ESI	IN SKIN FRICTION VALUE	<i>:</i>		
	PILE LENGTH, m	AVG. FRICTION VALUE (kPa)	PILE LENGTH, m	FRICTION VALUE (kPa)
	7.6m (25'-0")	19.1 kPa (400.0 psf)	TO 9.1m (TO 30')	19.1 kPa (400 psf
	9.1m (30'-0")	19.1 kPa (400.0 psf)	9.1m-10.7m (30'-35')	9.2 kPa (192 psf
	10.7m (35'-0")	16.6 kPa (346.6 psf)	10.7m-15.2m (35'-50')	8.0 kPa (167 psf
	12.2m (40'-0")	15.2 kPa (316.6 psf)		
	13.7m (45'-0")	14.1 kPa (295.2 psf)		
	15.2m (50'-0")	14.0 kPa (293.0 psf)		

CONCRETE

. ALL CONCRETE CONSTRUCTION, COLD WEATHER CONSTRUCTION & CONCRETE TESTING TO BE IN ACCORDANCE WITH THE LATEST EDITION OF CSA STANDARDS A23.1 AND A23.2. 2. ALL CONCRETE TO BE NORMAL WEIGHT HARD ROCK CONCRETE WITH A MINIMUM 28 DAY, OR 56 DAY COMPRESSIVE STRENGTH AS NOTED IN TABLE 2, A23.1-04. 3. CONCRETE CLASSES OF EXPOSURE (REFER TO TABLE 1, A23.1-04):

. CLASS F—2 EXPOSURE (25 MPa @28d) A. GRADE BEAMS . B. INTERIOR SLABS ON GRADE (INCLUDING TOPPING) ...CLASS N EXPOSURE (25 MPa @28d)CLASS N EXPOSURE (25 MPa @28d) C. INTERIOR STRUCTURAL SLABS D. EXTERIOR SLABS ON GRADE (SIDEWALKS, CURBS, TOPPING, PADS)......CLASS C-2 EXPOSURE (32 MPa @28d) E. EXTERIOR STRUCTURAL SLABS... ...CLASS C-1 EXPOSURE (35 MPa @28d) F. PILE CAPS....CLASS N EXPOSURE (25 MPa @28d)

4. CONCRETE SLUMP TO BE COORDINATED BETWEEN CONTRACTOR AND CONCRETE SUPPLIER CONSIDERING THE PERFORMANCE CRITERIA AND THE CONTRACTOR'S CRITERIA FOR CONSTRUCTION AND PLACEMENT. 5. MISCELLANEOUS CONCRETE ELEMENTS (PITS, TRENCHES, ETC,) TO BE MINIMUM 150mm (6") THICK REINFORCED WITH 10M @300mm (12") O/C EACH WAY UNLESS NOTED OTHERWISE.

REINFORCING

I. REINFORCING STEEL SHALL BE GRADE 400 DEFORMED NEW BILLET STOCK CONFORMING TO LATEST CSA SPECIFICATION G30.18-M92 (R2002). WELDED WIRE MESH SHALL CONFORM TO CSA G30.5-M1983, (R1991). GRADE 300 STEEL MAY BE USED FOR ALL STIRRUPS AND TEMPERATURE STEEL. 2. CONCRETE COVER TO BE AS FOLLOWS:

- A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 75mm (3"). B. EXPOSED TO EARTH OR WEATHER 50mm (2").
- C. NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: i) SLABS 20mm (3/4")
- ii) BEAMS 40mm (1 1/2")
- iii) CONCRETE COLUMNS 50mm (2")

3. TOP STEEL IN GRADE BEAMS TO BE SPLICED AT CENTER SPAN AND BOTTOM STEEL TO BE SPLICED OVER SUPPORTS. A. TENSION ZONE SPLICE TO BE AVOIDED WHEREVER POSSIBLE, BUT IF REQUIRED, LENGTH SHOULD BE SPECIFIED BY THE CONTRACT ADMINISTRATOR'S DESIGN ENGINEER. B. COMPRESSION ZONE SPLICE SHOULD NOT BE LESS THAN 30 BAR DIAMETERS.

MASONR

I. CONCRETE BLOCKS TO CONFORM TO CSA A165.1-M94 TO SPECIFICATIONS FOR, BLOCK TYPE, WATERPROOFING ADMIXTURES, ETC. 2. MASONRY WALLS TO BE BUILT WITH TYPE "S" MORTAR HAVING A MINIMUM STRENGTH OF 13 MPA 28 DAYS. MORTAR TO BE IN ACCORDANCE WITH CAN3-S304-M84. ALL MORTAR JOINTS SHALL BE FLUSH, FULL BED JOINTS. 3. USE DUR-O-WALL (OR EQUAL) SPACED VERTICALLY AT 400mm O/C.

4. COLD WEATHER CONSTRUCTION OF MASONRY SHALL CONFORM TO THE NATIONAL BUILDING CODE, WITH ADEQUATE PREHEATING OF MATERIALS, HOARDING AND HEATING DURING CONSTRUCTION AND THEREAFTER AS SPECIFIED. THE "TORCHING TECHNIQUE" WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. . MASONRY SUBCONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY BRACING OF ALL MASONRY COMPONENTS UNTIL

ALL RELATED STRUCTURAL FRAMING HAS BEEN ERECTED AND COMPLETELY INSTALLED. 6. PROVIDE EXPANSION JOINTS @ MAXIMUM OF 6.5m O/C UNO 7. PROVIDE CONTINUOUS BOND BEAMS WITH 2—15M BARS BOTTOM IN CONCRETE FILL AT TOP OF ALL EXTERIOR WALLS,

BEARING WALLS OR AS INDICATED ON DRAWINGS. PROVIDE 2-15M VERTICAL BARS AT ALL OPENINGS EXCEEDING 1200mm IN WIDTH AND AT END OF WALLS. FILL WITH CONCRETE. 8. INSPECTION HOLES SHALL BE LEFT AT THE BASE OF CONCRETE FILLED WALLS. 9. MASONRY CORES SHALL BE FILLED IN LIFTS NOT EXCEEDING 3m. 10. CONCRETE BLOCKS TO HAVE COMPRESSIVE STRENGTH OF 15 MPA OR BETTER.

11. ENSURE MASONRY CORES FILLED WITH CONCRETE AT EXPANSION ANCHOR LOCATIONS. MINIMUM 4" CONCRETE ON

12. TYPICAL MASONRY LINTELS UNLESS NOTED ON DRAWINGS: SPANS UP TO 1200mm -200 U-BLOCK 2-15M CONT. BOTTOM SPANS UP TO 2000mm -400 U-BLOCK 2-15M CONT. BOTTOM

PROVIDE MINIMUM 200mm BEARING AT EACH END. 13. BRICK TIES TO BE "FERO" SLOTTED BLOCK OR STUD TIES OR APPROVED EQUAL IN ACCORDANCE WITH B6, CONNECTORS SPACED AS FOLLOWS: HORIZONTAL: 450mm 0/C

VERTICAL: 1ST ROW @ 200mm FROM TOP AND BOTTOM. 2ND ROW @ 400mm FROM TOP AND BOTTOM.

STEEL REMOVED TO ALLOW FOR ONE 3/4" BOLT CONNECTION.

GRADE BEAM REINF.-TYP. TOP & BOT.

BALANCE @ 600mm O/C. 14. INTERIOR 6" WIDE MASONRY BLOCK TO BE 15MPA UNITS, TYPE N MORTAR . INSTALL BOND BEAM AT TOP OF WALL REINFORCED WITH 1-15M BAR. INSTALL 1-15M VERTICAL BAR AT ALL CORNERS AND DOORWAYS, FILL CORES WITH CONCRETE. PROVIDE 10M DOWELS FROM CONCRETE CURB TO MASONRY WALL EVERY 4th CORE, FILL BOTTOM 2 CORES

HOLLOWCORE

CEMENT GROUT, FROM THE TOP.

WITH CSA A251.

I. THE DESIGN OF ALL PRECAST FLOOR SLABS SHALL BE BY THE SUPPLIERS ENGINEER, AS PER SPECIFICATION, TO SUPPORT LOADS INDICATED ON DRAWING. 2. DESIGNS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION CSA 135 AND TOLERANCES SHALL BE IN ACCORDANCE

3. MINIMUM STRENGTH AT 28 DAYS SHALL BE 35 MPa. 4. THE SUPPLIER SHALL CHECK WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR OPENINGS LARGER THAN 150mm AND FORM THEM IN SHOP, ALL FRAMING AND REINFORCING FOR OPENINGS TO BE DESIGNED AND SUPPLIED BY PRECAST SUPPLIER. THE SUPPLIER SHALL PROVIDE THE CONTRACTOR WITH SETTING DRAWINGS, SHOWING THE LOCATIONS OF ALL 6. HOLLOWCORE SLABS MUST BE LEVELED AND ALIGNED BEFORE GROUTING THE KEYS AND JOINTS WITH A 3:1 SAND/

STRUCTURAL STEEL + OPEN WEB STEEL JOISTS

I. ALL STRUCTURAL STEEL ROLLED SECTIONS AND STRUCTURAL PLATES SHALL CONFORM TO THE LATEST EDITION OF CSA STANDARDS G40.21-M 350W. ALL HOLLOW STRUCTURAL SECTION SHALL CONFORM TO THE LATEST EDITION OF CSA STANDARD G40.21-M 350W. 2. ALL ANCHOR BOLTS SHALL CONFORM TO THE LATEST EDITION OF ASTM A307 UNLESS OTHERWISE NOTED. BOLTED CONNECTION SHALL BE TORQUE-TESTED IN ACCORDANCE WITH THE LATEST EDITION OF CSA S16.1. ANCHOR BOLTS TO BE 3/4"ø x18" C/W 3" HOOK. 3. ALL WELDERS AND WELDING PROCEDURES TO BE CERTIFIED BY CANADIAN WELDING BUREAU. 4. ALL OPEN WEB STEEL JOISTS TO BE DESIGNED ACCORDING TO THE REQUIREMENTS OF CSA STANDARD S-16 AND S-136, FOR THE LOADS SHOWN ON PLAN (INCLUDING MECHANICAL EQUIPMENT). 5. EXTEND THE BOTTOM CHORD AT THE END OF JOISTS, WHENEVER JOISTS LINE UP WITH CENTER LINE OF COLUMN. 3. MAXIMUM ALLOWABLE LIVE LOAD DEFLECTION FOR OPEN WEB STEEL JOISTS IS L/240 FOR ROOFS AND L/360 FOR 7. PROVIDE STIFFENER PLATES TO BOTH SIDES AT WEBS OF BEAMS BEARING OVER COLUMNS. THE PLATES ARE TO BE OF THE SAME THICKNESS AS COLUMN FLANGES FOR W-SHAPES, COLUMN WALL FOR HSS SHAPES OR 9mm WHICHEVER 3. REINFORCING FOR ALL OPENINGS IN STEEL DECK GREATER THAN 400mm x 400mm IS TO BE DESIGNED, SUPPLIED AND INSTALLED BY THE STRUCTURAL STEEL SUPPLIER UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL DRAWINGS FOR REQUIRED OPENINGS.). STEEL FABRICATOR TO DESIGN AND SUPPLY ANGLES AS INDICATED FOR SUPPORT AND SUSPENSION OF MECHANICAL

10. CROSS BRACING CONNECTIONS TO BE DESIGNED TO RESIST THE GROSS AREA OF THE BRACE LESS THE AREA OF

1200 LONG CORNER BARS

-ALL CORNER BARS TO BE

GRADE BEAM REINF .--

TYP. TOP & BOT.

TYPICAL CORNER BAR DETAIL

TOP AND BOT.

15M TYPICAL.

(S-1.0**) SCALE: 1:25**

ROOF DECK

1. ROOF DECK TO BE 1 1/2" DEEP (22 Ga.), ZINC COATED, TRANSVERSE WELDS AT 12" O/C. SIDE LAP BUTTON PUNCH AT 24" O/C. UNLESS OTHERWISE NOTED ON DRAWINGS OR IN SPECIFICATIONS. 2. STEEL ROOF DECK TO COVER THREE SPANS MINIMUM AND TO ACT AS A STRUCTURAL DIAPHRAGM. 3. ALL ROOF DECK OPENINGS 400mm x 400mm OR LARGER TO BE REINFORCED.

STRUCTURAL STEEL STUDS

1. REFERENCE STANDARD CSA CAN3-S136-M84 COLD FORMED STEEL STRUCTURAL MEMBERS. 2. ALL STUDS SHALL BE OF TYPE, SIZE, AND GAUGE SHOWN ON DRAWINGS. ALL 18 Ga. OR LIGHTER STUDS SHALL BE FORMED FROM GRADE A STEEL WITH MINIMUM YIELD OF 33 KSI. MIN. FLANGE TO BE 1 5/8" FOR 18 AND 20 Ga. AND 1 1/4" FOR 22 Ga. STEEL TO MEET REQUIREMENTS OF ASTM A446. 3. ALL STUD COMPONENTS SHALL BE L.Z.C. GALVANIZED.

4. SUPPLY AND INSTALL STEEL STUDS IN ONE PIECE FULL WALL HEIGHT UNLESS OTHERWISE NOTED, SPLICING IS NOT PERMITTED UNLESS OTHERWISE NOTED. 5. TOP AND BOTTOM TRACK SHALL BE OF THE SAME GAUGE AS STUDS UNLESS NOTED OTHERWISE, TRACK AND STUDS SHALL BE ANCHORED TO THE FLOOR AND/ OR ADJACENT STRUCTURE TO PROPERLY TRANSFER ALL IMPOSED LOADS.

6. WHEN REQUIRED, INSTALL FULL SIZE SHIMS BELOW BOTTOM TRACK AT STUD LOCATIONS AND/ OR SET TRACK ON 7. THE CONTRACTOR IS TO PROVIDE ALL NECESSARY BRIDGING TO ENSURE PROPER ALIGNMENT OF THE STUDS AND STRUCTURAL INTEGRITY DURING CONSTRUCTION. 8. CONTRACTOR TO SUBMIT DETAIL DRAWINGS, SEALED BY A PROFESSIONAL ENGINEER, DEPICTING ALL CONNECTION DETAILS TO THE CONTRACT ADMINISTRATOR FOR APPROVAL PRIOR TO COMMENCING WORK. DETAILS SHALL INCLUDE PROVISION FOR DEFLECTION OF MAIN STRUCTURAL COMPONENTS.

9. STUD REINFORCING, IF REQUIRED, TO BE INSTALLED AS NOTED ON THE DRAWINGS. 10. ALL STUDS SHALL BE REINFORCED AS SHOWN AND ERECTED TRUE AND PLUMB, AND TEMPORARY BRACING SHALL BE INTRODUCED WHEREVER NECESSARY 11. PROVIDE BUILT-UP STEEL STUD FRAMING AS REQUIRED AT ALL OPENINGS.

VERTICAL STUDS REQUIRED	OPENING WIDTH
2	〈 48"
3	48" - 80"
4	80" - 108"

ITEMS EMBEDDED IN CONCRETE

SEE ALSO CSA-A23.1 - CLAUSE 12.5
EXCEPT WHEN APPROVED BY THE STRUCTURAL ENGINEER, PIPES, CONDUITS, AND SLEEVES EMBEDDED IN CONCRETE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:

A. NOT WITHSTANDING THE SATISFYING OF THESE GUIDELINES, THE CONDUIT, SLEEVES, PIPES ETC. SHALL NOT IMPAIR THE STRUCTURAL STRENGTH AND SHALL BE MOVED IF SO DIRECTED BY THE STRUCTURAL ENGINEER. B. CENTERLINE SPACING TO BE NOT LESS THAN 3 DIAMETERS.

CENTERLINE SPACING BETWEEN PARALLEL CONDUIT AND REINFORCING BARS TO BE 3 DIAMETERS. D. ADD REINFORCING AT POINTS OF CONGESTION AS DIRECTED BY THE STRUCTURAL ENGINEER. 2. FOR SLABS - CONDUITS IN THE PLANE OF THE SLAB: A. LOCATE BETWEEN TOP AND BOTTOM REINFORCING. (WHERE APPLICABLE)

B. MAXIMUM SIZE IN ONE LAYER TO BE NOT MORE THAN 1/4 OF CONCRETE THICKNESS. C. THREE LAYERS OR MORE CROSSING WILL NOT BE PERMITTED. 3. FOR WALLS — CONDUIT/ PIPES NOT ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

NON-STRUCTURAL ELEMENTS

. "NON-STRUCTURAL" OR "SECONDARY STRUCTURAL" ELEMENTS ARE NOT THE RESPONSIBILITY OF THE CONTRACT ADMINISTRATOR. THEY ARE DESIGNED, DETAILED AND REVIEWED IN THE FIELD BY OTHERS. THEY APPEAR ON DRAWINGS OTHER THAN THOSE OF THE CONTRACT ADMINISTRATOR WHERE STRUCTURAL ENGINEERING RESPONSIBILITY IS REQUIRED FOR THESE ELEMENTS, THIS SHALL BE PROVIDED BY SPECIALTY STRUCTURAL ENGINEERS, WHO SHALL ALSO PROVIDE ANY LETTERS REQUIRED BY BUILDING PERMIT AUTHORITIES.

- EXAMPLES OF NON-STRUCTURAL ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO: A. ARCHITECTURAL COMPONENTS SUCH AS GUARDRAILS, HANDRAILS, CEILINGS, MILLWORK ETC. B. LANDSCAPE ELEMENTS SUCH AS BENCHES, LIGHT POSTS, PLANTERS, ETC.
- C. CLADDING, GLAZING, WINDOW MULLIONS, INTERIOR STUD WALLS AND EXTERIOR STUD WALLS. D. ARCHITECTURAL PRECAST, PRECAST CLADDING. MECHANICAL AND ELECTRICAL EQUIPMENT, COMPONENTS, AND THEIR ATTACHMENT DETAILS.
- . ELEVATORS AND CONVEYING SYSTEMS. G. BRICK OR BLOCK VENEERS AND THEIR ATTACHMENTS.

H. NON-LOAD BEARING MASONRY. I. NON-STRUCTURAL CONCRETE TOPPINGS

J. ALUMINUM SKYLIGHTS. . SHOP DRAWINGS FOR NON-STRUCTURAL ELEMENTS WHICH MAY AFFECT THE PRIMARY STRUCTURAL SYSTEM SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR. THESE DRAWINGS WILL BE REVIEWED ONLY FOR THE EFFECT ON THE PRIMARY STRUCTURAL SYSTEM.

STRUCTURAL MOVEMENTS/ TOLERANCES

THIS STRUCTURE WILL UNDERGO NORMAL TYPES OF MOVEMENT AND DEFLECTION AND THE NON-STRUCTURAL COMPONENTS MUST BE DETAILED TO ACCOMMODATE THIS DRYWALL PARTITIONS, MECHANICAL EQUIPMENT, ELECTRICAL EQUIPMENT AND BUILDING FIXTURES MUST BE DETAILED AND INSTALLED TO ACCOMMODATE SLAB MOVEMENT. ALL STRUCTURES ARE SUBJECT TO CONSTRUCTION TOLERANCES. THIS SHOULD BE ALLOWED FOR IN DETAILING NON-STRUCTURAL COMPONENTS.

LUMBER

1. FRAMING LUMBER SHALL CONFORM TO THE LATEST EDITION OF CSA 0141 AND SHALL BE OF THE FOLLOWING MINIMUM LINTELS, JOISTS, AND BEAMS: S-P-F NO. 2

STUD WALLS: S-P-F NO. 2 2. ALL SHEATHING MATERIAL TO BE 1/2" STD. SPRUCE PLYWOOD IN ACCORDANCE WITH CSA 0325 UNLESS NOTED OTHERWISE. ALL SHEETS TO BE STAGGERED. FASTEN SHEETS WITH 3" COMMON NAILS AT 12" O/C ALONG ALL STUDS AND AT 6" O/C ALONG EDGES OF SHEET, UNLESS NOTED OTHERWISE. 3. ALL FLOOR AND ROOF JOISTS TO HAVE CONTINUOUS CROSS BRIDGING AT 6'-0" MAX. SPACING UNLESS NOTED

DESIGN LOADS

TOP AND BOT.

15M TYPICAL.

GRADE BEAM

-ALL CORNER BARS TO BE

SNOW LOAD Ss = 1.9 KPaSr = 0.2 KPaWIND LOAD 0.45 KPa (q50) 0.35 KPa (q10) SEISMIC LOADS Sa(0.2) = 0.12Sa(0.5) = 0.056 Sa(1.0) = 0.023 Sa(2.0) = 0.006PGA = 0.059SEISMIC SITE RESPONSE SITE CLASSIFICATION AS PER GEOTECHNICAL REPORT PREPARED BY GENIVAR DATED JULY 9, 2007: SITE CLASS C.

REFER TO POLE MANUFACTURER'S -

DRAWINGS FOR BASE PLATE SIZE

PROVIDE 100mm SQUARE -

OPENING FOR CONDUITS

13mmø x600mm LONG HOT —

DIPPED GALVANIZED ANCHOR

BOLTS W/ 50mm HOOK

AND BOLT DETAILS.

REFER TO PLAN CONTRACTOR TO ENSURE THAT CONSTRUCTION LOADS DO NOT EXCEED DESIGN LOADS.

ABBREVIATIONS

ALT ALTERNATE BOT BOTTOM B.W BOTH WAYS C/W COMPLETE WITH D.L DEAD LOAD	N.T.S NOT TO SCALE O/C ON CENTER R/W REINFORCED WITH S.D.L SUPERIMPOSED DEAD LOAD
E.E.————— EACH END E.F.————— EACH FACE E.S.————— EACH SIDE E.W.————— EACH WAY H.1E—————— HOOK ONE END	SIM SIMILAR S.O.G SLAB ON GRADE STAG STAGGER S.J STRUT JOIST TYP TYPICAL T/O TOP OF
H.2E HOOK TWO ENDS H & V HORIZONTAL AND VERTICAL HORIZ HORIZONTAL L.L LIVE LOAD MAX MAXIMUM MIN MINIMUM	T1E TIE ONE END T & B TOP AND BOTTOM T & C TENSION AND COMPRESSION U.N.O UNLESS NOTED OTHERWISE VERT VERTICAL

OWNERSHIP AND COPYRIGHT RESERVED

ALL DRAWINGS, PLANS, MODELS, DESIGNS, SPECIFICATIONS AND OTHER DOCUMENTS PREPARED BY THE CONTRACT ADMINISTRATOR AND USED IN CONNECTION WITH THE PROJECT ARE INSTRUMENTS OF SERVICE FOR THE EXECUTION OF THE PROJECT, AND ARE AND REMAIN THE PROPERTY OF THE CONTRACT ADMINISTRATOR, WHETHER THE PROJECT IS EXECUTED OR NOT, AND THE CONTRACT ADMINISTRATOR RESERVES THE COPYRIGHT THEREIN AND IN THE WORK EXECUTED THEREFROM: SHALL NOT BE USED FOR ANY OTHER PROJECT. EXCEPT ONLY FOR GENERAL REFERENCE PURPOSES FOR ADDITION OF ALTERATION TO THE WORK SHOWN IN THEM, AND SINCE SUCH DOCUMENTS ARE "DESIGN" DOCUMENTS ONLY AND MAY NOT REPRESENT THE ACTUAL PROJECT "AS CONSTRUCTED", USE OF THESE DOCUMENTS FOR GENERAL REFERENCE PURPOSES IS AT THE SOLE RISK OF THE PARTY USING THEM: SHALL NOT BE COPIED WITHOUT THE WRITTEN CONSENT OF AN AUTHORIZED REPRESENTATIVE OF THE CONTRACT ADMINISTRATOR.

FIELD REVIEW BY THE CONTRACT ADMINISTRATOR

THE CONTRACT ADMINISTRATOR PROVIDES FIELD REVIEW ONLY FOR THE WORK SHOWN ON THESE STRUCTURAL DRAWINGS. THIS REVIEW IS NOT A "FULL TIME" REVIEW BUT IS A PERIODIC REVIEW AT THE SOLE DISCRETION OF THE CONTRACT ADMINISTRATOR'S ENGINEERS IN ORDER TO ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE PLANS AND SUPPORTING DOCUMENTS PREPARED BY THE CONTRACT ADMINISTRATOR. FIELD REVIEW BY THE CONTRACT ADMINISTRATOR IS NOT CARRIED OUT FOR THE CONTRACTOR'S BENEFIT, NOR DOES IT MAKE THE CONTRACT ADMINISTRATOR GUARANTORS OF THE CONTRACTORS WORK. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACT ADMINISTRATOR SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OF FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

THE CONTRACT ADMINISTRATOR WILL REVIEW SHOP DRAWINGS PERTAINING TO WORK SHOWN ON THE CONTRACT ADMINISTRATOR'S DRAWINGS. THE EXTENT OF THIS REVIEW IS AT THE SOLE DISCRETION OF THE CONTRACT ADMINISTRATOR'S ENGINEER AND IS FOR THE SOLE PURPOSE OF ASCERTAINING GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN CONCEPT. THE REVIEW IS NOT AN APPROVAL OF THE DESIGN, DETAILS AND DIMENSIONS INHERENT IN THE SHOP DRAWINGS. RESPONSIBILITY FOR WHICH SHALL REMAIN WITH THE CONTRACTOR SUBMITTING THEM. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR ERRORS AND OMISSIONS IN THE SHOP DRAWINGS OF FOR MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS.

GENERAL NOTES

1. THIS SET OF DRAWINGS SHOWS THE COMPLETED PROJECT. THEY DO NOT INCLUDE COMPONENTS THAT MAY BE NECESSARY FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY IN AND ABOUT THE JOB SITE DURING CONSTRUCTION, AND THE DESIGN AND ERECTION OF ALL TEMPORARY STRUCTURES. FORM WORK, FALSE WORK, SHORING, ETC. REQUIRED TO COMPLETE THE WORK.

2. THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISIONS COLUMN. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION" OR "ISSUED FOR TENDER" IN THE REVISION'S COLUMN BY THE CONTRACT ADMINISTRATOR.

3. THE INFORMATION ON THIS DRAWING SHALL NOT BE USED FOR ANY OTHER THAN THE SPECIFIED WORKS OR PART OF THE WORKS FOR WHICH IT HAS BEEN AUTHORIZED BY THE CONTRACT ADMINISTRATOR.

4. SECTION MARKER SHOWN THUS # MEANS SECTION # SHOWN ON DRAWING SHEET S-#. 5. SEE ARCHITECTURAL DRAWINGS FOR FLOOR AND ROOF ELEVATIONS, RECESSED, DRAINAGE SLOPES, DETAILED

DIMENSIONS FOR DOORS, WINDOWS AND OTHER OPENINGS ETC. 6. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SLEEVES, NAILERS, INSERTS, ETC. TO BE ENCASED IN CONCRETE.

7. THE CONTRACTOR SHALL REVIEW ALL THE DRAWINGS AND CHECK DIMENSIONS BEFORE CONSTRUCTION. REPORT DISCREPANCIES BETWEEN STRUCTURAL AND OTHER DISCIPLINES DRAWINGS FOR CLARIFICATION. 8. DO NOT CUT OR DRILL ANY OPENINGS IN STRUCTURAL MEMBERS WITHOUT THE WRITTEN PERMISSION OF THE CONTRACT ADMINISTRATOR. CONTRACTOR TO PROVIDE APPROPRIATE ATTACHMENTS AND CONNECTIONS FOR MECHANICAL, ELECTRICAL, AND OTHER SERVICES WITHOUT CUTTING OR DRILLING.

9. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND LANDSCAPE DRAWINGS FOR LOCATIONS, CONFIGURATIONS, EXTENT, AND SIZES OF ALL CURBS, UPSTANDS, DOWNTURNS: AND FOR OPENINGS THROUGH FLOORS AND WALLS FOR

SEE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR PRECISE LOCATION OF REQUIRED FIRE RESISTANCE RATINGS. 11. THE CONTRACTOR SHALL PROVIDE REASONABLE NOTICE TO THE CONTRACT ADMINISTRATOR PRIOR TO POURING CONCRETE OR CONCEALING ANY STRUCTURAL COMPONENTS. THE PURPOSE OF THIS NOTICE IS TO ENABLE THE CONTRACT ADMINISTRATOR TO CONDUCT ANY REQUIRED FIELD REVIEWS.

12. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTENT AND RECOMMENDATIONS OF THE GEOTECHNICAL 13. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL COMPONENTS TO THE CONTRACT

ADMINISTRATOR FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS TO INCLUDE SEAL AND SIGNATURE OF A PROFESSIONAL ENGINEER FOR DESIGN OF COMPONENTS AND/ OR CONNECTIONS AS REQUIRED.

LIST OF STRUCTURAL DRAWINGS

FOUNDATION PLAN MEZZANINE FRAMING PLAN AND SECTIONS S-4.0

ROOF FRAMING PLAN S - 5.0FOUNDATION SECTIONS FOUNDATION PLAN DETAILS AND SECTIONS

ROOF SECTIONS S-6.0S-6.1SECTIONS

FOWER ENGINEERING GROUP 208 — 897 CORYDON AVE. WINNIPEG, MB R3M OW7 EL: (204) 925-1150 FAX: (204) 925-1155 EMAIL: towereng@towereng.ca WEB: www.towereng.ca

NOTES :

THIS DRAWING MUST NOT BE SCALED.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS, AND LEVELS PRIOR TO COMMENCEMENT OF WORK. ALL ERRORS AND OMISSIONS TO BE REPORTED TO THE CONTRACT ADMINSTRATOR BEFORE PROCEEDING.

VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION OF THE CONTRACT ADMINISTRATOR.

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF NUMBER TEN ARCHITECTURAL GROUP AND THE COPYRIGHT IN THE SAME BEING RESERVED TO THEM. IT MAY BE REPRODUCED ONLY WITH THE PERMISSION OF THE CITY OF WINNIPEG.

architectural group

architecture = interior design = graphic design

EAPEGN

TOWER PROJECT NO.: 6150

REVISED/ ISSUED/ PLOTTED DESIGN DEVELOPMENT SUBMISSION **ISSUED FOR 40% REVIEW** SSUED FOR 80% REVIEW ISSUED FOR 100% REVIEW ISSUED FOR TENDER

REVISION/DESCRIPTION SEALS SCHAUB

Certificate of Authorization **Tower Engineering Group** No. 1918 Expiry: April 30, 2008 CHECKED BY DH APPROVED USER APPROVAL

2007.08.31

CITY OF WINNIPEG PLANNING, PROPERTY AND Winnipeg development department CIVIC ACCOMMODATIONS DIVISION 300 - 65 GARRY ST. R3C 4K4

PROJECT BRONX PARK COMMUNITY CENTRE GOOD NEIGHBOURS SENIOR CENTRE

WINNIPEG, MB.

GENERAL NOTES

PROJECT NO. PP&D 2006-065 AS SHOWN

DRAWING SHEET SIZE: ARCH E1 (42" x 30") PLOT 1:1

4 TYP. PIT DETAIL S-1.0 SCALE: 1:20

150mm STRUCTURAL SLAB —

(SEE PLAN FOR REINF.)

150mm VOID TYP.

ADD 10M RINGS

- PRE-CAST SUMP

PIT (SEE MECH.)

TOP AND BOT AT

PIT OPENING TYP.

LAMP STANDARD BASES DIAMETER

REINFORCEMENT TO 7.500 M 600mmø 1.800 M 6-20M VERT. 10M TIES @300mm 10-20M VERT. 10M TIES @300mm TO 9.500 M 750mmø TO 12.00 M 750mmø 3.000 M 10-20M VERT. 10M TIES @300mm



TYPICAL IN-FLOOR HEAT SLAB DETAIL S-1.0/ **SCALE: 1:20**

150mm VOID TYP. ---

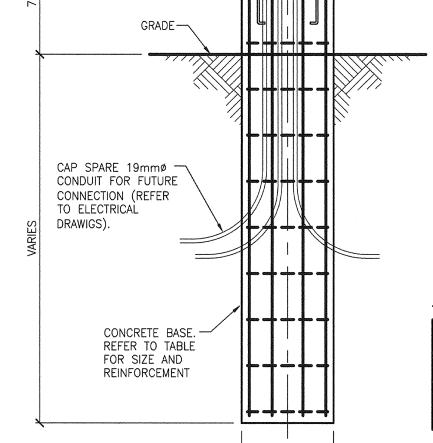
IN-FLOOR HEAT PIPING -

(SEE MECH.)

CONCRETE BARRIER FOIL (CBF) BY DOMTEK TYP.

150 OR 180mm STRUCTURAL -

SLAB (SEE PLAN FOR REINF.)



VARIES TYPICAL LAMP STANDARD DETAIL S-1.0/ SCALE: 1:25