Site Data

Lot Area	1,617.75 sm	(0.1618 ha)
Zoning		SR3
Established Grade		173.72
Floor Area		
Ground Floor (Includes 60.8 sf of Stairs)	287.92 sm	3099.2 sf
Second Floor (Excludes 60.8 sf of Stairs and 867.7 sf of O.T.B)	262.63 sm	2827.0 sf
Total Floor Area	550.54 sm	5926.2 sf
Garage (Measured to Exterior Face of Garage Walls)	55.11 sm	593.2 sf
Total Gross Floor Area	605.65 sm	6519.4 sf
Garage (Measured to Inside Face of Garage Walls)	50.72 sm	546.0 sf
Finished Basement (Measured to Inside Face of Finished Basement Walls)	231.63 sm	2493.3 sf
Lot Coverage		
Proposed Footprint (Including Garage)	21.20%	343.04 sm
Proposed Covered Porches	3.95%	63.76 sm
Total Proposed Coverage	25.15%	406.80 sm
Max Allowed Coverage	33.33%	539.25 sm
Landscaping		
Front Yard Area		437.66 sm
Landscape Soft Area	56.74%	248.33 sm

Notes:

Prior To Submitting A Building Permit Application, The Builder Shall Have Individual Siting Plans For Each Lot Approved By The Subdivider's Consulting Engineer, Which Comply With The Approved Subdivision Grading Plans And Composite Utility Plans. Siting Plans Shall Include As Constructed Sanitary And Storm Service Connection Invert Elevations At The Street Line For Each Lot.

Where Indicated On This Plan, Lots Which Abut The Subdivision Limit Shall Be Graded To Provide A Minimum 0.6 Metre Strip Of Undisturbed Land Adjacent To The Subdivision Limit. All Embankments Required For The Grading Of The Lots Shall Commence At The Inside Edge Of This Strip Of Land.

Drainage Swales Shall Be Constructed By The Builder On The Property Line And To The Grades, Depths And Sections Specified Herein:
- Minimum Depth = 0.15. Maximum Depth = 0.50m
- Minimum Gradient = 2.00%. Maximum Gradient = 5.00%
- 3:1 Maximum Side Slopes

All Embankments Formed During Lot Grading Shall Have A Maximum Five (5) Horizontal To One (1) Vertical Slope.

Driveways Shall Not Be Used As An Outlet For Any Side Yard Swales.

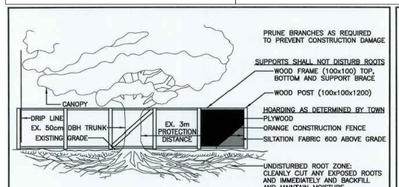
Driveways Shall Have A Gradient Between 2.00% To 8.00%.

Retaining Wall Designs Shall Be As Per Manufacturer's Specifications And Are To Be Stamped By The Structural Design Engineer. All Retaining Walls Are To Be Inspected By A Consulting Engineer During Construction And Certified Upon Completion Prior To Release Of Grading Deposit.

When A Separation Between Houses Is Less Than 3.0 Metres, Place 19mm Of Clear Stone To A Depth Of 100mm In Place Of Topsoil & Sod. A Positive Grade Away From The House At Subgrade Level Is Mandatory.

Underside Of Basement Floor Shall Be Min. 0.5m Above The 100 Year Hydraulic Grade Line.

-



MINIMUM TREE PROTECTION DISTANCE FROM TRUNK:

< 10cm DBH	1.2m
10~29cm DBH	1.8m
30~40cm DBH	2.4m
41~50cm DBH	3.0m
51~60cm DBH	3.6m
61~70cm DBH	4.2m
71~80cm DBH	4.8m
81~90cm DBH	5.4m
91~100cm DBH	6.0m
> 100cm DBH	6cm/1cm⌀

DIAMETER AT BREAST HEIGHT(1.4m) DBH = TRUNK DIAMETER AT 1.4m HEIGHT

40cmx60cm SIGN MOUNTED ON ALL SIDES OF BARRIER

MARKHAM

TREE PROTECTION ZONE

NO WORK IS PERMITTED WITHIN THE TREE PROTECTION ZONE INCLUDING GRADING, CONSTRUCTION ACCESS AND MATERIAL STORAGE.

BREACH OF TREE PROTECTION ZONE IS SUBJECT TO A FINE OF $_____

CONTACT TOWN OF MARKHAM FOR MORE INFORMATION: 905-477-5530

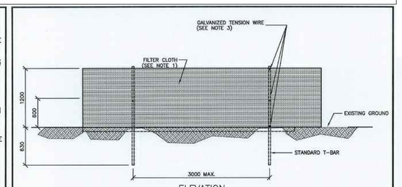
TREE PROTECTION NOTES:

1. ALL TREE PROTECTION BARRIERS SHALL BE IN PLACE AND APPROVED BY THE TOWN PRIOR TO CONSTRUCTION ACCESS.
2. ALL SUPPORTS AND STAKES SHALL BE OUTSIDE THE TREE PROTECTION ZONE AND SHALL MINIMIZE ROOT DAMAGE.
3. TREE PROTECTION BARRIERS SHALL REMAIN IN PLACE AND IN GOOD CONDITION UNTIL ALL CONSTRUCTION IS COMPLETE AND APPROVED BY THE TOWN.
4. ALL ARBORICULTURE WORK SUCH AS PRUNING OF BRANCHES AND ROOTS, SHALL BE DONE BY A QUALIFIED TREE WORKER CERTIFIED WITH THE INTERNATIONAL SOCIETY OF ARBORICULTRE APPROVED BY THE TOWN.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN

MARKHAM ENGINEERING DEPARTMENT

DRAWING NAME: TREE PRESERVATION DETAILS	SCALE: NTS	APPROVED BY: DIRECTOR OF ENGINEERING	
	REV: 0		
	DATE: SEPTEMBER 2010	DWG. NO.	MPI2

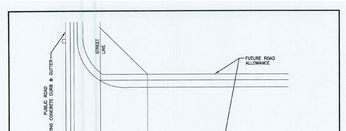


NOTES:
1. FILTER FABRIC TO BE TERRAFIX 270R OR APPROVED EQUIVALENT.
2. GEOTEXTILE TO HAVE A HORIZONTAL OVERLAY OF 1000mm AT JOINTS.
3. SINGLE STRAND GALVANIZED TENSION WIRE PASSING THROUGH T~BAR AND FILTER CLOTH.
4. INCREASE OR DECREASE T~BAR SPACING ON SLOPES, AS APPROVED BY THE DIRECTOR OF ENGINEERING.
5. WOODEN POSTS TO BE USED AT LOW POINTS FOR LARGE CATCHMENT AREAS.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN

MARKHAM ENGINEERING DEPARTMENT

DRAWING NAME: STANDARD SEDIMENT CONTROL FENCE	SCALE: NTS	APPROVED BY: DIRECTOR OF ENGINEERING	
	REV: 0		
	DATE: SEPTEMBER 2010	DWG. NO.	MPII



1. PERMISSION IS REQUIRED FROM THE AUTHORITIES HAVING JURISDICTION ON ANY PUBLIC RIGHT OF WAY.
2. THE LENGTH OF GRAVEL PAD MAY BE INCREASED IF REQUIRED BY THE DIRECTOR OF ENGINEERING.

ALL DIMENSIONS ARE IN METRES OR METRES UNLESS OTHERWISE SHOWN

MARKHAM ENGINEERING DEPARTMENT

DRAWING NAME: TEMPORARY GRAVEL ACCESS PAD (MUD MAT)	SCALE: NTS	APPROVED BY: DIRECTOR OF ENGINEERING	
	REV: 0		
	DATE: SEPTEMBER 2010	DWG. NO.	MP7

Legend

- 3R ▶ Main Level
- 3R ▷ Lower Level
- Property Line
- Existing To Be Removed
- 102.05 Existing Spot Elevation
- 102.05 Proposed Spot Elevation
- Rainwater Downspouts
- AC Air Conditioner
- Solid Hoarding
- Framed Hoarding
- AD Area Drain
- Denotes Coniferous Tree (with trunk diameter) To Remain
- Denotes Deciduous Tree (with trunk diameter) To Remain
- Denotes Tree (with trunk diameter) To Be Removed
- SM Denoted Replacement Tree Native Species Min 60mm Caliper For Deciduous And 1.8m Height For Coniferous
- (SM) Refers To Sugar Maple
- (RM) Refers To Red Maple

Base Information:

Base Information Taken From Plan Of Survey
BY: ertl surveyors
Dated: March 30, 2015

Location

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality Of York

City Benchmark

Elevations Are Refereed To The City Of Markham No. M-03-008, Having An Elevation of 168.023Meters

*TFW (Top Of Foundation Wall)

Floor Sill Plate On Inside Face Of Foundation.
- See Reduced Thickened Foundation Wall Detail & Reverse Veneer Detail For Foundation Wall Ledge Condition On Outside Face Of Foundation Walls.
- Extent Of Each Type To Be Determined By Contractor On Site During Construction

**U/F (Under Side of Footing)

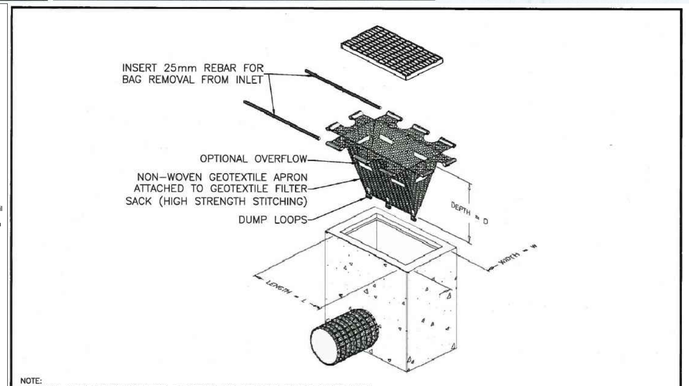
- U/F Denotes Minimum Depth Of Under Side of Footing.
- Under Side of Footing May Differ Depending On Basement Conditions. See Floor Plans And Elevations For Specific Under Side Of Footing Conditions .
- Footings To Be Min 1.2m Below Grade

General Notes:

1. Do Not Scale Drawings

2. These Plans Are To Remain The Property Of The Designer And Must Be Returned Upon Request. These Plans Must Not Be Used In Any Other Location Without The Written Approval Of The Designer.

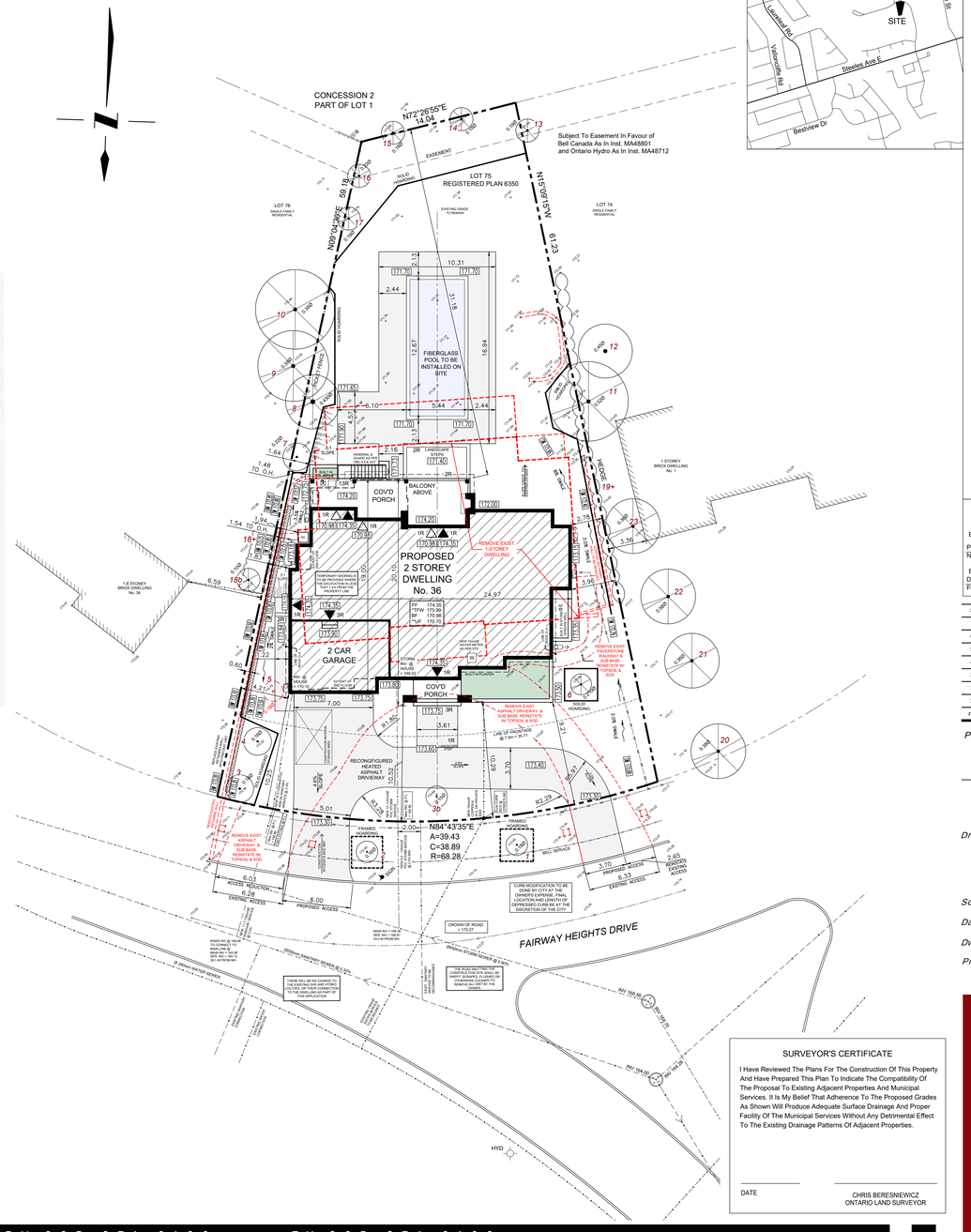
3. All Works To Be In Accordance With The Ontario Building Code And All Code References Refer To O.B.C. 2012 Division 'b'



NOTE:
1. FILTER FABRIC TO BE INSPECTED BI~WEEKLY AND REPLACED BY THE OWNER WHEN THE SILT BAG (OR SILT SACK) IS 50% FULL OF SEDIMENT.
2. THIS STANDARD SHOULD BE USED DURING ROAD CONSTRUCTION.
3. THE USE OF TERRAFIX SILT SACK IS REQUIRED. THE USE OF ANY EQUIVALENT PRODUCT IS SUBJECT TO APPROVAL BY THE DIRECTOR OF ENGINEERING.

MARKHAM ENGINEERING DEPARTMENT

DRAWING NAME: STREET CATCHBASIN SEDIMENT TRAP DETAIL	SCALE: NTS	APPROVED BY: DIRECTOR OF ENGINEERING	
	REV: 1.		
	DATE: AUGUST 2012	DWG. NO.	MP5



SURVEYOR'S CERTIFICATE

I Have Reviewed The Plans For The Construction Of This Property And Have Prepared This Plan To Indicate The Compatibility Of The Proposal To Existing Adjacent Properties And Municipal Services. It Is My Belief That Adherence To The Proposed Grades As Shown Will Produce Adequate Surface Drainage And Proper Facility Of The Municipal Services Without Any Detrimental Effect To The Existing Drainage Patterns Of Adjacent Properties.

DATE

CHRIS BERESNIEWICZ
ONTARIO LAND SURVEYOR

Key Plan nts

The Undersigned Has Reviewed And Takes Responsibility For This Design, And Has The Qualifications And Meets The Requirements Set Out In The Ontario Building Code To Be A Designer.
Qualification Information Required Unless The Design Is Exempt Under Division C-3.2.4.1. Of the 2012 ONTARIO Building Code.

Peter Giordano — 25061
Name — Signature — BCIN

Registration Information Required Unless The Design Is Exempt Under Division C-3.2.4.1. Of the 2012 ONTARIO Building Code.

DAVID W. SMALL DESIGNS INC. — 29999
Firm Name — BCIN

no.	date	revision / comment
8	Jun 10/20	As Per Zoning Comments
7	Jan 30/20	As RIGS Comments
6	Jan 08/20	As RIGS Comments
5	Dec 03/19	As RIGS Comments
4	Oct 29/19	As RIGS Comments
3	Sep 03/19	As Per Lot Grading Coordination
2	Aug 21/19	As Per Arborist Coordination
1	July 05/19	Issued To Owner For Building Permit Applic'n

Project:

Kianian Home
36 Fairway Heights Drive
Lot 75
Registered Plan 6350
City of Markham,
Regional Municipality of York

Drawing:

Site Plan

Scale:	1:200
Date:	Jul 2019
Dwn by:	EC
Proj. no.:	19-1735

SP

DAVID SMALL DESIGNS .COM

1440 Hurontario Street, Mississauga, ON L5G 3H4 PH 905.271.9100 FX 905.271.9109

Schedules

Wood Lintels / Beams

B1 2-2x8	B7 2-2x12	B13 1-9.5" LVL	B19 1-14" LVL
B2 3-2x8	B8 3-2x12	B14 2-9.5" LVL	B20 2-14" LVL
B3 4-2x8 Bolted	B9 4-2x12 Bolted	B15 3-9.5" LVL	B21 3-14" LVL
B4 2-2x10	B10 1-7.25" LVL	B16 1-11.88" LVL	B22 1-16" LVL
B5 3-2x10	B11 2-7.25" LVL	B17 2-11.88" LVL	B23 2-16" LVL
B6 4-2x10 Bolted	B12 3-7.25" LVL	B18 3-11.88" LVL	B24 3-16" LVL

Note: where solid (1) piece lumber shown - do not substitute multiple ply.

Note:
1). Engineered wood beams to be min. 2.0e or equal and 1-3/4" in width. Nailing pattern see S1.
2). 'SDS' = Simpson Strong-Tie Strong-Drive heavy-duty connector screws. Refer to manuf. specs. for exact details (see typ. detail screw patterns)

Columns / Posts

P2 2-2x6	P4 4-2x6	P6 3-2x4	P8 5-2x4	P10 6x6	P12 4-2x8
P3 3-2x6	P5 5-2x6	P7 4-2x4	P9 4x4	P11 3-2x8	

C1 HSS 3.5"x3.5"x0.25" - Brg. Plate 6"x 5/8"x 10" + (2) 5/8" Dia. A.B
C2 HSS 4"x4"x0.312" - Brg. Plate 10"x 3/4"x 10" + (2) 3/4" Dia. A.B
C3 HSS 5"x3"x 0.375" - Brg. Plate 11"x 3/4"x 11" + (2) 3/4" Dia. A.B
C4 HSS 5"x5"x 0.375" - Brg. Plate 11"x 1"x 11" + (2) 3/4" Dia. A.B
S1 W10x49 Exposed steel post/beam
S2 W12x40 Exposed steel post/beam

12" / 3" Typical anchor bolt

Steel Lintels

L1 3.5" x 3.5" x 1/4"	L3 5" x 3.5" x 5/16"	L5 6" x 4" x 3/8"
L2 5" x 3.5" x 1/4"	L4 5" x 3.5" x 3/8"	L6 7" x 4" x 1/2"

Steel Plates

WP1 = 6"x 5/8"x 10" + (2) 5/8" Diameter Anchor Bolts
WP2 = 6"x 7/8"x 14" + (2) 3/4" Diameter Anchor Bolts
WP3 = 11" x 1" x 11" + (2) 3/4" Diameter Anchor Bolts

12" / 2" Anchor bolt

All Structural Steel to Conform To G40.21-350W

Concrete Footings

BEW = Bottom Bars Each Way	F4 42" x 42" x 16" Deep c/w 5-15M BEW
	F5 48" x 48" x 16" Deep c/w 5-15M BEW
F1 24" x 24" x 12" Deep	F6 54" x 54" x 18" Deep c/w 7-15M BEW
F2 30" x 30" x 14" Deep	F7 60" x 60" x 18" Deep c/w 7-15M BEW
F3 36" x 36" x 16" Deep	F8 66" x 66" x 20" Deep c/w 9-15M BEW

> Strip footings below load bearing walls to have a min. 6" projection minimum 8" in depth + 2-15m bottom continuous
> All footings to bear on undisturbed soil, rock or engineered fill certified by soils engineer
> Min. soil bearing capacity = SLS 120 Kpa (2500 Psf) and to be verified by soils engineer prior to pouring footings

Refer to Sheet S1 for General Structural Notes

General Basement Notes:

1. Typical poured concrete basement floor

3" concrete slab c/w 6 mil poly vapor barrier on granular fill

2. Typical 2x6 interior load bearing wall

2x6 stud wall (@ 16" o.c.) on 10 mil poly moisture barrier on 6" concrete curb (anchored w/ 1/2" a.b. @ 4'-0" o.c.) on 18" x 8" deep poured concrete ftg. + 2-15m bars bottom continuous

3. Typical basement wall strapping with insulation

1/2" drywall on 6 mil poly v.b. on full ht. 2x4 studs @ 16" o/c strapping c/w min. R12 batt insul'n + r10ci or min. R20ci (typ. for entire perimeter of new bsmt.)

4. Provide minimum 4" bearing ledge for structural slab support

5. Typical poured concrete perimeter garage foundation walls

10" poured concrete foundation wall on 22" wide x 8" deep concrete footing (typ. U.N.O.)

6. Typical reinforced poured concrete foundation walls

Reinforced 10" poured concrete foundation wall on 22" wide x 8" deep concrete footing (typ. U.n.o.)

7. Ensure soil backfilling on unexcavated spaces is done balanced placing soil equally on both sides to avoid collapse

8. Foundation drainage layer to comply with ont. Reg. 332/12 and subsection 9.14.2. And 9.14.4.

9. Typical cold room notes

Vent cold room per obc 9.32.2.1 & 9.32.2.2 (0.2% floor area w/ rust proof insect screen). Cold room door to be metal insulated door with weather stripping

10. At least one smoke alarm shall be installed on or near the ceiling on each floor and basement levels as per OBC 9.10.19 and also in each sleeping room with a visual signaling component as per OBC 9.10.19.1 (2)(3)(4). Smoke alarms and co. Alarms shall be interconnected. A carbon monoxide alarm shall be installed adjacent to every sleeping area for dwellings with fuel burning appliances, or an attached garage.

11. Typical interior door heights

If ceiling height is 10'-0" or greater than interior doors to be 8'-0" tall
If ceiling height is 9'-0" - 10'-0" than interior doors to be 7'-6" tall
If ceiling height is less than 9'-0" than interior doors to be 6'-8" tall

12. Typical mechanical ventilation

A principal dwelling exhaust fan shall be installed and controlled by a centrally located switch identified as such. Every bathroom, powder room and laundry room shall be equipped with a mechanical exhaust fan and vent.

13. Typical railing & guard heights

An interior handrail & guard shall be @ 36" a.f.f. per obc 9.8 & sb7
An exterior handrail & guard shall be @ 36" (if less than a max. Of 6'-0" drop) per OBC 9.8 & sb7
An exterior handrail & guard shall be @ 42" (if greater than 6'-0" drop) a.f.f. per OBC 9.8 & sb7 insulated door with weather stripping

14. Window wells to be precast unit interlocking retaining wall - drain to storm (typ.)

15. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

General Notes:

1. Do not scale drawings

2. These plans are to remain the property of the designer and must be returned upon request. These plans must not be used in any other location without the written approval of the designer.

3. All works to be in accordance with the ontario building code and all code references refer to OBC 2012 division 'B'

4. Contractor to check all dimensions, specifications, etc. On site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

5. Structural engineer to be notified prior to pouring of concrete to inspect rubber septum during construction - engineer will not certify walls or footing/slabs unless prior inspection is conducted - it is the responsibility of the contractor to notify the project engineer and make all arrangements.

6. All wood framed window openings that exceed 48" wide are to have 2/2"x6" plates @ bottom of opening (typical.) U.N.O.

7. Adjustments or changes made to the floor layout roof truss layout, beams, lentils & point loads or required load bearing walls must be identified prior to construction and David w. Small Designs Inc. and project engineer must be notified for further review and approval.

8. All shop drawings for pacers units to be submitted for field review by site inspector prior to manufacturing and installation

9. 'SDS' = Simpson stuttering strong-drive heavy-duty connector screws. Refer to manful. Specs. For exact details (see S1 for screw patterns)

10. Typical wall stud construction

• Typical exterior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
• All 14' & 16' high exterior walls to be 2/2x6 sep #2 @ 12" o/c.
• Typical interior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
• All 14' & 16' high interior walls to be 2/2x6 sep #2 @ 12" o/c.
• All 10' high interior basement walls to be 2x6 sep #2 @ 16" o/c.

11. Where load bearing walls are not finished with drywall or a suitable interior finish, then blocking or strapping shall be fastened to the stud at mid-height as per OBC. 9.23.10.2.(2)(5)

12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c c/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

17. All electrical panels & components to comply with OBC. 9.34. & specific requirements of the local utility supplier

18. Protection from dampness

All wood framing members that are not pressure treated & which are supported on concrete. In contact with ground or fill shall be separated from the concrete. By min. 5mil polyethylene or type s roll roofing as per OBC 9.23.2.3.(1) & (2)

19. Typical wood posts

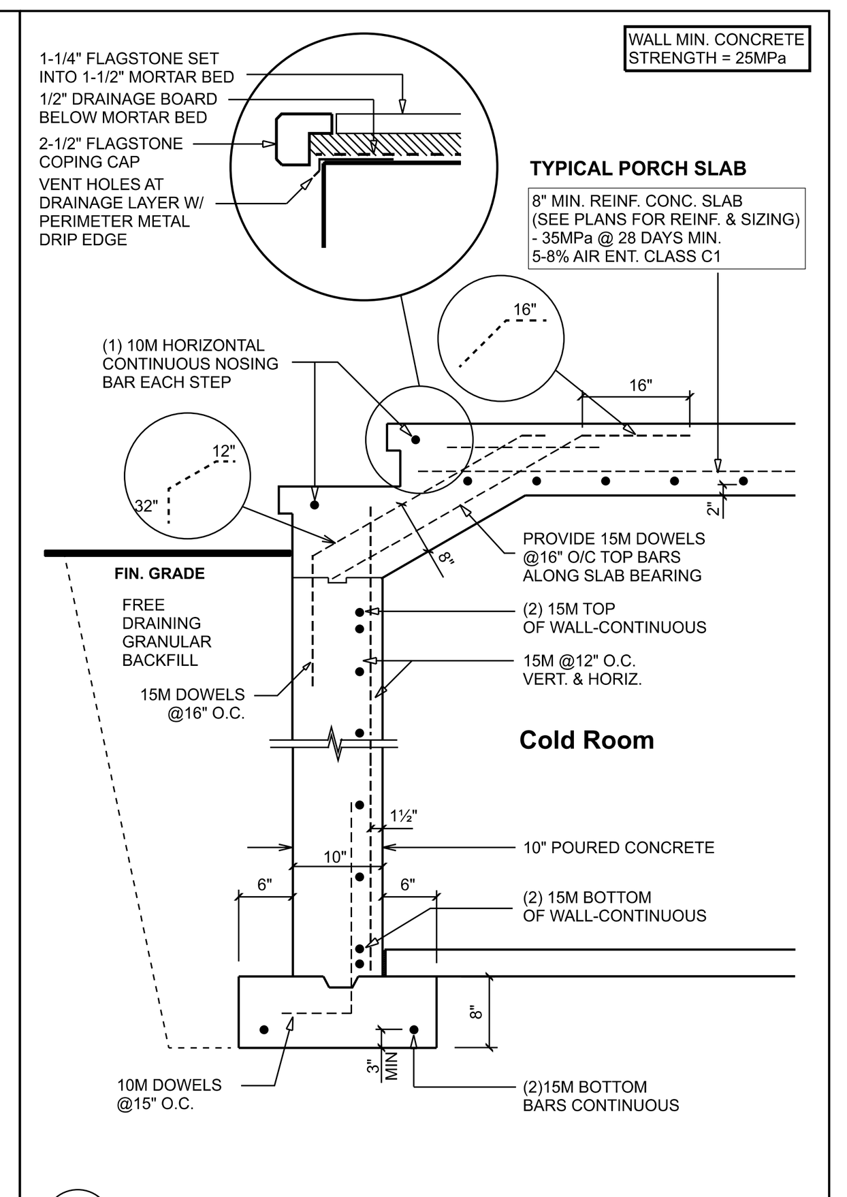
All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

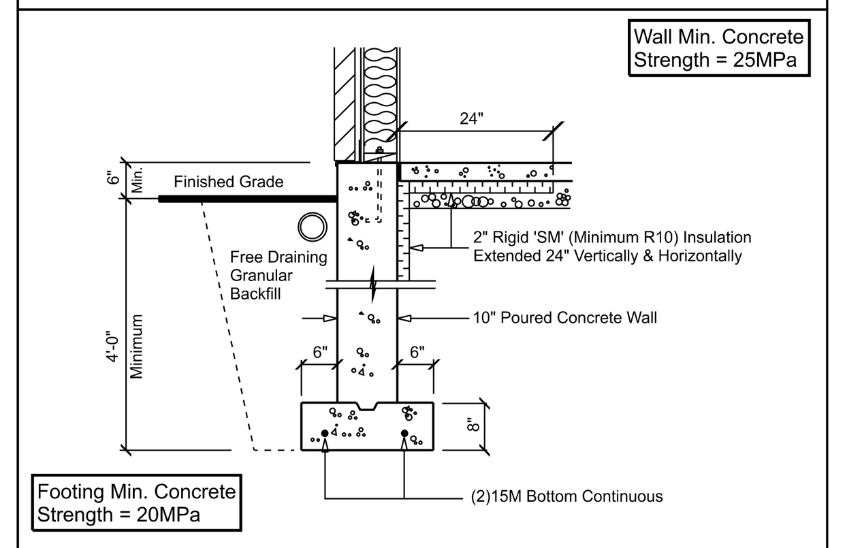
21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

Project Notes

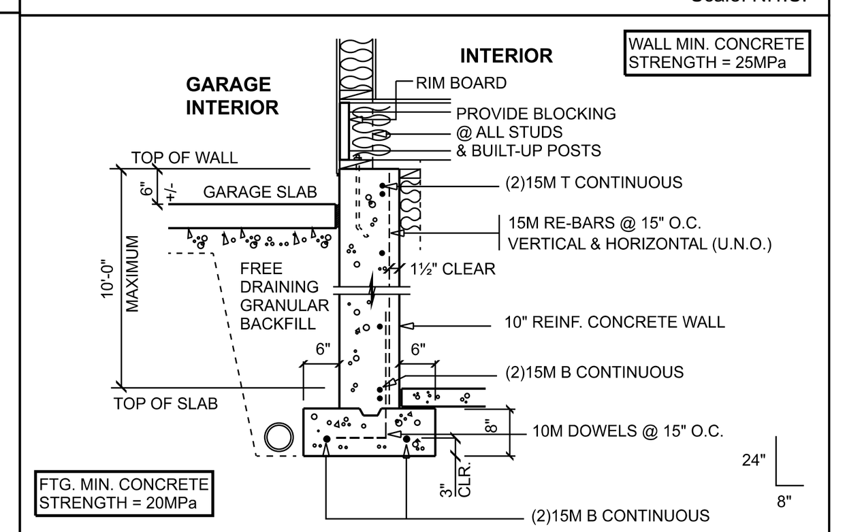
• Min. R31 rigid insul'n glued to u/s of slab
• Lower terrace steps to have 8" poured conc. Foundation wall w/ 20" wide x 8" deep conc. Footing
• All fndtns. To extend min. 48" below slab at lower terrace
•Lower terrace slab to be 3" concrete slab over 5" granular base sloped to drain
• Stair to be built as one-piece unit as drawn and fastened to adjacent wall and floor headers for support
• Front porch slab to be 8" reinforced conc. Slab above 35mpa @ 28 days min. - 5-8% air ent. Class c1
• All exposed floors to have floor joists above full w/ 2lb. Closed cell spray foam insul'n min. R31
• Flat roofs to have 2-ply torched on rubber membrane roof 2% slope to edge on 1/2" plywd. Roof shtg. On roof trusses/joists
• Install wood burning fireplace as per obc.9.22.10. And 9.22.1.4. Provide exterior combustion air as per obc. 9.22.8.
• Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications
• Interior fireplace to have reinforced concrete slab as per obc. 9.22.
• Ftg. Below fireplace foundation to be 12" deep x 6" projected poured concrete
• For all fireplaces provide min. 2" clearance to all combustible material
• Rear covered Porch Outdoor Sink to have shut-off valve and draining nib inside the heated basement space for annual winter decommissioning
• Provide 15m dowels @ 15" o.c. top bars along slab bearing (36")
• Provide 15m dowels @ 15" o.c. typical along slab bearing (24" / 24")



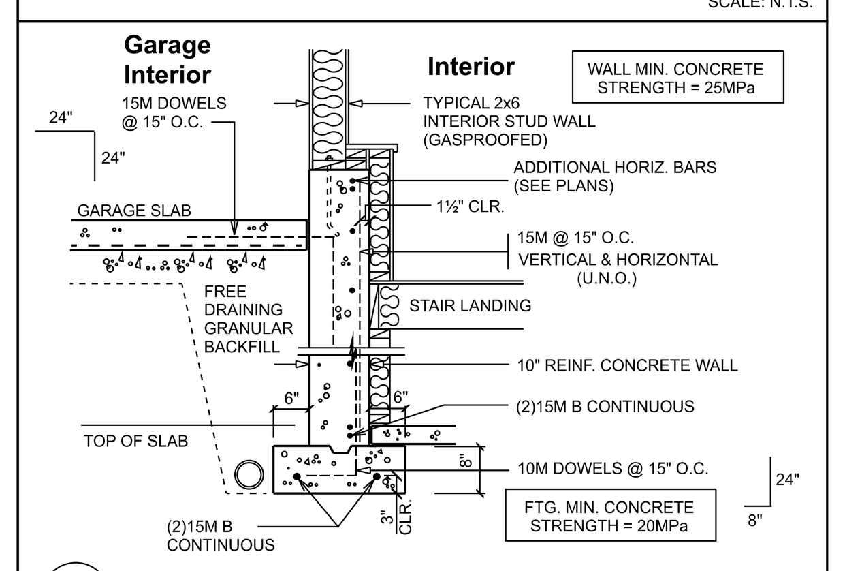
2 10" Reinf. Poured Conc. Wall @ Porch Steps
(EXCAVATED CONCRETE PORCH)
SCALE: N.T.S.



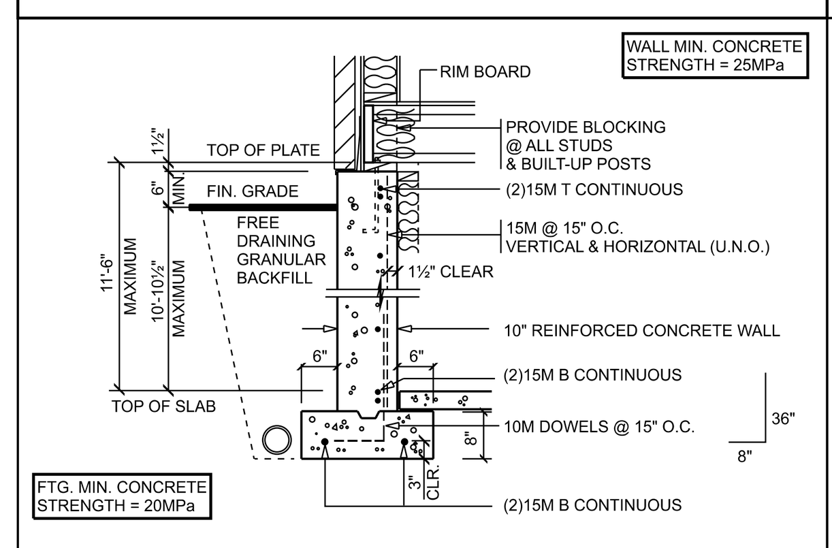
4 10" Poured Concrete Foundation Wall
(@ Rear Walk-Out (Typical))
Scale: N.T.S.



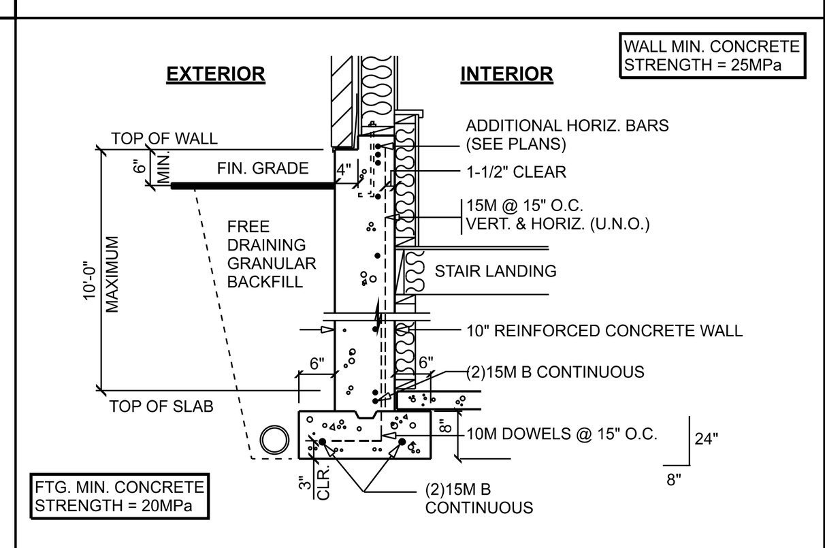
5 10" Reinforced Poured Concrete Foundation Wall @ Interior Garage Wall
SCALE: N.T.S.



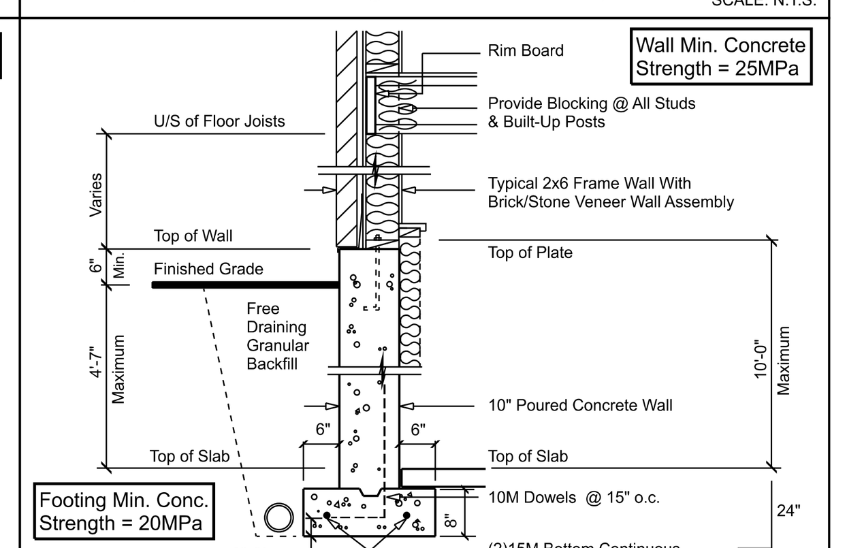
6 10" Reinforced Poured Concrete Foundation Wall
(LATTERALLY UNSUPPORTED @ STAIR OR OPEN TO BELOW)
SCALE: N.T.S.



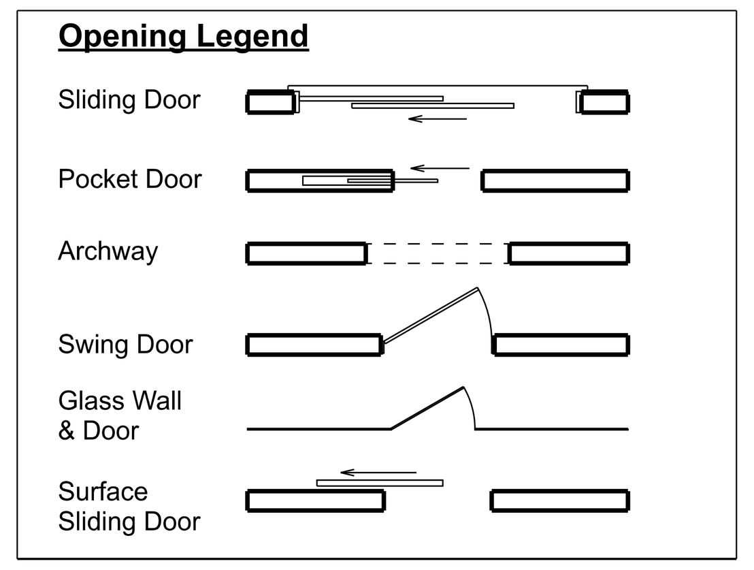
1 10" Reinf. Poured Conc. Basement Wall
SCALE: N.T.S.

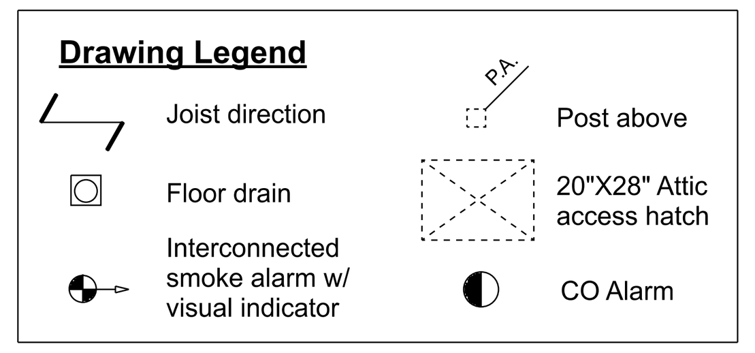


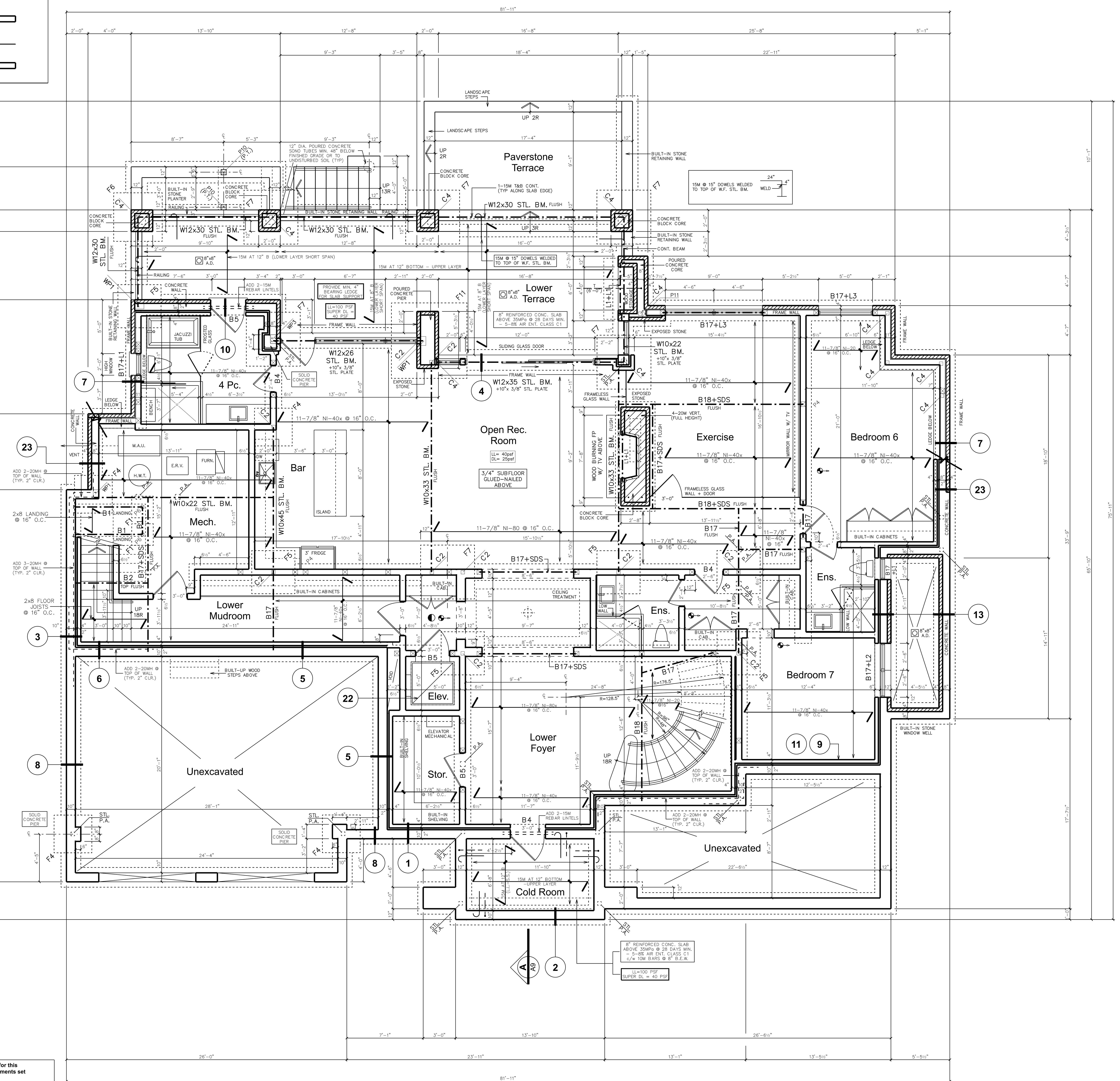
3 10" Reinf. Poured Conc. Foundation Wall
(LATERALLY UNSUPPORTED @ STAIR OR OPEN TO BELOW)
SCALE: N.T.S.

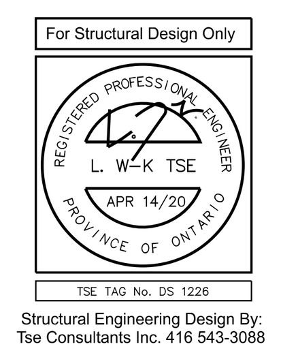


7 10" Poured Concrete Foundation Wall
(Laterally Unsupported - See OBC. 9.15.4.1.)
Scale: N.T.S.









Structural Engineering Design By:
Tse Consultants Inc. 416 543-3088

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the ontario building code to be a designer.
Qualification information required unless the design is exempt under Division C - 3.2.5.1. of the 2012 ontario building code.

Peter Giordano	25061
Name / Signature	BCIN

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

David W. Small Designs Inc.	29999
Firm Name	BCIN

Exterior walls	- R24	Wall area=	658.35 sm
Bsmt walls	- R20+10ci	Window area=	260.1 sm
Roof w/ attic	- N/A	** Ratio =	39.50%
Roof w/o attic	- R50	Window/skylight	
Exposed floors	- R50	Eff. = 1.4	
Exposed slab	- R10	SB-12 3.1.2 Performance	
		Climate zone 1	
		** house must be 'modelled'	

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
3	Apr 14/20	Engineered Floor Joist Coordination – Alpa
2	Feb 24/20	HVAC Coordination – McCallum Design Inc.
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home
36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Basement Floor Plan

Scale: 3/16"=1'-0"
Date: Jul 2019
Dwn by: NM
Proj. no.: 19–1735

A1

DAVID SMALL DESIGNS .COM

Schedules

Wood Lintels / Beams

B1 2-2x8	B7 2-2x12	B13 1-9.5" LVL	B19 1-14" LVL
B2 3-2x8	B8 3-2x12	B14 2-9.5" LVL	B20 2-14" LVL
B3 4-2x8 Bolted	B9 4-2x12 Bolted	B15 3-9.5" LVL	B21 3-14" LVL
B4 2-2x10	B10 1-7.25" LVL	B16 1-11.88" LVL	B22 1-16" LVL
B5 3-2x10	B11 2-7.25" LVL	B17 2-11.88" LVL	B23 2-16" LVL
B6 4-2x10 Bolted	B12 3-7.25" LVL	B18 3-11.88" LVL	B24 3-16" LVL

Note: where solid (1) piece lumber shown - do not substitute multiple ply.

Note:
1). Engineered wood beams to be min. 2.0e or equal and 1-3/4" in width. Nailing pattern see S1.
2). 'SDS' = Simpson Strong-Tie Strong-Drive heavy-duty connector screws. Refer to manuf. specs. for exact details (see typ. detail screw patterns)

Columns / Posts

P2 2-2x6	P4 4-2x6	P6 3-2x4	P8 5-2x4	P10 6x6	P12 4-2x8
P3 3-2x6	P5 5-2x6	P7 4-2x4	P9 4x4	P11 3-2x8	

C1 HSS 3.5"x3.5"x0.25" - Brg. Plate 6"x 5/8"x 10" + (2) 5/8" Dia. A.B
C2 HSS 4"x4"x0.312" - Brg. Plate 10"x 3/4"x 10" + (2) 3/4" Dia. A.B
C3 HSS 5"x3"x 0.375" - Brg. Plate 11"x 3/4"x 11" + (2) 3/4" Dia. A.B
C4 HSS 5"x5"x 0.375" - Brg. Plate 11"x 1"x 11" + (2) 3/4" Dia. A.B
S1 W10x49 Exposed steel post/beam
S2 W12x40 Exposed steel post/beam

12" 3" Typical anchor bolt

Steel Lintels

L1 3.5" x 3.5" x 1/4"	L3 5" x 3.5" x 5/16"	L5 6" x 4" x 3/8"
L2 5" x 3.5" x 1/4"	L4 5" x 3.5" x 3/8"	L6 7" x 4" x 1/2"

Steel Plates

WP1 = 6"x 5/8"x 10" + (2) 5/8" Diameter Anchor Bolts
WP2 = 6"x 7/8"x 14" + (2) 3/4" Diameter Anchor Bolts
WP3 = 11" x 1" x 11" + (2) 3/4" Diameter Anchor Bolts

12" 2" Anchor bolt

All Structural Steel to Conform To G40.21-350W

Concrete Footings

BEW = Bottom Bars Each Way	F4 42" x 42" x 16" Deep c/w 5-15M BEW
F1 24" x 24" x 12" Deep	F5 48" x 48" x 16" Deep c/w 5-15M BEW
F2 30" x 30" x 14" Deep	F6 54" x 54" x 18" Deep c/w 7-15M BEW
F3 36" x 36" x 16" Deep	F7 60" x 60" x 18" Deep c/w 7-15M BEW
	F8 66" x 66" x 20" Deep c/w 9-15M BEW

> Strip footings below load bearing walls to have a min. 6" projection minimum 8" in depth + 2-15m bottom continuous
> All footings to bear on undisturbed soil, rock or engineered fill certified by soils engineer
> Min. soil bearing capacity = SLS 120 Kpa (2500 Psf) and to be verified by soils engineer prior to pouring footings

Refer to Sheet S1 for General Structural Notes

General Notes:

1. Do not scale drawings

2. These plans are to remain the property of the designer and must be returned upon request. These plans must not be used in any other location without the written approval of the designer.

3. All works to be in accordance with the ontario building code and all code references refer to OBC 2012 division 'B'

4. Contractor to check all dimensions, specifications, etc. On site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

5. Structural engineer to be notified prior to pouring of concrete to inspect rubber septum during construction - engineer will not certify walls or footing/slabs unless prior inspection is conducted - it is the responsibility of the contractor to notify the project engineer and make all arrangements.

6. All wood framed window openings that exceed 48" wide are to have 2/2"x6" plates @ bottom of opening (typical.) U.N.O.

7. Adjustments or changes made to the floor layout roof truss layout, beams, lentils & point loads or required load bearing walls must be identified prior to construction and David w. Small Designs Inc. and project engineer must be notified for further review and approval.

8. All shop drawings for pacers units to be submitted for field review by site inspector prior to manufacturing and installation

9. 'SDS' = Simpson stuttering strong-drive heavy-duty connector screws. Refer to manful. Specs. For exact details (see S1 for screw patterns)

10. Typical wall stud construction

- Typical exterior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high exterior walls to be 2/2x6 sep #2 @ 12" o/c.
- Typical interior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high interior walls to be 2/2x6 sep #2 @ 12" o/c.
- All 10' high interior basement walls to be 2x6 sep #2 @ 16" o/c.

11. Where load bearing walls are not finished with drywall or a suitable interior finish, then blocking or strapping shall be fastened to the stud at mid-height as per OBC. 9.23.10.2.(2)(5)

12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c c/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

17. All electrical panels & components to comply with OBC. 9.34. & specific requirements of the local utility supplier

18. Protection from dampness

All wood framing members that are not pressure treated & which are supported on concrete. In contact with ground or fill shall be separated from the concrete. By min. 5mil polyethylene or type s roll roofing as per OBC 9.23.2.3.(1) & (2)

19. Typical wood posts

All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

General Garage Notes:

1. Garage slab to be 5" concrete slab on 6" clean granular fill 32 mpa - 5-8% air entr. C/w 6"x6"x3/16" w.w.m. opt. Class c1

2. Remove all top soil from top layer

3. Insulate all 'warm' garage walls with min. R22 batt insulation

4. Interior garage wall to be 1/2" drywall on gasproofed 2x6 studs @ 16" c/w r22 batt insul'n with 6 mil. Poly vapour barrier covered with 1/2" drywall

5. Garage ceiling to be 'gasproofed' ceiling with taped drywall and min. R31 insulation in floors above or r22 in walls

6. Interior garage door to be weather-stripped gasproof door w/ self-closer

7. Garage slab to be sloped to exterior a minimum of 4"

8. Drop foundation wall for garage door above

General Ground Floor Notes:

1. At least one smoke alarm shall be installed on or near the ceiling on each floor and basement levels as per OBC 9.10.19 and also in each sleeping room with a visual signaling component as per o.b.c. 9.10.19.1 (2)(3)(4). Smoke alarms and co. Alarms shall be interconnected. A carbon monoxide alarm shall be installed adjacent to every sleeping area for dwellings with fuel burning appliances, or an attached garage.

2. Typical interior door heights

If ceiling height is 10'-0" or greater than interior doors to be 8'-0" tall
If ceiling height is 9'-0" - 10'-0" than interior doors to be 7'-6" tall
If ceiling height is less than 9'-0" than interior doors to be 6'-8" tall

3. Typical mechanical ventilation

A principal dwelling exhaust fan shall be installed and controlled by a centrally located switch identified as such. Every bathroom, powder room and laundry room shall be equipped with a mechanical exhaust fan and vent.

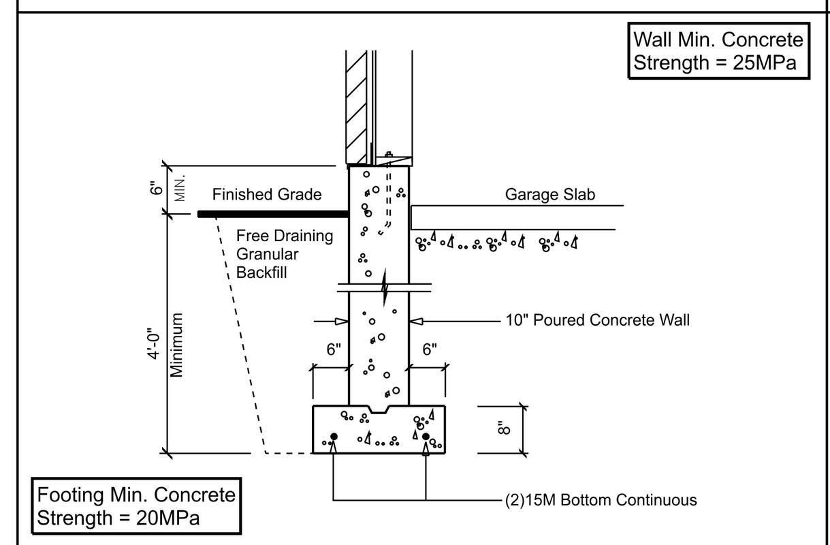
4. Typical railing & guard heights

An interior handrail & guard shall be @ 36" a.f.f. per OBC 9.8 & sb7
An exterior handrail & guard shall be @ 36" (if less than a max. Of 6'-0" drop) per OBC 9.8 & sb7
An exterior handrail & guard shall be @ 42" (if greater than 6'-0" drop) a.f.f. per OBC 9.8 & sb7

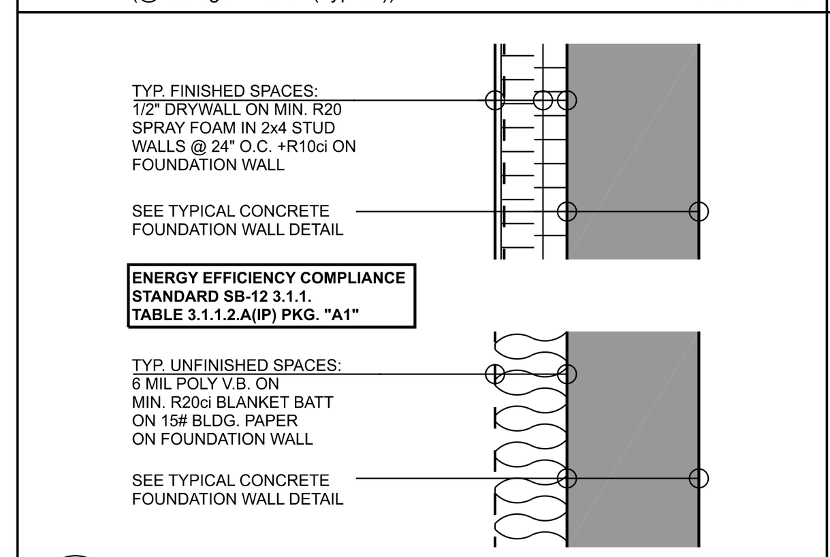
5. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

Project Notes

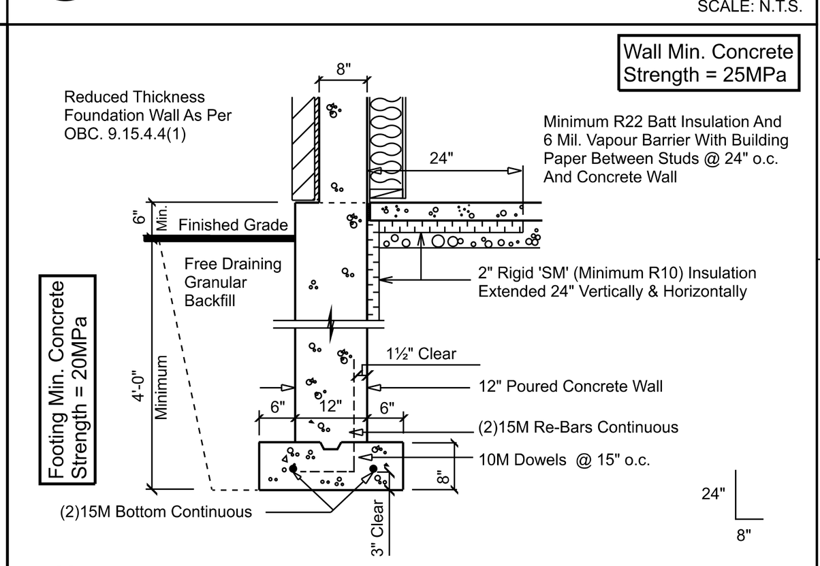
- Min. R31 rigid insul'n glued to u/s of slab
- Lower terrace steps to have 8" poured conc. Foundation wall w/ 20" wide x 8" deep conc. Footing
- All fndtns. To extend min. 48" below slab at lower terrace
- Lower terrace slab to be 3" concrete slab over 5" granular base sloped to drain
- Stair to be built as one-piece unit as drawn and fastened to adjacent wall and floor headers for support
- Front porch slab to be 8" reinforced conc. Slab above 35mpa @ 28 days min. - 5-8% air ent. Class c1
- All exposed floors to have floor joists above full w/ 2lb. Closed cell spray foam insul'n min. R31
- Flat roofs to have 2-ply torched on rubber membrane roof 2% slope to edge on 1/2" plywd. Roof shtg. On roof trusses/joists
- Install wood burning fireplace as per obc.9.22.10. And 9.22.1.4. Provide exterior combustion air as per obc. 9.22.8.
- Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications
- Interior fireplace to have reinforced concrete slab as per obc. 9.22.
- Ftg. Below fireplace foundation to be 12" deep x 6" projected poured concrete
- For all fireplaces provide min. 2" clearance to all combustible material
- Rear covered Porch Outdoor Sink to have shut-off valve and draining nib inside the heated basement space for annual winter decommissioning
- Provide 15m dowels @ 15" o.c. top bars along slab bearing (36")
- Provide 15m dowels @ 15" o.c. typical along slab bearing (24" / 24")



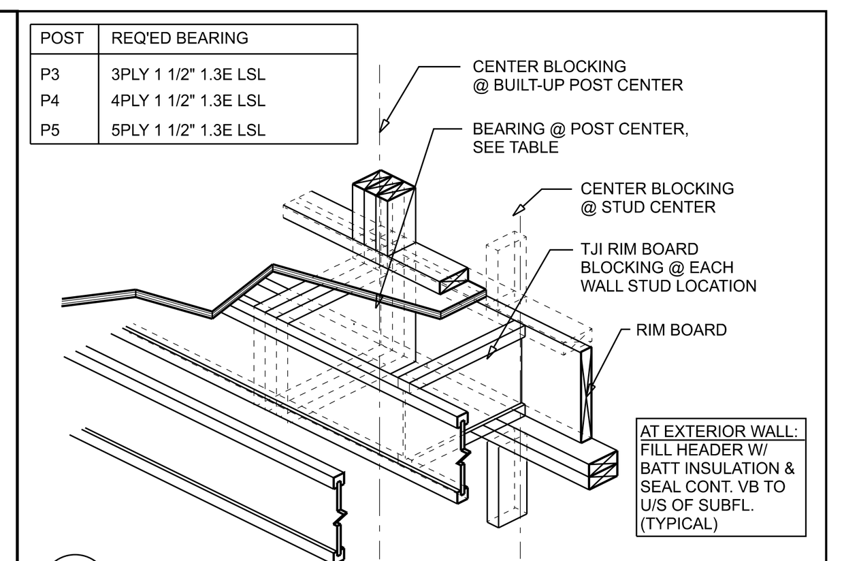
8 10" Poured Conc. (Ext.) Foundation Wall
(@ Garage Exterior (Typical))
Scale: N.T.S.



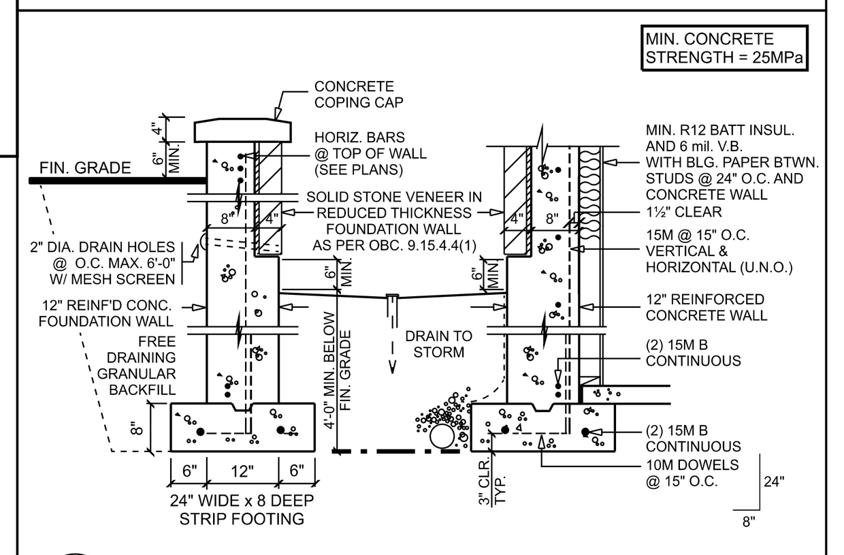
9 Typ. Bsmt. Foundation Insul. Requirements
SCALE: N.T.S.



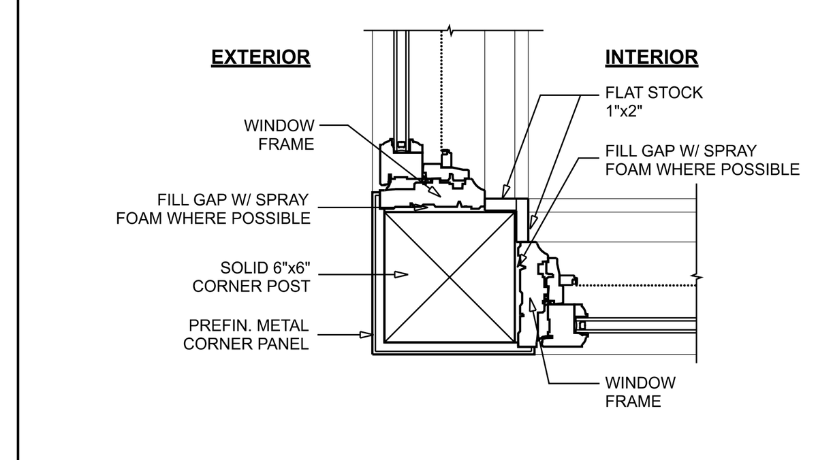
10 12" Poured Concrete Foundation Wall @ Rear Walk-Out
Scale: N.T.S.



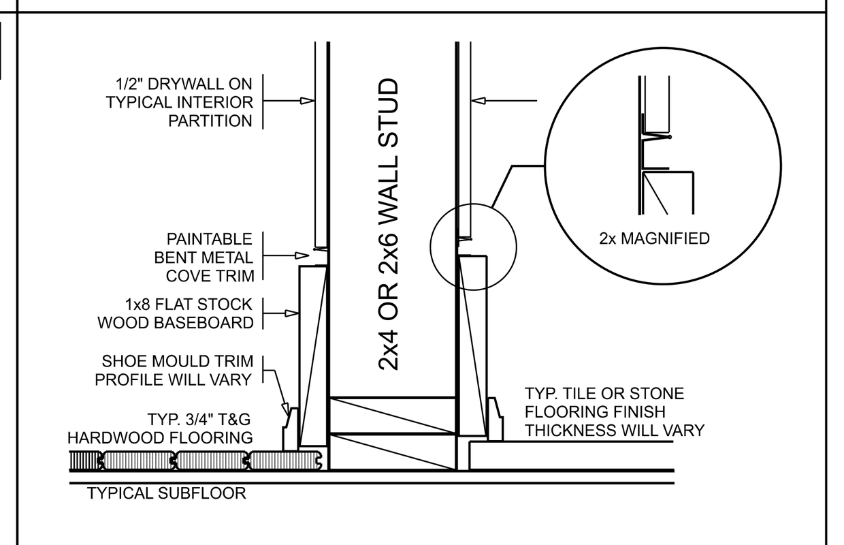
11 Lateral Support Floor Joist Blocking
SCALE: N.T.S.



13 12" Concrete Window Well Wall Detail
SCALE: N.T.S.

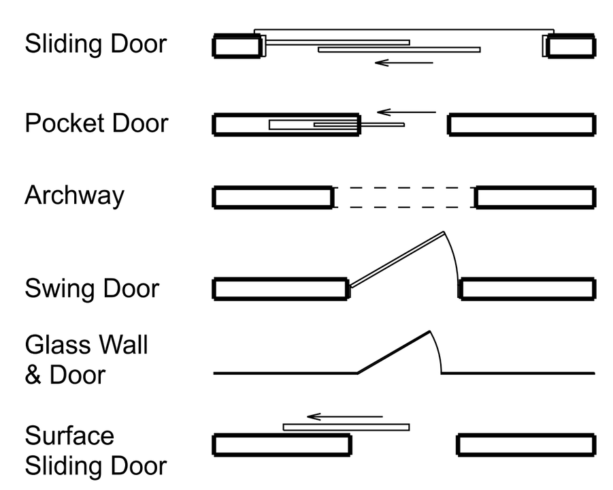


14 Corner Window Detail
SCALE: N.T.S.

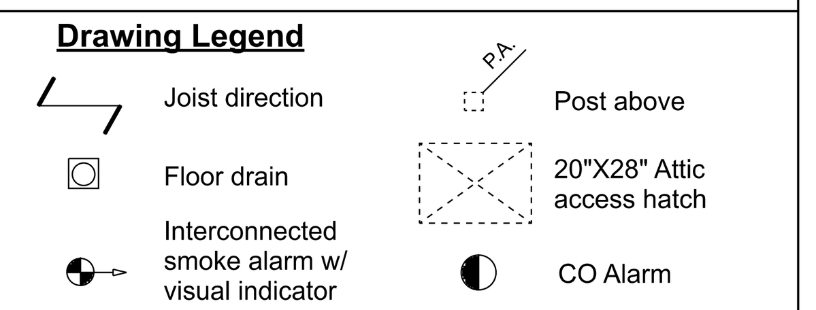


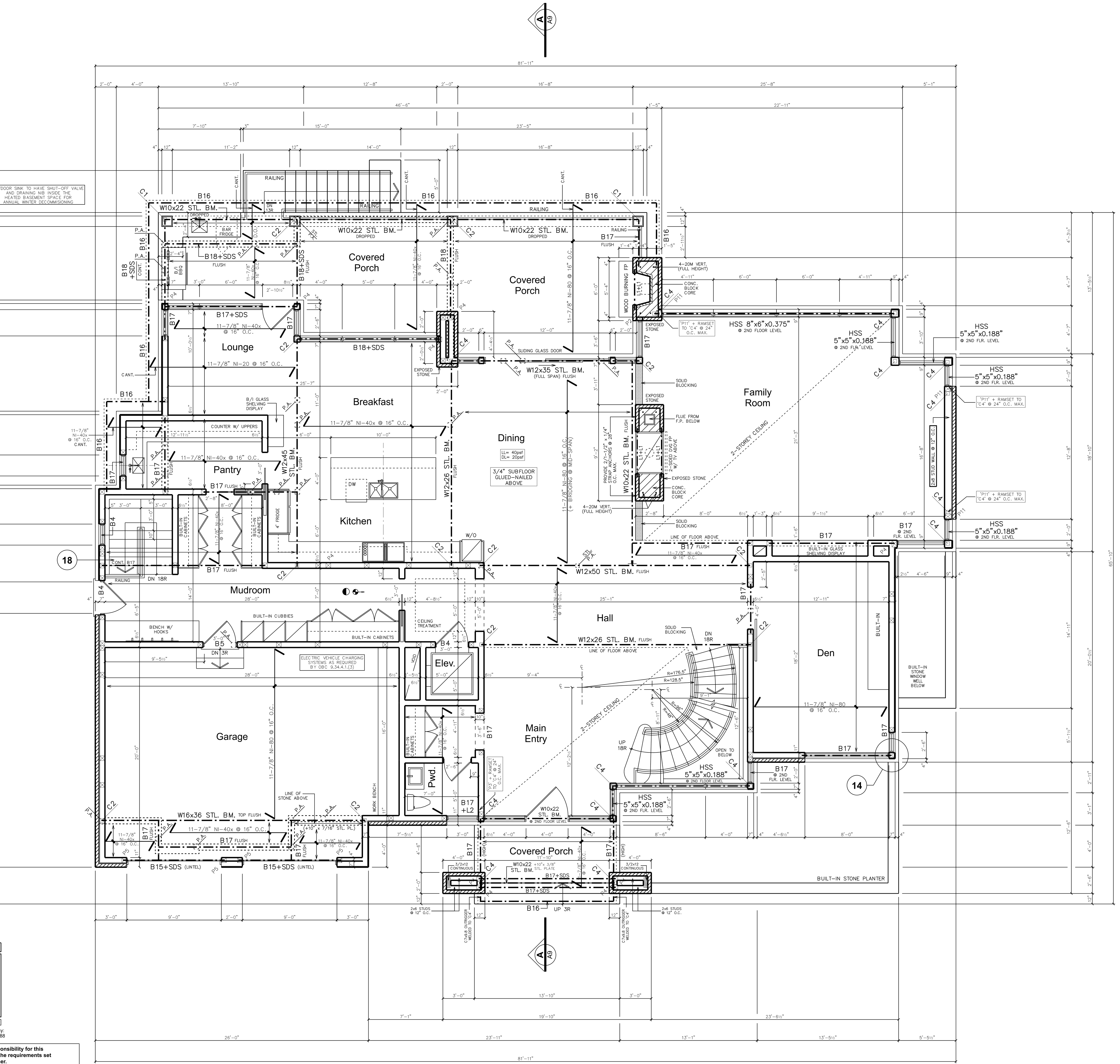
15 Typical Baseboard Reveal Detail
SCALE: N.T.S.

Opening Legend

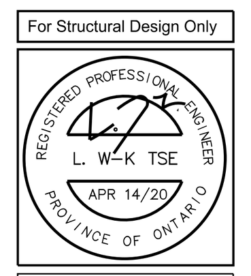


Drawing Legend





For Structural Design Only



TSE TAG No. DS 1226

Structural Engineering Design By:
Tse Consultants Inc. 416 543-3088

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the ontario building code to be a designer.
Qualification information required unless the design is exempt under Division C - 3.2.5.1. of the 2012 ontario building code.

Name	Signature	BCIN
Peter Giordano		**25061**

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

Firm Name	BCIN
David W. Small Designs Inc.	**29999**

Exterior walls - R24	Wall area= 658.35 sm
Bsmt walls - R20+10ci	Window area= 260.1 sm
Roof w/ attic - N/A	** Ratio = 39.50%
Roof w/o attic - R50	Window/skylight
Exposed floors - R50	Eff. = 1.4
Exposed slab - R10	SB-12 3.1.2 Performance
	Climate zone 1
	** house must be 'modelled'

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
3	Apr 14/20	Engineered Floor Joist Coordination – Alpa
2	Feb 24/20	HVAC Coordination – McCallum Design Inc.
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home
36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Ground Floor Plan

Scale: 3/16"=1'–0"
Date: Jul 2019
Dwn by: NM
Proj. no.: 19–1735

A2

DAVID SMALL DESIGNS .COM

1440 Hurontario Street, Mississauga, ON L5G 3H4 PH905.271.9100 FX 905.271.9109

Schedules

Wood Lintels / Beams

B1 2-2x8	B7 2-2x12	B13 1-9.5" LVL	B19 1-14" LVL
B2 3-2x8	B8 3-2x12	B14 2-9.5" LVL	B20 2-14" LVL
B3 4-2x8 Bolted	B9 4-2x12 Bolted	B15 3-9.5" LVL	B21 3-14" LVL
B4 2-2x10	B10 1-7.25" LVL	B16 1-11.88" LVL	B22 1-16" LVL
B5 3-2x10	B11 2-7.25" LVL	B17 2-11.88" LVL	B23 2-16" LVL
B6 4-2x10 Bolted	B12 3-7.25" LVL	B18 3-11.88" LVL	B24 3-16" LVL

Note: where solid (1) piece lumber shown - do not substitute multiple ply.

Note:
1). Engineered wood beams to be min. 2.0e or equal and 1-3/4" in width. Nailing pattern see S1.
2). 'SDS' = Simpson Strong-Tie Strong-Drive heavy-duty connector screws. Refer to manuf. specs. for exact details (see typ. detail screw patterns)

Columns / Posts

P2 2-2x6	P4 4-2x6	P6 3-2x4	P8 5-2x4	P10 6x6	P12 4-2x8
P3 3-2x6	P5 5-2x6	P7 4-2x4	P9 4x4	P11 3-2x8	

C1 HSS 3.5"x3.5"x0.25" - Brg. Plate 6"x 5/8"x 10" + (2) 5/8" Dia. A.B
C2 HSS 4"x4"x0.312" - Brg. Plate 10"x 3/4"x 10" + (2) 3/4" Dia. A.B
C3 HSS 5"x3"x 0.375" - Brg. Plate 11"x 3/4"x 11" + (2) 3/4" Dia. A.B
C4 HSS 5"x5"x 0.375" - Brg. Plate 11"x 1"x 11" + (2) 3/4" Dia. A.B
S1 W10x49 Exposed steel post/beam
S2 W12x40 Exposed steel post/beam

12" / 3" Typical anchor bolt

Steel Lintels

L1 3.5" x 3.5" x 1/4"	L3 5" x 3.5" x 5/16"	L5 6" x 4" x 3/8"
L2 5" x 3.5" x 1/4"	L4 5" x 3.5" x 3/8"	L6 7" x 4" x 1/2"

Steel Plates

WP1 = 6"x 5/8"x 10" + (2) 5/8" Diameter Anchor Bolts
WP2 = 6"x 7/8"x 14" + (2) 3/4" Diameter Anchor Bolts
WP3 = 11" x 1" x 11" + (2) 3/4" Diameter Anchor Bolts

12" / 2" Anchor bolt

All Structural Steel to Conform To G40.21-350W

Concrete Footings

BEW = Bottom Bars Each Way	F4 42" x 42" x 16" Deep c/w 5-15M BEW
F1 24" x 24" x 12" Deep	F5 48" x 48" x 16" Deep c/w 5-15M BEW
F2 30" x 30" x 14" Deep	F6 54" x 54" x 18" Deep c/w 7-15M BEW
F3 36" x 36" x 16" Deep	F7 60" x 60" x 18" Deep c/w 7-15M BEW
	F8 66" x 66" x 20" Deep c/w 9-15M BEW

> Strip footings below load bearing walls to have a min. 6" projection minimum 8" in depth + 2-15m bottom continuous
> All footings to bear on undisturbed soil, rock or engineered fill certified by soils engineer
> Min. soil bearing capacity = SLS 120 Kpa (2500 Psf) and to be verified by soils engineer prior to pouring footings

Refer to Sheet S1 for General Structural Notes

General Notes:

1. Do not scale drawings

2. These plans are to remain the property of the designer and must be returned upon request. These plans must not be used in any other location without the written approval of the designer.

3. All works to be in accordance with the ontario building code and all code references refer to OBC 2012 division 'B'

4. Contractor to check all dimensions, specifications, etc. On site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

5. Structural engineer to be notified prior to pouring of concrete to inspect rubber septum during construction - engineer will not certify walls or footing/slabs unless prior inspection is conducted - it is the responsibility of the contractor to notify the project engineer and make all arrangements.

6. All wood framed window openings that exceed 48" wide are to have 2/2"x6" plates @ bottom of opening (typical.) U.N.O.

7. Adjustments or changes made to the floor layout roof truss layout, beams, lentils & point loads or required load bearing walls must be identified prior to construction and David w. Small Designs Inc. and project engineer must be notified for further review and approval.

8. All shop drawings for pacers units to be submitted for field review by site inspector prior to manufacturing and installation

9. 'SDS' = Simpson stuttering strong-drive heavy-duty connector screws. Refer to manful. Specs. For exact details (see S1 for screw patterns)

10. Typical wall stud construction

- Typical exterior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high exterior walls to be 2/2x6 sep #2 @ 12" o/c.
- Typical interior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high interior walls to be 2/2x6 sep #2 @ 12" o/c.
- All 10' high interior basement walls to be 2x6 sep #2 @ 16" o/c.

11. Where load bearing walls are not finished with drywall or a suitable interior finish, then blocking or strapping shall be fastened to the stud at mid-height as per OBC. 9.23.10.2.(2)(5)

12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c c/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

17. All electrical panels & components to comply with OBC. 9.34. & specific requirements of the local utility supplier

18. Protection from dampness

All wood framing members that are not pressure treated & which are supported on concrete. In contact with ground or fill shall be separated from the concrete. By min. 5mil polyethylene or type s roll roofing as per OBC 9.23.2.3.(1) & (2)

19. Typical wood posts

All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

General Second Floor Notes:

1. At least one smoke alarm shall be installed on or near the ceiling on each floor and basement levels as per o.b.c. 9.10.19 and also in each sleeping room with a visual signaling component as per o.b.c. 9.10.19.1 (2)(3)(4). Smoke alarms and co. Alarms shall be interconnected. A carbon monoxide alarm shall be installed adjacent to every sleeping area for dwellings with fuel burning appliances, or an attached garage.

2. Typical interior door heights

If ceiling height is 10'-0" or greater than interior doors to be 8'-0" tall
If ceiling height is 9'-0" - 10'-0" than interior doors to be 7'-6" tall
If ceiling height is less than 9'-0" than interior doors to be 6'-8" tall

3. Typical mechanical ventilation

A principal dwelling exhaust fan shall be installed and controlled by a centrally located switch identified as such. Every bathroom, powder room and laundry room shall be equipped with a mechanical exhaust fan and vent.

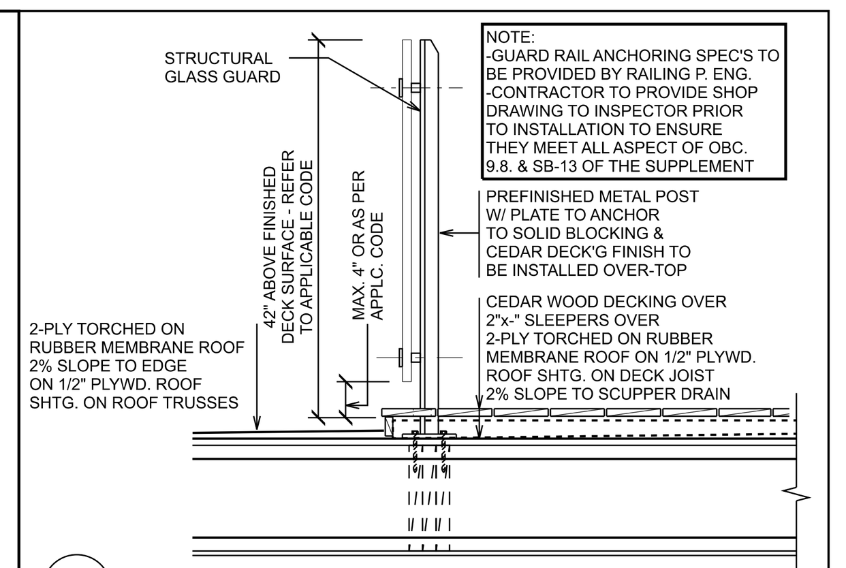
4. Typical railing & guard heights

An interior handrail & guard shall be @ 36" a.f.f. per obc 9.8 & sb7
An exterior handrail & guard shall be @ 36" (if less than a max. Of 6'-0" drop) per OBC 9.8 & sb7
An exterior handrail & guard shall be @ 42" (if greater than 6'-0" drop) a.f.f. per OBC 9.8 & sb7

5. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

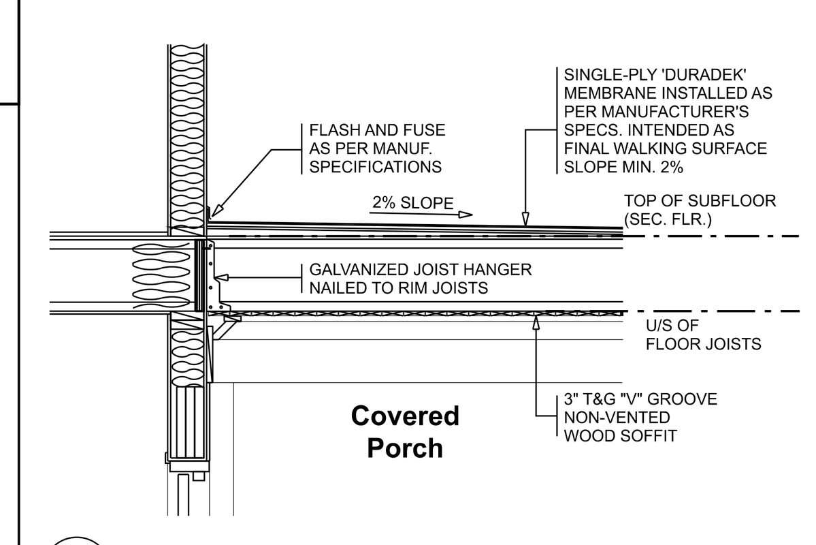
Project Notes

- Min. R31 rigid insul'n glued to u/s of slab
- Lower terrace steps to have 8" poured conc. Foundation wall w/ 20" wide x 8" deep conc. Footing
- All fndtns. To extend min. 48" below slab at lower terrace
- Lower terrace slab to be 3" concrete slab over 5" granular base sloped to drain
- Stair to be built as one-piece unit as drawn and fastened to adjacent wall and floor headers for support
- Front porch slab to be 8" reinforced conc. Slab above 35mpa @ 28 days min. - 5-8% air ent. Class c1
- All exposed floors to have floor joists above full w/ 2lb. Closed cell spray foam insul'n min. R31
- Flat roofs to have 2-ply torched on rubber membrane roof 2% slope to edge on 1/2" plywd. Roof shtg. On roof trusses/joists
- Install wood burning fireplace as per obc.9.22.10. And 9.22.1.4. Provide exterior combustion air as per obc. 9.22.8.
- Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications
- Interior fireplace to have reinforced concrete slab as per obc. 9.22.
- Ftg. Below fireplace foundation to be 12" deep x 6" projected poured concrete
- For all fireplaces provide min. 2" clearance to all combustible material
- Rear covered Porch Outdoor Sink to have shut-off valve and draining nib inside the heated basement space for annual winter decommissioning
- Provide 15m dowels @ 15" o.c. top bars along slab bearing (36")
- Provide 15m dowels @ 15" o.c. typical along slab bearing (24" / 24")



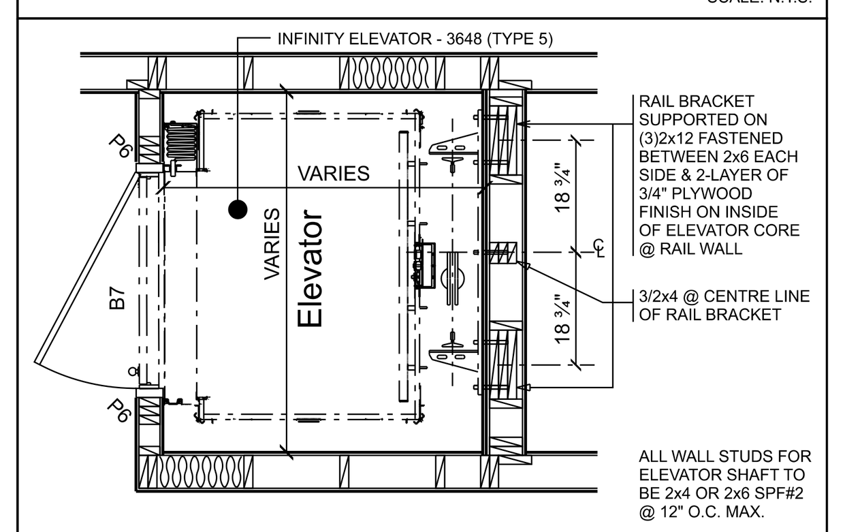
20 Cedar Decking & Glass Guard On Balcony

SCALE: N.T.S.



21 Flat Roof to Frame wall connection

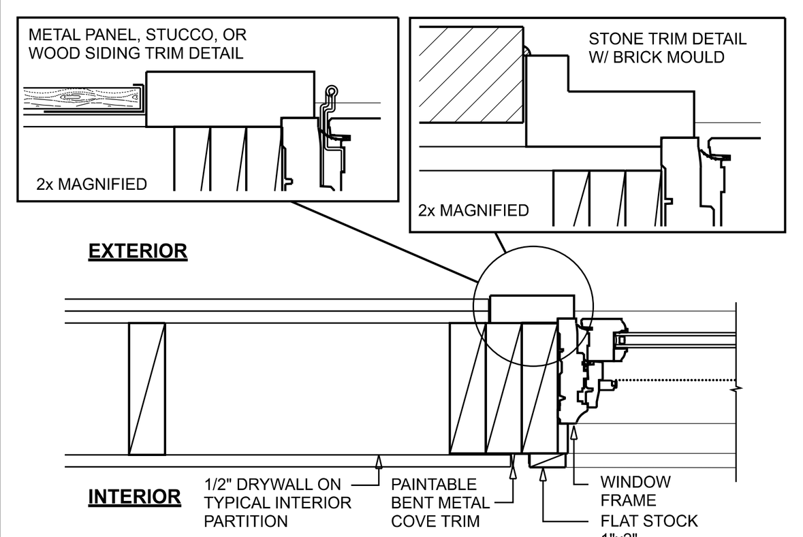
SCALE: N.T.S.



Elevator Detail

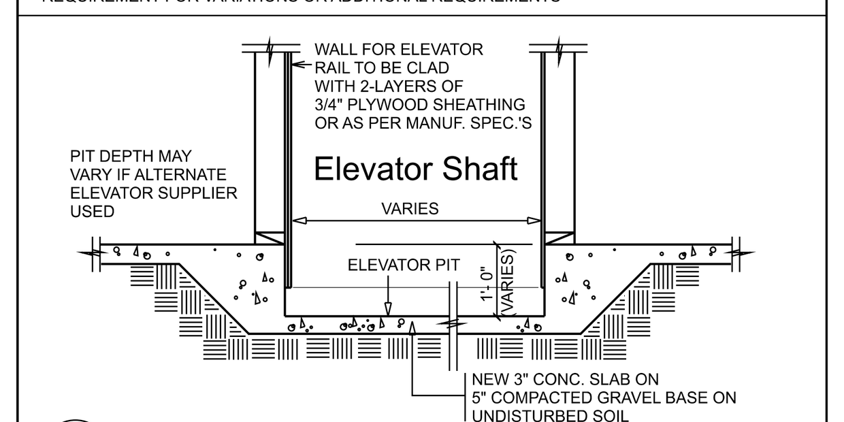
ALL WALL STUDS FOR ELEVATOR SHAFT TO BE 2x4 OR 2x6 SPF#2 @ 12" O.C. MAX.

1. PROVIDE BLOCKING @ EACH RAIL SUPPORT BRACKET PLACED HORIZONTALLY @ 48" O.C. MAX.
2. REFER TO ELEVATOR SPECIFICATION FOR ALL SPECIAL NAILING OR BOLTING REQUIRMENTS
3. NOTE: ALL VERTICALLY PLACED STUDS AND BRACING TO STOP AT U/S OF FLOOR JOISTS AND CONTINUE ABOVE TO U/S OF HIGHEST CEILING
4. WHERE FLOOR JOISTS RUN PARALLEL TO ELEVATOR SHAFT WALLS, USE 2x12 SOLID BLOCKING TO TIE WALL PLATES TO FLOOR SYSTEM
5. ALL NOTES ON THIS DETAIL TO BE CONFIRMED WITH ELEVATOR SUPPLIER'S SPECIFICATION, SHOP DRAWING AND INSTALLATION REQUIREMENT FOR VARIATIONS OR ADDITIONAL REQUIREMENTS



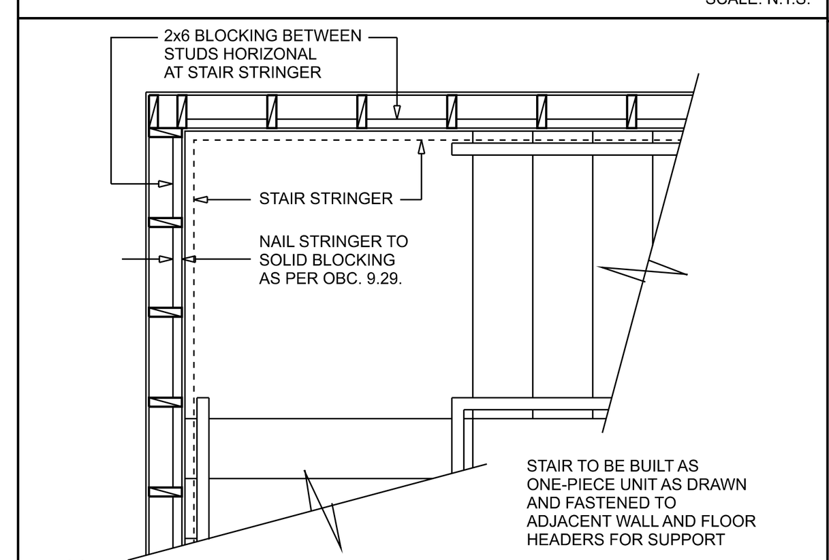
17 Typical Window Frame Reveal Detail

SCALE: N.T.S.



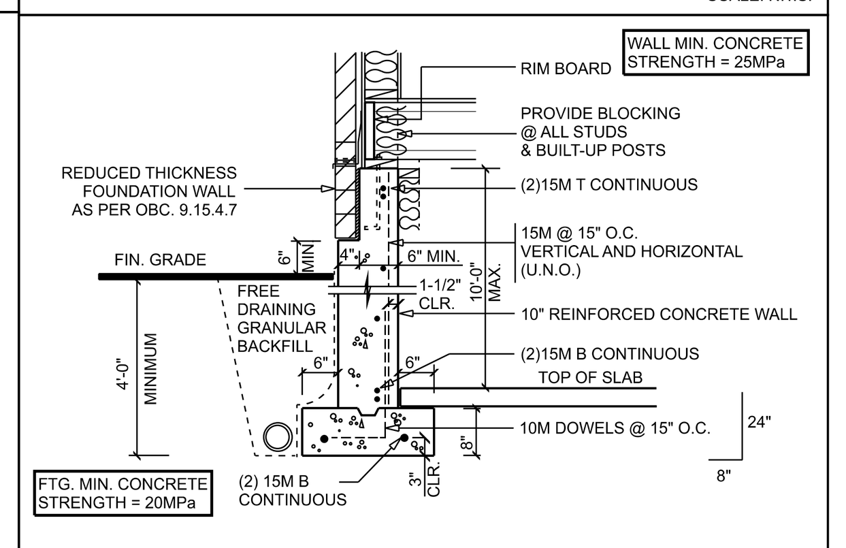
22 Dropped & Thickened Slab @ Elevator Pit

SCALE: N.T.S.



18 Fastening 1-piece stairs to adjacent walls

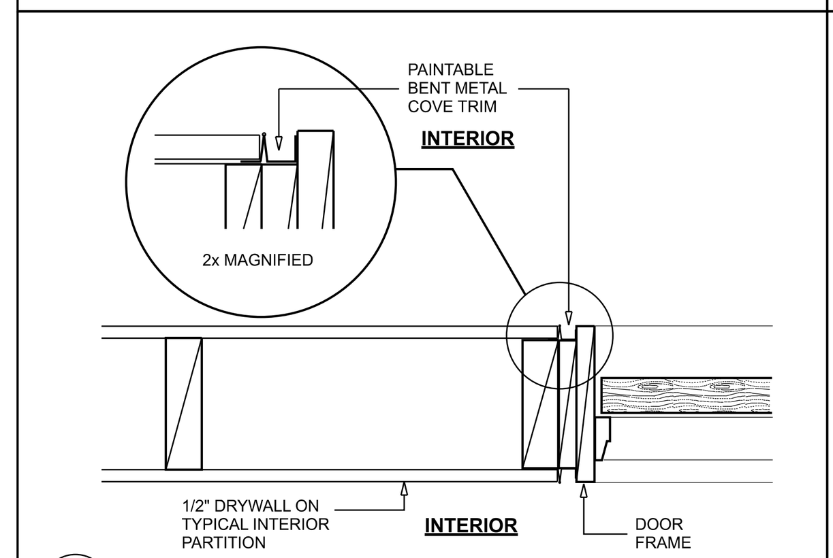
SCALE: N.T.S.



23 10" Reinf. Poured Conc. Foundation Wall

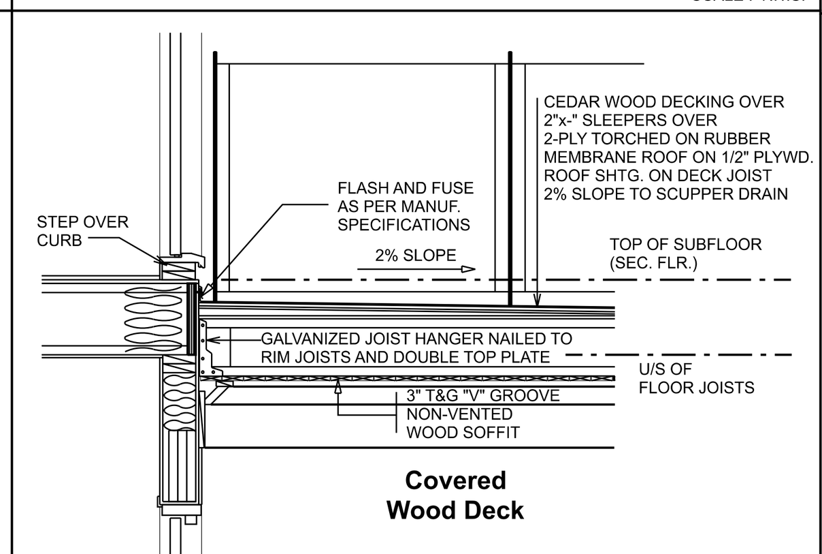
(REDUCED THICKNESS)

SCALE: N.T.S.



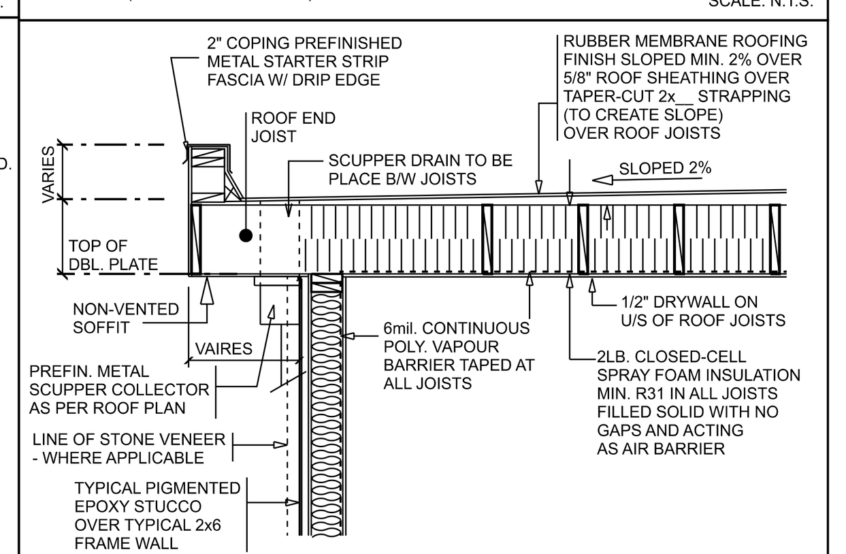
16 Typical Door Frame Reveal Detail

SCALE: N.T.S.



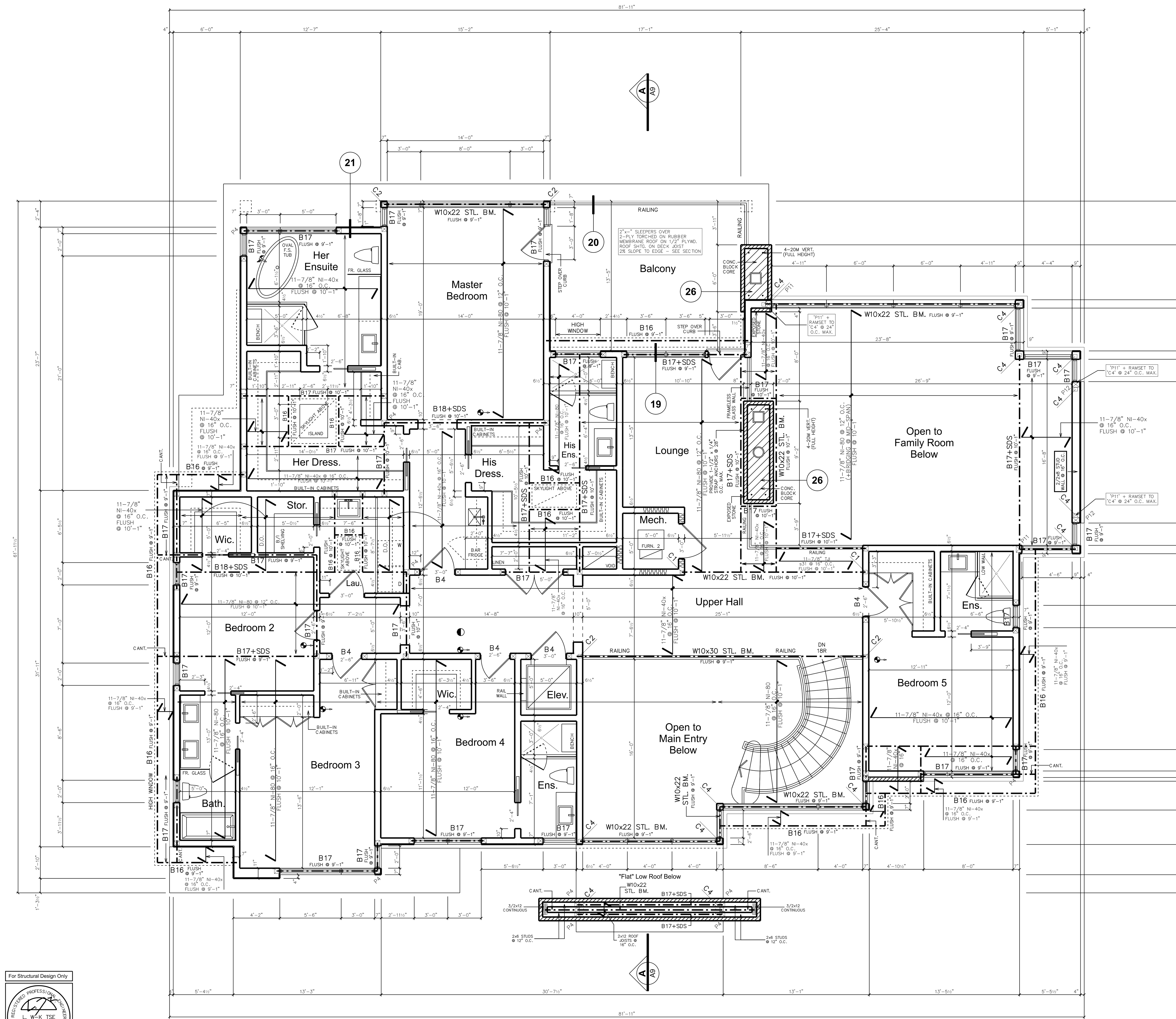
19 Balcony to Frame wall connection

SCALE: N.T.S.



24 Section Thru Typical Flat Roof

SCALE: N.T.S.



For Structural Design Only

TSE TAG No. DS 1226

Structural Engineering Design By:
Tse Consultants Inc. 416 543-3088

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the ontario building code to be a designer.
Qualification information required unless the design is exempt under Division C - 3.2.5.1. of the 2012 ontario building code.

Peter Giordano		**25061**
Name	**Signature**	**BCIN**

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

David W. Small Designs Inc.	**29999**
Firm Name	**BCIN**

Opening Legend

Sliding Door
Pocket Door
Archway
Swing Door
Glass Wall & Door
Surface Sliding Door

Drawing Legend

Joist direction
Post above
Floor drain
20"X28" Attic access hatch
Interconnected smoke alarm w/ visual indicator
CO Alarm

Exterior walls	- R24	Wall area=	658.35 sm
Bsmt walls	- R20+10ci	Window area=	260.1 sm
Roof w/ attic	- N/A	** Ratio =	39.50%
Roof w/o attic	- R50	Window/skylight Eff. = 1.4	
Exposed floors	- R50	SB-12 3.1.2 Performance	
Exposed slab	- R10	Climate zone 1	
		** house must be 'modelled'	

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
3	Apr 14/20	Engineered Roof Joist Coordination – Alpa
2	Feb 24/20	HVAC Coordination – McCallum Design Inc.
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home
36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Second Floor Plan

Scale: 3/16"=1'–0"
Date: Jul 2019
Dwn by: NM
Proj. no.: 19–1735

A3

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Schedules

Wood Lintels / Beams

B1 2-2x8	B7 2-2x12	B13 1-9.5" LVL	B19 1-14" LVL
B2 3-2x8	B8 3-2x12	B14 2-9.5" LVL	B20 2-14" LVL
B3 4-2x8 Bolted	B9 4-2x12 Bolted	B15 3-9.5" LVL	B21 3-14" LVL
B4 2-2x10	B10 1-7.25" LVL	B16 1-11.88" LVL	B22 1-16" LVL
B5 3-2x10	B11 2-7.25" LVL	B17 2-11.88" LVL	B23 2-16" LVL
B6 4-2x10 Bolted	B12 3-7.25" LVL	B18 3-11.88" LVL	B24 3-16" LVL

Note: where solid (1) piece lumber shown - do not substitute multiple ply.

Note:
1). Engineered wood beams to be min. 2.0e or equal and 1-3/4" in width. Nailing pattern see S1.
2). 'SDS' = Simpson Strong-Tie Strong-Drive heavy-duty connector screws. Refer to manuf. specs. for exact details (see typ. detail screw patterns)

Columns / Posts

P2 2-2x6	P4 4-2x6	P6 3-2x4	P8 5-2x4	P10 6x6	P12 4-2x8
P3 3-2x6	P5 5-2x6	P7 4-2x4	P9 4x4	P11 3-2x8	

C1 HSS 3.5"x3.5"x0.25" - Brg. Plate 6"x 5/8"x 10" + (2) 5/8" Dia. A.B
C2 HSS 4"x4"x0.312" - Brg. Plate 10"x 3/4"x 10" + (2) 3/4" Dia. A.B
C3 HSS 5"x3"x 0.375" - Brg. Plate 11"x 3/4"x 11" + (2) 3/4" Dia. A.B
C4 HSS 5"x5"x 0.375" - Brg. Plate 11"x 1"x 11" + (2) 3/4" Dia. A.B
S1 W10x49 Exposed steel post/beam
S2 W12x40 Exposed steel post/beam

12" 3" Typical anchor bolt

Steel Lintels

L1 3.5" x 3.5" x 1/4"	L3 5" x 3.5" x 5/16"	L5 6" x 4" x 3/8"
L2 5" x 3.5" x 1/4"	L4 5" x 3.5" x 3/8"	L6 7" x 4" x 1/2"

Steel Plates

WP1 = 6"x 5/8"x 10" + (2) 5/8" Diameter Anchor Bolts
WP2 = 6"x 7/8"x 14" + (2) 3/4" Diameter Anchor Bolts
WP3 = 11" x 1" x 11" + (2) 3/4" Diameter Anchor Bolts

12" 2" Anchor bolt

All Structural Steel to Conform To G40.21-350W

Concrete Footings

BEW = Bottom Bars Each Way	F4 42" x 42" x 16" Deep c/w 5-15M BEW
F1 24" x 24" x 12" Deep	F5 48" x 48" x 16" Deep c/w 5-15M BEW
F2 30" x 30" x 14" Deep	F6 54" x 54" x 18" Deep c/w 7-15M BEW
F3 36" x 36" x 16" Deep	F7 60" x 60" x 18" Deep c/w 7-15M BEW
	F8 66" x 66" x 20" Deep c/w 9-15M BEW

> Strip footings below load bearing walls to have a min. 6" projection minimum 8" in depth + 2-15m bottom continuous
> All footings to bear on undisturbed soil, rock or engineered fill certified by soils engineer
> Min. soil bearing capacity = SLS 120 Kpa (2500 Psf) and to be verified by soils engineer prior to pouring footings

Refer to Sheet S1 for General Structural Notes

General Notes:

1. Do not scale drawings

2. These plans are to remain the property of the designer and must be returned upon request. These plans must not be used in any other location without the written approval of the designer.

3. All works to be in accordance with the ontario building code and all code references refer to OBC 2012 division 'B'

4. Contractor to check all dimensions, specifications, etc. On site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

5. Structural engineer to be notified prior to pouring of concrete to inspect rubber septum during construction - engineer will not certify walls or footing/slabs unless prior inspection is conducted - it is the responsibility of the contractor to notify the project engineer and make all arrangements.

6. All wood framed window openings that exceed 48" wide are to have 2/2"x6" plates @ bottom of opening (typical.) U.N.O.

7. Adjustments or changes made to the floor layout roof truss layout, beams, lentils & point loads or required load bearing walls must be identified prior to construction and David w. Small Designs Inc. and project engineer must be notified for further review and approval.

8. All shop drawings for pacers units to be submitted for field review by site inspector prior to manufacturing and installation

9. 'SDS' = Simpson stuttering strong-drive heavy-duty connector screws. Refer to manful. Specs. For exact details (see S1 for screw patterns)

10. Typical wall stud construction

- Typical exterior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high exterior walls to be 2/2x6 sep #2 @ 12" o/c.
- Typical interior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high interior walls to be 2/2x6 sep #2 @ 12" o/c.
- All 10' high interior basement walls to be 2x6 sep #2 @ 16" o/c.

11. Where load bearing walls are not finished with drywall or a suitable interior finish, then blocking or strapping shall be fastened to the stud at mid-height as per OBC. 9.23.10.2.(2)(5)

12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c c/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

17. All electrical panels & components to comply with OBC. 9.34. & specific requirements of the local utility supplier

18. Protection from dampness

All wood framing members that are not pressure treated & which are supported on concrete. In contact with ground or fill shall be separated from the concrete. By min. 5mil polyethylene or type s roll roofing as per OBC 9.23.2.3.(1) & (2)

19. Typical wood posts

All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

General Roof Notes:

1. Typical flat roof specifications

Rubber membrane roofing to meet obc. 9.26.2.1.(g) requirements cgsb 37-gp-52m roofing & waterproofing membrane, sheet applied, elastomeric

2. Provide continuous ice and water shield membrane over sheathing on all roofs less than 4/12

3. Masonry chimney to fasten to framing with 1-1/2"x1/4" strap archors at each adjacent rafter

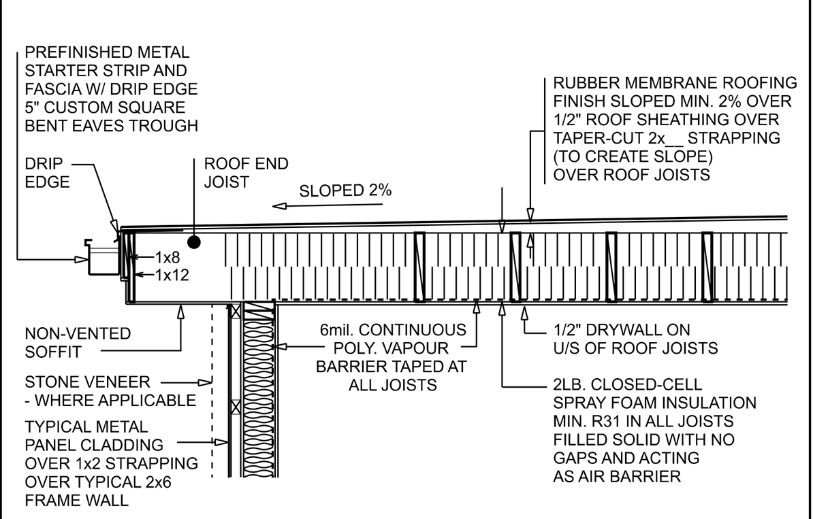
4. Fireplace chimney and flue as per OBC 9.22.10. And 9.22.1.4

5. For fireplace/chimney provide min. 2" clearance to all combustible material

6. Provide roof saddle and chimney flashing for contact between chimney masonry and roof shingles or wall finish as per OBC 2012

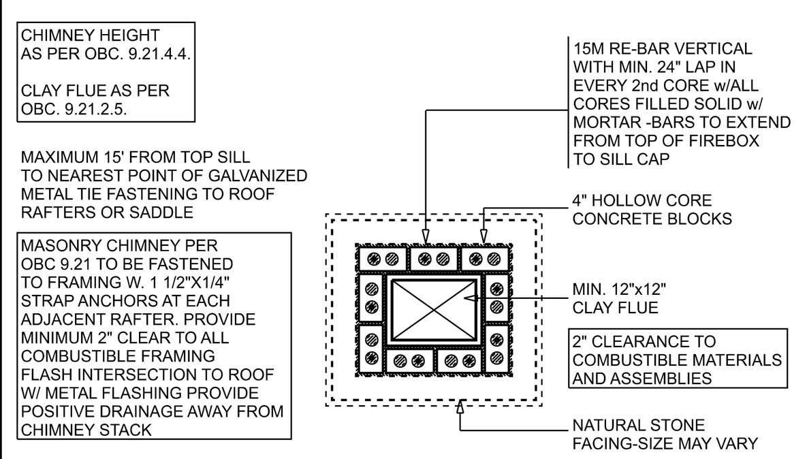
Project Notes

- Min. R31 rigid insul'n glued to u/s of slab
- Lower terrace steps to have 8" poured conc. Foundation wall w/ 20" wide x 8" deep conc. Footing
- All fndtns. To extend min. 48" below slab at lower terrace
- Lower terrace slab to be 3" concrete slab over 5" granular base sloped to drain
- Stair to be built as one-piece unit as drawn and fastened to adjacent wall and floor headers for support
- Front porch slab to be 8" reinforced conc. Slab above 35mpa @ 28 days min. - 5-8% air ent. Class c1
- All exposed floors to have floor joists above full w/ 2lb. Closed cell spray foam insul'n min. R31
- Flat roofs to have 2-ply torched on rubber membrane roof 2% slope to edge on 1/2" plywd. Roof shtg. On roof trusses/joists
- Install wood burning fireplace as per obc.9.22.10. And 9.22.1.4. Provide exterior combustion air as per obc. 9.22.8.
- Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications
- Interior fireplace to have reinforced concrete slab as per obc. 9.22.
- Ftg. Below fireplace foundation to be 12" deep x 6" projected poured concrete
- For all fireplaces provide min. 2" clearance to all combustible material
- Rear covered Porch Outdoor Sink to have shut-off valve and draining nib inside the heated basement space for annual winter decommissioning
- Provide 15m dowels @ 15" o.c. top bars along slab bearing (36")
- Provide 15m dowels @ 15" o.c. typical along slab bearing (24" x 24")



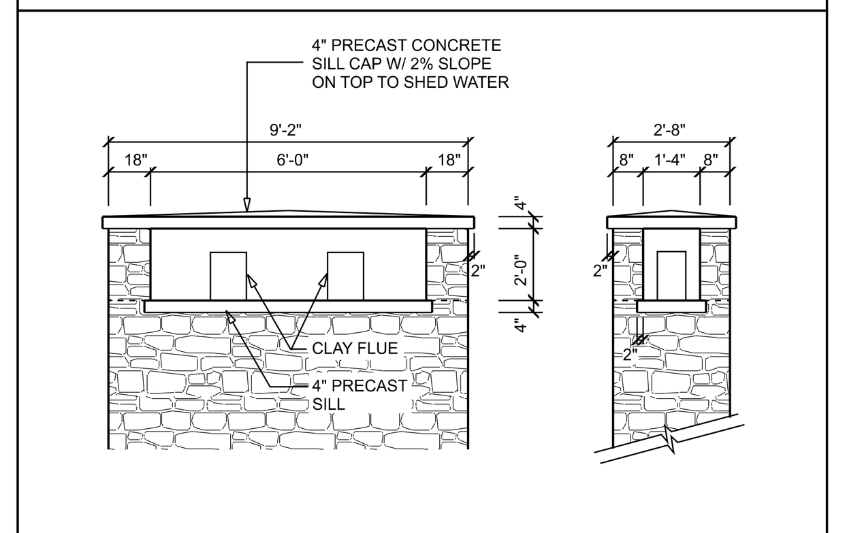
25 Section Through Typical Flat Roof

SCALE: N.T.S.



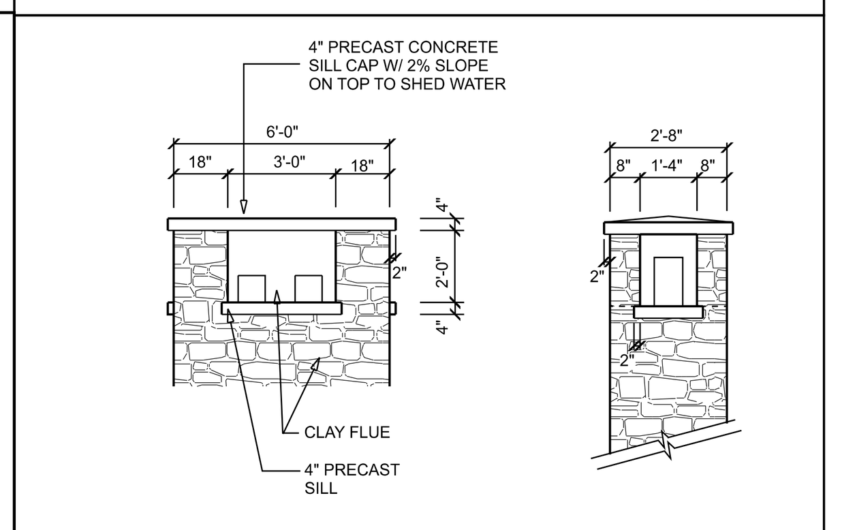
26 Solid Masonry Chimney

SCALE: N.T.S.



27 Chimney Cap Detail 'A'

SCALE: N.T.S.



28 Chimney Cap Detail 'B'

SCALE: N.T.S.

For Structural Design Only

REGISTERED PROFESSIONAL ENGINEER
L. W-K TSE
JUN 29/19
PROVINCE OF ONTARIO

TSE TAG No. DS 1226

Structural Engineering Design By:
Tse Consultants Inc. 416 543-3088

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the ontario building code to be a designer.
Qualification information required unless the design is exempt under Division C - 3.2.5.1. of the 2012 ontario building code.

Name	Signature	BCIN
Peter Giordano		25061

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

Firm Name	BCIN
David W. Small Designs Inc.	29999

Roof Notes

Ss= 1.1 kPa
Sr= 0.4 kPa

Note: all over-hangs are 4" inset from stone facing on ground floors (typical)

Note: all upper roof overhangs are to be 1'-2" U.N.O.

(A) 2'x 3' Skylight installed w/ curb & flashing as required by manufacturer specifications

(B) 2'x 4' Skylight installed w/ curb & flashing as required by manufacturer specifications

(C) 4'x 4' Skylight installed w/ curb & flashing as required by manufacturer specifications

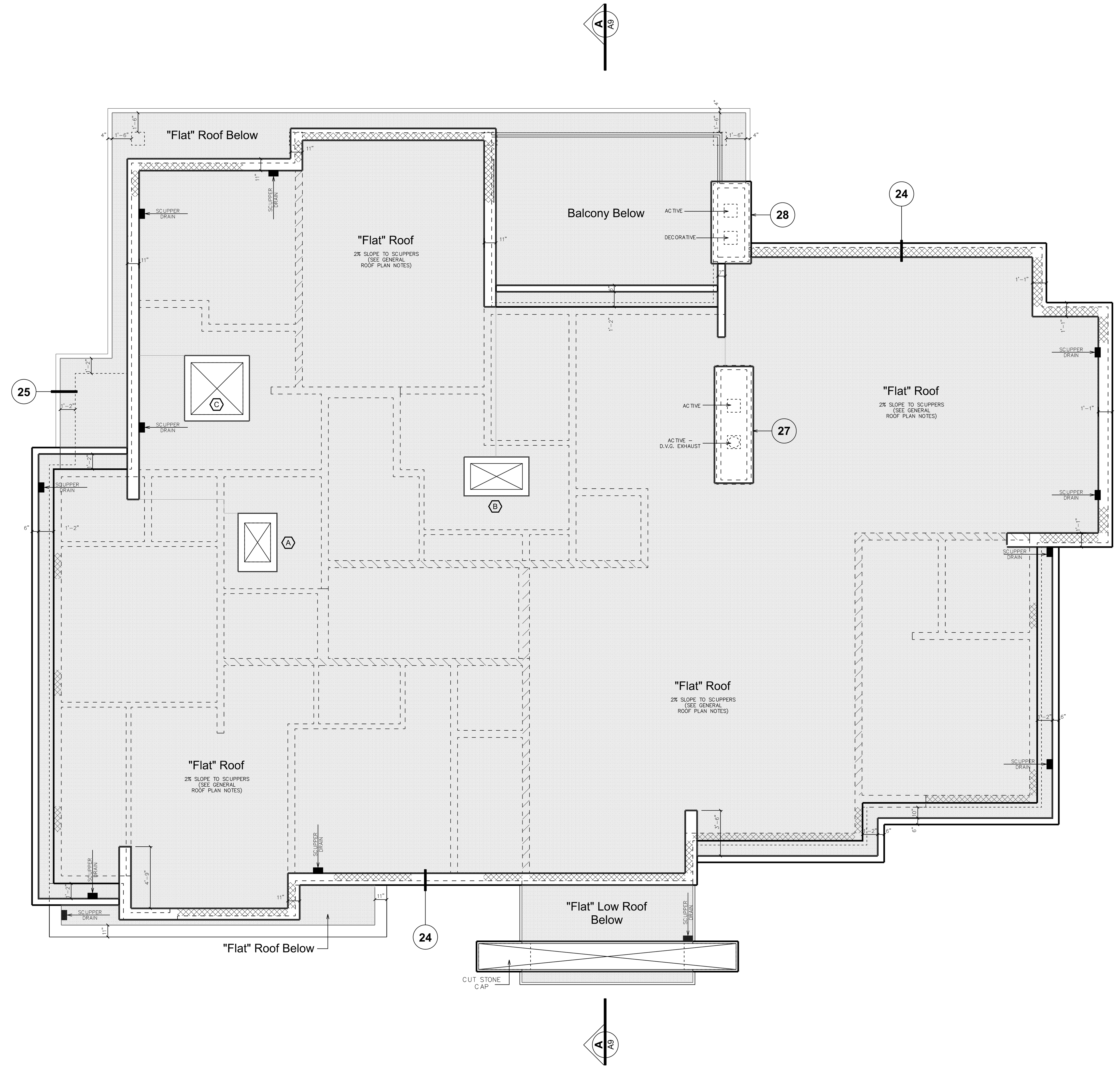
= Interior Load-Bearing Walls

= Flush Lintel

= Flat Roof - 2% Slope to Edges
(See General Roof Plan Notes)

Drawing Legend

- Joist direction
- Post above (P.A.)
- Floor drain
- 20"X28" Attic access hatch
- Interconnected smoke alarm w/ visual indicator
- CO Alarm



Exterior walls	- R24	Wall area=	658.35 sm
Bsmt walls	- R20+10ci	Window area=	260.1 sm
Roof w/ attic	- N/A	** Ratio =	39.50%
Roof w/o attic	- R50	Window/skylight	
Exposed floors	- R50	Eff. = 1.4	
Exposed slab	- R10	SB-12 3.1.2 Performance	
		Climate zone 1	
		** house must be 'modelled'	

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home
36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Roof Plan

Scale: 3/16"=1'-0"
Date: Jul 2019
Dwn by: NM
Proj. no.: 19-1735

A4

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Elevation Notes

(2) Prefinished 'natural' wood siding to comply with ONT. Reg. 332/12 subsection 9.27.6. Lumber-siding and table 9.27.5.4.

Blocking or furring for the attachment of siding to comply with 9.27.5.2 and 9.27.5.3. and as per manufacturer's specifications

(3) All stucco to be 'DuROCK' EIFS P.U.C.C.S. exterior insulation and finish system CCMC 12969R approved –install as per OBC, 9.28. and manufacturer's specifications –note use "Vapour block' by DuROCK for air/vapour barrier below stucco in place of Tyvek or equivalent product specified for all walls not clad in stucco

Note: All over-hangs are 4" inset from stone facing on ground floors (typical)

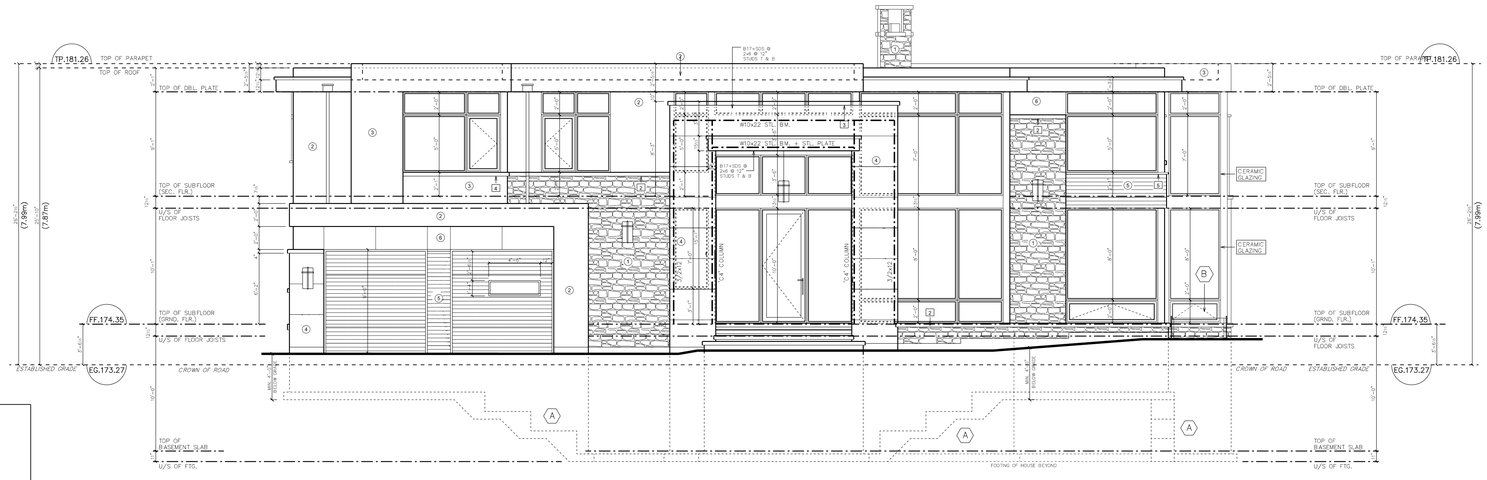
Note: Refer to roof plan for all roof slopes and overhang info

(A) Stepped footing per OBC 9.15.3.9.

(B) Glazing to be tempered glass (If operable window provide opening restrictor) - Comply with OBC 9.8.8.1 (5) and (6)

(C) Clay flue as per OBC 9.21.2.5
Chimney Height as per OBC 9.21.4.4

(D) 12" dia. Poured concrete Sono tubes min. 48" below finished grade or to undisturbed soil (Typ.)



General Notes:

1. Do not scale drawings

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4. Contractor to check all dimensions, specifications, etc. On site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

5. Structural engineer to be notified prior to pouring of concrete to inspect rubber septum during construction - engineer will not certify walls or footing/slabs unless prior inspection is conducted - it is the responsibility of the contractor to notify the project engineer and make all arrangements.

6. All wood framed window openings that exceed 48" wide are to have 2/2"x6" plates @ bottom of opening (typical.) U.N.O.

7. Adjustments or changes made to the floor layout roof truss layout, beams, lentils & point loads or required load bearing walls must be identified prior to construction and David w. Small Designs Inc. and project engineer must be notified for further review and approval.

8. All shop drawings for pacers units to be submitted for field review by site inspector prior to manufacturing and installation

9. 'SDS' = Simpson stuttering strong-drive heavy-duty connector screws. Refer to manful. Specs. For exact details (see S1 for screw patterns)

10. Typical wall stud construction

• Typical exterior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
• All 14' & 16' high exterior walls to be 2/2x6 sep #2 @ 12" o/c.
• Typical interior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
• All 14' & 16' high interior walls to be 2/2x6 sep #2 @ 12" o/c.
• All 10' high interior basement walls to be 2x6 sep #2 @ 16" o/c.

11. Where load bearing walls are not finished with drywall or a suitable interior finish, then blocking or strapping shall be fastened to the stud at mid-height as per OBC. 9.23.10.2.(2)(5)

12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c o/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

17. All electrical panels & components to comply with OBC. 9.34. & specific requirements of the local utility supplier

18. Protection from dampness

All wood framing members that are not pressure treated & which are supported on concrete. In contact with ground or fill shall be separated from the concrete. By min. 5mil polyethylene or type s roll roofing as per OBC 9.23.2.3.(1) & (2)

19. Typical wood posts

All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

Drawing Legend

1.0 Materials

(1) Natural Stone

(2) Pigmented Epoxy Stucco - Light

(3) Pigmented Epoxy Stucco - Dark

(4) Smooth Face Cut Stone

(5) 4 Inch Horizontal Wood Siding

(6) Prefinished Aluminium Panel

2.0 Roofing

(1) 2-Ply Torched On Rubber Membrane Roof Sloped To 2% To Eaves On 1/2" Plywood Roof Sheathing On Roof Trusses/Joists

3.0 Trim, Cornice, Moulding, & Gutter Notes

(2) 4" Cut Stone Sill c/w 2" Projection

(3) 4" Cut Stone Coping c/w 2" Projection

(4) 4" Stucco Covered Sill c/w 2" projection

(5) 2" Prefinished Metal Sill Flashing

4.0 Railing & Post

(6) 12"x12" Crezon Clad Post

(7) Frameless Tempered Glass Panels Min. 42" Above Fin. Decking - Contractor To Provide Shop Drawing To Inspector Prior To Installation To Ensure They Meet All Aspect Of OBC. 9.8. & SB-13 Of The Supplement

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the ontario building code to be a designer.
Qualification information required unless the design is exempt under Division C - 3.2.5.1. of the 2012 ontario building code.

Peter Giordano — 25061
Name — Signature — BCIN

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

David W. Small Designs Inc. — 29999
Firm Name — BCIN

Exterior walls	- R24
Bsmt walls	- R20+10ci
Roof w/ attic	- N/A
Roof w/o attic	- R50
Exposed floors	- R50
Exposed slab	- R10

Wall area=	658.35 sm
Window area=	260.1 sm
** Ratio =	39.50%
Window/skylight	
Eff. = 1.4	
SB-12 3.1.2 Performance Climate zone 1	
** house must be 'modelled'	

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
3	June 10/20	HVAC Coordination – McCallum Design Inc.
2	Feb 24/20	HVAC Coordination – McCallum Design Inc.
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home
36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Front Elevation

Scale: 3/16"=1'-0"
Date: Jul 2019
Dwn by: NM
Proj no.: 19-1735

A5

DAVID SMALL DESIGNS .COM
1440 Huron tario Street, Mississauga, ON L5G 3H4 PH905.271.9100 FX 905.271.9109

Elevation Notes

(2) Prefinished 'natural' wood siding to comply with ONT. Reg. 332/12 subsection 9.27.6. Lumber-siding and table 9.27.5.4.

Blocking or furring for the attachment of siding to comply with 9.27.5.2 and 9.27.5.3. and as per manufacturer's specifications

(3) All stucco to be 'DuROCK' EIFS P.U.C.C.S. exterior insulation and finish system CCMC 12969R approved -install as per OBC. 9.28. and manufacturer's specifications –note use 'Vapour block' by DuROCK for air/vapour barrier below stucco in place of Tyvek or equivalent product specified for all walls not clad in stucco

Note: All over-hangs are 4" inset from stone facing on ground floors (typical)

Note: Refer to roof plan for all roof slopes and overhang info

(A) Stepped footing per OBC 9.15.3.9.

(B) Glazing to be tempered glass (If operable window provide opening restrictor) - Comply with OBC 9.8.8.1 (5) and (6)

(C) Clay flue as per OBC 9.21.2.5

Chimney Height as per OBC 9.21.4.4

(D) 12" dia. Poured concrete Sono tubes min. 48" below finished grade or to undisturbed soil (Typ.)

Unprotected Openings Calculations

Limiting Distance	2.78m
Wall Area	1132.1 sf (105.2 sm)
Opening Area Allowed	108.2sf (9.6 %)
Opening Area Proposed	99.7 sf (8.7 %)

Please Note The Figure For % Openings Allowed Has Been Interpolated Based On O.B.C. Table 9.10.15.4 And Glazed Areas Were Used To Calculate Proposed Openings As Allowed By 9.10.15.4.

General Notes:

1. Do not scale drawings

2. These plans are to remain the property of the designer and must be returned upon request. These plans must not be used in any other location without the written approval of the designer.

3. All works to be in accordance with the ontario building code and all code references refer to OBC 2012 division 'B'

4. Contractor to check all dimensions, specifications, etc. On site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

5. Structural engineer to be notified prior to pouring of concrete to inspect rubber septum during construction - engineer will not certify walls or footing/slabs unless prior inspection is conducted - it is the responsibility of the contractor to notify the project engineer and make all arrangements.

6. All wood framed window openings that exceed 48" wide are to have 2/2"x6" plates @ bottom of opening (typical.) U.N.O.

7. Adjustments or changes made to the floor layout roof truss layout, beams, lentils & point loads or required load bearing walls must be identified prior to construction and David w. Small Designs Inc. and project engineer must be notified for further review and approval.

8. All shop drawings for pacers units to be submitted for field review by site inspector prior to manufacturing and installation

9. 'SDS' = Simpson stuttering strong-drive heavy-duty connector screws. Refer to manful. Specs. For exact details (see S1 for screw patterns)

10. Typical wall stud construction

- Typical exterior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high exterior walls to be 2/2x6 sep #2 @ 12" o/c.
- Typical interior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high interior walls to be 2/2x6 sep #2 @ 12" o/c.
- All 10' high interior basement walls to be 2x6 sep #2 @ 16" o/c.

11. Where load bearing walls are not finished with drywall or a suitable interior finish, then blocking or strapping shall be fastened to the stud at mid-height as per OBC. 9.23.10.2.(2)(5)

12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c c/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

17. All electrical panels & components to comply with OBC. 9.34. & specific requirements of the local utility supplier

18. Protection from dampness

All wood framing members that are not pressure treated & which are supported on concrete. In contact with ground or fill shall be separated from the concrete. By min. 5mil polyethylene or type s roll roofing as per OBC 9.23.2.3.(1) & (2)

19. Typical wood posts

All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

Drawing Legend

1.0 Materials

1. Natural Stone
2. Pigmented Epoxy Stucco - Light
3. Pigmented Epoxy Stucco - Dark
4. Smooth Face Cut Stone
5. 4 Inch Horizontal Wood Siding
6. Prefinished Aluminium Panel

2.0 Roofing

1. 2-Ply Torched On Rubber Membrane Roof Sloped To 2% To Eaves On 1/2" Plywood Roof Sheathing On Roof Trusses/Joists

3.0 Trim, Cornice, Moulding, & Gutter Notes

2. 4" Cut Stone Sill c/w 2" Projection
3. 4" Cut Stone Coping c/w 2" Projection
4. 4" Stucco Covered Sill c/w 2" projection
5. 2" Prefinished Metal Sill Flashing

4.0 Railing & Post

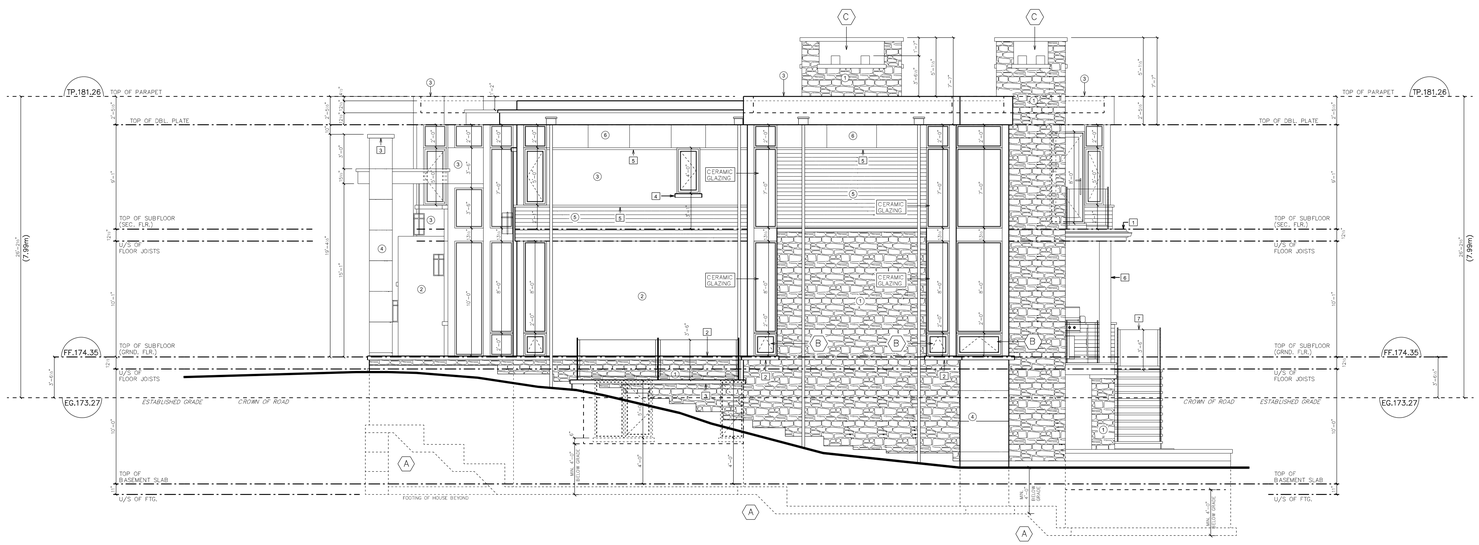
6. 12"x12" Crezon Clad Post
7. Frameless Tempered Glass Panels Min. 42" Above Fin. Decking - Contractor To Provide Shop Drawing To Inspector Prior To Installation To Ensure They Meet All Aspect Of OBC. 9.8. & SB-13 Of The Supplement

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the ontario building code to be a designer. Qualification information required unless the design is exempt under Division C - 3.2.5.1. of the 2012 ontario building code.

Peter Giordano	Signature	25061
Name		BCIN

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

David W. Small Designs Inc.		29999
Firm Name		BCIN



Exterior walls	- R24	Wall area= 658.35 sm
Bsmt walls	- R20+10ci	Window area= 260.1 sm
Roof w/ attic	- N/A	** Ratio = 39.50%
Roof w/o attic	- R50	Window/skylight
Exposed floors	- R50	Eff. = 1.4
Exposed slab	- R10	SB-12 3.1.2 Performance Climate zone 1
		** house must be 'modelled'

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
2	Feb 24/20	HVAC Coordination – McCallum Design Inc.
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home
36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Right-Side Elevation

Scale: 3/16"=1'-0"
Date: Jul 2019
Dwn by: NM
Proj no.: 19-1735

A6

DAVID SMALL DESIGNS .COM

1440 Huron tario Street, Mississauga, ON L5G 3H4 PH905.271.9100 FX 905.271.9109

Elevation Notes

(2) Prefinished 'natural' wood siding to comply with ONT. Reg. 332/12 subsection 9.27.6. Lumber-siding and table 9.27.5.4.

(2) Blocking or furring for the attachment of siding to comply with 9.27.5.2 and 9.27.5.3. and as per manufacturer's specifications

(3) All stucco to be 'DuROCK' EIFS P.U.C.C.S. exterior insulation and finish system CCMC 12969R approved -install as per OBC. 9.28. and manufacturer's specifications –note use 'Vapour block' by DuROCK for air/vapour barrier below stucco in place of Tyvek or equivalent product specified for all walls not clad in stucco

Note: All over-hangs are 4" inset from stone facing on ground floors (typical)

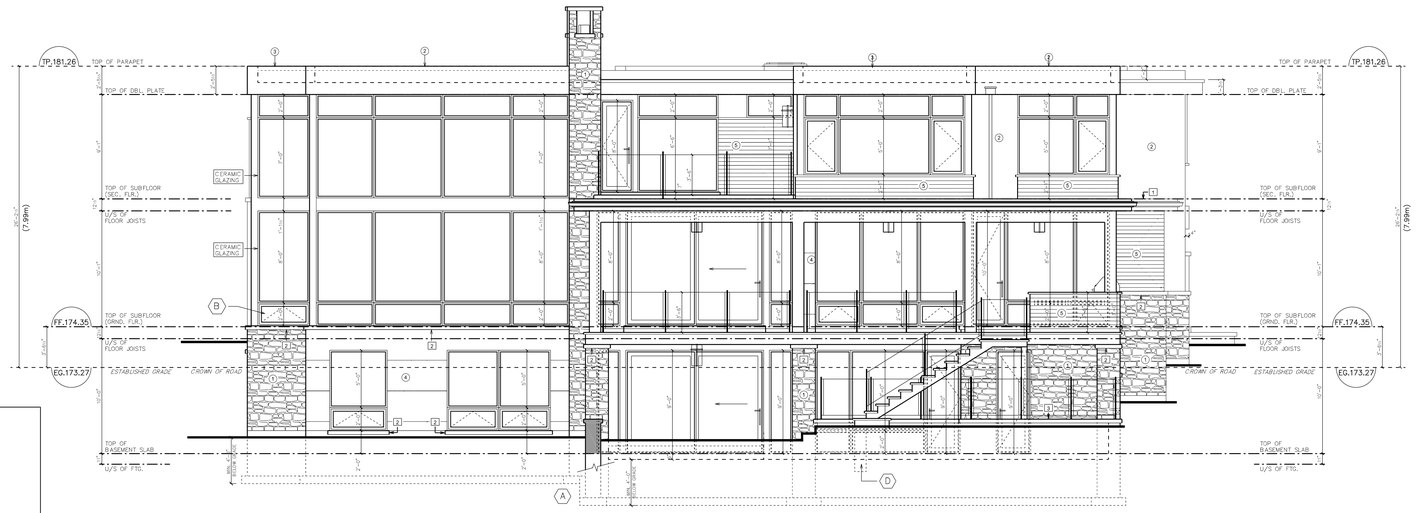
Note: Refer to roof plan for all roof slopes and overhang info

(A) Stepped footing per OBC 9.15.3.9.

(B) Glazing to be tempered glass (If operable window provide opening restrictor) - Comply with OBC 9.8.8.1 (5) and (6)

(C) Clay flue as per OBC 9.21.2.5
Chimney Height as per OBC 9.21.4.4

(D) 12" dia. Poured concrete Sono tubes min. 48" below finished grade or to undisturbed soil (Typ.)



General Notes:

1. Do not scale drawings

2. These plans are to remain the property of the designer and must be returned upon request. These plans must not be used in any other location without the written approval of the designer.

3. All works to be in accordance with the ontario building code and all code references refer to OBC 2012 division 'B'

4. Contractor to check all dimensions, specifications, etc. On site and shall be responsible for reporting any discrepancy to the engineer and/ or designer.

5. Structural engineer to be notified prior to pouring of concrete to inspect rubber septum during construction - engineer will not certify walls or footing/slabs unless prior inspection is conducted - it is the responsibility of the contractor to notify the project engineer and make all arrangements.

6. All wood framed window openings that exceed 48" wide are to have 2/2"x6" plates @ bottom of opening (typical.) U.N.O.

7. Adjustments or changes made to the floor layout roof truss layout, beams, lentils & point loads or required load bearing walls must be identified prior to construction and David w. Small Designs Inc. and project engineer must be notified for further review and approval.

8. All shop drawings for pacers units to be submitted for field review by site inspector prior to manufacturing and installation

9. 'SDS' = Simpson stuttering strong-drive heavy-duty connector screws. Refer to manful. Specs. For exact details (see S1 for screw patterns)

10. Typical wall stud construction

- Typical exterior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high exterior walls to be 2/2x6 sep #2 @ 12" o/c.
- Typical interior walls to be 2x6 sep #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high interior walls to be 2/2x6 sep #2 @ 12" o/c.
- All 10' high interior basement walls to be 2x6 sep #2 @ 16" o/c.

11. Where load bearing walls are not finished with drywall or a suitable interior finish, then blocking or strapping shall be fastened to the stud at mid-height as per OBC. 9.23.10.2.(2)(5)

12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c c/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

17. All electrical panels & components to comply with OBC. 9.34. & specific requirements of the local utility supplier

18. Protection from dampness

All wood framing members that are not pressure treated & which are supported on concrete. In contact with ground or fill shall be separated from the concrete. By min. 5mil polyethylene or type s roll roofing as per OBC 9.23.2.3.(1) & (2)

19. Typical wood posts

All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

Drawing Legend

1.0 Materials

1. Natural Stone
2. Pigmented Epoxy Stucco - Light
3. Pigmented Epoxy Stucco - Dark
4. Smooth Face Cut Stone
5. 4 Inch Horizontal Wood Siding
6. Prefinished Aluminium Panel

2.0 Roofing

1. 2-Ply Torched On Rubber Membrane Roof Sloped To 2% To Eaves On 1/2" Plywood Roof Sheathing On Roof Trusses/Joists

3.0 Trim, Cornice, Moulding, & Gutter Notes

2. 4" Cut Stone Sill c/w 2" Projection
3. 4" Cut Stone Coping c/w 2" Projection
4. 4" Stucco Covered Sill c/w 2" projection
5. 2" Prefinished Metal Sill Flashing

4.0 Railing & Post

6. 12"x12" Crezon Clad Post
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Peter Giordano Name	Signature	**25061** BCIN

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

David W. Small Designs Inc. Firm Name	**29999** BCIN

Exterior walls	- R24
Bsmt walls	- R20+10ci
Roof w/ attic	- N/A
Roof w/o attic	- R50
Exposed floors	- R50
Exposed slab	- R10

Wall area=	658.35 sm
Window area=	260.1 sm
** Ratio =	39.50%
Window/skylight	
Eff. = 1.4	
SB-12 3.1.2 Performance	
Climate zone 1	
** house must be 'modelled'	

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
2	Feb 24/20	HVAC Coordination – McCallum Design Inc.
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home

36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Rear Elevation

Scale: 3/16"=1'-0"
Date: Jul 2019
Dwn by: NM
Proj no.: 19-1735

A7

1440 Huron tario Street, Mississauga, ON L5G 3H4 PH 905.271.9100 FX 905.271.9109

Elevation Notes

(2) Prefinished 'natural' wood siding to comply with ONT. Reg. 332/12 subsection 9.27.6. Lumber-siding and table 9.27.5.4.

(2) Blocking or furring for the attachment of siding to comply with 9.27.5.2 and 9.27.5.3. and as per manufacturer's specifications

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(A) Stepped footing per OBC 9.15.3.9.

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(C) Clay flue as per OBC 9.21.2.5

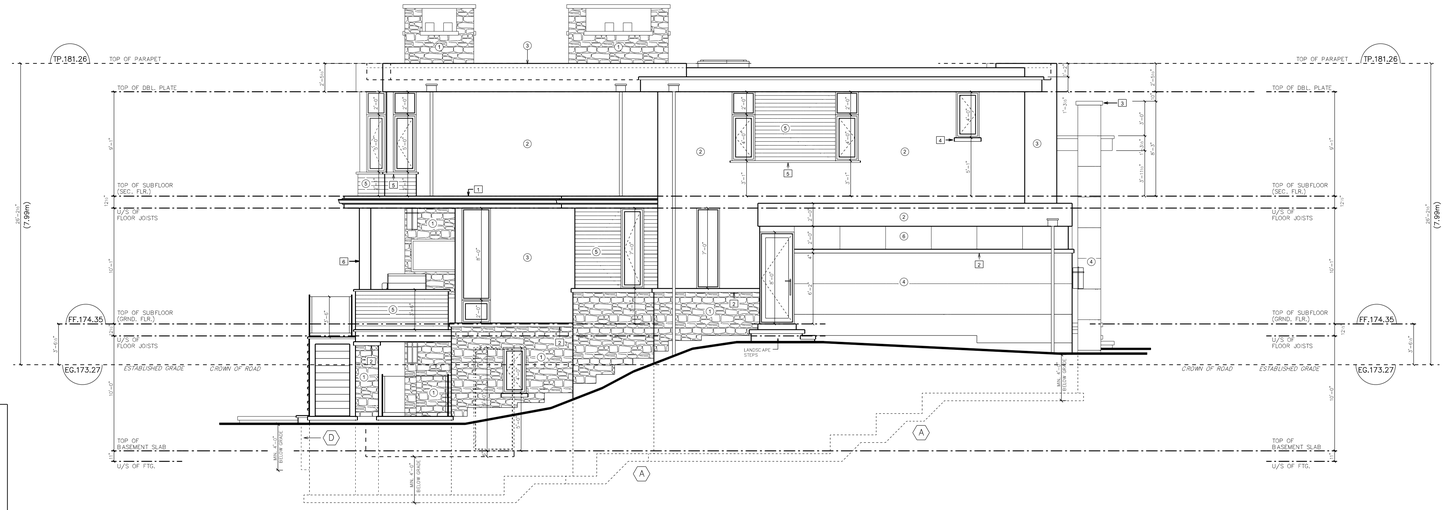
Chimney Height as per OBC 9.21.4.4

(D) 12" dia. Poured concrete Sono tubes min. 48" below finished grade or to undisturbed soil (Typ.)

Unprotected Openings Calculations

Limiting Distance	1.83m
Wall Area	1475.3 sf (137.1 sm)
Opening Area Allowed	113.0 sf (7.7 %)
Opening Area Proposed	85.8 sf (5.8 %)

Please Note The Figure For % Openings Allowed Has Been Interpolated Based On O.B.C. Table 9.10.15.4 And Glazed Areas Were Used To Calculate Proposed Openings As Allowed By 9.10.15.4.



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12. 3/4" subfloor sheathing to be screwed and glued to all TJI joists on all floors

13. Typical non load bearing partition

2x4 studs @16" o/c c/w double top & single bottom plate provide 1/2" drywall b/s

14. Typical bathroom reinforcement

Stud reinforcement required as per OBC. 9.5.2.3 in all bathrooms

15. All rigid or spray foam exposed interior insulation to be covered w/ taped and 'mudded' drywall

16. Specific location of hydro meter to be established by local utility on exterior of the house

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All wood post shown to be 'P3' U.N.O.

20. Floor drains to be located in every mechanical room, lower terrace, window well and laundry room.

21. All windows and glass doors less than 24" above finished floor are recommended to be tempered glass.

Drawing Legend

1.0 Materials

(1) Natural Stone

(2) Pigmented Epoxy Stucco - Light

(3) Pigmented Epoxy Stucco - Dark

(4) Smooth Face Cut Stone

(5) 4 Inch Horizontal Wood Siding

(6) Prefinished Aluminium Panel

2.0 Roofing

[1] 2-Ply Torched On Rubber Membrane Roof Sloped To 2% To Eaves On 1/2" Plywood Roof Sheathing On Roof Trusses/Joists

3.0 Trim, Cornice, Moulding, & Gutter Notes

[2] 4" Cut Stone Sill c/w 2" Projection

[3] 4" Cut Stone Coping c/w 2" Projection

[4] 4" Stucco Covered Sill c/w 2" projection

[5] 2" Prefinished Metal Sill Flashing

4.0 Railing & Post

[6] 12"x12" Crezon Clad Post

[7] Frameless Tempered Glass Panels Min. 42" Above Fin. Decking - Contractor To Provide Shop Drawing To Inspector Prior To Installation To Ensure They Meet All Aspect Of OBC. 9.8. & SB-13 Of The Supplement

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Peter Giordano — Name — Signature — 25061 BCIN

Registration information required unless the design is exempt under Division C - 3.2.4.1. of the 2012 Ontario Building Code.

David W. Small Designs Inc. — Firm Name — 29999 BCIN

Exterior walls	- R24	Wall area= 658.35 sm
Bsmt walls	- R20+10ci	Window area= 260.1 sm
Roof w/ attic	- N/A	** Ratio = 39.50%
Roof w/o attic	- R50	Window/skylight
Exposed floors	- R50	Eff. = 1.4
Exposed slab	- R10	SB-12 3.1.2 Performance Climate zone 1
		** house must be 'modelled'

Energy efficiency compliance standard SB-12 3.1.2. requirements T.B.D. by consultant - Target Table 3.1.1.2.A (IP) pkg. "A1"

no.	date	revision / comment
2	Feb 24/20	HVAC Coordination – McCallum Design Inc.
1	July 5/19	Issued To Owner For Building Permit Applic'n

Project:

The Kianian Home
36 Fairway Heights Drive

Lot 75
Registered Plan 6350
City Of Markham
Regional Municipality of York

Drawing:

Left-Side Elevation

Scale: 3/16"=1'-0"
Date: Jul 2019
Dwn by: NM
Proj no.: 19-1735

A8

DAVID SMALL DESIGNS .COM

1440 Hurontario Street, Mississauga, ON L5G 3H4 PH905.271.9100 FX 905.271.9109