A. GENERAL

1. All dimensions shall be checked and verified prior to commencing construction.
2. Confirm the location of all sub-grade services prior to commencing site work.
3. The structure shall be braced in all directions to safely withstand all lateral forces, which may be encountered during erection. The bracing shall remain in place until all walls and structural members with roof deck are in place.

B. FOUNDATION - C.I.P. FRICTION PILES

1. All piles to be cast-in-place friction piles, sizes as shown on plans. Pile length to be measured from finished contours of excavation.
2. Friction piles are designed for an assumed skin friction of 375 PSF in accordance to soils investigation performed by M. Block & Associates Ltd. on Feb. 12, 2004.

C. CONCRETE

1. All concrete work shall be in accordance with CAN3-A23.1 - concrete materials and methods of concrete construction.
2. Concrete strengths:

Component		Cement Type	28 Day Strength	Slump	Maximum Aggregate	Cover for Reinforcing Steel
	No.	Description	MPa	mm	mm	mm
Grade Beams	10	Normal Portland	30	90	20	40 stirr.
Piles	50	Sulphate Resistant	32	90	20	75
Slabs (on grade)	10	Normal Portland	25	90	20	40 Top
Slabs (structural)	10	Normal Portland	30	90	20	INT. SLAB - 20 TOP - 40 BOT. EXT. SLAB - 40 T&B
Extr Sidewalk	10	Normal Portland	32	90	20	40 Top

3. Air entrainment to conform to requirements of CAN3-A23.1.
4. Construct form work, shoring and bracing to meet design and code requirements, accurately, so that resultant finished concrete conforms to shapes, lines and to dimensions indicated on the drawings.
5. Construction joints, pour scheduling and work procedures shall be discussed with the consultant prior to commencing construction.
6. For cold weather concreting all ice, snow and frost shall be removed from formwork and the temperature of all contact surfaces shall be raised above 10°C for 24 hours prior to casting concrete. Concrete shall be not less than 20°C for 3 days and not less than 5°C for an additional 5 days.
7. Notify the consultant 24 hours prior to pouring concrete.
8. Three concrete test cylinders and one slump test shall be taken for every 75 or less cubic meters or each day concrete is placed, whichever is the greater. Testing shall be performed in accordance with CAN3-A23.2.
9. Void forms under slabs shall be wax coated void forms to thickness indicated, "WAXMAT" or approved equal, having a minimum compressive strength of 10 PSI.
10. Void forms under beams shall be "geospan" compressible fill material (or equal).

D. REINFORCING

1. Perform concrete reinforcing work in accordance with CAN3-A23.3- unless indicated otherwise.
2. All reinforcing bars shall be high strength deformed bars with a minimum specified yield strength of 400 MPA or equal in accordance with CSA G30.12. Welded wire fabric to be plain type, conforming to CSA G30.5
3. Locate reinforcing splices not indicated on drawings at points of minimum stress. Locations of splices to be approved by consultant.
4. Before placing ensure reinforcing is clean, free of loose scale, dirt or other foreign coating which would reduce the bond to concrete.
5. Shop drawings shall be submitted which clearly indicate bar sizes, spacings, locations and quantities of reinforcing steel and wire fabric, bending and cutting schedules, and supporting and spacing devices for review prior to fabrication of the reinforcing steel. Detail in accordance with the latest ACI detailing manual.

E. WOOD

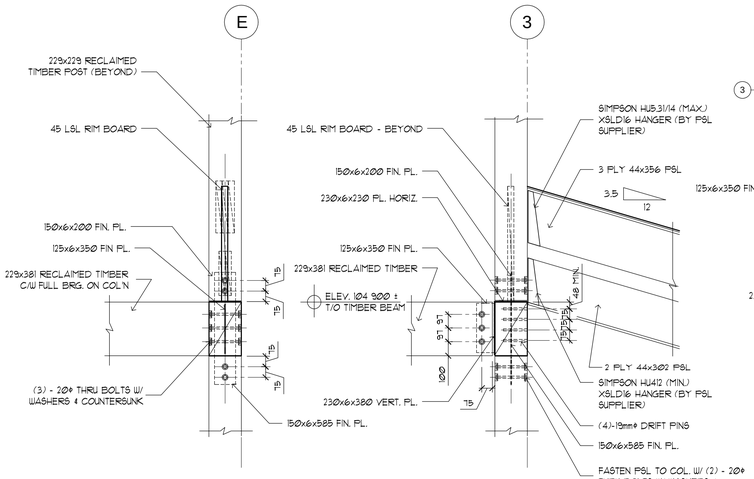
1. All lumber shall conform to latest NLGA standard grading rules for Canadian lumber.
2. All work shall be done in accordance with part nine of the National Building Code of Canada, except as noted on the drawings.
3. All members to be #2 spruce or better.
4. All wood in contact with concrete, masonry or steel shall be pressure treated.
5. Studs shall be doubled at each side of all openings unless otherwise noted.
6. Provide one row of solid wood blocking between studs at 1200 o/c max. - typical.
7. Splices in top plate members shall be at stud locations only.
8. Lintels shall bear on at least one stud at each end.
9. Install all framing anchors as per manufacturers recommendations.

F. TJI JOISTS

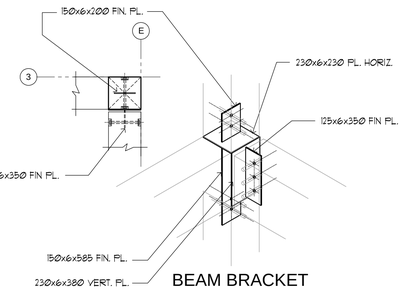
1. Joist supplier is responsible for design and certification of the roof joist system. Certified shop drawings shall be submitted indicating all required blocking, strapping, etc.
2. Maximum joist deflection shall be L/360 of total load.
3. The joist supplier is responsible for providing all openings required by mechanical and electrical. See mechanical and electrical drawings for size, location and extent of openings. See architectural drawings for additional openings.
4. Joists to meet vibration criterion due to intended mechanical mezzanine loading (see mechanical).
5. PSL beams & lintels to be min. 2.0E Parallam Material.
6. All PSL and TJI connections to be designed by supplier U/N.

G. WOOD TRUSS

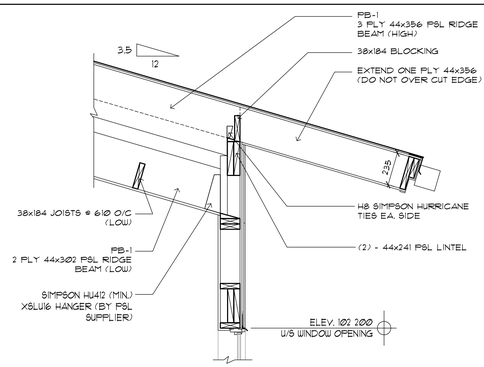
1. Wood trusses shall be designed in accordance with CAN/CSA-086 and applicable parts of the National Building Code of Canada (Latest).
2. Wood trusses shall be designed and certified by others unless otherwise noted. Refer to structural drawings for "Design Loads", and all other consultant's drawings for additional equipment and/or fixture loads.
3. Truss supplier shall submit shop drawings, under the seal of Professional Engineer registered in the project province, to the Architect for approval prior to fabrication. Shop drawings shall show span, spacing, slopes, design loads, deflection criteria, member sizes, connection details, bracing and bridging requirements, etc. of all trusses and/or girder trusses.
4. Truss supplier shall be responsible for design and supply of all truss to truss connections.
5. Refer to architectural drawings for span dimensions, slopes, heave conditions, heel sizes, etc.
6. Parallel chord type trusses shall be constructed with camber to offset all deflection due to dead load + 1/2 live load.
7. Trusses shall not be modified in any way unless approved by, and done in accordance with truss designer's requirements.
8. Truss supplier shall be responsible to make sure that installation has been carried out in accordance with the design and shop drawings. He shall certify the installation certificate to the Architect prior to installation of ceiling material.



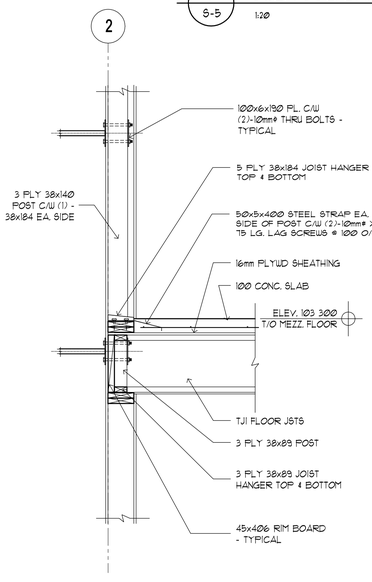
5 / S-5 TOWER COL./BM. CONN. SECTION 1:20



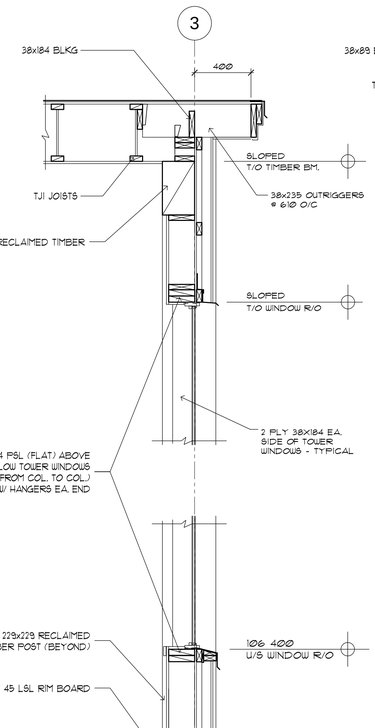
BEAM BRACKET ISOMETRIC



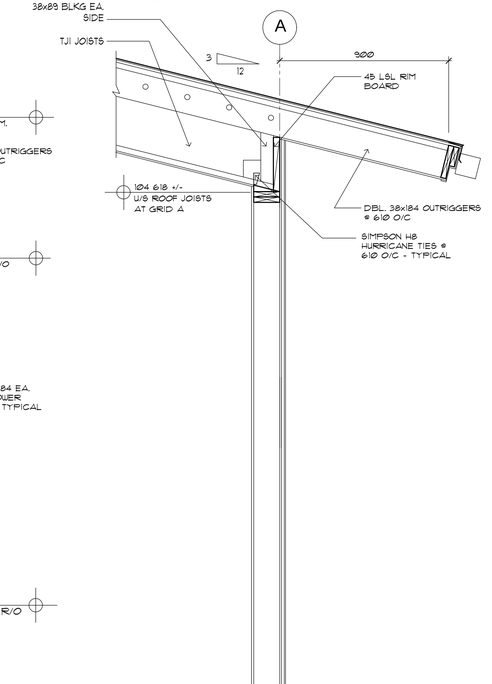
3 / S-5 SECTION 1:20



6 / S-5 BASKETBALL BACKBOARD SUPPORT DETAIL 1:20



2 / S-5 SECTION 1:20



1 / S-5 SECTION 1:20

4 / S-5 SECTION 1:20

REVISIONS

NO.	DATE	PARTICULARS
1	05-03-23	EXPANDED TENDER

NOTES

APEGM
Certificate of Authorization
Kowalchuk Consulting Engineers Ltd.
No. 1777 Expiry: April 30, 2005

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PROJECT TITLE

RED RIVER COMMUNITY CENTRE REDEVELOPMENT

LOCATION
WINNIPEG, MB
293 MURRAY AVENUE

CLIENT
THE CITY OF WINNIPEG

DRAWING TITLE
GENERAL NOTES SECTIONS AND DETAILS

DRAWN	APPROVED	DRAWING
CML	-	S-5
SCALE	DATE ISSUED	
1:20	05-03-23	
JOB NUMBER	DATE PLOTTED	REVISION
03-050	-	R-1