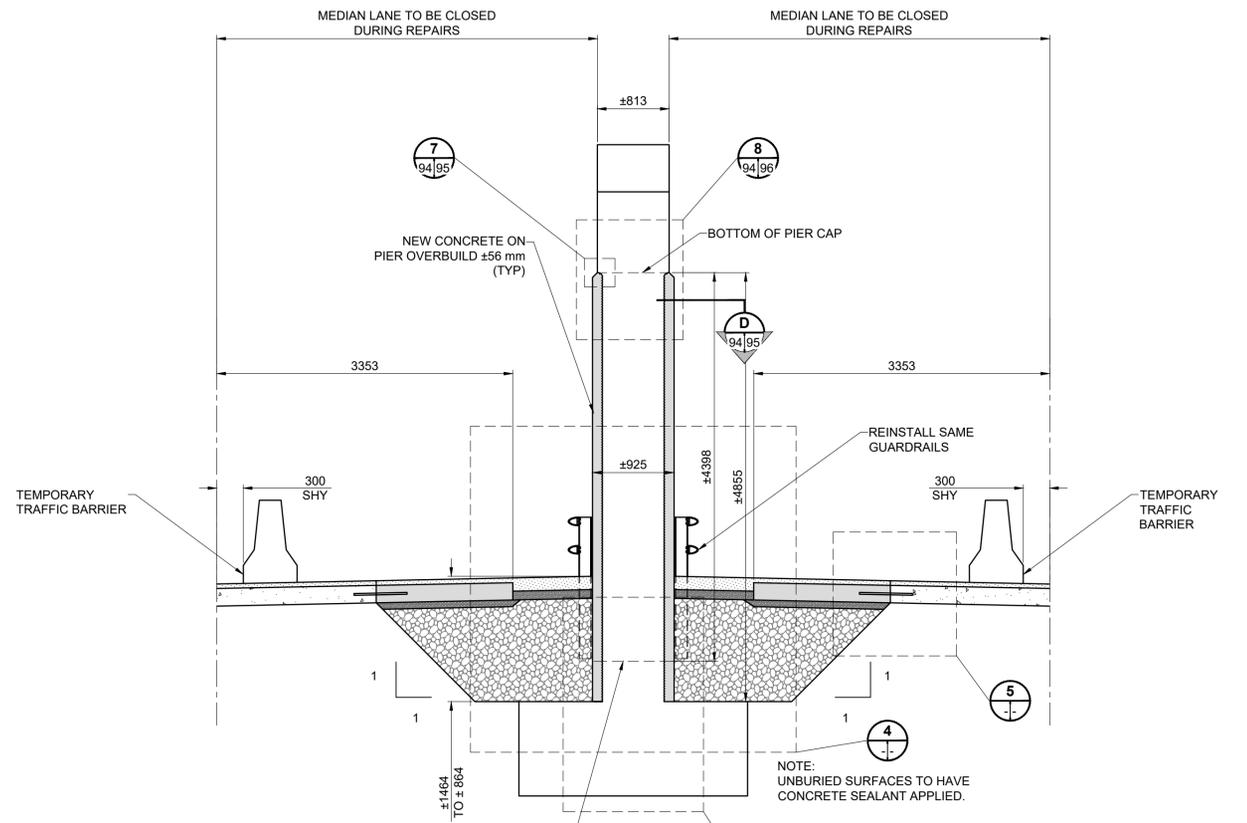
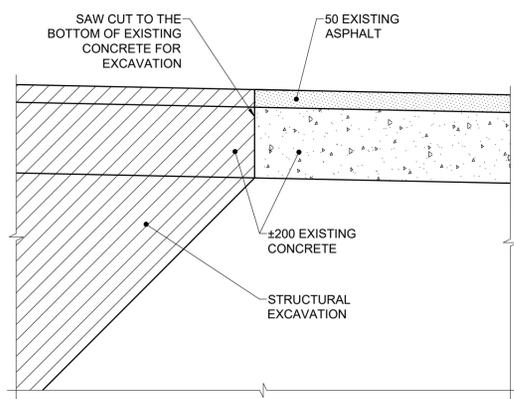


**A SECTION: STAGE 1 - DEMOLITION**  
SCALE: 1:40

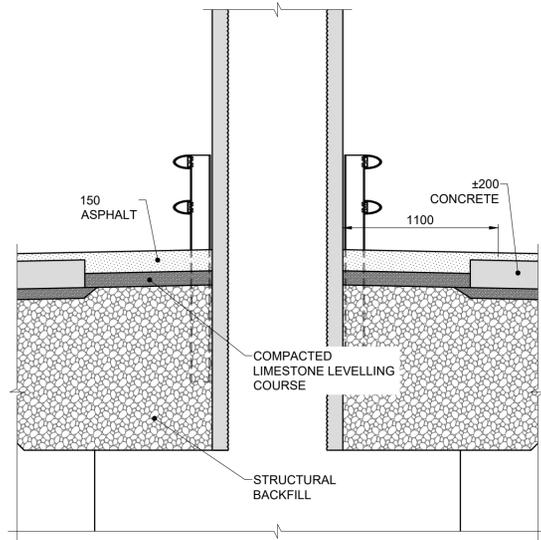


**B SECTION: STAGE 2 - CONCRETE JACKET**  
SCALE: 1:40

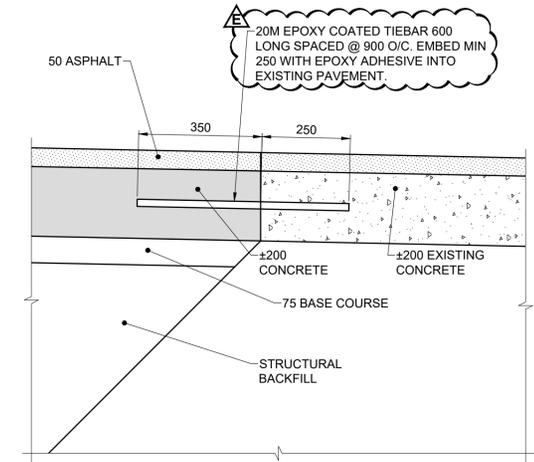
**CENTRE PIER COLUMN REPAIR - SECTION THRU CL PIER**  
SCALE: 1:40



**3 DETAIL: PAVEMENT REMOVAL AND EXCAVATION AT CENTRE PIER**  
SCALE: 1:10



**4 DETAIL - NEW PAVEMENT AT CENTRE PIER**  
SCALE: 1:25



**5 DETAIL - NEW PAVEMENT TIE-IN AT CENTRE PIER**  
SCALE: 1:10

- GENERAL NOTES:**
1. SUPERSTRUCTURE NOT SHOWN FOR CLARITY.
  2. PILES NOT SHOWN FOR CLARITY.
  3. PERFORM DEMOLITION ON ONE PIER COLUMN AT A TIME.
  4. PERFORM DEMOLITION STARTING AT THE TOP AND MOVING DOWNWARDS.
  5. PIER COLUMN DEMOLITION TO BE STAGED SUCH THAT DEMOLITION OCCURS WHEN EMPRESS LANES DIRECTLY ABOVE ARE CLOSED.
  6. REMOVE CONCRETE ON PIER COLUMNS TO EXTERIOR FACE OF EXISTING SPIRAL REINFORCEMENT.
  7. IF DISCOVERED THAT EXISTING SPIRAL PIER COLUMN REINFORCEMENT IS SEVERELY CORRODED OR BROKEN DURING REMOVALS, IMMEDIATELY PLACE HIGH TENSILE STEEL STRAPPING AROUND DAMAGED SECTION.
  8. SANDBLAST REINFORCING STEEL PRIOR TO INSTALLATION OF ANODES AND NEW REINFORCEMENT AS WELL AS NEW CONCRETE PLACEMENT. SEE SHEET 100 FOR INSTALLATION PROCEDURE.
  9. ALL EXPOSED CONCRETE SURFACES TO BE TREATED WITH SILANE SEALER AFTER ALL REPAIRS ARE COMPLETE.

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**LEGEND:**  
 REMOVALS  
 NEW CONCRETE

**ENGINEERS GEOSCIENTISTS**  
 Certificate of Authorization  
**MORRISON HERSHFIELD**  
 No. 1736  
**METRIC**  
 WHOLE NUMBERS INDICATE MILLIMETRES  
 DECIMALIZED NUMBERS INDICATE METRES

**LOCATION APPROVED UNDERGROUND STRUCTURES**

NO.	REVISIONS	DATE	BY
E	ISSUED FOR ADDENDUM 1	18/10/05	BAP
D	ISSUED FOR TENDER	18/03/04	BAP
C	ISSUED FOR 95% DESIGN REVIEW	18/08/07	BAP
B	ISSUED FOR 50% DESIGN REVIEW 1	18/06/28	AG
A	ISSUED FOR 50% DESIGN REVIEW	18/04/03	AF

**NOTE:** LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY
E	ISSUED FOR ADDENDUM 1	18/10/05	BAP
D	ISSUED FOR TENDER	18/03/04	BAP
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**MORRISON HERSHFIELD**

DESIGNED BY	AG	CHECKED BY	BAP
DRAWN BY	AH	APPROVED BY	BE
HOR SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	N/A
VERT SCALE	AS SHOWN	DATE	

PROFESSIONAL'S SEAL  
 PROVINCE OF MANITOBA  
**A.D.G. GILARSKI**  
 Member  
 32144  
 REGISTERED PROFESSIONAL ENGINEER  
 CONSULTANT FILE NAME  
 W160034 - DD SU.DWG

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

**EMPRESS STREET PROJECT**  
 OVERPASS REHABILITATION WORKS  
 SUBSTRUCTURE  
 CENTRE PIER REHABILITATION 2

CITY DRAWING NUMBER	P-3494-94
SHEET	94 OF 169
DRAWING NO.	REV
	94 E

BID OPPORTUNITY No. 602-2018