

EXISTING ZONING:	R2		
LOT AREA	1292.49 SQM (1391.21 SQFT)		
	BY-LAW	PROPOSED	
MIN. FRONT YARD SETBACK	6.0M	5.99M	(TO EXISTING BUILDING)
MIN. SIDE YARD (EAST) SETBACK	1.2M	1.2M	
MIN. REAR YARD SETBACK	10.0M	9.95M	(TO EXISTING BUILDING)
MIN. SIDE YARD (WEST) SETBACK	1.2M	1.67M 1.33M	(TO PROPOSED COV. PORCH)

GROSS FLOOR AREA	EXISTING	PROPOSED	TOTAL
BASEMENT (EXCLUDED FROM TOTAL)	106.38M <sup>2</sup>	-	106.38M <sup>2</sup>
FIRST FLOOR	116.18M <sup>2</sup>	0.44M <sup>2</sup>	116.62M <sup>2</sup>
SECOND FLOOR	60.80M <sup>2</sup>	69.23M <sup>2</sup>	130.03M <sup>2</sup>
LOFT AREA	45.16M <sup>2</sup>	-	45.16M <sup>2</sup>

TOTAL GROSS FLOOR AREA (EXCLUDING BASEMENT)	291.81 SQM (3141.12 SQFT)
EXISTING SHED	75.72M <sup>2</sup>
EXISTING SHED	5.82M <sup>2</sup>
EXISTING COVERED PORCH (FRONT)	15.44M <sup>2</sup>
PROPOSED COVERED PORCH (SIDE)	4.60M <sup>2</sup>
PROPOSED COVERED PORCH (REAR)	35.09M <sup>2</sup>
PROPOSED GARAGE	36.49M <sup>2</sup>

COVERAGE	
TOTAL BUILDING COVERAGE (INCLUDING COVERED PORCHES)	217.97 SQM (2346.26 SQFT) (16.9%)

ACCESSORY COVERAGE	
EXISTING ACCESSORY COVERAGE	79.54 SQM (856.16 SQFT) (6.2%)

MAX. BUILDING HEIGHT	10.5 M
EXISTING BUILDING HEIGHT (FROM EXISTING FIN. FLOOR)	~9.03 M



PLAN OF  
LOTS 92 AND 105  
REGISTERED PLAN 1447

MacKAY, MacKAY & PETERS LIMITED – ONTARIO LAND SURVEYORS  
© 2014

SURVEY REPORT (BEING PART 2)( to be read in conjunction with plan being Part 1 )

AND REGISTRY OFFICE TITLE INFORMATION ON SUBJECT PROPERTY INCLUDING  
BOUNDARIES, EASEMENTS AND RIGHT OF WAYS - FEBRUARY 25, 2014

REGISTERED EASEMENTS AND/OR RIGHTS-OF-WAY:  
NONE  
ADDITIONAL REMARKS:  
REFER TO PART 1 OF PROPERTY REPORT FOR LOCATION OF BUILDINGS AND OTHER SETBACKS

*Note:*

cKAY, MacKAY & PETERS LIMITED grants STRUCTURED CREATIONS INC. ["The Client(s)"], their solicitor and other related parties permission to use "Original Copies" of the Surveyor's Real Property Report in transactions involving "The Client(s)".

■ DENOTES A SURVEY MONUMENT FOUND  
 □ DENOTES A SURVEY MONUMENT PLANTED  
 SIB DENOTES STAND IRON BAR  
 SSB DENOTES SHORT STANDARD IRON BAR  
 IB DENOTES IRON BAR  
 C DENOTES CENTRE LINE  
 R DENOTES ROUND  
 WIT DENOTES WITNESS MONUMENT  
 CD DENOTES CUT CROSS  
 CP DENOTES CONCRETE PIN  
 PIN DENOTES PROPERTY IDENTIFICATION NUMBER  
 (O/U) DENOTES OWNER UNKNOWN  
 P1 DENOTES PLAN BY MONEY V. WOODS, DATED AUGUST 14, 1980  
 P2 DENOTES PLAN 62R-10912  
 P3 DENOTES PLAN 62R-6818  
 P4 DENOTES REGD PLAN 1347  
 P5 DENOTES PLAN 62R-15440  
 CL DENOTES CENTRELINE  
 RW DENOTES RETAINING WALL  
 EOA DENOTES EDGE OF ASPHALT

BUILDING TIES SHOWN HEREON ARE TO OUTSIDE FACE OF STRUCTURES, UNLESS OTHERWISE NOTED.

BEARINGS ARE ASTRONOMIC AND ARE REFERRED TO THE SOUTHERLY LIMIT OF  
WATLEY STREET, AS SHOWN ON PLAN 62R-10912,  
HAVING A BEARING OF N83°44'05"W.

CERTIFY THAT :  
THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE  
WITH THE SURVEYORS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT  
AND THE REGULATIONS MADE UNDER THEM.  
THE SURVEY WAS COMPLETED ON THE 27th DAY OF FEBRUARY, 2014.

DATE MARCH 24, 2014

ROSS A. CLARKE  
ONTARIO LAND SURVEYOR  
FOR: MACKAY, MACKAY & PETERS LIMITED

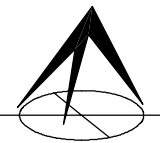
CAD FILE: X:\StructuredCreations\Projects\Projects2013\13-106Gardner\13106-Plans\FinalRev2.dwg

**MACKAY  
MACKAY  
& PETERS  
LIMITED**   
Established 1906

ONTARIO LAND SURVEYORS  
3380 SOUTH SERVICE ROAD  
BURLINGTON, ONTARIO L7N 3J5  
PHONE: (905) 639-1375  
FAX: (905) 333-9544  
e-mail: halton@mmplimited.com

**Records of Sewell & Sewell  
and Yates & Yates LTD.**

ASSOCIATION OF ONTARIO  
LAND SURVEYORS  
PLAN SUBMISSION FORM  
1902522



THIS PLAN IS NOT VALID  
UNLESS IT IS AN EMBOSSED  
ORIGINAL COPY  
ISSUED BY THE SURVEYOR  
In accordance with  
Regulation 1026, Section 29(3)

DRAWN BY:	A.B.
PARTY CHIEF:	J.M.
CHECKED BY:	K.J.D.
PROJECT NO.:	14-020

[illegible]

11	01.09.14	REV. AS PER CLIENT	S.N.
10	06.08.14	REV. 1 AS PER CITY OF HAMILTON	J.S.
9	23.06.14	SUB FOR BUILDING PERMIT	J.S.
8	06.06.14	REV SURVEY w/ GRADE ELEV.	J.S.
7	21.05.14	REV.1 AS PER CLIENT	J.S.
6	20.05.14	ISSUED FOR TENDER	J.S.
5	02.05.14	SUB FOR CONSERVATION REVIEW	J.S.
4	18.02.14	ISSUED FOR FINAL APPR.	D.S.S.
3	12.02.14	BUDGET REV. MTG.	D.S.S.
2	30.12.13	REV.1 AS PER INIT. MTG.	D.S.S.
1	30.10.13	INIT DESIGN PRESENT.	D.S.S.

No.	Date:	Issue/Revision	By:
Drawing Issues/Revisions:			

**Note:**  
ALL DIMENSIONS AND INFORMATION SHOWN ON THESE DRAWINGS MUST BE CHECKED AND VERIFIED ON SITE AND ANY DISCREPANCIES REPORTED TO THE ARCHITECT PRIOR TO CONSTRUCTION AND FABRICATION OF ITS COMPONENTS. SHOULD EXISTING CONDITIONS OR SERVICES BE FOUND TO VARY FROM THAT INDICATED ON THE DRAWINGS, THE ARCHITECT MUST BE NOTIFIED IMMEDIATELY.

FEATURES OF CONSTRUCTION NOT FULLY SHOWN ARE ASSUMED TO BE THE SAME CHARACTER AS THOSE NOTED FOR SIMILAR CONDITIONS.

UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISION HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACING, SHORINGS, SHEET PILING OR OTHER TEMPORARY SUPPORTS, TO SAFEGUARD ALL EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK.

ALL DRAWINGS AND RELATED DOCUMENTS SHALL REMAIN THE PROPERTY AND COPYRIGHT OF STRUCTURED CREATIONS USE LATEST REVISED DRAWINGS. DO NOT SCALE DRAWINGS.

CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL REQUIRED ELECTRICAL PERMITS PERTAINING TO THIS PROJECT. ALL WORK PERFORMED AND APPROVALS OF ELECTRICAL PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

--	--

[ STRUCTURED CREATIONS ]  
BY DARREN SANGER-SMITH

453 Brant St  
Burlington, ON, L7R 2G3

Project:

**GARDNER RESIDENCE  
RENO/ADDITION**

40 CAYLEY STREET  
DUNDAS ONTARIO

Sheet Title:  
**SITE PLAN**

Design By: D.S.S.	Drawn By: J.S.	Approved By: D.S.S.
Scale: 1:200	Date: SEPT 01/14	Project No.: 13-106

Drawing No:

# A0

Drawing Series:

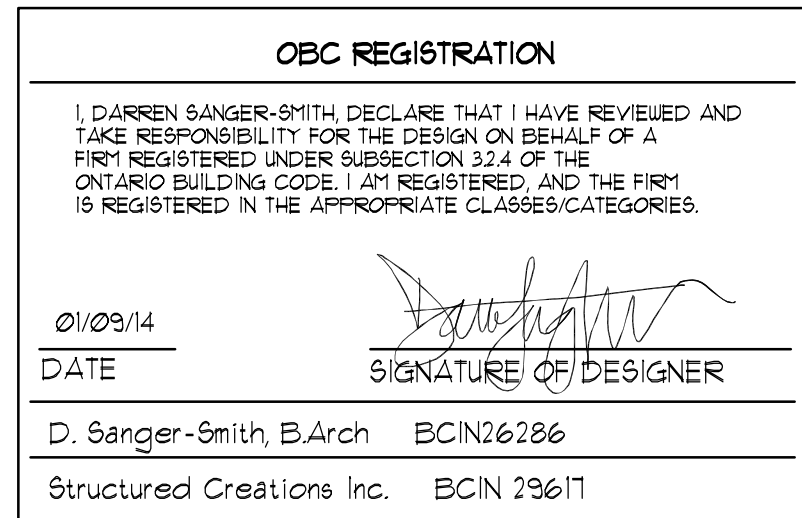
[illegible]



2  
A2

PROPOSED MAIN FLOOR PLAN

1/4" = 1'-0"



ALL PLUMBING PIPES, ABOVE AND BELOW GRADE, TO BE WRAPPED IN "MICRO-LOK" HIGH PERFORMANCE FIBER GLASS PIPE INSULATION (MIN. R12) (TO BE INSTALLED AS PER MANUFAC. RECOMM.)  
(SEE ATTACHED SPEC)



**Note:**

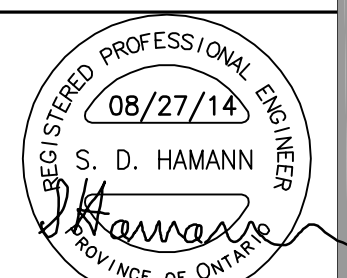
ALL DIMENSIONS AND INFORMATION SHOWN ON THESE DRAWINGS MUST BE CHECKED AND VERIFIED ON SITE AND ANY DISCREPANCIES REPORTED TO THE ARCHITECT PRIOR TO THE CONSTRUCTION AND FABRICATION OF ITS COMPONENTS. SHOULD EXISTING CONDITIONS OR SERVICES BE FOUND TO VARY FROM THAT SHOWN ON THE DRAWINGS, THE ARCHITECT MUST BE NOTIFIED IMMEDIATELY.

FEATURES OF CONSTRUCTION NOT FULLY SHOWN ARE ASSUMED TO BE THE SAME CHARACTER AS THOSE NOTED FOR SIMILAR CONDITIONS.

UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISION HAS BEEN MADE IN THE DESIGN FOR CONDITIONS CONCERNING THE EFFECTS OF CORROSION ON THE STRUCTURE. THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACING, SHORINGS, SHEET PILING OR OTHER TEMPORARY SUPPORTS, TO SAFEGUARD EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK.

ALL DRAWINGS AND RELATED DOCUMENTS SHALL REMAIN THE PROPERTY AND COPYRIGHT OF STRUCTURED CREATIONS, INC. UNLESS OTHERWISE SPECIFIED ON THESE DRAWINGS.

CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL REQUIRED ELECTRICAL PERMITS PERTAINING TO THIS PROJECT. ALL WORK PERFORMED AND APPROVALS OF ELECTRICAL PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.



Sheet Title:

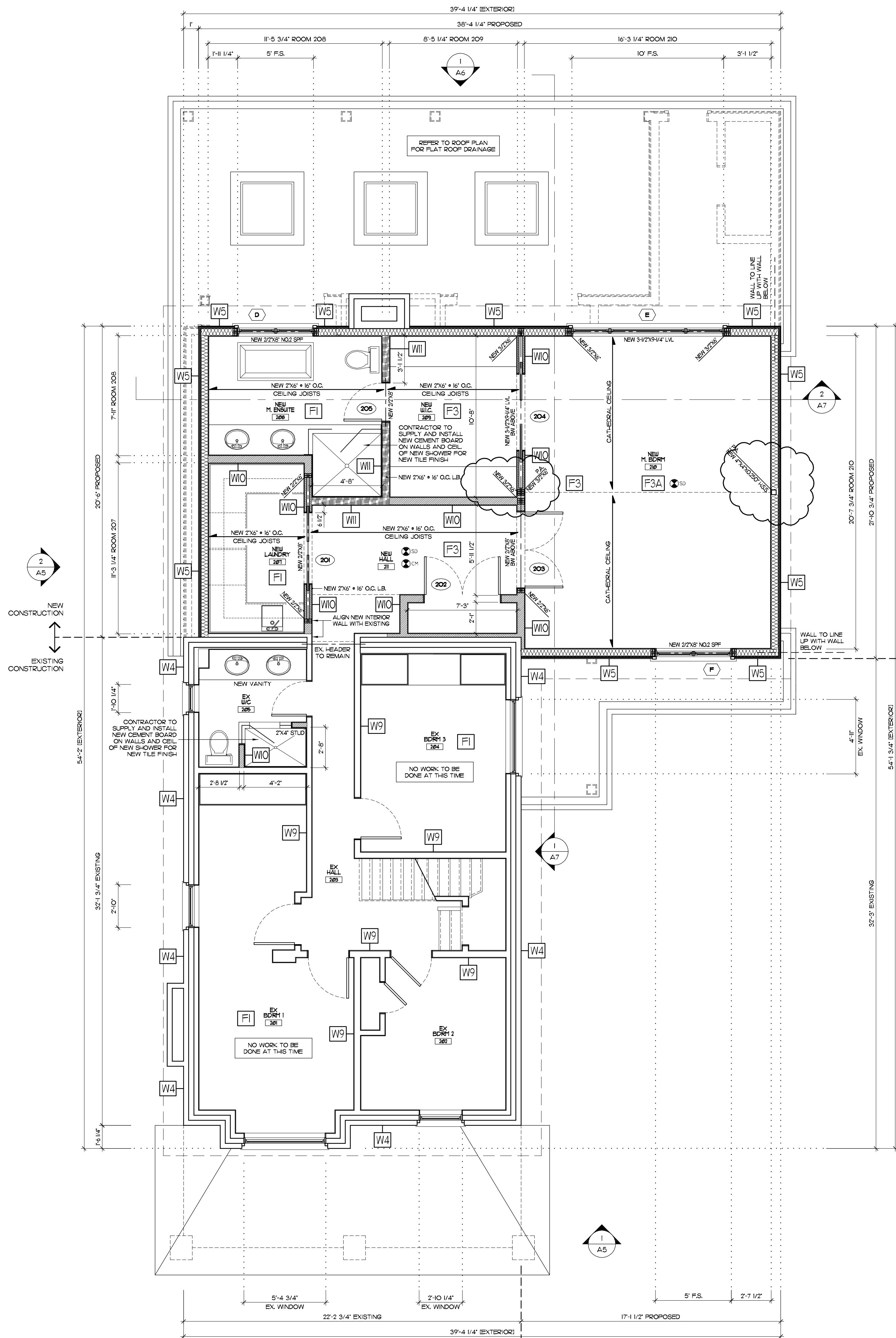
**PROPOSED**

- **BASEMENT PLAN**
- **MAIN FLOOR PLAN**

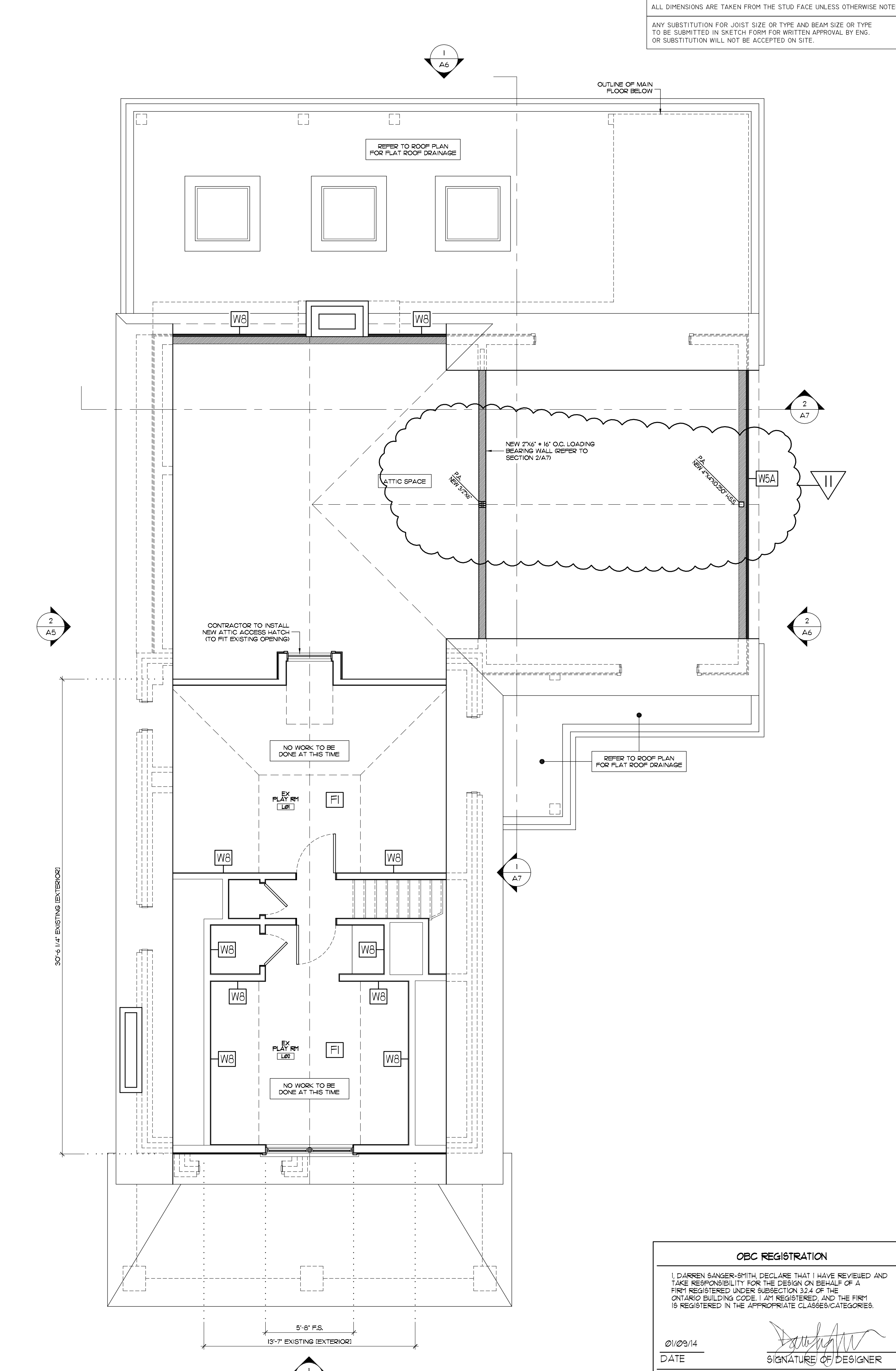
Drawing No:	<b>A2</b>	Of:
Drawing Series:		

**A2** Of:



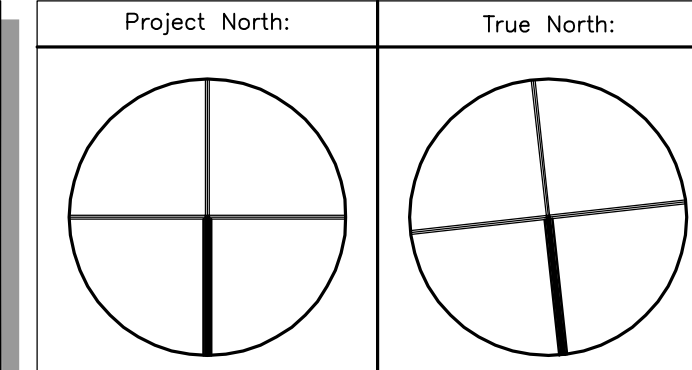


1  
A3  
PROPOSED SECOND FLOOR PLAN  
1/4"=1'-0"



2  
A3  
PROPOSED LOFT PLAN  
1/4"=1'-0"

ALL DIMENSIONS ARE TAKEN FROM THE STUD FACE UNLESS OTHERWISE NOTED.  
ANY SUBSTITUTION FOR JOIST SIZE OR TYPE AND BEAM SIZE OR TYPE TO BE SUBMITTED IN SKETCH FORM FOR WRITTEN APPROVAL BY ENG. OR SUBSTITUTION WILL NOT BE ACCEPTED ON SITE.



Key Plan:

No.	Date	Issue/Revision	By:
11	01.09.14	REV. AS PER CLIENT	S.N.
10	06.08.14	REV.1 AS PER CITY OF HAMILTON	J.S.
9	23.06.14	SUB FOR BUILDING PERMIT	J.S.
8	06.06.14	REV. SURVEY w/ GRADE ELEV.	J.S.
7	21.05.14	REV.1 AS PER CLIENT	J.S.
6	20.05.14	ISSUED FOR TENDER	J.S.
5	02.05.14	SUB FOR CONSERVATION REVIEW	J.S.
4	18.02.14	ISSUED FOR FINAL APPR.	D.S.S.
3	12.02.14	BUDGET REV. MTG.	D.S.S.
2	30.12.13	REV.1 AS PER INIT. MTG.	D.S.S.
1	30.10.13	INIT DESIGN PRESENT.	D.S.S.

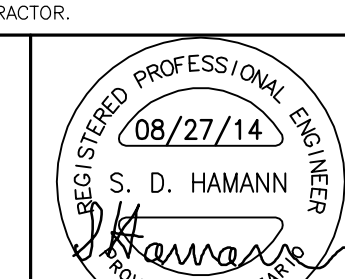
Drawing Issues/Revisions:

Note:  
ALL DIMENSIONS AND INFORMATION SHOWN ON THESE DRAWINGS MUST BE CHECKED AND VERIFIED ON SITE AND ANY DISCREPANCIES REPORTED TO THE ARCHITECT PRIOR TO CONSTRUCTION AND FABRICATION OF ITS COMPONENTS. SHOULD EXISTING CONDITIONS OR SERVICES BE FOUND TO VARY FROM THAT INDICATED ON THE DRAWINGS, THE ARCHITECT MUST BE NOTIFIED IMMEDIATELY.

FEATURES OF CONSTRUCTION NOT FULLY SHOWN ARE ASSUMED TO BE THE SAME CHARACTER AS THOSE NOTED FOR SIMILAR CONDITIONS.  
UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISION HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACING, SHORINGS, SHEET PILING OR OTHER TEMPORARY SUPPORTS, TO SAFEGUARD ALL EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK.

ALL DRAWINGS AND RELATED DOCUMENTS SHALL REMAIN THE PROPERTY AND COPYRIGHT OF STRUCTURED CREATIONS USE LATEST REVISED DRAWINGS. DO NOT SCALE DRAWINGS.

CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL REQUIRED ELECTRICAL PERMITS PERTAINING TO THIS PROJECT. ALL WORK PERFORMED AND APPROVALS OF ELECTRICAL PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.



FOR STRUCTURE ONLY  
OUR PROJECT 14052  
[ STRUCTURED CREATIONS ]  
BY DARREN SANGER-SMITH  
453 Brant St  
Burlington, ON, L7R 2G3  
(519) 416.204.0351  
(E): info@structuredcreations.com  
Project:  
**GARDNER RESIDENCE  
RENO/ADDITION**  
40 CAYLEY STREET  
DUNDAS ONTARIO

Sheet Title:  
**PROPOSED  
- SECOND FLOOR PLAN  
- LOFT PLAN**

Design By: D.S.S.	Drawn By: J.S.	Approved By: D.S.S.
Scale: 1/4"=1'-0"	Date: SEPT 01/14	Project No.: 13-106

Drawing No:

**A3**

Drawing Series:

OBC REGISTRATION  
I, DARREN SANGER-SMITH, DECLARE THAT I HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 32.4 OF THE ONTARIO BUILDING CODE. I AM REGISTERED, AND THE FIRM IS REGISTERED IN THE APPROPRIATE CLASS/ES/CATEGORIES.  
01/09/14  
DATE  
D. Sanger-Smith, BArch BCIN26286  
Structured Creations Inc. BCIN 23617





Of:







Drawing No:	<b>A6</b>	Of:
Drawing Series:		

Structured Creations Inc. BCIN 29617

Of:






Drawing No:	<b>A7</b>	Of:
Drawing Series:		

**OBC REGISTRATION**

I, DARREN SANGER-SMITH, DECLARE THAT I HAVE REVIEWED AND  
TAKE RESPONSIBILITY FOR THE ACCURACY OF THE CONTENT OF A  
FIRM REGISTERED UNDER SUBSECTION 32.4 OF THE  
ONTARIO BUILDING CODE. I AM REGISTERED AND THE FIRM  
IS REGISTERED IN THE APPROPRIATE CLASSES/CATEGORIES.

01/03/14  
DATE

  
SIGNATURE OF DESIGNER

D. Sanger-Smith, B.Arch BCIN26286

Structured Creations Inc. BCIN 23617

Of



FOUNDATION PLAN NOTES

1. NEW FOOTINGS SHALL BE CARRIED DOWN TO NATURAL UNDISTURBED SOIL CAPABLE OF SUSTAINING 1500psf (75kpa) AT S.L.S. AND 2100psf (105kpa) AT U.L.S. AS PER THE 2006 OBC, DIVISION B – PART 4 AND IN ALL CASES AT LEAST 12" BELOW EXISTING ORIGINAL GRADE.

INFORMATION RELATING TO THE VALUE OF THE SOIL UNDER THE FOOTINGS IS BASED ON THE INFORMATION AVAILABLE AT THE TIME DRAWINGS ARE ISSUED. THE CONTRACTOR SHALL PLACE FOOTINGS AND FLOORS ON SOIL CAPABLE OF SUPPORTING THE PRESSURES GIVEN ON THE DRAWINGS. ANY ADJUSTMENTS CONSIDERED NECESSARY SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

2. BOTTOM OF GARAGE/CRAWLSPACE WALL FOOTINGS AT ASSUMED ELEVATION -4'-0" BELOW FINISHED EXTERIOR GRADE. CRAWL SPACE SHALL BE HEATED, OR FOOTINGS PROTECTED WITH 4" RIGID INSULATION.

3. WE RECOMMEND SUBSOL AT FOOTING FOUNDING LEVELS SHALL BE INSPECTED BY A GEOTECHNICAL ENGINEER TO DETERMINE ALLOWABLE BEARING CAPACITY PRIOR TO PLACEMENT OF CONCRETE.

4. PROVIDE A 2" SKIN COAT OF CONCRETE IN FOOTING EXCAVATIONS, IF REQUIRED TO PROTECT FOUNDING LEVELS FROM SEEPAGE WATER.

5. CONCRETE STRENGTH SHALL BE 25 MPa UNLESS NOTED. EXPOSED CONCRETE SHALL BE AIR ENTRAINED. USE CONCRETE NOTES.

6. RIGID INSULATION WHERE INDICATED SHALL BE DOW 5M OR EQUIVALENT HAVING A MINIMUM COMPRESSIVE STRENGTH OF 40 psi.

7. CONTRACTOR SHALL OBTAIN INFORMATION RELATING TO EXISTING AND PROPOSED MECHANICAL SERVICES ADJACENT FOOTING LOCATIONS. ADJUST FOOTING FOUNDING LEVELS ACCORDINGLY. DIRECT INTERFERENCES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

8. SDF – STEP DOWN FOOTING  
- CONCRETE PAD FOOTING  
PA – POST ABOVE. SEE POST SCHEDULE S1  
BPL – STEEL BASE PLATE WELDED TO POST ABOVE. SEE POST SCHEDULE NOTES S1  
- BELOW FINISHED GRADE  
PBSE – TIMBER POST BASE. USE SIMPSON CB SERIES STRONG TIE CONNECTOR PRODUCTS.

9. F1 – 24" dia. "BIG FOOT" CONCRETE FORM FOOTING x 10" dia. CONCRETE FILLED SOUTERIE. REIN: 4-15 VERTICAL c/w 4" BOTTOM HOOK.

10. NEW/EXISTING CONSTRUCTION:  
1. FOOTINGS – STEP DOWN WALL FOOTINGS TO MATCH EXISTING AT END. DO NOT EXCEED DEPTH OF EXISTING.  
2. MASONRY FOUNDATION WALLS – PROVIDE 200#16 DOWELS x 24" LG DRILLED AND GROUTED INTO EXISTING WALL. FILL COLLAR JOINT SOLID.  
3. CONCRETE FOUNDATION WALLS – PROVIDE 200#16 DOWELS x 24" LG DRILLED AND GROUTED INTO EXISTING WALL.  
4. STUD WALLS – LAG FIRST WALL STUD TO EXISTING MASONRY WALL WITH 1/2" LAG BOLTS + LEAD SHIELDS @ 16" c/c VERT.  
5. AT OPENINGS THRU EXISTING MASONRY WALLS: DRILL AND GROUT 100#16 DOWELS INTO FACE OF CUT WALL. PRIOR TO FORMING AND POURING 4" MIN. x THICKNESS OF WALL VERTICAL CONCRETE CAP. IN ADDITION TO CONC. BEARING PAD FOR SUPPORTED BEAM AS PER PLAN.  
6. BENCH FOOTINGS – DO NOT STRAIGHT CUT SOIL BELOW EXISTING FOOTINGS. SLOPE CUT AT AN ANGLE NOT EXCEEDING 7 VERTICAL:10 HORIZONTAL.

ALL STRUCTURAL INFORMATION RELATING TO EXISTING MEMBERS, PROPERTIES AND LOCATIONS ARE ASSUMED ONLY.

HAMANN ENGINEERING IS NOT RESPONSIBLE FOR DISCREPANCIES OF ASSUMED EXISTING CONDITIONS ON DRAWINGS AND ACTUAL CONDITIONS DISCOVERED ON SITE.

THE CONTRACTOR SHALL NOTE AND REPORT TO THE ENGINEER ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONDITIONS INDICATED ON THESE DRAWINGS. REMEDIAL WORK WILL BE ISSUED AS REQUIRED BY THE ENGINEER.

GROUND FLOOR NOTES

1. DECK AREA  
LL = 40 psf  
DL = 15 psf.

2. TOP OF DECK -6" BELOW FINISHED GROUND FLOOR ELEVATION 0'-0" EXCEPT AS CROSSED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR FLOOR FINISH.

3. DECKING SHALL BE 2x6 PT LAD PLAT.

4. ——— INDICATES SPAN DIRECTION OF LOAD BEARING JOISTS.

5. ALL BEAMS ARE FLUSH BEAMS UNLESS NOTED. PROVIDE METAL HANGERS AT ALL JOISTS FRAMING INTO FLUSH BEAMS, AND FOR FLUSH BEAM CONNECTIONS. USE SIMPSON STRONG TIE CONNECTORS OR AN APPROVED EQUIVALENT.  
POSTS NOT SHEATHED WITHIN A STUD WALL SHALL BE CONSIDERED POST AND BEAM CONNECTIONS, AND APPROVED BASE AND BEAM CONNECTIONS SHALL BE USED.  
ELEVATED DECK FRAMING SHALL BE CONSIDERED POST AND BEAM CONSTRUCTION. SEE POST NOTES S1

6. STRUCTURAL DRAWINGS ARE FOR MEMBER SIZES ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, DETAILS AND SPECIFICATIONS. ALL FRAMING TO BE IN CONFORMANCE WITH PART 9, SECTION 9.2.3 OF THE OBC.

7. ALL TIMBER MEMBERS ARE TO BE NO. 2 SPF UNLESS NOTED. MEMBER SIZES ARE MINIMUM FOR STRUCTURAL REQUIREMENTS. ALL EXTERIOR TIMBER SHALL BE PRESSURE TREATED AND ALL HARDWARE GALVANIZED. LHM HANGERS IN CONTACT WITH PT TIMBER SHALL BE APPROPRIATE TYPE WITH EXTRA HEAVY GALV. COATING, AS PER MANUFACTURER'S RECOMMENDATIONS. EXPOSED PSL AND LVL MATERIAL SHALL BE WEATHER PROTECTED, OR USE IS PROHIBITED.

8. BW – BEAM  
TD – TOP OF DECK  
BW – BEARING WALL; 2x6#16 STUD WALL U/N  
CANTIL – CANTILEVER  
BPL – STEEL BASE PLATE WELDED TO POST ABOVE. SEE POST SCHEDULE NOTES S1  
DBL – DOUBLE JOIST  
L – BEAM DIRECTLY OVER WALL OPENING  
LSL – LONGITUDINAL STRAND LUMBER BY TIMBER STRAND. E=1.7e6psi; Fb=3140psi  
LV – LAMINATED VENER LUMBER BY LOUISIANA PACIFIC CORP. E=2.0e6psi; Fb = 5452psi  
PA – POST ABOVE. SEE POST SCHEDULE.  
PB – POST BELOW. SEE POST SCHEDULE.  
UPT – UP-TURNED BEAM. FLUSH WITH FLOOR FRAMING ON BOTTOM  
WPL – LOOSE STEEL BEARING PLATE  
PCAP – TIMBER POST CAP. USE SIMPSON CC SERIES STRONG TIE CONNECTOR PRODUCTS.  
PBSE – TIMBER POST BASE. USE SIMPSON CB SERIES STRONG TIE CONNECTOR PRODUCTS.  
PT – PRESSURE TREATED LUMBER  
TMH – TOP MOUNT BEAM HANGER – USE SIMPSON HW SERIES.

9. PROVIDE LINES OF 2"x2" CROSS BRIDGING IN JOIST BAYS UTILIZING SPF FRAMING AT A SPACING NOT EXCEEDING 7'-0" FROM ADJACENT BRIDGING LINES OR SUPPORT POINT OF JOIST. PROVIDE LINES OF 1"x3" STRAPPING IN JOIST BAYS AT A SPACING NOT EXCEEDING 7'-0" FROM ADJACENT STRAPPING LINES OR SUPPORT POINT OF JOIST. FASTEN STRAPPING TO PLATE OR HEADER EACH END. TYPICAL WHERE JOISTS DO NOT HAVE CEILING FINISH FASTENED DIRECTLY TO UNDERSIDE OF JOISTS.

10. LOAD BEARING EXTERIOR WALLS SUPPORTING SECOND FLOOR FRAMING SHALL BE 2x6#16 STUD WALLS, EXCEPT AS NOTED.

11. CONCRETE STRENGTH SHALL BE 25 MPa AT 28 DAYS MINIMUM. CLASS C2 FOR EXPOSED CONCRETE, CLASS C4 OTHERWISE. SEE NOTES S2.1 FOR AREAS EXPOSED TO DEICING CHEMICALS.

ADDITIONAL REQUIREMENTS FOR INTERIOR AND EXTERIOR PARKING AREA CONCRETE:  
A) CONCRETE STRENGTH SHALL BE 32 MPa, HAVING A MINIMUM CEMENT CONTENT OF 335 kg/m<sup>3</sup>.  
B) CONCRETE SHALL MEET THE REQUIREMENTS OF EXPOSURE CLASS C2, AS SET FORTH IN CSA STANDARD A23.1.  
C) AIR CONTENT SHALL BE 5 ± 8 %.  
D) APPLY NONMETALLIC HARDENER, NATURAL SYNTHETIC MATERIALS WITH MOH HARDNESS 7 MINIMUM, PREMIXED WITH PORTLAND CEMENT. FOLLOW MANUFACTURER'S SPECIAL INSTRUCTIONS FOR AIR ENTRAINMENT CONCRETE.

12. NEW/EXISTING CONSTRUCTION:  
MASONRY FOUNDATION WALLS – PROVIDE 200#16 DOWELS x 24" LG DRILLED AND GROUTED INTO EXISTING WALL. FILL COLLAR JOINT SOLID.  
CONCRETE FOUNDATION WALLS – PROVIDE 200#16 DOWELS x 24" LG DRILLED AND GROUTED INTO EXISTING WALL.  
STUD WALLS – LAG FIRST WALL STUD TO EXISTING MASONRY WALL WITH 1/2" LAG BOLTS + LEAD SHIELDS @ 16" c/c VERT.  
AT OPENINGS THRU EXISTING MASONRY WALLS: DRILL AND GROUT 100#16 DOWELS INTO FACE OF CUT WALL. PRIOR TO FORMING AND POURING 4" MIN. x THICKNESS OF WALL VERTICAL CONCRETE CAP. IN ADDITION TO CONC. BEARING PAD FOR SUPPORTED BEAM AS PER PLAN.

ALL STRUCTURAL INFORMATION RELATING TO EXISTING MEMBERS, PROPERTIES AND LOCATIONS ARE ASSUMED ONLY.

HAMANN ENGINEERING IS NOT RESPONSIBLE FOR DISCREPANCIES OF ASSUMED EXISTING CONDITIONS ON DRAWINGS AND ACTUAL CONDITIONS DISCOVERED ON SITE.

THE CONTRACTOR SHALL NOTE AND REPORT TO THE ENGINEER ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONDITIONS INDICATED ON THESE DRAWINGS. REMEDIAL WORK WILL BE ISSUED AS REQUIRED BY THE ENGINEER.

SECOND FLOOR FRAMING PLAN NOTES

1. FLOOR AREA  
LL = 40 psf  
DL = 35 psf, INCLUDING A 20 psf PARTITION ALLOWANCE.

2. TOP OF DECK 0" BELOW FINISHED SECOND FLOOR ELEVATION 4" EXCEPT AS CROSSED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR FLOOR FINISH.

3. SUBFLOOR DECK SHALL BE 3/4" T&G DOUGLAS FIR PLYWOOD. SEE ALSO TIMBER FRAMING NOTES.

4. ——— INDICATES SPAN DIRECTION OF LOAD BEARING JOISTS.

5. ALL BEAMS ARE FLUSH BEAMS UNLESS NOTED. PROVIDE METAL HANGERS AT ALL JOISTS FRAMING INTO FLUSH BEAMS, AND FOR FLUSH BEAM CONNECTIONS. USE SIMPSON STRONG TIE CONNECTORS OR AN APPROVED EQUIVALENT.

6. STRUCTURAL DRAWINGS ARE FOR MEMBER SIZES ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, DETAILS AND SPECIFICATIONS. ALL FRAMING TO BE IN CONFORMANCE WITH PART 9, SECTION 9.2.3 OF THE OBC.

7. ALL TIMBER MEMBERS ARE TO BE NO. 2 SPF UNLESS NOTED. MEMBER SIZES ARE MINIMUM FOR STRUCTURAL REQUIREMENTS. ALL EXTERIOR TIMBER SHALL BE PRESSURE TREATED AND ALL HARDWARE GALVANIZED. LHM HANGERS IN CONTACT WITH PT TIMBER SHALL BE APPROPRIATE TYPE WITH EXTRA HEAVY GALV. COATING, AS PER MANUFACTURER'S RECOMMENDATIONS. EXPOSED PSL AND LVL MATERIAL SHALL BE WEATHER PROTECTED, OR USE IS PROHIBITED.

8. BW – BEARING WALL; 2x6#16 STUD WALL U/N  
TD – TOP OF DECK  
CANTIL – CANTILEVER  
DBL – DOUBLE JOIST  
L – BEAM DIRECTLY OVER WALL OPENING  
LSL – LAMINATED VENER LUMBER BY LOUISIANA PACIFIC CORP. E=2.0e6psi; Fb = 5452psi  
PA – POST ABOVE. SEE POST SCHEDULE.  
PB – POST BELOW. SEE POST SCHEDULE.  
PCAP – TIMBER POST CAP. USE SIMPSON CC SERIES STRONG TIE CONNECTOR PRODUCTS.  
PBSE – TIMBER POST BASE. USE SIMPSON CB SERIES STRONG TIE CONNECTOR PRODUCTS.  
PT – PRESSURE TREATED LUMBER  
TMH – TOP MOUNT BEAM HANGER – USE SIMPSON HW SERIES.

9. PROVIDE LINES OF 2"x2" CROSS BRIDGING IN JOIST BAYS UTILIZING SPF FRAMING AT A SPACING NOT EXCEEDING 7'-0" FROM ADJACENT BRIDGING LINES OR SUPPORT POINT OF JOIST. PROVIDE LINES OF 1"x3" STRAPPING IN JOIST BAYS AT A SPACING NOT EXCEEDING 7'-0" FROM ADJACENT STRAPPING LINES OR SUPPORT POINT OF JOIST. FASTEN STRAPPING TO PLATE OR HEADER EACH END. TYPICAL WHERE JOISTS DO NOT HAVE CEILING FINISH FASTENED DIRECTLY TO UNDERSIDE OF JOISTS.

10. PROVIDE SOLID BLOCKING @ 16" O.C. BETWEEN THE FIRST PARALLEL FLOOR JOIST AND THE EXTERIOR WALL.

11. PROVIDE DOUBLE FLOOR JOIST DIRECTLY BELOW NON LOAD BEARING PARTITION WALL WHICH IS PARALLEL TO DIRECTION OF FLOOR JOISTS.  
PROVIDE LINE OF SOLID 2" BLOCKING BETWEEN JOISTS DIRECTLY BELOW NON LOAD BEARING PARTITION WALL WHICH IS PERPENDICULAR TO DIRECTION OF FLOOR JOISTS.

12. LOAD BEARING EXTERIOR WALLS SUPPORTING STICK FRAMED ROOF FRAMING SHALL BE 2x6#16 WALLS, EXCEPT AS NOTED.  
LOAD BEARING EXTERIOR WALLS SUPPORTING PRE ENGINEERED ROOF TRUSSES SHALL BE 2x6#12 FOR 24" TRUSS SPACING & 2x6#16 FOR 16" TRUSS SPACING. SEE ROOF TRUSS NOTES.

13. L1 – 2-2x8 No.2 SPF

14. NEW/EXISTING CONSTRUCTION:  
STUD WALLS – LAG FIRST WALL STUD TO EXISTING MASONRY WALL WITH 1/2" LAG BOLTS + LEAD SHIELDS @ 16" c/c VERT.  
AT OPENINGS THRU EXISTING MASONRY WALLS: DRILL AND GROUT 100#16 DOWELS INTO FACE OF CUT WALL. PRIOR TO FORMING AND POURING 4" MIN. x THICKNESS OF WALL VERTICAL CONCRETE CAP. IN ADDITION TO CONC. BEARING PAD FOR SUPPORTED BEAM AS PER PLAN.

ALL STRUCTURAL INFORMATION RELATING TO EXISTING MEMBERS, PROPERTIES AND LOCATIONS ARE ASSUMED ONLY.

HAMANN ENGINEERING IS NOT RESPONSIBLE FOR DISCREPANCIES OF ASSUMED EXISTING CONDITIONS ON DRAWINGS AND ACTUAL CONDITIONS DISCOVERED ON SITE.

THE CONTRACTOR SHALL NOTE AND REPORT TO THE ENGINEER ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONDITIONS INDICATED ON THESE DRAWINGS. REMEDIAL WORK WILL BE ISSUED AS REQUIRED BY THE ENGINEER.

1. SLOPED ROOF: L1 = 22 psf SPECIFIED SNOW LOAD FOR DJUNDAS.  
DL = 21 psf

2. TOP OF DECK 0" BELOW FINISHED ROOF EXCEPT AS NOTED.

3. ROOF DECK SHALL BE 1/2" D.FIR PLYWOOD FOR SUPPORT FRAMING UP TO 24". PROVIDE "H" CLIPS AT ALL UNSUPPORTED EDGES. SEE ALSO TIMBER FRAMING NOTES. ROOF DECK SHALL BE 2" T&G PLANK DECK FOR SUPPORT FRAMING 24" TO 48".

4. ——— INDICATES SPAN DIRECTION OF LOAD BEARING JOISTS.  
SHADED AREAS ON PLAN INDICATE FALSE ROOF FRAMING TO BE BUILT UP FROM MAIN ROOF FRAMING BELOW TO CREATE REQUIRED ARCHITECTURAL SHAPE. USE 2x6#16 MINIMUM. PROVIDE 1-2x8 LAD FLAT ON EXIST. ROOF DECK FOR FALSE RAFTER PLATE.

5. PROVIDE HOLD DOWN CONNECTORS FOR SPANS EXCEEDING 15'-0" AND ALL CANTILEVERED CONDITIONS. USE SIMPSON STRONG TIE 'H' SERIES TO SUIT SUPPORTED MEMBER.

6. ALL BEAMS ARE FLUSH BEAMS UNLESS NOTED. PROVIDE METAL HANGERS AT ALL JOISTS FRAMING INTO FLUSH BEAMS, AND FOR FLUSH BEAM CONNECTIONS. USE SIMPSON STRONG TIE CONNECTORS OR AN APPROVED EQUIVALENT.

7. STRUCTURAL DRAWINGS ARE FOR MEMBER SIZES ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, DETAILS AND SPECIFICATIONS. ALL FRAMING TO BE IN CONFORMANCE WITH PART 9, SECTION 9.2.3 OF THE OBC.

8. ALL TIMBER MEMBERS ARE TO BE NO. 2 SPF UNLESS NOTED. MEMBER SIZES ARE MINIMUM FOR STRUCTURAL REQUIREMENTS. ALL EXTERIOR TIMBER SHALL BE PRESSURE TREATED AND ALL HARDWARE GALVANIZED. LHM HANGERS IN CONTACT WITH PT TIMBER SHALL BE APPROPRIATE TYPE WITH EXTRA HEAVY GALV. COATING, AS PER MANUFACTURER'S RECOMMENDATIONS. EXPOSED PSL AND LVL MATERIAL SHALL BE WEATHER PROTECTED, OR USE IS PROHIBITED.

9. CANTIL – CANTILEVER  
DBL – DOUBLE JOIST  
L – BEAM DIRECTLY OVER WALL OPENING  
LSL – LONGITUDINAL STRAND LUMBER BY TIMBER STRAND. E=1.7e6psi; Fb=3140psi  
LV – LAMINATED VENER LUMBER BY LOUISIANA PACIFIC CORP. E=2.0e6psi; Fb = 5452psi  
PA – POST ABOVE. SEE POST SCHEDULE.  
PB – POST BELOW. SEE POST SCHEDULE.  
UPT – UP-TURNED BEAM. FLUSH WITH FLOOR FRAMING ON BOTTOM  
WPL – LOOSE STEEL BEARING PLATE  
PCAP – TIMBER POST CAP. USE SIMPSON CC SERIES STRONG TIE CONNECTOR PRODUCTS.  
PBSE – TIMBER POST BASE. USE SIMPSON CB SERIES STRONG TIE CONNECTOR PRODUCTS.  
PT – PRESSURE TREATED LUMBER  
TMH – TOP MOUNT BEAM HANGER – USE SIMPSON HW SERIES.

10. PROVIDE CEILING JOISTS HANGERS FROM ROOF JOISTS WHERE REQUIRED AS FOLLOWS:  
AT ALL CEILING JOIST LAP SPICES AND NOT FEWER THAN:  
2x4#16 CEL. JOISTS HANGERS AT 9'-3" c/c MAX.  
2x6#16 CEL. JOISTS HANGERS AT 14'-6" c/c MAX.

11. PROVIDE 2x4#16 COLLAR TIES IN CONVENTIONAL HIP AND GABLE ROOF FRAMING. COLLAR TIES AT EA. PAIR OF RAFTERS, LOCATED AT MID HEIGHT OF ROOF RIDGE ABOVE CEILING JOISTS. FOR ROOF SLOPES GREATER THAN OR EQUAL TO 1 IN 3.

12. L1 – 2-2x8 No.2 SPF  
L2 – 3-1/2x9 1/4LVL

ALL STRUCTURAL INFORMATION RELATING TO EXISTING MEMBERS, PROPERTIES AND LOCATIONS ARE ASSUMED ONLY.

HAMANN ENGINEERING IS NOT RESPONSIBLE FOR DISCREPANCIES OF ASSUMED EXISTING CONDITIONS ON DRAWINGS AND ACTUAL CONDITIONS DISCOVERED ON SITE.

THE CONTRACTOR SHALL NOTE AND REPORT TO THE ENGINEER ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONDITIONS INDICATED ON THESE DRAWINGS. REMEDIAL WORK WILL BE ISSUED AS REQUIRED BY THE ENGINEER.

1. GENERAL

1.1 DESIGN AND CONSTRUCTION IS TO CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE. REFER ALSO TO TYPICAL DETAILS, NOTES UNDER PLANS AND SCHEDULES ON THE STRUCTURAL DRAWINGS. ALL DIMENSIONS, OTHER THAN PURELY STRUCTURAL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE CHECKED AGAINST THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.

1.2 REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR DETAILS BY OTHER TRADES.

1.3 UNLESS SPECIFICALLY NOTED ON THE DRAWINGS, NO PROVISION HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE CONTRACTOR IS TO PROVIDE ALL BRACING AND SHORING REQUIRED TO SAFELY CARRY OUT THE WORK, INCLUDING TEMPORARY SUPPORT OF EXISTING OR ADJACENT STRUCTURES AFFECTED BY THE WORK.

2. SHOP DRAWINGS

PROVIDE SHOP DRAWINGS FOR ALL STRUCTURAL COMPONENTS SHOWN ON THE STRUCTURAL DRAWINGS.

3. INSPECTION AND TESTING

A SOLS CONSULTANT AND AN INDEPENDENT INSPECTION AND TESTING AGENCY ARE TO BE ENGAGED TO CARRY OUT SOME OR ALL OF THE FOLLOWING SERVICES AS SPECIFIED BY THE ARCHITECT/ENGINEER:

1. SOIL – FOOTING EXCAVATIONS AT FOUNDING LEVELS.  
2. SLAB ON GRADE – TO DETERMINE THE REQUIRED DEGREE OF COMPACTION HAS BEEN ATTAINED.

3. CAST-IN-PLACE CONCRETE – ROUTINE INSPECTION OF MATERIALS, INCLUDING SLUMP, CYLINDER AND AIR ENTRAINMENT TESTS & REINFORCING TESTS WHEN REQUIRED OR DIRECTED IN ACCORDANCE WITH CSA CAN3-A23.2M, BUT NOT LESS THAN ONE TEST FOR THE PROJECT AND/OR ONE TEST/100m<sup>3</sup> OF CONCRETE.

4. STRUCTURAL STEEL – ROUTINE SHOP AND FIELD INSPECTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF CSA CAN3-S16.1M.

ALL INSPECTION AND TESTING SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFIED BY THE CANADIAN STANDARDS ASSOCIATION AND FOR WELDING, INSPECTORS ARE TO BE CERTIFIED BY THE CANADIAN WELDING BUREAU.

4. FOUNDATIONS

REFER TO NOTES UNDER FOUNDATION PLANS. ALL EXTERIOR FOOTINGS OR OTHER FOOTINGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL BE FOUNDATION AT A MINIMUM OF 1200 mm (4'-0") BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED.

FOOTINGS EXPOSED TO FROST ACTION DURING CONSTRUCTION SHALL BE PROTECTED BY A MINIMUM OF 1200 mm (4'-0") OF EARTH OR ITS EQUIVALENT TO PREVENT FREEZING.

THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, MAXIMUM STEP 600 mm (2'-0").

IF ACTUAL JOB SITE OR SOIL CONDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN DIRECTIONS MUST BE OBTAINED FROM THE STRUCTURAL CONSULTANT BEFORE PROCEEDING WITH THE WORK.

5. BACKFILLING AND COMPACTION

SLABS-ON-GRADE AND ALL STRUCTURAL ELEMENTS FRAMING INTO WALLS WHICH RETAIN EARTH MUST BE IN PLACE BEFORE BACKFILLING.

AT FOUNDATION WALLS, EXCEPT AS NOTED, BACKFILL AND COMPACT EACH SIDE OF WALL SIMULTANEOUSLY.

UNDER SLAB-ON-GRADE REMOVE SOFT SPOTS, ORGANIC AND FOREIGN MATTER IN THE SUB-GRADE.

BACKFILL UNDER SLAB-ON-GRADE ONLY WITH APPROVED MATERIAL, CARRIED OUT IN A MINIMUM OF 200 mm (8") LIFTS OF LOOSE FILL, EACH COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.

6. CAST-IN PLACE CONCRETE NOTES

GENERAL  
PROVIDE ALL LABOUR, MATERIALS, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WORK.

6.2 PRODUCTS

1. PORTLAND CEMENT, WATER AND AGGREGATES SHALL CONFORM TO CSA CAN3-A23.3.1M.

2. COURSE AGGREGATE: NORMAL WEIGHT, MAX. SIZE 20mm.

3. PROVIDE AN APPROVED WATER REDUCING ADDITIVE IN ALL CONCRETE.

4. PROVIDE AN APPROVED AIR ENTRAINING ADDITIVE IN ALL CONCRETE WHICH WILL BE EXPOSED TO A FREEZE/THAW CYCLE AND/OR THE ACTION OF DE-ICING CHEMICALS.

5. ADMIXTURES SHALL CONFORM TO CSA CAN3-A266M SERIES.

6. FORMWORK SHALL CONFORM TO CSA CAN3-A23.1M AND FALSEWORK SHALL CONFORM TO CSA S209.1.

7. PROVIDE STANDARD ADJUSTABLE MASONRY ANCHOR SLOTS FOR ALL MASONRY FACING ABUTTING CONCRETE FACES.

8. REINFORCING STEEL, UNLESS SPECIFICALLY NOTED, SHALL BE DEFORMED BARS CONFORMING TO CSA C30.12M, GRADE 400 (58000psi).

9. DRY-PACK GROUT TO BE 1 PART PORTLAND CEMENT TO 1-1/2 PARTS SAND TO 2 PARTS OF 5mm FEA GRAVEL WITH ONLY SUFFICIENT WATER TO DAMPEN THE MIXTURE. COMPRESSIVE STRENGTH 50 MPa AT 28 DAYS.

10. NON-SHRINK GROUT TO BE AN APPROVED PRE-MIXED PROPRIETARY PRODUCT.

11. CURING AND SEALING COMPOUNDS WHERE APPROVED FOR USE TO CONFORM TO ASTM STANDARD C309, GENERALLY, ALL CONCRETE SURFACES ARE TO BE SEALED UNLESS NOTED OTHERWISE. COMPOUNDS ARE TO BE COMPATIBLE WITH APPLIED FINISHES.

12. DRILLED BOLTS: Kwik BOLTS BY HILTI CANADA LIMITED, SIZE AND LOCATION AS SPECIFIED ON THE DRAWINGS.

6.3 EXECUTION

MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE AT 28 DAYS SHALL BE AS NOTED ON THE DRAWINGS. (20 MPa MINIMUM)

SLUMP AT THE POINT OF DISCHARGE SHALL BE CONSISTENT AT 90mm (3.5").

CONSTRUCTION JOINTS FOR THE WALLS, SLABS, AND BEAMS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE CONSULTANT BEFORE CONSTRUCTION.

FLOOR FINISHES SHALL CONFORM TO CSA STANDARD CAN3-A23.1M (CLASS A FINISH UNLESS NOTED).

6.4 DESIGN

CONCRETE MEMBERS ARE DESIGNED IN ACCORDANCE WITH CSA STANDARD A23.3.

10. SAWN TIMBER NOTES

10.1 REFERENCE STANDARDS  
CAN/CSA-086.1M89  
CSA 0121.1 M  
CSA 0141 M  
ONTARIO BUILDING CODE

10.2 DESIGN CONNECTIONS, BRACKETS, AND HARDWARE TO RESIST THE REACTIONS PRODUCED BY THE FRAMING OR LOAD CONDITIONS.

10.3 THE CONTRACTOR SHALL PROVIDE CCMC REPORTS FOR ALL PRE-ENGINEERED PRODUCTS TO BE USED. BOTH FOR THOSE PRODUCTS SPECIFIED, OR PROPOSED FOR USE.

10.3 MATERIALS

1. SAWN LUMBER: PROVIDE GRADE NO. 2 SPF LUMBER AS SHOWN ON DRAWINGS CONFORMING TO CSA 0141M AND NLGA GRADING RULES FOR CANADIAN LUMBER. USE ONLY KILN DRIED LUMBER.

2. LVL – LONGITUDINAL STRAND LUMBER BY LOUISIANA PACIFIC CORP. OR AN APPROVED EQUIVALENT HAVING AN ALLOWABLE BENDING STRESS OF Fb = 37.6 MPa (5452psi) AND E=2.0e6psi.

3. PSL LUMBER: PARALLEL STRAND BY TRUS JOIST MACMILLAN OR APPROVED EQUIVALENT HAVING A MINIMUM ALLOWABLE BENDING STRESS Fb= 38.5 MPa (5530 psi) AND E=2.0e6psi.

4. LSL LUMBER: LONGITUDINAL STRAND BY TRUS JOIST MACMILLAN OR APPROVED EQUIVALENT HAVING A MINIMUM ALLOWABLE BENDING STRESS Fb= 30.6 MPa (4435 psi) AND E=1.8e6psi.

5. PLYWOOD: PANELS FOR ROOF, EXTERIOR WALL AND SUB FLOORING TO MEET SPECIFIED REQUIREMENTS OF CSA 0121M DOUGLAS FIR PLYWOOD (PPF) AND/OR CSA 0151M CANADIAN SOFT PLYWOOD (CSP). PANELS SHALL BE 4'-0" x 8'-0" IN SIZE, AND OF THICKNESS SHOWN ON DRAWINGS.

6. FASTENINGS AND HARDWARE: NAILS, SPIKES AND STAPLES: TO CONFORM TO CSA STANDARD B111.

7. BOLTS & LAG SCREWS: TO CONFORM TO ASTM STANDARD A307, CARBON STEEL, EXTERNALLY THREAD.

8. TRUSS PLATES: MANUFACTURED FROM GALVANIZED STEEL SHEET CONFORMING TO GRADE B OF ASTM STANDARD A446, SHEET STEEL, ZINC COATED BY THE HOT DIP PROCESS, STRUCTURAL QUALITY.

9. JOIST HANGERS: MINIMUM 1/4" THICK SHEET STEEL GALVANIZED 696 COATING DESIGNATION, 1500 LB. BEARING STRENGTH.

10. ADHESIVES: SUB FLOORING ADHESIVE TO CONFORM TO CGSB 71-01-26M

10.5 ERECTION

MAKE ADEQUATE PROVISION FOR HORIZONTAL AND VERTICAL ERECTION LOADS AND FOR SUFFICIENT TEMPORARY BRACING TO KEEP THE STRUCTURAL FRAME PLUMB AND IN TRUE ALIGNMENT UNTIL THE COMPLETION OF ERECTION AND THE INSTALLATION OF MASONRY, CONCRETE WORK, AND FLOOR AND ROOF DECKS WHICH WILL PROVIDE THE NECESSARY PERMANENT BRACING AND SUPPORT.

PROVIDE TEMPORARY WOOD MEMBERS AS MAY BE REQUIRED FOR ERECTION PURPOSES AND REMOVE THEM WHEN NO LONGER REQUIRED.

10.6 WOOD FRAME CONSTRUCTION  
COMPLY WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, SECTION 9.2.3, EXCEPT WHERE OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS. SEE ALSO PREFABRICATED TIMBER ROOF TRUSS NOTES.

ANCHOR ROOF DECKS TO SUPPORT FRAMING TO RESIST UPLIFTS SPECIFIED IN THE NATIONAL BUILDING CODE OF CANADA AND SUPPLEMENT.

GLUE AND SCREW BECKING MATERIAL TO FLOOR JOISTS.

8. STRUCTURAL STEEL NOTES

GENERAL  
STRUCTURAL STEEL DESIGN SHALL CONFORM TO CSA STANDARD CAN3-S16.1M. CONNECTIONS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER EXPERIENCED IN THIS TYPE OF WORK. HIS SEAL SHALL APPEAR ON SHOP DRAWINGS.

WELDING SHALL CONFORM TO CSA STANDARD W59 AND BE PERFORMED BY A FABRICATOR CERTIFIED TO CSA W47.1.

BEAM CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM OF 50 % OF THE BEAM SHEAR CAPACITY UNLESS OTHERWISE NOTED, AND IN NO CASE BE LESS THAN THE LOADS SHOWN ON OR IMPLIED BY THE DRAWINGS.

8.4 PRODUCTS

1. ALL STRUCTURAL STEEL MEMBERS SHALL CONFORM TO CSA CAN3 – 640.21-M, ROLLED SECTIONS, PLATES, SAC RODS, STRAP ANCHORS AND BARS SHALL BE TYPE 350 M AND HOLLOW STRUCTURAL SECTIONS SHALL BE TYPE 350W, CLASS H FOR SQUARE, HSS AND CLASS C FOR ROUND HSS.

2. BOLTS, NUTS AND WASHERS FOR CONNECTIONS TO CONFORM TO ASTM A325 UNLESS NOTED.

3. ANCHOR BOLTS, NUTS AND WASHERS FOR BASE PLATES, BEARING PLATES & WELD PLATES TO CONFORM TO ASTM A307 UNLESS NOTED.

4. WELDING MATERIALS TO CONFORM TO CSA W48-M (SERIES).

5. PRIMER PAINT TO CONFORM TO CGSB 1-GP-40M OR CGSB/CPMA 2-75.

6. GRADING: WELDED STEEL, OF SIZE AND TYPE SPECIFIED ON THE DRAWINGS. SUFFICIENT TO SUPPORT LOADINGS GIVEN ON THE DRAWINGS, WITH MAXIMUM DEFLECTION OF 1/180 OF SPAN, AND NOT TO EXCEED 1/4" MAXIMUM.

7. DRILLED BOLTS SHALL BE HILTI KWIK BOLTS BY HILTI CANADA OR AN APPROVED EQUIVALENT, OF THE SIZE AND SPACING INDICATED ON THE DRAWINGS.

8.5 EXECUTION

1. FABRICATION, HANDLING & ERECTION TO CONFORM TO CSA CAN 3-S16.1-M.

2. BEAMS TO BE WELDED TO BEARING PLATES.