

PROJECT DATA

Civic Address: 213 E. 22nd Str, N. Vancouver, BC, V7L 2G9
 Legal Description: LOT D, BLOCK 208, DISTRICT LOT 546, PLAN 18798, NEW WESTMINSTER DISTRICT - PID: 007-076-762

ZONING: Level One: Single Family (RS-1)
 OCP Designation: Level Two: Low Density (RT-1)
 Lot Dimensions: 51.52' x 135.05'
 Lot Area: 6957.77 sqf.

TOTAL FLOOR AREA
 Two Residential Units (three levels): 5148 sqf.
 Exclusions:
 Basement: 1714 sqf.
 Total Exclusions: 1714 sqf.

NET FLOOR AREA (Proposed): 3433sqf.
 FSR (OCP Maximum): 35% Lot Area + 1000 sqf. 3435 sqf.

LOT COVERAGE
 Proposed Lot Coverage: 32% (2333 sqf.)
 Max Allowable Lot Coverage: 35% (2434 sqf.)

Garage (2 stalls): 460 sqf.
 Carport (2 stalls): 418 sqf.

SETBACKS (proposed and required)
Main Building from:
 Front Lot Line (E. 22nd Str) 20'
 Rear Lot Line (Lane) 65'-11 1/2' (45' minimum required)
 Interior Side Lot Lines: 5'-7'

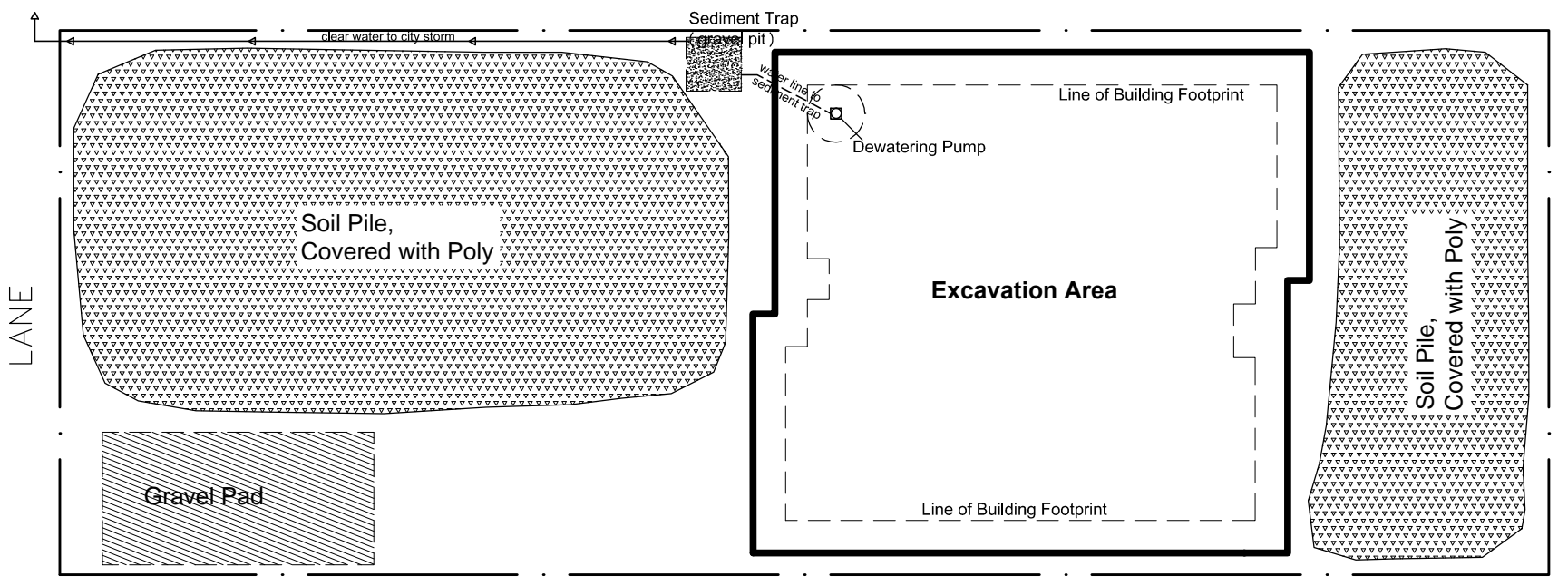
Garage from:
 Rear Lot Line (Lane) 4'
 Interior Side Lot Lines 3'-4"

Total Impervious Area: 3698 sqf, (53% of lot area)

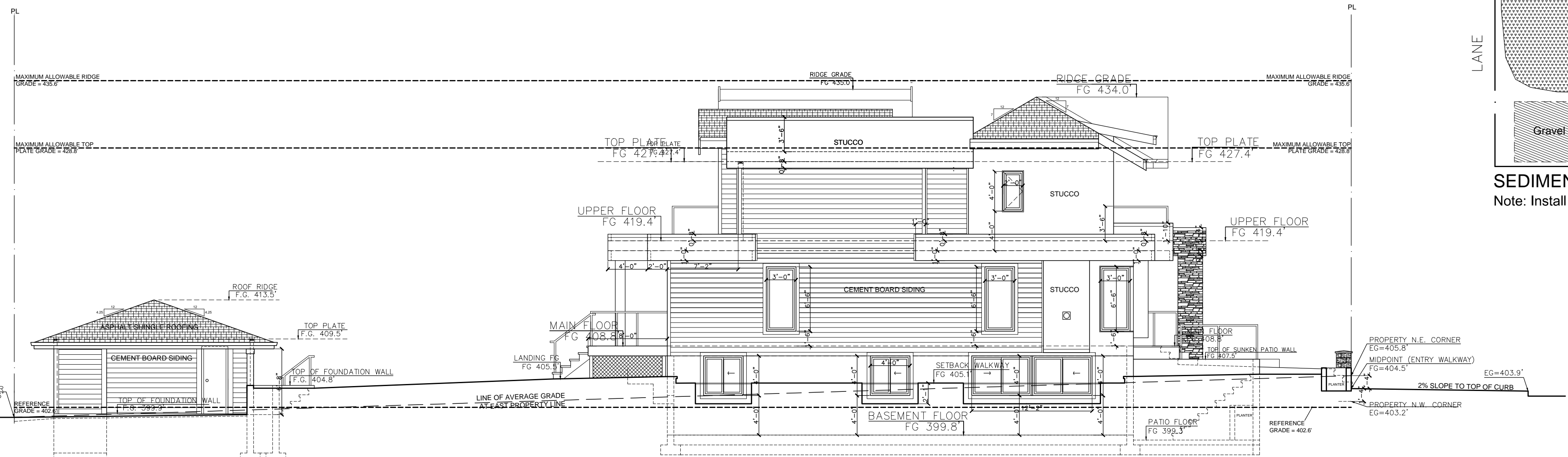
Owner: Ali Fekri, Behrooz Monadizadeh, Payman Khodarahmi
Design: Rock-Arc Development Corp.

SITE PLAN

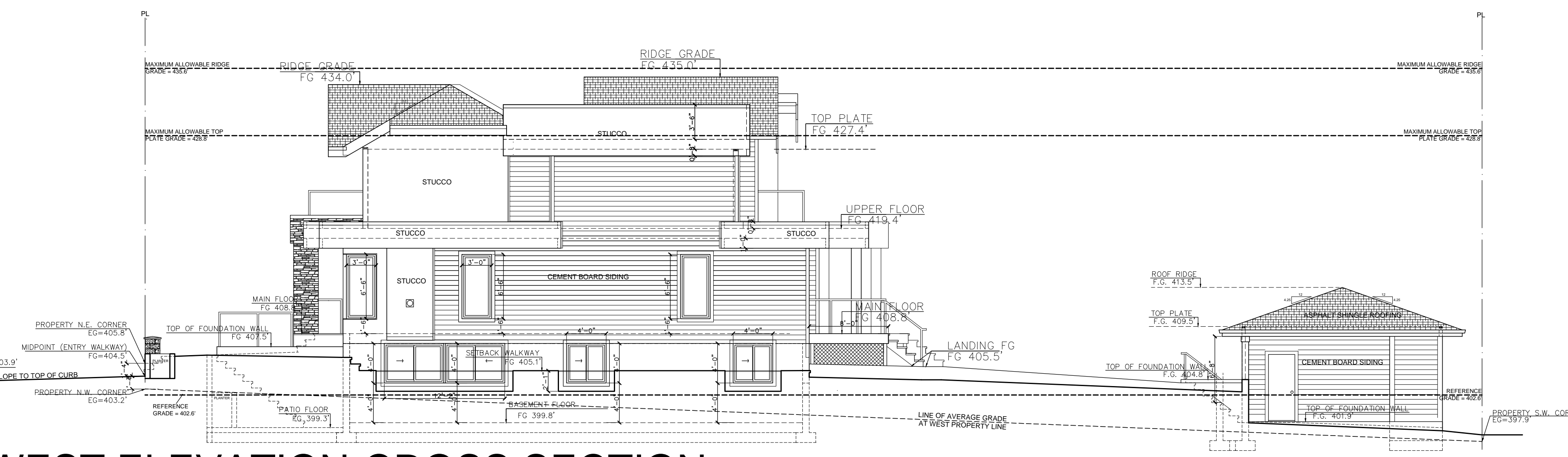
- NOTES:**
- Street lighting to be provided.
 - Mill and pave E. 22 Street, reconstruct as required.
 - Lane at the South of E. 22 Street to be reconstructed.
 - Third party utilities will be installed underground.



SEDIMENT AND EROSION CONTROL PLAN (scale: 1/16" = 1')
 Note: Install silt sack in the city storm manhole



EAST ELEVATION-CROSS SECTION



WEST ELEVATION-CROSS SECTION

- GENERAL NOTES:**
- Contractor to check and verify all dimensions and conditions on the plan and job site prior to the start of construction and report any discrepancies to designer (ROCK-ARC Development Corp). Written dimensions shall have precedence over scaled dimensions. Designer will not be responsible for costs incurred to owner or contractor through errors or omissions on plans or specifications after building permit is issued. Drawings and specifications and the ideas, designs and arrangements represented are the property of the designer. No plan or part thereof shall be copied, disclosed to others or used for any other project other than the specific project for which they have been prepared without written consent of the designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.
1. All work shall be carried out in accordance with the 2018 British Columbia Building Code and other local By-Laws.
 2. The Contractor shall be responsible for obtaining all permits.
 3. All interior partitions are to be 2"x4" studs @ 16" o.c. with 1/2" G.W.B. on both sides, unless noted otherwise.
 4. All exterior walls are to be 2"x6" studs @16" o.c. with 1/2" G.W.B. on interior side, unless noted otherwise (also see note #25).
 5. All Structural Lumber to be Douglas Fir #2 or better, unless noted otherwise.
 6. All Lintels to be 2 - 2"x10", unless noted otherwise.
 7. Provide solid blocking in all joist spaces under walls and columns. Cross Bridging at 7'-0" Max, at all joist spans. See structural drawings for details.
 8. All Basement concrete foundation walls are to be damp-proofed with two coats of Bitumen up to finished grade.
 9. Provide a 4" diameter perforated P.V.C. perimeter drain around all exterior footings with a minimum 6" drain rock on top, sloped down a minimum of 1/8" to 1'-0" to storm sewer.
 10. Provide smoke and CO detectors wired to electrical system in all bedrooms, in hallways outside bedroom, and in living spaces. Smoke and CO detector alarms shall be interconnected in all floors of each unit.
 11. Provide door closers to doors entering garage from living areas.
 12. All electrical wiring and fixtures shall conform to the requirements of the British Columbia Electrical Code (2012) and CSA standards.
 13. Rough openings for the interior doors to be 2" wider than the door width and 82.5" high.
 14. Rough openings for the interior double doors to be 2.5" wider than the door width and 82.5" high.
 15. All interior wood doors, trim and base to be paint grade 1 with two coats of semi-gloss latex paint.
 16. Exterior finished grade to be a minimum of 8" lower from top of foundation walls.
 17. Contractor to coordinate all rain water leader locations and receive approval from the owner prior to installation.
 18. All bedroom windows shall have unobstructed openings with minimum area of 3.8 sq. ft. with no dimensions less than 15".
 19. In all buildings (main building and garage) sideyard soffits must be solid and cannot have any openings within 4' distance from the property line. Soffit material in sideyards shall be "invented aluminum conforming to CAN/CSG-93.2-M." [see section 9.10.15.5.(10) of BCBC]
 20. Flash over and provide silicone caulking around all exterior openings. Metal flashing on top of all windows and exterior doors, to be extended 6" min on both sides.
 21. Heating system will be in-floor radiant heat in all floors.
 22. **TYPICAL GUARD NOTES:** Guards must not be climbable between 5 1/2" and 36" above deck surface. Maximum height to top of bottom rail must not be more than 5 1/2". Maximum opening must not be more than 4" in diameter.
 23. As per Energy Advisers recommendations, the following criteria shall be applied: a) Above Grade Exterior Walls: 2x6 @16" O/C, R-22 batt insulation (RSI-3.87); Rim Joist Boxes: R-22 batt insulation; b) Window and Door Headers: R-12 rigid insulation, full area; c) Attic: R-28 truss @24" O/C; R-40 insulation (RSI-7.04); d) Flat Roof: TJI 11.875" @16" O/C; R-28 (RSI-4.93) insulation; Below Grade Walls: 8" concrete, 2x4 @16" O/C; R-14 (RSI-2.46) insulation; e) Basement Under Whole Slab: R-12 rigid insulation; f) Floor Over Unheated Space: TJI 11.875" @16" O/C; R-28 (RSI-4.93); g) Windows and Glazed Doors meet U-Factor 1.4 or lower and SHGC 0.25 or higher; h) Doors must meet U-Factor 1.20 or lower; i) Boiler: Condensing Natural Gas Boiler 95% AFUE Min. with output 19000 BTU/hr; j) Principal ventilation: HRV 65% efficiency at 0 C. 64 CFM Min; k) Hot Water Heating: storage tank combi with boiler. Tank to be wrapped R-10 (RSI-1.75); l) Air Barrier System and Location: Inside, poly air barrier.
- 25. 9.36.6 - ENERGY STEP CODE 3**
26. MAIN BUILDING WILL HAVE FIRE SPRINKLER SYSTEM

DRAWING A-2:

- SITE PLAN
 - CROSS SECTIONS / ELEVATIONS

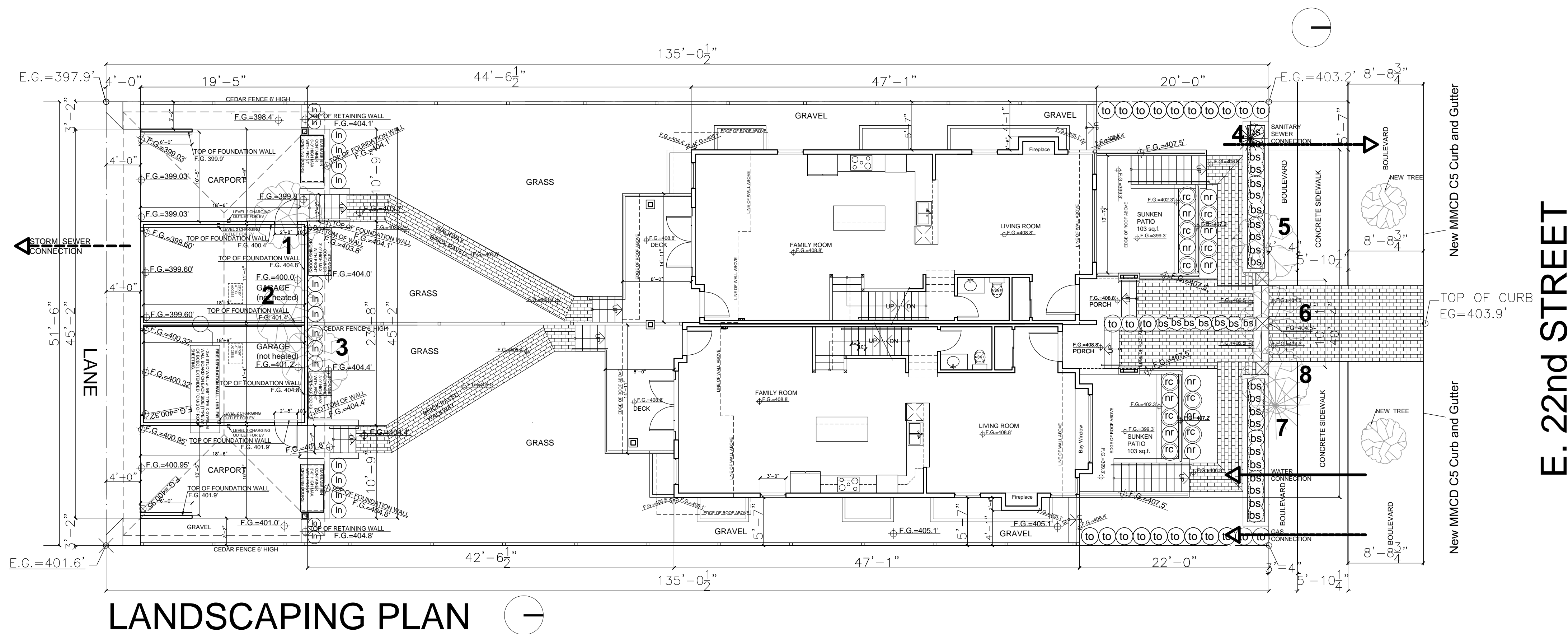
Scale:
 1/8" = 1' or as noted

Project Title:
DUPLEX WITH SECONDARY SUITES@ 213 E. 22nd STR. North Vancouver

- 1st submission:

ROCK-ARC DEVELOPMENT CORP.

230 - 1000 Roosevelt Crescent
 North Vancouver, BC
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LANDSCAPING PLAN

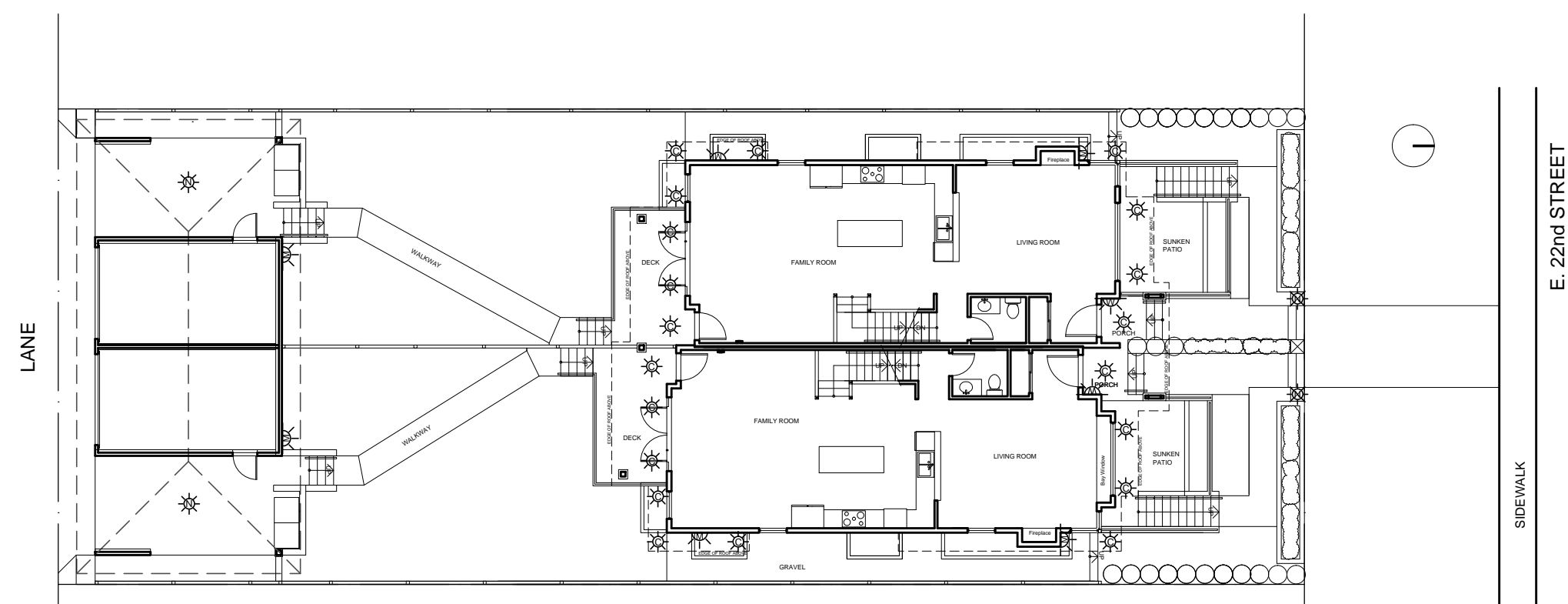
EXISTING TREES LIST

NO.	TYPE AND SURVEY NUMBER	DIAMETER	DRIP LINE
1	DECIDUOUS TREE #905	0.25'Ø	7.5' DRIP LINE
2	DECIDUOUS TREE #906	0.22'Ø	4.0' DRIP LINE
3	DECIDUOUS TREE #907	0.43'Ø	8.0' DRIP LINE
4	CONIFER TREE #812	0.15'Ø	4.0' DRIP LINE
5	DECIDUOUS TREE #811	0.15'Ø	2.4' DRIP LINE
6	DECIDUOUS TREE #810	0.1'Ø	3.8' DRIP LINE
7	DECIDUOUS TREE #809	0.1'Ø	2.8' DRIP LINE
8	CONIFER TREE #808	0.2'Ø	3.0' DRIP LINE

PROPOSED PLANT LIST

CODE	QTY	NAME	BOTANICAL	COMMON NAME	SIZE	TYPE
bs	29	Buxus sempervirens	Buxus sempervirens	Boxwood	#2 pot	shrub
nr	18	Rosa nutkana	Rosa nutkana	Nootka rose	#2 pot	shrub
rc	20	Ribes sanguineum	Ribes sanguineum	Red flowering currant	#1 pot	perennial
to	24	Thuja occidentalis 'Smaragd'	Thuja occidentalis 'Smaragd'	Cedar Hedge Tree	#3 pot	hedge/ tree
ln	22	Laurus nobilis	Laurus nobilis	Bay Laurel	#3 pot	shrub

NOTES:
 - TOP SOIL DEPTH IN GRASS AREA 6" MIN.
 - TOP SOIL DEPTH FOR SHRUBS AND PLANTERS 18" MIN.



EXTERIOR LIGHTING PLAN
 SCALE: 1/16"=1'

EXTERIOR LIGHTING SYMBOLS

- MOTION ACTIVATED - WALL MOUNT
- NIGHT TIME ACTIVATED - CEILING MOUNT
- NIGHT TIME ACTIVATED - WALL MOUNT
- SWITCH CONTROLLED - WALL MOUNT
- SWITCH CONTROLLED - CEILING MOUNT OR POT LIGHT

NOTE:
 ALL LIGHTING SHOULD BE INSTALLED IN A WAY THAT IT SHALL NOT CAST DISTURBING LIGHT INTO NEIGHBOURING PROPERTIES.

DRAWING A-2a:

- LANDSCAPING PLAN

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DRAWING A-2b:

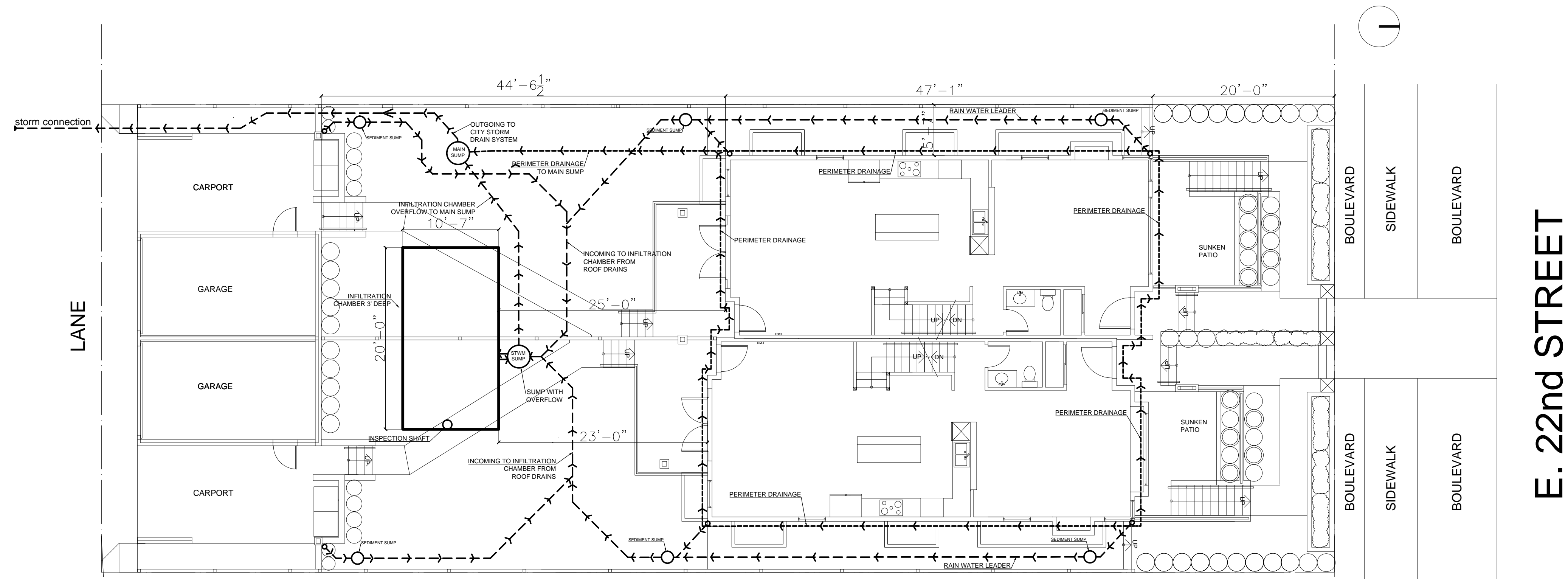
- STORM WATER
MANAGEMENT PLAN

Scale:
1/8" = 1' or as noted

Project Title:

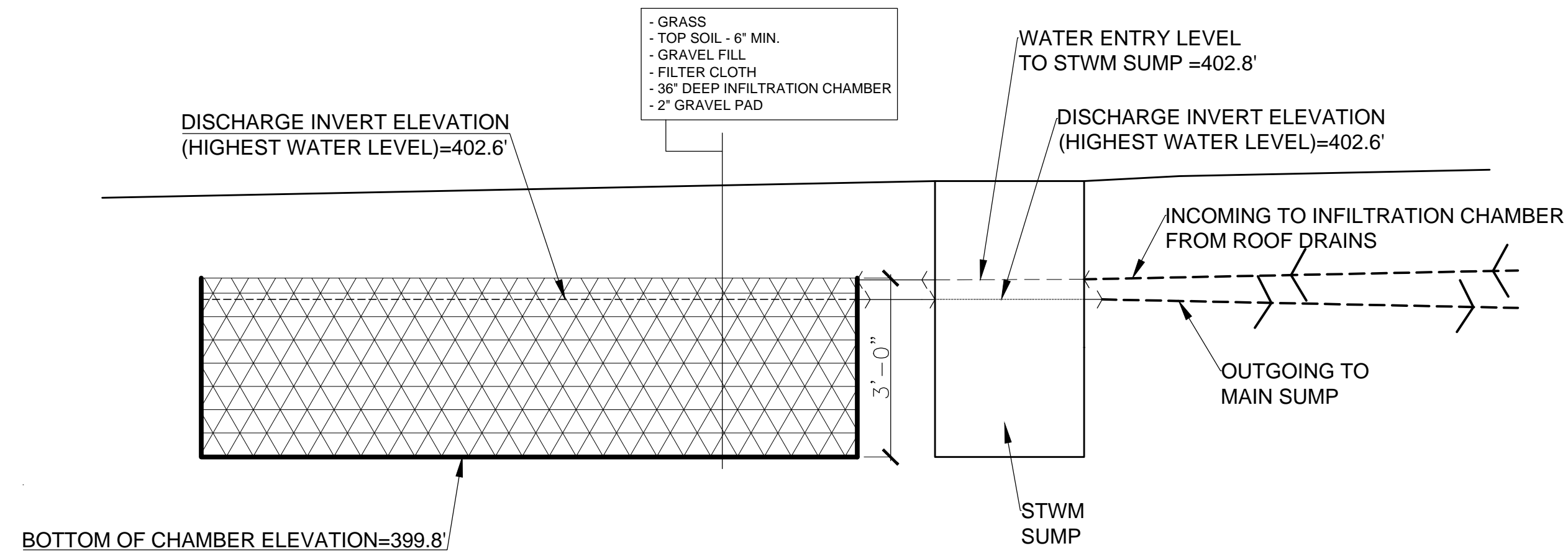
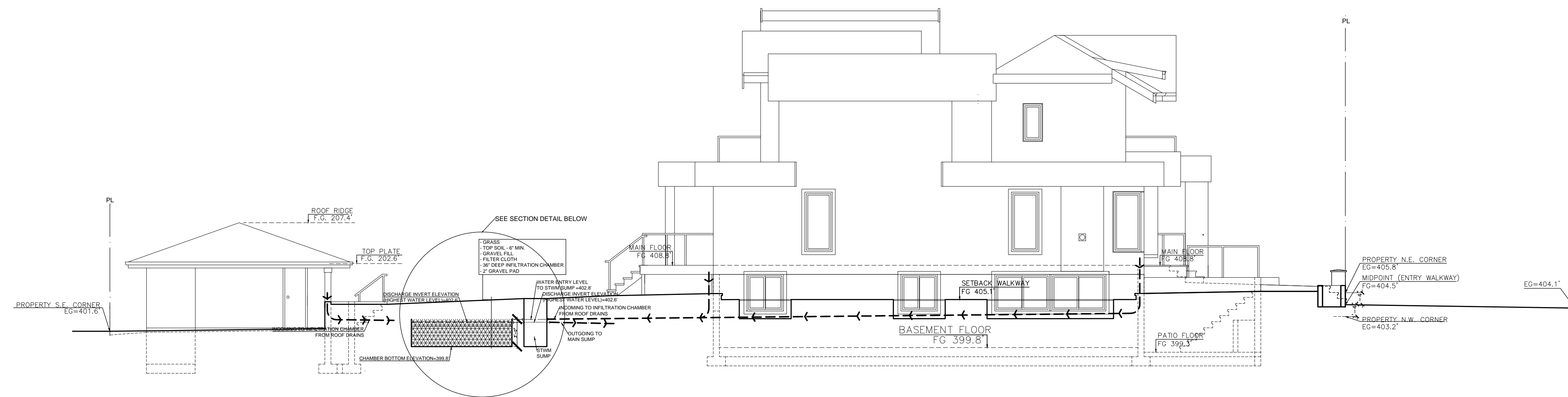
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STORM WATER MANAGEMENT PLAN

NOTES: LARGEST DRAIN PIPE (OUTGOING TO MAIN SUMP AND TO CITY STORM) WILL BE 4" DIAMETER.



SECTION DETAIL

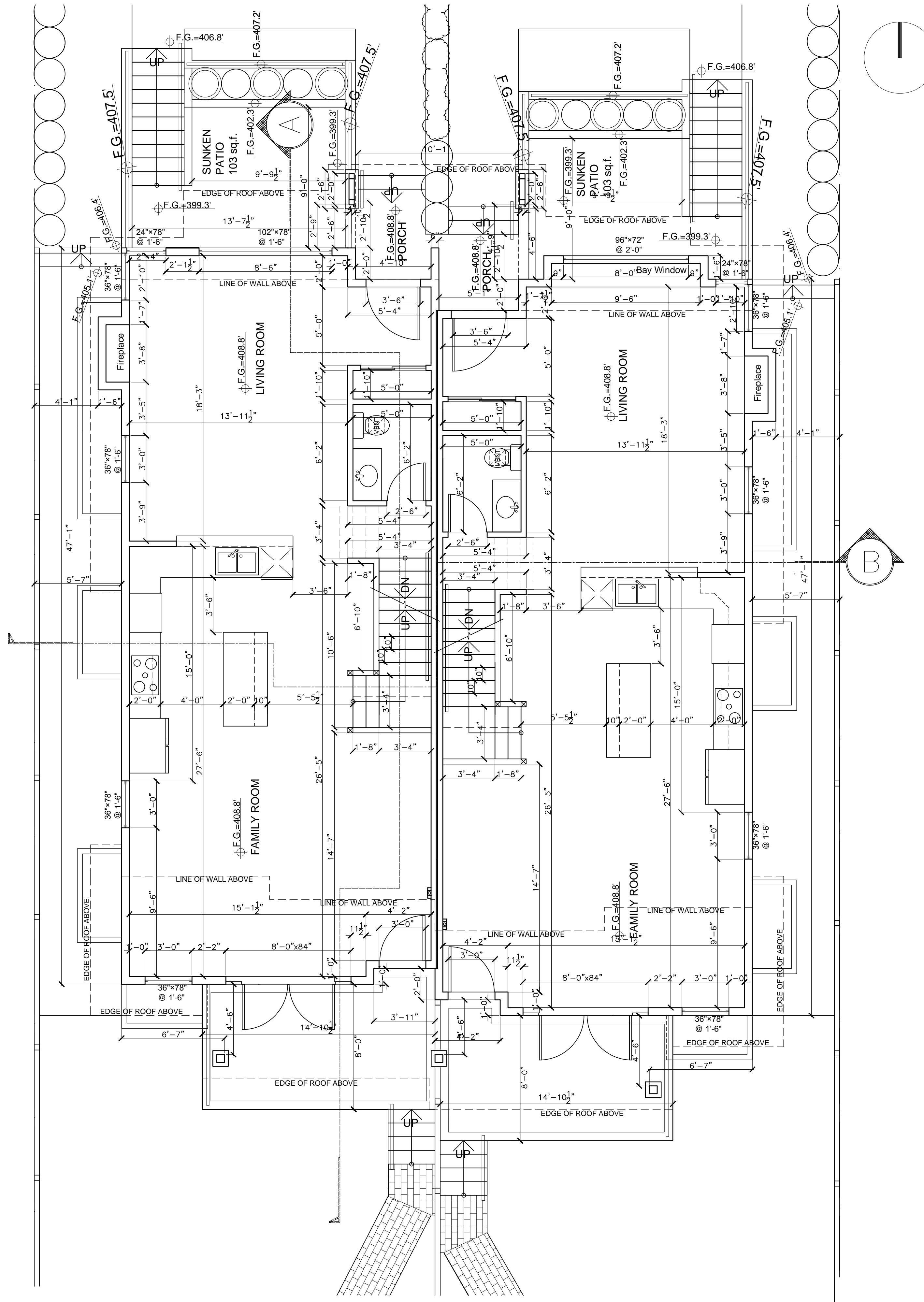
SCALE: 3/4"=1'

STORM WATER MANAGEMENT CALCULATIONS

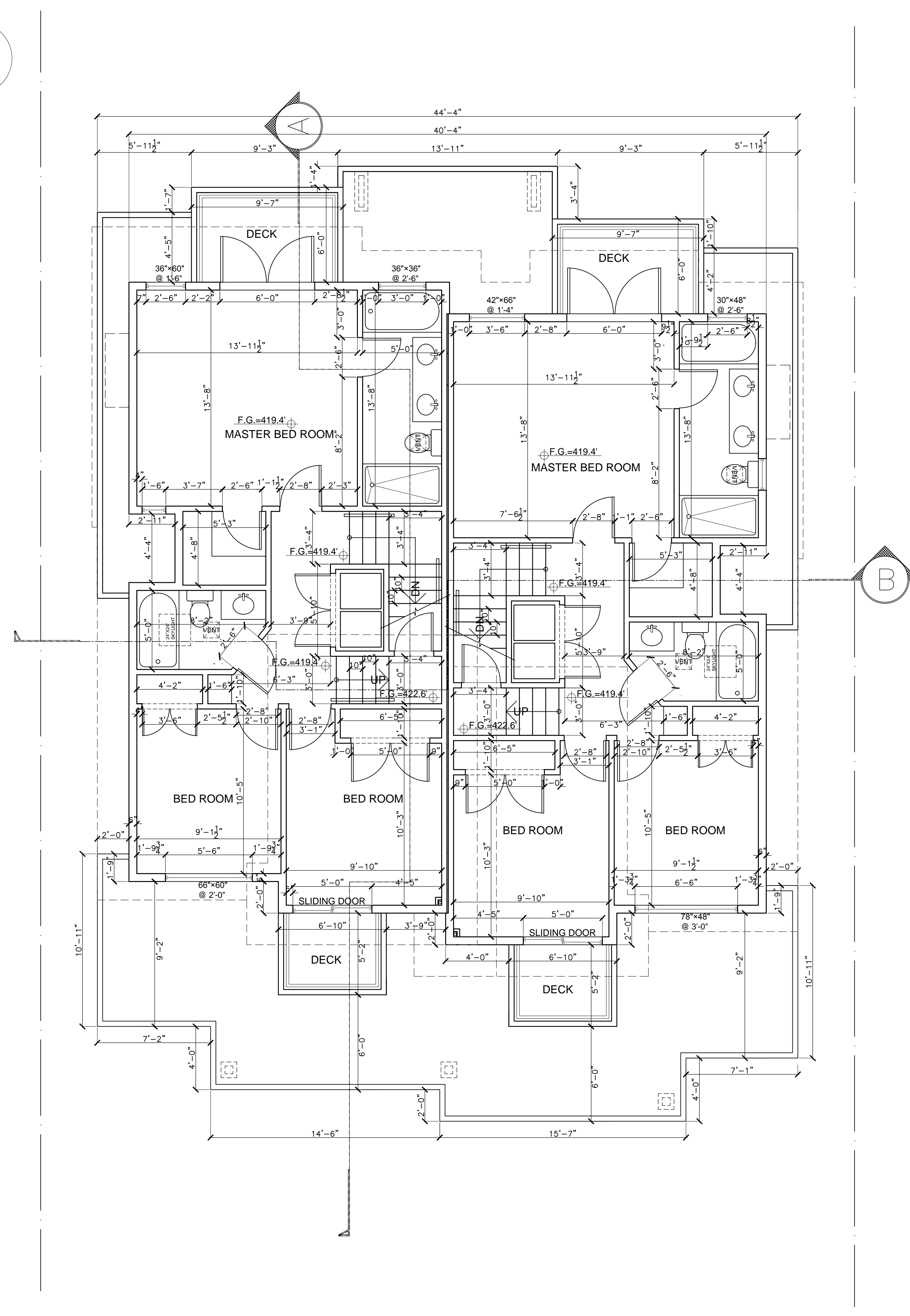
- Total roof area = 3699 sq.f.
- Presumed soil infiltration rate: 10 mm / hr
- Infiltration chamber area = 13 sq.m. (1.4 meter deep).
- **Infiltration chamber volume, required: 13 x 1.4 = 18.2 cub.m. = 643 cub.f.**
- 643 cub.ft. (infiltration chamber volume) / 3 ft. (infiltration chamber depth) = 214 sq.ft. (infiltration chamber surface area, required).

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MAIN FLOOR PLAN
(net area=1886 sq.f.)



UPPER FLOOR PLAN
(net area=1547 sq.f.)

DRAWING A-3:
- MAIN FLOOR PLAN
- UPPER FLOOR PLAN

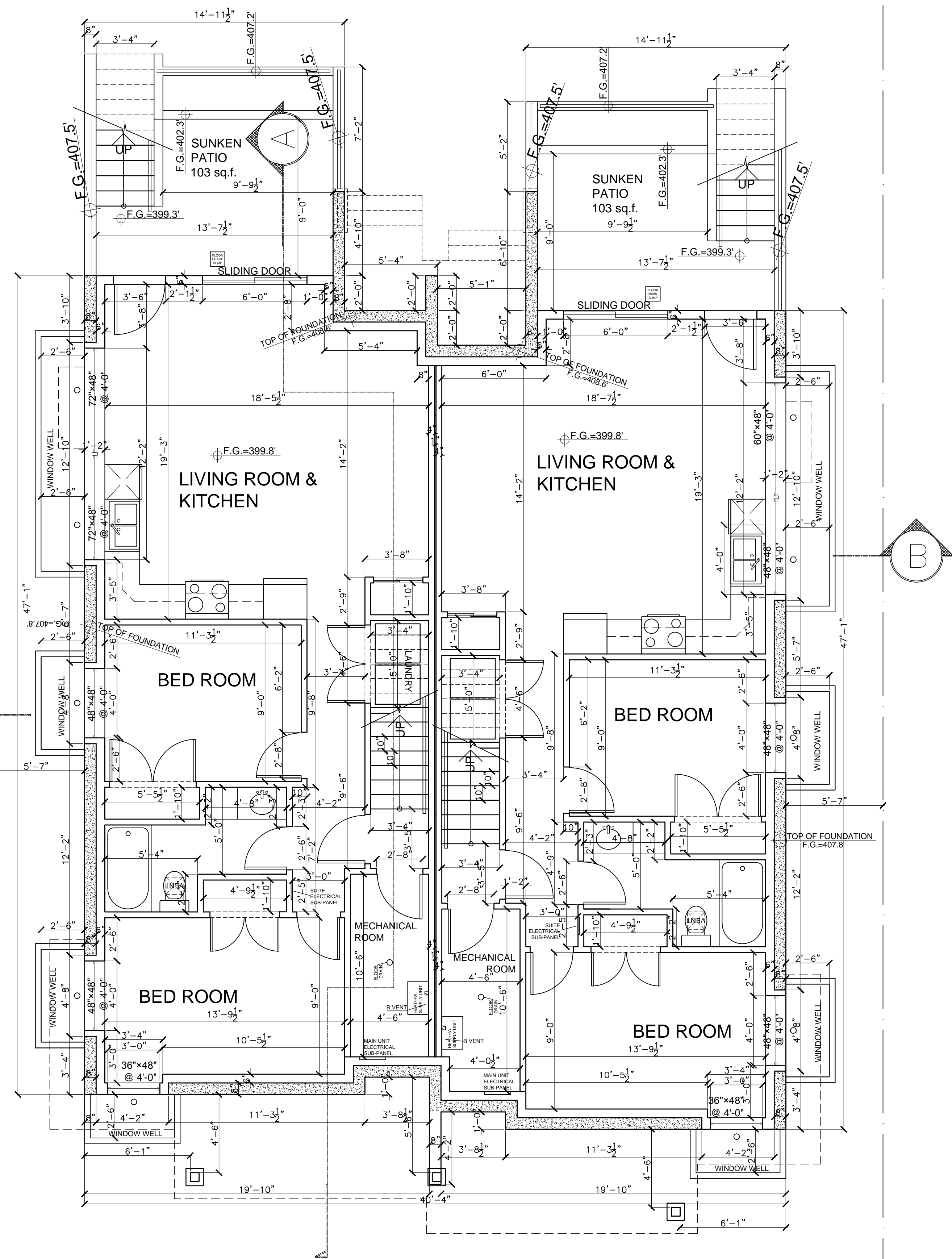
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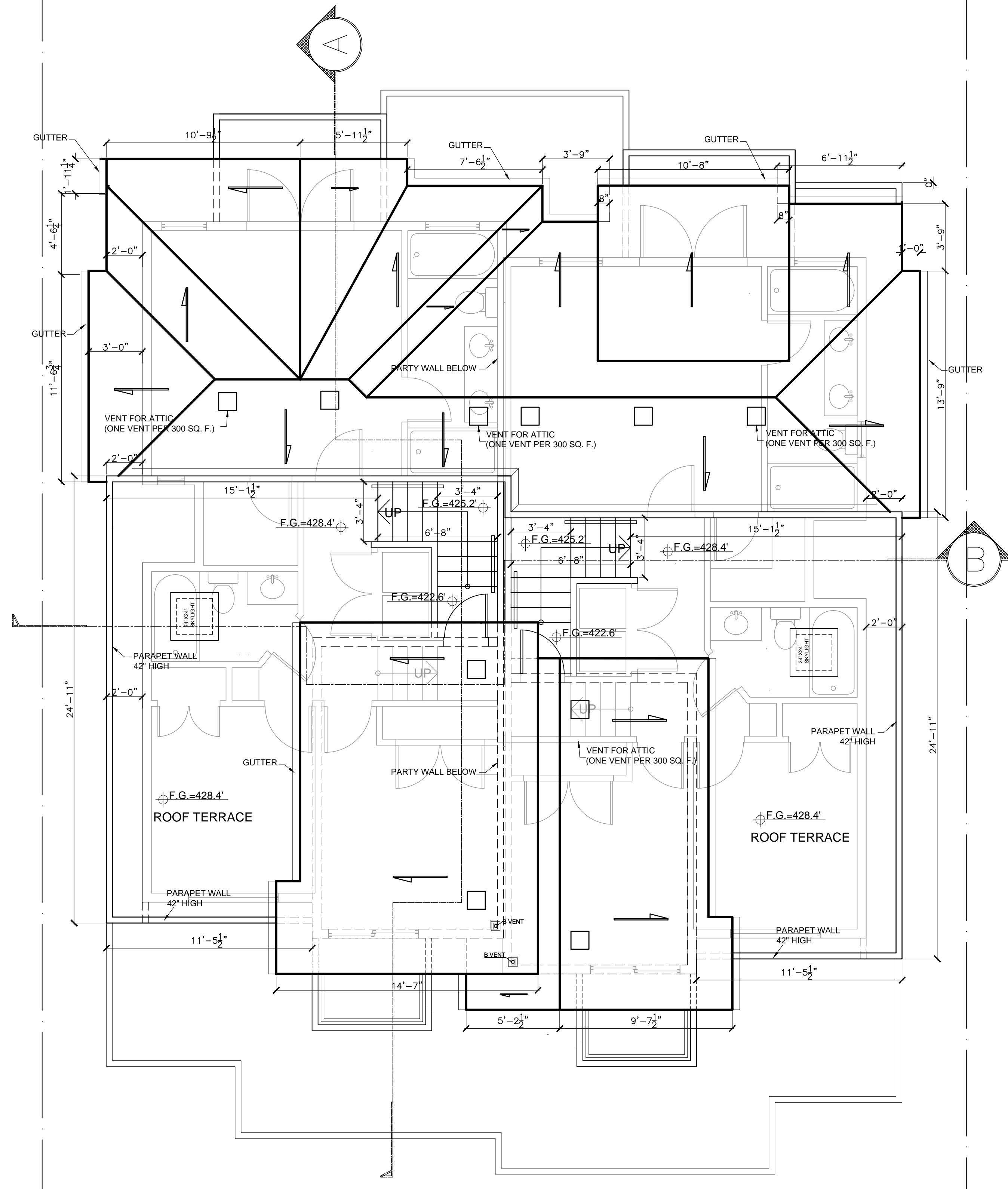
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BASEMENT PLAN
(net area=1871 sq.f.)



ROOF PLAN

DRAWING A-4:
- ROOF PLAN
- BASEMENT PLAN

Scale:
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DRAWING A-5:

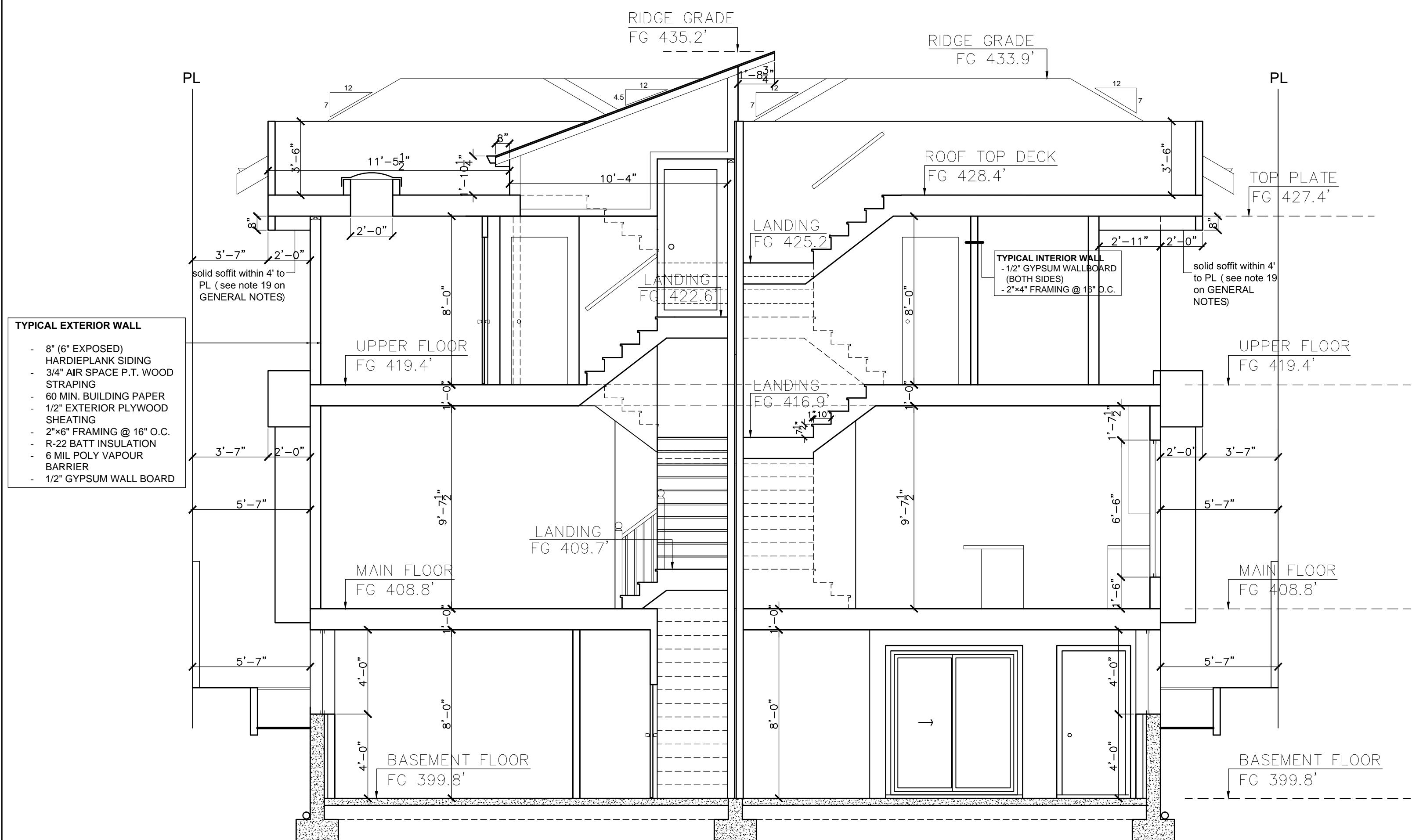
- SECTIONS
- PARTY WALL DETAIL

Scale:
1/4" = 1' or as noted

Project Title:

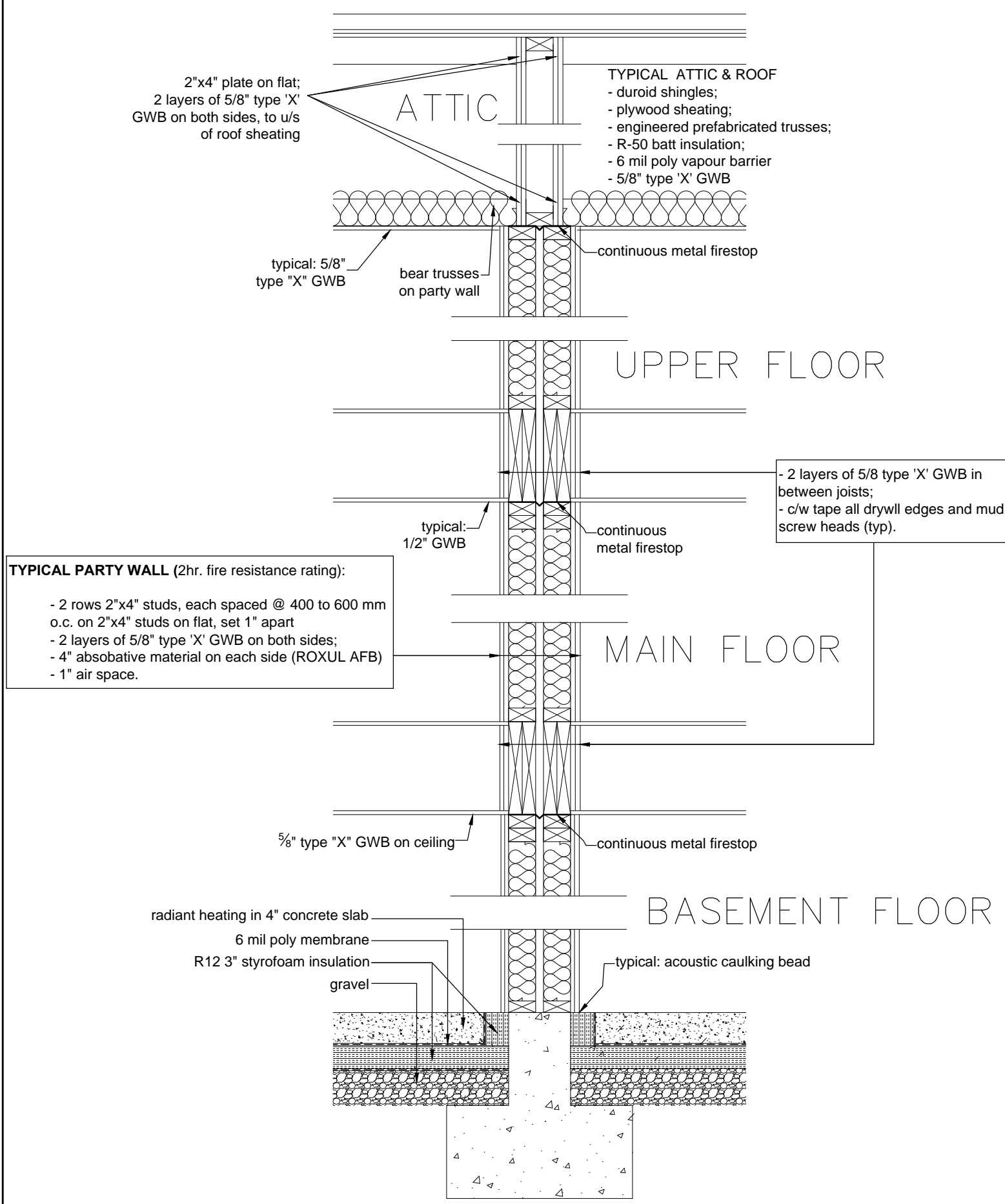
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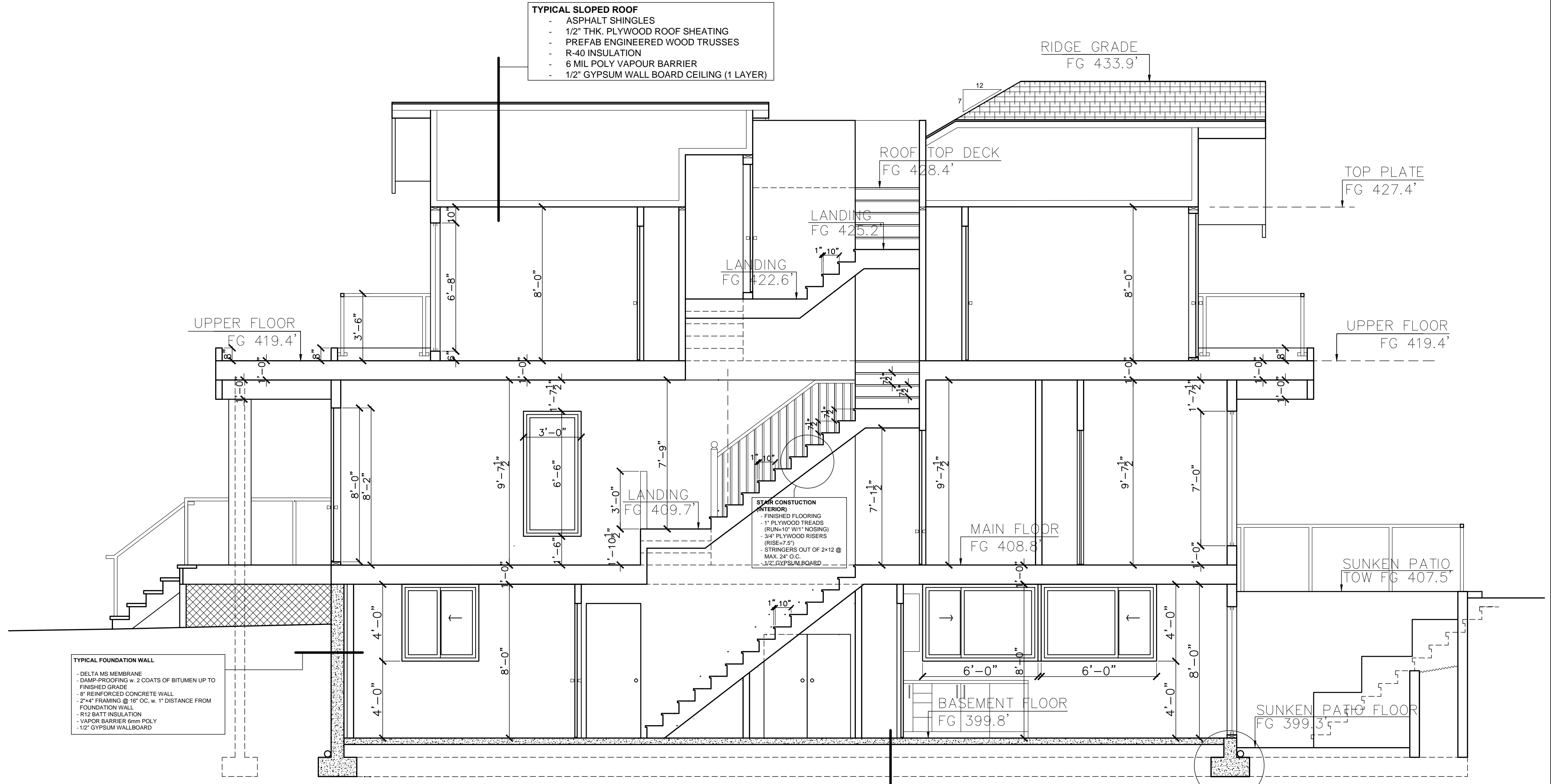


SECTION B

- TYPICAL EXTERIOR WALL**
- 8" (6" EXPOSED) HARDIEPLANK SIDING
 - 3/4" AIR SPACE P.T. WOOD STRAPPING
 - 60 MIN. BUILDING PAPER
 - 1/2" EXTERIOR PLYWOOD SHEATHING
 - 2"x4" FRAMING @ 16" O.C.
 - R-22 BATT INSULATION
 - 6 MIL POLY VAPOUR BARRIER
 - 1/2" GYPSUM WALL BOARD



PARTY WALL - 2HR. F/R
[cUL U351]
Scale: 3/4" = 1'



SECTION A

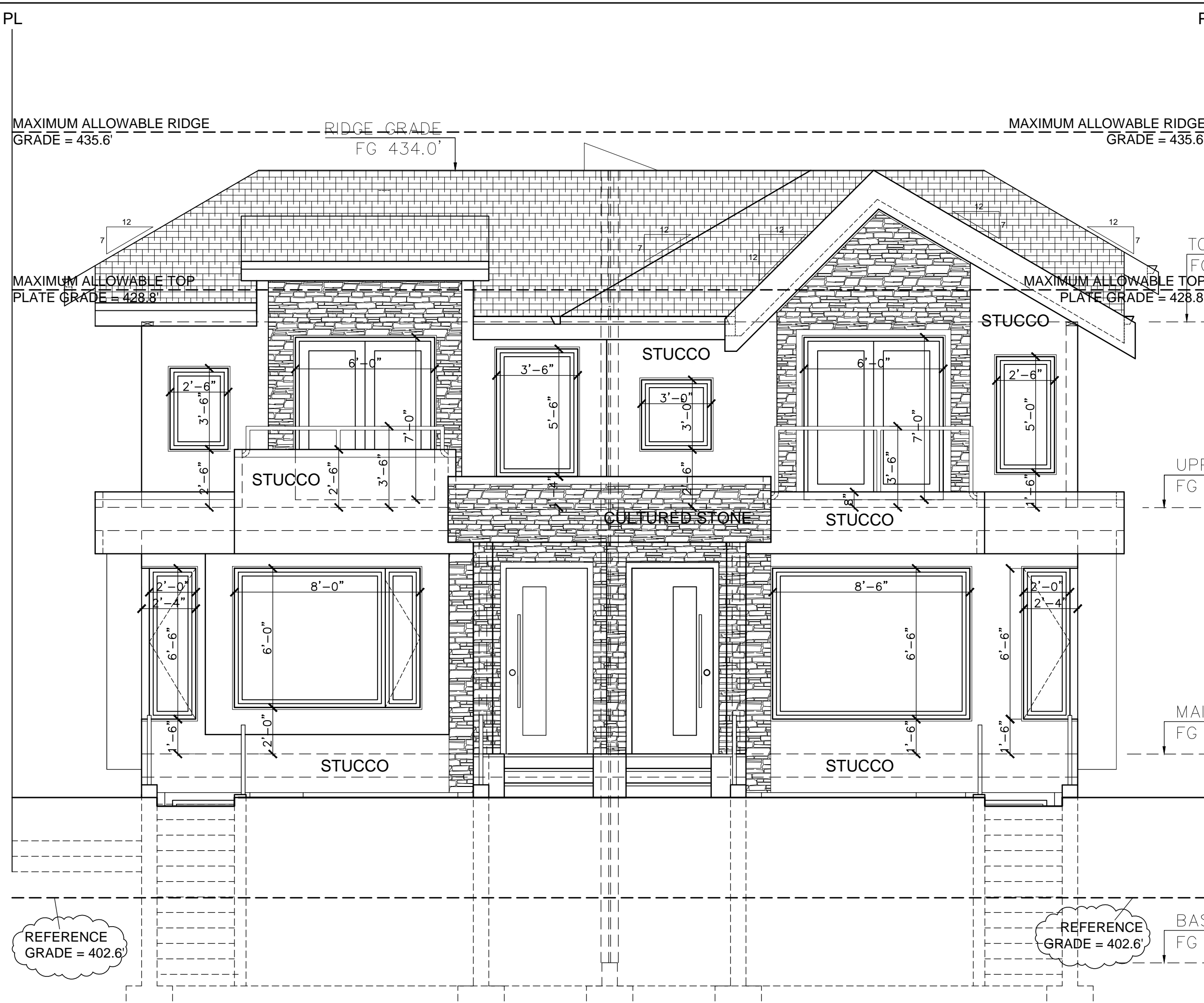
- TYPICAL SLOPED ROOF**
- ASPHALT SHINGLES
 - 1/2" THK. PLYWOOD ROOF SHEATHING
 - PREFAB ENGINEERED WOOD TRUSSES
 - R-40 INSULATION
 - 6 MIL POLY VAPOUR BARRIER
 - 1/2" GYPSUM WALL BOARD CEILING (1 LAYER)

- TYPICAL CONCRETE FLOOR SLAB**
- FLOORING LAMINATE
 - UNDERLAY
 - 4" CONCRETE
 - R12 RIGID INSULATION
 - POLY
 - GRAVEL

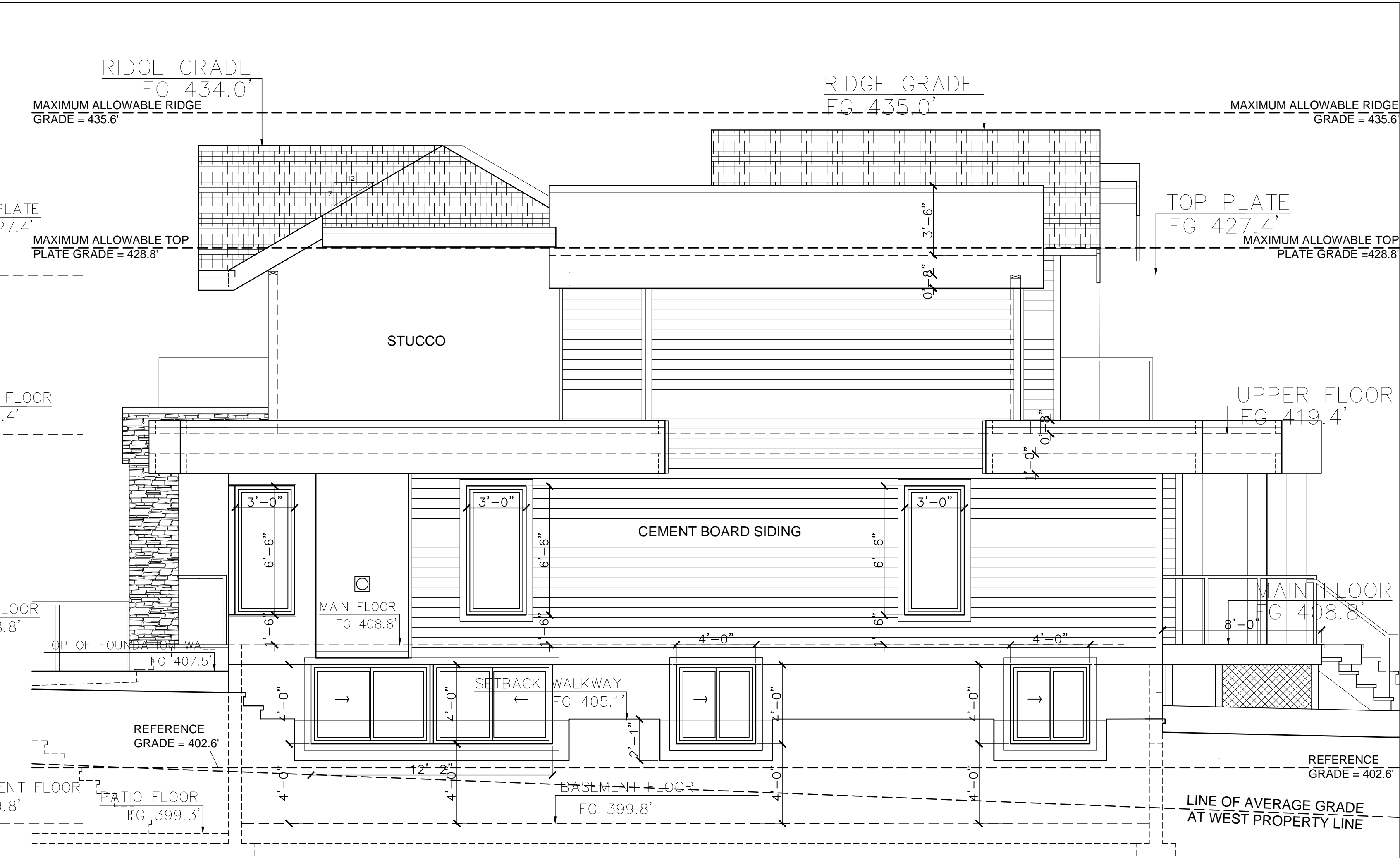
- TYPICAL FOUNDATION WALL / SLAB**
- CONCRETE FOUNDATION WALL
 - CONCRETE STRIP FOOTING
 - 4" DIAMETER DRAIN PIPE
 - GRAVEL BACKFILL

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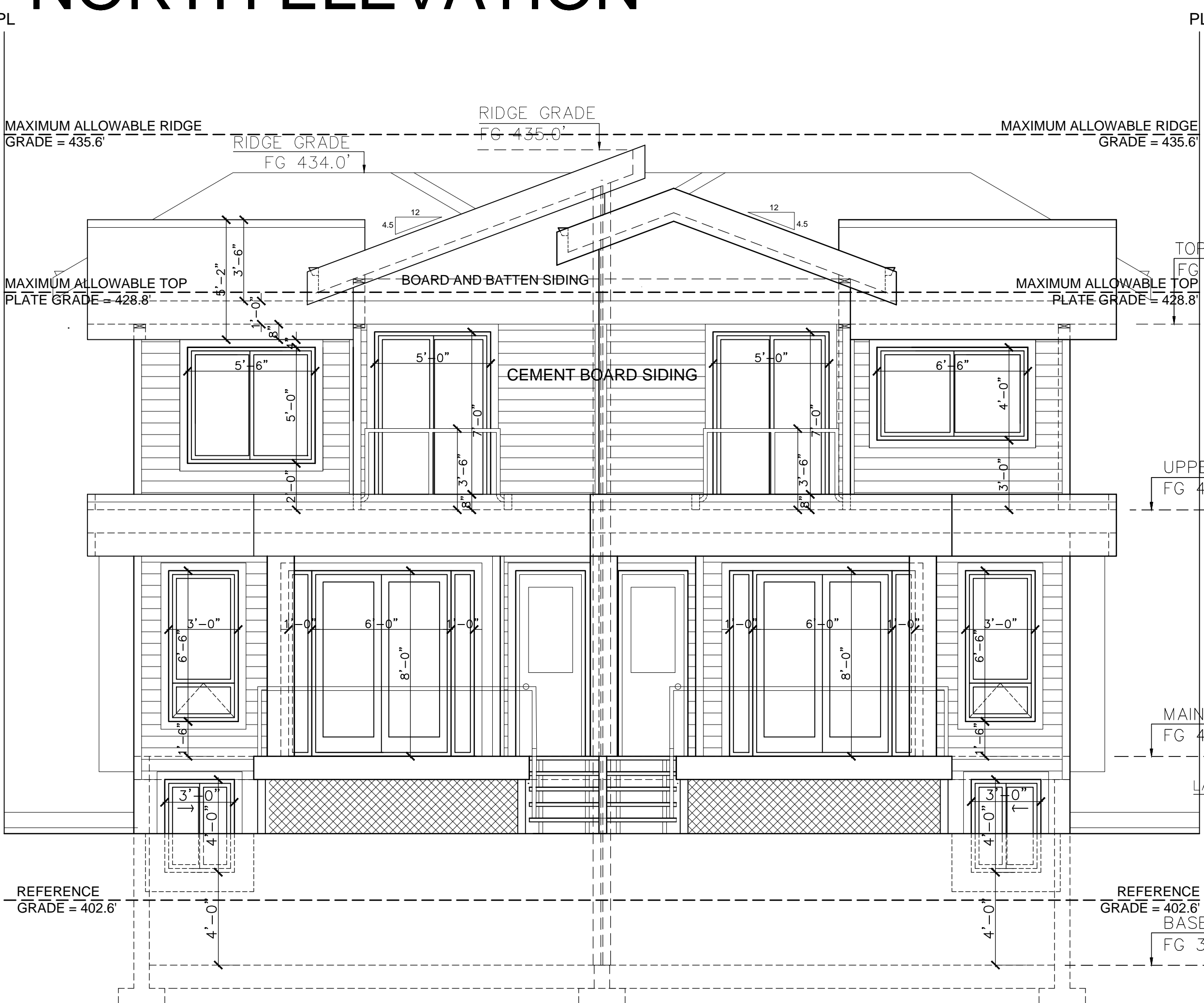
NORTH ELEVATION



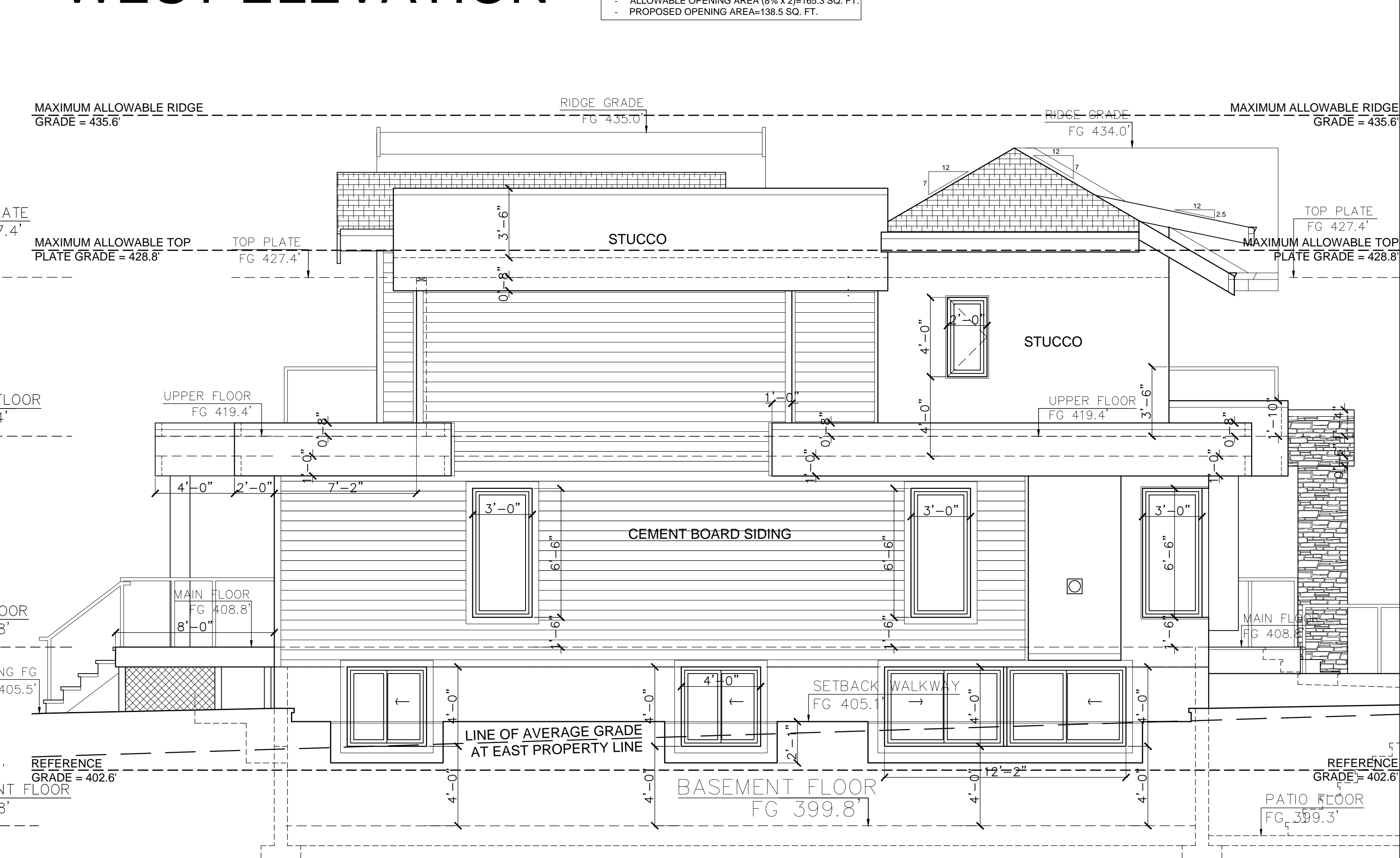
WEST ELEVATION

EAST ELEVATION SPATIAL CALCULATIONS

- TOTAL ELEVATION AREA=1033 SQ. FT.
- ALLOWABLE OPENING AREA (8% x 2)=165.3 SQ. FT.
- PROPOSED OPENING AREA=138.5 SQ. FT.



SOUTH ELEVATION



EAST ELEVATION

EAST ELEVATION SPATIAL CALCULATIONS

- TOTAL ELEVATION AREA=1033 SQ. FT.
- ALLOWABLE OPENING AREA (8% x 2)=165.3 SQ. FT.
- PROPOSED OPENING AREA=146.5 SQ. FT.

DRAWING A-6:

- ELEVATIONS

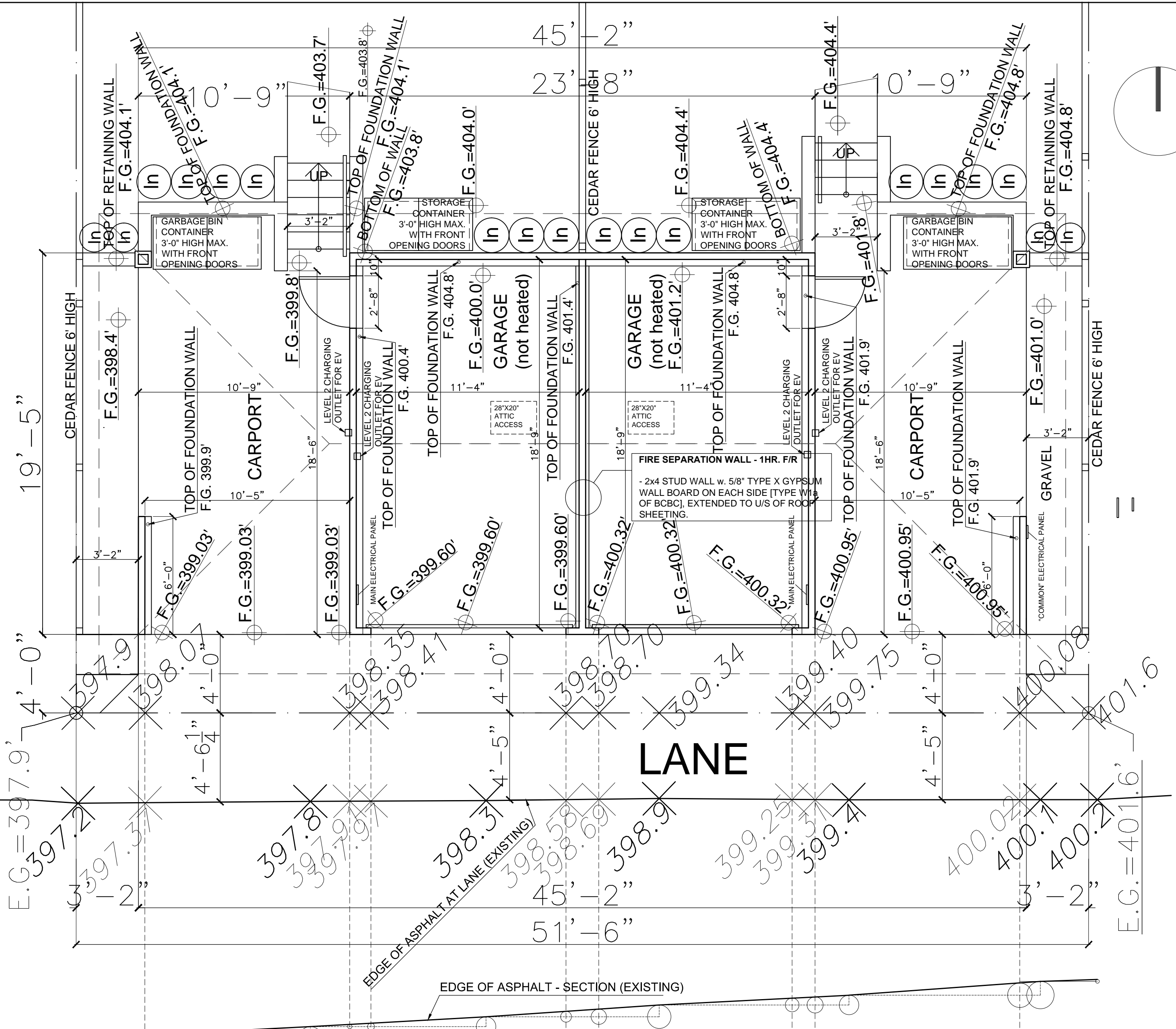
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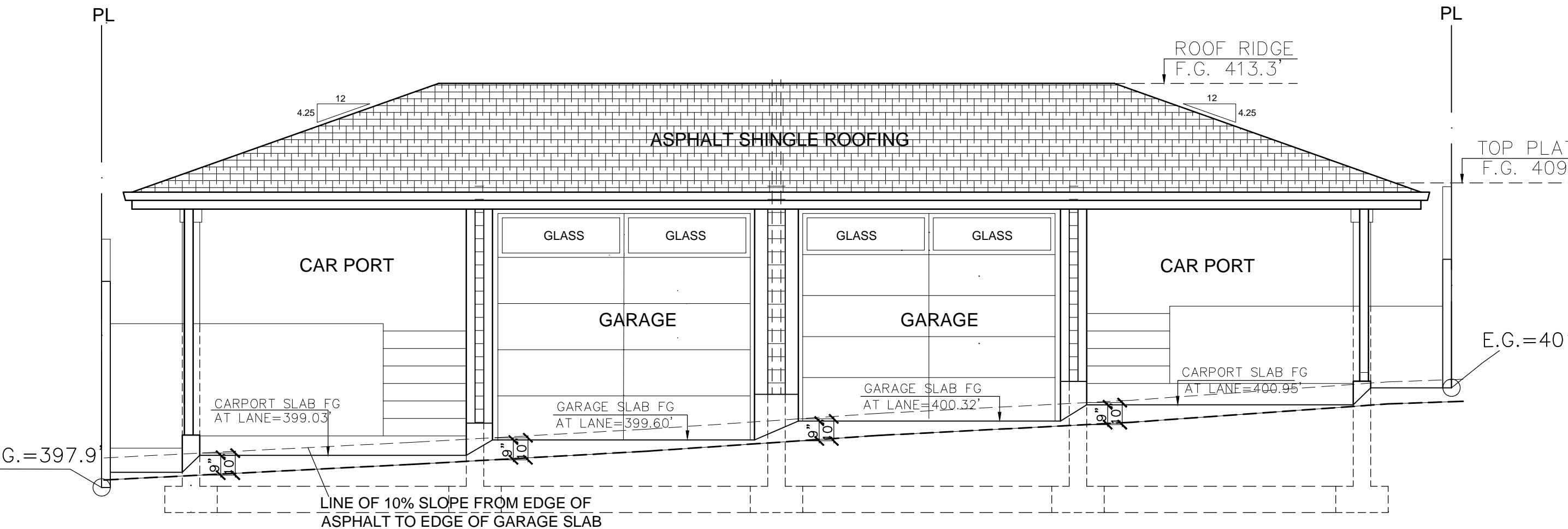
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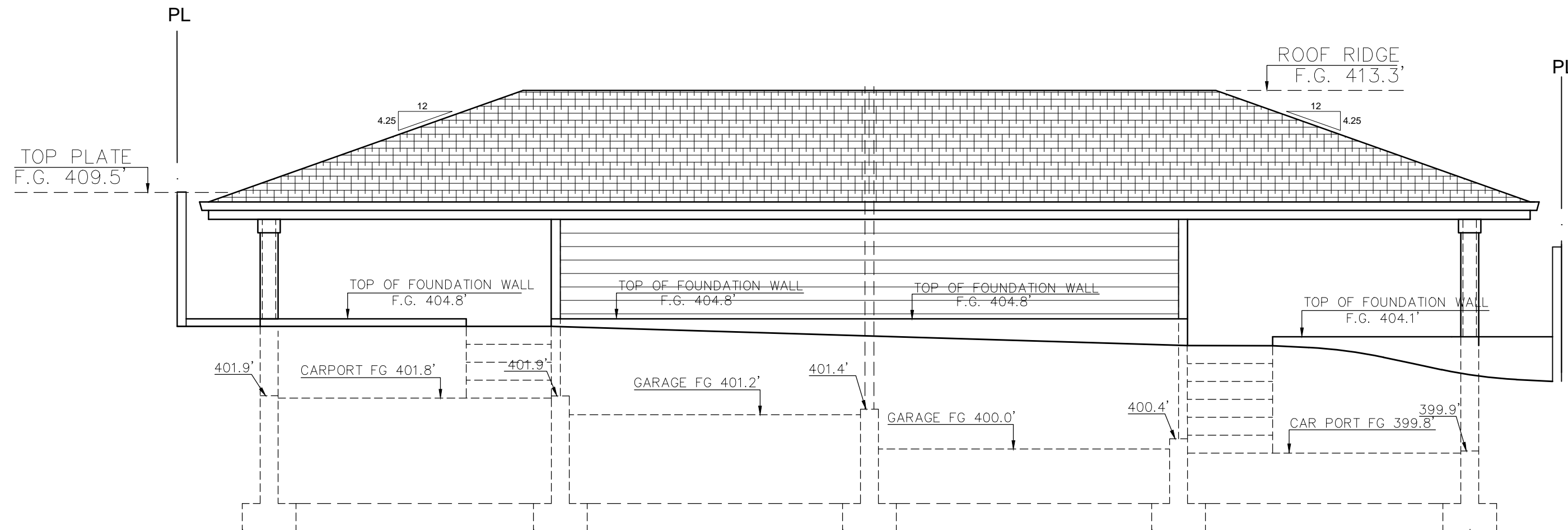
GARAGE PLAN
 NOTE: GARAGE SPACE IS NOT HEATED



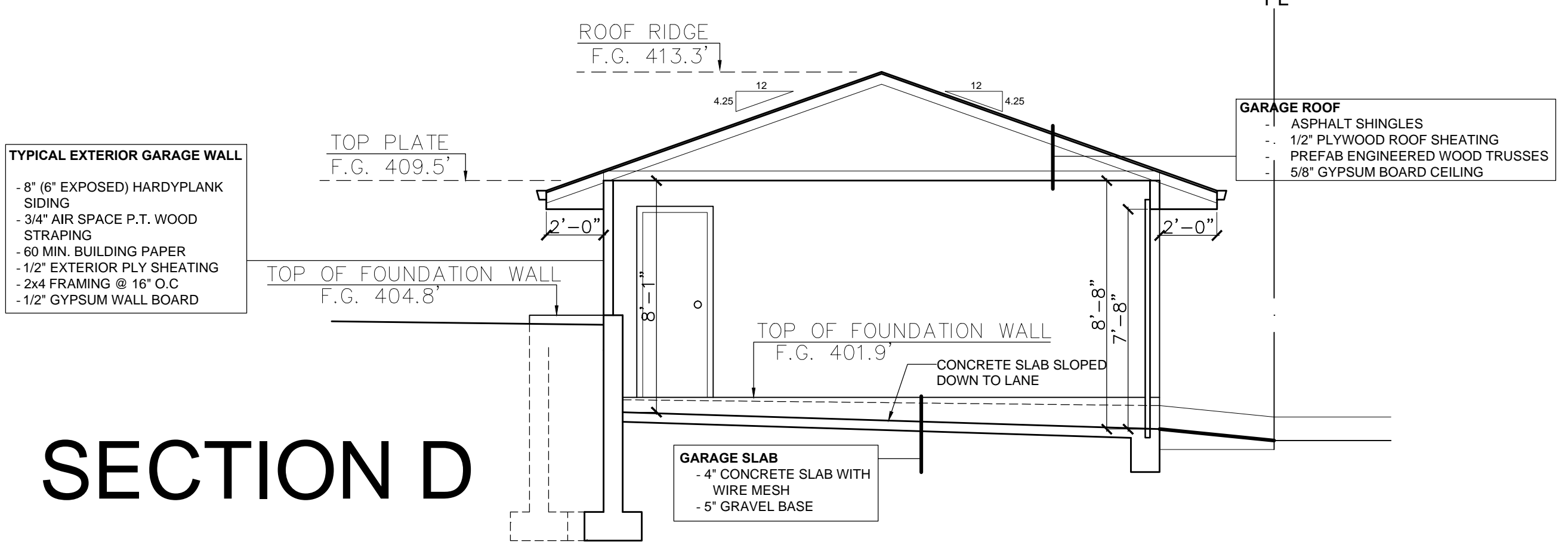
SOUTH ELEVATION

WEST ELEVATION

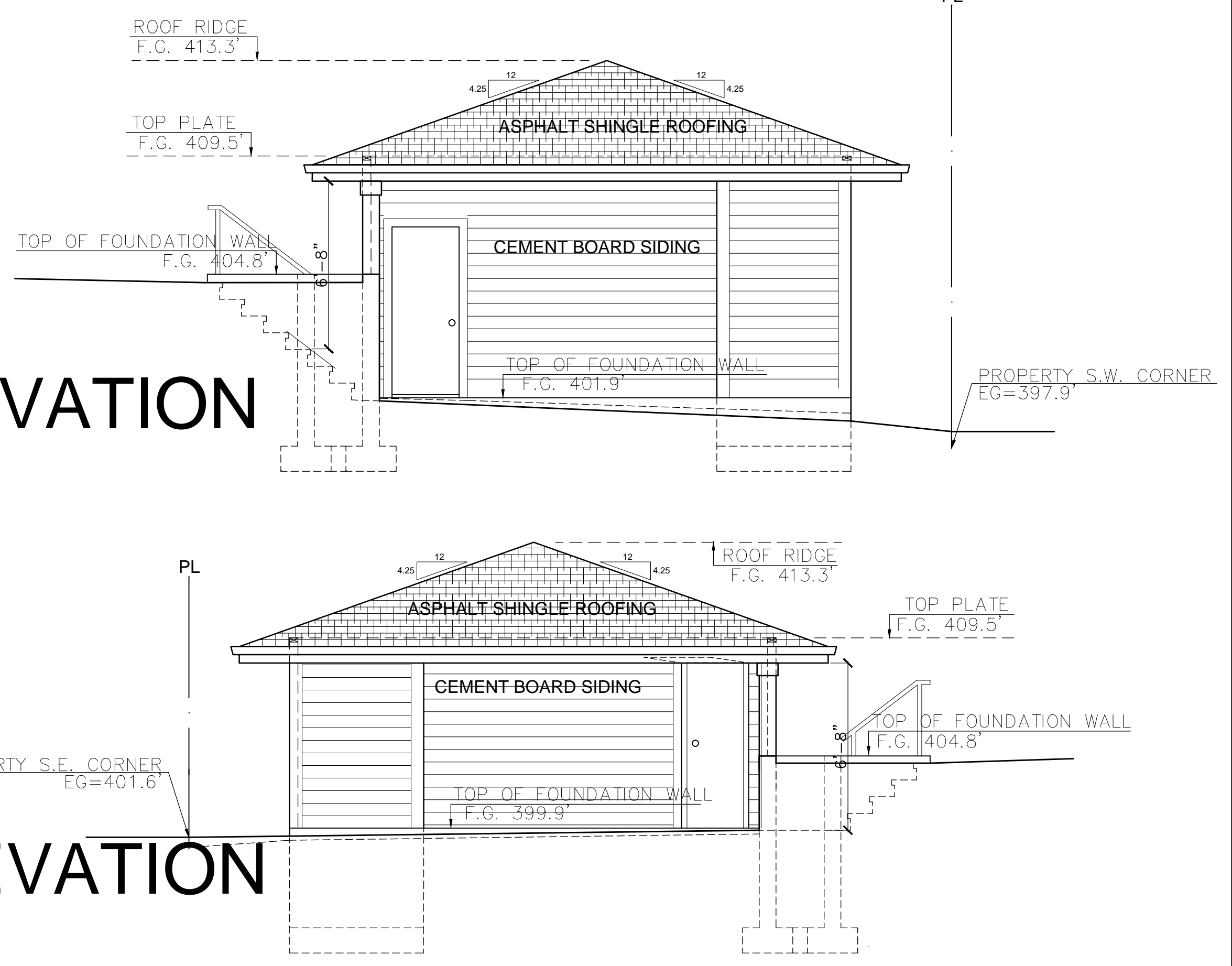
EAST ELEVATION



NORTH ELEVATION



SECTION D



DRAWING A-7:
 - GARAGE

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