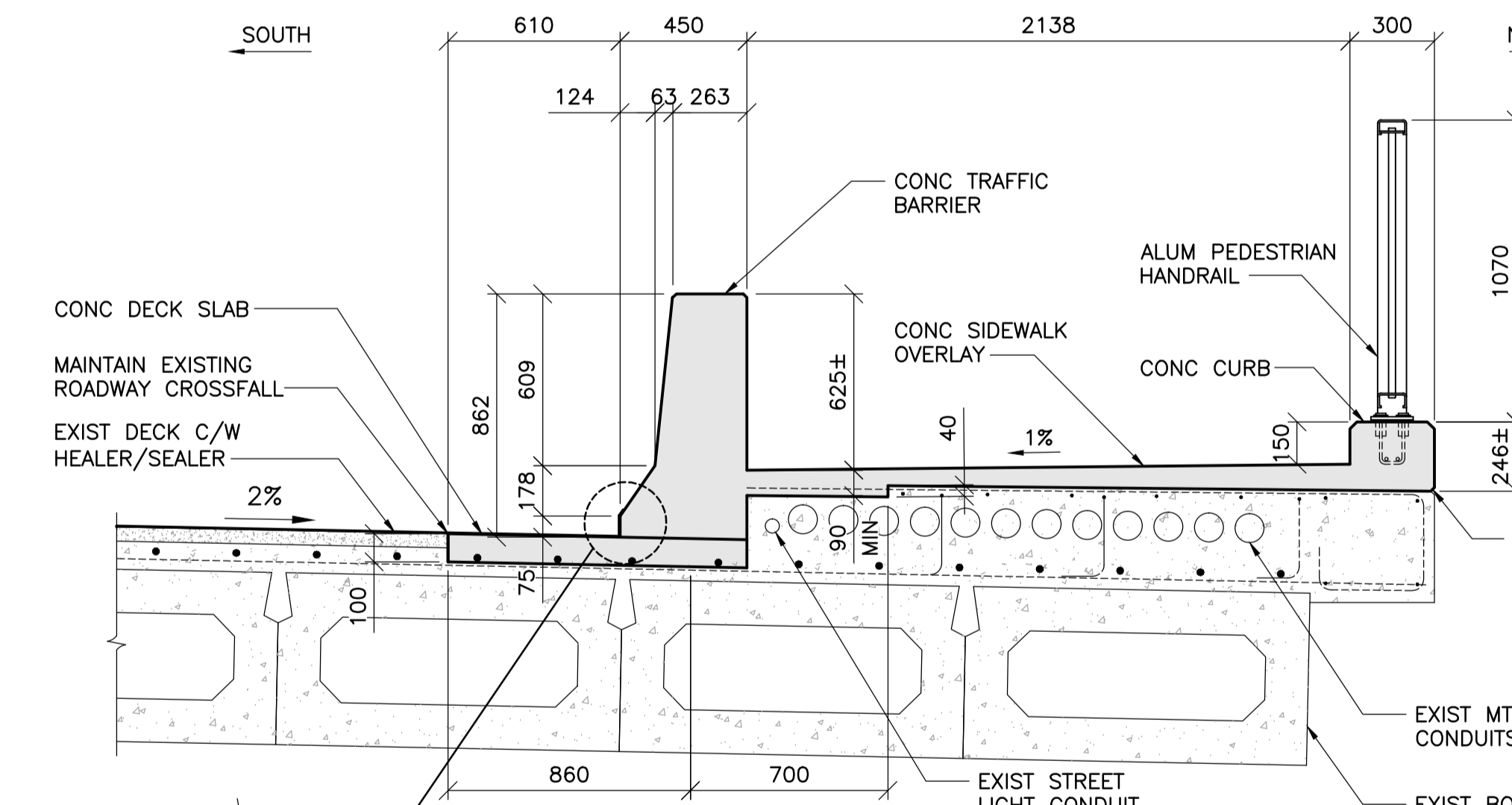


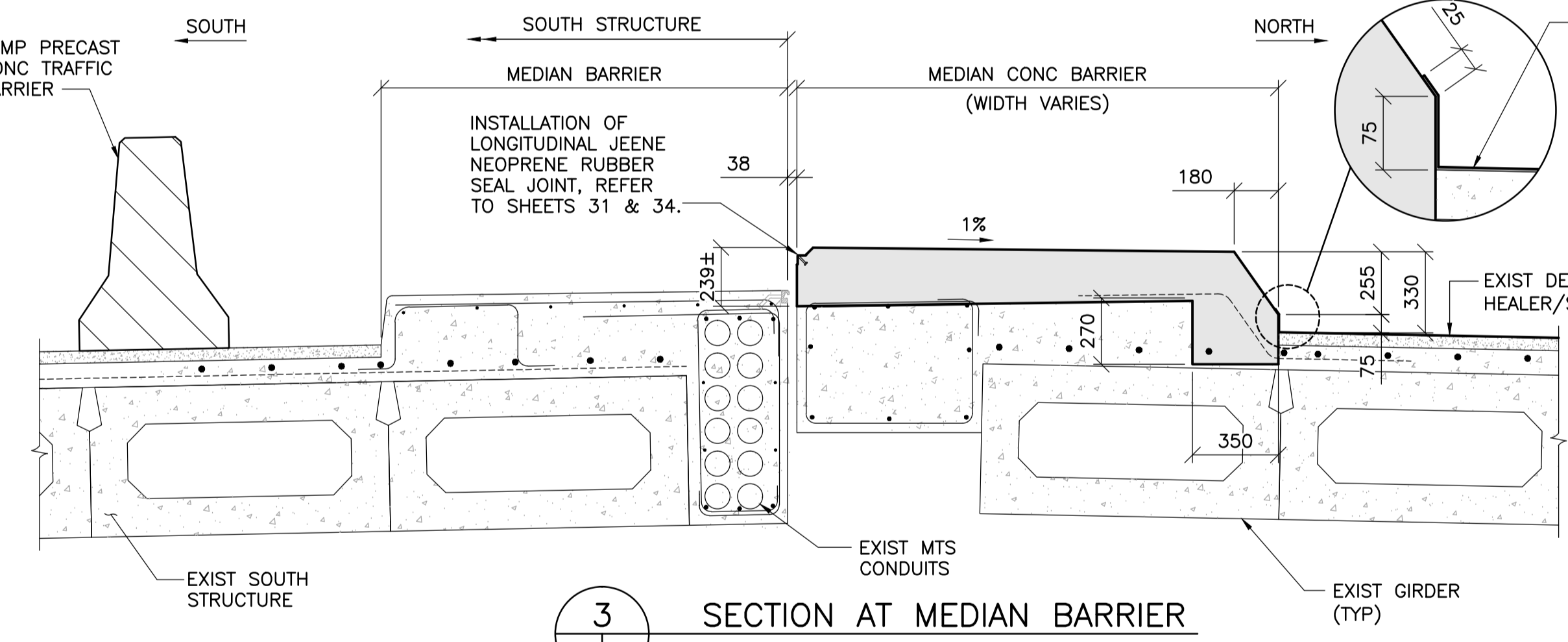
1 PLAN - PHASE 1 CONSTRUCTION  
1 : 125

**MISCELLANEOUS CONCRETE REPAIR NOTES:**

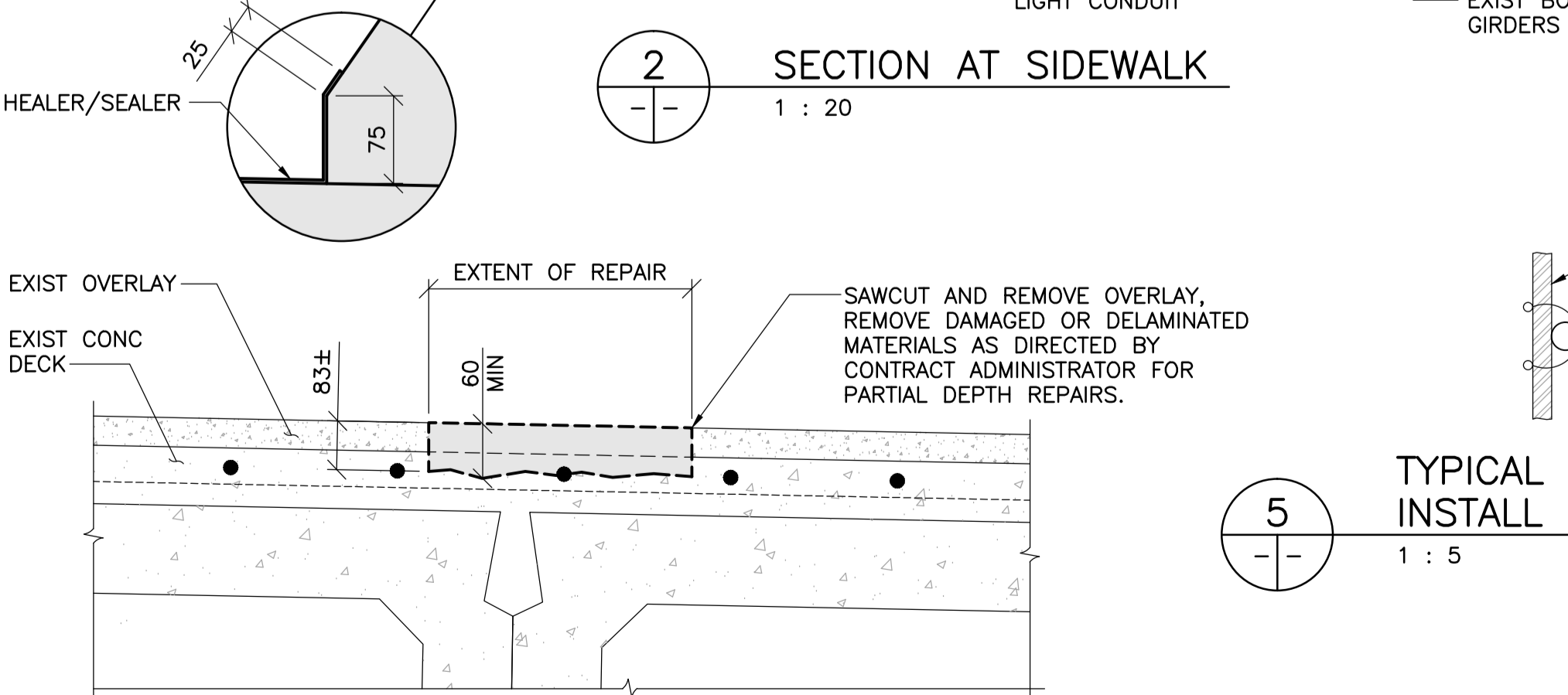
- REPAIR GUIDELINES SHALL BE IN ACCORDANCE WITH ICRI NO. 03730 AND NO. 03731.
- MISCELLANEOUS CONCRETE REPAIR AREAS SHALL BE IDENTIFIED BY THE CONTRACT ADMINISTRATOR.
- AS THE DETERIORATION IS NOT UNIFORM, THE AREA REQ'D FOR REPAIR SHALL BE EXTENDED TO A SIMPLE LAYOUT WITH SQUARE CORNERS.
- FOR PARTIAL DEPTH REPAIR, THE DETERIORATED CONCRETE SHALL BE REMOVED USING A CHIPPING HAMMER NO HEAVIER THE 20 lbs SO AS NOT TO DAMAGE THE REINFORCING STEEL.
- A REPAIR BOUNDARY SHALL BE SAW CUT AROUND THE AREA TO PREVENT FEATHER EDGE CONDITIONS. THIS PERIMETER SHALL BE CUT 90° INTO THE CONCRETE AT A DEPTH NO MORE THAN 25mm OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- FOR SURFACE REPAIR:
  - ALL REINF SHALL BE CLEANED OF RUST, SCALE, & OTHER BOND INHIBITING MATERIALS USING AN ABRASIVE FREE OF CORROSION PRODUCING AGENTS.
  - SAND ABRASIVES ARE RECOMMENDED. SLAG ABRASIVE SHALL BE LESS THAN 0.1% OIL BY MASS.
  - REPLACE ALL DAMAGED REINFORCING STEEL AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR.
- FOLLOWING THE COMPLETION OF CONCRETE REMOVALS, THE CONTRACTOR SHALL NOTIFY THE CONTRACT ADMINISTRATOR TO INSPECT THE WORK.
- FOLLOWING THE REMOVAL OF CONTAMINATED CONCRETE AND CONDITIONING OF REINFORCING STEEL, ABRASIVES SHALL BE USED TO REMOVE BOND INHIBITING MATERIALS FROM THE REPAIRED AREA(S) AND TO OPEN THE PORES OF THE EXISTING CONCRETE FOR REPAIR.
- ATTACH GALVASHIELD XP ANODES TO CLEAN REINFORCING STEEL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHODS. GALVASHIELD XP ANODES SHALL BE INSTALLED IN A GRID PATTERN WITH THE INTERIOR OF THE REPAIR AREA(S) WHEN CHLORIDE CONTAMINATED CONCRETE EXISTS IN CONTACT WITH THE REINFORCING STEEL.
- MINIMUM AMBIENT AIR TEMP. DURING REPAIR WORK SHALL BE ABOVE 5°C.
- THE SURFACE TEMP. OF THE CONCRETE SHALL BE ABOVE 5°C DURING REPAIR.
- REFER TO THE SPECIFICATIONS FOR APPROVED PATCHING MATERIALS.
- A BOND SHALL BE CREATED BETWEEN THE NEW CONCRETE MORTAR AND THE EXISTING SUBSTRATES. EXISTING CONCRETE SHALL BE SATURATED SURFACE DRY UPON APPLICATION OF BONDING GROUT. MORTAR SHALL BE APPLIED BY TROWELLING, PUMPING, SPRAYING, OR INTO FORMS ENSURING THAT ALL ENTRAPPED AIR IS REMOVED.
- UNFORMED CONCRETE SURFACES SHALL BE COVERED AND KEPT MOIST BY MEANS OF WET CURING BLANKETS FOR SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY FOLLOWING FINISHING OPERATIONS AND SHALL BE MAINTAINED AT ABOVE 5°C FOR AT LEAST SEVEN (7) CONSECUTIVE DAYS THEREAFTER OR THROUGH THE APPLICATION CURING COMPOUND WHERE APPROVED. FORMED CONCRETE SURFACES SHALL HAVE FORMWORK INTACT OVER REPAIR AREAS FOR SEVEN (7) CONSECUTIVE DAYS THEREAFTER. IF FORMWORK IS REMOVED PRIOR TO THE ABOVE NOTED SEVEN (7) DAY PERIOD THEN CURING SHALL TAKE PLACE IN ACCORDANCE WITH CURING METHODS FOR UNFORMED SURFACES.
- ALL REPAIRED AREAS SHALL BE INSPECTED BY THE CONTRACT ADMINISTRATOR FOR BOND PRIOR TO ACCEPTANCE.



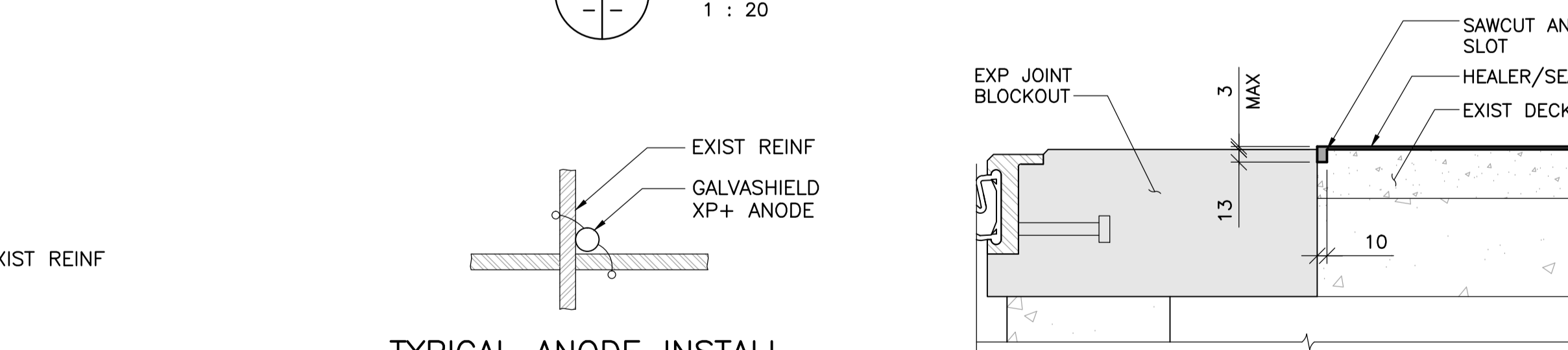
2 SECTION AT SIDEWALK  
1 : 20



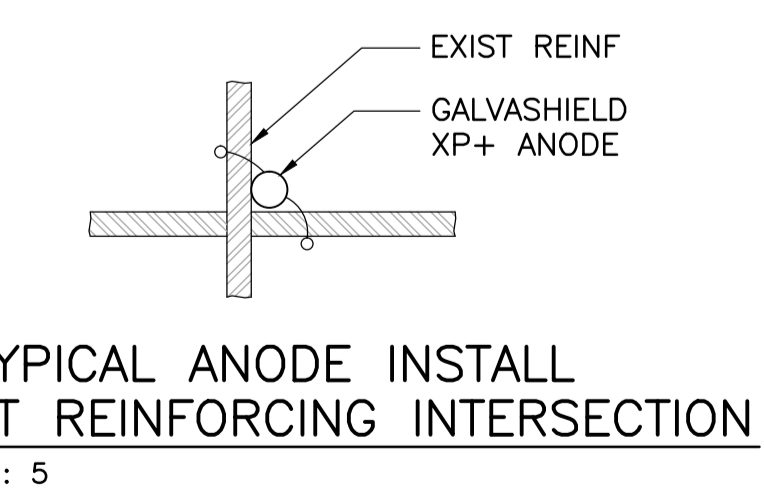
3 SECTION AT MEDIAN BARRIER  
1 : 20



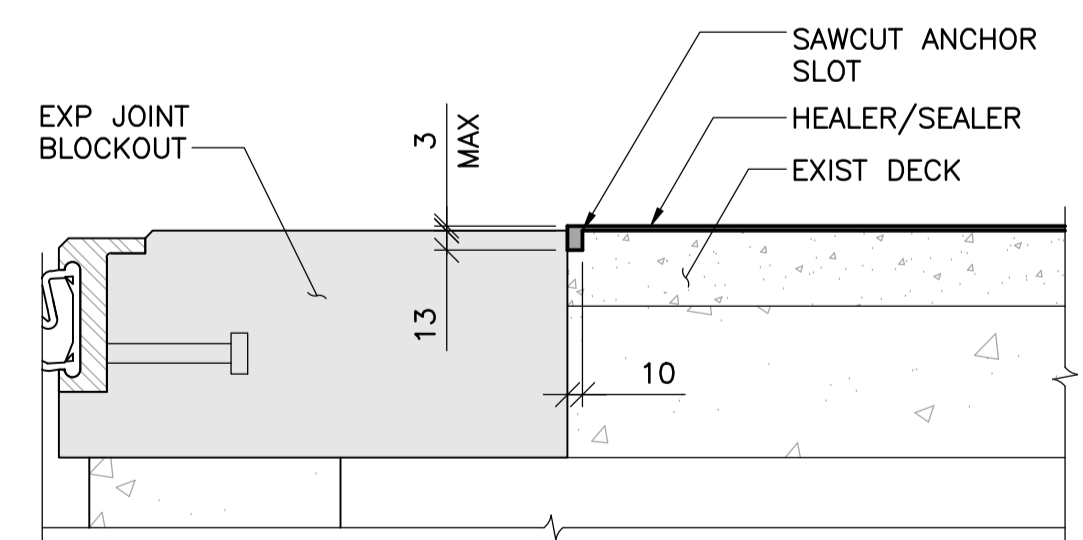
4 TYP SURFACE REPAIR  
1 : 10



5 TYPICAL ANODE INSTALL BESIDE REINFORCING  
1 : 5



6 TYPICAL ANODE INSTALL AT REINFORCING INTERSECTION  
1 : 5



7 SECTION  
1 : 5

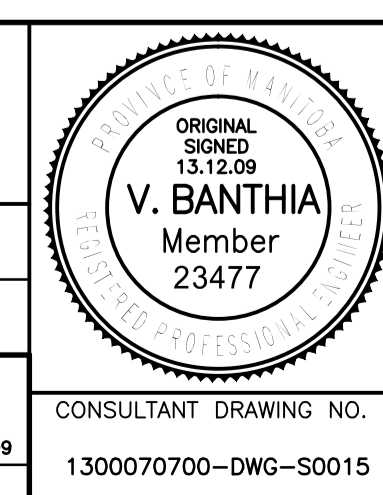


B.M. ELEV.	F.B.	NO.	REVISIONS	DATE	BY
		0	ISSUED FOR TENDER	13.12.09	V.B.
				13.07.18	

**TETRA TECH**

DESIGNED BY: D.M.	CHECKED BY: V.B.
DRAWN BY: G.I.	APPROVED BY: E.F.S.
HOR. SCALE: AS NOTED	RELEASED FOR CONSTRUCTION DATE: 13.12.09
VERTICAL: AS NOTED	ORIGINAL SIGNED: 13.12.09

CONSULTANT DRAWING NO. 1300070700-DWG-S0015



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

**PORTAGE AVENUE TWIN BRIDGES**  
OVER STURGEON CREEK  
REHABILITATION AND RELATED WORKS

PHASE 1 CONSTRUCTION  
NORTH STRUCTURE - PLAN & SECTIONS

CITY DRAWING NUMBER: B178-14-015  
SHEET 15 OF 70

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