

LEGEND

- EXISTING CHECKERED PLATE OR NOT IN CONTRACT
- HINGED SIDE
- CHECKERED PLATE
- HINGED SIDE
- EXISTING GRATING OR NOT IN CONTRACT
- GRATING
- GRATING
- LINTEL
- MAIN SPANNING OF STRUCTURAL ELEMENT

DESIGN NOTES

(NOTE: THIS INFORMATION IS FOR REFERENCE PURPOSES ONLY. CONTRACTOR TO REFER TO SPECIFICATIONS.)

- CONCRETE 28-DAY COMPRESSIVE STRENGTH:
 MIX TYPE 3 30MPa INTERIOR STRUCTURAL CONCRETE
 MIX TYPE 5 25MPa MISCELLANEOUS CONCRETE
 MIX TYPE 6 20MPa CONCRETE BLOCK MASONRY GROUT AND INFILL
- REINFORCEMENT BARS: CAN/CSA-G30.18-M92 (R2002); GRADE 400R, 400W WHERE INDICATED.
- ANCHOR BOLTS:
ASTM A307; UNLESS NOTED OTHERWISE
- STRUCTURAL STEEL: CAN/CSA-G40.21-M98; GRADE 350W, 300W.
- ALUMINUM: ASTM B221M-02; ALLOY 6351-T6, FOR STRUCTURAL EXTRUDED SHAPES, UNLESS NOTED OTHERWISE.
- MAXIMUM GROUNDWATER LEVEL ELEVATION 236.000
- SNOW LOAD DATA:
 GROUND SNOW LOADING $S_s = 1.7 \text{ kPa}$
 ASSOCIATED RAIN LOADING $S_r = 0.2 \text{ kPa}$
- WIND LOAD DATA:
 1/100 YEAR PRESSURE (q_{100}) 0.49 kPa
- SEISMIC DATA:
 ACCELERATION-RELATED SEISMIC ZONE $Z_a = 0$
 VELOCITY-RELATED SEISMIC ZONE $Z_v = 0$
 ZONAL VELOCITY RATIO $v = 0$
- REFERENCE CODES:
 i) NATIONAL BUILDING CODE OF CANADA 1995 (R2003) WITH THE 1999 MANITOBA AMENDMENTS.
 ii) ALUMINUM: CSA-S157/S157.1-05
 iii) STRUCTURAL STEEL: CAN/CSA-S16.01

ABBREVIATIONS

AB	ANCHOR BOLT	JT	JOINT
AL	ALUMINUM	LG	LONG
ADD	ADDITIONAL	LL	LIVE LOAD
ALT	ALTERNATE	LLH	LONG LEG HORIZONTAL
ARCH	ARCHITECTURAL	LLV	LONG LEG VERTICAL
		LPT	LOW POINT
		LSSJ	LONG SPAN STEEL JOIST
BLDG	BUILDING	MAX	MAXIMUM
BLL	BOTTOM LOWER LAYER	MC	MOMENT CONNECTION
BM	BEAM	MECH	MECHANICAL
BOC	BOTTOM OF CONCRETE	MEZZ	MEZZANINE
BOP	BOTTOM OF PIPE	MH	MANHOLE
BOT	BOTTOM	MID	MIDDLE
B PL	BASE OR BEARING PLATE	MIN	MINIMUM
BUL	BOTTOM UPPER LAYER	MISC	MISCELLANEOUS
		MPDD	MODIFIED PROCTOR DRY DENSITY
C TO C	CENTRE TO CENTRE	MW	MEMBRANE WATERPROOFING
CB	CATCH BASIN	NF	NEAR FACE
CHKD PL	CHECKERED PLATE	NIC	NOT IN CONTRACT
CJ	CONSTRUCTION JOINT	NO.	NUMBER
CL	CENTRE LINE	NTS	NOT TO SCALE
CLJ	CONTROL JOINT	OC	ON CENTRE
CLSM	CONTROLLED LOW STRENGTH MATERIAL	OD	OUTSIDE DIAMETER
		O.F.	OUTSIDE FACE
CMU	CONCRETE MASONRY UNIT	OPNG	OPENING
CO	CLEAN OUT	OPP	OPPOSITE
COL	COLUMN	OWSJ	OPEN-WEB STEEL JOIST
CONC	CONCRETE	PCAP	PILE CAP
CONN	CONNECTION	PCC	PRECAST CONCRETE
CONT	CONTINUOUS	PE	POLYETHYLENE
CW	CAPILLARY WATERPROOFING	PERF	PERFORATED
		PL	PLATE
DET	DETAIL	PLCS	PLACES
DIA	DIAMETER	PS	PIPE SUPPORT
DBS	DOWEL BAR SPLICER(S)	PVC	POLYVINYL CHLORIDE
DIM	DIMENSION	R	RISERS
DL	DEAD LOAD	R	RADIUS
DN	DOWN	REINF	REINFORCING STEEL BAR
DO.	DITTO	REQD	REQUIRED
DWG	DRAWING(S)	SEP JT	SEPARATION JOINT
DWL	DOWEL(S)	SIM	SIMILAR
		SP	SPACING
EA	EACH	SPS	SPACES
EF	EACH FACE	SPEC	SPECIFICATION/SPECIFIED
EL	ELEVATION	SPDD	STANDARD PROCTOR DRY DENSITY
EQL	EQUAL	SQ	SQUARE
EQPT	EQUIPMENT	SST	STAINLESS STEEL
ES	EACH SIDE	STD	STANDARD
EW	EACH WAY	STL	STEEL
EXST	EXISTING	STGR	STAGGERED
EXP JT	EXPANSION JOINT	STIF	STIFFENER
		STIRR	STIRRUP
FD	FLOOR DRAIN	SYMM	SYMMETRICAL
FF	FAR FACE		
FNSH	FINISH	T	TREADS
FL	FLOOR	T&B	TOP AND BOTTOM
FRP	FIBRE REINFORCED	TJ	TIE JOIST
FTG	FOOTING	TLL	TOP LOWER LAYER
		T.O.	TOP OF
GALV	GALVANIZED	TOC	TOP OF CONCRETE
GL	GRID LINE	TOS	TOP OF STEEL
GD	GUTTER DRAIN	TUL	TOP UPPER LAYER
GID	GROUTED-IN DOWEL	TYP	TYPICAL
GRAN	GRANULAR	U/S	UNDERSIDE
		UNO	UNLESS NOTED OTHERWISE
HEF	HORIZONTAL EACH FACE	VERT	VERTICAL
HORIZ	HORIZONTAL	VEF	VERTICAL EACH FACE
HPT	HIGH POINT	VIF	VERTICAL INSIDE FACE
HSS	HOLLOW STRUCTURAL STEEL	VOF	VERTICAL OUTSIDE FACE
HWL	HIGH WATER LEVEL	W	WIDE
H	HIGH	W/	WITH
H & V	HORIZONTAL AND VERTICAL	W/O	WITHOUT
		WS	WATER STOP
ID	INSIDE DIAMETER	WWF	WELDED WIRE FABRIC
I.F.	INSIDE FACE		
INSUL	INSULATION		
INV	INVERT		

GENERAL NOTES

- READ THE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER PERTINENT CONTRACT DOCUMENTS.
- DIMENSIONS IN MILLIMETRES. ELEVATIONS IN METRES.
- DO NOT SCALE DRAWINGS.
- CONSTRUCTION METHODS REQUIRING TEMPORARY SHORING OR BRACING SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR REVIEW. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER, EXPERIENCED AND REGISTERED IN THE PROVINCE OF MANITOBA, TO PERFORM AND TAKE RESPONSIBILITY FOR ANY SHORING AND OTHER DESIGNS REQUIRED TO COMPLETE THE CONSTRUCTION.
- ALL PLANS AND SECTIONS SHALL BE READ IN CONJUNCTION WITH STANDARD DESIGN DETAILS SHOWN ON DRAWINGS FROM WB-4451 TO WB-4454, AND THE CONTRACT DOCUMENTS UNLESS NOTED OTHERWISE.
- REFER TO ARCHITECTURAL DRAWINGS FOR CMU WALL HEIGHT, THICKNESS AND DOOR AND WINDOW OPENINGS. FOR PROCESS MECHANICAL AND PLUMBING AND ELECTRICAL OPENINGS COORDINATE WITH CONTRACT ADMINISTRATOR.
- OTHER CONTRACTS WILL BE EXECUTED CONCURRENTLY WITH THIS CONTRACT. WORK ON THOSE CONTRACTS WILL AFFECT THIS CONTRACT. COORDINATE WITH CONTRACT ADMINISTRATOR LOCATION OF ALL OPENINGS, EMBEDDED ITEMS, BLOCKOUTS, DOWELS, SLEEVES, AND INSERTS PRIOR TO STARTING ANY INSTALLATION WORK.
- DIMENSIONS, ELEVATIONS AND DETAILS OF STRUCTURES ARE BASED ON DRAWINGS FOR OTHER CONTRACTS. VERIFY ALL DIMENSIONS, ELEVATIONS AND DETAILS IN FIELD BEFORE COMMENCEMENT OF CONSTRUCTION.

<p>Certificate of Authorization CH2M HILL Canada Ltd. No. 1441 Expiry: April 30, 2008</p>	B.M. ELEV.	<p>Frederickson Cooper ARCHITECTS</p>	<p>A Tyco International Ltd. Company</p>	ENGINEER'S SEAL	<p>THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION</p>		
				DESIGNED BY: MH		CHECKED BY: AP	ORIGINAL SIGNED BY: C. MILITANO
				DRAWN BY: CR		APPROVED BY: AHL	2007/06/05
				SCALE: NTS		RELEASED FOR CONSTRUCTION BY: R. SOROKOWSKI	CONSULTANT DRAWING NO. WM-S4001
00	ISSUED FOR TENDER	07/06/05	MH	DATE: 2007/06/05	DATE: 2007/05/06		
NO.	REVISIONS	DATE	BY	DATE	DATE		

WATER TREATMENT PLANT MAIN BUILDING OFFICE AND PLANT INTERIOR FINISHES		CITY FILE NUMBER
STRUCTURAL LEGEND GENERAL NOTES AND ABBREVIATIONS		SHEET OF
		CITY DRAWING NUMBER
		1-0601M-D-S4001-001-000