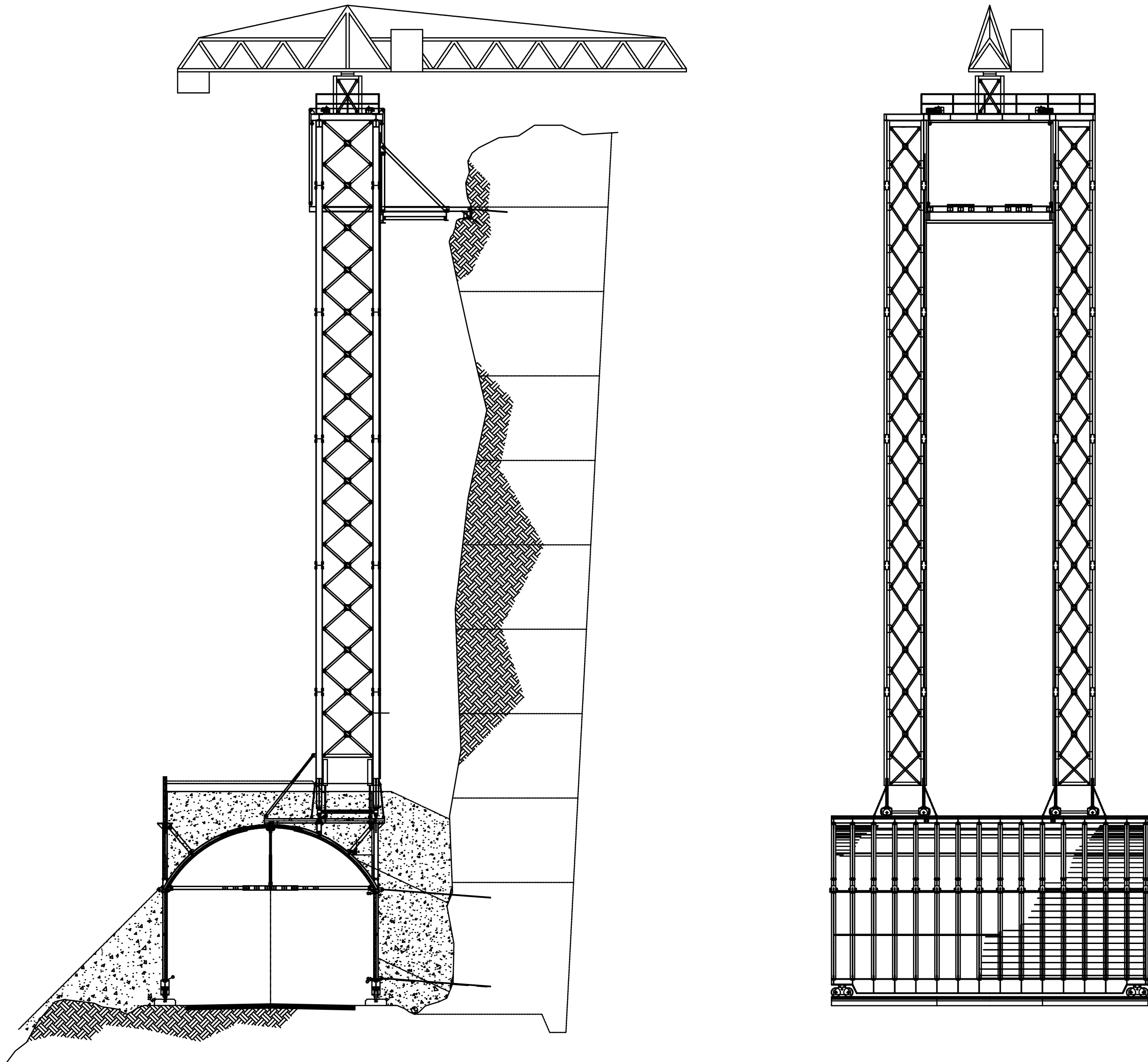


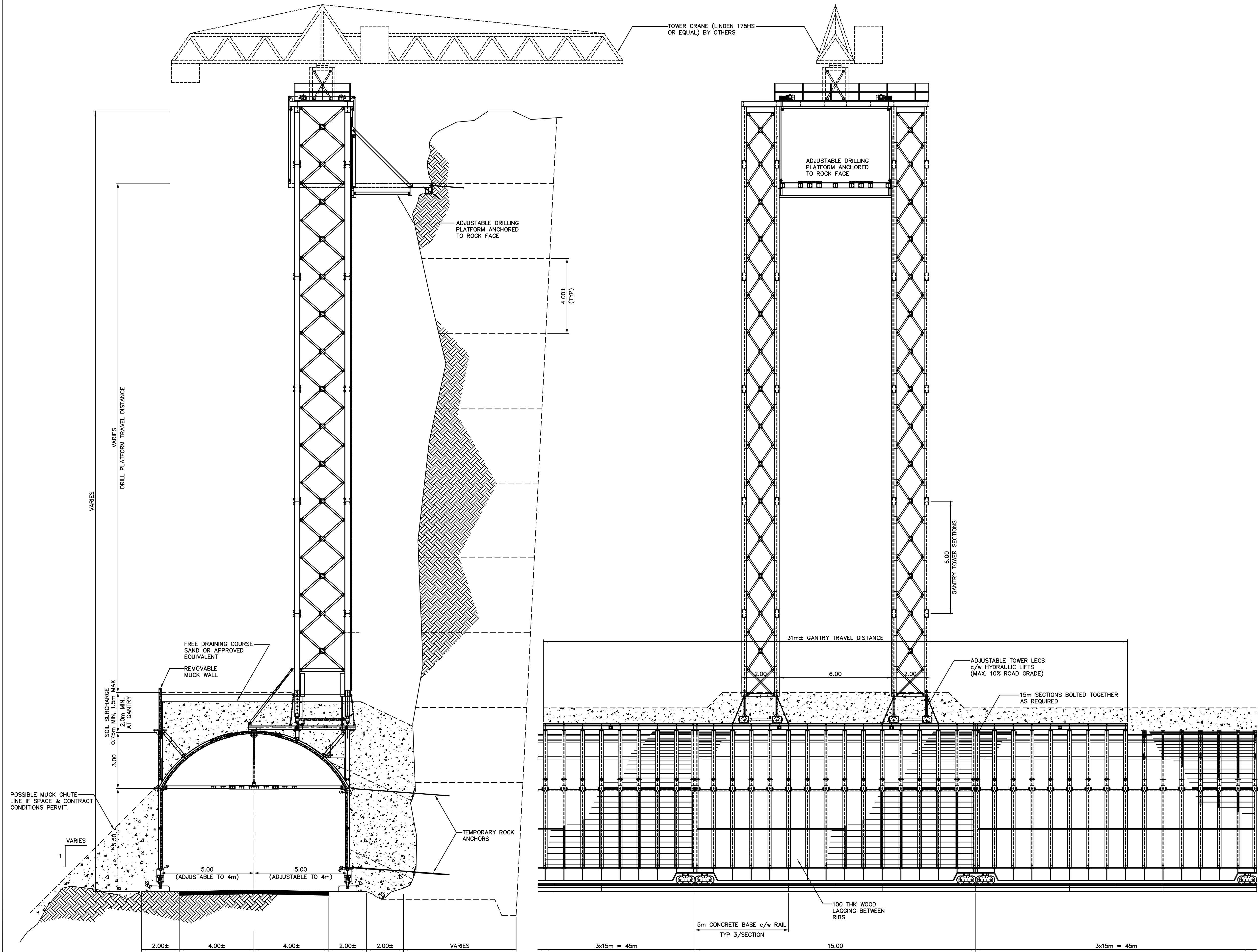
# ROAD WORKS SHIELD AND GANTRY SYSTEM \*

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101	GENERAL CONCEPT DRAWING
102	TYPICAL PLAN & ELEVATION
STRUCTURAL	
201	ROAD SHIELD AND GANTRY SECTIONS & DETAILS
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205	GANTRY TOWER AND PLATFORMS - ELEVATIONS
MECHANICAL / ELECTRICAL	
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302	MECHANICAL DETAILS, SPECIFICATIONS & NOTES
303	WIRING DIAGRAM, ELECTRICAL SPECIFICATIONS & NOTES



NOTES:



A TYPICAL SECTION @ CL R/S  
SCALE: 1:100

1 TYPICAL ELEVATION @ CL R/S  
SCALE: 1:100

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C	21/01/2020	GENERAL REVISION	LZ
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ROAD WORKS SHIELD AND GANTRY\*

GENERAL CONCEPT DRAWING

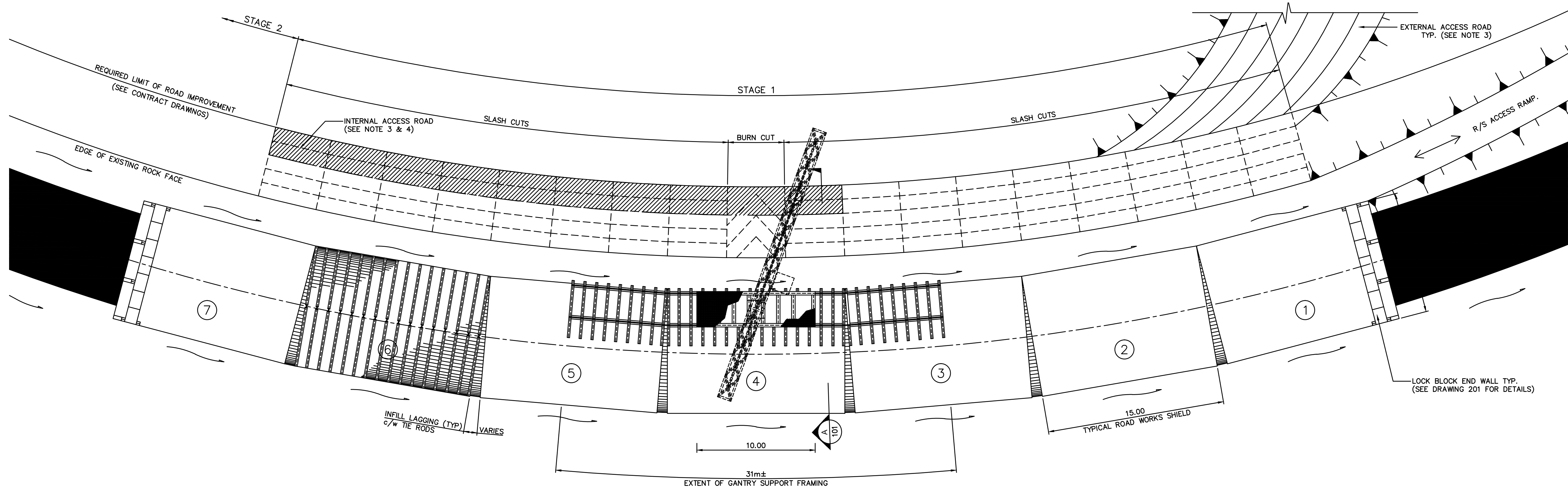
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BLASTING NOTES:

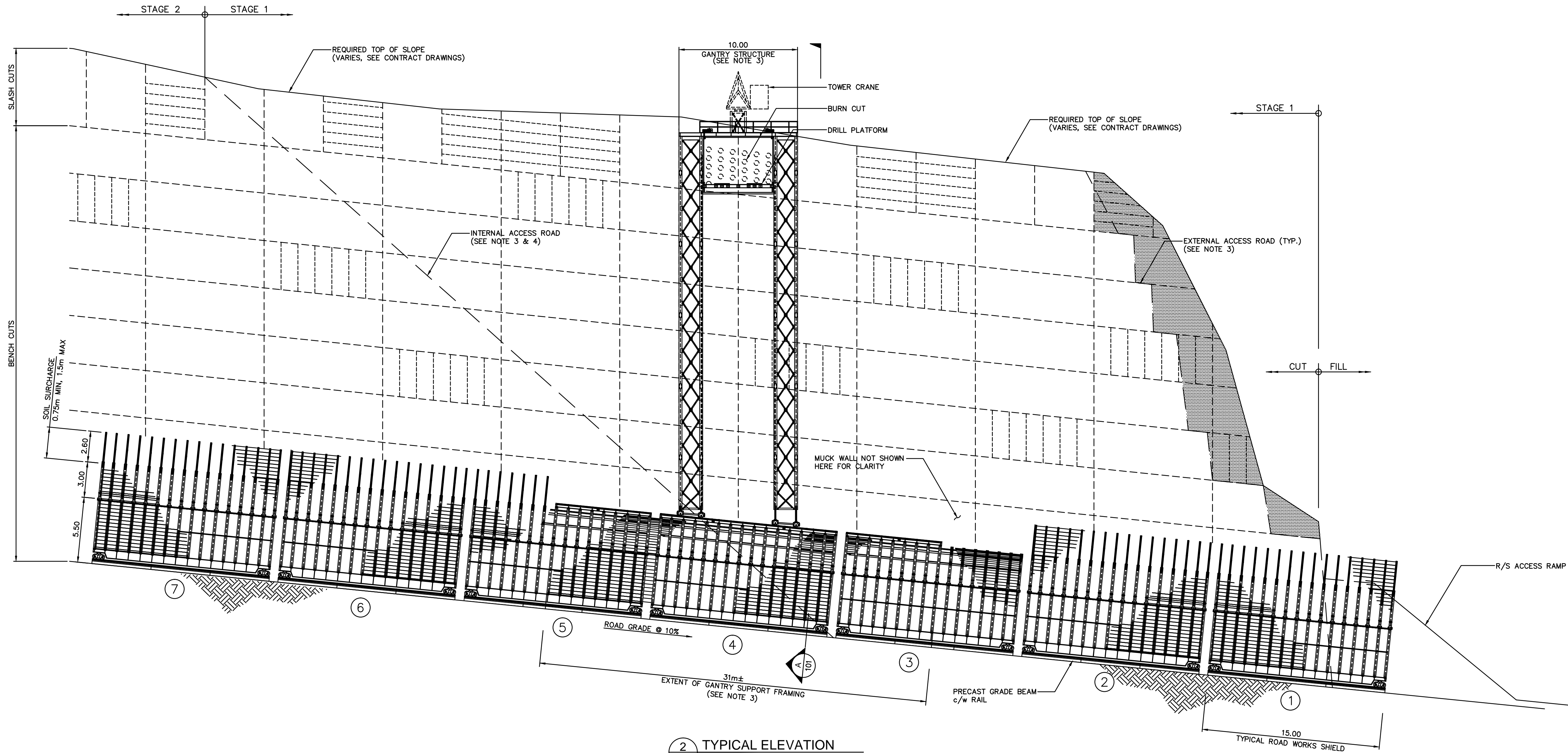
1. CONTROLLED PERIMETER BLASTING TO BE USED AT ALL TIMES.
2. ALL BLASTS TO BE MONITORED FOR VIBRATION. MAXIMUM PERMISSIBLE PEAK VIBRATION ON ANY PART OF STRUCTURE IS 50mm PER SECOND.
3. BLASTING MATS (OR APPROVED PROTECTION SYSTEM) TO BE USED ON ALL BLASTS WITHIN 10m OF THE GANTRY STRUCTURE.
4. FOR TRAFFIC CONTROL, SEE GENERAL CONTRACTOR'S APPROVED TRAFFIC SAFETY PLAN.

GENERAL NOTES:

1. ALL SHOT ROCK TO BE MACHINED CAST AT THE MAXIMUM RATE OF 2m<sup>3</sup>/CAST.
2. MAXIMUM PERMISSIBLE EQUIPMENT LOAD PER ROAD WORKS SHIELD STRUCTURE = 125,000 lbs (GROSS)
3. EXTERNAL AND INTERNAL ACCESS ROADS CAN BE USED IN LIEU OF GANTRY STRUCTURE. ALL OTHER ROAD WORKS SHIELD DETAILS REMAIN UNCHANGED.
4. INTERNAL ACCESS RAMP TO BE INSTALLED ADJACENT TO CUT FACE TO ENABLE FREE MOVEMENT OF R/S TO NEXT STAGE.



1 TYPICAL PLAN  
SCALE: 1:200



2 TYPICAL ELEVATION  
SCALE: 1:200

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ROAD WORKS SHIELD AND GANTRY\*

TYPICAL PLAN & ELEVATION

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104lb/yd TEE RAIL

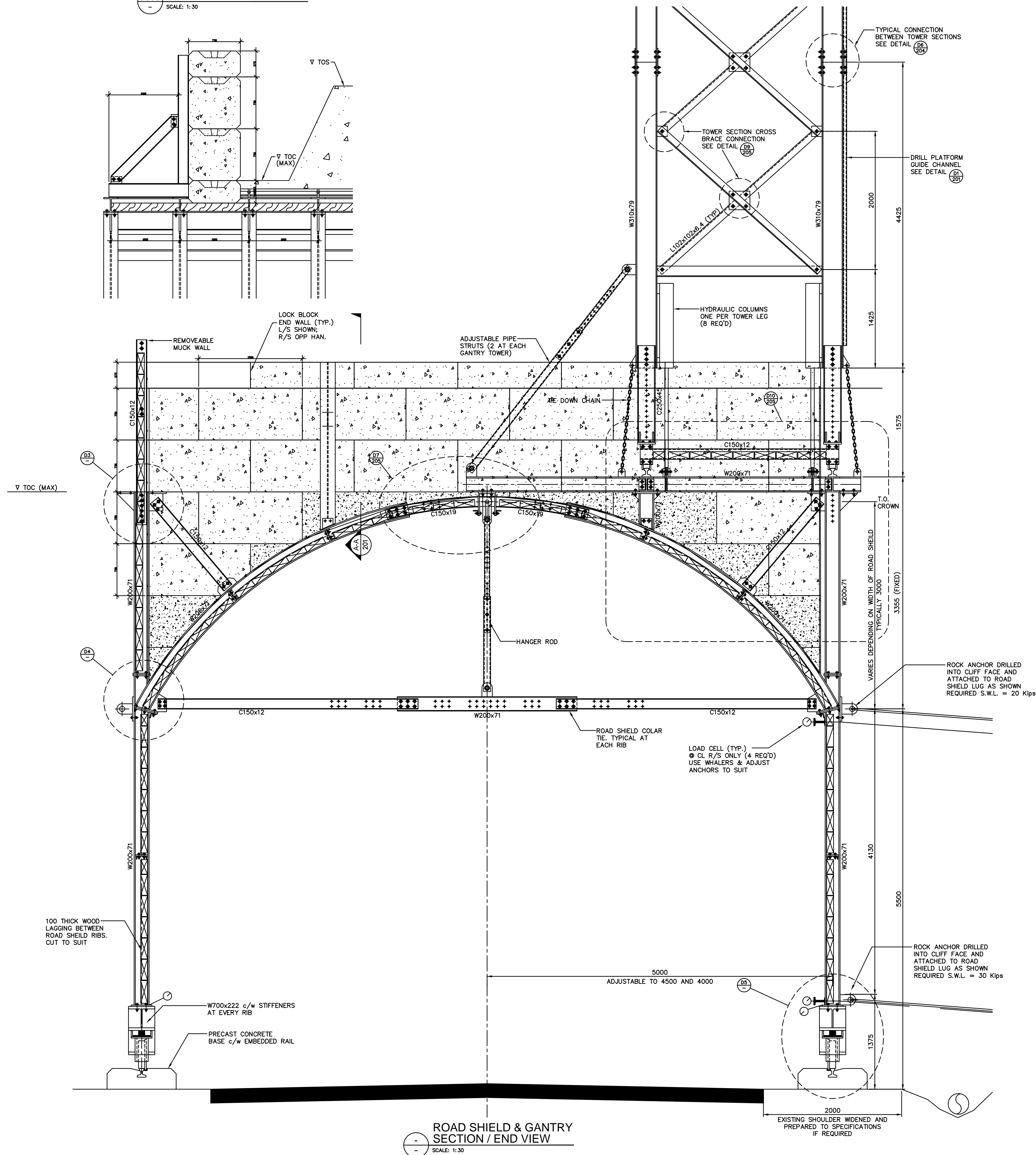
ANGLE IRON  
WELDED TO RAIL



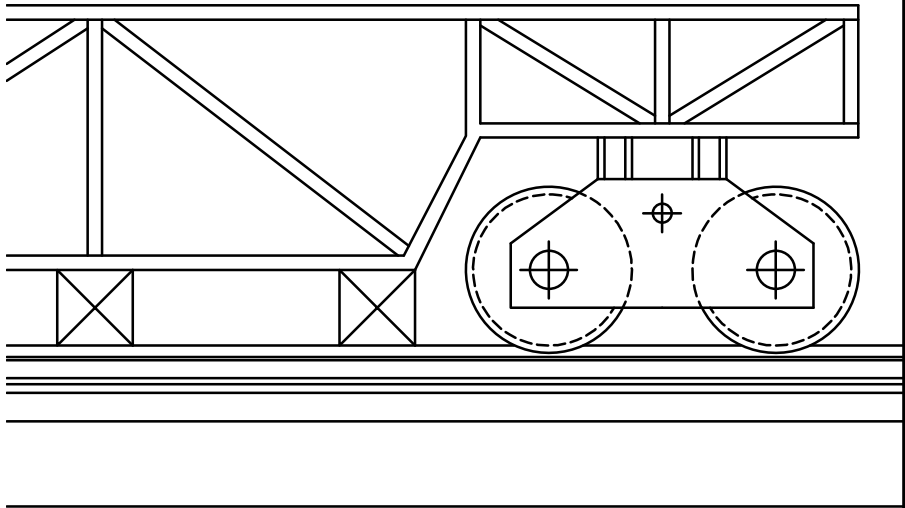
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## ROAD SHIELD AND GANTRY SECTIONS & DETAILS

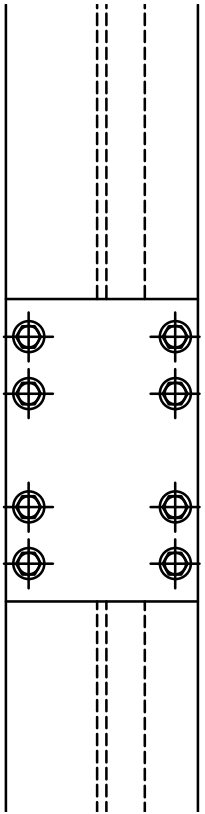
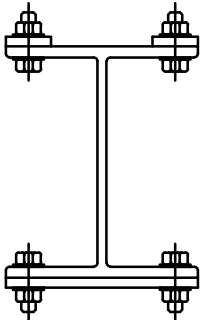
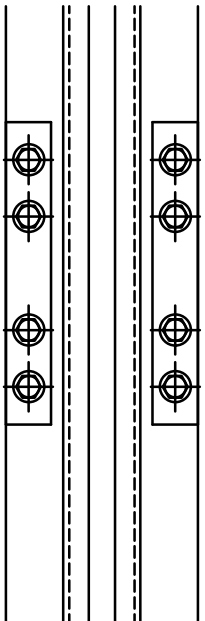
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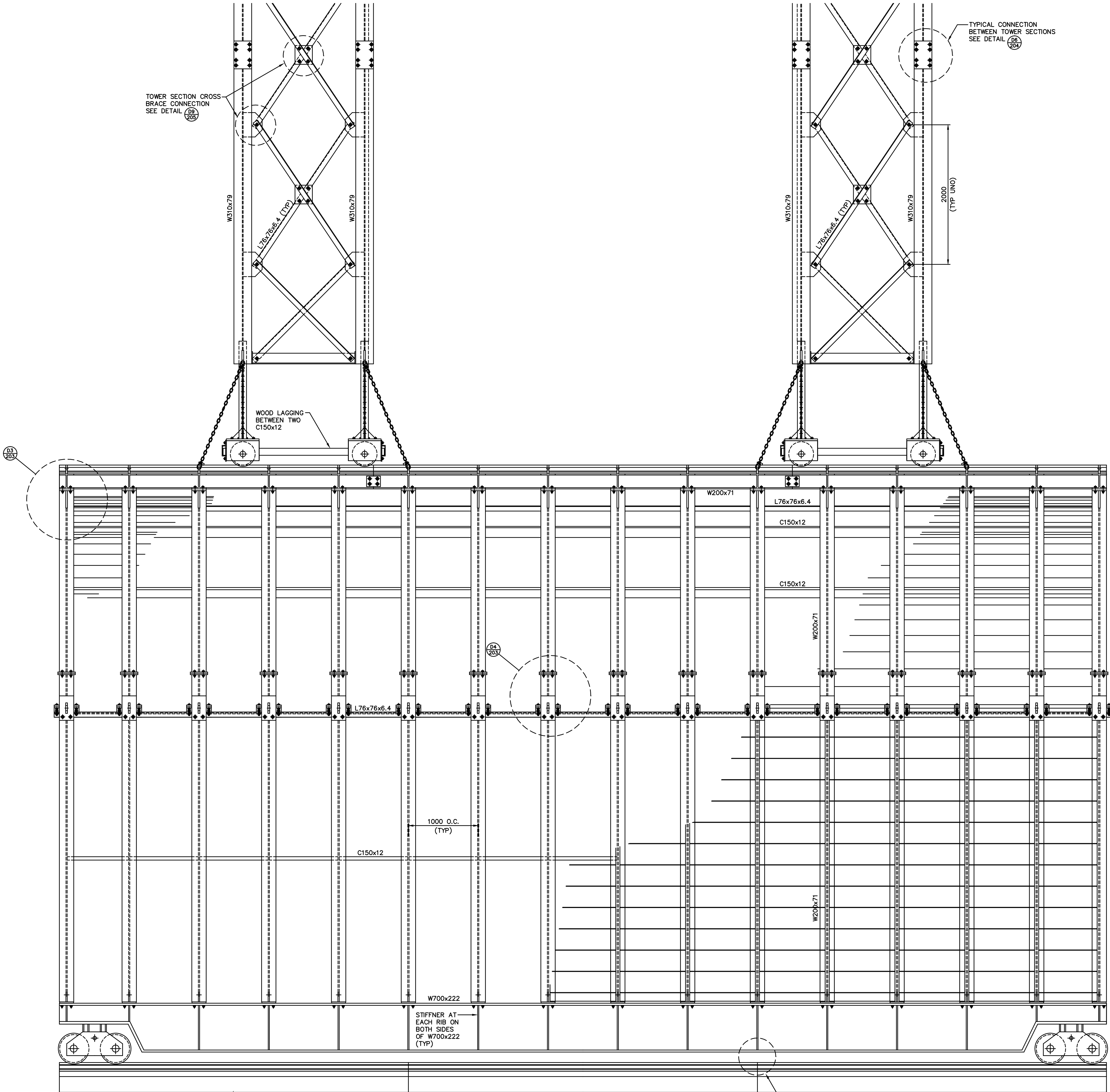
NOTES:



D5a ROAD SHIELD RAIL SYSTEM  
SCALE: 1:20



D6 CONNECTION DETAIL OF GANTRY TOWER SECTIONS  
SCALE: 1:10



ROAD SHIELD & GANTRY ELEVATION  
SCALE: 1:30

PRECAST CONCRETE BASE c/w RAIL WELDED TO EMBEDDED PLATE SEE DETAIL D5

STIFFNER AT EACH RIB ON BOTH SIDES OF W700x222 (TYP)

TOWER SECTION CROSS BRACE CONNECTION SEE DETAIL D2

TYPICAL CONNECTION BETWEEN TOWER SECTIONS SEE DETAIL D6

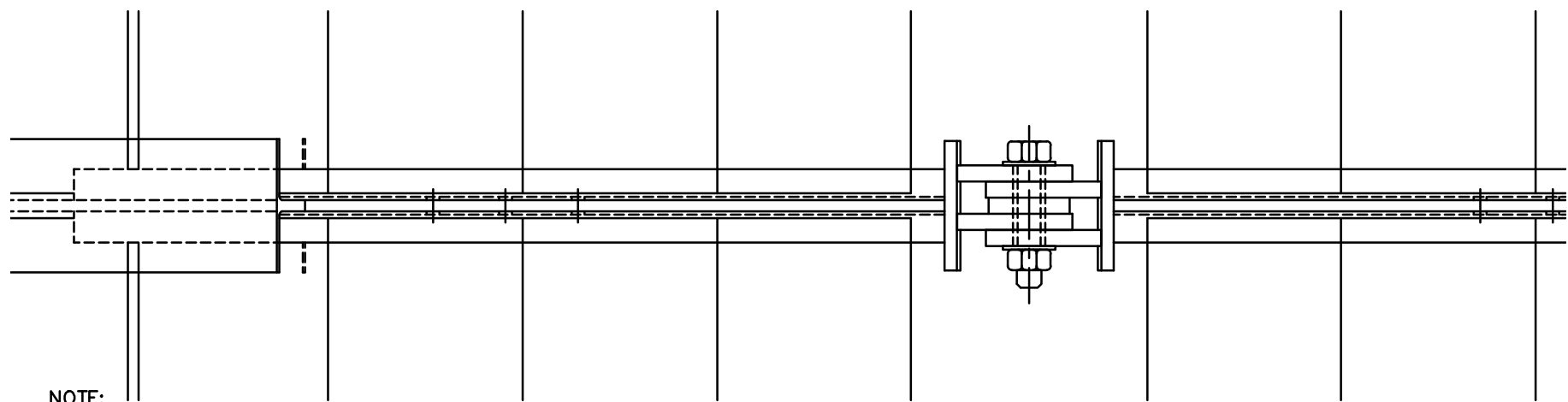
WOOD LAGGING BETWEEN TWO C150x12

ROAD WORKS SHIELD AND GANTRY\*

ROAD SHIELD AND GANTRY ELEVATION & DETAILS

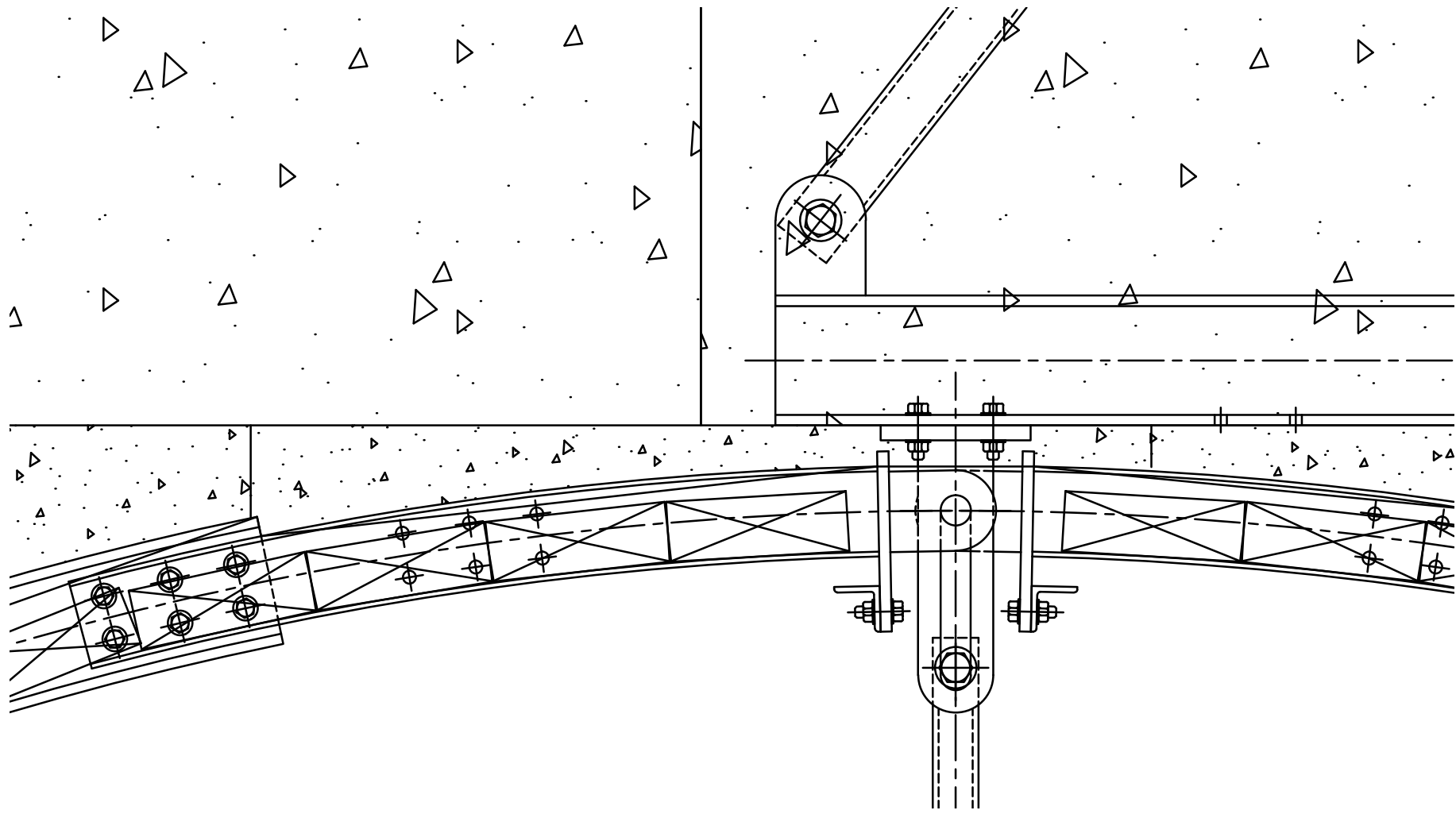
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NOTES:



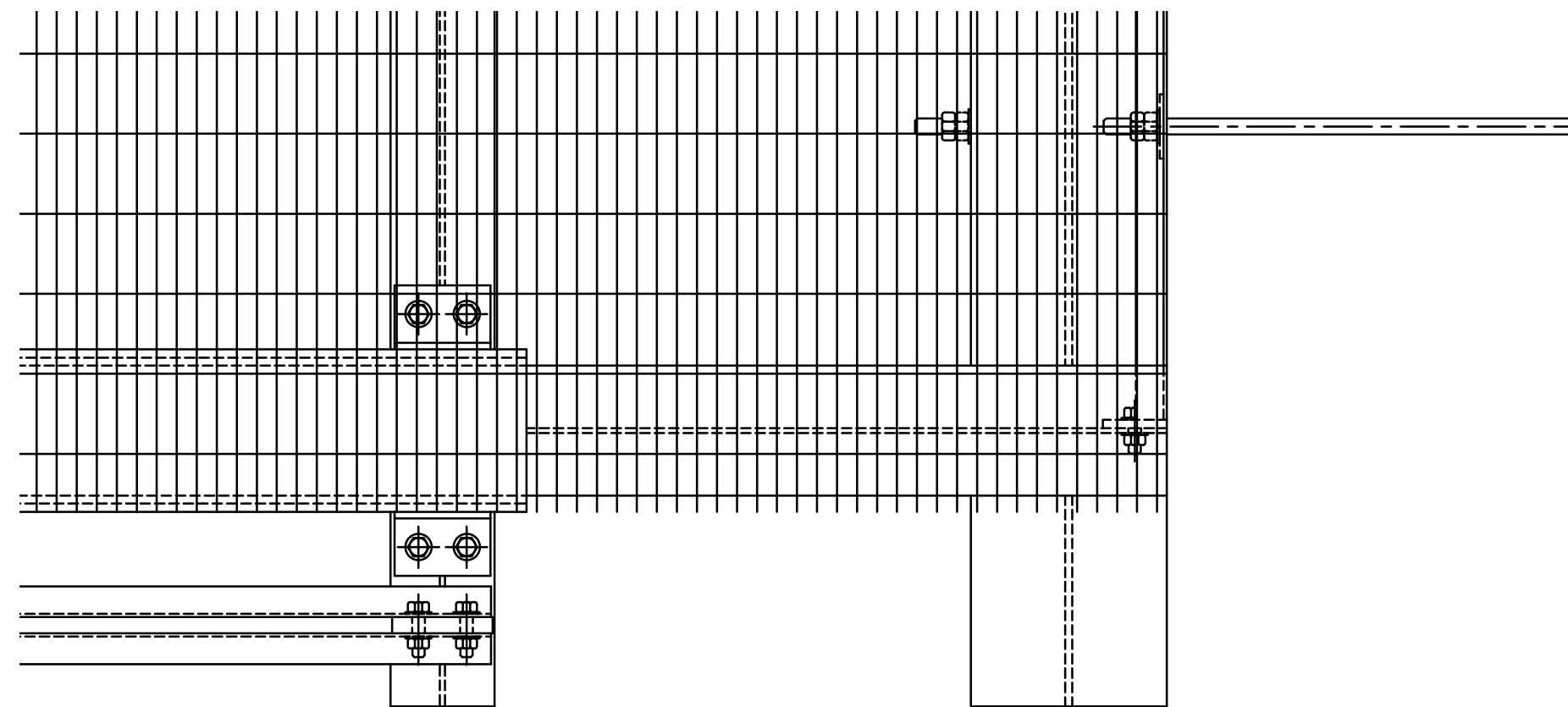
NOTE:  
FRAMING FOR GANTRY RAIL SYSTEM  
NOT SHOWN IN PLAN FOR CLARITY.

PLAN

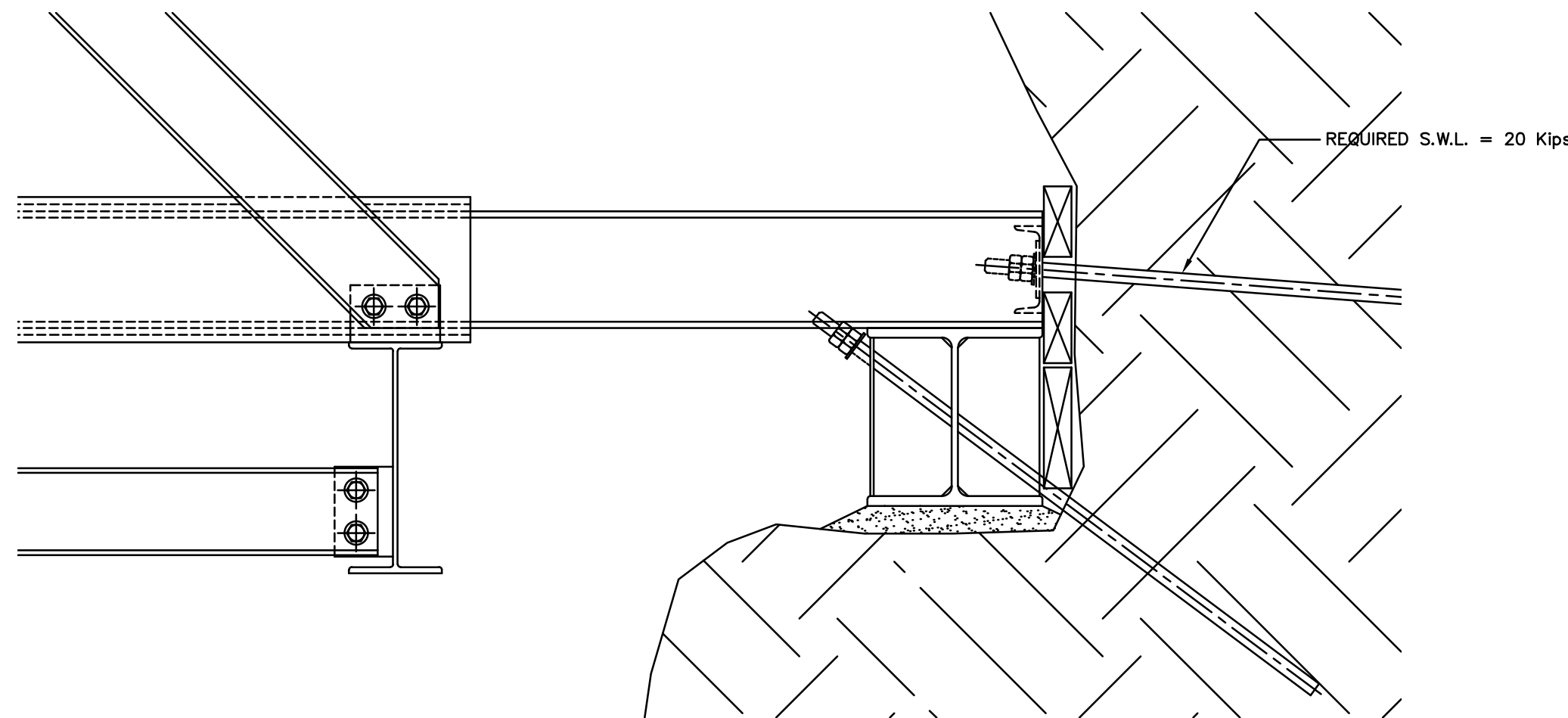


SECTION

**D7** ROAD SHIELD AT CROWN  
SCALE: 1:10

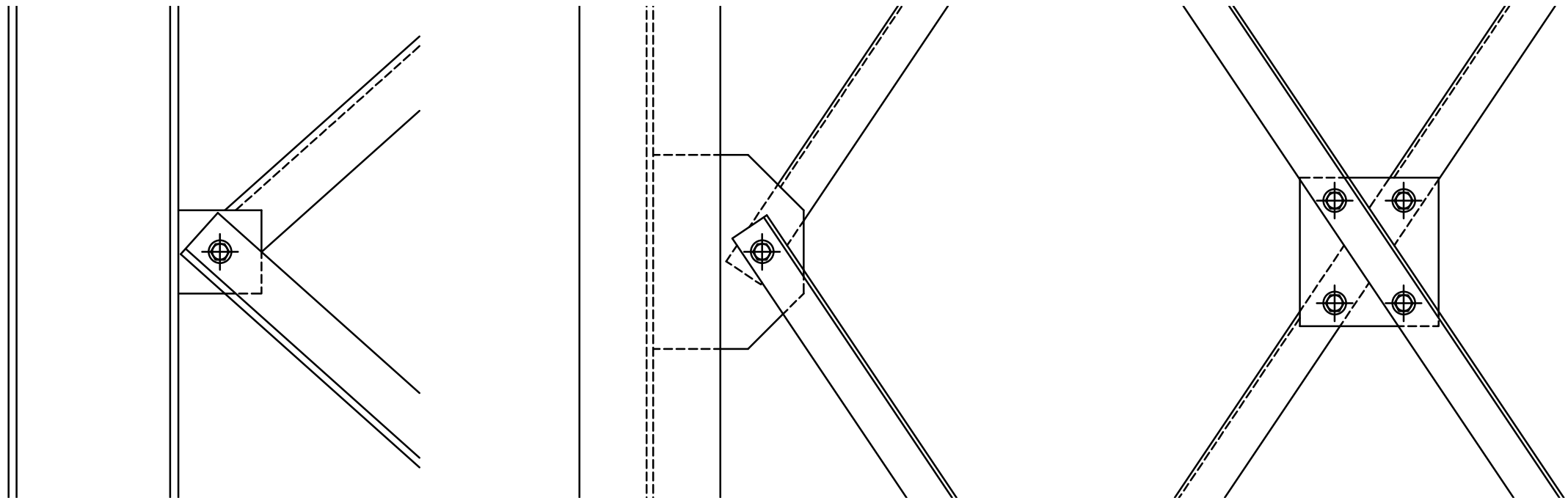


PLAN

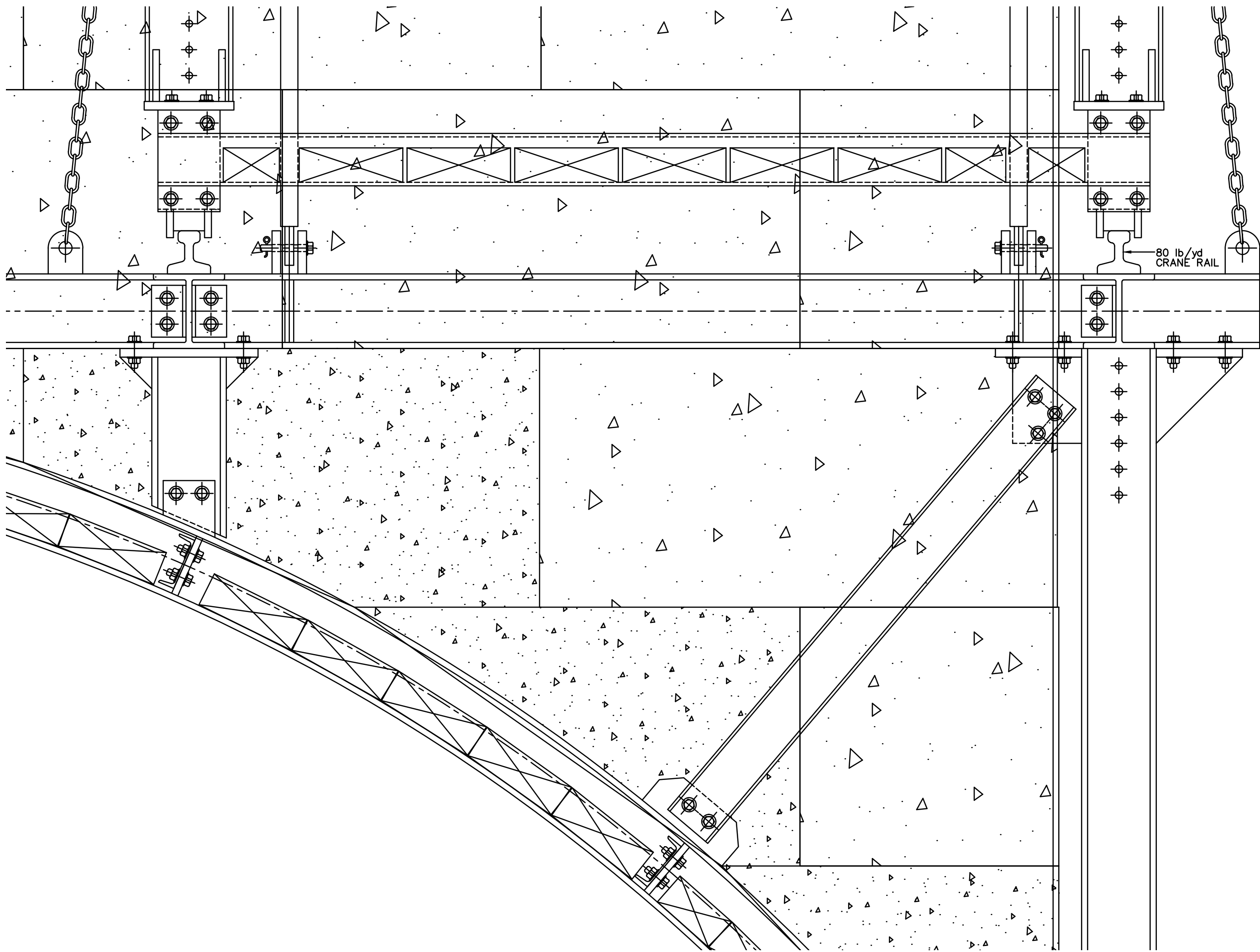


ELEVATION

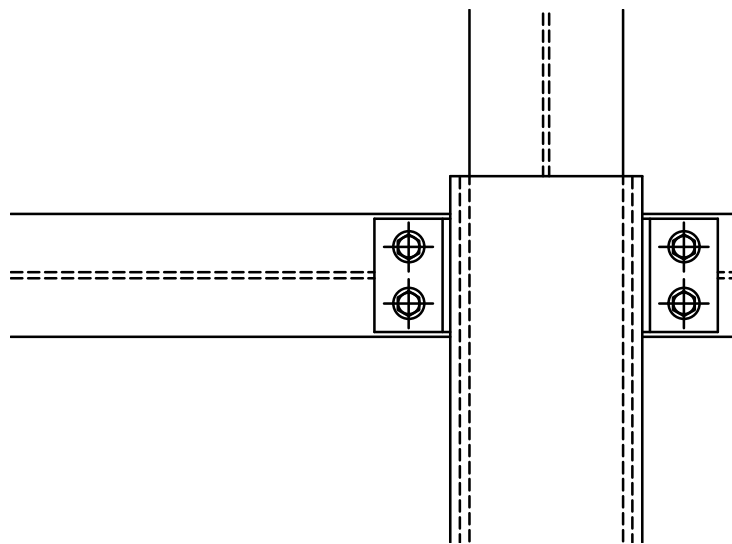
**D8** DRILL PLATFORM BRACING  
AT EXTENDABLE DECKING  
SCALE: 1:10



**D9** GANTRY TOWER BRACING  
CONNECTIONS  
SCALE: 1:10



**D10** GANTRY RAIL SYSTEM  
SCALE: 1:10  
TYPICAL AT EACH RIB ALONG THE 31m OF GANTRY TRAVEL



**D11** DRILL PLATFORM EXTENDABLE  
DECKING DRIVE SYSTEM  
SCALE: 1:10

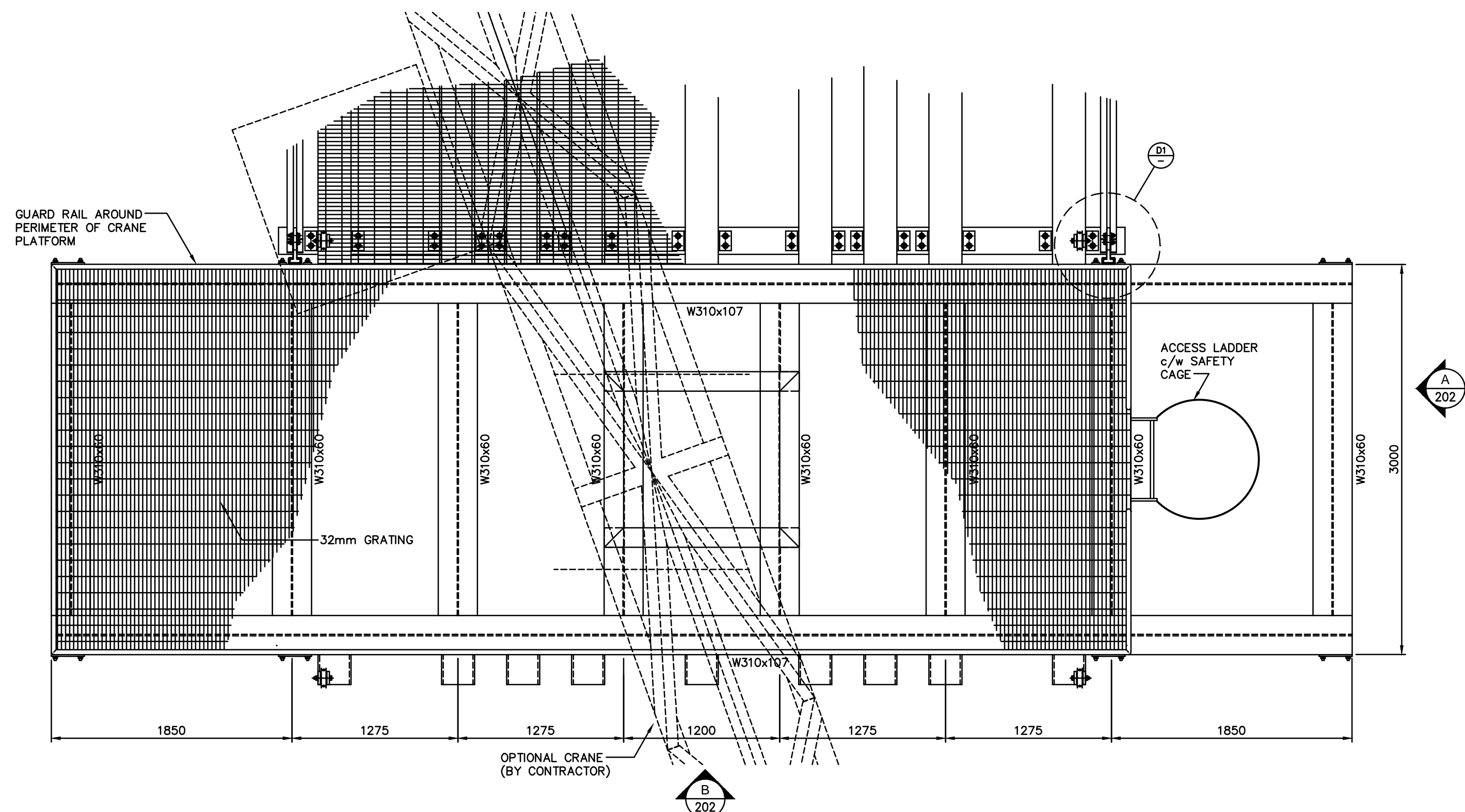
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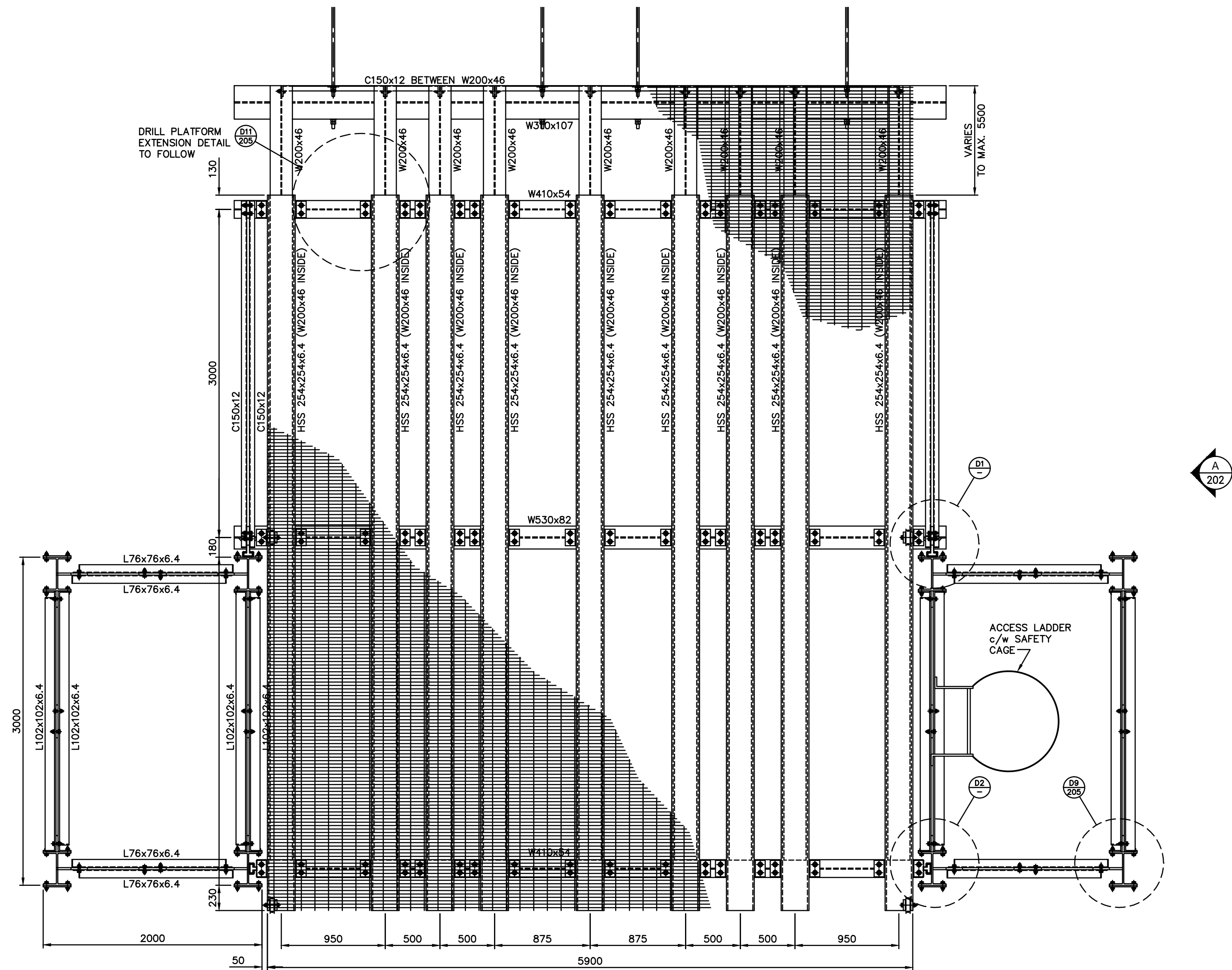
ROAD WORKS SHIELD AND GANTRY\*

MISCELLANEOUS DETAILS

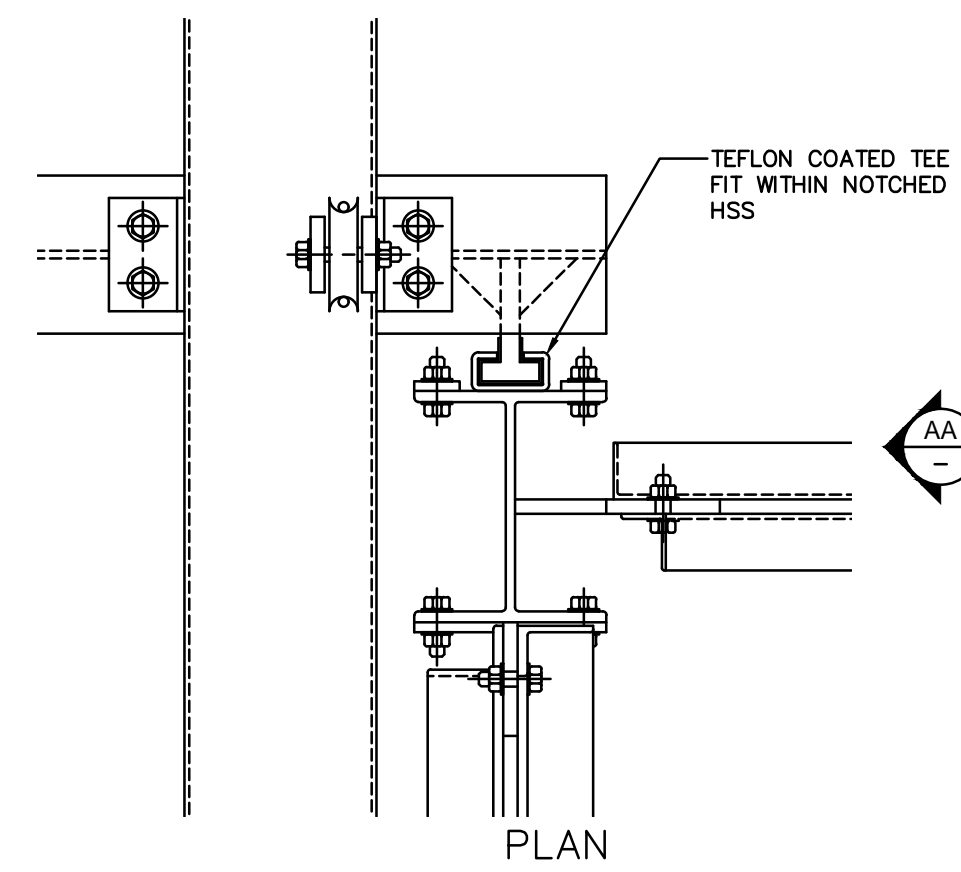
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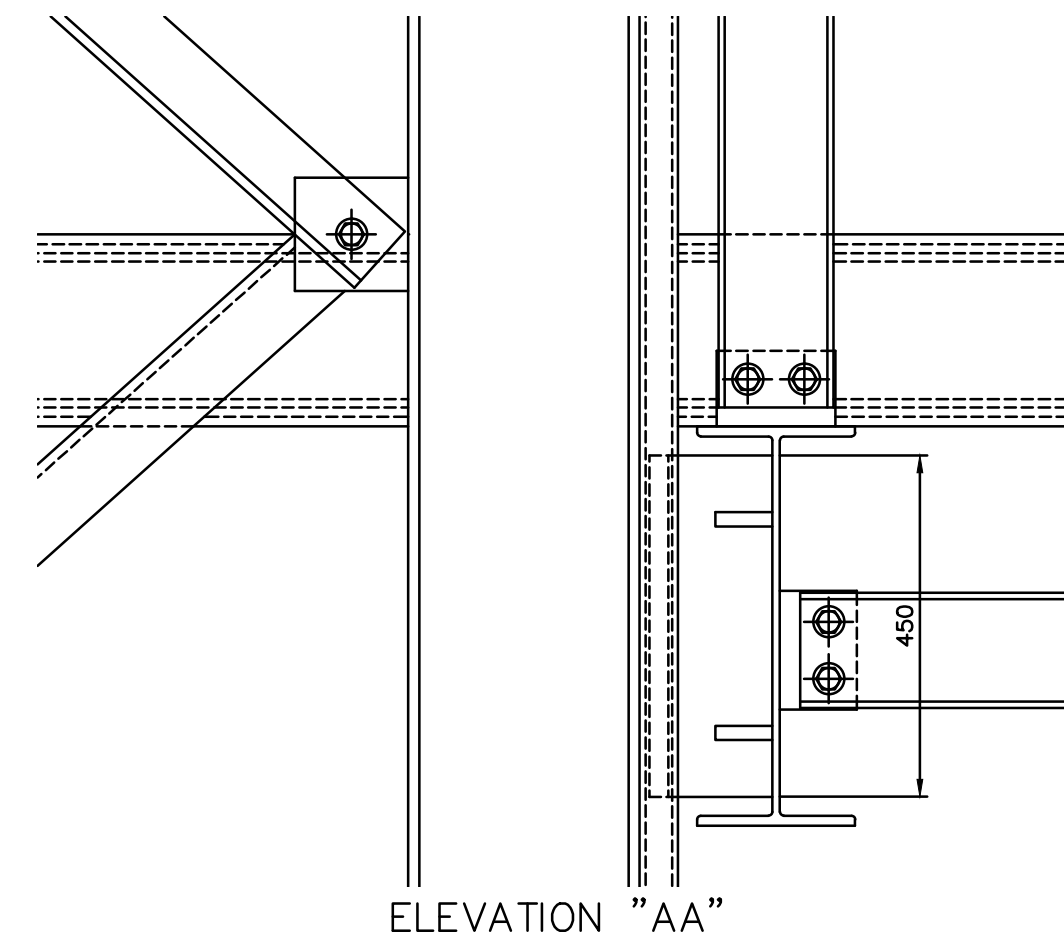
1  
CRANE PLATFORM  
PLAN  
SCALE: 1:30



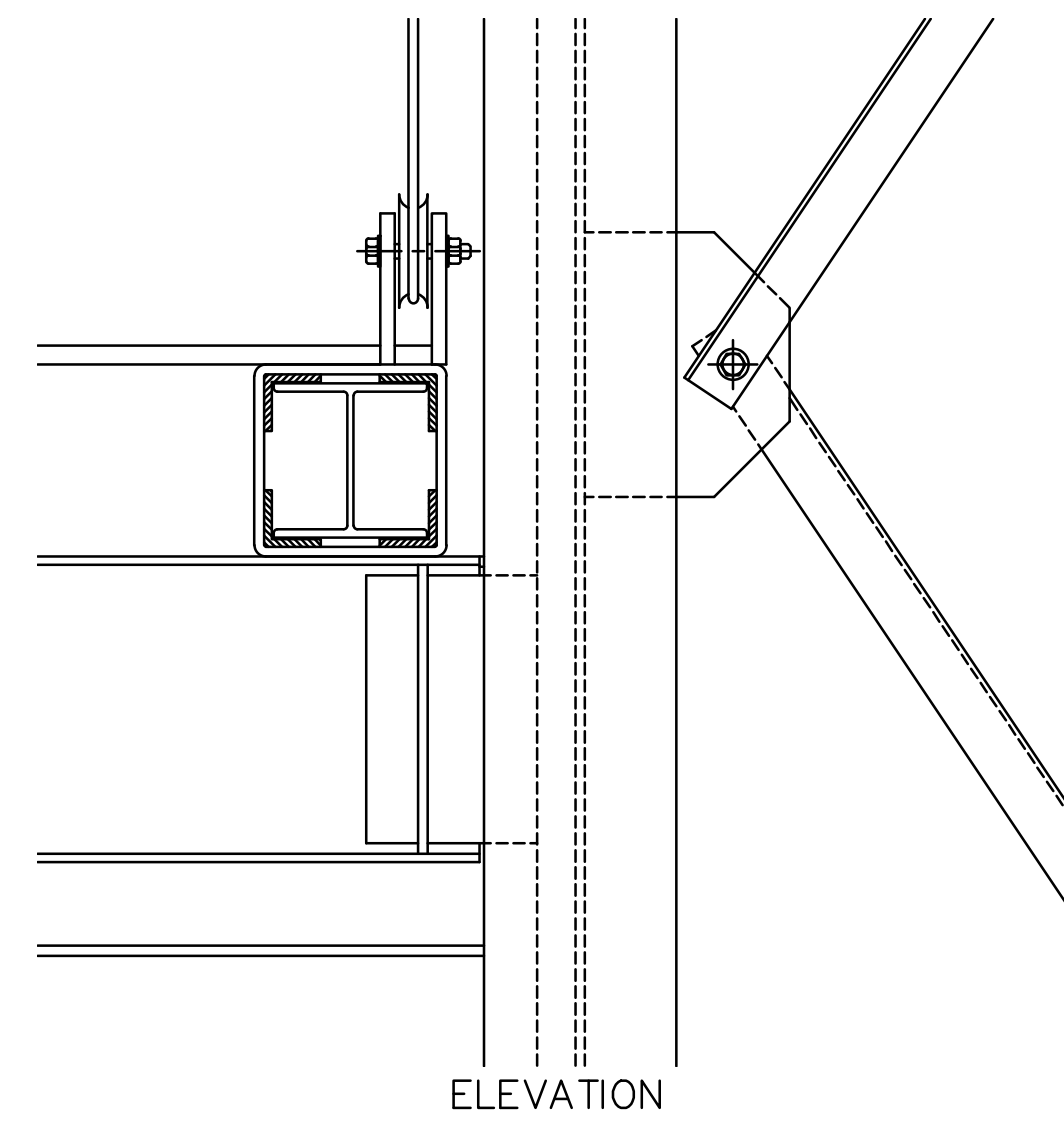
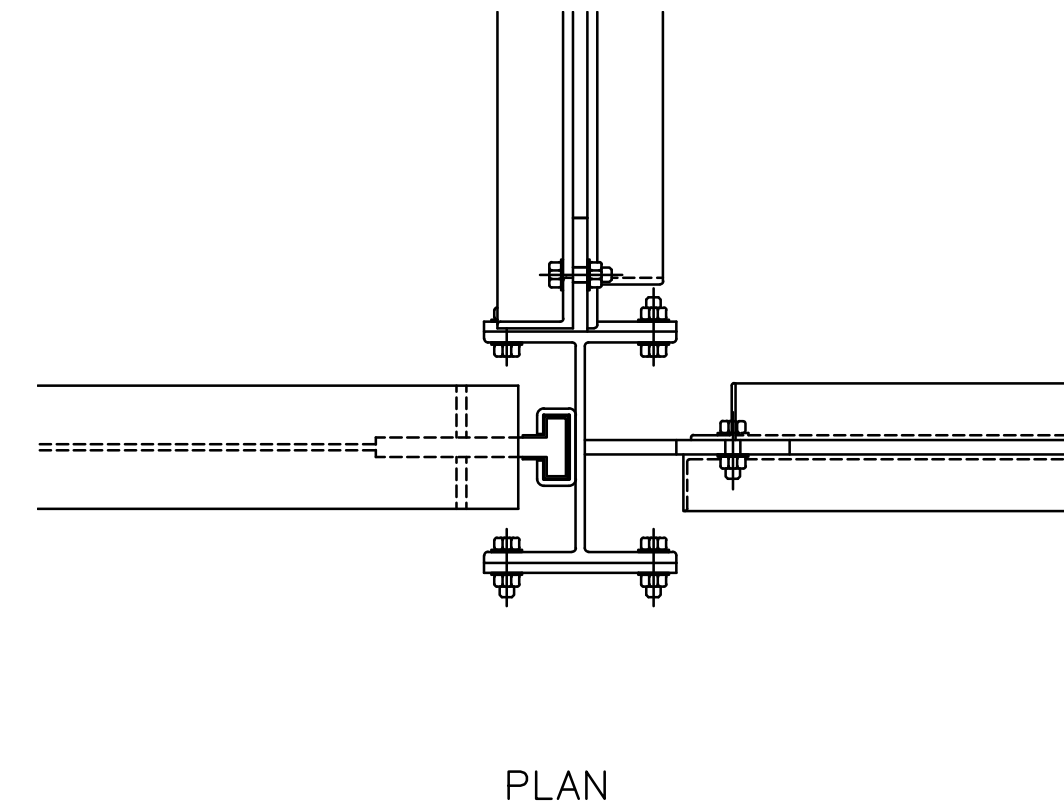
2  
DRILL PLATFORM  
PLAN  
SCALE: 1:30



D1  
DRILL PLATFORM  
GUIDE DETAIL  
SCALE: 1:10



D2  
DRILL PLATFORM  
GUIDE DETAIL  
SCALE: 1:10



\* PROTECTED BY COPYRIGHT AND PATENT LAW

#### NOTES:

1. ALL STRUCTURAL STEEL MATERIALS, FABRICATION AND ERECTION TO CSA S16.1, LATEST EDITION.
2. ALL STRUCTURAL STEEL TO BE G40.21 GRADE 350 U.N.O. MILL CERTIFICATES WILL BE REQUIRED.
3. ALL WELDING TO BE E70XX ELECTRODES AND 1/4" FILLETS U.N.O. NDT BY INDEPENDENT TESTING AGENCY AS REQUIRED BY THE ENGINEER.
4. ALL BOLTS TO BE A325 AND 3/4" DIA. U.N.O.
5. PRECAST CONCRETE F'c TO BE 35 mpa.

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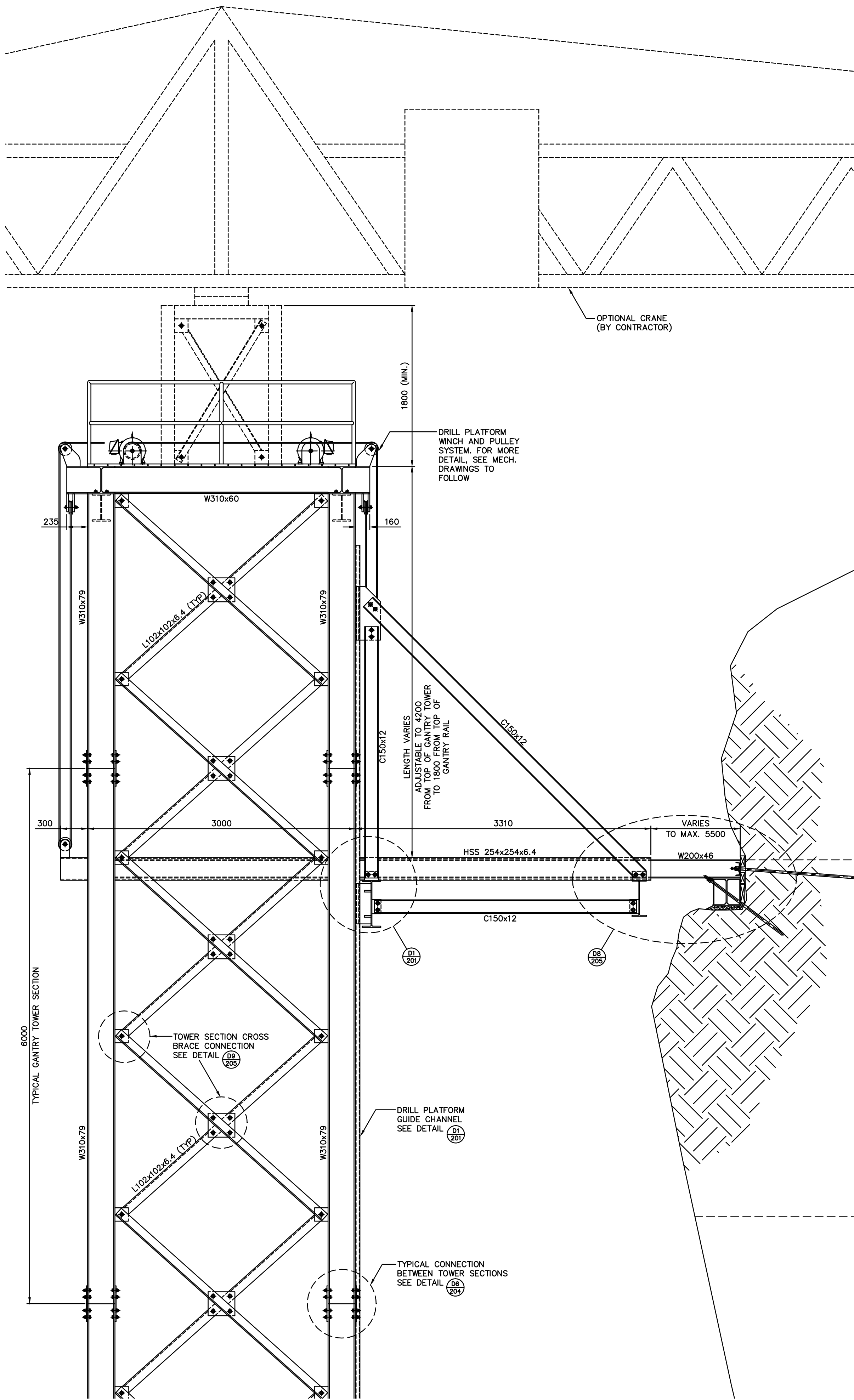
ROAD WORKS SHIELD AND GANTRY\*

DRILL AND CRANE PLATFORMS  
PLANS & DETAILS

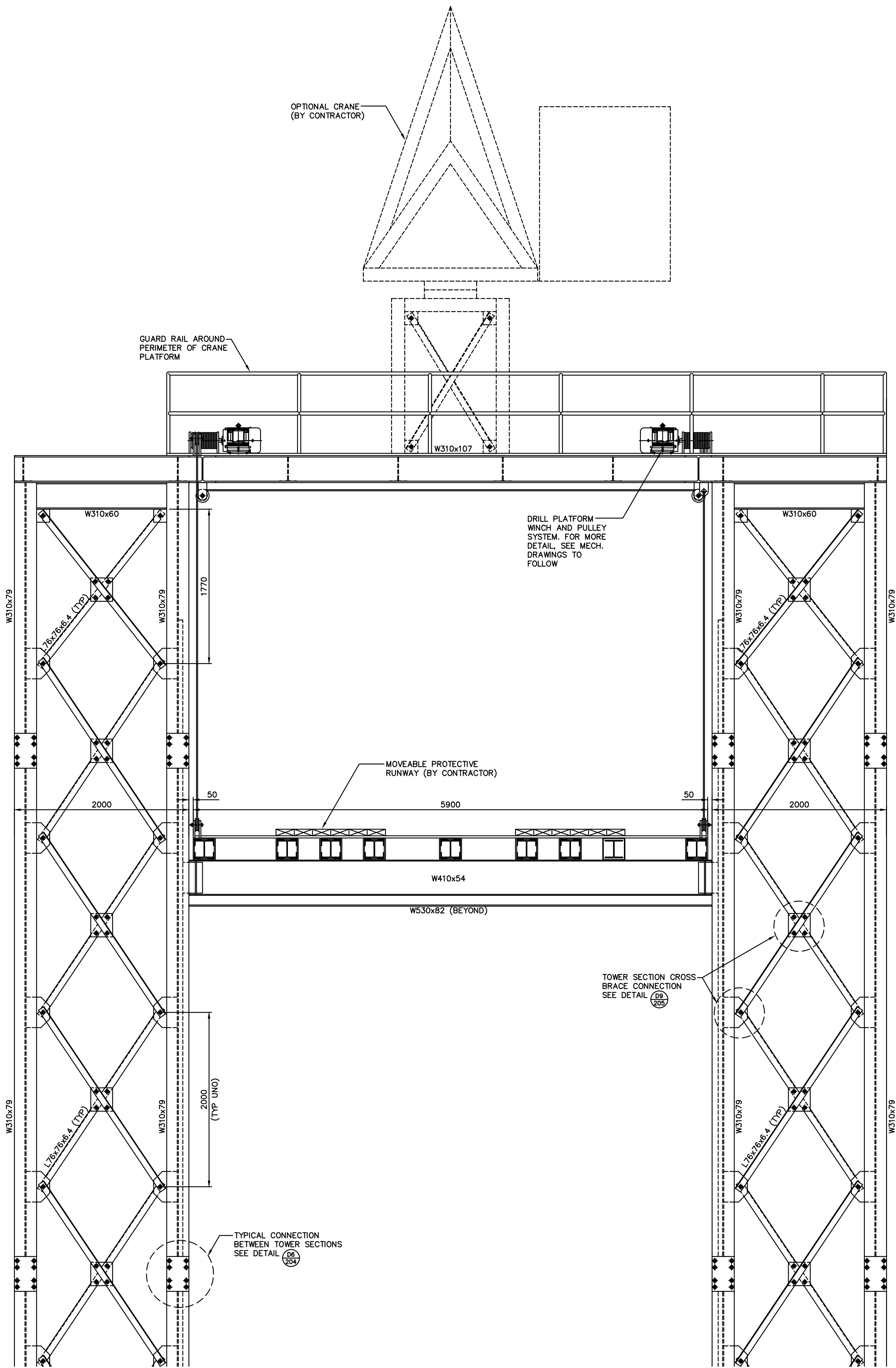
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NOTES:



**GANTRY TOWER AND PLATFORMS - ELEVATION**  
A  
201 SCALE: 1:30



**GANTRY TOWER AND PLATFORMS - ELEVATION**  
B  
201 SCALE: 1:30

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ROAD WORKS SHIELD AND GANTRY\*

GANTRY TOWER AND PLATFORMS – ELEVATIONS

DATE :	JAN 2020	SCALE :	AS NOTED
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