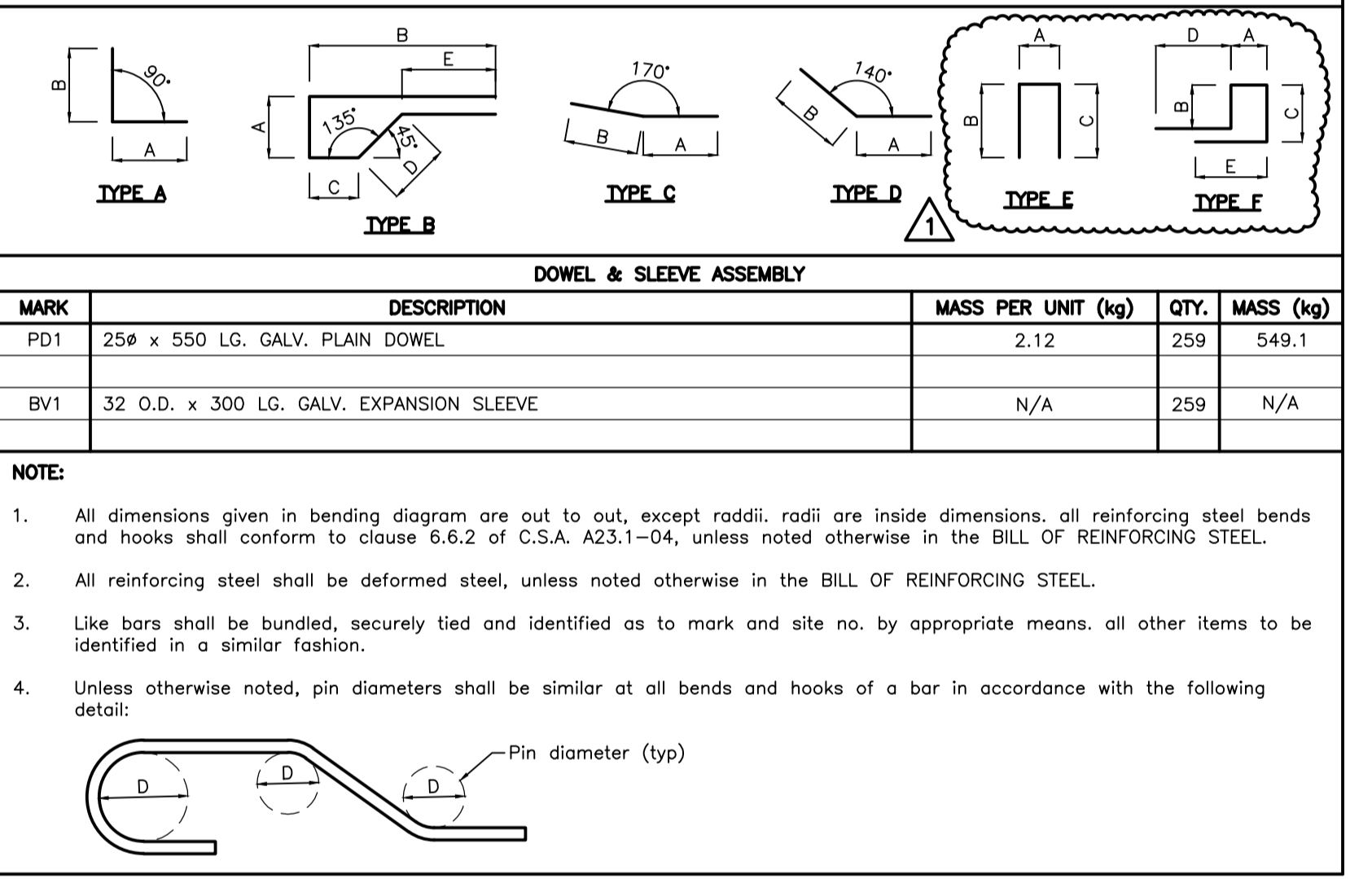


BILL OF REINFORCING STEEL														
EAST SIDEWALKS AND CURBS														
STRAIGHT BARS								BENT BARS						
MARK	QTY.	LENGTH (mm)	MASS (kg)	MARK	QTY.	TYPE	A	B	C	D	E	LENGTH (mm)	MASS (kg)	
E1601X	1722	6000	10941.8	E1629X	68	B	310	1110	190	450	600	2660	281.4	
E1602X	11	8630	147.7	E1630X	11	C	900	900				1800	30.8	
E1603X	1	7780	12.1	E1631X	18	D	700	700				1400	39.2	
E1604X	4	4920	30.0	E1632X	1285	A	600	1200				1800	3599.0	
E1605X	12	4460	83.3	E1633X	676	E	160	600	600			1360	1430.5	
E1606X	630	3750	3676.1	E1634X	199	F	170	245	245	600	600	1860	575.9	
E1607X	54	3735	313.8	E1639X	11	B	280	1110	190	450	600	2630	45.0	
E1608X	18	3325	93.1											
E1609X	76	3400	402.1											
E1610X	294	3230	1477.6											
E1611X	132	3225	662.4											
E1612X	187	3150	916.6											
E1613X	424	3050	2012.2											
E1614X	12	2940	54.9											
E1615X	84	2750	359.4											
E1616X	90	2450	343.1											
E1617X	6	2400	22.4											
E1618X	42	2200	143.8											
E1619X	3	2355	11.0											
E1620X	30	2025	94.5											
E1621X	19	1700	50.3											
E1622X	20	1650	51.3											
E1623X	14	1575	34.3											
E1624X	1	1445	2.2											
E1625X	1	1075	1.7											
E1626X	1	790	1.2											
E1627X	5	5500	8.6											
E1628X	2	1200	3.7											
E1635X	1	1955	3.0											
E1636X	1	3820	5.9											
E1637X	2	1360	4.2											
E1638X	20	2625	81.7											
E1639X	92	3950	565.5											
TOTAL MASS OF MMFX STEEL REINFORCING = 28613.3 kg														



NOTE:

- All dimensions given in bending diagram are out to out, except radii. radii are inside dimensions. all reinforcing steel bends and hooks shall conform to clause 6.6.2 of C.S.A. A23.1-04, unless noted otherwise in the BILL OF REINFORCING STEEL.
- All reinforcing steel shall be deformed steel, unless noted otherwise in the BILL OF REINFORCING STEEL.
- Like bars shall be bundled, securely tied and identified as to mark and site no. by appropriate means. all other items to be identified in a similar fashion.
- Unless otherwise noted, pin diameters shall be similar at all bends and hooks of a bar in accordance with the following detail:

APEGM
Certificate of Authorization
Stantec Consulting Ltd.
No. 1301

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES
UNLESS INDICATED OTHERWISE

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE DATE

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
1	ISSUED FOR ADDENDUM No.1	16.07.13	K.A.
0	ISSUED FOR TENDER	16.07.04	K.A.

Stantec
500 - 311 Portage Avenue, Winnipeg MB Canada
www.stantec.com

DESIGNED BY: S.Y.	CHECKED BY: K.S.A.
DRAWN BY: J.M.B.	APPROVED BY: B.J.W.
HOR. SCALE: AS NOTED	RELEASED FOR CONSTRUCTION: DATE
VERTICAL: AS NOTED	DATE: 2016.07.04

ENGINEER'S SEAL

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

2016 REGIONAL STREET PROGRAM
ARCHIBALD STREET
UNDERPASS REHABILITATION
EAST SIDEWALK REINFORCING DETAILS (2 OF 2)

SHEET 48 OF 62
CAD FILE DRAWING NUMBER 06880s-12B-884.dwg
CITY DRAWING NUMBER U205-16-48

CONSULTANT DRAWING NO. S-132

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