

## Design Rationale Statement

### Resident Background and Planned Development:

We have lived in the downtown heritage area neighborhood, with our three children, for 20 years, and on Maple Street for 15 years. We work downtown, own a business downtown, and commute by walking or biking to our businesses. We are enjoying this sustainable lifestyle and hope to continue living here but need to make some changes to our backyard. We are working with a local designer and architect to plan and design the backyard and garage.

We have started this development process of a new 2 bay enclosed garage, and pool for 2 main reasons. One was due to the increasing crime in our neighborhood and the need to better secure our vehicles, possessions, and feeling safe in our backyard. Secondly by being able to replace our existing 1 bay 'open and aging' carport with a 2-bay enclosed garage, we can make room on the street for existing public parking, thereby aiding the city with increased public parking and by conforming with the zone for off-street parking. We currently have to park one car on the city street needing annual permits.

This development not only aids the city by bringing us into conformance with the RU1 zone for parking bylaw requirements, but also allows for more much needed downtown public parking. Many people use our street for downtown events at city park or simply going to the beach.

### Variance Rationale:

We are asking for a south side yard set-back variance to be reduced to 1.0m from the regulation 1.5m, which will match our adjacent neighbor's set back variance previously approved to the south for his carriage house. Our current carport was built with a 1.0m set-back and we would like to use this existing footprint. The 0.5 m gain to our central backyard width will solve some critical site constraints that our proposed garage and pool creates.

On our narrow 50' wide city lot, we need our garage positioned as far south as we can to allow for enough garage width to accommodate our vehicles and storage, modest pool width of 10' and most importantly, the minimum required space of 10' provincial electrical set back between the north side of the garage and pool for pool mechanical. Given the shape of our lot and house position, this was the only feasible place for the pool mechanical shed.

Our current drawings that show the pool and garage with 1m side south side yard, give us "just" enough space to allow for the pool mechanical to be at the required 10' from the pool. With the proposed garage at 22'; wide and pool at 10' wide we have tried to be as pragmatic as we can for our garage and pool size to still achieve a successful result.

Lastly, 2 large shade trees unfortunately need to be removed in order to build a 2-bay garage. We wouldn't be on Maple Street if we didn't love trees, and we need to have enough space to replant enough trees around the garage and pool, to recreate the park like atmosphere we have enjoyed.

We really hope the city would see this development as a huge plus for the neighborhood, and as per letters from our neighbors, you'll see that there would be no resistance to our request for this 0.5m reduction on the side yard set-back which actually places it in the similar spot that our carport has been for 70 years. Given the rationale above, the conformity on our street, and the added value to our neighborhood, we feel this is a reasonable request for our backyard.

Thank you for your time and consideration,

Kevin and Melanie Bos





**CONCRETE SLAB ASSEMBLIES**

<b>SL-1</b>	<b>GARAGE FLOOR SLAB</b>
<b>CONSTRUCTION ASSEMBLY</b> 4" CONCRETE FLOOR SLAB (28 Mpa) REINFORCING w/ 10M REBAR @ 24" o.c. e.w. 6 MIL POLY VAPOUR BARRIER (U.V. RESISTANT) 6" CLEAN COMPACTED GRANULAR FILL	
<b>NOTES:</b> SAW CUT AT MIDPOINTS AND SLOPE FLOOR TOWARDS CENTRE OF OVERHEAD DOOR OPENING SLOPE GARAGE FLOOR DOWN 1/4" PER FOOT	

**WALL ASSEMBLIES**

<b>WL-1</b>	<b>ABOVE GRADE WALL ASSEMBLY</b>	RSI	R
<b>CONSTRUCTION ASSEMBLY</b> INTERIOR AIR FILM WALL PAINT AS PER OWNER 1/2" GYPSUM WALL BOARD (TAPED AND SANDED) 6 MIL POLY VAPOUR BARRIER 3" RIGID INSULATION 6" REINFORCED CONCRETE & FORM 3" RIGID INSULATION BUILDING PAPER HARDIBOARD SIDING / CULTURED STONE EXTERIOR AIR FILM		0.12 0.68 0.08 0.00 3.24 2.67 3.24 0.00 0.11 0.03	0.68 0.61 0.00 18.6 0.62 18.6 0.63 0.17
<b>TOTAL EFFECTIVE INSULATION VALUE:</b> MIN. EFFECTIVE THERMAL RESISTANCE		9.49	39.91
<b>NOTES:</b> INSTALL FLASHING TO ALL WALL PENETRATIONS INSTALL FLASHING AND WEEP HOLES AS PER REQUIRED BY MANUFACTURER OF CULTURED STONE			

**ROOF ASSEMBLIES**

<b>RF-1</b>	<b>TYPICAL ROOF CONSTRUCTION SCISSOR TRUSS: 6:12 EXTERIOR / 3:12 INTERIOR</b>	RSI	R
<b>CONSTRUCTION ASSEMBLY</b> EXTERIOR AIR FILM ASPHALT SHINGLES BUILDING PAPER 1/2" PLYWOOD ROOF SHEATHING H CLIPS AS REQUIRED COMMON ROOF TRUSSES @ 24" o.c. (RAISED HEEL) R-50 BLOWN INSULATION 6 MIL POLY VAPOUR BARRIER 5/8" GYPSUM WALL BOARD (TAPED & SANDED) INTERIOR AIR FILM		0.12 0.08 0.00 0.00 1.96 8.82 0.00 0.08 0.11	0.68 0.45 0.00 0.00 11.13 50 0.00 0.45 0.62
<b>EFFECTIVE RSI / R VALUE OF ENTIRE ASSEMBLY</b> REQUIRED PROVIDED		10.97 11.17	39.74 63.33

**FOUNDATION WALL ASSEMBLIES**

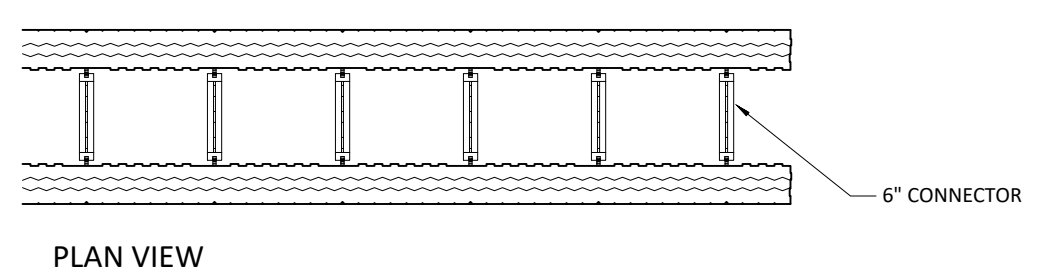
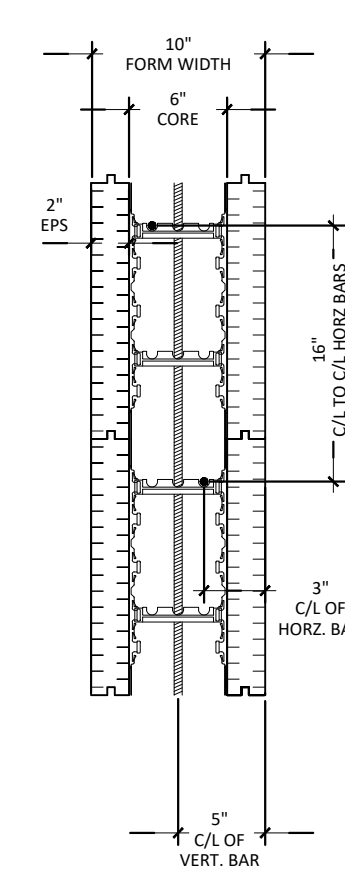
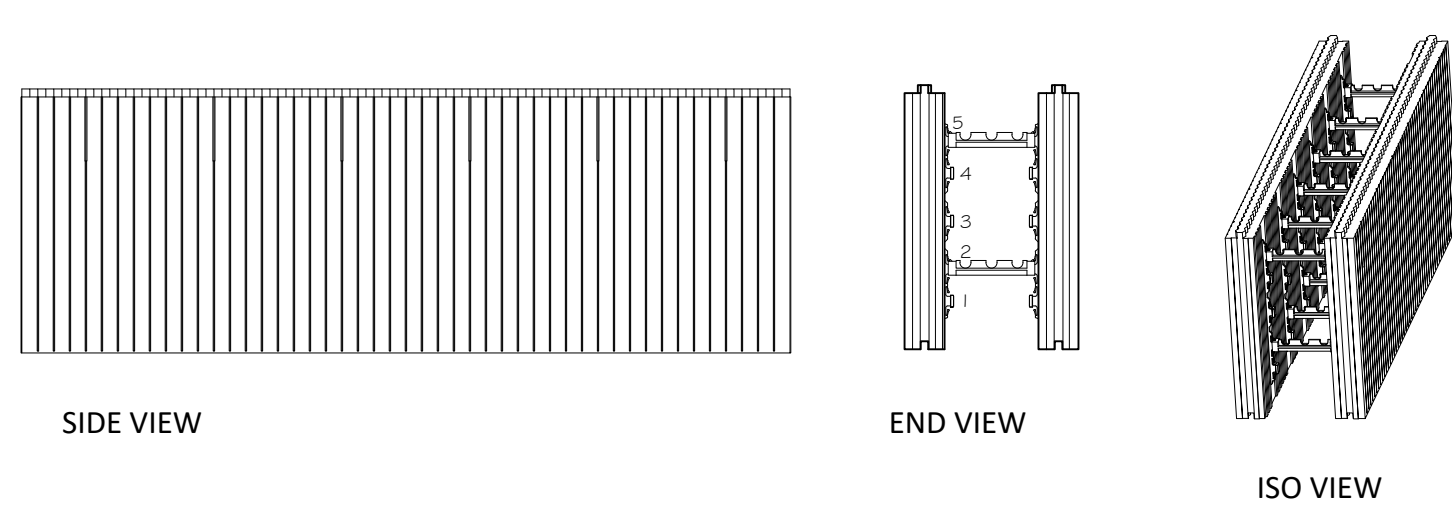
<b>FDN-1</b>	<b>TYPICAL FOUNDATION CONSTRUCTION</b>	RSI	R
<b>CONSTRUCTION ASSEMBLY</b> EXTERIOR AIR FILM DAMPROOFING 6 MIL POLY VAPOUR BARRIER 3" RIGID INSULATION 6" REINFORCED CONCRETE & FORM 3" RIGID INSULATION INTERIOR AIR FILM		0.12 0.00 3.24 2.67 3.24	0.68 0.00 18.6 0.62 18.6
<b>EFFECTIVE RSI / R VALUE OF ENTIRE ASSEMBLY</b> REQUIRED PROVIDED		9.27	37.9

**DOORS & WINDOWS**

FENESTRATION (WINDOWS) AND DOORS TO HAVE AN OVERALL THERMAL TRANSMITTANCE (U-VALUE) NOT GREATER THAN THE LISTED IN TABLE 9.36.27 A (B.C.B.C.) LATEST REVISION FOR THE APPLICATION HEATING DEGREE DAY CATEGORY: CLIMATE ZONE 5 MAXIMUM U-VALUE TO BE 1.80

DOOR TO UNCONDITIONED GARAGE FROM DWELLING	USI 2.6 (U-0.46)
ATTIC ACCESS HATCH	RSI 2.6 (R-14.8)
FRONT DOORS	USI 2.6 (U-0.46)
GLASS DOORS	USI 2.9 (U-0.51)
OVERHEAD GARAGE DOORS (WHEN GARAGE CONDITIONED)	RSI 5.1 (R-6.245)

**NOTE:**  
**FLOOR JOISTS:** Engineered joist manufacturer to design and submit joist package as shown. Provide eng. lintels, beams etc. as required for a complete job. Provide engineered drawings for erection and for the authority having jurisdiction.  
**ROOF TRUSSES:** Engineered truss manufacturer to design roof to hips, valleys, and ridges as shown. Provide eng. girders, beams etc. as required for a complete job. Provide engineered drawings for

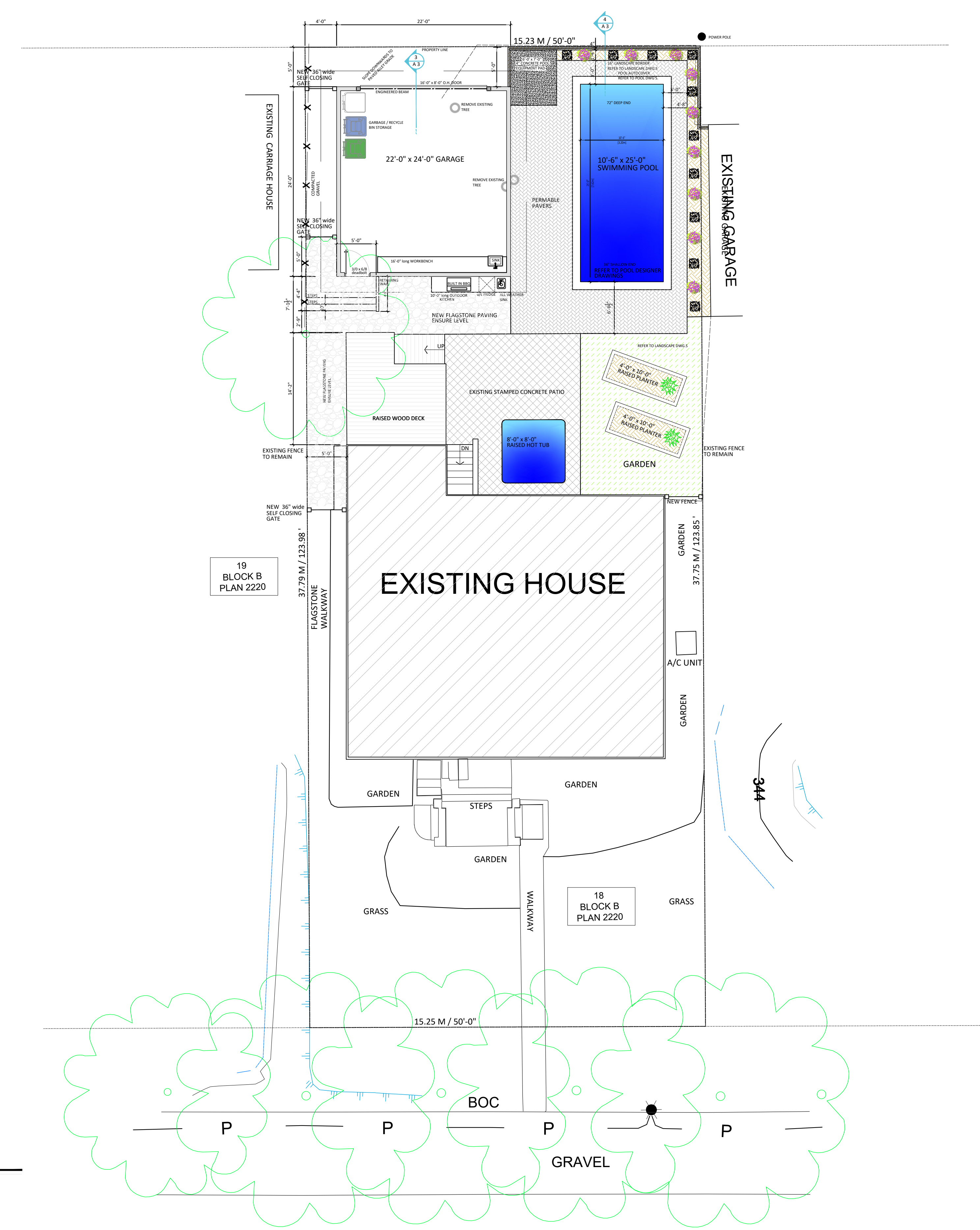


BLOCK SHOWN HAS CONNECTORS ARRANGED FOR UPPER COURSES. FOR FIRST COURSE PLACE A ROW OF CONNECTORS AT THE 1, 3, AND 5 TEE LOCATIONS.  
 WALL SURFACE AREA = 5.33 SQ. FT. PER BLOCK  
 CONCRETE VOLUME = 0.099 CU. YD. PER BLOCK

**1 ICF BLOCK**  
 SCALE: Not to Scale

**2 ICF BLOCK DETAIL**  
 SCALE: Not to Scale

**LANE**



**SITE CALCULATIONS:**

**ZONING**  
 RU 1  
**LEGAL ADDRESS**  
 LOT 18  
 BLOCK B  
 PLAN 2220

**MUNICIPAL ADDRESS**  
 1862 MAPLE STREET  
 KELOWNA, B.C. V1Y-1H3

**SITE AREA:**  
 6,205 sq. ft. / 576.4 M<sup>2</sup>  
 0.142 Acres (ESTIMATE)

**BUILDING AREA:**  
**RESIDENCE / on grade:**  
 1,130 sq. ft. / 104.9 M<sup>2</sup>  
**New Garage:**  
 528 sq. ft. / 49.0 M<sup>2</sup>  
**New Swimming Pool**  
 273 sq. ft. / 25.36 M<sup>2</sup>  
**Stamped Concrete**  
 295 sq. ft. / 27.4 M<sup>2</sup>

**Building SURFACE COVERAGE:**  
 1,931 / 6,205 = 32.1 %  
**Hard SURFACE COVERAGE:**  
 2,226 / 6,205 = 35.8 %

7/8/23	0	RAH	Issued for Building Permit
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 H.D.D.

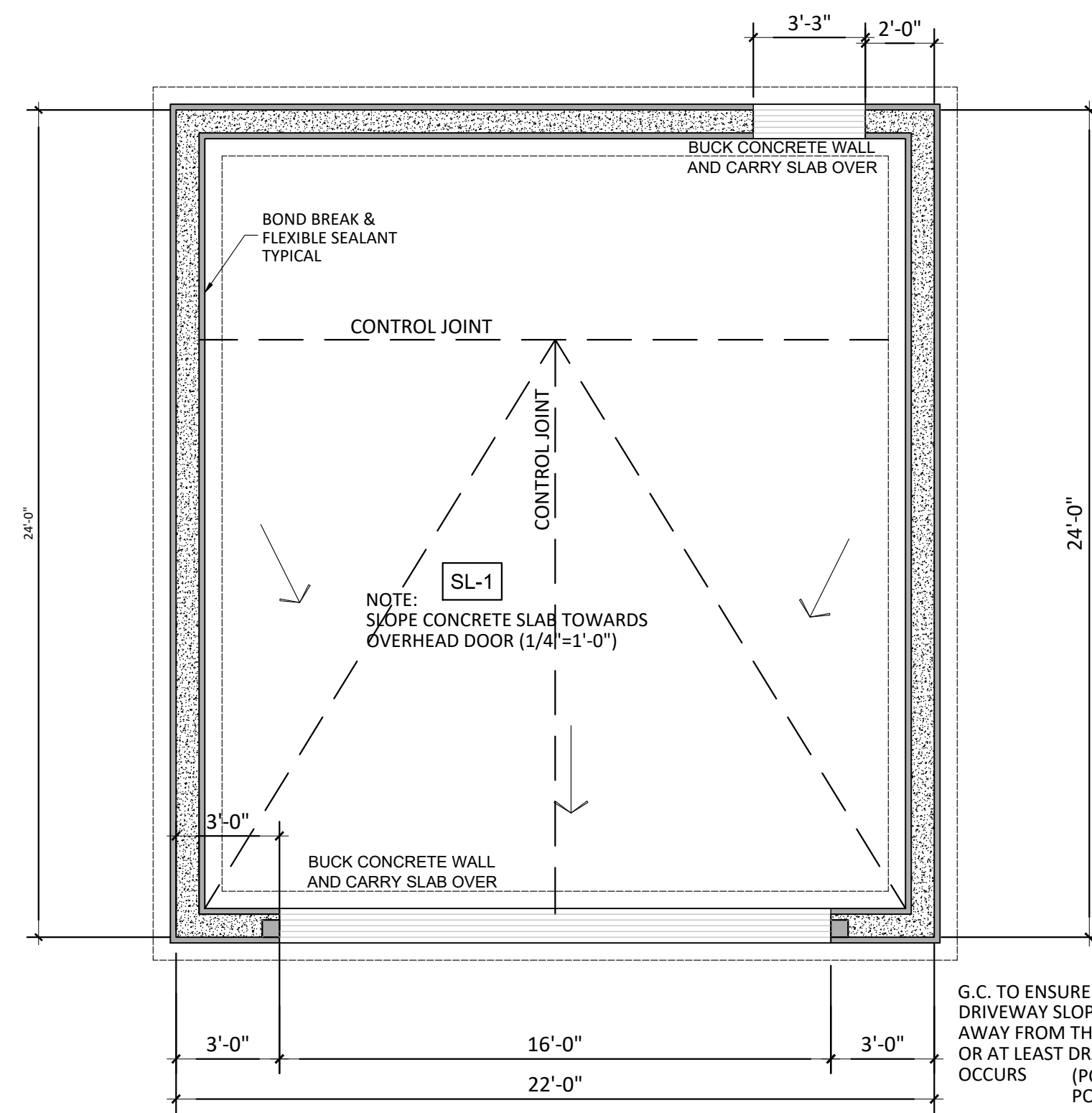
**PROJECT**  
 REAR GARAGE / RENOVATION  
 1862 MAPLE STREET  
 KELOWNA, B.C.

**SHEET TITLE**  
 PROPOSED REAR YARD

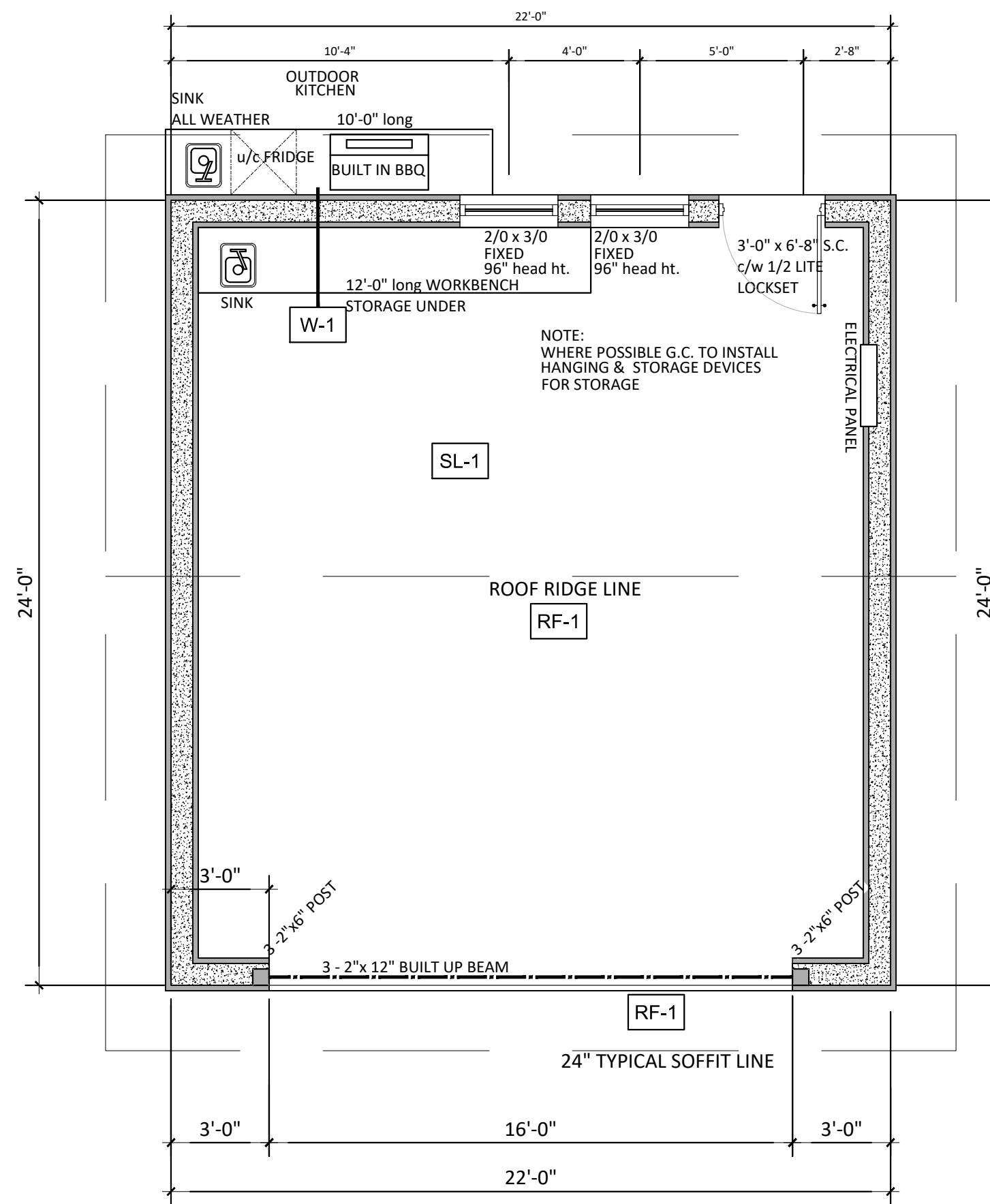
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CHECKED	K & M BOS	SCALE	
SCALE	1/8"=1'-0"	DATE	
DATE	July 8, 2023	Rev.	

**1 PROPOSED REAR YARD**  
 1862 MAPLE STREET  
 SCALE: 1/8"=1'-0"

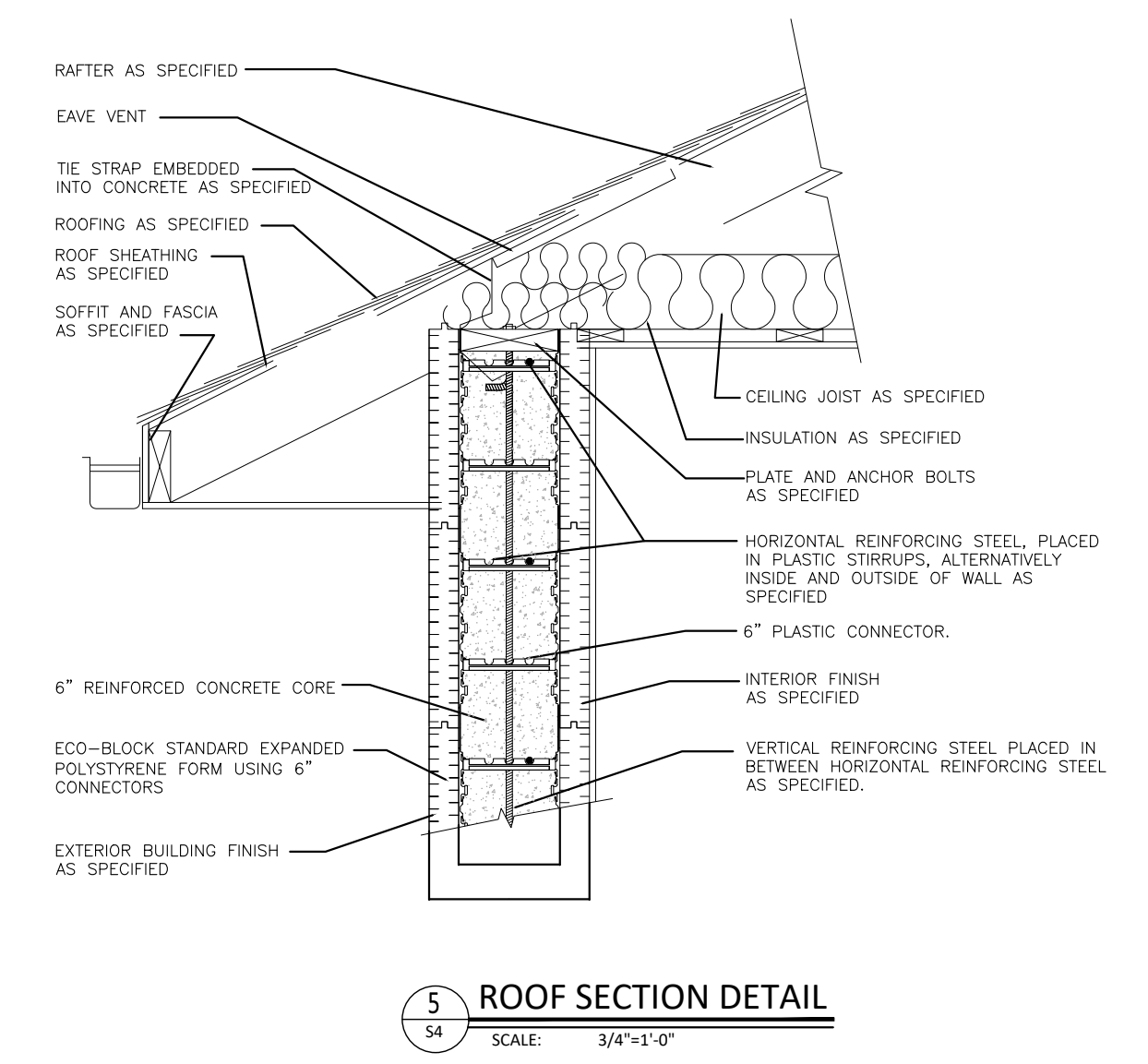




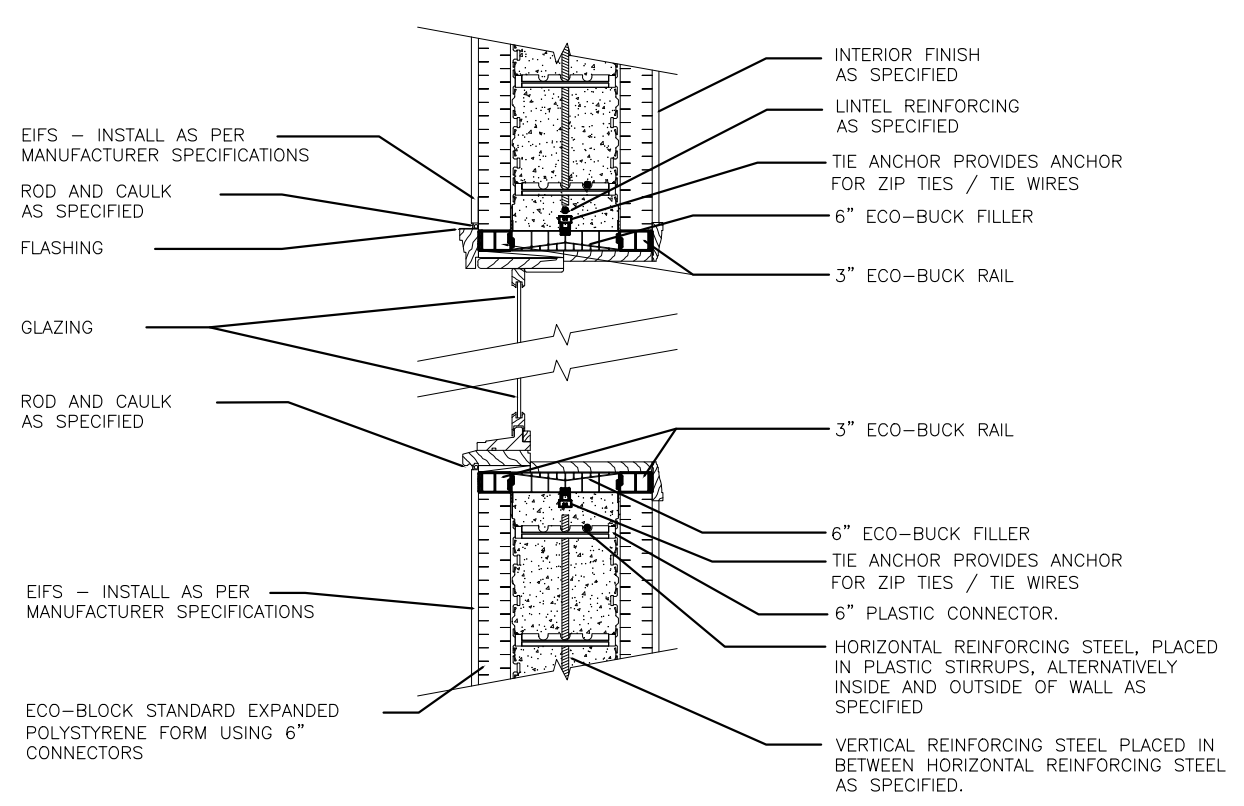
**1 FOUNDATION PLAN**  
SCALE: 1/4"=1'-0"



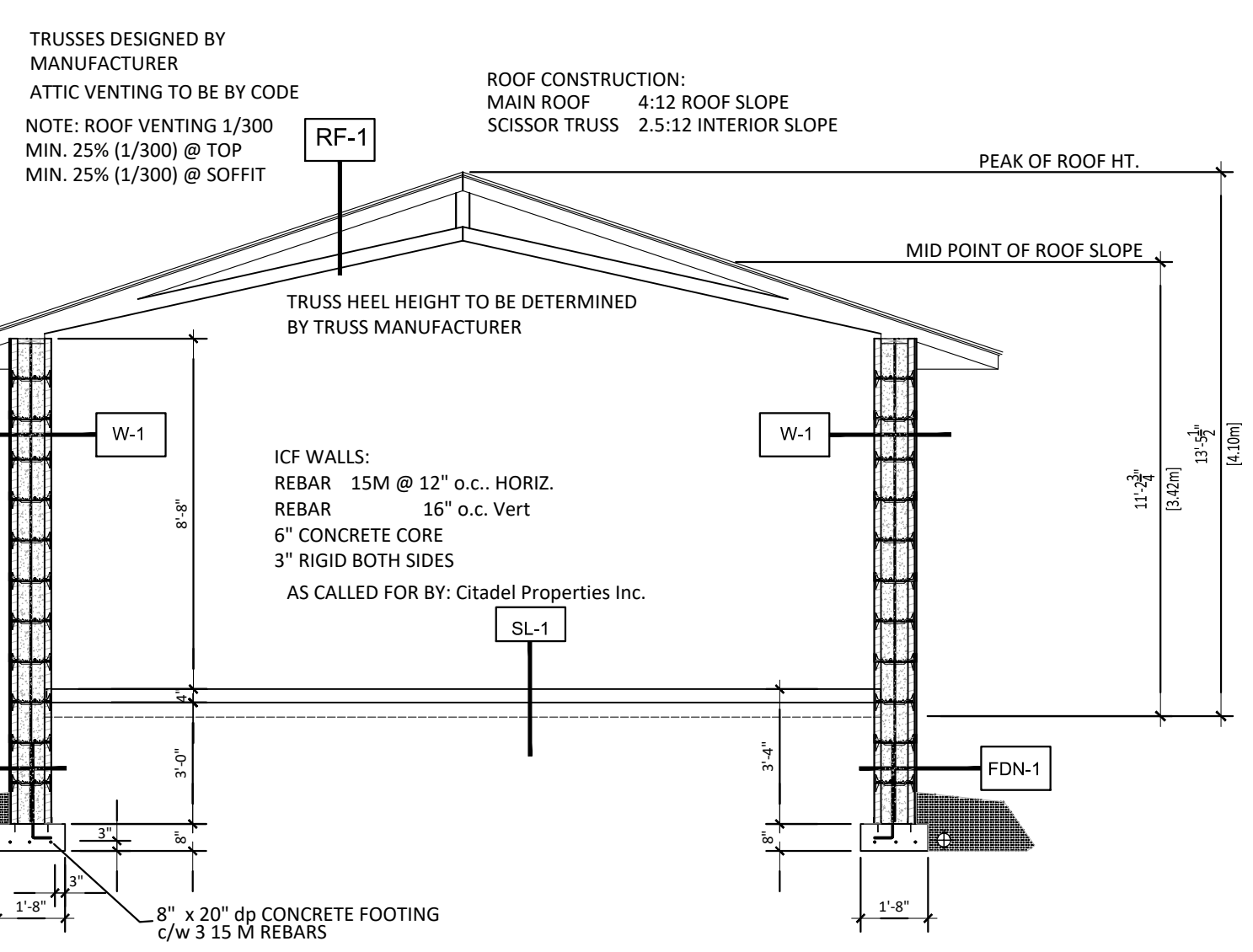
**2 FLOOR PLAN**  
SCALE: 1/4"=1'-0"



**5 ROOF SECTION DETAIL**  
SCALE: 3/4"=1'-0"



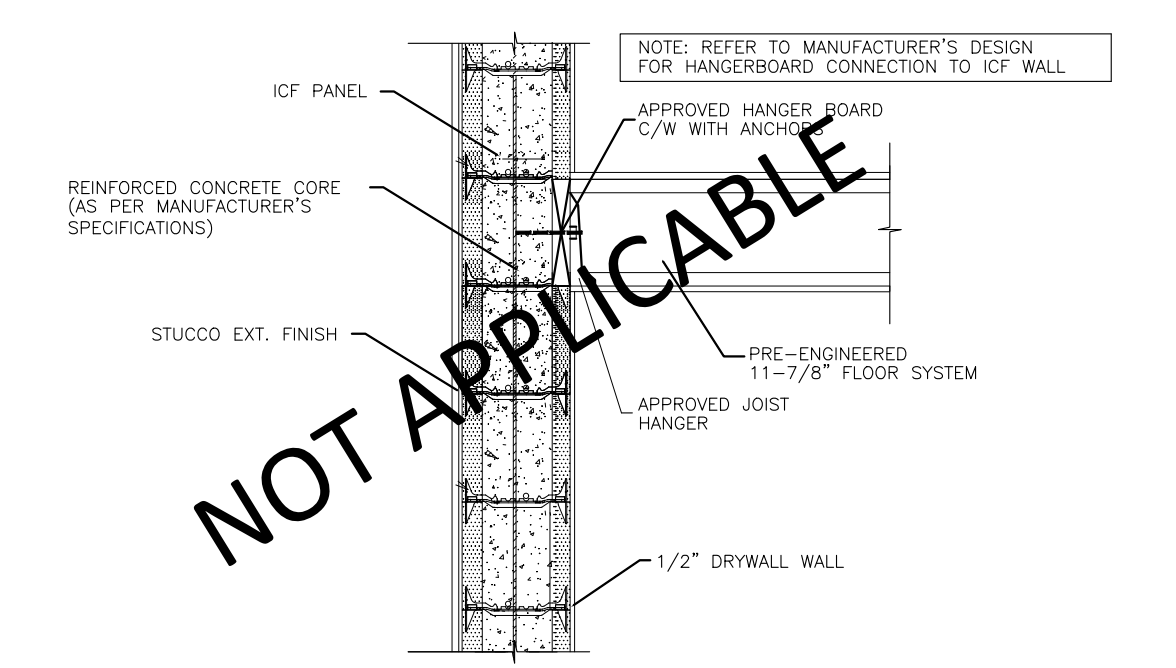
**4 WINDOW SECTION DETAIL**  
SCALE: 3/4"=1'-0"



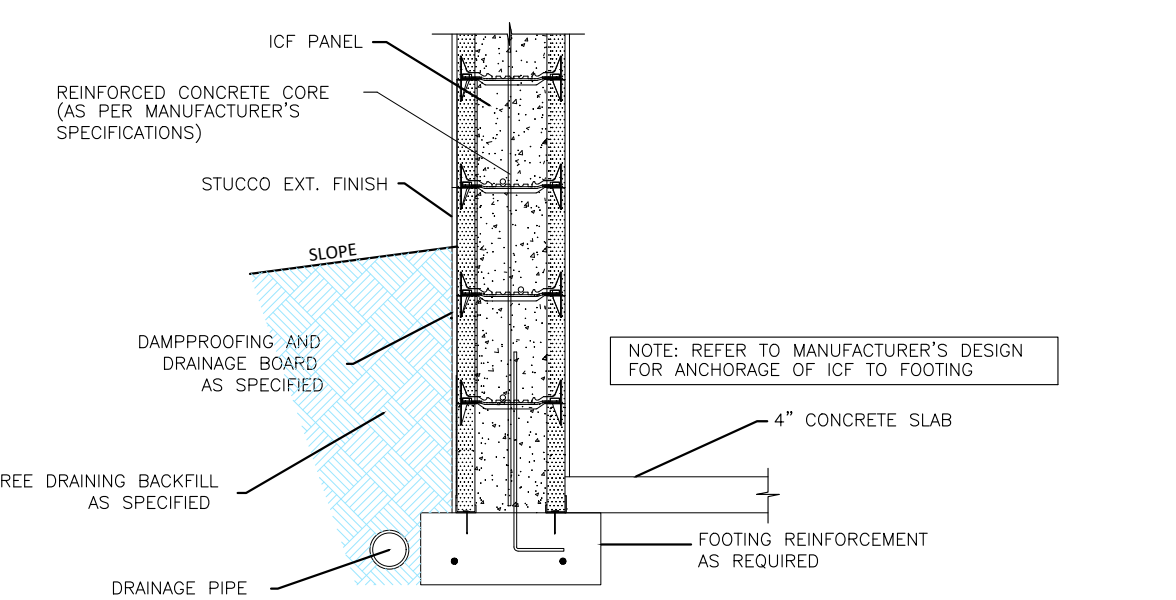
**3 CROSS SECTION**  
SCALE: 1/4"=1'-0"



**4 CROSS SECTION**  
SCALE: 1/4"=1'-0"



**3 FLOOR SECTION DETAIL**  
SCALE: 3/4"=1'-0"



**2 FOOTING SECTION DETAIL**  
SCALE: 3/4"=1'-0"

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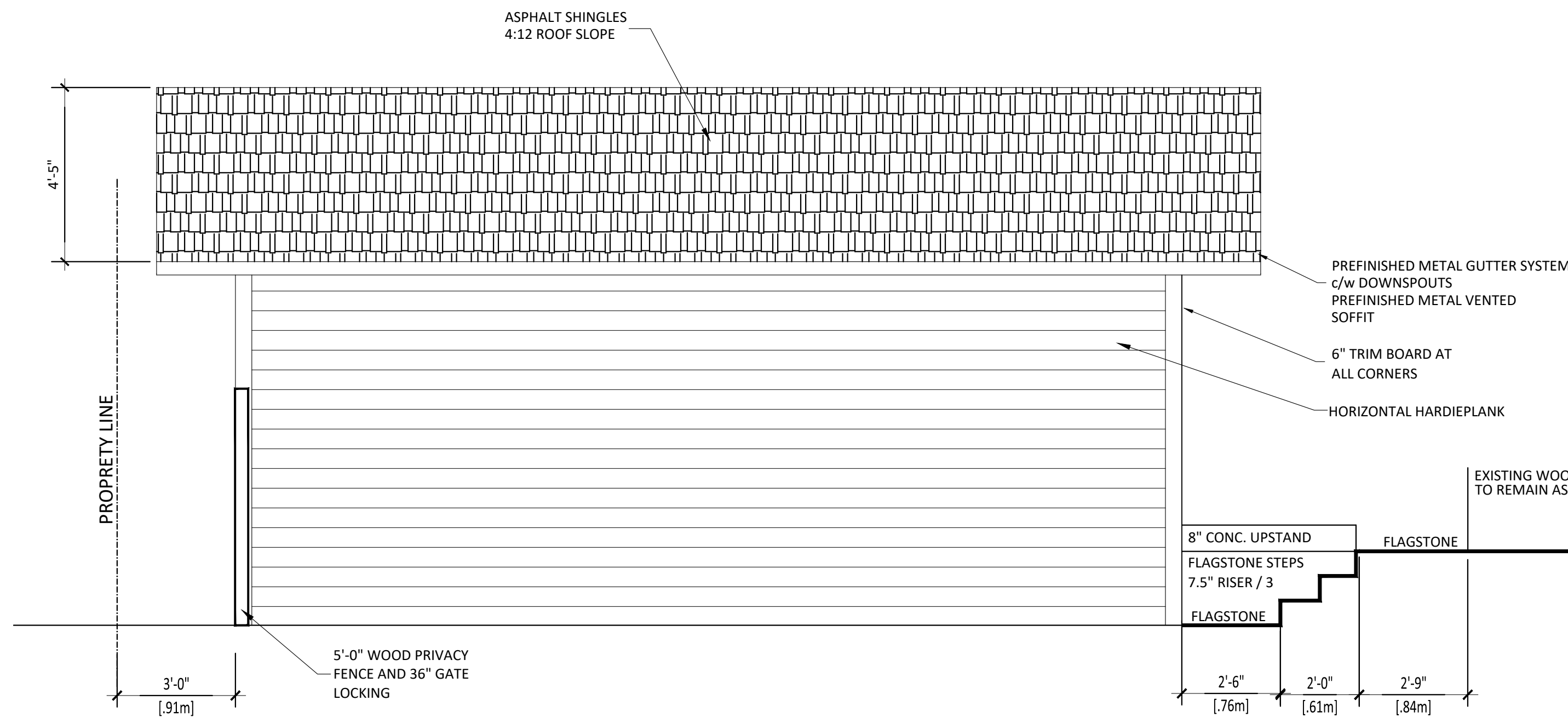
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**PROJECT**  
REAR GARAGE / RENOVATION  
1862 MAPLE STREET  
KELOWNA, B.C.

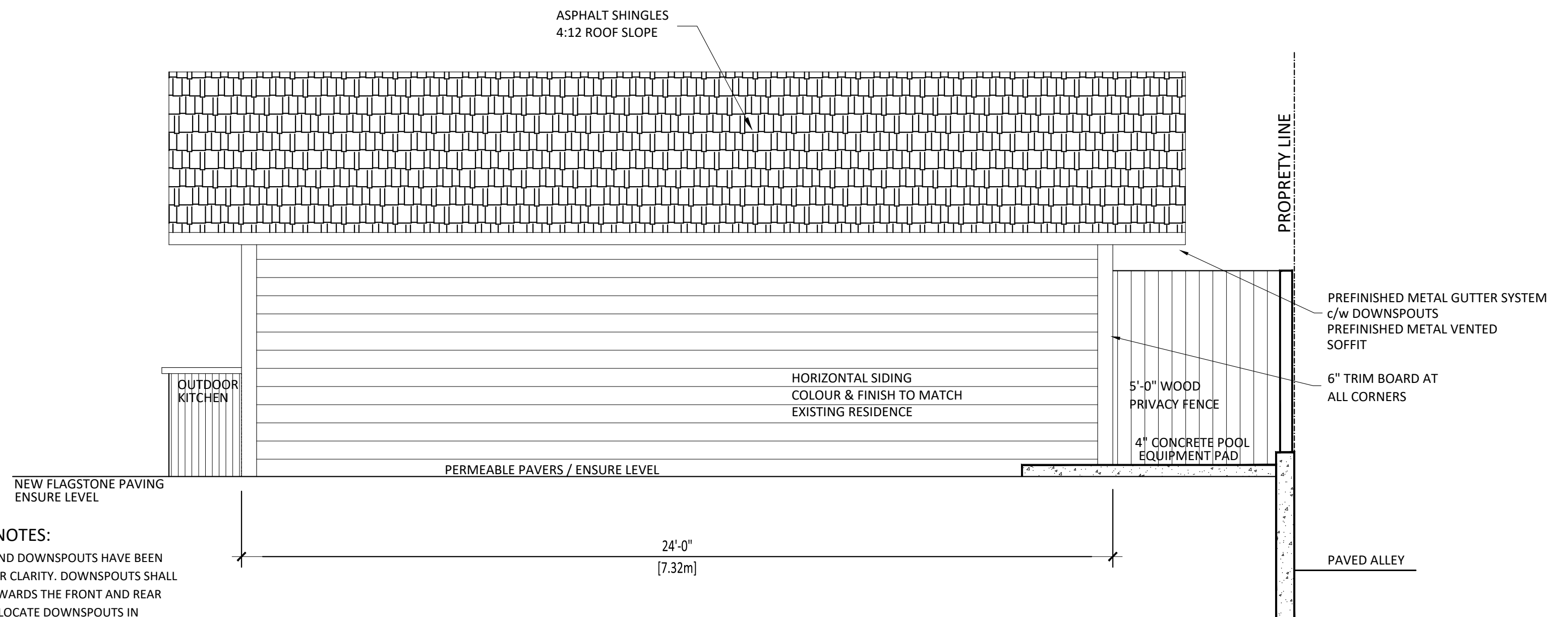
**SHEET TITLE**  
NEW GARAGE

DRAWN	RAH	SHEET NO.	A 3
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DATE	July 8, 2023	DATE	July 8, 2023

Rev. 0



1 SOUTH ELEVATION  
SCALE: 3/8"=1'-0"

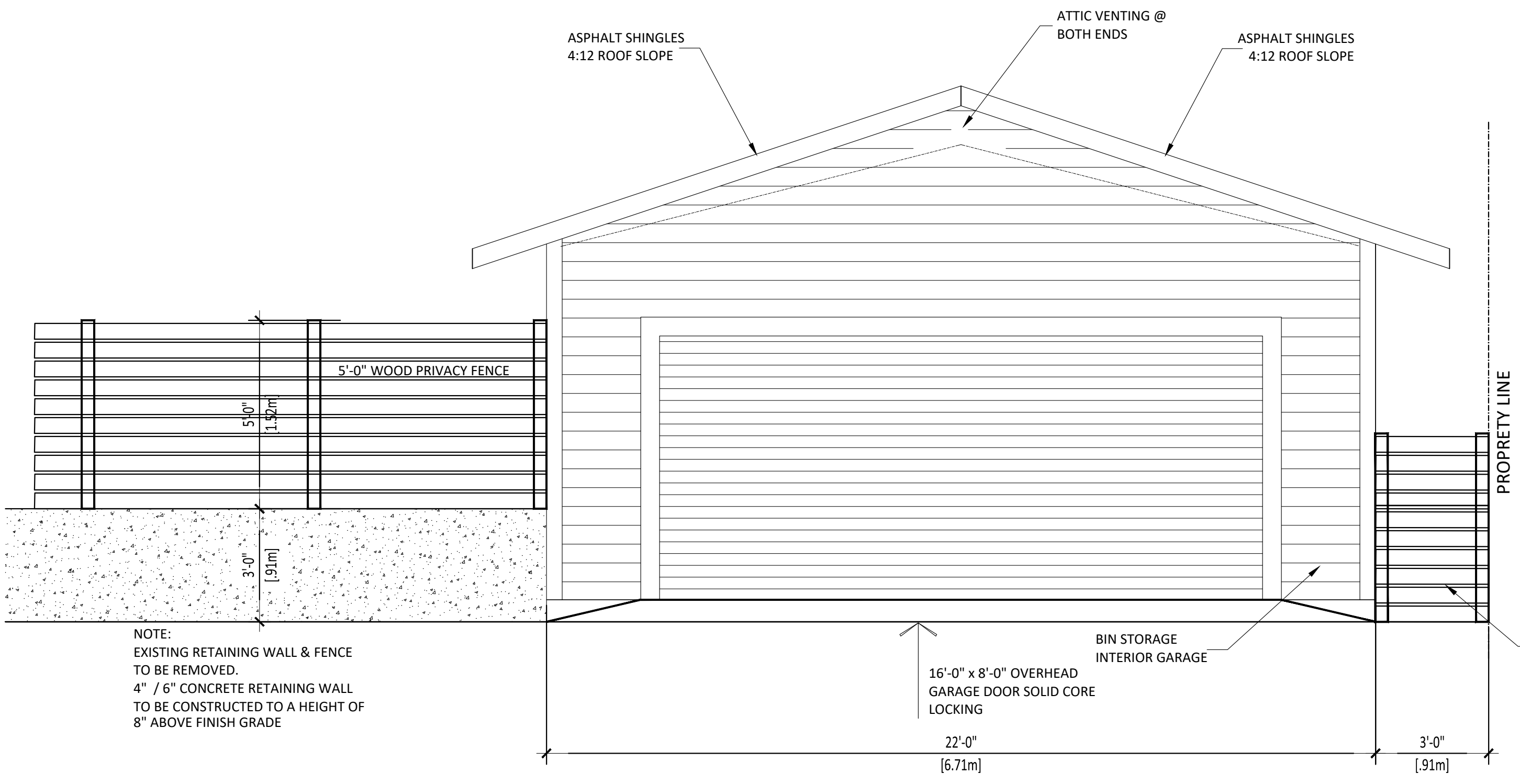


2 NORTH ELEVATION  
SCALE: 3/8"=1'-0"

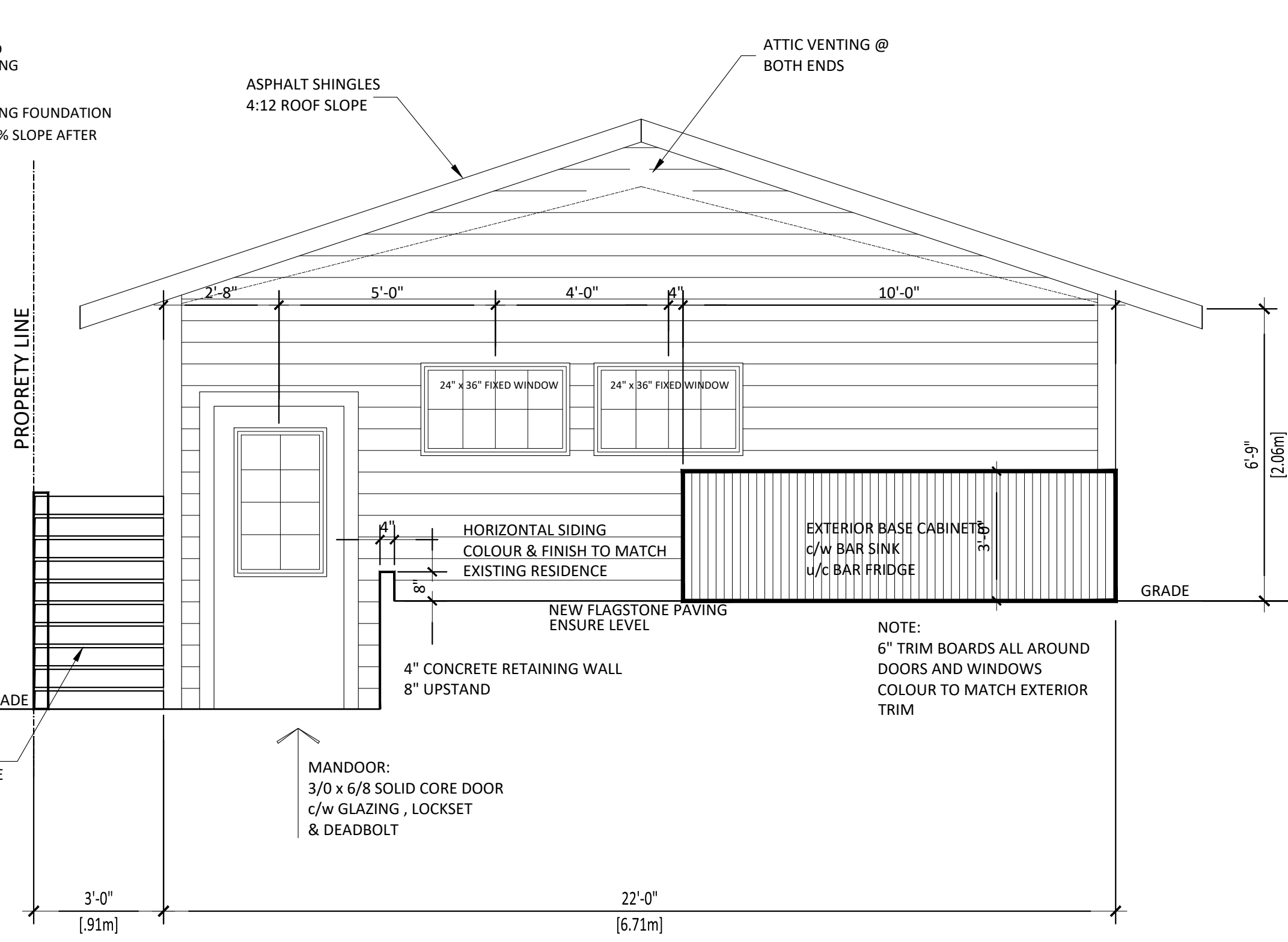
**ELEVATION NOTES:**

1. ALL GUTTERS AND DOWNSPOUTS HAVE BEEN NOT SHOWN FOR CLARITY. DOWNSPOUTS SHALL BE LOCATED TOWARDS THE FRONT AND REAR OF THE HOUSE. LOCATE DOWNSPOUTS IN NON-VISUALLY OFFENSIVE LOCATIONS. GENERAL CONTRACTOR TO VERIFY EXISTING GRADE AND COORDINATE ANY NECESSARY ADJUSTMENTS TO HOUSE WITH OWNER.
2. PLUMBING AND HVAC VENTING SHALL BE GROUPED IN A MANNER TO LIMIT ROOF PENETRATIONS AND TO RELOCATED AS TO MINIMIZE PUBLIC VIEW. THE PENETRATIONS SHALL BE PRIMED AND PAINTED TO MATCH ROOF COLOUR.
3. PROVIDE ATTIC VENTILATION PER LOCAL CODE REQUIREMENTS.
4. EXTERIOR FLASHING SHALL BE CORRECTLY INSTALLED AT ALL CONNECTIONS BETWEEN ROOF AND WALLS, PROJECTIONS, PENETRATIONS AND CHIMNEYS AS REQUIRED BY APPROVED CONSTRUCTION PRACTICES.
5. CONTRACTOR SHALL PROVIDE ADEQUATE ATTIC VENTILATION / ROOF VENTS PER LOCAL CODE INSTALL CONTINUOUS RIDGE VENTILATION AND PAINT TO MATCH ROOF (WHERE APPLICABLE) PROVIDE APPROPRIATE SOFFIT VENTILATION AT ALL OVERHANGS.
6. WINDOW SPECIFICATIONS TO BE CONFIRMED BY OWNER / CONTRACTOR PRIOR TO ORDERING TO ENSURE PROPER VENTING AND EGRESS
7. FINISH GRADE TO SLOPE AWAY FROM BUILDING FOUNDATION AT A 2% SLOPE IN THE FIRST 10'-0" AND AT 1% SLOPE AFTER THAT TO AN APPROVED DRAINAGE AREA.

NOTE:  
ALL DOORS AND WINDOWS SHOWN ON THE ELEVATIONS ARE FOR SUGGESTION ONLY. EXACT DOORS ARE TO BE SELECTED BY THE OWNER.



3 ALLEY VIEW WEST ELEVATION  
SCALE: 3/8"=1'-0"



4 EAST ELEVATION  
SCALE: 3/8"=1'-0"

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PROJECT  
**REAR GARAGE / RENOVATION**  
1862 MAPLE STREET  
KELOWNA, B.C.

SHEET TITLE  
**GARAGE ELEVATION**

DRAWN	RAH	SHEET NO.	<b>A 4</b>
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