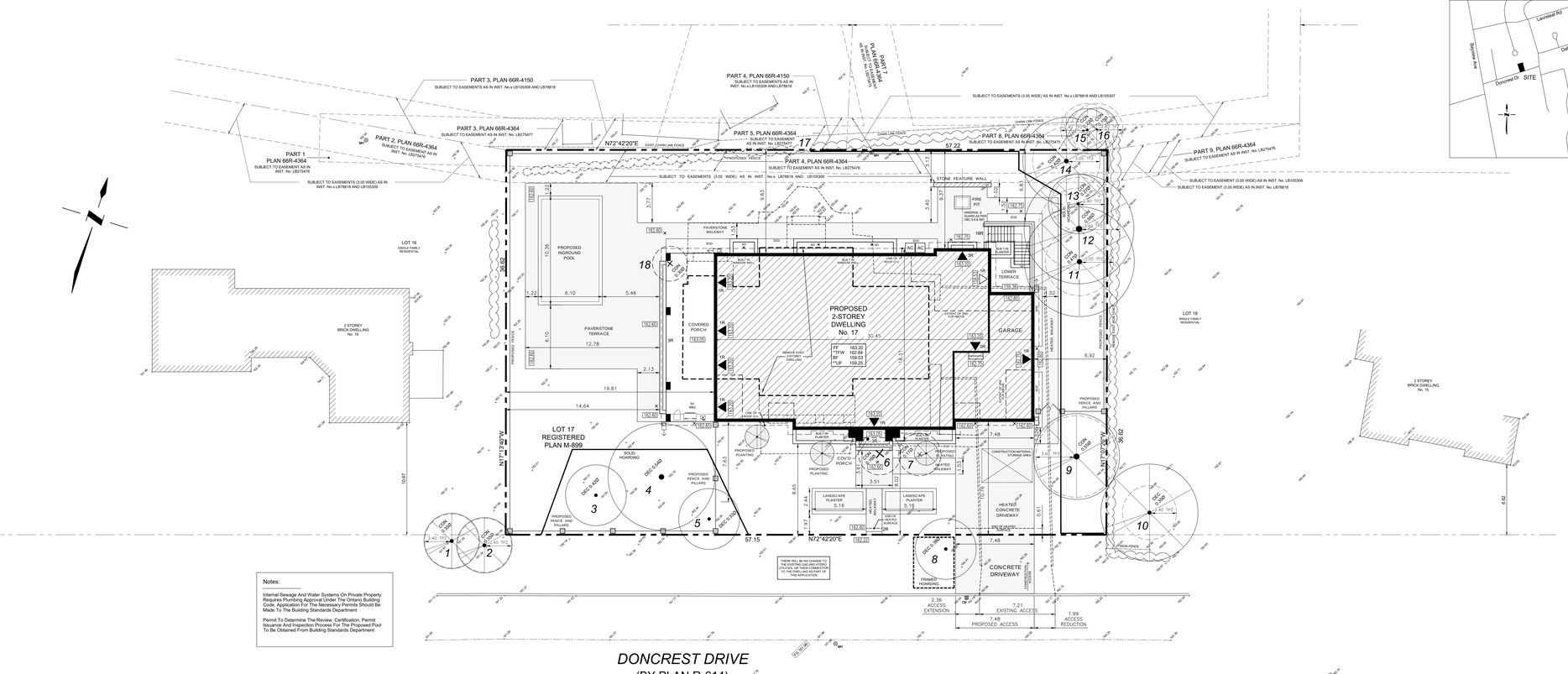



Key Plan nts



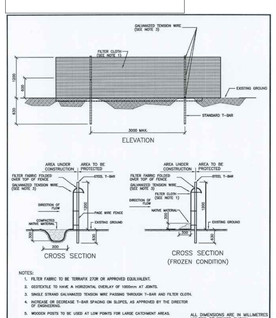

## Site Data

| | | |
|---|---|---|
| Lot Area | 2094.10 sm | (0.020 ha) |
| Zoning | | SR1 |
| Established Grade | | 161.98 |
| **Floor Area** | | |
| Ground Floor (Includes 98.7 sf of Stairs) | 415.26 sm | 4470.0 sf |
| Second Floor (Excludes 98.7 sf of Stairs ) | 397.26 sm | 4276.1 sf |
| Total Area | 812.52 sm | 8746.1 sf |
| Garage (Measured to Exterior Face of Garage Walls) | 74.15 sm | 798.2 sf |
| Total Gross Floor Area | 886.67 sm | 9544.3 sf |
| Max Gross Floor Area | 983.34 sm | 10584.56 sf |
| Garage (Measured to Inside Face of Garage Walls) | 67.57 sm | 727.3 sf |
| Finished Basement (Measured to Inside Face of Finished Basement Walls) | 328.54 sm | 3536.5 sf |
| **Lot Coverage** | | |
| Proposed Footprint (Including Garage) | 23.38% | 489.65 sm |
| Proposed Covered Porches | 3.61% | 75.55 sm |
| Total Proposed Coverage | 26.99% | 565.20 sm |
| Max Allowed Coverage | 33.33% | 698.03 sm |
| **Landscaping** | | |
| Front Yard Area | | 600.79 sm |
| Landscape Soft Area | 77.78% | 467.32 sm |

Notes:

Internal Sewage And Water Systems On Private Property Requires Plumbing Approval Under The Ontario Building Code, Application For The Necessary Permits Should Be Made To The Building Standards Department

Permit To Determine The Review, Certification, Permit Issuance And Inspection Process For The Proposed Pool To Be Obtained From Building Standards Department




NOTES:
1. FILTER FABRIC TO BE TERRAFIX 270R OR APPROVED EQUIVALENT.
2. GEOTEXTILE TO HAVE A HORIZONTAL OVERLAP OF 1800mm AT JOINTS.
3. SINGLE STRAND GALVANIZED TENSION WIRE PASSING THROUGH T-BAR AND FILTER CLOTH.
4. NOTCHED OR SCORCHED 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 |
| REV: | 0 |
| DATE: | SEPTEMBER 2010 |
| APPROVED BY: | DIRECTOR OF ENGINEERING |
| DWG. NO. | MPII |

## 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: Vladimir Dowen Surveying Dated: December 15, 2020

## Location

Lot 17
Registered Plan M-899
City of Markham
Regional Municipality of York

## City Benchmark

Elevations Are Refereed To The City Of Markham Benchmark No. BM-M-03-006, Having A Published Elevation Of 159.225 Meters

## *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)

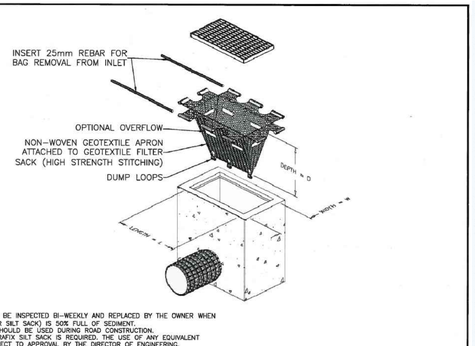
- U/F Denotes Minimum Depth Of Under Side Of Footing
- Under Side of Footing May Differ Depending On Basement Conditions. See Floor Plans And Elevations For Specific Under Side Of Footing Conditions.
- Footings To Be Min 1.2m Below Grade

## 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

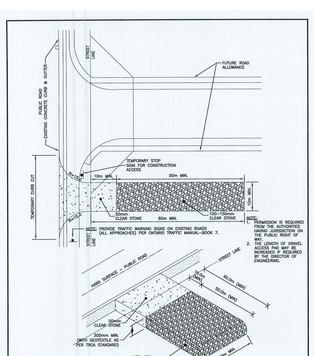
3. All Works To Be In Accordance With The Ontario Building Code And All Code References Refer To O.B.C. 2012 Division 'B'




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.

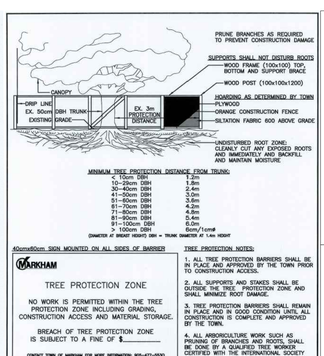
MARKHAM ENGINEERING DEPARTMENT

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




MARKHAM ENGINEERING DEPARTMENT

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




MINIMUM TREE PROTECTION DISTANCE FROM TRUNK:

| | |
|---|---|
| < 10cm DBH | 1.2m |
| 10--25cm 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) DBH = TRUNK DIAMETER AT 1.4m HEIGHT

40cmx60cm SIGN MOUNTED ON ALL SIDES OF BARRIER

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 STAKES SHALL BE OUTSIDE THE TREE PROTECTION ZONE AND SHALL MINIMIZE ROOT DAMAGE.

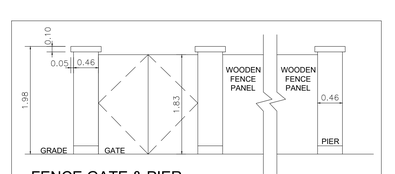
3. TREE PROTECTION BARRIERS SHALL REMAIN IN PLACE AND IN GOOD CONDITION UNTIL ALL CONSTRUCTION IS COMPLETE AND APPROVED BY THE TOWN.

4. ALL ARBORICULTURE WORK SUCH AS PRUNING OF BRANCHES AND ROOTS, SHALL BE DONE BY A QUALIFIED ARBORIST CERTIFIED WITH THE INTERNATIONAL SOCIETY OF ARBORICULTURE APPROVED BY THE TOWN.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN

MARKHAM ENGINEERING DEPARTMENT

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




FENCE GATE & PIER NTS

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.

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 | | 29061 |
| 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 |
|---|---|---|
| 5 | July 28/21 | As Per Updated Tree Inventory |
| 4 | June 14/21 | As Per Arborist Coordination |
| 3 | June 12/21 | Client Requested Revisions |
| 2 | May 21/21 | Client Requested Revisions |
| 1 | May 18/21 | Issued To Owner For Zoning Approval |

*Project:*

**The Maruszki-Desai Home**

**17 Doncrest Drive**

Lot 17
Registered Plan M-899
City of Markham
Regional Municipality of York

*Drawing:*

# Site Plan

*Scale:* 1:150
*Date:* May 2021
*Dwn by:* HD
*Proj. no.:* 20 - 1887

SP

David Small Designs

## Schedules

### Wood Lintels / Beams

| | | | | |
|---|---|---|---|---|
| B1 2-2x8 | B7 2-2x12 | B13 1-9.5" LVL | B19 1-14" LVL | Note: where solid (1)-piece lumber is specified, do not substitute multiple ply |
| B2 3-2x8 | B8 3-2x12 | B14 2-9.5" LVL | B20 2-14" LVL | |
| B3 2-2x10 Bolted | B9 2-2x12 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:
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"x0.313" - Brg. Plate 12"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 W12x49 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 3" 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"
1"

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

### Concrete Footings

BEW = Bottom Bars Each Way

F1 24" x 24" x 12" Deep
F2 30" x 30" x 14" Deep
F3 36" x 36" x 16" Deep
F4 42" x 42" x 16" Deep c/w 5-15M BEW
F5 48" x 48" x 16" Deep c/w 5-15M BEW
F6 54" x 54" x 18" Deep c/w 7-15M BEW
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**

## Project Notes:

- Min. R31 rigid insulation 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 foundations to extend min. 48" below slab at lower terrace
- Lower terrace slab to be 3" concrete slab over 6" 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
- Typical Porch Slab (Slab on Grade Condition)

6" R.C. slab on grade c/w 1-layer 6x6x6 welded wire mesh placed 2" down from top of slab over 6" granular 'A' or equal gravel on soil compacted to 98% standard proctor max.
Dry density on undisturb soil or engineered fill- note: if space below is changed to become excavated, the slab & wall requirement will require additional reinforcing

- 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 w/ 2% slope to edge on 1/2" plywood roof sheathing on roof trusses/joists
- Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications
- Provide 15M hook bars @ 15" o.c. top bars along slab bearing

36" UNO

- Provide 15M dowels @ 15" o.c. typical along slab bearing

24" UNO

## 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 re-bar set-up 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, lintills & 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 precast 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 manfut. specs. For exact details (see S1 for screw patterns)

10. Typical Wall Stud Construction

- Typical exterior walls to be 2x6 spf #2 @ 16" o/c. (up to 13' high)
- All 1st & 1lf high exterior walls to be 2/2x6 spf #2 @ 12" o/c.
- Typical interior walls to be 2x6 spf #2 @ 16" o/c. (up to 13' high)
- All 1st & 1lf high interior walls to be 2/2x6 spf #2 @ 12" o/c.
- All 10' high interior basement walls to be 2x6 spf #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. 5/8" 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 'e' 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.

22. All steel beams to bear on column cap plate. No side header connections allowed. Refer to detail 7/S1.

23. Structural steel shop drawing review to be done by builder. Builder to site confirm dimensions as per steel shop drawings prepared by steel supplier.

## 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" e.b. @ 4'-0" o.c.) on 18" x 8" deep poured concrete footing. + 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 basement.)

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

5. Typical Poured Concrete Perimeter Garage Foundation Walls

Reinforced 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

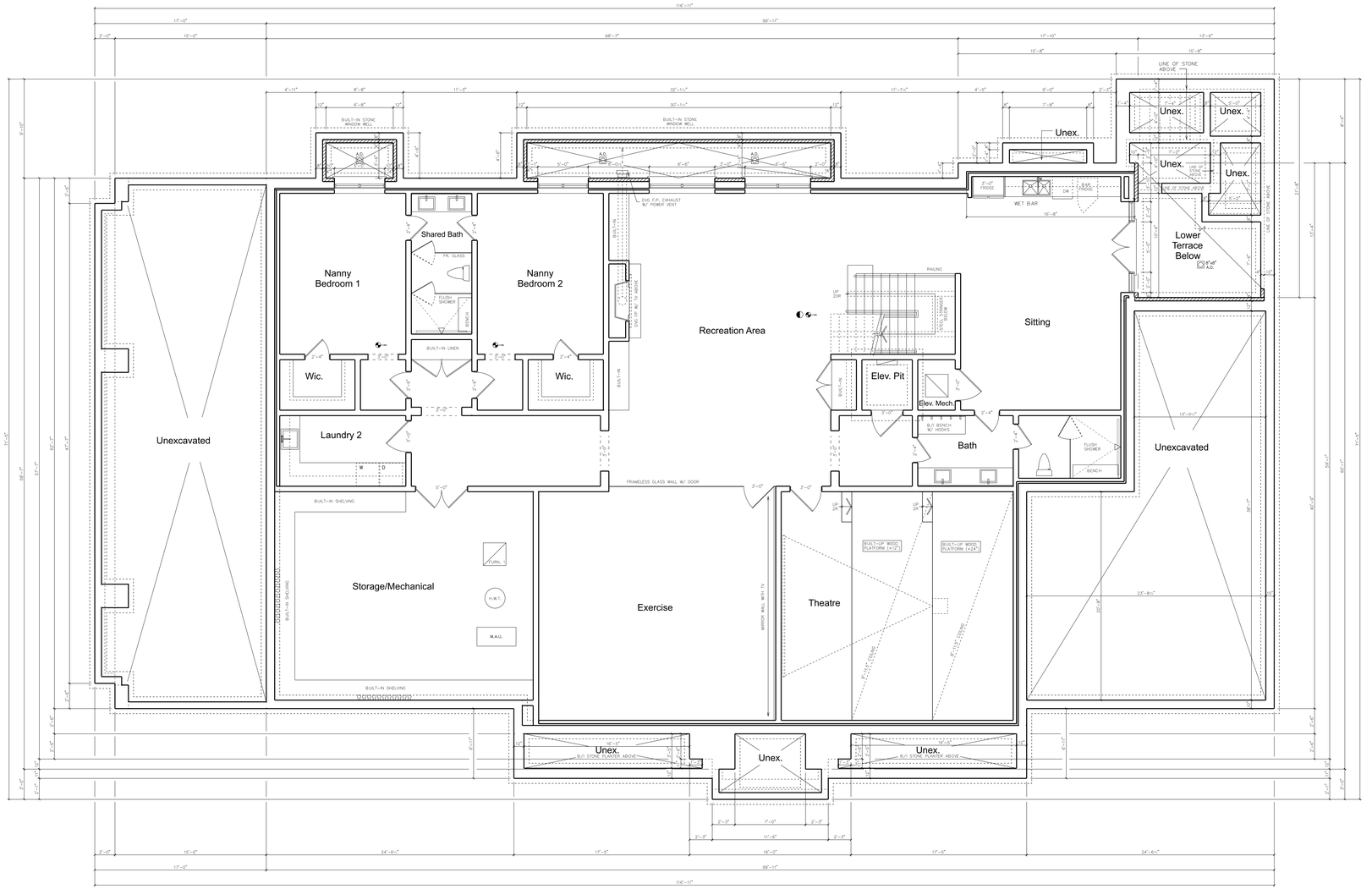
A principal dwelling exhaust fan shall be installed and controlled by a centrally located switch identified as such. Every bathroom, powder room and laundry room shall be equipped with a mechanical exhaust fan and vent.

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.




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 — Name — Signature — 20061 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 — 29890 BCIN

## Opening Legend

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

## Drawing Legend

Joist direction
Floor drain
Interconnected smoke alarm w/ visual indicator
CO Alarm
Post above
20"X28" Attic access hatch
Typical 'P3' post UNO

| | |
|---|---|
| Wall area | = 737.6 sm |
| Window area | = 191.6 sm |
| ** Ratio | = 25.98 % |
| Window/Sliding Glass Door Efficiency | = 1.4** |
| Skylight/Glazed Roofs Efficiency | = U-2.8 |

| | | |
|---|---|---|
| Ceiling w/ Attic Space | - R60 | Energy efficiency compliance standard SB-12 3.1.1. Table 3.1.1.2.A (IP) pkg. "A1" |
| Ceiling w/o Attic Space | - R31 | |
| Exposed Floors | - R31 | |
| Walls Above Grade | - R22 | |
| Basement Walls | - R20ci | |

*Refer to EEDS form for all other efficiency values

Note: All information shown are target R-Values and are to be confirmed by HVAC consultant through the building envelope modelling process.

| no. | date | revision / comment |
|---|---|---|
| 2 | Jun. 11/21 | Revised As Per Client Request |
| 1 | May 18/21 | Issued To Owner For Zoning Approvals |

*Project:*

**The Maruszki-Desai Home**
**17 Doncrest Drive**
Part of Lot 17
Registered Plan m-899
City of Markham
Regional Municipality of York

*Drawing:*

# Basement Floor Plan

*Scale:* 1/4"=1'-0"
*Date:* May 2021
*Dwn by:* MM/TK
*Proj. no.:* 21-1887

A1

David Small Designs

## Schedules

### Wood Lintels / Beams

| | | | | |
|---|---|---|---|---|
| B1 2-2x8 | B7 2-2x12 | B13 1-9.5" LVL | B19 1-14" LVL | Note: where solid (1) piece lumber shown - do not substitute multiple ply |
| 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:
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 |
| P3 3-2x6 | P5 5-2x6 | P7 4-2x4 | P9 4x4 | P11 3-2x8 |

P12 4-2x8

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" / 4" — 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 | 3" 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"

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

### Concrete Footings

BEW = Bottom Bars Each Way

F1 24" x 12" Deep
F2 30" x 30" x 14" Deep
F3 36" x 36" x 16" Deep
F4 42" x 42" x 16" Deep c/w 5-15M BEW
F5 48" x 48" x 16" Deep c/w 5-15M BEW
F6 54" x 54" x 18" Deep c/w 7-15M BEW
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 re-bar set-up during construction - engineer will not certify walls or footings/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 precast 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 spf #2 @ 16" o/c. (up to 13' high)
• All 14' & 16' high exterior walls to be 2/2x6 spf #2 @ 12" o/c.
• Typical interior walls to be 2x6 spf #2 @ 16" o/c. (up to 13' high)
• All 14' & 16' high interior walls to be 2/2x6 spf #2 @ 12" o/c.
• All 10' high interior basement walls to be 2x6 spf #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. 5/8" 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.

22. All steel beams to bear on column cap plate. No side header connections allowed. Refer to detail 7/S1.

23. Structural steel shop drawing review to be done by builder. Builder to site confirm dimensions as per steel shop drawings prepared by steel supplier.

## 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 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.

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.

## 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" o/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

## Project Notes:

• Min. R31 rigid insulation 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 foundations 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

• Typical Porch Slab (Slab on Grade Condition)

6" R.C. slab on grade c/w 1-layer 6x6x6 welded wire mesh placed 2" down from top of slab over 6" granular 'a' or equal gravel on soil compacted to 98% standard proctor max.
Dry density on undisturbed soil or engineered fill- note: if space below is changed to become excavated, the slab & wall requirement will require additional reinforcing

• All exposed floors to have floor joists above full w/ 2lb. closed cell spray foam insu'n min. R31

• Flat roofs to have 2-ply torched on rubber membrane roof w/ 2% slope to edge on 1/2" plywood roof sheathing on roof trusses/joists

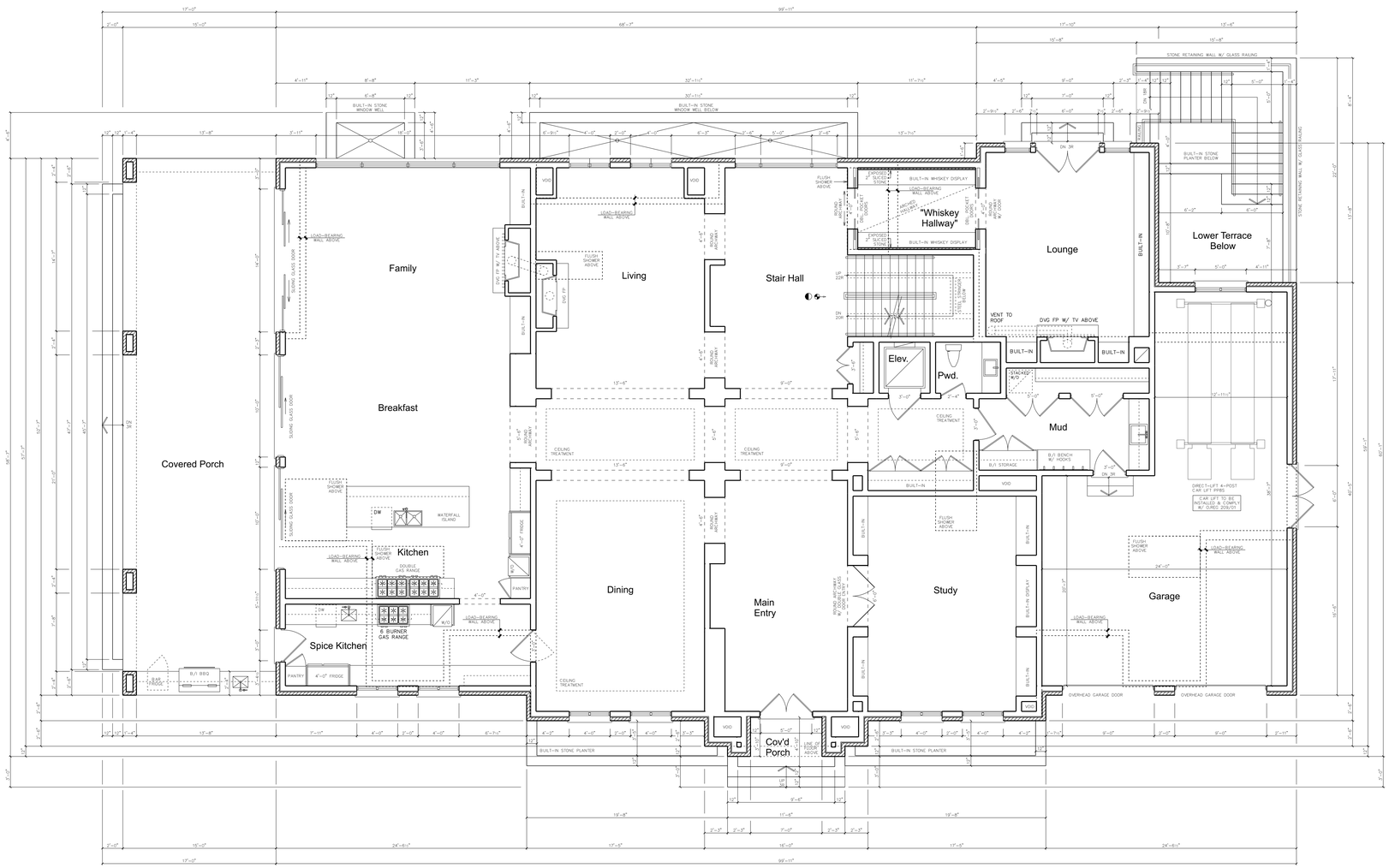
• Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications

• Provide 15M hook bars @ 15" o.c. top bars along slab bearing

36" C UNO

• Provide 15M dowels @ 15" o.c. typical along slab bearing

24" UNO




The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in Division C - 3.2.5.1. of the 2012 Ontario Building Code.

Peter Giordano — 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. — 29909 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"X26" Attic access hatch
Interconnected smoke alarm w/ visual indicator
Typical 'P3' post UNO
CO Alarm

| | |
|---|---|
| Wall area | = 737.6 sm |
| Window area | = 191.6 sm |
| ** Ratio | = 25.98 % |
| Window/Sliding Glass Door Efficiency | = 1.4** |
| Skylight/Glazed Roofs Efficiency | = U-2.8 |

| | |
|---|---|
| Ceiling w/ Attic Space - R60 | Energy efficiency |
| Ceiling w/o Attic Space - R31 | compliance standard |
| Exposed Floors - R31 | SB-12 3.1.1. Table |
| Walls Above Grade - R22 | 3.1.1.2.A (IP) pkg. "A1" |
| Basement Walls - R20ci | |

*Refer to EEDS form for all other efficiency values

Note: All information shown are target R-Values and are to be confirmed by HVAC consultant through the building envelope modelling process.

| no. | date | revision / comment |
|---|---|---|
| 4 | Aug 24/21 | Revised As Per Client Request |
| 3 | Jun 11/21 | Revised As Per Client Request |
| 2 | May 21/21 | Client Requested Revisions |
| 1 | May 18/21 | Issued To Owner For Zoning Approvals |

Project:

**The Maruszki-Desai Home**
**17 Doncrest Drive**

Part of Lot 17
Registered Plan m-899
City of Markham,
Regional Municipality of York

Drawing:

# Ground Floor Plan

Scale: 1/4"=1'-0"
Date: May 2021
Dwn by: MM/TK
Proj. no.: 21-1887

A2

David Small Designs

## Schedules

### Wood Lintels / Beams

| | | | | |
|---|---|---|---|---|
| B1 2-2x8 | B7 2-2x12 | B13 1-9.5" LVL | B19 1-1/4" LVL | Note: where solid (1) piece lumber shown - do not substitute multiple ply |
| B2 3-2x8 | B8 3-2x12 | B14 2-9.5" LVL | B20 2-1/4" LVL | |
| B3 4-2x8 Bolted | B9 4-2x12 Bolted | B15 3-9.5" LVL | B21 3-1/4" LVL | |
| B4 2-2x10 | B10 1-7.25" LVL | B16 1-11.88" LVL | B22 1-1/8" LVL | |
| B5 3-2x10 | B11 2-7.25" LVL | B17 2-11.88" LVL | B23 2-1/8" LVL | |
| B6 4-2x10 Bolted | B12 3-7.25" LVL | B18 3-11.88" LVL | B24 3-1/8" LVL | |

Note:
1). Engineered wood beams to be min. 2/3x 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 = 8"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"

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

### Concrete Footings

BEW = Bottom Bars Each Way

F1 24" x 24" x 12" Deep
F2 30" x 30" x 12" Deep
F3 36" x 36" x 16" Deep
F4 42" x 42" x 16" Deep c/w 5-15M BEW
F5 48" x 48" x 16" Deep c/w 5-15M BEW
F6 54" x 54" x 16" Deep c/w 7-15M BEW
F7 60" x 60" x 16" 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 re-bar set-up during construction - engineer will not certify walls or footings/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 precast 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 spf #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high exterior walls to be 2/2x6 spf #2 @ 12" o/c.
- Typical interior walls to be 2x6 spf #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high interior walls to be 2/2x6 spf #2 @ 12" o/c.
- All 10' high interior basement walls to be 2x6 spf #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. 9.23.10.0.2.(2)(5)

12. 5/8" 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 'A' 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.

22. All steel beams to bear on column cap plate. No side header connections allowed. Refer to detail 7/S1.

23. Structural steel shop drawing review to be done by builder. Builder to site confirm dimensions as per steel shop drawings prepared by steel supplier.

## 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 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.

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" ±1/ 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) a1/ 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 insulation 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 foundations 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
- Typical Porch Slab (Slab on Grade Condition)

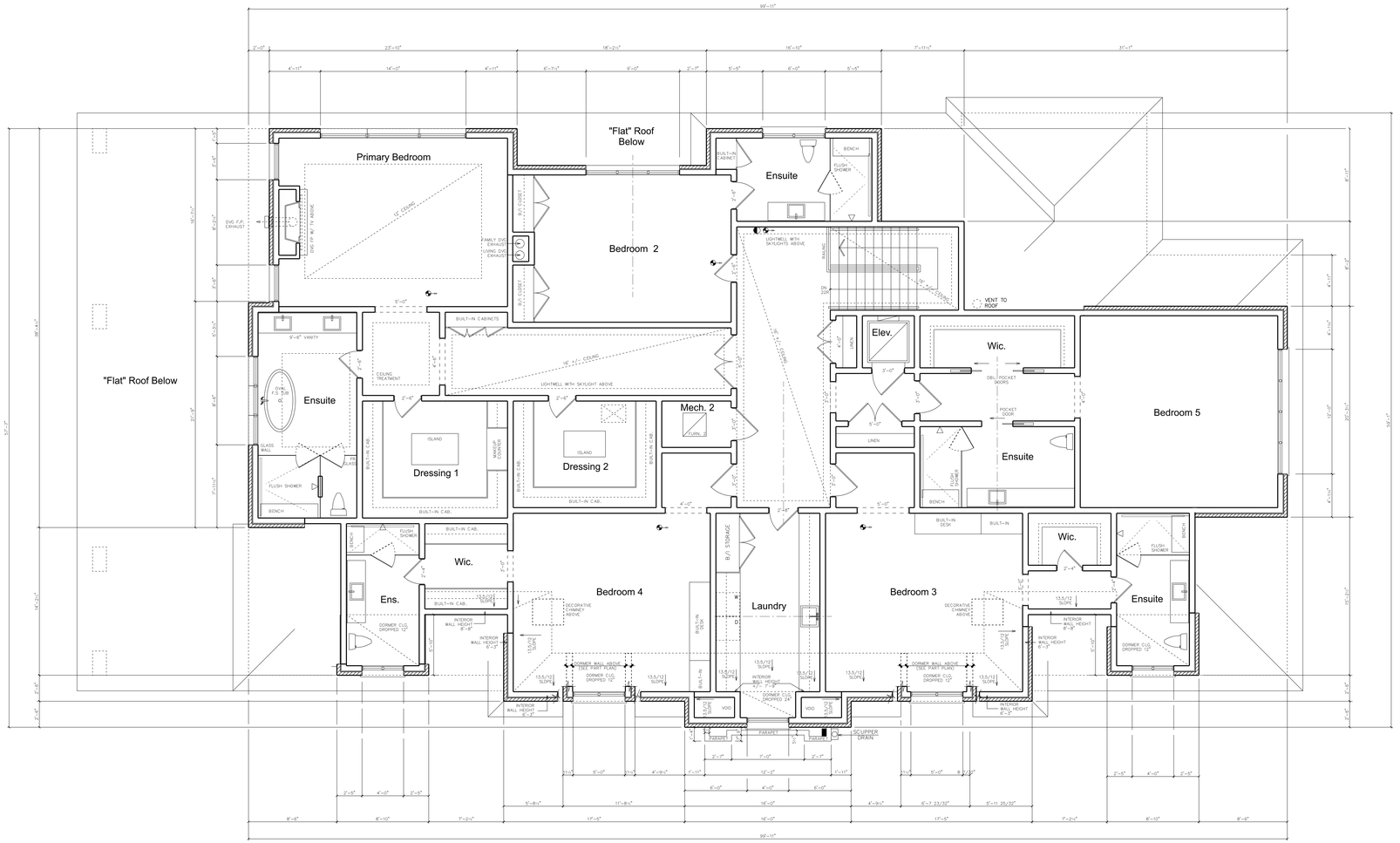
6" R.C. slab on grade c/w 1-layer 6x6x6 welded wire mesh placed 2" down from top of slab over 6" granular 'a' or equal gravel on soil compacted to 98% standard proctor max.
Dry density on undisturbed soil or engineered fill- note: if space below is changed to become excavated, the slab & wall requirement will require additional reinforcing

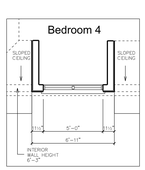
- All exposed floors to have floor joists above full w/ 2lb. closed cell spray foam insul'n min. R31
- Flat roofs to have 2-ply torched on rubber membrane roof w/ 2% slope to edge on 1/2" plywood roof sheathing on roof trusses/joists
- Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications
- Provide 15M hook bars @ 15" o.c. top bars along slab bearing

36" C UNO

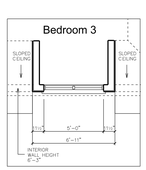
- Provide 15M dowels @ 15" o.c. typical along slab bearing

24" UNO / 24" UNO




**Dormer Part Plan**




**Dormer Part Plan**

SOUNDPROOF FLOORS BETWEEN SECOND AND GROUND FLOOR (1.5" RESILIENT METAL CHANNELS)

HEATED FLOORS IN ALL ENSUITES

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 — Name — Signature — 29061 — 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 — 29509 — 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
Typical 'P3' post UNO
CO Alarm

| | |
|---|---|
| Wall area | = 737.6 sm |
| Window area | = 191.6 sm |
| ** Ratio | = 25.98 % |
| Window/Sliding Glass Door Efficiency | = 1.4** |
| Skylight/Glazed Roofs Efficiency | = U-2.8 |

| | | | |
|---|---|---|---|
| Ceiling w/ Attic Space | - R60 | Energy efficiency compliance standard SB-12 3.1.1. Table 3.1.1.2.A (IP) pkg. "A1" |
| Ceiling w/o Attic Space | - R31 | |
| Exposed Floors | - R31 | |
| Walls Above Grade | - R22 | |
| Basement Walls | - R20ci | |

*Refer to EEDS form for all other efficiency values

Note: All information shown are target R-Values and are to be confirmed by HVAC consultant through the building envelope modelling process.

| no. | date | revision / comment |
|---|---|---|
| 4 | Aug 24/21 | Revised As Per Client Request |
| 3 | Jun 11/21 | Revised As Per Client Request |
| 2 | May 21/21 | Client Requested Revisions |
| 1 | May 18/21 | Issued To Owner For Zoning Approvals |

*Project:*

**The Maruszki-Desai Home**
**17 Doncrest Drive**

Part of Lot 17
Registered Plan m-899
City of Markham,
Regional Municipality of York

*Drawing:*

# Second Floor Plan

*Scale:* 1/4"=1'-0"
*Date:* May 2021
*Dwn by:* MM/TK
*Proj. no.:* 21-1887

A3

David Small Designs

## Schedules

### Wood Lintels / Beams

| | | | | |
|---|---|---|---|---|
| B1 2-2x6 | B7 2-2x12 | B13 1-9.5" LVL | B19 1-14" LVL | Note: where solid (1) piece lumber shown - do not substitute multiple ply |
| 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:
1). Engineered wood beams to be min. 2.0e or equal and 1-3/4" in width. Nailing pattern ses 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 3.1"x3.1"x0.25" - Brg. Plate 6"x 5.875 1/2" + (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 17" + (2) 3/4" Diameter Anchor Bolts

12" 2"

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

### Concrete Footings

BEW = Bottom Bars Each Way

| | |
|---|---|
| F1 24" x 24" x 12" Deep | F4 42" x 42" x 16" Deep c/w 5-15M BEW |
| F2 30" x 30" x 12" Deep | F5 48" x 48" x 16" Deep c/w 5-15M BEW |
| F3 36" x 36" x 16" Deep | F6 54" x 54" x 18" Deep c/w 7-15M BEW |
| | F7 60" x 60" x 20" Deep c/w 8-15M 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**

## Project Notes:

- Min. R31 rigid insulation 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 foundations to extend min. 48" below slab at lower terrace
- Lower terrace slab to be 3" concrete slab over 6" 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
- Typical Porch Slab (Slab on Grade Condition)

6" R.C. slab on grade c/w 1-layer 6x6x6 welded wire mesh placed 2" down from top of slab over 6" granular 'A' or equal gravel on soil compacted to 98% standard proctor max.
Dry density on undisturbed soil or engineered fill- note: if space below is changed to become excavated, the slab & wall requirement will require additional reinforcing

- 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 w/ 2% slope to edge on 1/2" plywood roof sheathing on roof trusses/joists
- Direct vent gas fireplace unit to comply with CAN/ULC-S610-M "Factory built fire places" installed with exhaust as per manufactures specifications
- Provide 15M hook bars @ 15" o.c. top bars along slab bearing

36" UNO

- Provide 15M dowels @ 15" o.c. typical along slab bearing

24" UNO

## 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 re-bar set-up during construction - engineer will not certify walls or footings/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 precast 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 spf #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high exterior walls to be 2/2x6 spf #2 @ 12" o/c.
- Typical interior walls to be 2x6 spf #2 @ 16" o/c. (up to 13' high)
- All 14' & 16' high interior walls to be 2/2x6 spf #2 @ 12" o/c.
- All 13' high interior basement walls to be 2x6 spf #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. 5/8" 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.

22. All steel beams to bear on column cap plate. No side header connections allowed. Refer to detail 7/S1.

23. Structural steel shop drawing review to be done by builder. Builder to site confirm dimensions as per steel shop drawings prepared by steel supplier.

## 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

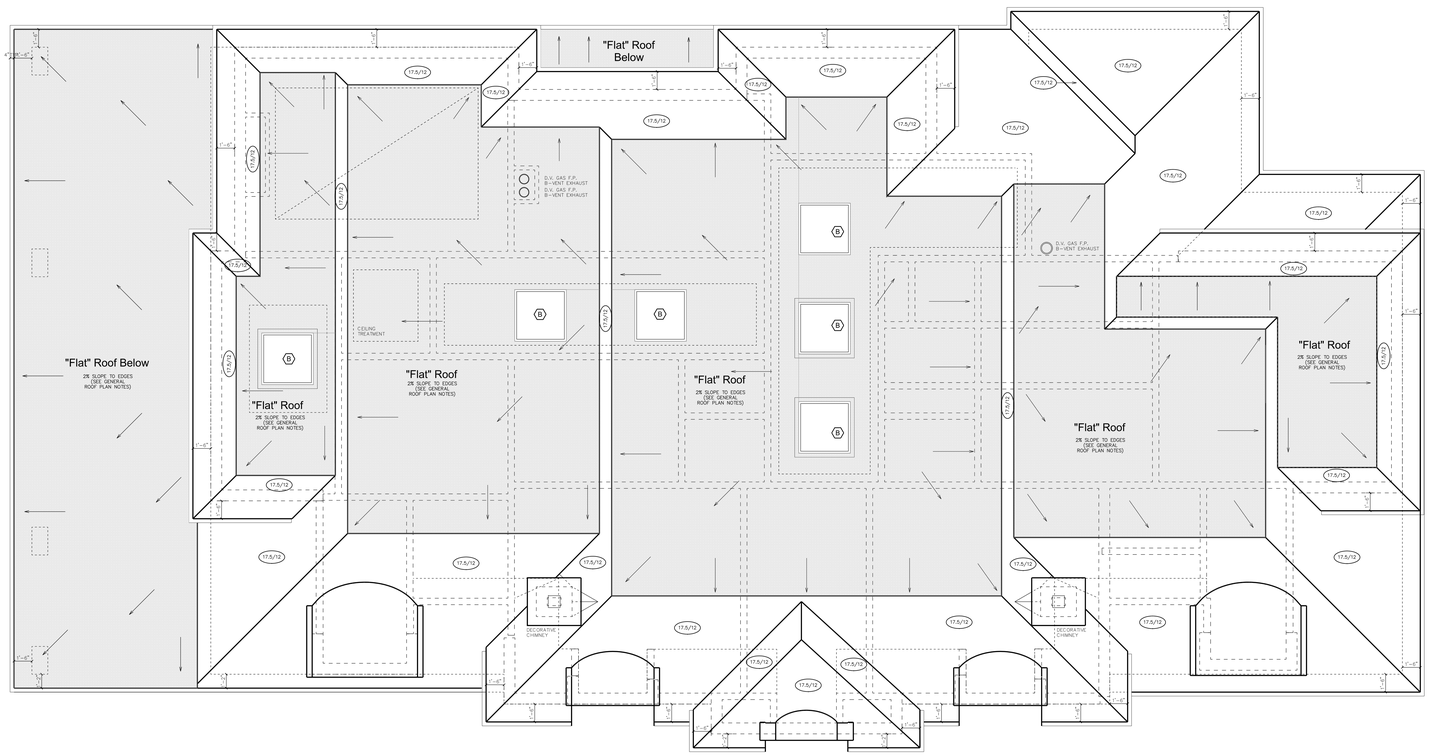
2. Provide continuous ice and water shield membrane over sheathing on all roofs less than 4/12

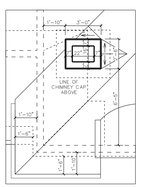
3. All truss dimensions to be site measured and verified by builder/client or truss supplier prior to initiating truss fabrication. All truss hangers, uplift anchors and special fasteners to be specified by truss designer including stamped hangers where required for approvals. Dwsd reviews truss package for general conformance with the truss layout and truss profiles but is not responsible for detailed truss engineering provided in truss 'packages'.

4. Typical Roof Vent Calculation

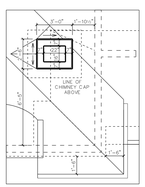
Roof area - 5,641.70 sf. @ 1/300 = 18.81 ( 18.81 / 2 = 9.41 or) min. 10 roof vent required

5. Truss to be designed to connect with hangers on inside face of flush lintel or where heel heights allow, the truss can be shaped to box around the raised lintel and bear on top - see details




**Decorative Chimney Part Plan**




**Decorative Chimney Part Plan**

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 — 20061 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. — 29859 BCIN

## Roof Notes

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

Note: all upper roof overhangs are to be 1'-6" U.N.O.

All roof slopes to be 17.5/12 unless noted otherwise

A 2'-0"x2'-0" skylight installed w/ curb & flashing as req'd by manuf. specs.

B 4'-0"x4'-0" skylight installed w/ curb & flashing as req'd by manuf. specs.

= Interior Load-Bearing Walls

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

## Drawing Legend

- Joist direction
- Post above
- Floor drain
- 20"X28" Attic access hatch
- Interconnected smoke alarm w/ visual indicator
- Typical 9"3" post UNO
- CO Alarm

| | |
|---|---|
| Wall area | = 737.6 sm |
| Window area | = 191.6 sm |
| ** Ratio | = 25.98 % |
| Window/Sliding Glass Door Efficiency | = 1.4** |
| Skylight/Glazed Roofs Efficiency | = U-2.8 |

| | | |
|---|---|---|
| Ceiling w/ Attic Space | - R60 | Energy efficiency compliance standard SB-12 3.1.1. Table 3.1.1.2.A (IP) pkg. "A1" |
| Ceiling w/o Attic Space | - R31 | |
| Exposed Floors | - R31 | |
| Walls Above Grade | - R22 | |
| Basement Walls | - R20ci | |

*Refer to EEDS form for all other efficiency values

Note: All information shown are target R-Values and are to be confirmed by HVAC consultant through the building envelope modelling process.

| no. | date | revision / comment |
|---|---|---|
| 4 | Aug 24/21 | Revised As Per Client Request |
| 3 | Jun 11/21 | Revised As Per Client Request |
| 2 | May 21/21 | Client Requested Revisions |
| 1 | May 18/21 | Issued To Owner For Zoning Approvals |

Project:

**The Maruszki-Desai Home**
**17 Doncrest Drive**
Part of Lot 17
Registered Plan m-899
City of Markham,
Regional Municipality of York

Drawing:

# Roof Plan

Scale: 1/4"=1'-0"
Date: May 2021
Dwn by: MM/TK
Proj. no.: 21-1887

A4

David Small Designs

## Elevation Notes

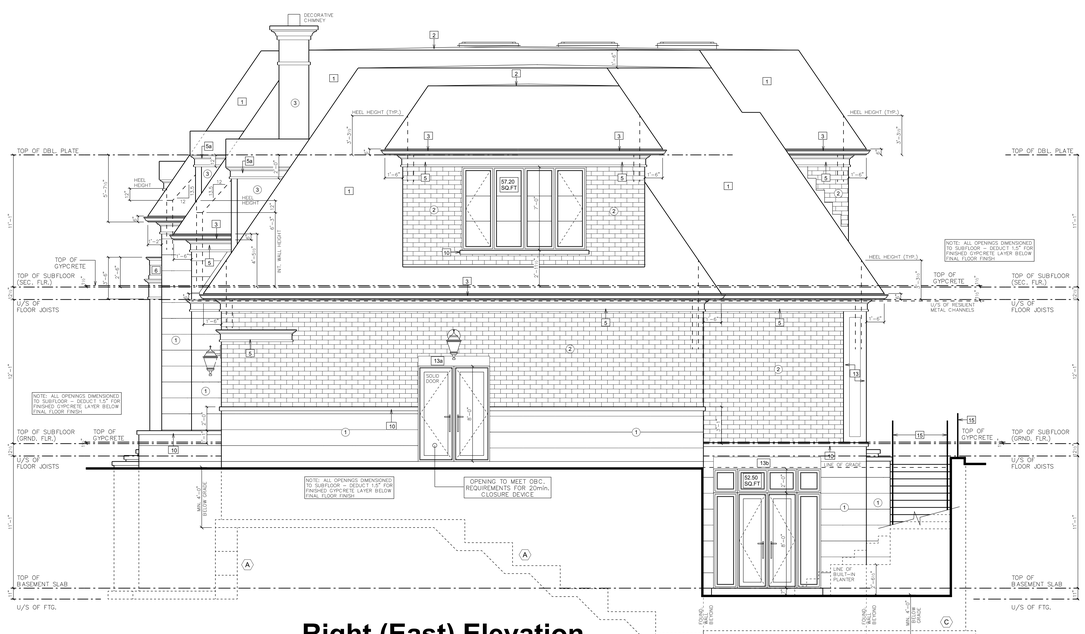
| | |
|---|---|
| 3 | All stucco to be 'DuROCK' EIFS P.U.C.C.S. exterior insulation and finish system CCMC 12968R approved -install as per OBC, 9.28. and manufacturer's specifications –note use 'Polar Bear' by DuROCK for air/moisture barrier below stucco in place of Tyvek or equivalent product specified 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 | 16" Reinforced Poured Concrete Wall w/ 36" Wide x 12" Deep Concrete Footing c/w 2-Runs 15M Rebar |

## Right (East) Elevation

| Unprotected Openings Calculations | | |
|---|---|---|
| Limiting Distance | 6.96m | |
| Wall Area | 1521.2 sf | (141.3 sm) |
| Opening Area Allowed | 354.7 sf | (23.3 %) |
| Opening Area Proposed | 109.7 sf | ( 7.2 %) |

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.


## Front (South) Elevation




## Right (East) Elevation

## Drawing Legend

### 1.0 Materials

1. Smooth Face Cut Stone
2. Brick Veneer
3. Pigmented Epoxy Stucco
4. Prefinished Metal Panel - Black

### 2.0 Roofing

1. 40 Year Asphalt Shingles
2. 2-Ply Torched On Rubber Membrane Roof Sloped To 2% To Outside Edge On 1/2" Plywood Roof Sheathing On Roof Trusses/Joists

### 3.0 Trim, Cornice, Moulding, & Gutter Notes

3. Prefinished Aluminum Gutter on 6" Prefinished Aluminum Fascia
4. 12" Wide Prefinished Aluminum Fascia c/w Starter Strip & Drip Edge 1"x12" Base Fascia Board 1"x6" Flat Stock 5" Square Bent Prefinished Aluminum Eaves Trough

   Typical Cornice Trim
5. 4" Stone Trim w/ Crown Mould Profile on Flat w/ 2" High x +\- 1-1/4" Deep Bottom Trim ( Total 12" High )
5a. Curved Stone Panel w/6" Curved Stone Trim
   3" Crown Mould Profile
6. Stone Trim by Others 3'-6" High
7. 4" Stone Trim w/ Crown Mould Profile
8. 10" Cut Stone Surround w/ 2" Edge Reveal
9. 
10. 4" Cut Stone Sill c/w 2" Projection
11. 4" Cut Stone Coping w/ 2" Projection
12. 
13. 6" Cut Stone Trim
13a. 10" Cut Stone Lintel
13b. 12" Cut Stone Lintel

### 4.0 Railing & Post

14. 28"x16" Cut Stone Post by others
15. 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 — Name — Signature — 29361 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 — 29959 BCIN

| no. | date | revision / comment |
|---|---|---|
| 4 | Aug 24/21 | Revised As Per Client Request |
| 3 | Jun 11/21 | Revised As Per Client Request |
| 2 | May 21/21 | Client Requested Revisions |
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*Project:*

**The Maruszki-Desai Home**
**17 Doncrest Drive**
Part of Lot 17
Registered Plan m-899
City of Markham,
Regional Municipality of York

*Drawing:*

# Front & Right-Side Elevations

*Scale:* 1/4"=1'-0"
*Date:* May 2021
*Dwn by:* MM/TK
*Proj no.:* 21-1887

**A5**

David Small Designs

## Elevation Notes

3 All stucco to be 'DuROCK' EIFS P.U.C.C.S. exterior insulation and finish system CCMC 12968R approved -install as per OBC, 9.28, and manufacturer's specifications --note use 'Polar Bear' by DuROCK for air/moisture 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 16" Reinforced Poured Concrete Wall w/ 36" Wide x 12" Deep Concrete Footing c/w 2-Runs 15M Rebar

## Rear (North) Elevation

| Unprotected Openings Calculations | | |
|---|---|---|
| Limiting Distance | 9.83m | |
| Wall Area | 2562.5 sf | (238.1 sm) |
| Opening Area Allowed | 998.9 sf | (39.0 %) |
| Opening Area Proposed | 547.2 sf | (21.4 %) |

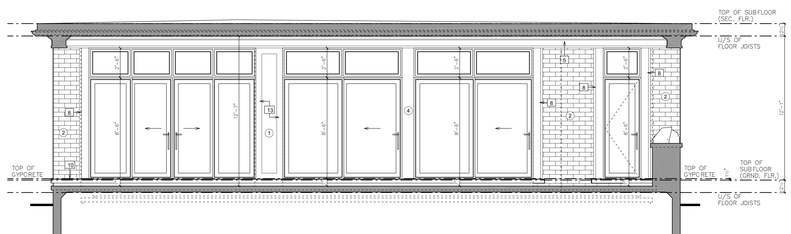
Please Note The Figure For % Openings Allowed Has Been Interpolated Based On O.B.C. Table 9.10.15.4 And Glazed Areas Were Used To Calculate Proposed Openings As Allowed By 9.10.15.4.

## Left (West) Elevation

| Unprotected Openings Calculations | | |
|---|---|---|
| Limiting Distance | 19.81m | |
| Wall Area | 1462.5 sf | (135.9 sm) |
| Opening Area Allowed | 1456.9 sf | (99.6 %) |
| Opening Area Proposed | 365.5 sf | (25.0 %) |

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.


## Rear (North) Elevation




## Left Hidden Profile


## Left (West) Elevation

## Drawing Legend

### 1.0 Materials

1 Smooth Face Cut Stone

2 Brick Veneer

3 Pigmented Epoxy Stucco

4 Prefinished Metal Panel - Black

### 2.0 Roofing

1 40 Year Asphalt Shingles

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

### 3.0 Trim, Cornice, Moulding, & Gutter Notes

3 Prefinished Aluminum Gutter on 6" Prefinished Aluminum Fascia

4 12" Wide Prefinished Aluminum Fascia c/w Starter Strip & Drip Edge 1"x12" Base Fascia Board 1"x6" Flat Stock 5" Square Bent Prefinished Aluminum Eaves Trough

Typical Cornice Trim

5 4" Stone Trim w/ Crown Mould Profile on Flat w/ 2" High x +/- 1-1/4" Deep Bottom Trim ( Total 12" High )

5a Curved Stone Panel w/6" Curved Stone Trim
3" Crown Mould Profile

6 Stone Trim by Others 3'-6" High

7 4" Stone Trim w/ Crown Mould Profile

8 10" Cut Stone Surround w/ 2" Edge Reveal

9

10 4" Cut Stone Sill c/w 2" Projection

11 4" Cut Stone Coping w/ 2" Projection

12 6" Stucco Covered Trim

13 6" Cut Stone Trim

13a 10" Cut Stone Lintel

13b 12" Cut Stone Lintel

### 4.0 Railing & Post

14 28"x16" Cut Stone Post by others

15 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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Qualification information required unless the design is exempt under Division C - 3.2.5.1. of the 2012 ontario building code.

Peter Giordano — Name — Signature — 25961 BCIN

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

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

| no. | date | revision / comment |
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**The Maruszki-Desai Home**
**17 Doncrest Drive**

Part of Lot 17
Registered Plan m-899
City of Markham,
Regional Municipality of York

*Drawing:*

**Rear & Left-Side Elevations**

*Scale:* 1/4"=1'-0"
*Date:* May 2021
*Dwn by:* MM/TK
*Proj. no.:* 21-1887

**A6**

David Small Designs