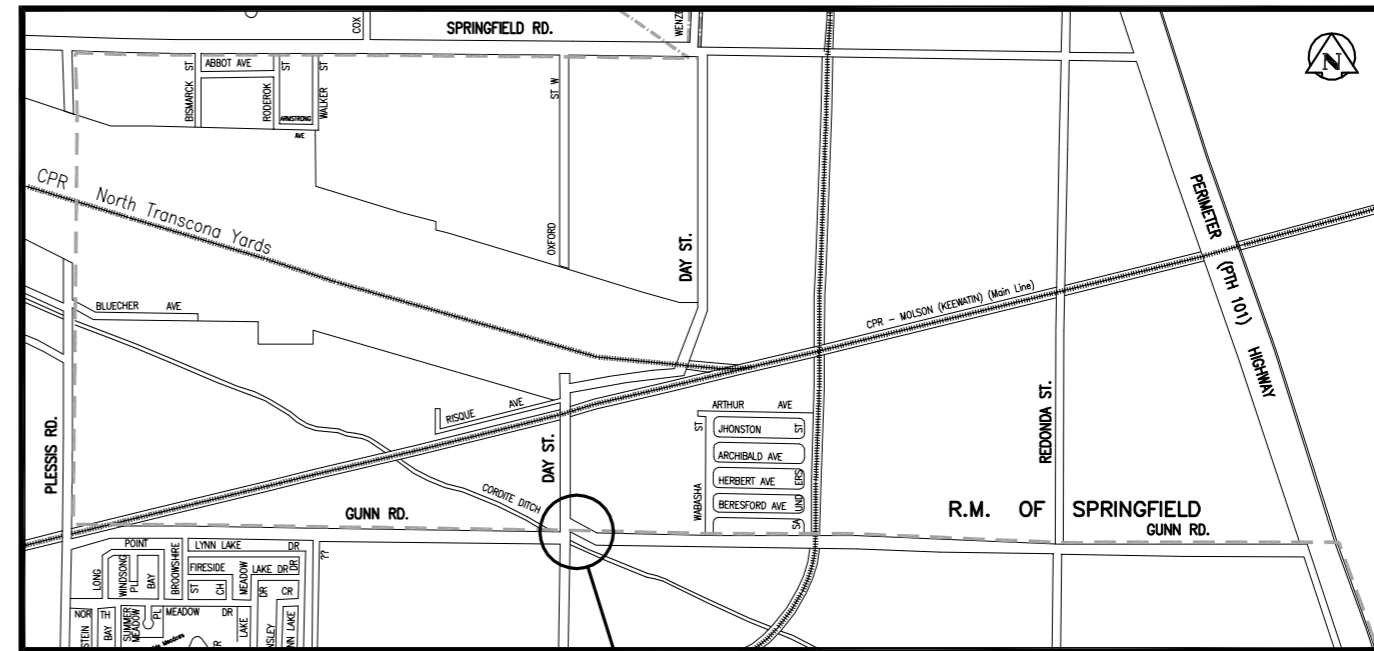


THE CITY OF WINNIPEG

PUBLIC WORKS DEPARTMENT
TRANSPORTATION ENGINEERING DIVISION



CULVERT SITE
INTERSECTION OF GUNN ROAD & DAY STREET

GUNN ROAD RECONSTRUCTION

CORDITE DITCH CULVERT REPLACEMENT AT DAY STREET AND GUNN ROAD

BID OPPORTUNITY No. 923-2009

DRAWING INDEX

C365-10-01	COVER SHEET & DRAWING INDEX	SHEET 1 OF 15
C365-10-02	SITE PLAN - EXISTING	SHEET 2 OF 15
C365-10-03	SITE PLAN - PHASE I	SHEET 3 OF 15
C365-10-04	SITE PLAN - PHASE II	SHEET 4 OF 15
C365-10-05	SITE PLAN - PHASE III	SHEET 5 OF 15
C365-10-06	SITE PLAN - COMPLETED PROJECT	SHEET 6 OF 15
C365-10-07	CONCRETE PLAN & ELEVATIONS	SHEET 7 OF 15
C365-10-08	CONCRETE SECTIONS & DETAILS	SHEET 8 OF 15
C365-10-09	REINFORCING DETAILS - SHEET 1 OF 6	SHEET 9 OF 15
C365-10-10	REINFORCING DETAILS - SHEET 2 OF 6	SHEET 10 OF 15
C365-10-11	REINFORCING DETAILS - SHEET 3 OF 6	SHEET 11 OF 15
C365-10-12	REINFORCING DETAILS - SHEET 4 OF 6	SHEET 12 OF 15
C365-10-13	REINFORCING DETAILS - SHEET 5 OF 6	SHEET 13 OF 15
C365-10-14	REINFORCING DETAILS - SHEET 6 OF 6	SHEET 14 OF 15
C365-10-15	REINFORCING BILL OF MATERIAL	SHEET 15 OF 15

DESIGN DATA

DESIGN SPECIFICATION	- CAN/CSA-S6-06
LIVE LOAD	- CL625 - DESIGN LANE LOAD
REINFORCING STEEL	- CSA G30.18 - M92 (R2002) GRADE 400W
CONCRETE STRENGTH AT 28 DAYS	- 35 MPa

HYDRAULIC DESIGN DATA

- DESIGN DISCHARGE 1% FUTURE FLOOD
Q = 5.5m³/S
V = 2.45m/S
W.L. = 232.3
- 50% FUTURE FLOOD
Q = 0.8m³/S
V = 0.9m/S
W.L. = 231.7

GENERAL NOTES

THESE DRAWINGS TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATIONS.
EXISTING DIMENSIONS ARE APPROXIMATE ONLY. CONTRACTOR SHALL SITE VERIFY ALL DIMENSIONS.

REINFORCING

CONCRETE CLEAR COVER TO REINFORCEMENT 65mm FOR TOP FACE OF CULVERT, 50mm FOR ALL OTHER SURFACES.

SUPPLY SUPPORT BARS TO SUPPORT MAIN REINFORCEMENT AS REQUIRED.

LAP SPLICE SCHEDULE

BAR SIZE	EMBEDMENT	TENSION LAP
15M	400	550
20M	500	700
25M	800	1100

LAP SPLICE SCHEDULE IS FOR CLASS B SPLICE UNLESS NOTED OTHERWISE AND APPLIES TO REINFORCING SPLICES NOT OTHERWISE DETAILED.

LOCATE REINFORCING SPLICES NOT INDICATED ON THE DRAWINGS AT POINTS OF MINIMUM STRESS. LOCATIONS OF SPLICES TO BE APPROVED BY THE ENGINEER.

BEFORE PLACING REBAR, ENSURE IT IS CLEAN, FREE OF LOOSE SCALE, DIRT, OR OTHER FOREIGN COATING WHICH WOULD REDUCE THE BOND TO CONCRETE.

LIST OF ABBREVIATIONS

@	AT	IB	IRON BAR
ALT.	ALTERNATING	I.F.	INSIDE FACE
ALUM.	ALUMINUM	LG.	LONGE
APPROX.	APPROXIMATE	MRK.	MARK
AVE.	AVENUE	MAX.	MAXIMUM
B.C.	BEGINNING OF CURB	m	METRE
BOT.	BOTTOM	MIN.	MINIMUM
B/W	BOTH WAYS	mm	MILLIMETRE
C.I.P.	CAST-IN-PLACE	No.	NUMBER
CJ.	CONSTRUCTION JOINT	O/C	ON CENTRE
CL.	CENTRE LINE	O/O	OUTSIDE TO OUTSIDE
C/W	COMPLETE WITH	PL.	PLATE
CONC.	CONCRETE	QTY.	QUANTITY
CONT.	CONTINUOUS	R	RADIUS
CL.	CLEAR	REINF.	REINFORCEMENT
CRES.	CRESCENT	SHT.	SHEET
DBL.	DOUBLE	S.U.	SUBSTRUCTURE UNIT
DIA.	DIAMETER	THK.	THICK
DTL.	DETAIL	TYP.	TYPICAL
DWG.	DRAWING	T/O	TOP OF
E.C.	END OF CURB	U.N.O.	UNLESS NOTED OTHERWISE
E.E.	EACH END	U/S	UNDERSIDE
E.F.	EACH FACE	VERT.	VERTICAL
E.W.	EACH WAY	WM	WORKMAN
EQ.	EQUAL	WP	WORKING POINT
EQ. SP.	EQUAL SPACE	W/	WITH
EL.	ELEVATION		
GALV.	GALVANIZING		
GRAN.	GRANULAR		
HORIZ.	HORIZONTAL		

LOCATION PREFIX

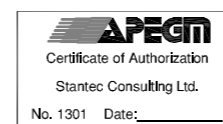
H - HEADWALL

REINFORCING MARK NUMBERING SYSTEM

eg: H 25 15
MARK SIZE OF BAR LOCATION PREFIX

SECTION AND DETAILS

- A SECTION NUMBER OR DETAIL LETTER
- B DRAWING WHERE SECTION OR DETAIL IS TAKEN
- C DRAWING WHERE SECTION OR DETAIL IS DRAWN



Stantec Consulting Ltd.

WINNIPEG

MANITOBA

RELEASED FOR CONSTRUCTION BY:

KEN TURKO, P.ENG.

DATE:

CONSULTANT DRAWING No.

G-001

CITY DRAWING No.

C365-10-01

CAD FILE DRAWING No.

05170g-001-726.dwg