

AGENDA
 IRVINE RANCH WATER DISTRICT
 ENGINEERING AND OPERATIONS COMMITTEE MEETING
 TUESDAY, MAY 16, 2023

This meeting will be held in-person at the District’s headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Web: <https://irwd.webex.com/irwd/j.php?MTID=m7eeea55fc4330092bfc5d21c4d62fe0b>
 Meeting Number (Access Code): 2483 578 3223
 Meeting Password: ziJ8V298ZQM (94588298 from video systems)

PLEASE NOTE: Webex observers of the meeting will be placed into the Webex lobby when the Board enters closed session. Participants who remain in the “lobby” will automatically be returned to the open session of the Board once the closed session has concluded. Observers joining the meeting while the Board is in closed session will receive a notice that the meeting has been locked. They will be able to observe the meeting once the closed session has concluded.

CALL TO ORDER 1:30 p.m.

ATTENDANCE Committee Chair: Doug Reinhart _____
 Committee Member: Karen McLaughlin _____

ALSO PRESENT

Paul Cook _____	Kevin Burton _____	Wendy Chambers _____
Jose Zepeda _____	Paul Weghorst _____	Cheryl Clary _____
Steve Choi _____	Jim Colston _____	Fiona Sanchez _____
Rich Mori _____	Eric Akiyoshi _____	Joseph McGhee _____
Jacob Moeder _____	Malcolm Cortez _____	Ken Pfister _____
Harry Cho _____	Alex Murphy _____	Kent Morris _____
_____	_____	_____
_____	_____	_____

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the “chat” feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. Public comments are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 9:00 a.m. on Tuesday, May 16, 2023.

COMMUNICATIONS

1. Notes: Burton
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted, and determine which items may be approved without discussion.

INFORMATION

4. UPCOMING PROJECTS STATUS REPORT – AKIYOSHI / CORTEZ / MOEDER / MORI / BURTON

Recommendation: Receive and file.

ACTION

5. MICHELSON WATER RECYCLING PLANT TERTIARY FILTER IMPROVEMENTS CONSULTANT SELECTION – BURK / CORTEZ / BURTON

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with HDR Engineering, Inc. in the amount of \$1,086,550 for construction phase engineering services for the Michelson Water Recycling Plant Tertiary Filter Improvements, Project 07892.

6. REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR THE FISCAL YEAR 2022-23 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT – RIOS / AKIYOSHI / BURTON

Recommendation: That the Board authorize the General Manager to execute the Reimbursement Agreement between IRWD and the City of Irvine for Adjustment of Street Utilities to Grade for the FY 2022-23 Annual Street Rehabilitation and Slurry Seal Project, subject to non-substantive changes.

ACTION, continued

7. THE MEADOWS LAKE FOREST TOLL BROTHERS CAPITAL FACILITIES – RIOS / AKIYOSHI / BURTON

Recommendation: That the Board authorize the General Manager to execute a reimbursement agreement with Toll Brothers, Inc. for The Meadows Lake Forest Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements; and authorize the General Manager to accept Toll Brothers, Inc.'s construction contract with FYDAQ Company Inc. in the amount of \$1,355,413 for The Meadows Lake Forest Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements, Projects 10096, 11749, and 11582.

8. PLANNING AREA 51 HERITAGE FIELDS CAPITAL FACILITIES – LEW / RIOS / AKIYOSHI / BURTON

Recommendation: That the Board authorize the General Manager to accept Heritage Fields' construction contract with FYDAQ Company Inc. in the amount of \$250,775.38 for the District 5 Cadence and Treble Capital Domestic Water and Recycled Water Improvements, Projects 10796 and 10804.

9. GEOGRAPHIC INFORMATION SYSTEM MASTER PLAN AND ENTERPRISE AGREEMENT – SHIH / AKIYOSHI / BURTON

Recommendation: That the Board authorize the General Manager to execute an Enterprise Agreement with Environmental Systems Research, Institute in the total amount of \$480,000 for a term of three years.

OTHER BUSINESS

10. Directors' Comments

11. Adjournment


Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

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May 16, 2023

Prepared by: E. Akiyoshi / M. Cortez /
J. Moeder / R. Mori

Submitted by: K. Burton

Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

UPCOMING PROJECTS STATUS REPORT

SUMMARY:

A status report of Irvine Ranch Water District's Upcoming Projects is presented to the Committee for information.

BACKGROUND:

The information, which is provided as Exhibit "A", is a status report submitted quarterly to the Committee for review.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Upcoming Projects Status Report

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Exhibit "A"
UPCOMING PROJECTS STATUS REPORT

Project Name	Planning	Design	Construction	Construction
				Final Acceptance
UCI Meter Vault Replacement	In-Process	Jun-23	-	-
SR 133 - 36" Trunk Sewer Relocation	Completed	In-Process	Mar-24	-
Riparian View Paving	Completed	Completed	In-Process	May-23
MWRP Biosolids Lift Station and Sewer Improvement	In-Process	Jul-23	-	-
MWRP Compressed Natural Gas and Diesel/Gasoline Fueling Station	Completed	Completed	In-Process	May-24
MWRP Tertiary Filter Rehabilitation	Completed	Completed	May-23	Oct-25
Operations Center Purchasing Warehouse	Completed	In-Process	Sep-23	-
Coastal Z2 and Z4 Pump Stations Rehabilitation	Completed	In-Process	Aug-23	-
Silverado Bridge 174 DW Improvements	Completed	In-Process	Sep-23	-
Silverado Bridge 175 DW Improvements	Completed	In-Process	Sep-23	-
Woodbridge RW Replacement	Completed	Completed	In-Process	Oct-23
MWRP MPS-2 Pump Bases Replacement	Completed	In-Process	Jul-23	-
El Toro Road Manhole Raise to Grade	Completed	Completed	In-Process	Jun-23
MWRP Biosolids Digester Basement Communications	In-Process	Jun-23	-	-
Serrano Creek Raw Water Pipeline Replacement	Completed	In-Process	Sep-23	-
Radio Tower Improvements	In-Process	Jun-23	-	-
MWRP Solids Force Main Relocation	Completed	In-Process	Sep-23	-
Lake Forest Woods Sewer Improvements	Completed	In-Process	Nov-23	-
Santiago Canyon Pump Station Improvements	Completed	Completed	In-Process	Dec-23
Turtle Rock Chloramine Booster Station	Completed	Completed	In-Process	Dec-23
Wells 10 and 12, IDP Well ET-1 Rehabilitation	Completed	Completed	In-Process	Dec-23
Irvine Desalter Well Rehabilitation (Wells 76, 110, 106, 115R, ET2)	Completed	Jun-23	-	-
Dyer Road Well Field Facility Rehabilitation Group 1	In-Process	Oct-23	-	-
PDF Sodium Hypochlorite Storage and Feed System	Completed	Completed	Completed	Jun-23
Santiago Creek Dam Outlet Tower and Spillway Improvements	Completed	In-Process	Dec-24	-
Rattlesnake Dam Risk Reduction Investigation	Completed	In-Process	-	-
Santiago Canyon Fleming Zone 8 Tank and Zone 8-9 BPS	Completed	Completed	In-Process	Jan-25
Generator Fuel Storage Upgrades	Completed	In-Process	Jul-23	-
Orange Heights Zone 6 Reservoir	Completed	On-Hold	-	-
Sewer Siphon Improvements Phase II	Completed	In-Process	Nov-23	-
Wells 51 and 52 Wellhead Equipping and Offsite Pipelines	In-Process	Oct-23	-	-
San Joaquin Reservoir Filtration	Completed	Completed	In-Process	Aug-24
Well OPA-1 PFAS Treatment	Completed	Completed	In-Process	Nov-23
Well ET-1 and SGU PFAS Treatment	Completed	Completed	In-Process	Dec-23
Zone A to Rattlesnake Reservoir BPS	Completed	Completed	In-Process	Dec-23
Orange Heights SAC/Baker Pipeline Relocation	Completed	Completed	On-Hold	-
MWRP Phase 3 Expansion	In-Process	Oct-23	-	-
Orange Heights Zn 5 to 6 and C+ to E Pump Stations	Completed	On-Hold	-	-
Syphon Reservoir Improvements	Completed	In-Process	Dec-24	-

UPCOMING PROJECTS STATUS REPORT

Project Name	Planning	Design	Construction	Construction
				Final Acceptance
Syphon Reservoir Intersection Improvements and Access Road	Completed	In-Process	Aug-23	-
Lake Forest Zone B-C BPS	Completed	Completed	In-Process	Oct-23
East Irvine Zone 3 to 4 Pump Station Rehabilitation	In-Process	Aug-23	-	-
MWRP Service A Replacement	In-Process	Jun-23	-	-
Enterprise RW Pipeline Replacement	Completed	In-Process	Jul-23	-
PA 1, Jeffrey Road Extension RW (RA w/CDC)	Completed	Completed	In-Process	Dec-23
PA 51, District 5, F and N St DW, RW	Completed	Completed	In-Process	Aug-23
PA 51, District 5, Astor DW, RW (RA w/Heritage Fields)	Completed	Completed	In-Process	Dec-23
PA 51, Marine Way from Alton Pkwy to Bake Pkwy DW, RW (RA w/Heritage Fields)	Completed	Completed	In-Process	Dec-23
PA 51, Marine Way at Bake Parkway DW (RA w/Heritage Fields)	Completed	Completed	In-Process	Dec-23
PA 51, Serrano Creek Sewer Relocation	Completed	Completed	In-Process	Dec-23
PA 51, District 5 South Harrier DW, SS, RW (RA with Heritage Fields)	Completed	Completed	In-Process	Dec-23
PA 51, District 5 South Chinon DW, RW (RA with Heritage Fields)	Completed	Completed	In-Process	Dec-23
PA 51 GP-5 from Skyhawk to Treble DW, SS, RW (RA with Heritage Fields)	Completed	Completed	In-Process	Dec-23
PA 51, Marine Way from Skyhawk to Treble DW, RW (RA with Heritage Fields)	Completed	In-Process	Aug-23	-
PA 51, Treble from GP5 to Marine Way DW, RW (RA with Heritage Fields)	Completed	Completed	Aug-23	-
PA 51 Lynx from Harrier to Marine Way DW, SS (RA with Heritage Fileds)	Completed	Completed	Aug-23	-
PA 1, Orchard Hills Neighborhood 4 RW (RA with TIC)	Completed	Completed	In-Process	Dec-23
East Orange, Orange Heights Tract 16199 SS, RW	Completed	In-Process	Sep-23	-
East Orange, Orange Heights Tract 17995 DW, RW	Completed	In-Process	Sep-23	-
East Orange, Orange Heights Jamboree and Chapman DW SS, RW	Completed	In-Process	Sep-23	-
The Meadows, SS (RA w/Toll Brothers)	Completed	Completed	In-Process	Sep-23
PA 51, Whatney SS (RA with Heritage Fields)	Completed	In-Process	Jan-24	-
Steel Tank Assessment	In-Process	-	-	-
Pump Station and Lift Station Assessment	In-Process	-	-	-
CIP Asset Management Phase II - Linear Asset Prioritization	Jun-23	-	-	-
Lead and Copper Rule Revision - Lead Pipe Inventory	In-Process	Oct-24	-	-
UC Regents Ag Research Center Redevelopment Planning	Completed	On-Hold	-	-

May 16, 2023

Prepared by: R. Burk / M. Cortez

Submitted by: K. Burton

Approved by: Paul A. Cook *PAC*

ENGINEERING AND OPERATIONS COMMITTEE

MICHELSON WATER RECYCLING PLANT TERTIARY FILTER IMPROVEMENTS CONSULTANT SELECTION

SUMMARY:

The Michelson Water Recycling Plant (MWRP) Tertiary Filter Improvements project will rehabilitate the tertiary filters to improve performance and reliability by replacing deteriorating and obsolete equipment and infrastructure at the filter tanks area, air scour blower area, and the backwash supply pumps area. Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement in the amount of \$1,086,550 to HDR Engineering, Inc. for construction phase engineering services for the MWRP Tertiary Filter Improvements.

BACKGROUND:

In April 2021, IRWD retained HDR to design improvements to replace obsolete equipment and infrastructure at the tertiary filter tanks area, air scour blower area, and the backwash supply pumps area including valves, slide gates, instrumentation, above-ground piping, air compressor, air scour blower, backwash supply pumps, a controller, electrical equipment, and conduits. The scope also includes the construction of a new electrical building, concrete replacement at the backwash supply tank, detailed construction sequencing, temporary backwash supply pumping, and temporary instrumentation and control systems to allow the work to proceed while maintaining the operation of the tertiary filters. A site plan is shown in Exhibit "A".

Consultant Selection Process:

HDR completed the design, and the project was advertised for construction bidding with a bid opening date of May 9, 2023. At staff's request, HDR submitted a proposal to provide construction phase engineering services in the amount of \$1,086,550. The proposal, provided as Exhibit "B", includes attending project construction meetings and site visits, responding to contractor requests for information, making plan revisions, reviewing shop drawings, maintaining an online document management system, assisting with commissioning and startup, and preparing final record drawings. Staff reviewed the proposal and found the scope of construction phase engineering support is commensurate with the requirements of the project and the fee to be fair and reasonable. Staff recommends awarding a Professional Services Agreement to HDR to perform construction phase engineering services.

FISCAL IMPACTS:

MWRP Tertiary Filter Improvements, Project No. 07892, is included in the FY 2022-23 Capital Budget. The current Engineer's Estimate for the construction of this project is \$18 million. The existing budget is sufficient to fund the additional engineering services. This project will be funded 100% by the Sewer Replacement Fund.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 which provides exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. A Notice of Exemption for the project was filed with the Orange County Clerk-Recorder on April 2, 2021.

RECOMMENDATION:

That the Board authorize the General Manager to execute a Professional Services Agreement with HDR Engineering, Inc. in the amount of \$1,086,550 for construction phase engineering services for the Michelson Water Recycling Plant Tertiary Filter Improvements, Project 07892.

LIST OF EXHIBITS:

- Exhibit "A" – Site Plan
- Exhibit "B" – HDR Engineering, Inc.'s Proposal

EXHIBIT "A"
PROJECT SITE PLAN
MICHELSON WATER RECYCLING PLANT TERTIARY FILTER IMPROVEMENTS



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April 12, 2023

Irvine Ranch Water District
Rachael Burk, PE, Project Manager
Michelson Water Recycling Plant, 3512 Michelson Dr.
Irvine, CA 92612

RE: Engineering Services During Construction – Michelson Water Recycling Plant Tertiary Filters Rehabilitation Project

Dear Mrs. Burk,

HDR is pleased to provide the Irvine Ranch Water District (District) with this proposal for Engineering Services During Construction (ESDCs) for the Michelson Water Recycling Plant (MWRP) Tertiary Filters Rehabilitation Project (Project). The Tertiary Filtration Facility is among the older operational structures at MWRP and the Project represents the most significant upgrade to that facility. As we recently completed the design, we are uniquely qualified to provide ESDCs and excited to continue working with you on delivering this important project.

Scope of Work

The Project represents a significant rehabilitation to existing facility, including existing piping, concrete in the backwash supply tank, improvements to the instrument and controls (I&C) system, and the electrical systems. As such, we propose that in addition to standard ESDCs, we will provide additional support to the District during both construction and startup of these systems as further described in the tasks below.

Task 1 – Project Management

Project management is a continuous task throughout the project and includes development of a project plan, staff coordination, schedule and budget monitoring, and coordination of internal quality assurance reviews.

Deliverables

- Monthly invoices
- Monthly status reports

Assumptions

- Project Duration is 36 months from Notice of Proceed to selected Contractor, with approximately 12 months required for delivery of major equipment followed by 18 months of on-site construction, with an additional 6 months for start-up.

Task 2 – Meetings and Site Visits

HDR will participate in meetings and site visits related to the Project as follows:

- Preconstruction Conference. HDR will prepare for and attendance to one kick-off construction meeting with up to 5 staff.
- Regular Construction Progress Meetings. Preparation for and attendance in the weekly construction meetings with approximately bi-monthly attendance by the HDR project manager and staff engineer.
- Technical / Special Meetings. HDR will attend other meetings at the request of the District to provide an engineering evaluation of the work in progress and advise the District of appropriate comments and/or concerns.
- Technical Site Visits. Prepare for, attend, and document site visits at the request of the District to review/address field issues. The task assumes that the senior engineer responsible for the specific design element will attend the site visit, evaluate the issues and advise the District of appropriate actions.
- Work Sequence Meetings. The Contractor will be required to develop a project schedule and work sequence for performing the Project within the schedule constraints defined in the contract. HDR will participate in meetings with the District and Contractor to review and discuss various work sequencing and shutdowns throughout the Project duration.
- Electrical / I&C Progress Meetings. Make site visits to verify design, assist with resolution of field issues, and participate in progress meetings to coordinate instrumentation supply and details.
- BWS Piping Vault Site Visits. During the design phase of the Project it was identified that the backwash supply piping that penetrates through the concrete floor into the channel below has significant corrosion and will require replacement. The exact method for replacing that piping will be determined in the field as the Contractor is conducting that portion of the Project. HDR will be onsite
- BWS Tank Technical / Field Support. HDR will perform various site visits to attend pre-repair and pre-installation meetings, progress inspection at key milestones in the repair sequence, testing of repairs, and final inspection. The following inspection events have been identified:
 - Condition Survey – Initial review of facilities to be repaired with Contractor, to identify repair requirements and review contract requirements.
 - Pre-Installation Conference – Initial review of repair needs, discuss repair requirements, schedule, communication requirements, and approval requirements.
 - Material Instruction Witness – Attend material vendor instruction session.
 - Substrate Inspection (pH Testing) – Inspection of substrate following concrete removal to assess if additional concrete removal is required.

- Reinforcement Inspection – Inspection of exposed reinforcement to establish need for remediation.
- Surface Prep Inspection (Concrete and Reinforcement) – Inspection of surface preparation to substrate and reinforcement prior to installation of shotcrete.
- In-Situ Pull Off Tests – Pull Off test is required following shotcrete installation, which will require two separate site visits, spaced minimum 48-hours apart.
- Additional Site Visits – Two additional site visits for general observations have been included to account for unanticipated inspection needs, such as repair of damage caused by Contractor.
- Final Inspection – final inspection of repairs.
- Cured-in-Place Pipe (CIPP) Technical / Field Support. As part of the CIPP process, HDR will provide observation of the pre-lining video, materials conformance, the insertion and curing process, final connections, and the post-lining video.
- Substantial Completion Walk-through. After the Contractor has indicated that the Project is Substantially Complete, HDR will participate in a scheduled walkthrough of the facility with representatives of the District and Contractor to provide items for incorporation into the final punch list. Due to the intermediate milestones established in the construction sequence, it is assumed that a partial completion walk through will occur to review process areas scheduled for early startup, and a final completion walk through will occur to review remaining process areas and systems.
- Final Completion Walk-through. By the scheduled Final Completion date established for the Project, HDR will participate in a final walkthrough of the facility with representatives of the District and Contractor to validate that the Final Punchlist has been completed.

Deliverables

- Review comments on regular Progress Meetings minutes that were attended.
- Field reports that document observations and recommendations.
- List of items to be included in punch list.

Assumptions

- Meeting minutes will be produced by others.
- Regular in-person construction progress meetings will occur monthly for the 36-month project duration. HDR's PM and one staff engineer will attend progress meetings. Discipline leads will attend approximately half of meetings.
- Participate in up to 20 Technical/Special Meetings.
- HDR will participate in-person at 6 Work Sequence Meetings with the Contractor and the District.

- HDR will participate in-person at 9 I&C Progress Meetings with the Contractor and the District.
- HDR will perform 18 as-needed Technical Site Visits during the 18-month on-site construction window.
- HDR will perform 4 BWS piping vault site visits.
- For the BWS Tank All scaffolding will remain in place to support inspection work (no rope-access will be required). All concrete surfaces will be available for a single inspection site visit. If additional concrete removal is required following the inspection, a follow-on inspection will be required, which will be considered as one of the two “Additional Site Visits”.
- HDR will participate in a Substantial Completion Walk-through that will include the PM and relevant discipline leads.
- HDR will participate in a Final Completion Walk-through that will include the PM and relevant discipline leads.

Task 3 – Submittal Reviews

As part of our Submittal review task HDR will prepare a list of proposed submittals required by the contract. We will then review and comment on contractor's submittals, including vendor tests, certifications, samples and reports. We will also provide review comments in a timely manner, including expedited reviews for time sensitive submittals. Reviews shall be performed and signed by the Engineer that designed the project or acceptable substitute, as defined in District Design Guidelines. We have included effort for re-submittals.

Deliverables

- Submittal responses with review comments.

Assumptions

- The budget for this task is based on a total of 200 original submittals and 150 resubmittals. Each original submittal will require an average of 3 hours for review and each resubmittal will require 1 hour.
- We will expedite the review of approximately 12 critical submittals that have long lead times that are required for the start of on-site construction.
- All submittals will be processed through the Document Management system as described in Task 8.

Task 4 – RFI Responses

HDR will review requests for information (RFIs) and provide response options and recommendations in a timely manner, including expedited reviews for time sensitive RFIs. We will prepare design clarifications as required to clarify design intent.

Deliverables

- Written response to RFIs with potential impacts to the design and costs.

Assumptions

- The budget for this task is based on 75 RFIs with an average of 6 hours to review and respond to each RFI.
- Budget also includes CAD support to prepare simple drawings to show impacts to the design.

Task 5 – Change Order Reviews

HDR will review proposed change orders (PCO) from the Contractor for design changes and will prepare modified design documents as required including design calculations, drawings, justification, and cost opinions. HDR will also assist the District in reviewing proposed change orders for conformance with design intent and verification of proposed cost.

Deliverables

- PCO written review comments.
- Revised design documents as required.
- Cost analysis.

Assumptions

- The budget is based on up to 20 PCOs from the contractor.
- 10 PCOs will require design changes prepared by HDR.

Task 6 – Commissioning and Startup Support

As part of our commissioning and startup support for the Project, HDR will provide the following services:

- Startup Plan Review. As required by the contract documents, the Contractor is required to provide a startup plan for equipment and major systems for review by the District. HDR will support the District by attending startup meetings and reviewing the startup plans prepared by the Contractor. In addition HDR will verify the equipment is ready for startup by reviewing the following:
 - Manufacturer field service forms that have been completed for each piece of equipment.
 - Documentation that pipe pressure test and concrete water tightness tests that have been conducted.

- Documentation that instruments are installed, calibrated, and the calibration documentation has been received.
- Testing Support. As equipment is brought on-line HDR will support the District to verify and document that the equipment is performing within its design parameters. We will review documentation from the Contractor and PLC/SCADA system programmer to verify the controls and alarms are working in conformance with the control loop descriptions. In addition we will identify and document equipment or control deficiencies for resolution by District staff, Contractor, and the PLC/SCADA system programmer.
- Coordination with PLC/SCADA Programmer. HDR will coordinate with District staff, Contractor, and the PLC/SCADA programmer will provide that the PLC/SCADA modifications are introduced to the process in such a way as to not adversely impact the rest of the plant. HDR will support the District to verify and document that the controls and alarms not tested during equipment startup are working in conformance with the control loop descriptions. We will also identify and document equipment or control deficiencies for resolution the Contractor and the PLC/SCADA system programmer.

Deliverables

- Startup plan review comments.
- Recommendations for addressing deficiencies in equipment performance or controls systems programming.

Assumptions

- Review field service forms for major equipment provided as part of the Project.
- Testing support and coordination with the PLC/SCADA programmer is limited to review of documentation provided by the Contractor and PLC/SCADA programmer. Field support and meetings for validating control systems will be covered in Task 2 as part of the Electrical / I&C Progress Meetings.

Task 7 – Record Drawings

HDR will provide CAD generated record drawings from the Contractor's and Construction Inspectors "red-line" drawings. This scope assumes that the Construction Manager is reviewing the Contractor's red-lines on a regular basis to ensure all contract changes are being incorporated into the Red-Line Drawings.

Deliverables

- CAD generated Record Drawings from the Contractor's and District's combined set of Red-Line Drawings (electronic)

Assumptions

- Contractor fulfills responsibilities associated with red-lining drawings throughout construction. Contractor and Construction Inspectors red lines will be contained in a single set of mark-ups to be provided to HDR.
- HDR's level of effort for Record Drawings is anticipated at 0.25 hour of PM time, 1 hour of PE time, and 2 CAD hours per sheet to update each of the 99 drawings.

Task 8 – Document Management System

HDR will establish a Project document management system, Newforma, for tracking correspondence, submittals, RFIs, PCOs, field notes, and other related documents. Newforma is a web-based system that will allow the Project team to track upcoming, overdue, and ball-in-court items regarding submittals and RFIs responses through the Dashboard. Information required to respond to a submittal, RFI, or PCO, including emails and other relevant files, will be maintained in the system and accessible to Project team members. HDR will track and manage documents in the system to better allow for timely responses and finding critical information as the Project progresses.

Deliverables

- Web-based document management system with dashboard.
- Project related files at the end of the Project.

Assumptions

- The District and the Contractor will obtain any required licensing fees to access the system.
- The District and Contractor will manage and submit documents related to the project using the system.

Schedule

The Project schedule is based on a bid opening in late April 2023, a construction contract award in May 2023, and Notice to Proceed (NTP) in June 2023. Based on this schedule, Project construction completion will be in December 2025, with startup finishing in June 2026. Our rates and fee for this proposed Scope of Work are based on this schedule.

Fee Estimate

We have estimated the fee for the scope of services based on our understanding of the work. We propose that compensation for the services described above be on an hourly rate basis with a not-to-exceed fee of \$1,086,550 as shown in the enclosed Fee Estimate and is based on the following:

Task No.	Description	Estimated Fee
1	Project Management	\$ 132,430
2	Meetings and Site Visits	\$ 280,770
3	Submittal Reviews	\$ 223,540
4	RFI Responses	\$ 120,180
5	Change Order Reviews	\$ 68,310
6	Commissioning and Startup Support	\$ 57,010
7	Record Drawings	\$ 72,360
8	Document Management System	\$ 131,320
TOTAL		\$ 1,086,550

Thank you for the opportunity to provide our engineering services to the District. We look forward to working with you and your staff. If you have any questions, contact Joe Nye at (213) 218-0805 or at joseph.nye@hdrinc.com.

Sincerely,
HDR Engineering, Inc.



Joseph Nye, PE, PMP
Vice President



Anna Lantin, PE
Vice President

Irvine Ranch Water District
 Michelson Tertiary Filters Rehabilitation - ESDCs
 Estimated Level of Effort and Fee




TASKS		LEVEL OF EFFORT												FEE					
No.	Description	Principal	Project Manager	Quality Manager	Quality Reviewer	Senior Engineer	Project Engineer	Staff Engineer	BIM Manager	BIM Technician	Accountant	Document Manager	Project Coordinator	Total Labor	Labor	Subs	Direct Costs	Total	TOTAL
		<i>Client Billing Rates</i>																	
1	Project Management	\$360	\$375	\$345	\$335	\$275	\$270	\$180	\$225	\$155	\$140	\$280	\$115	\$224					-1
1.1	Staffing Plan / Coordination	4	67											71	\$26,565	\$0	\$531	\$27,096	
1.2	Schedule / Budget Monitoring	4	66					44			80		80	274	\$54,510	\$0	\$1,090	\$55,600	
1.3	QA/QC	6	4	88	44									142	\$48,760	\$0	\$975	\$49,735	
	Subtotal 1 Project Management	14	137	88	44	0	0	44	0	0	80	0	80	487	\$129,835	\$0	\$2,596	\$132,431	\$132,430
2	Meetings & Site Visits																		
2.1	Preconstruction Conference	4	4					4						12	\$3,660	\$0	\$73	\$3,733	
2.2	Regular Progress Meetings	4	30					30						64	\$18,090	\$0	\$362	\$18,452	
2.3	Technical / Special Meetings	14	34		6	24	22	50						150	\$41,340	\$0	\$827	\$42,167	
2.4	Work Sequence Meetings	12	4		6	28	26	12						88	\$24,710	\$0	\$494	\$25,204	
2.5	Electrical / I&C Progress Meetings				6	44	42	40						132	\$32,650	\$0	\$653	\$33,303	
2.6	Technical Site Visits	13	8		6	76		82						185	\$45,350	\$0	\$907	\$46,257	
2.7	BWS Piping Vault Site Visits				6	24		20						50	\$12,210	\$0	\$244	\$12,454	
2.8	BWS Tank Rehab Site Visits				78	12		300						390	\$83,430	\$0	\$3,533	\$86,963	
2.9	Substantial Completion Walk-through	2	2			8	10	4						26	\$7,090	\$0	\$142	\$7,232	
2.10	Final Completion Walk-through	2	2			4	6	4						18	\$4,910	\$0	\$98	\$5,008	
	Subtotal 2 Meetings & Site Visits	51	84	0	108	220	106	546	0	0	0	0	0	1,115	\$273,440	\$0	\$7,333	\$280,773	\$280,770
3	Submittal Reviews																		
3.1	Critical Equipment Submittals	8	6	5	33	34	25	48						159	\$42,650	\$0	\$853	\$43,503	
3.2	Standard submittals	23	8	9	102	102	126	366						736	\$176,505	\$0	\$3,530	\$180,035	
	Subtotal 3 Submittal Reviews	31	14	14	135	136	151	414	0	0	0	0	0	895	\$219,155	\$0	\$4,383	\$223,538	\$223,540
4	RFI Responses																		
4.1	Critical RFIs	11	4	4	11	18	25	46	9	18				146	\$35,320	\$0	\$706	\$36,026	
4.2	Standard RFIs	16	5	5	22	35	80	130	22	44				359	\$83,125	\$0	\$1,663	\$84,788	
	Subtotal 4 RFI Responses	27	9	9	33	53	105	176	31	62	0	0	0	505	\$118,445	\$0	\$2,369	\$120,814	\$120,810
5	Change Order Review																		
5.1	Scope & Pricing Review	9	9	22	9		26							75	\$24,240	\$0	\$485	\$24,725	
5.2	Meetings	9	9				10							28	\$9,315	\$0	\$186	\$9,501	
5.3	Recommendation	9	9		9		26	44	9	44				150	\$33,415	\$0	\$668	\$34,083	
	Subtotal 5 Change Order Review	27	27	22	18	0	62	44	9	44	0	0	0	253	\$66,970	\$0	\$1,339	\$68,309	\$68,310
6	Commissioning & Startup																		
6.1	Commissioning Meetings		3		8		18	27						56	\$13,525	\$0	\$271	\$13,796	
6.2	Coordination with PLC/SCADA Programmer		2		16		26	44						88	\$21,050	\$0	\$421	\$21,471	
6.3	Startup Coordination		2		16		27	44						89	\$21,320	\$0	\$426	\$21,746	
	Subtotal 6 Commissioning & Startup	0	7	0	40	0	71	115	0	0	0	0	0	233	\$55,895	\$0	\$1,118	\$57,013	\$57,010
7	Record Drawings																		
7.1	Prepare Record Drawings		27	5	5		22	88	22	198				367	\$70,945	\$0	\$1,419	\$72,364	
	Subtotal 7 Record Drawings	0	27	5	5	0	22	88	22	198	0	0	0	367	\$70,945	\$0	\$1,419	\$72,364	\$72,360
8	Document Management																		
8.1	Setup System	2	9			4		8				44	40	107	\$23,555	\$0	\$5,441	\$28,996	
8.2	Manage System	2	9			6		5				22	668	712	\$89,625	\$0	\$1,793	\$91,418	
8.3	Transfer Files	2	9			4		5					40	60	\$10,695	\$0	\$214	\$10,909	
	Subtotal 8 Document Management	6	27	0	0	14	0	18	0	0	0	66	748	879	\$123,875	\$0	\$7,448	\$131,323	\$131,320
TOTAL, hours		156	332	138	383	423	517	1,445	62	304	80	66	828	4,734					
TOTAL, dollars														\$1,058,560	\$0	\$28,005	\$1,086,565	\$1,086,550	

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May 16, 2023

Prepared by: B. Rios / E. Akiyoshi

Submitted by: K. Burton

Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE
FOR THE FISCAL YEAR 2022-23 ANNUAL STREET REHABILITATION AND
SLURRY SEAL PROJECT

SUMMARY:

The City of Irvine is proceeding with its pavement rehabilitation and slurry seal for the Fiscal Year (FY) 2022-23 Annual Street Rehabilitation and Slurry Seal Project. This project requires an individual Reimbursement Agreement (RA) since the estimated construction cost is over \$100,000. Staff recommends the Board authorize the General Manager to execute an RA with the City for the FY 2022-23 Annual Street Rehabilitation and Slurry Seal Project, subject to non-substantive changes.

BACKGROUND:

IRWD has had an RA in place with the City since 1995 for managing various street rehabilitation projects. Typically included in the City's Capital Improvement projects are alternate bid items for raising existing IRWD sewer manhole covers, sewer cleanouts, and water valve frames and lids to the new pavement grade. Any project up to \$100,000 in reimbursable costs can be authorized by the General Manager as an addendum to this "umbrella" RA.

IRWD and the City have also agreed that any City street improvement project that involves the construction, modification, or relocation of IRWD facilities with an estimated construction cost over \$100,000 will be administered through a separate RA. The City's FY 2022-23 Annual Street Rehabilitation and Slurry Seal Project has an estimated construction cost of \$1,541,900. Therefore, this project requires a project-specific RA. The terms of the current RA, including design, bidding requirements, reimbursement requirements, inspection and administrative fee remain unchanged from previous annual street rehabilitation reimbursement agreements with the City.

This project includes replacement and adjustment to grade of approximately 737 domestic water valve cans and lids, 215 recycled water valve cans and lids, 6 sanitary sewer cleanout cans and lids, adjustment to grade of approximately 290 sewer manholes, and installation of approximately 102 sewer manhole plywood protection covers. The estimated construction cost is \$1,541,900 plus a City administrative fee equal to four percent of the actual construction cost per the terms of the RA. An Engineer's Estimate is attached as Exhibit "A", a Location Map as Exhibit "B", and the RA as Exhibit "C". The RA has been reviewed by IRWD's legal counsel.

FISCAL IMPACTS:

Projects 11774, 11777, and 11780 are included in the FY 2023-24 Capital Budget and have adequate budgets to fund the project.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3). The activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

RECOMMENDATION:

That the Board authorize the General Manager to execute the Reimbursement Agreement between IRWD and the City of Irvine for Adjustment of Street Utilities to Grade for the FY 2022-23 Annual Street Rehabilitation and Slurry Seal Project, subject to non-substantive changes.

LIST OF EXHIBITS:

Exhibit "A" – FY 2022-23 Annual Street Rehabilitation and Slurry Seal Engineer's Estimate
Exhibit "B" – FY 2022-23 Annual Street Rehabilitation and Slurry Seal Vicinity Map
Exhibit "C" – FY 2022-23 Annual Street Rehabilitation and Slurry Seal Reimbursement Agreement

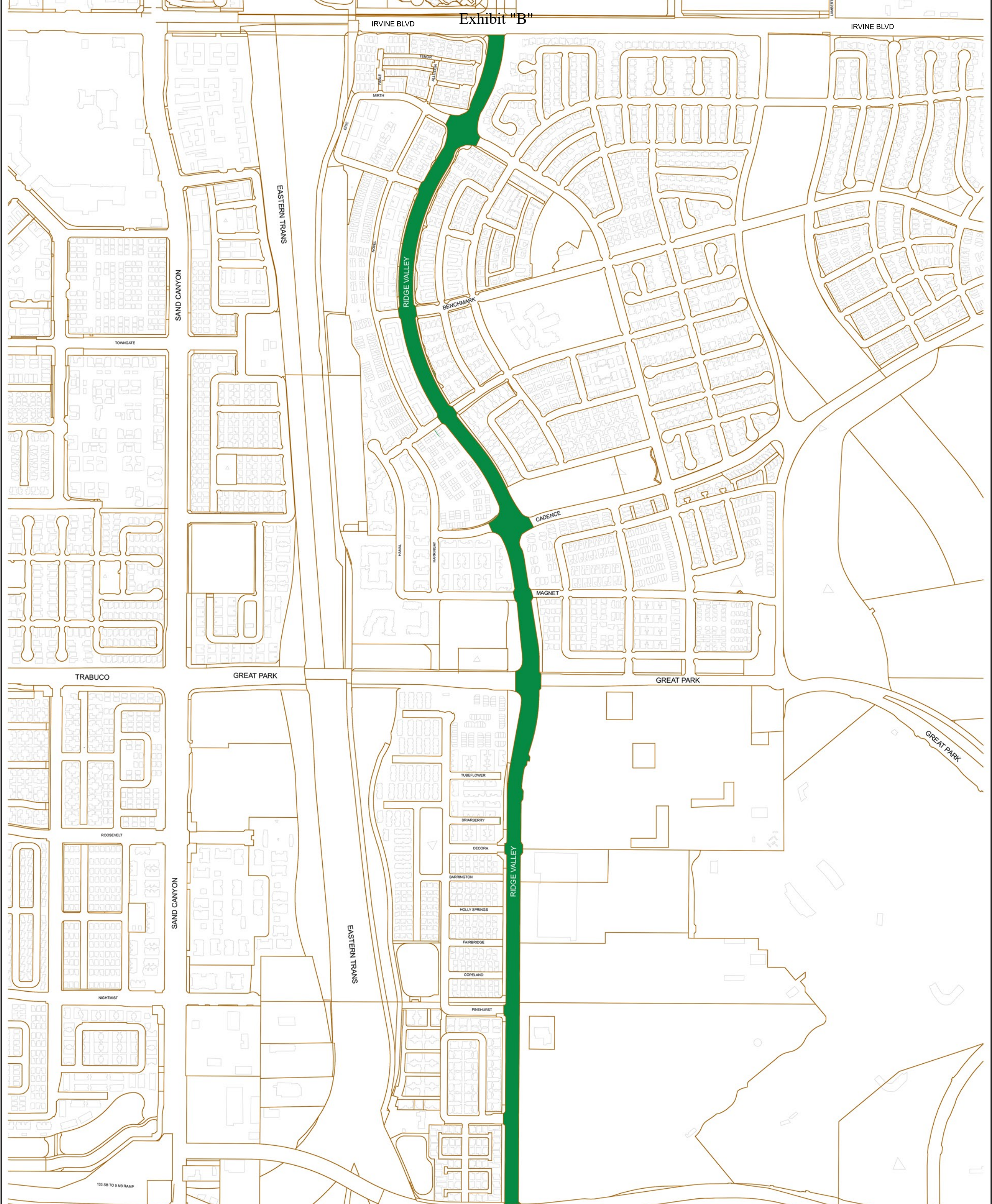
EXHIBIT "A"

**REIMBURSEMENT AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT (IRWD)
AND THE CITY OF IRVINE
FOR
FY 22-23 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT, BID NO. 23-3298**

ENGINEER'S ESTIMATE

ITEM NO.	DESCRIPTION	QUANTITY	UNITS	UNIT COST	EXTENDED AMOUNT
A-1	Install New IRWD Water Valve Frame and Cover to Grade after Slurry Seal	554	EA	\$ 1,200.00	\$ 664,800.00
A-2	Install New IRWD Reclaim Water Valve Frame and Cover to Grade After Slurry Seal	177	EA	\$ 1,200.00	\$ 212,400.00
A-3	Install New IRWD Sewer Cleanout Frame and Cover to Grade After Slurry Seal	5	EA	\$ 1,200.00	\$ 6,000.00
A-4	Adjust IRWD Sewer Manhole Frame and Cover to Grade After Slurry Seal	188	EA	\$ 1,300.00	\$ 244,400.00
A-5	Install New IRWD Water Valve Frame and Cover to Grade After Paving	183	EA	\$ 1,200.00	\$ 219,600.00
A-6	Install New IRWD Reclaim Water Valve Frame and Cover to Grade After Paving	38	EA	\$ 1,200.00	\$ 45,600.00
A-7	Install New IRWD Sewer Cleanout Frame and Cover to Grade After Paving	1	EA	\$ 1,200.00	\$ 1,200.00
A-8	Adjust IRWD Sewer Manhole Frame and Cover to Grade After Paving	102	EA	\$ 1,300.00	\$ 132,600.00
A-9	Install Plywood Covers in IRWD manholes per IRWD Std Plan S-1.	102	EA	\$ 150.00	\$ 15,300.00
TOTAL CONSTRUCTION ESTIMATE					\$ 1,541,900.00
4% ADMINISTRATION FEE PER SECTION 5 OF AGREEMENT					\$ 61,676.00
TOTAL COSTS					\$ 1,603,576.00

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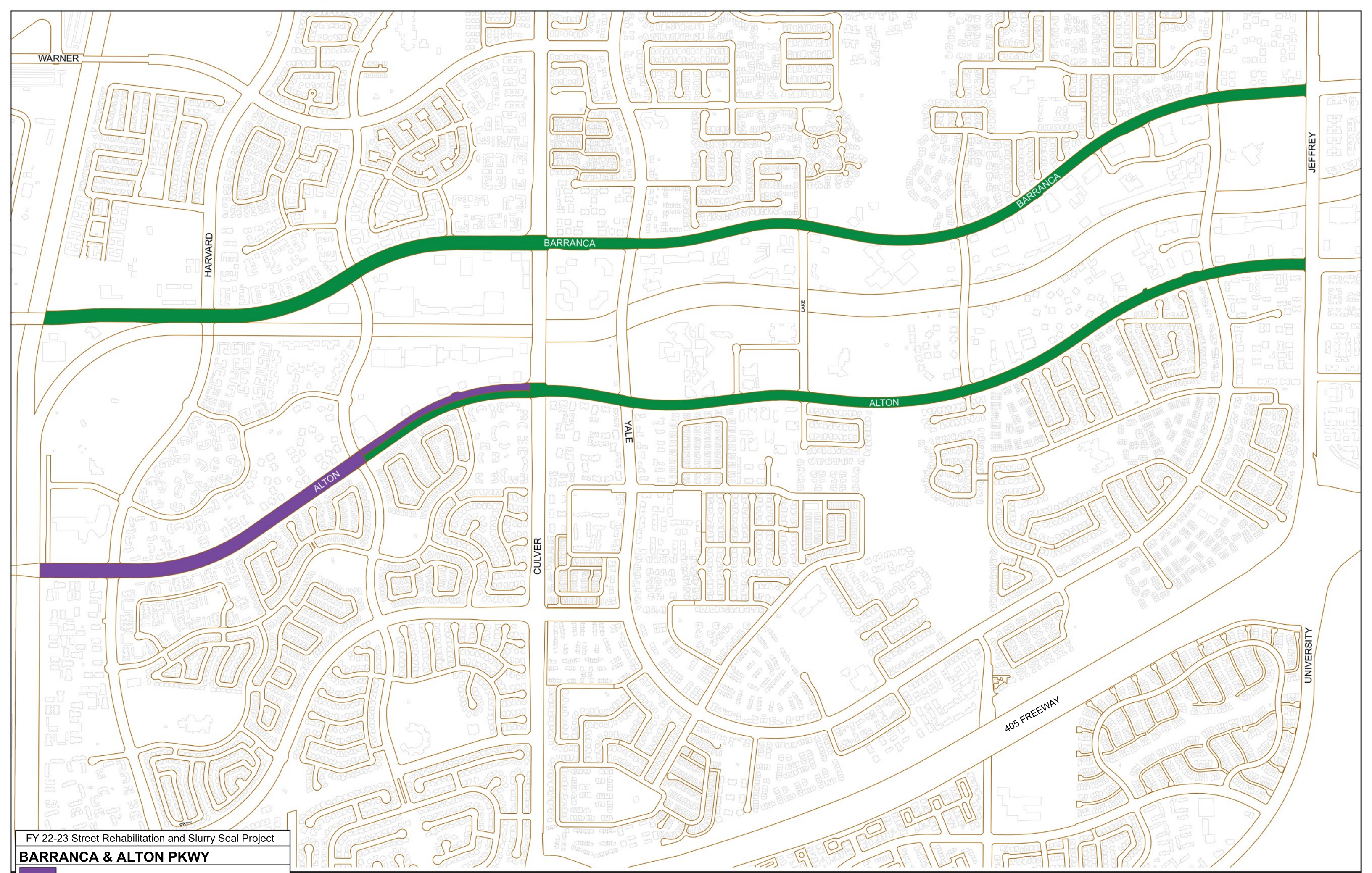


FY 22-23 Street Rehabilitation and Slurry Seal Project

RIDGE VALLEY (PA40)

- 0.2' grind and fiber reinforced ARHM overlay
- 0.2' Conventional fiber reinforced AC overlay
- Crack Seal / Type I Slurry Seal
- Crack Seal / Type II Slurry Seal
- AC repairs before slurry seal
- Private Streets

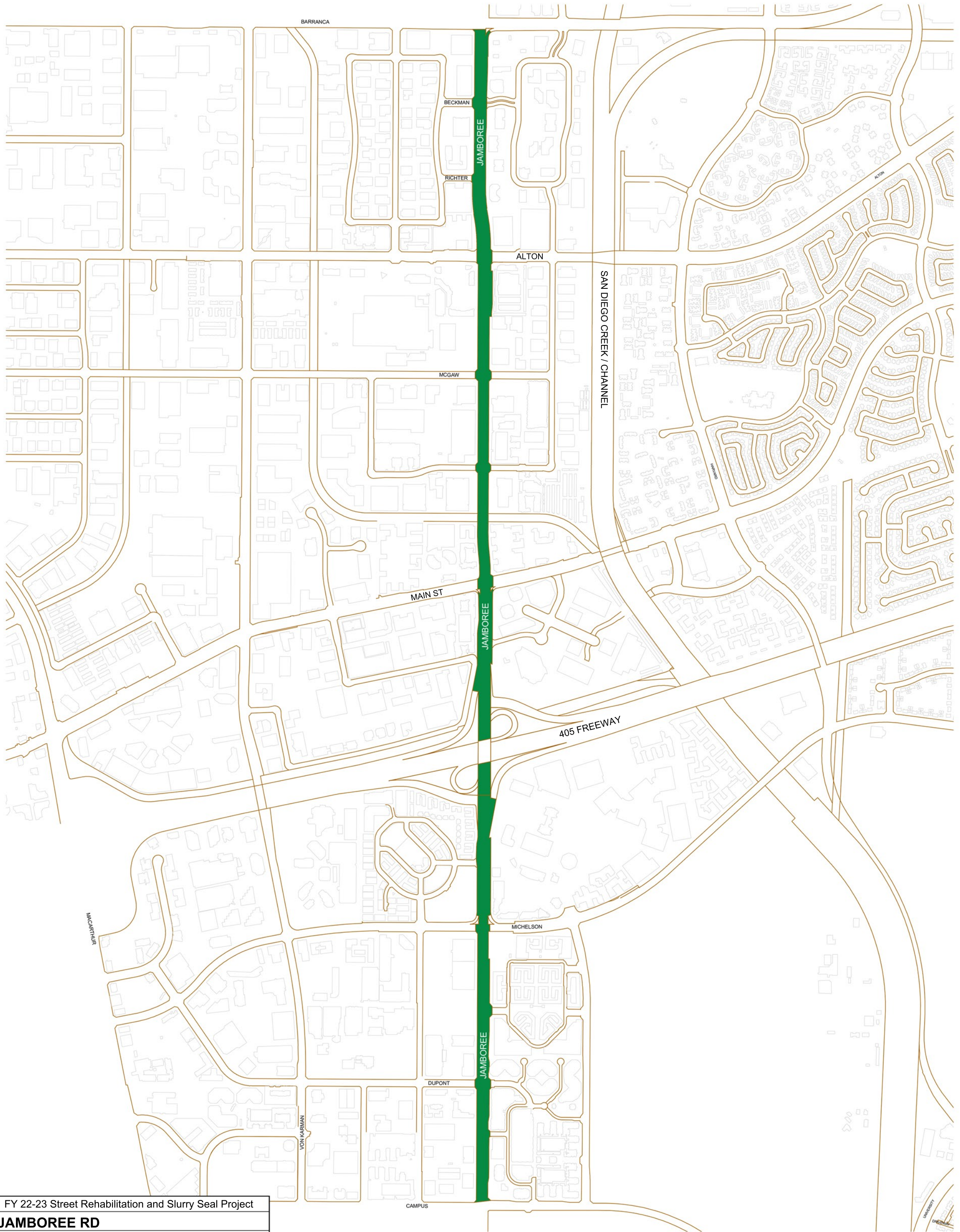




FY 22-23 Street Rehabilitation and Slurry Seal Project
BARRANCA & ALTON PKWY







- 0.2' grind and fiber reinforced ARHM overlay
- 0.2' Conventional fiber reinforced AC overlay
- Crack Seal / Type I Slurry Seal
- Crack Seal / Type II Slurry Seal
- AC repairs before slurry seal
- Private Streets



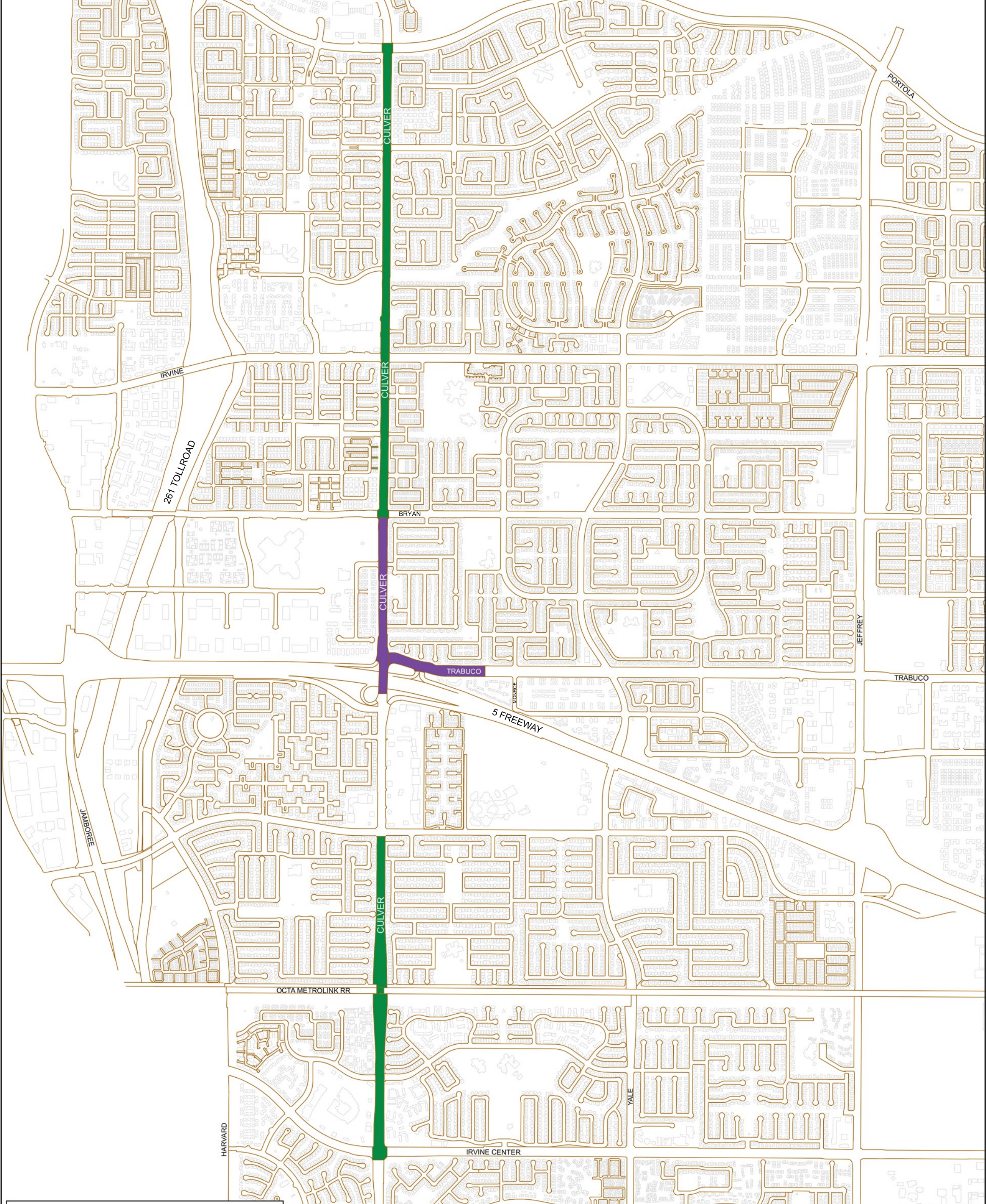


FY 22-23 Street Rehabilitation and Slurry Seal Project

JAMBOREE RD

	0.2' grind and fiber reinforced ARHM overlay
	0.2' Conventional fiber reinforced AC overlay
	Crack Seal / Type I Slurry Seal
	Crack Seal / Type II Slurry Seal
	AC repairs before slurry seal
	Private Streets





FY 22-23 Street Rehabilitation and Slurry Seal Project

CULVER DRIVE







- 0.2' grind and fiber reinforced ARHM overlay
- 0.2' Conventional fiber reinforced AC overlay
- Crack Seal / Type I Slurry Seal
- Crack Seal / Type II Slurry Seal
- AC repairs before slurry seal
- Private Streets



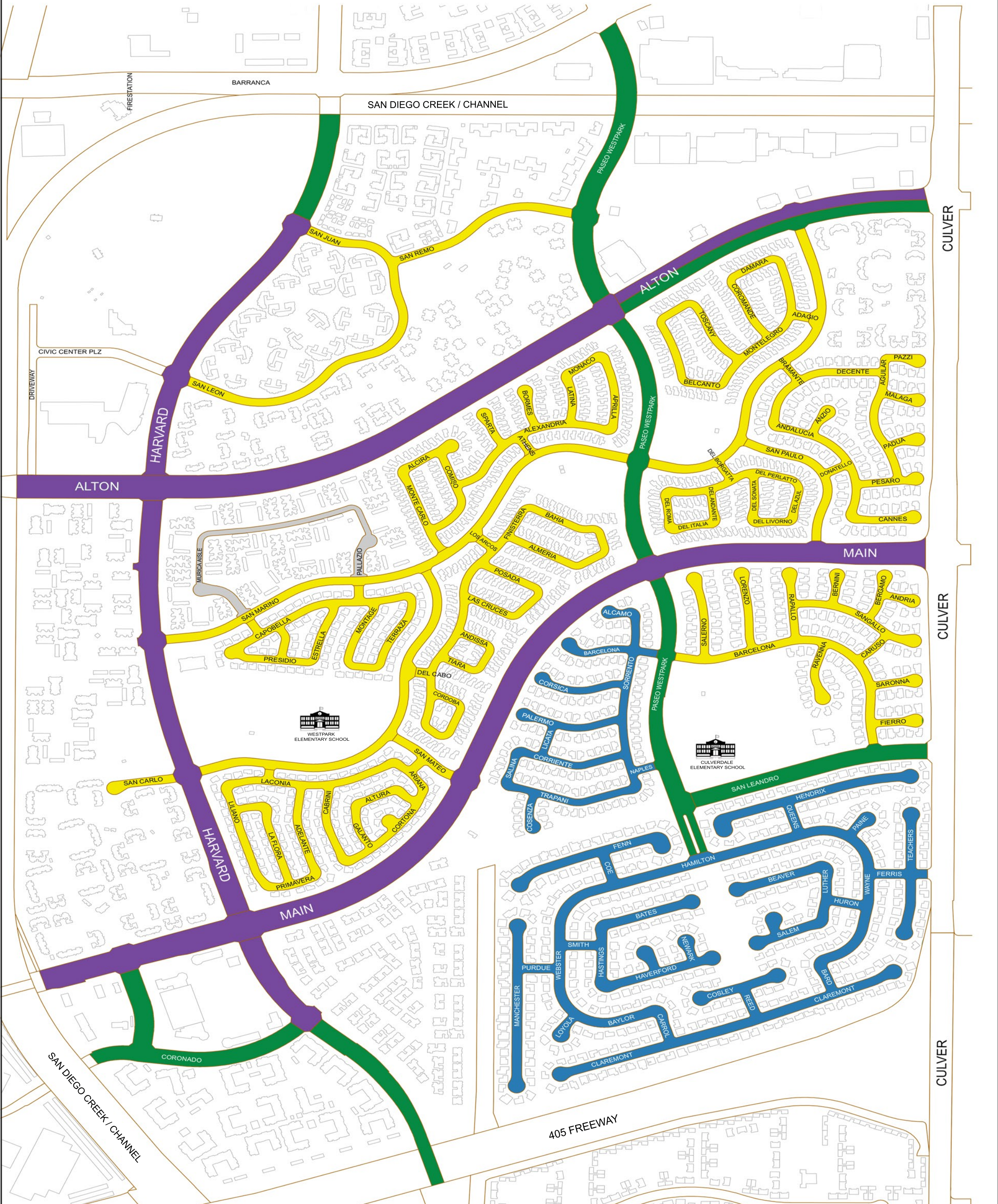


FY 22-23 Street Rehabilitation and Slurry Seal Project

HARVARD DR







	0.2' grind and fiber reinforced ARHM overlay
	0.2' Conventional fiber reinforced AC overlay
	Crack Seal / Type I Slurry Seal
	Crack Seal / Type II Slurry Seal
	AC repairs before slurry seal
	Private Streets



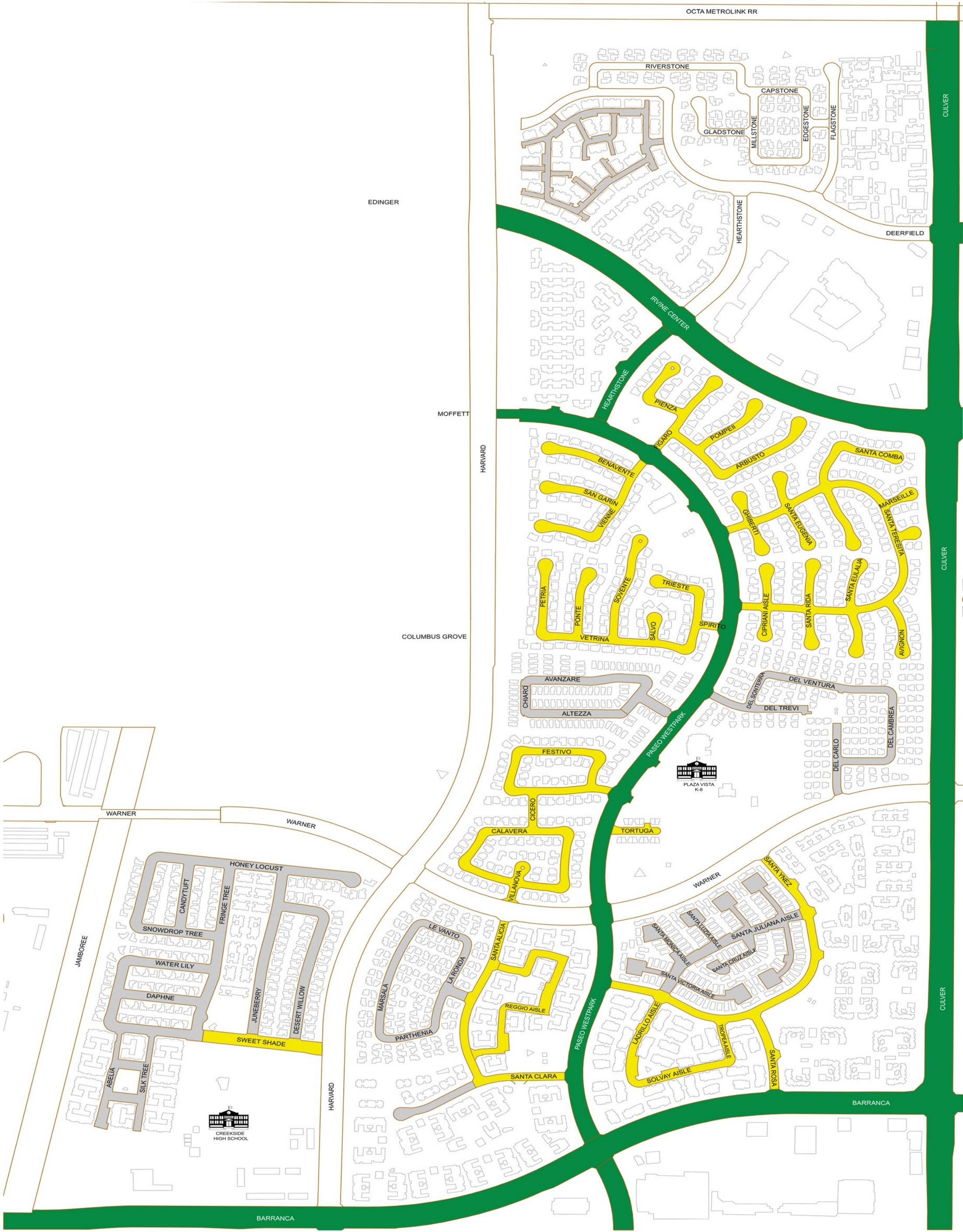


FY 22-23 Street Rehabilitation and Slurry Seal Project

WESTPARK (PA14)







	0.2' grind and fiber reinforced ARHM overlay
	0.2' Conventional fiber reinforced AC overlay
	Crack Seal / Type I Slurry Seal
	Crack Seal / Type II Slurry Seal
	AC repairs before slurry seal
	Private Streets



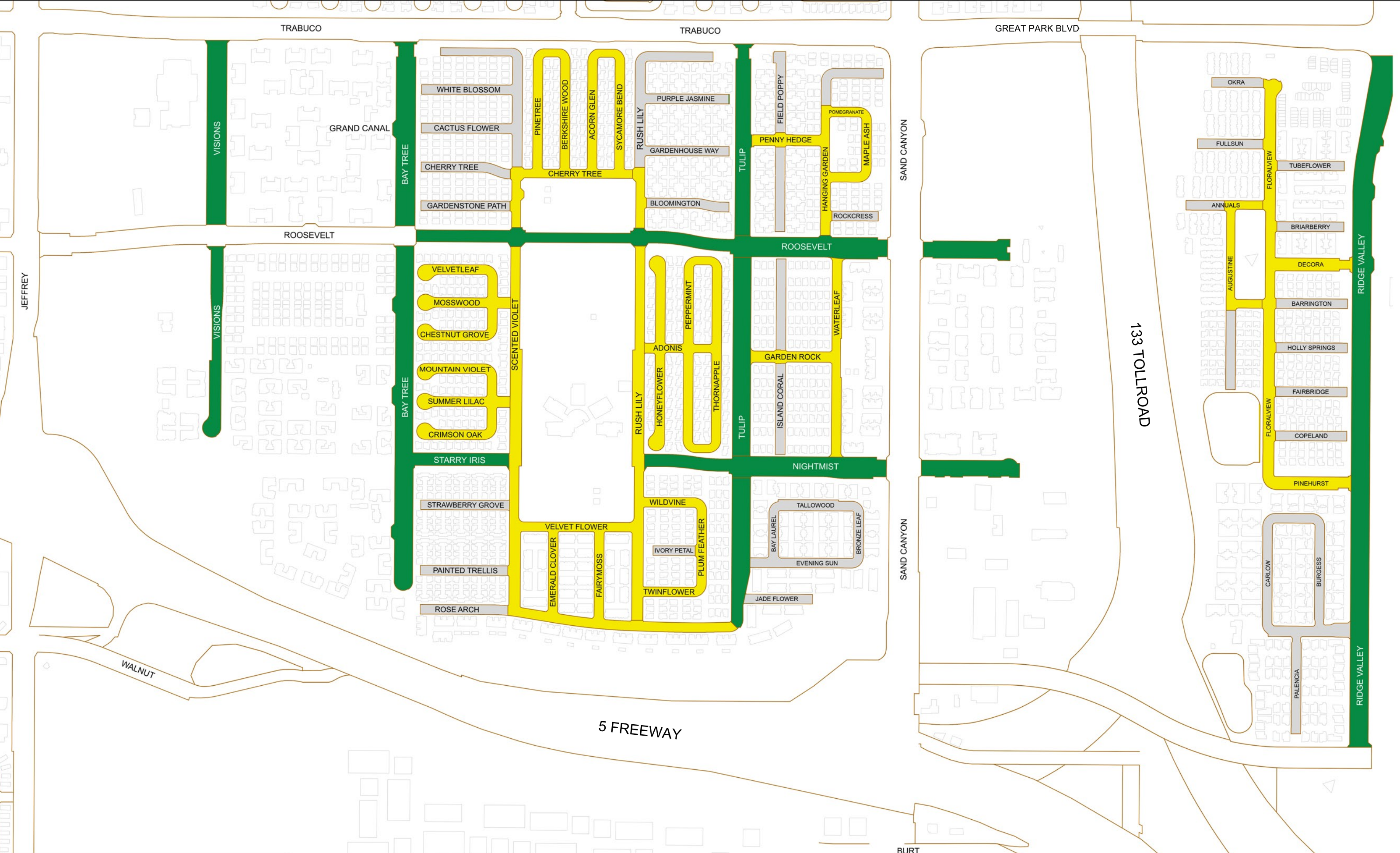


FY 22-23 Street Rehabilitation and Slurry Seal Project







WESTPARK II (PA38)

	0.2' grind and fiber reinforced ARHM overlay
	0.2' Conventional fiber reinforced AC overlay
	Crack Seal / Type I Slurry Seal
	Crack Seal / Type II Slurry Seal
	AC repairs before slurry seal
	Private Streets





FY 22-23 Street Rehabilitation and Slurry Seal Project
CYPRESS VILLAGE (PA40)

	0.2' grind and fiber reinforced ARHM overlay
	0.2' Conventional fiber reinforced AC overlay
	Crack Seal / Type I Slurry Seal
	Crack Seal / Type II Slurry Seal
	AC repairs before slurry seal
	Private Streets



REIMBURSEMENT AGREEMENT BETWEEN

IRVINE RANCH WATER DISTRICT

AND THE CITY OF IRVINE

FOR

INSTALLATION AND ADJUSTMENT OF STREET UTILITIES TO GRADE FOR

FY 2022-23 ANNUAL STREET REHABILITATION AND SLURRY SEAL

BID NO. 23-3298 CIP 312301

This Agreement is made and entered into as of this ____ day of _____, 2023, by and between IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law, hereinafter referred to as "DISTRICT," and the CITY OF IRVINE, a municipal corporation, hereinafter referred to as "CITY."

W I T N E S S E T H:

WHEREAS, CITY proposes to construct street and utility improvements within the area of the FY 2022-23 Annual Street Rehabilitation and Slurry Seal Project, Bid No. 23-3298 (the "Project"), within the jurisdictional boundaries of DISTRICT and the City of Irvine; and

WHEREAS, such construction will necessitate the following construction work on DISTRICT facilities: replacement and adjustment to grade of approximately 737 Domestic Water Valve cans and lids, replacement and adjustment to grade of approximately 215 Recycled Water Valve cans and lids, replacement and adjustment to grade of approximately 6 Sanitary Sewer Cleanout cans and lids, adjustment to grade of approximately 290 Sanitary Sewer Manholes, and installation of 102 Sewer manhole plywood protection covers, all as described on Exhibit "A" attached hereto and incorporated by reference (the infrastructure above collectively referred to as the "IRWD FACILITIES" and the construction work related to them is the "Work"); and

WHEREAS, the parties have determined that it would be more expedient for CITY to perform the IRWD FACILITIES Work rather than for DISTRICT to do so; and

WHEREAS, DISTRICT is amenable to the CITY performing the IRWD FACILITIES Work with the CITY agreeing to advance the costs; and

WHEREAS, DISTRICT intends to fully reimburse the CITY through payments billed by the CITY and approved by DISTRICT for the entire cost of the IRWD FACILITIES Work; and

WHEREAS, except as otherwise provided herein, upon the completion of the IRWD FACILITIES Work, the parties intend that any newly-installed IRWD FACILITIES shall become the property of DISTRICT in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties agree as follows:

SECTION 1. IRWD FACILITIES. In conjunction with the Project, CITY agrees to initiate and pursue to completion the design and construction of the IRWD FACILITIES Work pursuant to this Agreement.

SECTION 2. PLANS. CITY agrees that the IRWD FACILITIES Work shall be completed pursuant to project plans and specifications (the “Plans and Specifications”) approved by DISTRICT. Prior to commencement of preparation of the Plans and Specifications, CITY shall submit its design engineer’s proposed improvement plans for the IRWD FACILITIES to DISTRICT. DISTRICT will have a period of five (5) calendar days from its receipt of such design proposal to review and either indicate its approval or request changes. CITY shall cause its design engineer to review and respond to any requested changes. The Plans and Specifications must incorporate (directly or by reference) the applicable portions of DISTRICT’s latest edition of *Construction Manual for the Construction of Water, Sewer, and Recycled Water Facilities* (the “Construction Manual”). CITY shall let the contract for the performance of the IRWD FACILITIES Work (together with non-reimbursable work to be completed by CITY within the Project) pursuant to the approved plans prepared by CITY’s design engineer.

SECTION 3. BIDDING AND AWARD.

3.1 The parties agree that the performance of the IRWD FACILITIES Work shall be included in CITY’s contract(s) awarded for the Project and that the IRWD FACILITIES Work shall be bid as a separate item or items that can be deleted. During the bidding process, CITY shall deliver to IRWD one (1) complete set of the bid documents that include the IRWD FACILITIES Work, including all related addenda concurrently with the distribution thereof to prospective bidders. Upon opening of bids by CITY, CITY will submit the bids or a spread sheet summary of the bids to DISTRICT. DISTRICT will have a period of ten (10) calendar days from its receipt of the bid results for review and approval of the IRWD FACILITIES Work bid item(s) submitted by the bidder identified to DISTRICT by CITY as CITY’s proposed successful bidder. CITY agrees that bids received for the construction of the IRWD FACILITIES bid item(s) shall be subject to the approval of DISTRICT prior to award of the Project construction contract(s) that include the IRWD FACILITIES. If DISTRICT does not approve such bids, then either party may terminate this Agreement upon 24 hours’ prior written notice, in which event CITY shall have no further obligation to perform the IRWD FACILITIES Work, and DISTRICT may elect to perform the IRWD FACILITIES Work with its own contractor. If DISTRICT approves of the IRWD FACILITIES bid item(s) of CITY’s successful

bidder, then CITY shall cause the IRWD FACILITIES Work to be performed as part of the contract awarded to such bidder.

3.2 Estimated Costs. The total estimated construction cost for the IRWD FACILITIES Work is \$1,541,900, but the amount to be reimbursed by DISTRICT will be based on the actual costs of construction plus an administration fee as set forth in further detail in Section 5.

3.3 Contract Documents. Upon award of the construction contract, CITY shall provide DISTRICT with one original copy of the fully-executed contract documents and one copy of the bid package relating to the IRWD FACILITIES received from the successful bidder.

SECTION 4. DESIGN REVISIONS AND CHANGE ORDERS.

4.1 DISTRICT agrees to reimburse CITY for any change order(s) for revision(s) requested by DISTRICT or otherwise required to perform the IRWD FACILITIES Work. CITY shall promptly furnish DISTRICT with copies of any proposed change order(s) to such contract within five (5) working days of the initiation of the changed conditions to such contract, which change orders will be subject to DISTRICT approval if and to the extent the IRWD FACILITIES are affected.

4.2 DISTRICT shall promptly review proposed change order(s) and provide CITY with a response within five (5) working days or sooner of receiving proposed change order(s) information from CITY. DISTRICT agrees not to unreasonably cause delay(s) to the construction schedule of the Project in reviewing proposed change order(s) for the IRWD FACILITIES Work. Notwithstanding any other provision herein, any approval required to be given by the DISTRICT under this Section 4 will be deemed given if no response to the CITY's request for such approval is received by the CITY within eight (8) working days following the written request for such approval, unless the parties agree otherwise in a writing executed by both parties.

SECTION 5. REIMBURSEMENT.

5.1 Costs. CITY shall keep a separate accounting of all costs incurred by CITY in relation to the IRWD FACILITIES Work. DISTRICT shall reimburse CITY for the following costs (collectively, the "**Costs**");

(1) Actual Costs: the actual costs of design, construction, permits, bonds, and legal fees (excluding the costs of preparation of this Agreement) incurred by CITY in connection with the design and construction of the IRWD FACILITIES;

plus

(2) Administration Fee: an administration fee which shall be equal to four percent (4%) of the actual cost of construction (costs paid directly to CITY's contractor for construction only, excluding any cost for design, surveying, geotechnical or other work) of the IRWD FACILITIES Work. This amount is deemed to cover all

costs of project administration, including, but not limited to, accounting, inspection, surveying, compaction testing, geotechnical services and engineering.

5.2 Invoicing & Payment. Within sixty (60) days of DISTRICT's acceptance of the installed, relocated, or adjusted IRWD FACILITIES as provided in Section 8, a final accounting of the Costs shall be made by CITY and submitted to DISTRICT along with an invoice for the Costs and any supporting documentation necessary to show the amounts which represent Costs of performing the IRWD FACILITIES Work. Amounts paid pursuant to progress payment invoices shall be subject to adjustment in the final accounting. Within 30 days after the DISTRICT's receipt of the final accounting, DISTRICT agrees to pay to CITY the total amount of the Costs.

SECTION 6. LAWS, ORDINANCES, RULES AND REGULATIONS. CITY shall require in its contract for the construction of the IRWD FACILITIES that its contractor be fully informed of and comply with all laws, ordinances, rules and regulations, including, but not limited to, all applicable requirements of the California Labor Code, prevailing wage laws, the Construction Manual, and the Rules and Regulations of DISTRICT, in connection with performing the IRWD FACILITIES Work.

SECTION 7. INSPECTION. DISTRICT shall have sole and absolute discretion as to all aspects of design and construction of the IRWD FACILITIES, and DISTRICT shall be entitled to inspect the construction of IRWD FACILITIES Work as it deems necessary to assure compliance with the Plans and Specifications, including shop drawing review and material inspection thereof. DISTRICT shall have access to all phases of the Project work to be performed by CITY for the purpose of such inspection; provided, however, all questions regarding the work being performed will be directed to CITY's resident engineer. DISTRICT will promptly notify CITY of any portion of the Work on the IRWD FACILITIES which appears not to conform to the Plans and Specifications. The determination of DISTRICT as to conformity of the IRWD FACILITIES Work with the Plans and Specifications shall be made in DISTRICT's sole and absolute discretion. DISTRICT shall not unreasonably withhold its approval as to such conformity of the IRWD FACILITIES Work with the Plans and Specifications. CITY shall require its contractor to construct the IRWD FACILITIES so that the IRWD FACILITIES conform to the Plans and Specifications. CITY shall assume full responsibility for certifying or obtaining certification of the compaction of backfill material over the IRWD FACILITIES.

SECTION 8. ACCEPTANCE.

8.1 Acceptance. DISTRICT shall accept the IRWD FACILITIES, as installed, relocated, or adjusted when the IRWD FACILITIES Work has been completed by CITY in accordance with all requirements of the Plans and Specifications, including any change orders approved by DISTRICT as provided in Section 4.

8.2 As-Builts. At the time of completion and acceptance of the IRWD FACILITIES, CITY shall furnish DISTRICT with one copy of the contractor's redlined set of blue-line "record" drawings (showing all revisions, manufacturer and type of valves, pipe and

fittings as required by DISTRICT) and one copy of the compaction reports and certificate, survey notes, and cut sheets.

SECTION 9. OWNERSHIP. Notwithstanding the fact that CITY shall accomplish the construction of the IRWD FACILITIES subject to reimbursement, the IRWD FACILITIES to be completed hereunder, together with the necessary franchises, licenses, easements, rights-of-way, and other privileges, shall at all times be subject to the applicable rates, rules and regulations of DISTRICT, as modified or amended from time to time. CITY hereby disclaims any interest in the IRWD FACILITIES and hereby transfers and assigns to DISTRICT any and all right, title, and interest it may have in the IRWD FACILITIES upon their completion and acceptance. DISTRICT shall own, operate and maintain the IRWD FACILITIES following acceptance thereof.

SECTION 10. GUARANTEES. CITY will, pursuant to the requirement(s) of the Plans and Specifications, cause its contractor(s) for the IRWD FACILITIES to guarantee the IRWD FACILITIES against defects in workmanship and materials for a period of one (1) year from the date of acceptance by CITY, which acceptance shall be given only after acceptance by DISTRICT as provided in Section 8. It is further agreed that CITY shall cause the IRWD FACILITIES to be brought or restored to full compliance with the requirements of the Plans and Specifications, including any test requirements, for any portions of the IRWD FACILITIES which during said one (1) year period are found not to be in conformance with the provisions of the Plans and Specifications. This guarantee is in addition to any and all other warranties, express or implied, from CITY's contractors or material manufacturers, with respect to the IRWD FACILITIES. The guarantee and obligations under this section shall in no way be relieved by DISTRICT's inspection and/or acceptance of the IRWD FACILITIES. This section sets forth the entire guarantee and warranty of CITY with respect to the IRWD FACILITIES Work. The express or implied warranties of other persons with respect to IRWD FACILITIES shall in no way be limited by the guarantee and warranty of CITY contained in this section. If requested by DISTRICT, CITY agrees to assign to DISTRICT the contractor's guarantee and/or any other guarantees or warranties relating to the IRWD FACILITIES Work.

SECTION 11. INDEMNIFICATION.

11.1 CITY shall indemnify, defend and hold DISTRICT, its officers, agents, employees, and engineers harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen during construction of the IRWD FACILITIES as a result of any work or action performed by CITY or on behalf of CITY, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of DISTRICT, its officers, agents, employees or engineers or by any act or omission for which DISTRICT, its officers, agents, employees or engineers are liable without fault.

11.2 DISTRICT shall indemnify, defend and hold CITY, its officers, agents, and employees, harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen either (i) as a result of any acts performed by DISTRICT, its officers, agents, or employees, with respect to the IRWD FACILITIES construction; or (ii) following DISTRICT acceptance of the IRWD

FACILITIES, with respect to maintenance and operation of the IRWD FACILITIES, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any negligence of CITY, its officers, agents, employees or engineers, or by any act or omission for which CITY, its officers, agents, employees or engineers are liable without fault.

SECTION 12. INSURANCE AND BONDING. CITY shall cause its contractor(s) to provide performance and payment bonds for the construction of the Project including the IRWD FACILITIES and to obtain insurance coverage sufficiently broad to insure the matters set forth in this Agreement and to include DISTRICT, its officers, agents, employees and engineers, as additional insureds on all insurance policies that CITY requires its contractor(s) to provide. As evidence of such insurance coverage, CITY shall, prior to commencement of performance of the IRWD FACILITIES Work, provide DISTRICT with certificates of insurance and insurance endorsements from CITY's contractor(s) in a form acceptable to DISTRICT.

SECTION 13. TERMINATION.

13.1 DISTRICT shall have the right to terminate this Agreement at any time, subject to the provisions of this section, by providing five (5) business days' prior written notice to CITY, except as provided in Section 3 with respect to unapproved bids. If at the request or direction of a party other than CITY, the performance of the IRWD FACILITIES Work is not accomplished or completed, DISTRICT shall remain obligated for the actual amount of the Costs incurred by CITY to the date of termination.

13.2 If CITY's Project is canceled or modified so as to eliminate the necessity of the construction of the IRWD Facilities, CITY shall have the right to terminate this Agreement and thereby terminate its obligation to perform the IRWD FACILITIES Work, by providing five (5) business days' prior written notice to DISTRICT. In such case, DISTRICT will not be obligated for any design or any other Costs incurred by CITY. If IRWD elects to perform the IRWD FACILITIES Work, DISTRICT may, but shall not be obligated to, acquire the design or other work from CITY by separate agreement.

SECTION 14. NOTICE. Any notice or other written instrument required or permitted by this Agreement to be given to either party shall be deemed received when personally served or twenty-four (24) hours after being deposited in the U.S. Mail, postage prepaid, registered or certified and addressed as follows:

DISTRICT: Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager

CITY: City of Irvine
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618
Attn: Allison Tran, Associate Engineer

SECTION 15. SUCCESSORS AND ASSIGNS; INTEGRATION; AMENDMENT. This Agreement shall be binding upon and inure to the benefit of the successor and assigns of CITY and DISTRICT. This Agreement constitutes the entire Agreement between CITY and DISTRICT and supersedes all prior understandings and agreements between the parties with respect to the subjects hereof. This Agreement may be modified only in writing signed by both parties hereto.

SECTION 16. LEGAL FEES. In the event of any declaratory or other legal or equitable action instituted between CITY and DISTRICT in connection with this Agreement, the prevailing party shall be entitled to recover from the losing party all of its costs and expenses, including court costs and reasonable attorneys' fees.

SECTION 17. DEEMED APPROVAL. Any approval required to be given by either party pursuant to this Agreement shall be deemed given if no response to the party's request for such approval is received by the requesting party within fifteen (15) days following the written request for such approval.

SECTION 18. SEVERABILITY. If any term, provision, covenant or condition of this Agreement is held to be invalid, void or otherwise unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby, and each term provision, covenant or condition of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

SECTION 19. APPLICABLE LAW. This Agreement shall be construed and enforced in accordance with the laws of the State of California.

SECTION 20. WAIVER. The waiver of any provision of this Agreement by either party shall not be deemed to be a waiver of any other provision or of any preceding or subsequent breach hereunder.

IN WITNESS WHEREOF, the parties to the Agreement have executed this Agreement on the date herein above written.

IRVINE RANCH WATER DISTRICT

By _____
Paul Cook, General Manager

Dated _____

ATTEST:

By _____
Secretary/Assistant Secretary

Dated _____

APPROVED AS TO FORM:

By _____
Legal Counsel, IRWD

Dated _____

CITY OF IRVINE
A Municipal Corporation

By _____
Oliver C. Chi
City Manager of the City of Irvine

Dated _____

By _____
Jaimee Bourgeois
Interim Director of Public Works and
Transportation

Dated _____

ATTEST:

By _____
Carl Petersen
City Clerk of the City of Irvine

Dated _____

APPROVED AS TO FORM:


By _____
Robert Owen, RUTAN & TUCKER, LLP
City Attorney of the City of Irvine

Dated _____

May 16, 2023

Prepared by: B. Rios / E. Akiyoshi

Submitted by: K. Burton

Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

THE MEADOWS LAKE FOREST TOLL BROTHERS CAPITAL FACILITIES

SUMMARY:

Toll Brothers, Inc. is proceeding with development of The Meadows Lake Forest that includes the construction of streets, storm drains, domestic water, sanitary sewer, and recycled water improvements. As part of the development, Toll Brothers will construct IRWD capital facilities under a proposed Reimbursement Agreement (RA). Staff recommends that the Board:

- Authorize the General Manager to execute a Reimbursement Agreement with Toll Brothers, Inc. for The Meadows Lake Forest Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements; and
- Authorize the General Manager to accept Toll Brothers' construction contract with FYDAQ Company Inc. in the amount of \$1,355,413 for The Meadows Lake Forest Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements Project.

BACKGROUND:

Toll Brothers is moving forward with the residential development of The Meadows in Lake Forest. This property was a previous nursery site and formerly known as the Nakase Nursery. The Meadows is bounded by Bake Parkway on the west, Rancho Parkway on the north, Serrano Creek on the east and Pacific Commercentre Business Park on the south. The project location map is shown as Exhibit "A". As part of this development, Toll Brothers will design and construct IRWD's capital domestic water, sanitary sewer, and recycled water improvements. The required IRWD capital facilities are documented in the August 2020 Lake Forest Sub-Area Master Plan (SAMP) Addendum for the Nakase Development and all subsequent addendums and updates prepared by Dudek. An excerpt of the SAMP showing a summary of the required capital facilities is also shown in Exhibit "A".

The design and construction of the IRWD facilities will be performed under the terms of a proposed RA. The RA, which covers capital facilities in The Meadows development, is attached as Exhibit "B" and has been reviewed by IRWD's legal counsel.

The Meadows Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements:

The Meadows Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements consist of installing approximately 500 feet of twelve-inch domestic water pipeline, two domestic water pressure reducing stations, approximately 25 feet of twelve-inch recycled water pipeline, approximately 1,000 feet of six-inch recycled water pipeline, and approximately 1,800 feet of twelve-inch sanitary sewer pipeline as well as a pipeline diameter increase from the existing 12-inch to 24-inch of approximately 2,250 feet of the recycled water pipeline. Toll Brothers retained Hunsaker and Associates to prepare the design plans and received bids from

Engineering and Operations Committee: The Meadows Lake Forest Toll Brothers Capital Facilities

May 16, 2023

Page 2

three contractors. Toll Brothers recommends awarding the construction contract to the low bidder, FYDAQ Company Inc., for a bid amount of \$1,355,413 as shown in Exhibit “C”. In addition, Toll Brothers has received consultant proposals for geotechnical observation and testing, surveying, and construction support services. Field archeological and paleontological monitoring were provided during mass grading and are not included. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of The Meadows Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements costs is shown as follows:

Design (Hunsaker and Associates)	\$ 94,300.00
Construction (FYDAQ)	\$1,355,413.00
Geotechnical Services (NMG)	\$ 15,300.00
Construction Engineering/Surveying (Hunsaker)	\$ 30,152.00
Toll Brothers Administration Fee (1%)	<u>\$ 13,554.00</u>
	\$1,508,719.00

FISCAL IMPACTS:

Projects 10096, 11749 and 11582 are included in the FY 2022-23 Capital Budget and the budgets are sufficient to fund the project.

ENVIRONMENTAL COMPLIANCE:

Construction of capital domestic water, sewer, and recycled water facilities for The Meadows development is subject to the California Environmental Quality Act. In conformance with the California Code of Regulations Title 14, Chapter 3, Article 7 the City of Lake Forest, the lead agency, certified an Environmental Impact Report on January 21, 2020 (SCH# 2018071035) and filed a Notice of Determination on January 22, 2020.

RECOMMENDATION:

That the Board authorize the General Manager to execute a reimbursement agreement with Toll Brothers, Inc. for The Meadows Lake Forest Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements; and authorize the General Manager to accept Toll Brothers, Inc.’s construction contract with FYDAQ Company Inc. in the amount of \$1,355,413 for The Meadows Lake Forest Capital Domestic Water, Sanitary Sewer and Recycled Water Improvements, Projects 10096, 11749, and 11582.

LIST OF EXHIBITS:

- Exhibit “A” – Location Map and Capital Facilities Summary
- Exhibit “B” – Reimbursement Agreement with Toll Brothers, Inc. for The Meadows Lake Forest Capital Improvements
- Exhibit “C” – Bid Summary, The Meadows Lake Forest Capital Improvements, Projects 10096, 11749 and 11582.

EXHIBIT "A"

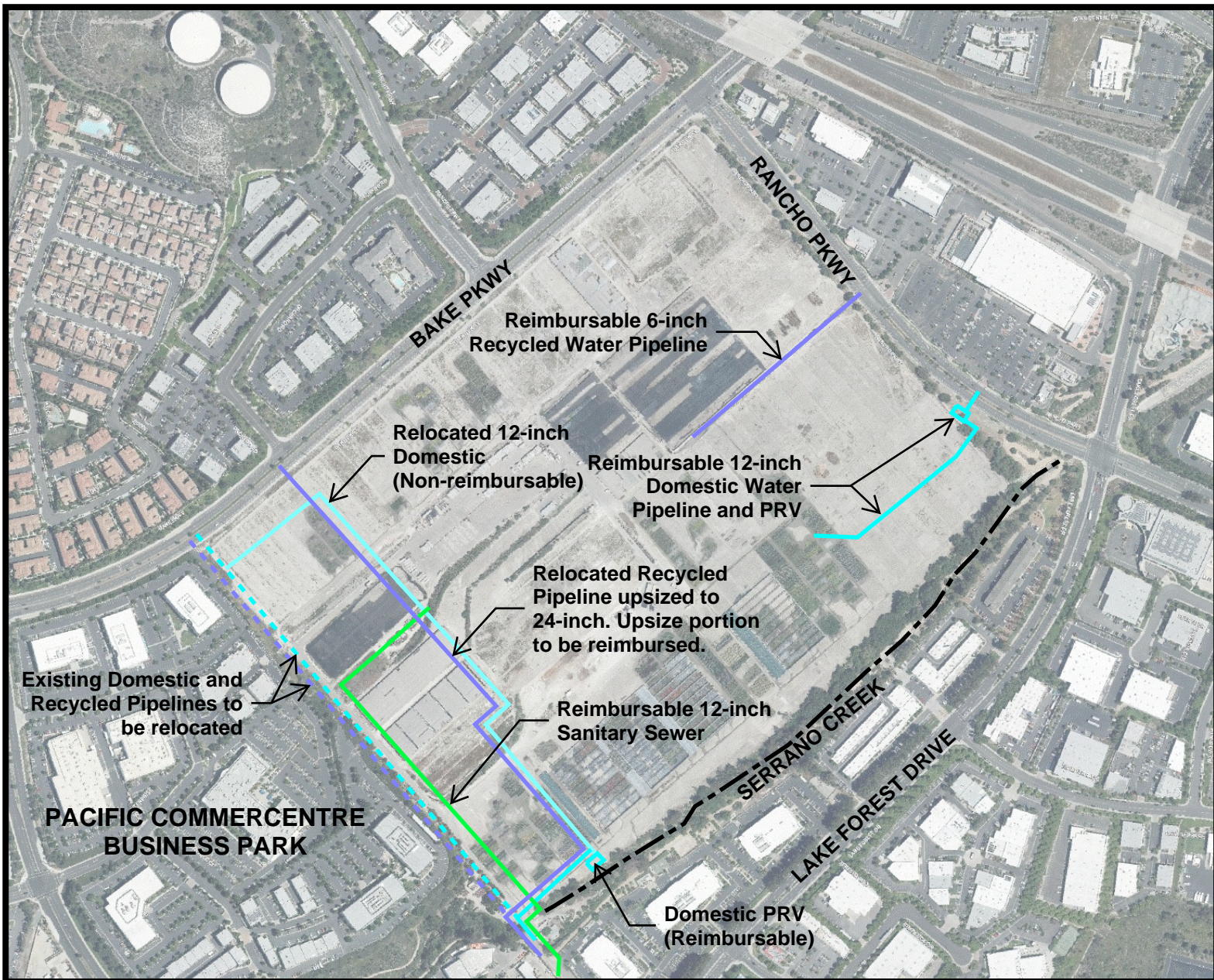


Table 7. Capital vs. Developer-Donated Facilities

Item	IRWD Funded		Developer Donated		Total	
	Qty	Unit	Qty	Unit	Qty	Unit
DOMESTIC WATER						
12" Pipeline ¹	519	LF	2,629	LF	3,148	LF
8" Pipeline	-	-	24,188	LF	24,188	LF
6" Pipeline	-	-	1,169	LF	1,169	LF
PRS (with Telemetry)	1	EA	-	-	1	EA
PRS (without Telemetry)	1	EA	-	-	1	EA
RECYCLED WATER						
24" Pipeline ²	2,249	LF	-	-	2,249	LF
12" Pipeline ²	22	LF	-	-	22	LF
6" Pipeline	947	LF	-	-	947	LF
4" Pipeline	-	-	3,364	LF	3,364	LF
SEWER						
12" Pipeline	1,757	LF	-	-	1,757	LF
8" Pipeline	-	-	21,041	LF	21,041	LF
Notes:						
¹ 2,629 LF of this line is being re-located by the developer for development of the site; therefore, the developer is funding the relocation.						
² Because this pipeline is being both re-located and upsized, this pipeline is actually funded by a cost share between the developer and IRWD per the terms listed in a separate Reimbursement Agreement.						

Exhibit "B"

File No. 7624

REIMBURSEMENT AGREEMENT

(The Meadows, Lake Forest)

This Reimbursement Agreement (“**Agreement**”) is effective _____, 2023, and is between IRVINE RANCH WATER DISTRICT, a California water district (“**IRWD**”) and TOLL BROS., INC. (“**Builder**”). IRWD and the Builder are each a “**Party**” and together are the “**Parties**.”

A. The Project. Builder proposes to construct street and utility improvements within a new residential tract, bordered by Bake Parkway, Rancho Parkway and Serrano Creek and known as “The Meadows” project (the “**Project**”), within the jurisdictional boundaries of IRWD and the City of Lake Forest. The Project was formerly known as the Nakase Development.

B. New Facilities. Prior to or in conjunction with Builder’s construction of the Project, IRWD desires to have constructed, within or adjacent to the street improvements for the Project, the following capital facilities and related appurtenances depicted on Exhibit A and collectively defined as the “**IRWD Facilities**”:

- approximately 500 linear feet (“**LF**”) of 12-inch domestic water pipeline,
- two domestic water pressure reducing stations,
- approximately 25 LF of 12-inch recycled water pipeline,
- approximately 1,000 LF of 6-inch recycled water pipeline, and
- approximately 1,800 LF of 12-inch sanitary sewer pipeline.

C. Relocated and Upsized Facilities. Builder will also relocate approximately 2,250 LF of an existing 12-inch recycled water pipeline that currently crosses the tract to a new location within the proposed residential streets at the Builder's cost. IRWD has requested that the size of that recycled water pipeline be increased from 12 inches to 24 inches based on engineering recommendations contained in the *Lake Forest Sub-Area Master Plan Addendum for the Nakase Development* dated August 2020, attached as Exhibit B. This pipeline upsizing work (but not the relocation) is also a part of the **IRWD Facilities**.

D. Purpose of Agreement. The Parties have determined that it would be more economical and efficient for Builder to construct the IRWD Facilities than for IRWD to do so. The Parties intend by this Agreement to provide for the Builder's design and construction of IRWD Facilities at Builder's cost, and IRWD's subsequent reimbursement upon certain terms and conditions.

The Parties therefore agree as follows:

SECTION 1. IRWD Facilities. In conjunction with the Project, Builder shall initiate and diligently pursue to completion the design and construction of the IRWD Facilities.

SECTION 2. PLANS.

2.1. Builder shall complete the IRWD Facilities pursuant to approved project plans and specifications (the “**Plans and Specifications**”), which must be approved by IRWD and used in awarding the construction contract. Before the commencement of the preparation of the Plans and Specifications, Builder shall submit its design engineer’s proposal for the design of IRWD Facilities to IRWD. IRWD will have a period of five calendar days from its receipt of the design proposal to review and either indicate its approval or request changes. Builder shall cause its design engineer to review and respond to any reasonable changes requested by IRWD.

2.2. The Plans and Specifications shall incorporate the applicable portions of IRWD’s latest edition of the *Construction Manual for the Construction of Water, Sewer, and Recycled Water Facilities* (the “**Construction Manual**”). Builder shall contract for construction of the IRWD Facilities together with non-reimbursable work to be completed by Builder within the Project pursuant to plans prepared by Builder’s design engineer.

SECTION 3. BIDDING AND AWARD.

3.1. Builder shall include construction of the IRWD Facilities in Builder’s contract(s) awarded for the Project. The IRWD Facilities must be bid as a separate item or items that can be deleted. During the bidding process, Builder shall deliver to IRWD one complete set of the bid documents that include IRWD Facilities, including all related addenda, concurrently with the distribution of the bid documents to prospective bidders. Upon opening of bids by Builder, Builder will submit the bids or a spread sheet summary of the bids to IRWD. IRWD will have a period of ten calendar days after its receipt of the bid results to review and approve IRWD Facilities bid item(s) submitted by the bidder identified to IRWD by Builder as Builder’s proposed successful bidder.

3.2. Builder shall obtain IRWD’s approval of any bid received for the construction of any IRWD Facilities bid item before Builder awards a Project construction contract that includes IRWD Facilities. If IRWD does not approve the bid within ten calendar days, then either Party may terminate this Agreement upon 24 hours’ prior written notice, in which event Builder will have no further obligation to construct IRWD Facilities and IRWD may elect to install IRWD Facilities with its own contractor. If IRWD approves of IRWD Facilities bid item(s) of Builder’s successful bidder, then Builder shall cause IRWD Facilities to be constructed as part of the contract awarded to that bidder.

3.3. The total estimated construction cost for IRWD Facilities is **\$1,355,413**, but the amount to be reimbursed by IRWD will be based on the actual costs of construction.

3.4. When Builder awards the construction contract, it shall provide IRWD with one original copy of the fully executed contract documents and one copy of the bid package relating to IRWD Facilities received from the successful bidder.

SECTION 4. DESIGN REVISIONS AND CHANGE ORDERS.

4.1. If, during design or construction, Builder requests or initiates any revision to the Plans and Specifications that would increase the cost of IRWD Facilities, then Builder shall pay those additional costs. Builder shall not seek reimbursement of those additional costs from IRWD, except for any revisions or costs that IRWD's General Manager determines are (a) reasonably necessary to construct IRWD Facilities and (b) could not reasonably have been foreseen at the time bids were received. IRWD shall reimburse Builder for the cost of any such necessary and unforeseeable revisions, and the cost of any revisions requested or initiated by IRWD.

4.2. Builder shall promptly furnish IRWD with copies of any proposed change orders to the Project contract within five (5) working days of being notified of changed conditions to the Project, which change orders will be subject to IRWD approval if and to the extent any of IRWD Facilities are affected by the change orders. IRWD will review and respond to proposed change orders affecting IRWD Facilities no later than five working days after receipt by IRWD.

SECTION 5. REIMBURSEMENT.

5.1. IRWD shall reimburse Builder for the following costs (collectively, the "Costs"):

5.1.1 the actual costs of design, construction, permits, bonds, and legal fees (excluding the costs of preparation of this Agreement) incurred by Builder for the design and construction of IRWD Facilities, plus

5.1.2 an administration fee equal to one percent (1%) of the actual cost of construction (costs paid directly to Builder's contractor for construction, only, excluding any cost for design, surveying, geotechnical or other work) of IRWD Facilities that will cover all costs of project administration, including, but not limited to, accounting, inspection, surveying, compaction testing, geotechnical services and engineering.

5.2. Builder shall keep a separate accounting of all Costs incurred by Builder in relation to IRWD Facilities.

5.3. No later than 30 days after IRWD's receipt from Builder of each invoice for IRWD's portion of a construction progress payment, accompanied by such supporting documentation as may be necessary to show the amounts which represent Costs of IRWD Facilities, IRWD shall deposit with Builder the amount of such invoice. No later than 60 days after IRWD's acceptance of IRWD Facilities as provided in Section 8, Builder shall provide a final accounting of the Costs to IRWD along with an invoice for the Costs and any supporting documentation necessary to show the amounts which represent Costs of IRWD Facilities. Amounts paid by IRWD pursuant to progress payment invoices will be subject to adjustment in the final accounting. No later than 30 days after the final accounting, IRWD shall pay to Builder the total amount of the Costs less previous progress payments made by IRWD. If the total of the

previously-paid progress payments exceeds the Costs, Builder shall refund the difference to IRWD no later than 30 days after Builder's submittal of the final accounting.

SECTION 6. LAWS, ORDINANCES, RULES AND REGULATIONS. Builder shall require in its contract for the construction of IRWD Facilities that its contractor be fully informed of and comply with all laws, ordinances, rules and regulations, including, but not limited to, all applicable requirements of the California Labor Code, prevailing wage laws, the Construction Manual, and the Rules and Regulations of IRWD, in connection with the construction of IRWD Facilities.

SECTION 7. INSPECTION. IRWD shall have sole and absolute discretion as to all aspects of design and construction of IRWD Facilities, and IRWD may inspect the construction of IRWD Facilities as it deems necessary to assure compliance with the Plans and Specifications, including shop drawing review and material inspection. Builder shall assure that IRWD has access to all phases of the Project work to be performed by Builder for the purpose of such inspection; provided, however, that all questions regarding the work being performed will be directed to Builder's resident engineer. IRWD will promptly notify Builder of any portion of the work on IRWD Facilities which appears not to conform to the Plans and Specifications. IRWD's determination as to conformity of IRWD Facilities with the Plans and Specifications will be made in IRWD's sole and absolute discretion. IRWD will not unreasonably withhold its approval as to such conformity of IRWD Facilities with the Plans and Specifications. Builder shall require its contractor to construct IRWD Facilities so that such Facilities conform to the Plans and Specifications. As between Builder and IRWD, Builder assumes full responsibility for certifying or obtaining certification of the compaction of backfill material over IRWD Facilities.

SECTION 8. ACCEPTANCE. IRWD shall accept IRWD Facilities when IRWD Facilities have been completed by Builder in accordance with all requirements of the Plans and Specifications, including any change orders approved by IRWD as provided in Section 3 of this Agreement. At the time of completion and acceptance of IRWD Facilities, Builder shall furnish IRWD with one copy of the contractor's redlined set of "record" drawings (showing all revisions, manufacturer and type of valves, pipe and fittings as required by IRWD) and one copy of the compaction reports and certificate, survey notes and cut sheets.

SECTION 9. OWNERSHIP. Notwithstanding that Builder shall accomplish the construction of IRWD Facilities subject to reimbursement, the IRWD Facilities to be completed hereunder, together with all necessary franchises, licenses, easements, rights-of-way, and other privileges, will at all times be subject to the applicable rates, rules and regulations of IRWD, as modified or amended from time to time. Builder hereby disclaims any interest in IRWD Facilities and does hereby transfer and assign to IRWD any and all right, title, and interest it may have in IRWD Facilities. IRWD shall own, operate and maintain IRWD Facilities following acceptance thereof.

SECTION 10. GUARANTEES. Builder shall, pursuant to the Plans and Specifications, cause its contractor(s) for IRWD Facilities to guarantee IRWD Facilities against defects in workmanship and materials for a period of one year after the date of acceptance by Builder, which shall provide acceptance only after acceptance by IRWD as provided in Section 8.

Builder shall cause IRWD Facilities to be brought or restored to full compliance with the requirements of the Plans and Specifications, including any test requirements, for any portions of IRWD Facilities which during that one year period are found not to be in conformance with the provisions of the Plans and Specifications. This guarantee is in addition to any and all other warranties, express or implied, from Builder's contractors or material manufacturers, with respect to IRWD Facilities. The guarantee and obligations under this section will not be relieved by IRWD's inspection and/or acceptance of IRWD Facilities. This section sets forth the entire guarantee and warranty of Builder with respect to IRWD Facilities. The express or implied warranties of other persons with respect to IRWD Facilities will not be limited by Builder's guarantee and warranty contained in this section. If requested by IRWD, Builder shall assign to IRWD the contractor's guarantee and/or any other guarantees or warranties relating to IRWD Facilities.

SECTION 11. INDEMNIFICATION.

11.1. Builder shall indemnify, defend and hold IRWD, its officers, agents, employees, and engineers harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen during construction of IRWD Facilities as a result of any work or action performed by Builder or on behalf of Builder, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of IRWD, its officers, agents, employees or engineers or by any act or omission for which IRWD, its officers, agents, employees or engineers are liable without fault.

11.2. IRWD shall indemnify, defend and hold Builder, its officers, agents, and employees, harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen either (i) as a result of any acts performed by IRWD, its officers, agents, or employees, with respect to IRWD Facilities construction; or (ii) following IRWD acceptance of IRWD Facilities, with respect to maintenance and operation of IRWD Facilities, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any negligence of Builder, its officers, agents, employees or engineers, or by any act or omission for which Builder, its officers, agents, employees or engineers are liable without fault.

SECTION 12. INSURANCE AND BONDING. Builder shall cause its contractor(s) to provide performance and payment bonds for the construction of the Project including IRWD Facilities and to obtain insurance coverage sufficiently broad to insure the matters set forth in this Agreement and to include IRWD, its officers, agents, employees and engineers, as additional insureds on all insurance policies that Builder requires its contractor(s) to provide. As evidence of such insurance coverage, Builder shall, prior to commencement of construction of IRWD Facilities, provide IRWD with certificates of insurance and insurance endorsements from Builder's contractor(s) in a form acceptable to IRWD.

SECTION 13. TERMINATION.

13.1. IRWD may terminate this Agreement at any time, subject to the provisions of this section, by providing five business days' prior written notice to Builder, except as provided in Section 3. If at the request or direction of a party other than Builder, the construction of IRWD Facilities is not accomplished or completed, IRWD shall remain obligated for the actual amount of the Costs incurred by Builder to the date of termination.

13.2. If Builder's Project is canceled or modified so as to eliminate the necessity of the construction of IRWD Facilities, Builder may terminate this Agreement and thereby terminate its obligation to construct IRWD Facilities, by providing five business days' prior written notice to IRWD. In such case, IRWD will not be obligated for any design or any other Costs incurred by Builder. If IRWD elects to construct IRWD Facilities, IRWD may, but will not be obligated to, acquire the design or other work from Builder by separate agreement.

SECTION 14. NOTICE. Any notice or other written instrument required or permitted by this Agreement to be given to either Party will be deemed received when personally served or 24 hours after being deposited in the U.S. Mail, postage prepaid, registered or certified and addressed as follows:

IRWD: Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager

Builder: Toll Bros., Inc.
350 Commerce, Suite 200
Irvine, CA 92602
Attn: Land Development Department

SECTION 15. SUCCESSORS AND ASSIGNS; INTEGRATION; AMENDMENT. This Agreement is binding upon and inures to the benefit of the successors and assigns of Builder and IRWD. This Agreement constitutes the entire Agreement between Builder and IRWD and supersedes all prior understandings and agreements between the Parties with respect to the IRWD Facilities for the Project. This Agreement may be modified only in writing signed by the Parties .

SECTION 16. LEGAL FEES. In the event of any declaratory or other legal or equitable action instituted between Builder and IRWD in connection with this Agreement, the prevailing party will be entitled to recover from the losing party all of its costs and expenses, including court costs and reasonable attorneys' fees.

SECTION 17. DEEMED APPROVAL. Any approval required to be given by either Party pursuant to this Agreement shall be deemed given if the requesting party receives no response to its request for such approval within fifteen days following the written request for such approval.

SECTION 18. SEVERABILITY. If any term, provision, covenant or condition of this Agreement is held to be invalid, void or other unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this Agreement will not be affected thereby, and each term, provision, covenant or condition of this Agreement will be valid and enforceable to the fullest extent permitted by law.

SECTION 19. APPLICABLE LAW. This Agreement must be construed and enforced in accordance with the laws of the State of California.

SECTION 20. WAIVER. The waiver of any provision of this Agreement by either Party will not be a waiver of any other provision or of any preceding or subsequent breach hereunder.

The Parties are signing this Agreement to be effective as of the date of the last signature.

IRVINE RANCH WATER DISTRICT:

By _____
Paul A. Cook, General Manager

Dated _____

ATTEST:

By _____
Secretary/Assistant Secretary

APPROVED AS TO FORM:

By _____
General Counsel, IRWD

BUILDER:

Toll Bros., Inc.
350 Commerce, Suite 200
Irvine, CA 92602

By _____
Name _____
Title: _____

Dated _____

ATTEST:

By _____
Title: _____

Dated _____

APPROVED AS TO FORM:

By _____
Attorney for Builder

Dated _____

SEWER

32210-2, 1510	48" MH	51	51	\$2,945.00	\$150,195.00	\$0.00	51	\$3,700.00	\$188,700.00	51	\$3,500.00	\$178,500.00	51	\$3,524.81	\$179,765.31
32210-2, 1510	8" TERMINAL CLEANOUT	5	5	\$565.00	\$2,825.00	\$0.00	5	\$700.00	\$3,500.00	5	\$750.00	\$3,750.00	5	\$982.71	\$4,913.55
32210-2, 1510	8" PVC SDR 35	10,713	10,665	\$34.00	\$362,610.00	\$0.00	10,779	\$40.00	\$431,160.00	10,756	\$38.00	\$408,728.00	10,713	\$43.29	\$463,765.77
32210-2, 1510	4" SEWER LATERAL	246	246	\$1,030.00	\$253,380.00	\$0.00	244	\$1,050.00	\$256,200.00	244	\$980.00	\$239,120.00	246	\$1,250.50	\$307,623.00
32210-2, 1510	TEMPORARY 8" TERMINAL CLEANOUT	10	10	\$365.00	\$3,650.00	\$0.00	12	\$600.00	\$7,200.00	12	\$575.00	\$6,900.00	10	\$982.71	\$9,827.10
32210-2, 1510	REMOVE TEMPORARY CLEANOUT & JOIN EX SEWER	4	4	\$669.00	\$2,676.00	\$0.00	4	\$1,000.00	\$4,000.00	4	\$1,050.00	\$4,200.00	4	\$4,707.14	\$18,828.56
32210-2, 1510	18" STEEL CASING	26	28	\$57.00	\$1,596.00	\$0.00	26	\$250.00	\$6,500.00	26	\$235.00	\$6,110.00	26	\$672.38	\$17,481.88
32210-2, 1510	CASING TEST STATION	4	4	\$1,915.00	\$7,660.00	\$0.00	4	\$1,000.00	\$4,000.00	4	\$1,100.00	\$4,400.00	4	\$982.71	\$3,930.84
32210-2, 1510	6" SEWER LATERAL	1	1	\$595.00	\$595.00	\$0.00	1	\$1,100.00	\$1,100.00	1	\$1,050.00	\$1,050.00	1	\$2,241.60	\$2,241.60
32210-2, 1510	RAISE MH BASE PAVE	51	56	\$400.00	\$22,400.00	\$0.00	51	\$600.00	\$30,600.00	51	\$550.00	\$28,050.00	51	\$775.83	\$39,567.33
32210-2, 1510	RAISE MH CAP PAVE	51	56	\$400.00	\$22,400.00	\$0.00	51	\$600.00	\$30,600.00	51	\$550.00	\$28,050.00	51	\$775.83	\$39,567.33
32210-2, 1510	CLEAN, FLUSH, BALL, TEST, VIDEO & INSPECTION	1	1	\$9,715.00	\$9,715.00	\$0.00	1	\$20,000.00	\$20,000.00	1	\$15,000.00	\$15,000.00	1	\$15,516.47	\$15,516.47
32210-2, 1510				\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00
32210-2, 1510	ADDITIONAL ITEMS			\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00
32210-2, 1510	Raise Cleanouts to Base Grade			\$0.00	\$0.00	\$0.00	17	\$450.00	\$7,650.00	5	\$475.00	\$2,375.00		\$0.00	\$0.00
32210-2, 1510	Raise Cleanouts to Cap Grade			\$0.00	\$0.00	\$0.00	17	\$450.00	\$7,650.00	5	\$475.00	\$2,375.00		\$0.00	\$0.00
				\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00
	SEWER TOTAL				\$839,702.00	\$0.00			\$998,860.00			\$928,608.00			\$1,103,028.74
	CODE 7640 GRAND TOTAL				\$2,230,712.00	\$0.00			\$2,750,528.00			\$2,491,523.00			\$2,830,294.54

GRAND TOTAL				\$5,605,431.00		\$0.00			\$6,452,935.00			\$6,148,807.00			\$6,726,334.26
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	DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE
ORIGINAL BID	2/4/21	\$5,593,560.00			1/30/21	\$6,452,935.00			1/30/21	\$6,219,745.00			1/30/21	\$11,866,990.64	
REVISED BID #1	2/17/21	\$5,605,431.00							2/17/21	\$6,148,807.00			2/17/21	\$6,726,334.00	
REVISED BID #2															


NOTES	2/9/21 - After clarification form IRWD on prevailing wage I sent all bidders update that Capital improvements would be Reimbursable and need to be repriced at prevailing wage. Also also had bidders clarify qty's and unit prices that stood out from Engineers or Competitors information.	2/4/21 - Bidder emailed that they were not able to bid because they did not have the man power to staff the job correctly	2/9/21 - Because the job was approved for IRWD reimbursement LA Strada could not continue as they are not on IRWD's vendor list	2/9/21 - After clarification form IRWD on prevailing wage I sent all bidders update that Capital improvements would be Reimbursable and need to be repriced at prevailing wage. Also also had bidders clarify qty's and unit prices that stood out from Engineers or Competitors information.	2/9/21 - After clarification form IRWD on prevailing wage I sent all bidders update that Capital improvements would be Reimbursable and need to be repriced at prevailing wage. Also also had bidders clarify qty's and unit prices that stood out from Engineers or Competitors information. I informed Paulus that they were the high bidder and they would need to get aggressive if they wanted a shot. They also had some huge qty's off so I was not able to evaluate their information correctly.

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May 16, 2023

Prepared by: K. Lew / B. Rios / E. Akiyoshi

Submitted by: K. Burton

Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

PLANNING AREA 51 HERITAGE FIELDS CAPITAL FACILITIES

SUMMARY:

Heritage Fields, LLC (Heritage Fields) is proceeding with development of Planning Area 51 (Great Park), which includes the construction of streets, storm drains, domestic water, sanitary sewer, and recycled water improvements. As part of the development, Heritage Fields will construct IRWD capital facilities under an existing Supplemental Reimbursement Agreement (SRA). Staff recommends that the Board authorize the General Manager to accept Heritage Fields' construction contract with FYDAQ Company Inc. in the amount of \$250,775.38 for the District 5 Cadence and Treble Domestic Water and Recycled Water Capital Improvement project.

BACKGROUND:

Heritage Fields continues to move forward with residential development within District 5. District 5 is located south of Irvine Boulevard, west of the wildlife corridor, north of Harrier, and east of Chinon. The project location map is shown as Exhibit "A". As part of this development, Heritage Fields will design and construct IRWD's domestic water, sanitary sewer, and recycled water capital improvements. The required IRWD capital facilities are documented in the September 2016 Planning Area 51 Sub-Area Master Plan Update and all subsequent addendums and updates prepared by Stantec. The design and construction of the IRWD facilities will be performed under the terms of the Master Reimbursement Agreement approved by the Board in August 2012 and as further refined in an existing SRA approved by the Board in November 2019.

The District 5 Cadence and Treble Capital Domestic Water and Recycled Water Improvements consist of installing approximately 1,180 feet of 12-inch domestic water pipeline and 2,185 feet of 10-inch and 12-inch recycled water pipeline in Cadence and Treble within District 5 of the Great Park. Heritage Fields retained Hunsaker and Associates to prepare the plans and received bids from three contractors. Heritage Fields recommends awarding the construction contract to the low bidder, FYDAQ Company Inc., for a bid amount of \$250,775.38 as shown in Exhibit "B". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, and field archeological and paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and find the amounts to be acceptable. A summary of the project costs is shown below:

Design (Hunsaker)	\$ 90,300.00
Construction (FYDAQ)	\$250,775.38
Geotechnical Services (Engeo)	\$ 4,400.00
Construction Eng and Surveying (Hunsaker)	\$ 13,300.00
Archeo/Paleo Monitoring (LSA)	\$ 1,485.00
Heritage Fields Administration Fee (1%)	<u>\$ 2,507.75</u>
	\$362,768.13

FISCAL IMPACTS:

Projects 10796 and 10804 are included in the FY 2022-23 Capital Budget and the budgets are sufficient to fund the project.

ENVIRONMENTAL COMPLIANCE:

Construction of capital domestic water, sewer, and recycled water facilities for the Great Park Development is subject to the California Environmental Quality Act. In conformance with the California Code of Regulations Title 14, Chapter 3, Article 7 an Environmental Impact Report was certified by the City of Irvine, the lead agency on April 4, 2012 (SCH# 2002101020).

RECOMMENDATION:

That the Board authorize the General Manager to accept Heritage Fields' construction contract with FYDAQ Company Inc. in the amount of \$250,775.38 for the District 5 Cadence and Treble Capital Domestic Water and Recycled Water Improvements, Projects 10796 and 10804.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Bid Summary, District 5 Cadence and Treble Capital Domestic Water and Recycled Water Improvements, Projects 10796 and 10804

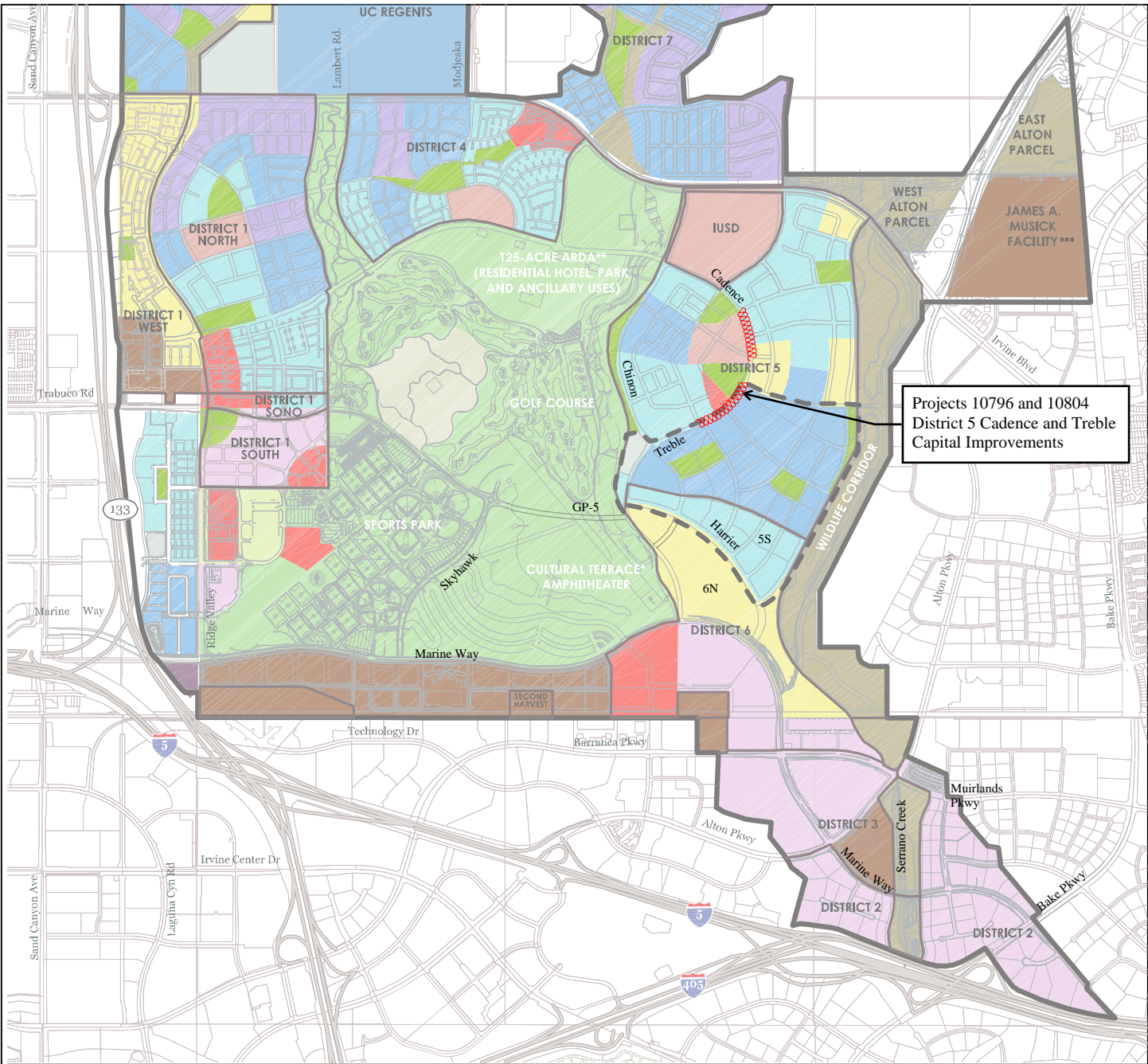


EXHIBIT A

LOCATION MAP

not to scale

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PROJECT: D5 JOINT BACKBONE - SD, SW, DW & RW IMPROVEMENTS

OWNER: Heritage Fields El Toro, LLC

BID SPREAD CODE 7262

ENGINEER'S ESTIMATE
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

FYDAQ - LOW BID
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

LEATHERWOOD
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

KEC
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

IRWD CAPITAL		"P" Street (From Chinon to Astor) Cadence (From Astor to Merit)	"P" Street (From Chinon to Astor) Cadence (From Astor to Merit)	"P" Street (From Chinon to Astor) Cadence (From Astor to Merit)	"P" Street (From Chinon to Astor) Cadence (From Astor to Merit)
A1.	131-00 DW - IRWD CAPITAL				
A1.1	SUB-TOTAL, SUBSECTION A1.1 - 131-01:	\$ 12,500.00	\$ 4,878.81	\$ 9,115.00	\$ 21,333.33
A1.2	SUB-TOTAL, SUBSECTION A1.2 - 131-02:	\$ 1,000.00	\$ 166.66	\$ 525.00	\$ 1,666.67
A1.3	SUB-TOTAL, SUBSECTION A1.3 - 131-05:	\$ 76,700.00	\$ 53,100.00	\$ 86,140.00	\$ 110,920.00
A1.4	SUB-TOTAL, SUBSECTION A1.4 - 131-15:	\$ 27,500.00	\$ 17,700.00	\$ 26,500.00	\$ 25,000.00
A1.5	SUB-TOTAL, SUBSECTION A1.5 - 131-20:	\$ 4,000.00	\$ 2,810.00	\$ 3,900.00	\$ 7,000.00
A1.6	SUB-TOTAL, SUBSECTION A1.6 - 131-95:	\$ 2,300.00	\$ 1,500.00	\$ 1,600.00	\$ 6,000.00
	131-00 DW - IRWD CAPITAL - TOTAL	\$ 124,000.00	\$ 80,155.47	\$ 127,780.00	\$ 171,920.00
A2.	132-00 RW - IRWD CAPITAL				
A2.1	SUB-TOTAL, SUBSECTION A2.1 - 132-01:	\$ 12,500.00	\$ 5,918.25	\$ 12,982.00	\$ 23,333.33
A2.2	SUB-TOTAL, SUBSECTION A2.2 - 132-02:	\$ 1,000.00	\$ 166.66	\$ 630.00	\$ 1,666.67
A2.3	SUB-TOTAL, SUBSECTION A2.3 - 132-05:	\$ 135,975.00	\$ 99,805.00	\$ 147,170.00	\$ 141,590.00
A2.4	SUB-TOTAL, SUBSECTION A2.4 - 132-06:	\$ 6,500.00	\$ 4,625.00	\$ 7,900.00	\$ 10,000.00
A2.5	SUB-TOTAL, SUBSECTION A2.5 - 132-15:	\$ 57,500.00	\$ 37,525.00	\$ 51,450.00	\$ 53,800.00
A2.6	SUB-TOTAL, SUBSECTION A2.6 - 132-20:	\$ 21,575.00	\$ 17,705.00	\$ 22,100.00	\$ 27,500.00
A2.7	SUB-TOTAL, SUBSECTION A2.7 - 132-95:	\$ 7,475.00	\$ 4,875.00	\$ 5,200.00	\$ 19,500.00
	132-00 RW - IRWD CAPITAL - TOTAL	\$ 242,525.00	\$ 170,619.91	\$ 247,432.00	\$ 277,390.00
TOTAL - IRWD CAPITAL CONTRACT PRICE SCHEDULE		\$ 366,525.00	\$ 250,775.38	\$ 375,212.00	\$ 449,310.00

IRWD Capital				Cadence IRWD Capital 7262				Cadence IRWD Capital 7262				Cadence IRWD Capital 7262				Cadence IRWD Capital 7262			
ITEM	CODE	DESCRIPTION	AMOUNT	QTY	UNIT	UNIT PRICE	AMOUNT	QTY	UNIT	UNIT PRICE	AMOUNT	QTY	UNIT	UNIT PRICE	AMOUNT	QTY	UNIT	UNIT PRICE	AMOUNT
131-01 DW DOMESTIC WATER-GENERAL - IRWD CAPITAL																			
001	131-01	Mobilization (Maximum of 2% of Section A2 Amount)	\$ 2,000.00	1	LS	\$ 2,000.00	\$ 2,000.00	1	LS	\$ 250.00	\$ 250.00	1	LS	\$ 2,500.00	\$ 2,500.00	1	LS	\$ 2,000.00	\$ 2,000.00
002	131-01	Performance, Labor & Payment Bond	\$ 1,500.00	1	LS	\$ 1,500.00	\$ 1,500.00	1	LS	\$ 1,053.82	\$ 1,053.82	1	LS	\$ 1,470.00	\$ 1,470.00	1	LS	\$ 1,666.67	\$ 1,666.67
003	131-01	Erosion Control - SWPPP & BMP's	\$ 1,000.00	1	LS	\$ 1,000.00	\$ 1,000.00	1	LS	\$ 250.00	\$ 250.00	1	LS	\$ 350.00	\$ 350.00	1	LS	\$ 2,000.00	\$ 2,000.00
004	131-01	Development and Application of Construction Water	\$ 1,500.00	1	LS	\$ 1,500.00	\$ 1,500.00	1	LS	\$ 250.00	\$ 250.00	1	LS	\$ 350.00	\$ 350.00	1	LS	\$ 2,000.00	\$ 2,000.00
005	131-01	Traffic Control	\$ 1,000.00	1	LS	\$ 1,000.00	\$ 1,000.00	1	LS	\$ 166.66	\$ 166.66	1	LS	\$ 35.00	\$ 35.00	1	LS	\$ 2,000.00	\$ 2,000.00
006	131-01	Chlorinate & Pressure Test Pipeline, including Disposal of Chlorinated Water, per IRWD Standards and Specifications, Complete	\$ 5,500.00	1	LS	\$ 5,500.00	\$ 5,500.00	1	LS	\$ 2,908.33	\$ 2,908.33	1	LS	\$ 4,410.00	\$ 4,410.00	1	LS	\$ 11,666.67	\$ 11,666.67
A1.1		SUB-TOTAL, SUBSECTION A1.1 - 131-01:	\$ 12,500.00								\$ 4,878.81			\$ 9,115.00				\$ 21,333.33	
131-02 DW SITE PREPARATION - IRWD CAPITAL																			
007	131-02	Clearing and Grubbing (All Vegetation Within the Project Site)	\$ 1,000.00	1	LS	\$ 1,000.00	\$ 1,000.00	1	LS	\$ 166.66	\$ 166.66	1	LS	\$ 525.00	\$ 525.00	1	LS	\$ 1,666.67	\$ 1,666.67
A1.2		SUB-TOTAL, SUBSECTION A1.2 - 131-02:	\$ 1,000.00								\$ 166.66			\$ 525.00				\$ 1,666.67	
131-05 DW MAINLINE PIPE - IRWD CAPITAL																			
008	131-05	Furnish and Install 12" PVC Pipe, C-900, DR 14, w/ Trenching, Bedding & Backfill per IRWD Std. W-17 including all fittings, appurtenances and thrust blocks per IRWD Std. W-16 and W-19 and as shown on the plans, Complete	\$ 76,700.00	1,180	LF	\$ 65.00	\$ 76,700.00	1,180	LF	\$ 45.00	\$ 53,100.00	1,180	LF	\$ 73.00	\$ 86,140.00	1,180	LF	\$ 94.00	\$ 110,920.00
009	131-05	Remove Temporary Flush-out Assembly and join existing PVC Waterline, Complete	\$ -	0	EA	\$ 2,500.00	\$ -	0	EA	\$ 1,845.00	\$ -	0	EA	\$ 4,100.00	\$ -	0	EA	\$ 1,200.00	\$ -
A1.3		SUB-TOTAL, SUBSECTION A1.3 - 131-05:	\$ 76,700.00								\$ 53,100.00			\$ 86,140.00				\$ 110,920.00	
131-15 DW GATE/BFV VALVES - IRWD CAPITAL																			
010	131-15	Furnish and Install 12" Butterfly Valve, Cl. 150B, Flg'd, w/ Thrust Block per IRWD Std. DWG. W-16, including Initial Can Raise, Valve Box per IRWD Std. W-22, Complete	\$ 27,500.00	5	EA	\$ 5,500.00	\$ 27,500.00	5	EA	\$ 3,540.00	\$ 17,700.00	5	EA	\$ 5,300.00	\$ 26,500.00	5	EA	\$ 5,000.00	\$ 25,000.00
A1.4		SUB-TOTAL, SUBSECTION A1.4 - 131-15:	\$ 27,500.00								\$ 17,700.00			\$ 26,500.00				\$ 25,000.00	
131-20 DW BLOW OFF ASSEMBLIES - IRWD CAPITAL																			
011	131-20	Furnish and Install 2" Air Vac Assembly, Case 3 per IRWD Std. W-11, including 1 Raise, Complete	\$ -	0	EA	\$ 6,500.00	\$ -	0	EA	\$ 4,650.00	\$ -	0	EA	\$ 7,900.00	\$ -	0	EA	\$ 10,000.00	\$ -

PROJECT: D5 JOINT BACKBONE - SD, SW, DW & RW IMPROVEMENTS

OWNER: Heritage Fields El Toro, LLC

BID SPREAD CODE 7262

ENGINEER'S ESTIMATE
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

FYDAQ - LOW BID
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

LEATHERWOOD
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

KEC
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

012	131-20	Furnish and Install Temporary Flush-Out Assembly per IRWD Std. W-12, including 1 Raise, Complete	2	EA	\$ 2,000.00	\$ 4,000.00
A1.5 SUB-TOTAL, SUBSECTION A1.5 - 131-20:			\$ 4,000.00			
131-95 DW SYSTEM ACCEPTANCE - IRWD CAPITAL						
013	131-95	Raise Valve Can to Final Grade After Improvements are Complete or Requested by Developer including Extra Move, Complete	4	EA	\$ 575.00	\$ 2,300.00
A1.6 SUB-TOTAL, SUBSECTION A1.6 - 131-95:			\$ 2,300.00			
TOTAL - DW - IRWD CAPITAL:			\$ 124,000.00			

2	EA	\$ 1,405.00	\$ 2,810.00
A1.5 SUB-TOTAL, SUBSECTION A1.5 - 131-20:		\$ 2,810.00	
131-95 DW SYSTEM ACCEPTANCE - IRWD CAPITAL			
4	EA	\$ 375.00	\$ 1,500.00
A1.6 SUB-TOTAL, SUBSECTION A1.6 - 131-95:		\$ 1,500.00	
TOTAL - DW - IRWD CAPITAL:		\$ 80,155.47	

2	EA	\$ 1,950.00	\$ 3,900.00
A1.5 SUB-TOTAL, SUBSECTION A1.5 - 131-20:		\$ 3,900.00	
131-95 DW SYSTEM ACCEPTANCE - IRWD CAPITAL			
4	EA	\$ 400.00	\$ 1,600.00
A1.6 SUB-TOTAL, SUBSECTION A1.6 - 131-95:		\$ 1,600.00	
TOTAL - DW - IRWD CAPITAL:		\$ 127,780.00	

2	EA	\$ 3,500.00	\$ 7,000.00
A1.5 SUB-TOTAL, SUBSECTION A1.5 - 131-20:		\$ 7,000.00	
131-95 DW SYSTEM ACCEPTANCE - IRWD CAPITAL			
4	EA	\$ 1,500.00	\$ 6,000.00
A1.6 SUB-TOTAL, SUBSECTION A1.6 - 131-95:		\$ 6,000.00	
TOTAL - DW - IRWD CAPITAL:		\$ 171,920.00	

ITEM	CODE	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT
132-01 RW RECYCLED WATER-GENERAL - IRWD CAPITAL						
014	132-01	Mobilization (Maximum of 2% of Section A2 Amount)	1	LS	\$ 2,000.00	\$ 2,000.00
015	132-01	Performance, Labor & Payment Bond	1	LS	\$ 1,500.00	\$ 1,500.00
016	132-01	Erosion Control - SWPPP & BMP's	1	LS	\$ 1,000.00	\$ 1,000.00
017	132-01	Development and Application of Construction Water	1	LS	\$ 1,500.00	\$ 1,500.00
018	132-01	Traffic Control	1	LS	\$ 1,000.00	\$ 1,000.00
019	132-01	Pressure Test Pipeline per IRWD Standards and Specifications, Complete	1	LS	\$ 5,500.00	\$ 5,500.00
A2.1 SUB-TOTAL, SUBSECTION A2.1 - 132-01:			\$ 12,500.00			
132-02 RW SITE PREPARATION - IRWD CAPITAL						
020	132-02	Clearing and Grubbing (All Vegetation Within the Project Site)	1	LS	\$ 1,000.00	\$ 1,000.00
A2.2 SUB-TOTAL, SUBSECTION A2.2 - 132-02:			\$ 1,000.00			
132-05 RW MAINLINE PIPE - IRWD CAPITAL						
021	132-05	Furnish and Install 12" PVC Purple Pipe, C900, DR 14, w/ Trenching, Bedding & Backfill per IRWD Std. W-17 including all fittings, appurtenances and thrust blocks per IRWD Std. W-16 and W-19 and as shown on the plans, Complete	975	LF	\$ 65.00	\$ 63,375.00
022	132-05	Furnish and Install 10" PVC Purple Pipe, C900, DR 14, w/ Trenching, Bedding & Backfill per IRWD Std. W-17 including all fittings, appurtenances and thrust blocks per IRWD Std. W-16 and W-19 and as shown on the plans, Complete	1,210	LF	\$ 60.00	\$ 72,600.00
A2.3 SUB-TOTAL, SUBSECTION A2.3 - 132-05:			\$ 135,975.00			

QTY	UNIT	UNIT PRICE	AMOUNT
132-01 RW RECYCLED WATER-GENERAL - IRWD CAPITAL			
1	LS	\$ 250.00	\$ 250.00
1	LS	\$ 1,726.59	\$ 1,726.59
1	LS	\$ 250.00	\$ 250.00
1	LS	\$ 250.00	\$ 250.00
1	LS	\$ 166.66	\$ 166.66
1	LS	\$ 3,275.00	\$ 3,275.00
A2.1 SUB-TOTAL, SUBSECTION A2.1 - 132-01:		\$ 5,918.25	
132-02 RW SITE PREPARATION - IRWD CAPITAL			
1	LS	\$ 166.66	\$ 166.66
A2.2 SUB-TOTAL, SUBSECTION A2.2 - 132-02:		\$ 166.66	
132-05 RW MAINLINE PIPE - IRWD CAPITAL			
975	LF	\$ 49.00	\$ 47,775.00
1,210	LF	\$ 43.00	\$ 52,030.00
A2.3 SUB-TOTAL, SUBSECTION A2.3 - 132-05:		\$ 99,805.00	

QTY	UNIT	UNIT PRICE	AMOUNT
132-01 RW RECYCLED WATER-GENERAL - IRWD CAPITAL			
1	LS	\$ 4,750.00	\$ 4,750.00
1	LS	\$ 2,600.00	\$ 2,600.00
1	LS	\$ 420.00	\$ 420.00
1	LS	\$ 420.00	\$ 420.00
1	LS	\$ 42.00	\$ 42.00
1	LS	\$ 4,750.00	\$ 4,750.00
A2.1 SUB-TOTAL, SUBSECTION A2.1 - 132-01:		\$ 12,982.00	
132-02 RW SITE PREPARATION - IRWD CAPITAL			
1	LS	\$ 630.00	\$ 630.00
A2.2 SUB-TOTAL, SUBSECTION A2.2 - 132-02:		\$ 630.00	
132-05 RW MAINLINE PIPE - IRWD CAPITAL			
975	LF	\$ 74.00	\$ 72,150.00
1,210	LF	\$ 62.00	\$ 75,020.00
A2.3 SUB-TOTAL, SUBSECTION A2.3 - 132-05:		\$ 147,170.00	

QTY	UNIT	UNIT PRICE	AMOUNT
132-01 RW RECYCLED WATER-GENERAL - IRWD CAPITAL			
1	LS	\$ 2,000.00	\$ 2,000.00
1	LS	\$ 2,000.00	\$ 2,000.00
1	LS	\$ 2,000.00	\$ 2,000.00
1	LS	\$ 2,000.00	\$ 2,000.00
1	LS	\$ 2,000.00	\$ 2,000.00
1	LS	\$ 13,333.33	\$ 13,333.33
A2.1 SUB-TOTAL, SUBSECTION A2.1 - 132-01:		\$ 23,333.33	
132-02 RW SITE PREPARATION - IRWD CAPITAL			
1	LS	\$ 1,666.67	\$ 1,666.67
A2.2 SUB-TOTAL, SUBSECTION A2.2 - 132-02:		\$ 1,666.67	
132-05 RW MAINLINE PIPE - IRWD CAPITAL			
975	LF	\$ 72.00	\$ 70,200.00
1,210	LF	\$ 59.00	\$ 71,390.00
A2.3 SUB-TOTAL, SUBSECTION A2.3 - 132-05:		\$ 141,590.00	

PROJECT: D5 JOINT BACKBONE - SD, SW, DW & RW IMPROVEMENTS

OWNER: Heritage Fields El Toro, LLC

BID SPREAD CODE 7262

ENGINEER'S ESTIMATE
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

FYDAQ - LOW BID
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

LEATHERWOOD
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

KEC
CODE 7262
Cadence - Wet UG - IRWD Capital & Non-Capital and SIP (SD, SW, DW & RW) - Prevailing Wage

132-06 RW RECLAIMED WATER - IRWD CAPITAL						
023	132-06	Remove Temporary Flush-out Assembly and join existing PVC Waterline, Complete	0	EA	\$ 2,500.00	\$ -
024	132-06	Furnish and Install 2" Air Vac Assembly, Case 3 per IRWD Std. W-11, including 1 Raise, Complete	1	EA	\$ 6,500.00	\$ 6,500.00
A2.4 SUB-TOTAL, SUBSECTION A2.4 - 132-06:					\$ 6,500.00	
132-15 RW GATE/BFV VALVES - IRWD CAPITAL						
025	132-15	Furnish and Install 12" Butterfly Valve, Cl. 150B, Flg'd., w/ Thrust Block per IRWD Std. W-16, including Initial Raise, valve box per IRWD Std. W-22, Complete	5	EA	\$ 5,500.00	\$ 27,500.00
026	132-15	Furnish and Install 10" Butterfly Valve, Cl. 150B, Flg'd., w/ Thrust Block per IRWD Std. W-16, including Initial Raise, valve box per IRWD Std. W-22, Complete	6	EA	\$ 5,000.00	\$ 30,000.00
A2.5 SUB-TOTAL, SUBSECTION A2.5 - 132-15:					\$ 57,500.00	
132-20 RW BLOW OFF ASSEMBLIES - IRWD CAPITAL						
027	132-20	Furnish and Install 4" Blow-off Assembly per IRWD Std. W-14, including 1 Raise, Complete	1	EA	\$ 13,575.00	\$ 13,575.00
028	132-20	Furnish and Install Temporary Flush-Out Assembly per IRWD Std. W-12, including 1 Raise, Complete	4	EA	\$ 2,000.00	\$ 8,000.00
A2.6 SUB-TOTAL, SUBSECTION A2.6 - 132-20:					\$ 21,575.00	
132-95 RW SYSTEM ACCEPTANCE - IRWD CAPITAL						
029	132-95	Raise Valve Can to Final Grade After Improvements are Complete or Requested by Developer including Extra Move, Complete	13	EA	\$ 575.00	\$ 7,475.00
A2.7 SUB-TOTAL, SUBSECTION A2.7 - 132-95:					\$ 7,475.00	
TOTAL - RW - IRWD CAPITAL:					\$ 242,525.00	
TOTAL - DW & RW IRWD CAPITAL:					\$ 366,525.00	

0	EA	\$ 1,845.00	\$ -
1	EA	\$ 4,625.00	\$ 4,625.00
		\$ 4,625.00	
5	EA	\$ 3,533.00	\$ 17,665.00
6	EA	\$ 3,310.00	\$ 19,860.00
		\$ 37,525.00	
1	EA	\$ 11,205.00	\$ 11,205.00
4	EA	\$ 1,625.00	\$ 6,500.00
		\$ 17,705.00	
13	EA	\$ 375.00	\$ 4,875.00
		\$ 4,875.00	
		\$ 170,619.91	
		\$ 250,775.38	

0	EA	\$ 4,000.00	\$ -
1	EA	\$ 7,900.00	\$ 7,900.00
		\$ 7,900.00	
5	EA	\$ 5,250.00	\$ 26,250.00
6	EA	\$ 4,200.00	\$ 25,200.00
		\$ 51,450.00	
1	EA	\$ 14,500.00	\$ 14,500.00
4	EA	\$ 1,900.00	\$ 7,600.00
		\$ 22,100.00	
13	EA	\$ 400.00	\$ 5,200.00
		\$ 5,200.00	
		\$ 247,432.00	
		\$ 375,212.00	


0	EA	\$ 1,200.00	\$ -
1	EA	\$ 10,000.00	\$ 10,000.00
		\$ 10,000.00	
5	EA	\$ 5,000.00	\$ 25,000.00
6	EA	\$ 4,800.00	\$ 28,800.00
		\$ 53,800.00	
1	EA	\$ 13,500.00	\$ 13,500.00
4	EA	\$ 3,500.00	\$ 14,000.00
		\$ 27,500.00	
13	EA	\$ 1,500.00	\$ 19,500.00
		\$ 19,500.00	
		\$ 277,390.00	
		\$ 449,310.00	

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May 16, 2023

Prepared by: J. Shih / E. Akiyoshi

Submitted by: K. Burton

Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

GEOGRAPHIC INFORMATION SYSTEM MASTER PLAN AND ENTERPRISE AGREEMENT

SUMMARY:

The IRWD Geographic Information System (GIS) Master Plan outlines a roadmap for optimizing the use of GIS as a spatial foundation for engaging other IRWD enterprise systems. GIS helps optimize district-wide management and enhances the District's business decisions. Staff will make a presentation on the GIS Master Plan and the recommended near-term implementations. Staff recommends that the Board authorize the General Manager to execute an Enterprise Agreement with Environmental Systems Research Institute (Esri) in the total amount of \$480,000 (\$160,000 per year) for a term of three years.

BACKGROUND:

In the mid-1990s, IRWD was one of Esri's early successful adopters of GIS technology. The District's GIS Team lead a grass-roots approach to establish GIS as the single source of truth (i.e., the system of record) for spatial data associated with pipelines and vertical facilities. The initial efforts consisted of converting mylar record drawings into spatial data sets, otherwise known as "GIS Layers," stored in geographically based databases. Initially, GIS was primarily a map-making electronic data storage system.

Shortly after the initial conversion of the mylars and limited AutoCAD files into the Esri GIS system, IRWD partnered with Esri and a local consultant, Spatial Wave, to develop innovative (for the early 2000s) mobile solutions. These mobile solutions improved IRWD's operations and business processes, such as the Underground Service Alert ticketing system. Operational linear asset management also adopted these mobile solutions in the mid-2000s including valve exercising, blow-off maintenance, hydrant flushing, leak tracking, and leak detection. By the late 2010s, GIS solutions expanded beyond Engineering and Operations departments into the Water Use Efficiency and Customer Service departments.

IRWD's GIS has grown from a grass-roots data-storage and map-making tool to the utility-wide spatial foundation that ties together many IRWD Enterprise Systems (e.g., Oracle CC&B, Maximo, and Field Mapplet) and many Decision Support / Data Analytic Tools (e.g., Everbridge, Hydraulic Modeling, Power BI, and CIP Asset Management). GIS is a critical component in establishing a unified operating picture of IRWD's facilities, operational and financial information, and staff resources.

The GIS Master Plan identifies areas where the unified operating picture can be optimized allowing better integration with Supervisory Control and Data Acquisition (SCADA), the Laboratory Information Management System, and Maximo. There are other opportunities in centralized data management and decision support tools as well.

Staff's presentation (attached Exhibit "A") will cover the following topics and make recommendations in the following areas:

- GIS Software and Data Modernization
- Data Management, Maintenance, and Ownership
- Staffing and Interdepartmental Coordination
- Optimizing GIS for IRWD's Growing Spatial Needs

The Enterprise Agreement with Esri is provided as Exhibit "B".

FISCAL IMPACTS:

Funds for the Esri Enterprise Agreement and the other recommended near-term implementations are included in the FY 2023-24 Operating Budget.

ENVIRONMENTAL COMPLIANCE:

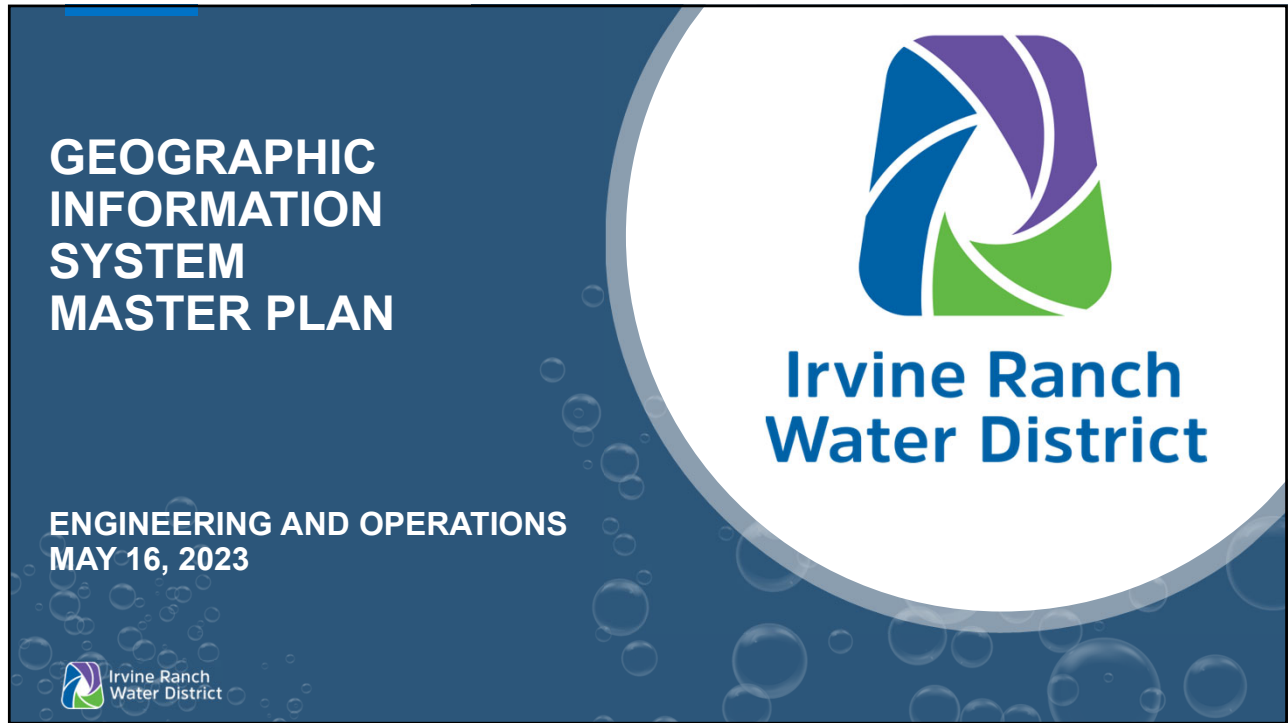
This project is exempt from the California Environmental Quality Act as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262 which provides exemption for planning studies.

RECOMMENDATION:

That the Board authorize the General Manager to execute an Enterprise Agreement with Environmental Systems Research, Institute in the total amount of \$480,000 for a term of three years.


LIST OF EXHIBITS:

Exhibit "A" – GIS Master Plan Presentation
Exhibit "B" – Esri Enterprise Agreement




**GEOGRAPHIC
INFORMATION
SYSTEM
MASTER PLAN**

**ENGINEERING AND OPERATIONS
MAY 16, 2023**

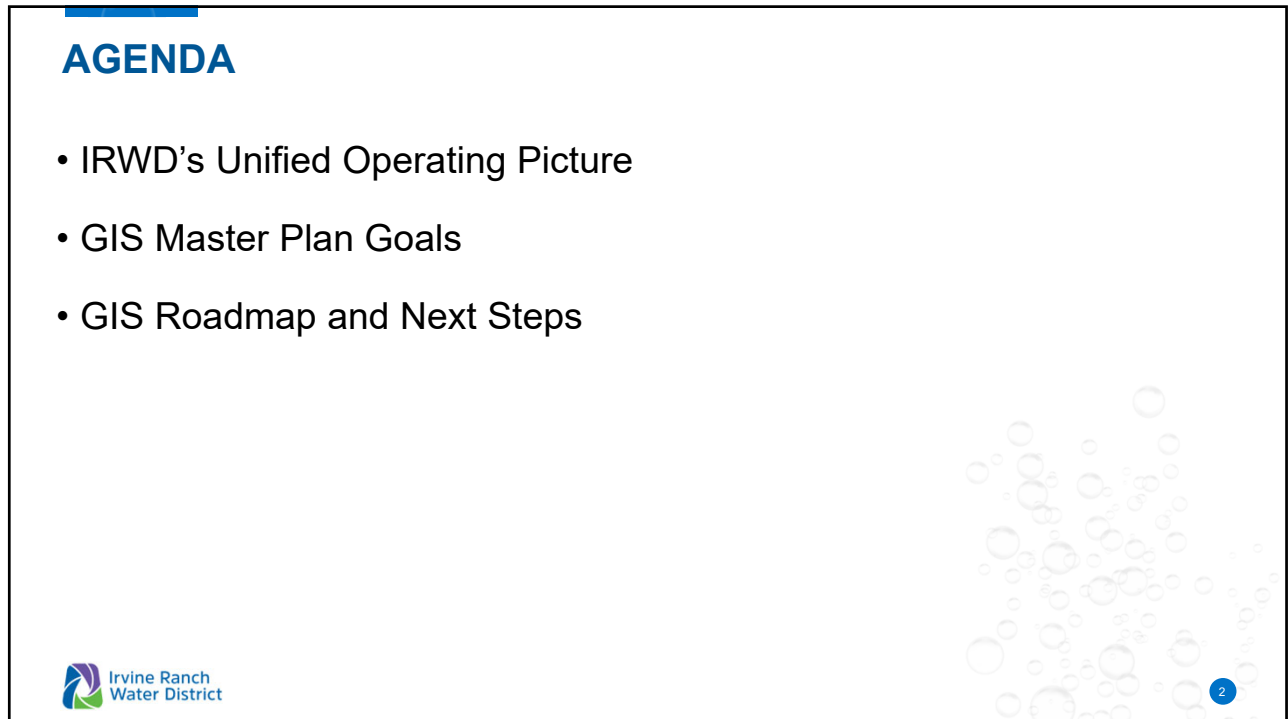


**Irvine Ranch
Water District**




Irvine Ranch
Water District

1




AGENDA

- IRWD's Unified Operating Picture
- GIS Master Plan Goals
- GIS Roadmap and Next Steps

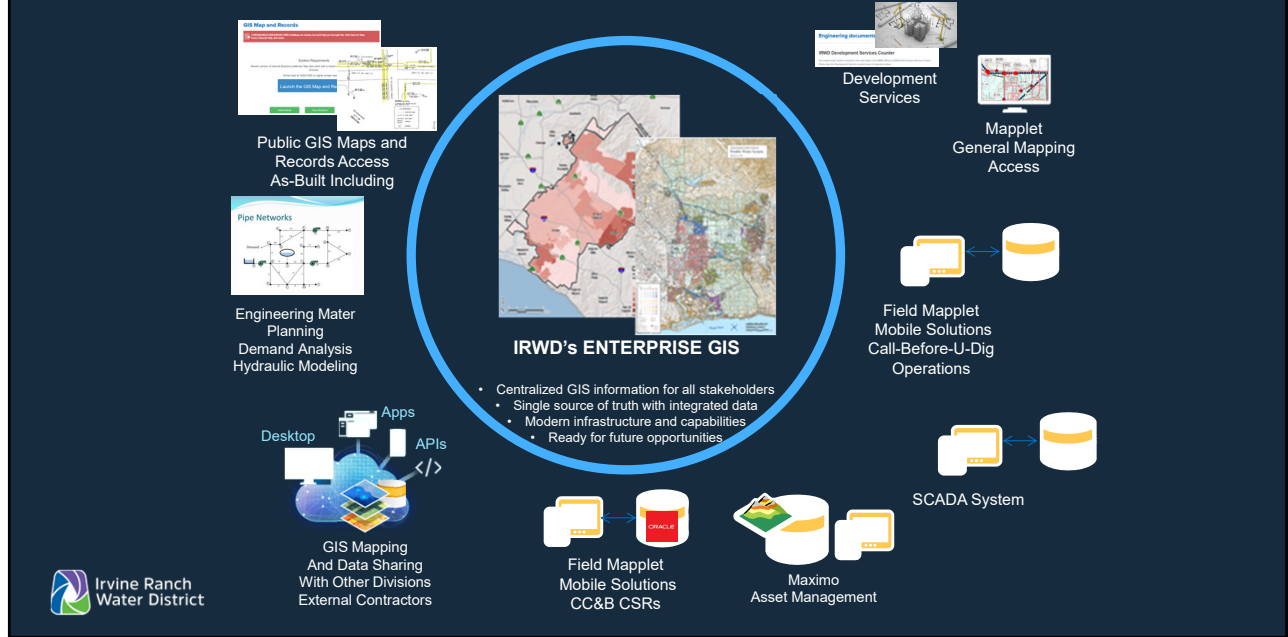


Irvine Ranch
Water District

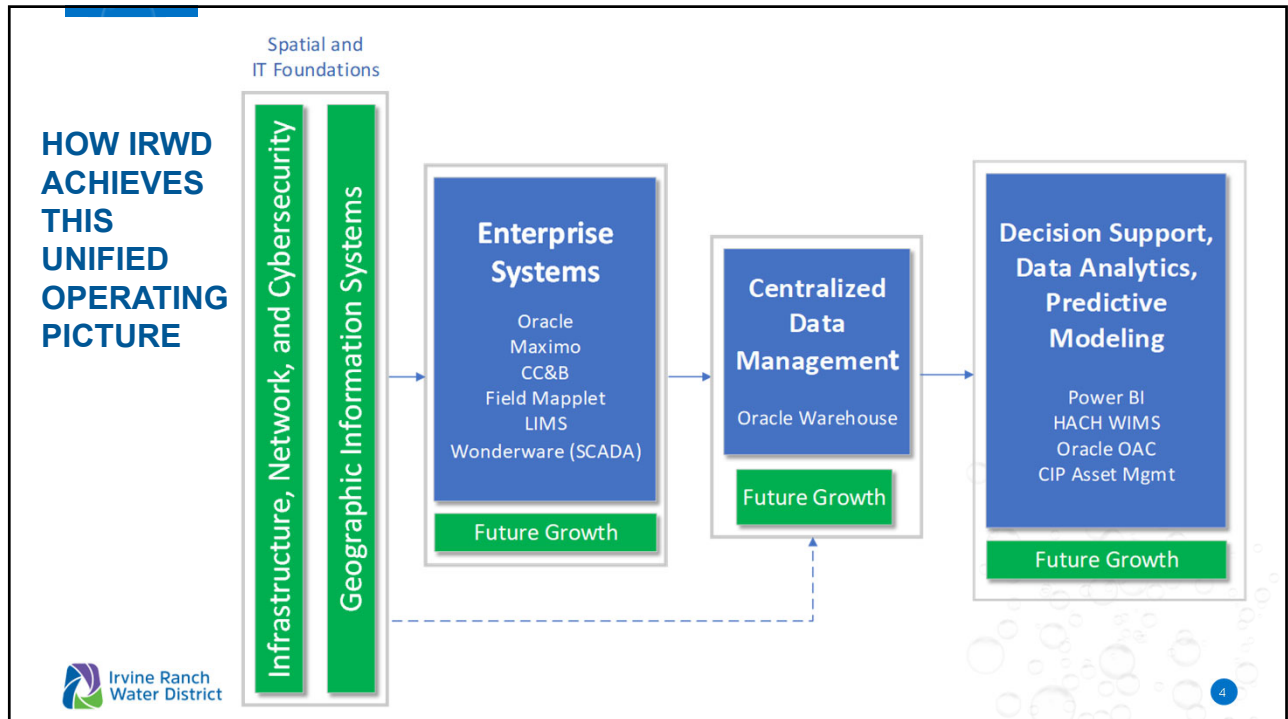


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What is a Unified Operating Picture?



3



4

GIS At IRWD Today

Spatial Analysis

- Conservation
- NTS
- Water Banking
- Finance



GIS Enabled Field Solutions (100+ Users)

- CC&B
- Water Loss Prevention
- USA
- Collections
- Construction Services
- Engineering
- Water Use Efficiency
- Redline corrections



GIS Enabled Office/Web Solution

- Conservation
- Asset Management
- Development Services
- Customer Services
- Recycled
- Engineering – Meter Data
- Public



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GIS MASTER PLAN GOALS

- Achieve a Unified Operating Picture
- Identify actionable items to help improve IRWD's spatial foundation
- Modernize GIS Licensing, software, and IT infrastructure
- Identify a roadmap to better integrate spatial technology
- Recommend near term implementation plan
- Be ready for the future



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PIONEERING SUCCESS

Infrastructure

- Modernize GIS software

Data

- Document
- Ownership
- Consumers
- Maintenance

Staffing and Roles

- Clarify
- Align
- Collaborate

Applications

- Integrate
- Expand
- Improve
- Train



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Infrastructure

- Modernize GIS software

Data

- Document
- Ownership
- Roles

Staffing and Roles

- Clarify
- Align
- Collaborate

Applications

- Integrate
- Expand
- Improve
- Train

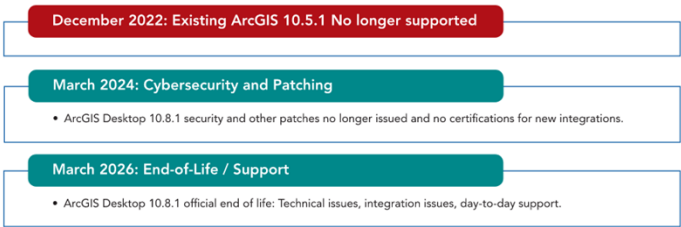


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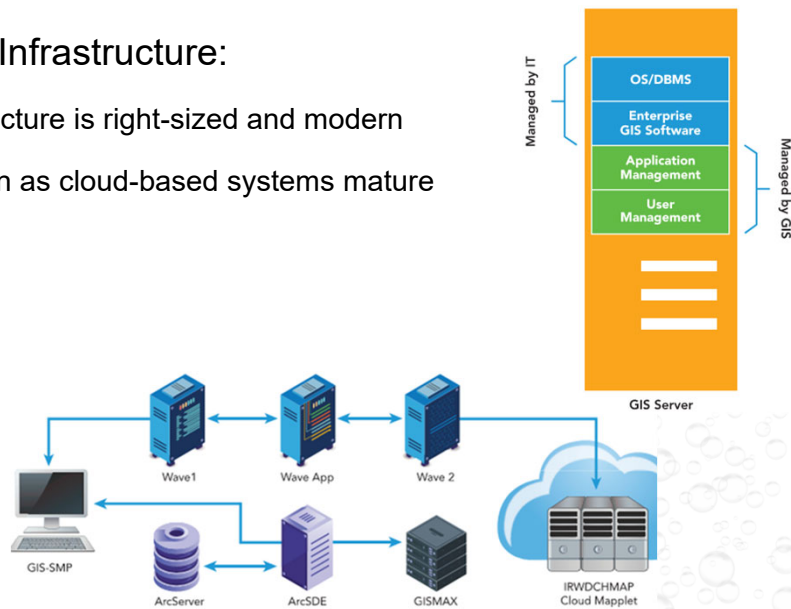
GIS SOFTWARE AND DATA MODEL MODERNIZATION

- Modernize existing GIS software (User interface and back-end support)
- Execute Enterprise License Agreement
- ESRI's new data model
 - Major conversion that supports digital twin technologies, vertical assets, and cloud-based data consumption
 - Think Oracle reimplementation scale!



IT INFRASTRUCTURE SUPPORTING GIS

- Existing and Future Infrastructure:
 - On-Premises Infrastructure is right-sized and modern
 - Develop transition plan as cloud-based systems mature





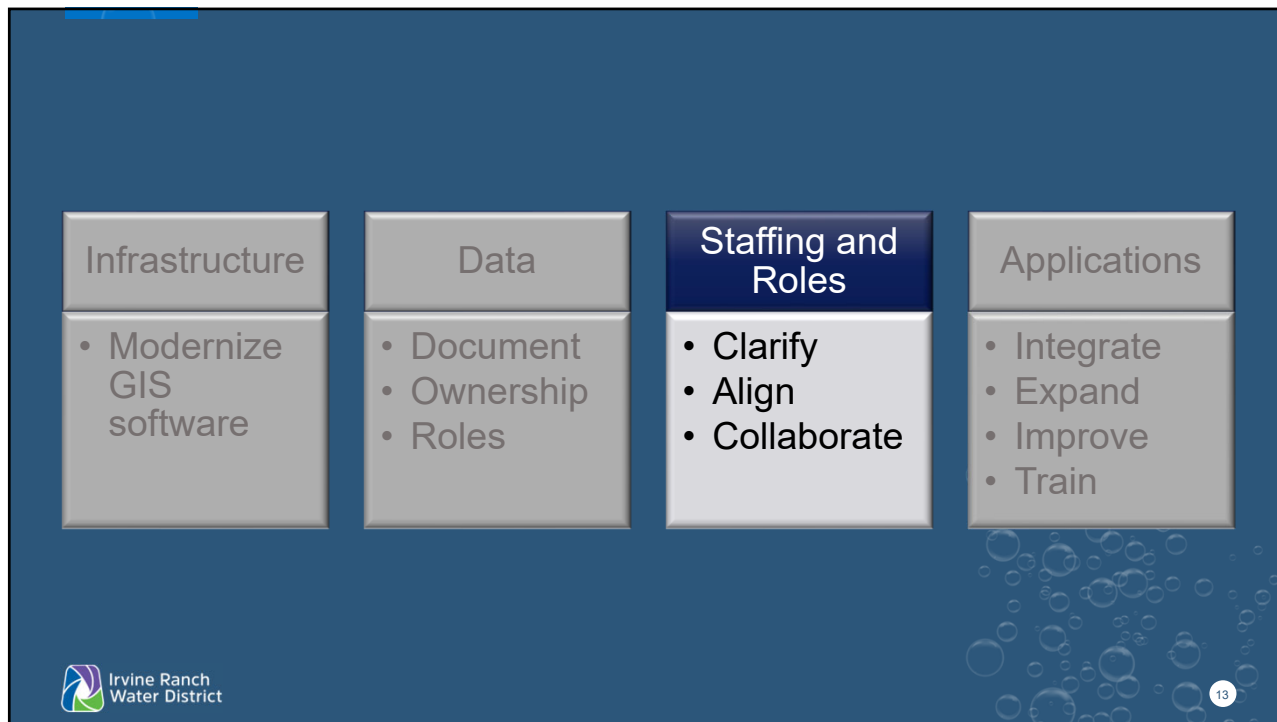
11

DATA MAINTENANCE, OWNERSHIP, AND USE

- Key finding: IRWD interacts with over 900 Spatial Data Sets
- Key Recommendations:
 - Clarify roles: Data ownership, super users, and maintainers
 - Optimize data maintenance: Optimize strategy for archiving, frequency of maintenance, update documentation, and storage

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STAFFING AND ROLES: COORDINATION

- Integrate with IRWD’s Data and Technology (D&T) Working Group
- GIS staff is currently optimized
 - Update training: Provide additional training for new tools and data model
- Coordination with IS staff
 - Collaboration: In all spaces (Enterprise Software, Operating Systems, User Support, application management, and other) collaborate proactively
 - Train and Transition: In all areas, train and transition roles as appropriate.

Managed by IT

Managed by GIS

GIS Server

GIS-SMP, Wave1, Wave App, Wave 2, ArcServer, ArcSDE, GISMAX, IRWDCHMAP Cloud Maplet

Irvine Ranch Water District 14

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VENDOR ALIGNMENT WITH ESRI GIS ECOSYSTEM

- **Current major software vendors**
 - Microsoft Enterprise Licensing
 - Oracle EBS / CC&B
 - Maximo / EZ Max Mobile
 - Wonderware (SCADA)
 - Other Spatial Applications
- **Recommendation**
 - Ensure that spatial applications are compliant and with ESRI platform in similar approach as Microsoft, Oracle, and other enterprise systems
 - Accomplish this by looking for ESRI certified packages (e.g. Innovyze hydraulic modeling, Spatial Wave Field Mapplet, and Mapplet systems)

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IRWD'S GROWING SPATIAL NEEDS

- Improve Existing Applications
 - Build better Decision Support and Data Analytics: Reporting, access, and analytics
 - Improve ease of use
 - Enhance Centralized Data Management
- Implement New Applications
 - Safety and Emergency Preparedness
 - WQ and Regulatory Compliance
 - Data driven sustainability
 - Operations and Capital Planning
- Provide Refreshers and New Training

Focus Groups
Communications
Human Resources
Safety and Security
Finance and Administration
Information Services
Customer Service
Engineering
Water Policy / Resources
Maintenance Ops
Recycling Ops / NTS / Collections
Water Ops
WQ and Reg Compliance



IRWD'S GROWING SPATIAL NEEDS

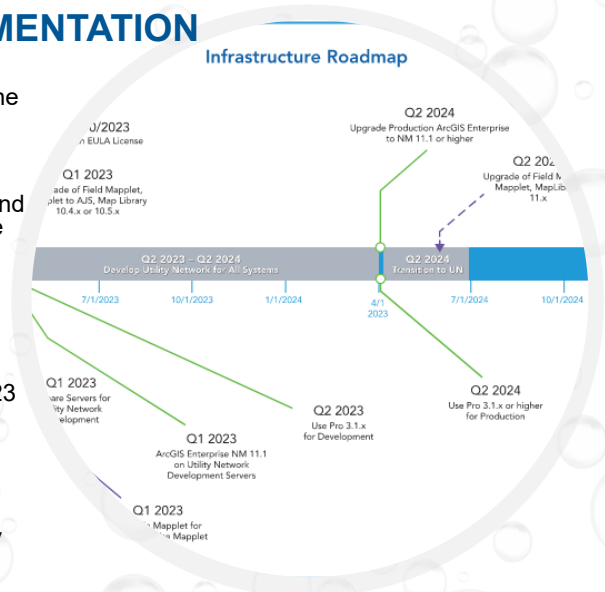
- Expand Safety and Emergency Preparedness
 - Customer Notification System
 - Dam Inspection
- Ensure WQ and Regulatory Compliance
 - Lead and Copper Rule, Regulatory Compliance / Sampling
- Encourage data driven sustainability
 - Real-Property tools
- Optimize Operations and Capital Planning
 - Integrate with SCADA and Operational Data
 - Capital Asset Management

Focus Groups
Communications
Human Resources
Safety and Security
Finance and Administration
Information Services
Customer Service
Engineering
Water Policy / Resources
Maintenance Ops
Recycling Ops / NTS / Collections
Water Ops
WQ and Reg Compliance



ROADMAP – NEAR TERM IMPLEMENTATION

- Upgrade existing GIS Software and Data Model: June 2023 to Dec 2024
- Update existing District-wide mobile solution for Customer Service, Water Use Efficiency, Underground Service Alert, and IRWD Mobile Facility and Pipeline Viewing tools (Field Mapplet 9 to 10): May 2023 to Oct 2023
- Execute Enterprise License Agreement: May 2023
- Initiate GIS data management optimization: Aug 2023
- Prioritize new application opportunities and optimize reporting for existing users
- Integrate GIS Master Plan into Data and Technology Working Group





Enterprise Agreement

Enterprise Agreement No. 00315535.0

This Enterprise Agreement, including the documents listed below ("EA"), is between **Irvine Ranch Water District ("Customer")**, with its principal place of business at 15600 Sand Canyon Ave, Irvine, CA. 92618, and **Environmental Systems Research Institute, Inc. ("Esri")**, with an Effective Date as of the later date of the signatures below when signed by both. This EA provides for the licensing and Deployment of certain EA Products, delivery of EA Maintenance, and provision of Esri User Conference registrations and any additional services as specified herein.

This EA includes the following documents, which are incorporated herein by reference:

1. Enterprise Agreement signature page(s)
2. Enterprise License Terms and Conditions, including
 - Appendix A—Products and Deployment Schedule
 - Appendix B—EA Fee Schedule
 - Appendix C—EA Points of Contact
3. Master Agreement

The parties acknowledge that they have read and understand this EA and agree to be bound by the terms and conditions contained herein.

This EA constitutes the sole and entire agreement of the parties as to the subject matter set forth herein and supersedes any previous agreements, proposals, presentations, understandings, and arrangements between the parties relating to such subject matter. Any modifications or amendments to this EA must be in writing and signed by an authorized representative of each party.

ACCEPTED AND AGREED:

IRVINE RANCH WATER DISTRICT
(Customer)

ENVIRONMENTAL SYSTEMS
RESEARCH INSTITUTE, INC.
(Esri)

By: _____
Authorized Signature

By: _____
Authorized Signature

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

ENTERPRISE AGREEMENT TERMS AND CONDITIONS

ARTICLE 1—DEFINITIONS

All definitions in other parts of the EA will have the same meaning in this Enterprise Agreement Terms and Conditions. In addition, the following definitions apply to the EA:

- "Case(s)" means a failure of Products to operate according to the Documentation where such failure substantially impacts operational or functional performance.
- "Customer(s)" means Irvine Ranch Water District. For avoidance of doubt, the definition of "Customer(s)" will not include consultants or contractors. Customer(s) must not include persons or entities ineligible to receive or have access to Esri products or services by operation of law, including US export control laws, decrees, orders, rules, regulations, policies, riders, conditions, or provisos.
- "Deploy," "Deployment," or "Deployed" means to redistribute, or the redistribution of, the EA Products (and their related keycodes/registration files), or their having been redistributed, by Customer during the term of this EA for installation and use by Customer.
- "EA Fee" means the fee set forth in Appendix B—EA Fee Schedule.
- "EA Maintenance" means Tier 2 Support, updates, and patches provided by Esri for EA Products and Rolled-In Software.
- "EA Products" means the Products identified in Tables A-1 and A-2 of Appendix A—Products and Deployment Schedule. EA Products do not include Unit-Priced Item(s) or Esri technology that may be embedded in third-party products purchased by Customer.
- "Effective Date" means the date the EA commences and the start date for all licenses, regardless of when an Ordering Document is provided by Customer.
- "Master Agreement" means the applicable master agreement incorporated by this reference that is either (i) the Click-Through Master Agreement, Products Only (E204CW) found at <https://www.esri.com/en-us/legal/terms/full-master-agreement> and available in the installation process requiring acceptance by electronic acknowledgment.
- "Rolled-In Software" means Products (excluding Term licenses or subscriptions) of the same type as EA Products that Customer acquired for use prior to the Effective Date, that are current on paid maintenance (as shown in Esri's customer service records), and that receive EA Maintenance during the term of the EA. If this EA is extended or renewed, Rolled-In Software shall include EA Products Deployed prior to the then-current renewal period.
- "Technical Support" means a process to attempt to resolve reported Case(s) through error correction, patches, hot fixes, and workarounds; replacement deliveries; or any other type of Product corrections or modifications specified in the most current applicable Esri Maintenance and Support Program.
- "Tier 1 Help Desk" means Customer's point of contact from which all Tier 1 Support will be given to Customer.
- "Tier 1 Support" means the Technical Support provided by the Tier 1 Help Desk as the primary contact to Customer in the attempted resolution of reported Case(s).
- "Tier 2 Support" means the Technical Support provided by Esri to the Tier 1 Help Desk when a Case cannot be resolved through Tier 1 Support.
- "Unit-Priced Item(s)" means separately orderable Products or maintenance that is available subject to a per-unit license fee, subscription fee, or maintenance fee.

ARTICLE 2—GRANT OF LICENSE

2.1 Grant of License. During the term of this EA, Customer's use of the EA Products is subject to the Master Agreement and any additional terms set forth in this EA. Unit-Priced Items, if acquired, and Rolled-In Software will be licensed in accordance with the Master Agreement.

2.2 Beta License. Beta licenses are not available under this EA as EA Products.

ARTICLE 3—SCOPE OF USE

During the term of this EA, the following terms supplement the Master Agreement for Customer's use of EA Products.

3.1 Additional Permitted Uses. For the term of the EA, Customer may copy and Deploy the EA Products to Customers up to the quantities of licenses granted in Appendix A. No other Customer has a right to copy (except as permitted in the Master Agreement) or Deploy the EA Products. Customer may transfer, redistribute, or Deploy the EA Products within the continental United States; Hawaii; Alaska; and US territories, excluding Puerto Rico and the US Virgin Islands.

3.2 Uses Not Permitted

- a. Customer shall not use the EA Products outside the United States or its territories or possessions without the prior written permission of Esri and agreement on additional fees, if any. Any such export will be subject to US Export Control Regulation requirements of the Master Agreement.
- b. Customer shall not transfer, redistribute, or assign EA Products to any third party without the prior written permission of Esri.

3.3 Consultant Access. Customer's consultants or contractors may use EA Products in accordance with the Master Agreement. Customer may not permit its consultants or contractors to install EA Products on consultant, contractor, or third-party computers or remove EA Products from Customer locations except for the purposes of hosting the EA Products on contractor servers for the benefit of Customer.

ARTICLE 4—MAINTENANCE

4.1 EA Maintenance. EA Maintenance is included in the EA Fee. Rolled-In Software and EA Products will receive EA Maintenance, provided that standard maintenance is available for each item. EA Maintenance includes benefits specified in the most current applicable Esri Maintenance and Support Program document (found at <https://www.esri.com/en-us/legal/terms/maintenance>) as modified by this Section 4.1.

a. Tier 1 Support Provided by Customer

- (1) The Tier 1 Help Desk will provide Tier 1 Support to all Customers.
- (2) The Tier 1 Help Desk will use analysts fully trained in the Products they are supporting.
- (3) At a minimum, Tier 1 Support will include those activities that assist the user in resolving how-to and operational questions as well as questions on installation and troubleshooting procedures.
- (4) Tier 1 Support analysts will be the initial points of contact for all questions and Case(s). Tier 1 Support analysts shall obtain a full description of each reported Case and the system configuration from Customer. This may include obtaining any customizations, code samples, or data involved in the Case. The analyst may also use any other information and databases that may be developed to satisfactorily resolve Case(s).
- (5) If the Tier 1 Help Desk cannot resolve a Case, an authorized Tier 1 Help Desk individual may contact Esri for Tier 2 Support. The Tier 1 Help Desk shall provide support in such a way as to minimize repeat calls and make solutions available to Customer.
- (6) Customer may assign named Tier 1 Help Desk individuals up to the quantity listed in Appendix B. These individuals will be identified through the My Esri portal and will be the only individuals (callers) authorized to contact Esri directly for Tier 2 Support.

b. Tier 2 Support Provided by Esri

- (1) Esri shall log the calls received from Tier 1 Help Desk individuals.
- (2) Esri shall review all information collected by and received from Tier 1 Help Desk individuals including preliminary documented troubleshooting provided by the Tier 1 Help Desk when Tier 2 Support is required.
- (3) Esri may request that Tier 1 Help Desk individuals provide verification of information, additional information, or answers to additional questions to supplement any preliminary information gathering or troubleshooting performed by Tier 1 Help Desk.
- (4) Esri shall attempt to resolve Case(s) submitted by Tier 1 Help Desk by assisting the Tier 1 Help Desk individuals and not Customer.

- (5) When a Case is resolved, Esri shall communicate the information to the Tier 1 Help Desk individuals, and the Tier 1 Help Desk shall disseminate the resolution to Customer.
- (6) Esri may, at its sole discretion, make patches, hot fixes, or updates available for downloading from Esri's website or, if requested, deliver them on media.

4.2 Maintenance for Unit-Priced Items. Annual maintenance fees for Unit-Priced Items are not included in the EA Fee, and if ordered, additional fees will apply.

ARTICLE 5—ORDERING, ADMINISTRATIVE PROCEDURES, DELIVERY, AND DEPLOYMENT REPORT

5.1 Purchase Orders, Invoicing, Delivery, and Deployment

- a. Esri does not require Customer to issue purchase orders and will invoice Customer for the initial payment upon the Effective Date of the EA. Subsequently, Esri may submit invoices up to thirty (30) days before (i) the payment date shown in Appendix B or, (ii) if no payment dates are shown, the anniversary dates of the EA. Customer may submit purchase orders in accordance with its own process requirements. If Customer issues purchase orders, then Customer will submit its initial purchase order upon execution of this EA and any subsequent purchase order at least thirty (30) days before the anniversary date. Invoices will be due and payable within thirty (30) days of invoice.
- b. Any purchase orders that Customer issues will reference, incorporate, and be subject to the terms and conditions of this EA. Additional or conflicting terms in any purchase orders, invoices, or other documents exchanged during the ordering process, other than the terms of this EA, Product or Service descriptions, quantities, pricing, and delivery instructions, are void and of no effect. Customer will process all orders and deliveries pertaining to this EA through Customer's centralized point of contact.
- c. Customer will include the following information in each purchase order:
 - (1) Esri customer number, the ship-to address, and bill-to address as identified in Appendix C.
 - (2) Purchase order number.
 - (3) Applicable annual payment due and name of Customer. For Unit-Priced Items, the name of the product and quantity.
 - (4) On the face of the purchase order, the following printed statement: "Governed by and subject to Enterprise Agreement No. 00315535.0."
- d. Esri will provide Authorization Codes to activate the nondestructive copy protection program that enables Customer to download, operate, or allow access to the EA Products listed in Appendix A.
- e. Delivery of updates/new versions of EA Products will be made in the same manner. If requested by Customer, Esri will deliver a limited number of sets of backup media as provided in Appendix B to the ship-to address identified in Appendix C—EA Points of Contact, FOB destination with shipping charges prepaid. Customer may purchase additional backup media sets at the prices in effect at the time of purchase. Delivery or receipt of tangible media could cause prior and future license fees to be subject to taxes. Esri may invoice for and Customer agrees to pay any such sales or use tax associated with receipt of tangible media.
- f. Esri reserves the right to suspend Customer's access to and use of EA Products if Customer fails to pay any undisputed amount owed on or before its due date. Esri may charge Customer interest at a monthly rate equal to the lesser of one percent (1.0%) per month or the maximum rate permitted by applicable law on any overdue fees plus all expenses of collection for any overdue balance that remains unpaid ten (10) days after Esri has notified Customer of the overdue balance.
- g. Certain Esri Offerings are consumption-based and allow Customer to sign up for payment in arrears; such consumption-based Esri Offerings will be billed separately and are not included in the EA Fees.

5.2 Annual Report of Deployments. At each anniversary date and ninety (90) days prior to the expiration date of this EA, Customer shall provide Esri a written report, in the form provided by Esri, detailing all Deployments made, including preexisting and Rolled-In Software (each a "Deployment Report"). The report will be subject to audit by an authorized representative of Esri.

5.3 Esri User Conference Registration. Esri shall provide Esri User Conference registrations to Customer annually during the term of this EA in the quantities set forth in Appendix B. Customer is responsible for

distributing the registrations to Customers. Third parties may not represent or attend on behalf of Customer at any Esri User Conference.

ARTICLE 6—POINTS OF CONTACT; NOTICES

6.1 Points of Contact. In Appendix C, each party shall identify points of contact for administrative and technical issues.

6.2 Legal Notices. Except as otherwise set forth in this EA, any notice, report, demand, or other communication will be made in writing in English; sent by courier, registered or certified airmail, or facsimile or other electronic transmission; and confirmed when sent by courier or by registered or certified airmail, properly addressed to the appropriate party at the address set forth below, until changed by notice in writing by either party hereto. If sent by courier or airmail, notice will be effective upon the earlier of confirmed receipt or seven (7) days from the date of deposit with the courier service or post office. If sent by electronic transmission, notice will be effective one (1) business day from the date of transmission, provided confirmation of receipt is made. Notices will be given at the following addresses:

To: Esri
380 New York Street
Redlands, CA 92373-8100
Attn.: Director of Contracts and Legal
Fax: 909-307-3020
Email: legalnotices@esri.com

To: Customer
as listed in Appendix C

ARTICLE 7—TERM, TERMINATION, AND EXPIRATION

7.1 Term. The term of the EA will commence on the Effective Date and be for the period listed in Appendix B unless this EA is terminated earlier as provided herein.

7.2 Termination for a Material Breach; Convenience. Esri may terminate this EA for a material breach by Customer. Customer will be given a period of thirty (30) days from date of written notice to cure any material breach. Upon termination of this EA by Esri for a material breach by Customer, all licenses Deployed will also terminate, and the full amount of unpaid EA Fees will be due and payable by Customer within thirty (30) days from the date of termination. Customers shall uninstall, remove, and destroy all EA Products; training materials; and any whole or partial copies, modifications, or merged portions in any form. Customer shall deliver evidence of such destruction to Esri (e.g., certification letter). Customer may continue to use Rolled-In Software, provided Customer complies with the terms and conditions of the Master Agreement. Further, Esri agrees that Customer is not required to pay a maintenance reinstatement fee for lapsed maintenance for Rolled-In Software if Customer orders maintenance at time of EA termination. Other items that may be included in this EA—such as Advantage Program, access codes, and Esri User Conference registrations—will also terminate if this EA is terminated. This EA may not be terminated for convenience.

7.3 Reserved

7.4 License Term and Use upon Expiration of EA Term. Upon full payment of EA Fee and expiration of this EA, the Master Agreement will survive, and Customer may continue to use the Deployed EA Products included in the final Deployment Report and Rolled-In Software in accordance with the terms and conditions set forth in the Master Agreement. Customer shall notify Esri of the quantity and type of licenses for which Customer elects to purchase standard maintenance. If maintenance is not ordered for Rolled-In Software or EA Products upon expiration of the EA, it lapses. If, at a later date, Customer decides to reinstate maintenance, Customer must pay maintenance reinstatement fees from the date of EA expiration (i.e., back maintenance fees). Customer may only purchase standard maintenance or reinstate maintenance on licenses that were included in the final Deployment Report. Customer shall not Deploy additional copies of the EA Products beyond the quantities in use upon termination or as of the date of expiration.

7.5 Termination for Non-Appropriation of Funds or Lack of Funds. Customer's obligation to pay the amounts due under this EA may be contingent upon appropriation of funds for this EA ("**Lack of Funds**"). Either party may terminate this EA for Lack of Funds by providing a written termination for Lack of Funds notice no less than sixty (60) days prior to the next annual EA payment. In all such cases, the effective date of the termination will be the last day of the EA year for which Customer has paid. Under no circumstances may Customer deploy additional copies of the EA Products upon termination of the EA for Lack of Funds.

- a. Customer may retain a combination of some or all of the perpetual Deployed EA Products and all Rolled-In Software of like products identified in Appendix A, subject to the following conditions:
 - i. Customer will report the quantity and types of EA Products Deployed as of the termination date;
 - ii. Esri will calculate the aggregate value of EA Products Deployed, excluding Online Services or term based Products, at then-current list price, plus the aggregate cost of maintenance for the Deployed EA Products and Rolled-In Software (collectively, the "**Deployed EA Value**");
 - iii. Esri will deduct the value of all other deliverables, including but not limited to Online Services, term based Products training, virtual campus, workshops, and services, provided as part of this EA from the total EA Fees paid by Customer, as set forth on Appendix B, at the date of termination, ("**Remaining Value**");
 - iv. If the Deployed EA Value is less than or equal to the Remaining Value, Customer may retain all Deployed perpetual EA Products and Rolled-In Software at the maintenance version current as of the date of termination. No refund will be provided to Customer for unused fees.
 - v. If the Deployed EA Value is greater than the Remaining Value, Customer will inform Esri of the quantities of Deployed EA Products and Rolled-in Software that it will retain at the maintenance version current as of the date of termination, such that the aggregate Software and maintenance does not exceed the Remaining Value. Customer will uninstall, remove and destroy all Deployed EA Products not retained. Rolled-In Software not retained at current maintenance will revert to the version that was current as of the start date of the EA term.
- b. After termination, Customer must immediately uninstall, remove and destroy all Deployed EA Products not retained. All subscriptions, User Conference Passes, Training and other services will end at termination. Rolled-In software not retained at current maintenance will revert to the version that was current as of the start date of the EA term.
- c. Within thirty (30) days of termination of the EA for Lack of Funds, Customer will document in writing to Esri the total quantity and type of Products for which Customer desires to obtain maintenance, if any. Payment of maintenance fees will be effective from the date of the EA termination.
- d. Customer's use of any retained Products and Rolled-In Software following termination of the EA Agreement will be in accordance with the License Agreement. If at a future date Customer chooses to renew its Rolled-In Software or any other retained Products, Customer will be required to pay maintenance retroactive to the date of termination in order to receive the most current version and support.

ARTICLE 8—CONFIDENTIALITY

8.1 Esri Confidential Information. Certain terms and conditions of this EA are confidential and proprietary information of Esri. Except as provided herein, Customer shall not publish or disclose the EA (or contents) to any third party without Esri's prior written consent. Disclosure may be made only to those Customer employees, contractors, or consultants of Customer (e.g., outside counsel or accountants) who have a need to know to perform their duties or work on behalf of Customer and have an obligation of confidentiality. No other portions of the EA may be disclosed to a contractor or consultant. To the extent that any such disclosures may be required by law, Customer shall inform Esri of the requested disclosure, with a reasonable description of the requested disclosure and identification of the requester, in sufficient time for Esri to assert any objection Esri may have to such disclosure with the appropriate administrative or judicial body.

8.2 Disclosure of Fees for Unit-Priced Item(s). If Unit-Priced Items are included in this EA, Esri gives permission to Customer to maintain Unit-Priced Item prices, fees, and discounts on Customer's intranet, subject to password protection accessible to Customers, to support potential procurements. Customer shall use no less than the same degree of care to protect this information as it uses to protect its own confidential information or third-party information of similar nature. Customer must include the following notice on information concerning this EA and its pricing posted on or accessible through Customer intranet that is accessible by Customers and their employees, or on any other web pages that make reference to this EA, including order forms:

PRICING INFORMATION, INCLUDING APPLICABLE DISCOUNT RATES, CONTAINED HEREIN IS CONSIDERED CONFIDENTIAL AND PROPRIETARY. EXCEPT TO SUPPORT AUTHORIZED LICENSE ACQUISITIONS, RECIPIENT WILL NOT COPY, DISCLOSE TO ANY THIRD PARTY, OR USE ANY PRICING INFORMATION FOR ANY OTHER PURPOSE OR PROGRAM.

ARTICLE 9—RELATIONSHIP OF THE PARTIES

The EA does not constitute a partnership, joint venture, or agency between Esri and Customer. Neither Esri nor Customer will hold itself out as such, nor shall Esri or Customer be bound or become liable because of any representation, action, or omission of the other.

ARTICLE 10—FORCE MAJEURE

If the performance of any obligation under this EA is prevented, restricted, or interfered with by reason of fire, flood, earthquake, explosion, or other casualty or accident; strikes or labor disputes; inability to procure or obtain delivery of parts, supplies, or power; war; threat of or actual terrorist act, cyber attack, or other violence; any law, order, proclamation, regulation, ordinance, demand, or requirement of any government agency; or any act or condition whatsoever beyond the reasonable control of the affected party, the party so affected, upon giving prompt notice to the other party, will be provided a temporary extension for a period of time as may be reasonably necessary to allow for such delay, prevention, interference, or restriction.

ARTICLE 11—GIS STANDARD

Customer shall officially name Esri as its GIS standard and act as a reference for other Esri customers and potential customers as long as the EA remains in effect. This EA will not be construed or interpreted as an exclusive dealings agreement, and Customer reserves the right to purchase from third parties any of their requirements for GIS software or related services.

Customer agrees that Esri may publicize the existence of the EA.

ARTICLE 12—ADMINISTRATIVE REQUIREMENTS

12.1 Esri Partner Original Equipment Manufacturer (OEM) Bundled or Embedded Items/Services. Certain Esri partners are authorized to either embed limited portions of Esri technology or bundle Esri products or services with the partner's application or service under Esri's OEM or Solution OEM programs. Partner pricing and product bundling is independent of this EA, and each partner markets under its own business model and pricing. Customer shall not be entitled to or seek any discount from the OEM partner or Esri, directly or indirectly, as a result of or based on the availability of such Products as EA Products under this EA. Customer shall not be entitled to or seek to decouple Esri's technology or products/services from the partner's bundle or solution. In addition, such Products, or any component thereof included in the OEM software program or product, will be licensed through the license agreement provided by the OEM partner and not through this EA.

12.2 EA Products—Limited Quantity or Unit-Priced Items. Esri reserves the right to exclude new Products from uncapped Deployment. New Products may contain or be developed with (i) newly acquired technology obtained through a significant investment or (ii) third-party intellectual property that requires a unit-based royalty fee or prohibits Deployment under a site or enterprise license. Such items can be made available to Customer on a limited-quantity basis or as unit-priced items.

12.3 Obsolescence. During the term of this EA, some of the items listed in Appendix A may become obsolete, will no longer be commercially offered, or may no longer be available for Deployment. Customer may continue to use EA Products that have been Deployed, but support and upgrades for older items may not be available. EA Maintenance and maintenance and availability of EA Products identified in Appendix A will be subject to each item's Product Life Cycle Support Status and Esri's Product Life Cycle Support Policy, which can be found at <https://support.esri.com/en/other-resources/product-life-cycle> by selecting the product type and clicking the Product Life Cycle link for specific product plans.

12.4 Mergers, Acquisitions, Asset Purchases, or Divestitures. Customer may not transfer or Deploy EA Products to any third party in connection with a divestiture, merger, or sale of Customer or its assets, in whole or in part.

ARTICLE 13—GENERAL PROVISIONS

13.1 If there is a conflict among any of the terms and conditions in the various documents, the order of descending precedence will be as follows: (1) Signature Page, (2) Enterprise License Terms and Conditions, (3) Master Agreement. For the avoidance of doubt, Article 7—Term, Termination, and Expiration of this EA supersedes any termination language in the Master Agreement with respect to all Products and Services provided under this EA. If Customer subscribes to the Advantage Program, the Advantage Program terms and conditions take precedence over the provisions of this EA with respect to products or services provided under Advantage Program. Except as otherwise expressly provided herein, any amendment or addendum to this EA must be in writing and signed by an authorized representative of each party.

13.2 Survival of Certain EA Clauses. The provisions of Sections 2.3 and 7.4 and Article 8 of this Enterprise License Terms and Conditions document will survive the expiration or termination of this EA.

**APPENDIX A
PRODUCTS AND DEPLOYMENT SCHEDULE**

Customer may Deploy the EA Products up to the total quantity of licenses indicated below to Customers during the term of this EA.

**Table A-1
EA Products—Uncapped Quantities**

Product	Total
ArcGIS Desktop: Advanced, Standard, and Basic (Single and Concurrent Use)	Uncapped
ArcGIS Desktop Extensions: ArcGIS 3D Analyst, ArcGIS Data Reviewer, ArcGIS Geostatistical Analyst, ArcGIS Network Analyst, ArcGIS Publisher, ArcGIS Schematics, ArcGIS Spatial Analyst, and ArcGIS Workflow Manager (Single and Concurrent Use)	Uncapped
ArcGIS Enterprise: ArcGIS Enterprise (Advanced and Standard)	Uncapped
ArcGIS Enterprise Extensions: ArcGIS 3D Analyst, ArcGIS Geostatistical Analyst, ArcGIS Network Analyst, ArcGIS Schematics, ArcGIS Spatial Analyst, and ArcGIS Workflow Manager	Uncapped
ArcGIS GIS Server: Advanced, Standard, Basic	Uncapped
ArcGIS Enterprise Additional Capability Servers: ArcGIS Image Server, ArcGIS GeoEvent Server	Uncapped
ArcGIS Monitor	Uncapped
ArcGIS Runtime Advanced	Uncapped
ArcGIS Runtime Analysis Extension	Uncapped
Mapping and Charting Solutions: Esri Production Mapping for Desktop (Single and Concurrent Use)	Uncapped

**Table A-2
EA Products—Capped Quantities**

User Type Product	Term 1	Term 2	Term 3
ArcGIS Enterprise (Total Users)			
ArcGIS Enterprise Mobile Worker Annual Subscription	50	50	50
ArcGIS Enterprise Creator Annual Subscription	10	10	10
ArcGIS Utility Network Service User Type Extension for ArcGIS Enterprise Term License	20	20	20
ArcGIS Insights in ArcGIS Enterprise Annual Subscription	1	1	1
ArcGIS Online (Total Users)			
ArcGIS Online Creator Annual Subscription (500 credits per user)	20	20	20
Developer Premium annual subscription	1	1	1
StreetMap Premium Desktop US Full Use Desktop SU version	1	1	1
ArcGIS StreetMap Premium for Runtime Deployments USA term license	20	20	20

**APPENDIX B
EA FEE SCHEDULE**

The EA Fee is \$480,000. The EA Fee is in consideration of the EA Products, EA Maintenance, and Esri User Conference registrations.

	Term 1	Term 2	Term 3	EA Fee
Payments	\$160,000	\$160,000	\$160,000	\$480,000

Number of Esri User Conference Registrations per Year	7
Number of Tier 1 Help Desk Callers That May Contact Esri for Tier 2 Support	3
Number of Sets of Backup Media, if Requested	2
Term of EA	Three years from Effective Date

**(Optional)
Unit-Priced Items**

Licenses and Maintenance for Unit-Priced Items are available at the prices set forth below and are not included in the EA Fee. Pricing is valid for one (1) year from the Effective Date and may be updated by Esri by written notice to Customer. Unit-Priced Items will be licensed in accordance with the terms and conditions of the Master Agreement.

Item	License Price	Maint. Price
None		

**APPENDIX C
EA POINTS OF CONTACT**

Either party may change its point of contact by written notice to the other party.

1. Esri point of contact for order processing issues:

Name: Customer Service
Esri
380 New York Street
Redlands, CA 92373-8100
Email: service@esri.com
Phone: 888-377-4575
Fax: 909-307-3083

2. Esri contact for Tier 2 Support issues:

MyEsri: <https://my.esri.com>
Phone: 909-793-3774 (within the United States only)
Web: <https://support.esri.com>

3. Customer centralized point of contact for order release and administrative issues:

Name: _____
Email: _____
Phone: _____
Fax: _____

4. All invoices to Customer will be mailed to the address listed below:

Customer Office: _____
Name: _____
Address: _____

5. All deliverables to Customer will be shipped to the address listed below:

Customer Office: _____
Name: _____
Address: _____

6. All notices to Customer will be mailed to the address listed below:

Customer Office: _____
Name: _____
Address: _____

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