I Street Bridge Replacement Project

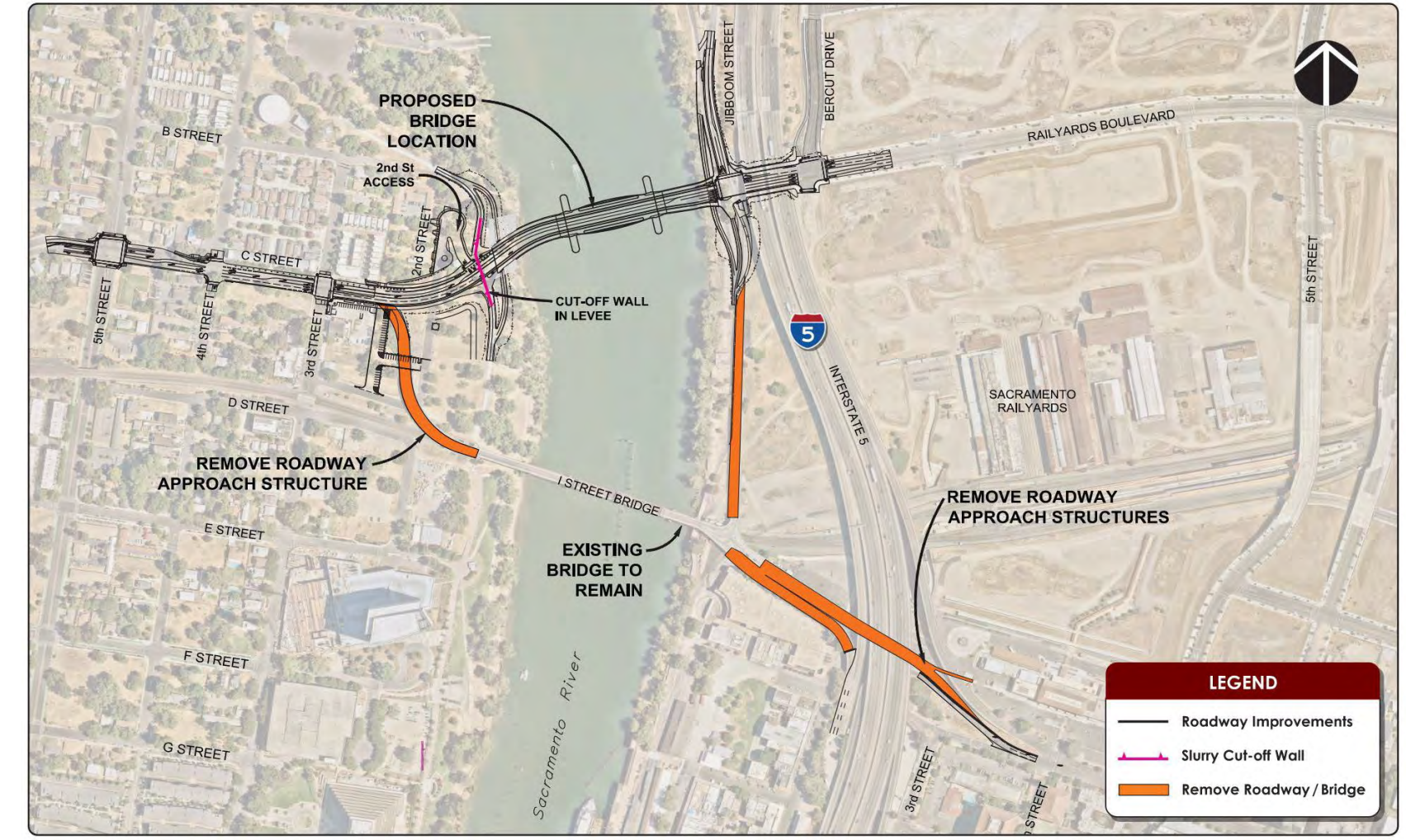
December 9, 2025

Contractor Outreach Meeting

Agenda

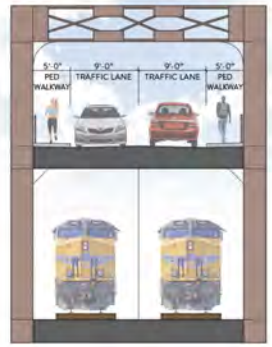
- Project Overview
- Bridge Design
- Design Details
- Drainage & Utilities
- Stage Construction
- Environmental Considerations
- Right of Way
- Project Schedule

The Project

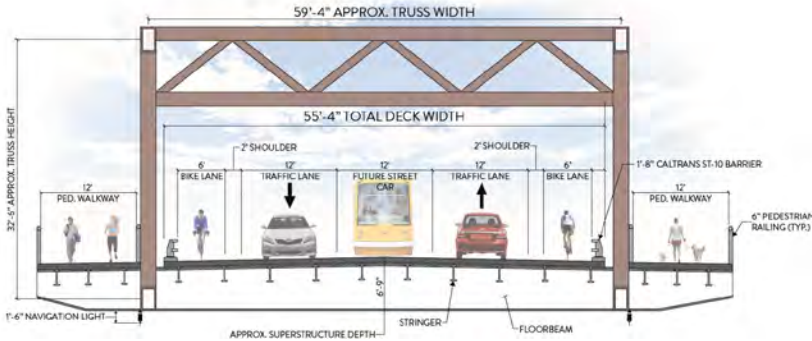


Cross Sections

Existing Bridge Cross Section



Proposed Bridge Cross Section



The Project

- Plans & Specifications
  - 2024 Caltrans Standard Plans and Specifications (with modifications)
    - Various NSSPs
      - Construction staking will be a contract bid item
      - Establish marine access
      - Potential City furnished materials for permanent steel casings
      - Specified limits on shop drawing submittals
      - Permit working window restriction for various species
  - City of Sacramento Standard Plans and Specifications
  - City of West Sacramento Standards

City of SACRAMENTO

CITY OF WEST SACRAMENTO

Bridge Design

Cross Section

- CIP Box Girder Approach Spans
- Network Tied Arch Lift Span
- 3 - 12ft Traffic Lanes
- 2 - 12ft Cantilevered Walkways
- 2 - 6ft Bike Lanes
- 2 - 10ft Bench Areas
- Out to Out – 119 ft (max)

Main Span

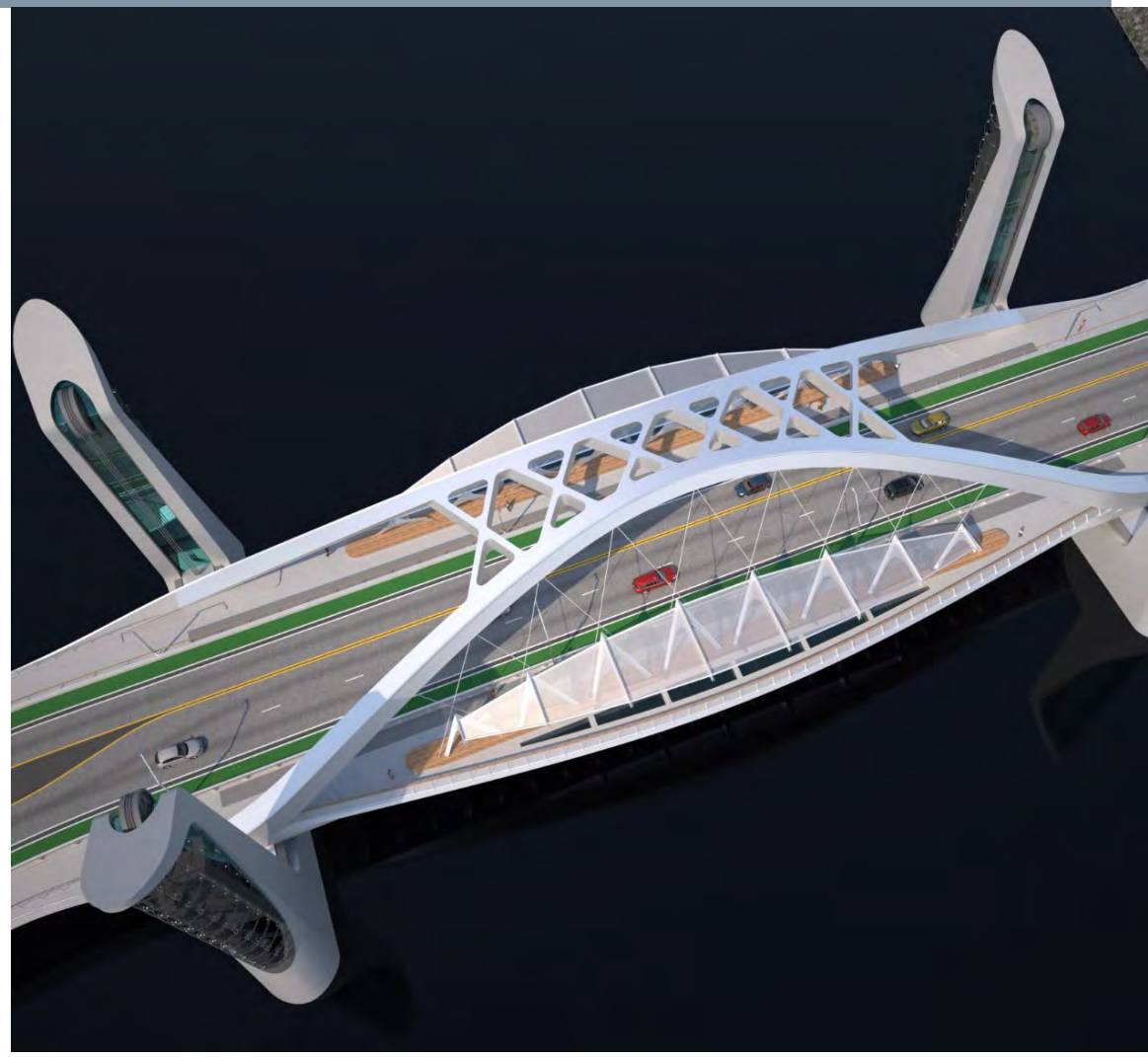
- 308 ft Main Span
- 278 ft Navigable Channel
- 53 ft Lift Height
- 157 ft Towers

Steel

- Structural Steel – 5.1M lbs
- Counterweight Steel – 6.5M lbs
- Bar Reinforcing Steel – 5.2M lbs

- Grand Total = 16.8M lbs of Steel

- **No waiver of Buy-America provisions are expected**



City of SACRAMENTO

CITY OF WEST SACRAMENTO

Design Details

CONSTRUCTION NOTES:

1. FOR "L1" AND "BP1" LINE DETAILS SEE LAYOUT PLAN.
2. SEE DWG L-3 FOR LEVEE DEGRADE DETAILS.
3. SEE DWG L-4 FOR RECONSTRUCTED LEVEE CROWN DIMENSIONS AND DETAILS.
4. "RY" LINE SHOWN FOR REFERENCE ONLY.
5. SEE DEMOLITION PLANS FOR DETAILS REGARDING DEMOLITION WORK LOCATED WITHIN THE WEST SACRAMENTO LEVEE IMPROVEMENTS AREA.
6. SEE UTILITY PLAN FOR DETAILS REGARDING UTILITIES LOCATED WITHIN THE WEST SACRAMENTO LEVEE IMPROVEMENT AREA.

40 20 0 40 80
SCALE: 1"=40'

PRELIMINARY - NOT FOR CONSTRUCTION

100% DESIGN L-1

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. _____

FIELD BOOK

SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

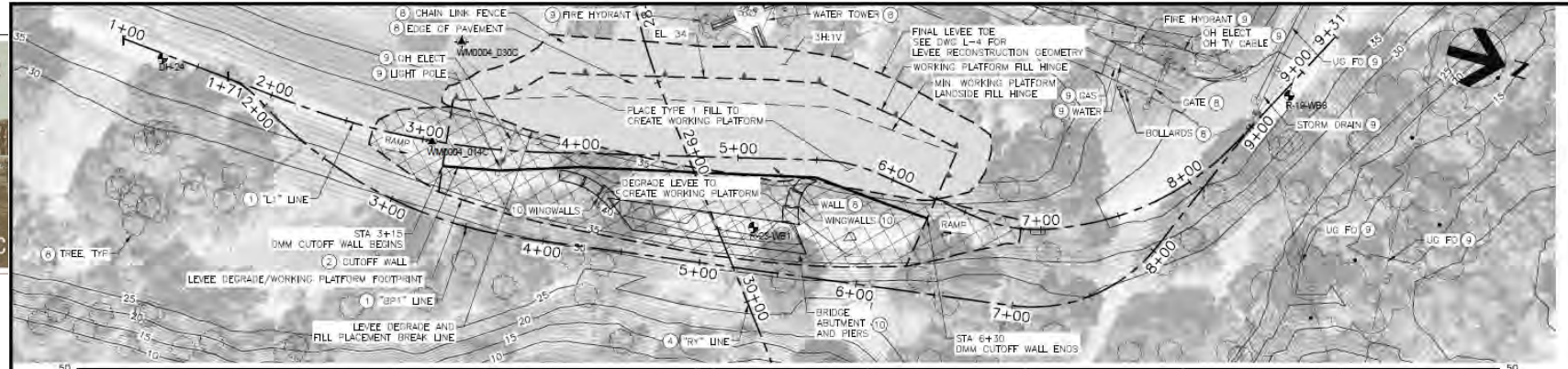
DRAWN BY: H. VELASQUEZ DATE 06/06/2025
DESIGNED BY: E. TICEN R.C.E. C83475 DATE 06/06/2025
CHECKED BY: M. FREITAS R.C.E. C36451 DATE 06/06/2025

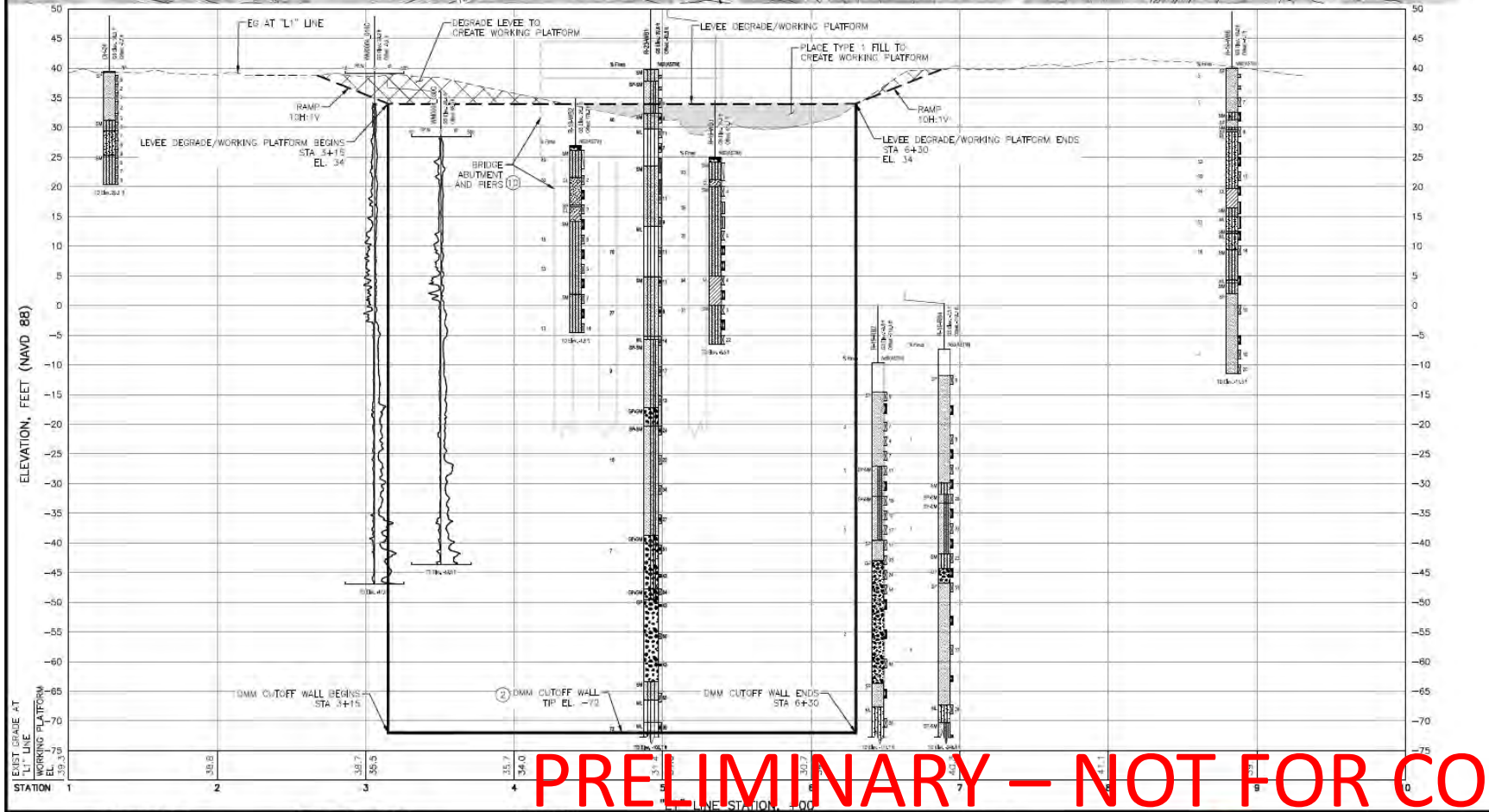
GEI Consultants
UNDER THE SUPERVISION OF: ELLIOTT TICEN
R.C.E. C83475
EXP. 03/31/27

I STREET BRIDGE REPLACEMENT
OVER SACRAMENTO RIVER
WEST SACRAMENTO LEVEE IMPROVEMENTS AREA
FOOTPRINT AND EXISTING TOPOGRAPHY

T15136000

SHEET 219 OF -





CONSTRUCTION NOTES:

1. FOR "L1" AND "BP1" LINE DETAILS SEE LAYOUT PLAN.
2. SEE CUTOFF WALL OFFSET TABLE AND CUTOFF WALL DEPTH SUMMARY TABLE FOR ALIGNMENT AND DEPTH DETAILS.
3. SEE DWG L-1 FOR DEMOLITION DETAILS WITHIN THE EXTENTS SHOWN ON THIS SHEET.
4. "RY" LINE SHOWN FOR REFERENCE ONLY.
5. CUTOFF WALL OFFSET ESTABLISHED FROM "L1" LINE TO CUTOFF WALL CENTERLINE.
6. "OFFSET SIDE" IDENTIFIES THE LOCATION OF THE NEW CUTOFF WALL WITH RESPECT TO THE "L1" LINE.
7. APPROX. DEPTHS ARE AS MEASURED FROM THE DEGRADE SURFACE SHOWN ON THIS DRAWING.
8. SEE DEMOLITION PLANS FOR DETAILS REGARDING DEMOLITION WORK LOCATED WITHIN THE WEST SACRAMENTO LEVEE IMPROVEMENTS AREA.
9. SEE UTILITY PLAN FOR DETAILS REGARDING UTILITIES LOCATED WITHIN THE WEST SACRAMENTO LEVEE IMPROVEMENT AREA.
10. SEE STRUCTURAL DRAWINGS.

CUTOFF WALL OFFSET (5)

STATION	OFFSET	OFFSET SIDE (6)	WALL TYPE
3+15	14.7	WS	DMM
3+50	13.2	WS	DMM
4+00	8.7	WS	DMM
4+50	9.6	WS	DMM
5+00	10.4	WS	DMM
5+50	11.3	WS	DMM
6+00	15.7	WS	DMM
6+30	13.3	WS	DMM

CUTOFF WALL DEPTH SUMMARY TABLE

BEGIN STATION	END STATION	CUTOFF WALL TIP EL. (FT)	APPROX. DEPTH FROM DEGRADE SURFACE (FT) (7)
3+15	6+30	-72	106

SCALE: 1"=40'

VERT. SCALE: 1"=20'

100% DESIGN

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. _____

FIELD BOOK

SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

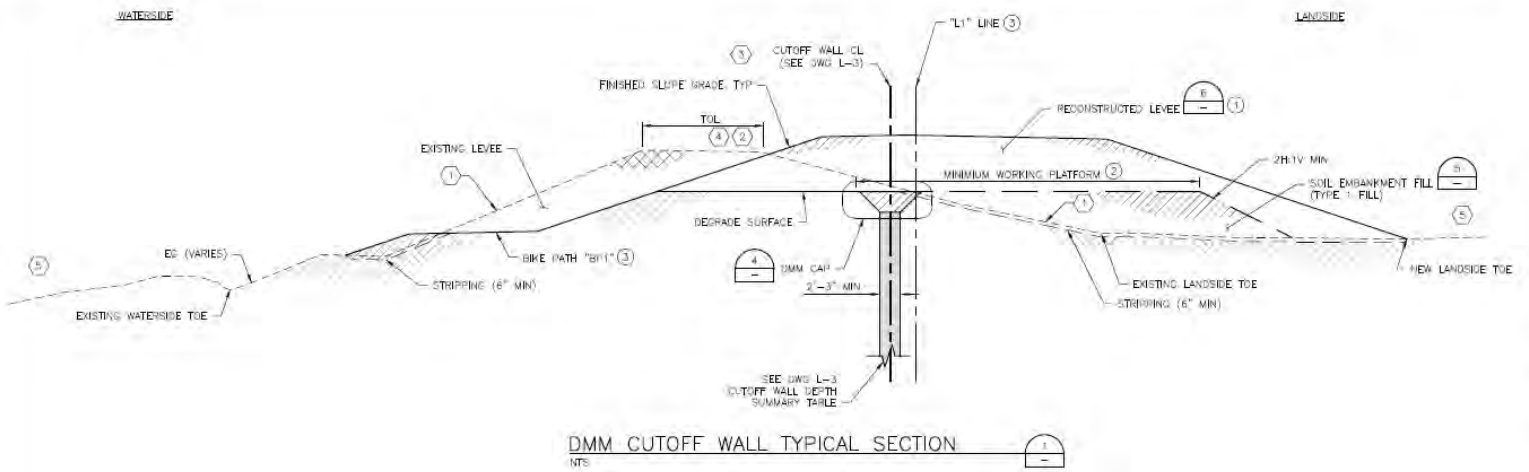
DRAWN BY: H. VELASQUEZ DATE 09/09/2025
DESIGNED BY: E. TICEN DATE 09/09/2025
CHECKED BY: M. FREITAS DATE 09/09/2025

GEI Consultants
UNDER THE SUPERVISION OF:
ELLIOTT TICEN
R.C.E. C83475
EXP. 03/31/27

I STREET BRIDGE REPLACEMENT
OVER SACRAMENTO RIVER
LEVEE DEGRADE AND CUTOFF WALL
PLAN AND PROFILE

T15136000

SHEET 221 OF -



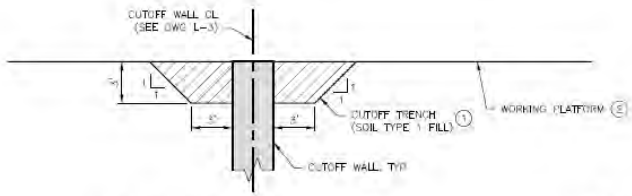
DMM CUTOFF WALL TYPICAL SECTION
NTS

CONSTRUCTION NOTES:

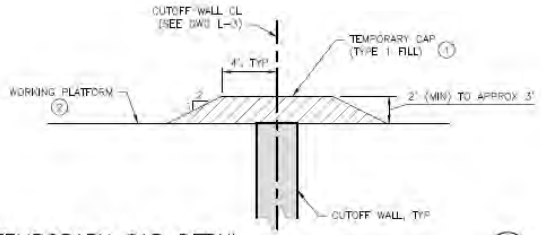
1. CLEAR AND GRUB LANDSIDE SLOPE TO CONSTRUCTION LIMIT OR 5' BEYOND NEW LANDSIDE LEVEE TOE, WHICHEVER IS CLOSER TO THE LEVEE CREST. CLEAR AND GRUB WATERSIDE SLOPE TO CONSTRUCTION LIMIT OR 5 FEET BEYOND EDGE OF WATERSIDE FINISHED SLOPE GRADE, WHICHEVER IS CLOSER TO THE LEVEE CREST. EXISTING TREES WITHIN THE LIMITS OF CLEARING MUST NOT BE REMOVED UNLESS SHOWN TO BE REMOVED ON THE DRAWINGS.
2. CROWN SURFACING NOT SHOWN FOR CLARITY.
3. THE CUTOFF WALL OFFSET IS IDENTIFIED FROM THE "L1" LINE IN DWG L-3.
4. AGGREGATE CROWN SURFACING MUST BE STRIPPED IN ACCORDANCE WITH PROJECT SPECIFICATIONS. AGGREGATE CROWN SURFACING THICKNESS IS VARIABLE AND CAN RANGE FROM ABOUT 3 INCHES UP TO IN EXCESS OF 6 INCHES DEPENDING ON THE LOCATION.
5. CONTRACTOR MUST NOT DISTURB AREAS OUTSIDE OF THE APPROVED CONSTRUCTION LIMITS.
6. CONFIGURATION OF SPOILS TRENCH TO BE DETERMINED BY CONTRACTOR. REMOVE ALL SPOILS AND BACKFILL SPOILS TRENCH WITH TYPE 1 FILL.
7. OVERBUILD SLOPE AS NECESSARY TO MAINTAIN MINIMUM COMPACTION WIDTH AND TRIM SLOPE TO REQUIRED FINAL GRADE.
8. PLACE FILL IN HORIZONTAL LIFTS AGAINST VERTICAL FACES CUT INTO EXISTING LEVEE MATERIAL.

NOTES:

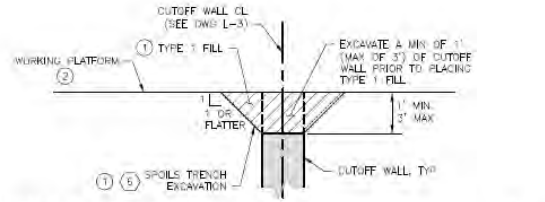
1. SEE DWG L-9 FOR CUTOFF WALL CONSTRUCTION SEQUENCING.
2. MINIMUM WORKING PLATFORM WIDTH IS 50 FT. MINIMUM WORKING PLATFORM LANDWARD OF THE DMM WALL CENTERLINE IS 45 FT. SEE DWG L-3 FOR LEVEE DEGRADE/WORKING PLATFORM ELEVATIONS.
3. FOR "L1" AND "BP1" LINE DETAILS SEE LAYOUT PLAN.
4. THE DESIGN TOL ELEVATION IS MEASURED TO THE BOTTOM OF THE CROWN SURFACING.
5. SEE DWG L-4 FOR RECONSTRUCTED LEVEE PROFILE EL.
6. SEE TABLE ON DWG L-4 FOR LEVEE RECONSTRUCTION DETAILS AND DIMENSIONS.



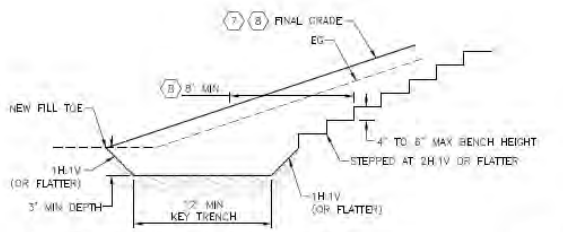
CUTOFF TRENCH DETAIL
NTS DMM CUTOFF WALL



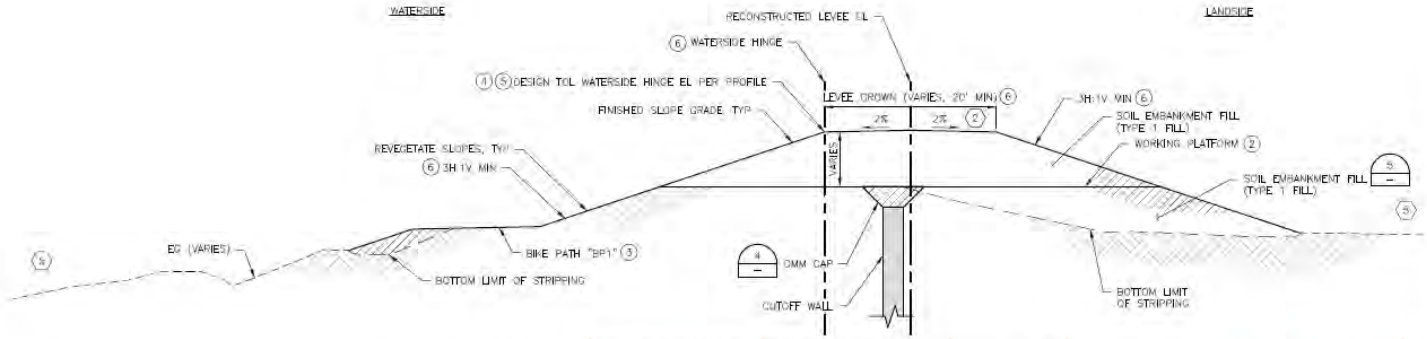
TEMPORARY CAP DETAIL
NTS DMM CUTOFF WALL



DMM CAP DETAIL
NTS DMM CUTOFF WALL



SLOPE BENCHING DETAIL, TYP
NTS (LANDSIDE OR WATERSIDE)



RECONSTRUCTED LEVEE SECTION
NTS

PRELIMINARY – NOT FOR CONSTRUCTION

100% DESIGN

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. _____

FIELD BOOK

SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: H. VELASQUEZ DATE 06/06/2025
DESIGNED BY: E. TICEN R.C.E. C83475 DATE 06/06/2025
CHECKED BY: M. FREITAS R.C.E. C39451 DATE 06/06/2025

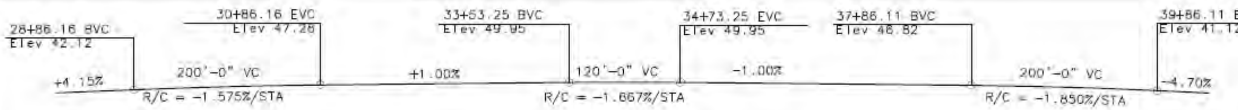
GEI Consultants
UNDER THE SUPERVISION OF: ELLIOTT TICEN
R.C.E. C83475 EXP. 03/31/27

I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER

TYPICAL SECTIONS AND DETAILS

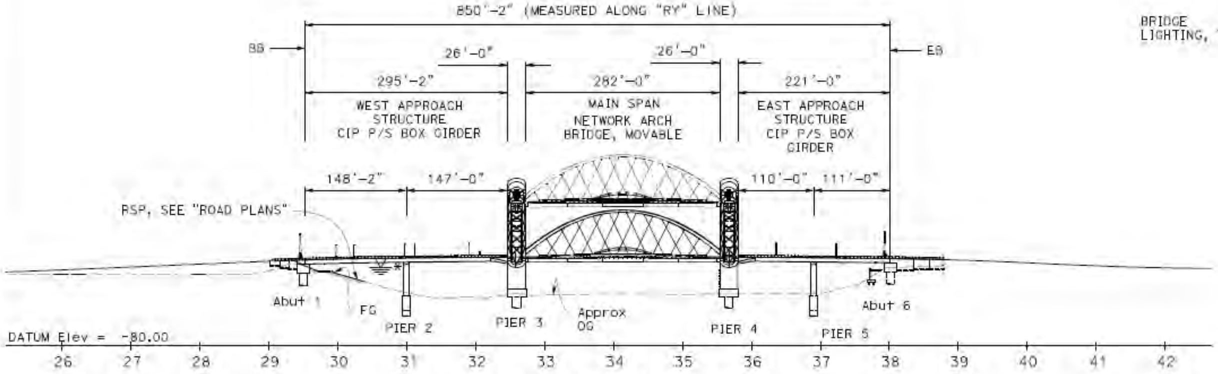
T15136000

SHEET 226 OF -



PROFILE GRADE

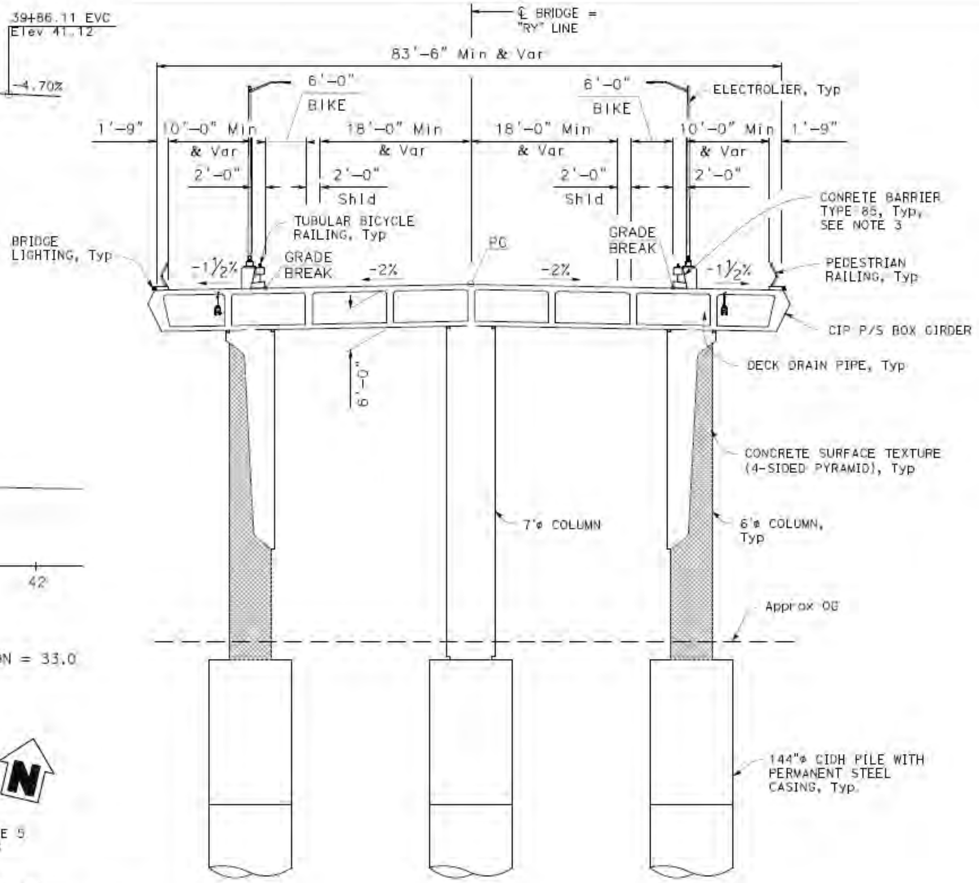
NO SCALE



DEVELOPED ELEVATION

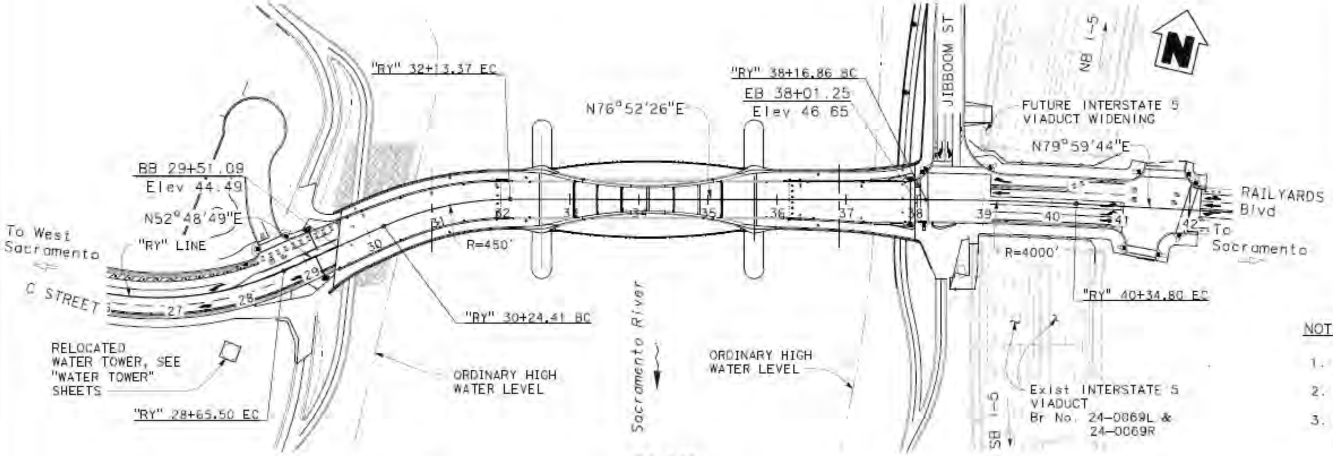
1" = 100'

NOTE:
✱ - 200 YEAR WATER SURFACE ELEVATION = 33.0



TYPICAL SECTION

1" = 10'



PLAN

1" = 100'

NOTES:

1. For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS" sheet.
2. For "PILE DATA TABLE", "HYDROLOGIC SUMMARY" and "SCOUR DATA TABLE", see "FOUNDATION PLAN" sheet.
3. Barrier transitions from Concrete Barrier Type 85 (Mod) to a CA ST-75 (Mod) Bridge Rail. See "BRIDGE BARRIER KEY MAP" and "BARRIER TRANSITION DETAILS" sheets for details.
4. For Pier 3, Pier 4, and Movable Span details, see "MAIN SPAN" plans.

CURVE DATA

R = 450.00'	R = 4000.00'
Δ = 24°03'37"	Δ = 03°07'18"
T = 95.90'	T = 109.00'
L = 188.97'	L = 217.94'

PRELIMINARY – NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

S-1

REVISIONS

BENCH MARK ELEV 37.81 FT
BENCHMARK# 297-82E
DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-82E STAMPED "GAGING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.76 FEET.

SCALE HORIZ AS NOTED VERT N/A

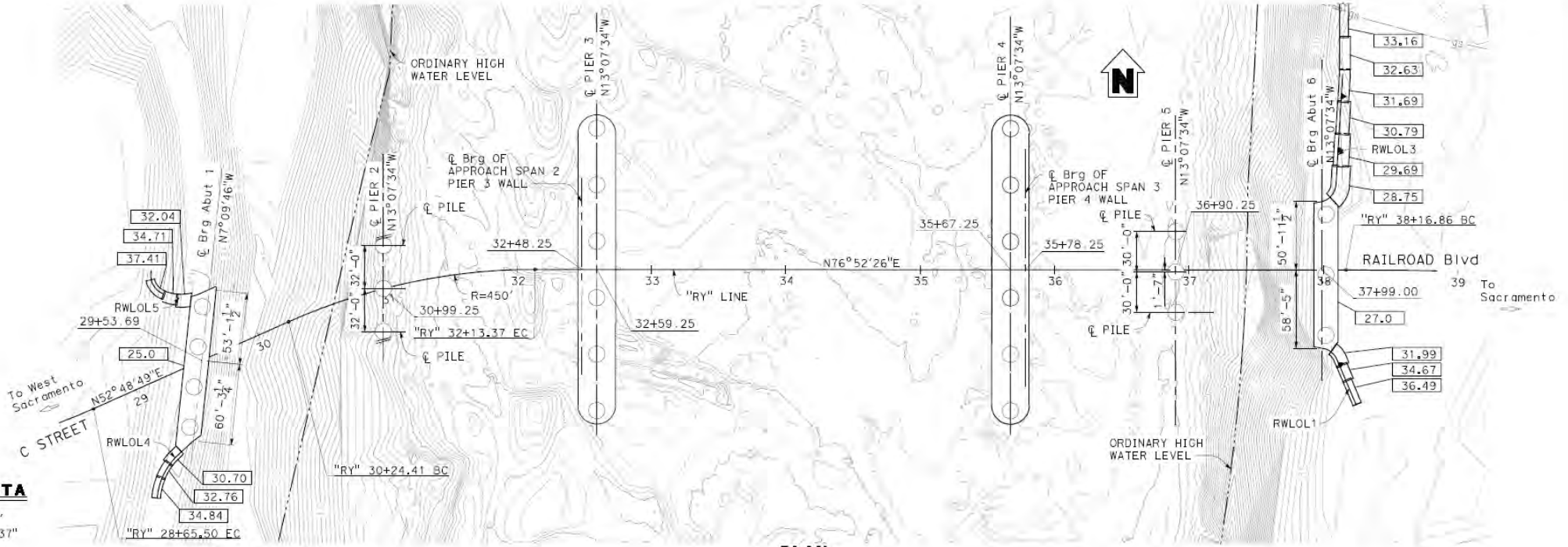
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY J. DOTY DATE 11/3/2025
DESIGNED BY V. SHERBY RCE 80646 DATE 3-31-27
CHECKED BY K. LUNDBLOM RCE 92686 DATE 9-30-25

MARK THOMAS
UNDER THE SUPERVISION OF JASON BRADFORD HICKEY
RCE S 5783 EXP 6-30-26

I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER
GENERAL PLAN

T15136000
SHEET 237 OF 627



PLAN
1" = 40'

CURVE DATA

R = 450.00'
Δ = 24°03'37"
T = 95.90'
L = 188.97'

PILE DATA TABLE

Location	Pile Type	Nominal Resistance (kips)		Design Tip Elevations (ft)	Specified Tip Elevations (ft)	Cut-Off Elevation (ft)
		Compression	Tension			
Abut 1	144" CIDH	4,734	0	-96 (a), -66 (c), -125 (d)	-127	25.25
PIER 2	144" CIDH	5,976	0	-197 (a), -97 (d)	-199	-7.0
PIER 5	144" CIDH	5,976	0	-197 (a), -97 (d)	-199	-7.0
Abut 6	144" CIDH	5,148	0	-108 (a), -100 (c), -123 (d)	-125	27.25

NOTES:
1. Design tip elevations are controlled by (a) Compression, (b) Tension, (c) Settlement, (d) Lateral Load.
2. Do not raise specified tip elevation.
3. For pile data for Piers 3 and 4, see "MAIN SPAN" plans.

SCOUR DATA TABLE

Location	Long Term (Degradation and Contraction) Scour Elevation (ft)	Short Term (Local) Scour Depth (ft)
Abut 1	N/A	0
PIER 2	-13	12
PIER 5	-13	12
Abut 6	N/A	0

NOTE: For scour data for Piers 3 and 4, see "MAIN SPAN" plans.

LEGEND:
- Indicates Bottom of Footing Elevation (feet)
- Indicates 144" Cast-in-drilled-hole Pile

BENCHMARK AND DATUM

MONUMENT	COORDINATES		ELEVATION	DESCRIPTION/LOCATION
	NORTH	EAST		
297-B2E	1976613.9	6703175.1	37.81	U.S. DEPT OF INTERIOR GEOLOGICAL SURVEY BRASS CAP STAMPED "GAGING STATION"

HYDROLOGIC SUMMARY

Drainage Area: 23,500 Square Miles

Frequency (Years)	50	100	200
Discharge (Cubic Foot per Sec)	105,500	108,000	110,300
Water Surface (Elevation at Bridge)	31.9	32.5	33.0

Flood plain data is based upon information available when the plans were prepared and is shown to meet federal requirements. The accuracy of said information is not guaranteed by the State and interested or affected parties should make their own investigation.

PRELIMINARY – NOT FOR CONSTRUCTION

S-17

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.81 FT
BENCHMARK# 297-B2E
DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-B2E STAMPED "GAGING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.78 FEET.

FIELD BOOK
SCALE
HORIZ. N/A
VERT. N/A

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: J. DOTY DATE: 11/3/2025
DESIGNED BY: V. SHERBY R.C.E. 80646 DATE 3-31-27
CHECKED BY: K. LUNDBLOM R.C.E. 92686 DATE 9-30-25

MARK THOMAS
UNDER THE SUPERVISION OF JASON BRADFORD HICKEY
R.S.E. S 5783 EXP. 6-30-26

I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER
FOUNDATION PLAN

T15136000
SHEET 253 OF 627

PRESTRESSING NOTES

270 ksi Low Relaxation Strand:

Pjack = 25,300 kips

Anchor Set = 0.375"

Friction curvature coefficients, u = 0.15/rad

Friction wobble coefficient, K = 0.0002/ft

Total Number of Girders = 9

The final force ratio (larger divided by smaller) between any two girders shall not exceed ratio of 10 to 9.

Concrete: f'c = 6.0 ksi @ 28 days

f'ci = 4.0 ksi @ time of stressing

Contractor shall submit elongation calculations based on initial stress at ☒ = 0.858 times jacking stress.

One end stressing shall be performed from Abutment 1.

LEGEND:

- Indicates girder stem width in inches
- Indicates drainage grate
- Indicates Soffit Access Opening
- Indicates Traffic Barrier Bollard
- Indicates Soffit Vent
- Indicates Soffit Light
- Indicates Manhole w/ Custom Manhole Cover
- Indicates girder designation

GIRDER LAYOUT

1/16" = 1'-0"

DUCT TIE LIMITS PER GIRDER

GIRDER	STATION RANGE
A	30+11.93 TO 32+03.30
B	30+24.41 TO 32+13.37
C	30+24.41 TO 32+13.37
D	30+24.41 TO 32+13.37
E	30+24.41 TO 32+13.37
F	30+24.41 TO 32+13.37
G	30+24.41 TO 32+13.37
H	30+24.41 TO 32+13.37
I	29+28.81 TO 32+11.78

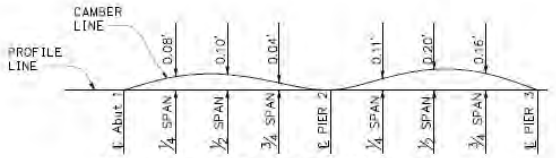
NOTE: For duct tie detail, see "DETAIL A"

#4 ⊃ DUCT TIES @ 24" Max, Typ UNLESS OTHERWISE NOTED. HOOK AROUND BOTH STIRRUP LEGS. ALTERNATE DUCT TIE PLACEMENT AT ADJACENT DUCTS AT 12" Max. CLOSED LOOP END OF DUCT TIES TO BE PLACED ON THE INSIDE OF CURVE

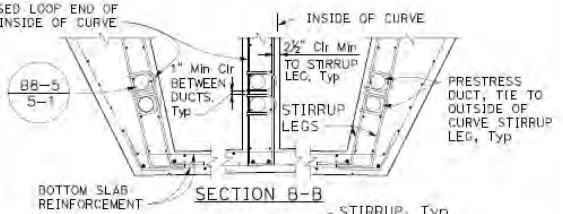
FOR DUCT TIES AT TENDON HORIZONTAL ANGLE CHANGES, SEE B8-5 / 5-1

CAMBER DIAGRAM

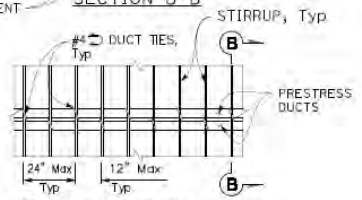
NO SCALE



NOTE: Does not include allowance for falsework settlement.



SECTION B-B

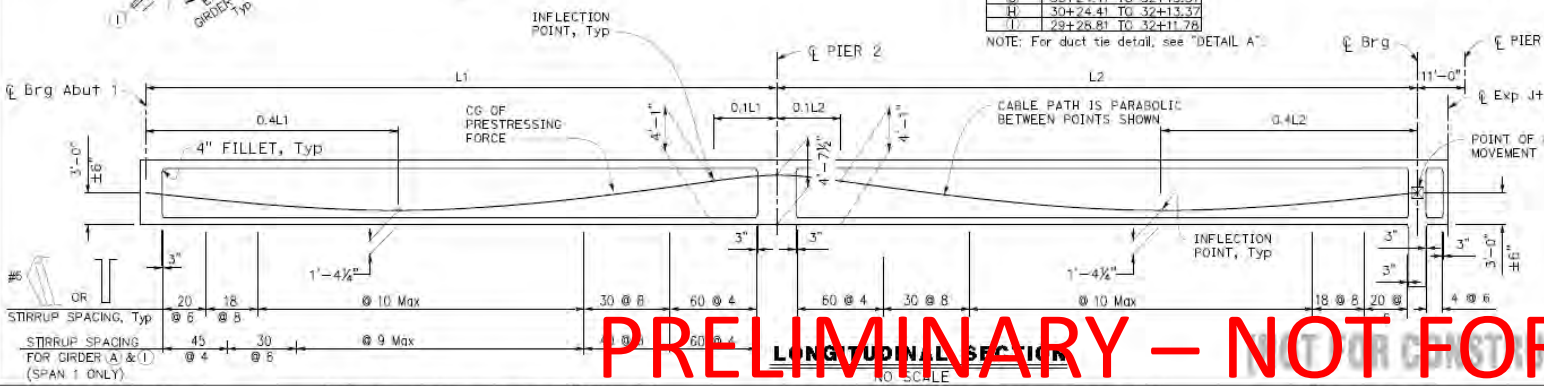


NOTE: Horizontal Girder Reinf not shown

GIRDER ELEVATION

DETAIL A

NO SCALE



LONGITUDINAL SECTION

NO SCALE

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS				BENCH MARK	ELEV 37.81 FT	FIELD BOOK
NO.	DESCRIPTION	DATE	BY	BENCHMARK# 297-82E DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-82E STAMPED "GAGING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.76 FEET.		SCALE HORIZ AS NOTE VERT N/A

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DEPARTMENT OF PUBLIC WORKS

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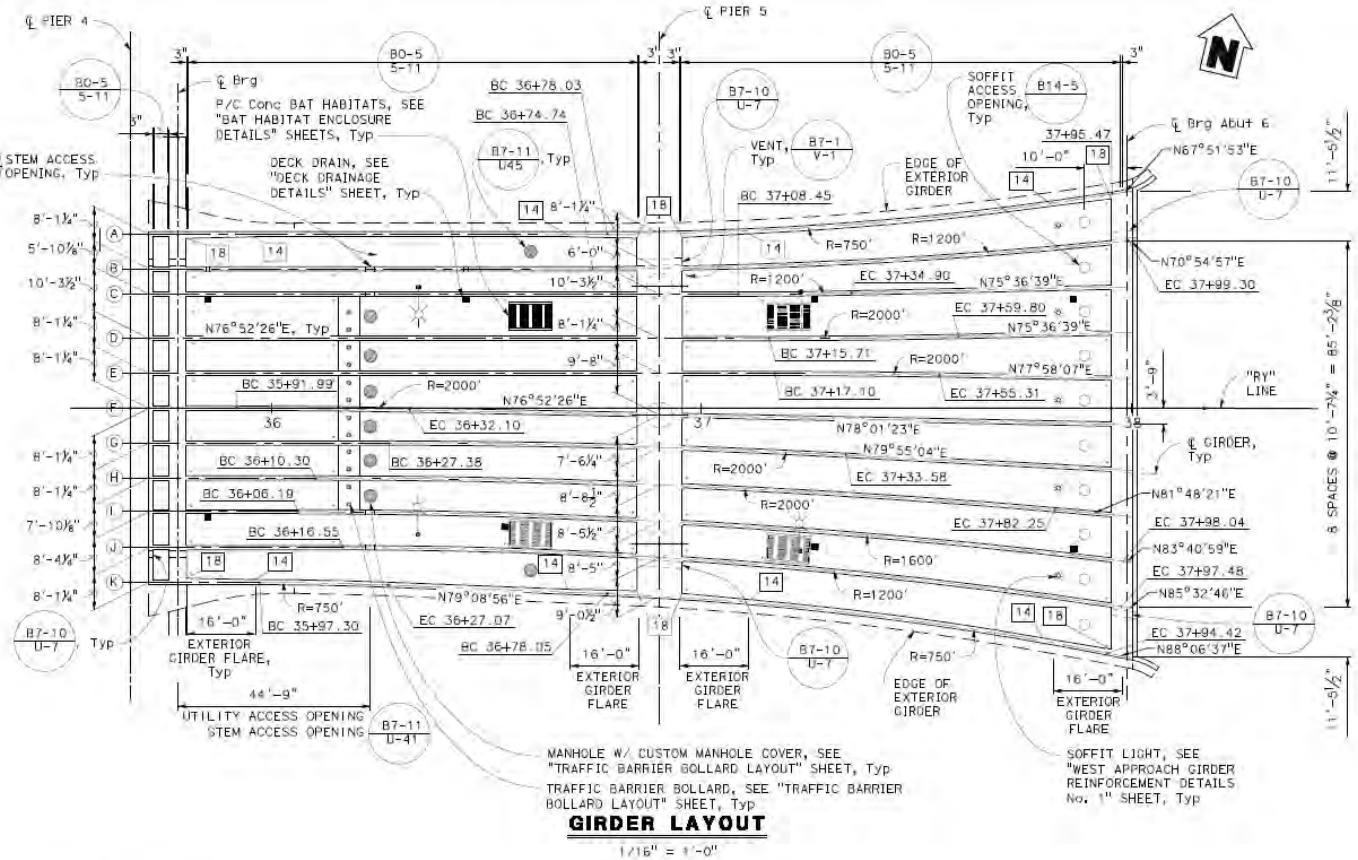
UNDER THE SUPERVISION OF JASON BRADFORD HICKEY
P.E. S 5783 EXP: 6-30-26

I STREET BRIDGE REPLACEMENT
OVER SACRAMENTO RIVER
WEST APPROACH
GIRDER LAYOUT

T15136000 | SHEET 270 OF 627

S-34



GIRDER LAYOUT

1/16" = 1'-0"

PRESTRESSING NOTES

270 ksi Low Relaxation Strand:

Pjack = 16,400 kips

Anchor Set = 0.375"

Friction curvature coefficients, u = 0.15/rad

Friction wobble coefficient, K = 0.0002/ft

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Concrete: f'c = 6.0 ksi @ 28 days

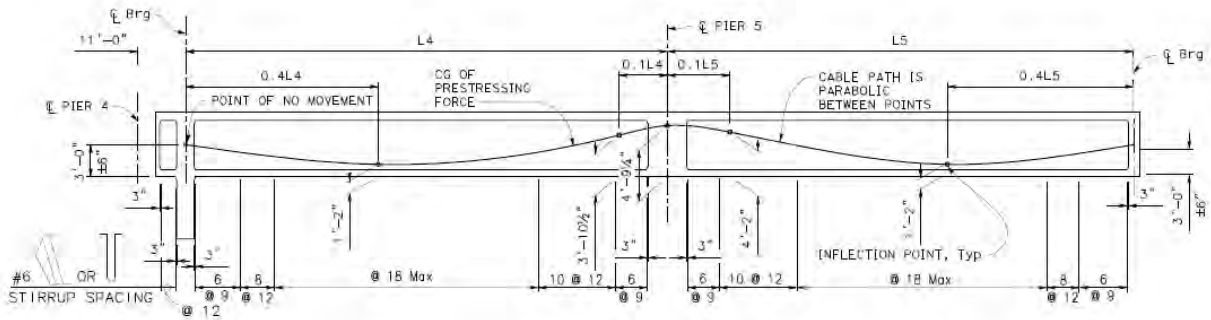
f'ci = 4.0 ksi @ time of stressing

Contractor shall submit elongation calculations based on initial stress at ⊠ = 0.868 times jacking stress.

One end stressing shall be performed from Abutment 1.

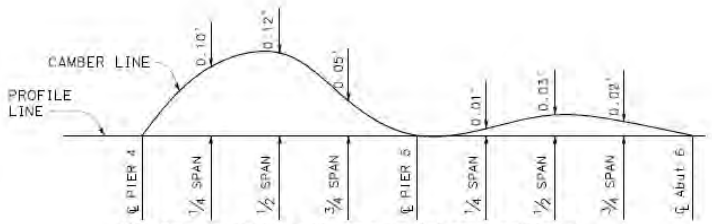
LEGEND:

- Indicates girder stem width in inches
- Indicates drainage grate
- Indicates Soffit Access Opening
- Indicates Traffic Barrier Bollard
- Indicates Soffit Vent
- Indicates Soffit Light
- Indicates Manhole w/ Custom Manhole Cover
- (A) Indicates Girder Designation



LONGITUDINAL SECTION

NO SCALE



NOTE: Does not include allowance for falsework settlement.

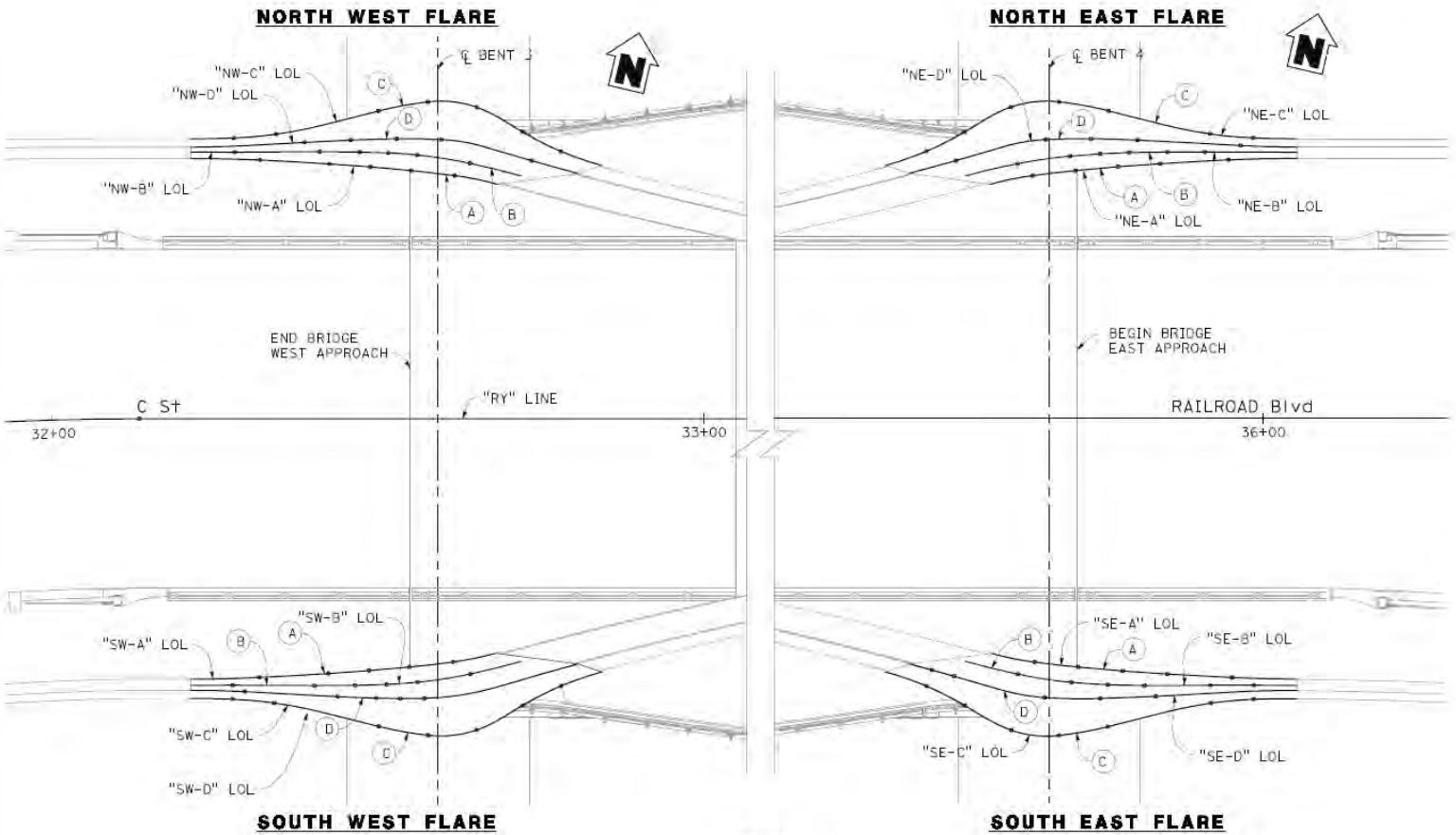
CAMBER DIAGRAM

NO SCALE

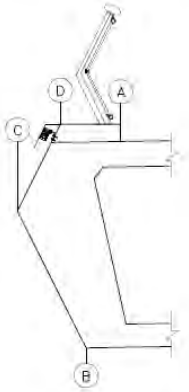
PRELIMINARY – NOT FOR CONSTRUCTION

S-35

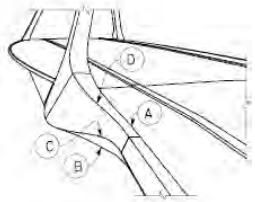
REVISIONS	BENCH MARK	CITY OF SACRAMENTO	MARK THOMAS	I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER	T15136000	SHEET 271 OF 627
NO. DESCRIPTION DATE BY	ELEV. 37.81 FT BENCHMARK# 297-82E DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-82E STAMPED "SACING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.78 FEET.	DEPARTMENT OF PUBLIC WORKS DRAWN BY J. DOTY DATE 11/3/2025 DESIGNED BY V. SHERBY R.C.E. 80646 DATE 3-31-27 CHECKED BY K. LUNDBLOM R.C.E. 92686 DATE 9-30-25	JASON BRADFORD HICKEY R.C.E. 93783 EXP. 6-30-26	EAST APPROACH GIRDER LAYOUT		

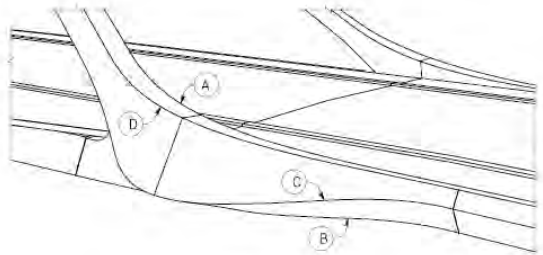


PLAN
1" = 10'



SECTION





ISOMETRIC VIEWS

EXTERIOR GIRDER FLARE
NO SCALE

LEGEND:

Indicates working point on the exterior girder

PRELIMINARY – NOT FOR CONSTRUCTION

S-41

REVISIONS				BENCH MARK ELEV 37.81 FT	FIELD BOOK	CITY OF SACRAMENTO	MARK THOMAS	I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER	T15136000	SHEET 277 OF 627
NO.	DESCRIPTION	DATE	BY	BENCHMARK# 297-82E DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-82E STAMPED "CACING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.76 FEET.	SCALE HORIZ. N/A VERT. N/A	DEPARTMENT OF PUBLIC WORKS	DRAWN BY J. DOTY DATE 11/3/2025 DESIGNED BY V. SHERBY R.C.E. 80646 DATE 3-31-27 CHECKED BY K. LUNDBLOM R.C.E. 92686 DATE 9-30-25	R.C.E. 5783 EXP. 6-30-26	EXTERIOR GIRDER ARCHITECTURAL FLARE LAYOUT		

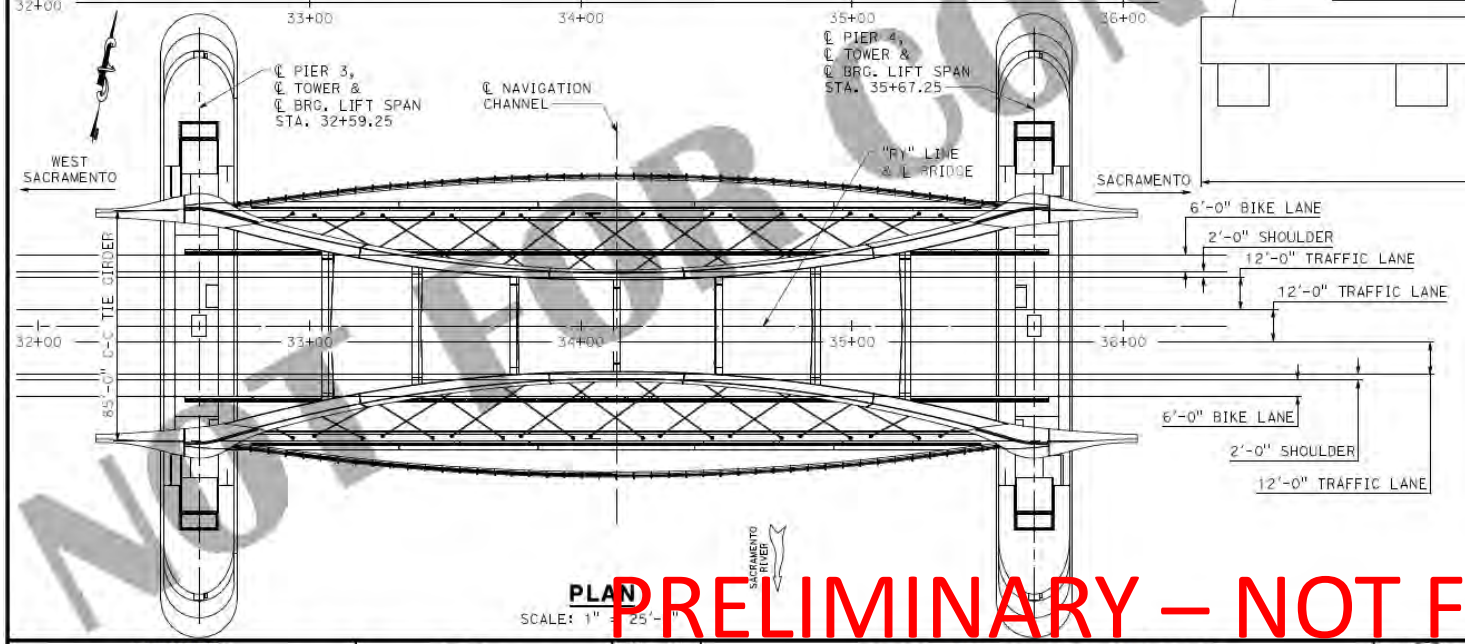
+1.00%
33+53.25 BVC
ELEV 49.95
120'-0" VC
34+73.25 EVC
ELEV 49.95
-1.00%

PROFILE GRADE - "RY" LINE
SCALE: 1" = 25'-0"

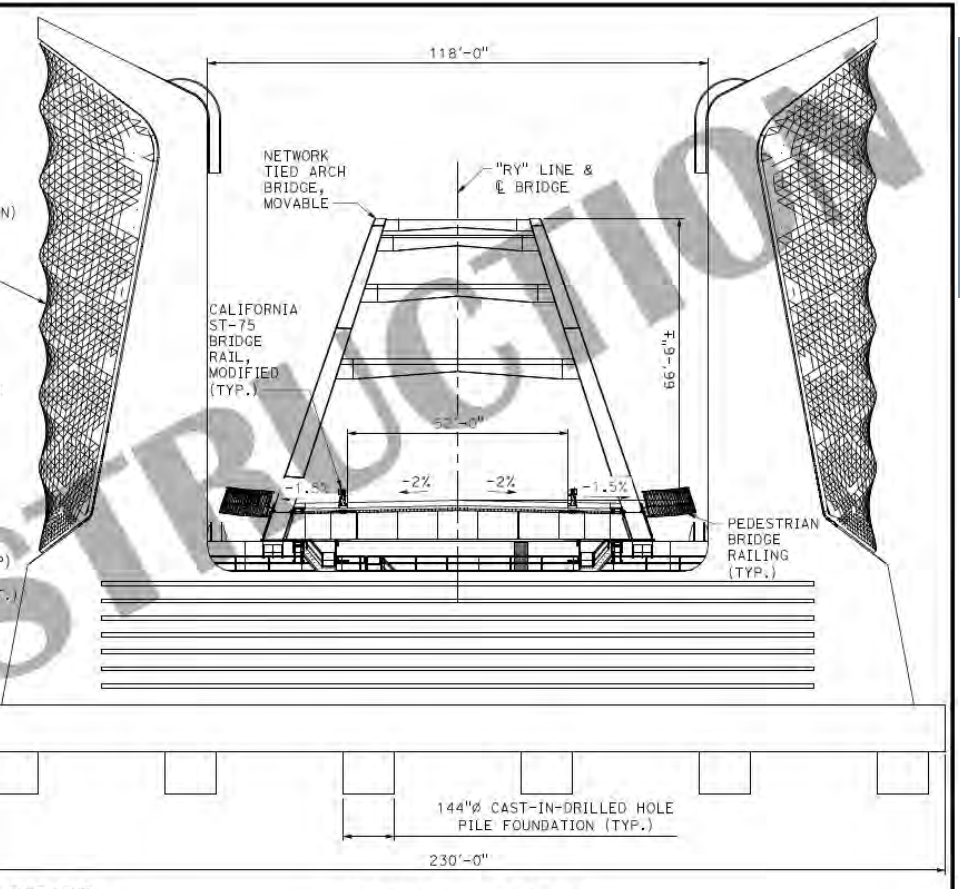
308'-0"
ARCH RIB
℄ TOWER (TYP.)
LIFT SPAN (BRIDGE OPEN)
TOWER (TYP.)
LIFT SPAN (BRIDGE CLOSED)
53'-10" LIFT HEIGHT
SPAN NAVIGATION LIGHT (TYP.)
CANOPY
LOW STEEL ELEV 38.74
TIE GIRDER
325 YEAR WSE = 34.6' (TOP)
200 YEAR WSE = 33.0' (BOT.)
APPROXIMATE GROUND LINE
278'-0" SACRAMENTO RIVER MAIN CHANNEL
SEAL CONCRETE
COFFERDAM (TYP.)

ELEVATION
SCALE: 1" = 25'-0"

32+00 33+00 34+00 35+00 36+00



PLAN
SCALE: 1" = 25'-0"



TYPICAL SECTION
SCALE: 1/16" = 1'-0"

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS
NO. DESCRIPTION DATE BY

MODJESKI and MASTERS
MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK —
SCALE AS SHOWN

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS
DRAWN BY T. STEPHENS DATE 11/03/2025
DESIGNED BY T. STEPHENS DATE 11/03/2025
CHECKED BY C. CAHILL DATE 11/03/2025

REGISTERED PROFESSIONAL ENGINEER TODD J. STEPHENS No. 87725 Exp. 09-30-27 STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
GENERAL PLAN AND ELEVATION
(Date: 11/03/2025)

PW: T15136000
DWG NO. MS-002
SHT NO. ## OF ###

NOT FOR CONSTRUCTION

131'-0"
℄ SHEAVE
Ø19'-1"
℄ SHEAVE
Ø17'-0⅝"
F MS-011
A MS-009
TOWER ROOF
EXTERIOR SCREEN LIMIT (SCREEN REMOVED FOR CLARITY)
EL. 140.25
E MS-011
TOWER CORBEL
LIFT SPAN TOWER (TYP.)
COUNTERWEIGHT
121'-1½" - APPROXIMATE SCREEN HEIGHT
LIFT SPAN TIE GIRDER (TYP.)
LIFTING GIRDER (OPEN POSITION)
58'-9"
TOWER LEG
BRIDGE FULLY CLOSED EL. 91.31
42'-6"
42'-6"
APPROACH SPAN BEARING SEAT
"RY" LINE
D MS-011
53'-10"
TOWER APRON ROOF
BRIDGE FULLY OPENED EL. 37.48
25'-8"
TOWER APRON
B MS-010
C MS-010
30'-0"
12'-0"
30'-0"
12'-0"
30'-0"
12'-0"
30'-0"
12'-0"
30'-0"
12'-0"
PIER FOOTING CAP

26'-0"
℄ PIER 3 STA. 32+59.25
℄ SHEAVE
EXTERIOR SCREENING
162'-3"

ELEVATION - LIFT SPAN PIER AND TOWERS
(PIER 3 LOOKING AHEAD STATION [illegible] PIER 4 STA [illegible] ABOUT ℄ LIFT SPAN EXCEPT AS NOTED)
SCALE: 1/32" = 1'-0"

SECTION
SCALE: ½" = 1'-0"

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS
NO. | DESCRIPTION | DATE | BY

MODJESKI and MASTERS
MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: ---
SCALE: AS SHOWN

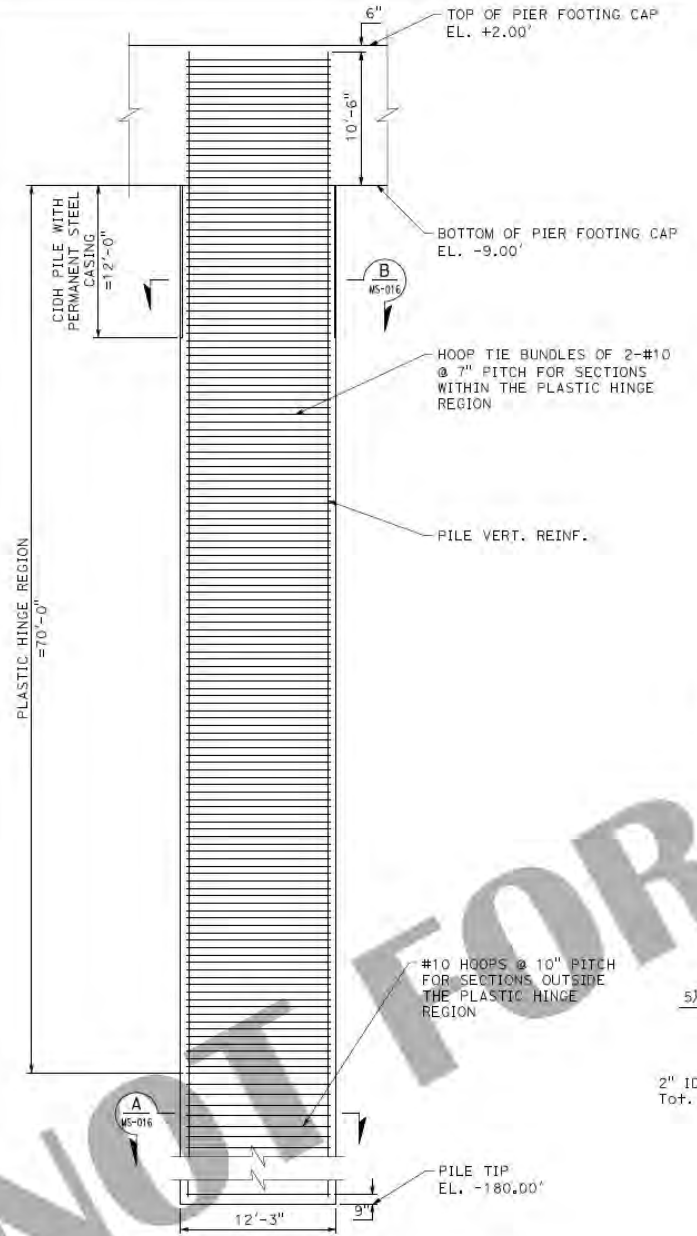
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: C. AHLBERG | DATE: 11/03/2025
DESIGN BY: C. AHLBERG | DATE: 11/03/2025
CHECKED BY: T. STEPHENS | DATE: 11/03/2025

REGISTERED PROFESSIONAL ENGINEER TODD J. STEPHENS No. 37725 Exp. 09-30-27 STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
PIER GENERAL PLAN AND ELEVATION
(Date: 11/03/2025)

PN: T15136000
DWG. NO.: MS-009
SHT NO.: ## OF ###



CIDH PILE DETAILS
SCALE: 3/16" = 1'-0"

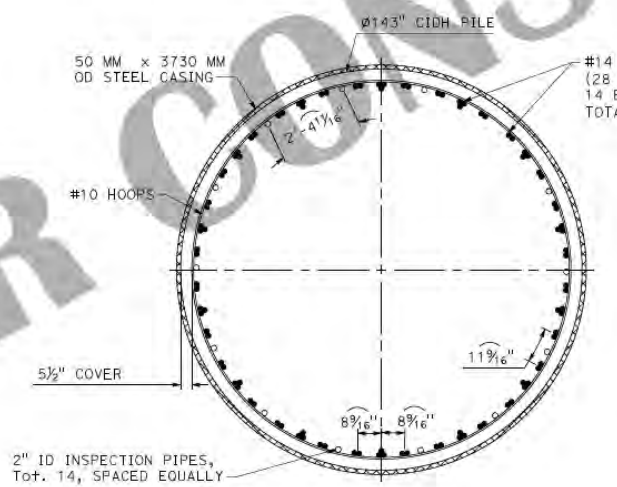
PILE DATA TABLE						
LOCATION	PILE TYPE	NOMINAL RESISTANCE (KIPS)		DRIVEN STEEL SHELL SPECIFIED TIP ELEVATION (ft)	CIDH DESIGN TIP ELEVATIONS (ft)	CIDH SPECIFIED TIP ELEVATIONS (ft)
		COMPRESSION	TENSION			
PIER 3 AND PIER 4	CIDH PILES WITH 50 MM x 3730 MM OD STEEL CASING	12000	1000	-21	-180.00 (a) -180.00 (b) -100.00 (d)	-180

PILE DATA NOTES:

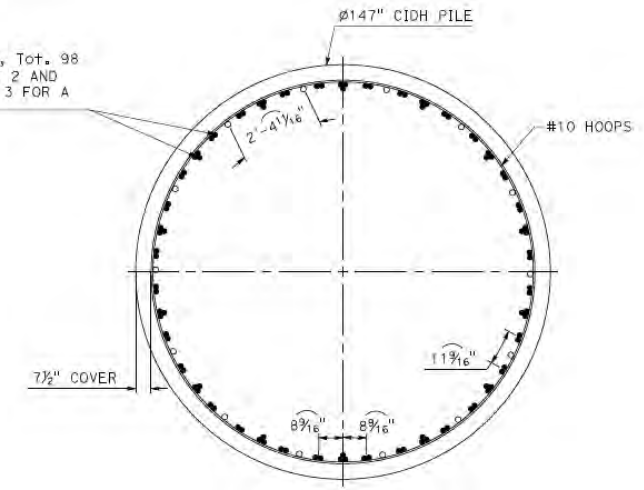
1. DESIGN TIP ELEVATIONS ARE CONTROLLED BY: (a) COMPRESSION, (b) TENSION, (d) LATERAL LOAD.
2. THE CIDH SPECIFIED TIP ELEVATION SHALL NOT BE RAISED.
3. UNSUITABLE SOIL LAYERS (VERY SOFT, LIQUEFIABLE, SCOURABLE) THAT DO NOT CONTRIBUTE TO THE DESIGN NOMINAL RESISTANCE EXIST AT PIERS 3 AND 4 EXTENDING TO ELEVATION OF -11 ft.

NOTES:

1. SPLICING OF LONGITUDINAL REINFORCEMENT IS ALLOWED AT A DISTANCE OF 18 FT BELOW THE BOTTOM OF CAP (ELEV. -27.00), AND OTHER LOCATIONS OUTSIDE THE PLASTIC HINGE REGION.
2. SPLICING OF LONGITUDINAL AND TRANSVERSE REINFORCEMENT SHALL MEET THE REQUIREMENTS FOR ULTIMATE BUTT SPLICING.



B MS-016 **SECTION**
SCALE: ½" = 1'-0"



A MS-016 **SECTION**
SCALE: ½" = 1'-0"

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE	BY

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: ---
SCALE: AS SHOWN

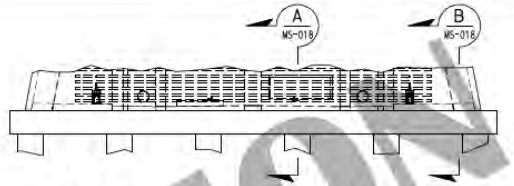
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: C. AHLSTROM DATE: 10/03/2025
DESIGN BY: C. AHLSTROM DATE: 10/03/2025
CHECKED BY: M. MAIO DATE: 10/03/2025

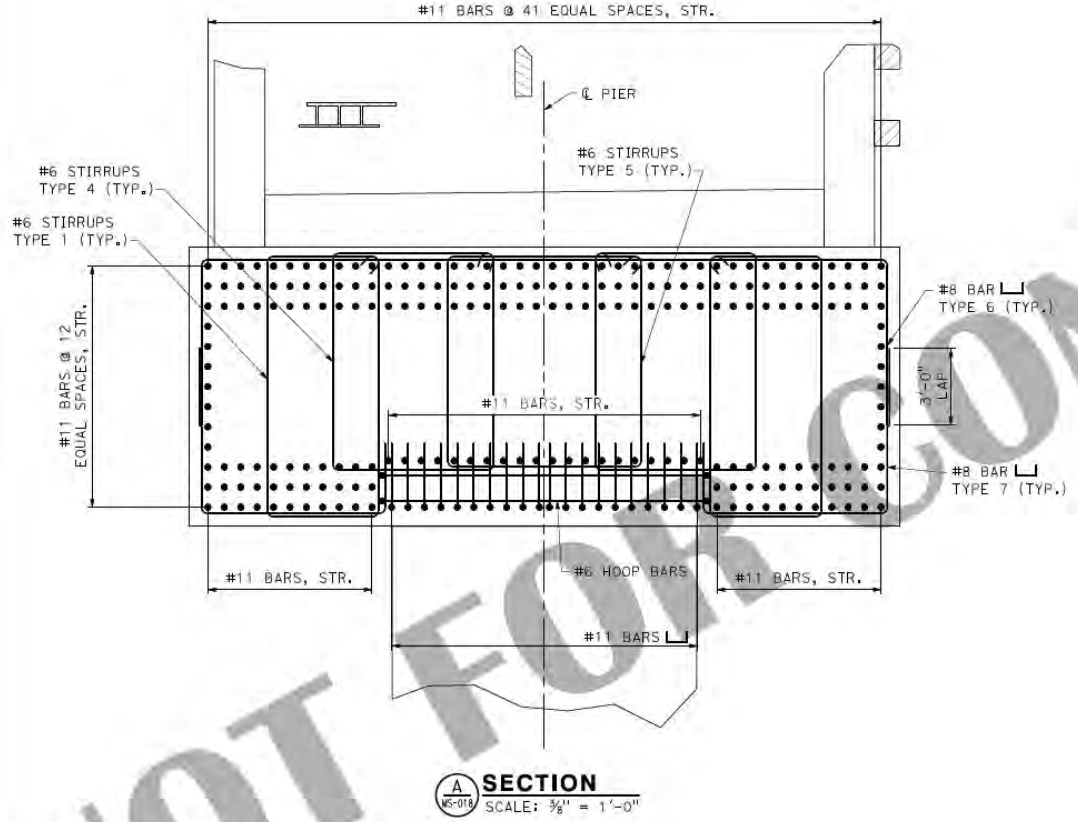
REGISTERED PROFESSIONAL ENGINEER — TODD J. STEPHENS — No. 87728 — Exp. 06-30-27 — CIVIL — STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
CIDH PILE DETAILS
(Date: 11/03/2025)

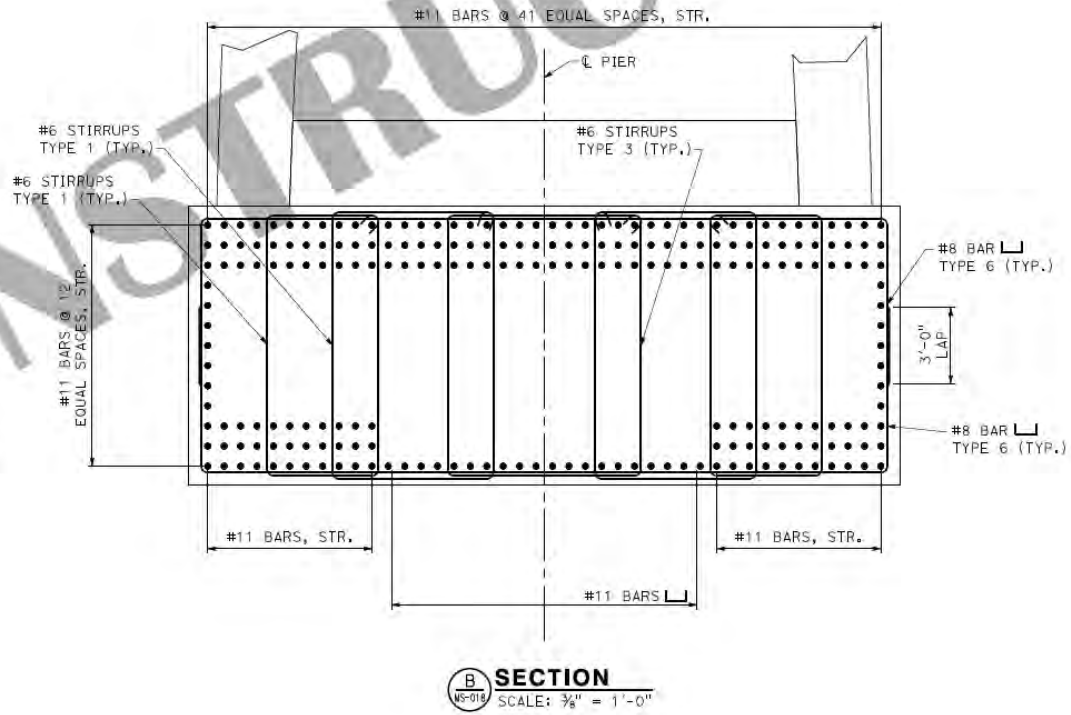
PN: T15136000
DWG NO: MS-016
SHT NO: ## OF ###



PARTIAL ELEVATION PIER CAP



A MS-018 **SECTION**
SCALE: ⅜" = 1'-0"



B MS-018 **SECTION**
SCALE: ⅜" = 1'-0"

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE	BY

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: —

SCALE: HORIZ. 1"=1'-0" VERT. 1"=1'-0"

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: C. AHLBERG DATE: 11/03/2025
DESIGN BY: C. AHLBERG DATE: 11/03/2025
CHECKED BY: M. MAZZI DATE: 11/03/2025

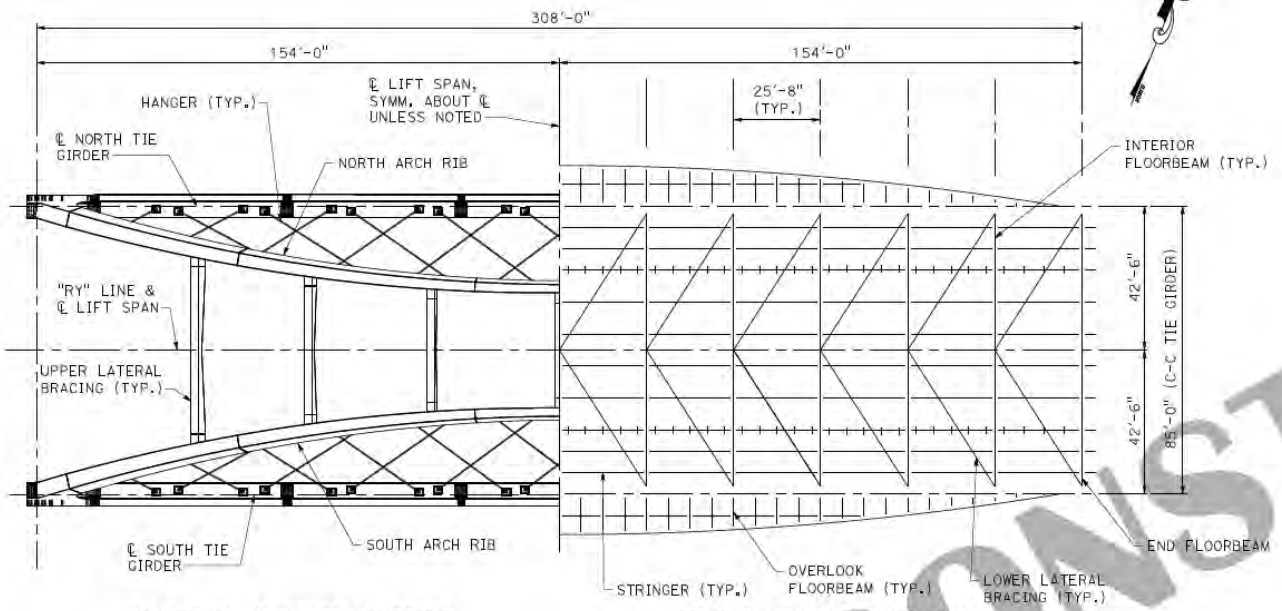
REGISTERED PROFESSIONAL ENGINEER TODD J. STEPHENS No. 87725 Exp. 03-30-27 CIVIL STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
PIER FOOTING CAP DETAILS - 2
(Date: 11/03/2025)

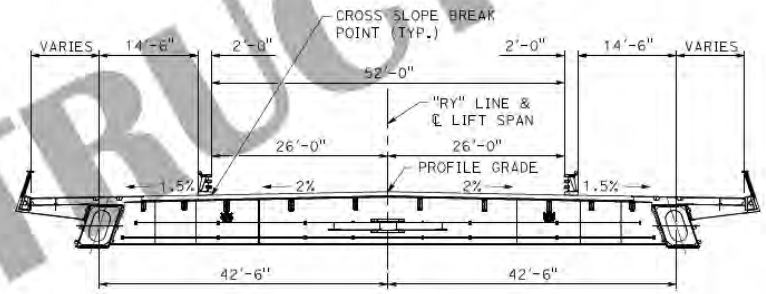
PN: 115136000

DWG NO.: MS-018

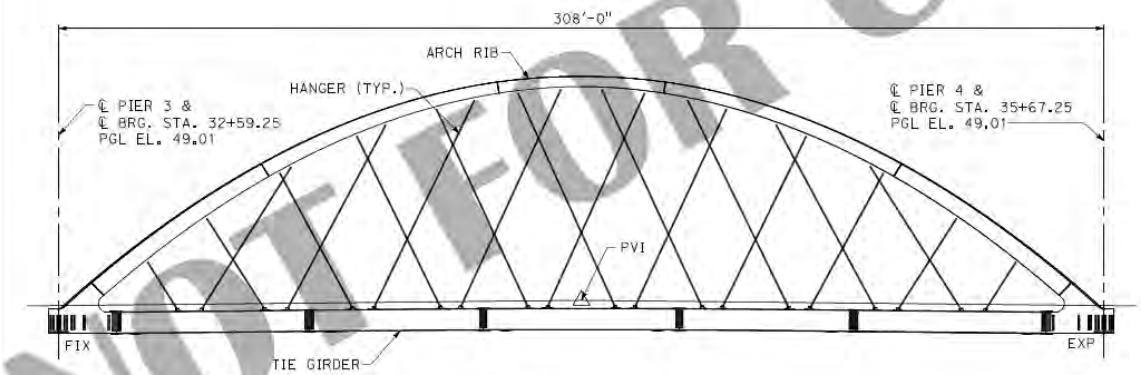
SHT NO.: ## OF ###



PLAN
SCALE: 1" = 20'-0"



TYPICAL CROSS SECTION
SCALE: 1" = 10'-0"
(HANGERS AND ARCH RIBS NOT SHOWN FOR CLARITY)



ELEVATION
SCALE: 1" = 20'-0"

VERTICAL CURVE DATA
P.V.I 34+13.25
EL. 50.55
120' V.C.
1.00% 1.00%

NOTES:

1. FOR GENERAL NOTES, SEE DWG. NOS. MS-003 THRU MS-005.
2. FOR LIFT SPAN ARCH - KEY ELEVATION, SEE DWG. NO. MS-080.
3. FOR ARCH RIB, TIE GIRDER, FLOORBEAM, HANGER AND UPPER LATERAL BRACING GEOMETRY, SEE DWG. NOS. MS-081 AND MS-082.
4. FOR LIFT SPAN FRAMING PLAN, SEE DWG. NO. MS-123.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS
NO. | DESCRIPTION | DATE | BY

MODJESKI and MASTERS
MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: ---
SCALE: AS SHOWN

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: T. STEPHENS DATE: 11/03/2025
DESIGN BY: T. STEPHENS DATE: 11/03/2025
CHECKED BY: M. ALESTRA DATE: 11/03/2025

REGISTERED PROFESSIONAL ENGINEER TODD J. STEPHENS No. 97725 Exp. 09-30-27 CIVIL STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
LIFT SPAN GENERAL PLAN AND ELEVATION
(Date: 11/03/2025)

PN: T15136000
DWG. NO.: MS-078
SHT NO.: ## OF ###

NOT FOR CONSTRUCTION

37'-4⅞"
18'-8⅞16"
18'-8⅞16"
℄ ARCH RIB & ℄ UPPER LATERAL MEMBER
ARCH RIB LIGHT COVERING (TYP.)
℄ ARCH & ℄ TIE GIRDER
℄ ARCH & ℄ TIE GIRDER
"RY" LINE & ℄ LIFT SPAN
ARCH HANGERS (TYP.)
VARIES - 11'-0" AT MIDSPAN
4'-3¼"
2'-10¾"
8'-3"
2'-0"
26'-0"
26'-0"
2'-0"
2'-10¾"
8'-3"
4'-3¼"
VARIES - 11'-0" AT MIDSPAN
10½"
10½"
3"
BRIDGE RAILING (TYP.)
EXODERMIC DECK
LOWER LATERAL BRACING
INTERIOR FLOORBEAM
3"
10½"
10½"
PEDESTRIAN RAILING (TYP.)
FASCIA BEAM (TYP.)
OVERLOOK FLOORBEAM (TYP.)
GRATING (TYP.)
VARIES - 11'-11" AT MIDSPAN
6'-6"
6'-0"
6'-3"
9'-6"
9'-6"
4'-9"
4'-9"
9'-6"
9'-6"
6'-3"
6'-0"
6'-6"
VARIES - 11'-11" AT MIDSPAN
42'-6"
42'-6"
85'-0"

LIFT SPAN TYPICAL SECTION
SCALE: ⅛" = 1'-0"

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS
NO. | DESCRIPTION | DATE | BY

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: ----
SCALE: AS SHOWN

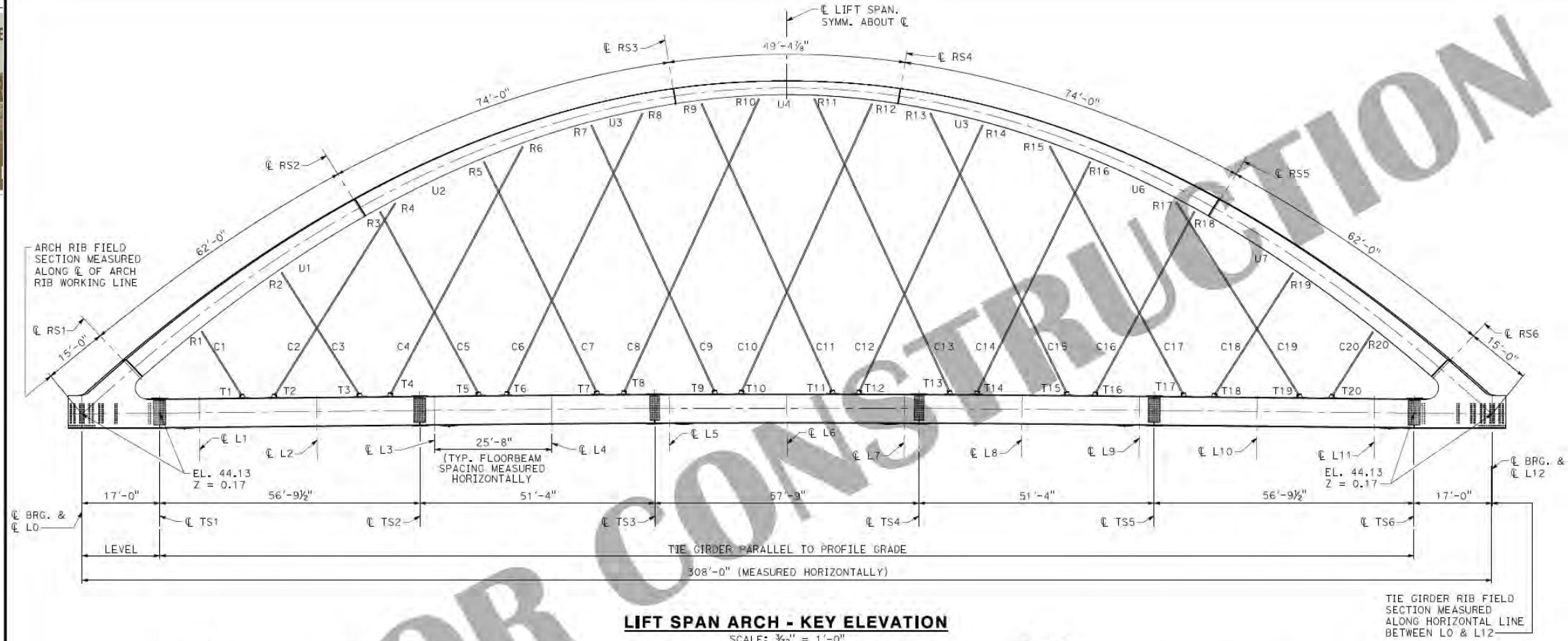
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: T. STEPHENS DATE: 11/03/2025
DESIGN BY: T. STEPHENS DATE: 11/03/2025
CHECKED BY: M. ALEXIEV DATE: 11/03/2025

REGISTERED PROFESSIONAL ENGINEER TODD J. STEPHENS No. 87725 Exp. 09-30-27 CIVIL STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
LIFT SPAN TYPICAL SECTION
(Date: 11/03/2025)

PN: T15136000
DWG. NO.: MS-079
SHT NO.: ## OF ###



LIFT SPAN ARCH - KEY ELEVATION

SCALE: 3/32" = 1'-0"

LEGEND:

C(n) INDICATES HANGER MEMBER

FB(n) INDICATES FLOORBEAM MEMBER

L(n) INDICATES FLOORBEAM PANEL POINT ON TIE GIRDER WORKING LINE

LL(n) INDICATES LOWER LATERAL BRACING MEMBER

R(n) INDICATES HANGER PANEL POINT ON ARCH RIB WORKING LINE

RS(n) INDICATES ARCH RIB SPLICE ON ARCH RIB WORKING LINE

T(n) INDICATES HANGER PANEL POINT ON TIE GIRDER WORKING LINE

TS(n) INDICATES TIE GIRDER SPLICE ON TIE GIRDER WORKING LINE

U(n) INDICATES UPPER LATERAL BRACING PANEL POINT ON ARCH RIB WORKING LINE

UL(n) INDICATES UPPER LATERAL BRACING MEMBER

NOTES:

1. FOR GENERAL NOTES, SEE DWG. NOS. MS-003 THRU MS-005.
2. FOR ARCH RIB, TIE GIRDER, HANGER AND UPPER LATERAL GEOMETRY, SEE DWG. NOS. MS-081 THRU MS-082.
3. FOR KNUCKLE JOINT DETAILS, SEE DWG. NOS. MS-094 THRU MS-098.
4. FOR ARCH RIB SEGMENT DETAILS, SEE DWG. NOS. MS-099 THRU MS-102.
5. FOR ARCH RIB SPLICE DETAILS, SEE DWG. NOS. MS-103 THRU MS-104.
6. FOR TIE GIRDER SEGMENT DETAILS, SEE DWG. NOS. MS-116 THRU MS-119.
7. FOR TIE GIRDER SPLICE DETAILS, SEE DWG. NOS. MS-120 THRU MS-122.
8. FOR HANGER CONNECTIONS AND DETAILS, SEE DWG. NOS. MS-112 THRU MS-115.
9. FOR UPPER LATERAL CONNECTIONS AND DETAILS, SEE DWG. NOS. MS-107 THRU MS-111.
10. FOR FLOORBEAM CONNECTIONS AND DETAILS, SEE DWG. NOS. MS-124 THRU MS-126.
11. WORK POINT GEOMETRY IS SHOWN IN THE FINAL CAMBERED POSITION WITH FULL DEAD LOAD, INCLUDING FUTURE STREETCAR ADDITIONS AT THE DESIGN TEMPERATURE.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE	BY

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: ----

SCALE: AS SHOWN

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: T. STEPHENS DATE: 11/03/2025
DESIGN BY: T. STEPHENS DATE: 11/03/2025
CHECKED BY: M. ALEXIN DATE: 11/03/2025

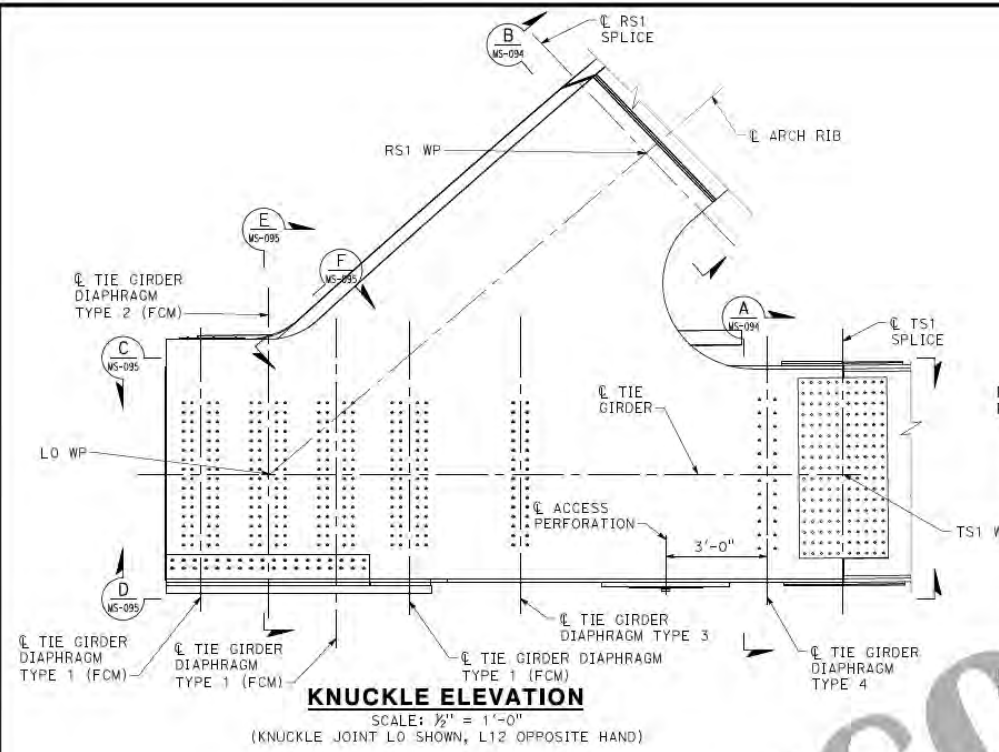
REGISTERED PROFESSIONAL ENGINEER TODD J. STEPHENS No. 37725 Exp. 03-31-27 CIVIL STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
LIFT SPAN GEOMETRY - 1
(Date: 11/03/2025)

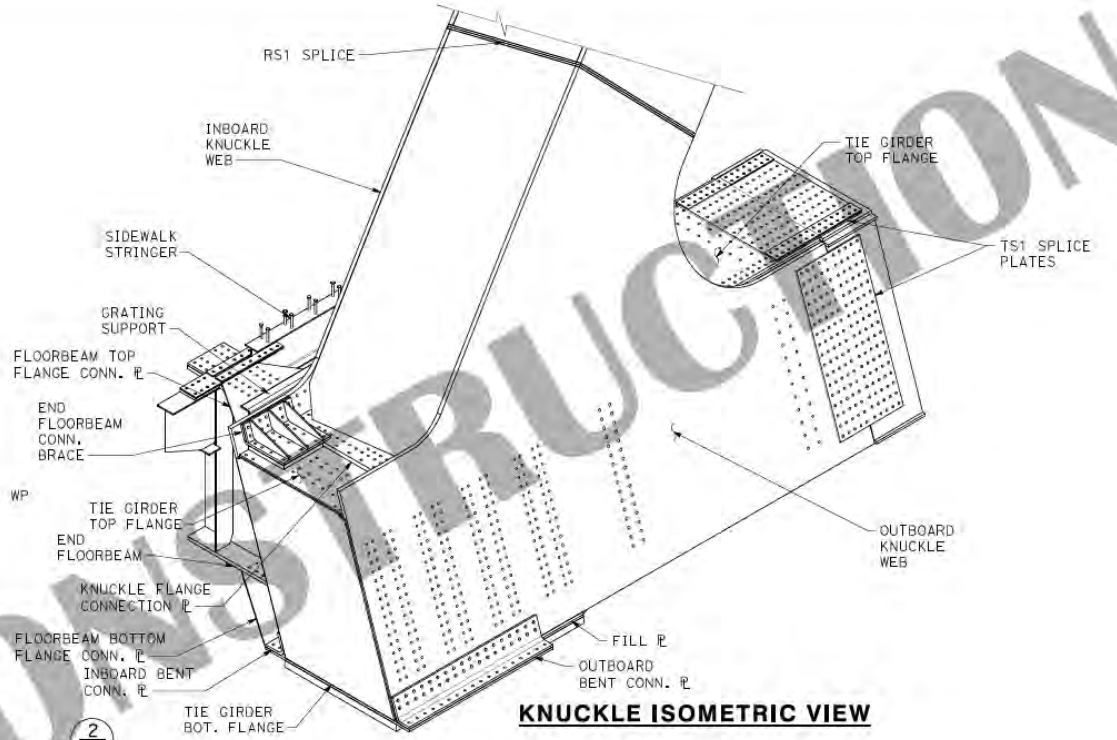
PN: T15136000

DWG. NO. MS-080
SHT NO. ## OF ###

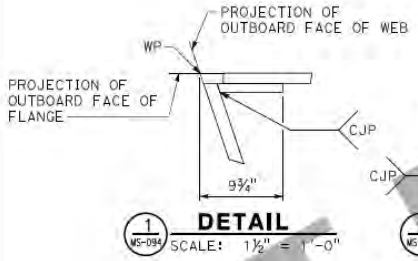
NOT FOR CONSTRUCTION



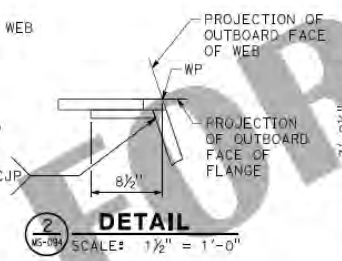
KNUCKLE ELEVATION
SCALE: ½" = 1'-0"
(KNUCKLE JOINT L0 SHOWN, L12 OPPOSITE HAND)



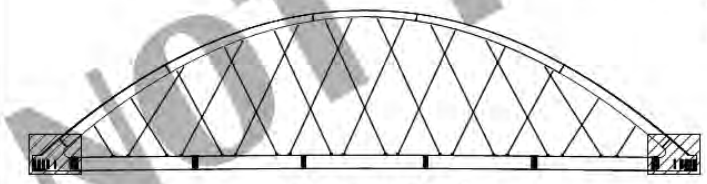
KNUCKLE ISOMETRIC VIEW



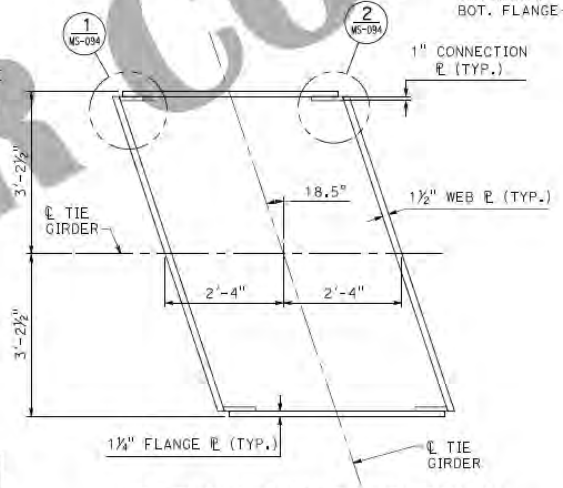
1 MS-094 **DETAIL**
SCALE: 1½" = 1'-0"



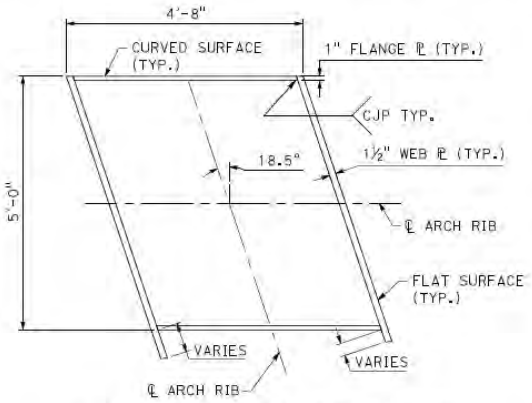
2 MS-094 **DETAIL**
SCALE: 1½" = 1'-0"



KEY ELEVATION



A MS-094 **TYPICAL L0-TS1 SECTION**
SCALE: ¾" = 1'-0"



B MS-094 **TYPICAL L0-RS1 SECTION**
SCALE: ¾" = 1'-0"

NOTES:
1. FOR GENERAL NOTES, SEE DWG. NOS. MS-093 THRU MS-095.

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE	BY

MODJESKI and MASTERS
MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: —
SCALE: AS SHOWN

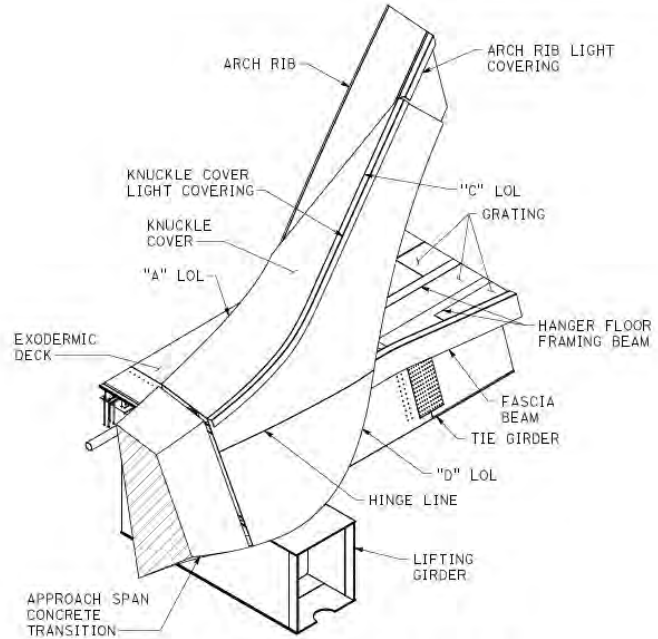
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: T. STEPHENS DATE: 11/03/2025
DESIGN BY: T. STEPHENS DATE: 11/03/2025
CHECKED BY: N.C.M.A.D. DATE: 11/03/2025

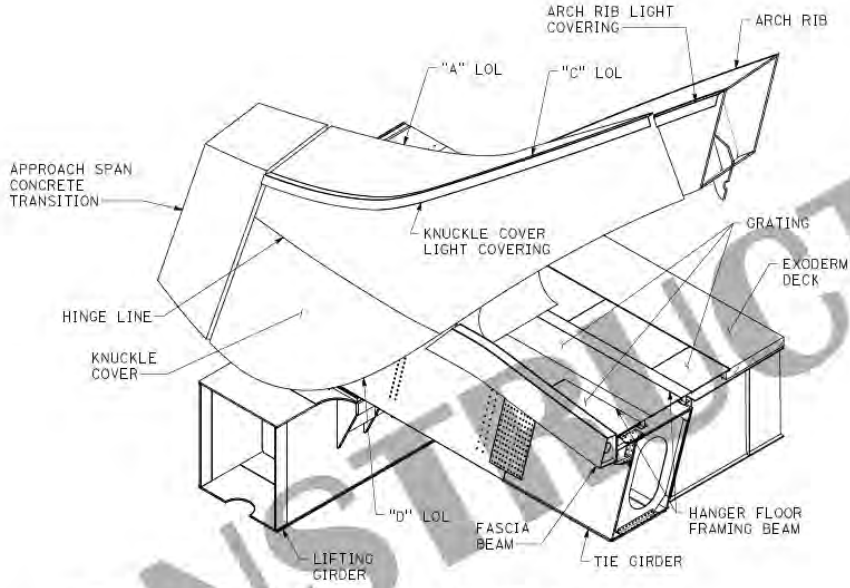
REGISTERED PROFESSIONAL ENGINEER TODD J. STEPHENS No. 87726 Exp. 09-30-27 CIVIL STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
KNUCKLE DETAILS - 1
(Date: 11/03/2025)

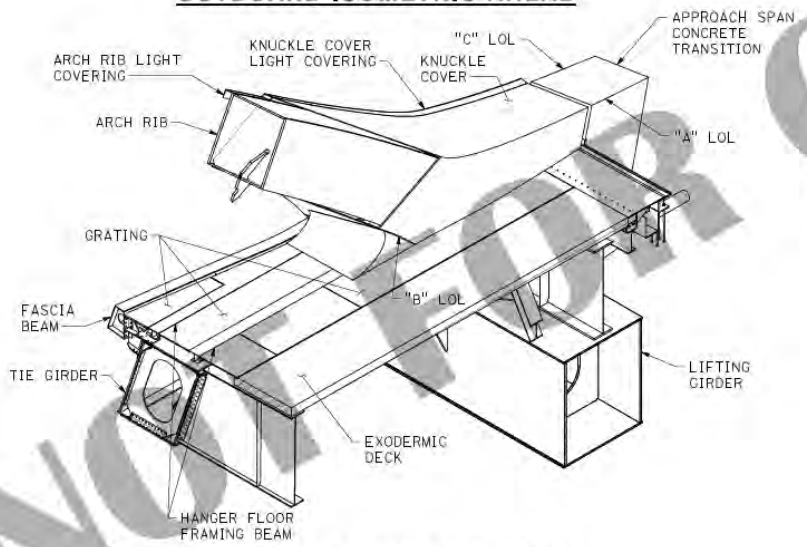
PN: T15136000
DWG. NO.: MS-094
SHT. NO.: ## OF ###



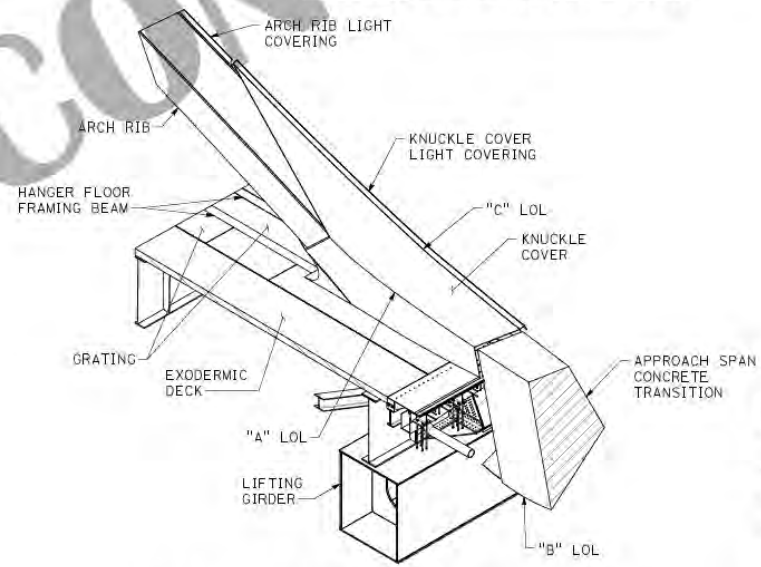
OUTBOARD ISOMETRIC AHEAD



OUTBOARD ISOMETRIC BACK



INBOARD ISOMETRIC BACK



INBOARD ISOMETRIC AHEAD

NOTES:

1. FOR KNUCKLE COVER CONTROL LINES, SEE DWG. NOS. S-33 THRU S-37.
2. FOR GENERAL NOTES, SEE DWG. NOS. MS-003 THRU MS-003.
3. ISOMETRIC VIEWS ARE SHOWN FOR THE SOUTH ARCH KNUCKLE AT PIER 3. OTHER LOCATIONS SIMILAR.
4. PEDESTRIAN RAILING AND APPROACH RAILING NOT SHOWN FOR CLARITY. FOR DETAILS OF APPROACH RAILING AND CONNECTION DETAILS WITH KNUCKLE COVER, SEE DRAWING NO. S-39.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE	BY

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK —
SCALE AS SHOWN

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: T. STEPHENS DATE: 11/03/2025
DESIGN BY: T. STEPHENS DATE: 11/03/2025
CHECKED BY: M. WARD DATE: 11/03/2025

REGISTERED PROFESSIONAL ENGINEER — TODD J. STEPHENS — No. 87125 — Exp. 09-30-27 — STATE OF CALIFORNIA — CIVIL

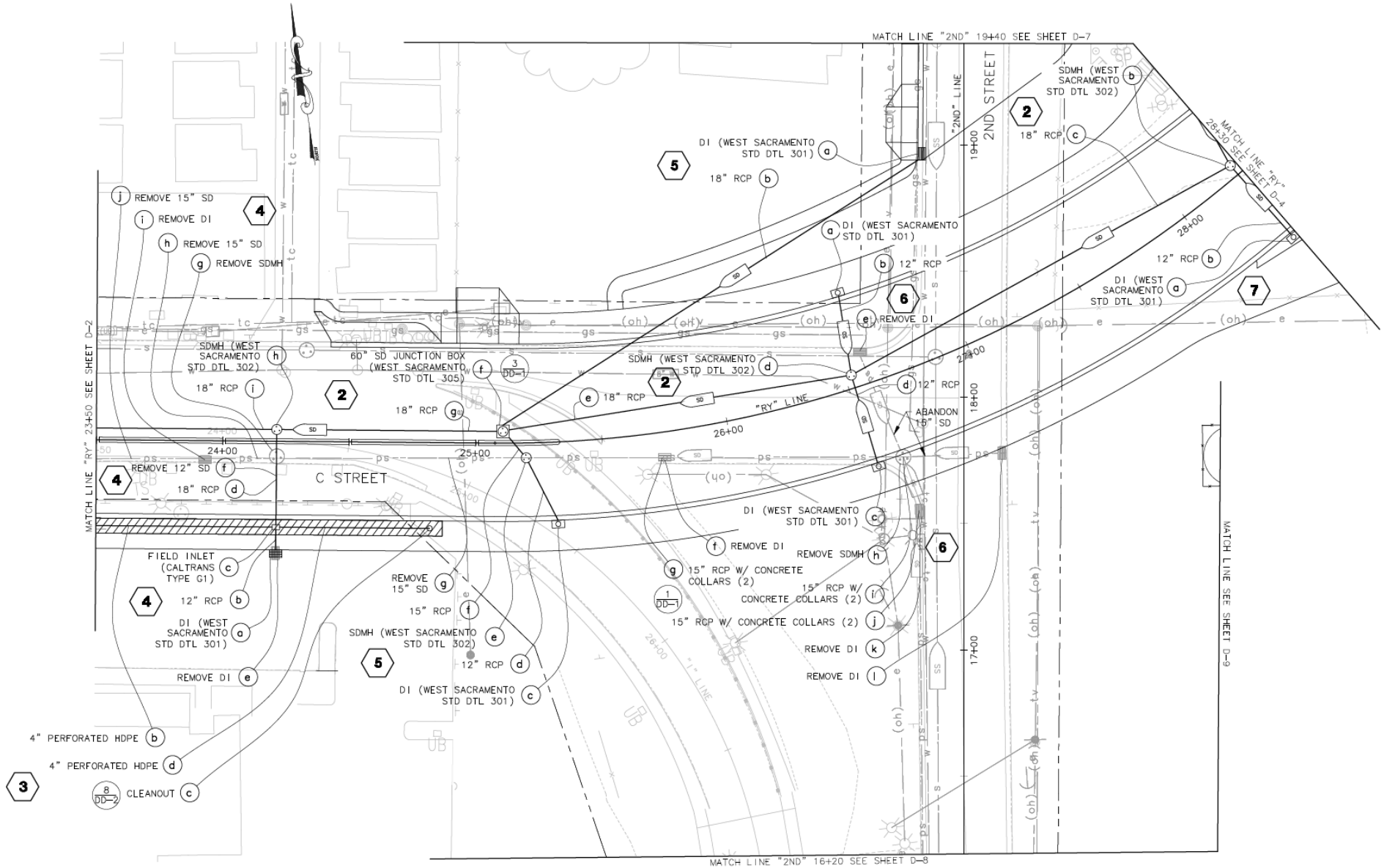
I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
KNUCKLE COVER - 1
(Date: 11/03/2025)

PN: T15136000
DWG. NO.: MS-105
SHT NO.: ## OF ###

City of SACRAMENTO

CITY OF WEST SACRAMENTO

Drainage & Utilities



PRELIMINARY – NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
HARFATEH SINGH GREWAL
No. 95969
Exp 06/30/26
CIVIL
STATE OF CALIFORNIA

D-3

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.81 FT
BENCHMARK# 297-B2E
DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-B2E STAMPED "GAGING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.78 FEET.

FIELD BOOK

SCALE
HORIZ. 1"=20'
VERT.

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: C. SAUVAGEAU DATE NOVEMBER 2025
DESIGNED BY: H. GREWAL R.C.E. 95969 DATE NOVEMBER 2025
CHECKED BY: K. CASELLI R.C.E. 86464 DATE NOVEMBER 2025

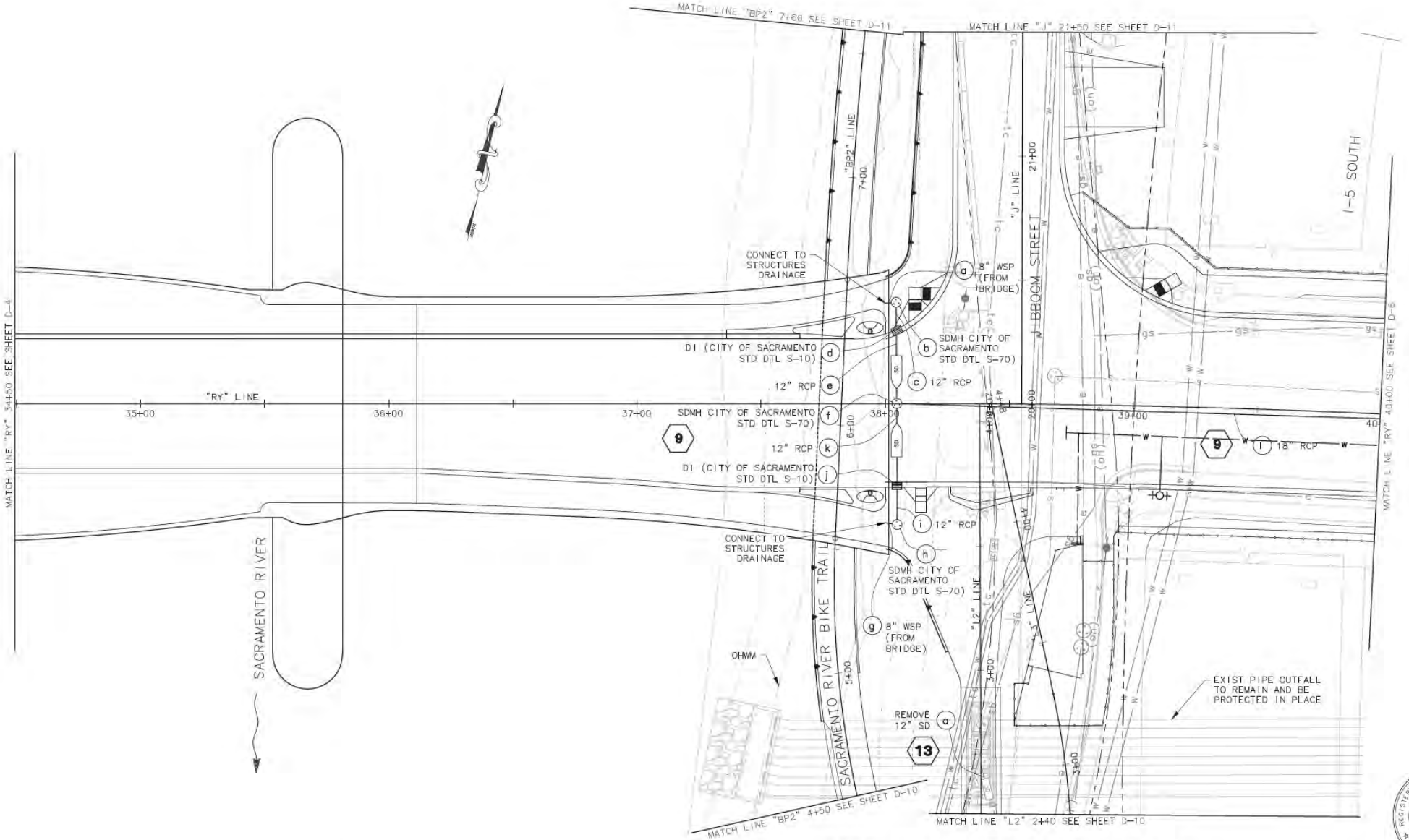
MARK THOMAS
UNDER THE SUPERVISION OF: ZACH SIVIGLIA R.C.E. 73128 EXP. 12-31-26

I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER

DRAINAGE PLANS

T15136000

SHEET 71 OF 593



REGISTERED PROFESSIONAL ENGINEER
HARFATEH SINGH GREWAL
No. 95969
Exp. 06/30/26
CIVIL
STATE OF CALIFORNIA

PRELIMINARY – NOT FOR CONSTRUCTION

D-5

REVISIONS				BENCH MARK	FIELD BOOK	CITY OF SACRAMENTO	MARK THOMAS	I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER	T15136000	SHEET 73 OF 593
NO.	DESCRIPTION	DATE	BY	ELEV. 37.81 FT		DEPARTMENT OF PUBLIC WORKS				
				BENCHMARK# 297-82E DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-82E STAMPED "GAGING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.78 FEET.	SCALE HORIZ. 1"=20' VERT.	DRAWN BY: C. SAUVAGEAU DATE NOVEMBER 2025 DESIGNED BY: H. GREWAL R.C.E. 95969 DATE NOVEMBER 2025 CHECKED BY: K. CASELLI R.C.E. 86464 DATE NOVEMBER 2025	UNDER THE SUPERVISION OF: ZACH SIVIGLIA R.C.E. 73128 EXP. 12-31-26	DRAINAGE PLANS		

City of SACRAMENTO

CITY OF WEST SACRAMENTO

Stage Construction

STAGE 1 CONSTRUCTION:

(1) CONSTRUCT SACRAMENTO RIVER BIKE TRAIL DETOUR.

LEGEND:

TEMPORARY CONSTRUCTION STAGE 1

KJRA CASELLI No. 86464 Exp. 03/31/27 CIVIL

PRELIMINARY – NOT FOR CONSTRUCTION

SC-1

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.81 FT
BENCHMARK# 297-B2E
DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-B2E STAMPED "GAGING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.78 FEET.

FIELD BOOK

SCALE
HORIZ. 1"=200'
VERT. —

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: C. SAUVAGEAU DATE NOVEMBER 2025
DESIGNED BY: K. CASELLI R.C.E. 86464 DATE NOVEMBER 2025
CHECKED BY: Z. SIVIGLIA R.C.E. 73128 DATE NOVEMBER 2025

MARK THOMAS
UNDER THE SUPERVISION OF: ZACH SIVIGLIA R.C.E. 73128 EXP. 12-31-26

I STREET BRIDGE REPLACEMENT OVER SACRAMENTO RIVER
STAGE CONSTRUCTION
STAGE 1

T15136000

SHEET 105 OF 627

STAGE 2a CONSTRUCTION:

(1) CONSTRUCT PARKING.

STAGE 2b CONSTRUCTION:

(2) CONSTRUCT I STREET REPLACEMENT BRIDGE AND C STREET AND RAILYARDS BLVD IMPROVEMENTS.

(3) CONSTRUCT SACRAMENTO RETAINING WALLS, BIKE TRAIL, AND JIBBOOM STREET.

(4) CONSTRUCT WEST SACRAMENTO LEVEE IMPROVEMENTS AND REMAINING CURB RAMPS.

(5) CONSTRUCT 2ND STREET ACCESS.

STAGE 2c CONSTRUCTION:

(6) CONSTRUCT RAILYARDS BLVD PEDESTRIAN FACILITIES AND REMAINING PORTION OF JIBBOOM STREET.

LEGEND:

- PERMANENT CONSTRUCTION STAGE 2a
- DEMOLITION STAGE 2a
- PERMANENT CONSTRUCTION STAGE 2b
- PERMANENT CONSTRUCTION STAGE 2c
- ROAD CLOSURE

KIRA CASELLI
No. 86464
Exp. 03/31/27
CIVIL

PRELIMINARY – NOT FOR CONSTRUCTION

SC-2

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.81 FT
BENCHMARK# 297-B2E
DESCRIPTION: ELEVATIONS ARE BASED ON NAVD88. CITY OF SACRAMENTO BENCHMARK 297-B2E STAMPED "GAGING STATION" HAS A PUBLISHED NAVD88 ELEVATION OF 37.81 FEET AND A NGVD29 ELEVATION OF 35.78 FEET.

FIELD BOOK

SCALE
HORIZ. 1"=200'
VERT. ——

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

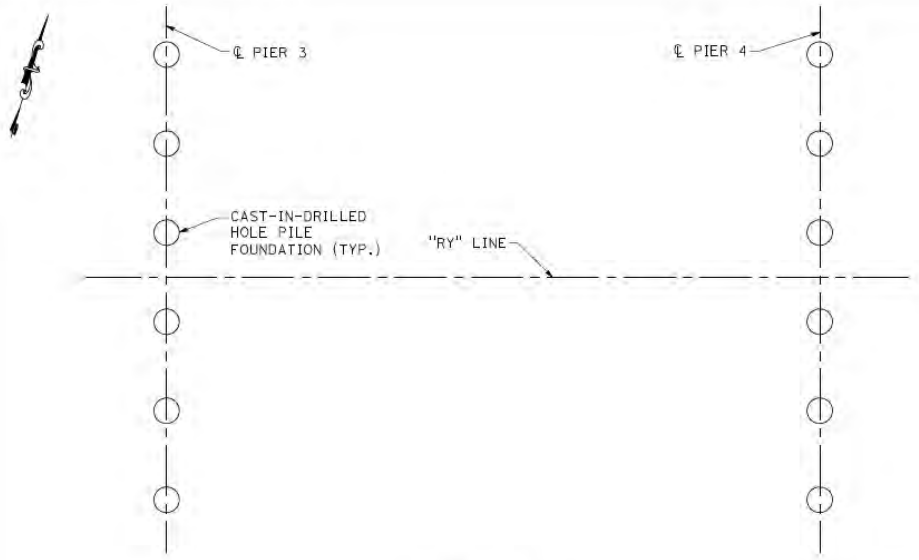
DRAWN BY: C. SAUVAGEAU DATE NOVEMBER 2025
DESIGNED BY: K. CASELLI R.C.E. 86464 DATE NOVEMBER 2025
CHECKED BY: Z. SIVIGLIA R.C.E. 73128 DATE NOVEMBER 2025

MARK THOMAS
UNDER THE SUPERVISION OF: ZACH SIVIGLIA R.C.E. 73128 EXP. 12-31-26

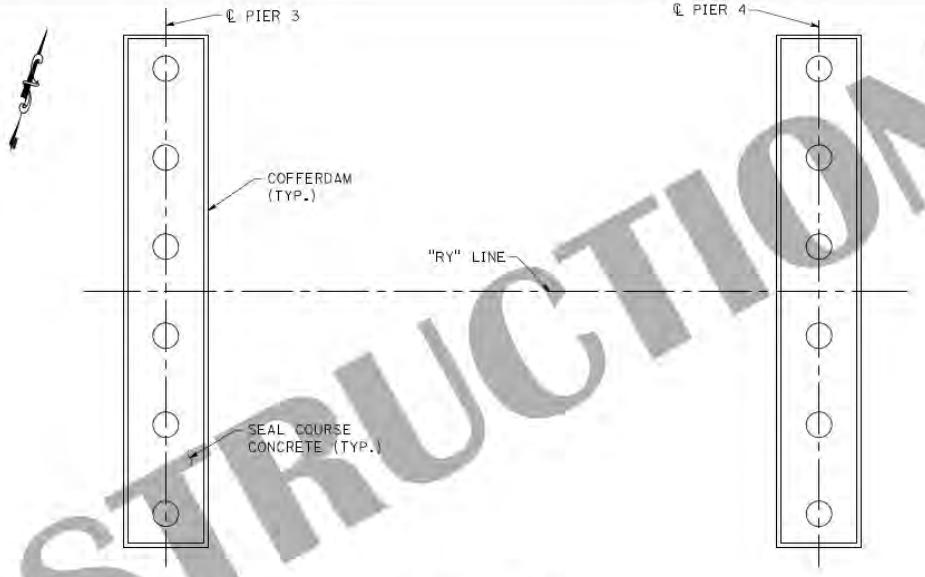
I STREET BRIDGE REPLACEMENT
OVER SACRAMENTO RIVER
STAGE CONSTRUCTION
STAGE 2

T15136000

SHEET 106 OF 627



STAGE 1
(NOT TO SCALE)



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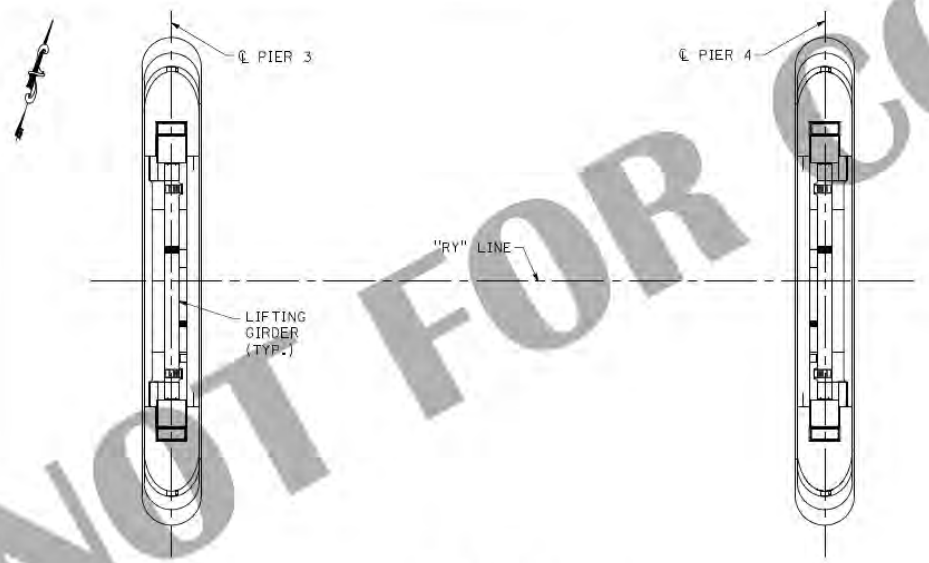


STAGE 3
(NOT TO SCALE)

STAGE 1:

INSTALL CAST-IN-DRILLED HOLE PILE FOUNDATIONS FOR PIERS 3 AND 4.

STAGE 2:

1. INSTALL COFFERDAMS.
2. PLACE SEAL COURSE CONCRETE IN COFFERDAMS.
3. DEWATER COFFERDAMS.

STAGE 3:

1. CONSTRUCT LIFT SPAN TOWERS IN THEIR ENTIRETY.
2. INSTALL AND HANG COUNTERWEIGHTS IN LIFT SPAN TOWERS.
3. REMOVE COFFERDAM.
5. INSTALL ALL MECHANICAL AND ELECTRICAL COMPONENTS IN LIFT SPAN TOWERS.
6. INSTALL LIFTING GIRDER, LIFT SPAN BEARINGS AND CENTERING DEVICES.

Need to maintain 269' navigation opening during construction of bridge piers.

NOTES:

1. WORK THIS DRAWING WITH DRAWING NOS. MS-168 AND MS-169.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE	BY

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: —
SCALE: AS SHOWN

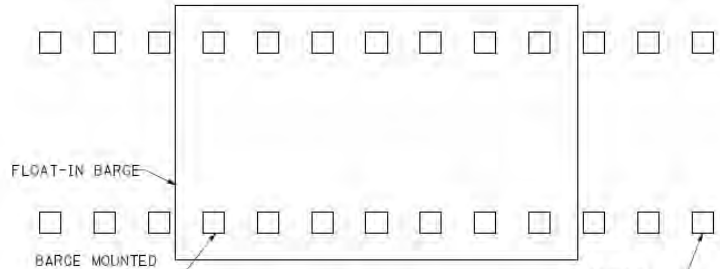
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: T. STEPHENS DATE: 11/03/2025
REVISED BY: T. STEPHENS DATE: 11/03/2025
CHECKED BY: M. ALESTRA DATE: 11/03/2025

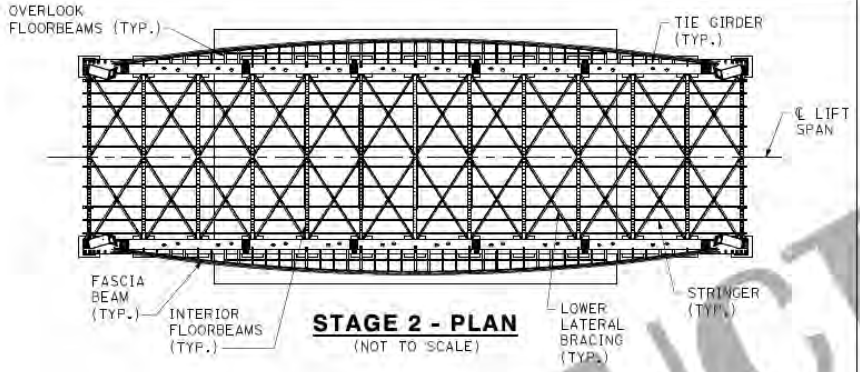
REGISTERED PROFESSIONAL ENGINEER — TODD J. STEPHENS — No. 87725 — Exp. 09-30-27 — CIVIL — STATE OF CALIFORNIA

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
SUGGESTED CONSTRUCTION STAGING - 1
(Date: 11/03/2025)

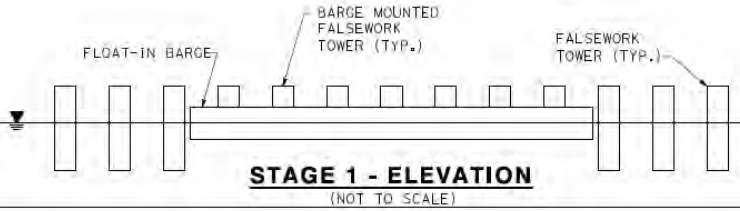
PN: T15136000
DWG NO.: MS-167
SHT NO.: ## OF ###



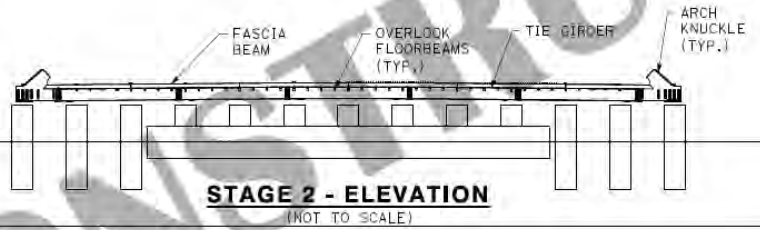
STAGE 1 - PLAN
(NOT TO SCALE)



STAGE 2 - PLAN
(NOT TO SCALE)



STAGE 1 - ELEVATION
(NOT TO SCALE)



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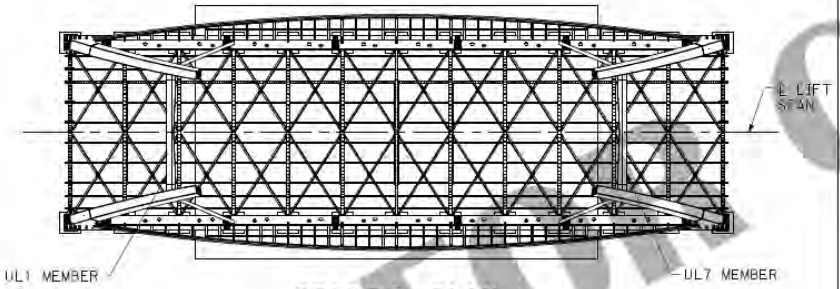
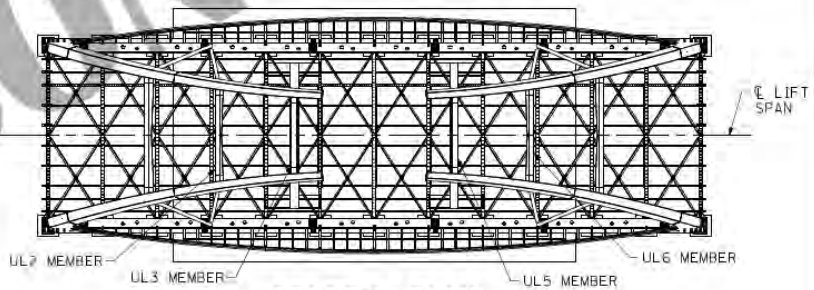
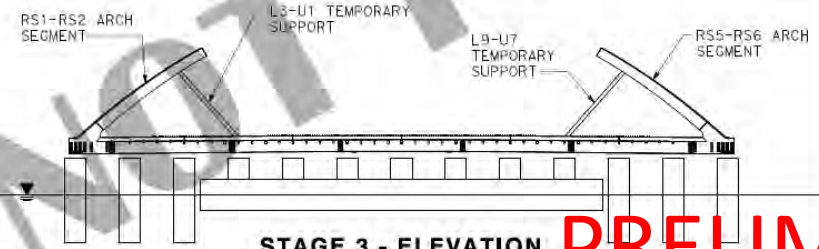


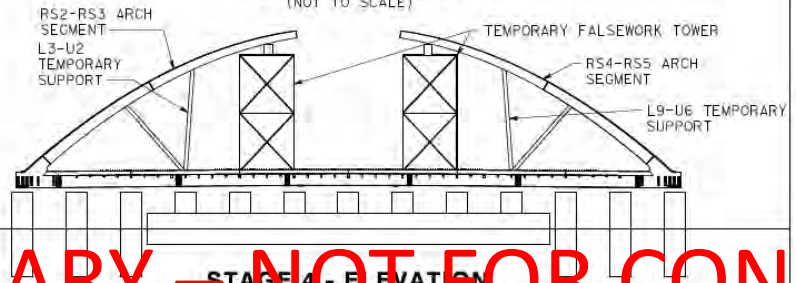
STAGE 3 - PLAN
(NOT TO SCALE)



STAGE 4 - PLAN
(NOT TO SCALE)



STAGE 3 - ELEVATION
(NOT TO SCALE)



STAGE 4 - ELEVATION
(NOT TO SCALE)

STAGE 1:

ERECT FALSEWORK TO PROVIDE TEMPORARY SUPPORTS TO THE LIFT SPAN. SEE DWG. NO. MS-127 FOR ROTATION CAMBERING REQUIREMENTS FOR THE TIE GIRDERS.

STAGE 2:

ERECT THE TIE GIRDERS, ARCH KNUCKLES, INTERIOR FLOORBEAMS, CANTILEVER FLOORBEAMS, LOWER LATERAL BRACING, STRINGERS AND FASCIA BEAMS. SEE DWG. NO. MS-140 FOR ADDITIONAL INFORMATION REGARDING STRINGER CONNECTIONS.

STAGE 3:

INSTALL RS1-RS2/RS5-RS6 ARCH SEGMENTS, UL1/UL7 MEMBERS, AND TEMPORARY SUPPORTS BETWEEN L3-U1/L9-U7.

STAGE 4:

INSTALL RS2-RS3/RS4-RS5 ARCH SEGMENTS, UL2/UL6 MEMBERS, UL3/UL5 MEMBERS, UL3/UL5 MEMBERS, TEMPORARY FALSEWORK TOWER, AND TEMPORARY SUPPORTS BETWEEN L3-U2/L9-U6.

NOTES:

1. WORK THIS DRAWING WITH DRAWING NO. MS-171.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK —
SCALE AS SHOWN

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

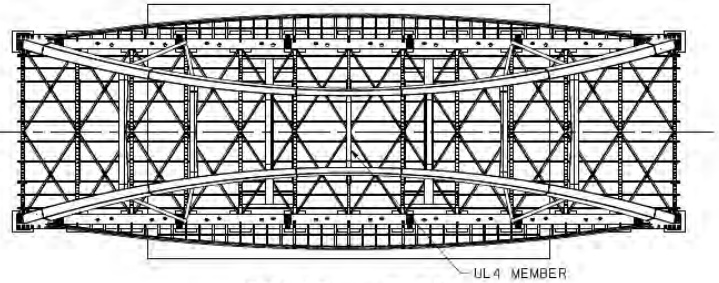
DRAWN BY: T. STEPHENS DATE:
DESIGNED BY: T. STEPHENS DATE:
CHECKED BY: T. STEPHENS DATE:

REGISTERED PROFESSIONAL ENGINEER — TODD J. STEPHENS — No. 37725 — Exp. 03-30-27 — CIVIL — STATE OF CALIFORNIA

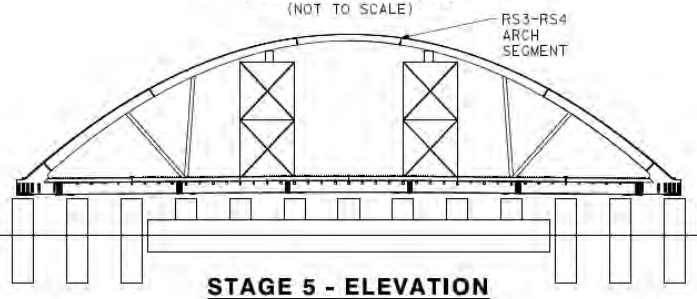
I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
SUGGESTED LIFT SPAN STAGING - 1
(Date: 11/03/2025)

PN: 715136000

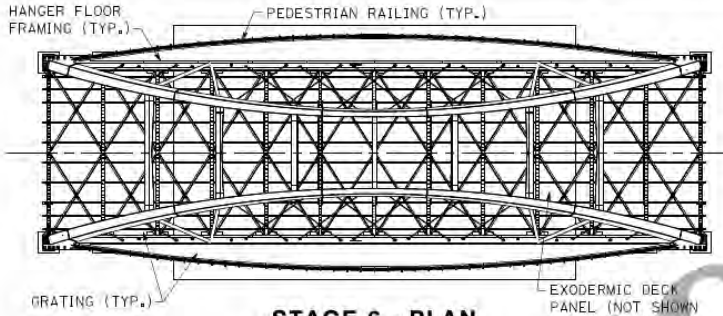
DWG NO. MS-170
SHT NO. ## OF ###



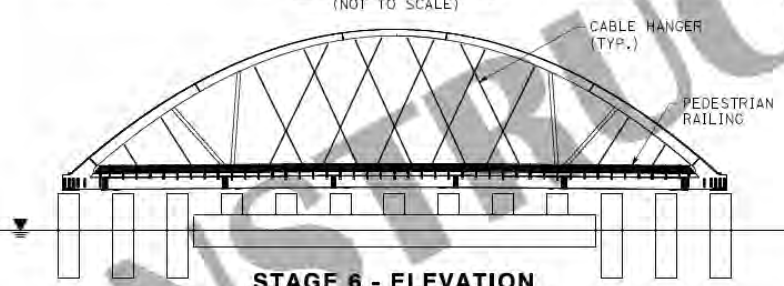
STAGE 5 - PLAN
(NOT TO SCALE)



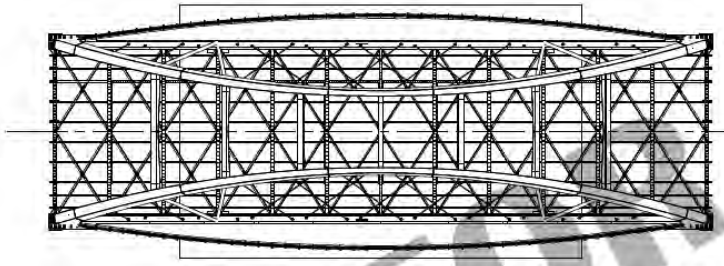
STAGE 5 - ELEVATION
(NOT TO SCALE)



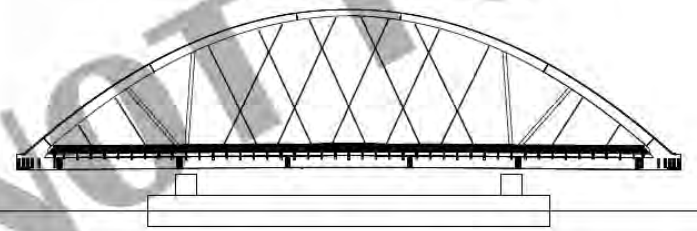
STAGE 6 - PLAN
(NOT TO SCALE)



STAGE 6 - ELEVATION
(NOT TO SCALE)



STAGE 7 - PLAN
(NOT TO SCALE)



STAGE 7 - ELEVATION
(NOT TO SCALE)

STAGE 5:

INSTALL RS3-RS4 ARCH SEGMENTS AND UL4 MEMBER

STAGE 6:

1. REMOVE TEMPORARY FALSEWORK TOWERS.
2. INSTALL HANGERS C1, C3, C6-15, C18 AND C20.
3. INSTALL EXODERMIC DECK PANELS WITHOUT CONCRETE OR STEEL REINFORCEMENT.
4. INSTALL HANGER FLOOR FRAMING MEMBERS NOT CONFLICTING WITH TEMPORARY SUPPORTS, GRATING, AND PEDESTRIAN RAILING.

STAGE 7:

1. JACK LIFT SPAT AT L3 AND L9 TO PREPARE FOR FLOAT-IN.
2. REMOVE FALSEWORK TOWERS AND BARGE MOUNTED FALSEWORK TOWERS NOT IN USE.

STAGE 8 - FLOAT-IN:

1. SEE DRAWINGS MS-167 THRU MS-169 FOR FLOAT-IN STAGING.

NOTES:

1. WORK THIS DRAWING WITH DRAWING NO. MS-170.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

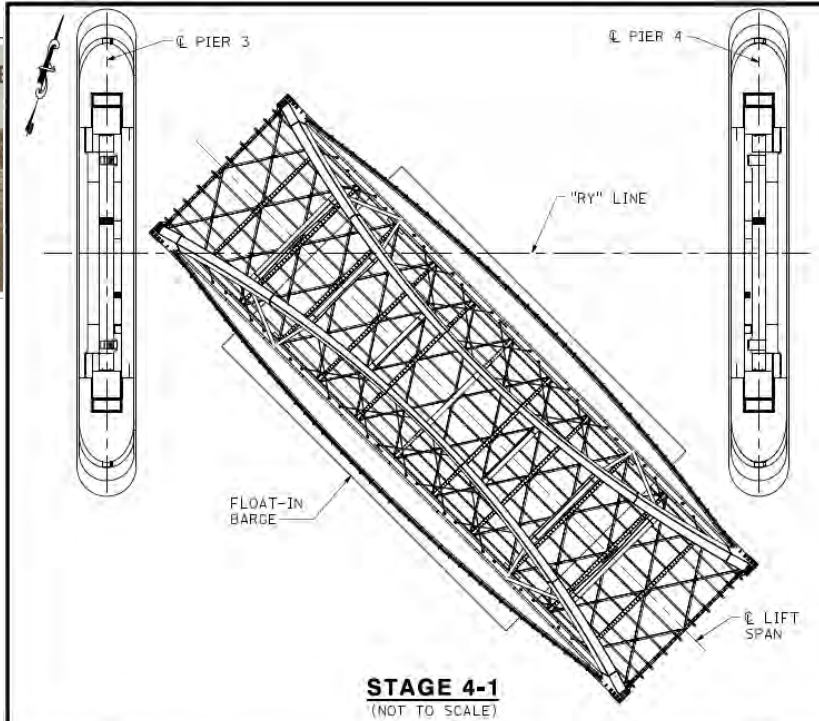
NO.	DESCRIPTION	DATE

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

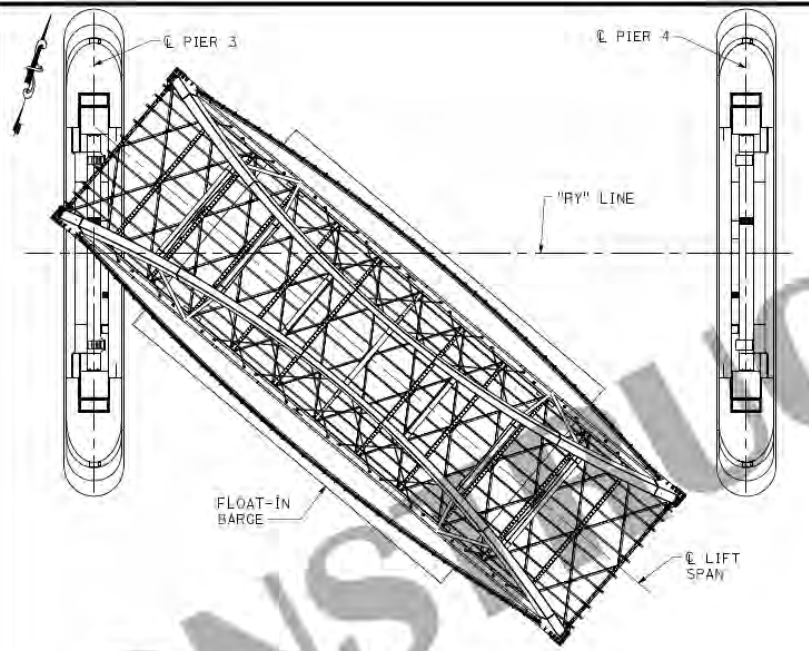
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
SUGGESTED LIFT SPAN STAGING - 2
(Date: 11/03/2025)

PN: T15136000
DWG NO. MS-171
SHT NO. ## OF ###



STAGE 4-1
(NOT TO SCALE)



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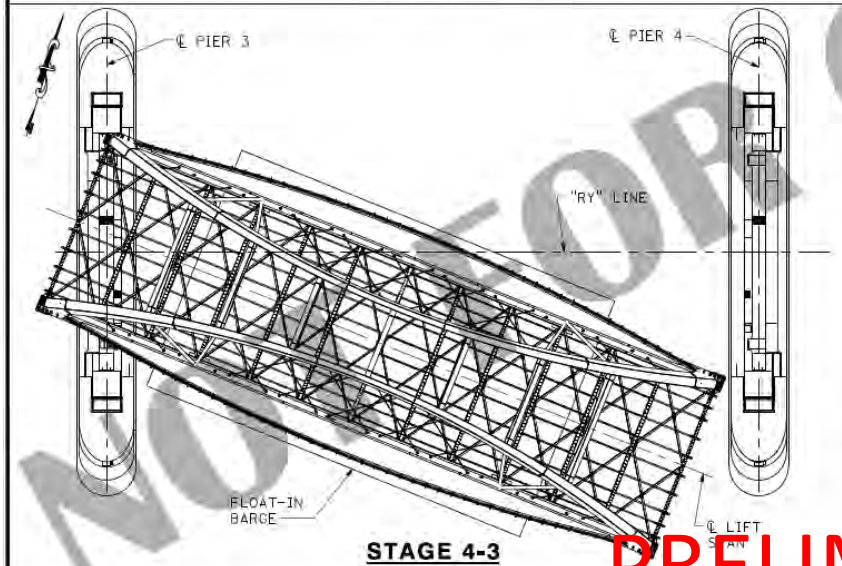
(NOT TO SCALE)



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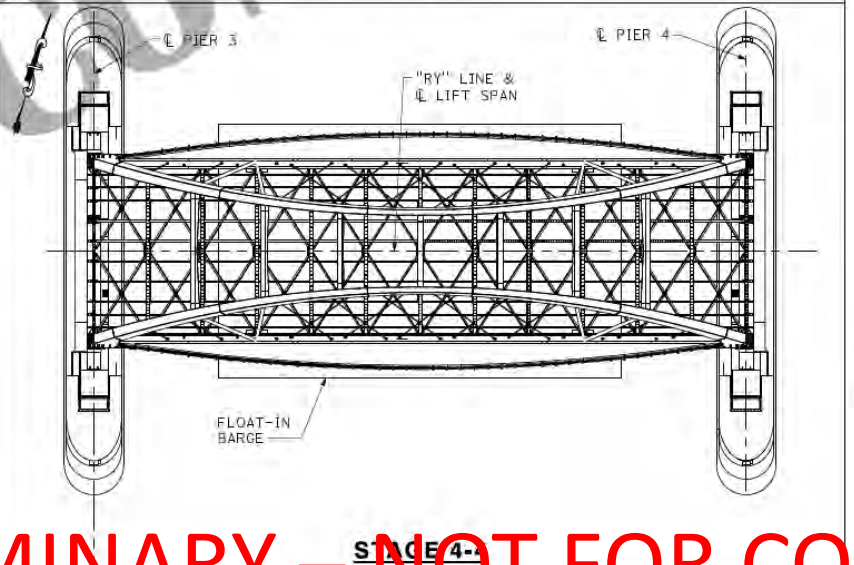


STAGE 4-4
(NOT TO SCALE)

STAGE 4:

1. CLOSE CHANNEL TO MARINE TRAFFIC.
2. FLOAT-IN LIFT SPAN. SEE DRAWING NOS. MS-170 AND MS-171 FOR SUGGESTED LIFT SPAN STAGING PRIOR TO FLOAT-IN. FLOAT-IN WILL REQUIRE THE LIFT SPAN TO BE INITIALLY ROTATED FROM ITS FINAL CONDITION TO FIT BETWEEN THE TOWER LEGS. SEVERAL ITERATIONS OF LONGITUDINAL AND TRANSVERSE TRANSLATIONS COMBINED WITH ROTATING THE SPAN WILL BE REQUIRED TO GET THE LIFT SPAN INTO THE FINAL POSITION.

NOTES:

1. WORK THIS DRAWING WITH DRAWING NOS. MS-167 AND MS-169.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS

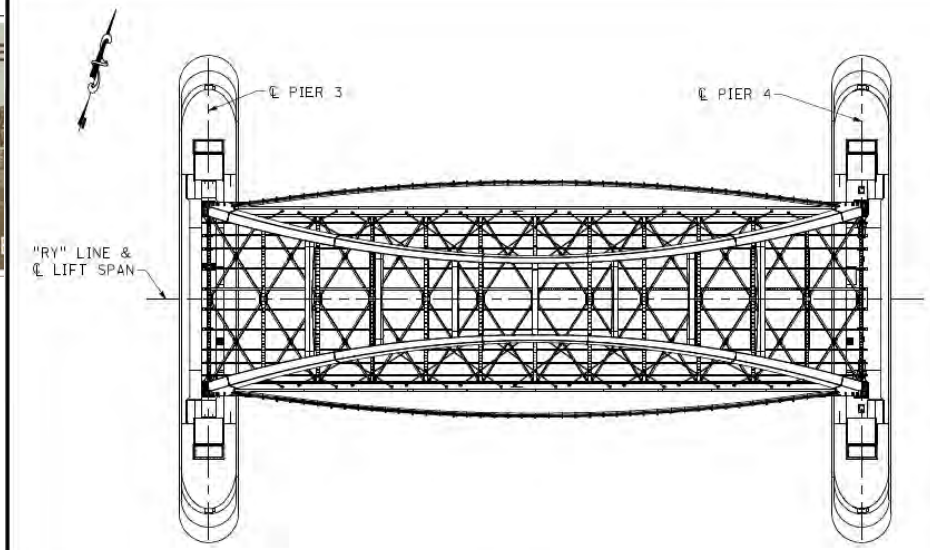
NO.	DESCRIPTION	DATE	BY

MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

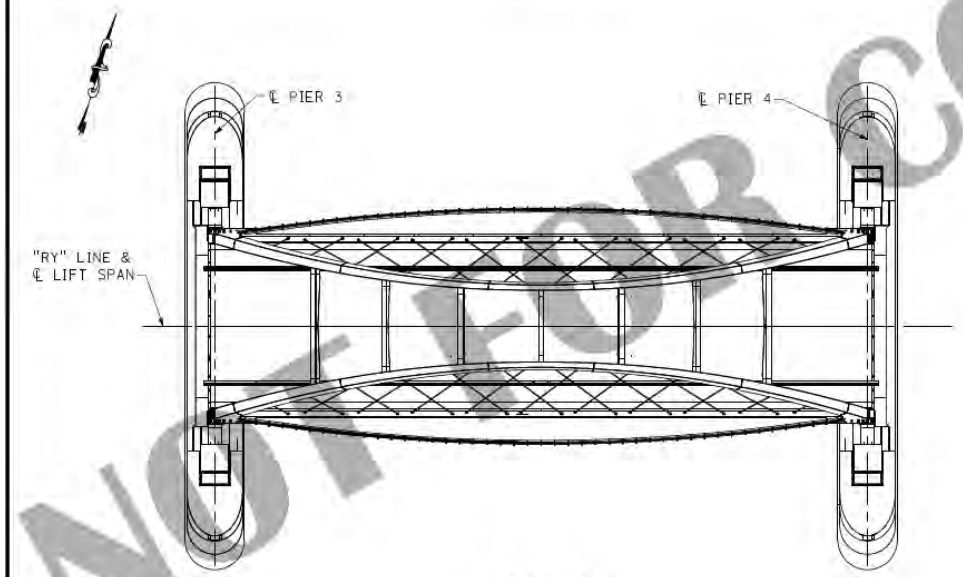
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
SUGGESTED CONSTRUCTION STAGING - 2
(Date: 11/03/2025)

PN: 715136000
MS-168
SHT NO. ## OF ###



STAGE 5
(NOT TO SCALE)



STAGE 6
(NOT TO SCALE)

STAGE 5:

1. REMOVE FLOAT-IN BARGE.
2. REMOVE TEMPORARY SUPPORTS BETWEEN L3-U4/L9-U7 AND L3-U3/L9-U5.
3. INSTALL HANGERS C2-C5 AND C16-C19

STAGE 6:

1. INSTALL REMAINING HANGER FLOOR FRAMING MEMBERS AND GRATING.
2. POUR CONCRETE FOR EXODERMIC DECK.

STAGE 7:

1. TEST OPERATE BRIDGE AND COMPLETE SPAN BALANCE TESTING.
2. COMPLETE SPAN BALANCE ADJUSTMENTS AND ADDITIONAL TESTING OPERATIONS.
3. OPEN WATERWAY TO MARINE TRAFFIC.

NOTES:

1. WORK THIS DRAWING WITH DRAWING NOS. MS-167 AND MS-168.

NOT FOR CONSTRUCTION

PRELIMINARY – NOT FOR CONSTRUCTION

REVISIONS
NO. | DESCRIPTION | DATE | BY

MODJESKI AND MASTERS
MODJESKI AND MASTERS, INC.
100 STERLING PARKWAY, SUITE 302
MECHANICSBURG, PA 17050

FIELD BOOK: ----
SCALE: AS SHOWN

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: T. STEPHENS | DATE: 11/03/2025
DESIGN BY: T. STEPHENS | DATE: 11/03/2025
CHECKED BY: M. ALESNA | DATE: 11/03/2025

REGISTERED PROFESSIONAL ENGINEER — TODD J. STEPHENS — No. 37725 — Exp. 06-30-27 — CIVIL — STATE OF CALIFORNIA

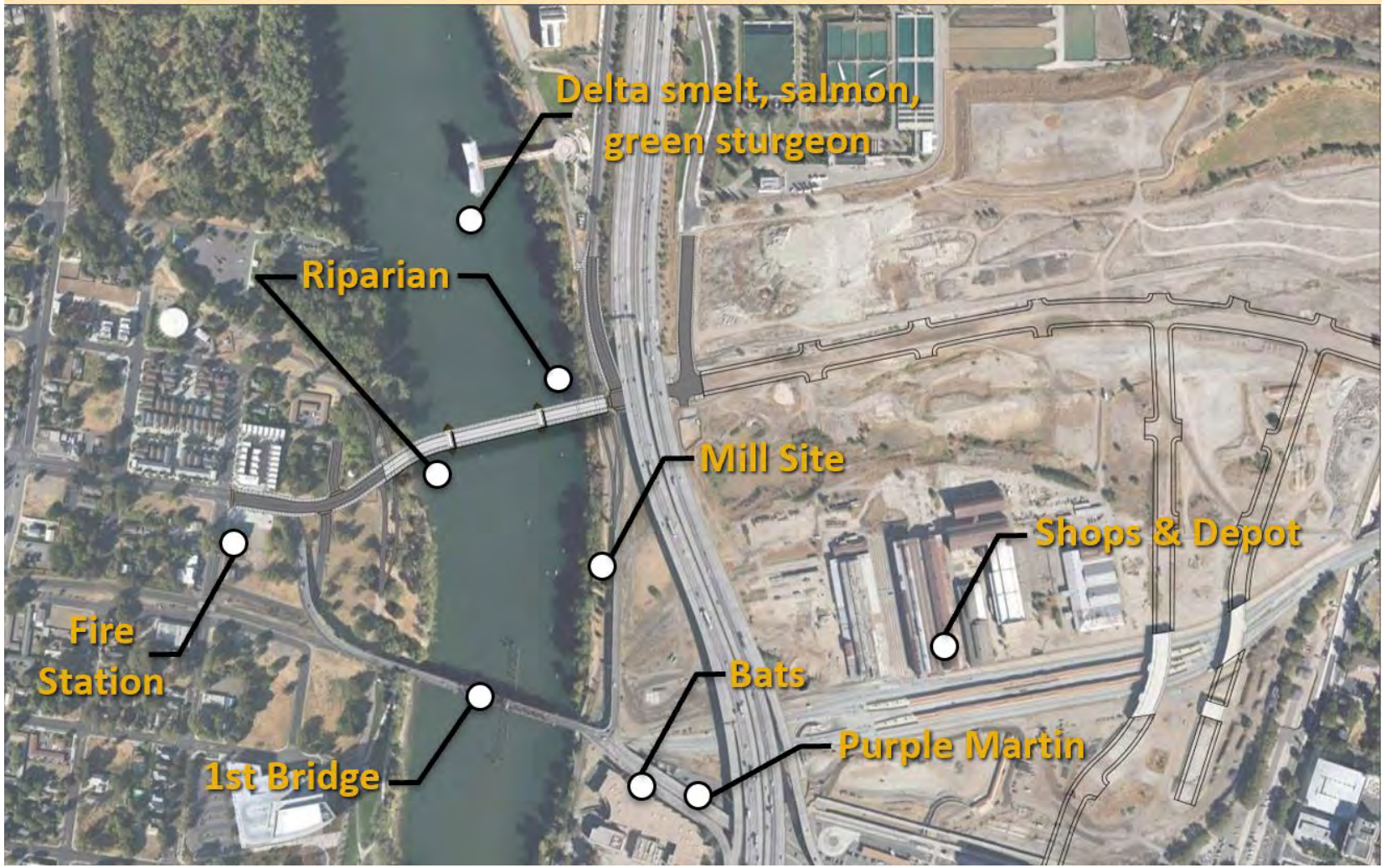
I STREET BRIDGE REPLACEMENT PROJECT
OVER THE SACRAMENTO RIVER
SUGGESTED CONSTRUCTION STAGING - 3
(Date: 11/03/2025)

PN: T15136000
DWG. NO.: MS-169
SHT NO.: ## OF ###

Environmental

I STREET BRIDGE REPLACEMENT PROJECT

Environmental Considerations



Environmental Considerations

Permit Status

- USACE 408 (Clean Water Act, for alteration of levee) – *Under Final Review*
- USACE 404 (Clean Water Act, for fill in waters of the US) – *Complete Pending 408*
- CDFW 1602 (Streambed Alteration Agreement) – *Complete Pending Final Approval*
- CDFW 2081 (Incidental Take Permit) – *Complete Pending Final Approval*
- USCG Bridge Permit – *Complete Pending 404 and 408*
- CA State Lands Commission - *Complete*
- Central Valley Regional Water Quality Control Board 401 - *Complete*

Environmental Considerations

Purple Martins

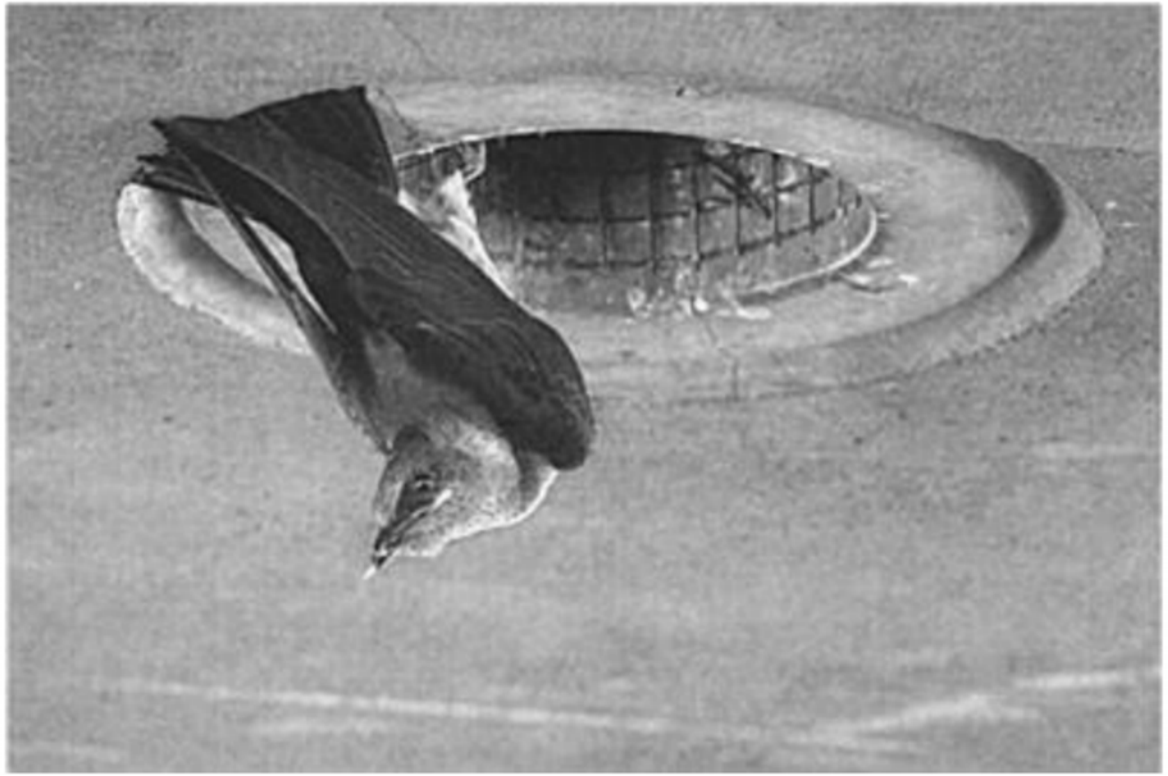
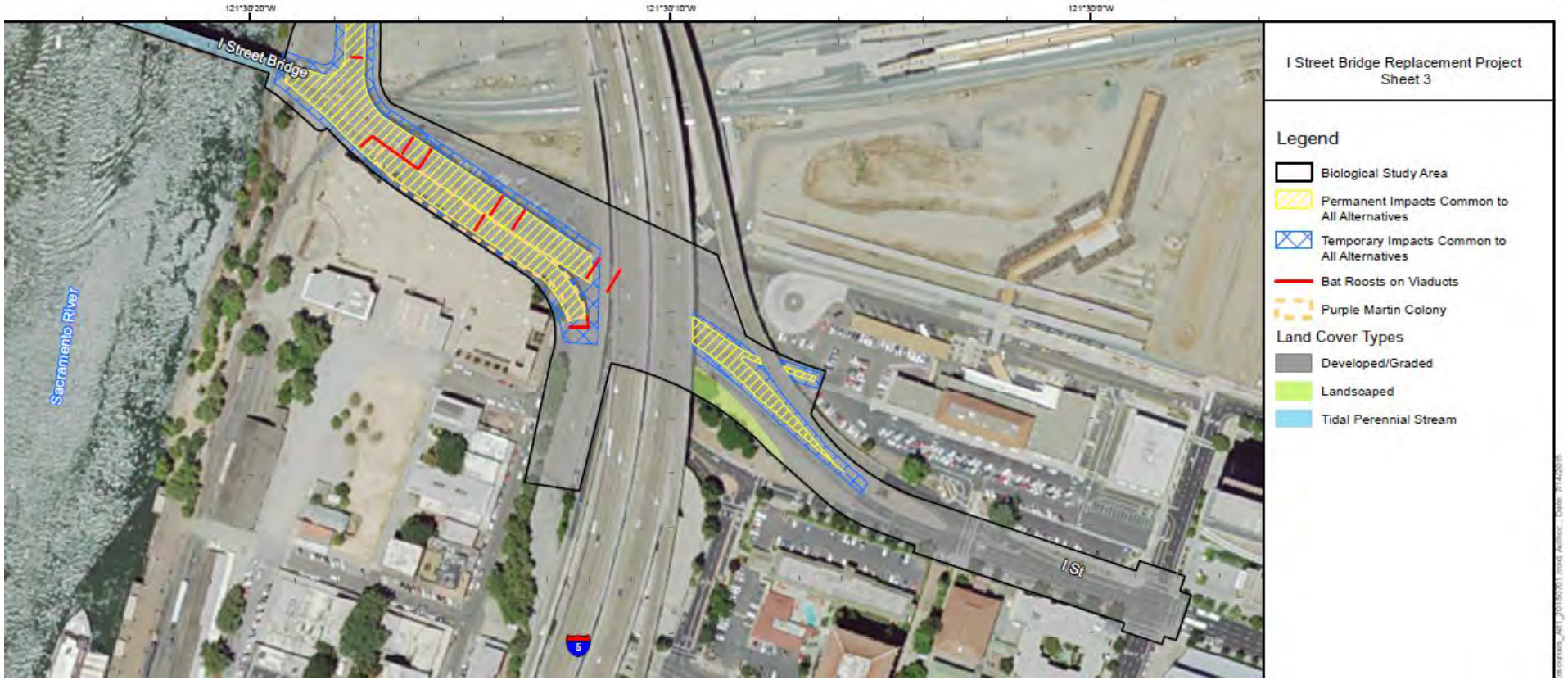


Figure 1. Female Purple Martin with food perching at a wire "nest guard" inserted into a weep hole beneath an elevated freeway in Sacramento, California.

Environmental Considerations

Purple Martins



Environmental Considerations

Purple Martins

1. No construction activity that results in ground disturbance, modification of the I Street Bridge approach structure, loud noises, and/or vibrations will be conducted within 100 feet of the edge of the purple martin colony during the purple martin nesting season (March 15 to August 15). In addition, no construction-related vehicles or machinery shall be operated or stored beneath the colony during this period or until a qualified biologist determines that the purple martins have completed nesting and are no longer occupying the structure.
2. Install and maintain throughout construction high-visibility fencing at 20 feet minimum from each elderberry shrub's dripline and install sign every 50 feet along the high-visibility fence. The sign will contain the following;
   This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.
3. Establish and maintain a minimum non-disturbance buffer of 600 feet radious around the active Swainson's Hawl and White-Tailed Kite nests.
4. Stop work in the area when the Western Pond Turtle is found during project activities until the turtle is able to move out of work area on its own.

Environmental Considerations

BATS

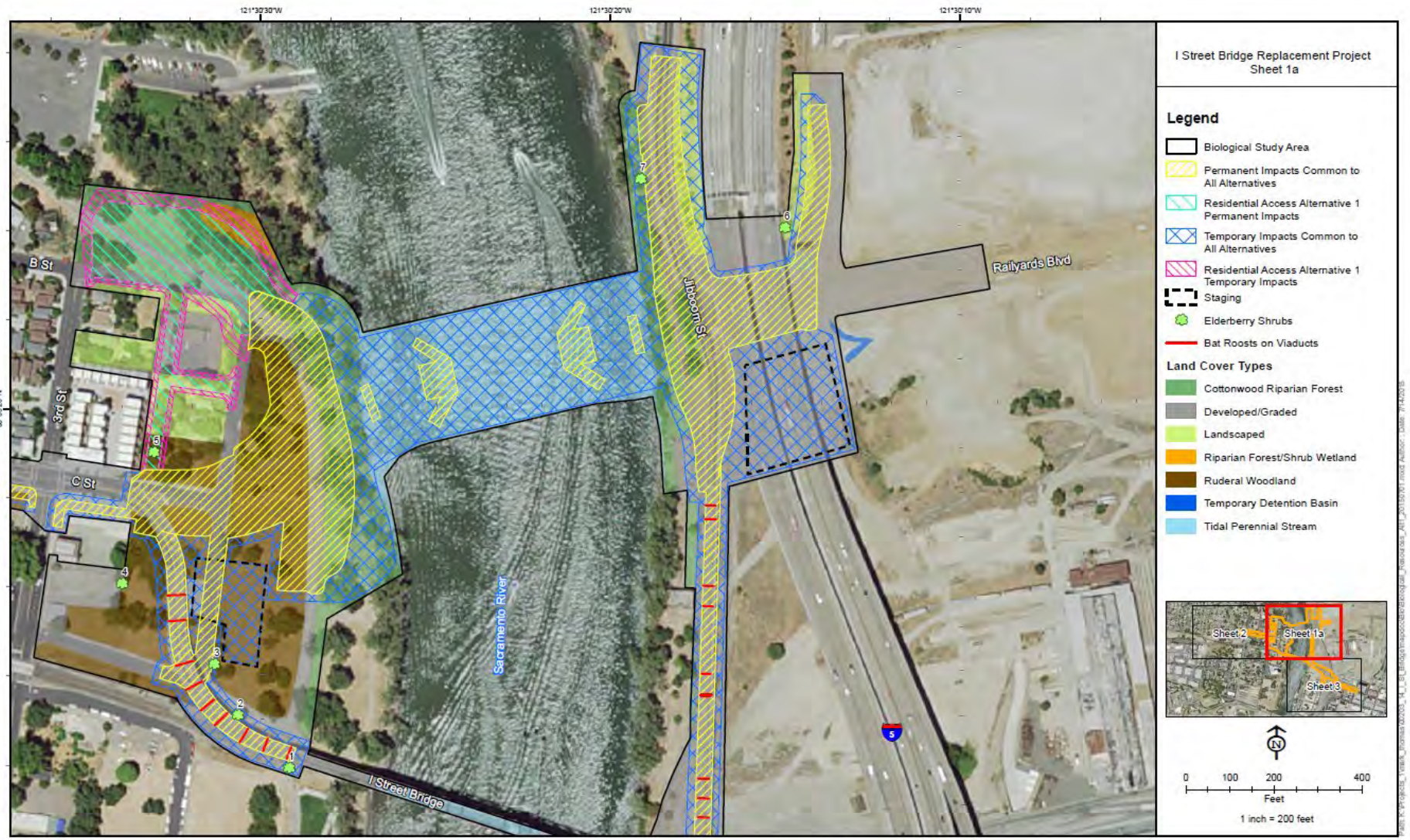
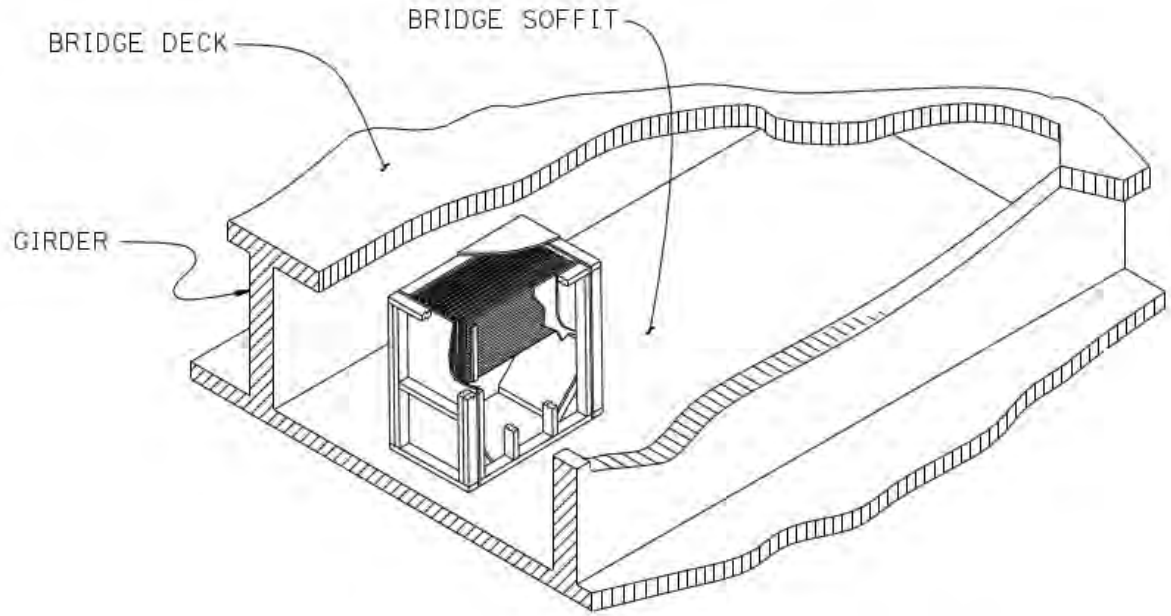


Figure 3-1
Impacts on Landcover Types and Sensitive Biological Resources in the Biological Study Area

Environmental Considerations

BATS



VIEW OF BAT HABITAT
INSIDE BOX GIRDER BRIDGE

No Scale

Environmental Considerations

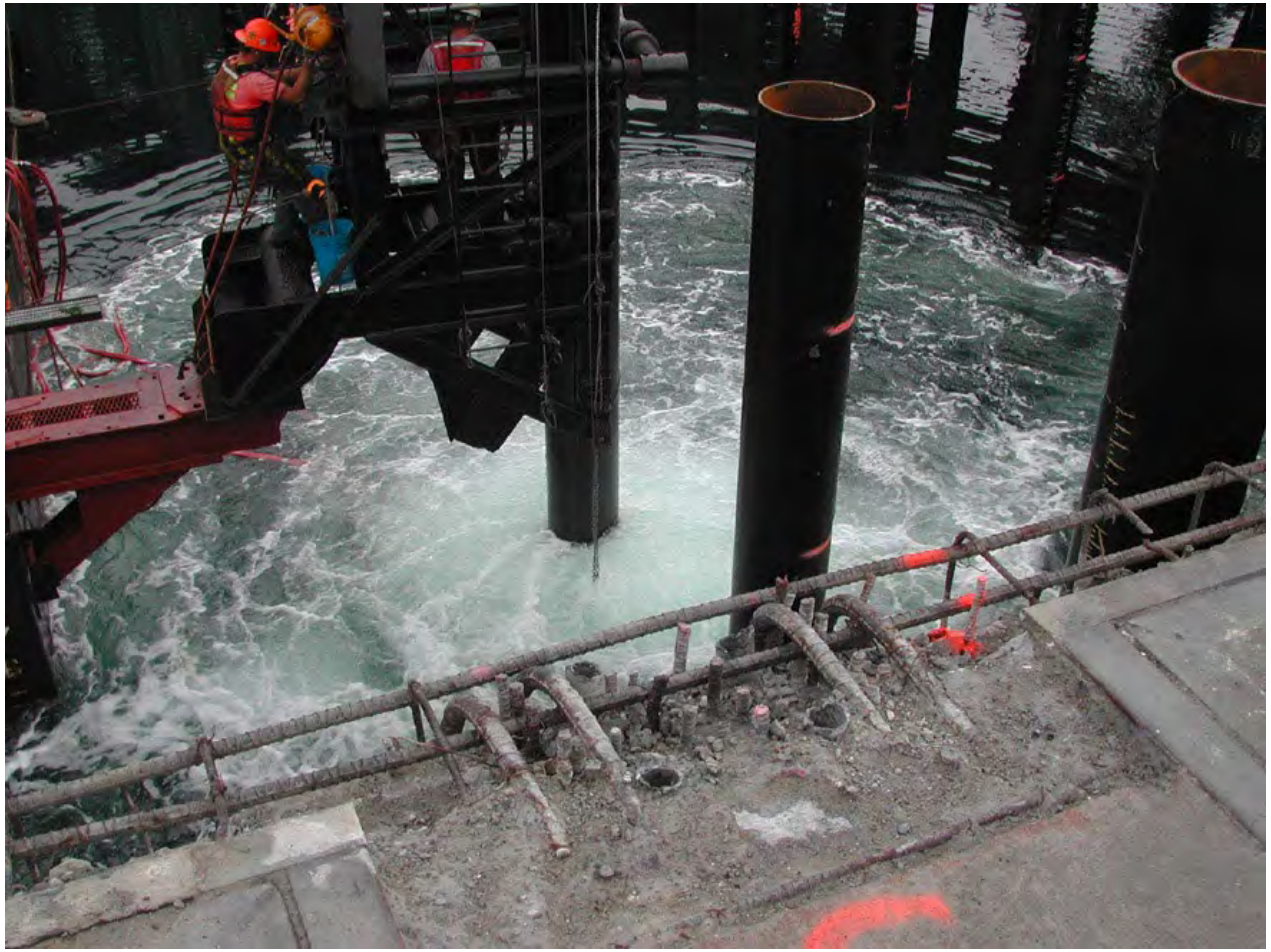
BATS

5. The removal of the approach structures associated with the I Street Bridge will take place outside of the breeding season for migratory birds and bats and will be conducted in the following manner to avoid and minimize direct harm and temporary disturbance to nesting birds and roosting bats.
6. Establish and maintain non-disturbance buffer around bat roots in cooperation with Designated Bat Biologist and CDFW during maternity season between April 15 and August 31 or hibernation season between October 15 and March 1.
7. Exclusion devices shall be installed either (1) between approximately March 1 (or when evening temperatures are above 45°F and rainfall less than ½-inch in 24 hours occurs) and April 15, prior to parturition of pups; or (2) between September 1 and October 15 (or prior to evening temperatures dropping below 45°F and onset of rainfall greater than ½-inch in 24 hours). Specific exclusion devices may include one-way doors, lights and fans, foam or steel wool, or other site-specific methods determined in coordination with CDFW. The Designated Bat Biologist shall monitor the roost prior to exclusion to confirm that it does not support a maternity colony. If a maternity colony is or may be present, the roost shall be avoided until it is no longer active, or until the Designated Bat Biologist can confirm that no maternity colony is present.
8. Remove or trim trees during the non-breeding season for tree-nesting migratory birds and raptors, and prior to periods when bats would be hibernating. If tree removal cannot be confined to this period, the project proponent will retain a qualified wildlife biologist with knowledge of the wildlife species that could occur in the project area to conduct the appropriate preconstruction surveys and establish no-disturbance buffers for sensitive wildlife species as described under measures for Swainson's hawk, nesting birds, and roosting bats.

Draft Binding

Environmental Considerations

FISH



Environmental Considerations

FISH

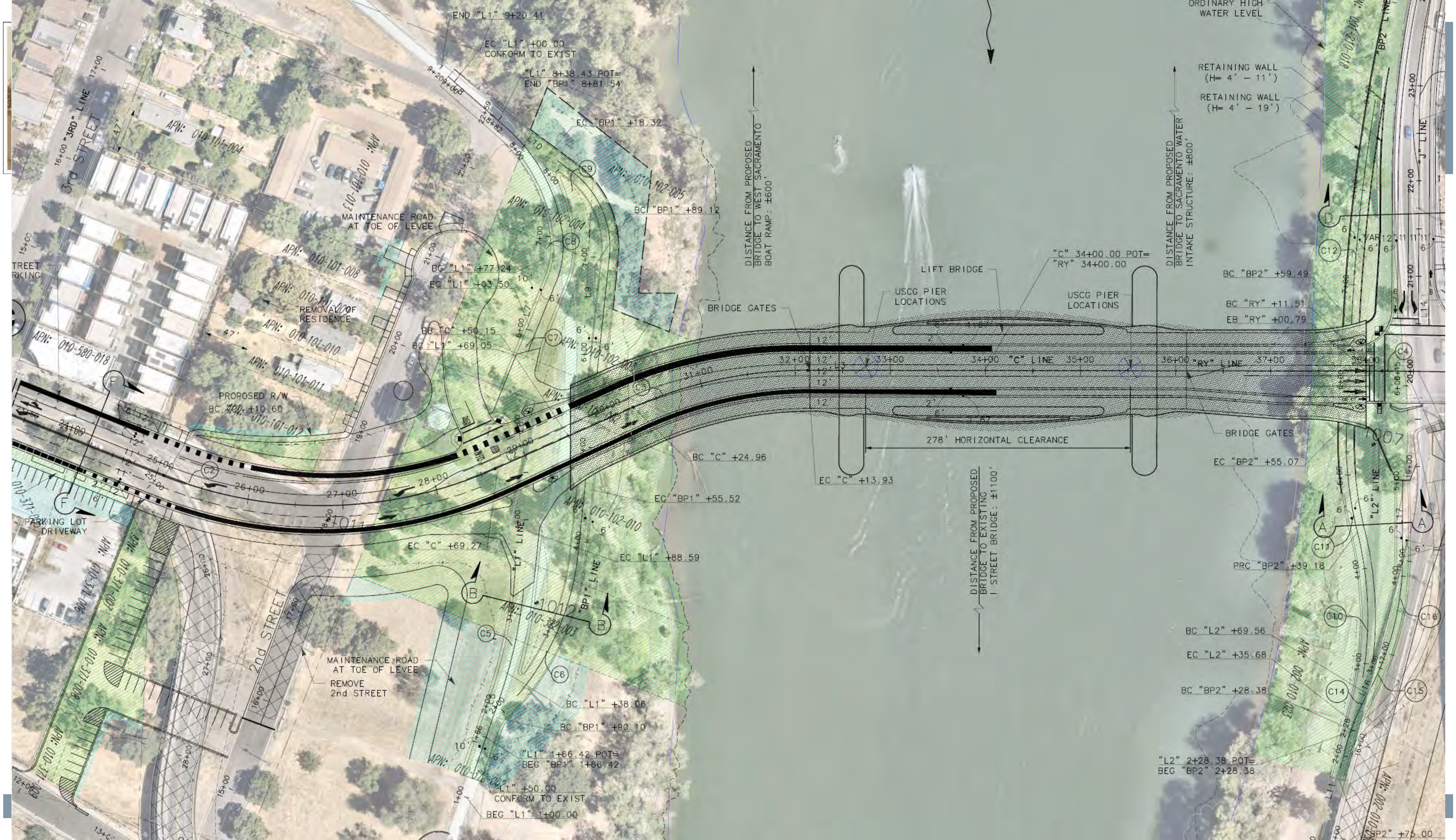
10. the contractor will vibrate all piles to the maximum depth possible before using an impact hammer. No more than 20 piles will be driven per day, and pile driving with an impact hammer will occur on no more than 75 individual days total during construction. During impact driving, the contractor will limit the number of strikes per day to the minimum necessary to complete the work and will limit the total number of hammer strikes to 16,000 strikes per day (i.e., 800 hammer strikes per pile, per day) for piles for the bridge piers and temporary trestles, and 20,000 strikes per day (i.e., 1,000 hammer strikes per pile, per day) for the piles for the bridge fender system. The smallest pile driver and minimum force necessary will be used to complete the work. During impact driving, the project proponent will require the contractor to use a bubble curtain or similar device, if feasible, to minimize the extent to which the interim peak and cumulative SEL thresholds are exceeded. No pile driving activity will occur at night, thereby providing fish with an extended quiet period during nighttime hours on days pile driving is being conducted for feeding and unobstructed passage. Sheet piles used for cofferdams will be installed and removed using a vibratory pile driver.
11. Cofferdams will not be left in place over winter where they could be overtopped by winter/spring flows and when juveniles of listed species are most likely to be present in the construction area.
12. Cofferdam dewatering and fish rescue/relocation from within cofferdams will commence immediately following cofferdam closure. All pumps used during dewatering of cofferdams will be screened according to CDFW and NMFS guidelines.
13. Install bubble curtains around piles during impact driving and proofing operations to dampen underwater sound shockwaves.
14. Conduct several dry or dead blows with the hammer initially to frighten fish away from the pile before the pile is driven or proofed with an impact pile driver. Implementation of several dry or dead blows with the hammer to initially frighten fish away is being proposed because the use of a cushioning block or similar feature would result in more strikes being needed to drive the piles, thereby resulting in a greater chance of exceeding the cumulative sound exposure levels (SELs) without significantly reducing peak SELs.
15. Whenever there has been downtime of 30 minutes or more without pile driving, Permittee shall reinitiate the pile driving with ramp-up procedures. For impact driving, an initial set of three strikes shall be made by the hammer at 40% energy, followed by a 1-minute waiting period, then two subsequent three-strike sets at 40% energy, with 1-minute waiting periods, before initiating continuous pile driving.
16. Prior to departure of vessels from their place of origin and before in-water construction equipment is allowed to operate within the waters of the Sacramento River, thoroughly inspect and remove and dispose of all dirt, mud, plant matter, and animals from all surfaces that are submerged or may become submerged, or places where water can be held and transferred to the surrounding water.

DRAFT

City of SACRAMENTO

CITY OF WEST SACRAMENTO

Right of Way


END "L1" 9+20.41
EC "L1" +00.00
CONFORM TO EXIST
"L1" 8+38.43 POT=
END "BP1" 8+81.54
EC "BP1" +18.32
BC "BP1" +89.12
"3RD" LINE
3rd STREET
APN: 010-101-004
APN: 010-101-010
APN: 010-102-005
APN: 010-102-004
MAINTENANCE ROAD
AT TOE OF LEVEE
APN: 010-101-008
APN: 010-101-009
REMOVAL OF
RESIDENCE
APN: 010-101-010
APN: 010-101-011
APN: 010-580-018
BC "L1" +77.24
EC "L1" +03.50
BB "C" +50.15
BC "L1" +69.05
PROPOSED R/W
BC "BP1" +10.60
APN: 010-101-012
DISTANCE FROM PROPOSED
BRIDGE TO WEST SACRAMENTO
BOAT RAMP: ±600'
DISTANCE FROM PROPOSED
BRIDGE TO SACRAMENTO WATER
INTAKE STRUCTURE: ±800'
ORDINARY HIGH
WATER LEVEL
RETAINING WALL
(H= 4' - 11')
RETAINING WALL
(H= 4' - 19')
BRIDGE GATES
USCG PIER
LOCATIONS
LIFT BRIDGE
"C" 34+00.00 POT=
"RY" 34+00.00
USCG PIER
LOCATIONS
BC "BP2" +59.49
BC "RY" +11.51
EB "RY" +00.79
"C" LINE
"RY" LINE
"BP2" LINE
"J" LINE
BRIDGE GATES
278' HORIZONTAL CLEARANCE
EC "BP2" +55.07
BC "C" +24.96
EC "C" +13.93
EC "BP1" +55.52
PARKING LOT
DRIVEWAY
EC "C" +69.27
EC "L1" +88.59
"L1" LINE
"BP1" LINE
APN: 010-102-010
APN: 010-382-003
DISTANCE FROM PROPOSED
BRIDGE TO EXISTING
I STREET BRIDGE: ±1100'
PRC "BP2" +39.18
"L2" LINE
2nd STREET
MAINTENANCE ROAD
AT TOE OF LEVEE
REMOVE
2nd STREET
BC "L1" +38.06
BC "BP1" +90.10
"L1" 1+66.42 POT=
BEG "BP1" 1+66.42
"L1" +50.00
CONFORM TO EXIST
BEG "L1" 1+00.00
BC "L2" +69.56
EC "L2" +35.68
BC "BP2" +28.38
APN: 010-200-023
"L2" 2+28.38 POT=
BEG "BP2" 2+28.38
"BP2" +75.00

City of SACRAMENTO

CITY OF WEST SACRAMENTO

Project Schedule

Project Schedule

- Right of Way – **Complete**
- 100% PS&E – Fall 2025 – **Complete**
- Construction Authorization – Fall 2025 – **Complete**
- Regulatory Permits – Fall 2025
- Advertisement – Week of Dec 15th 2025 – February 18th 2026
- Contract Award and Execute Agreement – March 31st 2026
- Construction NTP – By April 13th 2026
- Current Working Day Estimate – **1,100**