by a qualified biologist during the appropriate season as part of or prior to the project planning or design phase. Two rare plant surveys shall be conducted at the Pump Station A1 site, one in the early spring (April/May) and the other during mid to late July, to identify any federal, state, and City (narrow endemic) sensitive plant species. If sensitive plant species are observed onsite, they shall be avoided if possible. If impacts cannot be avoided, the significance of the impacts to those species shall be evaluated in a second tier document in compliance with CEQA and any significant impacts shall be mitigated based on the recommendations of the qualified biologist. Typically, impacts to any listed or City narrow endemic plants require species-specific mitigation, usually in the form of plant salvage and translocation to a suitable preserve area.</u></p> <p><u><i>Biological Resources – 4:</i> Prior to construction of Pump Station A1, a qualified biologist shall survey the Pump Station A1 site for the presence of suitable habitat for the following wildlife species: San Diego and Riverside fairy shrimp, quino checkerspot butterfly, and burrowing owl. If the biologist finds suitable habitat for any of these species, sensitive animal surveys for each species identified on the Pump Station site shall be conducted by a qualified biologist in accordance with the measures listed in <i>Biological Resources -4a, -4b, and 4-c</i>.</u></p> <p><u><i>Biological Resources – 4a:</i> If suitable habitat for San Diego or Riverside fairy shrimp is found on the Pump Station A1 site, U.S. Fish and Wildlife Service (USFWS) protocol surveys shall be required to determine the extent of these species within appropriate habitat (water holding basins) on site. Two seasons of surveys</u></p>	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<p><i>Biological Resources</i> (continued)</p>		<p>shall be required by the USFWS protocol. The surveys shall consist of two dry season surveys, two wet season surveys, or one of each. The dry season survey shall involve collecting soil samples in the summer and conducting a lab analysis to determine if fairy shrimp cysts are present. Wet season surveys shall require biweekly visits when the pools are full of water to net for adult fairy shrimp.</p>	
		<p>The City regulates impacts to vernal pools within its jurisdiction; however, it does not have the authority to permit take of listed fairy shrimp. Take of the listed fairy shrimp shall require a federal Endangered Species Act (ESA) Section 10(a) permit processed through the USFWS.</p>	
		<p>In order to process a 10(a) permit, the applicant shall prepare several documents including a Habitat Conservation Plan (HCP), Environmental Assessment (EA), Alternatives Analysis (AA), Implementing Agreement (IA), and associated mitigation and habitat restoration documents.</p>	
		<p><i>Biological Resources – 4b:</i> If suitable habitat for the quino checkerspot butterfly is found on the Pump Station A1 site, USFWS focused protocol surveys shall be required, which call for a pre-survey habitat assessment and approximately six weekly surveys during the quino flight period (generally early spring). The USFWS shall determine when conditions are suitable to begin surveys based on observations at several known quino sites. Similar to the San Diego and Riverside fairy shrimp, the quino checkerspot butterfly is not an MSCP covered species. Any take of this species would require an ESA Section 10(a) permit processed through the USFWS.</p>	
		<p><i>Biological Resources – 4c:</i> If suitable habitat for the burrowing owl is found on the Pump Station A1 site, surveys shall be conducted during both wintering (December 1 through January 31) and nesting seasons (April 15 and July 15), unless the species is detected during the first season of surveys. If the burrowing owl is observed onsite, impacts to the species shall be avoided to the maximum extent practicable. If impacts can not be avoided, all impacted individuals shall be relocated out of the impact area using passive or active methods approved by the wildlife agencies. Timing of any relocation activity shall be carried out prior to the nesting season (February 1 to August 31). Mitigation for impacts to occupied habitat shall be through conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management, and enhancement of burrowing owl nesting and foraging habitat. A management plan for the burrowing owl shall include enhancement of known historical and/or potential burrowing owl habitat, and management for ground squirrels (the primary excavator of burrowing owl burrows). Enhancement measures may include creation of artificial burrows and vegetation management to enhance foraging habitat. The management plan shall also include monitoring of burrowing owl nest sites to determine use and nesting success; predator control; and establishing a 300-foot wide impact avoidance area (within the preserve) around conserved occupied burrows.</p>	
		<p><i>Biological Resources – 5:</i> Immediately after pipeline alignments and pump station locations have been determined for Phase 2C, a comprehensive biological resources survey and analysis shall be prepared by a qualified biologist to determine if construction and/or operation of Phase 2C pipeline and pump station</p>	

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Biological Resources (continued)</i>		facilities would result in significant direct or indirect impacts to sensitive biological resources, including sensitive habitats, plant species and animal species. Any direct or indirect impacts to biological resources identified as a result of Phase 2C shall be mitigated in accordance with the City's Biology Guidelines (City of San Diego 2002). Impacts shall be reduced to below a level of significance whenever possible.	
4.10 Hazardous Materials			
Hazard to the Public or to the Environment	Construction of the proposed project would have the potential to result in significant hazardous materials impacts during the implementation of Phases 2A2, 2B1, 2B2, 2D, 2E, 2F, and 3 due to known or unknown contaminated soils and groundwater which may exist along the proposed project alignment. Construction of Phase 2C would also have the potential to result in a significant hazard to the public or the environment.	<p>Hazardous Materials – 1: Prior to the City's first pre-construction meeting, the applicant shall provide a letter of verification to the Assistant Deputy Director (ADD) of Land Development Review (LDR), the City's Local Enforcement Agency (LEA), and the Environmental Services Department (ESD), stating that a qualified hazardous materials monitor has been retained to implement the soil monitoring program during project excavation and trenching. The monitoring program shall be implemented during the following project construction phases: Phase 2B1 along Via De San Ysidro, East and West San Ysidro Boulevards, Hill Street; Phase 2B2 along Heritage Road; and Phases 2B2, 2E and 3 along Otay Mesa Road in the vicinity of Brown Field and along Cactus Road in the vicinity of the former Tripp Landfill. In addition, if soil sampling of the proposed Pump Station A1 site indicates that contaminated soils are located at this site, then the monitoring program shall also be implemented during excavation of the contaminated areas of the Pump Station A1 site. During these project phases, the monitoring program shall be conducted for the presence of petroleum hydrocarbon contamination, burn ash, debris-laden fill material, and discolored or odorous soil in the upper 10 feet of the soil column in all phases except 2B1. Monitoring shall occur for all excavation depths during Phase 2B1. If such soil is encountered, it should be evaluated by a qualified professional and handled in accordance with applicable environmental laws and regulations.</p> <p>Hazardous Materials – 2: Prior to the City's first pre-construction meeting, the applicant shall prepare a Community Health and Safety Plan for approval by the City's Local Enforcement Agency (LEA) for Phases 2B2, 2E and 3 along Cactus Road in the vicinity of Tripp Landfill.</p> <p>Hazardous Materials – 3: Prior to the City's first pre-construction meeting, construction plans shall be reviewed by City LEA and ESD staff for dewatering plans and operations. If dewatering plans and operations are proposed, environmental monitoring for the presence of free product and impacted groundwater shall be conducted as a part of dewatering plans and operations.</p> <p>Hazardous Materials – 4: During excavation and construction activities for all phases of the proposed project, any undocumented underground storage tanks (USTs) or other subsurface features indicative of potential contamination that are encountered along the project alignment shall be evaluated and handled in accordance with all applicable federal and state environmental laws and regulations. Specifically, the County Department of Environmental Health and the City LEA and ESD shall be notified if any USTs are discovered within the excavated areas of the proposed project alignment.</p>	Mitigated to below a level of significance.

Table S-1 Continued

Issue Area	Significant Impact(s)	Mitigation Measure(s)	Significance of Impact(s) After Mitigation
<i>Hazardous Materials (continued)</i>		<p><i>Hazardous Materials – 5:</i> Prior to the City’s first pre-construction meeting, construction plans shall be reviewed by City Local Enforcement Agency and Environmental Services Department staff for the destruction of existing groundwater monitoring wells located within the proposed project alignment. If the project would require the destruction of existing groundwater monitoring wells, permission to destroy such wells shall be obtained by the appropriate responsible parties and regulatory agencies.</p> <p><i>Hazardous Materials – 6:</i> Prior to the City’s first pre-construction meeting, the applicant shall provide proof of all necessary licenses and certifications to perform the excavation and other construction operations to the Assistant Deputy Director of Land Development Review. The project builder shall also ensure through employee training that all contractors and workers are made aware of the potential presence of petroleum hydrocarbons and other contaminants in the proposed project alignment. Health and safety measures shall be taken to minimize the risk of human exposure to contaminants during excavation and construction activities.</p> <p><i>Hazardous Materials – 7:</i> Prior to the City’s first pre-construction meeting or the issuance of a site development permit for the construction of Pump Station A1, whichever is applicable, soil sampling shall be conducted at the Pump Station A1 site by a qualified professional in order to determine if hydrocarbon-impacted soil is present on the site. If no contaminated soil is found onsite, no further action shall be required. If contaminated soils are found onsite, mitigation measure Hazardous Material – 1 shall be implemented during all excavation of identified areas of contamination within the proposed Pump Station A1 site.</p> <p><i>Hazardous Materials – 8:</i> When pipeline alignments and pump station location(s) have been determined for Phase 2C, a comprehensive Phase I site assessment shall be conducted by a qualified hazardous materials specialist in order to determine if Phase 2C would have the potential to result in significant hazardous materials impacts due to known or unknown contaminated soils and groundwater which may exist along the proposed project alignment. For potentially significant impacts, the Phase I site assessment shall include recommendations for the remediation of impacts to a level below significant, which may be similar to mitigation measures Hazardous Materials – 1 through 6, listed above. Mitigation measures implemented to reduce potentially significant impacts shall be approved by the City LEA and ESD and the ADD of LDR.</p>	
4.11 Visual Quality/Aesthetics			
Creation of a Negative Aesthetic Site	Pump stations constructed as part of Phase 2C would have the potential to result in the creation of a negative aesthetic site or project. Impacts would be potentially significant.	<i>Visual Quality/Aesthetics – 1:</i> For any pump station(s) constructed as part of Phase 2C, the architectural style and materials used in the pump station building(s) shall be designed to blend with the surrounding uses of the area.	Mitigated to below a level of significance.
4.12 Energy			
Excessive Use of Energy	Any pump stations constructed as part of Phase 2C would have the potential to result in the use of excessive amounts of fuel or energy during operation.	<i>Energy – 1:</i> Any pump station(s) constructed as part of Phase 2C shall be designed to incorporate energy efficient components such as soft start motors, high efficiency motors, energy-efficient interior, and exterior lighting and skylights in order to avoid the excessive use of fuel or energy.	Mitigated to below a level of significance.

Table S-2. Summary Comparison of Project Alternatives to the Proposed Project

Description of Alternative	Advantages	Disadvantages
<i>No Project Alternative</i>		
<p>Under the No Project Alternative, the proposed OMTS project would not be implemented. The existing sewerage system in the east mesa would continue to pump wastewater to the Otay Valley Trunk Sewer.</p>	<ul style="list-style-type: none"> • Significant land use impacts associated with conflicts with the City's MSCP would not occur. • Significant noise impacts associated with construction activities and the operation of proposed pump stations A1 and the proposed Phase 2C pump stations would be avoided. • Potentially significant air quality impacts associated with the construction and operation of Phase 2C pump stations, the construction of Phase 3 facilities, and the operation of the 35 MGD pump station A1 emergency generators would be avoided. • Potentially significant impacts to paleontological resources and subsurface prehistoric or historic archeological resources would be avoided. • Direct and indirect impacts to sensitive habitats, plants and animals would be avoided. Potentially significant indirect and direct biological resources impacts associated with Phase 2C pump stations would be avoided. • Potentially significant impacts to visual quality/aesthetics and energy would be avoided because Phase 2C pump stations would not be constructed. • Potentially significant hazardous materials impacts would be avoided because no excavation or construction activities would occur. • Potential relocation of public utilities would be avoided because no new and/or upgraded wastewater pipelines would be constructed. 	<ul style="list-style-type: none"> • This alternative would not fulfill any of the project objectives, including: <ol style="list-style-type: none"> 1. Extension of the existing OMTS system to accommodate future flows in the Otay Mesa area and to provide greater capacity to convey wastewater. 2. Provide sewer service to the currently underdeveloped western portion of Otay Mesa, including new developments along Old Otay Mesa Road. 3. Upgrade of the eastern portion of the Otay Mesa sewer system to accommodate build-out flows. 4. Upgrade the capacity of existing temporary Pump Station 23T from 2 MGD to 4 MGD. 5. Construct new Pump Station A1 with a capacity of up to 35 MGD, which would replace temporary Pump Station 23T. 6. Provide upgraded and new sewer service pipelines in the Otay Mesa area within existing right-of-way (ROW). 7. Provide upgraded and new sewer service in Otay Mesa over a phased implementation timeline in which facilities are built, as they are needed and in coordination with other major projects in the area. 8. Direct the majority of all sewer flows from the Otay Mesa area to the San Ysidro Interceptor via the OMTS sewer and minimize or eliminate flows to the Otay Valley Trunk Sewer. • The No Project Alternative would not provide adequate sewage system for future growth and development in the Otay Mesa area. Therefore, a new significant impact would occur with implementation of the No Project Alternative.

Table S-2 Continued

Description of Alternative	Advantages	Disadvantages
<p><i>Canyon Ridge Alternative</i></p> <p>This alternative would implement tunnel gravity sewer lines in the currently undeveloped portions of the west mesa that have been designated for future development.</p> <p>The eastern portions of the alternative alignment along La Media and Siempre Viva Roads would be the same as the proposed project.</p> <p>At the site of existing Pump Station 23T, this alternative would implement a deep sewer pipeline north under Cactus Road for approximately 650 feet. The alignment would then turn west under proposed future roads to Spring Canyon.</p> <p>This alternative would require the construction of a bridge over a portion of Spring Canyon. After crossing the canyon, the alignment would be located in the ROW of the proposed Airway Road extension. Thereafter, the alignment would continue west under Airway Road to Old Otay Mesa Road. At Old Otay Mesa Road, the alignment would be the same as the proposed project.</p>	<ul style="list-style-type: none"> • This alternative would eliminate the need for temporary Pump Station 23T and proposed Pump Station A1 and therefore would result in reduced operational noise impacts as compared to the proposed project. • This alternative would result in reduced impacts to hazardous materials as identified for the proposed project. • This alternative would reduce demand on energy resources as compared to the proposed project because operation of pump stations 23T and A1 would <i>not</i> be necessary. • <i>This alternative would result in reduced impacts to biological resources as compared to the proposed project because it would not require the development of the proposed Pump Station A1 site, which would impact 2.8 acres of non-native grassland habitat.</i> • <i>The following two project objectives would not be applicable under this alternative:</i> <ol style="list-style-type: none"> 1. Upgrade the capacity of existing Pump Station 23T from 2 MGD to 4 MGD; and 2. Construct a new Pump Station A1 with a capacity of up to 34 MGD, which would replace temporary Pump Station 23T. 	<ul style="list-style-type: none"> • This alternative would not fulfill the following project objective: Provide upgraded and new sewer service in Otay Mesa over a phased implementation timeline in which facilities are built as they are needed and in coordination with other major projects in the area. • In addition, this alternative would only partially meet the project objective to provide upgraded and new sewer service pipelines in the Otay Mesa Area within existing ROW. • Potential conflicts with two adopted San Diego City Council policies: Council Policy 400-13 and 400-14. • <i>Potential conflicts with the City's MSCP regulations and City's Historical Resources Regulations and ESL Regulations from the construction of a bridge across Spring Canyon.</i> • Potential noise impacts to sensitive wildlife within the canyons, including federally endangered avian species. • New potentially significant impacts to paleontological resources and unknown subsurface prehistoric or historic archaeological resources may occur from subsurface disturbances. • New potentially significant direct and indirect impacts to sensitive biological resources within Spring Canyon. This canyon is located within the Multiple Habitat Planning Area (MHPA) of the City's MSCP and contains sensitive biological habitats including vernal pools, non-native grassland, and coastal sage scrub (MSCP Subarea Plan 1997). • This alternative would result in new significant impacts to aesthetics/visual quality associated with the bridge crossing Spring Canyon. Mitigation may be unable to reduce impacts to below a level of significance; therefore, this impact may be significant and unavoidable.

Table S-2 Continued

Description of Alternative	Advantages	Disadvantages
<p><i>Deep Sewer Alternative</i></p> <p>The Deep Sewer Alternative is a gravity alternative in which the sewer pipeline would be located along a similar alignment as the proposed project but at increased depth.</p> <p>This alternative would eliminate the need for existing Pump Station 23T and proposed Pump Station A1. Existing temporary Pump Stations 31T and 48T would still be required.</p> <p>The eastern portions of the alternative alignment along La Media and Siempre Viva Roads and the western portions of the alignment along Old Otay Mesa Road, East Beyer Boulevard, Center Road, San Ysidro Boulevard, and Via de San Ysidro Boulevard would be the same as the proposed project.</p> <p>At the site of existing Pump Station 23T, this alternative would implement a sewer pipeline at a depth of 30-feet under Cactus Road and transition to a deep sewer approximately 400 feet north of Pump Station 23T. The deep sewer pipeline alignment would follow Cactus Road to the north and then to the west under Camino Maquiladora. The alignment would follow Camino Maquiladora in a westerly direction to the proposed Heritage Road under-crossing of SR-905. After this under-crossing, the alignment would continue west under Otay Mesa Road to Caliente Road. The alignment would be located under Caliente Road to Airway Road, and would continue west under Airway Road to Old Otay Mesa Road. At this point, the alignment would be similar to the proposed project alignment and would become shallower and flow by gravity to the San Ysidro Interceptor.</p>	<ul style="list-style-type: none"> • Construction and operational noise impacts associated with pump stations 23T and A1 would be eliminated. • Construction-related air quality impacts would be reduced because the project would not involve the construction of the proposed 35 MGD pump station A1. • Reduced impacts to biological resources as compared to the proposed project because it would not require the development of the proposed Pump Station A1 site, which would impact 2.8 acres of non-native grassland habitat. • This alternative would reduce demand on energy resources as compared the proposed project because the operation of pump stations 23T and A1 would not be necessary. • The following two project objectives would not be applicable under this alternative: (1) Upgrade the capacity of existing Pump Station 23T from 2 MGD to 4 MGD, and (2) Construct a new Pump Station A1 with a capacity of up to 34 MGD, which would replace temporary Pump Station 23T. 	<ul style="list-style-type: none"> • With regard to the project objectives, this alternative would not fulfill the following project objective: Provide upgraded and new sewer service in Otay Mesa over a phased implementation timeline in which facilities are built, as they are needed and in coordination with other major projects in the area. • This alternative would only partially meet the following project objective: Provide upgraded and new sewer service pipelines in the Otay Mesa Area within existing ROW. • Potential to contaminate groundwater during construction activities would increase. The depths of the pipeline would be deeper and thus more likely to encounter groundwater.

Table S-3. Summary of Effects Found Not to Be Significant

Issue Area	Reason for Non-Significance
Agricultural Resources	Project would be located within public ROW and would not impact existing or designated agricultural areas.
Mineral Resources	Project would be located within public ROW and would not impact any known mineral recovery sites.
Population and Housing	Project would not displace persons or housing and does not propose the development of new homes or businesses.
Public Services	Project would not impact any existing or proposed public facilities and would not result in the need for new or increased public facilities (e.g., police, fire, libraries, etc.).
Recreational Resources	Project would not increase the use of existing neighborhood and regional parks or other recreational facilities nor would it include recreational facilities or require the construction or expansion of recreational facilities.
Transportation/Parking	Project would not result in a long-term, substantial increase in vehicle trips. Increased vehicle trips during construction, circulation changes, and potential roadway closures would be temporary and would be managed through implementation of a detailed traffic control plan. Project would not affect existing or future availability of parking.
Water Conservation	Project would not require substantial amounts of water for construction or operational activities.

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- G. Hazardous Materials Technical Report
- H. Fine Screening Analysis

ACRONYMS

AMSL	above mean sea level
APCD	Air Pollution Control District
ASBS	Areas of Special Biological Significance
AST	aboveground storage tanks
ATS	automatic transfer switches
BACM	best available control measures
BI	Building inspector
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standard
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
City	City of San Diego
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
dBA	decibel
DTSC	California Department of Toxic Substances Control
EA	Environmental Assessment
EAS	Environmental Analysis Section
ECO/P	Environmental Compliance Officer/Planner
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ERM	Environmental Review Manager
ERNS	Emergency Response Notification System
ESA	Endangered Species Act
ESL	Environmentally Sensitive Lands

gpm	gallons per minute
HA	Hydrologic Area
HAS	Hydrologic Subareas
HCP	Habitat Conservation Plan
HMMP	Hazardous Materials Management Plan
hp	horsepower
HRG	Historical Resources Guidelines
HRR	Historic Resources Regulations
HSAs	Hydrologic Subareas
HUD	State Department of Housing and Urban Development
HVAC	Heating Ventilation Air Conditioning
H ₂ S	hydrogen sulfide
I	Interstate
IA	Implementing Agreement
IBWC	International Boundary and Water Commission
IS	Initial Study
kg	kilograms
KVP	key vantage point
KW/hr	kilowatts per hour
L _{dn}	Day-Night Equivalent Level
LDR	Land Development Review
LUST	Leaking Underground Storage Tanks
MBTA	Migratory Bird Treaty Act
MCC	motor control center
MGD	million gallons per day
MHPA	Multiple Habitat Planning Area
MLD	Most Likely Descendent
MMC	Mitigation Monitoring Coordination
MSCP	Multiple Species Conservation Program
MWD	Metropolitan Water District
MWWD	Metropolitan Wastewater Department
mya	millions of year ago

NAAQS	National Ambient Air Quality Standards
NAHC	Native American Historic Commission
NaOCl	sodium hypochlorite
NaOH	sodium hydroxide
NCCP	Natural Communities Conservation Planning
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	Nitrogen oxides
NO ₂	Nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NTP	Notice to Proceed
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OIC	Otay International Center
OMTS	Otay Mesa Trunk Sewer
OVRP	Otay Valley Regional Park
Pb	Lead
PCBs	polychlorinated biphenyls
PI	Principal Investigator
PLWTP	Point Loma Wastewater Treatment Plant
PM ₁₀	Respirable particulate matter less than or equal to 10 microns in aerodynamic diameter
PM _{2.5}	Fine particulate matter less than or equal to 2.5 microns in aerodynamic diameter
PWL	power level
RAQS	Regional Air Quality Strategy
RCRA GEN	Resource Conservation and Recovery Information System for Large and Small Quantity
RCRIS	Resource Conservation and Recovery Information System
RE	Resident Engineer
ROG	reactive organic gases
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Regional Association of Governments
SBWRP	South Bay Water Reclamation Plant
SCIC	South Coastal Information Center
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric Company
SF	square feet

SOL	sulfates
SO ₂	sulfur dioxide
SPL	sound pressure levels
STP	shovel test pits
SUSMP	Standard Urban Stormwater Mitigation Plan
SWL	Solid Waste Information System
SWRCB	State Water Resources Control Board
UBC	Uniform Building Code
UFC	Uniform Fire Code
URMP	Urban Runoff Management Program
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VFDs	variable frequency drives
WDID	waste discharger identification number
WURMP	Watershed Urban Runoff Management Program

CHAPTER 1.0

INTRODUCTION

This section includes information regarding the following topics:

1. Intended Use and Purpose of the EIR
2. CEQA Requirements
3. Project Background Information

1.1 INTENDED USE AND PURPOSE OF THE EIR

This *Environmental Impact Report (EIR)* for the proposed Otay Mesa Trunk Sewer (OMTS) project has been prepared in compliance with California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et Seq.). The purpose of the EIR is to provide CEQA documentation for the implementation of the 2004 OMTS Master Plan Update and Alignment Study. This EIR has been prepared as a Program EIR, as provided in Section 15168 of the State CEQA Guidelines. A Program EIR is recommended for a series of actions that are related geographically, as logical parts in a chain of contemplated actions, or in connection with the issuance of plans that govern the conduct of a continuing program [Section 15168 (a)]. The advantages of a Program EIR include the ability to provide a more exhaustive consideration of alternatives and cumulative effects than might be possible in a single project specific EIR; to avoid duplication of basic policy considerations; and to provide the Lead Agency (City of San Diego) with the ability to consider broad program-wide policies and mitigation measures that would apply to specific projects within the overall program [Section 15168(b)].

The Draft EIR will be distributed for review to the public and public agencies for a 45-day review period for the purpose of providing comments “on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided and mitigated” (Section 15204). The City, as Lead Agency, will consider written comments received on the Draft EIR in making its decision to certify the Final EIR as complete and, in compliance with CEQA, whether to approve or deny the proposed project.

1.2 CEQA REQUIREMENTS

1.2.1 CEQA COMPLIANCE

The EIR complies with the criteria, standards, and procedures of the CEQA; the State CEQA Guidelines (California Administrative Code, Section 15000, et seq.); and the *City of San Diego Technical Report and Environmental Impact Report Guidelines*, as revised September 2002.

1.2.2 INITIAL STUDY, NOTICE OF PREPARATION AND SCOPING MEETING

The scope of analysis of this EIR was determined by the City as a result of an Initial Study conducted in compliance with Section 15063 of the CEQA Guidelines; a scoping letter dated July 29, 2004; a scoping meeting held on August 12, 2004; and responses to the Notice of Preparation (NOP) dated July 29, 2004, prepared in compliance with Section 15082 of the CEQA Guidelines. The City's scoping letter, NOP, and associated responses are included in Appendix A of this document. The following issues were determined to be potentially significant and are addressed in this EIR:

- Land Use
- Noise
- Paleontological Resources
- Utilities
- Historical Resources
- Air Quality
- Biological Resources
- Hydrology/Water Quality
- Geotechnical Resources
- Hazardous Materials
- Visual Quality/Aesthetics
- Energy

Issues that were determined to be not significant are addressed in Chapter 7.0 of this EIR.

Other mandatory sections required by CEQA include a discussion of cumulative impacts, growth inducement, unavoidable and irreversible significant environmental effects, and alternatives to the proposed project. These mandatory discussions are provided in Chapters 5.0, 6.0, 8.0, and 9.0, respectively, of this EIR.

1.2.3 DISCRETIONARY ACTIONS

A complete list of the discretionary actions and permits required to complete the proposed project is provided in Section 3.5 of this EIR. This section includes a discussion of all applicable federal, state and local permits and approvals required from governmental agencies and jurisdictions.

1.3 PROJECT BACKGROUND

This section provides the planning context that led to the need for the proposed project. The following information is addressed in this section:

1. 1984 Otay Mesa Sewer Master Plan
2. 2004 Master Plan Update and Alignment Study
3. California Terraces EIR and Addendum
4. City of San Diego Ordinances and Council Policies

1.3.1 1984 OTAY MESA SEWER MASTER PLAN

Sewer planning in the Otay Mesa area began in the early 1980s as development of this area was spurred by the proliferation of economic ties and resulting traffic across the border. Sewer planning for the Otay Mesa area was initially conducted in the preparation of the 1984 Otay Mesa Sewer Master Plan (1984 Master Plan) for the development of the commercial Otay International Center (OIC) site. The 1984 Master Plan evaluated the capacity of the existing Otay Valley Trunk Sewer to serve the northern drainage basin, including the state prison, and temporary pipeline and pump station to serve the southern drainage basin, including the OIC. The 1984 Master Plan (modified in 1998) identified three phases for incorporating the new sewer infrastructure in the Otay Mesa area. These three phases are described below. The 1984 Master Plan ultimately identified the need for a permanent trunk sewer line to serve the entire Otay Mesa community. The 1984 Master Plan proposed a pipeline to cross Otay Mesa along the bottom of Spring Canyon adjacent to the U.S.-Mexican International Border, beneath I-805 and I-5, and to discharge to the future South Bay advanced secondary wastewater treatment facility. To date, the second and third phases of the 1984 Master Plan have not been constructed.

1.3.1.1 PHASE 1 (IMPLEMENTED)

Phase 1 of the 1984 Master Plan was to supply service to the OIC and other east Otay Mesa developments. This was accomplished with the construction of a wastewater collection system extending from the eastern City boundary westward to Cactus Road. Three temporary pump stations (23T, 31T and 48T) were also constructed later by other developers to convey the eastern Otay Mesa wastewater flows to the Otay Valley Trunk Sewer, owned and operated by the City Of San Diego's Metropolitan Wastewater Department (MWWD), and ultimately to the Point Loma Wastewater Treatment Facility. The OIC developers entered into a reimbursement agreement with the City of San Diego for the construction of these facilities and an assessment district was formed so that the future development would pay its fair share. These existing facilities are described in additional detail in Chapter 2.0 of this EIR.

1.3.1.2 PHASE 2 (NOT IMPLEMENTED)

The proposed second phase of the 1984 Master Plan was the construction of the Otay Mesa Trunk Sewer in Spring Canyon. The gravity alignment was proposed to cross Otay Mesa along the south, thereby eliminating the need for the three temporary pump stations. The proposed OMTS would divert wastewater flows from the Otay Valley Trunk Sewer by connecting directly to MWWD's San Ysidro Interceptor.

1.3.1.3 PHASE 3 (NOT IMPLEMENTED)

The proposed third phase of the 1984 Master Plan included the further diversion of flows from the San Ysidro Interceptor to the future South Bay secondary wastewater treatment plant. Implementation of this plan was proposed to relieve flows to both the Point Loma treatment facility and the San Ysidro Interceptor.

1.3.2 2004 OMTS MASTER PLAN UPDATE AND ALIGNMENT STUDY

Since 1984, land use plans for development of Otay Mesa have evolved and no longer reflect the assumptions made in the 1984 Master Plan. A comprehensive update to the Otay Mesa Sewer Master Plan was required to evaluate the tributary area and determine existing and future sewage flows based on current development plans and projected population growth. The intent of the 2004 OMTS Master Plan Update and Alignment Study was to plan, design, and construct sewer collection facilities to adequately provide sewer service to the Otay Mesa area for the next 15 to 20 years, to accommodate development and business growth that exceed the

capacity of the existing infrastructure. In addition, the study provides a framework for future sewer facilities to meet ultimate buildout needs of both the City and the County portions of Otay Mesa.

1.3.2.1 GOALS OF THE 2004 MASTER PLAN UPDATE

The 2004 Master Plan Update was prepared to fulfill two main goals. The first goal was to evaluate projected sewage flows from Otay Mesa and to assess the threshold capacity of the existing Otay Valley Trunk Sewer, which currently services a portion of the Otay Mesa area. The 2004 Master Plan established a time line for anticipated growth in order to provide the basis for a plan to construct sewage facilities as needed, as an alternative to building facilities that may be oversized for many years to come.

The second goal of the 2004 Master Plan was to identify conceptual solutions for providing sewer service to Otay Mesa in a manner that would facilitate phasing and adaptability. The 2004 Master Plan was prepared to allow for the City to periodically reevaluate its plans to meet the needs of the community as development of the area proceeds. The Master Plan was also prepared to be consistent with the City's design and reliability criteria that give preference to gravity sewers over pump station and forcemain facilities, while complying with City Council Policies CP-400-13 and CP-400-14, which discourage the construction of sewers in sensitive canyon habitats (see EIR Sections 1.3.4.2 and 1.3.4.3 for additional discussion).

1.3.2.2 2004 ALIGNMENT STUDY AND SCREENING PROCESS

Concurrent with the 2004 Master Plan Update, the 2004 OMTS Alignment Study evaluated alternative project concepts and alignments for sewer service from Otay Mesa. The Alignment Study included an initial analysis of environmental constraints within the project area. A screening process for the Otay Mesa Trunk Sewer project was developed to evaluate and compare opportunities and constraints of alternative alignments. The first step involved a coarse screening of over 400 alternative alignments within the Otay Mesa study area that concluded with 5 "short-listed" alignments, the best of each of the five alignment concepts developed. The second step addressed critical technical issues that could result in "fatal flaws" that would eliminate an alternative from the screening process or significantly modify the proposed alignment. The final step was the fine screening process, which took the recommended alignments of the coarse screening and critical technical issue analyses, as well as the existing Otay Valley Trunk Sewer alignment, and more rigorously evaluated those alignments to develop and recommend a "preferred" alignment to be analyzed in the project EIR. A major component of the fine screening analysis of each alternative was the ability to phase the proposed alignment to accommodate the projected rate of growth in the Otay Mesa study area. A detailed discussion of the screening process is provided in Chapter 9.0, Alternatives, of this EIR. The Fine Screening Analysis is provided as Appendix H to this EIR.

1.3.3 CALIFORNIA TERRACES EIR AND ADDENDUM

1.3.3.1 CALIFORNIA TERRACES FINAL EIR

The California Terraces Final EIR (SCH No. 85022015) was prepared by the City of San Diego on November 16, 1993 for the implementation of a Precise Plan, Master Rezone, Vesting Tentative Maps [DEP Numbers 86-1032 and 90-0574], Hillside Review Permit, Resource Protection Ordinance Permit, Planned Residential Development, Small Lot Overlay Zone, Community Plan Implementation Overlay Zone, and Community Plan Amendment to develop a 664.8-acre site in the western portion of Otay Mesa with 5,375 residential dwelling units, 24.4 acres of commercial uses, 153.4 acres of open space, four school sites totaling 53.6 acres, three parks totally 26.2 acres, and other public facilities. The California Terraces Final EIR addressed the need for off-site sewer facilities to be provided and included the Princess Park residential subdivision as a part of the project analysis. The EIR indicated that permanent sewer service for the Princess Park subdivision

would be provided southwesterly from the subdivision “into the City’s gravity system at Beyer Boulevard and I-805. In the interim, the single-family residences proposed south of SR-905 (Princess Park) would be served by a temporary pump station or gravity sewer.”

1.3.3.2 ADDENDUM TO THE CALIFORNIA TERRACES EIR

More than 10 years after the California Terraces Final EIR was prepared and certified, the Princess Park subdivision is under construction and the proposed off-site sewer facilities addressed in the Final EIR will be installed as part of the subdivision construction. In addition, the proposed OMTS project would include the construction of gravity sewer pipelines in Old Otay Mesa Road to provide a connection between the Princess Park subdivision and the City’s gravity system at Beyer Boulevard and I-805. Therefore, in an effort to avoid duplicating the installation of gravity pipeline, the City determined that an addendum to the California Terraces Final EIR would be appropriate to address the portion of the OMTS project from the Princess Park development along Old Otay Mesa Road to the connection at the San Ysidro Interceptor.

The addendum to the California Terraces EIR, entitled *California Terraces Offsite Sewer Connection*, was prepared and distributed for a 14-day public review period in accordance with City requirements in December 2003, and certified by the City Council on January 20, 2004. The segments of the OMTS project that can be constructed under the California Terraces Addendum include Phases 2A1, 2A2 and 2B1. Construction for Phase 2A was completed in June 2004. In accordance with CEQA Guidelines Section 15150(a), the California Terraces Final EIR and Addendum are hereby incorporated by reference and shall be considered to be set forth as part of the OMTS EIR.

1.3.4 CITY OF SAN DIEGO ORDINANCES AND COUNCIL POLICIES

The following City of San Diego ordinances and council policies were considered when preparing the 2004 OMTS Master Plan Update and Alignment Study.

1.3.4.1 ORDINANCE NUMBER O-19215

On September 22, 2003, the City of San Diego adopted Ordinance No. O-19215, amending the San Diego Municipal Code Chapter 6, Article 2, by adding Division 12 related to the payment of excavation fees. This Ordinance and Municipal Code Section effectively imposed a three-year moratorium on construction trenching in newly-paved City streets. Compliance with this ordinance and Municipal Code section conflicts with the construction of Phase 2 of the OMTS project, which involves the construction of a new sewer line along Old Otay Mesa Road. This road is scheduled to undergo grading activities, frontage road improvements and off-site utility construction work for the proposed Princess Park residential development, located at the northeastern end of Old Otay Mesa Road. The frontage road improvements are scheduled to be completed by the summer of 2005 and could prohibit the construction of the OMTS project in Old Otay Mesa Road until 2008, unless the two projects can be constructed concurrently.

Ordinance O-19215 was the driving force behind the decision to prepare an addendum to the California Terraces EIR, in order to ensure that the construction of Phases 2A1, 2A2, and 2B1 would not be delayed until 2008. Although the OMTS Project EIR, including all construction phases, is on schedule to be certified in 2005, the timing of the certified project EIR would not allow for concurrent construction of the Princess Park off-site utility improvements and the proposed project improvements in Old Otay Mesa Road. Therefore, the *California Terraces Final EIR Addendum* was prepared to meet the environmental review requirements of the CEQA and also to comply with City Ordinance O-19215.

1.3.4.2 STORM WATER MANAGEMENT AND DISCHARGE CONTROL ORDINANCE

The City of San Diego's Storm Water Management and Discharge Control Ordinance (San Diego Municipal Code Section 43.03, et seq.), requires that all new development and redevelopment activities comply with the storm water pollution prevention requirements in Chapter 14, Article 2, Division 1 (Grading Regulations) and Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) of the Land Development Code. These storm water pollution prevention requirements, which are described in detail in Sections III and IV of the City's Storm Water Standards Manual (2003) are site specific and vary based on the project's potential impact on receiving water quality.

1.3.4.3 COUNCIL POLICY CP-400-13

The purpose of this policy is to establish policies and guidelines for safe and effective access, maintenance and repair of sewer infrastructure located in canyons and other environmentally sensitive lands, while minimizing impacts to sensitive resources. It is the general intent of this policy to relocate sewer infrastructure out of canyons or other environmentally sensitive areas wherever economically practical (see CP-400-14 below). When sewer infrastructure cannot be or has not yet been relocated, policy CP-400-13 directs the City to minimize the construction of new sewer access roads. The policy states that all other access and maintenance practices and procedures undertaken in canyons and other environmentally sensitive lands shall avoid or minimize impacts to sensitive resources. The policy also identifies procedures that should be taken to minimize or avoid impacts to canyons or to other environmentally sensitive lands.

1.3.4.4 COUNCIL POLICY CP-400-14

The purpose of this policy is to establish a planning framework for the redirection of sewage discharge away from canyons and other environmentally sensitive lands. When planning for future projects, it is the intent of this policy that the City make a priority the redirection of sewage flow from existing locations within canyons to existing or newly proposed sewer mains in streets or other accessible locations. The policy directs the City to conduct a cost-benefit analysis, which includes both quantitative and qualitative costs and benefits of sewer relocation. When estimating the cost to maintain sewer facilities in canyons or other environmentally sensitive lands, the policy requires that the cost of the increased risk of a sewage spill and the cost of the impacts to the canyon habitat resulting from necessary canyon access be considered. The policy states that financial concerns shall not be the only methodology used to determine the feasibility of redirection of flow and that environmental analysis will be a part of the feasibility analysis. In addition, the policy directs City staff to involve Stakeholders and solicit community input as an integral part of the decision-making process.

CHAPTER 2.0

ENVIRONMENTAL SETTING

2.1 PROJECT LOCATION

The proposed Otay Mesa Trunk Sewer (OMTS) project would be located in the southernmost portion of the City of San Diego, just north of the International Border. The proposed project is a linear pipeline project that would extend from east of Brown Field Airport in the community of Otay Mesa to west of Interstate 5 (I-5) in the community of San Ysidro. The proposed project area is bounded by the Otay River Valley and the City of Chula Vista on the north, the International Border on the south, I-5 on the west, and the County of San Diego on the east. Figure 2.1-1 illustrates the regional location of the proposed project. A vicinity map of the project area is provided as Figure 2.1-2.

The proposed sewer infrastructure installed as part of the proposed project would provide sewer service to areas beyond the physical boundaries of the pipeline alignment. This is referred to as the project service area, which includes the Otay Mesa Sewer Basin (Figure 2.1-3). The project service area differs slightly from the project construction area because the service area extends east into the adjacent unincorporated area of the County of San Diego, and does not include the San Ysidro area to the west of I-805 where the proposed sewer alignment would connect to the San Ysidro Interceptor Sewer.

2.2 PROJECT AREA CHARACTERISTICS

2.2.1 OTAY MESA AREA

The proposed project would be located within the Otay Mesa community planning area, which consists of two general landforms: uplands and canyons. The uplands consist of relatively flat mesa areas and are the reason for the name of the region. The mesa areas have a high degree of disturbance and development. Development of the mesa consists of agricultural, residential and industrial development, which characterizes the majority of land uses adjacent to the proposed project alignment. The project alignment itself is characterized by a mixture of rural roadways and higher volume roadways that provide for heavy truck traffic in the east and west mesa areas, as well as higher volume urban roadways and freeways in the western portion of the project alignment. The project area also consists of natural open space characterized by grassland, coastal sage scrub and vernal pool habitat. Land uses in the project area are described in detail in Section 4.1, Land Use.

The canyon portions of the Otay Mesa area surround the mesa on the north, south, and west. The canyon areas are characterized by slopes and wide deep canyons that drain the vast mesas into the Otay River Valley, or toward Mexico. These areas are designated as Multi-Habitat Planning Areas (MHPA), as defined in the City of San Diego Multiple Species Conservation Program (MSCP). One biological linkage connecting the southern and northern areas across Otay Mesa Road is also included in an MHPA. The Otay Mesa MHPA comprises several areas supporting grasslands, vernal pools and coastal sage scrub. The San Diego National Wildlife Refuge Vernal Pool Units, which contain endangered species association with vernal pools, occur immediately north of Otay Mesa Road within and adjacent to Brown Field. The canyon areas contain primarily maritime succulent scrub and coastal sage scrub vegetation communities, which include components unique to the border area. The Spring Canyon area, the group of canyons south of Otay Mesa Road, contains a mixture of pristine succulent scrub, regenerating coastal sage scrub and severely eroded and disturbed lands (MSCP Subarea Plan 1997, hereby incorporated by reference).

The majority of the proposed project alignment is located under existing roadways and is not subject to a land conservation act contract under the Williamson Act. The Williamson Act is a State program that allows agricultural landowners to pay reduced property taxes in return for their contractual agreement to retain the land in agricultural and open space uses for a period of 10 years. In general, under State law, uses of Williamson Act-contracted lands must be consistent with the intent of the law to conserve agricultural, open space, and natural resources lands. While the proposed project alignment and pump station expansion sites are not subject to a Williamson Act contract, it is possible that properties within the project service area may be under a Williamson Act contract.

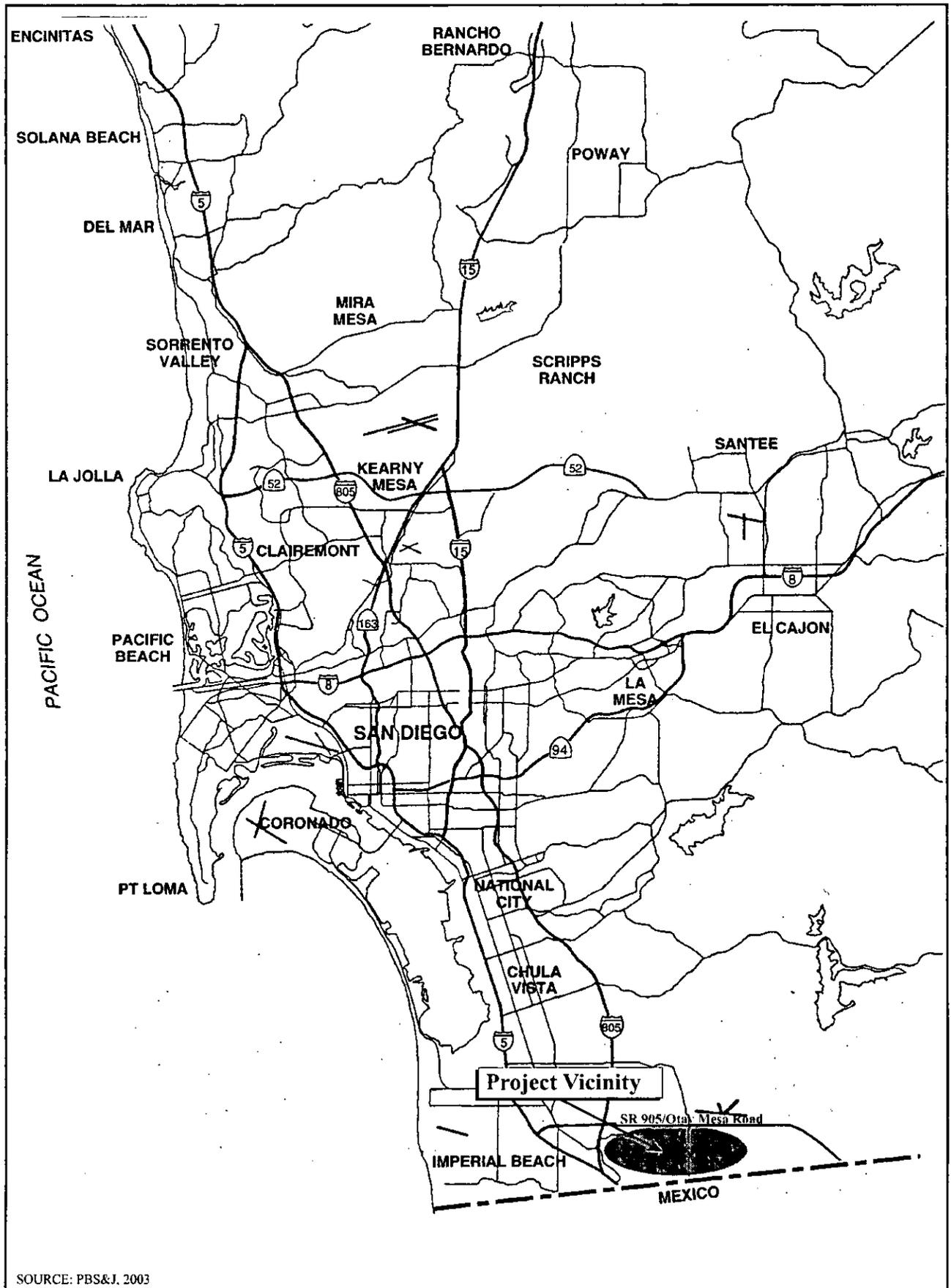
2.2.2 EXISTING SEWER INFRASTRUCTURE

Currently, the project area is supported by the East Otay Mesa Sewer Collection System, which includes pipelines, force mains, and three temporary pump stations (23T, 48T, and 31T) as shown in Figure 2.1-3. This existing sewer system consists of collectors and mains located underground within roadways extending from the eastern City boundary westward to Cactus Road. The sewer mains range in size from 6-inch to 33-inch and convey flow to a 30-inch main in Siempre Viva Road that flows westerly to Pump Station 23T. Wastewater flows collected by the 30-inch main in Siempre Viva Road include flows from collector pipelines located in Harvest Road, Via de la Amistad and out to the eastern City boundary in Enrico Fermi Drive.

Pump Station 23T is an existing temporary pump station located at 1190 Cactus Road and presently serves the eastern service area of the OMTS. This pump station was designed as a temporary facility to convey wastewater flows of up to 4 MGD, however, the pump station contains the necessary pumps, piping and electrical gear to currently convey only 2 MGD. Pump Station 23T includes standby power and redundant pumps, but lacks odor control or screening mechanisms.

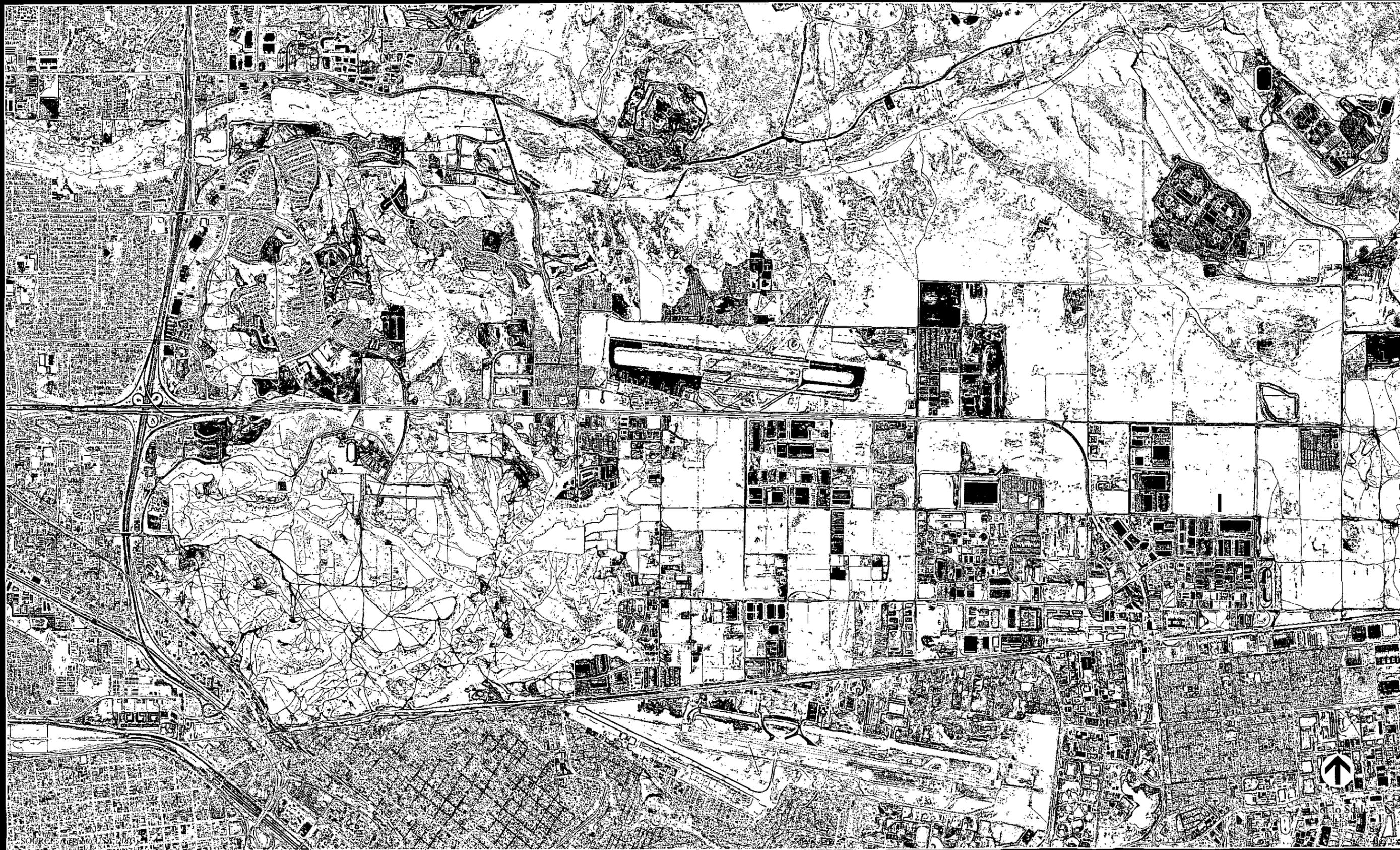
Pump Station 48T is located at 1600 Heritage Road and receives sewage flows generated in the Pacific Gateway, Mesa and Otay Heights Business Parks located along Camino Maquiladora and pumps north to the Otay Valley Trunk Sewer to the South Metro Interceptor. This pump station was designed as a temporary facility to convey wastewater flows of up to 4.8 MGD. Pump Station 48T contains two 30-hp pumps and has an overflow detention basin with approximately 170,000 gallons of capacity.

Pump Station 31T is located at 2862 Calle de la Linea and pumps sewage flows generated within the International Business Center to the wet well of Pump Station 23T. Pump Station 31T was designed as a temporary facility to convey wastewater flows of up to 1.9 MGD.



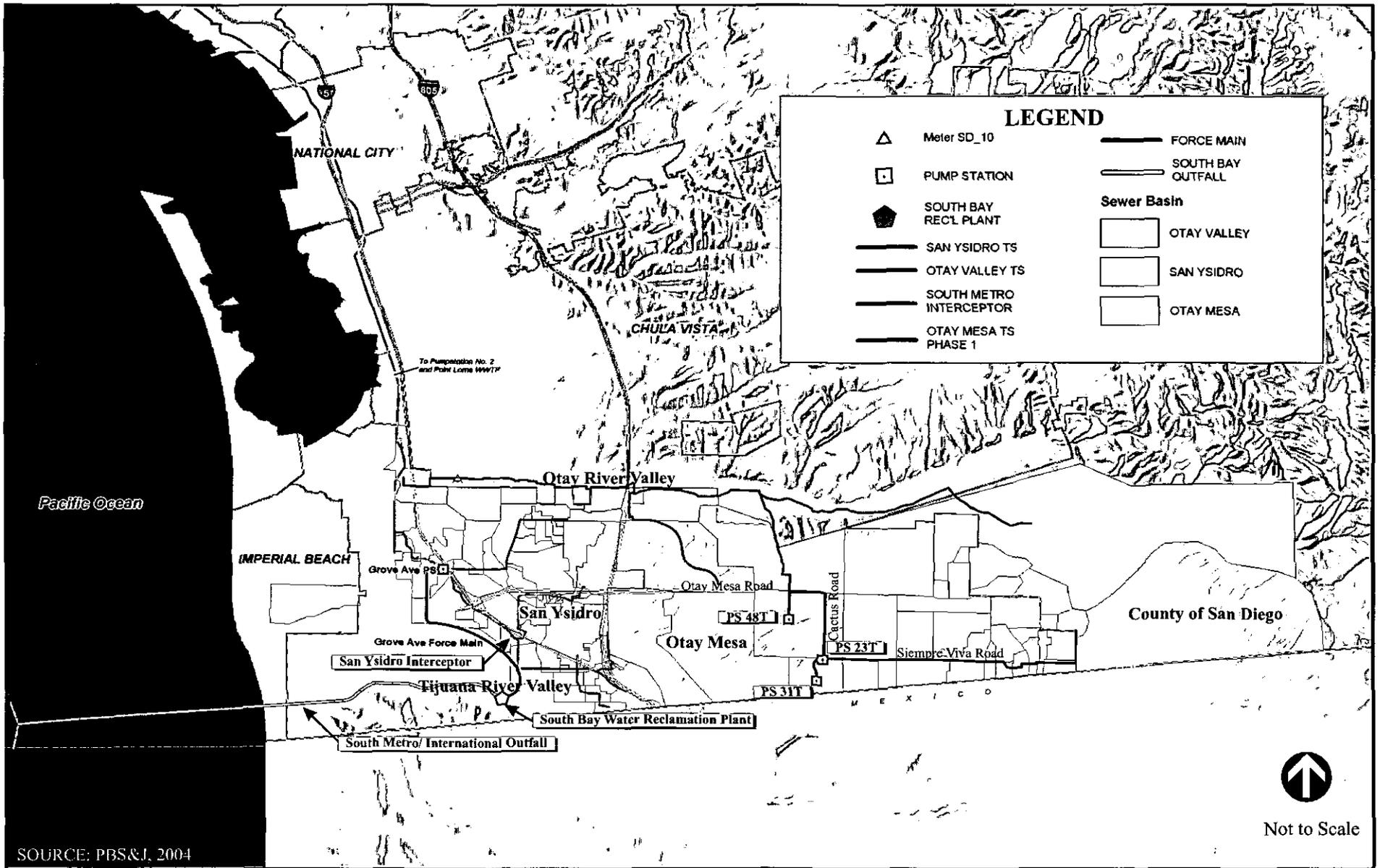
REGIONAL LOCATION MAP

FIGURE 2.1-1



VICINITY MAP OF THE PROJECT AREA

FIGURE 2.1-2



EXISTING SEWER INFRASTRUCTURE AND TEMPORARY PUMP STATIONS

FIGURE 2.1-3

2.2.3 SURROUNDING COMMUNITIES

The Otay Mesa area is bound to the north by the City of Chula Vista and the Otay River Valley, to the east by the County of San Diego, to the south by the International Border and Tijuana, Mexico and to the west and southwest by the community of San Ysidro and the Tijuana River Valley, respectively. These surrounding areas are identified on Figure 2.1-3.

The City of Chula Vista is the second largest city in San Diego County and the 21st largest in the state. Located in the south bay, south of downtown San Diego and north of Tijuana, Mexico, the city has more than 165,000 residents. The City of Chula Vista is an urban development with residential neighborhoods and business communities in an area that was once agricultural fields.

The Otay River Valley generally consists of a moderately narrow and well-defined floodplain bounded on both sides by urban development. The valley is currently a mixture of mining and processing activities, riparian scrub and forest, coastal sage scrub, disturbed habitats, several ponds and wetland mitigation areas, areas disturbed by trash dumping, off-road vehicle activities, and tilled land. Portions of this valley are located within the MHPA, which supports a number of sensitive species, while providing an important biological linkage from the Otay Mountains and Lake areas west, to the San Diego Bay. Natural open space in the area is characterized by riparian scrub and forest, riparian corridor, coastal sage scrub, and several ponds and wetland mitigation areas. The area also has a high degree of human-caused disturbance and development.

The County of San Diego encompasses approximately 2.7 million acres located in the southwestern corner of California with 18 incorporated cities and numerous communities. There are approximately 2.8 million residents countywide. County of San Diego lands in the Otay Mesa region are located directly east of the City of San Diego and the City of Chula Vista.

Tijuana, Mexico is located approximately 15 miles south of downtown San Diego along the western tip of the International Border and bordering the Pacific Ocean in a flat arid region of northern Baja California. Tijuana is an industrial community with a population of over 1 million. The economy depends primarily upon its industrial base, commerce, fishing, agriculture, and tourism.

The community of San Ysidro encompasses approximately 1,800 acres located in the most southern part of the City of San Diego and it is fragmented by the trolley system and two freeways, I-5 and I-805. San Ysidro is located at the international border with Mexico and it is the busiest international border crossing in the world. The majority of the area consists of residential communities with some commercial and industrial development. This area also occurs on the alluvial slopes at the base of the western canyons that drain the Otay Mesa area.

The Tijuana River Valley generally consists of a broad floodplain with high natural mesas to the south, bounded on three sides by urban development, and on the west by the Pacific Ocean. The area contains a mixture of agricultural fields, equestrian facilities, rural housing, riparian woodland and disturbed habitats, chaparral and riparian scrub, coastal sage and maritime succulent scrub communities, several ponds and a lake created by sand mining, the riverbed and pilot channel, and areas disturbed by dumping, off-road activities, grading, and flooding.

2.3 REGIONAL PLANNING CONTEXT

This section provides a general overview of the regional and general plans that are applicable to the proposed project and the consistency of the proposed project with those plans. The project site is located within the boundaries of the following regional plans: the San Diego County Congestion Management Program (SANDAG 2002), the San Diego County Regional Air Quality Strategy (APCD 2001), the San Diego Regional Water Quality Control Board Water Quality Control Plan (1994), the City of San Diego Multiple Species Conservation Program Subarea Plan (1997), the Otay Mesa Sewer Master Plan (City 1984), the Brown Field Airport Comprehensive Land Use Plan (SANDAG 1981), the Otay Mesa Community Plan (1981), and the San Ysidro Community Plan (1990). With regard to general plans, the project area is subject to the City of San Diego Progress Guide and General Plan (1991). Each of these plans and the project's consistency with these plans are described briefly in the following sections.

According to the CEQA Guidelines Section 15150 (a), "An EIR may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public. Where all or part of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of the EIR." Therefore, each of the following plans is hereby incorporated into the OMTS EIR by reference.

2.3.1 SAN DIEGO COUNTY CONGESTION MANAGEMENT PROGRAM

The 2002 Update to the San Diego County Congestion Management Program (CMP), adopted by the San Diego Regional Association of Governments (SANDAG) Board of Directors, requires enhanced CEQA review of regional impacts of large-scale projects and establishes operational standards for specific arterials and highways. The proposed project is the implementation of a sewer pipeline and would have a potential for a short-term impact to traffic during construction. However, as discussed in Section 3.0, Project Description, the project includes a construction traffic control plan feature to minimize traffic impacts. Furthermore, construction activities would be phased and conducted at night where necessary. A complete discussion of the construction traffic control plan, phasing and night construction can be found in Subsection 3.3.5, Project Construction.

Implementation of the proposed project may also result in growth-inducing impacts in the Otay Mesa Community, which could result in indirect impacts to project-area roadways and freeways. Potential growth-inducing impacts are discussed in Chapter 6.0, Growth Inducement.

2.3.2 SAN DIEGO COUNTY REGIONAL AIR QUALITY STRATEGY

The 2001 Update of the San Diego County Regional Air Quality Strategy (RAQS), developed by the Air Pollution Control District (APCD), focuses on emission control measures to achieve the emission reductions necessary to meet the state ambient air quality standards. To do this, the RAQS establishes a number of strategies for individual projects and local governments to follow. Many of the RAQS strategies are codified as APCD regulations for stationary emission sources. The RAQS also contains some non-regulatory strategies for land planning including carpooling, parking management measures, and development density and mixes. For the most part, these strategies apply to planning at a regional level and are, therefore, only considered during the development of general plans and the San Diego Regional Transportation Plan. However, some of these strategies can also be applied to individual projects. As discussed in Section 4.6, Air Quality, the proposed project would be in compliance with applicable strategies in the RAQS.

2.3.3 SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) WATER QUALITY CONTROL PLAN

The San Diego RWQCB Water Quality Control Plan (1994), also known as the Basin Plan, is designed to preserve and enhance water quality and protect beneficial uses of all regional waters. The Basin Plan identifies beneficial uses for numerous individual water bodies throughout the San Diego Region, including those in the Otay River and Tijuana River watersheds, which would be affected by the proposed project. The Basin Plan also identifies water quality goals and objectives (or standards) for each beneficial use. The designated beneficial uses of individual water bodies, the water quality standards for those beneficial uses, and the water quality of a water body is then used by the RWQCB to determine if a water body is in exceedence of applicable water quality standards. If such an exceedence exists then the water body is identified by the RWQCB as impaired. An analysis of the proposed project's potential effects on water bodies with regard to impairment and exceedence of water quality standards identified in the Basin Plan are discussed in Section 4.8, Hydrology and Water Quality. As discussed in that section, implementation of mitigation measures would reduce project-related impacts to a level that would not cause or contribute to the impairment of a water body.

2.3.4 CITY OF SAN DIEGO MULTIPLE SPECIES CONSERVATION PROGRAM (MSCP) SUBAREA PLAN

The MSCP (1998) is a comprehensive habitat conservation planning program for southern San Diego County. Consistent with the MSCP, the City developed a Subarea Plan (1997) specific to those portions of the MSCP within the City limits. The Subarea Plan identifies specific areas within the City that should be preserved to assure that habitat sufficient in quality and quantity remains in the City to support the numerous species encompassed by the Plan. The areas to be preserved are identified as the Multi-Habitat Planning Area (MHPA). The proposed project alignment is located adjacent to the MHPA boundary and does not encroach into any portion of the MHPA as designated in the MSCP Subarea Plan. However, the project would have biological impacts outside of the MHPA and would be required to conform to the MSCP Land Use Adjacency Guidelines. A complete discussion can be found in Section 4.7, Biological Resources.

2.3.5 CITY OF SAN DIEGO PROGRESS GUIDE AND GENERAL PLAN

The project area is subject to the City's Progress Guide and General Plan (1989), referred to simply as the General Plan. For the most part, the General Plan provides regional goals and policies that are more relevant to the development of City community plans than in guiding specific development proposals. Appropriately, the General Plan includes a series of community plans that define the General Plan goals for individual communities providing more project-specific guidance for development in San Diego. The proposed project is located within the planning area of the Otay Mesa Community Plan and San Ysidro Community Plan. The community plans goals are described in detail and analyzed with regard to the proposed project in Section 4.1, Land Use.

2.3.6 1984 OTAY MESA SEWER MASTER PLAN

As discussed in greater detail in Section 1.3.1 of this EIR, the Otay Mesa Sewer Master Plan (City 1984) was the first sewer planning document prepared for the Otay Mesa region. The Master Plan identified three phases for implementing new sewer infrastructure in the Otay Mesa area. Phase I of the Master Plan was

implemented in to supply the Otay International Center (OIC). The 1984 Master Plan has since been updated with the 2003 OMTS Master Plan Update and Alignment Study (City 2003).

2.3.7 BROWN FIELD AIRPORT COMPREHENSIVE LAND USE PLAN (CLUP)

The Brown Field Airport CLUP (SANDAG 1981) addresses the impact on land uses within the City of San Diego resulting from aircraft operations at Brown Field. The format of the plan permits the reader to determine if a particular property is impacted by aircraft-produced noise or flight activity, what the land use or construction implications are, and what mitigation measures must be used to permit development that is compatible with airport operations. Portions of the proposed pipeline alignment would be located within the Brown Field Airport Influence Area, which represents the boundary of the State of California's Airport Land Use Commission (ALUC) planning and review authority for Brown Field. The Brown Field Airport Influence Area includes 60, 65 and 70 community noise equivalent level (CNEL) noise contours. Portions of the proposed pipeline alignment would be located within the 60 and 65 CNEL noise contours. Because pipelines are not noise-sensitive land uses, they are allowed uses within the 60 and 65 CNEL noise contours.

2.3.8 OTAY MESA COMMUNITY PLAN

The portion of the project alignment located within the boundaries of the community of Otay Mesa would be subject to the 1981 Otay Mesa Community Plan. This is the existing land use plan for the Otay Mesa area. The Community Plan identifies four planning elements and nine overall goals. The 1981 Otay Mesa Community Plan is currently undergoing a comprehensive update including modifications to the various elements of the plan to reflect land use and circulation changes. The major revisions to the plan focus on redesignating land uses within six neighborhoods throughout the community planning area.

2.3.9 SAN YSIDRO COMMUNITY PLAN

The portion of the project alignment located within the boundaries of the community of San Ysidro would be subject to San Ysidro Community Plan (1990). This plan identifies nine planning elements, which include Residential, Commercial, the International Gateway, Industrial, Parks/Recreation/Open Space, Urban Form, Transportation and Circulation, Community Facilities and Services, and Cultural and Historic Resources. The proposed project is a public linear utility project, which is covered in the Community Facilities and Services Element.

CHAPTER 3.0

PROJECT DESCRIPTION

This chapter addresses the following information:

1. Project Location
2. Project Objectives
3. Description of Project Features (Project Phasing and Construction)
4. Discretionary Actions and Responsible and Trustee Agencies

3.1 PROJECT LOCATION

The proposed OMTS project would be located in the southernmost portion of the City of San Diego in the communities of Otay Mesa and San Ysidro. The proposed pipeline alignment would extend from Siempre Viva Road in east Otay Mesa to a connection with the San Ysidro Interceptor Sewer in the community of San Ysidro to the west. The pipelines would be located under existing and future roadway rights-of-way (ROW). For the purposes of this project, ROW is defined as the roadway alignment footprint and consists only of the paved portion of the roadway alignments. Figure 3.1-1 identifies the location of the proposed project alignment. One new pump station would be constructed at the southwest corner of Cactus and Siempre Viva Roads, adjacent to the existing temporary pump station at this location. Additional new pump stations may be constructed in currently undeveloped areas of Otay Mesa; however, the exact location of these stations has not been determined. Future development in the west mesa would dictate the need for and location of these pump stations and the associated force mains and collection system piping.

The proposed project would have a service area that includes the Otay Mesa Sewer Basin. This basin area is generally bound by the San Ysidro Sewer Basin to the west, the Otay Valley Sewer Basin to the north and the U.S./Mexico international border to the south. Included in the Otay Mesa Sewer Basin are the community of Otay Mesa and a portion of the unincorporated area of the County of San Diego to the east. The proposed project's service area is delineated in Figure 2.1-3, Chapter 2.0, of this EIR.

3.2 PROJECT OBJECTIVES

Project objectives include:

1. Extension of the existing OMTS system to accommodate future flows in the Otay Mesa area and to provide greater capacity to convey wastewater.

2. Provide sewer service to the currently underdeveloped western portion of Otay Mesa, including new developments along Old Otay Mesa Road.
3. Upgrade of the eastern portion of the Otay Mesa sewer system to accommodate future build-out flows.
4. Upgrade the capacity of existing temporary Pump Station 23T from 2 million gallons per day (MGD) to 4 MGD.
5. In response to growth, construct a new phased pump station to serve the east mesa area with a maximum expansion capacity of 35 MGD, which would replace existing temporary Pump Station 23T.
6. Provide upgraded and new sewer service pipelines in the Otay Mesa area within existing right-of-way (ROW) in order to minimize environmental impacts.
7. Provide upgraded and new sewer service in Otay Mesa over a phased implementation timeline in which facilities are built, as they are needed and in coordination with other major projects in the area.
8. Direct the majority of all sewer flows from the Otay Mesa area to the San Ysidro Interceptor Sewer via the OMTS sewer and minimize or eliminate flows to the Otay Valley Trunk Sewer.

3.3 DESCRIPTION OF PROPOSED PROJECT

The proposed project is the implementation of Phases 2 and 3 of the 2004 OMTS Master Plan Update and Alignment Study, which outlines a strategy for the provision of sewer infrastructure to serve the future build out of the Otay Mesa region. As discussed in Chapter 1.0, Introduction, Phase 1 of the OMTS Master Plan was completed with the construction of the Otay International Center (OIC). Implementation of Phases 2 and 3 of the proposed project would include the construction and/or expansion of the following types of sewer infrastructure:

- Sewer Pipelines (gravity and force mains) and manholes
- Sewer Pump stations
- Diversion structure
- Transition structure

The need for the proposed project is largely based upon future sewer demand in the Otay Mesa area. Therefore, the project would be constructed in phases, so that the new sewer facilities would be built only when the actual sewer flows reach designated thresholds that trigger construction of the next phase. The construction of the project phases is anticipated to be sequential, although a few phases could be constructed concurrently, depending on the rate of development in the project service area. The discussion of the proposed project is provided in Section 3.3.1, Project Phasing, and Section 3.3.2, Project Construction.

3.3.1 PROJECT PHASING

Phase 2 of the OMTS Master Plan Update and Alignment Study has been divided into sub phases 2A1, 2A2, 2B1, 2B2, 2B3, 2C, 2D, 2E, and 2F. As discussed in Chapter 1.0, Introduction, Phases 2A1, 2A2 and Phase 2B1 are currently being constructed concurrent with the Princess Park Sewer project, which is addressed in the California Terraces Off-Site Sewer Connection Addendum (California Terraces EIR Addendum), December 18, 2003. However, to provide a comprehensive analysis of the entire project, these phases are included as part of this EIR. Figure 3.3-1 shows the construction phasing for the proposed OMTS project.



LEGEND

-  Pumped
-  Gravity
-  Area of Future Sewer Facilities
- Existing Sewer Mains**
-  Gravity
-  Force Main
-  Manhole
-  Rivers
-  Railroad
-  Parcels
-  Municipal Boundary
- Pump Stations**
-  Existing
-  Proposed
-  SR 905
-  Assumed Developable Areas
-  Lakes

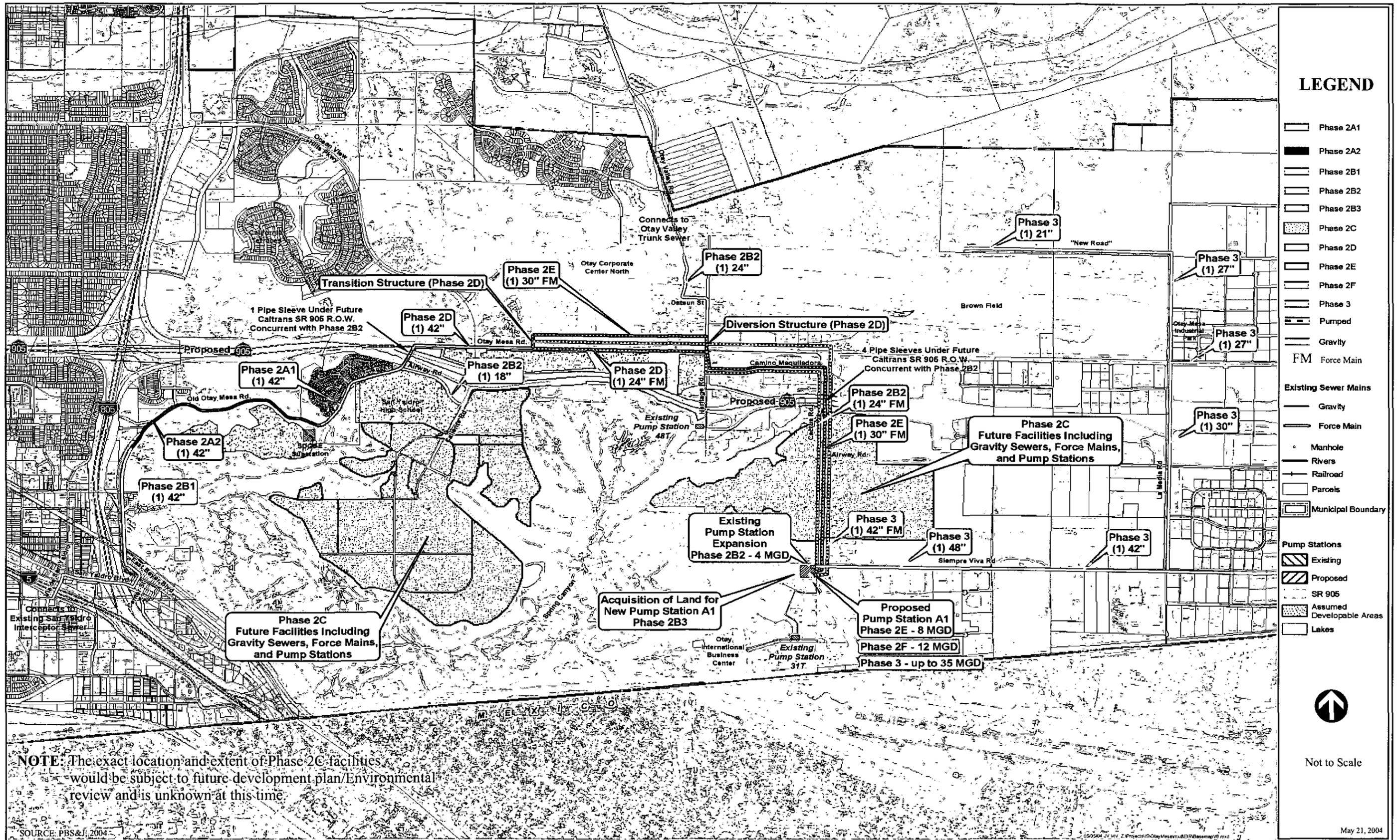


Not to Scale

May 21, 2004

LOCATION OF PROPOSED OMTS PROJECT

FIGURE 3.1-1



CONSTRUCTION PHASING FOR THE PROPOSED PROJECT

FIGURE 3.3-1

The project features that would occur during each phase of project construction are described in the following sections. Figures are also provided which identify the improvements to be completed during each phase of construction.

3.3.1.1 PHASE 2A1

PIPELINE INSTALLATION UNDER OLD OTAY MESA ROAD. Phase 2A1 includes the construction of approximately 2,500 feet (0.47 mile) of 42-inch gravity sewer pipeline under a stretch of Old Otay Mesa Road near the proposed Princess Park residential subdivision in order to provide sewer service to the Princess Park development and San Ysidro High School. The sewer pipeline begins at a location near the intersection of Old Otay Mesa Road/Airway Road and extends in a southwesterly direction under Old Otay Mesa Road to the southwestern corner of the Princess Park subdivision. No sewer connection is currently located at the northern or southern termination points of this sewer pipeline segment. As previously discussed, this phase was addressed in the California Terraces EIR Addendum and has recently been constructed as part of the Princess Park Sewer Project. Figure 3.3-2 shows the proposed improvements for Phases 2A1 and 2A2.

MANHOLE CONSTRUCTION (APPLICABLE TO ALL PHASES OF CONSTRUCTION INVOLVING PIPELINE INSTALLATION). Manholes would be located approximately every 800 feet along straight portions of the sewer pipeline alignment, consistent with the City's requirements. Along curving roadways, such as Old Otay Mesa Road, a manhole would be located at the end of each pipeline segment, resulting in manholes located closer together than 800 feet. The majority of manholes would have a 36-inch manhole cover and a seven-foot-wide inside diameter. A few manholes would be larger in size, and would have two 36-inch manhole covers and an eight-foot-wide inside diameter. The depth of the manhole would be dependent upon the depth of the pipeline in the area. Each manhole would have a ¾-inch crushed rock base. The bottom of the manhole would be constructed of poured concrete with an epoxy additive for a harder surface to reduce scour. The riser section would be constructed of pre-cast concrete rings with a PVC T-lock liner to protect the manhole walls. A fiberglass grate would be provided for access and safety provisions. A typical manhole cross-section is provided in Figure 3.3-3.

A few manholes at key locations would be equipped with a level monitoring system that would monitor the flow height inside the manhole. A small pipe would be secured to the inside of the manhole and a pressure gage would be located inside it, extending down into the bottom of the manhole. A high-pressure differential would signal a high-level flow alarm, which would be connected to the City's existing flow monitoring system.

3.3.1.2 PHASE 2A2

PIPELINE INSTALLATION UNDER OLD OTAY MESA ROAD. Phase 2A2 involves the extension of the 42-inch gravity sewer implemented in Phase 2A1 by approximately 5,200 feet (0.98 mile) to connect to the existing 10-inch gravity sewer pipeline located further south under Old Otay Mesa Road. The existing 10-inch sewer pipeline currently serves the Remington Hills residential development, San Ysidro Middle School, and East Beyer Elementary School, all located along Old Otay Mesa Road. Phase 2A2 improvements include construction of the 42-inch gravity sewer under Old Otay Mesa Road beginning at the southwestern corner of the Princess Park subdivision and ending at the connection with the existing 10-inch sewer line located just north of the San Ysidro Middle School entrance. As previously discussed, this phase was addressed in the California Terraces EIR Addendum and is currently under construction as part of the Princess Park Sewer Project. Proposed improvements associated with Phase 2A2 are shown in Figure 3.3-2.

3.3.1.3 PHASE 2B1

PIPE INSTALLATION FROM THE SOUTHWEST ENDPOINT OF PHASE 2A2 TO THE SAN YSIDRO INTERCEPTOR SEWER. Phase 2B1 would construct a 42- to 48-inch gravity sewer line beneath Old Otay Mesa Road, East Beyer Boulevard, Center Street, East and West San Ysidro Boulevard and Via de San Ysidro Boulevard. The existing 10-inch line located along this portion of the proposed alignment would be relocated to install the 42-inch line, but would remain as a collector sewer. This segment of the proposed project would begin at the southerly terminus of Phase 2A2 under Old Otay Mesa Road and continue for approximately 1,300 feet (0.25 mile) to the end of Old Otay Mesa Road at its intersection with East Beyer Boulevard. From this intersection the sewer pipeline alignment would continue southward for 2,000 (0.38 mile) feet under East Beyer Boulevard, which passes under the San Diego Trolley rail line, to its intersection with Center Street. The gravity line would then turn south for approximately 500 feet (0.09 miles) under Center Street to the intersection of Center Street and San Ysidro Boulevard. At this point, the pipeline would be located under San Ysidro Boulevard for approximately 1,500 feet (0.28 mile) passing under I-805. At the intersection of San Ysidro Boulevard and Via de San Ysidro, the gravity sewer pipe would turn south for approximately 600 feet (0.21 mile) under Via de San Ysidro, pass under I-5, and continue southward to a connection with the existing San Ysidro Interceptor sewer line. As previously discussed, this phase was addressed in the California Terraces EIR Addendum. Figure 3.3-4 shows the proposed improvements for Phases 2B1, 2B2, and 2B3.

3.3.1.4 PHASE 2B2

Phase 2B2 would involve several components that are physically separated from one another within the proposed project area. These components include the construction of an 18-inch gravity sewer line under Airway Road from Old Otay Mesa Road to Caliente Road to serve San Ysidro High School, the construction of a redundant 24-inch force main from temporary Pump Station 23T to the intersection of Heritage and Otay Mesa Roads, and the upsizing of a gravity line under a portion of Heritage Road, Datsun Street and Otay Valley Road. Phase 2B2 would also include the expansion of the flow capacity at Pump Station 23T from 2 MGD to 4 MGD. See Figure 3.3-4 for an illustration of Phase 2B2 components. A more detailed discussion of the Phase 2B2 facilities is provided below.

PIPE INSTALLATION UNDER AIRWAY ROAD FROM OLD OTAY MESA ROAD TO CALIENTE ROAD. Phase 2B1 would involve the construction of an 18-inch sewer pipeline under Airway Road for approximately 1,400 feet (0.27 mile), extending from its intersection with Old Otay Mesa Road on the west to the intersection with Caliente Road on the east. The new 18-inch pipeline would connect to the 42-inch sewer pipeline constructed under Old Otay Mesa Road as part of Phase 2A1. Together, these two sewer pipelines would serve San Ysidro High School, located to the south of Airway Road, and future development areas to the south of Airway Road.

PIPE INSTALLATION UNDER HERITAGE ROAD, DATSUN STREET AND OTAY VALLEY ROAD. Phase 2B would involve the upsizing of approximately 3,650 feet (0.69 mile) of existing 18-inch Otay Valley Trunk Sewer, located under Heritage Road to the north of Otay Mesa Road, to a 24-inch pipe. The new pipe would be located under Heritage Road from Otay Mesa Road to Datsun Street, west under Datsun Street to Otay Valley Road, and north under Otay Valley Road to a connection located approximately 950 feet north of the intersection of Datsun Street and Otay Valley Road.

PIPE INSTALLATION UNDER CACTUS ROAD, CAMINO MAQUILADORA AND HERITAGE ROAD. Phase 2B improvements would also include the installation of approximately 8,400 feet (1.59 miles) of a 24-inch redundant force main from Pump Station 23T, located at the southwest intersection of Cactus and Siempre Viva Roads, to the intersection of Heritage Road and Otay Mesa Road. The 24-inch force main would

convey wastewater north under Cactus Road for approximately 5,200 feet (0.98 mile) to the intersection of Camino Maquiladora. At this point, the flows would continue to the west under Camino Maquiladora for approximately 2,700 feet (0.51 mile) to the intersection with Heritage Road. Flows would then continue north under Heritage Road for approximately 500 feet (0.09 mile) to the intersection of Heritage and Otay Mesa Roads. The redundant 24-inch force main, along with the existing 16-inch force main located in Cactus Road, would convey all Phase 2B east mesa flows to the intersection of Heritage and Otay Mesa Roads. Until Phase 2D is completed, these flows would continue north in the improved 24-inch Otay Valley Trunk Sewer.

EXPANSION OF PUMP STATION 23T. Pump Station 23T is an existing temporary pump station located at 1190 Cactus Road and presently serves the eastern service area of the Otay Mesa Sewer Basin. This pump station was designed as a temporary facility to convey wastewater flows of up to 4 MGD and sized to pump to the Otay Valley Trunk Sewer. Currently, the pump station contains the necessary pumps, piping and electrical gear to convey 2 MGD. As part of Phase 2B2, Pump Station 23T would be expanded from 2 MGD to its build-out design of 4 MGD. This would be accomplished through the addition of two new 100 horsepower (hp) pumps, piping and electrical switchgear to increase the flow capacity to 4 MGD, but would not require an expansion of the existing wet well or the existing pump station footprint. A new aboveground electrical building would be constructed to house the control panels for the upgraded pump station within the existing pump station footprint. Figure 3.3-5 provides a site plan for the expansion of Pump Station 23T to 4 MGD and Figure 3.3-6 shows a cross-section of the upgraded pump station.

3.3.1.5 PHASE 2B3

Phase 2B3 would involve the acquisition of land by the City of San Diego on which to construct new Pump Station A1, as well as the preliminary engineering for the design of this 8 MGD pump station. Phase 2B3 involves the acquisition of land and preliminary engineering for Pump Station A1 only; the construction of this pump station would occur in Phase 2E (see Section 3.3.1.8 below). Once constructed, Pump Station A1 would replace Pump Station 23T.

The preferred site of new Pump Station A1 is located directly south of and adjacent to existing Pump Station 23T. This site, identified on Figure 3.3-4, is currently privately-owned. The pad elevation of the preferred site is approximately 470 feet above mean sea level (AMSL).

3.3.1.6 PHASE 2C

Phase 2C would provide sewer service to currently undeveloped areas of Otay Mesa located to the south of Caliente Road on the west mesa and to the east and west of Cactus Road on the east mesa. According to the Draft Otay Mesa Community Plan Update (2004), these areas are planned to be developed with residential land uses. Backbone gravity collection pipelines, redundant force mains and pump stations are anticipated to be constructed as part of this phase. Pipelines would be located under future roadways; however, the exact locations of the proposed Phase 2C facilities cannot be determined until the future residential development plans are approved. Phase 2C facilities would be constructed for the sole purpose of providing sewer service to the future residential development areas on the west and east mesas. If future residential development does not occur in these areas, then Phase 2C would not be implemented. Because the locations of the Phase 2C pipelines and pump stations are unknown at this time, the environmental effects of these facilities cannot be specifically and comprehensively addressed in this EIR. Therefore, Phase 2C is considered to be a subsequent activity of the Program EIR and would require subsequent environmental review once the locations of these facilities are determined [CEQA Guidelines Section 15168(c)(1)]. It is anticipated that the environmental review for the future residential development projects would include the Phase 2C sewer facilities as a project component. Therefore, it would be the responsibility of the future developer(s) to mitigate for any significant impacts resulting from the construction and operation of the Phase 2C facilities in

accordance with the City's CEQA requirements. Figure 3.3-7 identifies the future development areas in which the Phase 2C improvements would be located.

3.3.1.7 PHASE 2D

Phase 2D would involve the construction of a new sewer flow diversion structure within the intersection ROW of Otay Mesa and Heritage Roads and a new sewer flow transition structure located under Otay Mesa Road. This phase would also include the installation of a 24-inch force main under Otay Mesa Road between the diversion structure and the transition structure and the installation of a new 42-inch gravity pipeline from the transition structure to the intersection of Otay Mesa Road/Old Otay Mesa Road and then south under SR-905 (currently Old Otay Mesa Road) to the Old Otay Mesa Road/Airway Road intersection. Figure 3.3-8 identifies the proposed improvements for Phase 2D.

It should be noted that Phase 2D would only be built once sewer flows at the upgraded Pump Station 23T reach 3.5 to 4 MGD. Otherwise, flows would continue to be pumped north to the Otay Valley Trunk Sewer.

Phase 2D would also be dependent upon Caltrans' completion of the SR-905 Project, until which time, construction within Otay Mesa Road is restricted. Once SR-905 is completed, it would provide an alternative transportation route in the Otay Mesa area and would off-load the majority of vehicle trips from Otay Mesa Road. However, if development in the east Otay Mesa area occurs faster than projected, or if the construction of SR-905 is significantly delayed, then construction of Phase 2D may have to proceed before the construction of SR-905 is completed.

INSTALLATION OF A DIVERSION STRUCTURE WITHIN THE INTERSECTION ROW OF OTAY MESA AND HERITAGE ROADS. A diversion structure would be constructed as part of Phase 2D that would be able to divert wastewater flows to the west under Otay Mesa Road to the OMTS via a 24-inch sewer pipeline or to the north under Heritage Road to the Otay Valley Trunk Sewer. Future phases of the project would install additional upsized sewer lines that would connect to the diversion structure. A conceptual drawing of the Otay Mesa Road and Heritage Road intersection, showing the diversion structure and its connections to the existing and proposed sewer pipelines is provided as Figure 3.3-9. As noted on this figure, the diversion structure would be located within intersection ROW, however, the precise location of the diversion structure within the intersection (i.e., northwest corner, southwest corner, etc.) would be determined once the locations of all existing linear utilities within the intersection have been identified and mapped.

Figure 3.3-10 provides a plan view of the diversion structure and Figure 3.3-11 provides a cross-section view of the diversion structure. As shown in these figures, the 24-inch force main installed in Phase 2D would connect to the diversion structure. Two additional pipelines (30-inch and 42-inch) would be installed in subsequent phases of the proposed project and would also connect to the diversion structure. Plug valves and flow meters at the diversion structure, which would allow sewage flows to be pumped north to the Otay Valley Trunk Sewer when the plug valves are open, would regulate the flow in the three force mains. When the plug valves at the diversion structure are closed, the sewage would be pumped to the west to the Otay Mesa Trunk Sewer.

The existing available capacity of the Otay Valley Trunk Sewer to the north would continue to be used in order to defer further improvements to the City/Metro transmission lines. While the goal of the proposed project is to eventually direct flows to the OMTS, during the first five to ten years of the project, the primary operation of the diversion structure would be the conveyance of flows through an improved 24-inch gravity pipe to the Otay Valley Trunk Sewer.

INSTALLATION OF THE TRANSITION STRUCTURE UNDER OTAY MESA ROAD. A new transition structure would be constructed under Otay Mesa Road, approximately 4,000 feet (0.76 mile) west of the Heritage Road intersection. The transition structure would be constructed at the location where the pipeline alignment would transition from force main to gravity line. The conceptual design of the transition structure is provided in Figure 3.3-12, which shows a plan view and cross-section view of the transition structure. As shown in this figure, the 24-inch force main constructed in Phase 2D, along with two additional force mains (30-inch and 42-inch) constructed in subsequent phases of the proposed project, would connect to the eastern side of the transition structure. The flow from the three force mains would be combined within the transition structure and would continue to flow west under Otay Mesa Road via the new 42-inch gravity line connected to the western side of the diversion structure.

PIPE INSTALLATION UNDER OTAY MESA ROAD. A 24-inch force main would be constructed under Otay Mesa Road starting at the diversion structure and proceeding west for approximately 4,000 feet (0.76 mile). At approximately 4,000 feet (0.76 mile) west of Heritage Road, the force main would enter the transition structure, where it would transition to a 42-inch gravity line that would continue west for approximately 2,700 feet (0.51 mile) to the intersection with Old Otay Mesa Road. The 42-inch gravity line would then turn in a southwesterly direction under SR-905 (currently Old Otay Mesa Road) for approximately 700 feet to the intersection of Old Otay Mesa Road/Airway Road. At this intersection, the 42-inch gravity sewer would connect to the 42-inch gravity line implemented as part of Phase 2A1. This would provide a continuous sewer connection within the OMTS system between Pump Station 23T and the San Ysidro Interceptor Sewer. The proposed pipeline installation under Otay Mesa Road is illustrated in Figure 3.3-8.

3.3.1.8 PHASE 2E

Phase 2E would involve the construction of Pump Station A1 to serve the east mesa area, with an initial capacity of 8 MGD. This phase would only be constructed once flows in the east mesa reach 3.5 to 4 MGD, which is the capacity of the expanded Pump Station 23T. This phase would also include the installation of a 30-inch force from Pump Station A1 north under Cactus Road, west under Camino Maquiladora, and north under Heritage Road to the intersection of Otay Mesa Road and Heritage Road, and west along Otay Mesa Road to the transition structure. Figure 3.3-13 shows the proposed Phase 2E improvements.

NEW SEWER PUMP STATION A1. Phase 2E would include the construction of sewer Pump Station A1, with an initial capacity of 8 MGD, at a preferred location at the southwest corner of Cactus Road and Siempre Viva Road (see Figure 3.3-6). Proposed Pump Station A1 would be constructed to permanently replace existing Pump Station 23T as the major pump station in the eastern service area of the OMTS. The proposed new pump station would accommodate sewage flow from within the City of San Diego boundary as well as up to 4 MGD of wastewater flow from the County of San Diego. The City's Metropolitan Wastewater Department (MWWD) would own and operate the proposed pump station. It is anticipated that one person would man the pump station for approximately 40 hours per week.

The design of Pump Station A1 would begin when flows at temporary Pump Station 23T reach 3 MGD, and the construction of Pump Station A1 would begin when flows at Pump Station 23T reach 3.5 MGD. Pump Station A1 would be constructed to initially convey 8 MGD, with space allocated for additional pumps, piping and electrical switchgear to expand the pump station in later phases of the proposed project. The wet well would be constructed sufficiently to expand the pump station later, if needed, up to 35 MGD. This wet well capacity would provide ample operational volume and emergency storage for build out of the Otay Mesa community. Figure 3.3-14 shows a conceptual site plan for the 8 MGD pump station. Conceptual drawings of Floors 1 and 2 for the 8 MGD pump station are shown in Figures 3.3-15 and 3.3-16, respectively. Figure 3.3-17 shows a below-grade cross-section of the 8 MGD pump station.

The pump station building would be divided into multiple levels including a below-grade floor (Floor 1), a mid-level (mezzanine), and a ground level (Floor 2). Floor 1 would be located approximately 40-feet below grade and would include a wet well, maintenance/shop, emergency storage area, and pump room with two 125 horsepower (hp) pumps. The mid-level floor would be located approximately 15-feet below grade and would include a motor room. Floor 2 would be located at-grade and would contain a motor control center (MCC) room, office/control room, restroom, and dedicated SDG&E meter cabinet with separate access. A separate enclosure to the west of the aboveground building would contain one 500-gallon diesel emergency generator. Vehicle access to the pump station would be provided with a proposed concrete driveway. The building's architectural style and materials would be designed to blend with the surrounding community, consistent with the design standards for development within the Otay Mesa Development District, as identified in Section 103.1107(g) of the San Diego Municipal Code (City 2003).

The pump room would initially include a total of two 125 hp pumps, equipped with variable frequency drives (VFDs), to accommodate up to 8 MGD in flows at the pump station. Each of these pumps would be capable of delivering 2,020 gallons per minute (gpm) and would be vertical non-clog sewage pumps with cast iron construction, hardened wear rings and mechanical seals. Flows would be conveyed from the wet well to the 125 hp pumps to the force mains in Cactus Road via 10- and 12- inch pump suction piping. Buried piping would be epoxy-lined and coated ductile iron pipe. Exposed piping would be epoxy-lined and epoxy-painted ductile iron pipe. Cathodic protection design would be provided for the pump station and force main piping. Cathodic protection systems for the pump station piping would include insulating flange kits and corrosion test stations conforming to the City's requirements.

The motor room on the mid-level would be located directly above the pump room on Floor 1. The ceiling of the motor room would be located approximately at-grade.

Ventilation, consisting of exhaust fans, would be provided for the pump station building. Fans would be provided in the pump room, MCC, office/control room, and restrooms. Air ducts would be above-grade and constructed of fiberglass reinforced plastic. Noise attenuation devices, including acoustic louvers and doors would be provided during the final design. Noise emanating from the pump station would not exceed the City's noise ordinance requirements.

A diesel emergency generator would be located on site and equipped with an automatic transfer switches (ATS). The emergency generator would be sufficiently sized to start the pumps, station lighting, programmable logic controller, instrumentation, and telemetry. The ATS would automatically transfer the station to back-up power in the event of a commercial power failure. The emergency generator would also be equipped with sound mufflers and other noise attenuation equipment. The emergency generator would be located to the west of the pump station building in an acoustical weatherproof enclosure provided by the generator manufacturer. The generator would be tested once every week or two weeks for approximately 10 to 15 minutes, consistent with the National Fire Prevention Association's requirements.

One 500-gallon diesel storage tank would be located on site to fuel the diesel motor of the emergency generator. The storage tank would be aboveground and installed in a double-walled containment vessel with leak-detection monitoring devices. At all times, the amount of fuel necessary to operate the emergency generator for 24 hours would be stored on site. The diesel fuel would require recirculation approximately once per year in a process called fuel polishing. The fuel in the storage tank would be run through a filter to remove excess algae that build up over time. The fuel would then be recirculated back into the tank after being polished. In addition to fuel polishing, fuel stabilizer would be added to the fuel to slow the algae growth process.

Upon completion of Pump Station A1, the existing 16-inch and 24-inch force mains and the new 30-inch force main (discussed below) in Cactus Road would be connected to the new pump station for continued service. The gravity pipeline connections and the force main connections from Pump Station 31T would also be reconnected to the new pump station.

REMOVAL OF TEMPORARY PUMP STATION 23T FROM SERVICE. The upgraded (4 MGD) Pump Station 23T would continue to serve the OMTS eastern service area until the construction of permanent Pump Station A1 is finished. Upon the completion and operation of Pump Station A1, temporary Pump Station 23T would be removed from service.

PIPE INSTALLATION UNDER CACTUS ROAD, CAMINO MAQUILADORA, HERITAGE ROAD AND OTAY MESA ROAD. Phase 2E would also include the installation of approximately 8,400 feet (1.59 miles) of 30-inch diameter force main from Pump Station A1 north under Cactus Road, west under Camino Maquiladora, and north under Heritage Road to the intersection of Otay Mesa Road and Heritage Road. The 30-inch force main would be located parallel to the 24-inch pipeline implemented during Phase 2B2. The pipeline would then continue west under Otay Mesa Road to a connection with the transition structure implemented during Phase 2D. The proposed Phase 2E pipeline improvements are illustrated in Figure 3.3-13.

3.3.1.9 PHASE 2F

Phase 2F would involve the upgrade of Pump Station A1 from 8 MGD to 12 MGD, as dictated by demand. Figure 3.3-18 identifies the location of the proposed pump station upgrade.

EXPANSION OF SEWER PUMP STATION A1 TO 12 MGD DESIGN CAPACITY. Phase 2F would include the upgrade and expansion of Pump Station A1, constructed as part of Phase 2E, from 8 MGD to 12 MGD. Design of Phase 2F would be triggered when sewer flows from the east mesa reach 7 MGD and construction of Phase 2F would begin when flows reach 7.5 MGD. Phase 2F improvements would include the installation of additional pumps, electrical switchgear, and piping, as well as a Heating Ventilation Air Conditioning (HVAC) room, an odor control room, a load-out building, a screenings room, and one additional emergency generator enclosure and associated above-ground diesel storage-tank. A conceptual site plan of the proposed 12 MGD pump station is provided in Figure 3.3-19. Conceptual floor plans for Floors 1 and 2 of the proposed 12 MGD pump station are shown in Figures 3.3-20 and 3.3-21, respectively. Figure 3.3-22 shows a southern cross-section of the proposed 12 MGD pump station, including both aboveground and belowground structures.

Five 250 hp pumps would be added to the pump room, for a total of seven pumps. The two 125 hp pumps, installed in Phase 2E would remain. In addition, four 250 hp pumps would be added to provide capacity during peak hour flow and another 250 hp pump would provide full standby capacity to satisfy the City's redundancy requirement, which requires back-up pipes and pumps to protect against sewer failure. Two 250 hp pumps would be provided with VFDs to allow the pump speed to increase or decrease to meet flow conditions, while the other three 250 hp pumps, including the standby pump, would be constant-speed. Each 250 hp pump would be capable of delivering 5,000 gpm. All pumps would be vertical non-clog sewage pumps with cast iron construction, hardened wear rings and mechanical seals.

Flows would be conveyed from the wet well to the 250 hp pumps to the force mains in Cactus Road via 16- and 18-inch pump suction piping. Similar to the 125 hp pumps installed in Phase 2E, buried piping would be epoxy-lined and coated ductile iron pipe. Exposed piping would be epoxy-lined and epoxy-painted ductile iron pipe. Cathodic protection design would be provided for the pump station and force main piping. Cathodic protection systems for the pump station piping would include insulating flange kits and corrosion test stations conforming to the City's requirements.

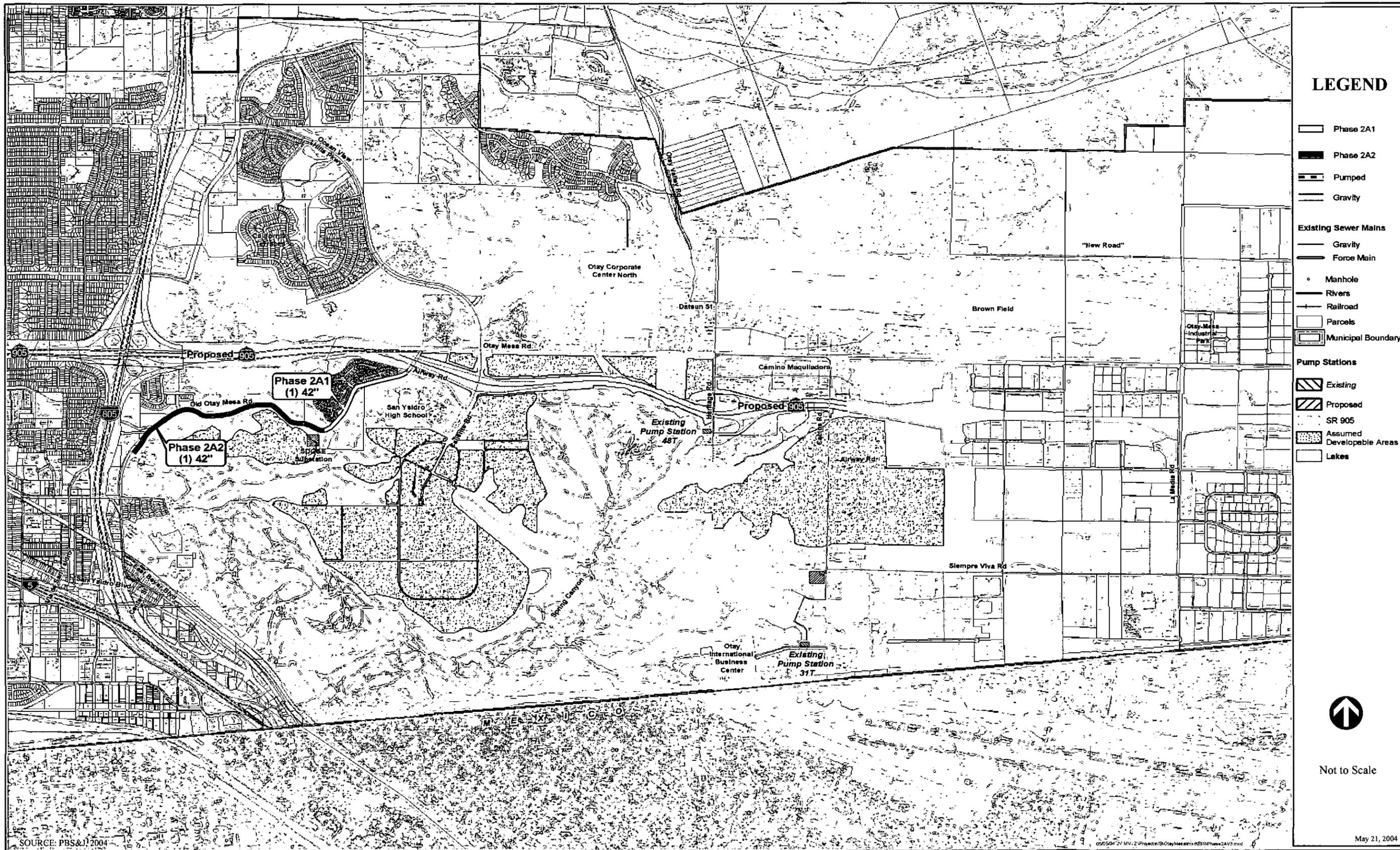
3.3.1.10 PHASE 3

Phase 3 would implement additional sewer facilities to accommodate future flows associated with the densification of all east mesa property to industrial use, which is the greatest wastewater-producing land use allowed in the east mesa. The need for these additional facilities would be reevaluated as development occurs in the Otay Mesa area. If the demand for sewer service in the east mesa does not increase beyond the capacity of the 12 MGD pump station, constructed in Phase 2F, then none of the Phase 3 improvements would be constructed. At this time, it is anticipated that Phase 3 would include improvements to the east mesa collection facilities east of Cactus Road, the phased expansion of Pump Station A1 up to a maximum capacity of 35 MGD, and the construction of a 42-inch force main from Pump Station A1 to the beginning of the 42-inch gravity line in Otay Mesa Road. Figure 3.3-23 illustrates the project components of Phase 3.

PIPE INSTALLATION IN THE EAST MESA. The east mesa improvements are anticipated to include the implementation of a 21-inch gravity pipeline under the unimproved road to the north of Brown Field, a 27-inch gravity pipeline under La Media Road and a small extent of Otay Mesa Road, and a 42- to 48-inch gravity line in Siempre Viva Road. The 42-inch gravity line would also extend east from the intersection of Siempre Viva and La Media Roads for approximately 1,500 feet (0.28 mile). The total gravity pipeline length of the Phase 3 east mesa improvements would be approximately 22,800 feet (4.32 miles). Additional pipeline extensions and/or upgrades may be required, depending upon future development patterns. The Phase 3 pipe installation in the east mesa is shown in Figure 3.3-23.

PIPE INSTALLATION IN THE WEST MESA. Phase 3 is also anticipated to include the construction of a redundant 42-inch force main extending north from Pump Station A1 under Cactus Road and future SR-905 for approximately 5,700 feet (1.08 miles) to Otay Mesa Road. It is anticipated that Caltrans would install a sleeve beneath SR-905 during the construction of this roadway to facilitate the installation of the future 42-inch pipeline. At the Cactus Road/Otay Mesa Road intersection, the force main would extend in a westerly direction below the road for approximately 2,700 feet (0.51 miles) to the diversion structure installed as part of Phase 2D. From the diversion structure, the redundant 42-inch force main would continue in a westerly direction under Otay Mesa Road for approximately 4,000 feet (0.76 mile) to the transition structure, implemented as a part of Phase 2D. At this connection, the construction of the new redundant 42-inch force main would terminate and would be connected, via the transition structure, to the 42-inch gravity sewer line under Otay Mesa Road, implemented as part of Phase 2D. The Phase 3 pipe installation in the west mesa is shown in Figure 3.3-23.

EXPANSION OF SEWER PUMP STATION A1 OF UP TO 35 MGD DESIGN CAPACITY. Pump Station A1 would have the potential to increase capacity up to 35 MGD. The upgrade of this facility beyond 12 MGD is speculative at this time and would be dependent upon future development in the east mesa. It is likely that the expansion of Pump Station A1 beyond 12 MGD would occur in phases, rather than all at once. Any expansion of the pump station would involve the addition and/or upgrade of pumps, piping and electrical switchgear to increase capacity. In addition, the upgrade of the pump station beyond 12 MGD is likely to require the expansion of the MCC room, the HVAC room, and the addition of one or more emergency generators and associated above-ground diesel storage tanks. The load-out building, odor control and screenings room may also require some expansion. A conceptual site plan of the 35 MGD pump station is shown in Figure 3.3-24. Conceptual site plans for Floors 1 and 2 of the 35 MGD pump station are presented in Figures 3.3-25 and 3.3-26, respectively. The southern cross-section of the proposed 35 MGD pump station is shown in Figure 3.3-27.



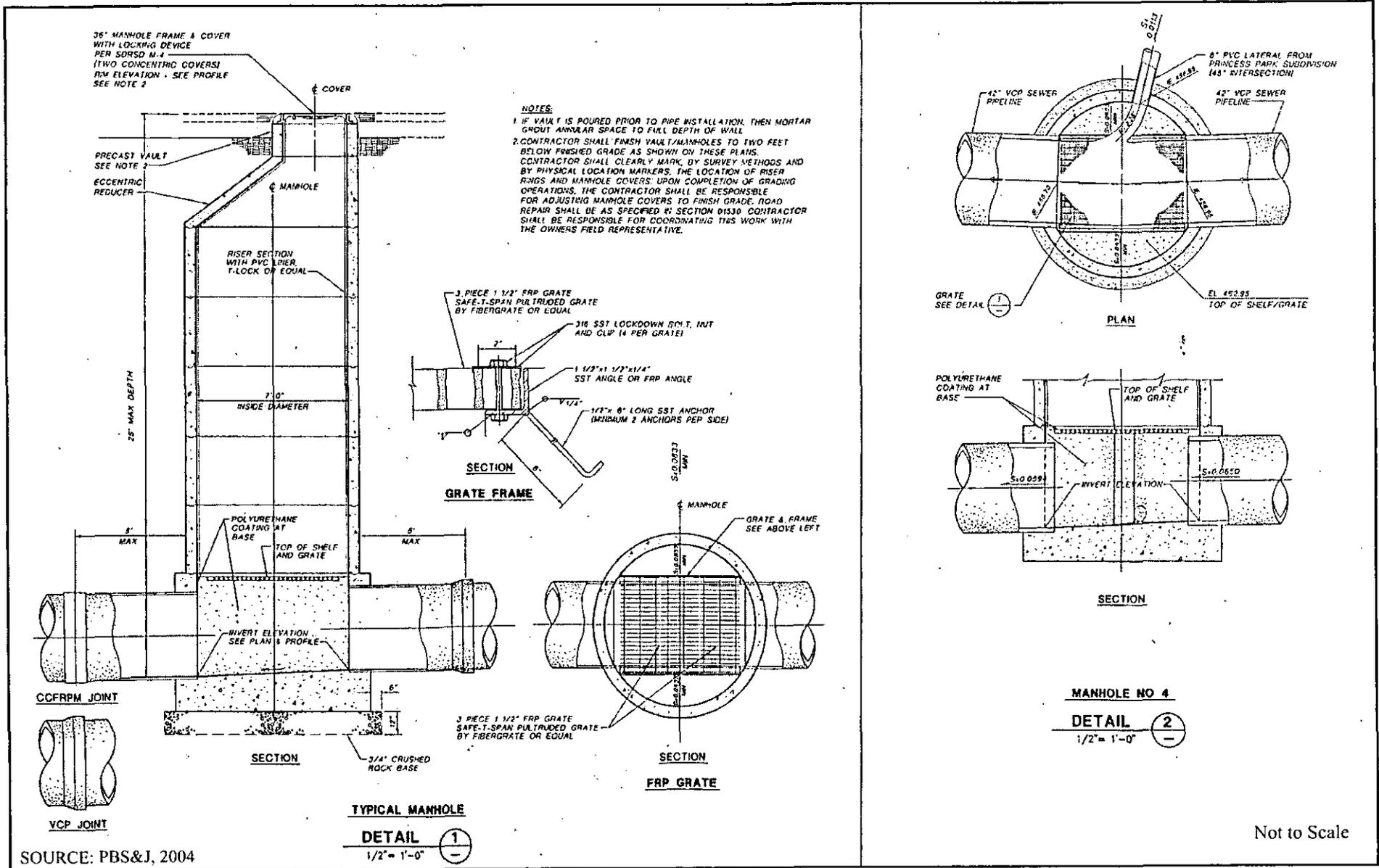
PROPOSED IMPROVEMENTS FOR PHASES 2A1 AND 2A2

FIGURE 3.3-2

SOURCE: PBS&J, 2004

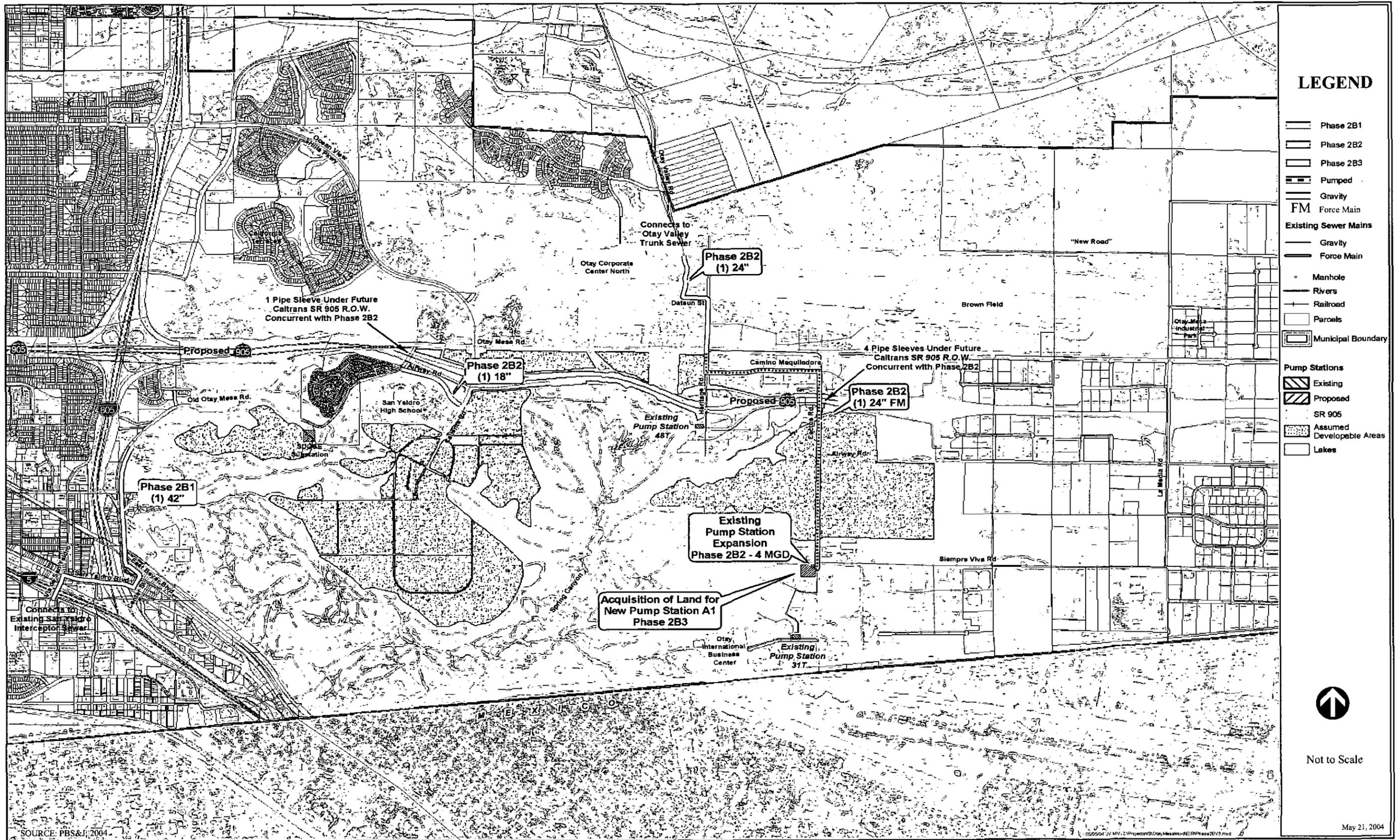
050504 JV.MV.2 \Project\1\Ota Mesa\mxd\BRPhase2AV3.mxd

May 21, 2004



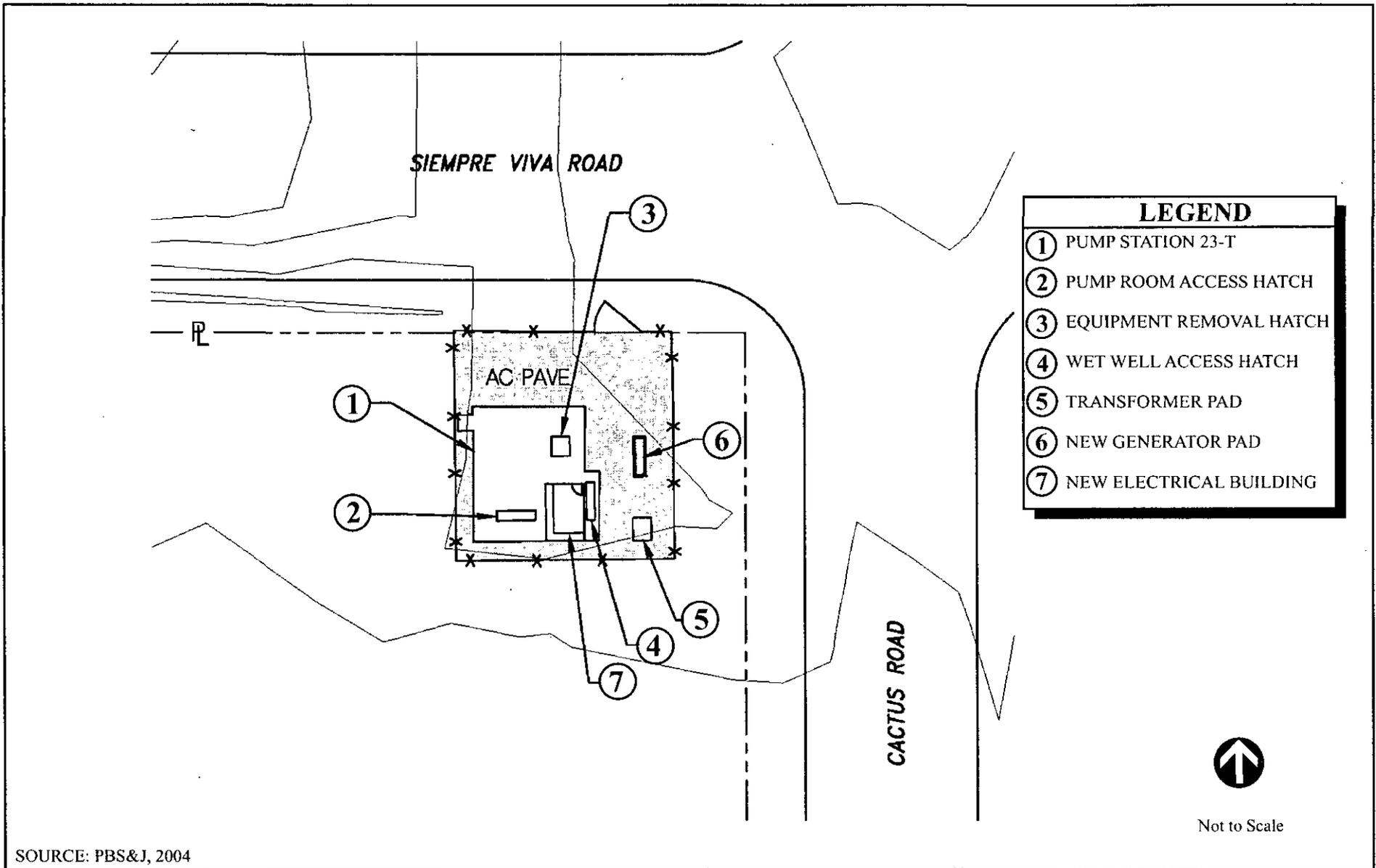
CROSS-SECTION OF TYPICAL MANHOLE

FIGURE 3.3-3



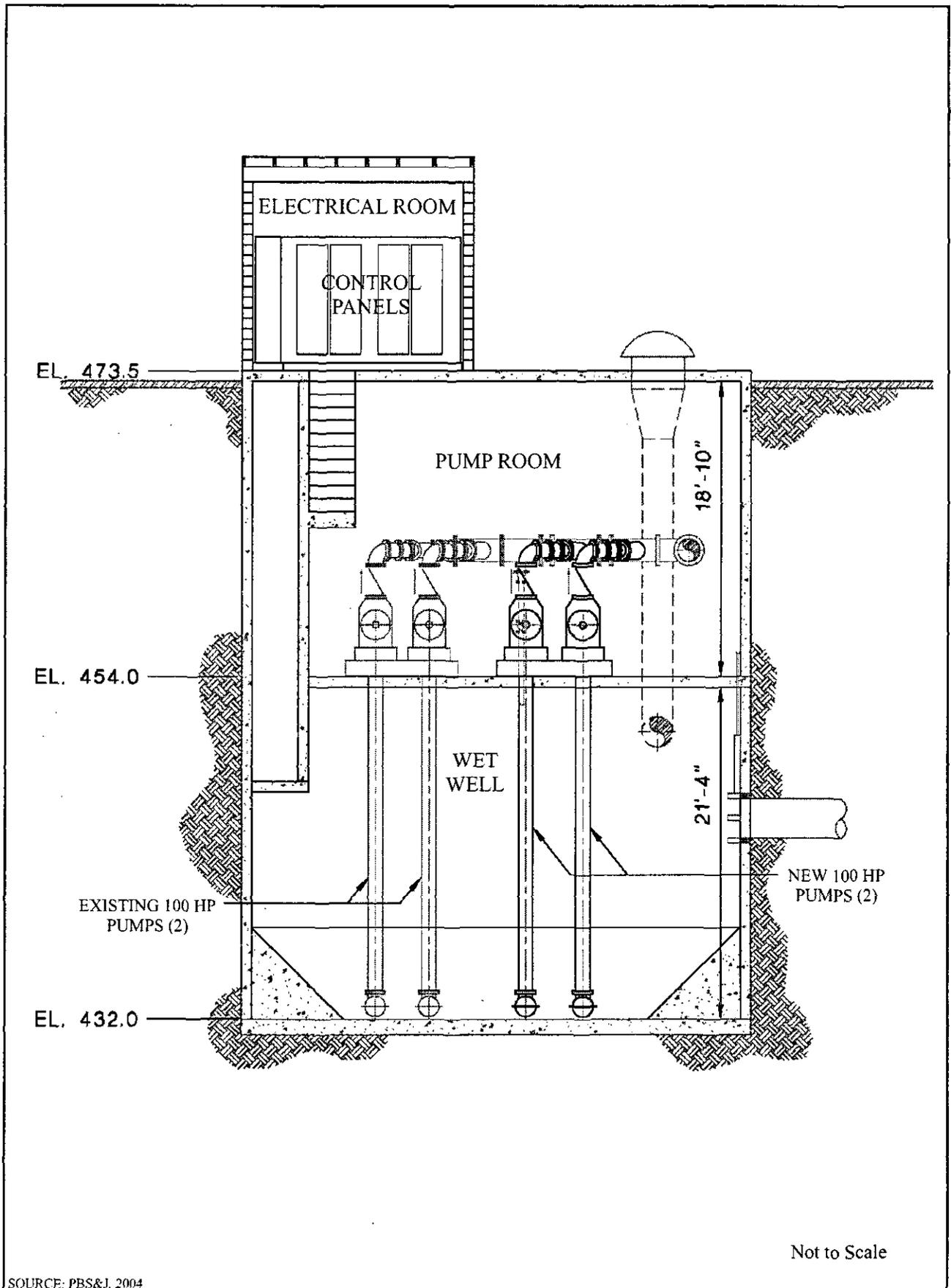
PROPOSED IMPROVEMENTS FOR PHASES 2B1, 2B2 AND 2B3

FIGURE 3.3-4



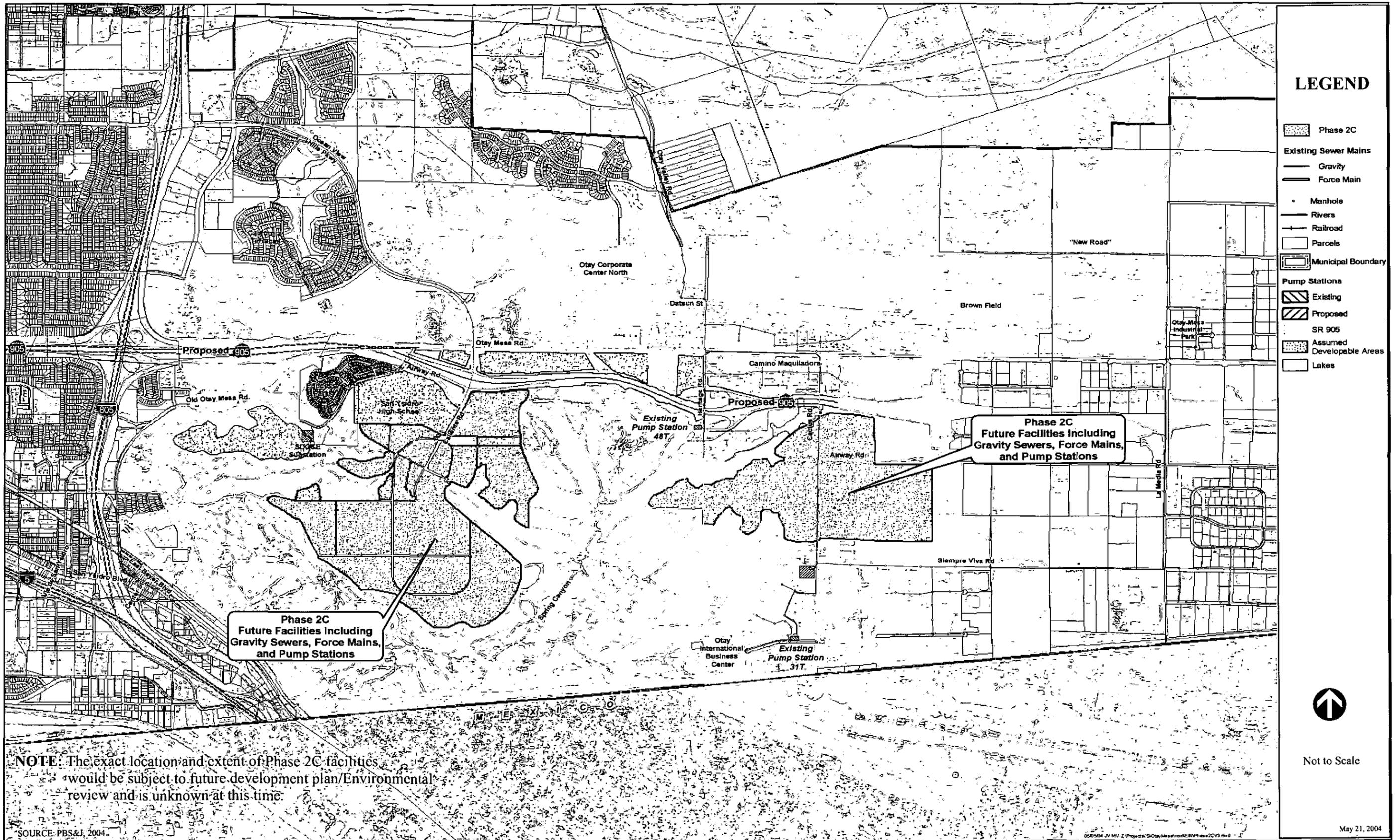
SITE PLAN FOR THE EXPANSION OF TEMPORARY PUMP STATION 23T (PHASE 2B2)

FIGURE 3.3-5



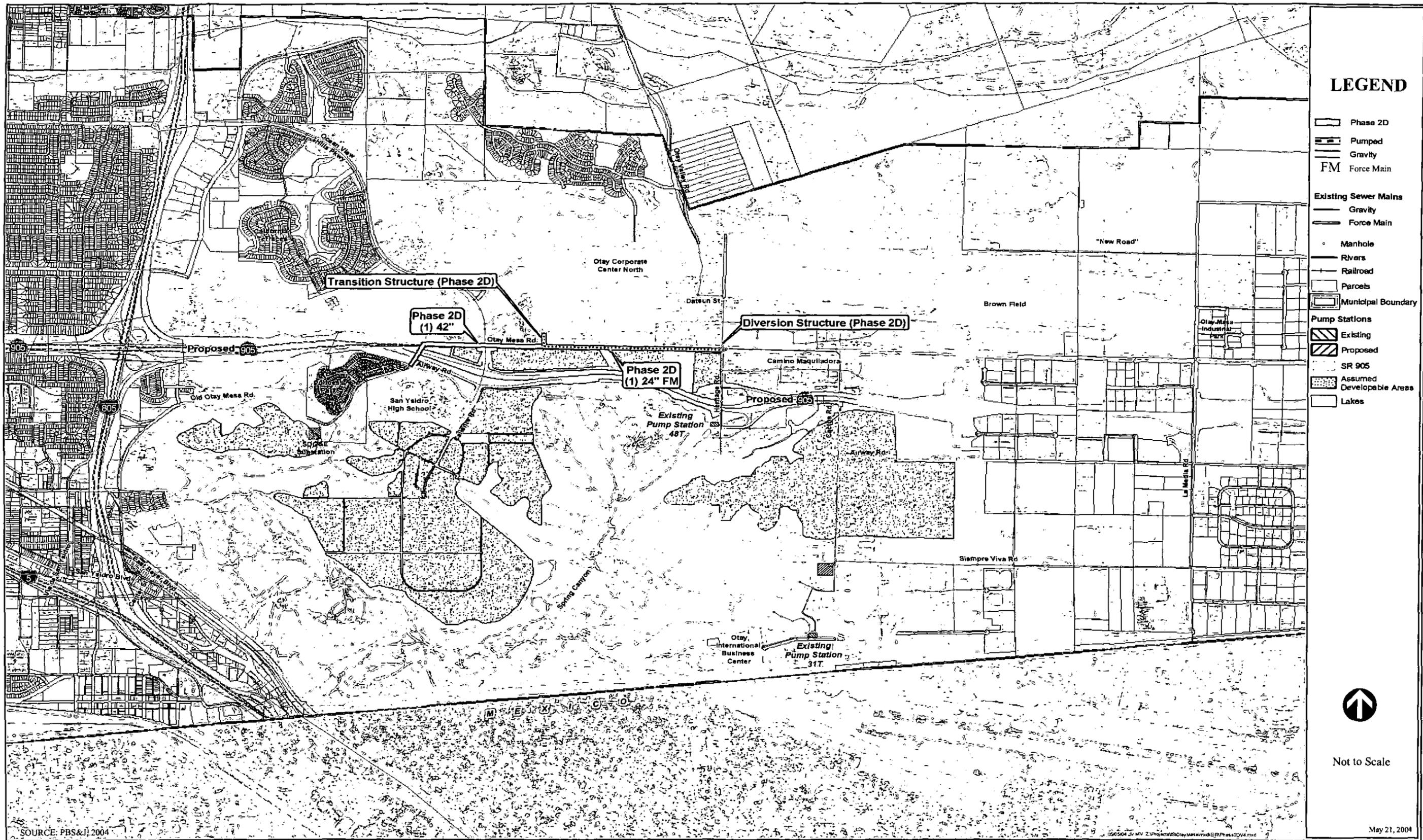
**CROSS-SECTION OF UPGRADED
TEMPORARY PUMP STATION 23T (PHASE 2B2)**

FIGURE 3.3-6



FUTURE DEVELOPMENT AREAS IN WHICH PHASE 2C IMPROVEMENTS WOULD BE LOCATED

FIGURE 3.3-7



LEGEND

- Phase 2D
- Pumped
- Gravity
- Force Main
- Existing Sewer Mains**
- Gravity
- Force Main
- Manhole
- Rivers
- Railroad
- Parcels
- Municipal Boundary
- Pump Stations**
- Existing
- Proposed
- SR 905
- Assumed Developable Area
- Lakes



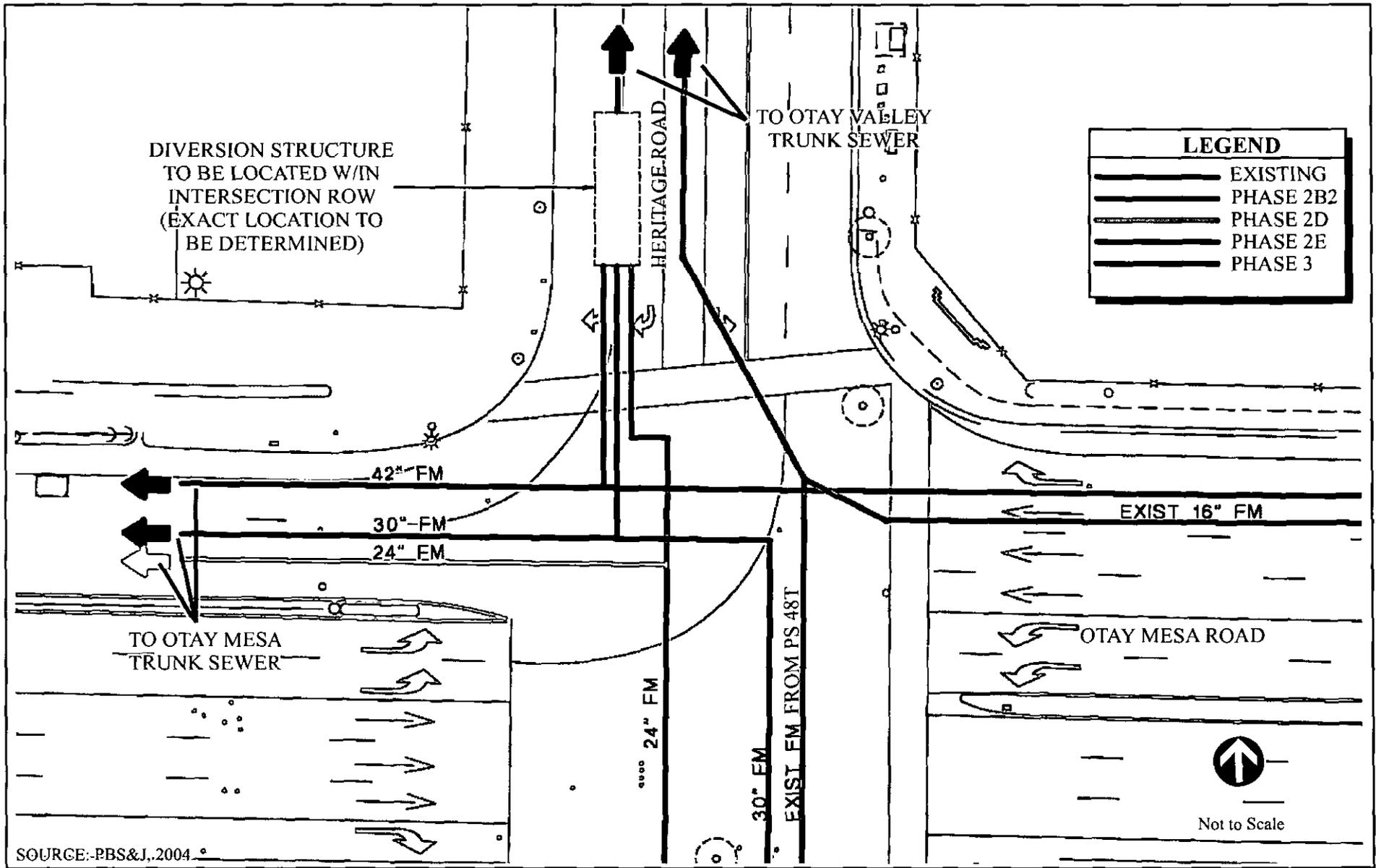
Not to Scale

SOURCE: PBS&J, 2004

May 21, 2004

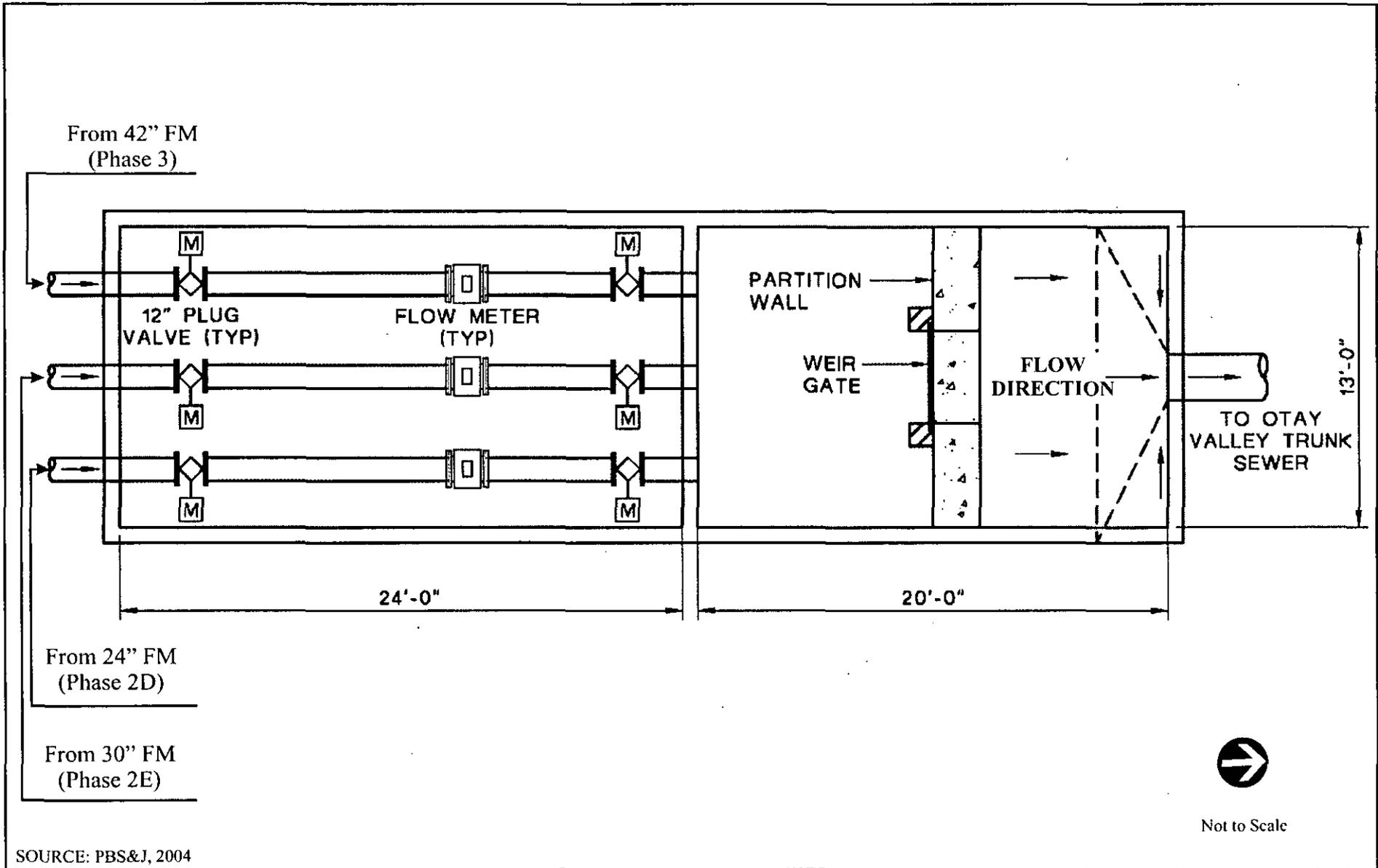
PROPOSED IMPROVEMENTS FOR PHASE 2D

FIGURE 3.3-8



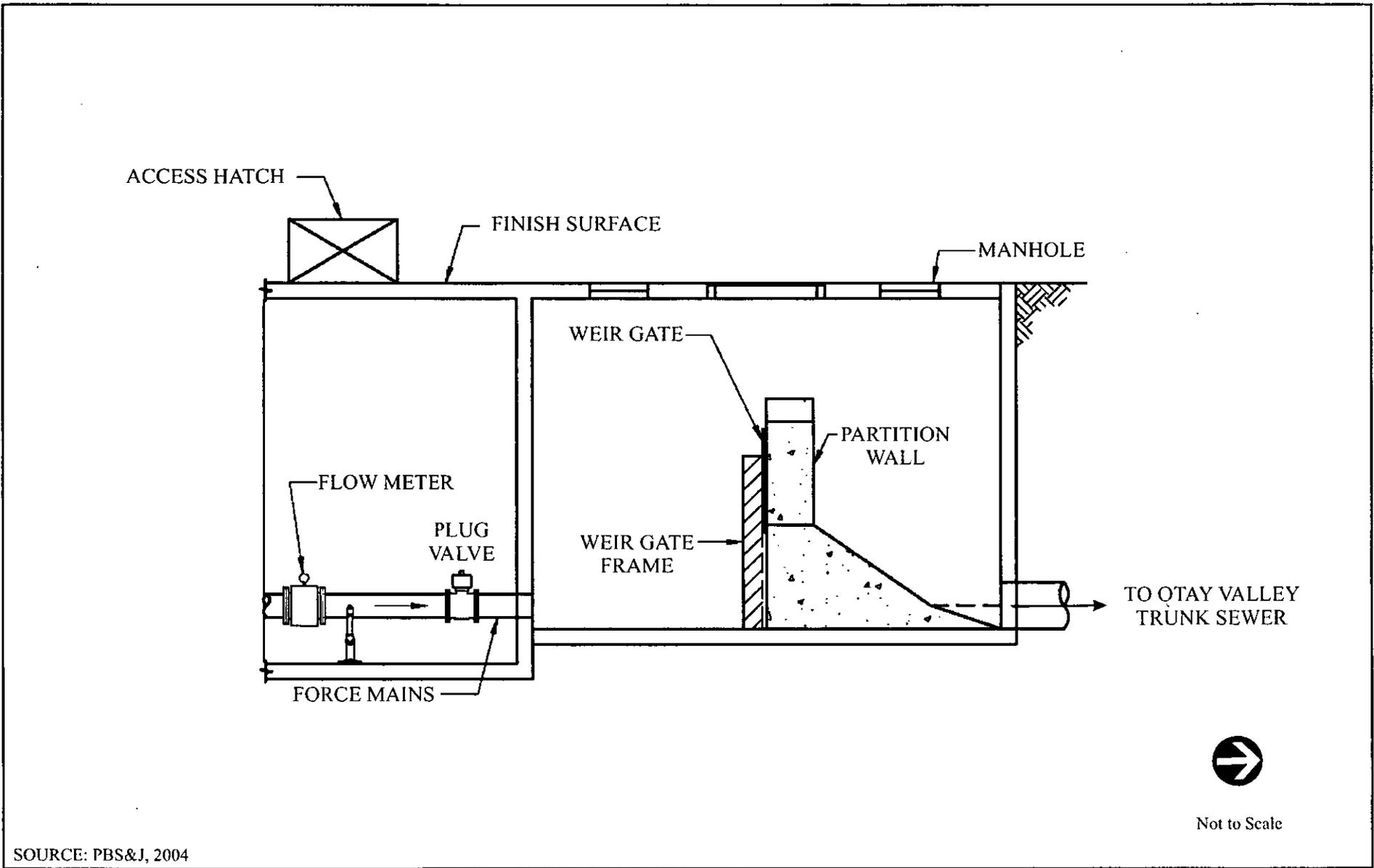
CONCEPTUAL SITE LOCATIONS OF THE DIVERSION STRUCTURE AND PROJECT PIPELINES AT THE OTAY MESA ROAD/HERITAGE ROAD INTERSECTION

FIGURE 3.3-9



CONCEPTUAL PLAN VIEW OF THE PROPOSED DIVERSION STRUCTURE (PHASE 2D)

FIGURE 3.3-10

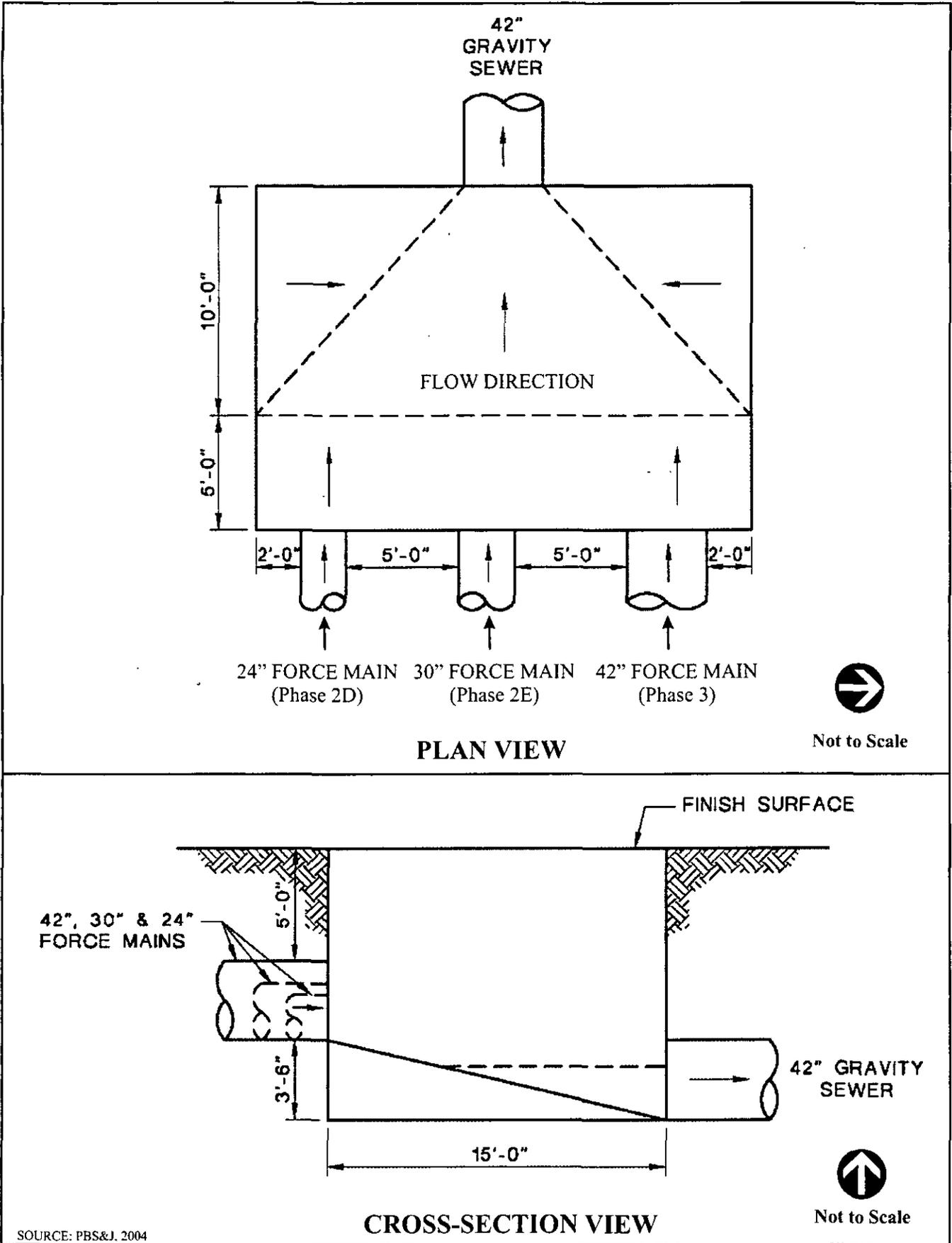


SOURCE: PBS&J, 2004

Not to Scale

CONCEPTUAL CROSS-SECTION OF THE PROPOSED DIVERSION STRUCTURE (PHASE 2D)

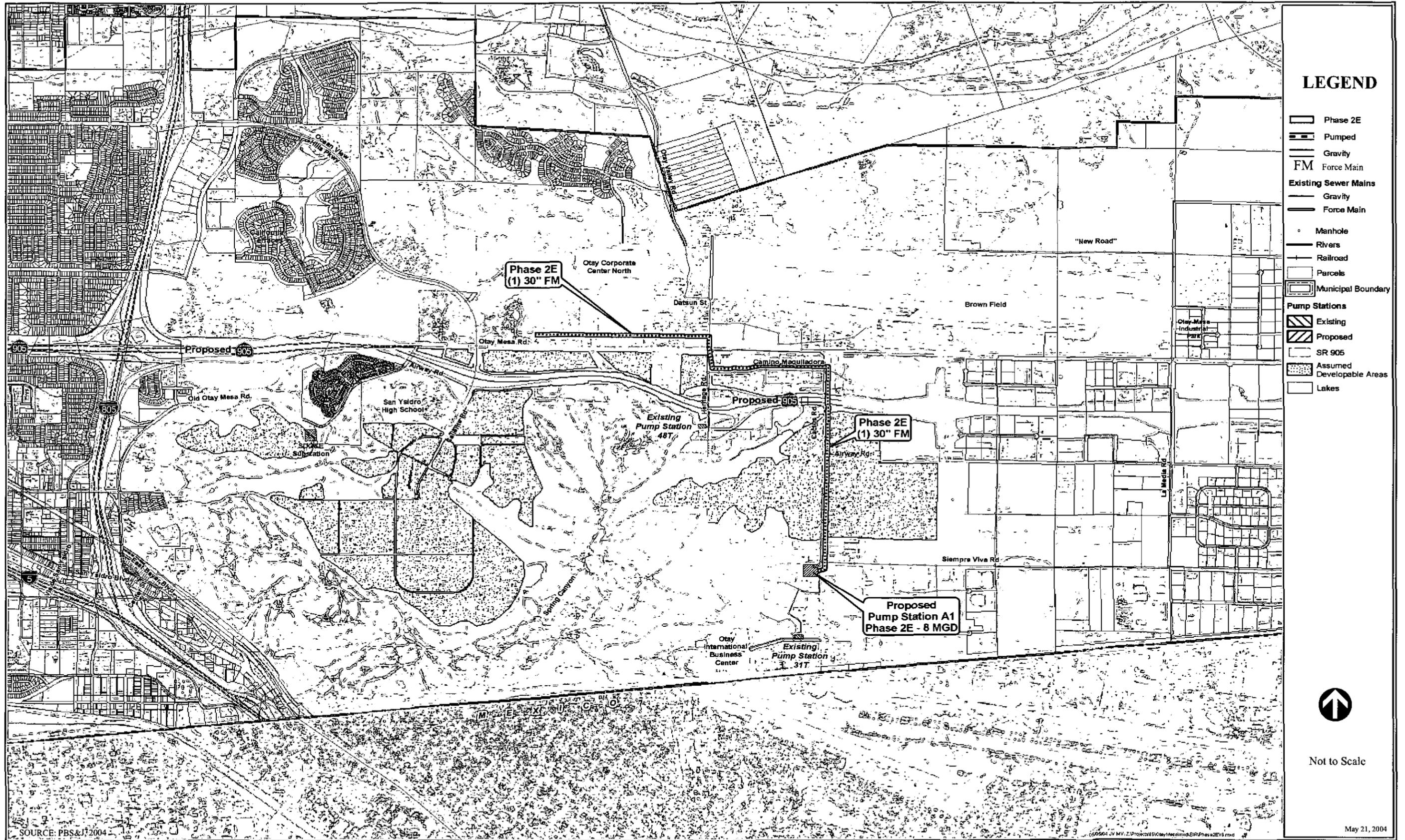
FIGURE 3.3-11



SOURCE: PBS&J. 2004

CONCEPTUAL DESIGN OF THE PROPOSED TRANSITION STRUCTURE (PHASE 2D)

FIGURE 3.3-12



LEGEND

- Phase 2E
- Pumped
- Gravity
- FM Force Main
- Existing Sewer Mains**
- Gravity
- Force Main
- Manhole
- Rivers
- Railroad
- Parcels
- Municipal Boundary
- Pump Stations**
- Existing
- Proposed
- SR 905
- Assumed Developable Areas
- Lakes

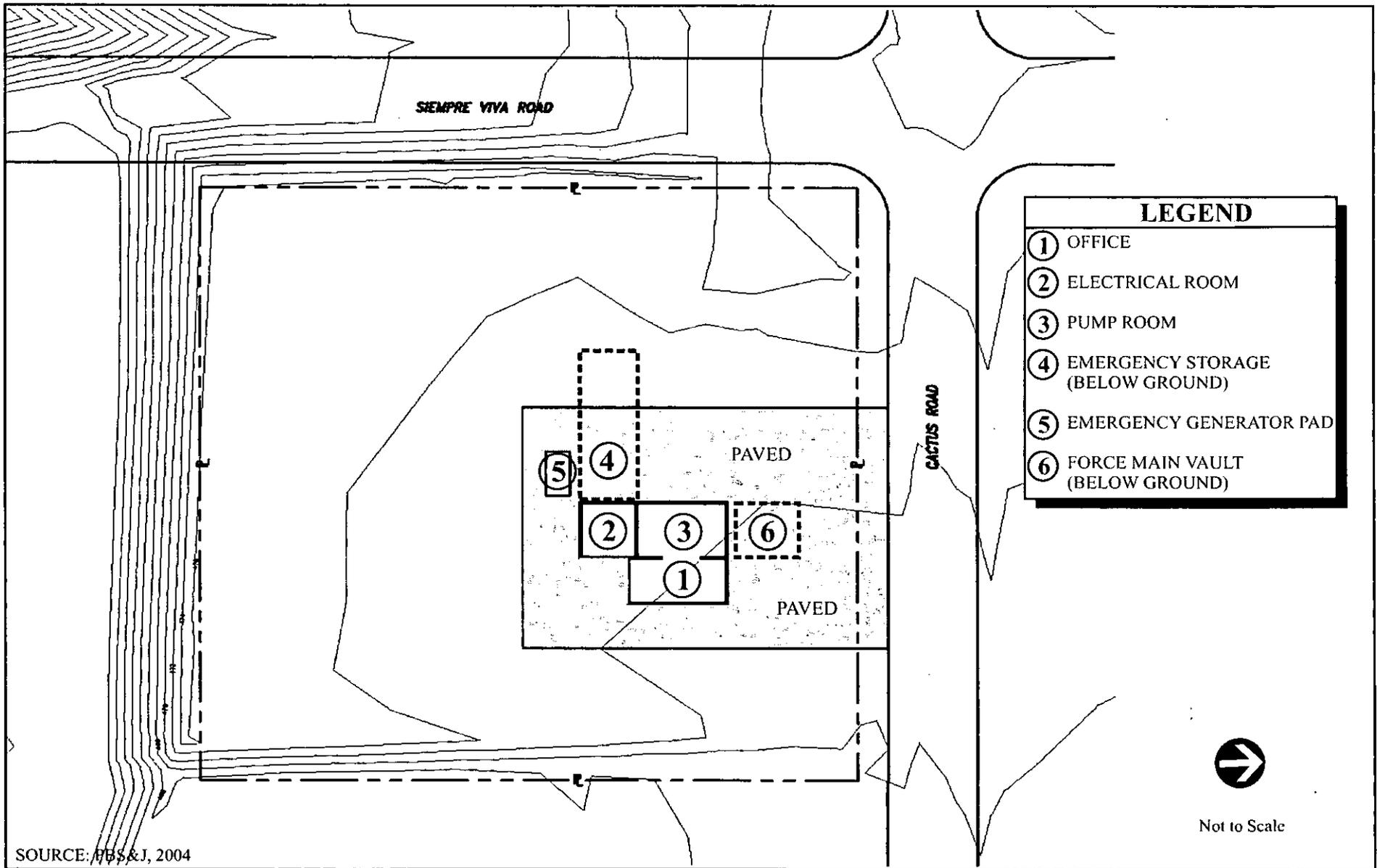


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May 21, 2004

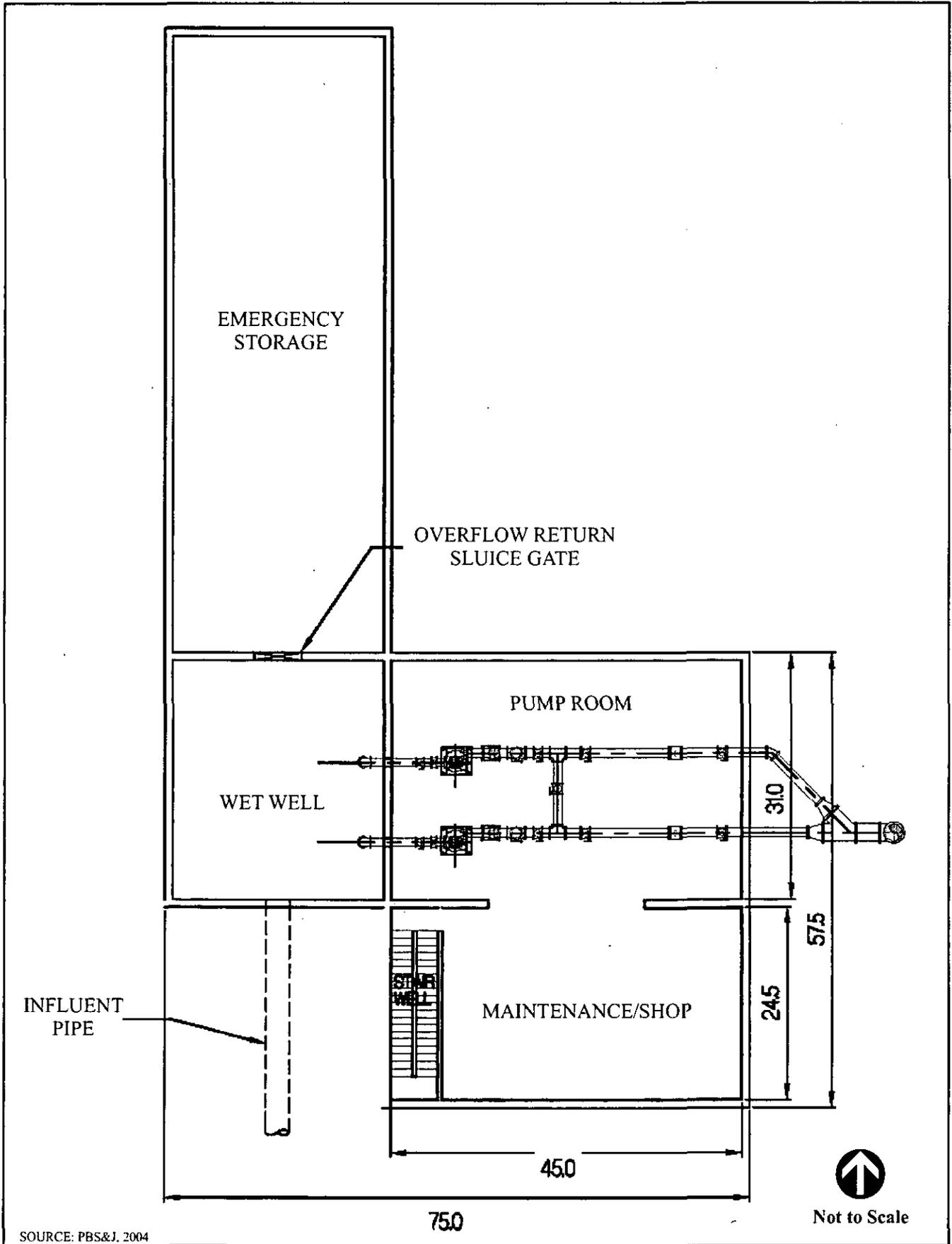
PROPOSED IMPROVEMENTS FOR PHASE 2E

FIGURE 3.3-13



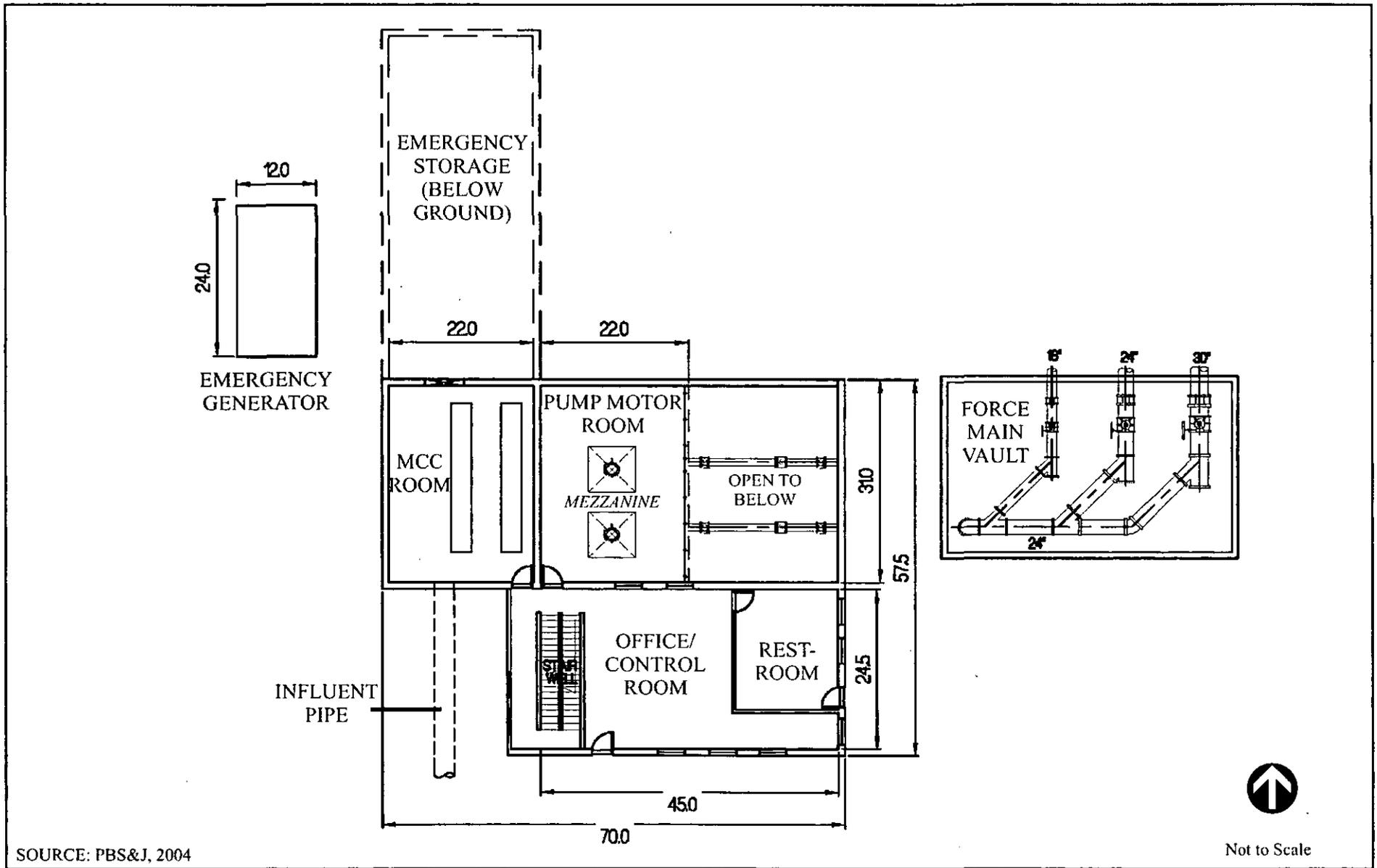
CONCEPTUAL SITE PLAN FOR THE PROPOSED 8 MGD PUMP STATION (PHASE 2E)

FIGURE 3.3-14



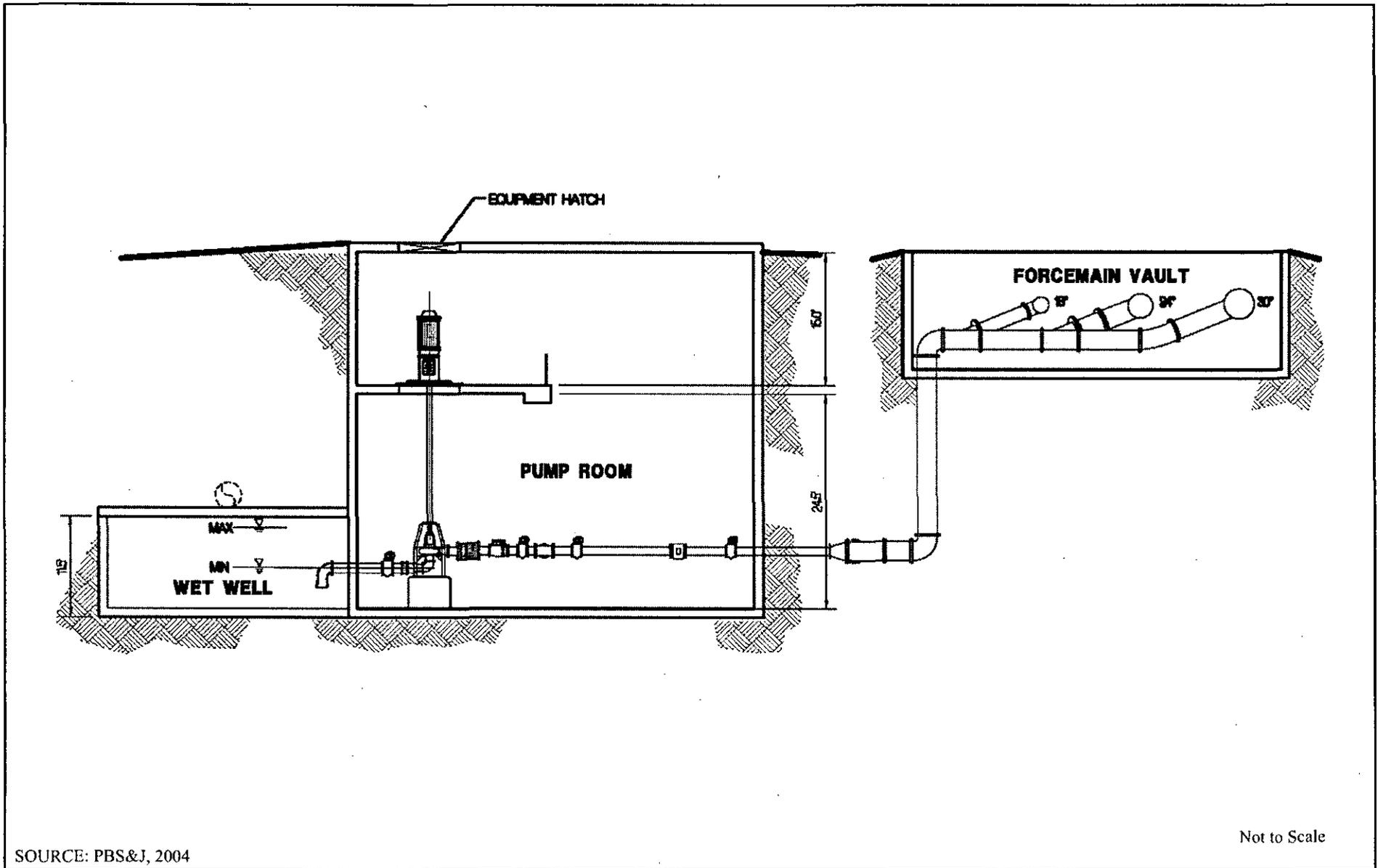
FLOOR 1 CONCEPT PLAN FOR THE PROPOSED 8 MGD PUMP STATION (PHASE 2E)

FIGURE 3.3-15



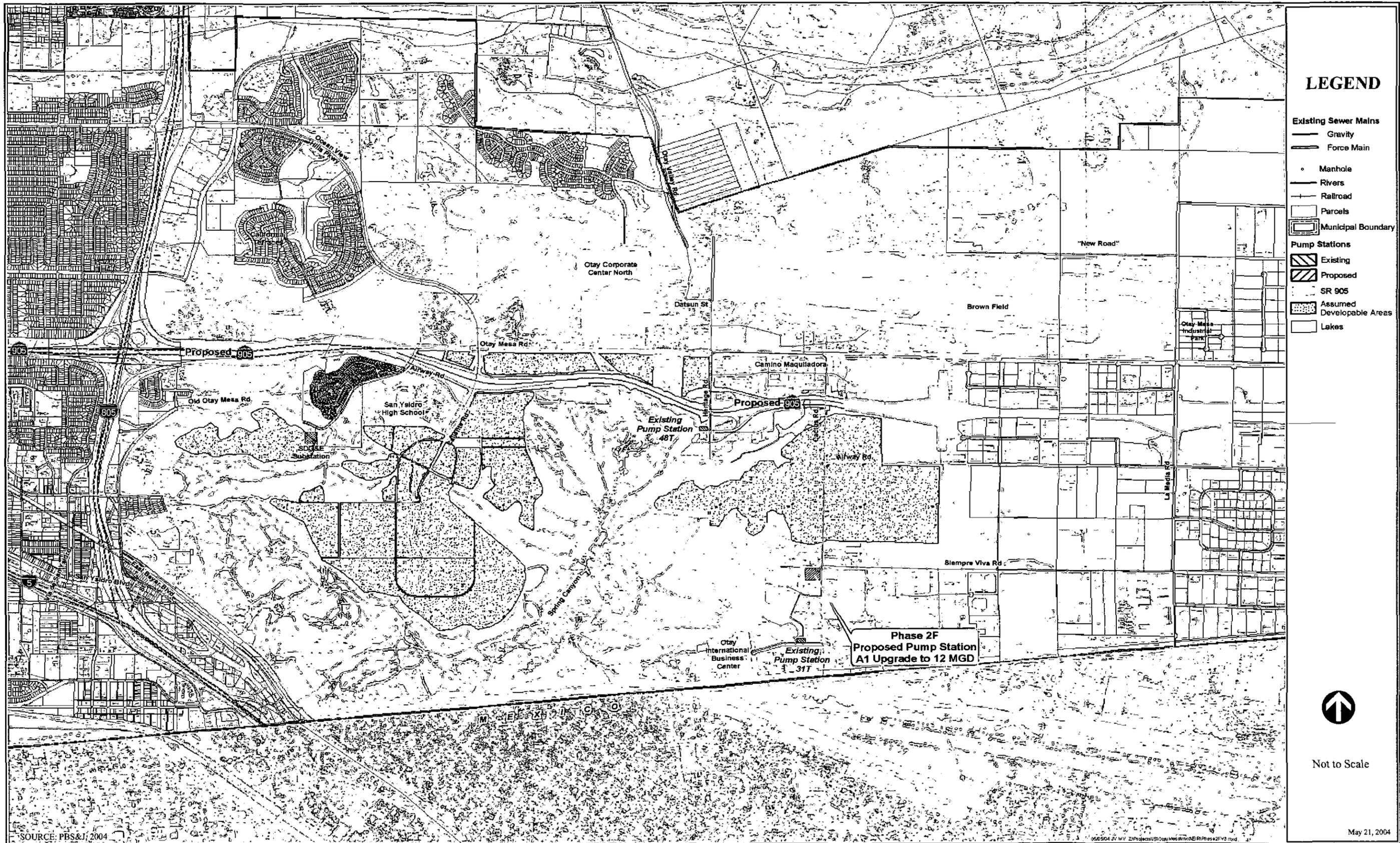
FLOOR 2 CONCEPT PLAN FOR THE PROPOSED 8 MGD PUMP STATION (PHASE 2E)

FIGURE 3.3-16



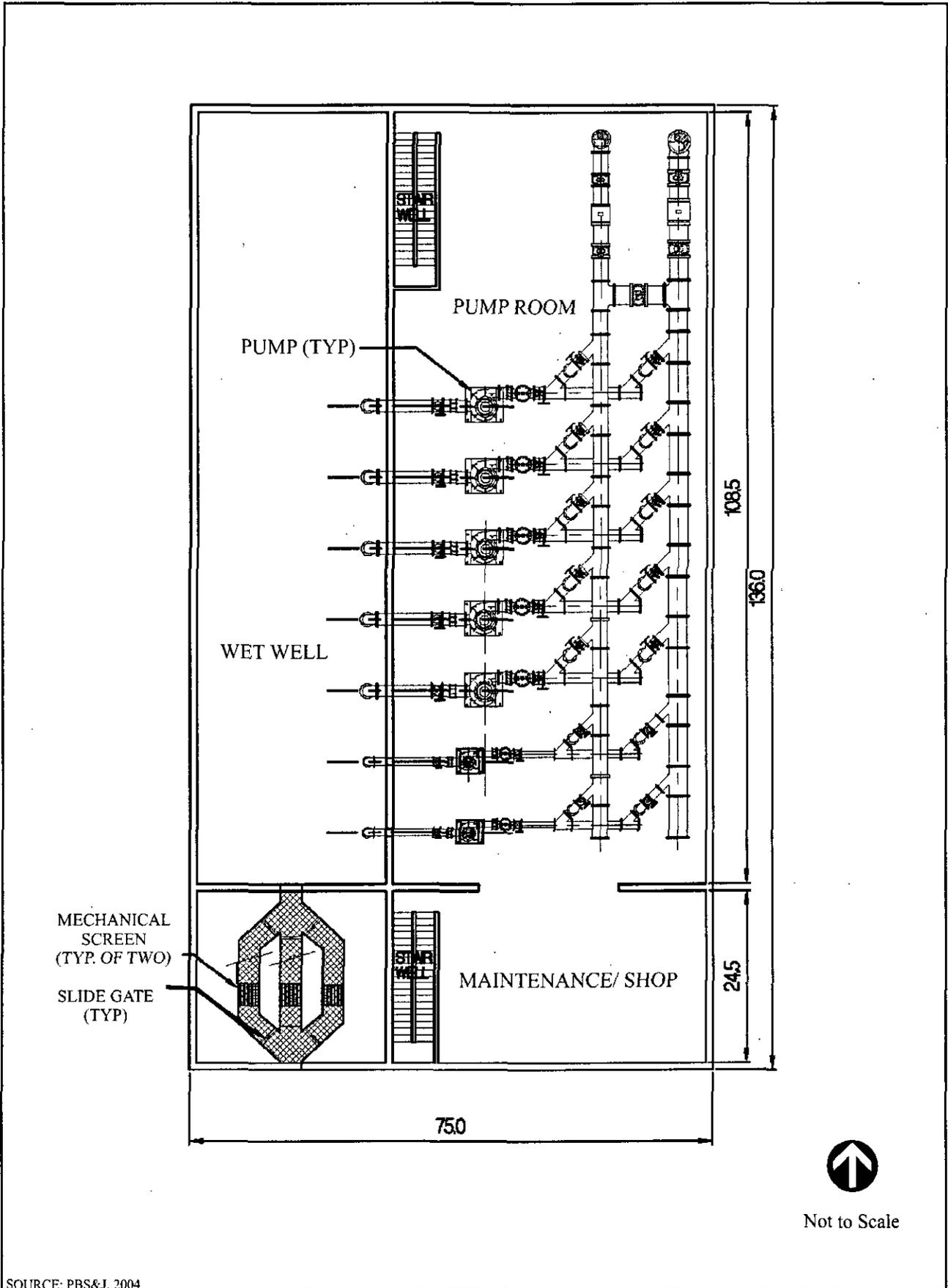
**BELOW-GRADE CROSS-SECTION OF THE
PROPOSED 8 MGD PUMP STATION (PHASE 2E)**

FIGURE 3.3-17



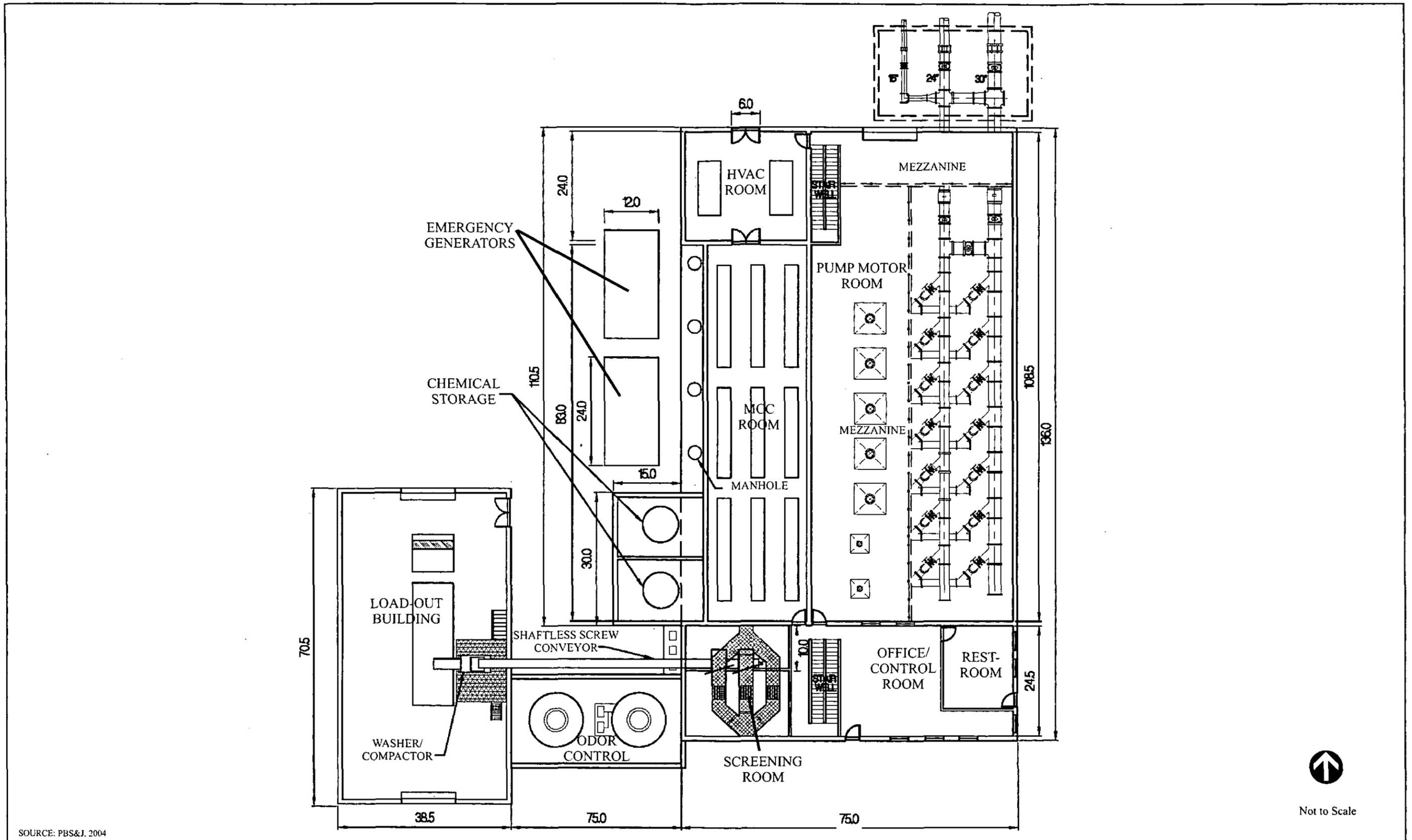
PROPOSED IMPROVEMENT FOR PHASE 2F

FIGURE 3.3-18



FLOOR 1 CONCEPT PLAN OF THE PROPOSED 12 MGD PUMP STATION (PHASE 2F)

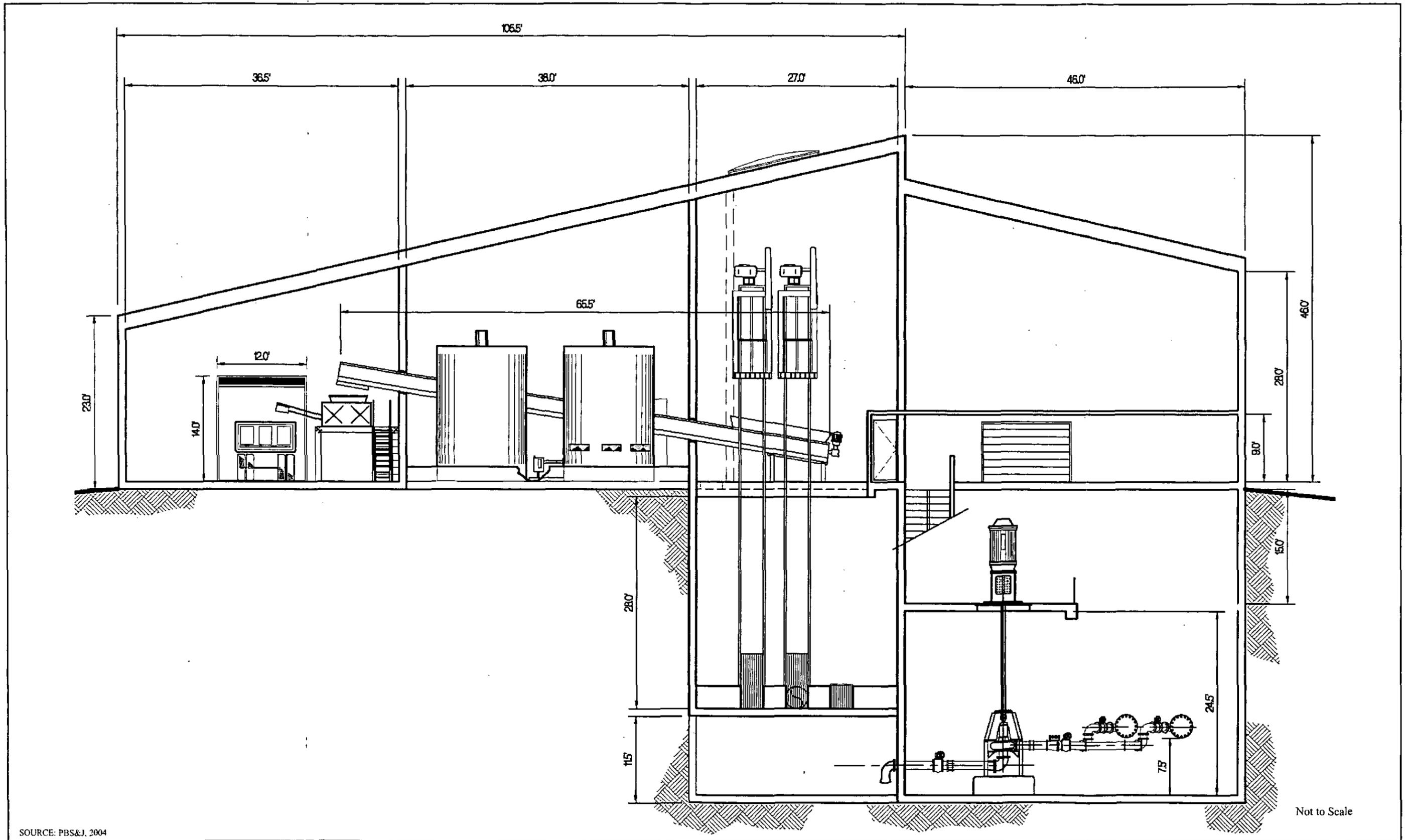
FIGURE 3.3-20



SOURCE: PBS&J, 2004

FLOOR 2 CONCEPT PLAN OF THE PROPOSED 12 MGD PUMP STATION (PHASE 2F)

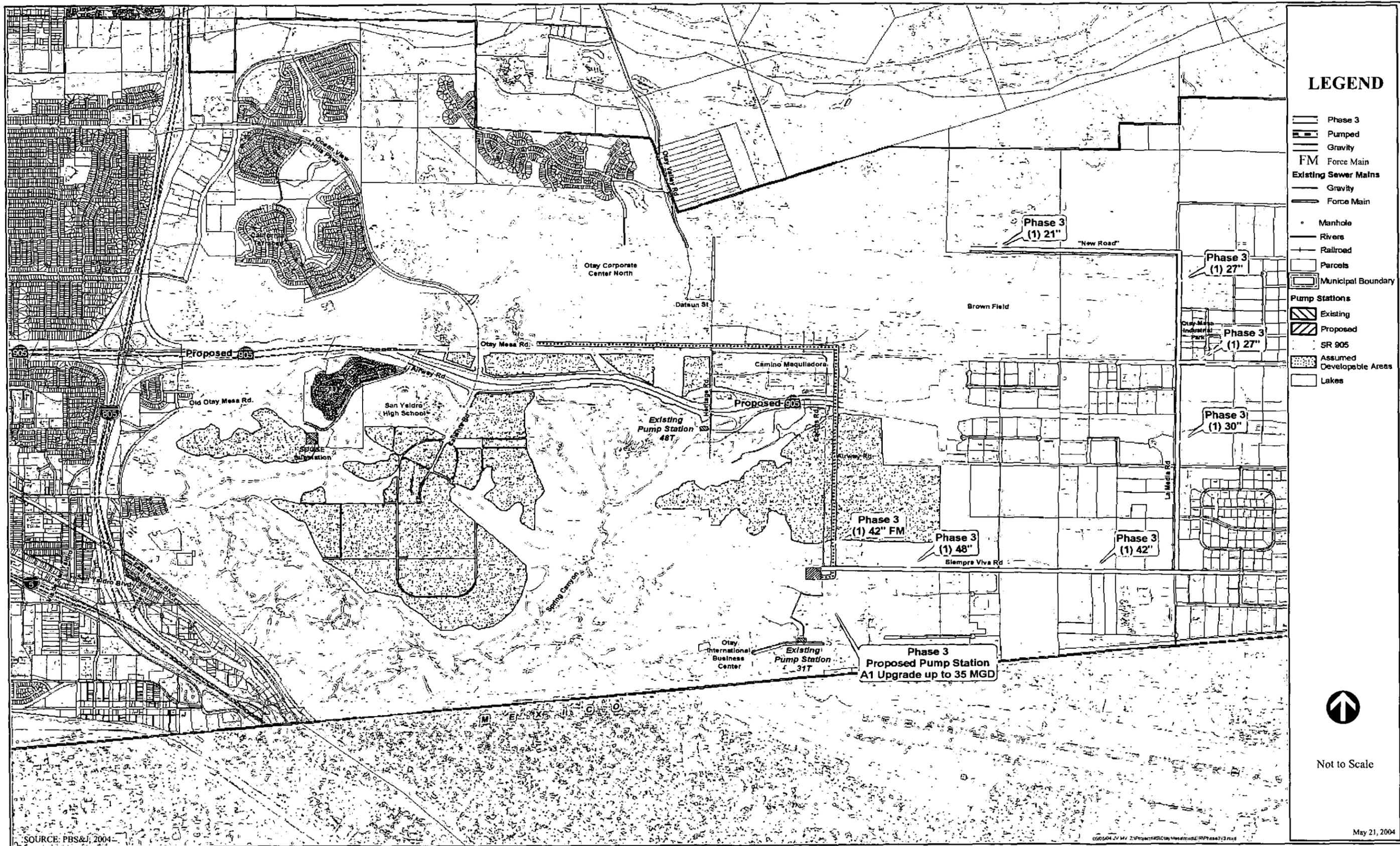
FIGURE 3.3-21



SOURCE: PBS&J, 2004

SOUTHERN CROSS-SECTION OF THE PROPOSED 12 MGD PUMP STATION (PHASE 2F)

FIGURE 3.3-22



LEGEND

- Phase 3
- Pumped
- Gravity
- FM Force Main
- Existing Sewer Mains
- Gravity
- Force Main
- Manhole
- Rivers
- Railroad
- Parcels
- Municipal Boundary
- Pump Stations
- Existing
- Proposed
- SR 905
- Assumed Developable Areas
- Lakes



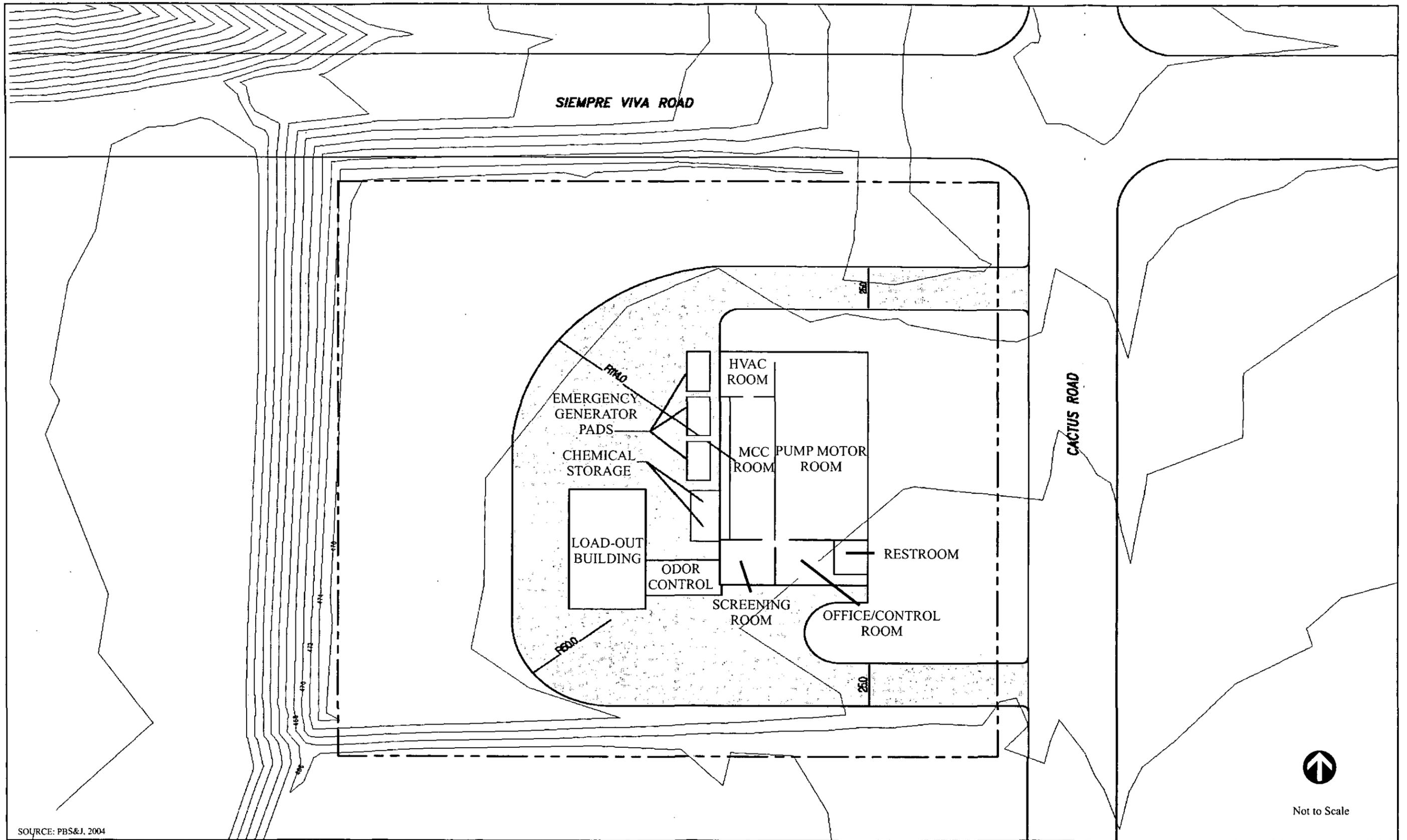
Not to Scale

SOURCE: PBS&J, 2004

May 21, 2004

PROPOSED IMPROVEMENTS FOR PHASE 3

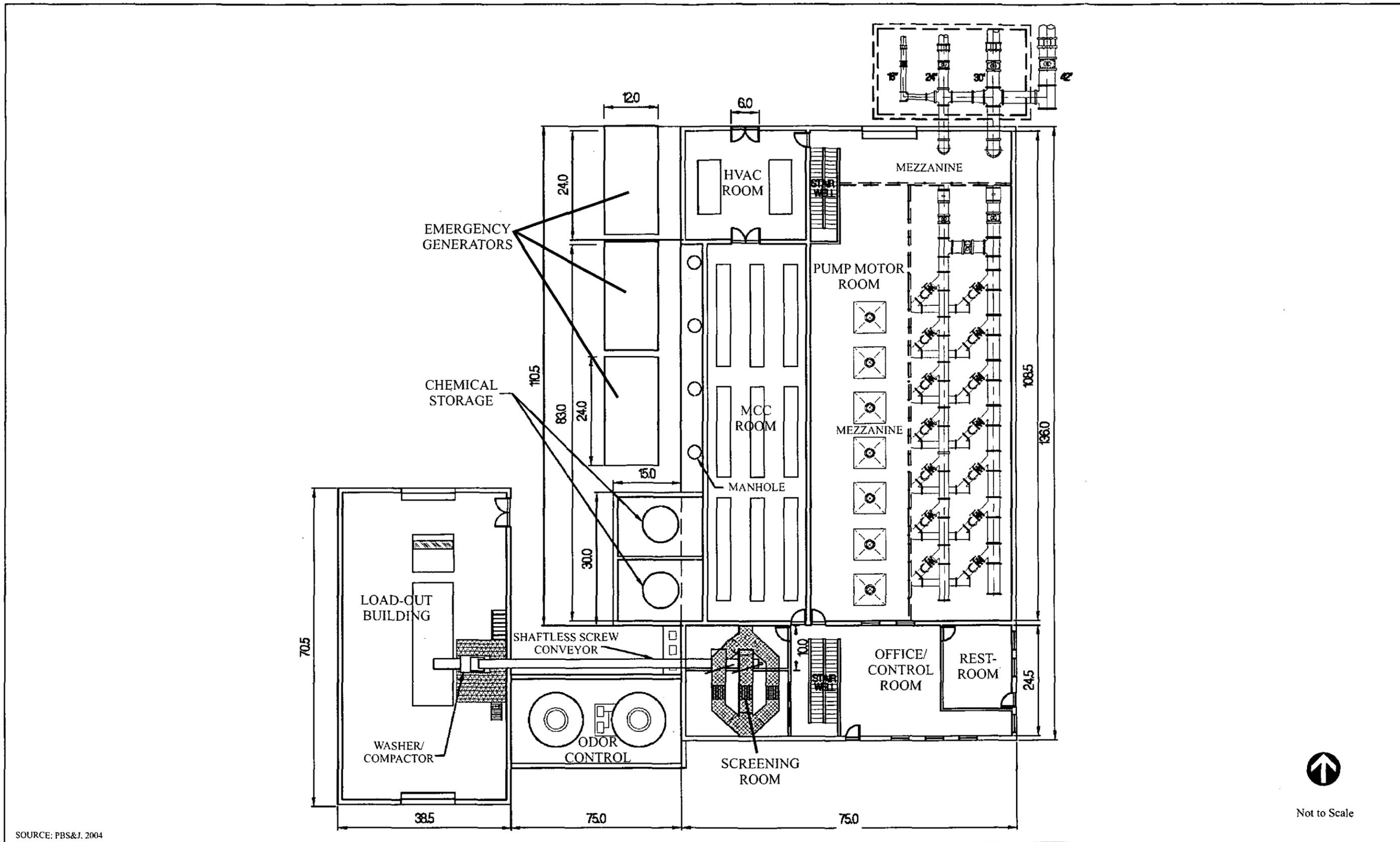
FIGURE 3.3-23



SOURCE: PBS&J, 2004

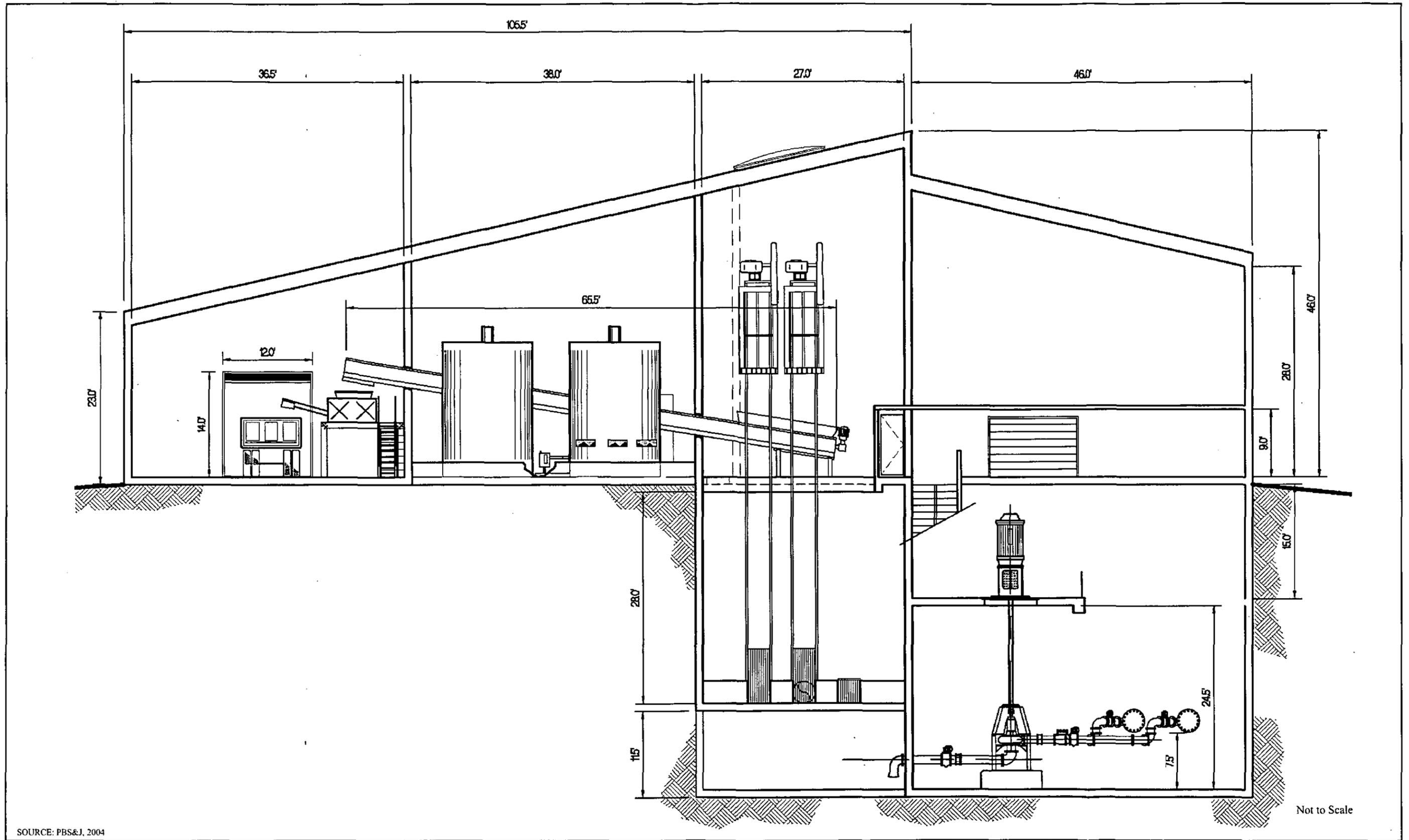
CONCEPTUAL SITE PLAN OF THE PROPOSED 35 MGD PUMP STATION (PHASE 3)

FIGURE 3.3-24



FLOOR 2 CONCEPT PLAN OF THE PROPOSED 35 MGD PUMP STATION (PHASE 3)

FIGURE 3.3-26



SOUTHERN CROSS-SECTION OF THE PROPOSED 35 MGD PUMP STATION (PHASE 3)

FIGURE 3.3-27

Table 3.3-1. Summary of Project Construction Activities

Phase	Duration of Construction	Pipeline Trenching					Spoils (cu. yd.)	Use of Jack & Bore Technique	Total Truck Trips*	Additional Facilities
		Length (ft.)	Width (ft.)	Depth (ft.)	Excavation (cu. yd.)	Depth (ft.)				
2A1**	3 months	2,300	11	17 - 38	25,000	5,000	200	4,320	N/A	
2A2**	5 months	5,200	11	13 - 17	30,000	10,000	Potential alternative to trenching	7,330	N/A	
2B1**	11 months	5,900	11	15	40,000	6,000	May be used under I-805 and I-5	14,800	N/A	
2B2	17 months	13,450	6-11	10-20	30,000	4,700	May be used to install pipeline under SR-905 crossing of Cactus Road	24,505	Expansion of Pump Station 23T from 2 MGD to 4 MGD	
2B3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Acquisition of land for Pump Station A1	
2C	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Potential construction of two new pump stations	
2D	12 months	7,400	6 - 11	< 15 - 35	4,875	1,200	N/A	8,197	Construction of a Diversion Structure and Termination Structure	
2E	18 months	8,400	6	<10 for pipeline, >40 for pump station wet well	54,000 ***	49,000	May be used to install pipeline under SR-905 crossing of Cactus Road	31,110	Construction of Pump Station A1 (8 MGD)	
2F	13 months	N/A	N/A	N/A	12,000 (at pump station)	9,000	N/A	4,800	Expansion of Pump Station A1 to 12 MGD	
3	TBD (could be constructed in phases)	35,200	11	10	94,000	14,000	May be used to install pipeline under SR-905 crossing of Cactus Road	TBD	Additional phased upgrades to Pump Station A1	

* Includes truck trips for export of excess dirt, heavy trucks transporting materials, and worker-related vehicle trips

** Construction of all or a portion of these phases is covered by the California Terraces EIR Addendum

*** Includes 9,000 cu. yd. from pipeline trenching and 45,000 cu. yd. from excavation of Pump Station A1 site

TBD To Be Determined

N/A Not Applicable

Source: PBS&J, June 2004.

3.3.2 PROJECT CONSTRUCTION

The OMTS project would be constructed in ten phases as discussed above. Project construction of each phase would vary in duration from approximately three months to more than a year. Work hours would be Monday through Friday, 7:00 a.m. to 7:00 p.m., as per the City Noise Ordinance. However, night and/or weekend construction work may be required during construction of the following phases: Phase 2B1 at the crossings of I-5 and I-805; Phases 2B2, 2E and 3 under Cactus Road; Phase 2D at the Otay Mesa Road/Heritage Road intersection, the SR-905 crossing, and under Otay Mesa Road; and Phase 3 under Siempre Viva Road. Pursuant to San Diego Municipal Code §59.4.0404(a), a permit for any nighttime or weekend construction work would be obtained from the Noise Abatement and Control Administrator prior to the start of construction.

3.3.2.1 PHASE 2A1 CONSTRUCTION (FEBRUARY 2004 – JUNE 2004)

PIPE INSTALLATION UNDER OLD OTAY MESA ROAD. The construction of Phase 2A1 began in February 2004 and was completed in June 2004. This phase involved the closure of a segment of Old Otay Mesa Road. Phase 2A1 included a sewer pipe segment that was installed through a jack and bore operation from the northeastern corner of the Princess Park development south for approximately 200 feet (0.04 mile) to avoid existing utilities under Old Otay Mesa Road. From the southern pit of the jack and bore operation, installation of the pipe was through an open trench under Old Otay Mesa Road to the southwest corner of the Princess Park subdivision. The trench for the new pipeline was approximately 11 feet wide and between 17 and 38 feet deep to maintain gravity flow. The average trench depth was approximately 24 feet. The top of pipe was located between 12 to 33 feet beneath the surface, with native backfill placed as cover material. The surface zone disturbance was approximately 50 feet in width. The surface zone disturbance included the trench for the sewer pipe and the area of construction equipment operation. The staging and temporary stockpile areas were located within the roadway. The trenching operation involved removal of approximately 25,000 cubic yards of dirt, with approximately 5,000 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 20,000 cubic yards were used as backfill. The construction operation required approximately 420 truck-trips to export the excess dirt. In addition, approximately 900 heavy truck trips were required for the transport of materials and 3,000 light vehicle trips were identified as worker-related trips. The number of daily truck trips varied during the construction period.

The construction timing of Phase 2A1 was coordinated with the public improvements for the Princess Park residential development which occurred during the scheduled road closure from February to June 2004. Coordination between the two projects was intended to minimize impacts to the community by installing the sewer line at a time when the road was closed and under construction, thereby avoiding the need to close the road again at a later date. It also allowed for the sewer line to be installed prior to the installation of new off-site utilities, thereby avoiding the need to move or construct around these utilities in the future. This effort was consistent with City Ordinance No. O-19215.

3.3.2.2 PHASE 2A2 CONSTRUCTION (JULY 2004 – MARCH 2005)

PIPE INSTALLATION UNDER OLD OTAY MESA ROAD. The construction of Phase 2A2 is estimated to last approximately five months and would begin directly after the completion of Phase 2A1. During the construction period, a segment of Old Otay Mesa Road above Hawkin Road to the railroad tracks would be closed to through traffic with access maintained for the Remington Hills residents. A traffic control plan would be prepared and implemented in accordance with City regulations to provide resident access to Remington Hills. Phase 2A2 would include trenching under Old Otay Mesa Road from the southwest corner of the Princess Park subdivision to a connection with the existing 10-inch sewer pipeline located further south

in Old Otay Mesa Road. This section of the proposed alignment also contains a mapped landslide. Jacking and boring may be used as an alternative construction method along this segment of the alignment to avoid impacting the landslide. A detailed discussion of geotechnical conditions, including the mapped landslide, is provided in Section 4.9 of this EIR. The trench for the new pipeline would be approximately 11 feet wide and between 13 and 17 feet deep. The average trench depth would be about 14 feet. The top of pipe would be between 8 to 12 feet beneath the surface with native dirt backfilled as cover material. The surface zone of disturbance would be approximately 50 feet in width, which would include the sewer pipe trench and the area of operation for the construction equipment. The staging and temporary stockpile areas would be located within the roadway. The trenching operation would involve removal of approximately 30,000 cubic yards of dirt, with approximately 10,000 cubic yards exported off site in conformance with current regulations and the remaining 20,000 cubic yards used as backfill. The spoils disposal site for this portion of the project is anticipated to be the Otay Corporate Center North site, which is the same site that would be used for spoils disposed of during Phase 2A1 construction. The construction operation would require approximately 830 truck-trips to export the excess dirt, approximately 1,500 heavy truck trips for transport of materials, and approximately 5,000 worker-related trips. The number of daily truck trips would vary during the construction period.

A temporary connection to the existing 10-inch diameter gravity pipeline would be installed to provide sewer service to the Princess Park development until the 42-inch sewer pipeline is extended to connect to the San Ysidro Interceptor Sewer in Phase 2B1.

3.3.2.3 PHASE 2B1 CONSTRUCTION (APRIL 2005 – MARCH 2006)

PIPE INSTALLATION FROM THE SOUTHWEST ENDPOINT OF PHASE 2A2 TO THE SAN YSIDRO INTERCEPTOR SEWER. The construction of Phase 2B1 is estimated to take approximately 11 months to complete. Phase 2B1 would include trenching from the southwest endpoint of Phase 2A2 under Old Otay Mesa Road to East Beyer Boulevard, under East Beyer Boulevard to Center Street, west under East and West San Ysidro Boulevard, and south under Via de San Ysidro Boulevard to the San Ysidro Interceptor Sewer at the intersection of Via de San Ysidro Boulevard and Calle Primera. This Phase 2B1 alignment would be approximately 5,900 feet in length (1.12 miles). The trenches for the new pipeline would be approximately 11 feet wide and a maximum of 15 feet deep. The pipe would be placed approximately 10 feet deep with 6.5 feet of backfill placed as cover material. The surface zone of disturbance would be approximately 50 feet in width and would include the actual trench for the sewer pipe and the impacts of the construction equipment required for excavating and trenching. The staging area and stockpile area would be located on the road, adjacent to the trench. A jack and bore operation may be required to install the pipeline under the I-805 and I-5 under crossings. The trenching and jack and bore operation would involve removal of approximately 40,000 cubic yards of dirt, with approximately 6,000 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 34,000 cubic yards would be used as backfill. The construction operation would require approximately 500 truck trips for export of dirt, 3,300 heavy truck trips for construction materials, and 11,000 light vehicles for worker-related trips. The number of daily truck trips would vary during the construction period.

3.3.2.4 PHASE 2B2 CONSTRUCTION (2005 – 2007)

PIPE INSTALLATION UNDER AIRWAY ROAD FROM OLD OTAY MESA ROAD TO CALIENTE ROAD. The construction of this portion of Phase 2B2 would last approximately two months and would include trenching for approximately 1,400 feet (0.27 mile) under Airway Road from Old Otay Mesa Road to Caliente Road. The trench for the new 18-inch pipeline would be approximately 10 feet wide and 15 to 20 feet deep. The average trench depth would be about 17 feet. The top of pipe would be 10 to 15 feet beneath the surface with native dirt backfilled as cover material. The surface zone of disturbance would be approximately 50 feet

in width, which would include the sewer pipe trench and the area of operation for the construction equipment. The staging and temporary stockpile areas would be located on the road, adjacent to the trench. The trenching operation would involve removal of approximately 6,000 cubic yards of dirt, with approximately 900 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 5,100 cubic yards to be used as backfill. The spoils disposal site for this portion of the project is anticipated to be the Otay Corporate Center North site, which is the same site that would be used for the soils disposed during Phase 2A1. The construction operation would require approximately 425 truck-trips to export the excess dirt. In addition, it is estimated that 600 heavy truck trips would occur for the transport of materials and 2,000 truck trips would be worker-related. The number of daily truck trips would vary during the construction period.

This portion of Phase 2B2 would be completed prior to the grading for the extension of SR-905, which is estimated to begin in late 2004 or early 2005. According to Caltrans, the planned elevation of SR-905 at Caliente Road would be lowered to approximately 30 to 35 feet below existing grade to provide adequate clearance under the new Caliente Road Bridge overpass. An existing gravity sewer main, located about 15 feet below grade, currently serves San Ysidro High School and connects to the sewer system located in Ocean View Hills Parkway to the north. This sewer main would be removed by Caltrans to accommodate the proposed freeway construction. Therefore, the relocation of the gravity sewer would need to be constructed and connected to the OMTS sewer in Old Otay Mesa Road prior to the grading for the freeway, so that the removal of the existing gravity sewer main would not interrupt sewer service to the high school. It is estimated that this sewer would need to be operational by 2005 for Caltrans to begin their grading operations.

PIPE INSTALLATION UNDER HERITAGE ROAD, DATSUN STREET AND OTAY VALLEY ROAD.

Construction of this portion of Phase 2B2 would last approximately three to four months and would include 3,650 feet (0.69 mile) of trenching from the intersection of Heritage and Otay Mesa Roads to approximately 950 feet north of the intersection of Datsun Street and Otay Valley Road. The trench for the new pipeline would be approximately 11 feet wide and 10 feet deep. The top of pipe would be approximately 5 feet beneath the surface with native dirt backfilled as cover material. The surface zone of disturbance would be approximately 50 feet in width, which would include the sewer pipe trench and the area of operation for the construction equipment. The staging and temporary stockpile areas would be located within the roadway. The trenching operation would involve removal of approximately 15,000 cubic yards of dirt, with approximately 2,500 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 12,500 cubic yards to be used as backfill. The spoils disposal site for this portion of the project is anticipated to be the Otay Corporate Center North site, which is the same site that would be used during Phases 2A1 and 2A2. The construction operation would require approximately 210 truck-trips to export the excess dirt. In addition, it is estimated that 1,050 heavy truck trips would occur for the transport of materials and another 3,500 worker-related trips would occur. The number of daily truck trips would vary during the construction period.

PIPE INSTALLATION UNDER CACTUS ROAD, CAMINO MAQUILADORA, AND HERITAGE ROAD.

Phase 2B2 would also include the installation of a new 24-inch force main from Pump Station 23T to the intersection of Heritage and Otay Mesa Roads. Construction would last approximately eight months. The trenching for the pipeline would follow Cactus Road in a northerly direction to the intersection of Cactus Road and Camino Maquiladora, approximately 5,200 feet (0.98 mile). The trenching would turn west under Camino Maquiladora for approximately 2,700 feet (0.51 mile) to the intersection of Camino Maquiladora and Heritage Road. The trench would then resume in a northerly direction for approximately 500 feet (0.09 mile) to the intersection of Heritage and Otay Mesa Roads where it connects to the Otay Valley Trunk Sewer. The trenches for the new pipeline would be approximately six feet wide and less than 10 feet deep. The pipe would be placed approximately five feet deep with approximately three feet of backfill placed as cover material. The staging area and stockpile area would be located on the road, adjacent to the trench. The

trenching operation would involve removal of approximately 9,000 cubic yards of dirt, with approximately 1,300 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 7,700 cubic yards would be used as backfill. The construction operation would require approximately 110-truck trips for export of dirt, 3,600 heavy truck trips for transport of construction materials and 12,000 light vehicle trips associated with construction workers. The number of daily truck trips would vary during the construction period.

PUMP STATION 23T EXPANSION. Construction to increase the capacity of temporary Pump Station 23T is estimated to last approximately eight to ten weeks. The expansion would include the addition of pumps, piping and electrical switchgear to increase the capacity of the pump station from 2 MGD to 4 MGD. A new aboveground structure would also be constructed to house the electrical panels. No grading or excavation of the site would be necessary and, therefore, no truck trips for export of dirt would be required. The construction operation would require approximately 10 heavy truck trips for transport of construction materials and 1,000 light vehicle trips for construction workers. The number of daily truck trips would vary during the construction period.

CALTRANS' INSTALLATION OF PIPE SLEEVES (TO BE CONSTRUCTED CONCURRENT WITH PHASE 2B2). In coordination with the construction of SR-905, Caltrans would install pipe sleeves at two crossings of SR-905 for the installation of pipelines during future phases of the proposed project. One sleeve for the 42-inch gravity main would be installed at the SR-905 crossing of Old Otay Mesa Road while three sleeves for the encasement of the future 24-, 30- and 42-inch force mains would be installed at the SR-905 crossing of Cactus Road. When installing the three pipe sleeves at the SR-905 crossing of Old Otay Mesa Road, Caltrans would also remove, replace and encase the existing 16-inch pipeline located at this crossing. While the sleeves would be installed by Caltrans during Phase 2B1, the future pipelines that would fill the sleeves would be installed as part of Phases 2B2, 2E and 3. In the event that Caltrans' construction schedule is delayed, the pipe sleeve for the 24-inch force main would be installed by the construction contractor during Phase 2B2 as a part of the proposed project.

3.3.2.5 PHASE 2B3 (2006 – 2007)

No construction activities would be associated with Phase 2B3.

3.3.2.6 PHASE 2C CONSTRUCTION (TO BE DETERMINED)

It is anticipated that the construction of Phase 2C would include the installation of gravity sewer pipeline, force mains, and two new pump stations. The pipelines are expected to be located under future roadways. However, the locations of the Phase 2C facilities have not been determined and would be subject to future development plans. Therefore, it is not possible to provide construction details for Phase 2C at this time.

3.3.2.7 PHASE 2D CONSTRUCTION (2009 – 2010)

The construction of Phase 2D, including the construction of a new diversion structure, a new transition structure, and a new 24-inch force main connecting to a new 42-inch gravity main under Otay Mesa Road is estimated to last eight months.

The start of construction for Phase 2D would be triggered by either the completion of Caltrans' SR-905 freeway project or the reaching of the flow capacity threshold of the Otay Valley Trunk Sewer. Ideally, construction of Phase 2D in Otay Mesa Road would be deferred until construction of SR-905 is completed, in order to minimize traffic impacts on the heavily traveled Otay Mesa Road. This road would be the main thoroughfare for both general public and construction traffic during the construction of SR-905. Deferring

construction until after the completion of SR-905 would avoid the need to close traffic lanes and install the pipeline during nighttime hours as well as avoid the need to obtain an encroachment permit from Caltrans for construction occurring along this roadway. Once SR-905 is completed, a Caltrans encroachment permit would not be required for construction under Otay Mesa Road because Caltrans would transfer the jurisdiction of the roadway back to the City of San Diego and would no longer retain control of Otay Mesa Road. Upon completion of SR-905, the western endpoint of Otay Mesa Road would dead-end just west of Caliente Road on the north side of SR-905. By waiting until SR-905 is completed, there would be considerably less traffic on Otay Mesa Road than prior to SR-905 completion because SR-905 would off-load the majority of the existing Otay Mesa Road traffic.

On the other hand, should the flow capacity threshold of the Otay Valley Trunk Sewer (4 MGD) be met prior to the completion of SR-905, then Phase 2D would have to be implemented, regardless of whether SR-905 has been completed or not. This would be dependent upon the rate of development growth in the east mesa and also the possibility that unforeseeable obstacles may cause the completion of SR-905 to be delayed. Based on projected flow values, the Otay Valley Trunk Sewer appears to have adequate capacity until beyond 2009, when SR-905 is anticipated to be completed and the jurisdiction of Otay Mesa Road would be returned to the City. It should also be noted that if development growth does increase demand to the point that the flow capacity threshold of the Otay Valley Trunk Sewer is reached (4 MGD), then Phase 2D and 2E may be constructed concurrently, rather than successively. This is because Pump Station 23T, as upgraded in Phase 2B2, would only be designed to handle flows up to 4 MGD, after which a new pump station with a larger capacity would be required.

CONSTRUCTION OF DIVERSION STRUCTURE. The diversion structure would be constructed at a location within the intersection ROW of Otay Mesa and Heritage Roads. The approximate duration of construction would be two months. Construction would involve the removal of approximately 425 cubic yards of dirt, with approximately 200 cubic yards exported off site to an appropriate site in conformance with current regulations, and the remaining 225 cubic yards would be used as backfill. The surface zone of disturbance would be approximately 50 feet in length and 20 feet in width. The staging area and stockpile area would be located on the road, adjacent to the excavation area. The construction operation would require approximately 20 truck trips for export of dirt, 20 heavy truck trips for transport of construction materials and 600 light vehicle trips for construction workers. The number of daily truck trips would vary during the construction period.

PIPE INSTALLATION UNDER OTAY MESA ROAD. Phase 2D would include the installation of a new 24-inch force main under Otay Mesa Road from the diversion structure at the intersection of Heritage and Otay Mesa Roads to the new transition structure located approximately 4,000 feet (0.76 mile) west of the Heritage Road intersection. This phase would also include the installation of new 42-inch gravity line under Otay Mesa Road from the transition structure to the intersection of Old Otay Mesa and Otay Mesa Roads. The trenches for the new 24-inch pipeline in Otay Mesa Road would average approximately six feet wide and less than 15 feet deep, however, the trench for the 42-inch gravity sewer would be approximately 11 feet wide and 30 to 35 feet deep. The top of pipe would be 25 to 30 feet beneath the surface with native dirt backfilled as cover material. The surface zone disturbance would be approximately 50 feet in width and would include the actual trench for the sewer pipe and the impacts of the construction equipment required for excavating the trenching. The staging area and stockpile area would be located on the road, adjacent to the trench. The trenching operation would involve removal of approximately 2,000 cubic yards of dirt, with approximately 300 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 1,700 cubic yards would be used as backfill. The construction operation would require approximately 25 truck trips for export of dirt, 1,500 heavy truck trips for transport of construction materials and 5,000 light vehicle trips for construction workers. The number of daily truck trips would vary during the construction period.

TRANSITION STRUCTURE. The transition structure would be constructed under Otay Mesa Road, approximately 4,000 feet west of the Otay Mesa and Heritage Roads intersection. The approximate duration of construction for the transition structure would be 10 weeks. Construction would involve the removal of approximately 1,250 cubic yards of dirt, with approximately 600 cubic yards exported off site to an appropriate site in conformance with current regulations, and the remaining 650 cubic yards would be used as backfill. The surface zone of disturbance would be approximately 80 feet in length and 40 feet in width. The staging area and stockpile area would be located on the road, adjacent to the excavation area. The construction operation would require approximately 20 truck trips for export of dirt, 20 heavy truck trips for transport of construction materials and 600 light vehicle trips for construction workers. The number of daily truck trips would vary during the construction period.

PIPELINE INSTALLATION UNDER OLD OTAY MESA ROAD. The proposed project would include the installation of a 42-inch gravity line under Old Otay Mesa Road from its intersection with Otay Mesa Road to its intersection with Airway Road. The 42-inch gravity line would be inserted into a pipe sleeve buried below the future SR-905 freeway. As discussed above, Caltrans would install the pipe sleeve prior to the construction of SR-905, most likely concurrent with Phase 2B2. The SR-905 freeway project would then be constructed above the pipe sleeve. To access the pipe sleeve, trenches would be dug on either side of the pipe sleeve and the gravity sewer pipeline would be inserted into the sleeve from either side. The gravity sewer would then be connected to the existing 42-inch gravity line in Old Otay Mesa Road, installed in Phase 2A1. The use of a sleeve would assure that no disturbance of SR-905 would occur. The trenching operation at each side of the pipe sleeve would involve the removal of approximately 1,200 cubic yards of dirt, with approximately 160 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 1,040 cubic yards to be used as backfill. The construction operation would require approximately 32 truck-trips to export the excess dirt, 60 heavy truck trips for transport of construction materials and 300 light vehicle trips for construction workers. The number of daily truck trips would vary during the construction period.

3.3.2.8 PHASE 2E CONSTRUCTION (2013 – 2015)

The construction of Phase 2E is estimated to take approximately 18 months to complete. As discussed above, the need to construct the Phase 2E improvements would be driven solely by sewer flow generation in the east mesa and the need for additional capacity to convey those flows. As discussed in Section 3.3.2.8 above, if development growth increases demand to the point that the flow capacity threshold of the Otay Valley Trunk Sewer is reached (4 MGD) then Phases 2D and 2E may be constructed concurrently.

CONSTRUCTION OF PUMP STATION A1 AND ABANDONMENT OF PUMP STATION 23T. Phase 2E would include construction of Pump Station A1 located at the southwest corner of the intersection of Cactus and Siempre Viva Roads. This pump station would be constructed on a parcel located adjacent to existing Pump Station 23T. Construction would last approximately 10 months and would include grading and excavation of the pump station site, as well as construction of the pump station building and wet well, and installation of pump station equipment, including pumps, piping, and electrical gear. The pump station would initially be constructed to accommodate flows up to 8 MGD. The pump station building would be approximately 3,300 square feet in size. Floor 1 of the pump station building would be located below-grade, requiring the excavation of approximately 45,000 cubic yards of soil, approximately 36,000 cubic yards of which would be disposed of at an off-site facility, consistent with all applicable laws. The remaining 9,000 cubic yards of excavated materials would be used as backfill. The wet well would be installed in the subterranean floor, which would be sized to accommodate the build-out capacity of 35 MGD. The foundation, substructure and building walls would be constructed of cast-in-place concrete. The roof would be flat and made of concrete with a mansard or other architectural treatment. Connections to the existing

sewer pipelines in Siempre Viva and Cactus Roads would also be required. The emergency generator building would be constructed to the west of the pump station building. This building would be constructed of masonry block and be approximately 12 feet wide by 24 feet long. Both buildings would include noise attenuation features for sound control. An estimated 2,725 truck trips would be required to export the spoils off site and another 575 heavy truck trips would be required for the transport of construction materials. Approximately 4,200 worker-related light vehicle trips would also occur. Upon completion of Pump Station A1, temporary Pump Station 23T would be abandoned and demolished. The existing force mains connecting to Pump Station 23T would be extended to new Pump Station A1.

Upon completion of Pump Station A1, temporary Pump Station 23T would be removed from service. The pumps and electrical equipment would be removed and either salvaged or properly disposed of, and the wet well would be filled with dirt or sand and capped, in accordance with all applicable regulations.

PIPELINE CONSTRUCTION. Phase 2E would also include trenching for a new 30-inch force main from Pump Station A1 to the diversion structure located within the intersection ROW of the Heritage Road and Otay Mesa Road intersection. Construction would last approximately eight months. The trenches for the new pipeline would be approximately six feet wide and less than 10 feet deep. The pipe would be placed approximately seven feet deep with approximately five feet of backfill placed as cover material. The staging area and stockpile area would be located on the road, adjacent to the trench. The trenching operation would involve removal of approximately 9,000 cubic yards of dirt, with approximately 1,300 cubic yards exported off site to an appropriate site in conformance with current regulations and the remaining 7,700 cubic yards would be used as backfill. The construction operation would require approximately 110-truck trips for export of dirt, 5,500 heavy truck trips for transport of construction materials and 18,000 vehicle trips for construction workers. The number of daily truck trips would vary during the construction period.

3.3.2.9 PHASE 2F CONSTRUCTION (2018 – 2020)

The construction of Phase 2F is estimated to take approximately thirteen months to complete. Phase 2F would include the expansion of Pump Station A1 from 8 MGD to 12 MGD. The pump station expansion would occur when flows from the east mesa reach approximately 7.5 MGD. New pumps, piping and electrical switchgear would be added to the pump station. The aboveground portion of the pump station building, constructed in Phase 2E, would need to be expanded to accommodate flows up to 12 MGD. Five 250 hp pumps would be added to the pump room, for a total of seven pumps. The expansion would include the addition of a Heating Ventilation Air Conditioning (HVAC) room, an odor control room, a load-out building, a screenings room, and one additional emergency generator with enclosure and associated aboveground diesel storage-tank. The expansion of the above-ground buildings would require approximately 12,000 cubic yards of excavated materials. Approximately 9,600 cubic yards would be exported off-site, in accordance with all applicable regulations, while the remaining 2,400 cubic yards would be used as backfill.

Connections to the existing sewer pipelines in Siempre Viva and Cactus Roads would also be required. The new emergency generator building would be approximately 12 feet wide by 24 feet long and would be located to the west of the pump station building. An estimated 785 truck trips would occur for the export of dirt, 515 heavy truck trips would occur for the transport of construction materials and approximately 4,800 worker-related light vehicle trips would also occur.

3.3.2.10 PHASE 3 CONSTRUCTION (2020 – 2050)

The construction timing of Phase 3 has not been determined because it would be dependent upon future development in the east mesa creating demand that would exceed the flow capacity of the 12 MGD pump station. It is likely that Phase 3 would be constructed in phases, as demand increases. Because Phase 3 would

occur more than 20 years in the future, the Phase 3 facilities would be reevaluated over time and would be subject to change from the anticipated improvements described below.

PIPELINE CONSTRUCTION IN THE EAST AND WEST MESAS. The upgrades to sewer pipelines would occur within the existing roads. Phase 3 pipeline improvements would include the construction of up to 35,200 feet of gravity lines and force mains. The trenches for the pipelines would be approximately 11 feet wide and 10 deep. The pipe would be placed approximately nine feet deep with five to seven feet of backfill placed as cover material. The staging area and stockpile area would be located on the road, adjacent to the trench. Trenching would involve removal of up to 94,000 cubic yards of dirt, with up to 14,000 cubic yards exported off site to an appropriate site in conformance with current regulations. The remaining soil would be used as backfill. The construction operation would require up to approximately 1,200 truck trips for export of dirt. The number of heavy truck trips for transport of construction materials and light vehicle trips associated with construction workers is dependent upon the duration of construction, which has not been determined at this time. The number of daily truck trips would vary during the construction period.

EXPANSION OF PUMP STATION A1 UP TO 35 MGD. The upgrade and expansion of Pump Station A1 beyond 12 MGD would occur when flows at the pump station exceed 11 MGD. The expansion of this pump station could be between 16 and 35 MGD and would be dictated by future development in the east mesa. The upgrade would include the addition of pumps, piping and electrical switchgear in order to increase capacity. In addition, the expansion of the pump station beyond 12 MGD is likely to require the expansion of the MCC room, the HVAC room, and the addition of one or more emergency generators and associated above-ground diesel storage tanks. The load-out building, odor control and screenings room may also require some expansion. The wet well would not have to be expanded, because it would have been designed to accommodate up to 35 MGD in Phase 2E. The duration of construction would depend upon the size of the expansion. Since the expansion of Pump Station A1 beyond 12 MGD is speculative at this time, it is not possible to determine the number of truck trips for construction materials and worker-related vehicle trips at this time.

3.3.3 TRAFFIC MANAGEMENT DURING CONSTRUCTION

CONSTRUCTION TRAFFIC CONTROL PLAN. As discussed above, the proposed project would be phased to avoid major transportation impacts during construction and to reduce the duration of construction impacts to any particular area. A construction traffic control plan would be prepared and implemented during all phases of project construction to allow access to the affected roadways. During the construction of Phases 2A1 and 2A2, localized sections of Old Otay Mesa Road would be closed and alternative access routes would be identified on the construction traffic control plan. A Traffic Control Plan/Permit has been issued by the City of San Diego for the construction of Phases 2A1 and 2A2, as covered by the California Terraces EIR Addendum. Phase 2B1 would involve temporary construction impacts to Beyer Boulevard, Center Street, East and West San Ysidro Boulevard, and Via de San Ysidro Boulevard. The construction traffic control plan for Phase 2B1 would identify alternative routes for access to San Ysidro Middle School, Beyer Elementary School, businesses and residents that require the use of the impacted roadways. In addition, the traffic control plan would also include the posting of signs informing customers how to access businesses located in the construction area. The traffic control plan would make every effort to maintain access to all businesses along the construction alignment when construction activities are not occurring directly adjacent to the businesses and for residences located along Phase 2B1, the traffic control plan require that access to residences and roadways containing residences be maintained whenever construction activities are not immediately adjacent. If road or lane closures would occur, signs shall be posted identifying alternative routes. Phase 2D, which would construct a sewer pipeline under Otay Mesa Road, is not anticipated to be necessary until the construction of SR-905 has been completed. This phasing would avoid traffic impacts during construction, as the operation of SR-905 would reduce traffic volumes on Otay Mesa Road. Nighttime/Weekend Construction

Activities. In addition, nighttime or weekend construction is likely to occur during Phases 2A2, 2B1, 2B2, 2E and 3, but may occur during any phase of construction, to avoid daytime traffic impacts along major thoroughfares during construction. Weekend work is currently occurring with the construction of Phase 2A1 which is being constructed as part of the Princess Park Sewer Project. During Phase 2B1 and 2B2, nighttime/weekend construction may occur to avoid daytime traffic impacts to major roadways and to avoid impacts to adjacent businesses and schools along the alignment. In addition, nighttime or weekend construction may occur at the I-5 and I-805 sewer crossings and possibly the stretch of roadway in between, due to the busy nature of the freeway off-ramps/on-ramps in this area. Construction of Phases 2D, 2E and 3 along Cactus Road may also include nighttime or weekend construction because this is a narrow roadway. In addition, construction of Phase 3 along Siempre Viva Road may involve nighttime or weekend construction because this roadway is considered to be a major thoroughfare.

EMERGENCY ACCESS. Emergency access for police/fire vehicles would be maintained along the project alignment at all times during construction. San Diego Gas and Electric (SDG&E) would also require that access to the substation located along Old Otay Mesa Road be maintained at all times. After construction, roadways would be returned to pre-project conditions and would not result in any alteration in access.

3.4 HISTORY OF PROJECT CHANGES

No physical changes have been made to the proposed project in response to environmental concerns raised during the City's review of the project.

3.5 DISCRETIONARY ACTIONS AND RESPONSIBLE AND TRUSTEE AGENCIES

Implementation of the OMTS project would require several discretionary actions/approvals from various governmental agencies and jurisdictions. Anticipated permits/approvals would include the following:

3.5.1 FEDERAL PERMITS/APPROVALS

No federal permits/approvals are anticipated for the proposed project.

3.5.2 STATE PERMITS/APPROVALS

- National Pollution Discharge Elimination System (NPDES) General Construction Permit requires notification of construction activities, implementation of BMPs, and development of a Storm Water Pollution Prevention Plan for submittal to and approval from the Regional Water Quality Control Board (RWQCB).
- NPDES Municipal Permit (Municipal Permit) requires implementation of storm water best management practices (BMPs) both during construction and in the project's permanent design.
- Caltrans Encroachment Permit for crossings of I-5, I-805, Otay Mesa Road at Heritage Road, and possibly SR-905.
- Encroachment permit/maintenance easement from MTDB to construct a sewer main under the San Diego Trolley ROW.

3.5.3 LOCAL PERMITS/APPROVALS

- City Council Certification of the Environmental Impact Report and adoption of the Mitigation Monitoring Reporting Program. Required to comply with CEQA requirements.
- City Council Approval of funds for the construction of any phase of the OMTS project.
- Authority to Construct and/or Permit to Operate. Required by the San Diego Air Pollution Control District (SDAPCD) for construction-related air pollutant emissions and emergency power generation equipment for pump stations.
- Land acquisition of the site at the southwestern corner of Cactus and Siempre Viva Roads for the construction of Pump Station A1 (APN No. 6670504100).
- Site Development Permit for the construction of Pump Station A1 on a site containing city-designated environmentally sensitive lands.
- City of San Diego Engineering Permits for the construction of public utilities.

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CHAPTER 4.0

ENVIRONMENTAL ANALYSIS

The following Environmental Analysis chapter provides information relative to twelve environmental topics as they pertain to each component of the proposed OMTS project. Each topical section describes existing conditions; the impact significance criteria used to determine whether an impact would be significant; impact analysis; the significance of the impacts and mitigation, monitoring, and reporting measures for significant impacts. The Lead Agency would require that the mitigation measures identified in this EIR be implemented by the project proponent except in the following cases:

- Either the proponent offers alternative mitigation that reduces the significant impact to a similar level as would be achieved by the mitigation identified in the EIR; or,
- The proponent presents substantial evidence that the required mitigation measure is infeasible and that there is no feasible mitigation measure or alternative. In this case, the Lead Agency must balance the benefits of the proposed project against the unavoidable significant environmental impacts to determine whether the unmitigated significant impacts are acceptable in view of specific overriding economic, social or other considerations (CEQA Guidelines Section 15093).

The twelve topics addressed in Chapter 4.0 are the following:

- Land Use
- Noise
- Paleontological Resources
- Utilities
- Historical Resources
- Air Quality
- Biological Resources
- Hydrology/Water Quality
- Geotechnical Conditions
- Hazardous Materials
- Visual Quality/Aesthetics
- Energy

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4.1 LAND USE

4.1.1 EXISTING CONDITIONS

AFFECTED COMMUNITIES

The proposed OMTS project would be located within the Otay Mesa and San Ysidro communities in the southern region of the City of San Diego. The majority of the OMTS project would be located within the Otay Mesa community planning area located south of the Otay River Valley, north of the International Border, east of I-805, and west of an unincorporated area of the County of San Diego. Existing land uses in the Otay Mesa community include a mix of residential, commercial, institutional, industrial, agriculture and open space. A community land use map is provided in Figure 4.1-1. The Otay Mesa Community Plan is currently undergoing an update. Upon completion of the update, it is anticipated that some of the lands identified for industrial uses in the planning area would be converted to residential uses.

The San Ysidro community planning area is located south of I-905, north of the International Border, west of I-5, and east of the Otay Mesa community. The western portion of the OMTS project would be located in San Ysidro community planning area. Existing land uses in the San Ysidro community planning area are provided in Figure 4.1-2. As shown in this figure, the northern portion of the community is dominated by residential development, while the southern portion of the community is used mostly for commercial and industrial land uses.

A discussion of the remaining communities and jurisdictions surrounding the proposed project service area is provided in Section 2.0, Environmental Setting.

ON-SITE LAND USES

Land uses occurring within the construction area of the proposed pipeline alignment are limited to existing roadways including an unpaved road along the northeastern border of Brown Field, La Media Road, Siempre Viva Road, Cactus Road, Otay Mesa Road, Camino Maquiladora, Heritage Road, Datsun Road, Otay Valley Road, Old Otay Mesa Road, East Beyer Boulevard, Center Street, East and West San Ysidro Boulevard, Via de San Ysidro Boulevard and Calle Primera. Otay Mesa Road is a six-lane roadway with a median and is characterized by heavy truck traffic. East and West San Ysidro Boulevard and Via de San Ysidro Boulevard are four lane roadways. Camino Maquiladora is a wide two-lane roadway with a sidewalk along both sides. The remaining roads have two lanes. The majority of the roadways are paved, although portions of La Media and Siempre Viva Roads, in addition to the unpaved road north of Brown Field, are not paved.

The project site also includes temporary Pump Station 23T, located at the southwest corner of the intersection of Cactus and Siempre Viva Roads. This site contains a 2 MGD pump station including pumps piping and electrical switchgear, one overhead light pole, and concrete paving. Chain-link fencing with barbed wire and extensive landscaping are located at the site perimeter. The site of proposed Pump Station A1, located adjacent to Pump Station 23T, currently contains a commercial building used for a landscaping business, concrete and gravel parking lots, a vehicle storage yard containing a warehouse surrounded by a chain link fence, and a previously graded pad covered with disturbed non-native grassland. According to the Otay Mesa Community Plan, the proposed Pump Station A1 site is located within the Industrial Subdistrict of the Otay Mesa Development District, and is zoned for industrial parks (Figure 4.1-1).

A flat mesa top containing open space characterizes the west mesa area in the vicinity of the proposed Phase 2C facilities and disturbed graded areas that are interrupted by relatively undisturbed finger canyons. In the future, it is anticipated that these areas would be developed with residential land uses, as identified in the Notice of Preparation of a Draft Environmental Impact Report for the Otay Mesa Community Plan Update published by the City of San Diego on May 12, 2004.

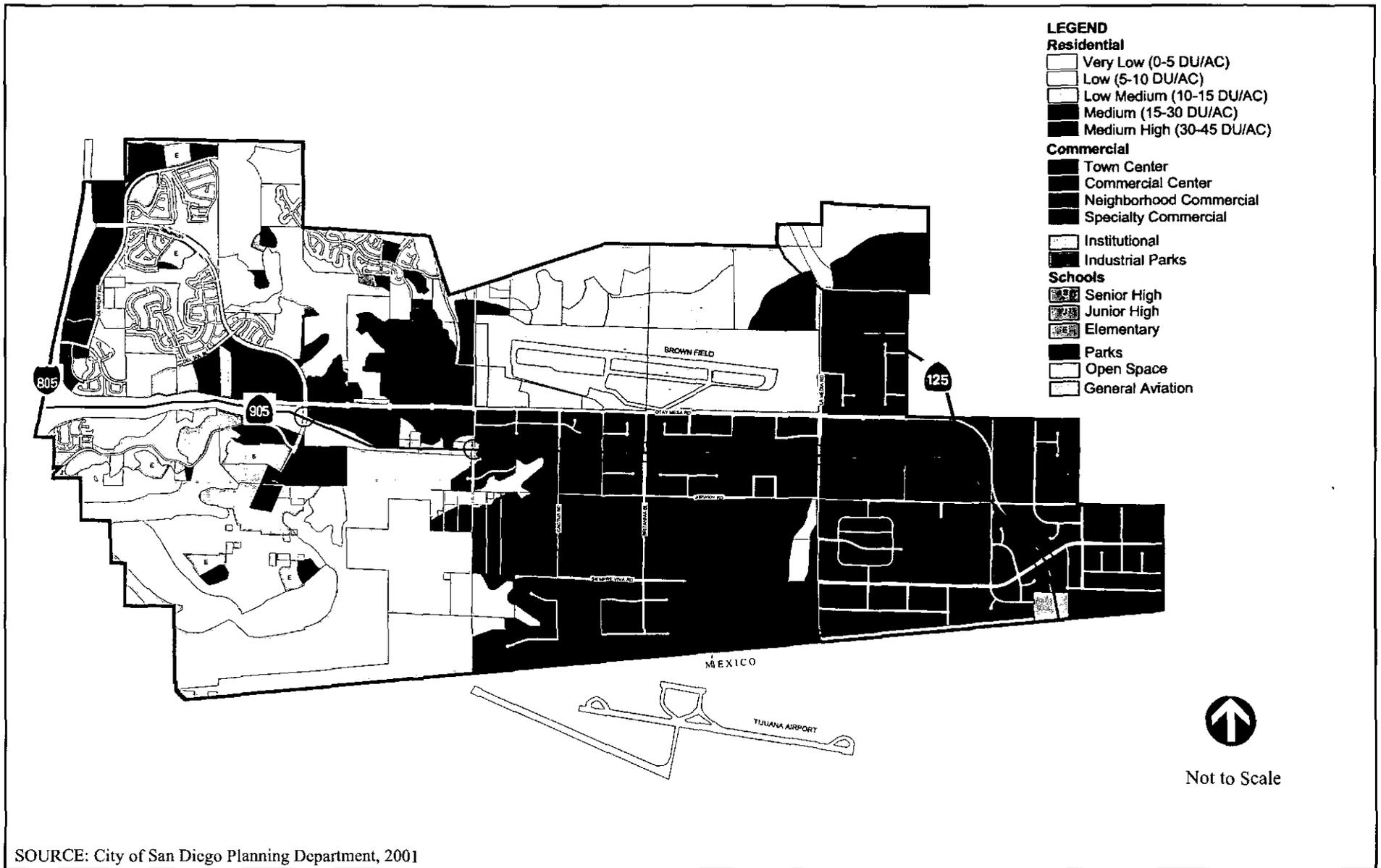
ADJACENT LAND USES

The proposed project alignment, located beneath area roadways, would be located adjacent to a variety of land uses types. The eastern portion of the project alignment is located within the Otay Mesa Development District, which is zoned for industrial uses, although many land uses in this area are non-industrial including residential, commercial and agricultural uses. The northeastern endpoint of the OMTS pipeline alignment would begin in the east mesa area, along an unpaved road located along the northeastern boundary of Brown Field, an aviation industrial park operated by the City of San Diego. The area to the north of Brown Field is currently undeveloped and zoned for industrial land use. The proposed alignment would be located under La Media Road, adjacent to industrial, commercial, agricultural, and open space land uses. A large detention basin is located along the east side of La Media Road just north of its intersection with Siempre Viva Road. At this intersection, the proposed pipeline alignment would turn and follow under Siempre Viva Road between La Media Road and Cactus Road. Land uses adjacent to Siempre Viva Road include open space, disturbed, agricultural, industrial, and commercial land uses. A few residential uses are also located along this roadway. An aboveground parking structure at Tijuana Airport and the fence along the U.S./Mexico international border is visible to the south.

The alignment would then follow Cactus Road from Siempre Viva Road to Otay Mesa Road. Land uses adjacent to Cactus Road include open space, disturbed, residential, industrial, and commercial land uses. A portion of the sewer pipeline would be located under Camino Maquiladora from Cactus Road to Heritage Road and Heritage Road between Camino Maquiladora and Otay Mesa Road. Land uses along these roads are highly developed with industrial and commercial uses. The proposed project would be located under Otay Mesa Road from Cactus Road to Old Otay Mesa Road. Land uses adjacent to Otay Mesa Road include industrial, residential, agricultural, and disturbed land uses. Gasoline stations are located along Otay Mesa Road at the intersections of Cactus Road, Heritage Road and La Media Road. Open space/preserve area, including a southern branch of the Otay Valley Regional Park (OVRP), is located to the north of Otay Mesa Road.

The proposed pipeline alignment would also be located under Caliente and Airway Roads. Land uses surrounding Caliente Road are undeveloped and mostly disturbed with the exception of San Ysidro High School. Overhead power lines are located along Caliente Road. San Ysidro High School is located at 5353 Airway Road on the southern side of Airway Road and the western side of Caliente Road. Light poles for street lighting are located along Airway Road.

The proposed pipeline would be located under Old Otay Mesa Road from Otay Mesa Road to East Beyer Boulevard. The northern portion of Old Otay Mesa Road, from Otay Mesa Road to the Remington Hills residential development, is temporarily closed due to the construction of the Princess Park residential development and the California Terraces Offsite Sewer Project. This portion of the roadway would re-open once construction is completed. Residential, school, and open space land uses are located along Old Otay Mesa Road. Schools include San Ysidro Middle School, the San Ysidro School District Educational Service Center, and the Sweetwater Union High School District Adult Education Center in San Ysidro. From Old Otay Mesa Road, the pipeline would follow under East Beyer Boulevard. This roadway has a higher density of residential and commercial uses than the other project-area roadways. East Beyer Boulevard passes under the San Diego & Arizona Eastern railroad. Beyer Elementary School is also located along this roadway.



The remainder of the alignment would be located under Center Street, East and West San Ysidro Boulevard and Via de San Ysidro Boulevard located in the highly developed San Ysidro area. Land uses in this area include residential, commercial, and transportation land uses including I-805 and I-5 freeway crossings.

Land uses adjacent to existing Pump Station 23T include agricultural, commercial, industrial and open space.

RELEVANT PLANS AND POLICIES

Several plans and policies have been adopted which apply to the proposed project, the project area, or the potentially affected surrounding areas and resources. The applicable plans and policies governing the proposed project are discussed in the following sections.

CITY OF SAN DIEGO PROGRESS GUIDE AND GENERAL PLAN

The City's Progress Guide and General Plan (General Plan) is a comprehensive long-term plan for the physical development of the City that presents overall policies for the entire City. The General Plan provides regional goals and policies to guide the development of community plans. The General Plan includes a series of community plans that define the General Plan land use goals for individual communities in the City. The OMTS project is located within the planning areas of the Otay Mesa and San Ysidro Community Plans, which are described in the following sections.

Even though the General Plan is a broad regional document, the plan does contain some goals and recommendations that are pertinent to the proposed project. The Public Facilities, Services and Safety Element provides findings, a goal, and recommendations for sanitation liquid wastes. This section's main focus is on the pursuit of a recyclable approach to liquid waste management. However, it does provide one recommendation that would be applicable to the proposed OMTS project. This recommendation is to permit the extension of sewerage lines only when in conformance with adopted regional, City and community plans, and the holding and treating capacity of the existing plants.

OTAY MESA COMMUNITY PLAN

The 1981 Otay Mesa Community Plan and Environmental Impact Report is the existing land use plan for the Otay Mesa area. The Community Plan identifies four planning elements, which include Land Use, Public Facilities, Social Environment, and Transportation. The Otay Mesa Community Plan identifies *nine* overall goals. One of these goals applies to the provision of public facilities and services, such a sewer. This goal is to assure standard public facilities and services commensurate with development of the planning area. The Public Facilities Element includes a section on Sewer Facilities. This section identifies a specific objective to provide adequate water and sewer services. No other elements of the Otay Mesa Community Plan specifically pertain to the proposed OMTS project.

The 1981 Otay Mesa Community Plan is currently undergoing a comprehensive update including modifications to the various elements of the plan to reflect land use and circulation changes. The major revisions to the plan focus on redesignating land uses within six proposed neighborhoods throughout the community planning area. The majority of these neighborhoods are currently designated for industrial uses. A Notice of Preparation of a Draft Environmental Impact Report was published on May 12 2004 for the Otay Mesa Community Plan Update. Once completed, it is anticipated that the community plan update would differ greatly from the 1981 Community Plan, due to the new development goals that the City of San Diego has for the Otay Mesa region.

SAN YSIDRO COMMUNITY PLAN

The San Ysidro Community Plan (1990) identifies nine planning elements, which include Residential, Commercial, the International Gateway, Industrial, Parks/Recreation/Open Space, Urban Form, Transportation and Circulation, Community Facilities and Services, and Cultural and Historic Resources. The proposed project is a public linear utility project, which is covered in the Community Facilities and Services Element. The overall goal of this element is to provide a full balanced range of employment opportunities, medical facilities, public utilities, and educational, social, and recreational facilities and services. Specific objectives applicable to public linear utility projects as found in the Community Facilities and Services Element include the following:

- Provide sewer and water service to all residents of San Ysidro; and
- Ensure the maintenance and periodic upgrading of public utilities services.

OTAY MESA DEVELOPMENT DISTRICT

The Otay Mesa Development District is discussed in Chapter 10, Article 3, Division 11 of the San Diego Municipal Code. The District includes designated industrial and commercial land uses in the Otay Mesa community planning area. The purpose of the District is to create and promote the development of the industrial area and to control the use, development intensity, and development design of the District. Roadways are not included in the District. The District includes Industrial and Commercial Subdistricts. Proposed Pump Station A1 would be located in the Industrial Subdistrict of the Otay Mesa Development District. Section 103.1103(a) identifies allowed uses in the Industrial Subdistrict and Section 103.1107 identifies development regulations applicable to the allowed uses.

MULTIPLE SPECIES CONSERVATION PROGRAM SUBAREA PLAN

The Multiple Species Conservation Program (MSCP) is a comprehensive habitat conservation planning program for southwestern San Diego County. The MSCP Subarea Plan (City of San Diego 1997) is consistent with the MSCP Plan and qualifies as a stand alone document to implement the City's portion of the MSCP Preserve. The Subarea Plan has been prepared pursuant to the general outline developed by the United States Fish and Wildlife Service (USFWS) and the California Department Fish and Games (CDF&G) to meet the requirements of the California Natural Communities Conservation Planning (NCCP) Act of 1992.

A component of the MSCP is the Multi-Habitat Planning Area (MHPA). The MHPA delineates core biological resource areas and corridors that are targeted for conservation, and includes the portions of Otay Valley Regional Park located within the City of San Diego boundaries. The proposed project would be located adjacent to the Otay Mesa area of the MHPA in some locations along the proposed alignment. It would not be located within the MHPA. Land uses including utility lines, roads, limited water facilities and other essential public facilities are considered conditionally compatible with the biological objectives of the MSCP. General planning policies and design guidelines are provided in the MSCP Subarea Plan for application in the review and approval of development projects within or adjacent to the MHPA. These include construction and maintenance policies for roads and utilities. Although most of these policies refer to road and utilities projects within the MHPA, the following two policies would apply to projects adjacent to the MHPA:

- All proposed utility lines (e.g. sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights-of-way and disturbed areas, minimizing habitat fragmentation.

- Temporary construction areas and roads, staging areas or permanent access roads must not disturb existing habitats unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in the habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for the disturbed area after project completion will be required.

The MSCP Subarea Plan also contains Land Use Adjacency Guidelines to be followed by planned or existing land uses adjacent to the MHPA. The adjacency guidelines are provided to ensure minimal impacts to the MHPA. Issues identified in the *Land Use Adjacency Guidelines* include drainage, toxics, lighting, noise, barriers, invasives, brush management, and grading/land development. Land Use Adjacency Guidelines regarding barriers and invasives are not applicable to the OMTS project.

The following Land Use Agency Guidelines would apply to the proposed project:

- Drainage: All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g. clay compounds) when necessary and appropriate.
- Toxics: Land uses, such as recreation and agriculture, that use chemicals or generate byproducts such as manure, which are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality, need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.
- Lighting: Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.
- Noise: Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.
- Brush Management: Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible.
- Grading/Land Development: Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

SAN DIEGO LAND DEVELOPMENT CODE

Chapters 11 through 14 of the San Diego Municipal Code are referred to as the Land Development Code. These chapters contain the City's planning, zoning, subdivision, and building regulations. The Land Development Code is one of the tools used to implement the City's General Plan. The proposed project would be subject to the planning, zoning, subdivision, and building regulations of the Land Development Code as well as the development regulations for Environmentally Sensitive Lands and Historical Resources, which are provided in Chapter 14 of the Land Development Code. Descriptions of the Environmentally Sensitive Lands Regulations and the Historical Resources Regulations are provided below.

City of San Diego Environmentally Sensitive Lands Regulations

The Environmentally Sensitive Lands (ESL) Regulations are provided in Chapter 14, Article 3, Division 1 of the Land Development Code. ESL Regulations are provided as supplemental development regulations with the purpose of protecting, preserving, and restoring environmentally sensitive lands in the City of San Diego. These regulations apply to those developments that are located on lands containing sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, or 100-year floodplains. The proposed project would include the construction of Pump Station A1 on a 2.8-acre parcel containing non-native grassland. The construction of Phase 2A1 would also result in impacts to approximately 0.03 acre of Diegan coastal sage scrub, 0.04 acre of disturbed Diegan coastal sage scrub, and 0.79 acre of non-native grassland along Old Otay Mesa Road. Diegan coastal sage scrub, disturbed Diegan coastal sage scrub and non-native grassland are identified in the ESL as a sensitive biological resource. Section 143.0141 identifies development regulations for development that would encroach into sensitive biological resources. Many of these regulations would not apply to the proposed project because they pertain to impacts to wetlands and sensitive biological resources in the MHPA. However, the following development regulations for development occurring adjacent to or outside of the MHPA would apply to the proposed project:

- Inside and adjacent to the MHPA, all development proposals shall be consistent with the City of San Diego MSCP Subarea Plan.
- Outside the MHPA, encroachment into sensitive biological resources is not limited, except as set forth in regulations pursuant to development of wetlands or open space.
- All development occurring in sensitive biological resources is subject to a site-specific impact analysis conducted by the City Manager, in accordance with the Biology Guidelines in the Land Development Manual. The impact analysis shall evaluate impacts to sensitive biological resources and CEQA sensitive species. The analysis shall determine the corresponding mitigation, where appropriate, and the requirements for protection and management.
- Grading during wildlife breeding seasons shall be consistent with the requirements of the City of San Diego MSCP Subarea Plan.

City of San Diego Historical Resources Regulations

Historical Resources Regulations are supplemental development regulations provided for the purpose of protecting, preserving, and restoring the historical resources of the City. These regulations apply to designated historical resources, historical buildings, historical districts, historical landscapes, historical objects, historical structures, important archaeological sites, and traditional cultural properties. The Historical Resources Regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources. The proposed project would not impact any designated historical structures, objects, districts, landscapes, or traditional cultural sites. The proposed project would have the potential to impact archaeological

resources within and/or adjacent to the project alignment. As defined in Chapter 11, Article 10, Division 1 of the San Diego Municipal Code, important archaeological site means the following:

"a site or location of past human occupation with significant subsurface deposits, where important prehistoric or historic activities or events occurred, that possesses unique historical, scientific, cultural, religious, or ethnic value of local, regional, state, or federal importance. Important archaeological sites include:

(a) Archaeological sites listed in the City of San Diego Historical Resources Board Register or listed in or determined to be eligible for listing in the California Register of Historical Resources or in the National Register of Historic Places;

(b) Areas of past human occupation where important prehistoric or historic activities or events occurred (such as villages or large camps); and

(c) Locations of past or current traditional religious or ceremonial observances as defined by California Public Resources Code Section 5097.9, et seq., and protected under Public Law 95-341, the American Indian Religious Freedom."

As identified in Section 143.0253 of the Land Development Code, the following development regulations apply to important archaeological sites:

(a) Important archaeological sites shall be preserved in their natural state, except that development may be permitted as provided in this section or as provided in Section 143.0260.

(1) Development may be permitted in areas containing important archaeological sites if necessary to achieve a reasonable development area, with up to 25 percent encroachment into any important archaeological site allowed. This 25 percent encroachment includes all grading, structures, public and private streets, brush management except as provided in Section 143.0225, and any project-serving utilities.

(2) An additional encroachment of up to 15 percent, for a total encroachment of 40 percent, into important archaeological sites may be permitted for essential public service projects that are sited, designed, and constructed to minimize adverse impacts to important archaeological sites, where it has been demonstrated that there is no feasible, less environmentally damaging location or alternative. Essential public service projects include publicly owned parks and recreation facilities, fire and police stations, publicly owned libraries, public schools, major streets and primary arterials, and public utility systems.

(b) Any encroachment into important archaeological sites shall include measures to mitigate for the partial loss of the resource as a condition of approval. Mitigation shall include the following methods, consistent with the Historical Resources Guidelines of the Land Development Manual:

(1) The preservation through avoidance of the remaining portion of the important archaeological site; and

(2) The implementation of a research design and excavation program that recovers the scientific value of the portion of the important archaeological site that would be lost due to encroachment.

4.1.2 IMPACT SIGNIFICANCE CRITERIA

The criteria identified below for land use impact significance are based upon the City and CEQA thresholds. Land use impacts would be considered significant if the proposed project:

- Is in conflict with the goals, objectives, and recommendations of the *City's Progress Guide and General Plan*, applicable community plans, or any other adopted plans or policies; or
- Is incompatible with adjacent land uses and surrounding densities.

4.1.3 ISSUE 1 – LAND USE PLAN, POLICY, AND REGULATION CONSISTENCY

Issue 1: Would the project result in a conflict with the goals, objectives and recommendations of the City's Progress Guide and General Plan, applicable community plans, or any other adopted plans or policies?

IMPACT ANALYSIS

As discussed in Section 4.1.1, Existing Conditions, applicable land use plans, policies, and regulations include the City's Progress Guide and General Plan, the Otay Mesa Community Plan, the San Ysidro Community Plan, the City's Land Development Code, and the MSCP Subarea Plan. In the following sections, the proposed project's consistency is discussed for each of the above-listed land use plans, policies, and regulations.

PROGRESS GUIDE AND GENERAL PLAN

As previously discussed, the General Plan primarily provides regional goals and policies which guide development of community plans, however, there is one recommendation identified in the Public Facilities, Services and Safety Element that is relevant to the proposed project. This recommendation is to permit the extension of sewerage lines only when in conformance with adopted regional, City and community plans, and the holding and treating capacity of the existing plants. The proposed project would involve the extension and upgrade of sewer pipelines in the Otay Mesa area, as well as the concurrent upgrade of associated pump stations. As discussed in Section 2.3 of Chapter 2.0, the proposed project would be in conformance with all applicable regional plans, including the San Diego County Congestion Management Program (SANDAG 2002), the San Diego County Regional Air Quality Strategy (APCD 2001), the San Diego Regional Water Quality Control Board Water Quality Control Plan (1994), the San Diego Multiple Species Conservation Plan Subarea Plan (City 1997), the 1984 Otay Mesa Sewer Master Plan (City 1984), and the Brown Field Airport Comprehensive Land Use Plan (SANDAG 1981). The proposed project would be in conformance with the City's 1981 Otay Mesa and 1990 San Ysidro Community Plans. A discussion of the project's conformance with these plans is provided below. The project would also be in conformance with holding and treating capacity of the Point Loma Wastewater Treatment Plant (PLWTP), which treats wastewater from the Otay Mesa area. This facility currently treats approximately 180 MGD, however, it has the capacity to treat up to 240 MGD. With approximately 60 MGD of excess capacity, the PLWTP facility would have adequate capacity to treat the increase in wastewater (up to 35 MGD) that could be accommodated by construction of the proposed project. Therefore, the proposed project would not conflict with the recommendation of the Public Facilities, Services and Safety Element of the General Plan.

OTAY MESA COMMUNITY PLAN

The 1981 Otay Mesa Community Plan identifies one overall goal to assure standard public facilities and services commensurate with development of the planning area. The Public Facilities Element of the community plan identifies one specific objective related to sewer facilities, which is to provide adequate water and sewer services to the Otay Mesa community. The proposed project would be consistent with the overall plan and the specific sewer facilities objective of the Public Facilities Element because it would provide new and upgraded sewer facilities and service to the Otay Mesa area. The proposed sewer pipelines and pump stations would be sized to adequately serve the anticipated future population of the Otay Mesa community, as identified in SANDAG's *2030 Cities/County Forecast* (December 2003). Construction of the proposed project would be phased so that sewer facilities are upgraded and expanded only when demand for the services is dictated by future growth. Therefore, sewer services would be commensurate with development and would be adequate to serve the future population. No conflict with the Otay Mesa Community Plan would occur.

In addition, an amendment to the Otay Mesa Community Plan was approved on April 12, 1994 (RESOLUTION R-283693) for the California Terraces project, which modified the locations for proposed single-family, multifamily, school and park uses; added a high-medium density residential land use category (30-43 units per acre); expanded the open space system; deleted a commercial site; and revised the circulation system. The proposed project assures sewer facilities commensurate with the development approvals issued for the California Terraces project, including the approved community plan amendment.

SAN YSIDRO COMMUNITY PLAN

The Community Facilities and Services Element of the San Ysidro Community Plan (1990) identifies two specific objectives applicable to public linear utility projects in the San Ysidro community. The first objective is to provide sewer and water service to all residents of San Ysidro. The second objective is to ensure the maintenance and periodic upgrading of public utilities services. A portion of the pipeline alignment for the proposed project would be located beneath roadways in the San Ysidro community in order to provide a connection between the OMTS and the San Ysidro Interceptor sewer. However, the proposed project would be constructed to provide sewer service to the developing community of Otay Mesa. The proposed project would not include any sewer service connections to development within the San Ysidro community. Therefore, these objectives would not apply to the proposed project. As such, no conflict with the San Ysidro Community Plan would occur.

OTAY MESA DEVELOPMENT DISTRICT

The Otay Mesa Development District was created to promote and regulate the development of industrial and commercial land uses in the Otay Mesa community. Roadways are not included in the District; therefore, the proposed sewer pipeline alignment in this area would not be subject to the development regulations of the District. Proposed Pump Station A1 would be located in the Industrial Subdistrict of the Otay Mesa Development District and would be subject to the development regulations identified for this subdistrict. The uses allowed within the Industrial Subdistrict are outlined in Section 103.1103(a), which identifies major utilities and services as an allowed use. The proposed project is the provision of sewer facilities and services, which is considered to be a major utility. The proposed pump station must also be consistent with the development regulations identified in Section 103.1107. Therefore, the proposed project would be consistent with the allowed uses and development regulations of the Industrial Subdistrict. No conflict with the applicable development regulations of the Otay Mesa Development District would occur.

MSCP SUBAREA PLAN

According to the MSCP Subarea Plan, utility lines and other essential public facilities are considered conditionally compatible with the biological objectives of the MSCP. The majority of the goals and

objectives identified in the MSCP Subarea Plan apply to those areas identified as part of the MHPA; however, the plan also contains goals and objectives for projects adjacent to the MHPA. The OMTS project would not be located within the MHPA. Portions of the project alignment located under Old Otay Mesa Road, Otay Mesa Road, Siempre Viva Road and La Media Road would be located adjacent to the MHPA within Otay Mesa. Phases 2A1, 2A2, 2D and 3 would involve pipeline construction along the portions of these roadways located adjacent to the MHPA.

Proposed Pump Station A1 would be located approximately 1,000 feet to the east of the MHPA and would be physically separated from the MHPA by existing industrial development. The siting of the Phase 2C sewer facilities is not likely to be located within, but may be located adjacent to, the MHPA. The precise location and extent of these facilities is unknown at this time and would be subject to the development plans of future residential projects. As discussed in Chapter 3.0, Project Description, these future development projects would require environmental review in accordance with the California Environmental Quality Act (CEQA), which would address potential impacts to the MHPA.

The MSCP Subarea Plan identifies policies and guidelines for the construction and maintenance of roads and utilities adjacent to or within the MHPA. Two of these policies would be applicable to the proposed project. The MSCP Subarea Plan also identifies Land Use Adjacency Guidelines for planned and existing land uses adjacent to the MHPA. Issues identified include drainage, toxics, lighting, noise, barriers, invasives, brush management, and grading/land development. Guidelines regarding barriers, invasives and brush management would not apply to the OMTS project. Table 4.1-1 states the applicable policies identified in the MSCP Subarea Plan and provides an evaluation of the consistency of the proposed OMTS project with each policy.

CITY OF SAN DIEGO LAND DEVELOPMENT CODE

The proposed project is not expected to conflict with the planning, zoning, subdivision and building regulations of the Land Development Code. Zoning designations do not apply to roadways. Since the majority of the proposed sewer pipeline would be constructed under existing and proposed roadways, no zoning designations would apply to these project areas. Proposed Pump Station A1 would be located in an area designated for industrial use. A sewer pump station would be compatible with industrial uses and would be consistent with the land use designation of the property. With respect to the Historical Resources Regulations, the project would be subject to these regulations because project construction may impact important archaeological sites. The project area contains sensitive habitat and, therefore, the proposed project must comply with the Environmentally Sensitive Lands Regulations. A detailed discussion of the relation of the proposed project to these regulations is provided below. As discussed in those sections, the proposed project would not conflict with the Historical Resources Regulations or the Environmentally Sensitive Lands Regulations. The proposed pump station would comply with the planning and building regulations contained in the Land Development Code. Therefore, the proposed project would not conflict with this planning document.

Environmentally Sensitive Lands Regulations

The OMTS project would include the construction of Pump Station A1 on a 2.8-acre parcel containing non-native grassland habitat. The ESL Regulations identify non-native grassland habitat as a sensitive biological resource. No other portions of the proposed project area would involve development on environmentally sensitive lands. Table 4.1-2 states the applicable policies identified in the ESL Regulations and provides an evaluation of the consistency of the proposed OMTS project with each policy.

Table 4.1-1. Applicable MSCP Subarea Plan Policies and Proposed Project Consistency

MSCP Policies for Construction/Maintenance of Utilities	Proposed Project Consistency
<p>All proposed utility lines (e.g. sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights of way, and disturbed areas, minimizing habitat fragmentation.</p> <p>Temporary areas and roads, staging areas or permanent access roads must not disturb existing habitats unless determined to be unavoidable. All such activities must occur on exiting agricultural lands or in other disturbed areas rather than in the habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for the disturbed area after project completion will be required.</p>	<p>The proposed project would be designed to avoid impacts to the MHPA through the construction of the proposed sewer pipeline alignment under existing and future roadways not located within the MHPA. Proposed Pump Station A1 would also not be located within the MHPA. Therefore, the proposed project would avoid impacts to the MHPA and would not conflict with this policy.</p> <p>The proposed project would include materials and equipment staging areas and soil stockpile locations during construction activities. As discussed in Section 3.0, Project Description, the staging areas would be sited within existing roadway ROW, which does not contain sensitive habitats. The proposed project would not include temporary areas and roads. Nonetheless, mitigation measures <i>Land Use – 1</i> and <i>2</i>, would require all staging areas to be located in existing disturbed or developed areas, outside the MHPA and drainage areas. Therefore, the proposed project would not conflict with this policy.</p>
MSCP Land Use Adjacency Guidelines	Proposed Project Consistency
<p><u>Drainage:</u> All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g. clay compounds) when necessary and appropriate.</p> <p><u>Toxics:</u> Land uses, such as recreation and agriculture, that use chemicals or generate byproducts such as manure, that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.</p>	<p>The proposed project would include the construction of Pump Station A1 including a new parking lot at the southeast corner of the intersection of Cactus and Siempre Viva Roads. This site would be located approximately 1,000 feet to the east of the MHPA and would be physically separated from the MHPA by existing industrial development. Due to the distance of the MHPA to the pump station, the pump station site would not drain directly into the MHPA. Conformance with the NPDES Construction Permit, NPDES General Permit and the City’s Storm Water Standards Manual would reduce short and long-term water quality impacts to downstream water bodies resulting from discharges at the pump station site to below a level of significance. No other development or parking lots would be constructed as a result of the proposed project. Therefore, the proposed project would not conflict with this policy.</p> <p>The proposed project would not include recreational or agricultural land uses that generate byproducts such as manure. The underground sewer pipelines implemented as part of the proposed project would not utilize any chemicals or generate any byproducts that would be applied to or drain into the MHPA. Proposed Pump Station A1 would utilize chemicals for odor control in the wet well and flow stream; however, these chemicals would be used indoors and in compliance with all applicable regulations for the storage and use of hazardous materials. In addition, the proposed pump station would be constructed approximately 1,000 feet to the east of the MHPA and would not drain directly to the MHPA. Therefore, the proposed project would not conflict with this policy.</p>

Table 4.1-1 Continued

MSCP Land Use Adjacency Guidelines	Proposed Project Consistency
<p><u>Lighting:</u> Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.</p>	<p>The only permanent lighting associated with the operation of the proposed project would be at Pump Station A1, which would require minimal nighttime security lighting. In addition, the pump station would be located approximately 1,000 feet to the east of the MHPA and would be physically separated from the MHPA by existing industrial development. Due to the distance of the pump station site to the MHPA, it is unlikely that lighting at the pump station would affect the MHPA. Nonetheless, mitigation measure <i>Land Use - 3</i>, would require all lighting installed at the proposed pump station to be shielded to prevent light spillover to adjacent MHPA areas. Therefore, the proposed project would not conflict with this policy.</p>
<p><u>Noise:</u> Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.</p>	<p>In addition, several phases of the proposed project would require nighttime construction adjacent to the MHPA. As a result, there is the potential for a short-term temporary construction lighting impact to the adjacent MHPA. However, the implementation of mitigation measure <i>Land Use - 4</i>, requiring all construction lighting to be shielded to prevent light spillover to adjacent MHPA areas, would reduce the impact to below a level of significance. Therefore, the proposed project would not conflict with this policy.</p>
<p><u>Grading/Land Development:</u> Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.</p>	<p>The only noise associated with the operation of the proposed project would be at the Pump Station A1 site. This site would be located approximately 1,000 feet to the east of the MHPA and would be physically separated from the MHPA by existing industrial development. Due to the distance of the pump station site to the MHPA, noise generated at Pump Station A1 would not affect the MHPA. Therefore, the proposed project would not conflict with this policy.</p>
	<p>Noise associated with project construction activities would have the potential to affect the MHPA where it is located adjacent to the proposed project alignment. As discussed in Section 2.4.2, operation of dewatering pumps during construction would have a potential noise impact to sensitive biological species during construction. Mitigation measures <i>Land Use - 5</i> through <i>7</i> would reduce temporary construction noise impacts on sensitive receptors to below a level of significance. In addition, mitigation measure <i>Land Use - 8, 8a, 8b, and 8c</i> would reduce potential indirect construction noise impacts to sensitive bird species within the MHPA to below a level of significance.</p>
	<p>The proposed project would require grading for the development of Pump Station A1 but would not involve the creation of manufactured slopes. Therefore, this policy would not be applicable to the proposed project.</p>

Table 4.1-2. Applicable ESL Guidelines and Proposed Project Consistency

Development Regulations for Sensitive Biological Resources	Proposed Project Consistency
<p>Inside and adjacent to the MHPA, all development proposals shall be consistent with the City of San Diego MSCP Subarea Plan.</p>	<p>The proposed project would not be located within the MHPA but would be located adjacent to it at certain locations along the pipeline alignment. As described above in Table 4.1-1, implementation of mitigation measures <i>Land Use – 1</i> through <i>8c</i> would ensure that the proposed project would be consistent with the policies identified in the City of San Diego MSCP Subarea Plan. Therefore, the proposed project would not conflict with this policy.</p>
<p>Outside the MHPA, encroachment into sensitive biological resources is not limited, except as set forth in regulations pursuant to development of wetlands or open space.</p>	<p>The proposed project would not involve the development of wetlands or designated open space outside or inside the MHPA. Therefore, the proposed project would not conflict with this policy.</p>
<p>All development occurring in sensitive biological resources is subject to a site-specific impact analysis conducted by the City Manager, in accordance with the Biology Guidelines in the Land Development Manual. The impact analysis shall evaluate impacts to sensitive biological resources and CEQA sensitive species. The analysis shall determine the corresponding mitigation, where appropriate, and the requirements for protection and management.</p>	<p>A site specific impact analysis was conducted for the proposed project which identified the following impacts to sensitive biological resources outside the MHPA: 2.8-acres of non-native grassland (HELIX, 2003). The analysis, provided as Appendix E, evaluates the impacts to these sensitive biological resources and provides mitigation measures to reduce impacts to below a level of significance. <i>Biology mitigation measures are provided in Section 4.7, Biological Resources – 1</i> through <i>5</i>. Therefore, the proposed project would not conflict with this policy.</p>
<p>Grading during wildlife breeding seasons shall be consistent with the requirements of the City of San Diego MSCP Subarea Plan.</p>	<p>The only grading associated for the proposed project would be for Pump Station A1 during Phase 2E. As discussed above, this pump station would be located approximately 1,000 feet to the east of the MHPA. In addition, <i>Land Use – 8, 8a, 8b, and 8c</i> requires pre-construction protocol surveys if construction adjacent to the MHPA would occur during sensitive avian species breeding seasons. Therefore, the proposed project would not conflict with this policy.</p>

**Table 4.1-3. Applicable Historical Resources Regulations Guidelines
and Proposed Project Consistency**

General Development Regulations for Historical Resources	Proposed Project Consistency
<p>All areas with designated historical resources, traditional cultural properties or important archaeological sites that remain undisturbed or are restored or enhanced as a result of a development approval shall be preserved as a condition of that approval.</p>	<p>See Section 4.5.3. Any important archaeological resources that are not disturbed or that are restored or enhanced as a result of the proposed project would be preserved in their existing state. Therefore, the proposed project would not conflict with this policy.</p>
<p>Important archaeological sites shall be preserved in their natural state, except that development may be permitted as provided below.</p>	<p>The proposed project is a public sewer project and, therefore, it would qualify as an essential public utility project, allowing for up to 40 percent encroachment into an important archaeological site. However, the project's impacts to archaeological resources would be limited to the public ROW and would be unlikely to impact greater than 40 percent of any potentially important archaeological site. Construction monitoring would be implemented for all archaeological sites identified within the Phase 2 project alignment, consistent with mitigation measure <i>Historical Resources - 2</i>. This monitoring effort would ensure that project construction would not impact greater than 40 percent of an important archaeological site. Therefore, the proposed project would not conflict with this policy.</p>
<p>(1) Development may be permitted in areas containing important archaeological sites if necessary to achieve a reasonable development area, with up to 25 percent encroachment into any important archaeological site allowed. This 25 percent encroachment includes all grading, structures, public and private streets, brush management except as provided in Section 143.0225, and any project-serving utilities.</p>	<p>(2) An additional encroachment of up to 15 percent, for a total encroachment of 40 percent, into important archaeological sites may be permitted for essential public service projects that are sited, designed, and constructed to minimize adverse impacts to important archaeological sites, where it has been demonstrated that there is no feasible, less environmentally damaging location or alternative. Essential public service projects include publicly owned parks and recreation facilities, fire and police stations, publicly owned libraries, public schools, major streets and primary arterials, and public utility systems.</p>
<p>Any encroachment into important archaeological sites shall include measures to mitigate for the partial loss of the resource as a condition of approval. Mitigation shall include the following methods, consistent with the Historical Resources Guidelines of the Land Development Manual:</p>	<p>As identified in Section 4.5.3, the proposed project would have the potential to impact known and unknown archaeological resources located within and adjacent to the proposed project alignment. Mitigation measures <i>Historical Resources - 1</i> and <i>2</i> would be implemented to reduce impacts to archaeological resources to below a level of significance. These mitigation measures are consistent with the Historical Resources Regulations of the Land Development Manual. Therefore, the proposed project would not conflict with this regulation.</p>
<p>(1) The preservation through avoidance of the remaining portion of the important archaeological site; and</p>	<p>(2) The implementation of a research design and excavation program that recovers the scientific value of the portion of the important archaeological site that would be lost due to encroachment.</p>

Historical Resources Regulations

Construction of the OMTS project may have the potential to impact important archaeological resources, which are regulated by the Historical Resources Regulations of the City of San Diego Land Development Code. The proposed project would not impact any designated historical structures, objects, districts, landscapes, or traditional cultural sites. Table 4.1-3 states the applicable policies identified in the Historical Resources Regulations and provides an evaluation of the proposed OMTS project with each policy.

SIGNIFICANCE OF IMPACT

The construction and operation of the proposed project would not result in a conflict with the goals, objectives and recommendations of the City's Progress Guide and General Plan, applicable community plans, or Land Development Code including the ESL Regulations and Historical Resources Regulations. However, the project would have the potential to conflict with the MSCP policies for Construction/Maintenance of Utilities and the MSCP Land Use Adjacency Guidelines. As a result, the project would result in a significant impact with an adopted land use plan.

MITIGATION, MONITORING, AND REPORTING

Implementation of the following mitigation measures would reduce potentially significant impacts associated with project conflicts with MSCP policies and guidelines to below a level of significance. Measures *Land Use – 1* and *2* are intended to reduce indirect impacts from errant construction activities to below a level of significance. Indirect impacts from night lighting are addressed with measures *Land Use – 3* and *4* and indirect impacts from noise are addressed with measures *Land Use – 5, 6, 7, 8, 8a, 8b* and *8c*.

Land Use – 1: All staging areas shall be located in existing disturbed or developed areas outside the MHPA and drainage areas. All equipment and/or materials related to construction shall be stored in designated and properly maintained staging areas. The location of the staging areas shall be reviewed and approved by the City Manager. A responsible party (i.e., superintendent, resident engineer) shall be identified to ensure that all construction crews and/or field workers comply with these measures.

Land Use – 2: Prior to the City's first pre-construction meeting, all construction and staging area limits shall be clearly delineated with orange construction fencing and silt fencing or fiber rolls to ensure that construction activity remains within the defined construction limits. A qualified biologist shall inspect the fencing prior to the start of construction and shall monitor activities during construction to avoid unauthorized impacts. The schedule for the biological monitoring visits during construction shall be determined at the pre-construction meeting for each phase of project construction. In addition, an educational brochure shall be developed for distribution to construction and maintenance personnel to minimize the occurrence of unauthorized activities. The qualified biologist shall provide direction to construction personnel regarding the need to avoid impacts adjacent sensitive areas.

Land Use – 3: Prior to the City's final construction inspection of the expansion of Pump Station 23T and the construction and/or expansion of Pump Station A1, all new lighting installed at the pump stations shall be shielded to prevent light spillover to adjacent MHPA areas, in conformance with the City's MSCP Adjacency Guidelines. The shielding shall consist of fixtures that physically direct light away from adjacent MHPA areas.

Land Use – 4: If construction is planned within or adjacent to the MHPA during nighttime hours, lighting shall be directed and/or shielded to prevent light spillover to adjacent MHPA areas, in conformance with the

City's MSCP Adjacency Guidelines. The shielding shall consist of fixtures that physically direct light away from adjacent MHPA areas.

Land Use – 5: During nocturnal operation of any dewatering pumps the construction contractor shall require temporary berms or sound walls, or the relocation of the dewatering pumps outside the 160-foot noise "envelope" of any sensitive receptor.

Land Use – 6: The project contractor shall place all stationary construction equipment so that emitted noise is directed away from identified sensitive receptors.

Land Use – 7: The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction related noise sources and noise sensitive receptors. Construction staging areas shall not be located adjacent to residential land uses.

Land Use – 8: If construction is planned within or adjacent to the MHPA during the breeding season of sensitive avian species, it shall only occur subject to the City's Mitigation, Monitoring, and Reporting Conditions for Potential Impacts to Habitats Occupied by Sensitive Avian Species. Nesting avians are susceptible to disturbance from construction activity. Any construction activity within 500 feet of an active raptor nest, or within 300 feet of a Cooper's hawk nest, shall be considered significant. Five hundred feet has been recognized by biologists and agencies as a conservative distance to use in addressing potential indirect nesting impacts for most raptor species. All phases of construction for the proposed project that are located adjacent to the MHPA shall be required to comply with the mitigation measures **Land Use – 8a, 8b, and 8c**, described below, to reduce potential indirect construction noise impacts to sensitive bird species to below a level of significance.

Land Use – 8a: Pre-construction protocol surveys, conducted by a qualified biologist, shall be required for the following species if any phase of project construction would occur adjacent to the MHPA between the identified species' breeding seasons:

- March 1 to August 15 (Coastal California gnatcatcher)
- February 1 to August 31 (Burrowing owl)
- February 1 to July 30 (Raptors - tall trees)
- February 15 to August 15 (Cactus Wren)

If it is determined that construction activities would occur during the raptor breeding season, one pre-construction nest survey shall be conducted within 500 feet of the impact area to look for active raptor nests. If no active nests are found, no further mitigation shall be required.

Land Use – 8b: If one or more active nests are found, monitoring shall be conducted throughout construction by a qualified biologist to ensure that all construction activities remain at least 500 feet from the active nest, with the exception of Cooper's hawk nest, for which construction activities shall remain 300 feet away from the nest. The biologist shall also determine when the nest becomes inactive and construction can move closer to the nest site. If construction activities are conducted within the MHPA, additional raptor impact avoidance shall occur, as listed below:

Golden Eagle	4,000 feet from nesting, and
Northern Harrier	900 feet from nesting site.

Land Use – 8c: Any removal of potential raptor nesting trees or other structures should occur during the non-breeding season (i.e., between August 1 and January 31st).

4.2 NOISE

The following noise discussion is based on the information in the *Acoustical Report for Otay Mesa Trunk Sewer Project, City of San Diego, California* (June 2004) prepared by Giroux & Associates. This document is included as Appendix B to this EIR.

4.2.1 EXISTING CONDITIONS

NOISE SETTING

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech, sleep disturbance and, in the extreme, hearing impairment. Table 4.2-1 shows the relationship of various sound levels to commonly experienced noise events.

The sound pressure level is the most common descriptor used to characterize the loudness of ambient noise. The unit of measurement of sound pressure level is a decibel (dBA). Because sound or noise can vary in intensity by over one million times within the human hearing range, a logarithmic loudness scale is used to characterize dBA values within a convenient and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire logarithmic spectrum, noise levels at maximum human sensitivity (i.e., middle-"A" and its higher harmonics) are factored more heavily into sound descriptions in a process called "A-weighting", written as dBA.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant, community noise levels vary continuously. Most environmental noise includes a mixture of noise from distant sources that create a relatively steady background noise in which no particular source is identified. Localized sources are typically superimposed upon the general background. To describe the time-varying character of environmental noise, the statistical noise descriptors, L10, L50, and L90 are commonly used. They are A-weighted noise levels exceeded during 10, 50, and 90 percent of a stated time period. In addition, Lmax describes the instantaneous maximum noise level measured.

Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq} , or the equivalent noise level for that period of time. The period of time average may be specified; $L_{eq(3)}$ would be a three-hour average; when no period is specified, only L_{eq} , a one-hour average is assumed. Community Noise Equivalent Level (CNEL) is the energy-averaged time-weighted annual noise level over a 24-hour period. Time weighting applies a penalty to the actual hourly noise level during certain periods of evening and/or nighttime hours. CNEL applies a 4-dBA penalty to the evening hours of 7:00 p.m. to 10:00 p.m., and a 10 dBA penalty to the nighttime hours of 10:00 p.m. to 7:00 a.m. These time periods and penalties were selected to reflect people's sensitivity to noise as a function of activity. Day-Night Equivalent Level (L_{dn}) is similar to CNEL except it does not apply the penalty for evening hours. L_{dn} and CNEL are often used interchangeably.

Humans can just begin to detect changes of approximately 1.5 dBA under laboratory conditions. Under outdoor ambient conditions, particularly over an extended period of time, the perception threshold for noise changes is approximately 3 dBA.

Table 4.2-1. Sound Levels of Typical Noise Sources and Noise Environments

Noise Level (Decibels)	Effect	Representative Sounds
140	Painfully Loud	Carrier Deck Military Jet Take-off with After-burner Civil Defense Siren (100 ft)
130		Commercial Jet Take-off
120	Maximum Vocal Effort	Rock Music Concert
110		Pile Driver (50 feet)
100		Ambulance Siren (100 ft) Power Lawnmower (3 ft)/Motorcycle (25 ft) Propeller Plan Flyover (1000 ft)
90	Very Annoying Hearing Damage (8 hours)	Heavy Truck (50 feet) City Traffic
80	Annoying	Alarm Clock (2 feet) Hair Dryer Vacuum Cleaner (5 feet)
70	Telephone Use Difficult	Noisy Restaurant Freeway Traffic Men's Voices (3 feet)
60	Intrusive	Air Conditioning Unit (20 feet)
50	Quiet	Light Auto Traffic (100 feet)
40		Living-room Bedroom Quiet Office
30	Very Quiet	Library Soft Whisper (15 feet)
20		Recording Studio
10	Just Audible	
0	Hearing Begins	

Note: This decibel (dBA) table compares some common sounds and shows how they rank in potential harm to hearing. Note that 70 dBA is the point at which noise begins to harm hearing, that 60 dBA is the threshold of stress response, and 45 dBA disturbs sleep. To the ear, each 10 dBA seems twice as loud.

REGULATORY STANDARDS

CITY OF SAN DIEGO LAND USE COMPATIBILITY CRITERIA

The City has adopted Noise Level Compatibility Standards for various land uses. The Compatibility Standards indicate the compatibility of various land uses with specific CNEL. The Community Noise Equivalent Level is the sound level in dBA that corresponds to the average energy content of the noise from transportation and non-transportation sources, measured over a 24-hour period. General community noise and land use compatibility guidelines are set forth in the Transportation Element in the City of San Diego (City) Progress Guide and General Plan as shown in Table 4.2-2. The guidelines are based primarily on noise/land

use recommendations from the State Department of Housing and Urban Development (HUD) document entitled "Planning Guidelines for Local Agencies." An exterior noise exposure of 65 dBA CNEL is compatible with residential and other noise sensitive uses. Noise standards for offices (business and professional) are 70 dBA CNEL. Least sensitive commercial, manufacturing and some recreational uses are considered compatible with noise levels up to 75 dBA CNEL.

Table 4.2-2. City of San Diego Noise Land Use Compatibility Chart

Land Use	Annual Community Noise Equivalent Level in Decibels					
	50	55	60	65	70	75
1. Outdoor Amphitheaters (may not be suitable for certain types of music).	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
2. Schools, Libraries	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
3. Nature Preserves, Wildlife Preserves	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
4. Residential-Single Family, Multiple Family, Mobile Homes, Transient Housing	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
5. Retirement Home, Intermediate Care Facilities, Convalescent Homes	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
6. Hospitals	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
7. Parks, Playgrounds	Compatible	Compatible	Compatible	Incompatible	Incompatible	Incompatible
8. Office Buildings, Business and Professional	Compatible	Compatible	Compatible	Compatible	Incompatible	Incompatible
9. Auditoriums, Concert Halls, Indoor Arenas, Churches	Compatible	Compatible	Compatible	Compatible	Compatible	Incompatible
10. Riding Stables, Water Recreation Facilities	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
11. Outdoor Spectator Sports, Golf Courses	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
12. Livestock Farming, Animal Breeding	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
13. Commercial-Retail, Shopping Centers, Restaurants, Movie Theaters	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
14. Commercial-Wholesale, Industrial Manufacturing, Utilities	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
15. Agriculture (except Livestock), Extractive Industry, Farming	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
16. Cemeteries	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible

Source: City of San Diego Progress Guide and General Plan (Transportation Element), 1989

- 
COMPATIBLE The average noise level is such that indoor and outdoor activities associated with the land use may be carried out with essentially no interference from noise.
- 
INCOMPATIBLE The average noise level is so severe that construction costs to make the indoor environment acceptable for performance of activities would probably be prohibitive. The outdoor environment would be intolerable for outdoor activities associated with the land use.

CITY OF SAN DIEGO NOISE ORDINANCE

The City also has a Noise Ordinance that is intended to address impacts from construction, fixed source, and/or operational noise. The City's Noise Ordinance is contained in Chapter V, Article 9, Section 59.5.0401 of the *City of San Diego Municipal Code* and contains the maximum one-hour average sound levels for various land uses (Table 4.2-3). The City's Noise Ordinance sets an allowed level for residential uses of 50 dBA L_{eq} from 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} from 10:00 p.m. to 7:00 a.m. For commercial uses 65 dBA L_{eq} is allowed from 7:00 a.m. to 10:00 p.m. and 55 dBA L_{eq} is allowed from 10:00 p.m. to 7:00 a.m.

Table 4.2-3. City of San Diego Noise Ordinance Limits for Exterior Noise Exposure

Land Use Zone	Time of Day	1 Hour Average Sound Level (decibels)
Residential: All R-1	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
All R-2	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
R-3, R-4 and all other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
All Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Manufacturing all other Industrial, including Agriculture and Extractive Industry	Any time	75

Source: City of San Diego Noise ordinance Section 59.5.0401

Section 59.5.0404A of the Noise Ordinance sets forth a requirement that construction activities may require a permit if such activities occur between the hours of 7:00 p.m. and 7:00 a.m. of the following day, or if construction activities create disturbing, excessive, or offensive noise. Section 59.5.0404B states that the noise level shall not exceed an average sound level of 75 dBA for more than 12 hours, between the hours of 7:00 a.m. and 7:00 p.m., at or beyond any residential property.

For the types of existing and planned land uses currently found in the study area, the following City of San Diego outdoor noise standards apply:

- Residential, schools, parks and wildlife preserves: 65 dBA.
- Office and professional: 70 dBA.
- Commercial, industrial, agriculture and livestock: 75 dBA.

AMBIENT NOISE ENVIRONMENT

The proposed project site is located within the southernmost portion of the City of San Diego and specifically encompassing the areas of Otay Mesa and San Ysidro. The project area is surrounded with some residential areas, schools, commercial/industrial areas and business parks, and the airfields (Brown Field and Tijuana International Airport). The undeveloped areas include disturbed and undisturbed habitat, and some wetlands. Existing noise levels within the project area are minimal and are generated from the major existing noise sources, which include vehicle traffic along the various roadways (i.e., frontage streets, I-5, I-805, and SR-905) and aircraft traffic from Brown Field and Tijuana International Airport. Sensitive receptors in the vicinity of the project area include some residential areas consisting of low-density single-family homes, schools, industrial parks, and the potential for noise sensitive species.

4.2.2 IMPACT SIGNIFICANCE CRITERIA

Based on City and/or CEQA thresholds, noise impacts would be significant if the proposed project:

1. Exposes residential areas or other noise-sensitive uses to exterior traffic noise levels in excess of 65 dBA CNEL;
2. Causes an increase in the traffic noise level of +3 dBA when the project is currently at or exceeds the significance thresholds listed in 1;
3. Causes a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
4. Exposes noise-sensitive uses to temporary construction noise which exceeds 75 dBA L_{eq} over a 12 hour period, or construction activities that occur before 7:00 a.m. or after 7:00 p.m.;
5. Exposes noise-sensitive species to temporary construction noise which meets or exceeds 60 dBA hourly L_{eq} .

4.2.3 ISSUE 1 – INCREASE IN AMBIENT NOISE LEVELS

Issue 1: Would the proposed project result in a significant increase in the existing ambient noise levels?

IMPACT ANALYSIS

Noise emissions associated with the proposed project would be generated from the operation of pump stations and/or pipeline maintenance. Typically, pipelines are not perceived as significant noise generators because there are few noise sources associated with fluid flowing in an underground pipeline. Therefore, potential noise impacts from the project pipelines would only be associated with construction activities, and not operational activities.

Pump stations are generally considered noise generators, because they forcefully pump water through pipes, sometimes uphill. The stations operations, engines and machine apparatus, are usually ensconced in concrete-block buildings. Internally, sound absorbing materials are used to help prevent workers from hearing damage. While these materials may reduce noise impacts, they would not eliminate the need for hearing protection for project site employees.

PROPOSED PUMP STATION A1

Proposed Pump Station A1 would replace existing Pump Station 23T as the major pump station in the eastern service area of the OMTS. The construction of Pump Station A1 would begin when flows at Pump Station 23T reach approximately 3.5 MGD. The actual construction of Pump Station A1 would be phased, so that the expansion of the pump station would only occur when the flow capacity dictated the need for it. As demand increases, and the pump station building is expanded, additional pumps, piping and electrical switchgear would be installed to accommodate the increasing flow capacity.

Chronic project-related noise emissions would derive mainly from the operation of the pumps in the pump room. In addition, the emergency generators, when operating, would also contribute to noise, but would be only used briefly and intermittently. The pump room would primarily affect on-site employees. There is a wide range of noise emissions data for comparable equipment depending upon minor design characteristics. Therefore, to best represent the noise impacts associated with interior noise and off-site operations noise of the pump station the noise values for the worst-case scenario have been used to ensure that the project would comply with ambient and workplace standards.

Within the pump station, employee noise protection standards apply. The state/federal OSHA standard is 90 dB averaged over 8 hours, but a noise conservation program must be implemented if 8-hour exposures exceed 85 dB. In addition, off-site noise levels must comply with biotic habitat protection standards that have been identified as 75 dB L_{eq} at the nearest property line. No other noise sensitive receptors exist in the vicinity of the pump station.

Interior Noise at Pump Station A1

According to the Noise Technical Report prepared by Giroux & Associates (2004), the interior noise level for the pump room inside the pump station would potentially exceed the hearing protection standard of 85 dB if more than five pumps operate simultaneously. Because theoretical noise levels exceed 85 dB, the interior noise levels would have the potential to have a significant noise impact on onsite employees and would require a noise protection and monitoring program. However, with the implementation of sound absorption panels inside the pump room on the walls and ceiling, the interior noise levels would be reduced to a level less than significant. Therefore, with the implementation of mitigation, the interior noise levels within Pump Station A1 would be below a level of significance.

Exterior Noise Levels From Pump Station A1

Noise level reduction of approximately 35 dB is attainable with concrete-masonry block wall construction as proposed for the pump station. The exterior noise level for all pumps in simultaneous operation is estimated to be 60 dB L_{eq} . 60 dB L_{eq} level is less than the 75 dB L_{eq} property line exposure, and is equal to the allowable noise level for any noise-sensitive avian species. Factoring in additional spreading losses with distance, offsite noise levels is estimated to be below 60 dB L_{eq} . However, because noise levels are estimated, a final acoustical analysis of the pump station would be required in order to ensure that acceptable noise standards are not exceeded.

Emergency generators would generate noise during periodic testing. Such testing would occur during daytime hours, which are considered to be less sensitive than nighttime hours. The emergency generators would be located within and would be equipped with physical design features, such as perimeter block walls and/or upgraded mufflers, to meet the 75 dB L_{eq} property line standard and/or any 60 dB L_{eq} level at nearby sensitive biological habitat areas. Attainment of noise standards would be a condition of procurement of the unit(s). Therefore, operational exterior noise from periodic testing of emergency generators would be less than significant.

Operational noise generation from pump station A1 would occur well away from any noise-sensitive residences or schools. However, future pump station(s) constructed as a part of Phase 2C would have the potential to result in significant operational noise impacts to sensitive receptors.

Fluid flowing in underground pipelines would create no detectable surface noise. Therefore, non-pump-station operational noise would be undetectable and would not result in a significant operational noise impact.

PIPELINE MAINTENANCE

Maintenance of the pipeline would occur occasionally, and would not generate excessive noise levels above the City's Noise Ordinance. Noise associated with pipeline maintenance would be limited to noise from maintenance crew trucks, and would only occur over a short duration of time. Therefore, the proposed project would not generate a substantial increase in ambient noise levels above existing noise levels in the project area.

SIGNIFICANCE OF IMPACT

Noise generated from operation of proposed Pump Station A1 would potentially exceed the 85 dB standard for interior noise levels averaged over 8 hours and would result in a *significant noise impact*. Noise from operation of the pump station would have the potential to impact nearby sensitive receptors if it were to exceed the 75 dB Leq property line noise standard. Operational noise from pump station(s) constructed as a part of Phase 2C would have the potential to result in significant impacts to nearby sensitive receptors, including residences and schools.

MITIGATION, MONITORING, AND REPORTING

Project operational noise impacts shall be mitigated to below a level of significance with the following measures:

Noise – 1: Prior to the operation of Pump Station A1, sound absorption panels shall be installed inside the pump room on the walls and ceiling to reduce interior noise levels.

Noise – 2: Prior to the operation of Pump Station A1, a final acoustical performance test shall be conducted at the pump station by a qualified acoustician within ninety (90) days after project completion. The test shall verify compliance with the recommended 75 dB Leq property line noise standard. Any violation of standards shall require pump station modification and retesting within ninety (90) days. Standard test protocols as to equipment selected, proper exposure and test duration, calibration, and monitoring parameters shall be used and documented in the final acoustical test report.

Noise – 3: For any pump station(s) constructed as part of Phase 2C, an acoustical noise analysis shall be prepared by a qualified individual to determine if the proposed pump station(s) would have a significant operational impact on nearby sensitive receptors. If a significant operational noise impact would occur, noise abatement measures shall be implemented to reduce noise to below a level of significance, and/or the pump station shall be relocated to an area where noise impacts to sensitive receptors would be below a level of significance.

4.2.4 ISSUE 2 – TEMPORARY CONSTRUCTION NOISE

Issue 2: Would the proposed project result in a significant generation of temporary construction noise?

IMPACT ANALYSIS

Construction activity noise standards are focused mainly on limiting the activity to hours of lesser noise sensitivity. The City of San Diego also has a noise performance standard of 75 dB Leq (12-hour) at the property line of any residence or other noise-sensitive land use in close proximity to any construction activity. Figure 4.2-1 shows the range of noise generation from on-site construction equipment and from haul trucks. The range represents the maximum (upper end of range) and average (lower end of range) when the equipment is operating at 50 feet from the nearest receiver. Earth-moving equipment has a theoretical noise level of 90 dB (maximum) and 80 dB (average).

Linear construction projects such as pipelines generally do not cause the 75 dB Leq standard to be exceeded even in close proximity to the equipment because of the mobility of the source and the intermittent duty cycle. The average rate of progression of the various pipeline projects has been assessed between 27 and 52 feet per day. However, given that many projects include contingency periods or downtime awaiting equipment, inspections, etc., the rate of progression during continuous pipe laying is perhaps twice the above overall project average. Therefore, the net rate of progress for each phase will likely range from 50 to 100 feet per day.

The noise levels of the construction equipment would range from 60-90 dBA at 50 feet from the source. Construction noise generated from the operation of heavy equipment and truck traffic would constitute the primary noise impact from the proposed pipeline projects. Varying types and sizes of construction equipment would be utilized during construction of the proposed pipelines, but similarities in the dominant noise sources and in patterns of operations allow the assignment of all equipment to a limited number of categories. Categories of construction noise sources include the following:

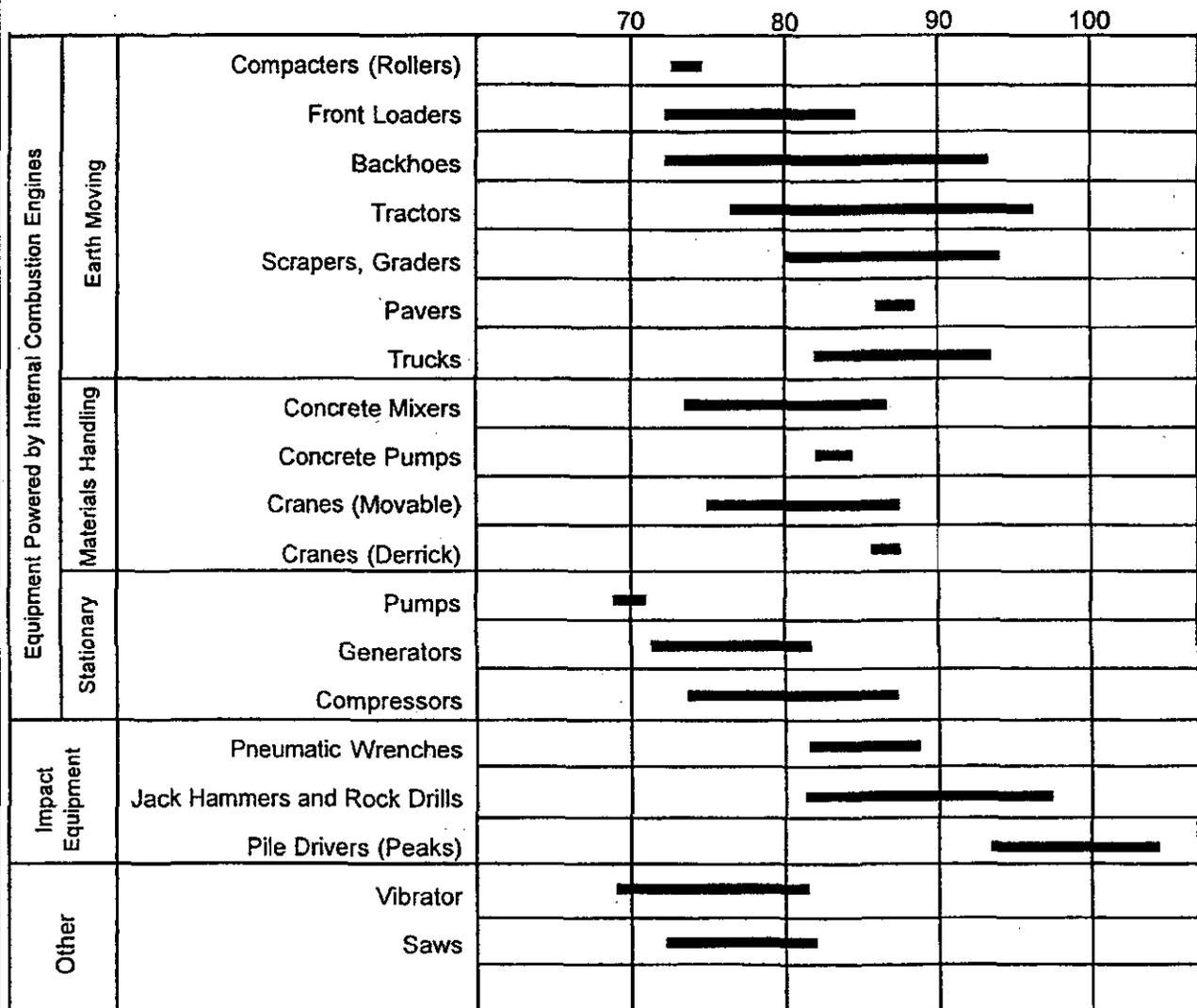
- Earth-moving equipment (highly mobile);
- Handling equipment (partly mobile);
- Stationary equipment;
- Impulse Noise;
- Construction Staging Areas; and
- Haul trucks.

The relative types of impacts from these classes of construction noise sources are discussed below. Construction-related noise impacts to biological resources are also discussed in the following section.

NOISE ASSOCIATED WITH EARTH-MOVING EQUIPMENT (HIGHLY MOBILE)

Earth-moving equipment would include excavators, backhoes, tractors, dump trucks, scrapers, and front loaders. Internal combustion engines are used for propulsion and for powering working mechanisms (buckets, arms, trenchers, etc.). Engine power would vary from about 50 hp to over 600 hp. Engine noise and exhaust noise are typically the loudest noise emission from construction. Other sources of noise from earth moving equipment include the earth moving operation, mechanical and hydraulic transmission and actuation systems, and cooling fans. On average the operating cycles would involve one or two minutes of

NOISE LEVEL (dBA) AT 50 FT



SOURCE: EPA PB 206717, Environmental Protection Agency, Dec. 31, 1971, "Noise from Construction Equipment & Operation"

February 6, 2004

**CONSTRUCTION EQUIPMENT NOISE
GENERATION LEVELS (THEORETICAL)**

FIGURE 4.2-1

full-power operation, followed by three or four minutes at lower power. Noise levels at 50 feet from earth-moving equipment range from about 73 to 96 dB(A). This alternating cycle of full power/low power produces a theoretical hourly average of around 82 dB at 50 feet from a single piece of large equipment. If that operational pattern persisted throughout the workday, a setback distance of 112 feet would be needed to meet the project noise significance standard of 75 dB a 12-hour average.

In addition, if several pieces of equipment are operating in very close proximity, their noise impacts are additive and would increase the noise "envelope" of potentially significant construction noise impacts. For three major pieces of highly mobile equipment in simultaneous and co-located operation, their theoretical combined noise level is 85 dB with the 75 dB performance standard met beyond 160 feet from the equipment. These values are not precise, because the mobility of the equipment constantly changes the source-receiver line of sight and distance separation.

As part of an Metropolitan Water District (MWD) pipeline installation project (MWD Pipeline No. 5, San Marcos, California) on-site noise monitoring was performed during excavation of the pipeline bed and a roadway jacking pit. Measurements were conducted for 36 hours as an excavator excavated the existing paved road. A small amount of traffic noise was observed, but basically the measurements were highly representative of excavation and loading a dump truck to haul the spoils away because there was no room to stockpile the cuttings near the trench. Measured at 50 feet from the center of the trench, a noise level of 78.0 dB was observed for the maximum 1-hour exposure period, a noise level of 71.8 dB was observed for the maximum 8-hour exposure period, and a noise level of 70.7 dB was observed for the maximum 12-hour exposure period.

The observed noise levels are much lower than the theoretical maximum equipment noise levels described above, probably due to the fact that equipment operation is seldom continuous over an extended period of time. The 70.7 dB 12-hour average translates into a 30-foot setback distance for the 75 dB threshold. To the extent that excavation activities for the monitored MWD pipeline are representative of the noise generation to be expected from trench excavation for the proposed project, the noise impact significance standard would not be exceeded unless equipment encroaches closer than 50 feet to a noise-sensitive receiver location.

Given that the pipeline would progress between 50 and 100 feet per day along the various portions of the project alignment, peak noise impacts would last for approximately two days before the continued forward progress of construction activities would create the distance buffer. The brief period of potential impact from temporary cut-and-cover operations and the fact that measured construction activity noise levels for another pipeline project were below their theoretical maximum noise levels, results in a determination that temporary noise impacts from highly mobile construction equipment would be less than significant.

NOISE ASSOCIATED WITH HANDLING EQUIPMENT (PARTLY MOBILE)

Engine-powered materials-handling equipment expected to be used includes cranes, concrete mixers, and concrete pumps. Mobility of this equipment over the ground is not part of its major work cycle. Theoretical noise levels at 50 feet range from about 76 to 88 dB(A).

Although the equipment is less noisy than the more mobile sources, it has a tendency to be parked in one location for a greater part of the workday. The noise impact zone is, therefore, about the same as the highly mobile sources in that the reduced mobility compensates for the lower noise generation rate. A noise measurement of semi-stationary noise sources was conducted during the MWD Pipeline No. 5 project. The measurements were taken from a crane placing a steel pipeline in a trench and subsequent welding of the pipeline seams. The observed noise levels were all below the 75 dB, 12-hour significance criterion for noise. Because the observed noise level from the partly mobile equipment was noticeably lower than its theoretical level, it is not anticipated that the 75 dB, 12-hour significance criterion would be exceeded outside the

construction right-of-way from partly mobile equipment. Therefore, no significant construction noise impacts would occur.

NOISE ASSOCIATED WITH STATIONARY EQUIPMENT

Stationary equipment expected to be used during construction activities includes generators, pumps, and air compressors. Typical noise levels at 50 feet range from 69 to 86 dB(A). This type of equipment is generally the smallest and least noisy. Due to the size, the equipment is easily placed behind temporary berms or shields for noise protection relative to a nearby noise-sensitive use. However, engines continuously running at night are a potential sleep-disturbing nuisance. The dewatering pumps are the only pieces of equipment to be scheduled for a 24-hour operation. The estimated noise level at 50 feet from the pump is 60 dBA. A desirable bedroom interior noise level is 35 dB. With windows slightly ajar, an exterior level of 50 dB would be reduced to 35 dB by structural attenuation. An exterior noise level from dewatering pumps of 50 dB occurs at 160 feet from the pump. Nocturnal operation of any dewatering pumps within 160 feet of any residence would result in a significant noise impact. However, the implementation of mitigation measures *Land Use – 5* and *6* would reduce dewatering pump and stationary construction noise impacts to below a level of significance.

IMPULSE NOISE

Sharp impulsive noise has a significant impact potential because human psychological noise adaptation is poor to unexpected percussive noise. The natural human "fight-or-flight" adrenaline rush from being startled by such noise creates a number of physiological responses that are negatively perceived.

Impulsive noise with jackhammers might include pavement breaking, handling and/or placement of steel plates to allow vehicles to drive on trenched areas, and hammering on equipment to effect temporary repairs or to dislodge stuck materials. In contrast to more predictable equipment operations during pipeline construction, impulsive sources are more sporadic. The estimated noise level at 50 feet from the anticipated use of a jackhammer is 90 dBA. A sensitive receptor located within 300 feet of jackhammer operations could experience noise exposure levels greater than 75 dBA, if the activity occurred semi-continuously. With the normally intermittent nature of pavement breaking, significant noise impacts would normally be confined to the immediate vicinity of the construction area.

Depending upon the location and duration of jackhammering or other similar impulsive noise sources, impacts to noise-sensitive receptors could exceed the 75 dB Leq threshold, resulting in a potentially significant short-term noise impact. Table 4.2-4 provides a matrix of activity duration and setback requirements that would create a potentially significant noise impact.

Table 4.2-4. Impulse Noise Activity Duration and Setback Requirements

Duration	Distance to Source				
	50 feet	75 feet	100 feet	150 feet	200 feet
1 hour	<u>79</u>	75	73	70	67
2 hour	<u>82</u>	<u>78</u>	<u>76</u>	73	70
4 hour	<u>85</u>	<u>81</u>	<u>79</u>	<u>76</u>	73
8 hour	<u>88</u>	<u>84</u>	<u>82</u>	<u>79</u>	<u>76</u>

Note: Underlined values represent potentially significant impacts.
Source: Giroux & Associates, 2004

Noise sensitive residences are located along the following project roadways: Siempre Viva Road, Cactus Road, Old Otay Mesa Road or Beyer Boulevard. Many of these residences are located within 50 feet from the roadway, and construction activities would exceed the setback distances listed in Table 4.2-2. Therefore, pipeline construction along Siempre Viva Road, Cactus Road, Old Otay Mesa Road or Beyer Boulevard would result in a potentially significant short-term noise impact from impulse noise.

Impulse noise could also have significant noise impacts to schools located along project roadways including San Ysidro High School, San Ysidro Middle School and several other education centers. Impulse noise near these institutions would potentially disrupt the learning environment if it intrudes into educational space.

The noise standard applied to classrooms is typically 50 dB Leq as an hourly average. The structural noise attenuation ability of air-conditioned space is 25 dB. An exterior noise level of 75 dB Leq could be accommodated without excessively impacting classroom function. For a jackhammer operating for a solid one-hour period, its 75 dB Leq "noise envelope" would extend to 280 feet from the activity. Therefore, a significant short-term noise impact would occur if any major impulsive noise sources were to operate within 280 feet of any classroom. A potentially significant impact would occur.

NOISE ASSOCIATED WITH CONSTRUCTION STAGING AREAS

Construction staging noise generation is not anticipated to be substantially different from cut-and-cover construction as it entails similar operations involving mobile equipment, especially trucks. The main difference is that trenching impacts end within about a week, while staging area utilization may last several months. Typical staging area activities/uses include a construction office, equipment maintenance/repair and storage, materials storage and employee parking. A staging area located adjacent to residential uses could result in significant noise impacts to residents in the area. *Land Use – 7* would reduce construction noise impacts to sensitive receptors from construction staging areas to below a level of significance.

NOISE ASSOCIATED WITH HAUL TRUCKS

Haul truck traffic would occur to haul away excess excavated material or to bring in backfill if the excavation spoils are not suitable for backfill. Each foot of a 4.5-foot diameter excavator's bucket generates about 1.2 yards of excess material. For an average daily progress of 100 feet, about 120 yards of material (10 truck trips of 12 yards each) would be required to haul away the excess material. In an 8-hour shift, one truck would load about every 48 minutes on an average. The noise impact of less than two haul trucks per hour in and out of a construction area would not measurably increase the noise environment. Therefore, haul truck traffic during construction would not result in a significant noise impact.

CONSTRUCTION NOISE IMPACTS TO BIOLOGICAL HABITAT

Noise resulting from project construction of pipelines and pump stations has the potential to adversely affect breeding birds and mammals by causing them to temporarily or permanently leave their territories in order to avoid noisy activity. Construction activity noise of up to 90 dBA has the potential of adversely impacting noise-sensitive bird species, including the coastal California gnatcatcher, burrowing owl, and raptors, found in and around the canyons in the project area during their nesting and breeding seasons. The theoretical noise impact "footprint" for an 88 dB construction noise source as it relates to rare or endangered species avian habitats is over 1,200 feet. Noise impacts from project construction activities would be considered significant if they would affect federally or state listed species or raptors. Therefore, the proposed project would result in a potentially noise impact to sensitive biological species during construction. However, the implementation of mitigation measures *Land Use – 8, 8a, 8b* and *8c* in Section 4.1, Land Use, would reduce potential indirect construction noise impacts to sensitive bird species to below a level of significance.

SIGNIFICANT IMPACTS TO SENSITIVE RECEPTORS

Construction noise impacts resulting from the proposed project would be short-term in nature. Noise generated from the nocturnal operation of dewatering pumps within 160 feet of any residence within the project area would result in a significant noise impact to sensitive receptors. Staging areas constructed adjacent to residential uses would result in potentially significant impacts to residents. Impulse noise from construction equipment would also result in potentially significant impacts to residents living along the following project roadways: Siempre Viva Road, Cactus Road, Old Otay Mesa Road or Beyer Boulevard. Impulse noise levels at schools and learning institutions located along project roadways would also result in potentially significant noise impacts.

MITIGATION, MONITORING, AND REPORTING

Mitigation measures *Land Use – 5* and *6* would reduce short-term construction noise impacts from nighttime dewatering pumps and stationary construction equipment, respectively, to below a level of significance. *Land Use – 7* would reduce construction noise impacts from construction staging areas on nearby sensitive receptors to below a level of significance. *Land Use – 8, 8a, 8b, and 8c* would reduce construction noise impacts to sensitive bird species to below a level of significance. *Noise – 4* would reduce construction impulse noise levels at residences located along project roadways to below a level of significance. *Noise – 5* would reduce construction impulse noise levels at nearby schools and learning institutions to below a level of significance.

Noise – 4: Along project roadways, including Siempre Viva Road, Cactus Road, Old Otay Mesa Road or Beyer Boulevard, where impulse noise levels at adjacent residences would exceed the 75 dB Leq noise threshold, the construction contractor shall implement one or more of the following measures to reduce noise impacts to impacted residents:

1. Erect temporary barriers to separate the noise-generating equipment from adjacent residences. The temporary barriers shall be constructed of either 3/4-inch plywood or steel-framed canvas batts.
2. Limit the total hours per day working near any individual receiver.
3. Utilize smaller, quieter equipment and limit the use of jackhammers (shielded, if necessary) to break up reinforced concrete only.
4. Reimburse affected stay-at-home residents to spend a day or two at a recreational amenity away from the job site until the pavement breaking is completed.

Noise – 5: The construction contractor shall implement the following measures whenever any major impulsive noise source is operating within 280 feet of any project-area classroom.

1. Perform the activity when school is not in session;
2. Shield the activity with a solid barrier to break the line-of-sight; and
3. Perform the activity only during small fractions of any hour.

4.3 PALEONTOLOGICAL RESOURCES

This section of the EIR evaluates the potential for paleontological resources impacts associated with implementation of the proposed project. The term "paleontological resources" refers to fossil remains and/or traces of prehistoric plant and animal life. This section identifies the potential for paleontological resources to occur within the project area based upon the geologic formations that underlie the project alignment.

4.3.1 EXISTING CONDITIONS

Paleontological resources are the remains and/or traces of prehistoric plant and animal life exclusive of man. Fossil remains such as bones, teeth, shells, leaves and wood are found in the geologic deposits within which they were originally buried. Thus, the potential for fossil remains at a given location can be predicted based on known correlations between fossil occurrences and the geologic formations with which they are associated. Paleontological resources can be thought of as including not only the actual fossil remains, but also the collecting localities and the geologic formations containing those remains. Geologic formations are rated according to the potential for yielding paleontological resources. These "sensitivity" ratings are described below:

- High sensitivity ratings are assigned to formations known to contain paleontological sites with rare, well-preserved, critical fossil materials for interpretation, and fossils providing important information about the paleobiology and evolutionary history of animal and plant groups. Generally speaking, highly sensitive formations contain vertebrate fossil remains or they are considered to have the potential to contain such remains.
- Moderate sensitivity is assigned to geologic formations known to contain paleontological localities with poorly preserved or common and unimportant fossil material. This category is also applied to formations that are judged to have strong, but unproven potential for containing important remains.
- Low sensitivity is assigned to formations that, based on their relative youthful age or the history of the deposits, are judged to be unlikely to contain important fossil remains. Typically, low sensitivity formations contain invertebrate fossil remains in low abundance.

ON-SITE GEOLOGY AND PALEONTOLOGY

Potentially sensitive geologic deposits associated with the project site include the Later Quaternary Alluvium Deposits, Quaternary Stream-Terrace Deposits (unnamed river terrace deposits), Lindavista Formation, San Diego Formation, Bay Point Formation and Otay Formation. Each formation and the level of paleontological resource sensitivity assigned to each formation are described below.

LATER QUATERNARY ALLUVIUM DEPOSITS

Modern drainage floors consist of poorly consolidated alluvial sediments (i.e., clays, silts, sands, and gravels) of relatively recent age, typically younger than 10,000 years old. In general, these quaternary alluvium deposits are comprised of poorly consolidated sediments associated with active high-energy stream environments. Fossils are usually unknown from the later Quaternary alluvial deposits in the Coastal Plain Province with three notable exceptions, which include the teeth and limb bones of a mammoth, a single mammoth tusk, and a mammoth femur. Based on the young age of the later Quaternary alluvium deposits, it is assigned low paleontological resource sensitivity.

QUATERNARY STREAM-TERRACE DEPOSITS (UNNAMED RIVER TERRACE DEPOSITS)

Deposits of coarse-grained, gravelly sandstones, pebble and cobble conglomerates, and claystones occur along the margins of many of the larger coastal valleys. These deposits generally occur at levels above the active stream channels and represent the sediments of ancient river courses as well as in isolated areas associated with elevated marine abrasion platforms (terraces). The exact age of these deposits is uncertain but they are clearly related to the late Pleistocene climatic events dating between 10,000 and 500,000 years ago. Fossils occurring in the unnamed river terrace deposits include a variety of animals (i.e., pond turtle, passenger pigeon, hawk, mole, gopher, squirrel, rabbit, and horse) and a diverse collection of Ice Age mammals (i.e., ground sloth, shrew, mole, mice, wolf, camel, deer, horse, mastodon, and mammoth). The general nature of these deposits suggests low paleontological resource sensitivity, however, important vertebrate remains have been collected which indicate additional fossils may be encountered. Thus, the Quaternary Stream-Terrace Deposits (unnamed river terrace deposits) is assigned moderate paleontological resource sensitivity.

LINDA VISTA FORMATION

The Lindavista Formation represents a marine and/or non-marine terrace deposit of early Pleistocene age, approximately 0.5 to 1.5 millions of year ago (mya). Typical exposures of the formation consist of rust-red, coarse-grained, pebbly sandstones and pebble conglomerates with locally common deposits of green claystone. The formation has an average thickness of 20 to 30 feet and is thought to have been deposited under fluvial, aeolian and shallow near-shore marine conditions. These deposits accumulated on a flat, wave-cut platform during a period of dropping sea levels. Today, these deposits form the extensive mesa surfaces characteristic of the Otay Mesa, San Diego Mesa, Kearny Mesa and Mira Mesa areas of the County. Fossil sites are rare in the Lindavista Formation and have only been recorded from a few areas. Fossils collected from these sites consist of remains of nearshore marine invertebrates, including clams, scallops, snails and barnacles. Infrequently, there are remains of sharks and baleen whales. Based on the scarcity of fossils reported from this formation, the Lindavista Formation is assigned a moderate paleontological resource sensitivity.

SAN DIEGO FORMATION

The San Diego Formation represents a marine sedimentary deposit of late Pliocene age, approximately 1.5 to 3.0 mya. Typical exposures consist of yellowish-gray, fine-grained, friable sandstones. Poorly sorted gravels, pebble conglomerates and well-laminated claystones also occur within the formation. The maximum thickness of the formation is 250 to 300 feet. In the South Bay, this formation overlies the Otay Formation and is in turn overlain by the Lindavista Formation. The San Diego Formation is well known for its rich fossil beds that have yielded extremely diverse assemblages of marine clams, scallops, snails, barnacles, sand dollars, sharks, rays, bony fishes, sea birds, walrus, fur seal, sea cow, dolphins, and baleen whales. Rare remains of terrestrial mammals have also been recovered from the formation, which includes cats, wolves, skunks, peccary, camels, antelopes, deer, and horses. In addition, there are occurrences of fossil wood and leaves that include the remains of pine, oak, laurel, cottonwood, and avocado. Collectively, this diverse assemblage of fossil organisms represents one of the most important sources in the world of information on Pliocene marine organisms and environments. Due to the importance of the remains of these fossils recorded from this rock unit, the San Diego Formation is assigned high paleontological resource sensitivity.

BAY POINT FORMATION

The Bay Point Formation represents a nearshore marine sedimentary deposit of late Pleistocene age, approximately 220,000 years old. Typical exposures of the formation consist of light gray, friable to partially cemented, fine to coarse grained, massive and cross-bedded sandstones. The formation is generally exposed at sea level and has produced large and diverse assemblages of well-preserved marine invertebrate fossils,

primarily mollusks. However, remains of fossil marine vertebrates have also been recovered, specifically including sharks, rays, and bony fishes. Based on the occurrence of extremely diverse and well-preserved assemblages of marine invertebrate fossils and rare vertebrate fossils in this formation, the Bay Point Formation is assigned a high paleontological resource sensitivity.

OTAY FORMATION

The Otay Formation represents a fluvial sedimentary rock unit of late Oligocene age, approximately 29 mya. This formation has been recognized and divided into three members, which include a basal angular conglomerate unit, a middle gritstone unit and an upper sandstone unit. Typical exposures of the upper unit consist of gray-white medium-grained tuffaceous sandstone with interbedded layers of brown and red-brown claystones and white waxy bentonites. The middle unit consists of interbedded coarse-grained sandstones and angular gravels (gritstone). The lower unit is a poorly sorted, cobble to boulder conglomerate. The general characteristic of the Otay Formation is it becomes finer-grained from bottom to top with the basal angular conglomerate unit grading upward and westward into the gritstone unit which in turn grades upward and westward into the sandstone-mudstone unit. Collectively, this formation can be up to 400 feet thick. Numerous fossils have been recorded in the upper sandstone-mudstone member and the middle gritstone member; however, no fossils have been recorded from the angular conglomerate member. Fossils from this formation include well-preserved remains of a diverse assemblage of terrestrial vertebrates such as tortoise, lizards, snakes, birds, shrews, rodents, rabbits, dogs, foxes, rhinoceros, camels, mouse deer, and oreodonts. These fossil occurrences are considered to be the richest source of late Oligocene terrestrial vertebrates in California. The Otay Formation is exposed from approximately the Golden Hill area of the City of San Diego south to the International Border and east from the Otay Mesa area to the base of the San Ysidro Mountains and San Miguel Mountain. The lower conglomerate portion of the formation is exposed extensively in the area around Lower Otay Lake as well as in patches along the north side of the San Ysidro Mountains and as far east as Sycamore Canyon. The upper sandstone portion of the Otay Formation is assigned a high paleontological resource sensitivity and the lower gritstone and conglomerate portion is assigned a moderate paleontological resource sensitivity.

4.3.2 IMPACT SIGNIFICANCE CRITERIA

Based on City and/or CEQA thresholds, paleontological resources impacts would be significant if the proposed sewer project:

- Would disturb or remove any known paleontological resources;
- Would result in excavation of soils at depths of 10 feet or deeper from the original ground surface in areas designated with moderate or high paleontological resource sensitivity for pipeline alignments; and/or
- Would remove more than 1,000 cubic yards or 2,000 cubic yards of soil at depths of 10 feet or deeper from the original ground surface designated with moderate or high paleontological resource sensitivity (pump station installation).

According to the City's Paleontological Guidelines (2002), monitoring is not required for geologic units with a low sensitivity and, therefore, no threshold is provided.

4.3.3 ISSUE 1 – LOSS OF PALEONTOLOGICAL RESOURCES

Issue 1: Will the proposal result in the loss of paleontological resources?

IMPACT ANALYSIS

Impacts to paleontological resources generally take the form of physical destruction of fossil remains by excavation operations that cut into geologic formations. Paleontological resources can potentially occur in any soils or geologic formation and are generally not apparent until revealed by excavation. Direct impacts are in the form of physical destruction of fossil remains. Because fossils are the remains of prehistoric animal and plant life, they are nonrenewable resources. Construction of the proposed project would involve excavation for the installation of the sewer line along the entire alignment. In addition, excavation for a new sewer pump station wet well would occur during Phase 2E. As discussed above, the underlying formations in the project area include Alluvium Deposits, Quaternary Stream-Terrace Deposits, Lindavista Formation, San Diego Formation, Bay Point Formation, and Otay Formation. The Quaternary Stream-Terrace Deposits, Lindavista, San Diego, Bay Point, and Otay Mesa Formations have a moderate to high potential of containing fossil resources (City of San Diego 2002). The grading thresholds for the Quaternary Stream-Terrace Deposits, Lindavista, San Diego, Bay Point and Otay Mesa Formation is the excavation of soils at a depth of 10 feet or deeper from the original ground surface for pipeline alignments and 1,000 cubic yards or 2,000 cubic yards of soil at depths of 10 feet or deeper from the original ground surface for structures (pump station installation). The proposed project would be constructed in phases. As identified in Table 3.3-1, each phase of project construction would involve excavations to 10 feet or deeper. Therefore, the proposed project would have the potential to significantly impact paleontological resources found in the Quaternary Stream-Terrace Deposits, Lindavista, San Diego, Bay Point and Otay Mesa Formation.

SIGNIFICANCE OF IMPACT

Implementation of the proposed project could have significant adverse effects on paleontological resources with trenching activities within the Quaternary Stream-Terrace Deposits, Lindavista Formation, San Diego Formation, Bay Point Formation and Otay Formation.

MITIGATION, MONITORING AND REPORTING

The scientific value of fossils is in the information they contain rather than in the fossilized materials themselves. Thus, any mitigation program must focus upon recovering, not every fossil and/or fossil fragment encountered, but rather those fossils that are sufficiently complete and diagnostic to allow generic and specific identifications. Therefore, potential impacts caused by construction of the proposed pipeline would be mitigated through implementation of a comprehensive program of construction monitoring, fossil salvage, fossil preparation, fossil curation, fossil storage and summary report preparation. While sensitive resources may be encountered during project grading, the recovery of these resources for scientific study would minimize potential impacts. The following measures are required to mitigate the potentially significant impacts to paleontological resources to below a level of significance.

Paleontological Resources – 1: Prior to the City's first pre-construction meeting, or the issuance of a building or grading permit, whichever is applicable, the project builder shall provide a letter of verification to the Assistant Deputy Director (ADD) of Land Development Review (LDR) stating that a qualified paleontologist has been retained to implement the monitoring program. A qualified paleontologist is defined as an individual with a Ph.D. or M.S. degree in paleontology or geology who is a recognized expert in the application of paleontological procedures and techniques such as screen washing of materials and identification of fossil

deposits. The following conditions apply to the implementation of mitigation measure *Paleontological Resources – 1*:

I. Prior to Permit Issuance, or Bid Opening/Bid Award of Contract or First Preconstruction Meeting

A. Land Development Review (LDR) Plan Check

1. Prior to permit issuance, or ~~after Bid Opening/Bid Award of the contract, but prior to the first preconstruction meeting~~, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction 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~~must obtain approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

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 Precon Meetings

1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation-related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.
 - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM 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 construction

documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits.

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 construction 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 construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as: depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which that may reduce or increase the potential for resources to be present.

5. Approval of PME and Construction Schedule

After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Construction Schedule from the CM.

III. **During Construction**

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 and as authorized by the CM that could result in impacts to formations with high and/or moderate resource sensitivity at depths of 10 feet or greater and as authorized by the Construction Manager. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities.

2. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, ~~monthly,~~ (notification of monitoring completion), monthly, and in the case of ANY discoveries. The RE shall forward copies to MMC.

3. The PI may submit a detailed letter to the CM and/or RE for concurrence and forwarding to MMC during construction 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.

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 CM 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." Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume.~~
 - 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 can not 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 VI-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.

IV. Night Work

- A. If night work is included in the contract
 1. When night work is included in the contract package, the extent and timing shall be presented and discussed at the ~~P~~recon ~~m~~Meeting.
 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night work, ~~T~~he PI shall record the information on the CSVR and submit to MMC via the RE via fax by 9 ~~AM~~ the following morning, if possible.
 - b. Discoveries
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction.
 - c. Potentially Significant Discoveries
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed.
 - d. The PI shall immediately contact the RE and MMC, or by 8 ~~AM~~ the following morning, to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night work becomes necessary during the course of construction
 1. The Construction 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.

V. Post Construction

A. Submittal of Draft Monitoring Report

~~Completion of Monitoring Program and Submittal of Draft Monitoring Report~~

1. The PI shall submit two copies of the Draft Monitoring Report (even if negative) which describes the results, analysis, and conclusions of all phases of the ~~Archaeo~~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 ~~archaeo~~paleontological resources encountered during monitoring, the ~~Archaeo~~Paleontological ~~Data~~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.

- ~~3. 4. MMC shall provide written verification to the PI of the approved report. e. 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.~~
- ~~5. d. MMC shall notify the RE or BI, as appropriate, of receipt of the Draft Monitoring Report.~~
- B. Handling of Fossil Remains~~2. Handling of Artifacts~~
- ~~a. The PI shall be responsible for ensuring that all cultural 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. b. 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.
- ~~3. Curation of artifacts: Deed of Gift and Acceptance Verification~~
- ~~a. 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 EAS and the Native American representative, as applicable.~~
- ~~b. The PI shall submit the Deed of Gift and catalogue record(s) to MMC for signature by the RE or BI, as appropriate.~~
- ~~c. The RE or BI, as appropriate shall obtain signature on Deed of Gift and shall return to MMC.~~
- ~~d. MMC shall return the signed Deed of Gift to the PI.~~
- ~~e. The PI shall include the Acceptance Verification from the curation institution to MMC with submittal of the Final Monitoring Report.~~
- D. B. 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. after approval of the draft report, which describes the results, analysis, and conclusions of the Paleontological Monitoring Program (with appropriate graphics).
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.

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4.4 UTILITIES

4.4.1 EXISTING CONDITIONS

Existing utilities, including water, storm drain, electrical, gas, and communications infrastructure, are identified in Figure 4.4-1.

POTABLE WATER

The City of San Diego Water Department provides potable water for the project area. The primary source of potable water for San Diego County is provided by the San Diego County Water Authority (CWA), which receives its imported water exclusively from the Metropolitan Water District (MWD) of Southern California. The MWD's primary water resources are the Colorado River and the California State Water Project (primarily water from northern California).

Water imported by the CWA meets approximately 80 to 90 percent of the City's total demand. Local water sources (i.e., waterfall captured in local reservoirs and wells) account for the remaining 10 to 20 percent needed to meet demand.

The City owns and operates ten water reservoirs. The San Vicente and El Capitan reservoirs are the largest, and together account for nearly half of the City's total available potable water storage and over one quarter of its watershed. Smaller reservoirs, such as the Miramar and Murray reservoirs have low potential for local water production. These lower-end facilities are primarily used to supply the short-term peak demands associated with water treatment plants.

The project vicinity is served by water lines running underground within the existing roadways. Known locations for water pipelines are underground within the roadways of the project alignment.

SEWER SYSTEMS

The City's Metropolitan Sewerage System provides wastewater services to the greater San Diego area including 16 cities and districts. The City's Metropolitan Wastewater Department (MWWD) treats wastewater generated in a 450-square-mile area that stretches from Del Mar to Poway on the north, from Alpine to Lakeside on the east, and to the international border on the south. Approximately 190 million gallons of wastewater per day are produced and treated in the region.

The City's Metropolitan Wastewater Department provides wastewater collection services in the project area. The existing regional sewerage system consists of approximately 25 miles of collection and interceptor sewers, force main pipelines, various pump stations, the Point Loma Treatment Plant, outfall pipes, and sludge drying beds. Major trunk sewer lines are in place to serve the entire City area, including the project area.

TREATMENT FACILITIES

The Point Loma Wastewater Treatment Plant (PLWTP) began operations in 1963 and now treats over 190 million gallons of wastewater per day from the service area. At the PLWTP, wastewater undergoes advanced primary treatment, which removes approximately eighty percent of total suspended solids. The effluent is then discharged into the Pacific Ocean through a 4.5 mile, 320 foot deep ocean outfall (City of San Diego Metropolitan Wastewater District Website 2002).

EXISTING INFRASTRUCTURE

Existing sewer facilities in the study area include the East Otay Mesa collection system, the Otay Valley Trunk Sewer system, and MWWD facilities. The MWWD facilities include the San Ysidro Interceptor, the South Metro Interceptor, and the South Bay Water Reclamation Plant (SBWRP). These facilities, identified in Figure 2.1-3, are discussed in detail below.

East Otay Mesa Sewer Collection System

Existing wet weather flows from the East Otay Mesa Collection System averaged approximately 1 MGD in 2002. Wastewater from existing development in the eastern portion of the Otay Mesa drainage basin is collected via existing sewer mains ranging in size from 6- to 33-inches and conveyed to a 30-inch main in Siempre Viva Road that flows westerly to existing Pump Station 23T. This 2 MGD capacity pump station pumps the wastewater north under Cactus, Otay Mesa and Heritage Roads via an existing 16-inch force main to the Otay Valley Trunk Sewer. This pump station and force main, installed in 1985, were constructed as temporary facilities to be used until the proposed OMTS is constructed.

Two additional temporary pump stations, referred to as Pump Stations 31T and 48T, are also located within the Otay Mesa drainage basin. Pump Station 31T pumps sewage flows generated within the International Business Center, located south of Pump Station 23T on Calle de Linea, to Pump Station 23T. Pump Station 48T receives sewage flows generated in the Pacific Gateway, Mesa and Otay Heights business parks located along Camino Maquiladora and pumps the flows north to the Otay Valley Trunk Sewer.

Otay Valley Trunk Sewer System

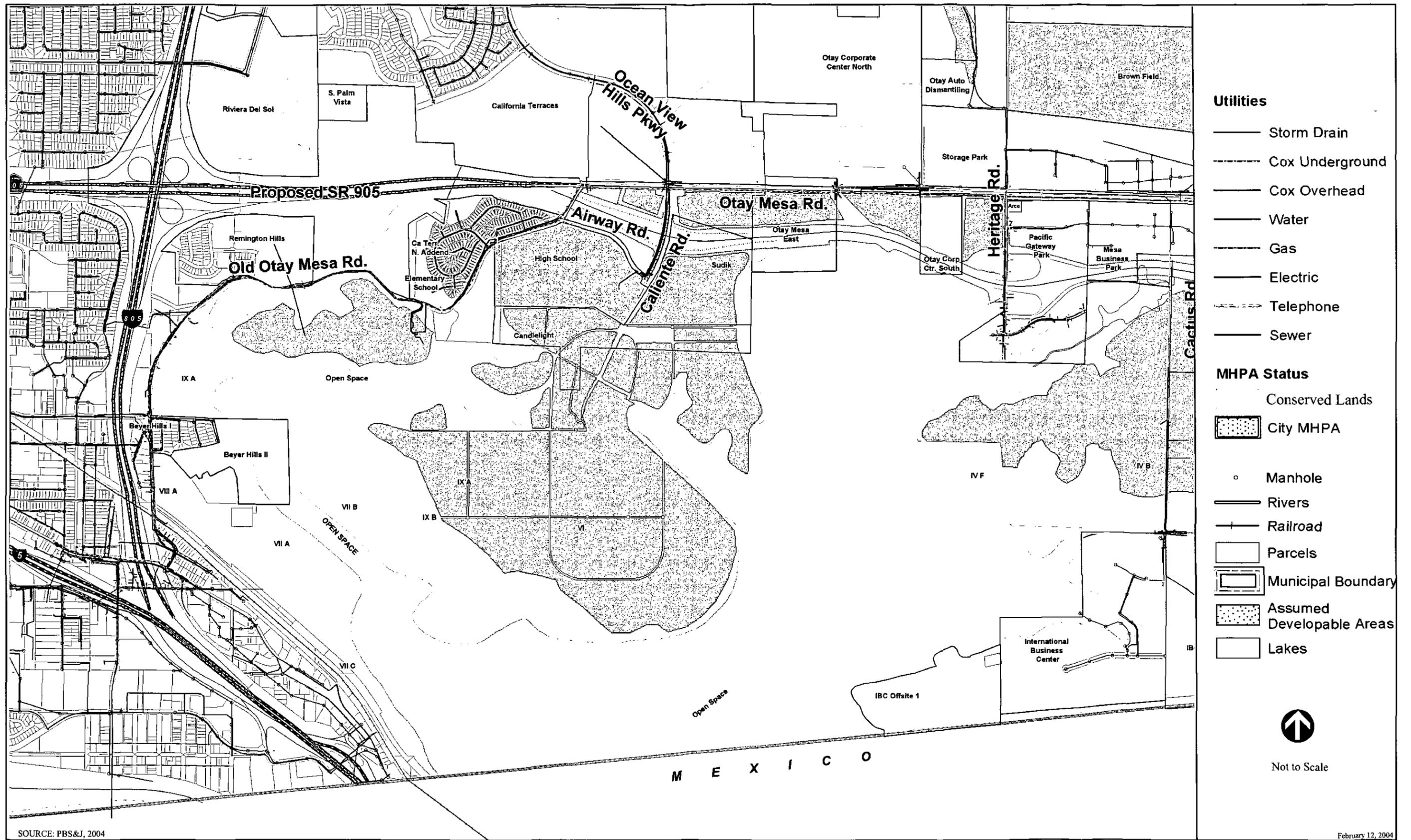
The existing 27-inch Otay Valley Trunk Sewer conveys wastewater from the Otay Valley drainage basin west to the City's MWWD system. This facility also conveys the wastewater generated in East Otay Mesa via Pump Stations 23T and 48T, as described above. The Otay Valley Trunk Sewer is operated and maintained by MWWD. The 7.3-mile long gravity main extends from Heritage Road, east along Otay Valley Road to I-805 and within existing roads north of the Otay River between I-805 and the connection to the South Metro Interceptor.

MWWD Facilities

South Metro Interceptor. Wastewater from the South Bay area is conveyed in a 72-inch South Metro Interceptor north to MWWD's regional wastewater treatment facility, the Point Loma Wastewater Treatment Plant. The South Metro Interceptor collects wastewater from the San Ysidro Interceptor to the south, the Otay Valley Trunk Sewer to the east and a number of trunk sewers from the City of Chula Vista.

San Ysidro Interceptor. The San Ysidro Interceptor collects wastewater from the South Bay area, west of I-805. The upstream end of the interceptor is located west of the I-5 and I-805 merge, just north of the border crossing. The 30- to 42-inch pipeline conveys wastewater north along the west side of I-5 to its connection with the South Metro Interceptor. The Grove Avenue Pump Station intercepts a portion of the wastewater flow from the San Ysidro Interceptor and redirects the "skimmed flow" south to the newly operational South Bay Water Reclamation Plant via a 30-inch force main. No Otay Mesa wastewater flows are currently conveyed via the San Ysidro Interceptor.

Point Loma Wastewater Treatment Plant. The Point Loma Wastewater Treatment Plant (PLWTP) is located at the tip of Point Loma on the ocean side of the entrance to San Diego Bay. It treats up to 190 MGD of wastewater from the entire MWWD service area, including the South Bay and Otay Mesa drainage basins.



EXISTING UTILITIES IN THE PROJECT AREA

FIGURE 4.4-1

Expansion of the plant is underway that will allow the facility to treat up to 240 MGD. The wastewater is treated to an advanced primary level and discharged via a deep ocean outfall. Flow from the South Bay is pumped to PLWTP via Pump Station No. 2, located on Harbor Drive near the airport.

South Bay Water Reclamation Plant. The South Bay Water Reclamation Plant (SBWRP) is located at the intersection of Dairy Mart and Monument Roads in the Tijuana River Valley, adjacent to the International Boundary and Water Commission's International Wastewater Treatment Plant. The SBWRP is newly operational and currently accepts up to 5 MGD of wastewater conveyed via the Grove Avenue Pump Station for treatment and reuse. The plant has a design capacity of 15 MGD and treats the wastewater to a tertiary level for reuse. Excess recycled water is disposed of via the South Bay Land and Ocean Outfall.

ENERGY

ELECTRICITY

Electricity is provided to the project area by San Diego Gas & Electric Company (SDG&E). A system of underground and aboveground electrical distribution lines service the Otay Mesa area and a substation is located along Old Otay Mesa Road. The electrical lines along the proposed alignment are located both on poles along the roadways and underground within the roads.

NATURAL GAS

Natural gas to the primary project area is provided by SDG&E. The major gas supplier to SDG&E is the Southern California Gas Company. Natural gas is distributed throughout the project area by underground lines within roadway ROW, which functions as a backbone system to service individual parcels.

COMMUNICATIONS

Pacific Bell Corporation and Cox Cable provide communication services to the project area via a system of underground lines located within the majority of the roadways along the proposed project alignment.

4.4.2 IMPACT SIGNIFICANCE CRITERIA

The following criteria were used to determine whether impacts to the water system, sewer system, energy services (electrical and natural gas), and communications facilities would be considered significant.

WATER

A proposed project would have a significant impact on potable water systems if the additional demand placed on existing pipelines were to exceed the capacity of existing or planned pipelines.

SEWER SYSTEM

A proposed project would have a significant impact on sewer systems if the additional demand placed on sewer infrastructure were to exceed the capacity of existing or planned facilities.

ENERGY

The proposed project would have a significant impact on electrical and natural gas systems if estimated project energy consumption were to exceed the capacity of existing facilities such that additional transmission or distribution lines must be installed and/or electrical substations upgraded.

COMMUNICATION FACILITIES

A proposed project would have a significant impact on communications facilities if the additional demand placed on communications infrastructure exceeded the capacity of existing or planned facilities.

4.4.3 ISSUE 1 – ALTERATIONS TO UTILITIES

Issue 1: Would the proposal result in a need for new systems, or require substantial alterations related to the following utilities: water, sewer, power and energy, natural gas, and communications systems?

ENVIRONMENTAL IMPACTS

Potable Water

Water Demand. The proposed project would not require or create a demand for water that exceeds the current available supply. A small amount of water would be required for operation of proposed Pump Station A1. Water demand at the pump station would be limited to restroom facilities and routine maintenance/cleaning activities such as washing the floors. One person would man pump Station A1 for approximately 40 hours per week. Thus, water demands for restroom facilities and maintenance/cleaning activities would be limited to 40 hours per week.

The daily operation of the proposed sewer pipeline would not require the use of water, although maintenance (i.e., cleaning) of the sewer pipelines would be required a few times per year. The pipelines would be cleaned via high pressure flushing of pipeline segments, which would require the consumption of water. Typically, the amount of water used to clean each pipeline segment would be limited to the capacity of the water tank mounted on a Vactor truck, which is approximately 1,000 gallons. The water demand for the maintenance of sewer pipelines would be temporary in nature. The existing available supply of water is anticipated to be adequate to serve the proposed project. Therefore, no new systems would have to be constructed to supply the proposed project with water.

Conflicts with Existing Water Infrastructure. There is potential for the existing water pipelines to conflict with the proposed OMTS sewer pipelines because they would both be located under project roadways. As a result, portions of the water pipelines may require relocation in order to accommodate the proposed sewer pipelines. The locations of the potential areas of conflict would be identified during the design stage of each phase of construction of the proposed project and conflicts would be avoided if possible. The relocation of transmission facilities would require scheduling of water supply shutdowns by the City Water Department. Implementation of the traffic control plan in accordance with City standards, as discussed in Section 3.0, Project Description, would ensure that temporary traffic impacts associated with the infrastructure relocation would be below a level of significance. The relocation of existing water infrastructure within project roadways would be temporary in nature and would not be considered a substantial alteration to existing water infrastructure. In addition, any relocation of Water Department facilities by the Metropolitan Wastewater Department would be subject to the Memorandum of Understanding (MOU) executed between the two departments on March 28, 2005. Therefore, impacts would be below a level of significance.

Sewer Systems

The proposed project would require wastewater service to the proposed pump stations to collect sewage flow from the restroom facilities. The anticipated daily wastewater flow for the proposed pump stations would be limited to 40 hours per week and would not exceed the current available capacity of the waste water system.

In addition, the proposed project would extend and upgrade existing sewer service and provide new sewer service to accommodate future flows and associated increased capacity. No significant impact would occur.

Energy

The following sections provide a discussion of the project's energy demands and potential conflicts with energy infrastructure. Issues regarding energy efficiency are addressed in Section 4.12, Energy.

Electricity Demand. Implementation of the proposed project would require electrical service for the operation of the proposed pump stations. The anticipated electricity usage for temporary Pump Station 23T and proposed Pump Station A1 would increase as the pump stations are upgraded during the various phases of the proposed project. The existing energy demand at Pump Station 23T is approximately 75 kilowatts per hour (KW/hr). The energy demand would increase to approximately 240 KW/hr in Phase 2B when the pump station capacity is increased from 2 MGD to 4 MGD. A new Pump Station A1 would be constructed in Phase 2E, which would increase the demand to approximately 370 KW/hr. In Phase 2F, Pump Station A1 would be increased from 8 MGD to 12 MGD and the energy demand would increase to approximately 560 KW/hr. The ultimate buildout of Pump Station A1 to 35 MGD in Phase 3 would require approximately 930 KW/hr. The project phasing was designed to ensure that sewer infrastructure would be provided only when future development requires it. Therefore, the energy requirements of the pump stations would be commensurate with population growth and sewer service demand. The proposed project would provide upgraded and extended sewer service to the Otay Mesa area, which is anticipated to experience a population increase over the next 25 years by the City of San Diego and SANDAG (SANDAG 2003). The planned population growth would be accommodated through the provision of all essential public facilities. Adequate electrical service would be provided to serve the future development and other essential public utilities, such as sewer and water. Therefore, the existing and planned electrical infrastructure in the Otay Mesa area is anticipated to be sufficient to provide electricity to the proposed pump stations. Impacts would be below a level of significance.

Conflicts with Existing Electrical Infrastructure. There is potential for the existing electrical infrastructure to conflict with the proposed OMTS sewer pipelines because they would both be located under project roadways. As a result, portions of the electrical lines may require relocation in order to accommodate the proposed sewer pipelines. The locations of the potential areas of conflict would be identified during the design period of each construction phase and conflicts would be avoided if possible. The relocation of electrical transmission facilities would require scheduling of electrical shutdowns with SDG&E. Implementation of the traffic control plan in accordance with City standards, as discussed in Section 3.0, Project Description, would ensure that temporary traffic impacts associated with infrastructure relocation would be below a level of significance. The relocation of existing electrical infrastructure within project roadways would be temporary in nature and would not be considered a substantial alteration to existing electrical infrastructure. Impacts would be below a level of significance.

Natural Gas

Natural Gas Demand. The proposed project would not require the use of natural gas. The proposed pump stations would utilize electricity. Therefore, the proposed OMTS project would not create an increased demand for natural gas that exceeds the current available supply or create the need for new or require substantial alterations related to natural gas.

Conflicts with Existing Natural Gas Infrastructure. There is potential for the existing natural gas infrastructure to conflict with the proposed OMTS sewer pipelines because they would both be located under project roadways. As a result, portions of the natural gas lines may require relocation in order to accommodate the proposed sewer pipelines. The locations of the potential areas of conflict would be

identified during the design period of each construction phase and conflicts would be avoided if possible. The relocation of natural gas facilities would require scheduling of natural gas shutdowns with SDG&E. Implementation of the traffic control plan in accordance with City standards, as discussed in Section 3.0, Project Description, would ensure that temporary traffic impacts associated with infrastructure relocation would be below a level of significance. The relocation of existing natural gas infrastructure within project roadways would be temporary in nature and would not be considered a substantial alteration to existing natural gas infrastructure. Impacts would be below a level of significance.

Communications

Communications Demand. Implementation of the proposed project would require communications service to support the proposed pump stations, which would consist of one or two telephone lines per pump station. This demand for communication facilities would not be expected to exceed the current available supply. Therefore, the OMTS project is anticipated to create the need for new or require substantial alterations to communications.

Conflicts with Existing Communications Infrastructure. There is potential for the existing communications infrastructure to conflict with the proposed OMTS sewer pipelines because they would both be located under project roadways. As a result, portions of the communications infrastructure may require relocation in order to accommodate the proposed sewer pipelines. The locations of the potential areas of conflict would be identified during the design period of each construction phase and conflicts would be avoided if possible. The relocation of communications facilities would require scheduling of communications infrastructure shutdowns with Cox Communications and/or Pacific Bell. Implementation of the traffic control plan in accordance with City standards, as discussed in Section 3.0, Project Description, would ensure that temporary traffic impacts associated with infrastructure relocation would be below a level of significance. The relocation of existing communications infrastructure within project roadways would be temporary in nature and would not be considered a substantial alteration to existing communications infrastructure. Impacts would be below a level of significance.

SIGNIFICANCE OF IMPACT

The proposed OMTS project would not result in the need for new utility systems or require substantial alterations related to the water, ~~sewer~~, power and energy, natural gas and communications systems. The project would extend and upgrade existing sewer service and provide new sewer service to accommodate future flows in the Otay Mesa area. Impacts would be below a level of significance.

MITIGATION, MONITORING, AND REPORTING

Because no significant noise impacts were identified, no mitigation is required.