

Calexico New River Improvement Project Calexico Reach

Final Construction Update 03/01/2026

Dynamic Consulting Engineers, Inc., Imperial, CA – Construction Manager

Mountain Cascade, Inc., Livermore, CA - Contractor

City of Calexico Project – State DWR funded

Michael Baker, International, San Diego, CA - Design Engineer



Calexico New River Improvement Project

Calexico Reach Key Dates

- 11/30/2022 -Bid Date
- 2/15/2023 - City Award Contract to Mountain Cascade, Inc. (MCI) – (\$40,690,908.04 bid amount)
- 5/10/2023 - Limited NTP – mobilization & long lead items
- 5/26/2023 - Groundbreaking Ceremony
- 6/29/2023 - Notice to Proceed Date – 300 calendar days
- Original completion date April 23, 2024
- Delays – Environmental permitting, Staging Yard Unavailable and Unstable Utilities (Sewer) conflict with 72” pipeline
- Other Delays – January 22, 2024 storm damages to cofferdam
- Revised completion date – Rain/storm events, Change Orders & Delays December 2024
- Substantial Completion date & MCI Request Relief of Maintenance & Responsibility April 8, 2025
- Project Punchlist Created 4/28/2025

Calexico New River Improvement Project

Calexico Reach Key Dates

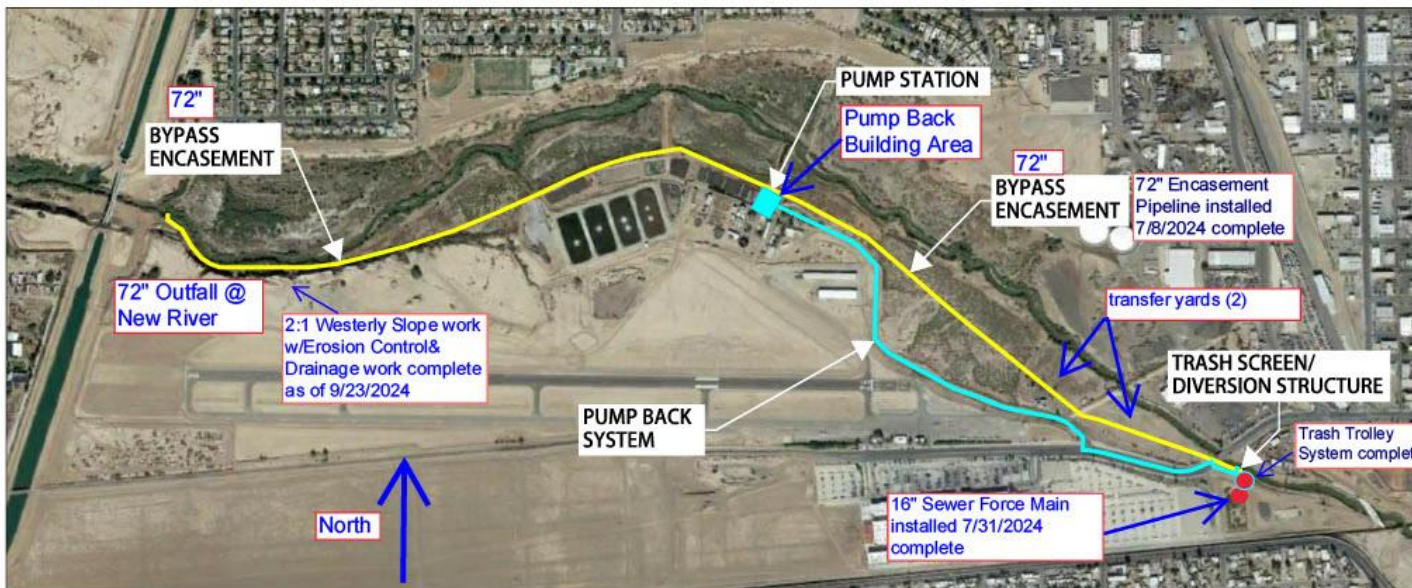
- 4/28/2025 Punchlist – 43 items – minor and not so minor issues to resolve; including pumps not holding suction pressure, various electronic controls, pump house sealing from exterior, project cleanup, spare parts for various components in pump house and for Ovivo trash trolley & control system, recordkeeping which included final submittals of City of Calexico staff training, videos, manuals, redlines, and certifications of all features in pump house, emergency generator, electronics and the Ovivo trash trolley system.
- 7/01/2025 – Last MCI workday on punchlist construction items only
- 8/21/2025 All Punchlist Items addressed (submittals/reports/spare parts)
- 9/03/2025 City of Calexico Change Order No. 10 Approved
- 9/08/2025 Dynamic certified MCI last monthly billing #27
- 9/17/2025 City of Calexico Accepted work
- 9/25/2025 Notice of Completion recorded w/County Recorder
- 10/12/2025 Dynamic certified MCI retention billing #28
- 10/20/2025 Certificate of Project Completion Signed

Project Site Plan



NEW RIVER IMPROVEMENT PROJECT - CALEXICO REACH

Funding Partners: State Water Resources Control Board, California Department of Water Resources



Work Summary 04/07/2025: Diversion channel area - 72" slide gate training Friday 04/04/25, manufacturer to replace defective voltage display & repair electronic arming. Trolley System training Thursday 04/04/25; operational. PB Building minor electrical instrument calibration. Generator testing & calibrations this week. Ongoing punch list items being worked on.



CITY OF CALEXICO

GROUNDBREAKING CEREMONY

MAY 26, 2023



Calexico New River Improvement Project

Work Summary – 3 Basic Work Components

1. Trash Screen & Diversion Channel downstream from US – Mexico International Border; (**\$11.24 million bid amount**) *New River Trash Trolley System, 72” Pipe Diversion Structure & 16” Sewer Force Main Discharge*
2. Pump Back System – replaces NR polluted water with clean, treated & disinfected wastewater from City WWTP; 5 MGD (7.74 CFS), 4000 feet of 16” diameter force main (**\$7.85 million bid amount**). *2a-Pump Back Building & 2b-16” Sewer Force Main Pipeline*
3. 1.5 miles of 72” diameter underground fiberglass reinforced mortar pipe to carry NR polluted water to outfall outside City limits just upstream of IID’s AAC Siphon over the NR – 160 CFS (**\$20.55 million bid amount**) (160 CFS = 103,410 MGD). *3a-72” Pipeline, Access Road & 3b-West Slope Excavation*

*Add mobilization, various environmental permitting, traffic control - \$1.053 million bid amount for **total \$40,690,908.04 bid amount.***



Calexico New River Improvement Project

Construction Cost Summary

Original Contract amount (w/bid error) \$40,690,908.04
Contract amount w/bid error addressed (CCO1) \$40,748,408.04
CCOs 1-10; \$2,916,081.14; CCO 9 credit = \$2,578,070.87
Final Contract amount - \$43,326,478.91 (6.3% increase)

Change Orders included additions of
\$4,527,107.61 but cost savings of \$1,949,036.74

CCOs consisted of -

- Equipment standby time delay due to permitting & lay down yard not available
- Transfer yard cleanup of trash on City property to be used as transfer yard
- East Access of river not available – changed condition from bid requiring additional procedures to construct diversion channel
- 30 Inch Diam & 18 Inch Diam. VCP Sewer Main conflicts required reconstruct portion of sewer main lines from VCP to PVC
- 2nd Street Mall property rental for staging, stockpile and transfer yard at the diversion channel.
- Burrowing owl & erosion gully backfill - westerly top bluff required owl protocols consisting of filling in gulleys and holes (burrows).
- Substitution request for use of soil cement backfill (cost savings)
- Changing 16” sewer force main from DIP to PVC C900 pipe
- Shoring rental for NR diversion channel & wet well, due to delays extending the work
- Precast catch basins & junction boxes at westerly slope area
- Pump station sewer outfall pipeline due to other utility conflicts not shown on plans
- Class 2 base all weather emergency access road around airport to access project during wet (inclement) weather
- Retaining wall elimination and diversion access regrading
- New River Trash Clean up between time NR Diversion & the Ovivo trash rack trolley system is operational
- electrical/instrumentation at Trash Trolley System
- Balancing change order to account for changes in final quantities and/or eliminated items for various bid items

Other:

- January 22, 2024, storm event damages – MCI repair work to re-establish working areas from 1/22 to 2/2; \$539,815.22. City position a force majeure issue.



Calexico New River Improvement Project

1. Trash Screen & Diversion Channel South of Second Street BEFORE



Calexico New River Improvement Project

1. Trash Screen & Diversion Channel South of Second Street AFTER



Calexico New River Improvement Project

Diversion Channel, South of Second Street

River Diversion/Bypass



7/13/2023

Calexico New River Improvement Project

Diversion Channel, South of Second Street



7/18/2023

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Diversion Channel, South of Second Street

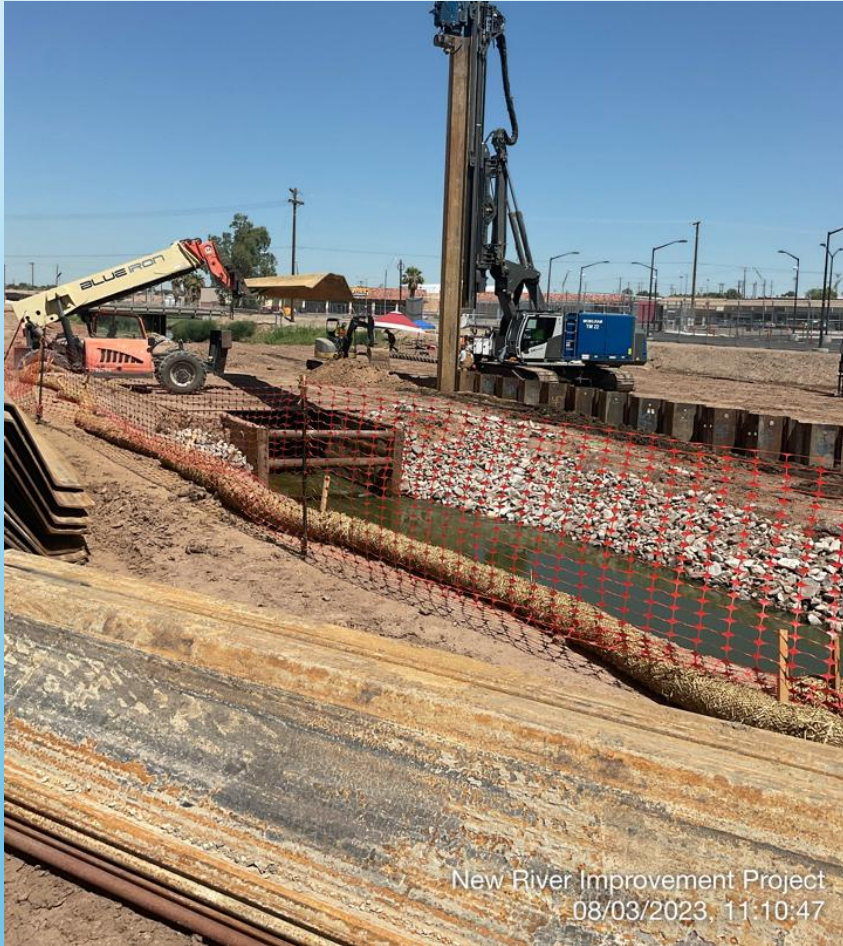


New River Improvement Project
07/20/2023, 14:45:43

New River Improvement Project
07/20/2023, 14:46:09

Calexico New River Improvement Project

Diversion Channel, South of Second Street



08/03/2023; driving sheet piles for cofferdam

Calexico New River Improvement Project

Diversion Channel, South of Second Street



09/06/2023; Ground modification (3 sack slurry injection), 7' grid pattern

09/07/2023

Calexico New River Improvement Project

Diversion Channel, South of Second Street

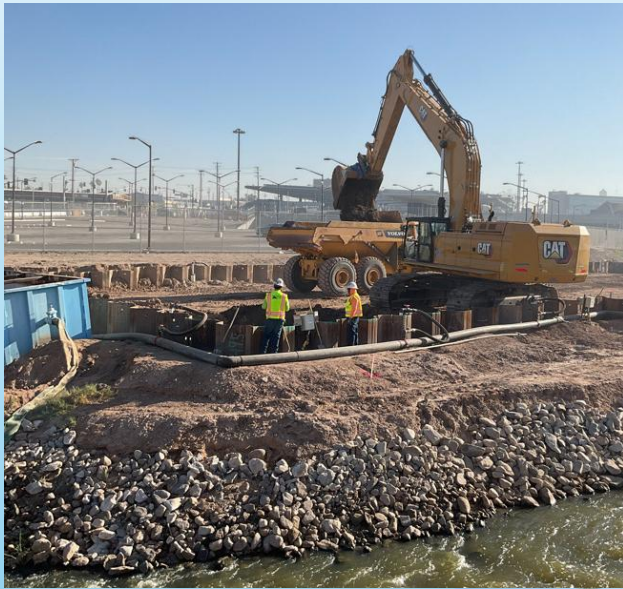


11/2023; Dewatering operational, excavating within cofferdam; 20 wells w/submersible pumps - 50 feet deep,

10/24/2023

Calexico New River Improvement Project

Diversion Channel, South of Second Street



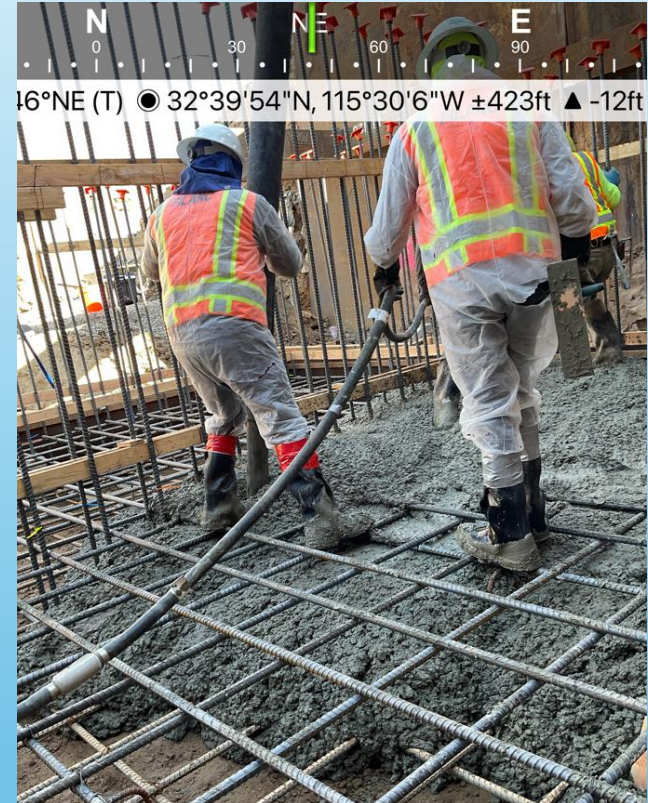
11/06/2026



11/10/2023, excavate/haul within cofferdam area & bring in base material

Calexico New River Improvement Project

Diversion Channel, South of Second Street



11/10/2023

12/08/2023, pouring wet well base



Calexico New River Improvement Project

Diversion Channel, South of Second Street



Calexico New River Improvement Project

January 22, 2024 Storm & Flooding Event

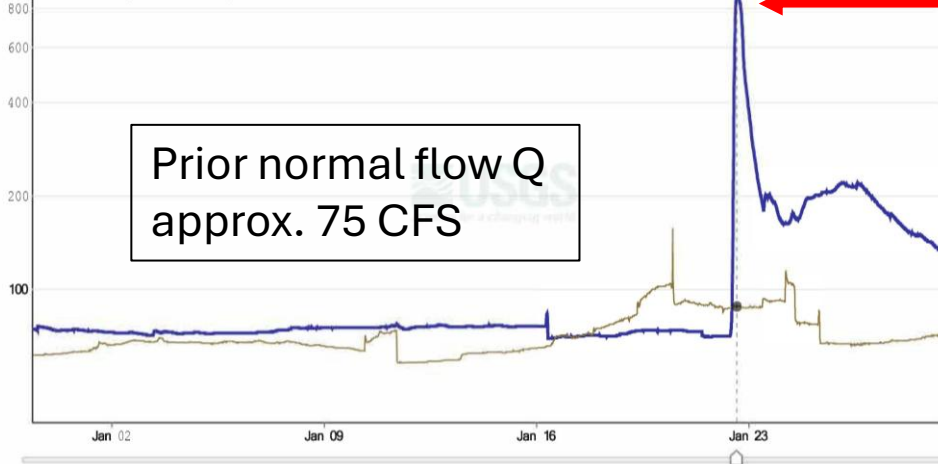
New River at International Border –USGS Flow Record

December 30, 2023 - January 29, 2024

Discharge, cubic feet per second

912 ft³/s - Jan 22, 2024 02:45:00 PM PST

87.8 ft³/s - Jan 22, 2023 02:45:00 PM PST



1/22/2024 at 245pm Q=912 CFS

IMPORTANT Data may be P-rovisional

Discharge, cubic feet per second

This year

- Recorded

Last year

- Recorded

Hide legend;...

	Value	Status
• Latest	133	Provisional
Jan 29, 2024 09:00:00 AM PST		
• Selected	912	Provisional
Jan 22, 2024 02:45:00 PM PST		

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January 22, 2024 Storm & Flooding Event - prior



Calexico New River Improvement Project

January 22, 2024 Storm & Flooding Event



Calexico New River Improvement Project

January 22, 2024 Storm & Flooding Event

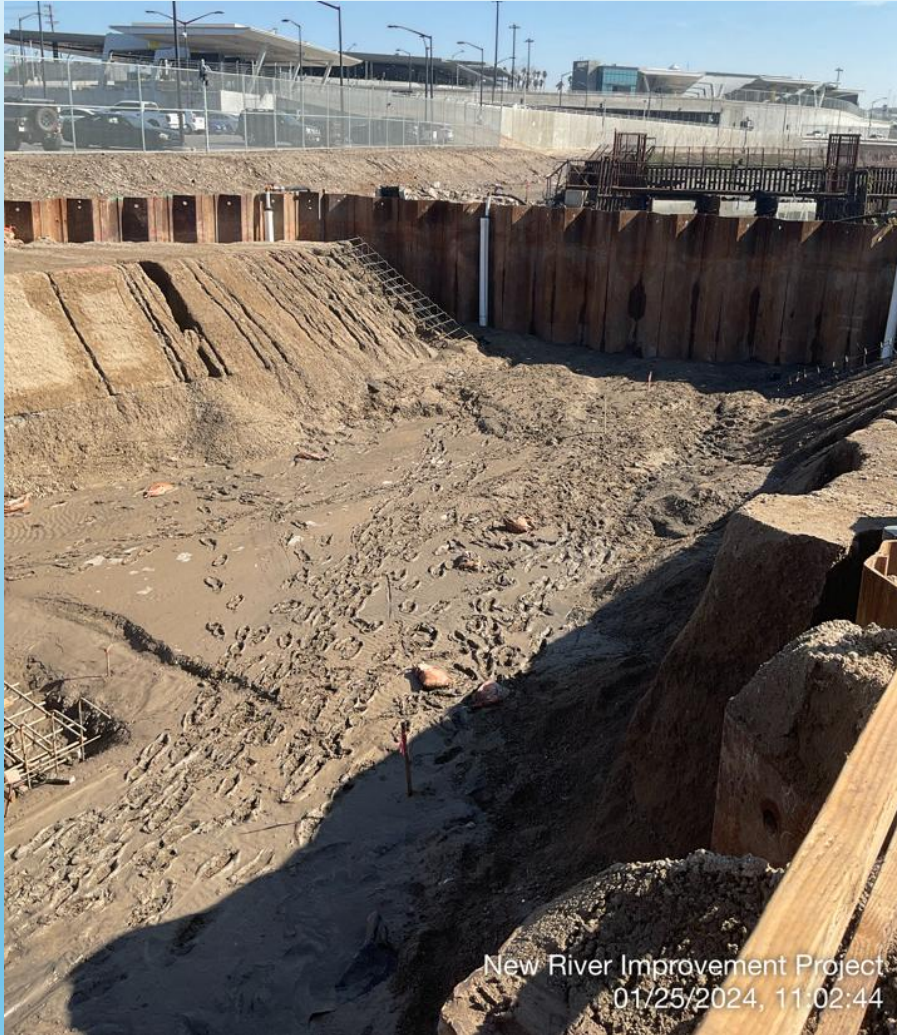


Tuesday January 23, 2025 after storm event



Calexico New River Improvement Project

January 2024 Storm & Flooding Event



After storm event

- Impact all 3 portions of project
- Dewatering pump damages
- Approx 1 month delay
- Equipment delay
- Steel shoring delay
- Access repairs
- Restoration & cleanup
- Redo steel reinforcement
- Approx \$368,000 Contractor Claim

Calexico New River Improvement Project

Diversion Channel, South of Second Street



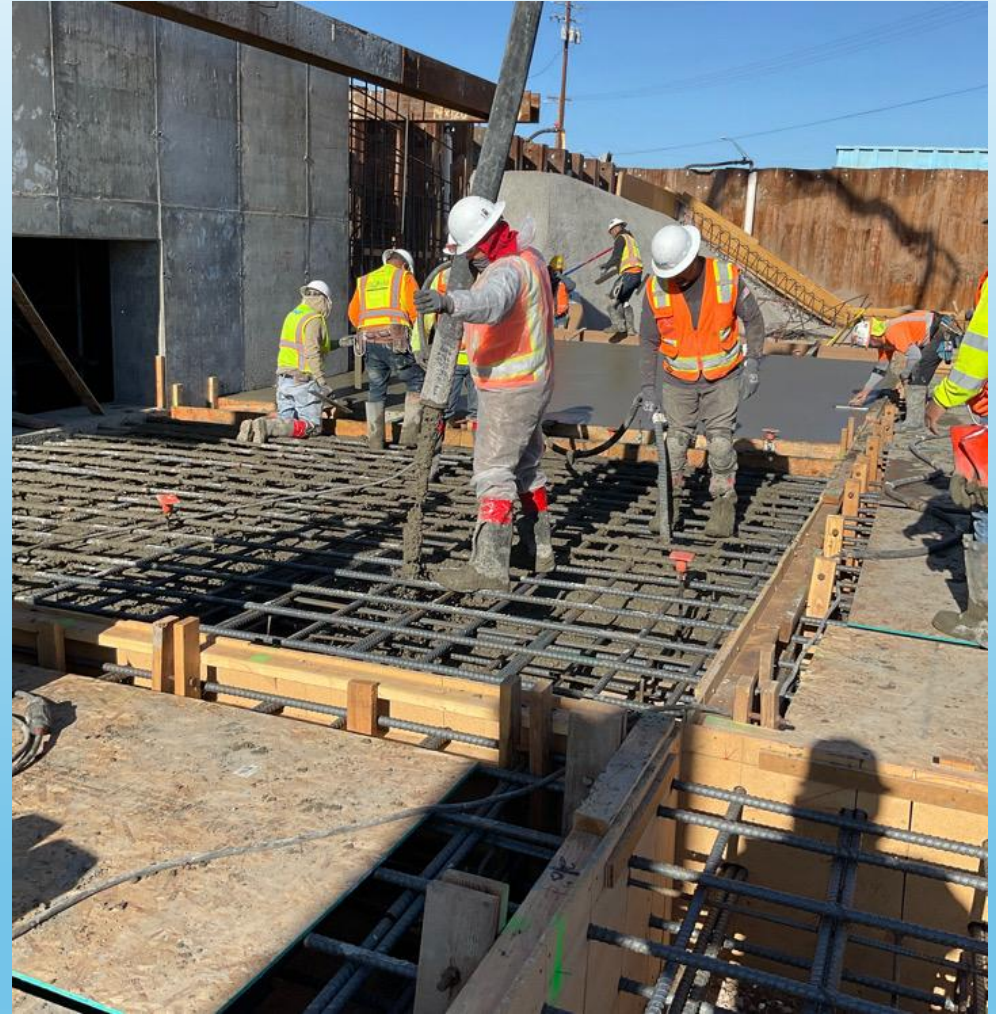
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Diversion Channel, South of Second Street



Calexico New River Improvement Project

Diversion Channel, South of Second Street, Looking North



March 2024 concrete pours

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Diversion Channel, South of Second Street, Looking North



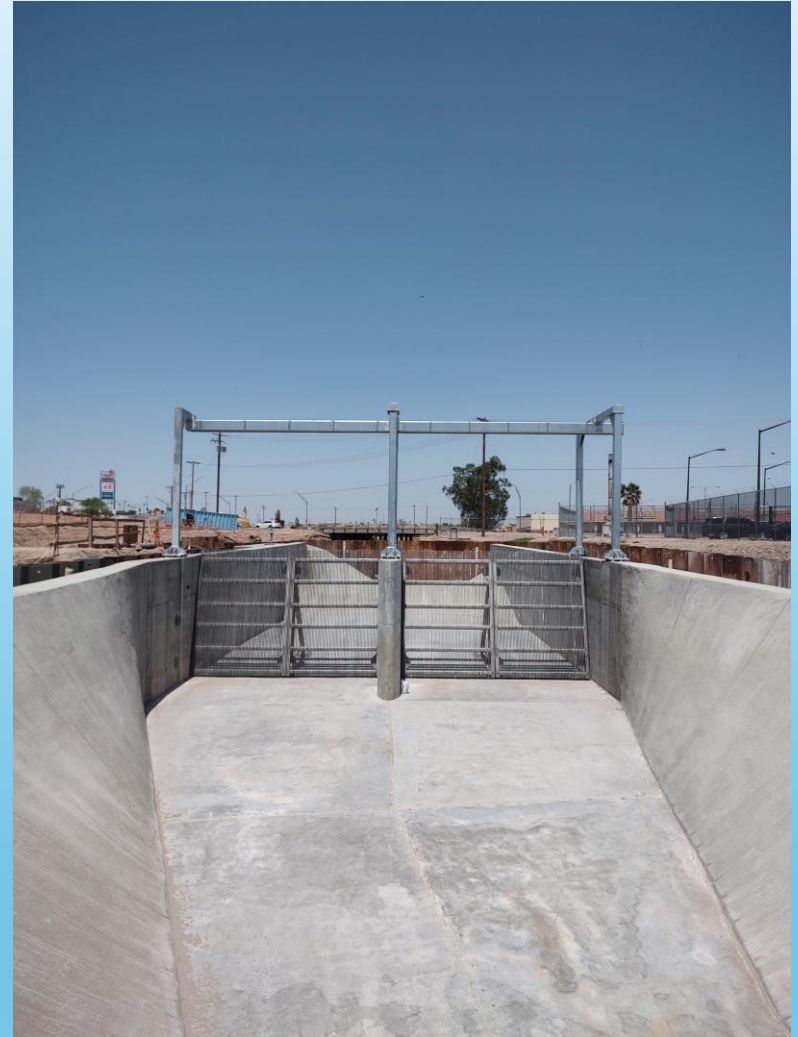
Dynamic CONSULTING ENGINEERS

04/22/2024 – Tele-belt recycled concrete backfill behind channel walls (due to no access East Side)



Calexico New River Improvement Project

Diversion Channel, South of Second Street, Looking North



05/30/2024 – Channel ready to remove
cofferdam/sheet piles

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Diversion Channel, South of Second Street, Looking North



6/3/2024



6/10/2024, sheet
piles removed

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Diversion Channel, South of Second Street



200 ton crane cofferdam sheet pile removals



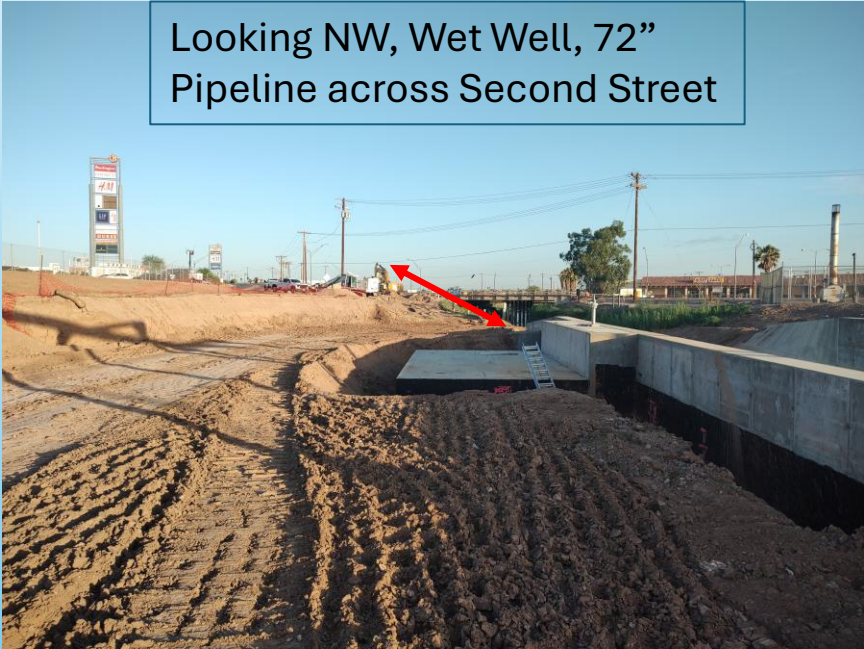
Calexico New River Improvement Project

Diversion Channel, South of Second Street



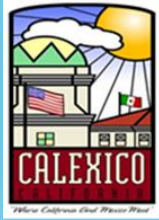
Looking NW, Temporary Diversion Removed, Area Filled and Compacted

6/24/2024



Looking NW, Wet Well, 72” Pipeline across Second Street

6/24/2024



Calexico New River Improvement Project

Diversion Channel, South of Second Street



10/28/2024, Looking East;
electrical conduit work ongoing
between wet well & trash rack
trolley; also installing transformer
pad & IID conduit with control
panel



11/04/2024, continued electrical conduit work
ongoing between wet well & trash rack
trolley; also installing transformer
pad & IID conduit with
control panel

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Diversion Channel, South of Second Street, looking E



11/18/2024, access road grading, trash rack trolley supports & columns in place, looking NW



11/25/2024, access road fine graded w/portion geogrid fabric, looking S

Calexico New River Improvement Project

Diversion Channel Access Road, South of Second Street



12/16/2024, Bottom concrete access road poured Friday 12/13/2024

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Diversion Channel, South of Second Street, looking SE



12/30/2024, Access roads paved with asphalt concrete two weeks ago; shotcrete & chain link fencing expected next week January 6, 2025

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Diversion Channel, South of Second Street



01/13/2025 Slope paving (concrete & shotcrete placed last week, 8' chain link fencing being placed, IID electrical from 2nd Street to transformer & area sector box; start on trash rack trolley

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Diversion Channel, South of Second Street



Calexico New River Improvement Project

2. Pump Back System- 2a. Pump Back Building



04/07/2025

Calexico New River Improvement Project

2a. Pump Back Building



05/23/2025

Calexico New River Improvement Project

Pump Back Building area – Animal Shelter Road



01/16/2024

02/14/2024

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Pump Back Building area – Animal Shelter Road



03/20/2024 forming pump pads, checking grades

Calexico New River Improvement Project

Pump Back Building area – Animal Shelter Road



04/26/2024

06/20/2024

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Pump Back Building area – Animal Shelter Road



7/31/2024, Prefab building start this week, pumps arriving this week, ongoing electrical work



Calexico New River Improvement Project

Pump Back Building area – Animal Shelter Road



12/02/2024; PB Building, electrical & lighting work ongoing; AC components in place

Calexico New River Improvement Project

Pump Back Building area – Animal Shelter Road



12/02/2024; PB Building, electrical work ongoing, Right picture in 16" sewer force main flow meter vault.

Calexico New River Improvement Project

Pump Back Building area – Animal Shelter Road



12/09/2024; electrical & lighting work ongoing; start paving next week



12/23/2024; electrical & lighting work ongoing; paved last week

Calexico New River Improvement Project

Pump Back Building area – Animal Shelter Road



01/13/2025 AC paving/dike complete,
rock backing to swale

Calexico New River Improvement Project

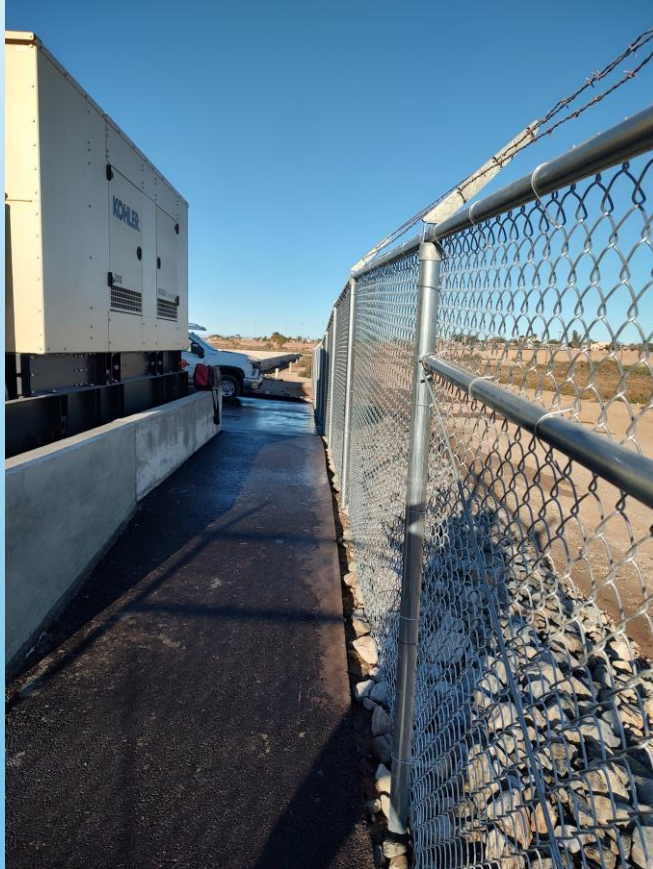
Pump Back Building area – Animal Shelter Road



01/13/2025 8' CL fencing & rock backing in place

Calexico New River Improvement Project

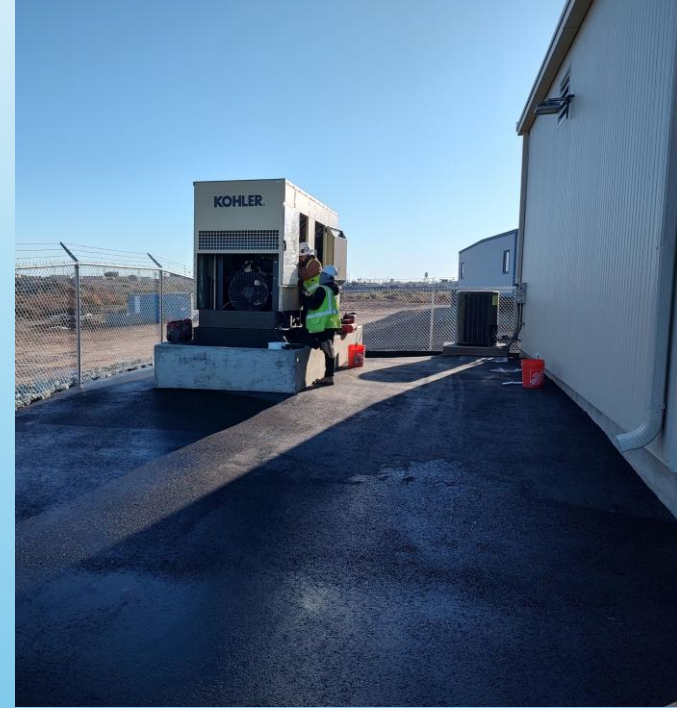
Pump Back Building area – Animal Shelter Road



01/13/2025- 8' CL fencing & rock backing in place

Calexico New River Improvement Project

Pump Back Building area – Animal Shelter Road



01/13/2025 finishing electrical connections for generator

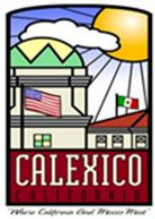
Calexico New River Improvement Project

2b. 16” Force Main from Pump Back Building to Diversion Channel



New River Improvement Project
02/15/2024 13:26:30

02/15/2024 16” FM Start Pipeline Construction at PB Building Area



Calexico New River Improvement Project

2b. 16" Force Main from Pump Back Building to Diversion Channel



03/13/2024 Second Street Pipeline
Construction, $\frac{3}{4}$ mile of 16" C900 PVC pipeline.

Calexico New River Improvement Project

16" Sewer Force Main at Diversion Channel, South of Second Street



7/25/2024, last 15' of 16" sewer force main connected to diversion channel



7/31/2024; both, 72" encasement pipeline & 16" force main pipelines are complete, in place; waiting to start the access road grading

Calexico New River Improvement Project

16" Sewer Force Main at Diversion Channel, South of Second Street



Calexico New River Improvement Project

3a. 72" Pipeline from Diversion Channel to New River Outfall



3/4/2024 Griffin drilling 50' deep holes for dewatering wells; 17 wells each 1000' section

Calexico New River Improvement Project

3a. 72” Pipeline from Diversion Channel to New River Outfall



Dynamic CM Team –(L-R) Frank, Mark, Robert, Carlos & Miguel and pipe installation, March, 2024

72” Pipe –Centrifugally Cast Fiberglass Reinforced Polymer Mortar (CCFRPM) pipe
– Hobas Pipe Texas

Calexico New River Improvement Project

72" Pipeline from Diversion Channel to New River Outfall



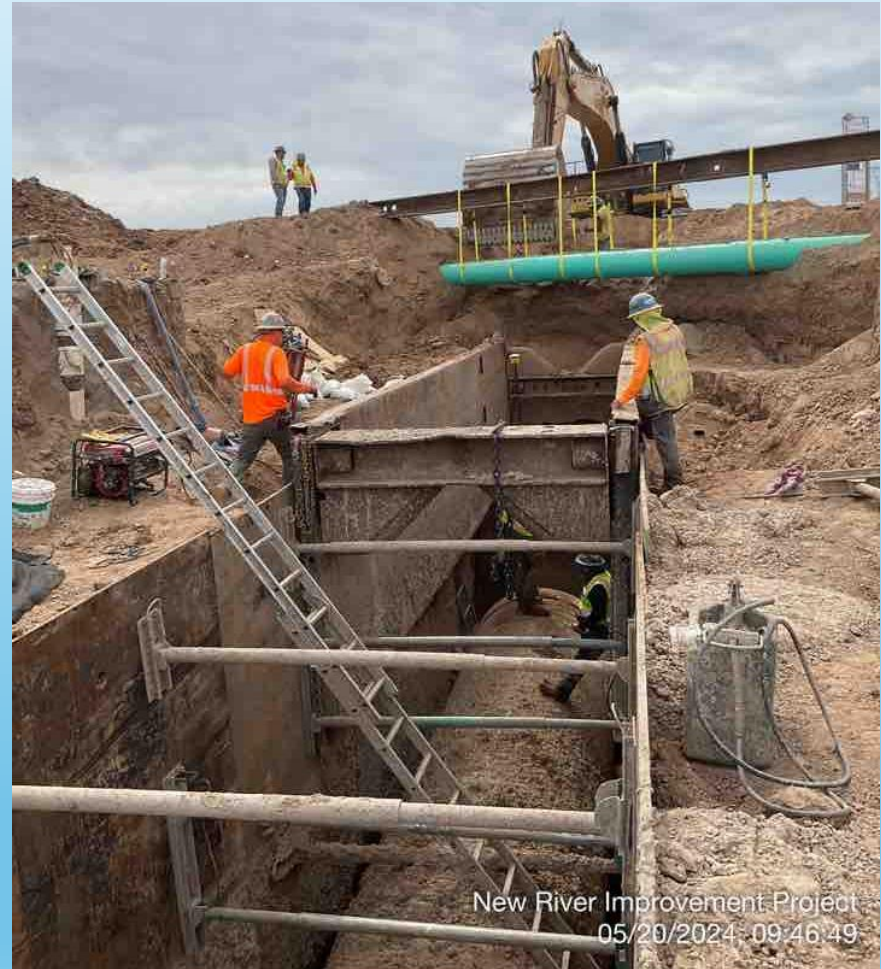
Calexico New River Improvement Project

72" Pipeline from Diversion Channel to New River Outfall



Calexico New River Improvement Project

3a. 72" Pipeline from Diversion Channel to New River Outfall



04/26/2024

5/20/2024- 20' deep
under sewer crossing

Calexico New River Improvement Project

72" Pipeline Alignment, north of Second Street and east of Animal Shelter Rd



11/13/2024 at 72" pipe alignment within Transfer yard looking NW; 11/18 same, no changes; red arrow shows approx. location 72" pipeline.

Calexico New River Improvement Project

3b. Westerly Slope Grading & Drainage Improvements



01/19/2024 Excavating along slope area & rock trucks hauling to lay down yard

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West Slope 2:1



Week prior to and during week of 8/5/2024, slopes were wetted & tracked w/dozer; concrete V ditch work to start this week of 8/12/2024 (subcontractor on site)



Calexico New River Improvement Project

West Slope 2:1



9/11/2024 placing fiber rolls and finish grading 72" alignment access.

Calexico New River Improvement Project

West Slope 2:1



9/23/2024 Conc V Ditches poured last week, placing fiber rolls/erosion control and finish grading 72" alignment access road complete.

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West Slope 2:1



11/13/2024 bottom slope at 72" alignment looking west

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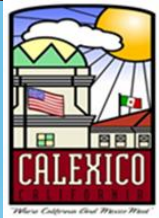
West Slope 2:1



11/18/2024 top slope looking west

Calexico New River Improvement Project

West Slope & 72" Outfall Structure at New River



Calexico New River Improvement Project

72" Outfall Structure at New River



02/21/2024; 72" outfall pad,
near IID's AAC Pipe Siphons,
starting to drive sheet piles



Calexico New River Improvement Project

72" Outfall Structure at New River



Rock & structure pad within cofferdam, 3/2024



Calexico New River Improvement Project

72" Outfall Structure at New River



Forming structure with first joints of 72" outfall pipe 4/10/2024

Calexico New River Improvement Project

72" Outfall Structure at New River



04/29/2024

04/18/2024

Calexico New River Improvement Project

72" Outfall Structure at New River



06/04/2024

Calexico New River Improvement Project

72" Outfall Structure at New River



72" outfall on 7/31/2024 complete in place



Calexico New River Improvement Project

72" Outfall Structure at New River



11/18/2024; 72" outfall w/5' CL Fencing



Calexico New River Improvement Project

END
PRESENTATION



05/23/2025