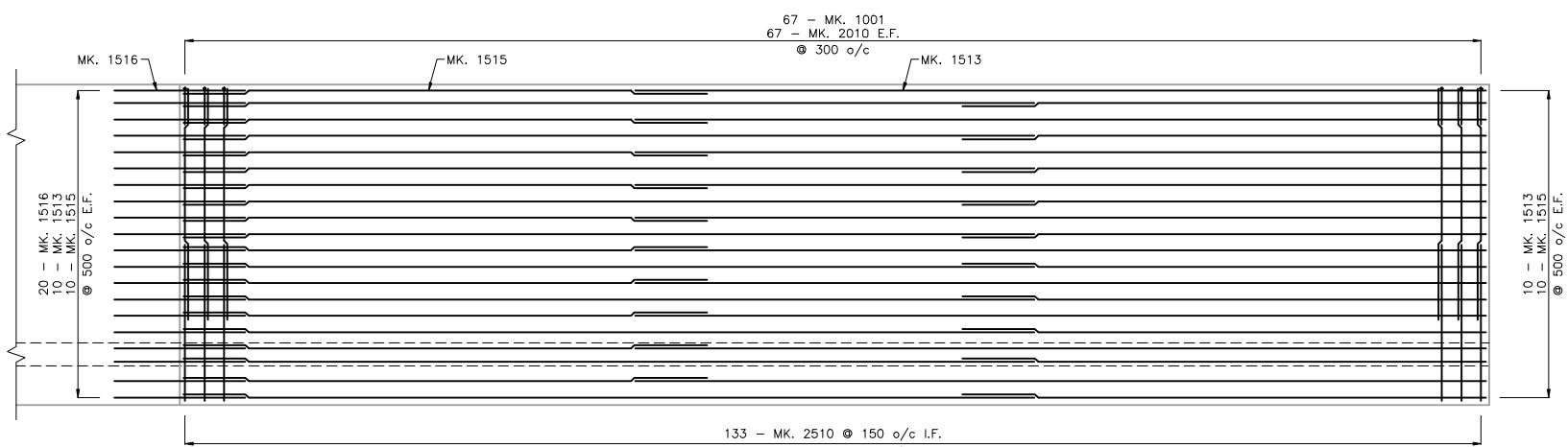
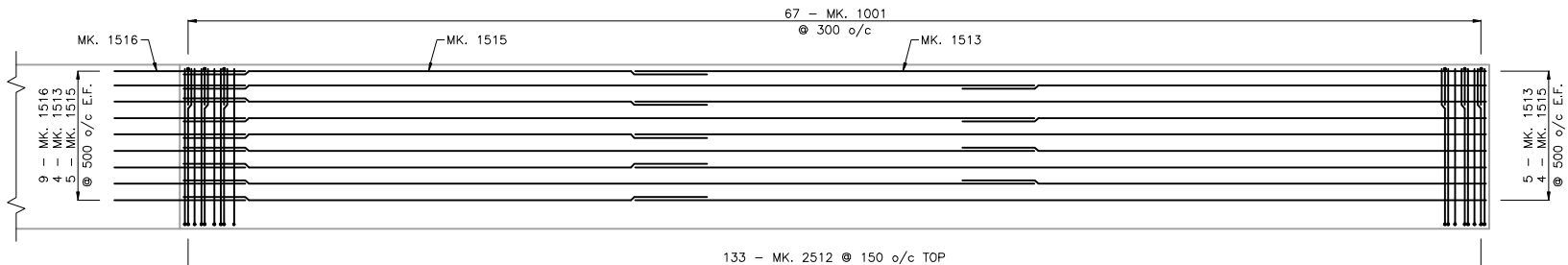


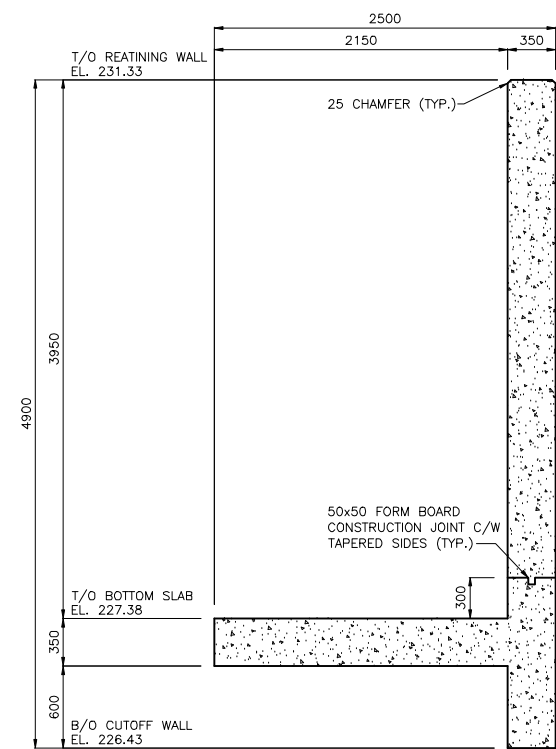
A VIEW
7 13



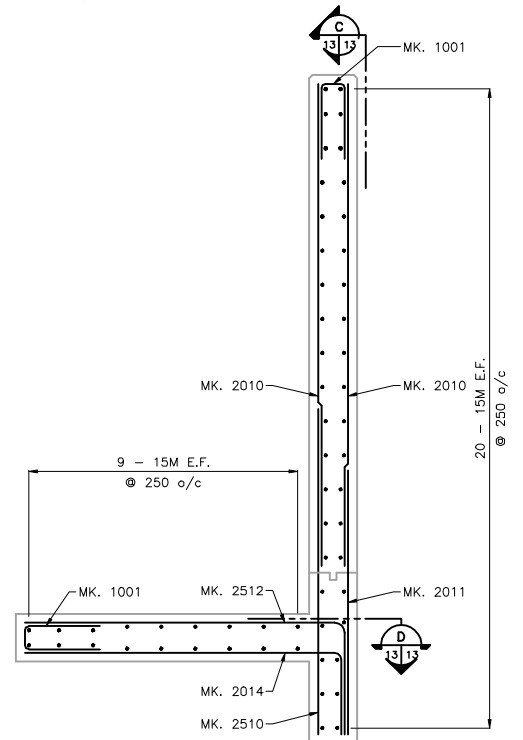
C VIEW
13 13



D SECTION
13 13



B TYP. WINGWALL SECTION
13 13 1:25



B TYP. WINGWALL REINFORCING
13 13 1:25

- NOTES:**
- ALL DIMENSIONS GIVEN ARE OUT TO OUT, EXCEPT RADI. RADI ARE INSIDE DIMENSIONS.
 - ALL REINFORCING STEEL SHALL BE DEFORMED STEEL UNLESS NOTED OTHERWISE.
 - 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.

STRAIGHT BARS				WINGWALL				BENT BARS				BAR TYPES		
MARK	QTY.	LENGTH (mm)	MASS (kg)	MARK	QTY.	TYPE	A	B	C	LENGTH (mm)	MASS (kg)			
1513	58	13000	1183.8	1001	134	C	220	600	600	1420	149.4			
1515	58	8000	728.5	2014	67	A	2370	600		2970	466.6			
1516	58	2000	182.1	2512	133	A	2370	820		3190	1665.3			
2010	133	3535	1107.2	TOTAL MASS OF REINFORCING STEEL								7273.1 kg		
2011	67	2285	360.5											
2510	133	2735	1427.7											

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
0	ISSUED FOR TENDER	11.01.06	K.S.A.
		DATE	2010.01.04

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DESIGNED BY	K.S.A.	CHECKED BY	K.S.A.
DRAWN BY	J.M.B.	APPROVED BY	K.S.A.
SCALE:	1:50	RELEASED FOR CONSTRUCTION:	U.N.O.

ENGINEER'S SEAL	
CONSULTANT DRAWING NO.	S-107

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

KENASTON BOULEVARD
AT BISHOP GRANDIN BOULEVARD
CONCRETE CULVERT EXTENSION
RETAINING WALL CONCRETE & REINFORCING

SHEET **13** OF **13**
CAD FILE DRAWING NUMBER **04840s-107-727.dwg**
CITY DRAWING NUMBER **C375-II-13**