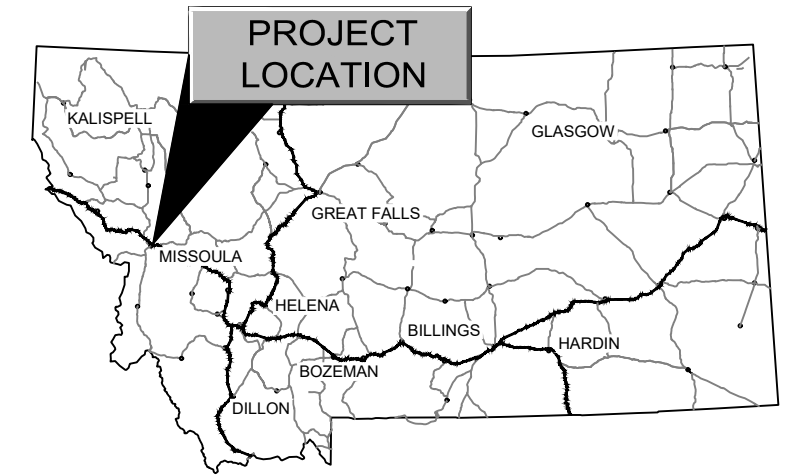




PRELIMINARY PLANS FOR: LOLO STREET BRIDGE REPLACEMENT

COUNTY PROJECT NO. XXXX-XXX

S14 T13N R19W
MISSOULA COUNTY, MONTANA



LOCATION MAP

INDEX TO SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES
3	PROJECT CONTROL & TYPICAL SECTIONS
4	ROAD PLAN & PROFILE
5	BRIDGE GENERAL LAYOUT



PLANS PREPARED FOR
MISSOULA COUNTY



SITE MAP
NO SCALE

GENERAL NOTES

- SPECIFICATIONS:** CONSTRUCT THE PROJECT IN COMPLIANCE WITH THE PROJECT SPECIAL PROVISIONS, MONTANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, MONTANA PUBLIC WORKS AND MONTANA DEPARTMENT OF TRANSPORTATION SUPPLEMENTS, AND BEST MANAGEMENT PRACTICES.
- MATERIAL SOURCES:** ALL MATERIALS ARE CONTRACTOR FURNISHED.
- EROSION EROSION AND POLLUTION CONTROL PLAN:** SUBMIT A SOIL EROSION AND POLLUTION CONTROL PLAN TO THE COUNTY FOR APPROVAL PRIOR TO BEGINNING WORK. PROVIDE METHODS TO PREVENT RUNOFF FROM THE CONSTRUCTION SITE FROM ENTERING THE ACTIVE STREAM OR ADJACENT PROPERTIES. PROVIDE A SILT BASIN FOR ANY WATER PUMPED FROM THE EXCAVATION.
- DISPOSAL:** ALL MATERIALS DESIGNATED FOR REMOVAL, EXCEPT FOR MATERIALS TO BE SALVAGED PER THE PROJECT PLANS AND SPECIFICATIONS, BECOME THE PROPERTY OF THE CONTRACTOR UPON REMOVAL AND ARE TO BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- UTILITIES:** UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. NOT ALL EXISTING UTILITIES ARE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY LOCATIONS OF ALL UTILITIES THAT MAY BE IMPACTED BY THIS PROJECT. THE CONTRACTOR SHALL COORDINATE ALL UTILITY RELOCATIONS WITH THE UTILITY PROVIDERS AT NO COST TO THE OWNER.
- RIGHTS-OF-WAY:** DUE TO THE PROXIMITY OF WORK TO ADJACENT PROPERTIES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY LOCATION OF EXISTING RIGHT-OF-WAY PRIOR TO STARTING WORK. WHERE APPLICABLE, THE RIGHT-OF-WAY BASED ON FOUND MONUMENTS TAKES PRECEDENCE OVER THAT BASED ON AS-BUILT PLANS. SEE PROJECT SPECIAL PROVISIONS FOR MORE INFORMATION.
- TEMPORARY TRAFFIC CONTROL:** SUBMIT A TEMPORARY TRAFFIC CONTROL PLAN TO THE COUNTY FOR APPROVAL PRIOR TO BEGINNING WORK. THE MAIN STREET MAY BE CLOSED IN THE VICINITY OF THE CONSTRUCTION FOR THE DURATION OF CONSTRUCTION. MAINTAIN ACCESS TO RESIDENTS' DRIVEWAYS AT ALL TIMES.
- MAILBOXES:** ALL MAILBOXES ARE TO REMAIN OPERATIONAL DURING CONSTRUCTION, EITHER BY INSTALLING CLUSTER MAILBOXES BEFORE REMOVING EXISTING MAILBOXES OR BY PROVIDING TEMPORARY MAILBOX USE.
- RESET EXISTING SIGNS:** RESET STREET SIGNS IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND MONTANA DEPARTMENT OF TRANSPORTATION DETAILED DRAWINGS.
- UTILITIES:** APPROXIMATE UTILITY LOCATIONS ARE SHOWN IN THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO ANY EXCAVATION AND ANY COORDINATION NECESSARY WITH THE APPROPRIATE UTILITY COMPANIES TO COMPLETE THE WORK.
- CONCRETE:** USE CLASS DD-BRIDGE CONCRETE FOR ALL PRECAST, NON PRESTRESSED CONCRETE WITH F'C = 4000 PSI AT 28 DAYS AND AN ENTRAINED AIR CONTENT OF 6% ± 1%. FINISH ALL PRECAST ELEMENTS WITH AN ORDINARY FINISH.

USE CLASS PRE CONCRETE FOR ALL PRESTRESSED MEMBERS WITH AN ENTRAINED AIR CONTENT OF 6% ± 1% WITH INITIAL AND 28-DAY COMPRESSIVE STRENGTHS DETERMINED BY THE FABRICATOR.

MAKE ALL CONCRETE IN ACCORDANCE WITH AN MDT APPROVED MIX DESIGN. CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4" AND FILLET ALL ACUTE ANGLES 3" UNLESS OTHERWISE NOTED.
- REINFORCING STEEL:** USE NON-PRESTRESSED REINFORCING OF THE DEFORMED TYPE CONFORMING TO AASHTO M31 (ASTM A615), GRADE 60. CONCRETE COVER SHALL BE AS SHOWN; WHERE NOT SHOWN IT SHALL CONFORM TO AASHTO. CUT AND BEND STEEL IN ACCORDANCE WITH ACI 315.
- PRESTRESSING STEEL:** USE PRESTRESSING STEEL OF LOW-RELAXATION PRESTRESSING STRAND CONFORMING TO AASHTO M203, GRADE 270.
- HARDWARE AND STRUCTURAL STEEL:** USE STEEL SHAPES, PLATES AND BARS MEETING THE REQUIREMENTS OF ASTM A36. GALVANIZE ALL STEEL IN ACCORDANCE WITH AASHTO M111 (ASTM A123) UNLESS OTHERWISE NOTED. USE HARDWARE MEETING THE REQUIREMENTS OF ASTM A307 EXCEPT AS NOTED. GALVANIZE HARDWARE IN ACCORDANCE WITH AASHTO M232 (ASTM A153) UNLESS OTHERWISE NOTED.

WELD IN ACCORDANCE WITH THE BRIDGE WELDING CODE, AWS D1.5 WITH E70XX ELECTRODES. A CERTIFIED WELDER IS REQUIRED.

DESIGN STANDARDS

- BRIDGE DESIGN:** THIS STRUCTURE IS DESIGNED FOR HL-93 LOADING IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION WITH CURRENT INTERIMS.

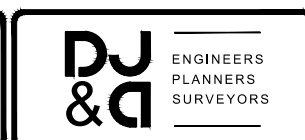
LEGEND

	EXISTING	PROPOSED
EDGE OF ASPHALT		
TEMPORARY CONSTRUCTION EASEMENT		
ROAD CENTERLINE		
SIGNS		
MINOR CONTOUR		
MAJOR CONTOUR		
FENCE		
NATURAL GAS LINE		
OVERHEAD POWER LINE		
POWER POLE		
POWER POLE ANCHOR		
LIGHTING		
UTILITY BOX		
RIGHT-OF-WAY BASED ON FOUND MONUMENTS		
RIGHT OF WAY BASED ON AS-BUILT CENTERLINE		
CURB AND GUTTER		
CONSTRUCTION LIMITS		
CONTROL POINT		
ASPHALT CONCRETE PAVEMENT		
CONCRETE		
GRAVEL		
CULVERT		
TOPSOIL AND SEEDING		
WATER VALVE		
WATER LINE		
SEWER MANHOLE		
SEWER LINE		
MAILBOX		
STORM SUMP OR CATCH BASIN		

4/20/23 10:45 AM JACOB LUTZ/LOLO STREET BRIDGE REHABILITATION DRAWING/STRUCTURAL PERSONAL/LOLO STREET BRIDGE - REHABILITATION

REVISION	DATE	DESCRIPTION

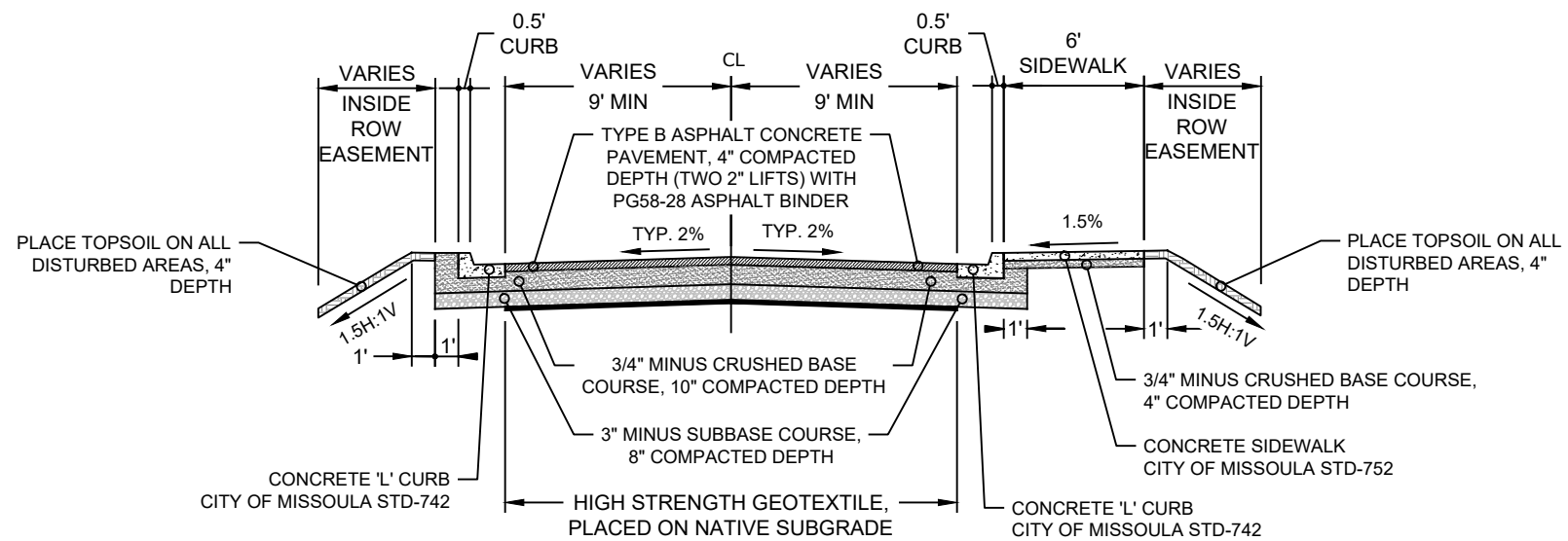
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DRAWN	KM	DATE	4/20/23
CHECKED	JWR	SURVEYED	D&A P.C.



LOLO STREET BRIDGE REPLACEMENT
MISSOULA COUNTY

GENERAL NOTES

SHEET	
OF	
2	5

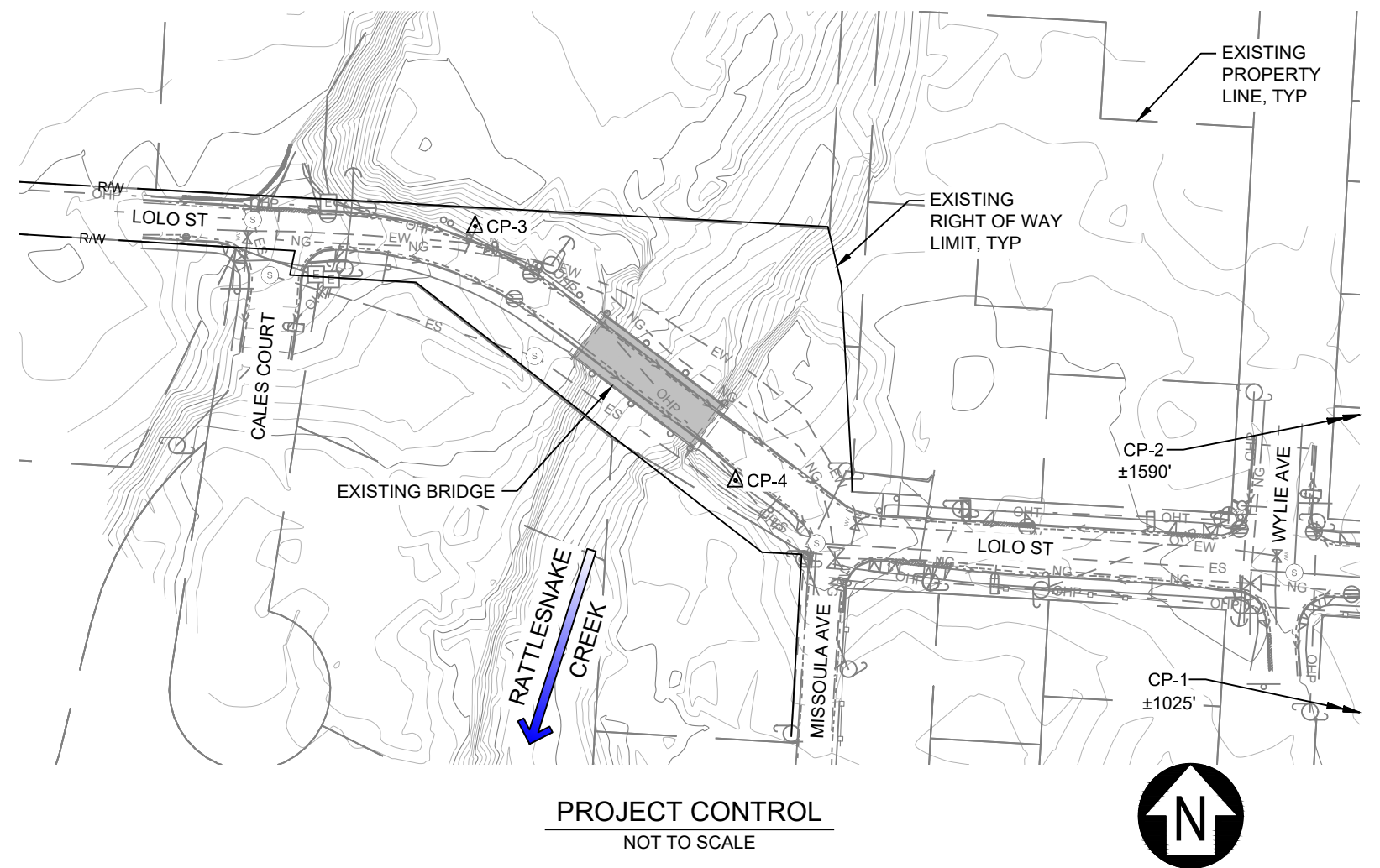


ROAD TYPICAL SECTION
NOT TO SCALE

CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-1	992136.25	852994.45	3342.08	SET 1" RPC ON 5/8" REBAR
CP-2	992793.09	853534.73	3361.78	SET 1" RPC ON 5/8" REBAR
CP-3	992628.69	851558.76	3313.47	SET 1" RPC ON 5/8" REBAR
CP-4	992471.00	851720.23	3309.86	SET MAG NAIL

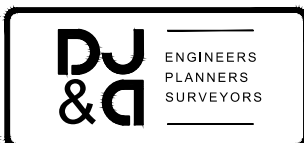
SURVEY CONTROL INFORMATION

PROJECT: LOLO STREET BRIDGE MISSOULA COUNTY
 DATE OF FIELD WORK: SPRING 2023
 VERTICAL DATUM: NAVD 88
 PROJECT UNITS: INTERNATIONAL FEET
 COORDINATE SYSTEM: MODIFIED MONTANA STATE PLANE - 2500
 PROJECT COMBINATION SCALE FACTOR: 1.0007612462
 SPC TRANSLATION POINT: N46° 53' 06.52926" W 113° 58' 17.35905"



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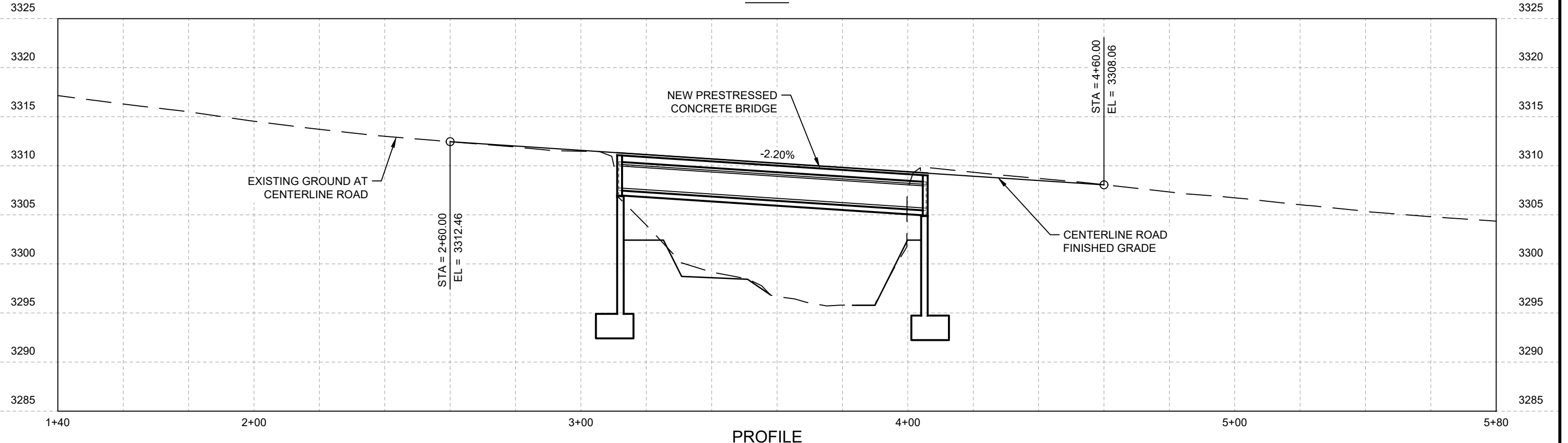
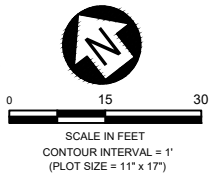
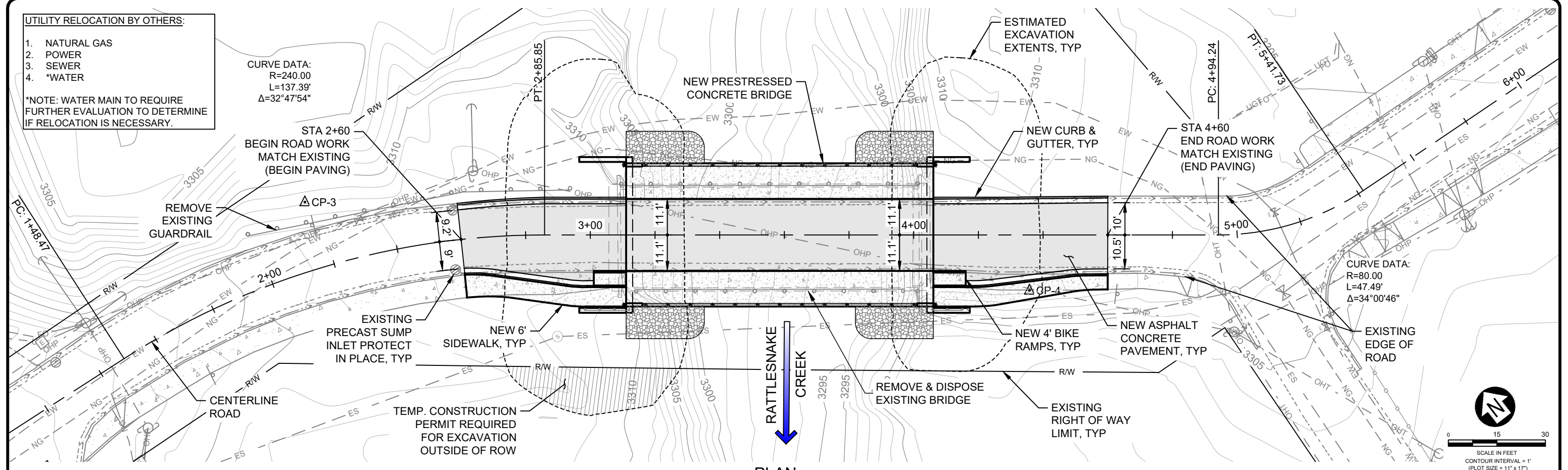
LOLO STREET BRIDGE REPLACEMENT
MISSOULA COUNTY

PROJECT CONTROL & TYPICAL SECTIONS

- UTILITY RELOCATION BY OTHERS:
1. NATURAL GAS
 2. POWER
 3. SEWER
 4. *WATER
- *NOTE: WATER MAIN TO REQUIRE FURTHER EVALUATION TO DETERMINE IF RELOCATION IS NECESSARY.

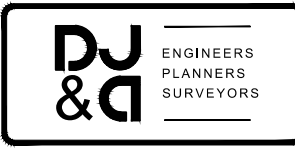
CURVE DATA:
 R=240.00
 L=137.39'
 $\Delta=32^{\circ}47'54''$

CURVE DATA:
 R=80.00
 L=47.49'
 $\Delta=34^{\circ}00'46''$



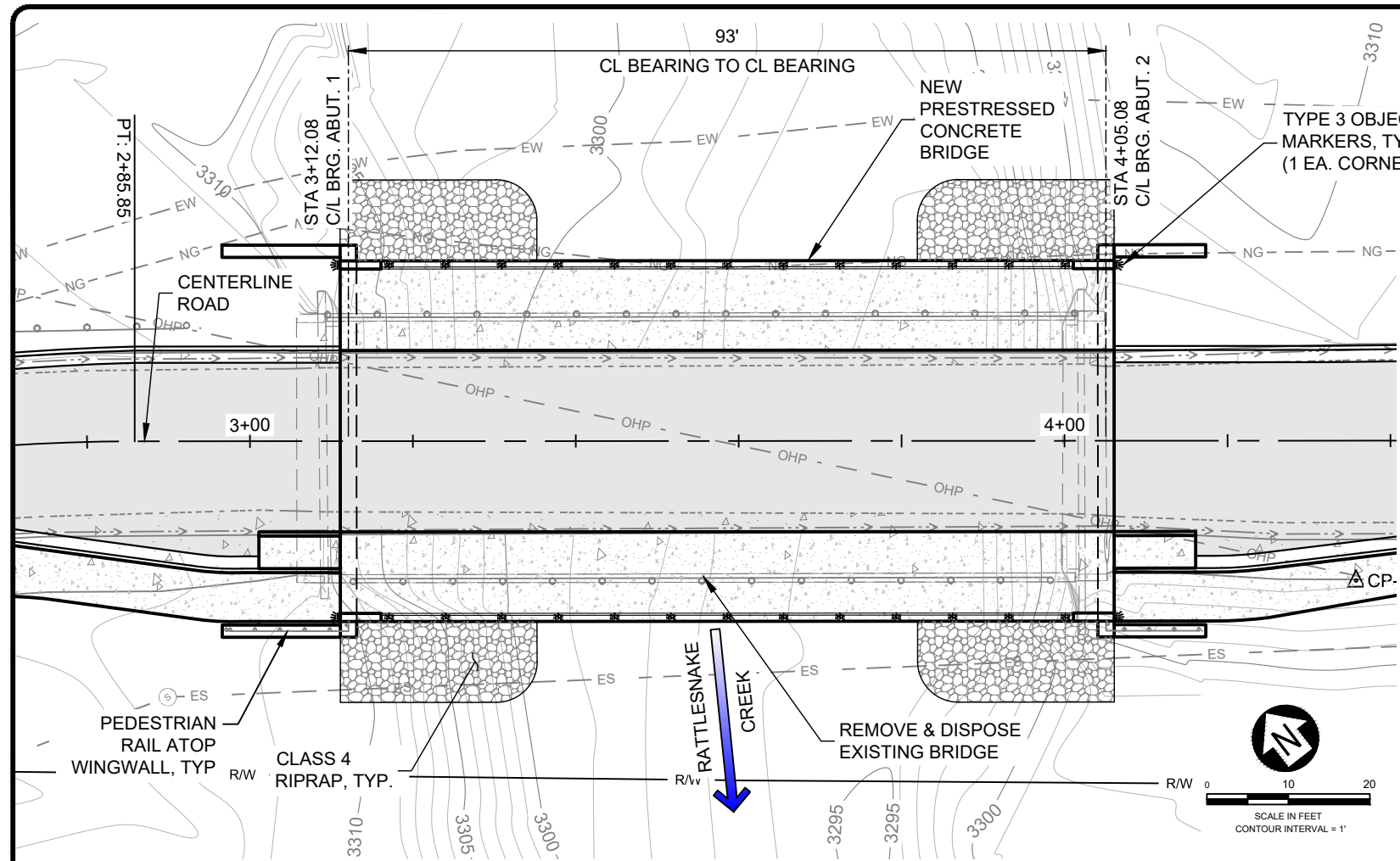
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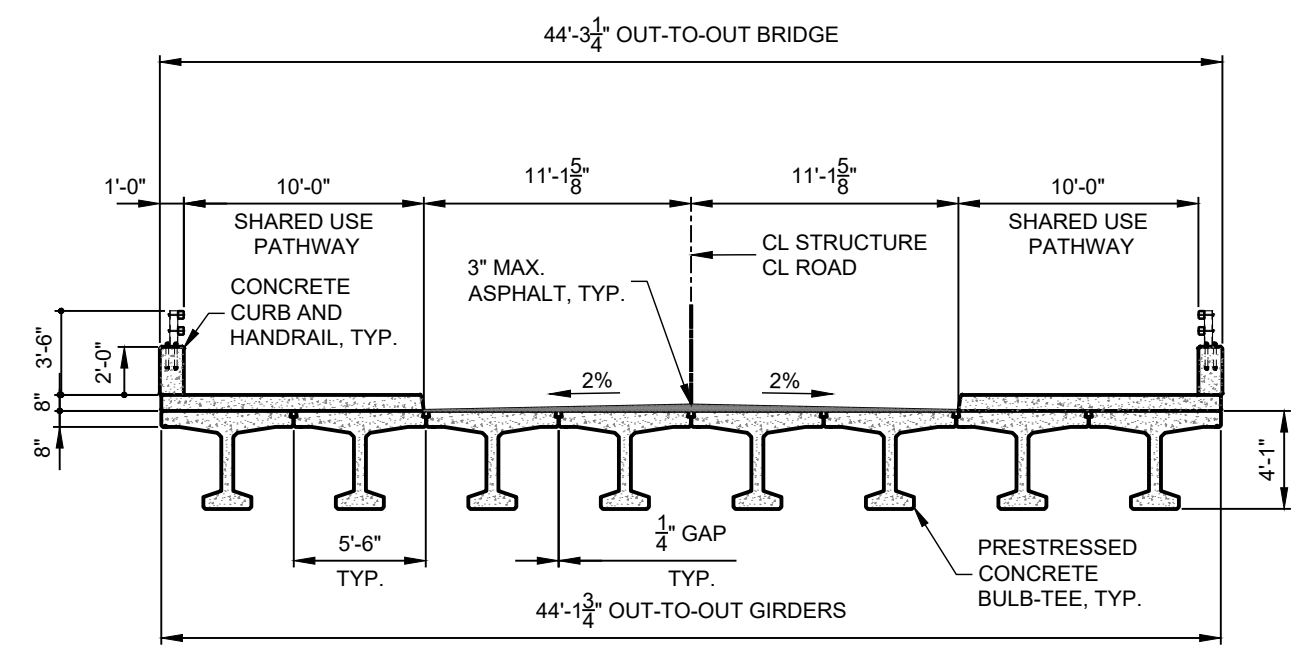


LOLO STREET BRIDGE REPLACEMENT
 MISSOULA COUNTY

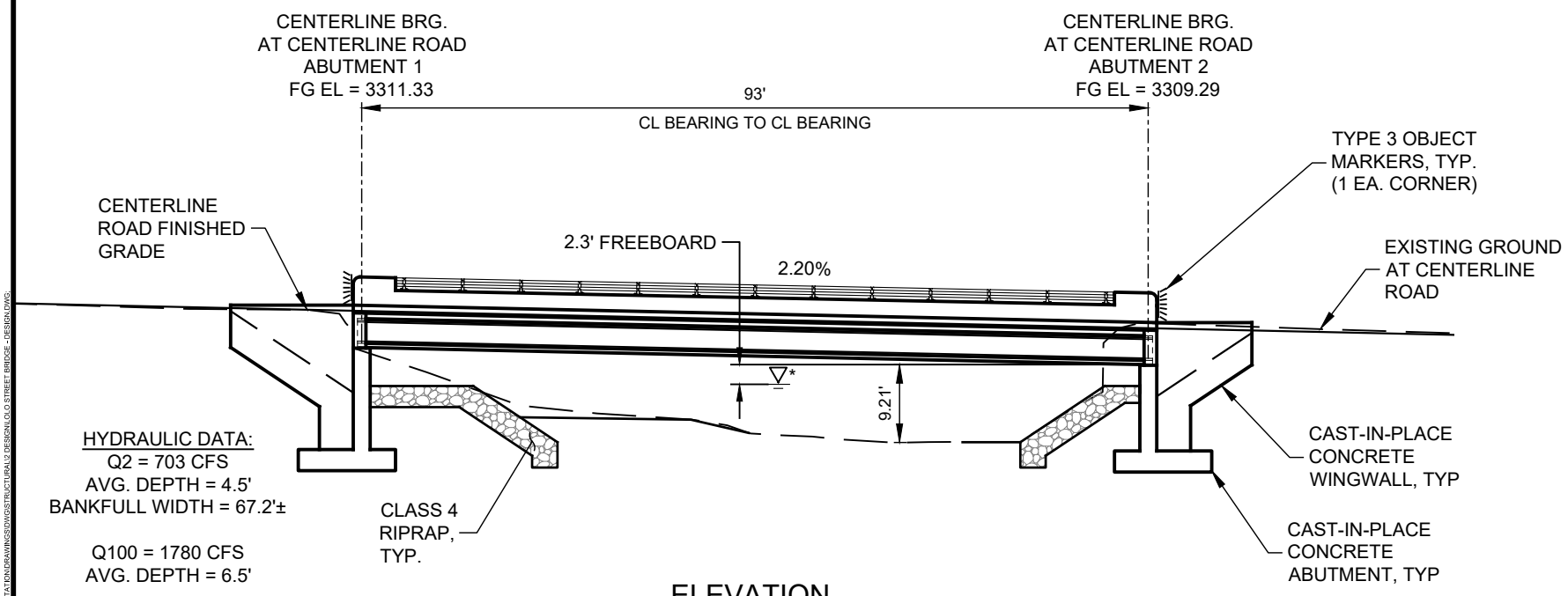
ROAD PLAN & PROFILE



PLAN



TYPICAL SECTION
SCALE: 1/8" = 1'-0"

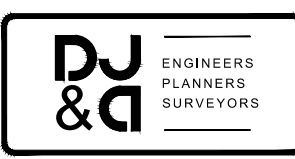


ELEVATION
SCALE: 1" = 20'

*Q100 = 3302.63 AT UPSTREAM EDGE OF BRIDGE

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BRIDGE GENERAL LAYOUT