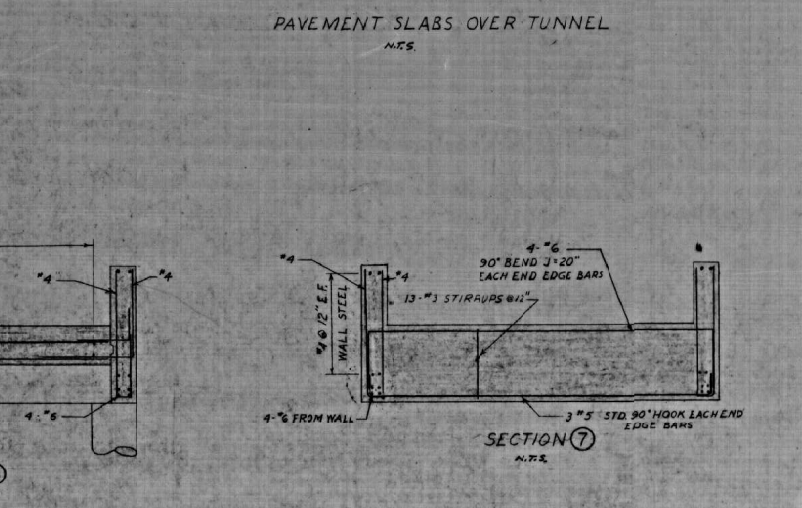
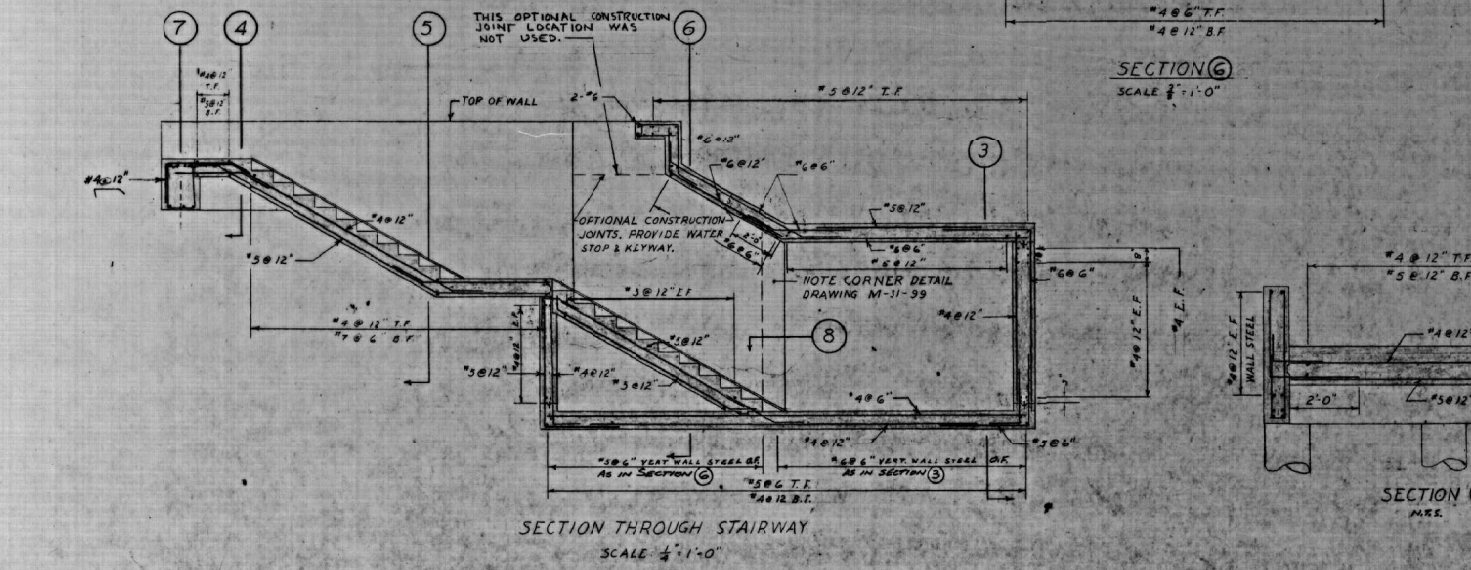


NOTE: SECTIONS 1 & 2 SHOW TYPICAL ARRANGEMENT OF TUNNEL REINFORCING. CONCRETE DIMENSIONS ON DRAWING M-29-99

- NOTES:
1. ALL CONCRETE TO BE MADE WITH SULPHATE RESISTING CEMENT TYPE I AND TO ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS.
 2. REINFORCING STEEL SHALL BE INTERMEDIATE GRADE DEFORMED BARS F-20,000 PSI. CONTRACTOR TO SUBMIT BAR LISTS AND PLACING DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. UNLESS OTHERWISE SHOWN, DETAILING SHALL BE IN ACCORDANCE WITH A.C.I. 315
 3. CHAMFER ALL EXPOSED CORNERS OF CONCRETE 3/8" EXCEPT AT TILE RECESSES
 4. CONCRETE COVER FOR REINFORCING STEEL:
SOIL FACE OF WALLS, ROOF AND FLOOR SLAB: 2"
INSIDE FACE OF TUNNEL ROOF WALLS & FLOOR: 1 1/2"
 5. MAXIMUM SIZE OF AGGREGATES: 3/4" FOR STAIRS UPPER STAIRWELL WALLS, 1 1/2" ELSEWHERE
 6. CONSTRUCTION JOINTS TO HAVE DURAJOINT HYDROSTOP 3/4" P.V.C. CONTINUOUS WATERSTOP WHERE SHOWN ON THE DRAWINGS. RELOCATION OF OR ADDITIONAL CONSTRUCTION JOINTS MUST HAVE THE APPROVAL OF THE ENGINEER.
 7. LAP ALL STEEL 3/8" BAR DIAMETERS UNLESS SHOWN OTHERWISE.
 8. REFER TO DRAWINGS M-22-99, M-31-99 AND M-36-99 FOR CONCRETE DIMENSIONS, INSERTS, CONDUITS AND OPENINGS IN CONCRETE.
 9. ABBREVIATIONS: T.F. = TOP FACE, B.F. = BOTTOM FACE, E.F. = EACH FACE, O.F. = OUTSIDE (SOIL) FACE, I.F. = INSIDE FACE

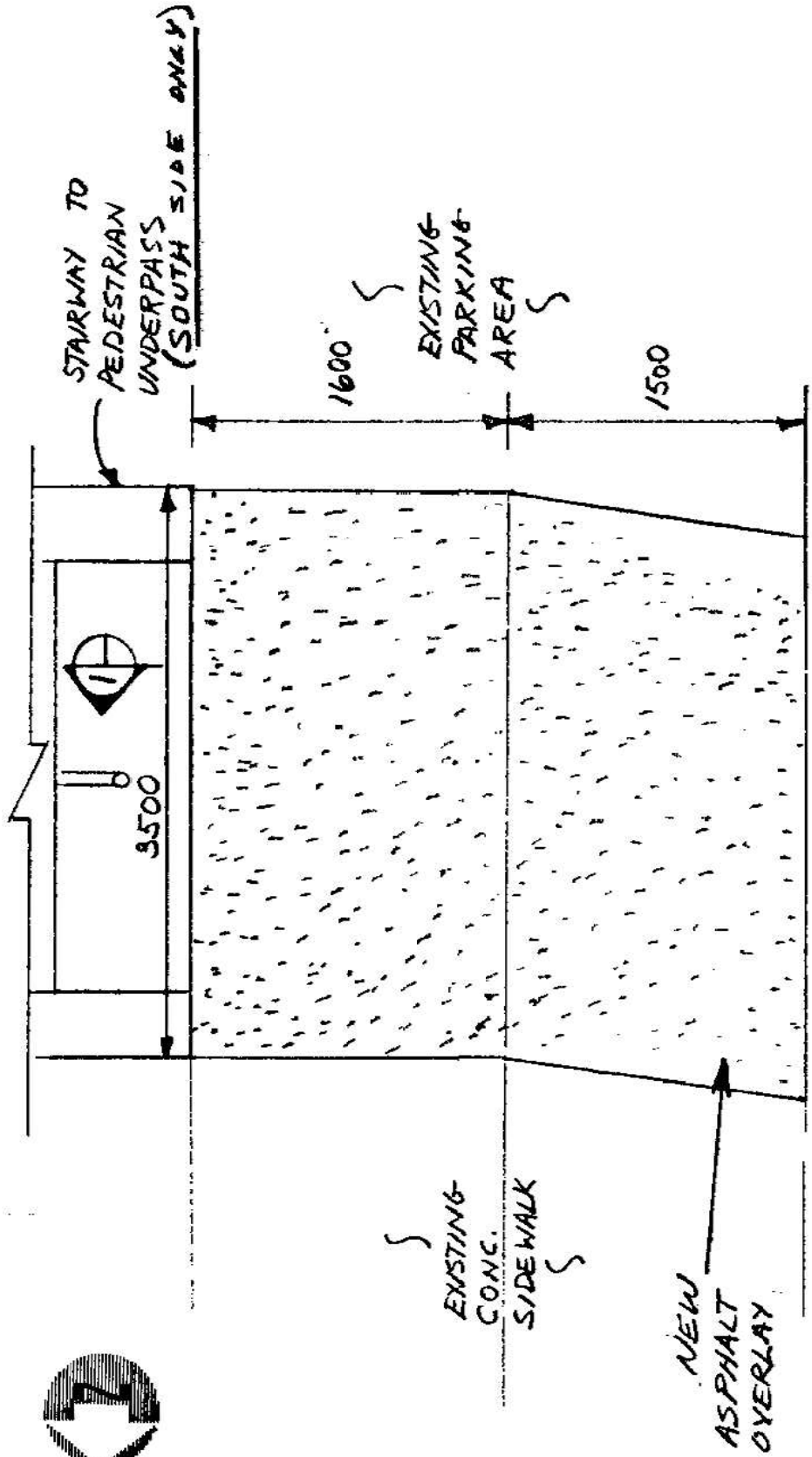
NOTE: RE "AS BUILT"
REINFORCING STEEL WAS ASSEMBLED AND PLACED AS SHOWN ON
GWINN STEEL CO. D.W.G. 8191-1 APPROVED JUNE 22, 1965



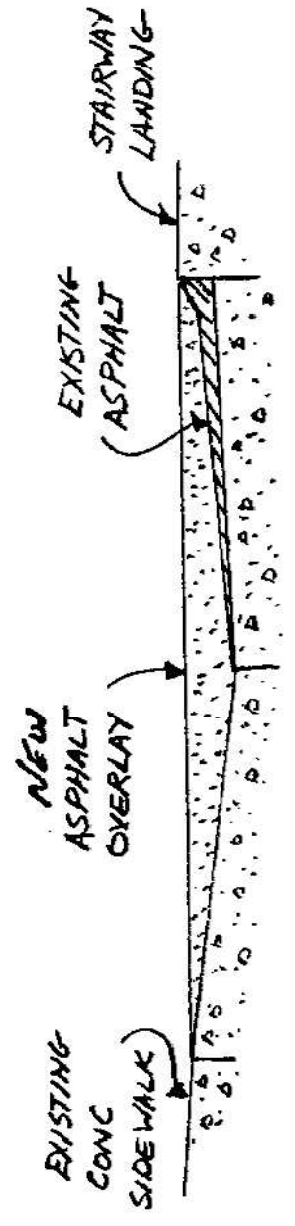
NO.	DESCRIPTION	BY	DATE
1	REVISED TO AS BUILT	R.C.I.	DEL 11/67
REVISIONS			
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION FERMOR PEDESTRIAN UNDERPASS REINFORCING STEEL			
TEMPLETON ENGINEERING COMPANY			
DESIGNED BY: AM/ie	SCALE: AS SHOWN	PLAN NO. N-30-99	
CHECKED BY: RE	DATE: APRIL 2, 1965		
APPROVED BY: K			



5W-31



EXISTING CONC. SIDEWALK
PLAN
NTS




SECTION
NTS



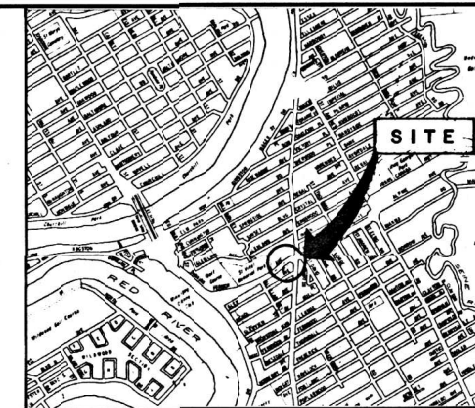
B-5353

AS BUILT
APPROVED BY: *R. A. Wiebe*

CITY OF WINNIPEG ACCEPTED FOR CONST. BY <i>BR Smith</i> DATE 01-10-01 APPROVED BY <i>MB Dillon</i> DATE 25/7/81		MM DILLON	
 DILLON Consulting Engineers & Planners	TITLE ST. VITAL LIBRARY PEDESTRIAN UNDERPASS ON FERMOY AVENUE PLACEMENT OF SIDEWALK ASPHALT PATCH PROJECT BRIDGE MAINTENANCE PHASE B102 A		PROJECT NO. 9029-02 DRAWING NO. U218-81-01 / of 1
	DATE JULY, 1981		



FERMOR AVE



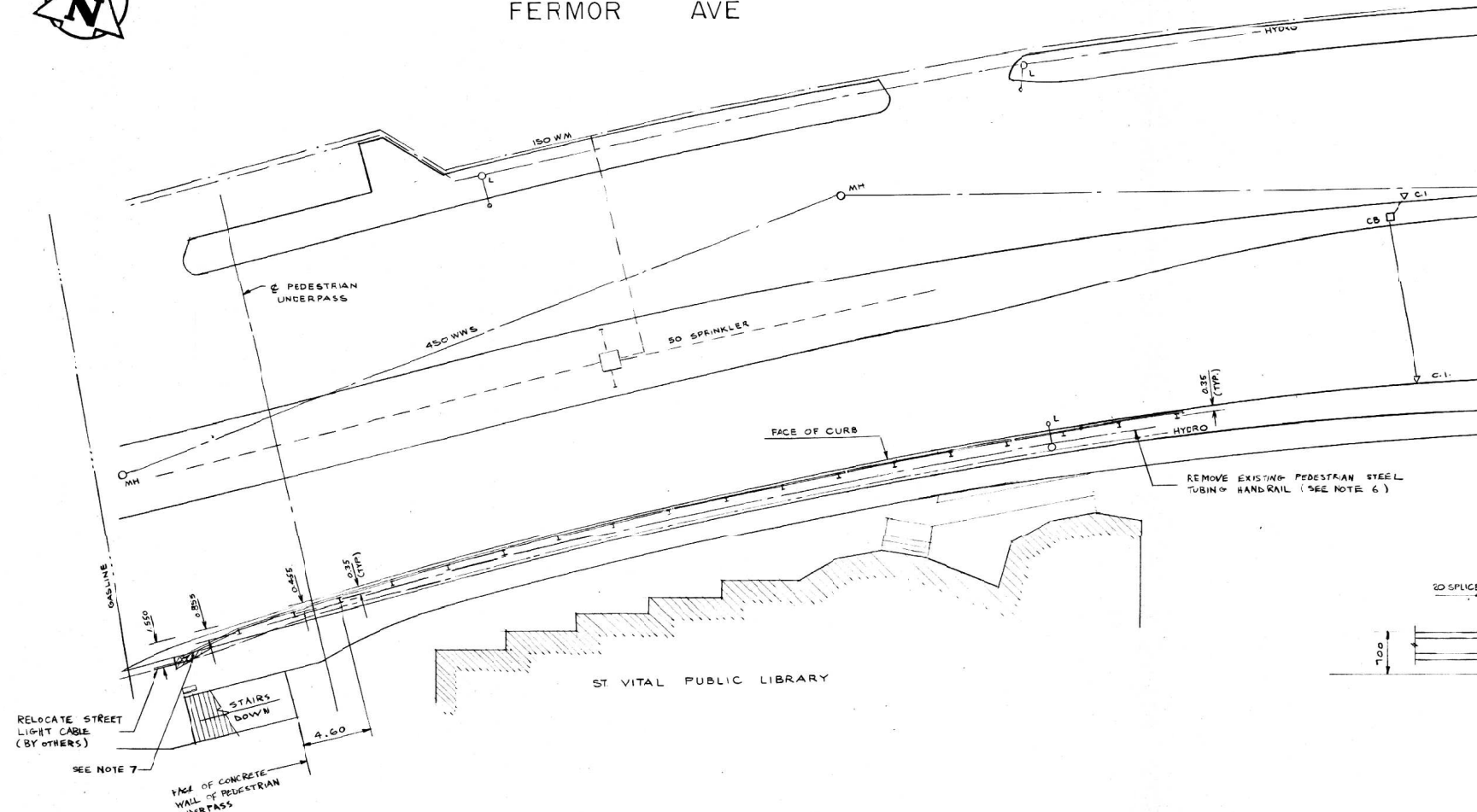
LOCATION PLAN

* MATERIALS TO BE SUPPLIED BY THE CITY OF WINNIPEG

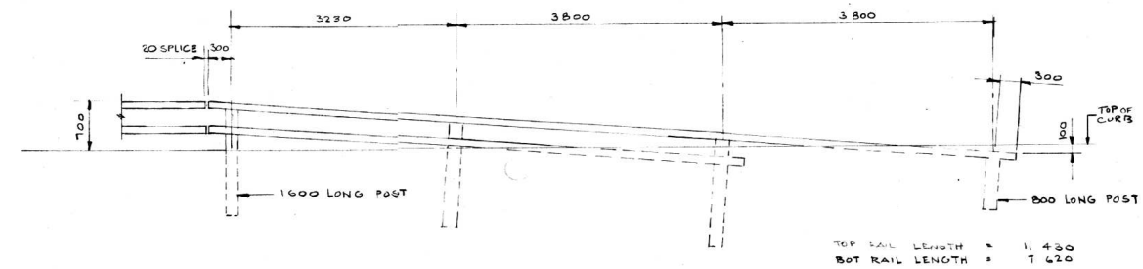
BILL OF MATERIALS *		
ITEM		SOUTH
BARRIER RAIL	11.43	10
BARRIER RAIL	7.62	2
BARRIER RAIL	3.81	1
BARRIER POST	0.80	1
BARRIER POST	1.60	10
RAIL END CAPS		2
SPLICE BAR		11
RAIL CLAMP BAR		74
13-13 X 25 STAINLESS STEEL HEAVY HEAD CAP SCREW		192
27 O.D. X 14 I.D. X 2 THICK STAINLESS STEEL WASHER		192

NOTES:

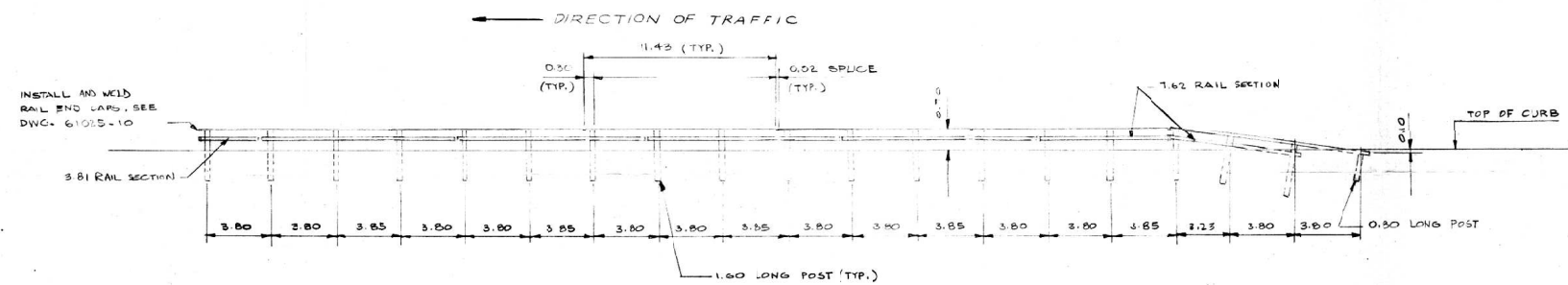
1. ALL DIMENSIONS ARE FROM FACE OF CURB TO CENTER LINE OF POSTS.
2. ALL POSTS ARE 1.60 LONG UNLESS OTHERWISE INDICATED.
3. ALL RAIL SECTIONS ARE 11.43 UNLESS OTHERWISE INDICATED.
4. HEIGHT OF TOP OF POST IS MEASURED FROM EXISTING GRADE AT FACE OF POST.
5. REFER TO DRAWING GH15-10 FOR STANDARD DETAILS.
6. EXISTING POSTS ARE EMBEDDED IN CONCRETE.
7. CUT AND REMOVE EXISTING SIDEWALK TO INSTALL POSTS.



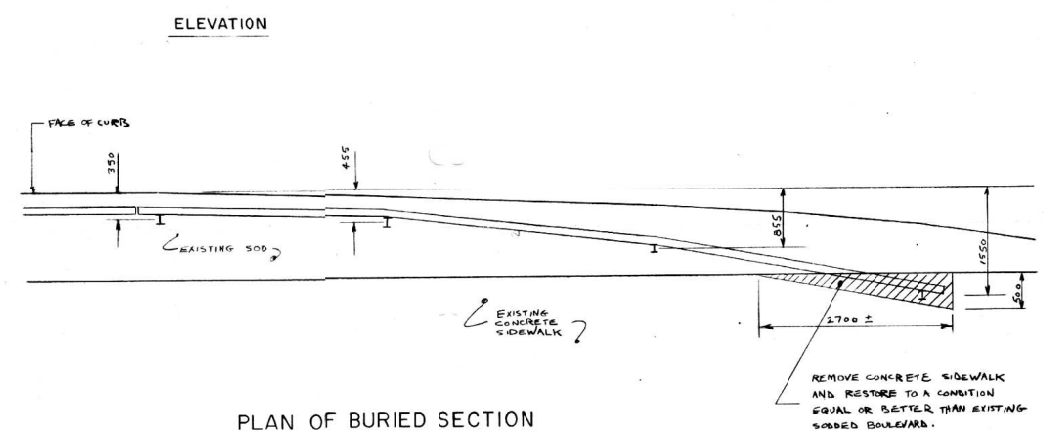
PLAN
1:200



ELEVATION OF BURIED SECTION
1:50



SOUTH ELEVATION
1:200 HORIZ



PLAN OF BURIED SECTION
1:50

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALS INDICATE METRES

LOCATION APPROVED UNDERGROUND STRUCTURES
 SUPPLY UNDERGROUND STRUCTURES COMMITTEE
 DATE: 8/10/28
 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

Reid Crowther
 Reid Crowther & Partners Ltd.
 Engineers-Planners-Scientists

DESIGNED BY: W. J. L.	CHECKED BY: D. R. K.
DRAWN BY: G. M.	APPROVED BY: [Signature]
HOR. SCALE: AS SHOWN	AUTHORIZED BY: [Signature]
VERT. CAL: AS SHOWN	BRIDGE ENGINEER: [Signature]
DATE: 88-07-28	ACCEPTED BY: [Signature]
	BRIDGE INSPECTOR: [Signature]

ENGINEER'S SEAL
 PROVINCE OF MANITOBA
 D. R. KRUPSKAY
 REGISTERED ENGINEER
 CONSULTANT DRAWING NO. 61125-05

THE CITY OF WINNIPEG
 WORKS AND OPERATIONS DIVISION
 STREETS AND TRANSPORTATION DEPARTMENT

1988 BRIDGE MAINTENANCE
 ST. VITAL LIBRARY PEDESTRIAN
 UNDERPASS ON FERMOR AVENUE
 LAYOUT OF ALUMINUM
 BALANCED SHOULDER BARRIER

CITY DRAWING NUMBER: U218-88-01
 SHEET 3 OF 5