

**R.2****COMMUNITY SERVICES DEPARTMENT**

BUILDING AND DEVELOPMENT PERMIT

Permit # 3328/21

BPA # BPA-03386/21
 ISSUE DATE Nov 9, 2021
 EXPIRY DATE Nov 9, 2023
 JOB SEARCH KEY NKHJ1DYY

Civic Address 257 Campion Cres**Scope of Permit** Addition and Conversion to O.U.D. w/Secondary Suite

Issued T Connect Architecture Inc.
 9 Capital Circle
 Saskatoon SK S7R 0H4

Fees Building Permit Fee
 Building Permit Fee Penalty
 Development Permit Fee
 Construction - Design Fee
 Water - Sewer Fee
 Total Fees

INSPECTIONS

The City of Saskatoon Policy C09-029 (The Plan Review and Building Inspection Program) provides for mandatory inspections for this project as noted below. Failure to call for an inspection when you have reached a particular stage of construction will result in the requirement to remove materials so that the inspection may be made and/or submission of acceptable evidence to provide assurance that the construction meets the requirements of the Code. Should an inspection not be requested within a reasonable time period, you may receive a letter in the mail reminding you of your obligation to call for an inspection, or an inspector may drop by to determine the status of construction.

Mandatory Inspections required to be arranged: Footing, Pre-Backfill, Framing, Vapour Barrier, Final

Book your inspection online at: www.saskatoon.ca/go/buildinginspectionrequests or call the inspection line at (306) 975-7924

TERMS AND CONDITIONS

Permit issued subject to conditions noted on approved drawings and/or letters. Any deviation from the approved plans must be authorized by the Community Services Department.

This permit may expire if work authorized by the permit is not commenced within 6 months from the issue date and actively carried out thereafter.

If work has not started and the owner requests cancellation of this permit within 6 months of the issue date, the owner may be entitled to a partial refund.

Separate authorization for the use of streets or lanes must be obtained from the Transportation and Utilities Department.

Separate permits are required for plumbing, electrical, signs, sidewalk or curb crossings, and building moves.

Locations of utility easements are not reviewed as part of this permit. Please contact applicable utility companies prior to construction.

If occupancy of a building or part of building occurs prior to the completion of the permit, it is the owners responsibility to ensure that no occupant is exposed to an unsafe condition resulting from the work being carried out.

Director, Building Standards

Neither the issuance of a Building and Development Permit, nor the inspections made by the City of Saskatoon shall relieve the owner of the building from full responsibility for carrying out the construction or having the construction carried out in accordance with the requirements of the Uniform Building and Accessibility Standards Act, the City of Saskatoon Building Bylaw, the City of Saskatoon Zoning Bylaw or other applicable Bylaws and regulations.



Building Standards Department
222 3rd Avenue North
Saskatoon SK S7K 0J5

www.saskatoon.ca
tel 306.975.2645
fax 306.975.7712

November 8, 2021

KOLA AKINYEMI
Connect Architecture Inc.
9 Capital Circle
Saskatoon SK S7R 0H4

BP3328/21
Civic Address: 257 Campion Cres
Site Address: 257 Campion Cres (Siteld: 1315157)

**Re: Building Permit Application BAP# 3386/21
257 Campion Cres, Saskatoon
Addition and Conversion to O.U.D. w/Secondary Suite**

Dear Kola:

The above referenced building has been reviewed using the National Building Code (NBC) and the Uniform Building and Accessibility Standards (UBAS) Act & Regulations. All articles quoted are from the current NBC.

The building permit application is approved subject to the items outlined in this letter, notes on drawings and other requirements that may be determined during the building inspection process:

1.1. General Items

- 1.1.1 Please refer to your building and development permit for the expiry date. If construction has not begun within 6 months or completed by the expiry date, the permit may expire and additional fees will be required to re-instate the permit.
- 1.1.2 An exterior passage way, not less than 860mm (34 in.) wide, is required from the exit to a public lane or street. Please ensure this requirement is met for access to a future suite.
- 1.1.3 Trees on City property are not to be removed, pruned, or destroyed Please see www.saskatoon.ca/treeprotection for more information from Urban Forestry on protection of trees.
- 1.1.4 For waste and recycling service guidelines please go to www.saskatoon.ca/buildingforms and search "Waste and recycling service guidelines"
- 1.1.5 The City of Saskatoon does not review drawing for conformance to high efficient housing programs such as Passive House, Built Green, Leed or R-2000. It is the responsibility of the owner to verify certification.
- 1.1.6 Any changes from these approved documents are required to be authorized by Community Services before construction.
- 1.1.7 House numbering must be prominently displayed on the front of the building and be clearly visible from the street.

- 1.1.8 It is the responsibility of the owner to locate underground services and ensure the proposed structure does not conflict with these service locations. A copy of the easement agreement can be obtained through ISC (Information Services Corporation)
- 1.1.9 Structure encroachments are not permitted inside the boundaries of any utility easement. If there is a conflict with a utility service, the owner shall inform the respective utility. The owner shall confirm and abide by any easements registered against the property and obtain approval should the proposed structure encroach upon any easements registered against the property.
- 1.1.10 A 1.8 m (6 ft) construction fence is required to be provided during construction in established areas and/or as required by the building inspector until all openings up to 1.8 m (6 ft) from grade are sealed. Ensure that the site security (if required) is provided as per Part 8 of the NBC.
- 1.1.11 The plumbing and electrical systems have not been reviewed nor approved. The respective contractors are responsible for permitting the project and facilitating inspection and testing.

1.2. Footing, Foundation and Pre-Backfill

- 1.2.1 Concrete properties are required to conform to Section 9.3.
- 1.2.6 It is the builder's responsibility to provide full, continuous support from column(s) to pile(s).
- 1.2.7 If unstable soil conditions (water, rock, etc.) are encountered when drilling piles, an engineer's sealed design will be required.
- 1.2.10 Flexible sealant is required around the perimeter of the concrete floor and at all floor penetrations.

1.3. Framing

- 1.3.1 Shop drawings detailing engineered floors including attachments, details for suspended landings, lintels, beams and trusses are required to be submitted on site for the framing inspection.
- 1.3.2 It is recommended that the bottom plate(s) in contact with concrete be treated lumber or otherwise protected against decay.
- 1.3.3 All bedrooms are required to have a door or window, openable to the outdoors without the use of keys, tools or special knowledge. The window shall have an unobstructed opening of not less than 0.35 m² (3.77 ft²) with no dimension less than 380 mm (15 in.) as per Article 9.9.10.1.
- 1.3.4 Ensure that adequate roof ventilation is provided as per Article 9.19.1.2.
- 1.3.5 Except where a soffit faces a street, lane or public thoroughfare:
 - a) Soffits are not allowed within 450 mm (18 in.) of property lines, and
 - b) Where soffits project to less than 1.2 m (4 ft) of property lines they shall be protected against the spread of fire (no vented soffits) as per Sentence 9.10.15.5.(11).

1.4. Insulation, Vapour Barrier

- 1.4.1 Ensure the vapour barrier forms a continuous membrane as per Subsection 9.25.4.
- 1.4.2 Effective fume barriers are required between the dwelling unit/suite and the attached garages. The door between the dwelling and garage requires a self-closing device and weather-stripping as per Article 9.10.9.16.
- 1.4.3 As per NBC 9.25.1.1.(2), where the exterior perimeter walls in an attached garage have been insulated to create a partially conditioned space, the garage ceiling shall remain open to the bottom of roof deck, or, if sheeted with a membrane having a vapour permeance less than 60 ng/Pa·s·m², be insulated as per NBC 9.25.2.

1.5. Final

- 1.5.1 Ensure that permanently wired and interconnected smoke alarms are installed as per Subsection 9.10.19 (see City of Saskatoon information sheet – Smoke and CO Alarms).
- 1.5.2 Ensure that a carbon monoxide alarm is installed in each bedroom or within 5 m (16.4 ft) of each bedroom door as per Article 9.32.3.9 (see City of Saskatoon information sheet – Smoke and CO Alarms).
- 1.5.3 Ventilation shall be installed in accordance with the submitted and approved ventilation design sheets and as per Section 9.32.
- 1.5.4 Please ensure the kitchen and all bathrooms are equipped with exhaust air venting to the exterior.
- 1.5.5 A waterproof wall finish is required to a height of 1.8 m (6 ft) above the floor in shower stalls, 1.2 m (4 ft) above the rim of bathtubs equipped with a shower, and 400 mm (16 in.) above the rim of bathtubs not equipped with a shower as per Article 9.29.2.1.
- 1.5.6 Combustible cladding, if installed less than 1.2m from the property line, must be installed over 12.7mm (1/2") gypsum sheathing and have a flame spread rating not greater than 25 as per Sentence 9.10.15.5(3). Vinyl siding must also not exceed 2mm (0.08 in) in thickness. This includes wall projection sides and, if the underside of the projection is greater than 600 mm above grade, the underside shall be protected as per NBC 9.10.15.5.(7).
- 1.5.7 A 45-minute fire resistance rated wall is required where the distance to the property line is less than 1.2 m (4 ft) as per Article 9.10.15.5. The wall, including the rim joists, shall be rated for exposure to fire on the interior wall face (Sentence 9.10.3.3.(2)). If Vinyl siding is installed, it must not exceed 2 mm (0.08") in thickness.
- 1.5.8 All grade is to be sloped away from the building so water does not accumulate at or near the building as per Article 9.14.6.1.

2.0 Submit the following items to your inspector or inspections@saskatoon.ca before the final inspection:

- 2.1 Letter(s) for Assurance of Field Review and Compliance for the structural components.

2.2 Ventilation certificate for the ventilation system.

Please note it is the building owner's responsibility to have the construction carried out to meet the requirements of the National Building Code, the Uniform Building and Accessibility Standards Act & Regulations, and the City of Saskatoon's Bylaws.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Pongco'.

Paul Pongco
Building Inspector
Paul.pongco@saskatoon.ca
306.986.0823

RECEIVED

November 8, 2021

**CITY OF SASKATOON
BUILDING STANDARDS**

See Approval Letter and Notes on Drawings

APPROVED

for Construction in

THE CITY OF SASKATOON

SUBJECT TO CHANGES NOTED ON PLANS
AND/OR SPECIFICATIONS, REQUIREMENTS
OF SITE INSPECTIONS AND COMPLIANCE
WITH CITY AND/OR PROVINCIAL
REGULATIONS GOVERNING BUILDING

PERMIT No 3328/21



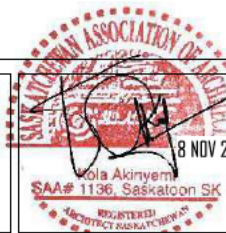
257 CAMPION CRESCENT

**CONNECT
ARCHITECTURE**

9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

**PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN**

257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

COVER PAGE

Project number	Project Number	AD-1
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
		Scale



Soffits not permitted within 0.45m (18") of property line

- ALL CONSTRUCTION TO MEET OR EXCEED LOCAL AND 2015 NATIONAL BUILDING CODES OF CANADA PART 9 WITH CURRENT REVISIONS.
- ENG. FLOOR JOISTS, TRUSSEES AND LVL BEAMS AND UNITS TO BE ENGINEERED BY P. ENG. LICENSED TO PRACTICE IN SASKATCHEWAN.
- GENERAL CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE REPORTED IMMEDIATELY.
- DRAWING MAY BE SCALED FOR APPROXIMATE DIMENSIONS ONLY. DIMENSIONS AND NOTES SHALL GOVERN.
- HEATING CONTRACTOR TO DETERMINE EXACT LOCATION OF FURNACE AND HEAT ON SITE WITH OWNER.
- ALL UNITS TO BE 2 PLY 2X10 SPURCE UNLESS NOTED OTHERWISE.
- TOTAL NUMBER OF PLYS IN A BUILT UP WOOD COLUMN TO BE NO LESS THAT THE NUMBER OF PLYS OF THE FRAMING MEMBER THAT THE COLUMN IS SUPPORTING.
- PROVIDE PRE-FAB METAL FLASHING OVER ALL EXTERIOR WINDOWS AND DOORS.
- SECURE EXTERIOR DOOR UNTIL COMPLETION OF DECK (IF APPLICABLE).
- ROOM SIZES SHOWN ON PLANS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY WITH FINAL CONSTRUCTION.
- MIRRORRED GLASS DOORS ARE NOT PERMITTED ON ANY WALK IN CLOSET.
- EXTERIOR DOORS TO BE C/WIDEAD BOLTS TO PROVIDE RESISTANCE TO FORCED ENTRY INTO HOME.
- ALL WINDOWS LESS THAN 2M TO GRADE TO COMPLY WITH CAN/CSA-A440-M FOR RESISTANCE TO FORCED ENTRY.
- ALL STAIRS, HANDRAILS AND GUARDS TO CONFORM TO THE N.B.C.C. 9B.
- INTERIOR GUARDS MUST BE A MINIMUM 900MM HIGH INCLUDES LANDINGS OVER STAIRS, 900MM HIGH ABOVE STAIR NOSINGS. MAXIMUM OPENINGS 100MM.
- GUARDRAILS MUST BE A MINIMUM HEIGHT OF 900MM FOR DECKS MORE THAN 600MM ABOVE GRADE AND 1070MM FOR DECKS MORE THAN 1.8M ABOVE GRADE. MAXIMUM OPENINGS 100MM.
- ALL BEDROOMS MUST HAVE AN OPENABLE WINDOW WITH AN UNOBSTRUCTED OPENING OF NOT LESS THAN 380MM IN HEIGHTS AND WIDTH AND A MINIMUM TOTAL UNOBSTRUCTED OPENABLE AREA OF 0.35 SQUARE METERS.
- PROVIDE SAFETY GLASS AROUND ALL TUB AND SHOWER ENCLOSURES, ENTRANCE DOORS, SLEIGHT AND GUARDS.
- PROVIDE WATER RESISTANT FLOORING IN ALL BATHROOMS.
- PROVIDE WATERPROOF WALL FINISH IN ACCORDANCE TO 2015 N.B.C.C. 9.29.2.
- ALL ATTIC ACCESSES SHOWN TO BE C/W WEATHER STRIPPING.

- SURVEYOR TO CONFIRM SIZE AND SHAPE OF LOT PRIOR TO CONSTRUCTION
- SURVEYOR TO CONFIRM SIZE AND LOCATION OF ALL EASEMENTS IF ANY
- CONTRACTOR TO PROVIDE A SITE SECURITY FENCE AT TIME OF EXCAVATION (ESTABLISHED NEIGHBOURHOOD)

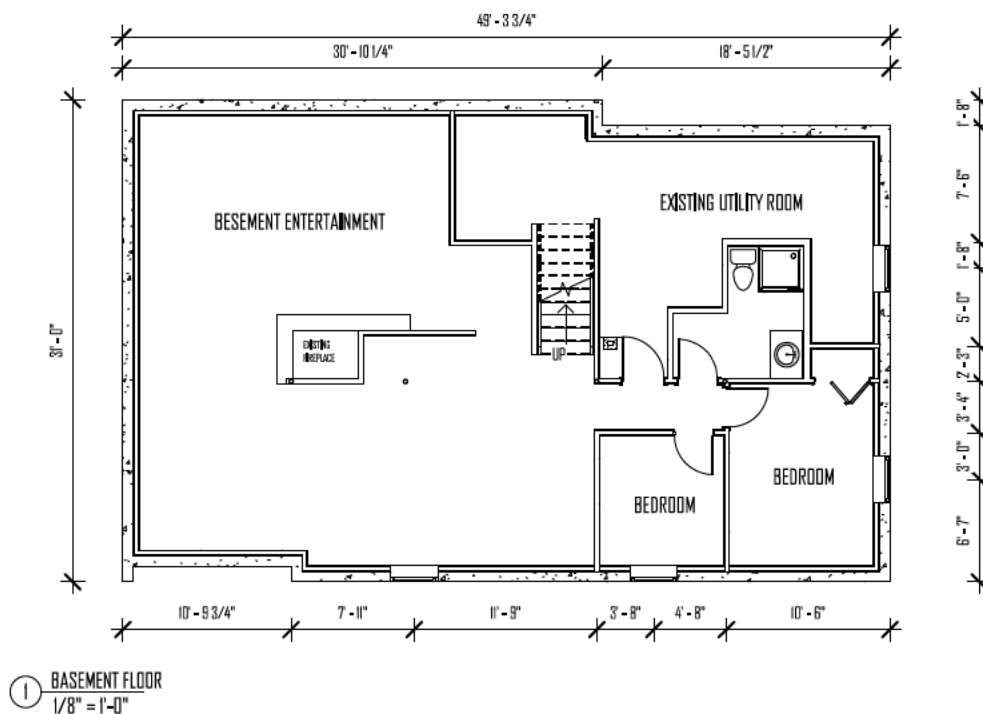


1 SITE PLAN
3/64" = 1'-0"

[illegible]

Project number	Project Number	A1-1
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
		Scale 3/64" = 1'-0"

257 CAMPION CRE, SASKATOON SK S7H 3T8



CONNECT
ARCHITECTURE

9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

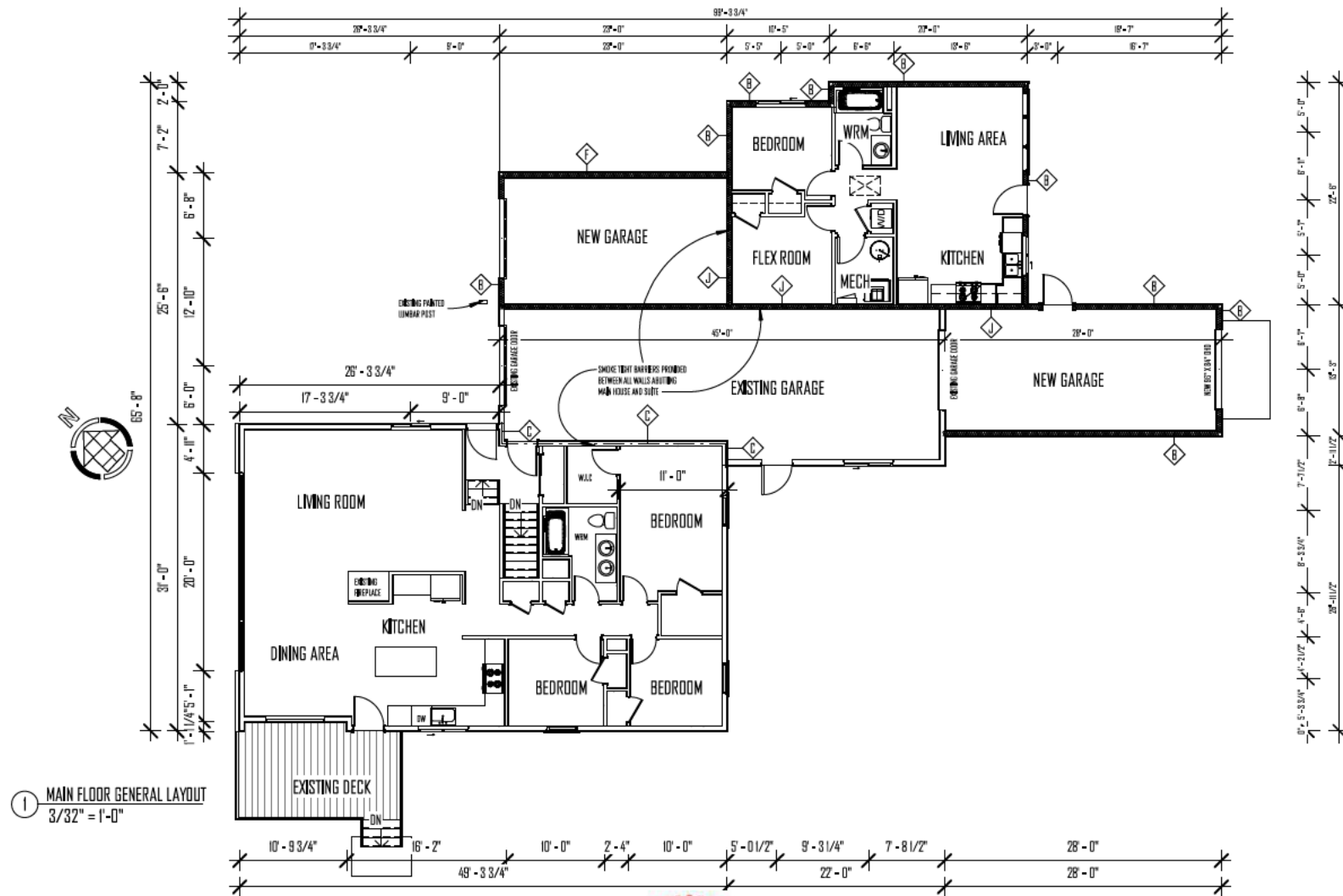
PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN
257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

BASEMENT FLOOR (EXISTING)

Project number	Project Number	A2-0
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
Scale		1/8" = 1'-0"

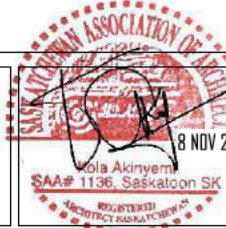


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PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN

257 CAMPION CRE, SASKATOON SK S7H 3T8



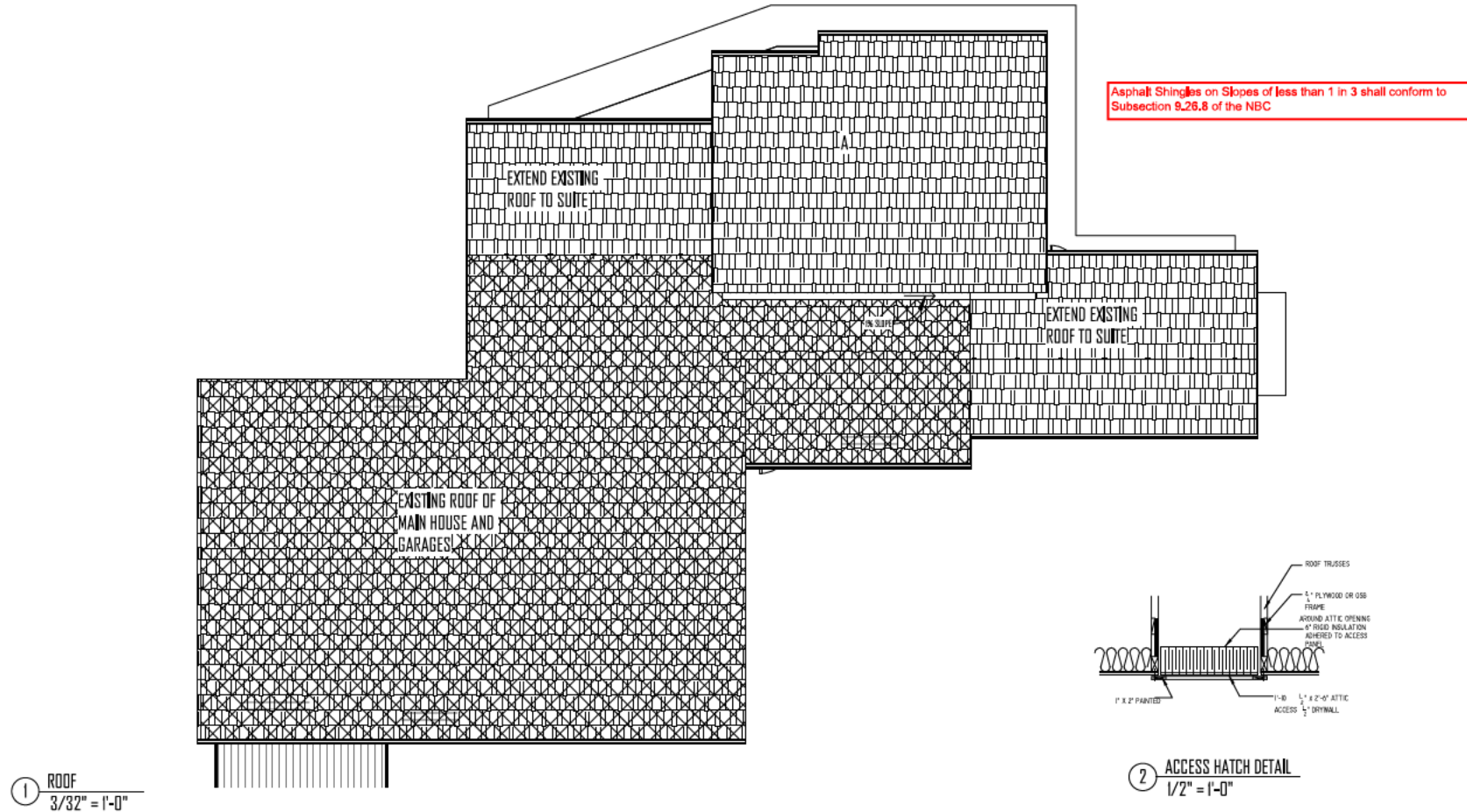
No.	Description	Date

MAIN FLOOR GENERAL LAYOUT

Project number	Project Number
Date	Issue Date
Drawn by	Author
Checked by	Checker

A2-1

Scale 3/32" = 1'-0"



No.	Description	Date

ROOF PLAN		
Project number	Project Number	A2-3
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
Scale		As indicated



② EAST ELEVATION
1/8" = 1'-0"



③ WEST ELEVATION
1/8" = 1'-0"

CONNECT
ARCHITECTURE

9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

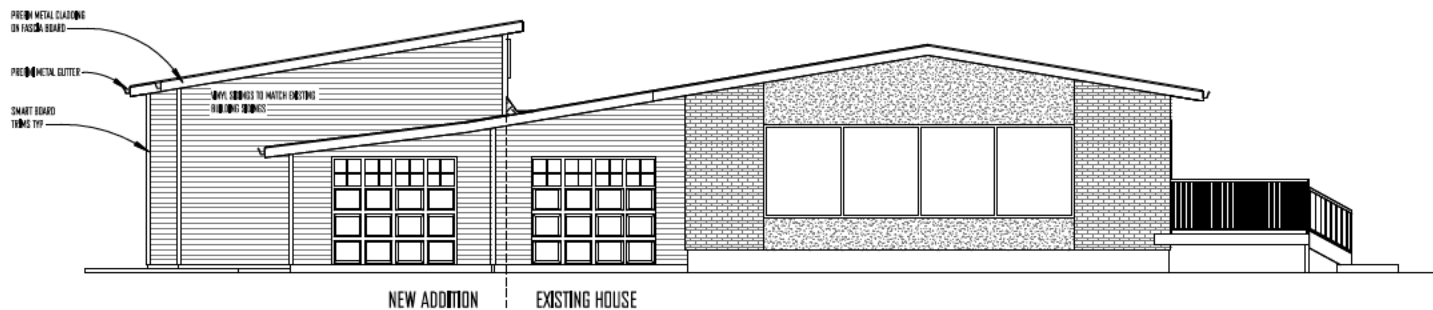
PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN
257 CAMPION CRE, SASKATOON SK S7H 3T8



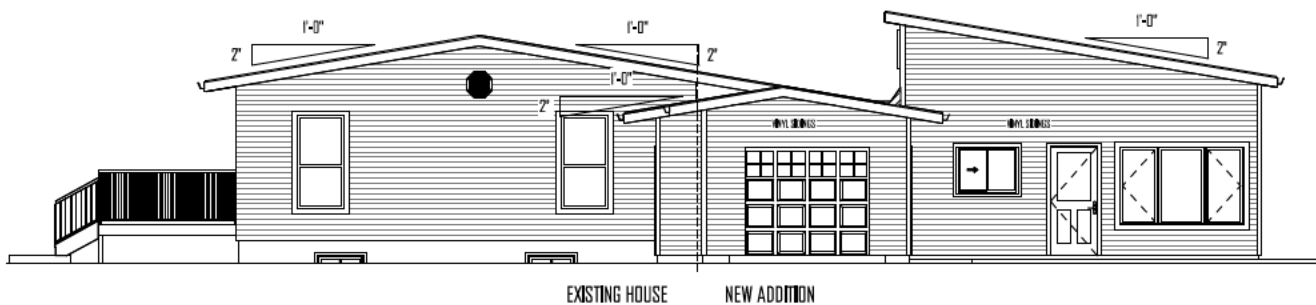
No.	Description	Date

BUILDING ELEVATIONS

Project number	Project Number	A3-1
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	Scale 1/8" = 1'-0"



① NORTH ELEVATION
1/8" = 1'-0"

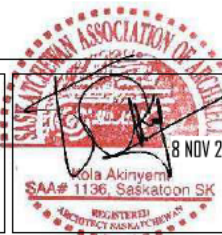


② SOUTH ELEVATION
1/8" = 1'-0"

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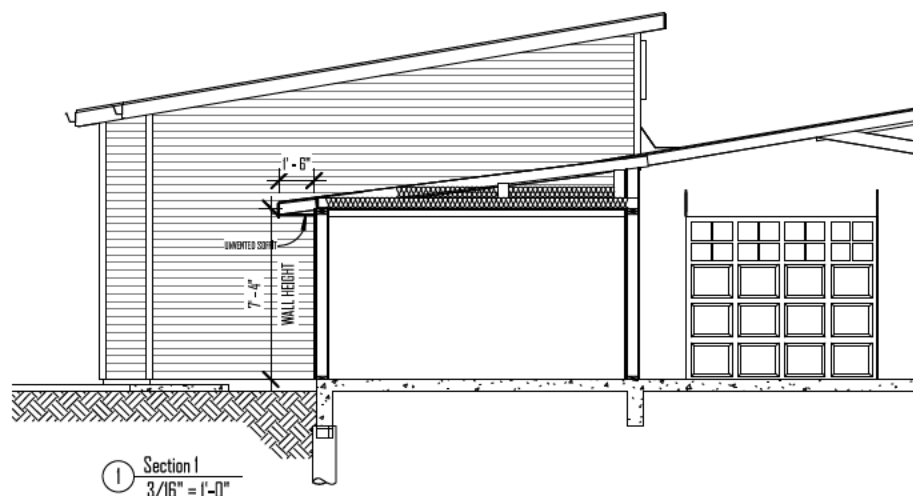
PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN
257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

BUILDING ELEVATIONS

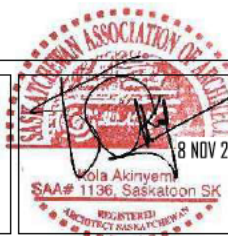
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Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
Scale		1/8" = 1'-0"



CONNECT
ARCHITECTURE

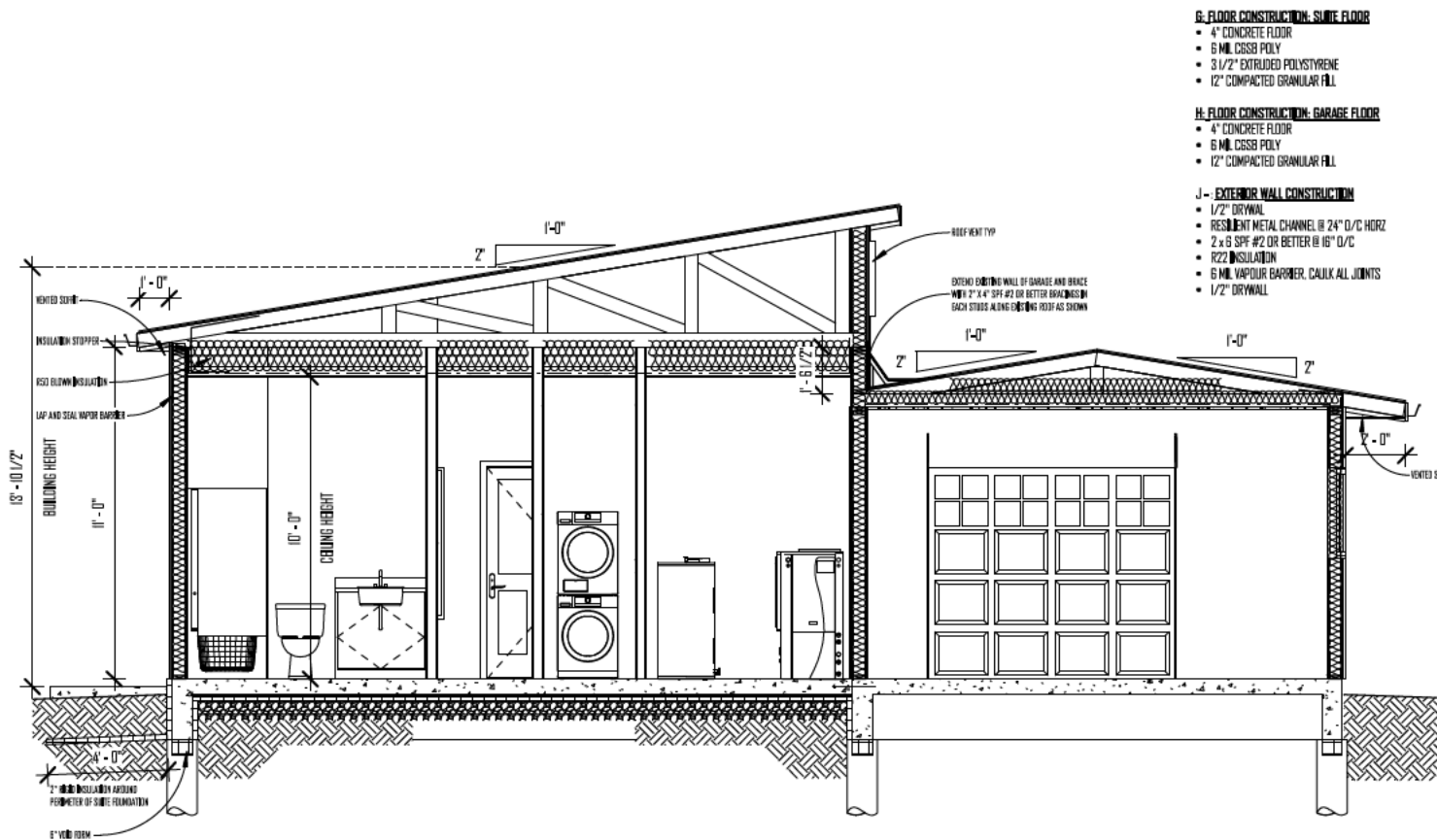
9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN
257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

BUILDING SECTIONS		
Project number	Project Number	A4-1
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	Scale 3/16" = 1'-0"



Section 2
1/4" = 1'-0"

G - FLOOR CONSTRUCTION - SUITE FLOOR

- 4" CONCRETE FLOOR
- 6 MIL CSSB POLY
- 3 1/2" EXTRUDED POLYSTYRENE
- 12" COMPACTED GRANULAR FILL

H - FLOOR CONSTRUCTION - GARAGE FLOOR

- 4" CONCRETE FLOOR
- 6 MIL CSSB POLY
- 12" COMPACTED GRANULAR FILL

J - EXTERIOR WALL CONSTRUCTION

- 1/2" DRYWALL
- RESILIENT METAL CHANNEL @ 24" O/C HORIZ
- 2 x 6 SPF #2 OR BETTER @ 16" O/C
- R22 INSULATION
- 6 MIL VAPOUR BARRIER, CAULK ALL JOINTS
- 1/2" DRYWALL

A - NEW ROOF CONSTRUCTION

- ASPHALT SHINGLE
- ROOF VENT AS REQUIRED
- ICE & WATER SHIELD PROTECTION AS PER CODE
- 3/8" OSB SHEATHING, c/w H CLIPS
- ENGINEERED ROOF SYSTEM BY SUPPLIER
- R50 BLOWN IN INSULATION, INCLUDING INSULATION STOPS
- 6 MIL POLY VAPOUR BARRIER, CAULK ALL JOINTS
- 1/2" (CD) DRYWALL CEILING FINISH AS PER SELECTION

B - EXTERIOR WALL CONSTRUCTION

- EXTERIOR FINISH AS SPECIFIED
- BUILDING PAPER AS REQUIRED BY CODE
- 3/8" OSB SHEATHING (FIRE RETARDANT SHEATHING PROTECTION OF ADJACENT BLDG PER FIRE CODE 5.5.1.2.)
- 2 x 6 SPF #2 OR BETTER @ 16" O/C
- R22 INSULATION
- 6 MIL VAPOUR BARRIER, CAULK ALL JOINTS
- 1/2" DRYWALL
- STUDS BACKING ON TO KITCHEN CABINETS 12" O/C
- BLOCKINGS ON WALLS ABOVE 12'-0" @ 48" O/C VERT

C - GARAGE TO HOUSE WALL CONSTRUCTION

- 1 LAYER 1/2" TYPE X DRYWALL TAPE & 1 COAT OF MUD (FR)
- 1.5" EXTRUDED POLYSTYRENE INSULATION
- AIR BARRIER
- 3/8" OSB SHEATHING
- 2 x 6 SPF #2 OR BETTER @ 24" O/C
- R22 INSULATION
- 6 MIL VAPOUR BARRIER, CAULK ALL JOINTS
- 1/2" DRYWALL

D - INTERIOR WALL CONSTRUCTION

- 1/2" DRYWALL
- 2 x 4 or 2 x 6 SPF #2 OR BETTER @ 24" O/C (OR TO ALIGN WITH JOISTS ABOVE FOR BEARING WALLS)
- 1/2" DRYWALL
- STUDS BACKING ON TO KITCHEN CABINETS ARE 12" O/C

E - FOUNDATION WALL CONSTRUCTION (GRADE BEAM)

- CEMENT PAVING ABOVE GRADE
- 2" EXTRUDED POLYSTYRENE
- 20 MPA HS TYPE S0 8" CONC. WALL C/W 2-ISM CONTINUOUS HORIZONTAL REBAR @ TOP, MIDDLE & BOTTOM & 10M TIES @ 16" O/C
- 2" EXTRUDED POLYSTYRENE
- 14.5" x 24" x 8" CONCRETE PILES C/W 2-ISM CONTINUOUS REBAR

See pile schedule

F - EXTERIOR WALL CONSTRUCTION

- EXTERIOR FINISH AS SPECIFIED
- BUILDING PAPER AS REQUIRED BY CODE
- 3/8" OSB SHEATHING (FIRE RETARDANT SHEATHING PROTECTION OF ADJACENT BLDG PER FIRE CODE 5.5.1.2.)
- 2 x 6 SPF #2 OR BETTER @ 16" O/C
- R22 INSULATION
- 6 MIL VAPOUR BARRIER, CAULK ALL JOINTS
- 1 LAYER 5/8" TYPE X DRYWALL

NOTES

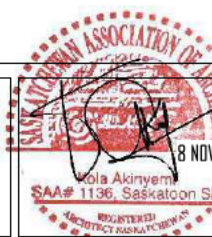
- INSTALL UNVENTED SOFFIT WHEN WITHIN 1.2m OF PROPERTY LINE AND INSTALL LOWER ROOF VENTS
- MEDICINE CABINET R₀ = 14.5" w X 24.5" h BOTTOM OF MED CAB 1854" FROM A.F.F.
- BACKING FOR TOWEL BARS TO BE 48" A.F.F. TO CENTER OR 54" ABOVE TUBS TO CENTER FROM A.F.F. BACKING FOR PAPER HOLDERS TO BE 24" A.F.F. TO CENTER

CONNECT
ARCHITECTURE

9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN

257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

BUILDING SECTION		
Project number	Project Number	A4-2
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
Scale		1/4" = 1'-0"

DIVISION 1 GENERAL REQUIREMENTS

DIVISION 1 GENERAL INSTRUCTIONS

1. EXECUTE WORK IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA 2015 WITH CURRENT REVISIONS AND SASKATCHEWAN AMENDMENTS, CONFORM TO ALL OTHER PROVINCIAL OR MUNICIPAL CODES, REGULATIONS AND STANDARDS.
2. WHERE WORK IS SUB-CONTRACTED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE COMPLIANCE OF THE VARIOUS TRADES WITH ALL APPLICABLE CODES, REGULATIONS, BYLAWS ETC.
3. CONTRACTOR TO APPLY FOR, PAY FOR AND OBTAIN THE BUILDING PERMIT AND ALL OTHER PERMITS AND ALLOWANCES REQUIRED FOR THE WORK.
4. CONTINUE ALL WORK WITHIN PROPERTY LIMITS OF SITE, ARRANGE WORK TO MINIMISE DAMAGE AND DISTURBANCE TO SURROUNDINGS
5. CONTRACTOR SHALL COMPLY WITH WORKER'S COMPENSATION BOARD REQUIREMENTS
6. CONTRACTOR SHALL CARRY INSURANCE SUFFICIENT FOR PEOPLE AND PROPERTY PROTECTION, COMPLY WITH LANDLORD REQUIREMENTS FOR INSURANCE

DIVISION 5 SAFETY REQUIREMENTS

1. PROVIDE AND ERECT HOARDING AND GUARDRAILS AS REQUIRED TO PROTECT THE PUBLIC, WORKERS AND PUBLIC AND PRIVATE PROPERTY FROM INJURY OR DAMAGE.
2. UNLESS OTHERWISE INDICATED ELSEWHERE, INSTALL OR ERECT ALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. USE NONCORROSIVE HOT DIP GALVANISED FASTENERS OR ANCHORS FOR SECURING EXTERIOR WORK.
4. ANY ERRORS IN OMISSIONS FROM OR DISCREPANCIES IN THESE SPECIFICATIONS SHALL BE REPORTED TO THE ARCHITECT.
5. THE CONTRACTOR SHALL EXAMINE THE SITE TO FAMILIARISE HIMSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE CARRIED OUT AND OBTAIN ALL INFORMATION NECESSARY FOR THE PROPER CARRYING OUT OF THE WORK.
6. THE CONTRACTOR ACKNOWLEDGES THAT HE IS AWARE OF AND FAMILIAR WITH ALL SITE CONDITIONS, NO EXTRA COSTS WILL BE ALLOWED FOR WORK THAT WOULD HAVE BEEN FORESEEN BY A CAREFUL EXAMINATION OF THE SITE AND EXISTING CONDITIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE CONNECTION OF ALL SERVICES INCLUDING POWER, GAS, SEWER, WATER, INTERNET CABLE (IF REQUIRED) AND TELEPHONE FROM THE SERVICE MAINS TO THE BUILDING.
8. WHEN BREAKING INTO OR CONNECTING TO EXISTING SERVICES OR UTILITIES, CARRY OUT WORK AT TIMES DIRECTED BY LOCAL GOVERNING AUTHORITIES WITH A MINIMUM OF DISTURBANCE TO WORK AND/OR NEIGHBOURS AND PEDESTRIAN AND VEHICULAR TRAFFIC.
9. THE CONTRACTOR IS TO PROVIDE ALL NECESSARY PROTECTION: TEMPORARY HEATING, STORAGE FACILITIES, SANITATION, LIGHT, POWER AND WATER.
10. THE CONTRACTOR IS TO SUBMIT SAMPLES OF FINISHING PRODUCTS AND MATERIALS TO ENABLE COLOURS AND BRAND TO BE SELECTED AND APPROVED BY THE OWNER

DIVISION 7 PROJECT CLEAN-UP

1. REMOVE ALL WASTE MATERIALS FROM THE SITE AT REGULARLY SCHEDULED TIMES AND LEAVE THE BUILDING BROOM CLEAN.

DIVISION 9 FINISHES

- 09250 GYPSUM BOARD
1. GYPSUM BOARD TO COMPLY WITH CSA A82.27 "PRODUCTS AND CSA A82.31 APPLICATION".

GENERAL ELECTRICAL

1. ALL ELECTRICAL EQUIPMENT, MATERIALS AND SYSTEMS SPECIFIED SHALL CONFORM TO THE LATEST EDITION OF THE CANADIAN STANDARDS ASSOCIATION C22.1 AS WELL AS MUNICIPAL AND PROVINCIAL CODES AND REGULATIONS.
2. MATERIALS TO CARRY CSA APPROVAL AND CONFORM WITH CEMA STANDARDS.
3. EQUIPMENT WIRING AND WIRING DEVICES SHALL MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE.

1.2 PERMITS, CERTIFICATES AND FEES

1. THE ELECTRICAL CONTRACTOR WILL SUBMIT THE ELECTRICAL INSPECTION DEPARTMENT AND SUPPLY AUTHORITY THE NECESSARY NUMBER OF DRAWINGS AND SPECIFICATIONS FOR EXAMINATION AND APPROVAL PRIOR TO COMMENCEMENT OF WORK AND SHALL PAY ALL FEES ASSOCIATED WITH THIS EXAMINATION AND APPROVAL INCLUDING ANY ELECTRICAL ENGINEERING REQUIRED BY AUTHORITIES HAVING JURISDICTION.

1.3 DRAWINGS AND SPECIFICATIONS

1. EXAMINE ALSO THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
2. DRAWINGS DO NOT INDICATE ALL CONSTRUCTION DETAILS. ANY INSTALLATION INVOLVING ACCURATE MEASUREMENTS OF THE BUILDING SHALL BE COORDINATED WITH CONSTRUCTION DRAWINGS AND/OR ACTUAL ON-SITE MEASUREMENTS.

1.4 EXAMINATION OF THE SITE

1. PRIOR TO SUBMITTING THE TENDER, VISIT THE SITE AND THOROUGHLY INVESTIGATE THE LOCATION, CONNECTION POINTS AND DETAILS OF ALL SERVICES AND SYSTEMS WHICH IN ANYWAY MAY AFFECT THE WORK COVERED IN THESE SPECIFICATIONS AND ACCOMPANYING DRAWINGS. NO EXTRAS WILL BE ALLOWED FOR WORK RESULTING FROM CONDITIONS THAT WOULD HAVE BEEN EVIDENT UPON THOROUGH EXAMINATION OF THE SITE.

GENERAL MECHANICAL

1. ALL MECHANICAL EQUIPMENT, MATERIALS AND SYSTEMS SPECIFIED AND SHOWN ON THE DRAWINGS SHALL BE CONFORM TO ALL APPLICABLE CANADIAN STANDARDS ASSOCIATION REQUIREMENTS AS WELL AS MUNICIPAL AND PROVINCIAL CODES AND REGULATIONS UNLESS SPECIFIED OTHERWISE.

1.2 PERMITS, CERTIFICATES AND FEES

1. THE MECHANICAL CONTRACTOR SHALL PAY ALL FEES ASSOCIATED WITH EXAMINATION AND APPROVAL OF RELATED WORK, INCLUDING ANY MECHANICAL ENGINEERING REQUIRED BY AUTHORITIES HAVING JURISDICTION.

1.3 DRAWINGS AND SPECIFICATIONS

1. EXAMINE ALSO THE ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
2. DRAWINGS DO NOT INDICATE ALL CONSTRUCTION DETAILS. ANY INSTALLATION INVOLVING ACCURATE MEASUREMENTS OF THE BUILDING SHALL BE COORDINATED WITH CONSTRUCTION DRAWINGS AND /OR ACTUAL ON-SITE MEASUREMENTS.
3. DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND BY INFORMATION INDICATED ON ONE AND OMITTED ON THE OTHER SHALL BE ASSUMED AS INCLUDED IN THE MECHANICAL CONTRACT BID PRICE.
4. THE MECHANICAL CONTRACTOR PERUSE THE ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS/WORK TO CO-ORDINATE EXACT MECHANICAL REQUIREMENTS OF ALL EQUIPMENT.

1.4 CUTTING AND PATCHING

1. ALLOW FOR VARIATION OF UP TO 1 METER FROM THE OPENINGS LOCATIONS SHOWN WITH OUT EXTRA COST AND OBTAIN PERTINENT INFORMATION PRIOR TO INSTALLATION.
2. LOCATE AND PROVIDE HOLES AND SLEEVES. CUTTING AND FITTING REQUIRED FOR MECHANICAL WORK, NO EXTRA COST WILL BE ALLOWED FOR RELOCATION OR REPLACEMENT OF IMPROPERLY LOCATED HOLES AND SLEEVES. PROVIDE ANY FLASHING REQUIRED FOR THIS DIVISION.
3. DRILL FOR EXPANSION BOLTS, HANGER RODS, SUPPORTS AND OTHER FITTINGS.
4. PATCH, REPAIR AND MAKE GOOD FINISHED CONSTRUCTION UTILIZING QUALIFIED TRADES EXPERIENCED IN THAT PARTICULAR SCOPE OF WORK.

GENERAL NOTES:

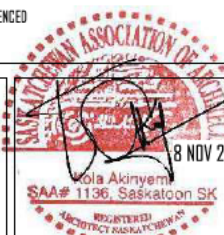
- ALL CONSTRUCTION TO MEET OR EXCEED LOCAL AND NATIONAL BUILDING CODES 2015 PART 9 WITH CURRENT REVISIONS.
- ENG. FLOOR JOISTS, TRUSSEES AND LVL BEAMS AND UNTELS TO BE ENGINEERED BY P. ENG. LICENSED TO PRACTICE IN SASKATCHEWAN.
- GENERAL CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE REPORTED IMMEDIATELY.
- DRAWING MAY BE SCALED FOR APPROXIMATE DIMENSIONS ONLY. DIMENSIONS AND NOTES SHALL GOVERN.
- HEATING CONTRACTOR TO DETERMINE EXACT LOCATION OF FURNACE AND HEAT ON SITE WITH OWNER.
- ALL UNTELS TO BE 2 PLY 2X10 SPRUCE UNLESS NOTED OTHERWISE.
- TOTAL NUMBER OF PLYS IN A BUILT UP WOOD COLUMN TO BE NO LESS THAT THE NUMBER OF PLYS OF THE FRAMING MEMBER THAT THE COLUMN IS SUPPORTING.
- PROVIDE PRE-FIN. METAL FLASHING OVER ALL EXTERIOR WINDOWS AND DOORS.
- SECURE EXTERIOR DOOR UNTIL COMPLETION OF DECK (IF APPLICABLE).
- ROOM SIZES SHOWN ON PLANS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY WITH FINAL CONSTRUCTION.
- MIRRORRED GLASS DOORS ARE NOT PERMITTED ON ANY WALK IN CLOSET.
- EXTERIOR DOORS TO BE C/W DEAD BOLTS TO PROVIDE RESISTANCE TO FORCED ENTRY INTO HOME.
- ALL WINDOWS LESS THAN 2M TO GRADE TO COMPLY WITH CAN/CSA-A440-M FOR RESISTANCE TO FORCED ENTRY.
- ALL STAIRS, HANDRAILS AND GUARDS TO CONFORM TO THE N.B.C.C. 98.
- INTERIOR GUARDS MUST BE A MINIMUM: 900MM HIGH INCLUDES LANDINGS OVER STAIRS, 900MM HIGH ABOVE STAIR NOSINGS. MAXIMUM OPENINGS 100MM.
- GUARDRAILS MUST BE A MINIMUM HEIGHT OF 900MM FOR DECKS MORE THAN 600MM ABOVE GRADE AND 1070MM FOR DECKS MORE THAN 1.8M ABOVE GRADE. MAXIMUM OPENINGS 100MM.
- ALL BEDROOMS MUST HAVE AN OPENABLE WINDOW WITH AN UNOBSTRUCTED OPENING OF NOT LESS THAN 380MM IN HEIGHTS AND WIDTH AND A MINIMUM TOTAL UNOBSTRUCTED OPENABLE AREA OF 0.32 SQUARE METERS.
- PROVIDE SAFETY GLASS AROUND ALL TUB AND SHOWER ENCLOSURES, ENTRANCE DOORS, SIDE LIGHT AND GUARDS.
- PROVIDE WATER RESISTANT FLOORING IN ALL BATHROOMS.
- PROVIDE WATERPROOF WALL FINISH IN ACCORDANCE TO 2015 N.B.C.C. 9.29.2.
- ALL ATTIC ACCESSSES SHOWN TO BE C/W WEATHER STRIPPING.

CONNECT
ARCHITECTURE

9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN

257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

SPECIFICATIONS

Project number	Project Number	A9-1
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
		Scale

ENERGY CODE NOTES & CALCULATIONS:

ALL THE BUILDINGS MUST COMPLY WITH NECB OR NBC 9.36 INCLUDING BUT NOT LIMITED TO THE FOLLOWING FOR ZONE 7A:

- FENESTRATION AND DOOR SHALL HAVE AN OVERALL THERMAL TRANSMITTANCE (U-VALUE) NOT GREATER THAN 1.80 W/(M²-K) OR ANY ENERGY RATING NOT LESS THAN 25.
- SKYLIGHTS SHALL HAVE AN OVERALL THERMAL TRANSMITTANCE NOT GREATER THAN 2.70 W/(M²-K).
- VENTILATION ACCESS DOOR SEPARATING A CONDITIONED SPACE FROM AN UNCONDITIONED OR EXTERIOR SHALL HAVE A NOMINAL THERMAL RESISTANCE OF NOT LESS THAN 1.0 W/(M²-K).
- ALL CONTINUOUS AIR BARRIERS INTO AND OUT OF THE CONDITIONED SPACE SHALL BE INSTALLED ACCORDING TO NBC 9.36 SPECS AND DETAILS.
- ALL MECHANICAL UNITS AND SYSTEMS SHALL BE DESIGNED BY MECHANICAL SUPPLIER AND CONFORM TO ECBC OR NBC 9.36.
- MATERIALS INSTALLED TOWARDS THE INTERIOR OF A CONDITIONED AIR SPACE CANNOT BE INCLUDED IN CALCULATION OF EFFECTIVE THERMAL RESISTANCE OF THE ASSEMBLY

REQUIRED EFFECTIVE THERMAL RESISTANCE OF ASSEMBLIES FOR ZONE 7A ARE PROVIDED BELOW:

ASSEMBLY	WITHOUT HRV (RSI)	WITH HRV (RSI)
• CEILING BELOW ATTICS	10.43	8.67
• CATHEDRAL / FLAT ROOFS	5.02	5.02
• ABOVE GRADE WALLS	3.08	2.97
• FLOORS OVER UNHEATED SPACE	5.02	5.02
• HEATED FLOORS	2.84	2.84
• UNHEATED FLOORS ABOVE FROST LINE	1.96	1.96

	UN-INSULATED	UN-INSULATED
• UNHEATED FLOORS BELOW FROST LINE		
• FOUNDATION WALLS	3.46	2.98
• SLAB ON GRADE W/ INTEGRATING FOOTING	3.72	2.84
• RM JOISTS	3.08	2.97
• ATTIC ACCESS HATCH	2.60	2.60
• WALL B/T HEATED GARAGE AND LIVING SPACE	3.08	2.97
• WALL OF UN-CONDITIONED GARAGE (-DJG)	2.92	2.81

WINDOWS & DOORS	
MAXIMUM U-VALUE	1.80 OR
MINIMUM ENERGY RATING	≥ 25
ONE DOOR EXCEPTION MAX U-VALUE	2.60
ACCESS HATCHES MAX U-VALUE	0.38
SKYLIGHTS (NOT APPLICABLE) MAX U-VALUE	2.70

HVAC EQUIPMENT PERFORMANCE REQUIREMENTS

GAS FIRED FURNACE W/D W/O AC	≤ 65.90
W/D W/O AC	> 65.9 6 ≤ 117.23
ELECTRIC BOILER	≤ 88
GAS FIRED BOILER (STANDARD CSA P.2, MIN AFUE	> 80%) ≤ 88
GAS FIRED BOILER (STANDARD AHRI R1, MIN E _f	> 83%) > 88 ≤ 117.23

WATER HEATERS PERFORMANCE

TANK STORAGE GAS FIRED (STANDARD ANSI Z21.0/CSA 4.3	≥ 22 KW
MIN EFF. E _t ≥ 80% AND STANDBY LOSS ≤ RATED INPUT	(800 + 16.57)(P/V)

216 EXTERIOR WALL (ABOVE GRADE):

COMPONENTS RSI CALCULATIONS RSI FOR COMPONENTS	
OUTDOOR AIR FILM	0.03 0.03
EXTERIOR FINISH - VINYL SIDINGS	0.11 0.11
SHEATHING WRAP (WP) - -	
3/8" (9.5MM) OSB SHEATHING	0.083 0.093
2"x6" (38X94) STUDS @ 16" O.C.	
R22 (5 1/2") FIBERGLASS BATT INSULATION 100/[(23/LJ9)+(77/3.87*)] =	2.55
*(LJ9 = SPF STUDS 140 X 0.0085)	
*(3.87 = R24 BATT FIBERGLAS)	
6 MIL POLY SEALED AIR VAPOR BARRIER - -	
1/2" (12.7MM) GYPSUM BOARD 12.7MM X 0.0061 =	0.077 0.077
INTERIOR AIR FILM	0.12 0.12
TOTAL ENTIRE WALL ASSEMBLY =	2.98
REQUIRED N.B.C. RSI 9.36 =	2.97

216 INTERIOR GARAGE & HOUSE SEPARATION WALL (ABOVE GRADE):

COMPONENTS RSI CALCULATIONS RSI FOR COMPONENTS	
OUTER AIR FILM 0.03 0.03	
1/2" (12.7MM) FIRE RATED GYPSUM BOARD 15.9MM X 0.0061 =	0.0775
1.5" EXTRUDED POLYSTYRENE (50.8 X 0.0336)	1.28
3/8" (9.5MM) OSB SHEATHING	0.093 0.093
2"x6" (38X94) STUDS @ 24" O.C.	
R22 (5 1/2") FIBERGLASS BATT INSULATION 100/[(23/LJ9)+(77/4.23*)] =	2.55
*(LJ9 = SPF STUDS 140 X 0.0085)	
*(4.23 = R24 BATT FIBERGLAS)	
6 MIL POLY SEALED AIR VAPOR BARRIER - -	
1/2" (12.7MM) GYPSUM BOARD 12.7MM X 0.0061 =	0.077 0.077
INTERIOR AIR FILM	0.12 0.12
TOTAL ENTIRE WALL ASSEMBLY =	4.1075
REQUIRED N.B.C. RSI 9.36 =	2.97

FOUNDATION WALL ASSEMBLY (BELOW GRADE) TYPE 2:

COMPONENTS RSI CALCULATIONS RSI FOR COMPONENTS	
PAREING - -	
2" XPS INSULATION (50 X 0.0336)	1.68
DAMP PROOFING TO GRADE - -	
8" (203MM) CONCRETE WALL 203 X 0.004 =	0.081 0.081
2" XPS INSULATION (63 X 0.0336)	1.68
TOTAL ENTIRE FOUNDATION WALL ASSEMBLY =	3.441

HEATED CONCRETE SLAB w/ 89mm OF EXTRUDED POLYSTYRENE:

COMPONENTS RSI CALCULATIONS RSI FOR COMPONENTS	
3.5" EXTRUDED POLYSTYRENE (89 X 0.0336*)	2.99
6 MIL POLY SEALED AIR VAPOR BARRIER - -	
4" CONCRETE SLAB (102 X 0.0004)	0.1408
INTERIOR AIR FILM	0.16 0.16
TOTAL ENTIRE FLOOR ASSEMBLY =	3.19
REQUIRED N.B.C. RSI 9.36 =	2.84

ROOF - (CEILING BELOW ATTIC ASSEMBLY):

COMPONENTS RSI CALCULATIONS RSI FOR COMPONENTS	
OUTDOOR AIR FILM - -	0.03
CORRUGATED METAL ROOFING (4MM) - -	
#15 FELT PAPER - -	
7/16" (11MM) OSB SHEATHING	
ENGINEERED TRUSSES @ 24" O/C W/ 18LJ" LOOSE FILL INSULATION	
100 / [(11/0.7565) + (89/1.66875)] =	
0.7565 = 89 x 0.0085 (WOOD S.P.F.) "	
1.66875 = 89 x 0.01875 (LOOSE FILL) "	1.4733
LOOSE FILL INSULATION (381 X 0.01875)	2.4275
6 MIL POLY SEALED AIR VAPOR BARRIER - -	
1/2" (12.7MM) GYPSUM BOARD 12.7MM X 0.0061 =	0.077 0.077
PAIN FINISH - -	
INTERIOR AIR FILM	0.11 0.11
TOTAL ROOF ATTIC ASSEMBLY =	8.83
REQUIRED N.B.C. RSI 9.36 C/W HRV =	8.67

ACCESS HATCH:

COMPONENTS RSI CALCULATIONS RSI FOR COMPONENTS	
6" FIBER INSULATION (152 X 0.0336)	5.107
6 MIL POLY SEALED AIR VAPOR BARRIER - -	
1/2" (12.7MM) GYPSUM BOARD 12.7MM X 0.0061 =	0.077 0.077
PAIN FINISH - -	
TOTAL ROOF ATTIC ASSEMBLY =	5.184
REQUIRED N.B.C. RSI 9.36 C/W HRV =	2.61



9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN

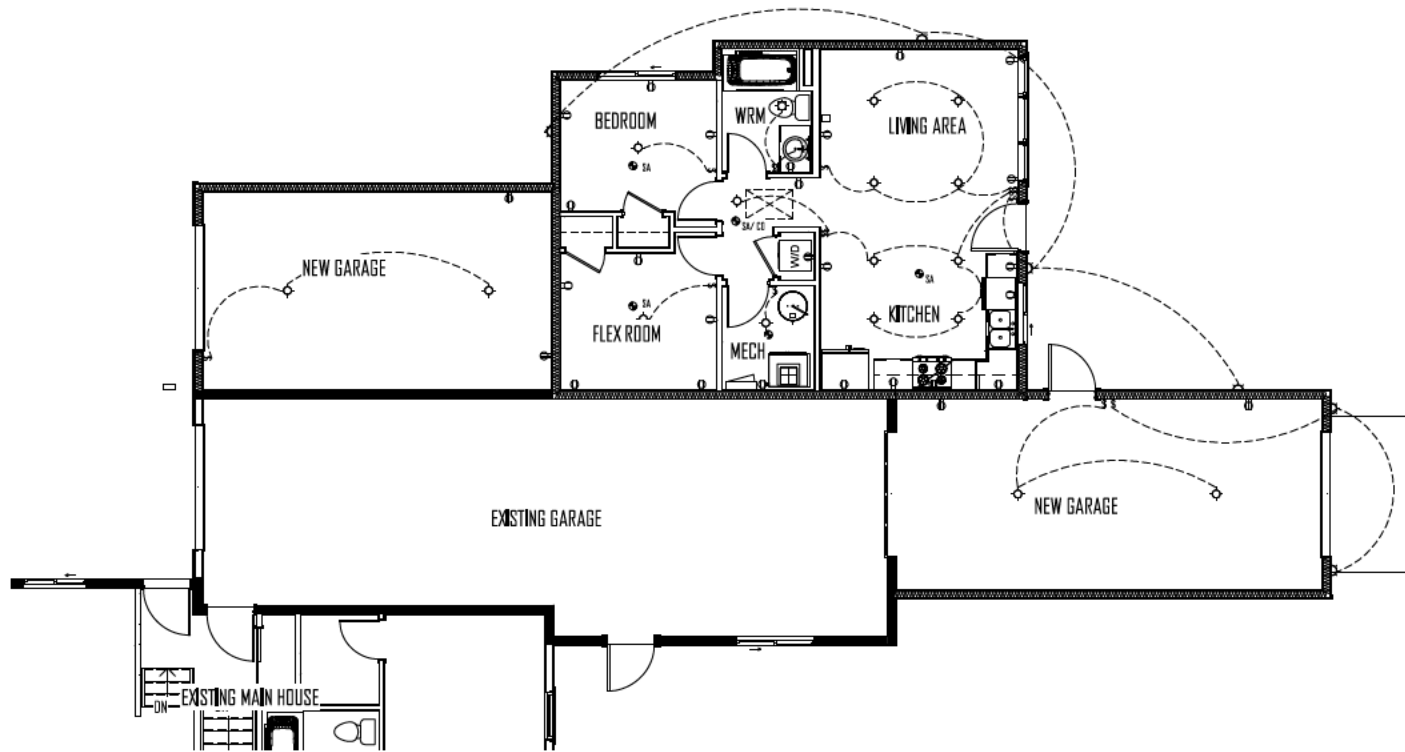
257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

ENERGY CALCULATIONS

Project number	Project Number	A9-2
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
		Scale

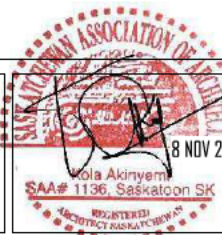


1 MAIN FLOOR ELECTRICAL
1/8" = 1'-0"

CONNECT
ARCHITECTURE

9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

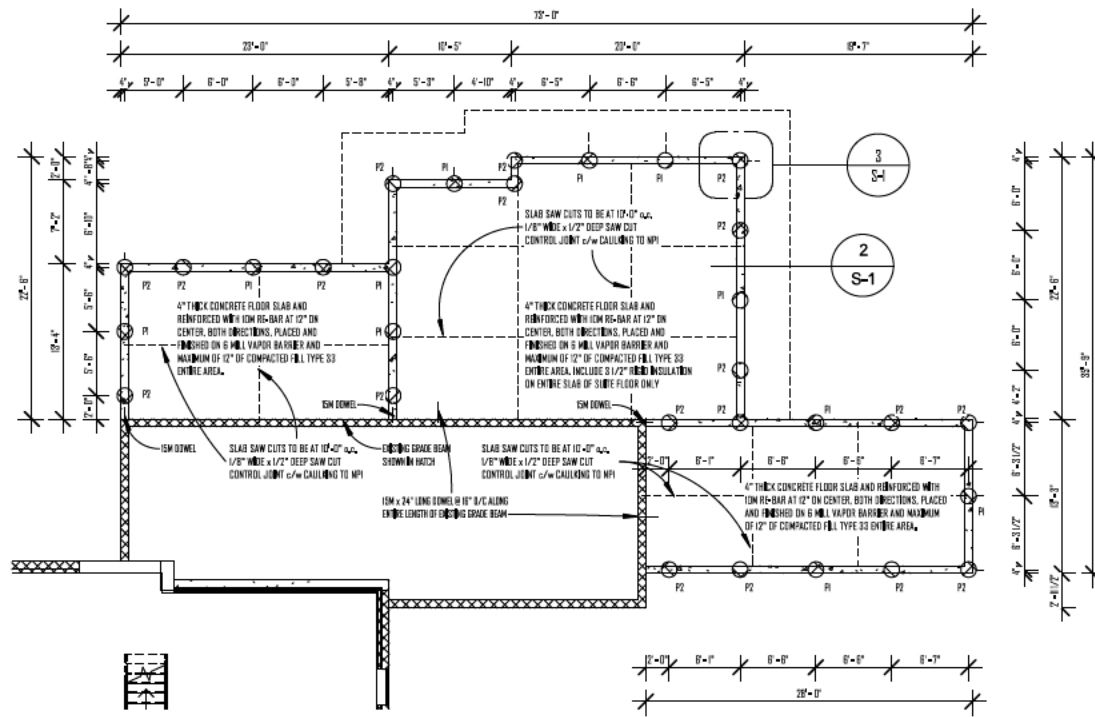
PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN
257 CAMPION CRE, SASKATOON SK S7H 3T8



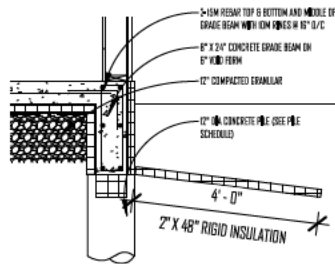
No.	Description	Date

ELECTRICAL PLAN

Project number	Project Number	E-1
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	Scale 1/8" = 1'-0"



① FOUNDATION
3/32\" = 1'-0"



② GRADE BEAM DETAIL
3/8\" = 1'-0"

③ CORNER REINF. DETAIL
3/8\" = 1'-0"

FOUNDATION NOTES:

1. **Material Specifications**
 - MATERIALS SHALL CONFORM TO THESE MINIMUM STANDARDS
 - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 30 MPa @ 28 DAYS, TYPE HS CEMENT SHALL BE USED FOR ALL CONCRETE IN CONTACT WITH SOIL. THE MAXIMUM ACCEPTABLE CONCRETE SLUMP SHALL BE 50-75mm, DO NOT ADD WATER ONCE CONCRETE HAS LEFT THE BATCH PLANT, MINIMUM AIR CONTENT 5-8%
 - REINFORCING SHALL BE NEW BILLET STEEL DEFORMED BARS 400 MPa YIELD STRENGTH CONFORMING TO CAN/CSA G-30.16-MB2, GRADE 400, CORNERS SHALL BE LAPPED OR PROVIDE CORNER BARS.
 - CLEAR STEEL COVER MINIMUM OF L5" UNLESS OTHERWISE NOTED (THICKENED EDGE CLEAR COVER 3" FROM BOTTOM), MINIMUM SPICE FOR 10M AND 15M BARS TO BE 18" AND 24", RESPECTIVELY
 - ALL CONDITIONS AND HEIGHTS THAT MAY NOT CONFORM TO THE DRAWINGS SHALL BE COMMUNICATED WITH ENGINEER BEFORE CONSTRUCTION.
 - CURE CONCRETE FOR FOUR DAYS MINIMUM
 - ALL PILES ARE 3" SREW PILES @ 14'-0" DEPTH MINIMUM
2. **PERFORMANCE EXPECTATIONS**
 - THE PERFORMANCE DESIGN IS EMPIRICAL AND BASED ON INDUSTRY STANDARDS, COMMON PRACTICE AND PAST PERFORMANCE, THE FOLLOWING ARE NORMAL EXPECTATIONS FOR PERFORMANCE OF THE SPECIFIED SYSTEM IN THE EXPANSIVE GLACIAL CLAYS FOUND IN THE MOOSE JAW AREA.
 - THE FOUNDATION SYSTEM MAY EXPERIENCE VERTICAL MOVEMENT.
 - SLABS ON GRADE ARE SUSCEPTIBLE TO SWELLING, VERTICAL DISPLACEMENT IS COMMON, DISPLACEMENT MAY BE IN EXCESS OF 3" (75mm).
 - FOUNDATIONS ARE SUSCEPTIBLE TO DAMAGE FROM WATER PONDING ADJACENT TO THE FOUNDATION ON THE EXTERIOR, POSITIVE DRAINAGE AWAY FROM FOUNDATIONS IS ESSENTIAL FOR THE LONG-TERM PERFORMANCE OF THE FOUNDATION SYSTEM.
 - CONTRACTOR TO EVALUATE SITE ELEVATION AROUND FLOOR OF SLURIE TO DETERMINE ELEVATION OF FLOOR OF SLURIE RELATIVE TO EXISTING GARAGE (CONTACT ARCHITECT FOR JOINT EVALUATION)

STRUCTURAL NOTES:

- GENERAL:
 - ALL CONSTRUCTION TO CURRENT NATIONAL BUILDING CODE OF CANADA (NBC) CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS, SITE CONDITIONS AND MEASUREMENTS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO ENGINEER IMMEDIATELY, MAINTAIN PROPER GRADING AND DRAINAGE AROUND THE PERIMETER OF THE BUILDING, MINIMUM 2% SLOPE AWAY FROM FOUNDATION PROVIDE ADEQUATE DISTANCE BETWEEN THE FOOTING AND THE GROUND WATER LEVEL (MINIMUM 36") WHILE MAINTAINING ADEQUATE SOIL COVER OVER FOOTING (MINIMUM 48") ... IF THIS NOT POSSIBLE THEN CONTACT ENGINEER PRIOR TO CONSTRUCTION
- CONCRETE:
 - PERFORM CAST-IN-PLACE CONCRETE WORK IN ACCORDANCE WITH CAN/CSA-A23.1/A23.2 UNLESS NOTED OTHERWISE BELOW. CONCRETE TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 25 MPa @ 28 DAYS, 2" TO 4" SLUMP, 4-7% AIR ENTRAPMENT, MAXIMUM AGGREGATE SIZE 3/4", TYPE HS CEMENT, WHEN OUTSIDE AIR TEMPERATURE DROPS BELOW +5 DEGREES C (CAN BE REASONABLY EXPECTED TO DO SO) PROVIDE EFFECTIVE MEANS TO MAINTAIN CONCRETE CURING TEMPERATURE AS REQUIRED TO ACHIEVE CONCRETE PERFORMANCE REQUIREMENTS

GARAGE CONCRETE:

CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa @ 28 DAYS, TYPE HS CEMENT SHALL BE USED FOR ALL CONCRETE IN CONTACT WITH SOIL. THE MAXIMUM ACCEPTABLE CONCRETE SLUMP SHALL BE 50-75mm, DO NOT ADD WATER ONCE CONCRETE HAS LEFT THE BATCH PLANT, MINIMUM AIR CONTENT 5-8%

REINFORCING STEEL:

ALL REINFORCING STEEL TO CSA G30.16, GRADE 400, INSTALL TO CAN/CSA-A23.3 CLEAR COVER L5" UNLESS NOTED OTHERWISE (FOOTING CLEAR COVER 3" FROM BOTTOM) MINIMUM SPICE FOR 10M AND 15M BARS TO BE 18" AND 24", RESPECTIVELY

FOUNDATION WALL/FOOTING:

FOOTING MUST BEAR ON UNDISTURBED, NATURALLY DEPOSITED SOIL. IF FILL OR SOFT SOIL IS ENCOUNTERED AT FOOTING DEPTH ENGINEER PRIOR TO PROCEEDING DO NOT CAST FOOTING ON FROZEN SOIL. IF SOIL BELOW FOOTING IS ALLOWED TO FREEZE AT ANY POINT AFTER INSTALLATION THEN FOUNDATION MOVEMENT AND RELATED DAMAGES COULD OCCUR (AT BUILDER'S SOLE RISK) CONTRACTOR TO MAINTAIN MINIMUM SOIL COVER OF 4'-0" FROM FINISHED GRADE TO TOP OF FOOTING, CONTACT ENGINEER PRIOR TO CONSTRUCTION IF THIS CANNOT BE ACHIEVED DUE TO SITE CONDITIONS.

PILE SCHEDULE		(*SEE NOTES UNDER CONC. SPECS)		
PILE	DIAMETER	DEPTH	REINF.	REMARKS
P-1	12"	20'-0" (6000 MM)	2-15M	--
P-2	12"	15'-0" (4500 MM)	2-15M	--

CONNECT
ARCHITECTURE

9 Capital Circle, Saskatoon S7R 0H4, Tel: 639 470 3870

PROPOSED SECONDARY SUITE FOR
WILLIAM IAN MCPHADDEN

257 CAMPION CRE, SASKATOON SK S7H 3T8



No.	Description	Date

FOUNDATION DETAILS

Project number	Project Number	S-1
Date	Issue Date	
Drawn by	Author	
Checked by	Checker	
Scale		As indicated



BUILDING & DEVELOPMENT PERMIT APPLICATION
SECTION 9.36 – ENERGY EFFICIENCY COMPLIANCE
PRESCRIPTIVE

Project Information

Address: <u>257 CAMPION CRE, SASKATOON SK</u>		BPA Number (Office use only) _____
Occupancy Class: <u>RESIDENTIAL</u>	Floor Area (m ²): <u>61.64</u>	Climate Zone: <u>7A</u>

Applies to the design and construction of all *buildings* and *additions* including:

- *Buildings of residential occupancy to which Part 9 applies;*
- *Buildings containing business and personal services, mercantile or low hazard industrial occupancies to which Part 9 applies to whose combined floor area does not exceed 300 m², excluding parking garages serving residential occupancies.;*
- *Buildings containing any mixture of the above two.*
- *Additions where the total gross floor area of the proposed addition(s) is more than 10m².*

Form to be completed by a *competent person*

Competent person is defined as a person who is familiar and fluent with building design under Section 9.36 of the NBC and acceptable to the Authority Having Jurisdiction.

***All calculations are required to be completed by a *competent person* and attached to this form.**

HRV / ERV: Yes ☒ No ☐

Effective Thermal Resistance of Above Ground Opaque Building Assemblies (RSI)

Assembly	w/ HRV	w/o HRV	Proposed	Office Use
Ceilings below attics	8.67	10.43	8.83	
Cathedral / Flat roofs	5.02	5.02	N/A	
Walls	2.97	3.08	2.98	
Rim joists	2.97	3.08	N/A	
Floors over unheated spaces	5.02		N/A	
Floors over garage	4.86		N/A	

Thermal Characteristics of Fenestration, Doors and Skylights (U)

Assembly	Efficiency	Proposed	Office Use
Windows & Doors	Maximum U-Value 1.60 or Minimum Energy Rating ≥ 25	29	
One door exception	Maximum U-Value 2.60	N/A	
Access hatches	Maximum U-Value 0.38	0.193	
Skylights	Maximum U-Value 2.70	N/A	

Effective Thermal Resistance of Below-Grade or In-Contact-With-Ground Opaque Buildings Assemblies (RSI)

Assembly	w/ HRV	w/o HRV	Proposed	Office Use
Foundation Walls	2.98	3.46	3.441	
Slab On Grade With Integral Footing	2.84	3.72		
Unheated floors:				
Below Frost Line	uninsulated	uninsulated		
Above Frost Line	1.96	1.96		
Heated Floors	2.84	2.84	3.19	

***** Calculations of RSI_{eff} for the above assemblies are required to be submitted.**



BUILDING & DEVELOPMENT PERMIT APPLICATION
SECTION 9.36 – ENERGY EFFICIENCY COMPLIANCE
PRESCRIPTIVE

HVAC Equipment Performance Requirements					
Equipment	Capacity KW	Standard	Min. Efficiency	Proposed	Office Use
Gas Fired Furnace w or w/o A/C	≤ 65.9	CSA P.2	AFUE $\geq 92\%$	92%	
	> 65.9 & ≤ 117.23	CAN/CSA-P.8	$E_t \geq 78.5\%$		
Electric Boiler	≤ 88	(1)		N/A	
Gas Fired Boiler	≤ 88	CSA P.2	AFUE $\geq 90\%$	90%	
	> 88 & ≤ 117.23	AHRI BTS	$E_t \geq 83\%$	83%	
Other					
Heat Loss / Gain Calculations	Calculations were prepared in conformance with CSA F280-12			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No BTU:	
Nomenclature	AFUE= annual fuel utilization efficiency, E_t = thermal efficiency				
Water Heaters Performance Requirements					
Equipment	Capacity KW	Standard	Min. Efficiency	Proposed	Office Use
Tank Storage Electric	≤ 12 kW (50 L to 270 L capacity)	CAN/CSA-C191	$SL \leq 35 + 0.20V$ (top inlet)	N/A	
			$SL \leq 40 + 0.20V$ (bottom inlet)		
	≤ 12 kW (> 270 L and ≤ 454 L capacity)		$SL \leq (0.472V) - 38.5$ (top inlet)		
		$SL \leq (0.472V) - 33.5$ (bottom inlet)			
	> 12 kW (> 75 L capacity)	ANSI Z21.10.3/CSA 4.3 and DOE 10 CFR, Part 431, Subpart G	$S = 0.30 + 27 / V_m$		
Tank Storage Gas Fired	< 22 kW	CAN/CSA-P.3	$EF \geq 0.67 - 0.0005V$	0.8	
	≥ 22 kW	ANSI Z21.10.3/CSA 4.3	$E_t \geq 80\%$ and standby loss \leq rated Input / $(800 + 16.57)(\sqrt{V})$		
Tankless Gas Fired	≤ 73.2 kW	CAN/CSA-P.7	$EF \geq 0.8$		
	> 73.2 kW	ANSI Z21.10.3/CSA 4.3 and DOE 10CFR, Part 431, Subpart G	$E_t \geq 80\%$	N/A	
Other					
Nomenclature	EF = energy factor in %/h, E_t = thermal efficiency S = standby loss in %/h, SL = standby loss in W, V = volume, V_m = measured storage volume in US gallons				

(1) Must be equipped with automatic water temperature control. No standard addresses the performance efficiency; however their efficiency typically approaches 100%

Declaration

I hereby certify that the calculations submitted were prepared in full accordance with Section 9.36.

KOLA AKINYEMI (SAA)

Print Name

Signature

8 NOV 2021

Date