

RECLAMATION

Managing Water in the West

Draft Environmental Assessment

DICA Partners Water Conveyance Project



— BUREAU OF —
RECLAMATION

Interior Region 8 – Lower Colorado Basin
Arizona, California, Nevada
Yuma Area Office
Yuma, Arizona

April 2020

Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about these resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Environmental Assessment

DICA Partners Water Conveyance Project

USBR Contract No. 18-07-34-L1934

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Acronyms and Abbreviations

APE	Area of Potential Effects
BMPs	Best Management Practices
BIA	Bureau of Indian Affairs
CFR	Code of Federal Regulations
CVWD	Coachella Valley Water District
CVWRMP	Coachella Valley Water Resources Management Plan
CWA	Clean Water Act
cfs	cubic feet per second
EA	Environmental Assessment
EDR	Environmental Database Report
ESA	Environmental Site Assessment (Hazardous Materials)
FONSI	Finding of No Significant Impact
gpm	Gallons Per Minute
ID-1	Improvement District No. 1 (CVWD)
IID	Imperial Irrigation District
ITAs	Indian Trust Assets
MBTA	Migratory Bird Treaty Act
MSHCP	Multi-Species Habitat Conservation Program
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO₂	Nitrogen Dioxide
NRHP	National Register of Historic Places
O₃	Ozone
O&M	Operation and Maintenance
OHWM	Ordinary High-Water Mark
PM_{2.5}	Particulate Matter 2.5 microns in diameter or less

PM₁₀	Particulate Matter 10 microns in diameter or less
POLs	Petroleum, Oil, and Lubricants
psi	Pounds per Square Inch
PVC	Polyvinyl Chloride
QSA	Quantification Settlement Agreement
Reclamation	Bureau of Reclamation
RMP	Coachella Canal Area Resource Management Plan
ROW	Right-of-Way
SO₂	Sulfur Dioxide
SSAB	Salton Sea Air Basin
SHPO	State Historic Preservation Office
USFWS	United States Fish and Wildlife Service
USACE	United States Army Corps of Engineers
VEC	Vapor Encroachment Condition
VOCs	Volatile Organic Compounds
YAO	Yuma Area Office

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Chapter 1 - Purpose and Need for Proposed Action

1.1 Introduction

DICA Partners (DICA), a California Partnership has applied to the Bureau of Reclamation (Reclamation) for a License Agreement (License) to install a pipeline segment across lands subject to Reclamation’s jurisdiction. The pipeline License would be for an area within an existing 30-foot wide roadway and approximately one-mile long, located in the North Shore area of the eastern Coachella Valley, Riverside County, California (see Figure 1 Project Location Map, and Figure 2 Project Index Map). The application also includes modifications to the Coachella Canal for the installation of a new turnout to be owned by Reclamation and operated by the Coachella Valley Water District (CVWD), and an existing bridge and pipeline crossing Wasteway No. 1 that was installed in 2019 as part of the wasteway reconstruction. Two small regulating reservoirs located on private land are not subject to the License but are connected actions as they would be reliant upon the pipeline and canal turnout to operate. The canal turnout would provide CVWD access to Coachella Canal water that could be diverted to two adjacent regulating reservoirs that would supply irrigation water to downslope farmland.

Reclamation has prepared this Environmental Assessment (EA) to evaluate potential impacts associated with the proposed pipeline and canal turnout License, (“project” or “Proposed Action”). The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 UCS 4321 et seq.), the Council on Environmental Quality regulations (40 CFR 1500-1508) for implementing NEPA, and the Department of the Interior’s NEPA Regulations (43 CFR Part 46), and Reclamation Manual NEPA Policy (ENV P03). Reclamation is the lead Federal agency pursuant to NEPA. Because the project would modify Reclamation facilities (Coachella Canal turnout) and introduce new facilities (conveyance pipeline) within Reclamation’s right-of-way (ROW), a License from Reclamation is required in accordance with Reclamation’s Directives and Standards LND 08-01, dated 1/3/2002. The proposed project is a Federal Undertaking and therefore subject to NEPA. A Categorical Exclusion is not appropriate and does not exist for the proposed action, therefore an EA has been prepared to analyze the effects of the action.

1.2 Location

The License includes a northern portion of Section 18. Section 18 is bordered by Cleveland Street and Arthur Street, north of Avenue 68; (Riverside County Assessor’s Parcel Number 721-040-006). The proposed pipeline License is aligned within an existing 30-foot wide all weather, gravel roadway across open desert which has been used and maintained by CVWD for several decades, unofficially known as “Riddle Way”. The License would also apply to the new canal turnout and the existing bridge and pipeline crossing Wasteway No. 1. (See Figure 1 and Figure 2 below with details of each component of the proposed water conveyance system).

Table 1 Land Ownership

Section Number	Legal Description	Land Ownership
Section 13	T. 7 S., R. 9 E., SBBM	Private – DICA Partners
Section 17	T. 7 S., R. 10 E., SBBM	Private – DICA Partners (purchase option to buy the land)
Sections 18	T. 7 S., R. 10 E., SBBM	Reclamation

1.3 Purpose and Need

CVWD has an entitlement to Colorado River water that is now being augmented under terms of the 2003 Quantification Settlement Agreement (QSA), which will provide up to an additional 94,000 acre-feet to CVWD, with delivery to be ramped up over a period of about 15 years. CVWD intends to utilize this water directly for irrigation to reduce aquifer overdraft in accordance with the objectives set forth in the 2010 Coachella Valley Water Management Plan Update (CVWMP). As a part of long-term management of this additional surface water supply, CVWD is proposing a source substitution project as defined in its CVWMP, providing Colorado River water for in-lieu recharge, replacing groundwater use for the irrigation systems in the North Shore Area.

The purpose of the Proposed Action is to establish a surface water distribution system for irrigating private lands, owned by DICA, located adjacent to the Coachella Canal. The objective of the Proposed Action is to supply Coachella Canal water at a rate of 3,500 gallons per minute (GPM) to lands located in Section and 17, (see Figure 2). The pipeline portion of the Proposed Project is to supply well water at a rate of 3,500 gallons per minute (GPM) from wells located in Section 13, inside Improvement District 1 (ID-1) and the Area of Benefit, to lands located in Section 17, one mile to the east. The GPM capacity would accommodate flows and maximize the use of an existing 18-inch pipe located across Wasteway No. 1.

The proposed project would allow DICA to irrigate 540 acres of land using groundwater supplied by its existing wells in Section 13. DICA is required to have that ability as a condition for CVWD to provide Coachella Canal water for irrigation in-lieu of the groundwater. The new farmed lands would be served from the CVWD Colorado River QSA water allocation and would benefit CVWD by preventing the use of groundwater for irrigation that CVWD seeks to manage to prevent overdraft of the local aquifer. CVWD Board of Director's approved, per their In-Lieu Recharge Policy, a new canal water turnout in Section 17 on November 22, 2016. CVWD structural design engineering group reviewed and approved construction drawings for both the existing bridge over Wasteway No. 1 and canal turnout one-half mile to the east.

The Coachella Canal is owned by Reclamation and managed by CVWD. Therefore, DICA (Applicant) has applied to Reclamation for a License that would grant them access to cross Reclamation land and make modifications to the Coachella Canal for implementing the Proposed Action. In addition, DICA will coordinate with CVWD to ensure the Proposed Action does not impact future operation and maintenance activities of the Coachella Canal.

1.4 Reclamation Authority, Policy, and Resource Management Plan

Reclamation's authority to grant land use authorizations is stated in the Reclamation Manual, in Directives and Standards LND 08-01 (dated 1/3/2002). This document provides standard procedures for issuing land use authorization documents such as easements, leases, licenses, and permits, which allow others to use Reclamation lands and interests in its lands, facilities, and water surfaces. According to LND 08-01 item 2.C:

“Permits and licenses are similar in nature. Permits are generally considered a form, or subset, of licenses. They do not convey possessory interest but grant only permission to use real property under specific, limited conditions. Licenses, including permits, are use authorizations that grant personal, revocable permission or authority for a person or entity to utilize a specific parcel of land for a specific purpose or purposes. Licenses, including permits do not convey any ownership interest in the land and are not generally considered to be appurtenant to a parcel of land, thus are personal in nature. In Reclamation, the term ‘permit’ is generally used to refer to short-term and less intense uses (less than 3 years) and ‘license’ generally is used to refer to longer and more substantial uses.”

If Reclamation determines to issue the License, it would grant DICA access to the Coachella Canal to construct the turnout and install the pipeline. It will be DICA's responsibility to adhere to guidance detailed in this EA concerning implementation, and to provide funding, labor and materials to implement and maintain the proposed water conveyance systems.

Therefore, since the project would result in the addition of permanent infrastructure involving a Reclamation facility and lands that would be a long and substantial use requiring a License, the project is subject to the provisions in LND 08-01 item 7.A-C regarding licenses.

In addition, the proposed project falls within the boundaries of the Reclamation *Coachella Canal Area Resource Management Plan* (Coachella Canal RMP) and is subject to the provisions within the Coachella Canal RMP. In September 2006, Reclamation prepared the Coachella Canal RMP in order to establish a long term plan detailing the management framework for the conservation, protection, enhancement, development, and use of the natural and cultural resources along the Coachella Canal while protecting the authorized Reclamation project purposes as detailed in the Boulder Canyon Project Act of December 21, 1928 (45 Stat. 1057).

Figure 1 Project Location Map

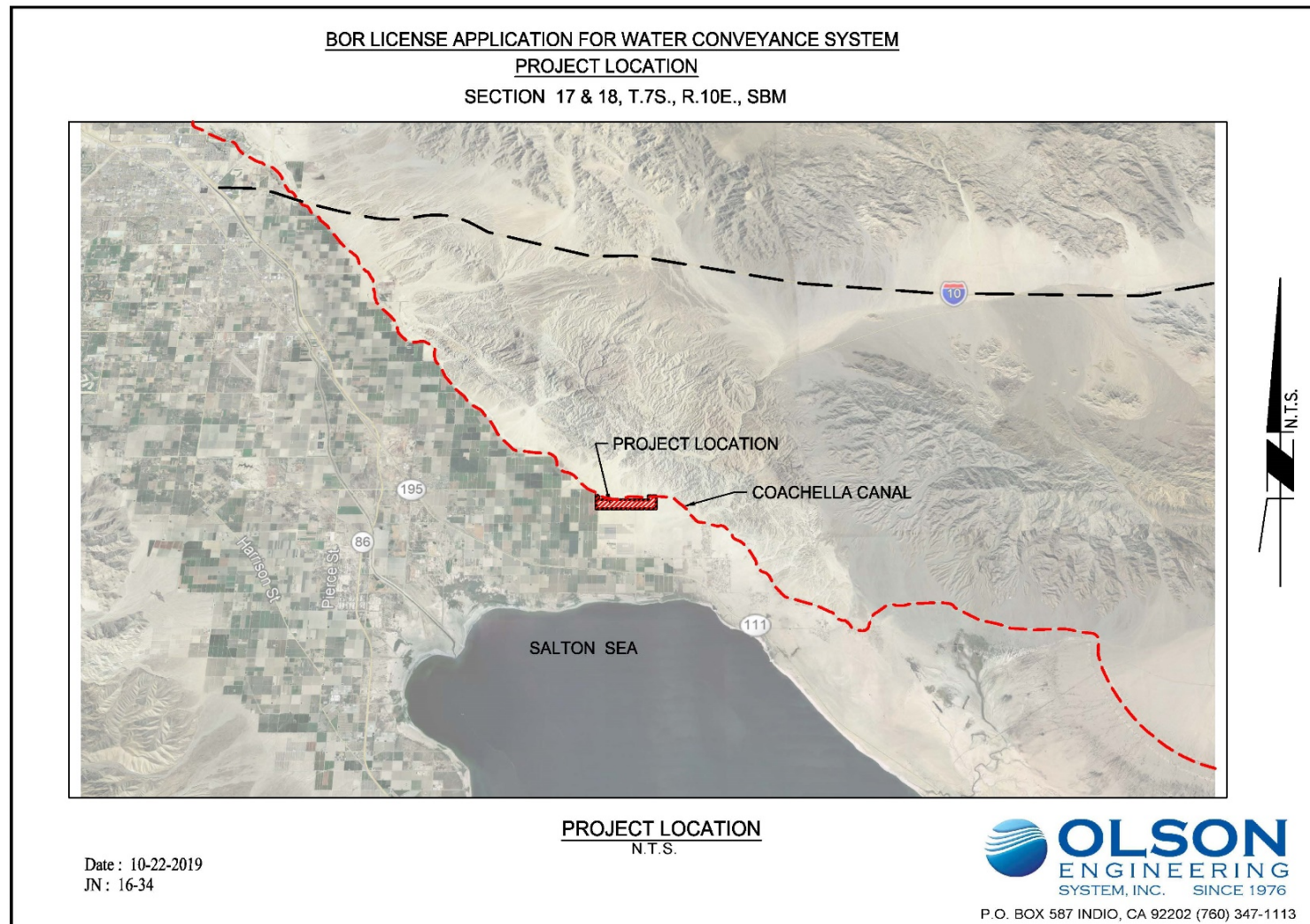
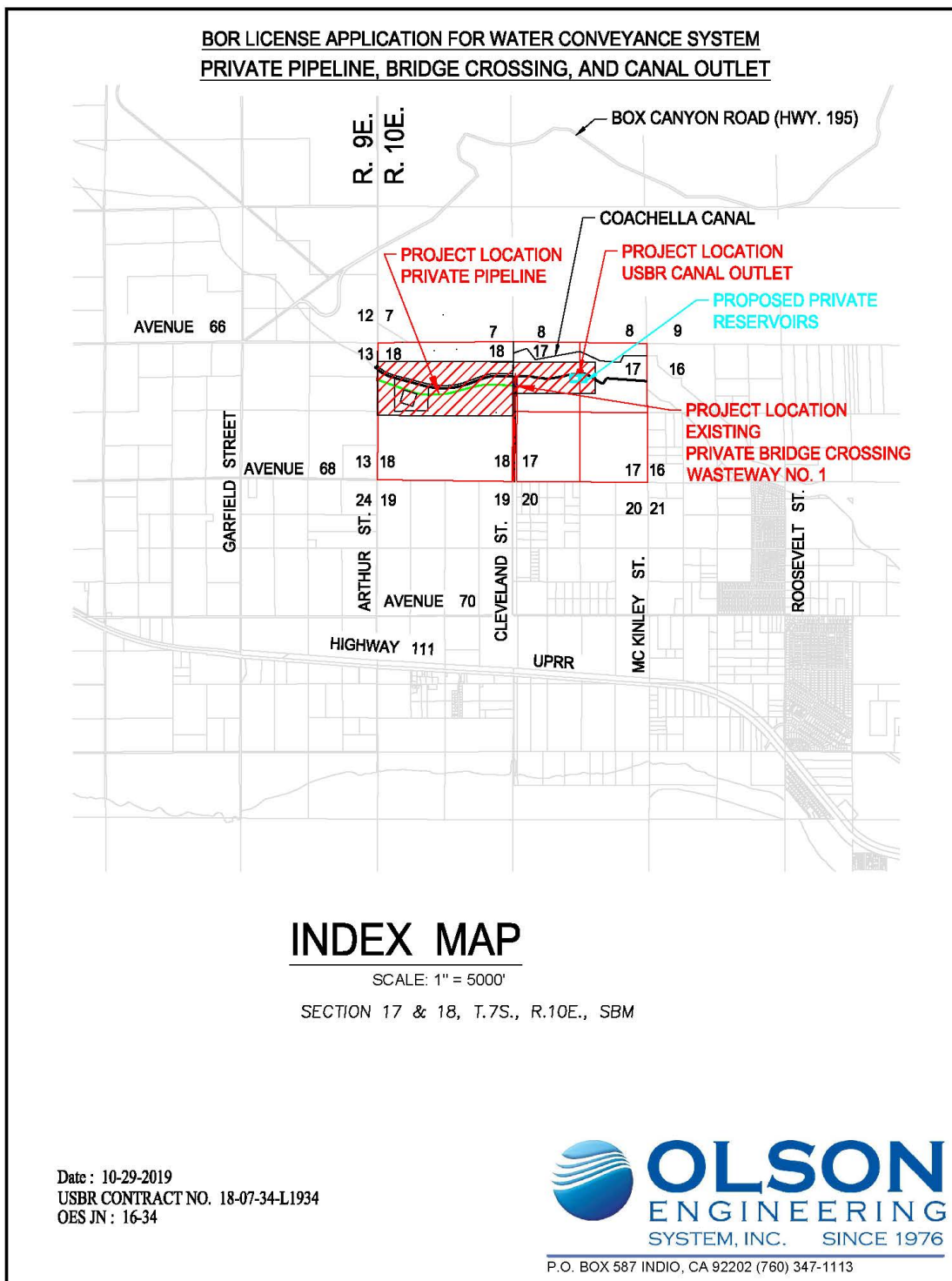


Figure 2 Project Index Map



The portion of the Coachella Canal Area covered by the Coachella Canal RMP is entirely within Riverside County and consists of about 30 miles of the canal and approximately 3,990 acres of Reclamation lands. The Coachella Canal RMP was developed in participation with the Bureau of Land Management, Bureau of Indian Affairs (BIA), County of Riverside (County), and CVWD. Reclamation made a concerted effort to involve interested parties, including agencies, special interest groups, landowners, and individuals in planning for the environmental, land, recreation, and wildlife resources within the Coachella Canal Area.

1.5 Relationship to Other Projects and Activities

1.5.1 Coachella Canal Area Resource Management Plan

As discussed above, the project falls within the boundaries of the Coachella Canal RMP, issued by Reclamation in 2006 as a tool to effectively manage the Coachella Canal Area's natural resources, recreational developments and opportunities, and to involve the public in the planning process.

1.5.2 Quantification Settlement Agreement (QSA)

As noted in the purpose and need statement above, CVWD's Colorado River water entitlement is being augmented as a part of implementation of the 2003 QSA, which will ultimately provide an additional 94,000 acre-feet to CVWD. The District is committed to utilize a significant portion of this water to reduce aquifer overdraft in fulfillment of objectives adopted in the CVWMP. As a part of long-term management of this additional surface water supply, CVWD is encouraging source substitution projects as defined in its CVWMP, providing Colorado River water from the Coachella Canal as in-lieu recharge by replacing groundwater use for the irrigation systems in the North Shore Area.

1.6 Determinations to be Made

This EA will be distributed to appropriate decision-makers within Reclamation for review to determine whether a Finding of No Significant Impact (FONSI) is appropriate. This decision will be based on a determination that potential impacts are either not significant or can be reduced to less than significant levels through the implementation of mitigation measures. If any potential impacts are considered significant and cannot be avoided or reduced to less than significant levels, the preparation and processing of an Environmental Impact Statement (EIS) is necessary to implement the proposed action.

Chapter 2 - Alternatives Considered

This chapter describes the alternatives considered for the proposed project. It includes the Proposed Action and No Action alternatives. It also includes an assessment of design and route alternatives that were considered but eliminated for detailed analysis.

2.1 No Action Alternative

NEPA guidelines require that an EA evaluate the “No Action” alternative in addition to the Proposed Action. The No Action Alternative provides a basis for comparison of the environmental consequences of the Proposed Action. In this EA, the No Action Alternative assumes that the project would not occur, and the pipeline, turnout and regulating reservoirs would not be constructed. The existing bridge and pipeline crossing over Wasteway No. 1 on Riddle Way would remain in place.

2.2 Proposed Action

The Proposed Action includes construction of a 1.5-mile long (7,700 linear feet) 18-inch diameter Polyvinyl Chloride (PVC) pipeline buried within the existing Riddle Way alignment and a canal turnout. The pipeline would extend east from the existing wells and open reservoir located west of Arthur Street, connected at the existing Wasteway No. 1 bridge crossing, and extend to two new regulating reservoirs approximately 2.2 acres each in the central portion of Section 17. The new canal turnout would alternatively supply the new regulating reservoirs, see Figure 3. The pipeline design parameters include capacity for 3,500 gpm at a flow rate of approximately 7.8 cubic feet per second (cfs), with pressure of approximately 60 pounds per square inch (psi). The change in elevation from the existing open reservoir west of Arthur Street to the new reservoir site is 16 feet up slope.

The Proposed Action was formulated as the most cost-effective conveyance system, and with pipeline buried within the existing 30-foot wide Riddle Way segments east and west of the existing Wasteway No. 1 bridge crossing to result in minimal environmental disturbance. It is the shortest route between the two endpoints and is a very low maintenance system.

2.2.1 Project Description

DICA Partners owns lands adjacent to and west of Section 18 west of Arthur Street (Section 13,). DICA also has a Lease/Option Purchase Contract on Section 17, east of Section 18. The pipeline alignment and operations ingress and egress would be included within the existing 30-foot wide roadway, currently operated and maintained by CVWD. This existing roadway and proposed pipeline crosses over the existing Reclamation Wasteway No. 1 within Section 17, east of Cleveland Street and proceeds across DICA property to the proposed new canal water delivery turnout.

DICA would install two new water storage reservoirs on private property near the north, mid-section line of Section 17. The existing 30-foot wide roadway and proposed pipeline would not interfere with, nor affect, CVWD's existing equipment storage yard known as the "Mecca Yard". This 30-foot wide easement and 18-inch pipeline will be utilized throughout the year.

2.2.2 Water Pipeline

The proposed pipeline alignment would be five feet south of the centerline of the 30-foot wide existing roadway. An 18-inch Class 125 PVC pipeline would be installed with graded bedding and minimum four feet cover. Air vents and thrust blocks will be installed and protected by bollards. Maximum pressure in the pipeline is 60 psi. Maximum flow rate is 3,500 gpm from two existing 50-horsepower booster pumps located on DICA Partners property in Section 13. Water would be conveyed across the existing Reclamation Wasteway No. 1, east of Cleveland Street in Section 17, to land currently under contract with DICA as the purchasing agent.

2.2.3 Pipeline Installation

An Encroachment Permit would be obtained from CVWD's ROW Department. All construction work to be done would be within the existing 30-foot wide roadway. The exact size and type of construction equipment will depend upon final selection of the pipeline contractor. Expected equipment would be of sufficient size to excavate, lay and backfill 18-inch Class 125, PVC Rubber Gasket pipe.

Alignment hubs and stakes would be set at 100-foot intervals prior to construction, five to eight feet offset from final pipeline alignment. Pipe would be strung and laid on the south (shorter) side of the roadway, approximately five feet south of centerline of the roadway. The pipeline trench would be dug with an excavator to a depth of six-feet and 36-inches wide. The spoil pile would be less than six-feet wide, four-feet high to the north. Initial backfill and bedding would utilize select native material installed by a small dozer and/or excavator bucket. Backfill would be compacted to 90 percent maximum density utilizing two 4,000 gallon all terrain water trucks, water and vibrating or sheeps-foot compactor in eight-inch lifts.

Existing roadbed backfill would be removed, saved and re-placed to obtain 95 percent maximum density. Locator foil or wire would be installed 24-inches above the top of pipe for future location purposes if necessary. Concrete thrust blocks would be installed, cured, and expulsion of air from the pipeline would occur via multiple air vents. The pipeline would be pressure tested (no flow) to 100 psi for four continuous hours after backing. The pipeline would be installed within the existing 30-foot wide all-weather gravel roadway (Riddle Way). Graded native soil would be used for trench bedding and backfill. There would be no new vegetative removal or wildlife habitat disturbance. The closest farmhouse or other residences are more than one mile distant in any direction. (See Figures 3 through 6 below for details of the proposed layout.)

2.2.4 Seasonal Timeline

Pipeline installation would commence by a licensed pipeline contractor within two weeks of issuance of the License from Reclamation and the CVWD Encroachment Permit. Construction and final pressure testing would occur over a four-week period.

2.2.5 Wasteway No. 1 Crossing

The 30-foot wide roadway and 18-inch pipeline currently cross Reclamation's Wasteway No. 1, (locally referred to as the "Cleveland Street Drain", Coachella Canal Station 4783+43). The structural design drawings were submitted and approved by CVWD as a part of their emergency reconstruction of the Wasteway channel in early 2019.

The existing bridge is owned by DICA and will need to be added to Reclamation's Bridge Inventory as a Type 3 Bridge, defined as any non-Reclamation owned bridge that crosses a Reclamation dam, associated facility, or power facility. DICA will be responsible for consulting with the Federal Highway Administration (FHWA) to ensure it follows the inspection and reporting responsibilities that are applicable under the National Bridge Inspection Standards. Inspection requirements for the bridge will be implemented by DICA and are not the responsibility of Reclamation. DICA has consulted with FHWA and has been advised that as a privately-owned bridge, a National Bridge Inventory number is not required; (personal communication: Chris Long, P.E., FHWA, to Gabriel Gonzalez, Olson Engineering System, Inc., representing DICA, email August 27, 2019).

2.2.6 Canal Turnout

A canal turnout and CVWD meter has been designed and approved by CVWD at Coachella Canal Station 4756+84 to supply 11 cfs to Section 17. The turnout would be at the mid-point of Section 17. Section 17 consists of approximately 540 acres of private desert land, outside CVWD Improvement District 1 (ID-1) which will enable future farming activities with permanent and row crops. All equipment storage will be on private land within Section 17.

Figure 3 Pipeline Alignment Detail

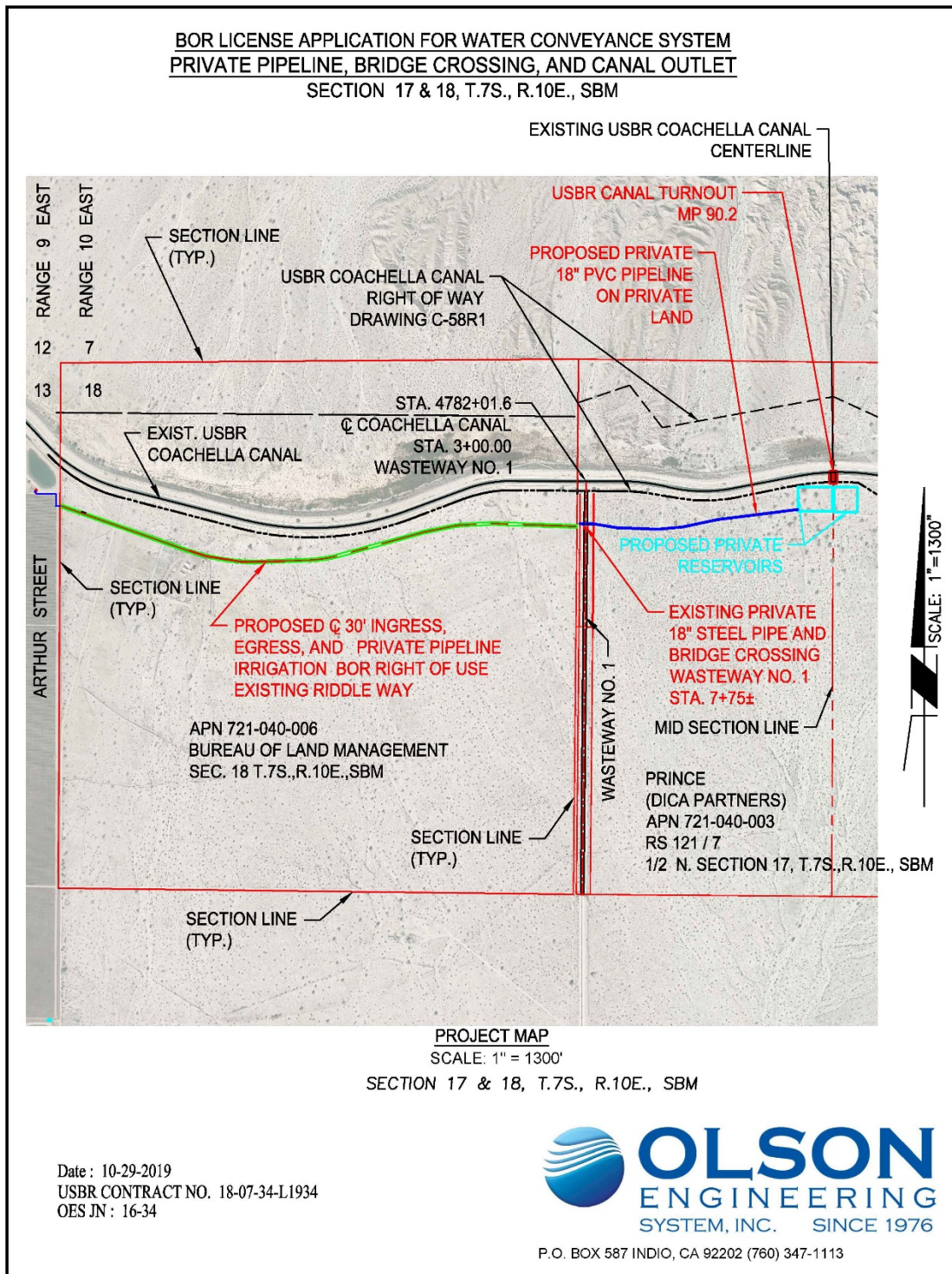


Figure 4 Existing Bridge and Pipeline Crossing Wasteway No. 1 Location

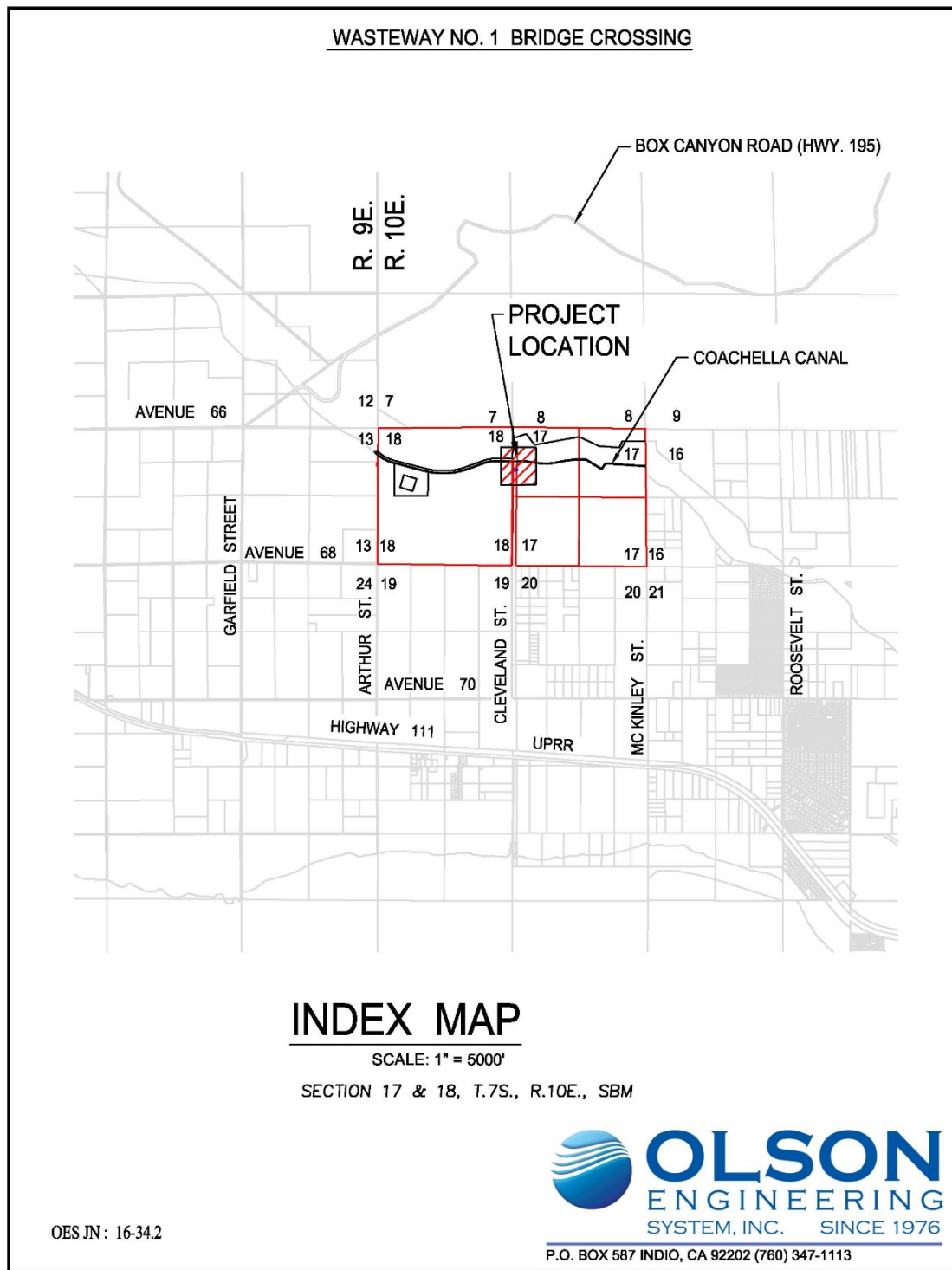


Figure 5 Existing Bridge and Pipeline Crossing Wasteway No. 1 Detail

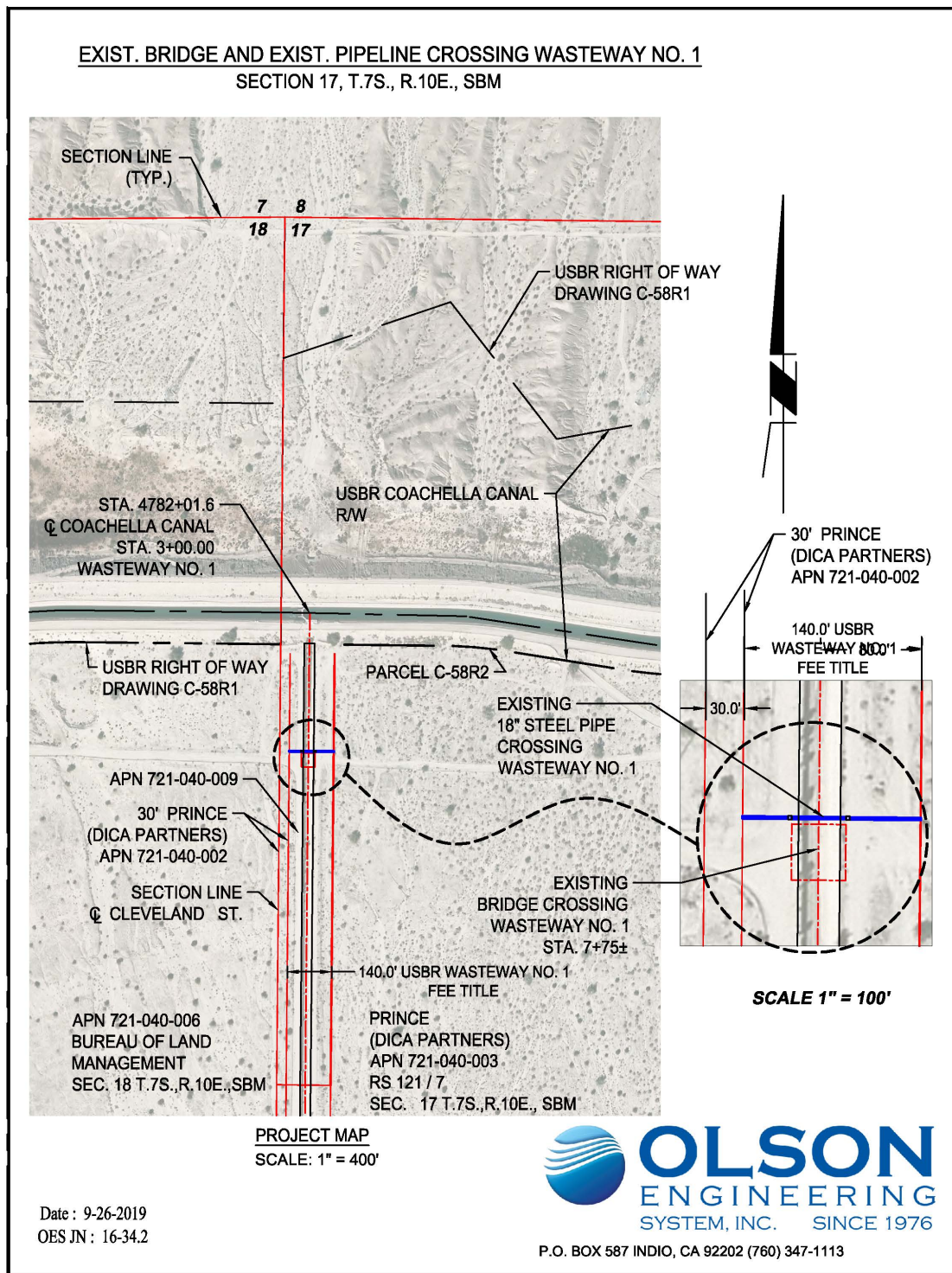
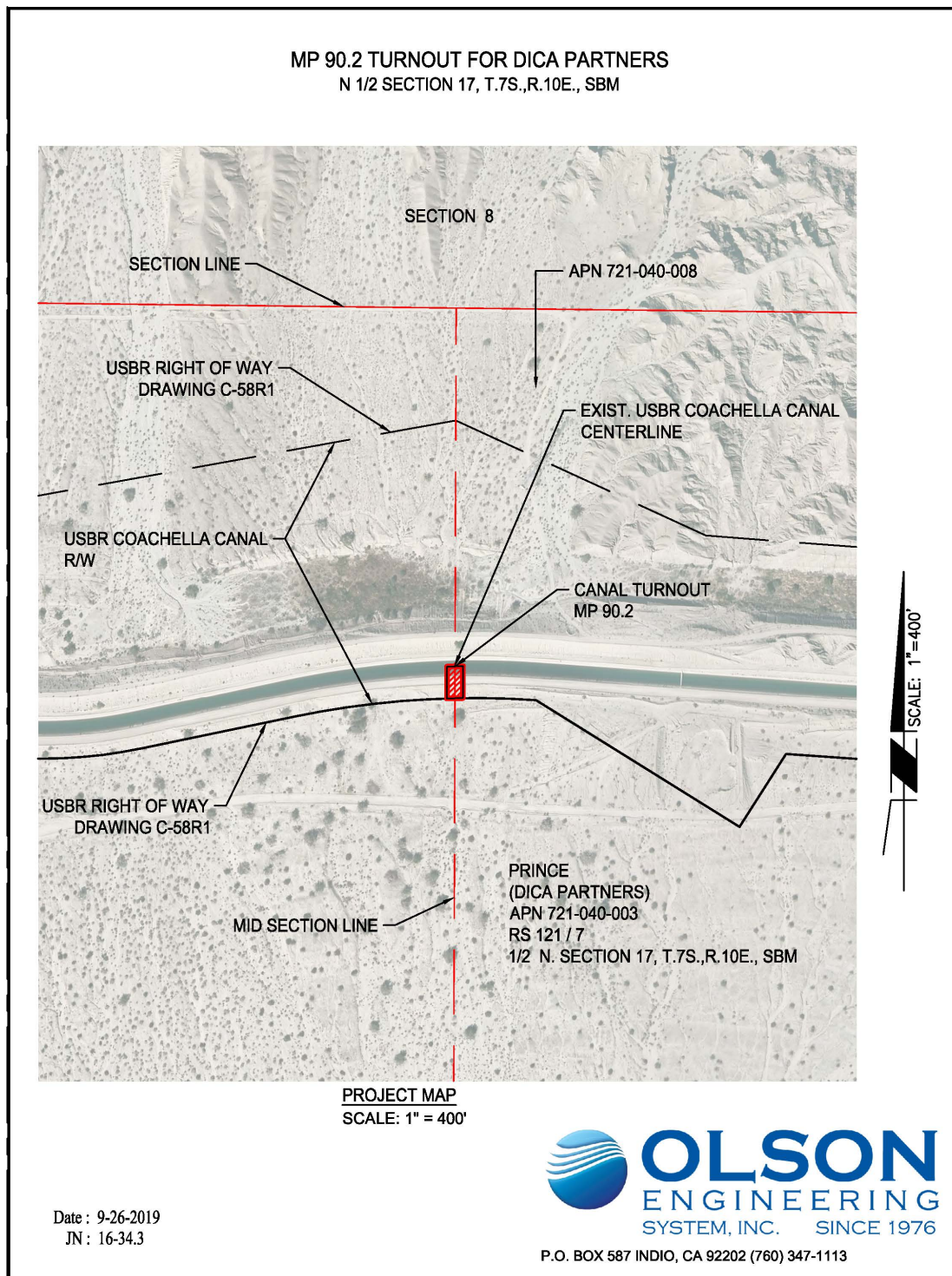


Figure 6 Canal Turnout Detail



A Cofferdam would be set in the external wall of the Coachella Canal with no interruption of flow. Water is pumped from the cofferdam area making for a safe, dry work area down to the existing canal bottom. A 12-foot long concrete panel is removed by cutting at the existing expansion joints. A slide gate and moving screen is installed in the side wall of the canal.

A Reinforced Concrete Pipeline is attached to the slide gate and extends under the embankment to the new magnetic flow meter, approximately 80 feet south. All construction is within Reclamation's ROW.

2.2.7 Regulating Reservoirs

The canal turnout would allow Coachella Canal water to be diverted to two new privately owned regulating reservoirs located adjacent to the Coachella Canal. The reservoirs would provide irrigation water to the downslope farmland. The storage reservoirs would be excavated, and berms would be placed along the south side for balanced cut and fill within the reservoir footprint. They would be lined with 24-millimeter polyethylene sheeting over an eight-pound geofabric felt layer covering a total of 70,000 square-feet. Total surface area is 2.2 acres each, with storage capacity of 7.4 acre-feet each. Maximum water depth would be 12-feet.

2.2.8 Operation and Maintenance

The new 18-inch PVC pipeline in Section 18 and across Wasteway No. 1 Crossing will be operated and maintained by the landowner of Section 17, DICA. The roadway and Wasteway No. 1 Crossing will continue to be shared with CVWD construction and canal maintenance vehicles. The canal turnout and meter will be owned and operated by CVWD.

2.2.9 Termination and Restoration

The 18-inch pipeline would be covered with four-feet of native backfill, compacted to 90 percent density. Only a few small air vents would be left on the ground surface, out of the existing roadway and protected by bollards. The existing Wasteway No. 1 bridge crossing would be left in place in perpetuity, cleaned, painted, repaired and maintained by DICA. A gate and trash screen would be installed in the side wall of the Coachella Canal. Following construction, the canal turnout would be operated, repaired, and maintained by CVWD.

2.3 Other Actions Considered but Eliminated for Detailed Analysis

Other actions that could provide equivalent design and operational parameters besides the No Action Alternative and the Proposed Action were considered for detailed analysis. In each case, the alternative would satisfy the basic purpose and need for the Proposed Action by creating a conveyance system connecting the existing wells in Section 13 to deliver groundwater to the 540 acres in Section 17. Each alternative other than No Action also includes development of the new turnout from the Coachella Canal so that CVWD could provide Coachella Canal water in-lieu of use of groundwater.

2.3.1 Buried Pipeline on Private Land Alternative

This alternative would avoid the use of Riddle Way, and route the pipeline south from the existing wells and open reservoir located in Section 13 west of Arthur Street, south on Arthur Street to Avenue 68, then east to a new crossing of Wasteway No. 1, and then north to Riddle Way and east to the new regulating reservoirs, (see Figure 7). This alternative also includes construction of the new turnout from the Coachella Canal. This route extends 16,300 linear feet and would require a 24-inch pipeline to compensate for significant hydraulic losses. This alternative was rejected as unreasonable since it is a significantly longer route and has the highest energy requirements for pumping uphill from Avenue 68 to the new regulating reservoirs. The route would encounter the solar farm property, adding to the expensive pipeline easement needed. It would also not utilize the existing bridge crossing and would instead require another new Wasteway No. 1 pipeline crossing at Avenue 68. Because of the high energy demands for this alternative, it would also be the most expensive to operate.

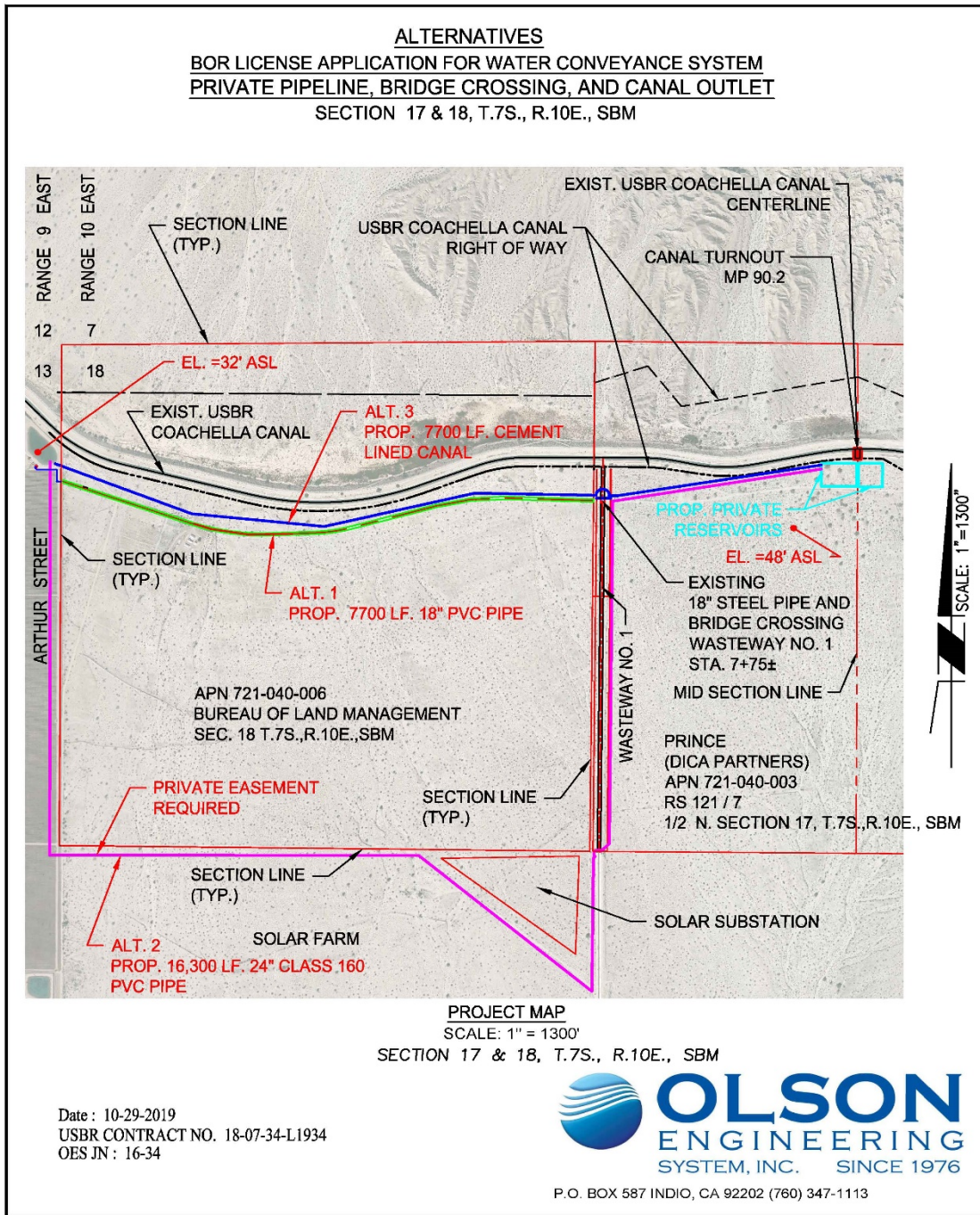
2.3.1 Cement Lined Open Channel Alternative

This alternative consists of development of an above ground canal extending approximately 7,700 linear feet parallel to and south of the Coachella Canal, with a 24-inch bottom width, (see Figure 7). For gravity flow, the western end of the canal would need to be built approximately 16-feet up slope with a lift pump system. This alternative also includes construction of the new turnout from the Coachella Canal. In addition to exposure to vandalism and vehicle damage, this alternative was rejected as unreasonable since it would have the greatest environmental impact due to the excessive grading required to obtain gravity flow in the canal.

2.3.2 Above Ground 24-Inch Diameter Steel Pipe Alternative

A final alternative considered and rejected involves an above ground steel pipe extending the 7,700 linear feet as for the Proposed Action and following approximately the same alignment. The alignment would be adjacent to but outside of Riddle Way, crossing lands that have been less disturbed than the existing 30-foot wide roadway. This alternative also includes construction of the new turnout from the Coachella Canal. This alternative was rejected as unreasonable due to the need for relatively expensive welded steel pipe with multiple culverts and road crossings, design challenges to account for expansion and contraction due to extreme temperature changes, and its susceptibility to traffic damage and vandalism damage. The above ground design would also have greater ground disturbance and visual impacts.

Figure 7 Alternative Alignments



2.4 Photo Record of Project Area and Conditions

Photos 1 through 9 show the site and surrounding area of the Proposed Action. Each photo is labelled for location and project component.



1. Existing Bridge and Pipeline segment over Wasteway No. 1 looking west down 1.0-mile proposed pipeline segment within Riddle Way. Photo date: 09/05/2019



2. Existing Bridge and Pipeline segment over Wasteway No. 1 looking east down Riddle Way and proposed 0.5-mile pipeline alignment. Photo date: 12/18/2019.



3. From Bridge looking north up Wasteway No. 1 to culvert opening under south bank of Coachella Canal. Photo date: 12/18/2019.



4. From Bridge looking south down Wasteway No. 1 to Salton Sea. Photo date: 09/05/2019



5. Looking southwest from south bank of Coachella Canal. Wasteway No. 1 in center of photo and the existing bridge and pipeline crossing at left center. Photo date: 09/05/2019.



6. Looking west down Riddle Way and proposed pipeline alignment near the “Government Yard” site now used as a CVWD storage and maintenance yard. The proposed project will not encroach on the yard property. Photo date: 09/05/2019.



7. Looking west-southwest from south bank of Coachella Canal. Tree in left center is south of the proposed new canal turnout location. Photo date: 12/18/2019.



8. From top of south bank of the Coachella Canal looking south from proposed new canal turnout location, with sites of two small regulating reservoirs to left and right of the tree. Photo date: 12/18/2019.



9. From top of south bank of the Coachella Canal looking down at location of proposed new canal turnout. Photo date: 12/18/2019.

Chapter 3 - Affected Environment, Environmental Consequences, and Management and Mitigation Measures

This section describes the existing environmental resources in the project area that may be affected by the Proposed Action and the No Action Alternative, if implemented. It also serves as the baseline for comparison of alternatives.

The following critical elements of the human environment are not present or would not be affected by the alternatives and will therefore not be addressed in more detail in this EA:

Housing and Population: The Proposed Action and No Action alternatives have no potential to create a need for additional housing, alter existing housing, or cause any change in location population. The Proposed Action is intended to replace use of groundwater with CVWD's surface water supplies for irrigation in development of additional farmed lands. No further analysis of potential effects to housing and population is required.

Land Use: The Proposed Action and No Action alternatives have no potential to create a change in land use or status within the Salton Sea North Shore area. The area and neighboring properties are in predominately agricultural use and open space, consistent with their designation in the Riverside County General Plan. Use of CVWD canal water in-lieu of groundwater to irrigate lands east of the Wasteway No. 1 currently open space would not pose adverse land use impacts on the area, and no further analysis of land use related effects is required.

Noise: The Proposed Action and No Action alternatives have no potential to create a source of noise that could have any effects on any noise-sensitive receptors such as residences, schools, and hospitals and similar facilities. The nearest residence to the proposed pipeline route is more than a mile away, and typical construction noise for excavation, pipeline installation and backfilling would not generate any unusual noise levels. Operational noise would include low level pumping from the wells located west of Arthur Street near the existing above-ground reservoir. These wells are also not in the vicinity of any sensitive receptors. The Proposed Action does not have the potential to generate excessive noise, and no further analysis of noise impacts is required.

Recreation: There are no recreational facilities in the vicinity of the Proposed Action, and neither the Proposed Action nor the No Action alternative has any potential effect on existing or planned recreational facilities or activities. No further analysis of potential effects on recreation is required.

3.1 Air Quality

3.1.1 Affected Environment

The Proposed Action site is located in Riverside County within the northern portion of the Salton Sea Air Basin (SSAB), which is under the jurisdiction of the South Coast Air Quality Management District and the California Air Resources Board. The SSAB encompasses the central portion of Riverside County, and all of Imperial County.

The Clean Air Act, as amended in 1990, requires the Environmental Protection Agency to set National Ambient Air Quality Standards (NAAQS) for wide-spread pollutants from numerous and diverse sources considered harmful to public health and the environment. The SSAB is an unclassified/ attainment area for carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulate matter (PM_{2.5}) for both State and Federal standards. The SSAB is a nonattainment area for ozone (O₃) and PM₁₀ under both State and Federal standards.

3.1.2 Environmental Consequences

No Action: Under the No Action Alternative, air quality in the area would not change from its present conditions due to the project.

Proposed Action: Construction activities associated with the Proposed Action have the potential to release small amounts of ozone precursors such as nitrogen oxides (NO_x) or volatile organic compounds (VOCs) from vehicle and machine exhaust. Ground disturbance associated with the movement of dirt and other dry material has the potential to generate dust, resulting in an increase in PM₁₀ emissions.

3.1.3 Management and Mitigation Measures

Best Management Practices (BMPs) would be followed to limit dust and PM₁₀ emissions, including at a minimum:

- Water or soil binders would be applied to the affected segments of Riddle Way during construction to limit dust from construction traffic, and excavation and backfill equipment.
- Vehicle speed shall not exceed 15 miles per hour within the construction limits.
- Equipment must be properly maintained to minimize exhaust emissions, and equipment idling would be limited to no more than 5 minutes.
- Ground disturbing activities would cease temporarily when wind speeds at the site exceed 20 miles per hour.

3.2 Biological Resources

Helix EPI, Inc. was retained by the DICA to prepare a Biological Resources Assessment for the entire project area (Helix EPI, Inc., 2020). Their report is summarized herein and is attached as Appendix A.

3.2.1 Affected Environment

The proposed project areas (pipeline alignment and canal turnout) are generally composed of an existing roadway and areas immediately adjacent to the roadway that have been subjected to disturbance from roadway maintenance, off-highway vehicle (OHV) activity, dumping, and other disturbances. The new turnout would be constructed within the existing Coachella Canal under the downslope face and bank of the canal. All elements of the project site are located outside of Critical Habitat designated by the United States Fish and Wildlife Service (USFWS) and outside of other lands targeted for conservation under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMMSHCP) or other regional plans.

For the purposes of this assessment, sensitive natural communities include land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants. USFWS-designated Critical Habitat and CVMSHCP Conservation Areas are also included here as sensitive community overlay types.

The project site and expected pipeline work areas are composed of disturbed and developed land associated with Riddle Way. Limited portions at the east end support Sonoran creosote bush scrub habitat that has re-established over the previous borrow pit and tailings areas from the Coachella Canal construction. None of the land cover types that occur within the expected work areas for the project components meet the definition of sensitive. No sensitive natural communities occur on site.

No USFWS-designated Critical Habitat occurs on or immediately adjacent to the project site. The nearest Critical Habitat is mapped for the federally threatened desert tortoise (*Gopherus agassizii*) approximately 3.0 miles north of the site, on the north side of the Orocopia Mountains, within Shavers Valley and near Cactus City, Chiriaco Summit, and the I-10 corridor. The project site is physically separated from this Critical Habitat area by the Orocopia Mountains, but more importantly, by the Coachella Canal, which serves as a major physical impediment for desert tortoise and other species to move from the Orocopia Mountains south toward the Salton Sea and Coachella Valley.

No special-status plant species, including two federally listed species, Coachella Valley milk-vetch (*Astragalus lentiginosus coachellae*), and triple-ribbed milk-vetch (*Astragalus tricarlinatus*), were observed on site during surveys completed in 2017 and 2019. None of the 20 species evaluated have potential to occur within the project site due to very poor habitat conditions for plant species. The site is predominately characterized by an existing roadway that is regularly used and maintained. The soils within the roadway and adjacent margins are compacted and evidently subjected to routine maintenance, including scraping. These disturbances have also altered the vegetation and hydrology of the project site, such that the appropriate vegetation community makeups and hydrology regimes associated with special-status plant species do not exist.

A total of 17 special-status animal species known to occur in the region were evaluated for their potential to occur in the study area. Five of these species are federally listed as endangered including Casey's June beetle (*Dinacoma caseyi*), Least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), and desert pupfish (*Cyprinodon macularius*). Another of these species, Mojave desert tortoise (*Gopherus agassizii*), is federally listed as threatened.

No special-status animal species, including the six federally listed species, were observed on site during surveys completed in 2017 and 2019. None of the 17 species evaluated have potential to occur within the project site due to poor habitat conditions for animals. The road and immediate vicinity provide limited opportunity for breeding, foraging, dispersal, and other life history functions required by most animal species. The disturbances to the area have altered the vegetation, leaving limited shelter, breeding, and foraging opportunities for most animals.

In addition to negative survey results for the species in 2017, Casey's June beetle is not likely to occur due to its current range, which is restricted to areas west of Cathedral City, more than 30 miles west of the project site. Least Bell's vireo, southwestern willow flycatcher, Yuma Ridgway's rail, and desert pupfish are also not likely to occur due to lack of riparian and aquatic habitat on or adjacent to the project site. Protocol-level surveys conducted in 2017 yielded negative findings for the Mojave desert tortoise, including no observations or evidence of the species within the action area. No tortoise or tortoise sign were observed during 2019 surveys. The potential for desert tortoise to occur within the action area is substantially limited as a result of the project site occurring on the south side of the Coachella Canal and in close proximity to active agricultural zones within the Coachella Valley. The current range of tortoise occurs further to the north of the site, on the north side of the Coachella Canal and north and east of the Orocopia Mountains.

The project site does not by itself serve as or contribute to any known or potential corridors or linkages. Surveys completed in 2017 included tracking stations to detect potential wildlife movement through the site. Smoothing of soil surfaces on Riddle Way was done to detect animal tracks and the possible existence of a wildlife corridor through or near the site, and did reveal tracks of small rodents, coyote and a black-tailed jackrabbit. This evidence along with the inability to regularly observe or otherwise detect any medium to large-sized mammals resulted in the conclusion that no important wildlife corridor existed on or near the project site.

3.2.2 Environmental Consequences

No Action: Under the No Action Alternative, the water conveyance system would not be constructed, and there would be no impacts to the biological resources discussed above.

Proposed Action: The Biological Resources Assessment evaluated key issues pertaining to potential effects of the proposed action on vegetation and wildlife as defined by the federal Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, Coastal Zone Management Act, Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA), wetlands, and Wild and Scenic Rivers Act. Finding for each issue is reported below.

ISSUE 1: Federal Endangered Species Act, Section 7

Does the project involve any direct effects from construction activities, or indirect effects such as growth inducement that may affect federally listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on site, in the surrounding area, or in the service area?

No Effect. The project has been specifically sited and designed to occur primarily within the disturbed and developed footprint of an existing road and associated ROW. These existing roadway portions of the action area are not likely to support federally listed species. Limited areas within the eastern portion of the site will occur over land that has been previously disturbed but since re-established with low quality, native Sonoran creosote bush scrub habitat. Federally listed species are also not expected to occur in these areas due to lack of suitable habitat, poor quality habitat conditions, range restrictions, and the fact that they were not observed during either 2017 or 2019 biological surveys. As such, no effect on federally listed threatened or endangered species is anticipated. Last, no portion of the action area occurs on or in the vicinity of USFWS-designated Critical Habitat; no adverse modification or other effect would occur.

3.2.3 Federally Listed Plant Species

No Effect. The following federally listed endangered (FE) and federally listed threatened (FT) plant species were analyzed for their potential to occur:

- Coachella Valley milk-vetch (*Astragalus lentiginosus coachellae*) – FE
- triple-ribbed milk-vetch (*Astragalus tricarinatus*) – FE

Neither of these federally listed plant species were found during surveys completed in 2017 and 2019. They further do not have a high potential to occur due to very poor habitat conditions for plant species. The project occurs in developed land currently being used as an active roadway. The soils within the roadway and adjacent margins are compacted and evidently subjected to routine vehicular activity and maintenance, including scraping. These disturbances have also altered the vegetation and hydrology of the project site, such that the appropriate vegetation community makeups and hydrology regimes associated with these two species do not exist. Therefore, no adverse direct or indirect effects on federally listed plant species are anticipated to occur as a result of proposed action.

3.2.4 Federally Listed Animal Species

No Effect. The following federally listed endangered (FE) and federally listed threatened (FT) animal species were analyzed for their potential to occur:

- Casey's June beetle (*Dinacoma caseyi*) – FE
- Least Bell's vireo (*Vireo bellii pusillus*) – FE
- southwestern willow flycatcher (*Empidonax traillii extimus*) – FE
- Yuma Ridgway's rail (*Rallus obsoletus yumanensis*) -FE
- desert pupfish (*Cyprinodon macularius*) – FE
- Mojave desert tortoise (*Gopherus agassizii*) – FT

None of these six federally listed species were observed on site during surveys completed in 2017 and 2019. None have potential to occur within the project site due to poor habitat conditions for animals.

Casey's June beetle was not observed during surveys in 2017 and is not likely to occur due to its current range, which is restricted to areas west of Cathedral City, more than 30 miles west of the project site. Least Bell's vireo, southwestern willow flycatcher, Yuma Ridgway's rail, and desert pupfish are also not likely to occur due to lack of riparian and aquatic habitat on or adjacent to the project site.

Protocol-level surveys conducted in 2017 yielded negative findings for the Mojave desert tortoise, including no observations or evidence of the species within the action area. No tortoise or tortoise sign were observed during 2019 surveys. The potential for desert tortoise to occur within the action area is substantially limited as a result of the project site occurring on the south side of the Coachella Canal and in close proximity to active agricultural zones within the Coachella Valley. The current range of tortoise occurs further to the north of the site, on the north side of the Coachella Canal and north and east of the Orocopia Mountains. The nearest reported record for the species occurs over five miles from the site. Therefore, the species is presumed to be absent from the action area and no effect on the species is anticipated.

3.2.5 Critical Habitat

No Effect. No USFWS-designated Critical Habitat occurs on or immediately adjacent to the project site. As such, no adverse modification or other effect would occur. The nearest Critical Habitat is mapped for the federally threatened desert tortoise approximately 3.0 miles north of the site, on the north side of the Orocopia Mountains, within Shavers Valley and near Cactus City, Chiriaco Summit, and the I-10 corridor. The site is physically separated from this Critical Habitat area by the Orocopia Mountains, but more importantly, by the Coachella Canal, which serves as a major physical impediment for desert tortoise and other species to move from the Orocopia Mountains south toward the Salton Sea and Coachella Valley.

ISSUE 2: Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat

Does the project involve any direct effects from construction activities, or indirect effects such as growth inducement that may adversely affect essential fish habitat?

No Effect. The proposed project would be constructed within areas that lack marine resources and Essential Fish Habitat regulated under the Magnuson-Stevens Fishery Conservation and Management Act. Therefore, the proposed project would not adversely affect Essential Fish Habitat and would be in conformance with the Magnuson-Stevens Fishery Conservation and Management Act.

ISSUE 3: Coastal Zone Management Act

Is any portion of the project site located within the coastal zone?

No Effect. No portion of the project site is located within the coastal zone. Therefore, the proposed project would have no effect on resources protected under the Coastal Zone Management Act.

ISSUE 4: Migratory Bird Treaty Act

Will the project affect protected migratory birds that are known, or have a potential, to occur on site, in the surrounding area, or in the service area?

No Effect. Compliance with the MBTA is a regulatory requirement of the project. Construction of the project may require the removal or trimming of trees and shrubs during the general bird nesting season of March 1 to September 15 (January 1 to July 31 for raptors). If avoidance measures are not implemented, these activities could directly and adversely affect an active nest in violation of the MBTA. Similarly, if avoidance measures are not implemented, the activities could indirectly and adversely affect an active nest during construction as a result of noise, such that the disturbance results in nest abandonment or nest failure. Mitigation measure BIO-1 listed in section 3.3.3 below is proposed to ensure that the proposed action would have no effect on nesting birds and the project would be in conformance with the MBTA.

ISSUE 5: Protection of Wetlands

Does any portion of the project boundaries contain areas that should be evaluated for wetland delineation or require a permit from the United States Army Corps of Engineers (USACE)?

No Effect. None of the proposed project components are planned within wetlands or other waters of the United States (U.S.) requiring a permit from the USACE pursuant to the CWA. Therefore, the proposed project would result in no effects on any waters of the U.S. and would be in conformance with the CWA.

ISSUE 6: Wild and Scenic Rivers Act

Is any portion of the project located within a wild and scenic river?

No Effect. None of the proposed project components are planned on or in the immediate vicinity of areas designated as Wild and Scenic River. Therefore, the proposed project would result in no effects on any areas designated as Wild and Scenic River and would be in conformance with the Wild and Scenic Rivers Act.

3.2.6 Management and Mitigation Measures

Mitigation measure BIO-1 is recommended as a condition of approval for the proposed action to avoid potential effects on nesting birds in conformance with the MBTA.

BIO-1: Avoidance of Nesting Birds and Raptors. To prevent potential adverse effects on nesting birds, including raptors, protected under MBTA, the project proponent shall implement the following avoidance measures:

- Project activities requiring the removal and/or trimming of vegetation suitable for nesting birds shall occur outside of the general bird breeding season of March 1 to September 15 (January 1 to July 31 for raptors) to the extent feasible. If the activities cannot avoid the general bird breeding season, a qualified biologist shall be retained to conduct a pre-activity nesting bird survey within seven days prior to the activities to confirm the presence or absence of active bird nests. If no active bird nests are found by the qualified biologist, then the activities shall proceed with the reassurance that no violation to the MBTA would occur.
- If an active bird nest is found by the qualified biologist, then vegetation removal and/or trimming activities at the nest location shall not be allowed to occur until the qualified biologist has determined that the nest is no longer active. Avoidance buffers should start at 300 feet for passerine birds and 500 feet for raptors. However, buffers could be reduced at the discretion of the qualified biologist depending on the bird species and project activities required in the vicinity of the active nest.

3.3 Cultural Resources

Applied Earthworks, Inc. was retained by the License Applicant to prepare a Class I and III cultural resources investigation for the Area of Potential Effect (APE) (Applied Earthworks, Inc., 2020).

3.3.1 Affected Environment

3.3.1.1 Regulatory Setting

National Environmental Policy Act of 1969 (NEPA) and National Historic Preservation Act of 1966 (NHPA)

Under NEPA, federal agencies have broad responsibilities in regard to the impacts of their activities on the environment, including historic properties. To an extent, NEPA addresses some of the same concerns as the NHPA, for instance the identification of irreversible effects on historic properties. Federal agencies routinely coordinate studies and documents prepared for compliance with the NHPA with those completed for NEPA compliance. The Advisory Council on Historic Preservation teamed with the President's Council on Environmental Quality (CEQ), the overseer of NEPA implementation, to provide guidance on the integration of the NEPA and NHPA review processes (CEQ et al. 2013).

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. Undertakings include any federally funded, licensed, or permitted project (36 CFR 800.16[y]). A historic property as defined in 36 CFR 800.16(l)(1) means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). Historic properties illustrate the quality of significance in American history, architecture, archaeology, and culture present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association.

In the context of a federally permitted undertaking, such as this Proposed Action, the significance of cultural resources is measured against the NRHP criteria for evaluation (36 CFR 60.4) including features that:

- A. are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. are associated with the lives of persons significant in our past; or
- C. embody the distinctive characteristics of a type, period, or method of construction, or
- D. that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- E. have yielded, or may be likely to yield, information important in prehistory or history.

A property must meet one or more of these specific criteria and retain sufficient integrity to qualify as a good representative of a significant historical theme or pattern. Unless a site is of exceptional importance, it is not eligible for listing in the NRHP until it is 50 years old.

3.3.1.2 Area of Potential Effect

The Area of Potential Effect (APE) is defined as the geographic area within which the Project has the potential to directly or indirectly cause alterations to historic properties, per 36 CFR § 800.16(d). The APE, when broken down into sections, includes 1.5 miles centered on Riddle Way (30-foot buffer on either side of the roadway), the parcel for the proposed reservoirs (approximately 5 acres of private land at the east end of Riddle Way), and the turnout connection to the Coachella Canal (approximately 0.2 acres). The APE for this Project is limited to the Area of Direct Effects (ADI), which totals approximately 21 acres. The maximum depth of Project-related ground disturbance will be 12 feet below ground surface.

3.3.2 Environmental Consequences

No Action: Under the No Action Alternative, the proposed water conveyance system would not be constructed, and the historic resources (Coachella Canal and Riddle Way) would not be altered in any way.

Proposed Action: Prior to the field survey of the APE, a literature and records search was conducted at the Eastern Information Center (EIC) of the California Historical Resources Information System, housed at the University of California, Riverside. The objective of this records search was to determine whether any prehistoric or historical cultural resources had been recorded previously within the APE plus a 1-mile-wide buffer (Study Area). The records search indicated 12 cultural resource studies have been conducted previously within the Study Area.

A Class III cultural resource investigation was conducted, which included the intensive cultural resource survey of the approximately 21-acre APE. A previous Class III investigation completed in 2017 did not include the additional 0.5 miles of pipeline or the two small regulating reservoirs. The 2019-2020 supplemental assessment includes an updated records and literature search, an updated Sacred Lands File (SLF) Search with the Native American Heritage Commission (NAHC), and an archaeological survey of the updated APE. The purpose of the investigation was to determine the potential for the proposed Project to affect cultural resources eligible for or listed on the NRHP.

The literature and records search indicated 12 previous cultural resource investigations and 8 cultural resources are documented within the APE or within a 1-mile-wide buffer (Study Area). Two of these previously recorded cultural resources, the Coachella Canal and Riddle Way, are within the APE. The Coachella Canal was previously evaluated and determined eligible for inclusion on the NRHP. Riddle Way was evaluated and recommended eligible for the NRHP. The NAHC completed the SLF search with negative results.

An intensive pedestrian surface survey of the APE conducted on December 18, 2019 confirmed that the Coachella Canal and Riddle Way are within the APE and are in the same condition as previously documented. No additional historical or archaeological cultural resources were encountered within the APE during the Class III survey.

The Coachella Canal has previously been determined eligible for NRHP inclusion under Criterion A by Reclamation, with State Historic Preservation Office (SHPO) concurrence. In addition, Riddle Way is recommended as eligible for the NRHP as a contributor to the Coachella Canal. Therefore, the Coachella Canal and Riddle Way are considered historic properties under Section 106.

To determine if the proposed undertaking would affect the Coachella Canal and Riddle Way, the criteria of adverse effect were applied to analyze how different aspects of the proposed action would alter or diminish the resources' integrity. In accordance with 36 CFR 800.5(a)(1), an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property that qualify the property for listing on the NRHP. Examples of adverse effects on historic properties included, but are not limited to:

- A. Physical destruction of or damage to all or part of the property;
- B. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
- C. Removal of the property from its historic location;
- D. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- E. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- F. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- G. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 CFR 800.5(a)[2]).

The applicable criteria of adverse effect stipulated in 36 CFR 800.5(a)(2) were applied to the historic properties identified in the Project APE. Although the proposed undertaking will not change the Coachella Canal's use, the construction of the canal turnout at Coachella Canal Station 4756+84 would result in the physical alteration of an approximately 65-foot-long section of the approximately 123-mile-long property. However, the physical alteration will be in accordance with the Secretary of the Interior's Standards and will be consistent in its function and operation as a canal. Further, the proposed changes will be similar in appearance, materials, scale and massing but are distinct from other canal turnouts along the Coachella Canal. Given that the majority of the Coachella Canal will remain unchanged, the proposed alteration to the recorded segment within the APE will not result in a significant change to the resource's ability to convey its historical significance and will not rise to the level of "adverse".

Riddle Way has been in continuous use since its construction resulting in changes made due to use and maintenance. It is completely modern in appearance, design, and construction. Because Riddle Way is a contributing element to the Coachella Canal as a whole, the Project will have an effect on this historic property. However, this effect is not adverse, considering it amounts to no substantial change to the physical appearance or alignment of Riddle Way, nor will it result in the destruction of the historic fabric of the road.

With regard to cumulative effects, there are no foreseeable connected undertakings in the future associated with the proposed Project that would result in a cumulative effect to the historic resources. Therefore, the proposed Project would not contribute significantly to cumulative impacts to significant cultural resources within the region.

No further cultural resource management is recommended during this Project for the Coachella Canal or Riddle Way under Section 106 of the NHPA and a finding of No Adverse Effect for the Project as presently planned is recommended. Consultations with California SHPO and Native American tribes is ongoing.

3.3.3 Management and Mitigation Measures

The results of the archaeological surveys indicate the Project APE is previously disturbed by routine maintenance of the road and canal and the recent reconstruction of Wasteway No. 1. In addition, the APE's landscape is both recent and heavily disturbed by modern agricultural activity and Coachella Canal infrastructure maintenance. The mapped soils within the APE have no buried horizons that would hold the potential for archaeological deposits. The likelihood of uncovering buried archaeological deposits is very low. Therefore, no further cultural resource management is recommended for the Project.

Although it is unlikely, Mitigation measure Cult-1 is recommended in the event that archaeological materials or human remains are discovered during excavation for project construction.

CULT-1 In the event that archaeological materials are encountered during construction, all work must be halted in the vicinity of the discovery until a qualified archaeologist can visit the site of discovery and assess the significance and integrity of the find. If intact and significant archaeological remains are encountered, the effects of the Project must be mitigated appropriately. Any such discoveries, and subsequent evaluation and treatment, should be documented in a cultural resource report, which would be submitted to the EIC for archival purposes.

Additionally, California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 mandate the process to be followed in the unlikely event of an accidental discovery of human remains in a location other than a dedicated cemetery. If human remains are discovered during project activities, the Bureau of Reclamation and Riverside County Coroner's office shall be notified within 24 hours (California Health and Safety Code § 7050.5) and all activities in the immediate area of the find shall cease until appropriate and lawful measures have been taken. If the Coroner determines that the remains are Native American, the NAHC shall also be contacted (California Public Resources Code § 5097.98). In accordance with Section 5097.98 of the California Public Resources Code, the NAHC shall designate a Most Likely Descendent, who may make recommendations concerning the disposition of the remains in consultation with Reclamation and the project archaeologist.

3.4 Indian Trust Assets

3.4.1 Affected Environment

Indian Trust Assets (ITAs) are legal interests in property held in trust by the U.S. for Indian tribes or individuals, or property in which the U.S. is charged by law to protect for Indian tribes or individuals. In accordance with the Indian Trusts Fund Management Reform Act of 1994, as amended, all Department of the Interior agencies, including Reclamation, are responsible for protecting ITAs from adverse impacts resulting from their programs and activities. In cooperation with tribes, federal agencies must inventory and evaluate assets and mitigate or compensate for adverse impacts to the asset. While most ITAs are located on reservation lands, they may also be located off-reservation. Examples of ITAs include, but are not limited to, land, minerals, rights to hunt, fish, and gather, and water rights.

Water from the Colorado River has been a major source of supply for the Coachella Valley since 1949 when the Coachella Canal was first placed into service. This water is used for agricultural and non-urban purposes, as well as groundwater recharge. The Colorado River is managed and operated in accordance with the "Law of the River", a complicated collection of interstate compacts, federal and state legislation, various agreements and contracts, an international treaty, a U.S. Supreme Court decree, and federal administrative actions that govern the rights to use of Colorado River water within the seven Colorado River Basin states.

CVWD serves the greater project area, and multiple tribes have lands within the CVWD service area. Torres-Martinez Desert-Cahuilla Indians tribal reservation lands are located throughout the North Shore and Salton Sea area, with the closest lands to the Proposed Action lands being approximately three miles away. Further to the north in eastern Indio the Cabazon Band of Mission Indians also has significant tribal reservation lands.

3.4.2 Environmental Consequences

Reclamation departmental policy requires the agency to address potential impacts to ITAs even if impacts are found to be non-significant. The Proposed Action site is located approximately three miles to the southeast of the Torres-Martinez reservation lands.

3.4.2.1 Trust Lands

The Proposed Action is not located on ITA lands. The nearest tribal land, part of the Torres-Martinez Desert-Cahuilla Indians tribal reservation, is located approximately three miles away north and west of the project area. There are no tribal residences and/or facilities within the Proposed Action area.

3.4.2.2 Water Rights

The service area for water delivery under CVWD's contract with Reclamation is defined as Improvement District No. 1 (ID-1) which encompasses most of the East Valley and a portion of the West Valley north of Interstate 10. The nearest tribal land within CVWD's ID-1 belonging to the Torres-Martinez Desert-Cahuilla Indians, is served by CVWD as part of water rights contract with Reclamation.

3.4.2.3 Hunting, Fishing, and Gathering Rights

Colorado River water is currently delivered to the project vicinity via the Coachella Canal, and is primarily used for non-potable uses such as agricultural, golf course irrigation, fish farming operations, duck clubs, and recreational lake uses. In addition, the Coachella Canal is concrete lined, and although a small number of fish are present, it is not a significant source of recreational or subsistence fishing. CVWD prohibits recreational fishing in the Coachella Canal.

No Action: Under the No Action Alternative, construction of the new water conveyance system would not take place. Therefore, no change to federal actions would occur that could result in adverse effects on ITAs.

Proposed Action: The Proposed Action is not located on or adjacent to any Trust Lands and would not prevent the use or management of any tribal or Trust Lands. The Proposed Action would not result in a change to any tribal water rights, or to the diversion or delivery of tribal water entitlements. The Proposed Action also has no potential to interfere with any hunting, fishing or gathering rights which could be exercised by any tribe.

3.4.3 Management and Mitigation Measures

The Proposed Action has no potential to impact Indian Trust Assets and no management or mitigation measures related to such assets are needed or proposed.

3.5 Environmental Justice and Socioeconomic Conditions

3.5.1 Affected Environment

Executive Order (EO) 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the U.S. Minority populations include persons identified by the Census of Population and Housing to be of Hispanic or Latino Origin, as well as, non-Hispanic persons who are African American, American Indian and Alaska Native, Native Hawaiian or other Pacific Islander.

Low-income populations are those that fall within the annual statistical poverty thresholds from the U.S. Census Bureau for the 2010 Census. The definition of poverty is dependent upon the size of the family. The poverty threshold for a family of three is \$17,374, and for a family of four is \$22,314. According to the 2010 Census, more than 60 percent (60.3%) of the population of Riverside County is classified as minority, and nearly 17 percent have incomes below poverty levels.

The immediate project vicinity is vacant and contains no residences or inhabitants within at least one mile in any direction. There is a large representation of both minority and low-income populations within the broad vicinity of the Proposed Action. The City of Mecca located nearest to the Proposed Action has a substantially larger percentage of minority residents than Riverside County as a whole (99.9 percent Hispanic or Latino), and the poverty level in Mecca is 39.5% compared to 16.9% for the County as a whole.

3.5.2 Environmental Consequences

No Action: Under the No Action Alternative, the project would not take place. Therefore, no Federal actions would occur that could result in a disproportionately high and adverse effect on the health or environment of minority or low-income populations.

Proposed Action: Implementation of the Proposed Action would not disproportionately affect the minority and impoverished population in the area. The southern Coachella Valley has a large Hispanic population in comparison with Riverside County as a whole. Construction-related effects would be short-term only. The project location is isolated from any residences or other sensitive human habitation and would not affect any surrounding community or group, or disproportionately impact any disadvantaged community. The Proposed Action is not expected to significantly affect local socioeconomic conditions, except for the provision of additional farm worker jobs on the private lands that would be irrigated for farm use as a result of the water conveyance project.

3.5.3 Management and Mitigation Measures

Based upon the analyses presented throughout this EA, changes resulting from implementing the Proposed Action would not result in disproportionately high or adverse impacts to the environment or to the health of low-income and minority populations. No mitigation measures are needed or proposed.

3.6 Geology and Soils

Sladden Engineering was retained by the License Applicant to prepare a geotechnical and geologic investigation for the entire project area (Sladden Engineering, 2018). Their report is summarized herein and is attached as Appendix B.

3.6.1 Affected Environment

The Proposed Action is located in the Coachella Valley, northeast of the Santa Rosa Mountains, in the Northshore area of Riverside County, California. The Coachella Valley is part of the tectonically active Salton Trough. The Salton Trough is a closed, internally draining basin bounded in its northerly portion by the San Jacinto Mountains and Santa Rosa Mountains to the southwest, San Bernardino Mountains to the northwest, and the Little San Bernardino Mountains to the northeast. These mountain ranges are composed of granitic and metamorphic rocks that also form the basement complex of the Coachella Valley.

Overlying the basement complex, the valley is filled with a series of unconsolidated and semi-consolidated continental elastic materials eroded from the surrounding mountain ranges, lacustrine deposits of ancient Lake Cahuilla, and wind-blown sand deposited in the active blow sand areas of Riverside County.

The northwest-southeast trending San Andreas fault zone dominates the geology of the Coachella Valley. The Banning, Mission Creek, and Garnet Hill faults (which are part of the San Andreas fault system), divide the Coachella Valley into four distinct hydro-geologic sub-basins, as the faults are generally impermeable to groundwater flow.

The property is located at an elevation of approximately 45-feet above sea level. The topography increases in elevation to the north and descends to the south. An Environmental Database Report (EDR) was conducted to search for specific hydro-geologic information maintained by EDR Lightbox Company within a 1.25-mile radius from the property; however, no specific information was found. Near surface soil in the general area is described as gravelly sand with high infiltration rates and areas identified as borrow pits with no soil description.

The EDR report also searched for public water systems and water wells known to the United States Geological Survey (USGS) and State of California within a one-mile radius of the property. Two wells were found within one mile of the subject site. There were no groundwater depth measurements available.

3.6.2 Environmental Consequences

No Action: The No Action Alternative will not include any construction or placement of new structures in this geologic environment and therefore has no potential to impact geologic conditions or resources in the project area.

Proposed Action: The geologic report identified the most significant geologic hazard to the proposed project to be the potential for moderate to strong seismic shaking that is likely to occur during the design life of the project. The proposed project is located in the highly seismic Southern California region within the influence of several fault systems that are considered to be active or potentially active. An active fault is defined by the State of California as a "sufficiently active and well-defined fault" that has exhibited surface displacement within the Holocene epoch (about the last 11,000 years). A potentially active fault is defined by the State as a fault with a history of movement within Pleistocene time (between 11,000 and 1.6 million years ago).

The site has been subjected to strong seismic shaking related to active faults that traverse through the region. Some of the more significant seismic events near the subject site within recent times include: M6.0 North Palm Springs (1986), M6.1 Joshua Tree (1992), M7.3 Landers (1992), M6.2 Big Bear (1992) and M7.1 Hector Mine (1999). The entire proposed Project, and the existing Coachella Canal are located within the San Andreas Fault Zone.

Sladden Engineering concluded that the proposed project should be feasible from a geotechnical perspective provided that the recommendations provided in their report are incorporated into design and carried out through construction. The main geotechnical concerns are the presence of loose native surface soil and the potential impacts associated with primary surface ground rupture along the San Andreas fault.

3.6.3 Management and Mitigation Measures

The construction contractor should be required to implement the earthwork recommendations identified by Sladden Engineering in their geotechnical investigation. These include the following specific recommendations.

GEO-1 All earthwork including excavation, backfill and preparation of the subgrade soil, should be performed in accordance with the geotechnical recommendations presented in the Sladden report and portions of the local regulatory requirements, as applicable. All earthwork should be performed under the observation and testing of a qualified soil engineer. The following geotechnical engineering recommendations for the proposed project are based on observations from the field investigation program, laboratory testing and geotechnical engineering analyses. (See Sladden, Geotechnical Investigation, March 21, 2018, pp. 8-9.)

- A. **Stripping.** Areas to be graded should be cleared of any vegetation, associated root systems, and debris. All areas scheduled to receive fill should be cleared of any undocumented fill and unsuitable materials. The strippings should be removed off site or stockpiled for later

use in landscape areas. Voids left by obstructions should be properly backfilled in accordance with the compaction recommendations of the geotechnical report.

- B. Preparation Foundation Areas:** In order to provide for firm and uniform foundation bearing conditions, the primary bearing soil should be over-excavated and recompact. Over-excavation should extend to a minimum depth of 2-feet below the bottom of the trapezoidal inserts or footings. Once adequate removals have been verified, the exposed native soil should be scarified to a depth of approximately 12 inches, moisture conditioned to within two percent of optimum moisture content and compacted to at least 90 percent relative compaction. The previously removed material may then be placed as compacted engineered fill as outlined below. Removals should extend at least 3-feet laterally beyond the footing limits.
- C. Fill Placement and Compaction:** Soil to be used as engineered fill should be free of organic material, debris, and other deleterious substances, and should not contain irreducible matter greater than three inches in maximum dimension. All fill materials should be placed in thin lifts, not exceeding six inches in a loose condition. If import fill is required, the material should be of a low to non-expansive nature and should meet the following criteria:

Plastic Index	Less than 12
Liquid Limit	Less than 35
Percent Soil Passing #200 Sieve	Between 15% and 35%
Maximum Aggregate Size	3 inches

The subgrade and all fill should be compacted with acceptable compaction equipment, to at least 90 percent relative compaction. The bottom of the exposed subgrade should be observed by a representative of Sladden Engineering prior to fill placement. Compaction testing should be performed on all lifts in order to verify proper placement of the fill materials.

- D. Shrinkage and Subsidence.** Volumetric shrinkage of the material that is excavated and replaced as controlled compacted fill should be anticipated. Sladden estimates that this shrinkage should be between 15 and 20 percent. Subsidence of the surfaces that are scarified and compacted should be less than 1 tenth of a foot. This will vary depending upon the type of equipment used, the moisture content of the soil at the time of grading and the actual degree of compaction attained.

3.7 Floodplain

3.7.1 Affected Environment

The project site is flat, with an elevation of approximately 45-feet above mean sea level (AMSL) to 24-feet AMSL. Soils are predominantly gravelly sand with small pockets of fine sand. The entirety of the surface soils within the project site show signs of significant disturbance and alteration from their native state as a result of vehicle use and maintenance for the roadway. Remnant desert dry washes exist across the length of the water conveyance route. When the Coachella Canal was constructed in 1949 all upstream runoff from north to south was channeled into Wasteway No. 1, eliminating flows in the dry washes. The entire project area is defined as “an area of minimal flood hazard” by the Federal Emergency Management Agency.

The project occurs in developed land, with the pipeline alignment currently being used as an active roadway, and the canal turnout to be built within the existing Coachella Canal. The soils within the roadway and adjacent margins are compacted and evidently subjected to routine vehicular activity and maintenance, including scraping. These disturbances have also altered the vegetation and hydrology of the project site, such that there are no distinct stream channels or floodplain features.

None of the proposed project components are planned within wetlands or other Waters of the U.S. that would require a permit from the USACE pursuant to the CWA. Therefore, the proposed project would result in no effects on any Waters of the U.S. and would be in conformance with the CWA.

3.7.2 Environmental Consequences

No Action: The No Action Alternative would not affect any floodplain or result in potential flood hazards.

Proposed Action: Construction and operation of the Proposed Action would have no impact on any floodplain or result in potential flood hazards.

3.7.3 Management and Mitigation Measures

The Proposed Action has no potential to impact floodplain conditions or resources in the project area, and no management or mitigation measures are recommended.

3.8 Hazardous Materials or Solid Waste

3.8.1 Affected Environment

Sladden Engineering was retained by the License Applicant to prepare an updated Phase 1 Environmental Site Assessment for hazardous materials (“Phase 1 ESA”) for the entire project area (Sladden Engineering, 2020). Their report is summarized herein and is attached as Appendix C.

The Riverside County Department of Environmental Health and the Regional Water Quality Control Board, Colorado River Region are the local environmental oversight agencies responsible for site contamination or activities relating to hazardous substances and hazardous waste sites. Because the property was not listed on any of the environmental agency databases reviewed, agencies would not be expected to have information regarding the presence or absence of adverse or negative environmental conditions at the site. Past interviews with staff from these agencies indicate that they do not have unpublished information relating to adverse or negative environmental conditions at sites not listed in environmental databases.

To identify reported areas of possible environmental impairment on or within a 2-mile radius measured from central portion of the subject property, an Environmental Database Report (EDR) was obtained from the EDR Lightbox Company (Sladden, 2020, Phase 1 ESA, Appendix B).

An area of stained soil measuring approximately 10-feet by 3-feet was observed to the north of the proposed pipeline alignment. Past illegal dumping has occurred on the property. However, in the absence of a documented VOC or petroleum release at this site, a vapor encroachment condition (VEC) can be ruled out because it does not exist or is not likely to exist. The containers and surficial staining identified to the north of the project alignment appears limited to the approximately 10-foot by 3-foot area discussed. The noted stain appears relatively minor in nature and is not considered a significant "recognized environmental condition" (REC).

Other hazardous materials routinely used during construction of the project are small volumes of petroleum hydrocarbons and their derivatives (for example, fuels, oils, lubricants, and solvents) required to operate the equipment used in the construction activities. These materials are those typical for operation and maintenance of heavy equipment and support vehicles, including gasoline, diesel fuels, and hydraulic fluids.

3.8.2 Environmental Consequences

No Action: Under this alternative, no ground disturbance or grading would occur, nor would construction vehicles be required on the project site. Therefore, impacts related to hazardous materials associated with construction activities and vehicles would not occur under the No Action Alternative.

Proposed Action: During excavation and filling activities that would occur for construction under the Proposed Action, there is the potential to encounter hazardous materials in soils on the project site. There is also potential for buried contaminated soils to be encountered, although it is considered unlikely. Therefore, management and mitigation measures have been identified to reduce impacts related to potential hazardous materials found in soils during construction.

3.8.3 Management and Mitigation Measures

Mitigation actions designed to limit the potential impact of hazardous materials or solid waste would be implemented according to State and Federal regulations as specified in measure HAZ-1.

HAZ-1: A site-specific contingency spill plan would be developed and implemented by the construction contractor. The plan shall consist of reporting guidelines in the event of a spill, BMPs applicable to the hazardous materials, and employee training in the use of required equipment and proper handling of potentially hazardous materials.

Hazardous materials used for this project would be contained within vessels engineered for safe storage. Staging areas for refueling of equipment should be located west of Wasteway No. 1 away from the pipeline excavation site and the regulating reservoirs to prevent any accidental fuel leakage from contaminating desert dry washes groundwater, or soils.

3.9 Traffic and Transportation

3.9.1 Affected Environment

The immediate project area is currently vacant and contains no residences and no transportation infrastructure, apart from the existing dirt and gravel roads, including Riddle Way (the proposed pipeline alignment), the maintenance road along the south side of the Coachella Canal (the proposed canal turnout), Arthur Street on the west, and Cleveland Street on the east and west sides of Wasteway No. 1 extending from Avenue 68 north to Riddle Way. Construction traffic will access the site from Highway 111, north on Cleveland Street to the Riddle Way pipeline alignment and access to the new canal turnout site and regulating reservoirs between Riddle Way and the Coachella Canal.

Cleveland Street has recently been compacted and gravel covered as a part of the Wasteway No. 1 emergency repair and reconstruction project and is in very good condition. Construction traffic will include cars and pick-up trucks for workers, and trailers to transport the pipeline trench excavator, a small dozer and/or excavator bucket for spoil pile management and backfill. Two 4,000 gallon all terrain water trucks, and a compactor will be used to complete backfill operations.

3.9.2 Environmental Consequences

No Action: Under the No Action Alternative, no construction would occur, and no construction related traffic would need to access Riddle Way or the Coachella Canal maintenance road.

Proposed Action: Construction and final pressure testing will occur over a four-week period. No adverse traffic or transportation impacts are anticipated with implementation of the Proposed Action, and the short-term duration and few construction vehicles needed at the remote site preclude interference with normal flow of traffic on any area roads. The contractor will be required to coordinate with CVWD prior to beginning construction of the new canal turnout to adjust use of the Coachella Canal maintenance road for an estimated period of about two weeks.

3.9.3 Management and Mitigation Measures

One short segment of the western pipeline route passes in front of the entrance driveway from Riddle Way to a CVWD storage and maintenance yard. At least one week prior to initiating construction, the contractor should coordinate with CVWD to plan the trench location and spoils pile placement in that location to ensure that access to and from the driveway is not interrupted.

3.10 Visual Resources

3.10.1 Affected Environment

Visual resources consist of natural and manmade features that provide aesthetic qualities in a particular landscape. Visual quality is evaluated to assess whether the project will be compatible with the existing features or would contrast and noticeably degrade the existing environment. Visual resources within the project area generally include open space, agricultural areas, and desert habitats, and the Salton Sea and Salton Trough. The landscape surrounding the proposed project site is characterized by constructed slopes and drainage features supporting the Coachella Canal, farmed lands, undeveloped desert lands, and a small photovoltaic solar energy generation project.

3.10.2 Environmental Consequences

No Action: The No Action alternative would not result in any visual change to the area.

Proposed Action: Under the Proposed Action alternative a short-term change in visual conditions would occur during construction with the presence of construction vehicles and equipment, trenching for the pipeline, installation of the canal turnout, and grading of the regulating reservoirs. Once in operation, the pipeline is buried and only visible at the existing bridge crossing Wasteway No. 1. On the private lands east of the Wasteway No. 1 there would be a visual change with the presence of the two small regulating reservoirs, and irrigated farmland downslope. Although this is a visual change from the existing desert open space, it is consistent with the surrounding and regional landscapes that also include irrigated farmlands and is not considered to be an adverse effect. The new canal turnout would be detectable as a visual change to the downslope face of the canal bank but would be consistent with the appearance of similar structures that can be seen along the Coachella Canal.

3.10.3 Management and Mitigation Measures

The Proposed Action has no potential to impact visual resources or conditions in the project area, and no management or mitigation measures are recommended.

3.11 Water Resources

3.11.1 Affected Environment

The Coachella Canal is a branch of the All-American Canal that brings water from the Lower Colorado River into the Imperial and Coachella Valleys. Historically, CVWD received 330,000 acre-feet per year (AFY) of Colorado River water delivered via the Coachella Canal. The service area for water delivery under CVWD's contract with Reclamation is defined as Improvement District No. 1 (ID-1) which encompasses most of the East Valley and a portion of the West Valley north of Interstate 10. Under the 1931 California Seven Party Agreement, CVWD has water rights to Colorado River water as part of the first 3.85 million AFY of the total 4.4 million AFY allocated to California. CVWD is in the third priority position along with Imperial Irrigation District (IID).

CVWDs entitlement to Colorado River water is now being augmented under terms of the 2003 QSA, which will provide up to an additional 94,000 AFY to CVWD, with delivery to be ramped up over a period of about 15 years. CVWD intends to utilize this water to reduce aquifer overdraft in accordance with the objectives set forth in the 2010 CVWMP, and directly for irrigation. As a part of long-term management of this additional surface water supply, CVWD is implementing source substitution projects as defined in its CVWMP, providing Colorado River water for in-lieu recharge, replacing groundwater use for the irrigation systems in the North Shore Area.

Groundwater characteristics in the area of the proposed action are governed by the features of the Whitewater River sub-basin, which is bound by the Garnet Hill fault to the northwest, and the San Jacinto Mountains and Santa Rosa Mountains to the west and south. Groundwater in the Whitewater River sub-basin generally flows in a southeasterly direction from the main recharge area near San Geronio Pass towards the Salton Sea. Average transmissivity (a measure of groundwater flow rate) of the main aquifer in the subject vicinity is relatively high, averaging 300,000 gallons per columnar foot per day. Average water storage capacity within the main aquifer is eighteen percent.

3.11.2 Environmental Consequences

No Action: Under the No Action Alternative, the new canal turnout providing surface water to the regulating reservoirs would not be built. By preventing delivery of Coachella Canal water, this alternative may limit CVWDs ability to make full use of its QSA entitlement, and to prevent desired reductions of groundwater use by in-lieu replacement with Coachella Canal water. Piping water from DICAs current wells and regulating reservoirs in Section 13 to the new lands to be irrigated in Section 17, or alternatively developing new wells for the lands in Section 17, would place a greater demand on groundwater and impacts on the aquifer.

Proposed Action: The Proposed Action has no potential to adversely affect water resources in the area or region. Development of the new canal turnout providing surface water to the regulating reservoirs for agricultural irrigation on the lands in Section 17 does contribute to implementation of CVWDs source substitution projects to provide Colorado River water from its QSA entitlement for in-lieu recharge, replacing groundwater use for irrigation systems in the North Shore Area.

3.11.3 Management and Mitigation Measures

The Proposed Action has no potential to impact water resources in the region, and no management or mitigation measures are recommended.

3.12 Cumulative Effects of the Proposed Action

Cumulative effects are potential impacts on the environment that result from the incremental impacts of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The most significant former project located within or in the vicinity of the planning area and having the potential to impact common resources as the Proposed Action is the Coachella Canal, and Riddle Way which was developed as a part of the Coachella Canal construction in the mid-late 1940s. The Proposed Action is intentionally collocated within the existing Riddle Way road alignment and ROW to avoid and minimize any additional adverse effects, and in close proximity to the Coachella Canal to access CVWD surface water delivery.

One cumulative effect that is recognized throughout the irrigated lands in this farmed region of the Coachella Valley around the Salton Sea is groundwater overdraft, contributing to aquifer depletion and possibly to land subsidence. As reported in Chapter 1 of this EA, a primary purpose and need for the project is to provide Coachella Canal water supplies for irrigation in-lieu of pumping groundwater to irrigate these lands.

There are no other current and/or planned projects that would have any effects on the area of potential effects for the Proposed Action, or on common affected resources. Therefore, it is concluded that the Proposed Action has no potential to contribute to any adverse cumulative effects, and will contribute to alleviating adverse cumulative effects of groundwater use in conformance with CVWD goals for long term groundwater management, and full use of the District's QSA water supplies.

Chapter 4 - Consultation, Coordination and List of Preparers

4.1 Agencies Consulted

4.1.1 Scoping

As part of the NEPA process, YAO sent a Notice of Intent (NOI) to prepare this EA on November 1, 2019 with a scoping letter to the agencies listed below. No written comments on the NOI scoping letter were received by YAO.

4.1.2 Draft EA

An electronic copy of this EA has been posted for public viewing on Reclamation's YAO website at <http://www.usbr.gov/lc/yuma/>. Paper copies of the Notice of Availability memorandum and EA were also distributed to the following entities:

- Bureau of Land Management, Palm Springs - South Coast Field Office
- U.S. Fish and Wildlife Service, Palm Springs Fish and Wildlife Office
- County of Riverside, Transportation and Land Management Department
- California Department of Fish and Wildlife, Inland Deserts Region
- Torres-Martinez Desert-Cahuilla Indians
- Cabazon Band of Mission Indians
- Coachella Valley Water District

Consultation with the State Historic Preservation Office is ongoing under Section 106 of the National Historic Preservation Act (NHPA) (36 Part 800) for an undertaking involving Federal facilities.

4.1.3 Final Environmental Assessment

Reclamation will consider and incorporate relevant comments from the Draft EA and publish a Final EA and FONSI if a determination is made that an EIS is not required and a FONSI is appropriate. Reclamation will make the final documents available on the YAO's Environmental Documents website at <http://www.usbr.gov/lc/yuma/>.

4.2 List of Preparers

Bureau of Reclamation, Yuma Area Office, Lower Colorado Region

- Cindy Flores, Manager, Water & Lands Contracts Group
- Julian DeSantiago, Supervisory Environmental Protection Specialist
- Nicholas Heatwole, Senior Environmental Protection Specialist
- Erik Bray, Environmental Protection Specialist
- Andrea Kayser, Archaeologist
- Melissa Fairchild, Realty Specialist

Harvey Consulting Group, Environmental Consultants

- Jeff Harvey, Ph.D., Principal & Senior Scientist
- Jennifer Reed, Production Specialist

Olson Engineering System, Inc.

- Ben Olson, Jr., P.E., President and Senior Engineer
- Gabriel Gonzalez, P.E., LEED AP
- Melinda Cabanyog, Office Administrator

Sladden Engineering

- Matthew Cohrt, CEG, Principal Geologist
- Brett Anderson, P.E., Principal Engineer

Applied Earthworks, Inc.

- M. Colleen Hamilton, M.A., RPA (10535), Managing Principal & Principal Investigator
- Joan George, B.S., Associate Archaeologist & Project Manager
- Evan Mills, M.A., RPA (18026), Associate Archaeologist
- Susan Wood, Ph.D., Senior Architectural Historian

Helix Environmental Planners, Inc.

- Karl Osmundson, Principal Biologist / Biology Group Manager
- Amy Mattson, Senior Biologist

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