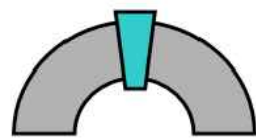


TOWNSHIP OF SOUTH GLENGARRY



Keystone Bridge
Management Inc.



LIST OF DRAWINGS

1. TRAFFIC DETOUR
2. GENERAL ARRANGEMENT
3. STEEL REPAIRS 1 AND JACKING
4. REMOVALS AND NEW CONSTRUCTION
5. STEEL REPAIRS 2
6. BEARING DETAILS AND EXPANSION JOINT DETAIL

SUTHERLAND CREEK BRIDGE REHABILITATION

STRUCTURE No. 30056

CONTRACT No. 2026 - 04

ISSUED FOR TENDER



ROAD CLOSURE NOTES

1. ROAD CLOSURE SHALL BE DURING BRIDGE JACKING OPERATIONS.
ONE (1), EIGHT (8) HOUR FULL ROAD CLOSURE IS PERMITTED TO JACK THE BRIDGE AND LOWER IT ONTO TEMPORARY BLOCKING.
ONE (1), FIVE (5) DAY CONSECUTIVE FULL ROAD CLOSURE IS PERMITTED TO COMPLETE THE FOLLOWING SCOPE ITEMS: JACK THE BRIDGE DOWN ONTO THE NEW BEARINGS, TO COMPLETE EXPANSION JOINT CONCRETE REMOVALS AND PLACEMENT OF NEW CONCRETE, INSTALL WABO SILICONE SEAL, WATERPROOFING, PAVING AND PLACEMENT OF LINE MARKINGS.
2. ALL SIGNAGE TO BE SUPPLIED, INSTALLED, MAINTAINED AND REMOVED BY THE CONTRACTOR.
3. ALL SIGNAGE AND SETUP PROCEDURE SHALL BE IN COMPLIANCE WITH THE ONTARIO TRAFFIC MANUAL TEMPORARY CONDITIONS, BOOK 7. THE CONTRACTOR SHALL MAINTAIN SIGNS FOR THE DURATION OF CONSTRUCTION.
4. SOUTH SERVICE ROAD SHALL BE CLOSED BETWEEN 3rd LINE ROAD AND COUNTY ROAD 2.
5. CONTRACTOR TO PROVIDE ADVANCE WARNING SIGNS

TC-67'S SHALL READ
"SOUTH SERVICE ROAD
WILL BE CLOSED BETWEEN
3rd LINE ROAD
AND COUNTY ROAD 2
DATE TO DATE"

LEGEND

TC 67 IMAGE IS ONLY REPRESENTATIVE



DETOUR ROUTE



DETOUR DIRECTION

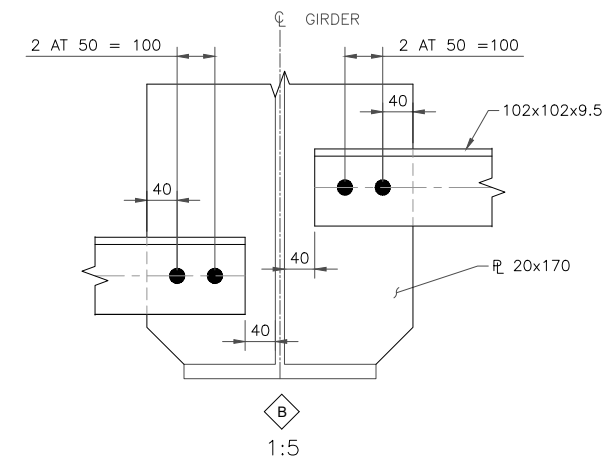
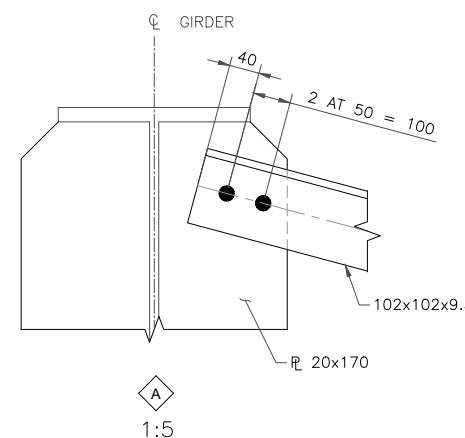
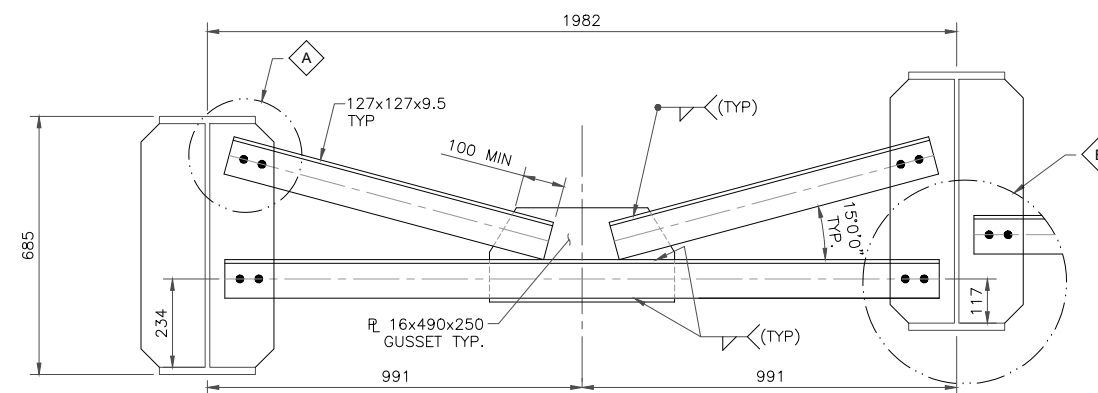
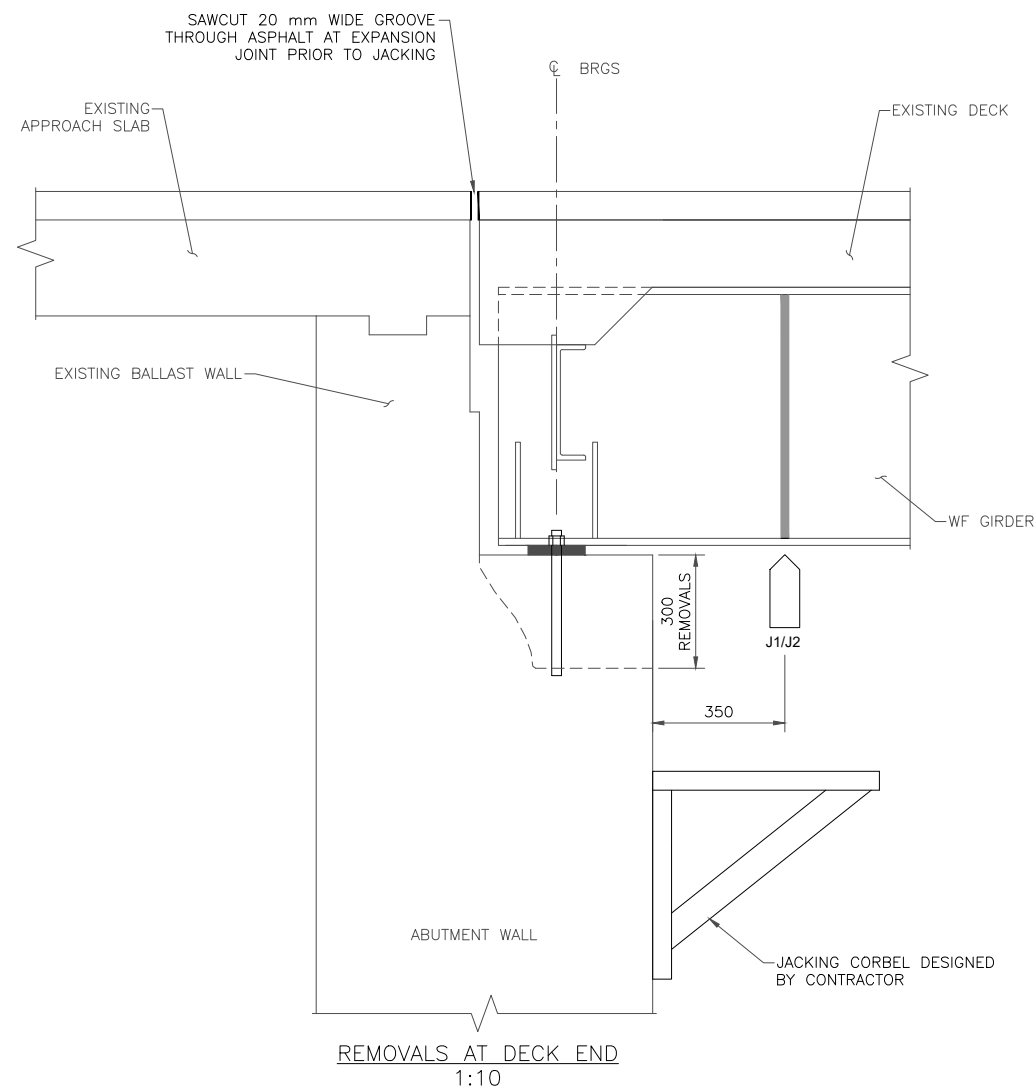
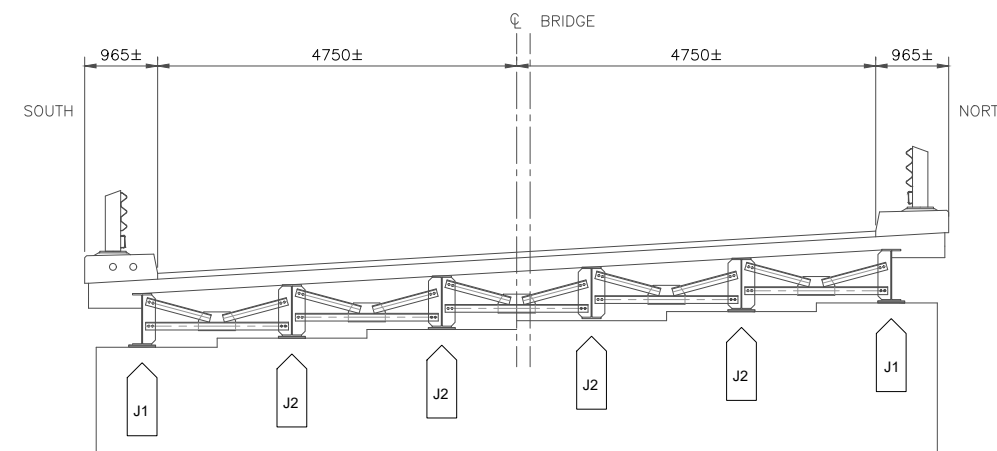
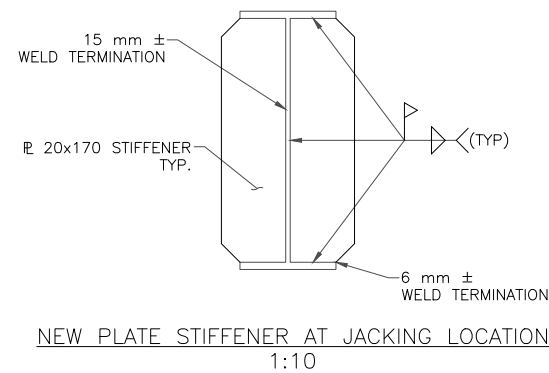


REVISIONS	DATE	BY	DESCRIPTION
	16/03/26	SPM	ISSUED FOR TENDER
			DESCRIPTION

DESIGN SPM	CHK MJM	CODE	DATE MAR 2026
DRAWN SR	CHK SPM	SITE 30056	DWG 1

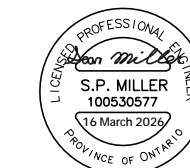


JACKING LOAD	
2x UNFACTORED DEAD LOAD	
LOCATION	FORCE (kN)
J1	220
J2	140

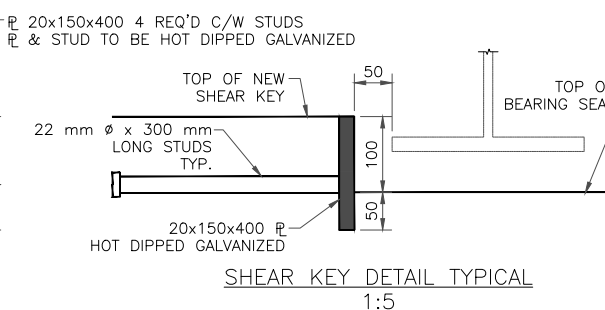
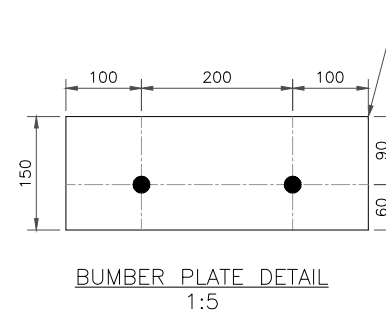
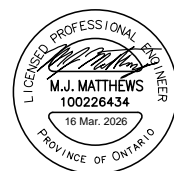
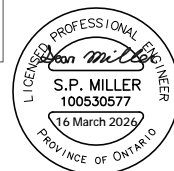
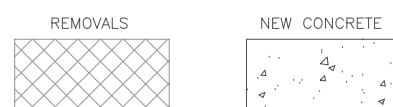
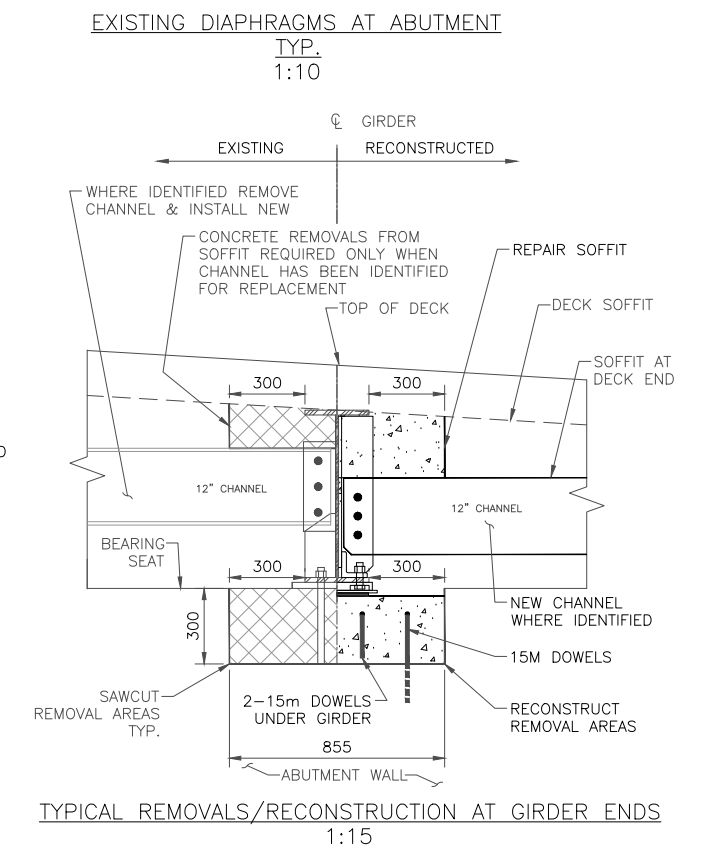
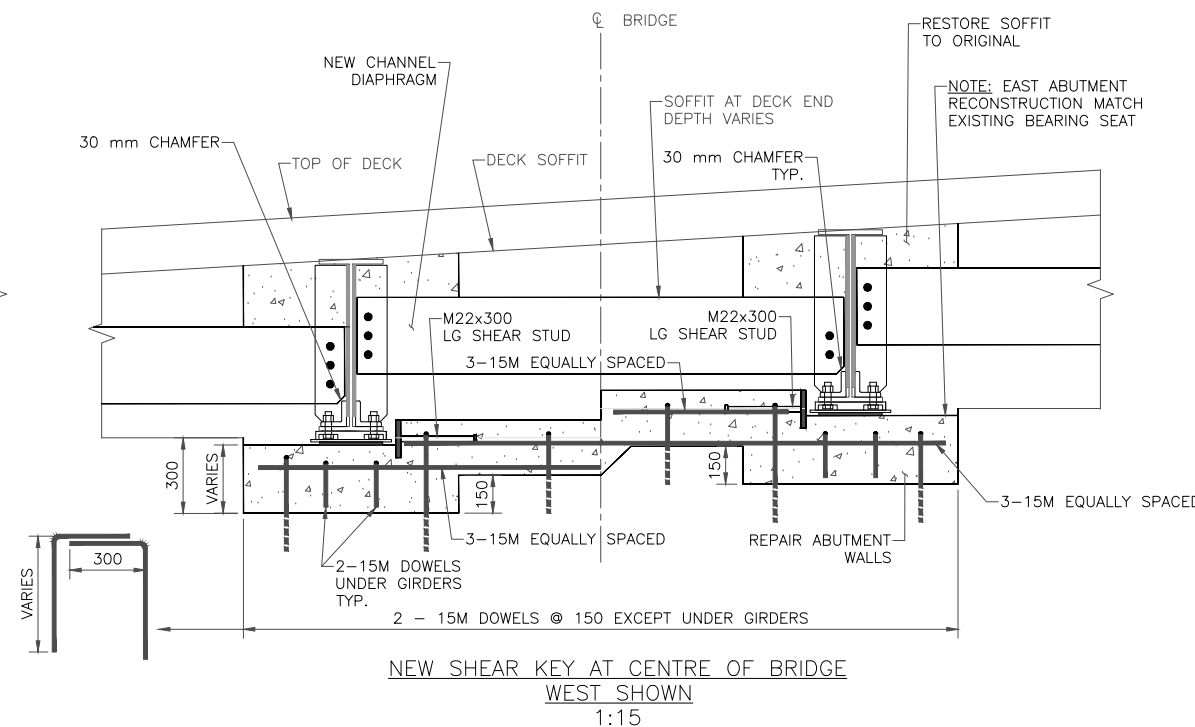
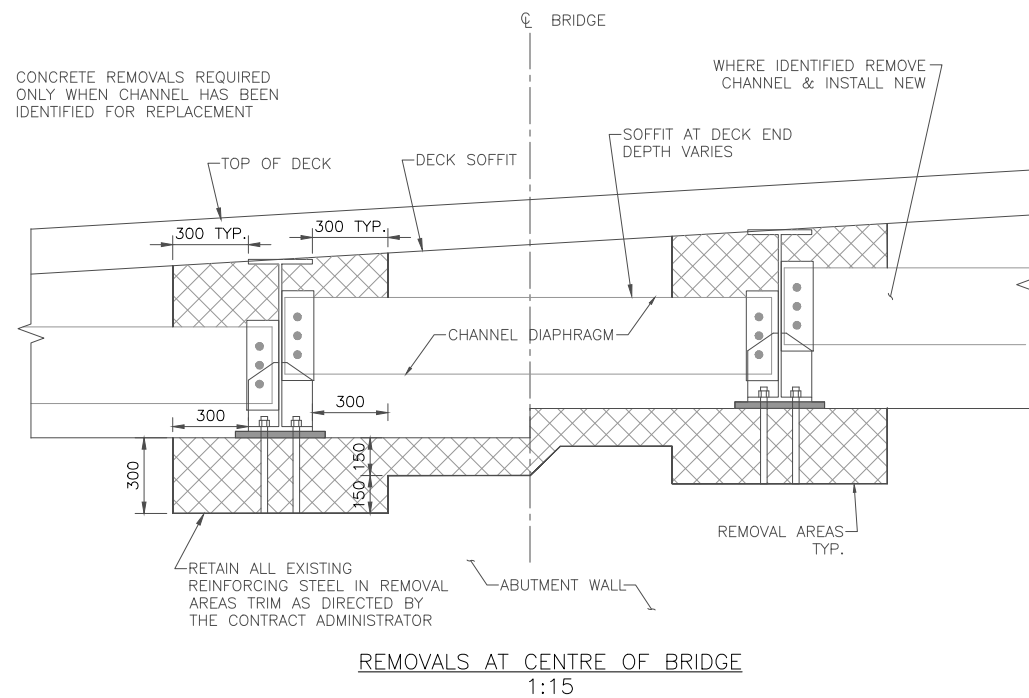
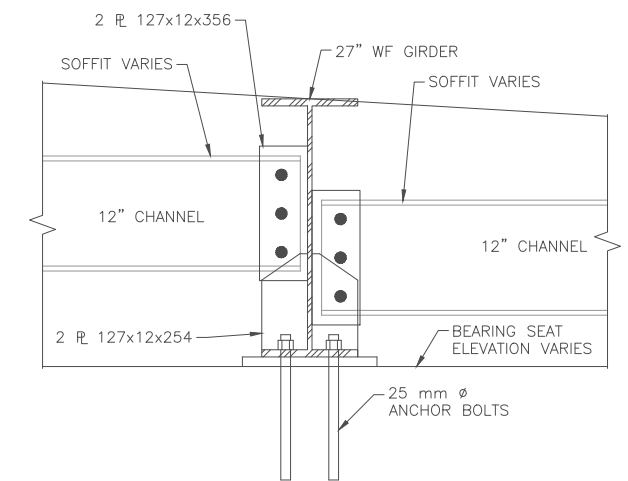
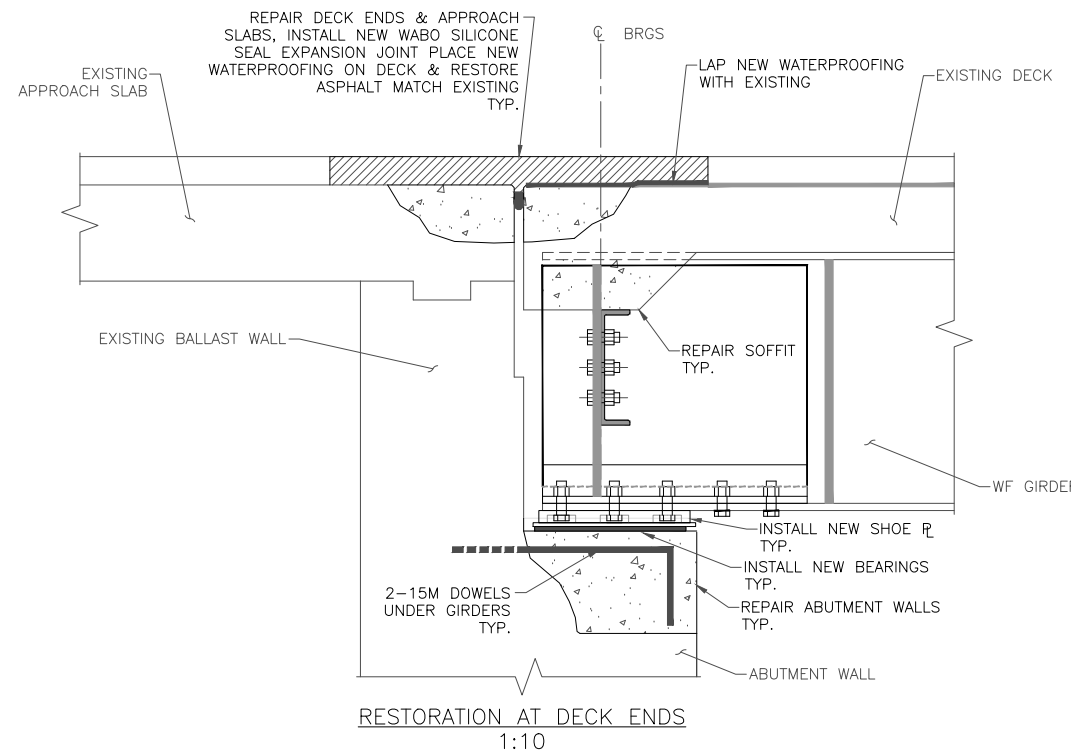
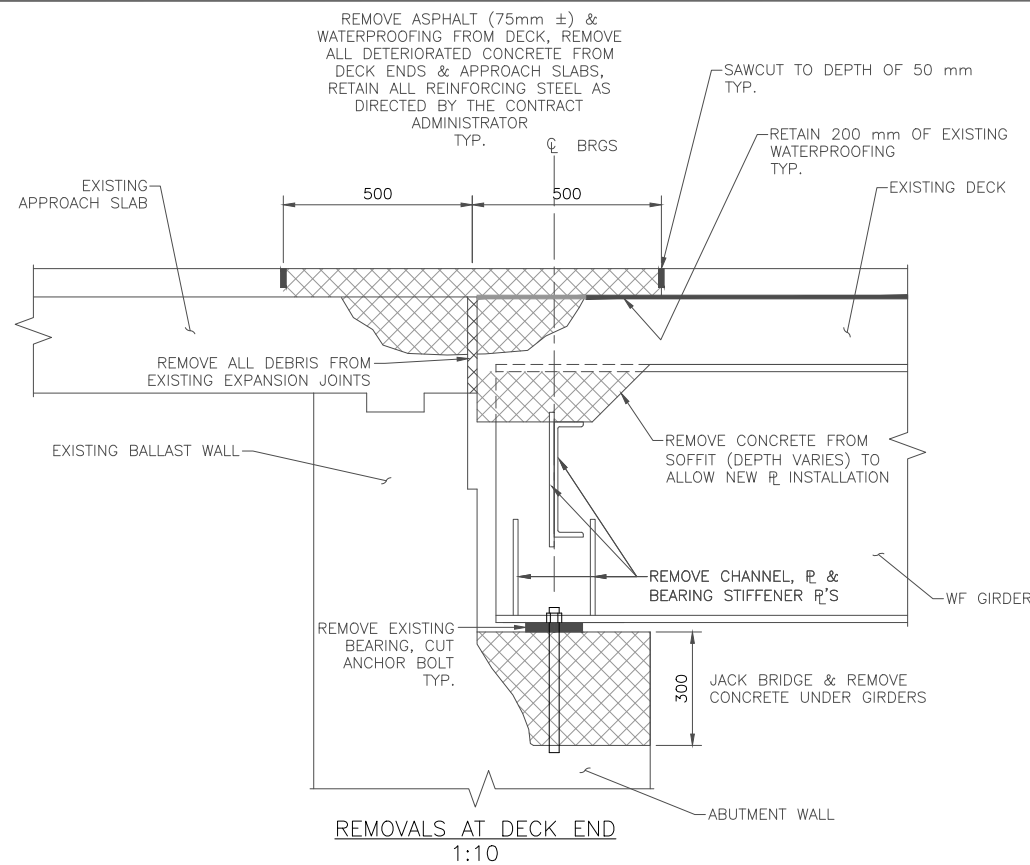


NOTES

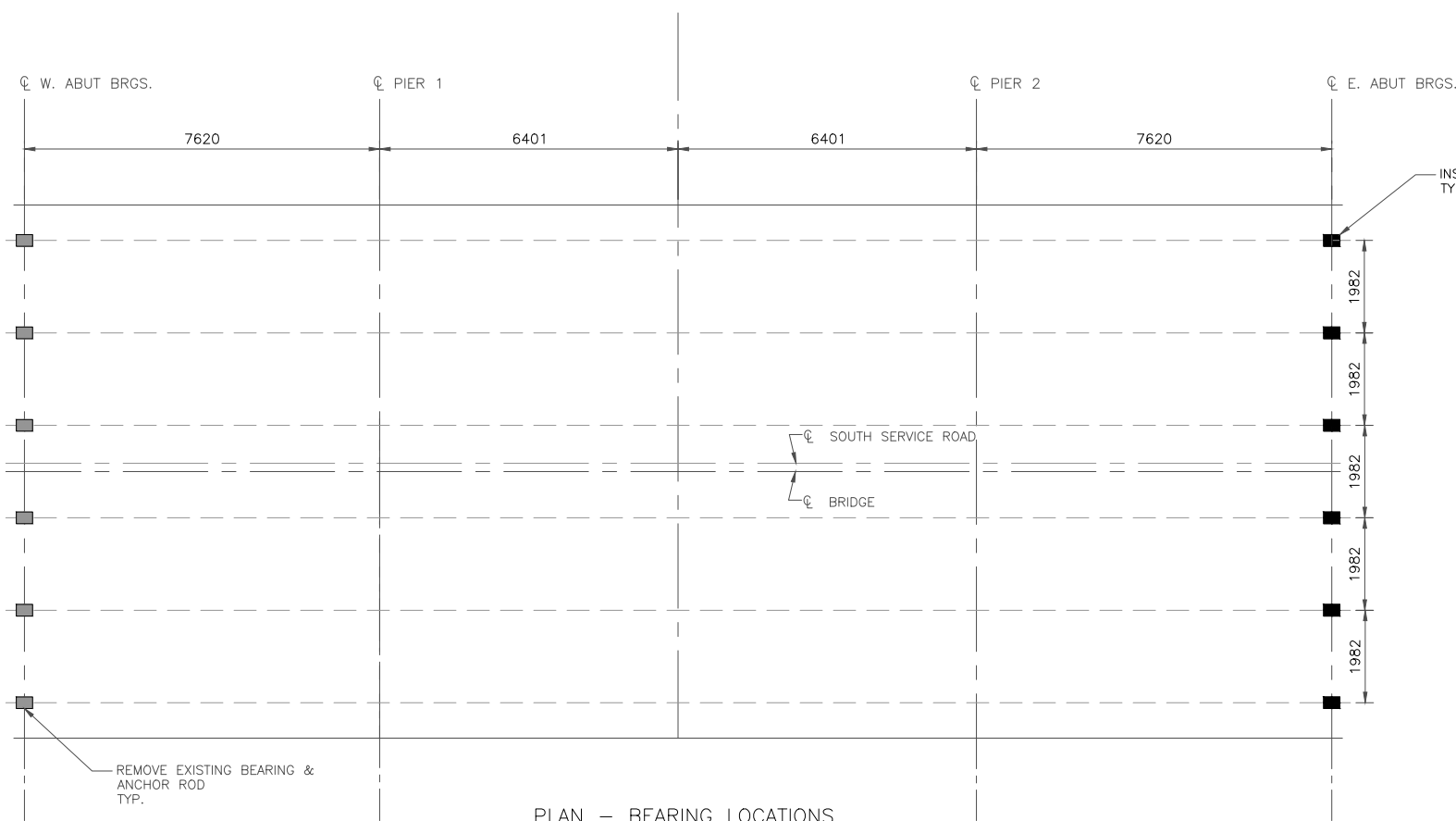
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWINGS 1, 2 AND 6
- FOR GENERAL NOTES REFER TO DRAWING 2.
- FOR STEEL NOTES REFER TO DRAWING 6.
- JACKING SCHEME SHOWN IS FOR INFORMATION ONLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND REMOVAL OF TEMPORARY JACKING SUPPORTS.
- JACKING OPERATIONS SHALL BE PERFORMED PRIOR TO REMOVAL OF EXISTING END DIAPHRAGMS, EXISTING BEARING STIFFENERS AND EXISTING CONCRETE IN DECK ENDS.
- NEW BEARING STIFFENERS AND DIAPHRAGMS SHALL BE INSTALLED AT JACKING LOCATIONS PRIOR TO BRIDGE JACKING.
- ABUTMENT WALLS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION FOLLOWING JACKING OPERATIONS, HOLES SHALL BE FILLED AND EMBEDDED FASTENERS CUT 25 mm FROM FACE OF ABUTMENT AND PARGED OVER.
- SOUTH SERVICE ROAD SHALL BE FULLY CLOSED DURING BRIDGE JACKING OPERATIONS. THE BRIDGE SHALL BE JACKED AND LOWERED ONTO BLOCKING PRIOR TO REOPENING SOUTH SERVICE ROAD TO TRAFFIC.
- THE BRIDGE SHALL BE JACKED A MAXIMUM OF 5mm.
- THE CONTRACTOR SHALL PROVIDE TRANSVERSE RESTRAINT AT ABUTMENTS WHILE IN THE JACK AND BLOCKED STATE.
- ANCHOR RODS AT ABUTMENTS SHALL BE CUT PRIOR TO JACKING.
- AFTER THE FULL ROAD CLOSURE IS IMPLEMENTED AND PRIOR TO BRIDGE JACKING, THE THRIE BEAM SHALL BE LOOSENED FROM ITS POSTS. BOLTS SHALL BE RETIGHTENED PRIOR TO REOPENING SOUTH SERVICE ROAD TO TRAFFIC.
- THE MAXIMUM LIFT HEIGHT IS 5mm. THE DIFFERENTIAL DISPLACEMENT BETWEEN ALL JACKS SHALL NOT EXCEED ±1.5mm. DIFFERENTIAL DISPLACEMENT BETWEEN ADJACENT JACKS TRANSVERSELY SHALL NOT EXCEED ±1mm.
- ALL TEMPORARY BLOCKING SHALL CONSIST OF STEEL PLATE AND OR STEEL SHIMS AND SHALL BE WELDED TOGETHER DURING THE BLOCKED STATE WHEN THE BRIDGE IS OPEN TO LIVE TRAFFIC.
- TEMPORARY LONGITUDINAL AND TRANSVERSE RESTRAINT SHALL BE PROVIDED WHEN THE BRIDGE IS BLOCKED AND OPEN TO LIVE TRAFFIC. EACH JACK SHALL BE FITTED WITH A PRESSURE GAUGE AND A SHUTOFF VALVE.
- ALL JACKS SHALL BE FITTED WITH LOCKING COLLARS.
- LINEAR VARIABLE DIFFERENTIAL TRANSFORMER (LVDT) SENSORS WITH A TOLERANCE OF ±0.10mm SHALL BE FITTED BETWEEN THE SUBSTRUCTURE AND SUPERSTRUCTURE AT EACH JACKING POINT TO MEASURE THE VERTICAL DISPLACEMENT BETWEEN THE SUPERSTRUCTURE AND SUBSTRUCTURE DURING JACKING OPERATIONS. DATA SHALL BE RECORDED AT 1 SECOND INTERVALS MINIMUM AND SHALL BE PROVIDED TO THE CONTRACT ADMINISTRATOR IN EXCEL FORMAT WITHIN 24 HOURS OF ANY JACKING OPERATIONS. DURING JACKING OPERATIONS ACCESS TO DISPLACEMENT DATA SHALL BE PROVIDED TO THE CONTRACT ADMINISTRATOR IMMEDIATELY UPON REQUEST IN REAL TIME DIGITAL FORMAT.



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DRAWN	SR	CHK SPM	SITE 30056
			DATE MAR 2026
			DWG 3



REVISIONS	DATE	BY	DESCRIPTION
16/03/26	SPM		ISSUED FOR TENDER
DESIGN	SPM	CHK MJM	CODE S6-25
DRAWN	SR	CHK SPM	SITE 30056
			DATE MAR 2026
			DWG 4



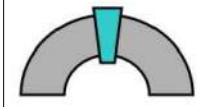
PLAN - BEARING LOCATIONS
1:75

INSTALL NEW BEARINGS TYP.

BEARING DATA	WEST ABUTMENT	EAST ABUTMENT
DEAD LOAD (kN) - SLS	55 kN	55 kN
TOTAL LOAD (kN) - SLS	250 kN	250 kN
DEAD LOAD (kN) - ULS	75 kN	75 kN
TOTAL LOAD (kN) - ULS	435 kN	435 kN
MOVEMENT (mm)	6	6
BEARING SIZE (mm)	350x250x12	350x250x12
NUMBER REQUIRED	6	6
BEARING TYPE	PLAIN	PLAIN

* THE SHEAR RATES PROVIDED ARE MAXIMUM AND MINIMUM ALLOWABLE STIFFNESS THAT CORRESPONDS TO TEMPERATURES OF -25 °C AND 20 °C, RESPECTIVELY AND AN AVERAGE HARDNESS OF 75 DUROMETER.

REMOVE EXISTING BEARING & ANCHOR ROD TYP.



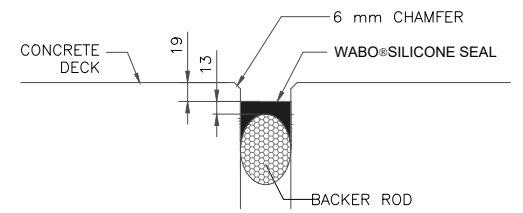
Keystone Bridge Management Inc.

NOTES:

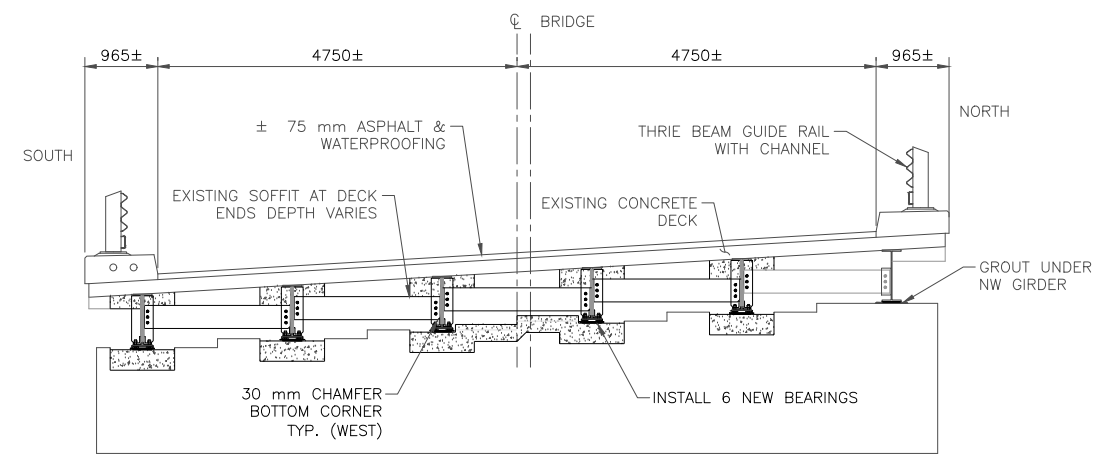
GAP BETWEEN EXISTING DECK END AND BALLAST WALL SHALL BE ABRASIVELY BLAST CLEANED PRIOR TO INSTALLATION OF NEW SEAL.

EXPANSION JOINT SEAL SHALL BE WABO SILICONE SEAL OR APPROVED EQUIVALENT.

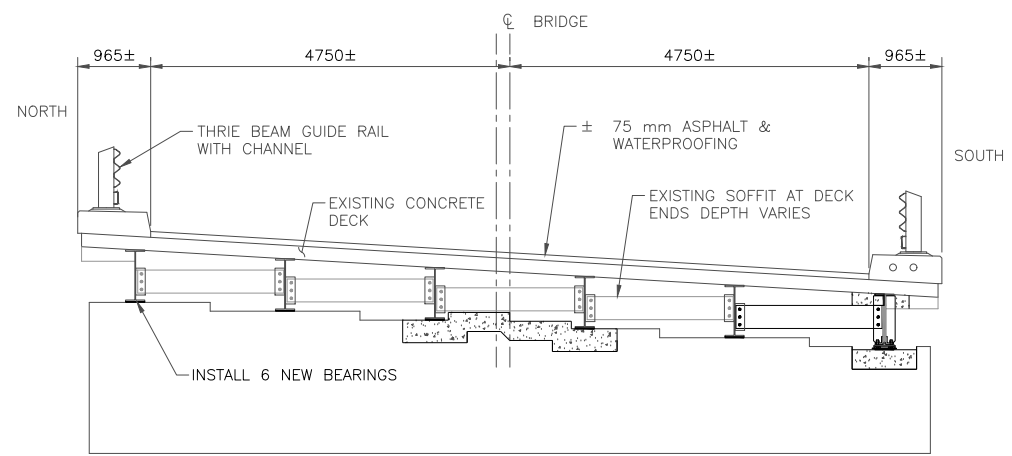
THE EXISTING GIRDER ELEVATIONS SHALL BE MAINTAINED. THE CONTRACTOR SHALL ADJUST THE BEARING SEAT ELEVATION UPWARD OR DOWNWARD TO ACCOUNT FOR THE COMPRESSION OF THE NEW BEARINGS.



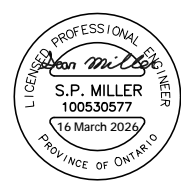
WABO SILICONE SEAL EXPANSION JOINT
1:15



REHABILITATED SECTION AT WEST ABUTMENT
1:50



REHABILITATED SECTION AT EAST ABUTMENT
1:50



REVISIONS	DATE	BY	DESCRIPTION

ISSUED FOR TENDER

DESIGN SPM	CHK MJM	CODE S6-25	DATE MAR 2026
DRAWN SR	CHK SPM	SITE 30056	DWG 6