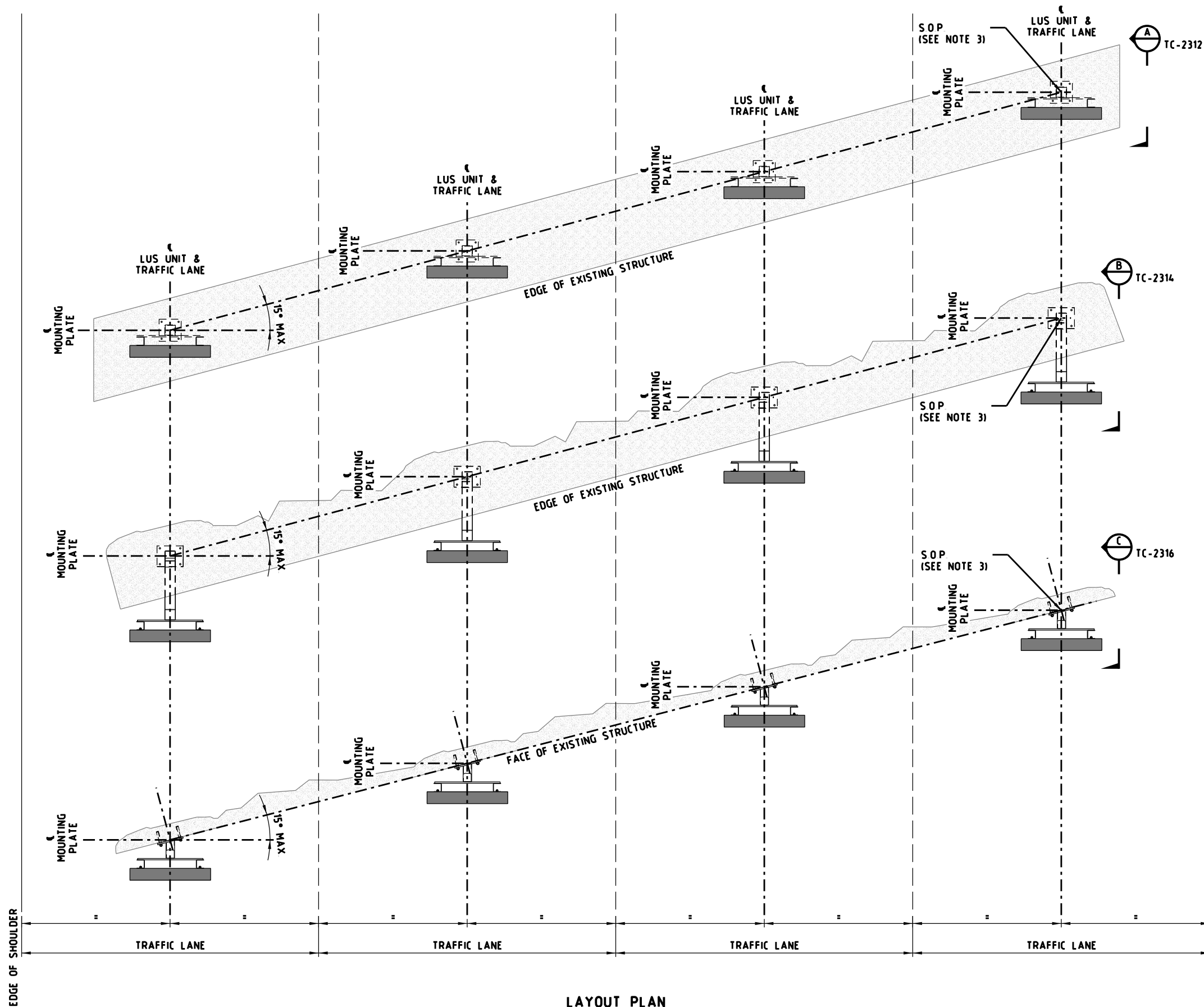


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C					ITS INFRASTRUCTURE & SYSTEM 08/2015					ELEVATION							
B										TYPICAL ARRANGEMENT							
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**LAYOUT PLAN
MOUNTING ARRANGEMENTS**
NTS

TYPE 1

TYPE 2


TYPE 3

NOTES

- 1 DIMENSIONS, ANGLES AND SETOUTS ARE GIVEN SUCH THAT LUS ARE SET VERTICALLY, IN LINE, AND PERPENDICULAR AND CENTRAL OVER LANES
- 2 EXISTING CONDITIONS AND SETOUT POINTS SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCING WORKS
- 3 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2312 TO TC-2317
- 4 STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
- 5 LUS MOUNTING ARRANGMENT DETAILS TO BE DESIGNED TO THE SATISFACTION OF VICROADS

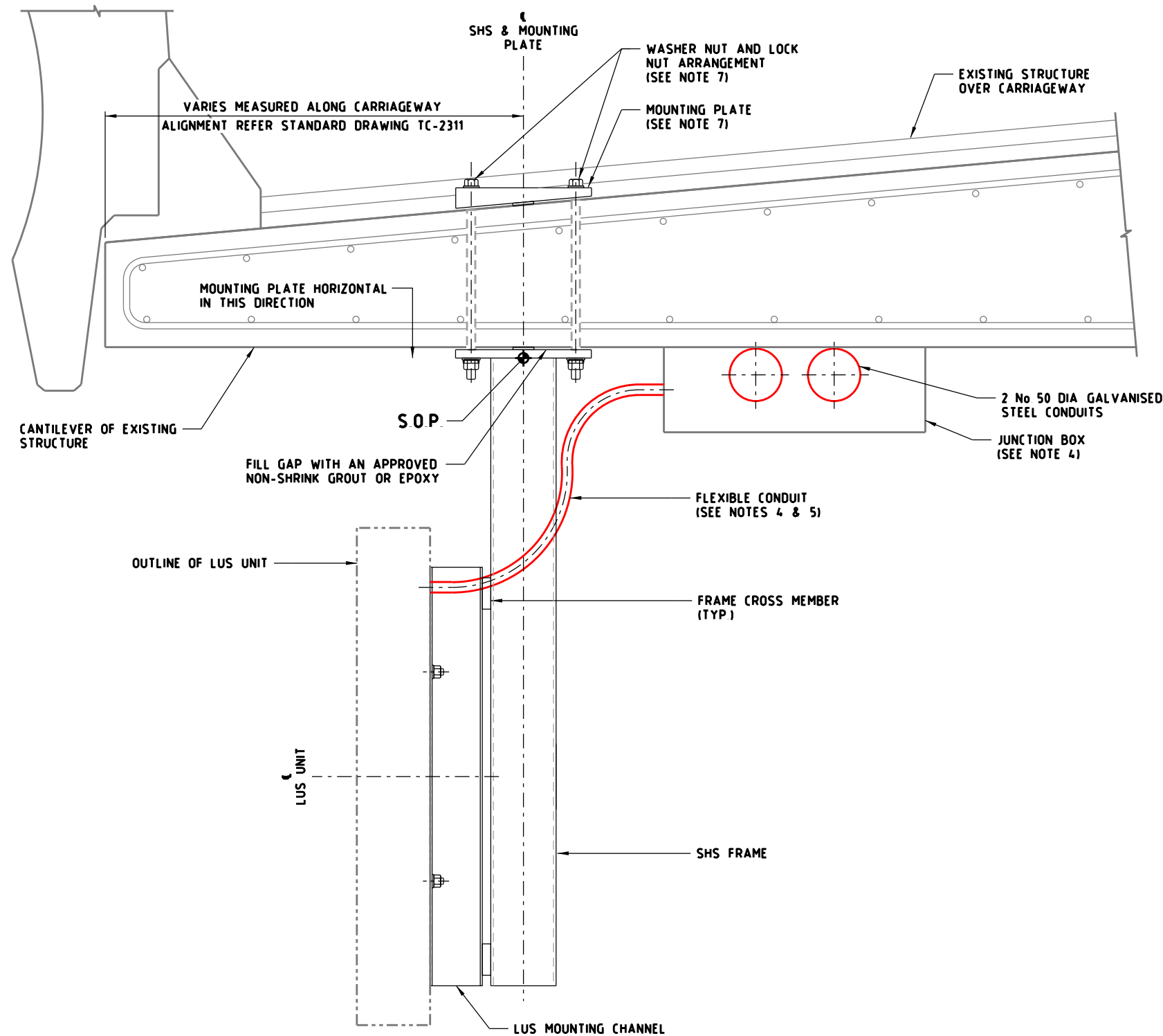
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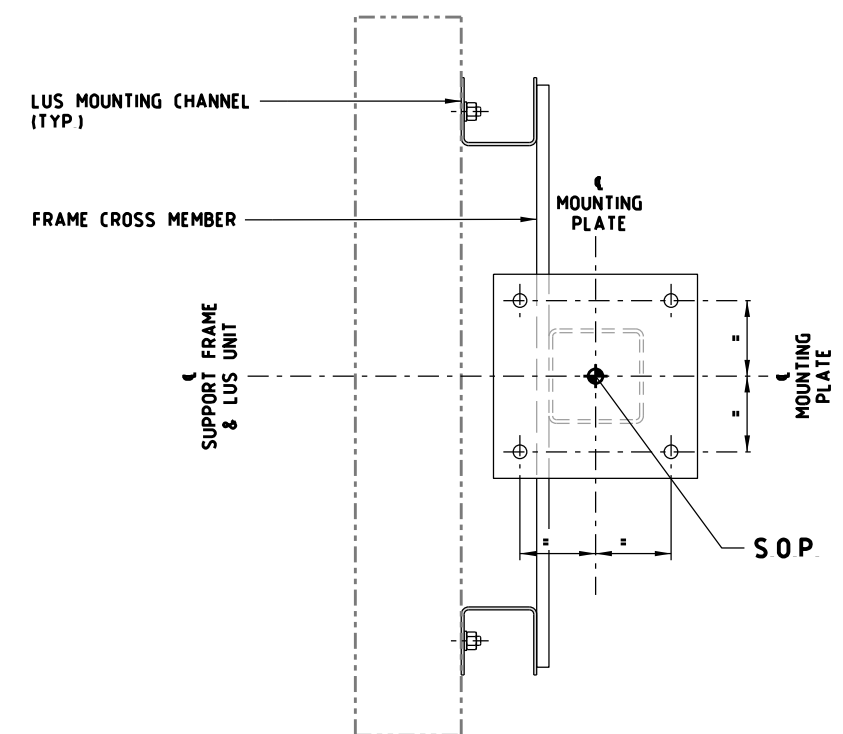
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APPROVED		W HARVEY - MANAGER					
		ITS INFRASTRUCTURE & SYSTEM 08/2015					
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STANDARD DRAWING MANAGED MOTORWAY				
STRUCTURE MOUNTED LUMS ARRANGEMENTS GENERAL ARRANGEMENT LAYOUT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2311	A



SECTION **A**
NTS TC-2311



TYPICAL PLAN
LUS MOUNTING FRAME
NTS

NOTES:

- EXISTING CONDITIONS AND SETOUT POINT SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCING WORKS
- FRAMES SHALL BE MOUNTED VERTICAL
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2310, TC-2311 AND TC-2313
- FOR JUNCTION BOX AND CABLE CONNECTION DETAILS, REFER TO STANDARD DRAWING TC-2319
- FLEXIBLE CONDUIT BETWEEN JUNCTION BOX AND LUS UNIT TO BE WEATHERPROOF WITH MATCHING WEATHERPROOF GLANDS
- STRUCTURE MUST BE DESIGNED IN ACCORDANCE WITH AS5100
- STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
- AN APPROPRIATE METHOD TO CONCEAL THE CONDUITS SHALL BE SUBMITTED TO VICROADS FOR APPROVAL PRIOR INSTALLATION
- PROCEDURE FOR PREVENTING ANY DAMAGE TO EXISTING REINFORCEMENT SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO WORKS COMMENCING
- LUS MOUNTING ARRANGMENT DETAILS TO BE DESIGNED TO THE SATISFACTION OF VICROADS

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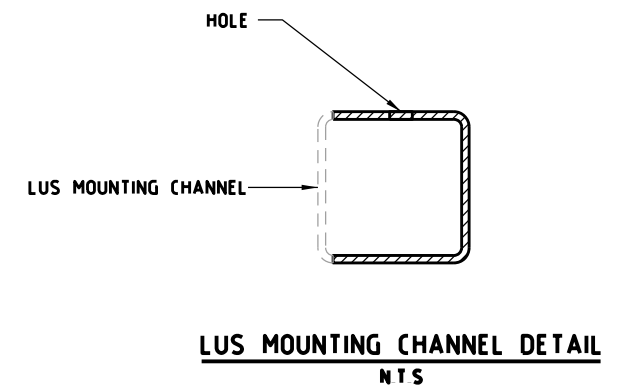
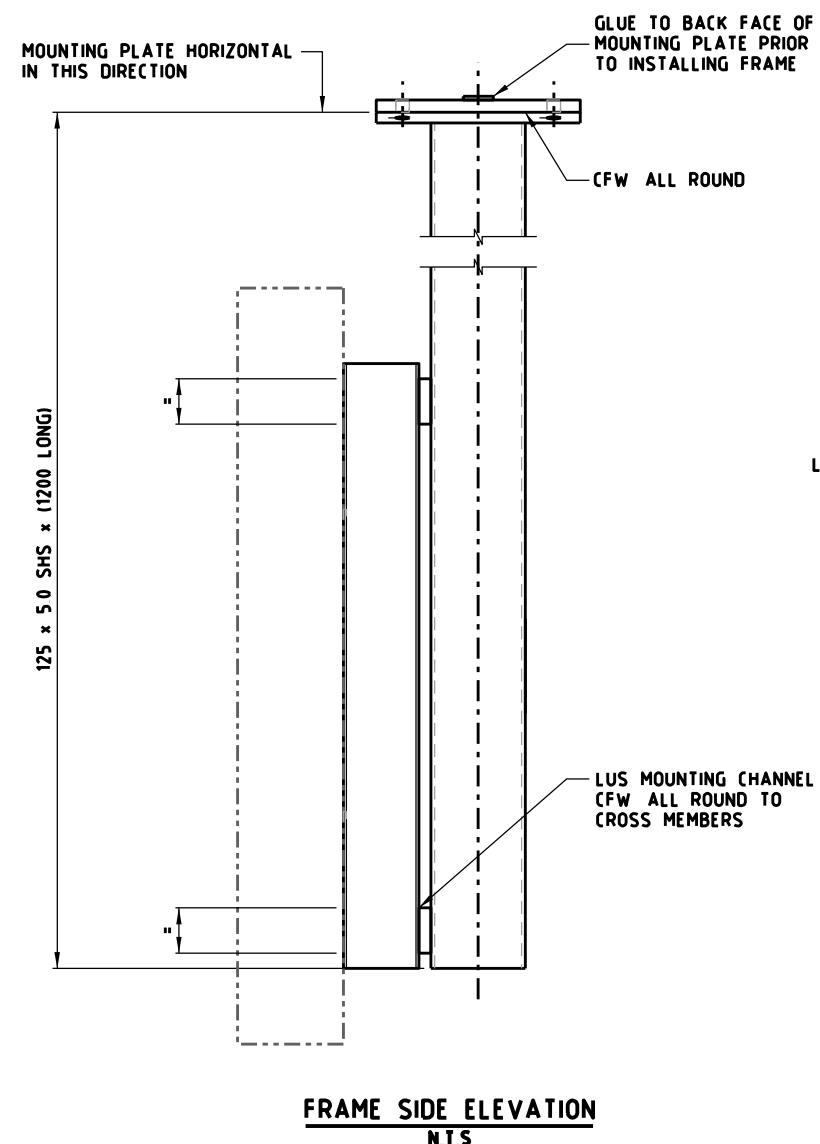
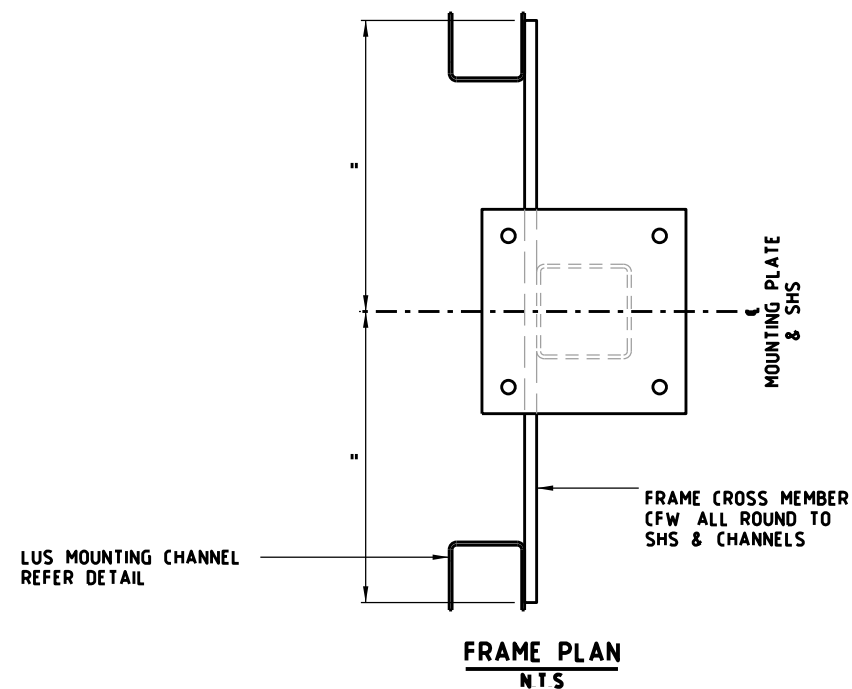
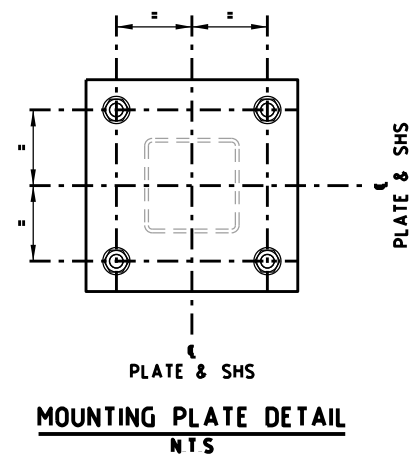
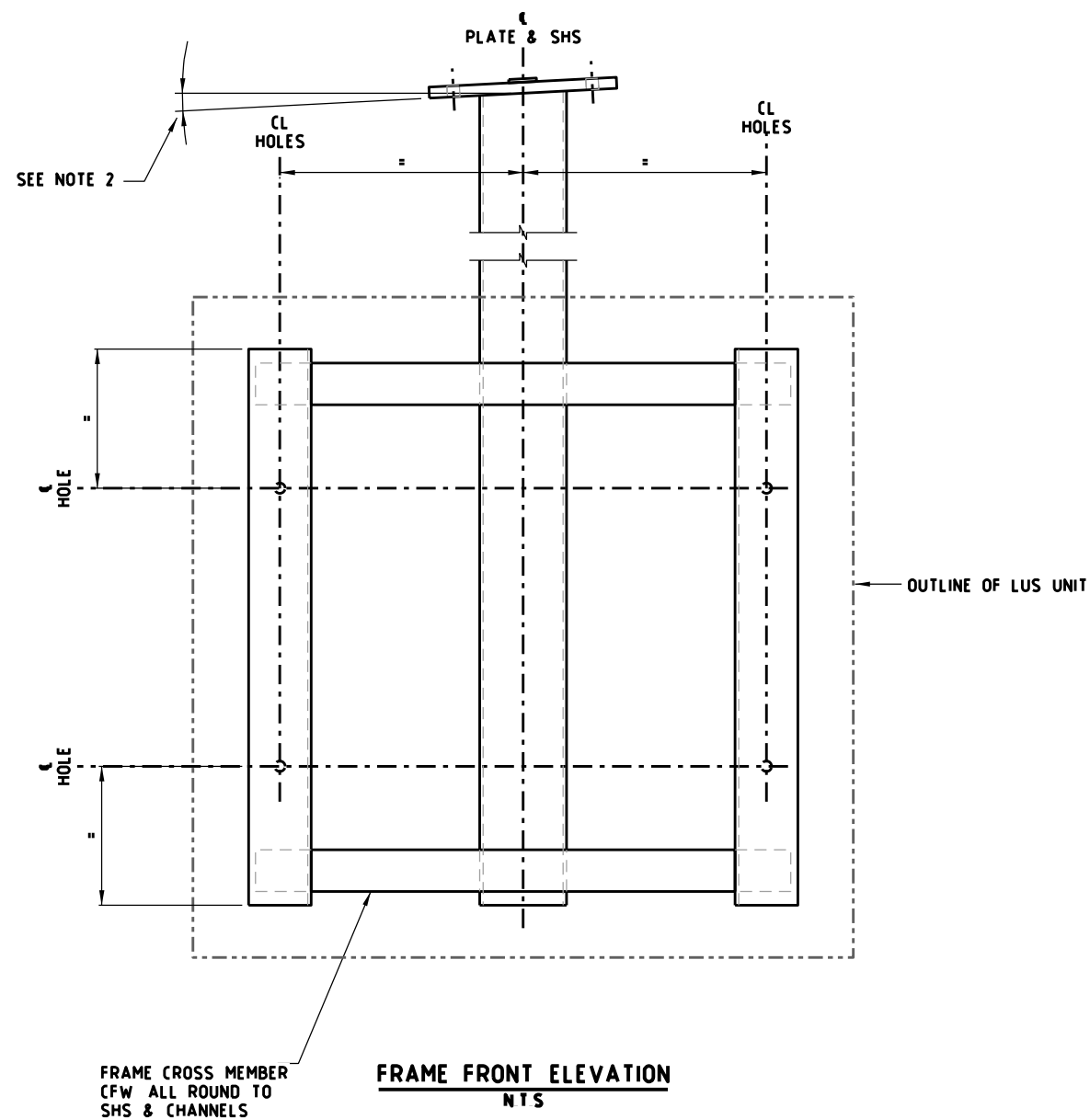
GENERAL NOTES

DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	ITS INFRASTRUCTURE & SYSTEM 08/2015
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SCALE OF METRES	NTS
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STANDARD DRAWING MANAGED MOTORWAY STRUCTURE MOUNTED LUMS ARRANGEMENTS MOUNTING ARRANGEMENT TYPE 1 TYPICAL ARRANGEMENT					
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE	
			TC-2312	A	



NOTES:

- 1 ANGLE TO BE SUCH THAT LUS ARE SET VERTICALLY
- 2 SUPPORT FRAME SHALL BE HOT-DIP GALVANISED AFTER FABRICATION
- 3 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2310, TC-2311 AND TC-2312
- 4 STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
- 5 LUS MOUNTING ARRANGMENT DETAILS TO BE DESIGNED TO THE SATISFACTION OF VICROADS

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ISSUE	APP'D	DATE	AMENDMENT

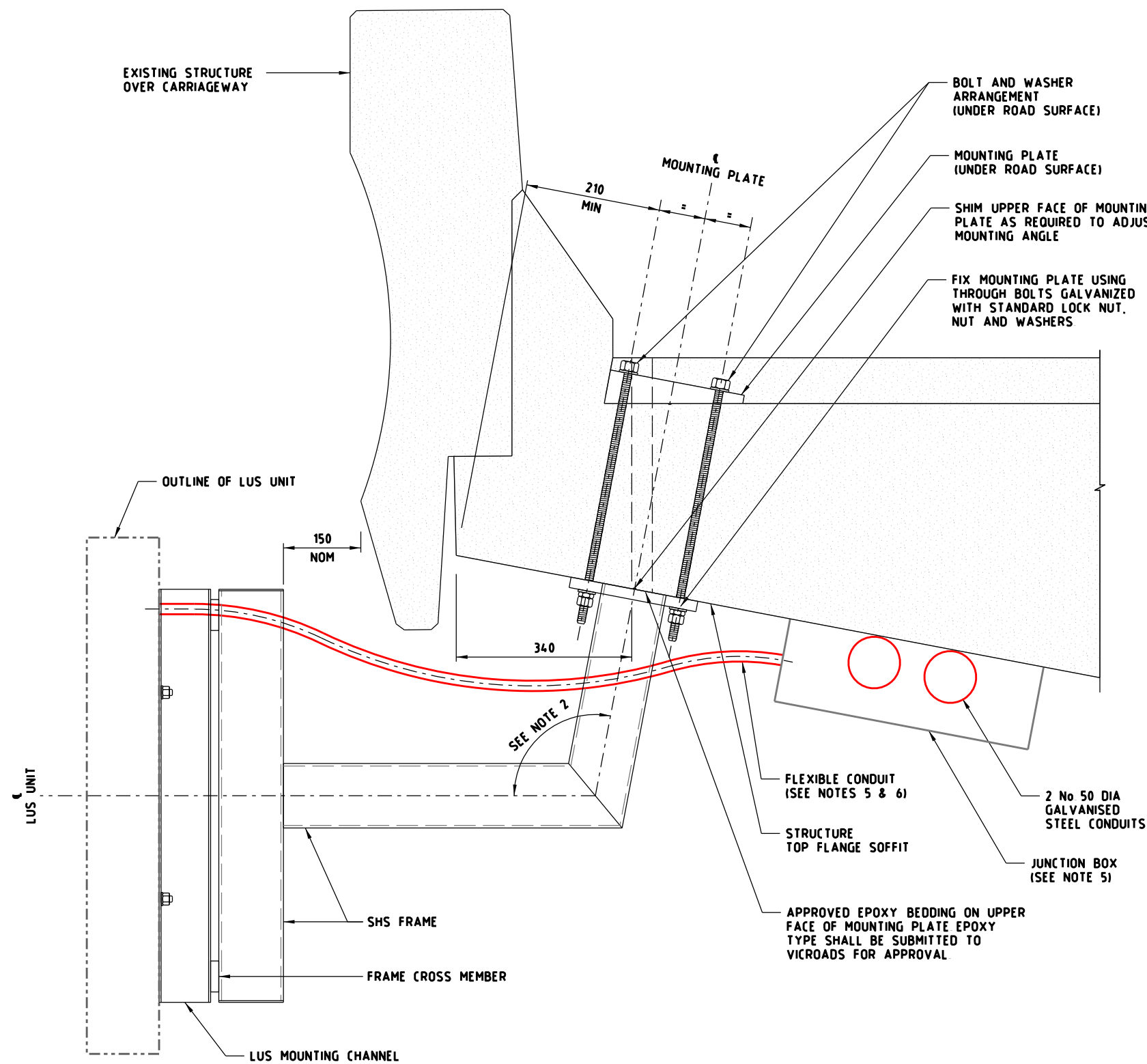
GENERAL NOTES

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APPROVED	W HARVEY - MANAGER	ITS INFRASTRUCTURE & SYSTEM 08/2015
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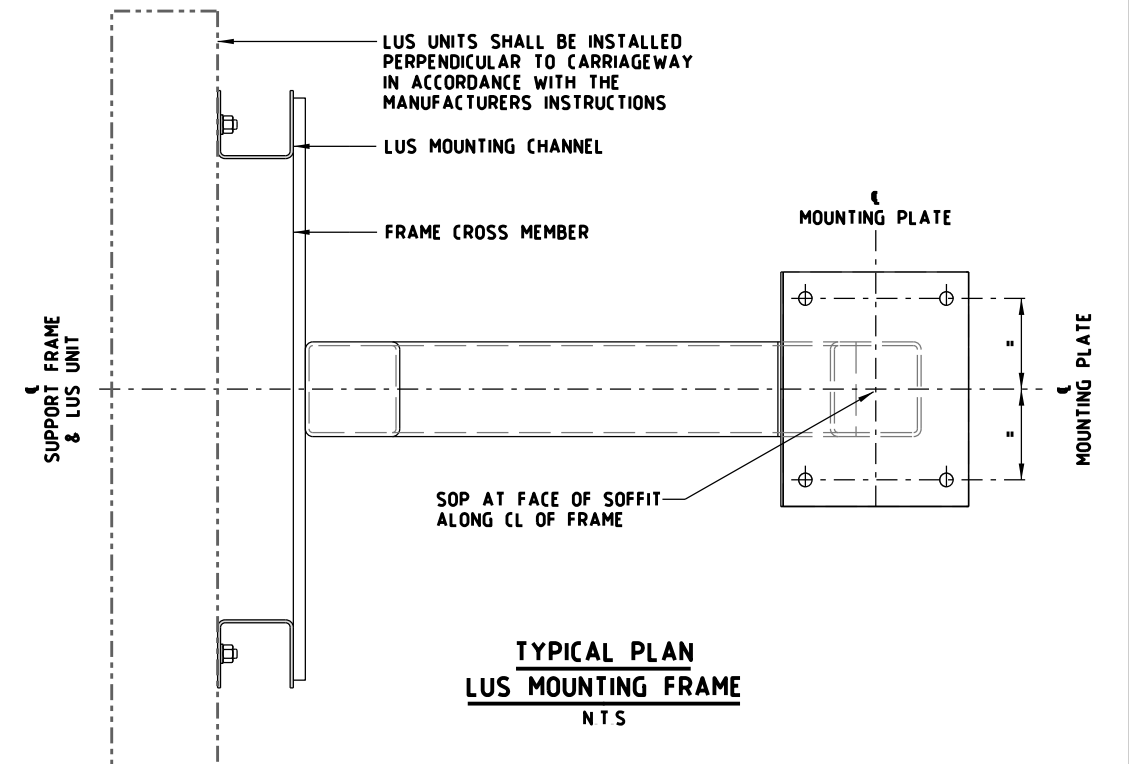


SCALE OF METRES
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STANDARD DRAWING MANAGED MOTORWAY STRUCTURE MOUNTED LUMS ARRANGEMENTS MOUNTING FRAME TYPE 1 TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
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SECTION B
NTS TC-2311



NOTES

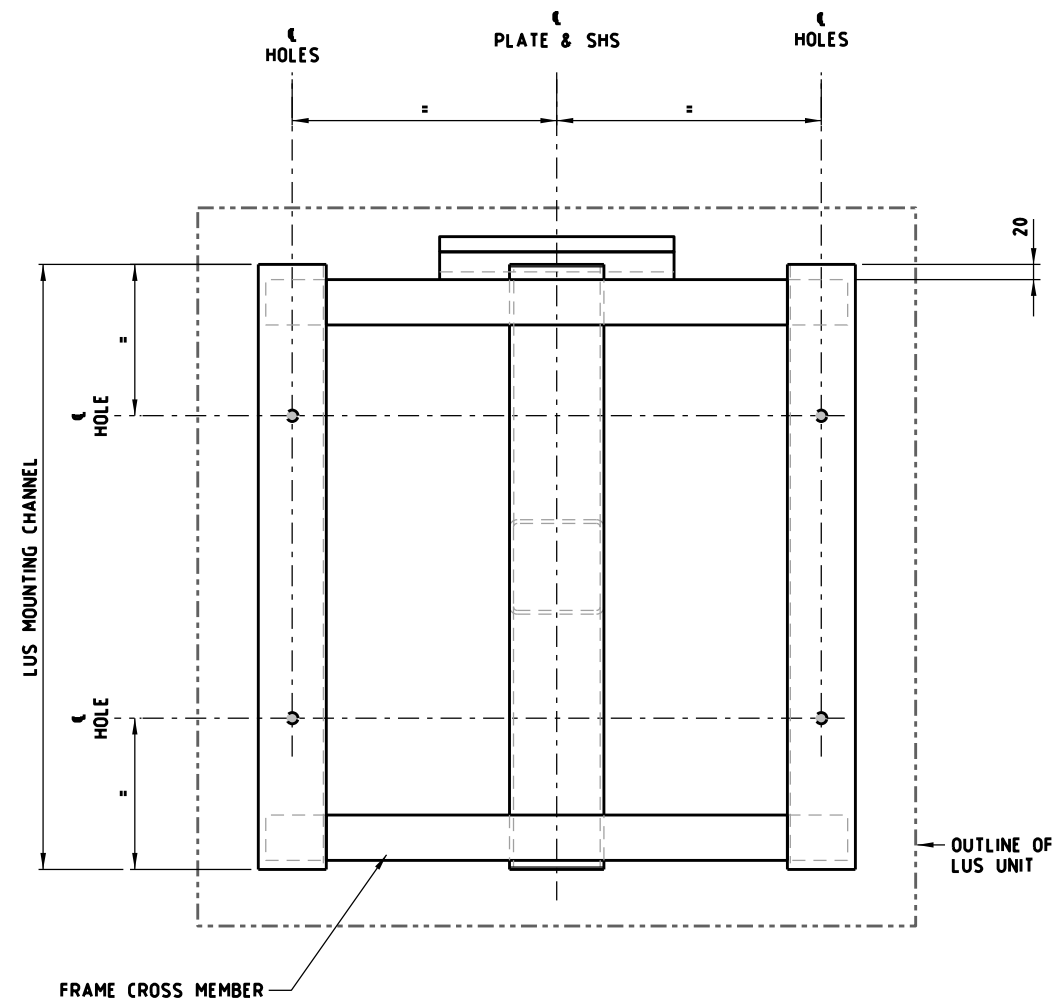
- EXISTING CONDITIONS AND SETOUT POINT SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCING WORKS
- ANGLE TO BE SUCH THAT LUS ARE SET VERTICALLY
- FRAMES SHALL BE MOUNTED VERTICAL
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2310, TC-2311 AND TC-2315
- FOR JUNCTION BOX AND CABLE CONNECTION DETAILS, REFER TO STANDARD DRAWING TC-2319
- FLEXIBLE CONDUIT BETWEEN JUNCTION BOX AND LUS UNIT TO BE WEATHERPROOF WITH MATCHING WEATHERPROOF GLANDS
- STRUCTURE MUST BE DESIGNED IN ACCORDANCE WITH AS5100
- STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
- AN APPROPRIATE METHOD TO CONCEAL THE CONDUITS SHALL BE SUBMITTED TO VICROADS FOR APPROVAL PRIOR INSTALLATION
- PROCEDURE FOR PREVENTING ANY DAMAGE TO EXISTING REINFORCEMENT SHALL BE SUBMITTED TO VICROADS FOR APPROVAL PRIOR TO WORKS COMMENCING
- LUS MOUNTING ARRANGMENT DETAILS TO BE DESIGNED TO THE SATISFACTION OF VICROADS

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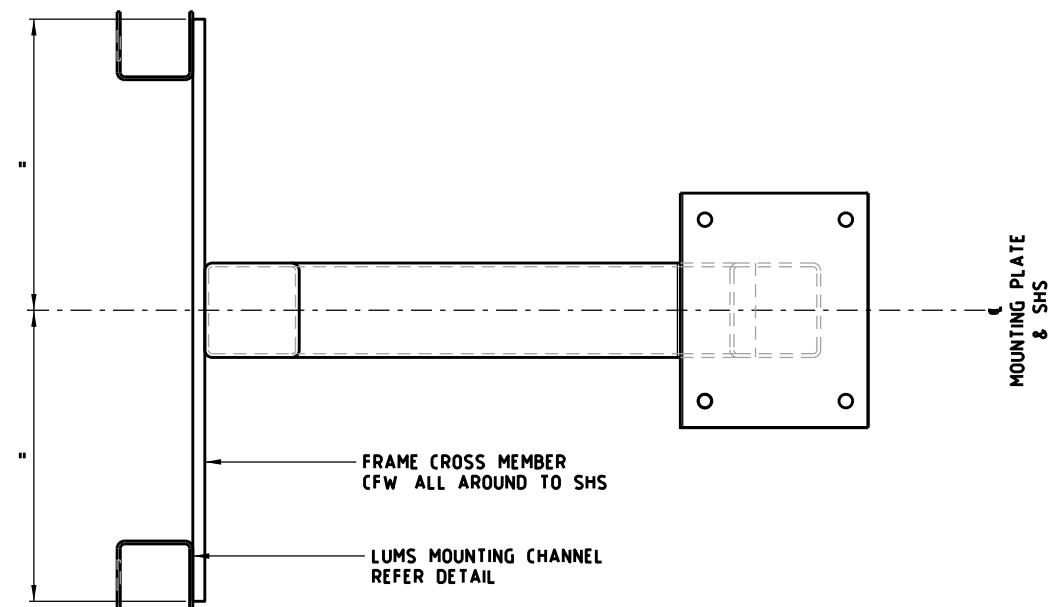
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APPROVED	W HARVEY - MANAGER	
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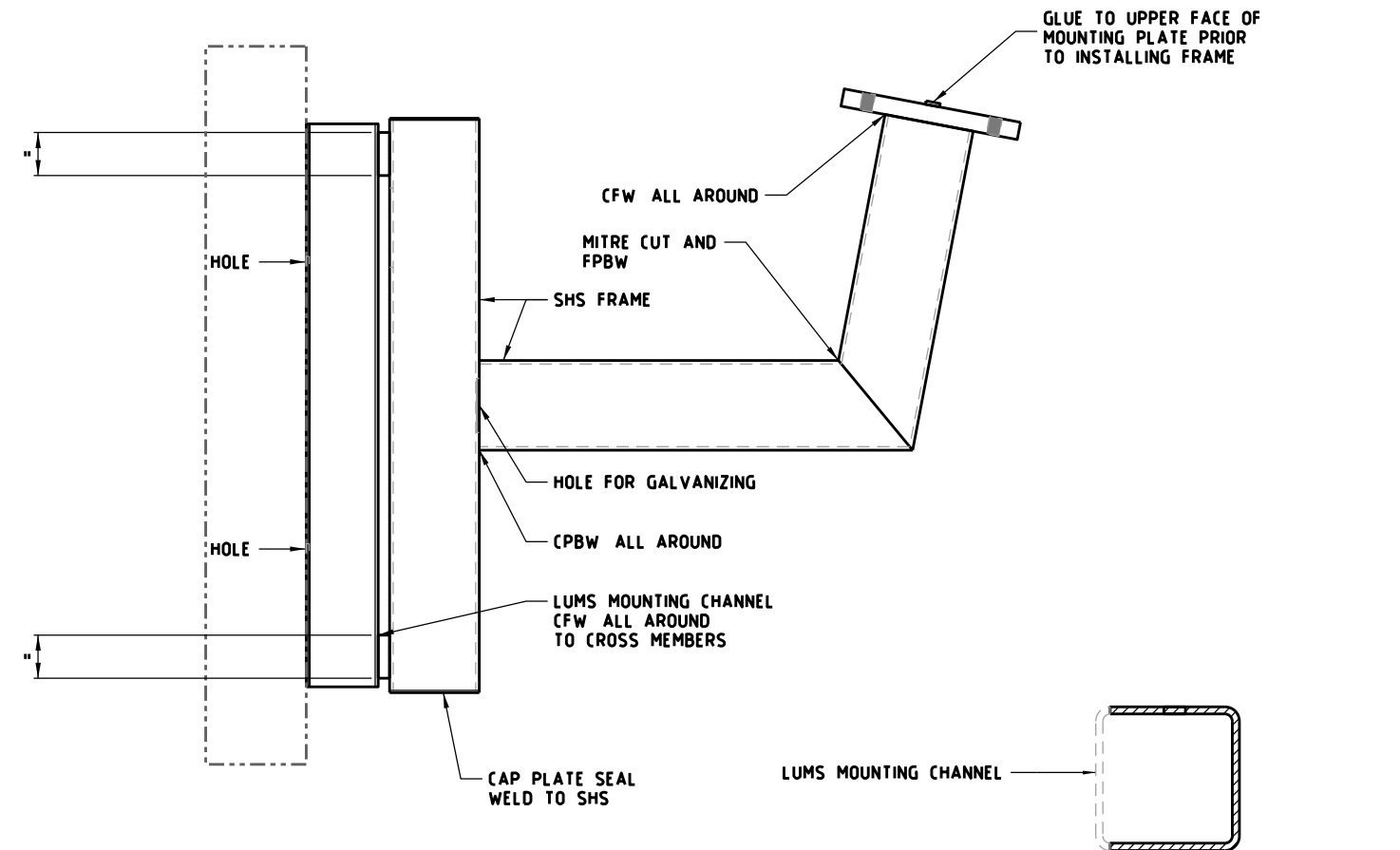
STANDARD DRAWING MANAGED MOTORWAY STRUCTURE MOUNTED LUMS ARRANGEMENTS MOUNTING ARRANGEMENT TYPE 2 TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2314	A



FRAME FRONT ELEVATION
NTS

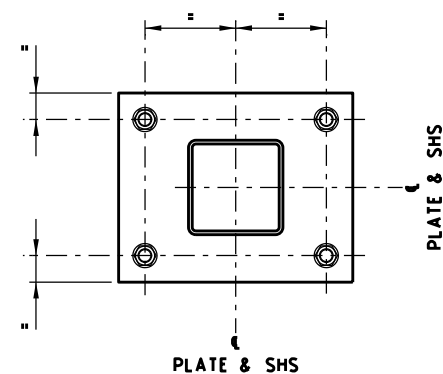


FRAME PLAN
NTS



FRAME SIDE ELEVATION
NTS

LUS MOUNTING CHANNEL DETAIL
NTS



MOUNTING PLATE DETAIL
NTS

NOTES

1. SUPPORT FRAME SHALL BE HOT-DIP GALVANISED AFTER FABRICATION
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2310, TC-2311 AND TC-2314
3. STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
4. LUS MOUNTING ARRANGMENT DETAILS TO BE DESIGNED TO THE SATISFACTION OF VICROADS

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ISSUE	APP'D	DATE	AMENDMENT

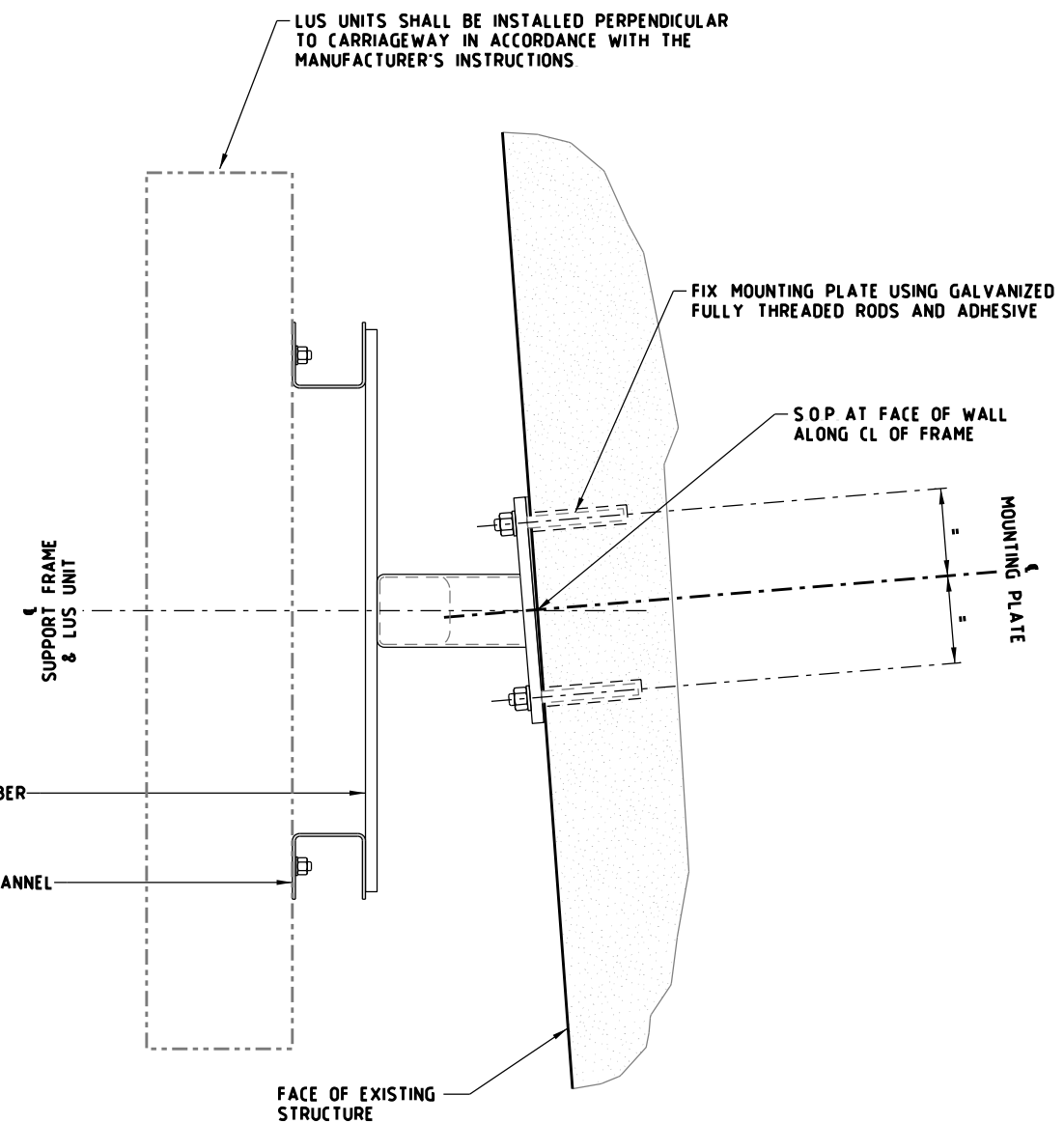
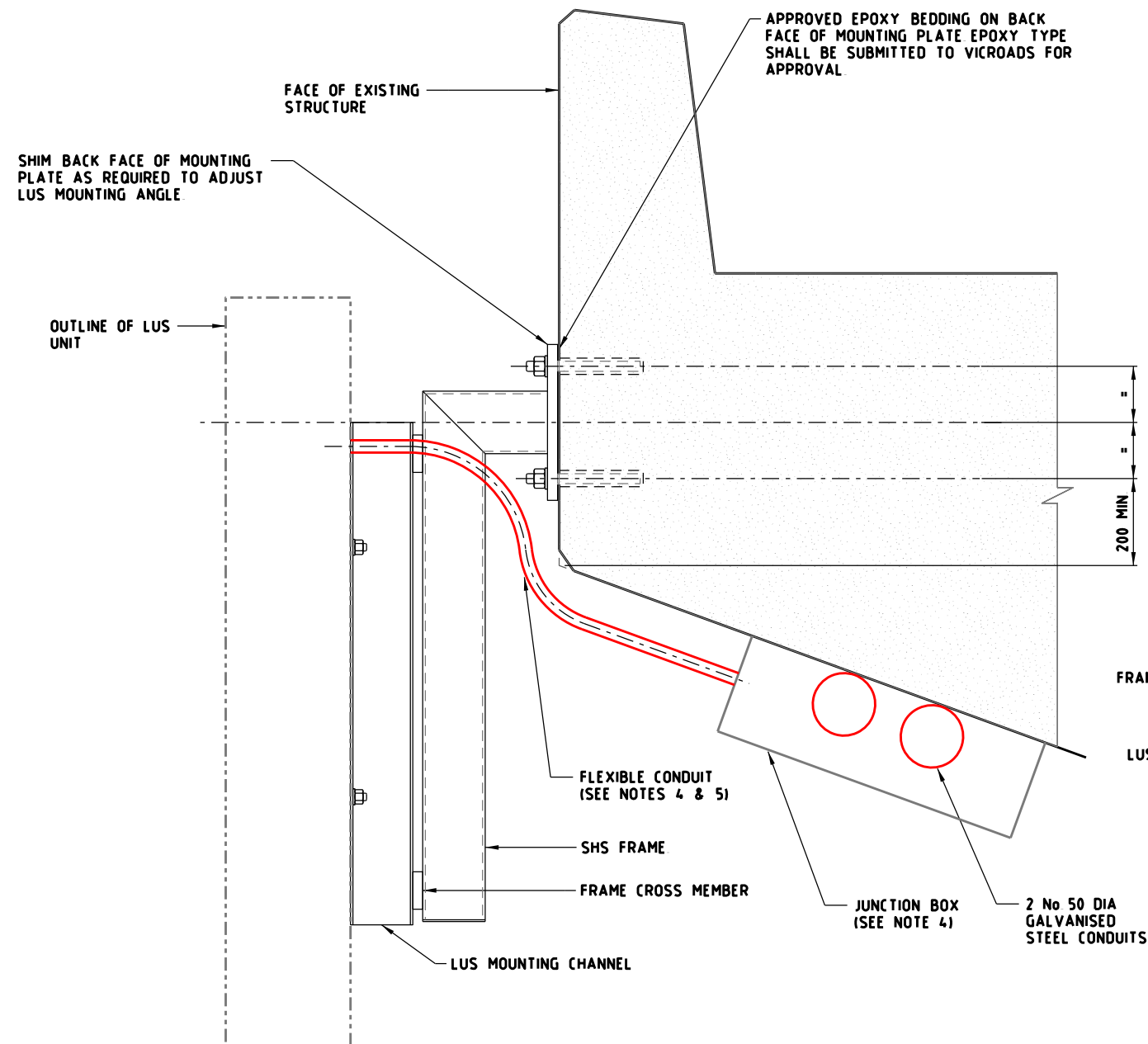
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DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	ITS INFRASTRUCTURE & SYSTEM 08/2015
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STANDARD DRAWING				
MANAGED MOTORWAY				
STRUCTURE MOUNTED LUMS ARRANGEMENTS				
MOUNTING FRAME TYPE 2				
TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2315	A



PLAN - LUS MOUNTING FRAME
NTS

SECTION B
NTS TC-2311

NOTES:

- EXISTING CONDITIONS AND SETOUT POINT SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCING WORKS
- FRAMES SHALL BE MOUNTED VERTICAL
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2310, TC-2311 AND TC-2317
- FOR JUNCTION BOX AND CABLE CONNECTION DETAILS, REFER TO STANDARD DRAWING TC-2319
- FLEXIBLE CONDUIT BETWEEN JUNCTION BOX AND LUS UNIT TO BE WEATHERPROOF WITH MATCHING WEATHERPROOF GLANDS
- STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
- AN APPROPRIATE METHOD TO CONCEAL THE CONDUITS SHALL BE SUBMITTED TO VICROADS FOR APPROVAL PRIOR INSTALLATION
- PROCEDURE FOR PREVENTING ANY DAMAGE TO EXISTING REINFORCEMENT SHALL BE SUBMITTED TO VICROADS FOR APPROVAL PRIOR TO WORKS COMMENCING
- LUS MOUNTING ARRANGMENT DETAILS TO BE DESIGNED TO THE SATISFACTION OF VICROADS

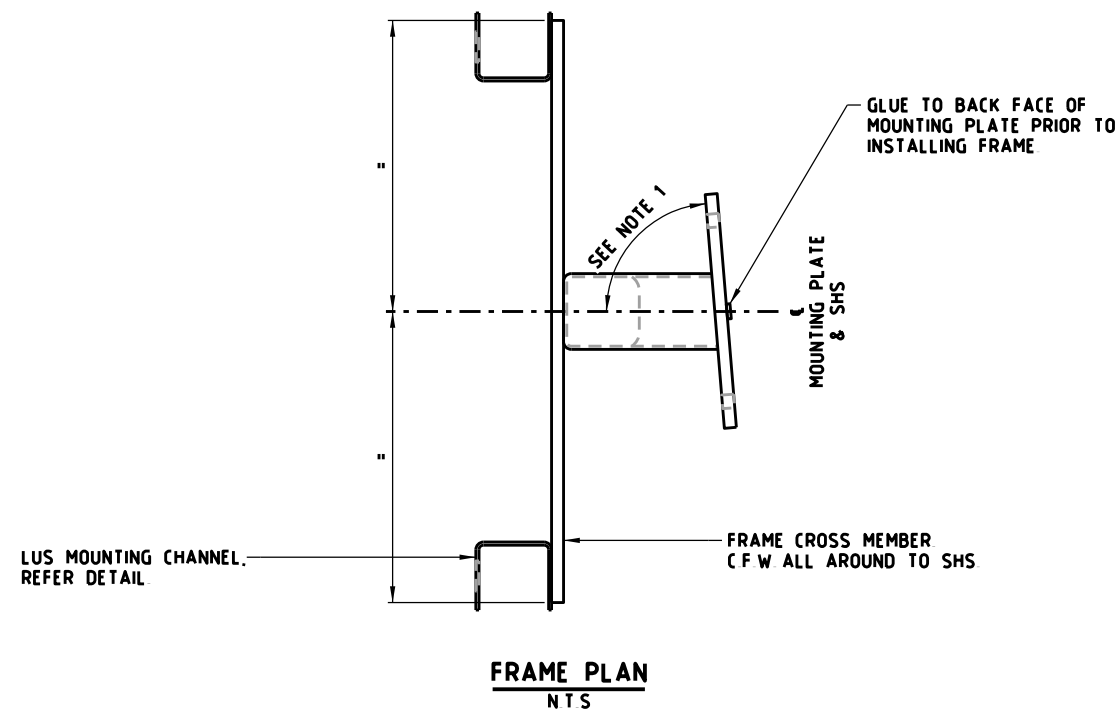
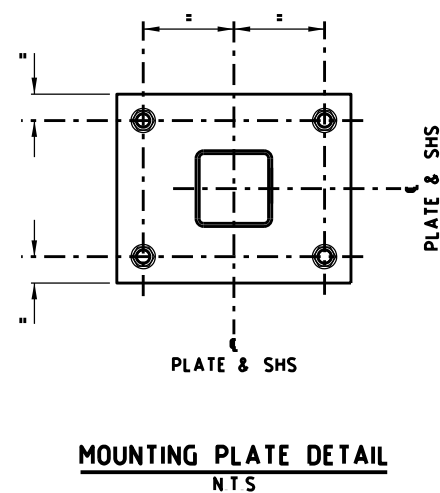
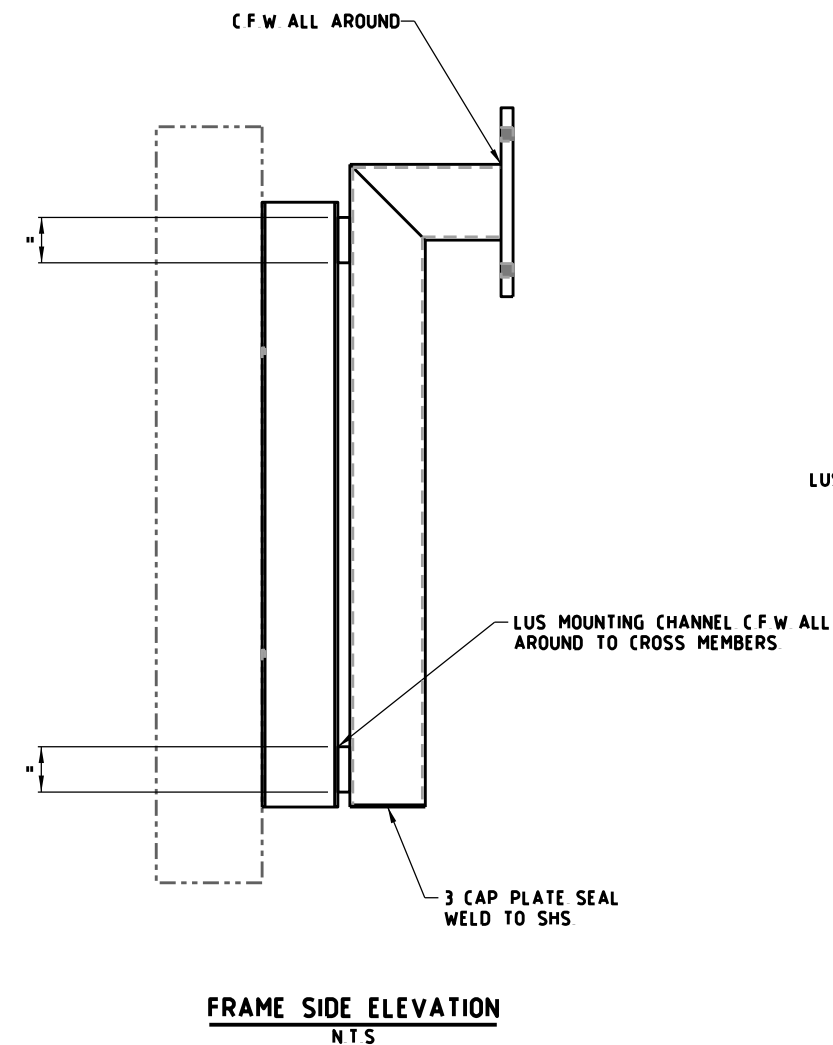
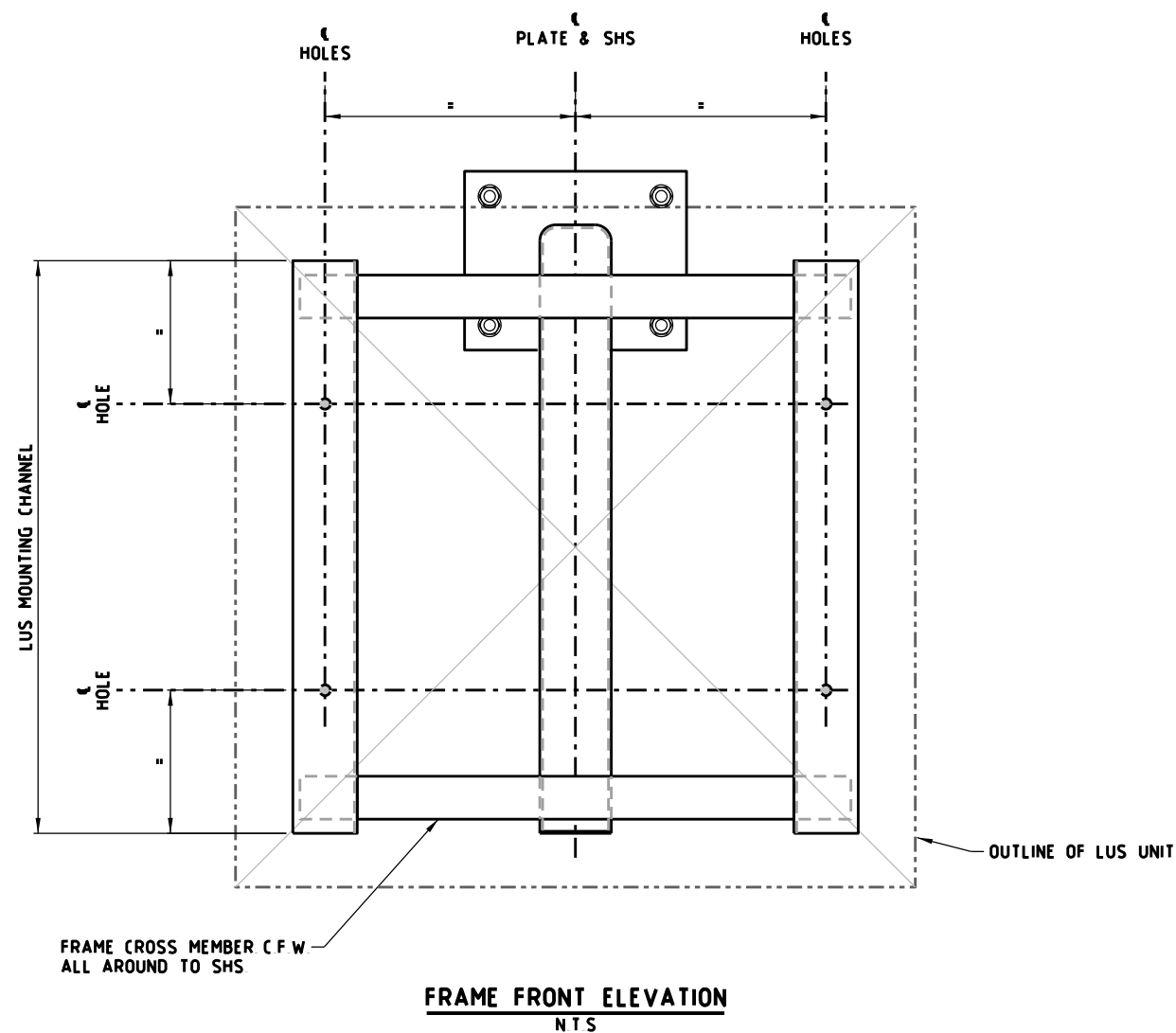
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GENERAL NOTES

DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	ITS INFRASTRUCTURE & SYSTEM 08/2015
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STANDARD DRAWING MANAGED MOTORWAY STRUCTURE MOUNTED LUMS ARRANGEMENTS MOUNTING ARRANGEMENT TYPE 3 TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2316	A



NOTES

1. ANGLE TO BE SUCH THAT LUS ARE SET PERPENDICULAR TO LANE
2. SUPPORT FRAME SHALL BE HOT-DIP GALVANISED AFTER FABRICATION
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2310, TC-2311 AND TC-2316
4. STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY. STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
5. LUS MOUNTING ARRANGMENT DETAILS TO BE DESIGNED TO THE SATISFACTION OF VICROADS

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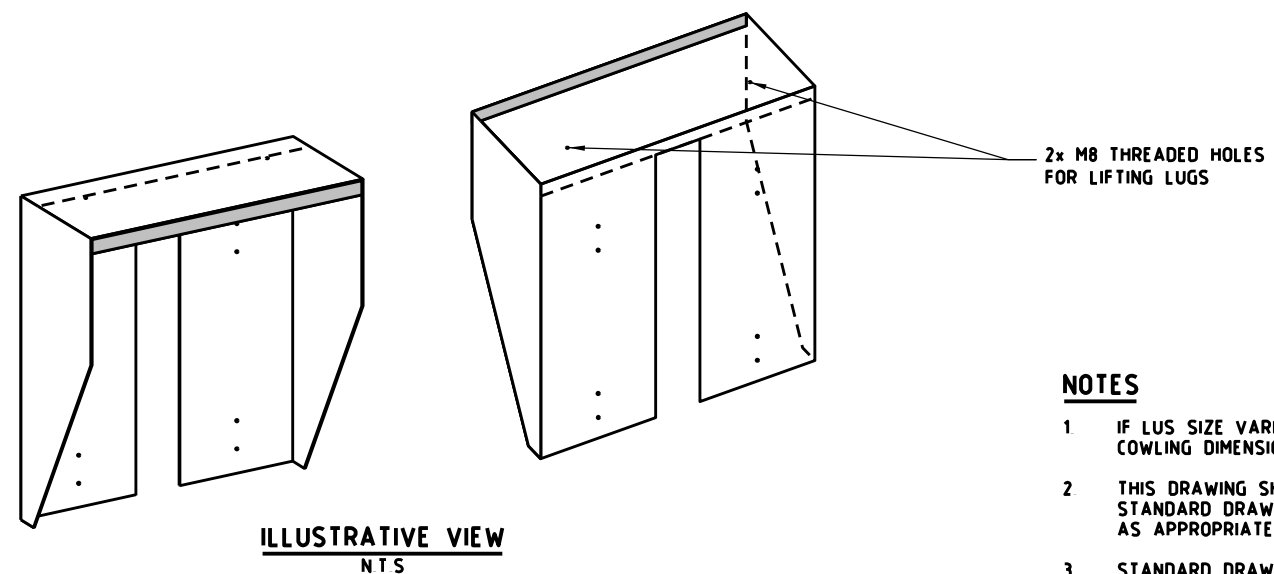
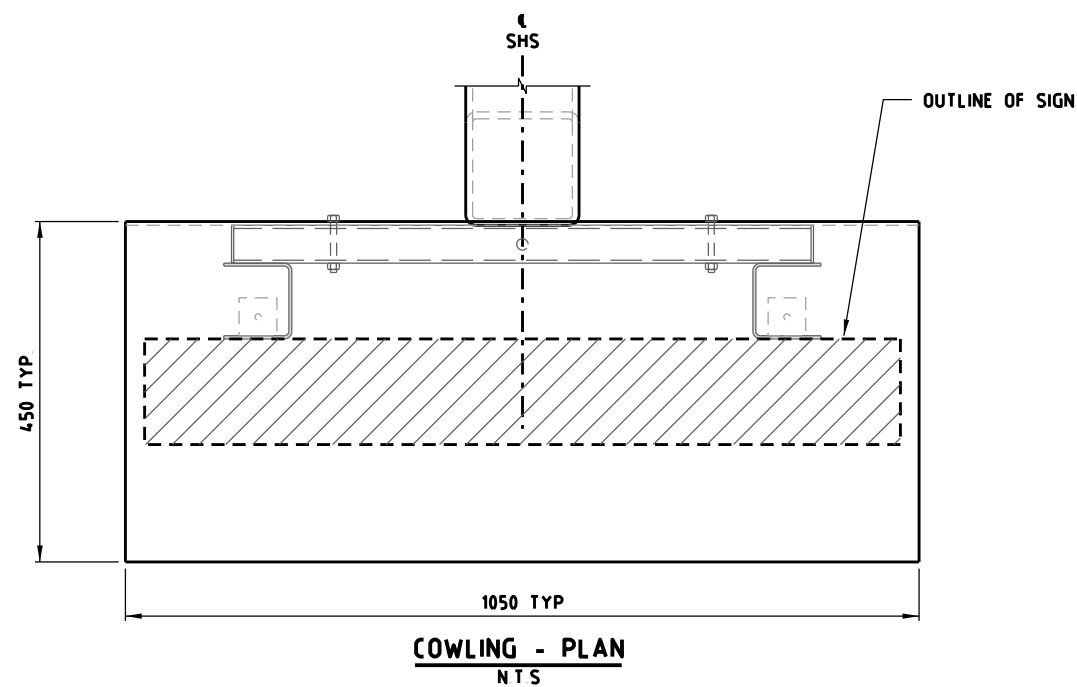
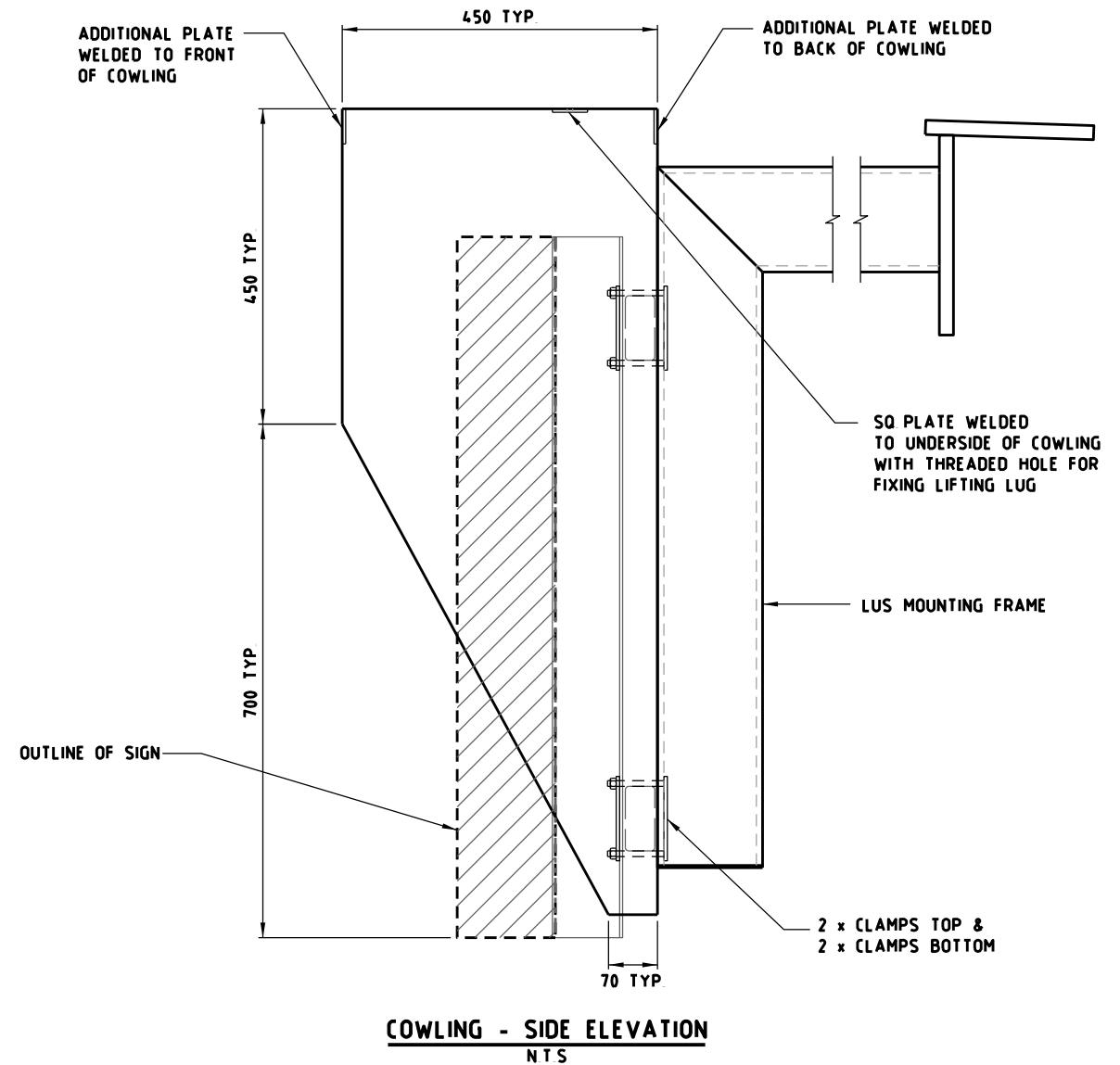
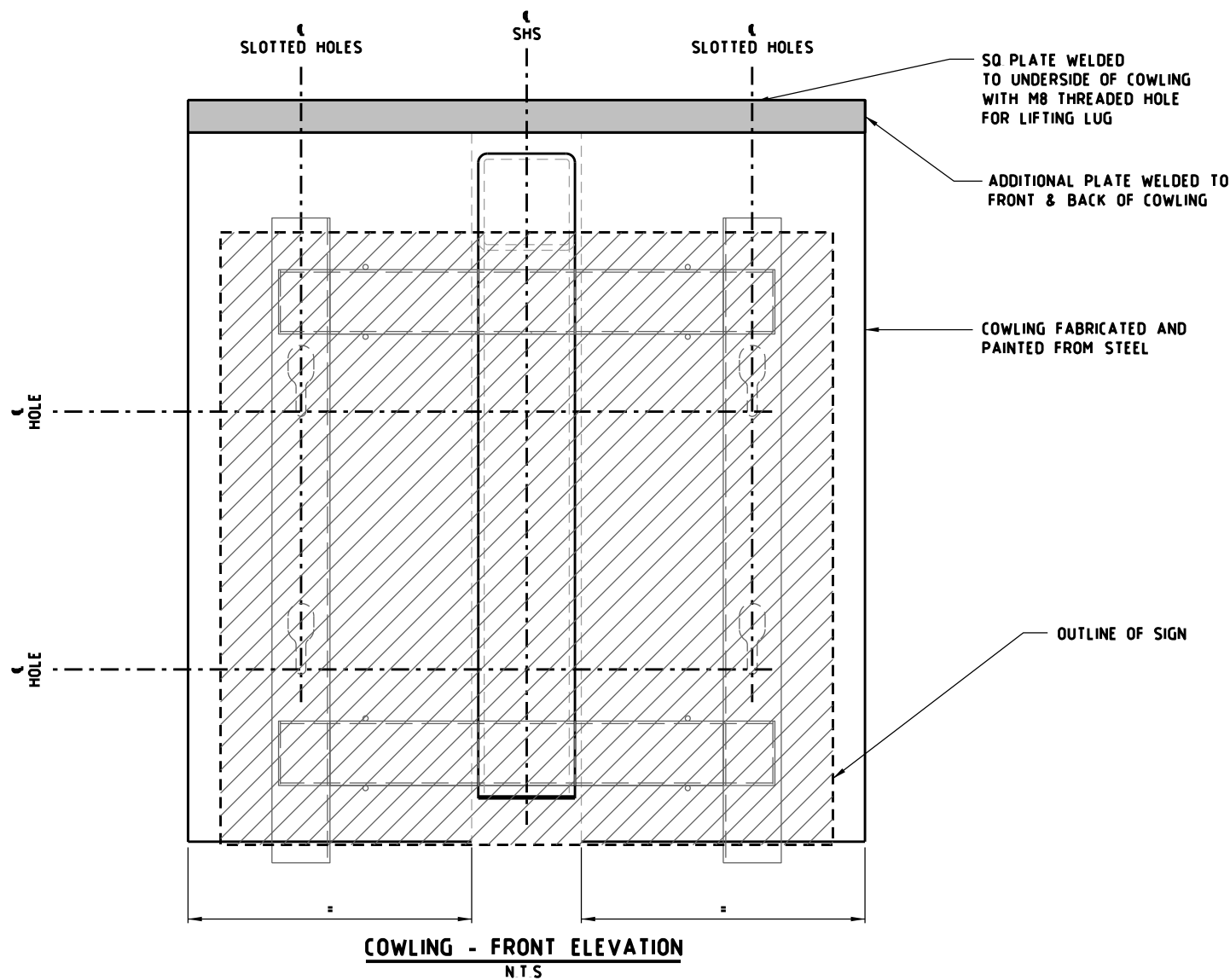
GENERAL NOTES

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STANDARD DRAWING MANAGED MOTORWAY STRUCTURE MOUNTED LUMS ARRANGEMENTS MOUNTING FRAME TYPE 3 TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2317	A



NOTES

- 1 IF LUS SIZE VARIES FROM THAT ASSUMED, COWLING DIMENSIONS TO BE ADJUSTED TO SUIT.
- 2 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH STANDARD DRAWINGS TC-2313, TC-2315 OR TC-2317 AS APPROPRIATE.
- 3 STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY. STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE.

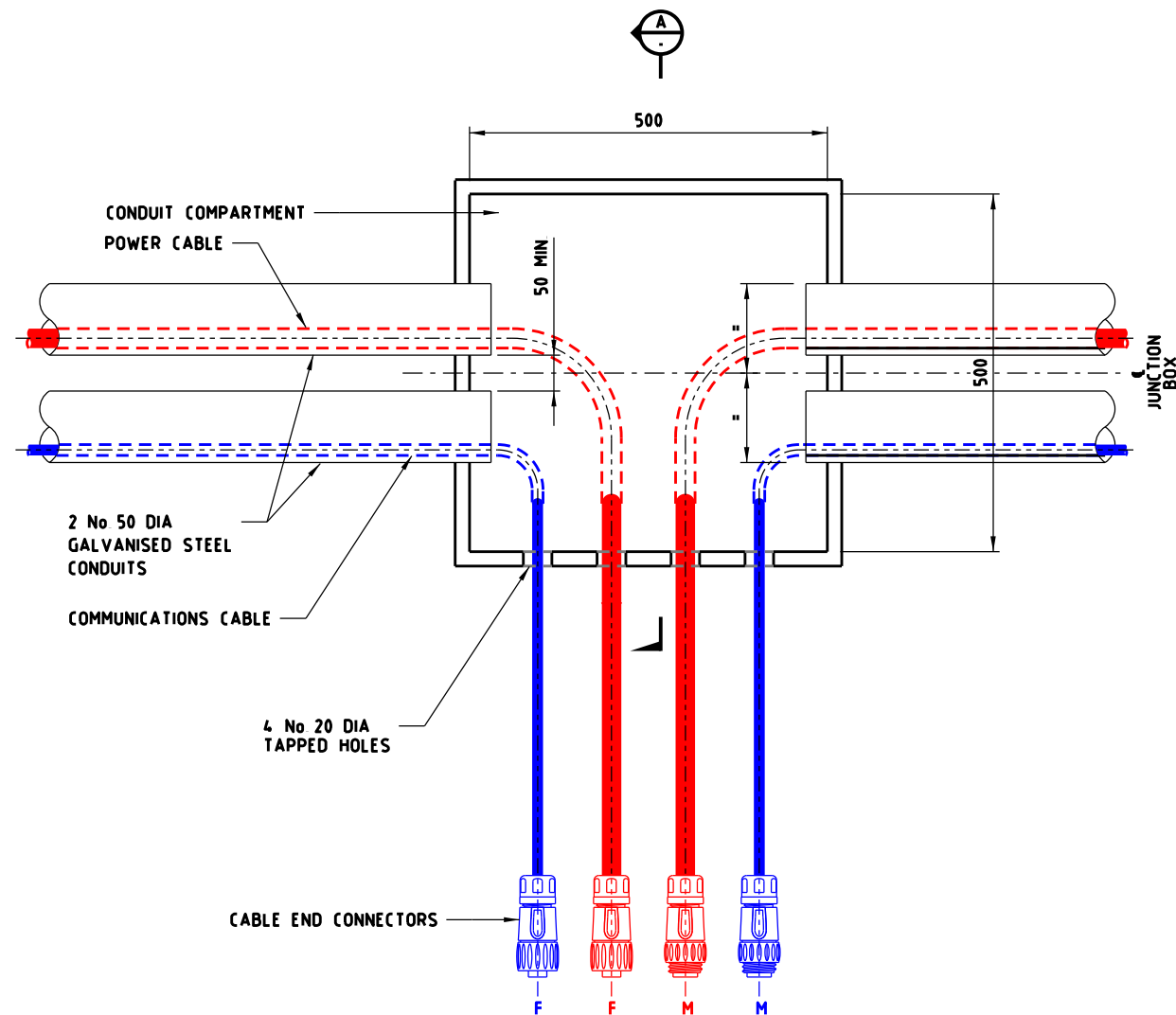
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GENERAL NOTES

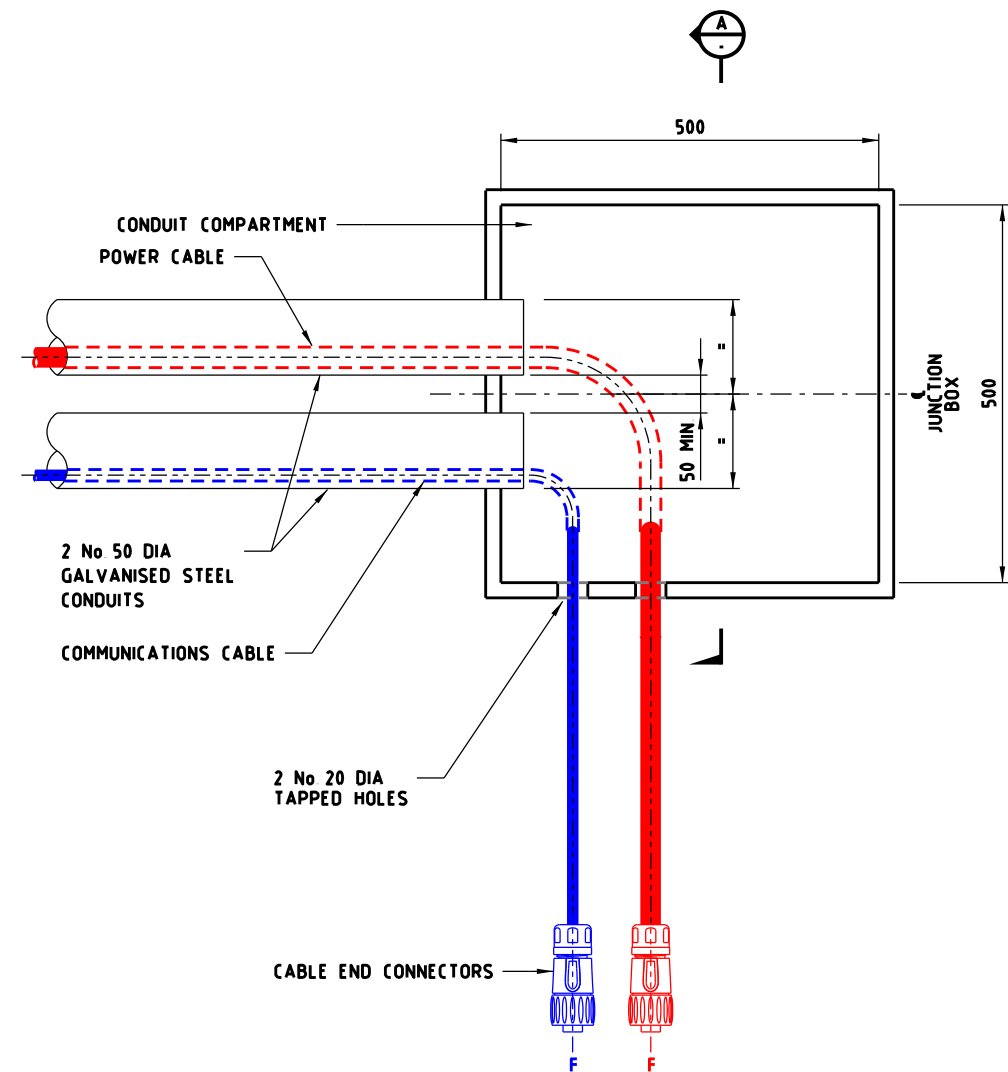
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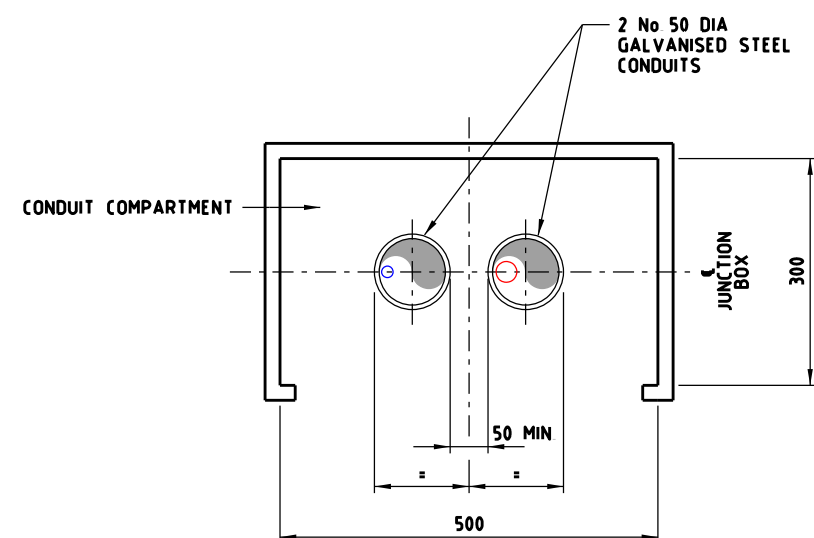
STANDARD DRAWING MANAGED MOTORWAY				
STRUCTURE MOUNTED LUMS ARRANGEMENTS ANTI-VANDAL COWLING				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2318	A



CONNECTORS TO LUS WITH
TYPE 3 STRUCTURE MOUNTED JUNCTION BOX
PLAN
NTS



CONNECTORS TO LUS WITH
TYPE 4 STRUCTURE MOUNTED JUNCTION BOX
PLAN
NTS



SECTION A

LEGEND

BLUE - COMMUNICATIONS CABLE
RED - POWER CABLE

NOTES

- 1 COMMUNICATIONS AND POWER CABLES BETWEEN JUNCTION BOX AND LUS UNIT TO BE RUN INSIDE WEATHERPROOF FLEXIBLE CONDUIT WITH MATCHING WEATHERPROOF GLANDS
- 2 DIMENSIONS SHOWN ARE IN MILLIMETERS, UNO
- 3 ANY VARIATION IN SIZE TO BE APPROVED BY THE SUPERINTENDENT
- 4 WEATHERPROOF COUPLING TO BE PROVIDED BETWEEN CONDUIT AND JUNCTION BOX
- 5 ENDS OF CONDUITS TO BE TRIMMED NEATLY AND FREE FROM SHARP EDGES
- 6 JUNCTION BOX SHALL BE 2mm MARINE GRADE ALUMINIUM POWDER COATED OR 15mm STAINLESS STEEL (GRADE 316)
- 7 DOORS TO BE INDIVIDUALLY LOCKABLE AND SECURED IN THE CLOSED POSITION BY WAY OF A MULTIPPOINT SECURING SYSTEM ACTIVATED VIA A SINGLE KEYED LOCK
- 8 THE LOCK TO BE A STANDARD VICROADS BI-LOCK TYPE WITH INTERCHANGEABLE CYLINDER THE KEYING TO BE SET TO MATCH A STANDARD VICROADS CABINET KEY CODE

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ISSUE	APP'D	DATE	AMENDMENT

GENERAL NOTES

DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	ITS INFRASTRUCTURE & SYSTEM 08/2015
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STANDARD DRAWING MANAGED MOTORWAY			
STRUCTURE MOUNTED LUMS ARRANGEMENTS JUNCTION BOX, ELECTRICAL AND COMMUNICATIONS CABLE CONNECTION DETAIL			
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO
			TC-2319
			ISSUE A