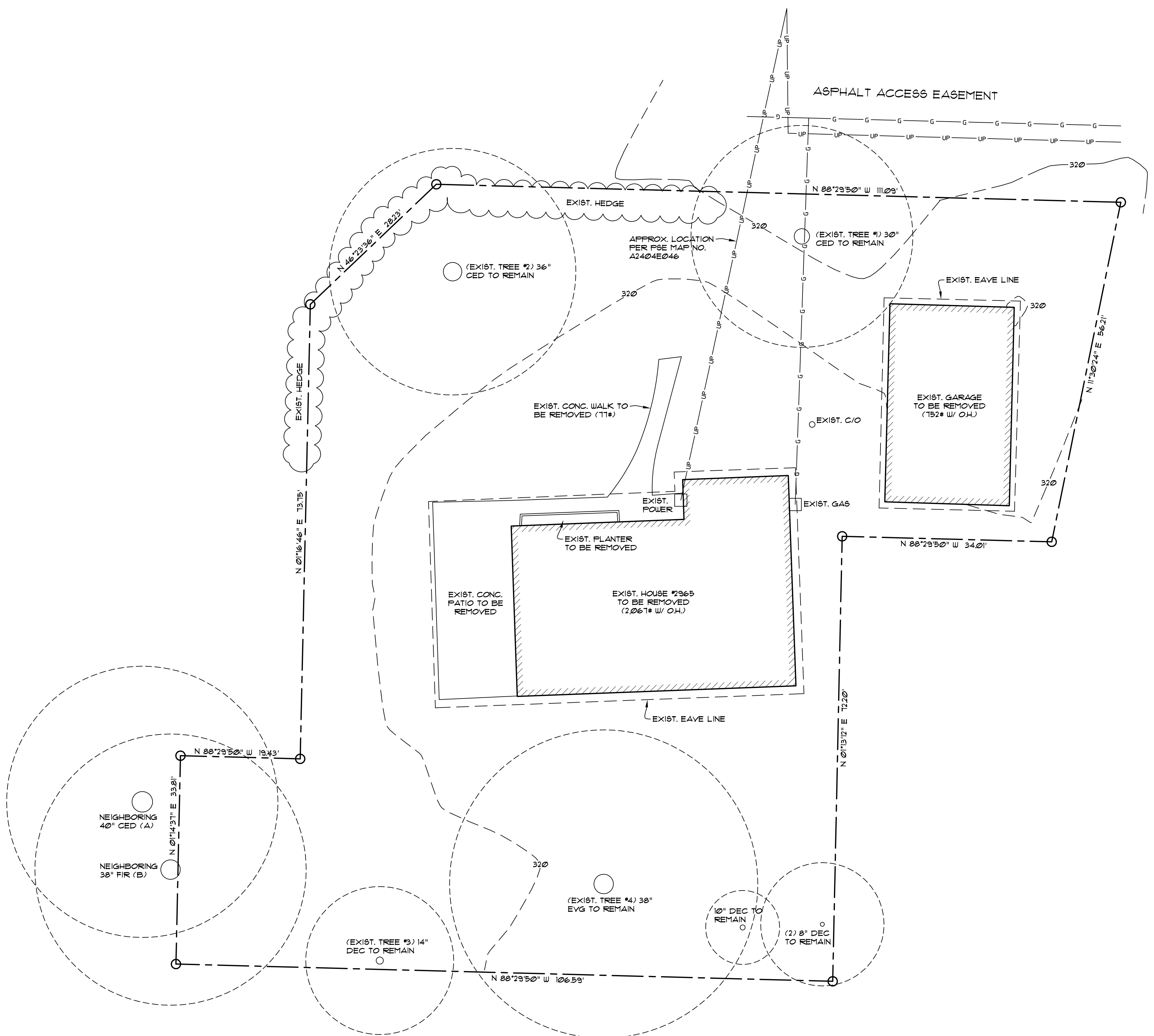


nw
lifestyle
homes
www.nwlifestylehomes.com

N W L H

HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040



TREE INVENTORY		
TREE #1	30" CEDAR	TO BE REMOVED
TREE #2	36" CEDAR	TO REMAIN
TREE #3	14" CEDAR	TO REMAIN
TREE #4	38" EVERGREEN	TO REMAIN
TREE 'A'	40" CEDAR	NEIGHBORING PROPERTY
TREE 'B'	38" FIR	NEIGHBORING PROPERTY

EFFECTIVE MARCH 15, 2024 WASHINGTON STATUTES MANDATE ALL JURISDICTIONS IN THE STATE TO ADOPT AND ENFORCE THE FOLLOWING UPDATED CONSTRUCTION CODE EDITIONS AS THEY WERE ADOPTED AND AMENDED BY THE STATE OF WASHINGTON:

2021 INTERNATIONAL BUILDING CODE (IBC)
 2021 INTERNATIONAL RESIDENTIAL CODE (IRC)
 2021 INTERNATIONAL MECHANICAL CODE (IMC)
 2021 INTERNATIONAL FUEL GAS CODE (IFGC)
 2021 UNIFORM PLUMBING CODE (UPC)
 2021 INTERNATIONAL FIRE CODE (IFC)
 2021 INTERNATIONAL EXISTING BUILDING CODE
 2021 INTERNATIONAL SWIMMING POOL AND SPA CODE
 2021 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE
 2021 WASHINGTON STATE ENERGY CODE (WSEC)
 2021 WASHINGTON CITIES ELECTRICAL CODE (WCEC)
 (C/C/ANS) A117.1, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES, WITH STATEWIDE AND CITY AMENDMENTS

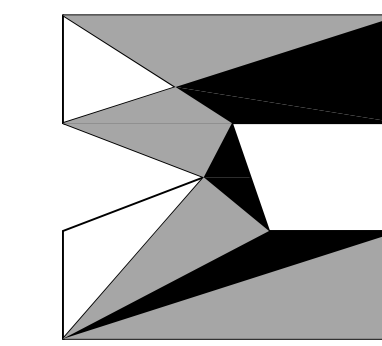
SHEET INDEX	
1 OF 1	- TOPOGRAPHIC & BOUNDARY SURVEY
A0.1	- SITE DEMOLITION PLAN & TREE RETENTION PLAN
A0.2	- SITE PLAN
A0.3	- SITE PLAN NOTES & DETAILS
A0.4	- GENERAL NOTES
A1	- FOUNDATION PLAN
A2	- MAIN FLOOR FRAMING PLAN
A3	- MAIN FLOOR PLAN
A4	- UPPER FLOOR & MAIN ROOF FRAMING PLAN
A5	- UPPER FLOOR PLAN
A6	- UPPER ROOF FRAMING PLAN
A7	- FRONT & LEFT BUILDING ELEVATIONS
A8	- REAR & RIGHT BUILDING ELEVATIONS
A9	- BUILDING SECTIONS 'A', 'B', & 'C'
A10	- WINDOW & DOOR SCHEDULES
D1	- BUILDING DETAILS
SD1	- STRUCTURAL ENGINEERING NOTES
SD2	- STRUCTURAL DETAILS
SD3	- STRUCTURAL MAIN & UPPER FLOOR SHEAR WALLS
C-101	- CIVIL COVER SHEET
C-102	- CIVIL GENERAL NOTES AND LEGEND
C-201	- DEMOLITION AND TESC PLAN
C-202	- DEMOLITION AND TESC PLAN
C-301	- GRADING AND DRAINAGE PLAN
C-401	- UTILITY PLAN
C-402	- UTILITY PLAN
C-501	- CIVIL DETAILS

JOB NO: 23-012
 DATE: 2/11/25
 DRW. BY: M/M/MG
 REVISED: 1/17/25

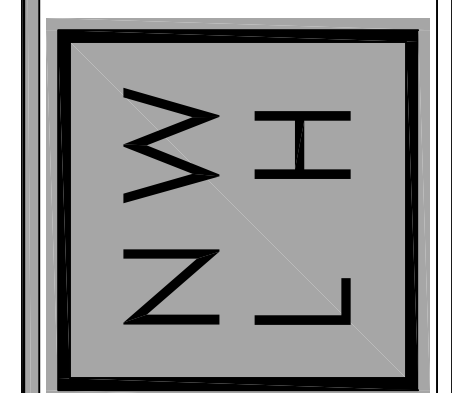
SHEET NO.
A0.1

NORTH

SITE DEMOLITION PLAN & TREE RETENTION PLAN
 SCALE: 1" = 10'
HACKETT RESIDENCE
 2965 74TH AVE SE
 MERCER ISLAND, WA 98040



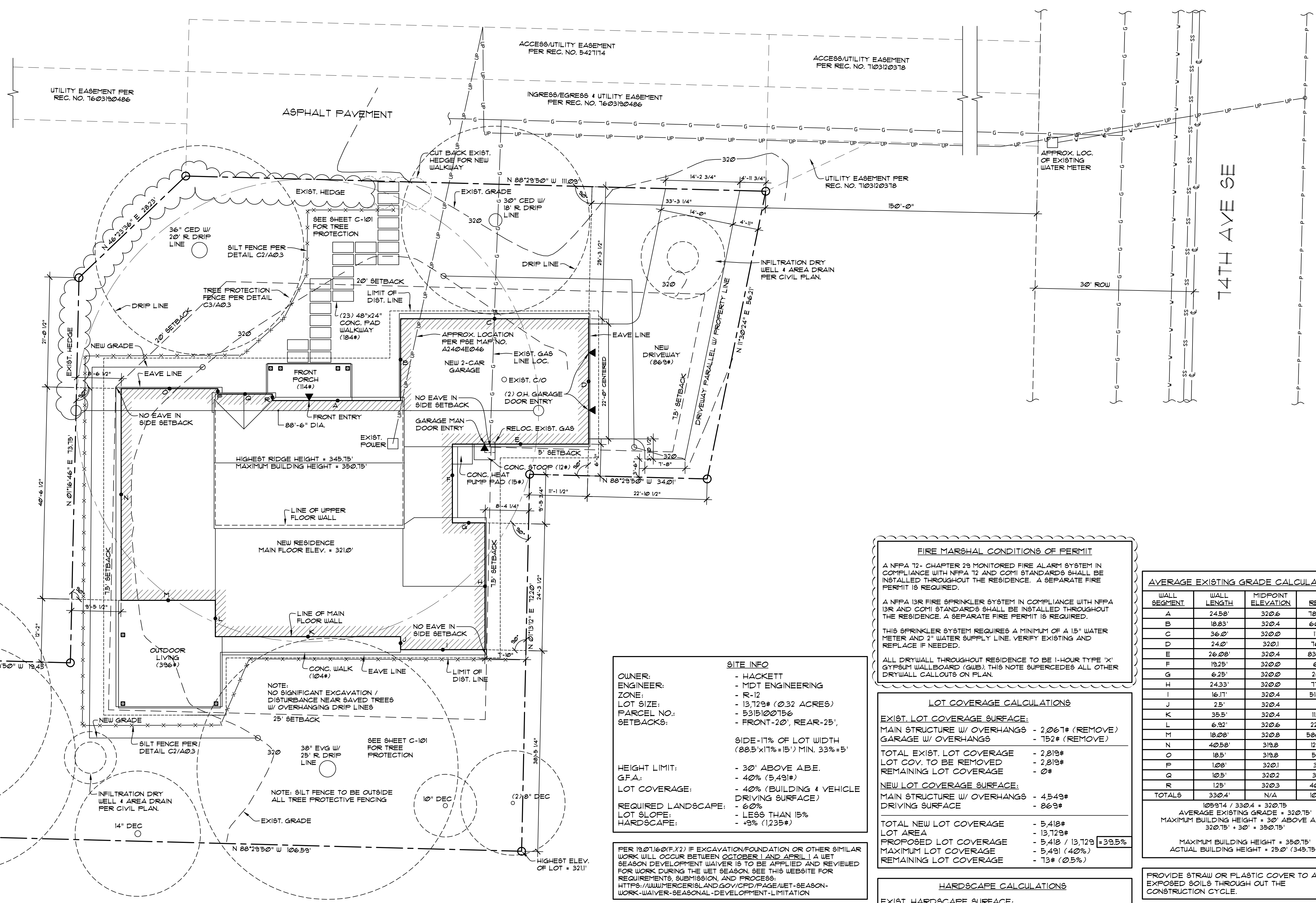
nw
lifestyle
homes
www.nwlifestylehomes.com



HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

JOB NO: 23-012
DATE: 2/11/25
DRWN. BY: MM/MG
REVISED: 8/21/25

SHEET NO.
A0.2



FIRE MARSHAL CONDITIONS OF PERMIT
A NFPA 12- CHAPTER 29 MONITORED FIRE ALARM SYSTEM IN COMPLIANCE WITH NFPA 72 AND COM1 STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.
A NFPA 13R FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13R AND COM1 STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.
THIS SPRINKLER SYSTEM REQUIRES A MINIMUM OF A 1 1/2" WATER METER AND 2" WATER SUPPLY LINE. VERIFY EXISTING AND REPLACE IF NEEDED.
ALL DRYWALL THROUGHOUT RESIDENCE TO BE 1-HOUR TYPE 'X' GYPSUM WALLBOARD (GWB). THIS NOTE SUPERCEDES ALL OTHER DRYWALL CALLOUTS ON PLAN.

SITE INFO
OWNER: - HACKETT
ENGINEER: - MDT ENGINEERING
ZONE: - R-12
LOT SIZE: - 13,129 sq ft (0.32 ACRES)
PARCEL NO.: - 5315100156
SETBACKS: - FRONT-20', REAR-25',
SIDE-17% OF LOT WIDTH (88.5'x17% = 15') MIN. 33% = 5'
HEIGHT LIMIT: - 30' ABOVE A.B.E.
G.F.A.: - 40% (5,491 sq ft)
LOT COVERAGE: - 40% (BUILDING & VEHICLE DRIVING SURFACE)
REQUIRED LANDSCAPE: - 60%
LOT SLOPE: - LESS THAN 15%
HARDSCAPE: - +9% (1,235 sq ft)

PER 19.07.160(F.12) IF EXCAVATION/FOUNDATION OR OTHER SIMILAR WORK WILL OCCUR BETWEEN OCTOBER 1 AND APRIL 1 A WET SEASON DEVELOPMENT WAIVER IS TO BE APPLIED AND REVIEWED FOR WORK DURING THE WET SEASON. SEE THIS WEBSITE FOR REQUIREMENTS, SUBMISSION, AND PROCESS:
<https://www.wa.gov/development-waiver-waiver-seasonal-development-limitation>

LOT SLOPE:
HIGHEST ELEVATION POINT OF LOT (SE CORNER): - 321.1'
LOWEST ELEVATION POINT OF LOT (SW CORNER): - 318.5'
ELEVATION DIFFERENCE (321.1 - 318.5): - 2.6'
HORIZ. DIFFERENCE BETWEEN HIGH & LOW POINTS: - 106.59'
LOT SLOPE (2.6 / 106.59): - 2.4%

DEVELOPMENT PROPOSALS FOR A NEW SINGLE-FAMILY HOME SHALL REMOVE JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUANT TO SUBSECTION 19.02.02(F)(3)(A). NEW LANDSCAPING ASSOCIATED WITH NEW SINGLE-FAMILY HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.

LOT COVERAGE CALCULATIONS

EXIST. LOT COVERAGE SURFACE:	
MAIN STRUCTURE W/ OVERHANGS	- 2,067 sq ft (REMOVE)
GARAGE W/ OVERHANGS	- 152 sq ft (REMOVE)
TOTAL EXIST. LOT COVERAGE	- 2,219 sq ft
LOT COV. TO BE REMOVED	- 2,219 sq ft
REMAINING LOT COVERAGE	- 0 sq ft
NEW LOT COVERAGE SURFACE:	
MAIN STRUCTURE W/ OVERHANGS	- 4,549 sq ft
DRIVING SURFACE	- 869 sq ft
TOTAL NEW LOT COVERAGE	- 5,418 sq ft
LOT AREA	- 13,129 sq ft
PROPOSED LOT COVERAGE	- 5,418 / 13,129 = 41.3%
MAXIMUM LOT COVERAGE	- 5,491 (42%)
REMAINING LOT COVERAGE	- 773 sq ft (5.9%)

HARDSCAPE CALCULATIONS

EXIST. HARDSCAPE SURFACE:	
CONC. WALK	- 17 sq ft (REMOVE)
TOTAL EXIST. HARDSCAPE	- 17 sq ft
HARDSCAPE TO BE REMOVED	- 17 sq ft
REMAINING HARDSCAPE	- 0 sq ft
NEW HARDSCAPE SURFACE:	
UNCOVERED FRONT PORCH	- 3 sq ft
UNCOVERED OL. PATIO	- 5 sq ft
CONCRETE WALKWAY	- 104 sq ft
GARAGE CONC. SToop	- 11 sq ft
HEAT PUMP CONC. PAD	- 10 sq ft
TOTAL NEW HARDSCAPE	- 137 sq ft
LOT AREA	- 13,129 sq ft
PROPOSED HARDSCAPE	- 137 / 13,129 = 1.0%
MAXIMUM HARDSCAPE %	- 0.5% + 9.0% = 9.5%
REMAINING HARDSCAPE	- 1,098 sq ft

AVERAGE EXISTING GRADE CALCULATIONS

WALL SEGMENT	WALL LENGTH	MIDPOINT ELEVATION	RESULT
A	24.58'	320.6	7880.35
B	10.83'	320.4	6033.13
C	36.0'	320.0	11520
D	24.0'	320.1	7682.4
E	26.08'	320.4	8356.03
F	19.25'	320.0	6160
G	6.25'	320.0	2000
H	24.33'	320.0	7785.6
I	16.11'	320.4	5180.81
J	2.5'	320.4	801
K	35.5'	320.4	11374.2
L	6.32'	320.6	2218.55
M	10.08'	320.8	5000.06
N	40.58'	319.8	12911.5
O	10.5'	319.8	5916.3
P	10.8'	320.1	3451.7
Q	10.5'	320.2	3362.1
R	12.5'	320.3	4003.8
TOTALS	330.4'	N/A	105914

105914 / 330.4 = 320.75
AVERAGE EXISTING GRADE = 320.75'
MAXIMUM BUILDING HEIGHT = 30' ABOVE A.E.G. 320.75' + 30' = 350.75'
MAXIMUM BUILDING HEIGHT = 350.75'
ACTUAL BUILDING HEIGHT = 25'0" (345.75')

PROVIDE STRAW OR PLASTIC COVER TO ANY EXPOSED SOILS THROUGH OUT THE CONSTRUCTION CYCLE.

24 HOUR EROSION CONTROL CONTACT INFO.
MASON MAUER - 425.417.1819

INFORMATION TAKEN FROM TOPOGRAPHIC & BOUNDARY SURVEY DATED 11/02/2023 BY TERRANE (JOB #231833)

GROSS FLOOR AREA CALCULATIONS

SITE AREA	- 13,129 sq ft
ALLOWABLE F.A.R.	- 5.49% (40%)
MAIN FLOOR W/ GARAGE	- 3,320 sq ft
UPPER FLOOR	- 822 sq ft
TOTAL FLOOR AREA	- 4,142 sq ft
PROPOSED G.F.A.	- 4,142 (34.5%)

SITE PLAN
SCALE: 1" = 10'
HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

TEMPORARY EROSION/SEDIMENTATION CONTROL - PLAN NOTES

1. THE APPROVED CONSTRUCTION SEQUENCE SHALL BE AS FOLLOWS:
 - A. CONDUCT PRE-CONSTRUCTION MEETING.
 - B. FLAG OR FENCE CLEARING LIMITS.
 - C. POST SIGN WITH NAME AND PHONE NUMBER OF TESC SUPERVISOR.
 - D. INSTALL CATCH BASIN PROTECTION IF REQUIRED.
 - E. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
 - F. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
 - G. CONSTRUCT SEDIMENT PONDS AND TRAPS.
 - H. GRADE AND STABILIZE CONSTRUCTION ROADS.
 - I. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
 - J. MAINTAIN EROSION CONTROL MEASURE IN ACCORDANCE WITH CITY/COUNTY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
 - K. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY/COUNTY TESC MINIMUM REQUIREMENTS.
 - L. COVER ALL AREAS WITHIN THE SPECIFIED TIME FRAME WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, CRUSHED ROCK OR EQUIVALENT.
 - M. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN 7 DAYS.
 - N. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
 - O. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.

2. CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS CLEAN AND FREE OF CONTAMINANTS AT ALL TIMES AND FOR PREVENTING AN ILLICIT DISCHARGE (KMC 18.52) INTO THE MUNICIPAL STORM DRAIN SYSTEM. IF YOUR CONSTRUCTION PROJECT CAUSES AN ILLICIT DISCHARGE TO THE MUNICIPAL STORM DRAIN SYSTEM, THE CITY/COUNTY STORM MAINTENANCE DIVISION WILL BE CALLED TO CLEAN THE PUBLIC STORM SYSTEM AND OTHER AFFECTED PUBLIC INFRASTRUCTURE. THE CONTRACTOR(S), PROPERTY OWNER, AND ANY OTHER RESPONSIBLE PARTY MAY BE CHARGED ALL COSTS ASSOCIATED WITH THE CLEAN-UP AND MAY ALSO BE ASSESSED MONETARY PENALTIES. THE MINIMUM PENALTY IS \$200. A FINE FOR A REPEAT VIOLATION SHALL BE A MULTIPLIED BY THE NUMBER OF VIOLATIONS. A FINE MAY BE REQUIRED OR WAIVED FOR PERSONS WHO IMMEDIATELY SELF-REPORT VIOLATION TO THE CITY/COUNTY. A FINAL INSPECTION OF YOUR PROJECT WILL NOT BE GRANTED UNTIL ALL COSTS ASSOCIATED WITH THE CLEAN-UP, AND PENALTIES, ARE PAID TO THE CITY/COUNTY.

3. CONSTRUCTION DEWATERING DISCHARGES SHALL ALWAYS MEET WATER QUALITY GUIDELINES LISTED IN COK POLICY E-1. SPECIFICALLY, DISCHARGES TO THE PUBLIC STORMWATER DRAINAGE SYSTEM MUST BE BELOW 25 NTU, AND NOT CONSIDERED AN ILLICIT DISCHARGE. TEMPORARY DISCHARGES TO SANITARY SEWER REQUIRE PRIOR AUTHORIZATION AND PERMIT AND NOTIFICATION TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR.

4. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY/COUNTY STANDARDS AND SPECIFICATIONS.

5. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE SET BY SURVEY AND CLEARLY FLAGGED IN THE FIELD BY A CLEARING CONTROL FENCE PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE OR REMOVAL OF ANY GROUND COVER BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE PERMITTEE/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.

6. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

7. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.

8. A COPY OF THE APPROVED ESC PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

9. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.

10. THE ESC FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THE APPROVED PLANS. LOCATIONS MAY BE MOVED TO SUIT FIELD CONDITIONS, SUBJECT TO APPROVAL BY THE ENGINEER AND THE CITY/COUNTY INSPECTOR.

11. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G. ADDITIONAL BUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS. ADDITIONALLY, MORE ESC FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED.

12. THE ESC FACILITIES SHALL BE INSPECTED BY THE PERMITTEE/CONTRACTOR DAILY DURING NON-RAINFALL PERIODS, EVERY HOUR (DAYLIGHT) DURING A RAINFALL EVENT, AND AT THE END OF EVERY RAINFALL, AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, TEMPORARY SILTATION PONDS AND ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED. WRITTEN RECORDS SHALL BE KEPT DOCUMENTING THE REVIEW OF THE ESC FACILITIES.

13. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.

14. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

15. ALL DENUDED SOILS MUST BE STABILIZED WITH AN APPROVED TESC METHOD (E.G. SEEDING, MULCHING, PLASTIC COVERING, CRUSHED ROCK) WITHIN THE FOLLOWING TIMELINES:
 • MAY 1 TO SEPTEMBER 30 - SOILS MUST BE STABILIZED WITHIN 7 DAYS OF GRADING.
 • OCTOBER 1 TO APRIL 30 - SOILS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING.
 • STABILIZE SOILS AT THE END OF THE WORKDAY PRIOR TO A WEEKEND, HOLIDAY, OR PREDICTED RAIN EVENT.

16. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (EXAMPLE: ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).

17. WHERE STRAW MULCH IS REQUIRED FOR TEMPORARY EROSION CONTROL, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2".

18. ALL LOTS ADJOINING OR HAVING ANY NATIVE GROWTH PROTECTION EASEMENTS (NGPE) SHALL HAVE A 6' HIGH TEMPORARY CONSTRUCTION FENCE (CHAIN LINK WITH PIER BLOCKS) SEPARATING THE LOT (OR BUILDABLE PORTIONS OF THE LOT) FROM THE AREA RESTRICTED BY THE NGPE AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR CLEARING AND REMAIN IN PLACE UNTIL THE PLANNING DEPARTMENT AUTHORIZES REMOVAL.

19. CLEARING LIMITS SHALL BE DELINEATED WITH A CLEARING CONTROL FENCE. THE CLEARING CONTROL FENCE SHALL CONSIST OF A 6-FT. HIGH CHAIN LINK FENCE ADJACENT THE DRIP LINE OF TREES TO BE SAVED, WETLAND OR STREAM BUFFERS, AND SENSITIVE SLOPES. CLEARING CONTROL FENCES ALONG WETLAND OR STREAM BUFFERS OR UPSLOPE OF SENSITIVE SLOPES SHALL BE ACCOMPANIED BY AN EROSION CONTROL FENCE. IF APPROVED BY THE CITY, A FOUR-FOOT HIGH ORANGE MESH CLEARING CONTROL FENCE MAY BE USED TO DELINEATE CLEARING LIMITS IN ALL OTHER AREAS.

20. OFF-SITE STREETS MUST BE KEPT CLEAN AT ALL TIMES. IF DIRT IS DEPOSITED ON THE PUBLIC STREET SYSTEM, THE STREET SHALL BE IMMEDIATELY CLEANED WITH POWER SWEEPER OR OTHER EQUIPMENT. ALL VEHICLES SHALL LEAVE THE SITE BY WAY OF THE CONSTRUCTION ENTRANCE AND SHALL BE CLEANED OF ALL DIRT THAT WOULD BE DEPOSITED ON THE PUBLIC STREETS.

21. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES (WHERE REQUIRED) MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF 1' AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8" ROCK/40%-10% PASSING; 2"-4" ROCK/30%-40% PASSING; AND 1"-2" ROCK/10%-20% PASSING. RECYCLED CONCRETE SHALL NOT BE USED FOR EROSION PROTECTION, INCLUDING CONSTRUCTION ENTRANCE OR TEMPORARY STABILIZATION ELSEWHERE ON THE SITE.

22. IF ANY PART(S) OF THE CLEARING LIMIT BOUNDARY OR TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN IS/ARE DAMAGED, IT SHALL BE REPAIRED IMMEDIATELY.

23. ALL PROPERTIES ADJACENT TO THE PROJECT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND RUNOFF.

24. AT NO TIME SHALL MORE THAN 1' OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED IMMEDIATELY FOLLOWING REMOVAL OF EROSION CONTROL BARRIERS. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSYSTEM SYSTEM.

25. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION OR DISPERSION SYSTEM, THE FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANK, DETENTION VAULT, OR SYSTEM WHICH BACKS UNDER OR INTO A POND SHALL BE USED AS A TEMPORARY SETTLING BASIN.

26. ALL EROSION/SEDIMENTATION CONTROL PONDS WITH A DEAD STORAGE DEPTH EXCEEDING 6" MUST HAVE A PERIMETER FENCE WITH A MINIMUM HEIGHT OF 3'.

27. THE WASHED GRAVEL BACKFILL ADJACENT TO THE FILTER FABRIC FENCE SHALL BE REPLACED AND THE FILTER FABRIC CLEANED IF IT IS NONFUNCTIONAL BY EXCESSIVE SILT ACCUMULATION AS DETERMINED BY THE CITY OF KIRKLAND. ALSO, ALL INTERCEPTOR SNALES SHALL BE CLEANED IF SILT ACCUMULATION EXCEEDS ONE-QUARTER DEPTH.

28. PRIOR TO THE OCTOBER 1 OF EACH YEAR (THE BEGINNING OF THE WET SEASON), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. THE IDENTIFIED DISTURBED AREA SHALL BE SEEDED WITHIN ONE WEEK AFTER OCTOBER 1. A SITE PLAN DEPICTING THE AREAS TO BE SEEDED AND THE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR. THE INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

29. ANY AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT (INCLUDING A 5-FOOT BUFFER) MUST BE SURROUNDED BY SILT FENCE PRIOR TO CONSTRUCTION AND UNTIL FINAL STABILIZATION OF THE SITE TO PREVENT SOIL CONTRACTION AND SILTATION BY CONSTRUCTION ACTIVITIES.

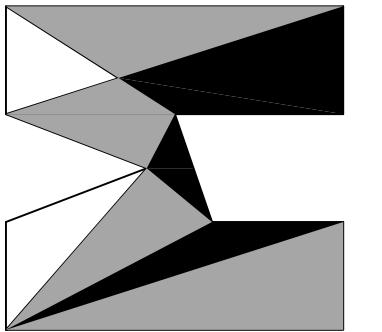
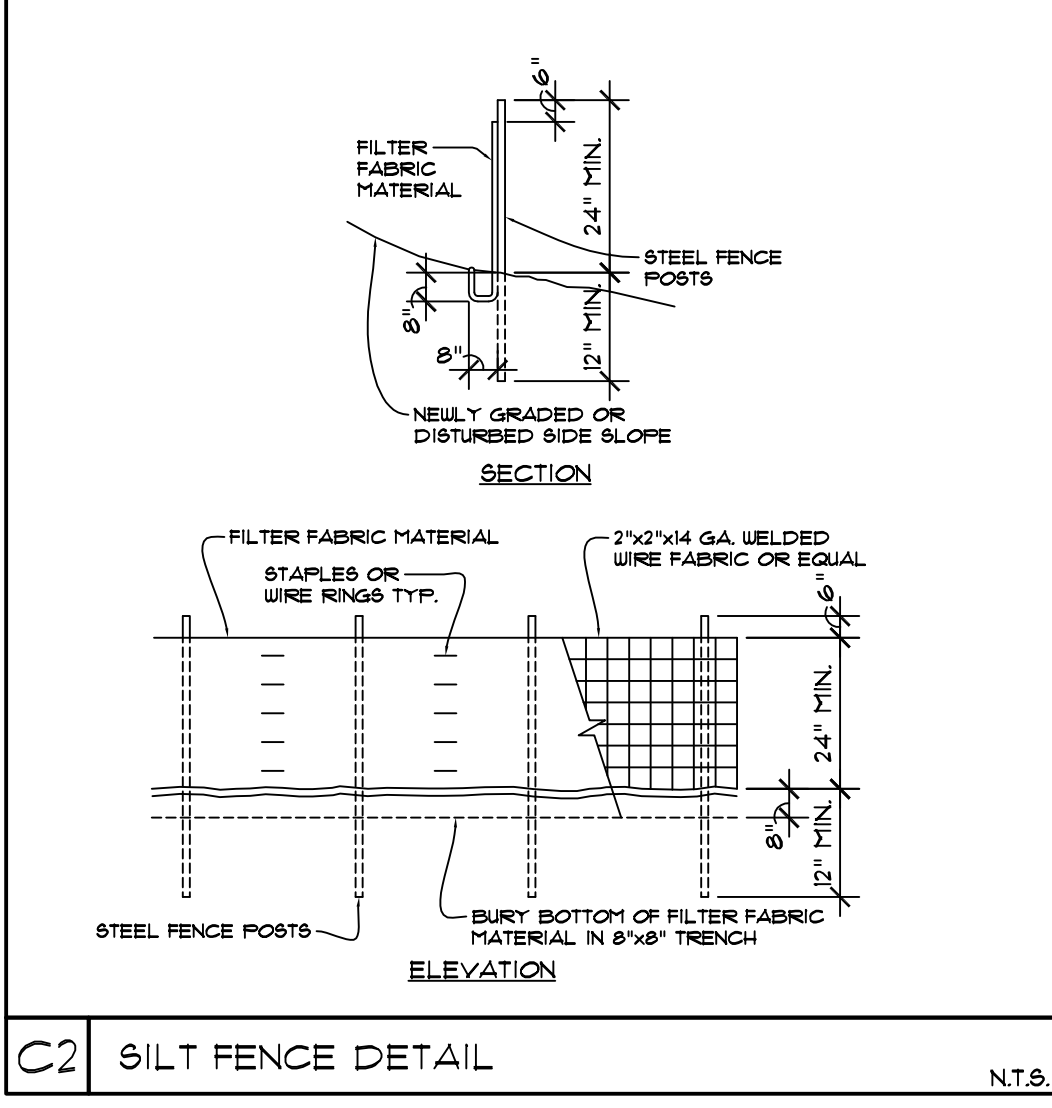
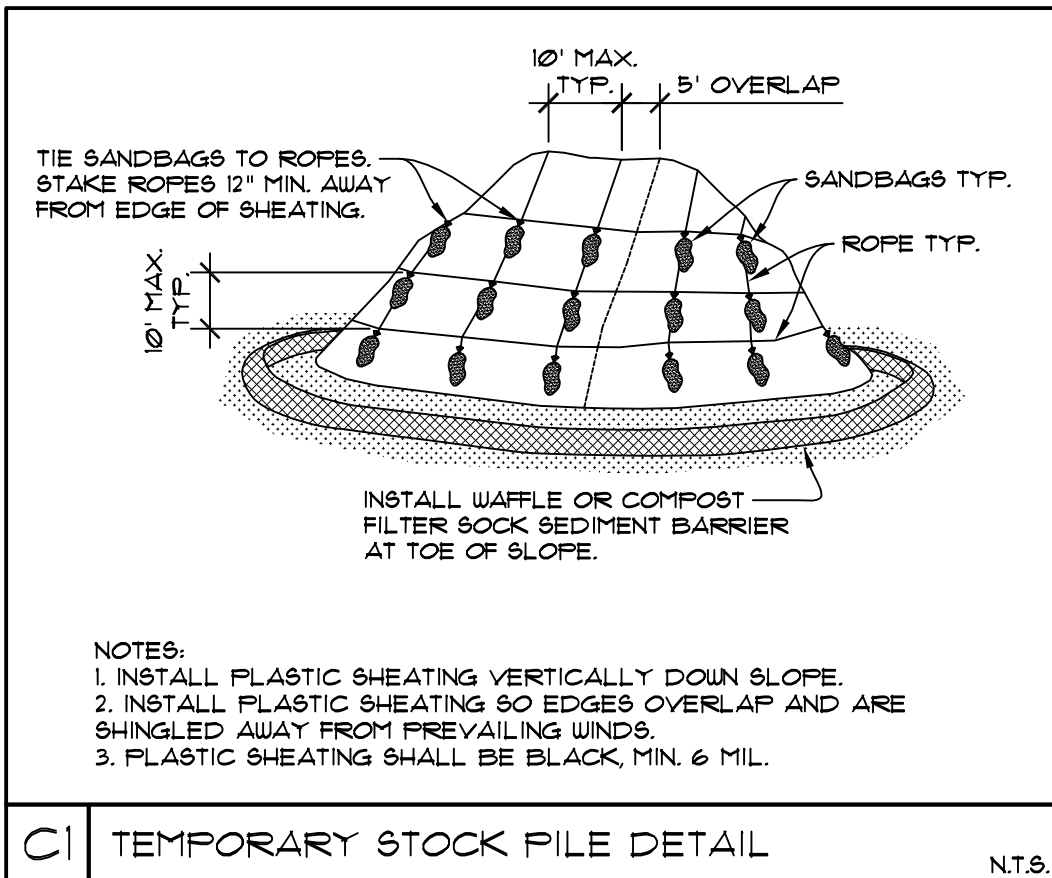
30. IF THE TEMPORARY CONSTRUCTION ENTRANCE OR ANY OTHER AREA WITH HEAVY VEHICLE LOADING IS LOCATED IN THE SAME AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT, 6" OF SEDIMENT BELOW THE GRAVEL SHALL BE REMOVED PRIOR TO INSTALLATION OF THE INFILTRATION FACILITY OR PERVIOUS PAVEMENT (TO REMOVE FINES ACCUMULATED DURING CONSTRUCTION).

31. ANY CATCH BASINS COLLECTING RUNOFF FROM THE SITE, WHETHER THEY ARE ON OR OFF THE SITE, SHALL HAVE ADEQUATE PROTECTION FROM SEDIMENT. CATCH BASINS DIRECTLY DOWNSYSTEM OF THE CONSTRUCTION ENTRANCE OR ANY OTHER CATCH BASIN AS DETERMINED BY THE CITY INSPECTOR SHALL BE PROTECTED WITH A STORM DRAIN PROTECTION INSERT OR EQUIVALENT.

32. IF A SEDIMENT POND IS NOT PROPOSED, A BAKER TANK OR OTHER TEMPORARY GROUND AND/OR SURFACE WATER STORAGE TANK MAY BE REQUIRED DURING CONSTRUCTION, DEPENDING ON WEATHER CONDITIONS.

33. DO NOT FLUSH CONCRETE BY PRODUCTS OR TRUCKS NEAR OR INTO THE STORM DRAINAGE SYSTEM. IF EXPOSED AGGREGATE IS FLUSHED INTO THE STORM SYSTEM, IT COULD MEAN RE-CLEANING THE ENTIRE DOWNSYSTEM STORM SYSTEM, OR POSSIBLY RE-LAYING THE STORM LINE.

34. RECYCLED CONCRETE SHALL NOT BE STOCKPILED ON SITE, UNLESS FULLY COVERED WITH NO POTENTIAL FOR RELEASE OF RUNOFF.



nw
lifestyle homes
www.nwlifestylehomes.com

HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

JOB NO: 23-012
DATE: 1/30/25
DRW. BY: MMM/G
REVISED: 1/17/25

SHEET NO.
A0.3

SITE PLAN NOTES & DETAILS
3777 19TH AVE SE
MERCER ISLAND, WA 98040

GENERAL NOTES:

- ALL FLOOR JOISTS PER PLAN. REFER TO MFG. LAYOUT FOR ALL FRAMING DETAILS AND BLOCKING. REVIEW MFG. LAYOUT PRIOR TO FRAMING. DOUBLE UNDER BEARING PARTITIONS. PROVIDE SOLID BLOCKING OVER BEARING MEMBERS.
- ALL PRE-MANUFACTURED TRUSSES TO BE IDENTIFIED BY MFG'S STAMP.
- FACTORY BUILT FIREPLACE & CHIMNEY TO BE UL LABELED INSTALL PER MANUFACTURER'S SPECS. O/SIDE COMBUSTION AIR REQ'D (MIN 6 SQ IN) DUCTED TO P/BOX W/ OPERABLE O/SIDE DAMPER, TIGHTLY FITTING FLUE DAMPER, AND TIGHT FITTING GLASS OR METAL DOORS OR FLUE DRAFT INDUCTION FAN. MINIMUM FIREPLACE EFFICIENCY OF 80% OR GREATER PER USBC R402.4.2.1. PILOT LIGHT SHALL NOT BE CONTINUOUSLY BURNING PER USBC R403.1.3.
- LIMIT SHOWER FLOW TO 2.5 GALLON/MIN.
- LIMIT TO BE LABELED PER ASHRAE STD. NO. 90A-90, AND MEET THE REQUIREMENTS PER 1991 NATIONAL APPLIANCE ENERGY CONSERVATION ACT.
- FURNACE AND HWY TANK, PILOTS, BURNERS, HEATING ELEMENTS, AND SWITCHES TO BE A MIN. OF 18" ABOVE FINISHED FLOOR.
- ALL SKYLITES TO COMPLY WITH IRC, SECTION 2409.1 & 2409.2.
- ALL SIDELITES, SLIDING GLASS DOORS AND TUB/SHOWER ENCLOSURES TO COMPLY WITH I.B.C. SECTION 2406.
- HEAT REGISTERS TO BE PER LEGEND, LOCATE APPROXIMATELY AS SHOWN, 6" IN FROM EXTERIOR WALLS, 3" IN FROM INTERIOR WALLS.
- VENT DRYER, OVEN/RANGE & EXHAUST FANS TO O/SIDE. DRYER EXHAUST DUCTS SHALL NOT EXCEED A TOTAL COMB. HORIZ. AND VERT. LENGTH OF 14'-0". INCL. 2 90° ELBOWS. DUCT 2'-0" FOR EA. 90° ELBOW EXCEEDING 14'-0". SEE DRYER DUCT DTL. FOR ALT. SOLUTIONS. ALL EXHAUST DUCTS INSULATED (MIN. OF R-4).
- ALL NAILING PER IRC TABLE R602.3(1) AND/OR IBC TABLE 2304.9.1. COLUMN POST & BEAM CONNECTIONS TO COMPLY WITH I.B.C. SECTION 2316.
- ALL UNDERGROUND PLUMBING LOCATIONS TO BE FIELD VERIFIED PRIOR TO FOUNDATION INSTALLATION.
- SOLID SHYTG REQ'D ON LOWER STORY OF 2 STORY BUILDING PER I.B.C. DRYWALL NAILED PER SHEAR NAILING SCHEDULES OR IBC 2018 EDITION.
- TUB/SHOWER SURROUND WALLS TO HAVE WATER RESISTANT GYP BOARD AND A SMOOTH HARD SURFACE TO A MINIMUM HEIGHT OF 72" ABOVE DRAIN INLET.
- PROVIDE SMOKE DETECTOR IN COMPLIANCE WITH I.B.C. AND I.B.C. STD. 403.6. ALL SMOKE DETECTORS MUST BACKUP. SMOKE DETECTORS WILL SOUND AN AUDIBLE ALARM IN ALL SLEEPING ROOMS.
- DUELLING TO COMPLY W/ 2021 USBC-R.
- SEAL, CAULK, GASKET, OR WEATHERSTRIP TO LIMIT AIR LEAKAGE. AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS BETWEEN WALL AND ROOF AND WALL PANELS, OPENINGS AT UTILITY PENETRATIONS THROUGH WALLS, FLOORS, AND ROOFS, ALL OTHER OPENINGS IN BUILDING ENVELOPE.
- ALL EXTERIOR DOORS OR ACCESS HATCHES TO ENCLOSED UNHEATED AREAS MUST BE WEATHERSTRIPPED.
- MINIMUM SOIL BEARING PRESSURE PER STRUCTURAL ENGINEER.
- FOOTINGS TO BE PLACED ON FIRM, UNDISTURBED NATIVE SOIL.
- DUELLING TO COMPLY WITH INTERNATIONAL BUILDING CODE (I.B.C.) 2021
- PER R302.11, FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORES, AND BETWEEN A TOP STORY AND THE ROOF SPACE.
- CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC TABLE R301.5.

- ALL WINDOWS TO HAVE INDIVIDUAL OUTDOOR AIR INLET PORTS PER IMC 4012.4.402.1
- THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE. THE RESULTS OF THE TEST SHALL BE BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL (R402.4.2.1).
- AT LEAST ONE THERMOSTAT PER DUELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.
- DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. A MINIMUM OF 15% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.
- R301.3 GEOGRAPHICAL AREAS APPROVED NATURALLY DURABLE OR PRESSURE-PRESERVATIVE-TREATED WOOD SHALL BE USED FOR THOSE PORTIONS OF WOOD MEMBERS THAT FORM THE STRUCTURAL SUPPORTS OF BUILDINGS, BALCONIES, PORCHES OR SIMILAR PERMANENT BUILDING AFFURTENANCES WHEN THOSE MEMBERS ARE EXPOSED TO THE WEATHER WITHOUT ADEQUATE PROTECTION FROM A ROOF, EAVE, OVERHANG OR OTHER COVERING THAT WOULD PREVENT MOISTURE OR WATER ACCUMULATION ON THE SURFACE OR AT JOINTS BETWEEN MEMBERS. DEPENDING ON LOCAL EXPERIENCE, SUCH MEMBERS MAY INCLUDE:
- HORIZONTAL MEMBERS SUCH AS GIRDERS, JOISTS AND DECKING.
 - VERTICAL MEMBERS SUCH AS POSTS, POLES AND COLUMNS.
 - BOTH HORIZONTAL AND VERTICAL MEMBERS.
- R303.7 STAIRWAY ILLUMINATION.
ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A MEANS TO ILLUMINATE THE STAIRS, INCLUDING THE LANDINGS AND TREADS. INTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF EACH LANDING OF THE STAIRWAY. FOR INTERIOR STAIRS THE ARTIFICIAL LIGHT SOURCES SHALL BE CAPABLE OF ILLUMINATING LANDINGS TO LEVELS NOT LESS THAN 1 FOOT-CANDLE (1 LUX) MEASURED AT THE CENTER OF TREADS AND LANDINGS. EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP LANDING OF THE STAIRWAY. EXTERIOR STAIRWAYS PROVIDING ACCESS TO A BASEMENT FROM THE OUTSIDE GRADE LEVEL SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE BOTTOM LANDING OF THE STAIRWAY.

WHOLE HOUSE MECHANICAL VENTILATION SYSTEM (WITH WASHINGTON STATE AMENDMENTS)

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M105.4.1 THROUGH M105.4.4.

M105.4.1 SYSTEM DESIGN:
THE WHOLE-HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY OR EXHAUST FANS, OR A COMBINATION OF SUCH, AND ASSOCIATED DUCTS AND CONTROLS. LOCAL EXHAUST OR SUPPLY FANS ARE PERMITTED TO SERVE AS SUCH A SYSTEM. OUTDOOR AIR DUCTS CONNECTED TO THE RETURN SIDE OF AN AIR HANDLER SHALL BE CONSIDERED AS PROVIDING SUPPLY VENTILATION.

M105.4.2 SYSTEM CONTROLS:
THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE. CONTROLS SHALL INCLUDE TEXT OR A SYMBOL INDICATING THEIR FUNCTION.

M105.4.3 MECHANICAL VENTILATION RATE:
THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE NOT LESS THAN THAT DETERMINED IN ACCORDANCE WITH TABLE M105.4.3(1) OR NOT LESS THAN THAT DETERMINED BY EQUATION 15-1.

EXCEPTIONS:
1. VENTILATION RATE CREDIT. THE MINIMUM MECHANICAL VENTILATION RATE DETERMINED IN ACCORDANCE WITH TABLE M105.4.3(1) OR EQUATION 15-1 SHALL BE REDUCED BY 30 PERCENT, PROVIDED THAT BOTH OF THE FOLLOWING CONDITIONS APPLY:
1. A DUCTED SYSTEM SUPPLIES VENTILATION AIR DIRECTLY TO EACH BEDROOM AND TO ONE OR MORE OF THE FOLLOWING ROOMS:
1.1. LIVING ROOM,
1.2. DINING ROOM,
1.3. KITCHEN.
2. PROGRAMMED INTERMITTENT OPERATION. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS PERMITTED TO OPERATE INTERMITTENTLY WHERE THE SYSTEM HAS CONTROLS THAT ENABLE OPERATION FOR NOT LESS THAN 25 PERCENT OF EACH 4-HOUR SEGMENT AND THE VENTILATION RATE PRESCRIBED IN TABLE M105.4.3(1) BY EQUATION 15-1 OR BY EXCEPTION 1 IS MET AND BY THE FACTOR DETERMINED IN ACCORDANCE WITH TABLE M105.4.3(2).

DWELLING UNIT (SQUARE FEET)	NUMBER OF BEDROOMS				
	0-1	2	3	4	5 OR MORE
< 500	30	30	35	45	55
501-1000	30	35	40	50	50
1001-1500	30	40	45	55	60
1501-2000	35	45	50	60	65
2001-2500	40	50	55	65	70
2501-3000	45	55	60	70	75
3001-3500	50	60	65	75	80
3501-4000	55	65	70	80	85
4001-4500	60	70	75	85	90
4501-5000	65	75	80	90	95

TABLE M105.4.3(2) SYSTEM COEFFICIENT C_{system}

SYSTEM TYPE	DISTRIBUTED	NOT DISTRIBUTED
BALANCED	1.0	1.25
NOT BALANCED	1.25	1.5

TABLE M105.4.3(3) INTERMITTENT WHOLE HOUSE MECHANICAL VENTILATION RATE FACTORS F_D

RUN TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	50%	66%	75%	100%
FACTOR	2	1.5	1.3	1.0

4. FOR VENTILATION SYSTEM RUN TIME VALUES BETWEEN THOSE GIVEN, THE FACTORS ARE PERMITTED TO BE DETERMINED BY INTERPOLATION.
b. EXTRAPOLATION BEYOND THE TABLE IS PROHIBITED.

M105.4.4 LOCAL EXHAUST RATES:
LOCAL EXHAUST SYSTEMS SHALL BE DESIGNED TO HAVE THE CAPACITY TO EXHAUST THE MINIMUM AIRFLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M105.4.4.

AREA TO BE EXHAUSTED	EXHAUST RATES ^a
KITCHENS	100 CFM INTERMITTENT OR 25 CFM CONTINUOUS
BATHROOMS TOILET ROOMS	MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS

a. THE LISTED EXHAUST RATE FOR BATHROOMS-TOILET ROOMS SHALL BE EQUAL OR EXCEED THE EXHAUST RATE AT A MINIMUM STATIC PRESSURE OF 0.25 INCH WATER COLUMN IN ACCORDANCE WITH SECTION M105.3.

SOURCE SPECIFIC VENTILATION REQUIREMENTS:
BATHROOMS, LAUNDRY AND POWDER ROOM FANS TO BE 50 CFM UNO. KITCHEN EXHAUST FANS TO BE 100 CFM UNO. EXHAUST FANS SHALL BE FLOW RATED AT 25 W.G. STATIC PRESSURE. EXHAUST DUCTS SHALL BE INSULATED TO R-4 IN UNCONDITIONED SPACE BE EQUIPPED WITH A BACKDRAFT DAMPER TERMINATE OUTSIDE THE BUILDING PER SRC M100.1. COMPLY WITH BELOW:

FAN CFM	MAX. FLEX DIA.	MAX. FT.	MAX. SMOOTH DIA.	MAX. FT.
50	4"	25'	4"	70'
50	5"	30'	5"	100'
50	6"	OVER 100'	6"	OVER 100'
80	4"	N/A	4"	70'
80	5"	15'	5"	100'
80	6"	30'	6"	OVER 100'
100	5"	N/A	5"	50'
100	6"	45'	6"	OVER 100'
125	6"	15'	6"	OVER 100'
125	7"	70'	7"	OVER 100'

STAIRWAYS - 2021 IRC SECTION 311.1

R311.1 STAIRWAYS SERVING DWELLINGS OR ACCESSORY STRUCTURES. ALL STAIRWAYS SERVING A DWELLING OR ACCESSORY STRUCTURE, OR ANY PART THEREOF, SHALL COMPLY WITH THIS SECTION. THIS SHALL INCLUDE EXTERIOR STAIRS FROM A DWELLING OR GARAGE TO GRADE AND THOSE STAIRS SERVING DECKS, PORCHES, BALCONIES, SUN ROOMS, AND SIMILAR STRUCTURES.

R311.1.1 STAIRS SERVING ATTICS OR CRAWL SPACES. STAIRS THAT ONLY PROVIDE ACCESS TO PLUMBING, MECHANICAL, OR ELECTRICAL EQUIPMENT.

R311.1.2 WIDTH. STAIRWAYS SHALL BE NOT LESS THAN 36 INCHES (914 MM) IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES (114 MM) ON EITHER SIDE OF THE STAIRWAY AND THE MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL BE NOT LESS THAN 31 1/2 INCHES (781 MM) WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES (686 MM) WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES. EXCEPTION: THE WIDTH OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.1.2.1 HEADROOM. THE MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY SHALL BE NOT LESS THAN 6 FEET 8 INCHES (2032 MM) MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM ON THAT PORTION OF THE STAIRWAY.

R311.1.2.2 EXHAUSTION. WHERE THE NOSINGS OF TREADS AT THE SIDE OF A FLIGHT EXTEND UNDER THE EDGE OF A FLOOR OPENING THROUGH WHICH THE STAIR PASSES, THE FLOOR OPENING SHALL BE ALLOWED TO PROJECT HORIZONTALLY INTO THE REQUIRED HEADROOM A MAXIMUM OF 43/4 INCHES (101 MM). THE MINIMUM HEADROOM FOR EXISTING BUILDINGS SHALL BE IN ACCORDANCE WITH SECTION R305.2.2. THE HEADROOM FOR SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.1.3 VERTICAL RISE. A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 81 INCHES (2057 MM) BETWEEN FLOOR LEVELS OR LANDINGS.

R311.1.4 WALKLINE. THE WALKLINE ACROSS UNDER TREADS AND LANDINGS SHALL BE CONCENTRIC TO THE TURN AND PARALLEL TO THE DIRECTION OF TRAVEL ENTERING AND EXITING THE TURN. THE WALKLINE SHALL BE LOCATED 12 INCHES (305 MM) FROM THE INSIDE OF THE TURN. THE 12-INCH (305 MM) DIMENSION SHALL BE MEASURED FROM THE WIDEST POINT OF THE CLEAR STAIR WIDTH AT THE WALKING SURFACE WHERE WINDERS ARE ADJACENT WITHIN A FLIGHT. THE POINT OF THE WIDEST CLEAR STAIR WIDTH OF THE ADJACENT WINDERS SHALL BE USED.

R311.1.5 STAIR TREADS AND RISERS. STAIR TREADS AND RISERS SHALL MEET THE REQUIREMENTS OF THIS SECTION FOR THE PURPOSES OF THIS SECTION. DIMENSIONS AND DIMENSIONED SURFACES SHALL BE EXCLUSIVE OF CARPETS, RUGS OR RUNNERS.

R311.1.5.1 RISERS. THE RISER HEIGHT SHALL BE NOT MORE THAN 7 3/4 INCHES (196 MM). THE RISER SHALL BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 MM). RISERS SHALL BE VERTICAL OR SLOPED FROM THE UNDERSIDE OF THE NOSING OF THE TREAD ABOVE AT AN ANGLE NOT MORE THAN 30 DEGREES (0.51 RAD) FROM THE VERTICAL. AT OPEN RISERS, OPENINGS LOCATED MORE THAN 30 INCHES (762 MM) AS MEASURED VERTICALLY, TO THE FLOOR OR GRADE BELOW SHALL NOT PERMIT THE PASSAGE OF A 4-INCH DIAMETER (102 MM) SPHERE. EXCEPTIONS: THE OPENING BETWEEN ADJACENT TREADS IS NOT LIMITED ON SPIRAL STAIRWAYS. THE RISER HEIGHT OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.1.5.2 TREADS. THE TREAD DEPTH SHALL BE NOT LESS THAN 10 INCHES (254 MM). THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 MM).

R311.1.5.2.1 UNDER TREADS. UNDER TREADS SHALL HAVE A TREAD DEPTH OF NOT LESS THAN 10 INCHES (254 MM) MEASURED BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AT THE INTERSECTIONS WITH THE WALKLINE. UNDER TREADS SHALL HAVE A TREAD DEPTH OF NOT LESS THAN 6 INCHES (152 MM) AT ANY POINT WITHIN THE CLEAR WIDTH OF THE STAIRS WITHIN ANY FLIGHT OF STAIRS. THE LARGEST UNDER TREAD DEPTH AT THE WALKLINE SHALL NOT EXCEED THE SMALLEST UNDER TREAD BY MORE THAN 3/8 INCH (9.5 MM). CONSISTENTLY SHAPED WINDERS AT THE WALKLINE SHALL BE ALLOWED WITHIN THE SAME FLIGHT OF STAIRS AS RECTANGULAR TREADS AND SHALL NOT BE REQUIRED TO BE WITHIN 3/8 INCH (9.5 MM) OF THE RECTANGULAR TREAD DEPTH. EXCEPTION: THE TREAD DEPTH AT SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.1.5.3 NOSINGS. NOSINGS AT TREADS, LANDINGS AND FLOORS OF STAIRWAYS SHALL HAVE A RADIUS OF CURVATURE AT THE NOSING NOT GREATER THAN 3/16 INCH (14 MM) OR A BEVEL NOT GREATER THAN 1/2 INCH (12.7 MM). A NOSING PROJECTION NOT LESS THAN 3/4 INCH (19 MM) AND NOT MORE THAN 1/4 INCHES (32 MM) SHALL BE PROVIDED ON STAIRWAYS. THE GREATEST PROJECTION SHALL NOT EXCEED THE SMALLEST NOSING PROJECTION BY MORE THAN 3/8 INCH (9.5 MM) WITHIN A STAIRWAY. EXCEPTION: A NOSING PROJECTION IS NOT REQUIRED WHERE THE TREAD DEPTH IS NOT LESS THAN 11 INCHES (279 MM).

R311.1.5.4 EXTERIOR PLASTIC COMPOSITE STAIR TREADS. PLASTIC COMPOSITE EXTERIOR STAIR TREADS SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION AND SECTION R901.2.2.

R311.1.6 LANDINGS FOR STAIRWAYS. THERE SHALL BE A FLOOR OR LANDING AT THE TOP AND BOTTOM OF EACH STAIRWAY. THE WIDTH PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN THE WIDTH OF THE FLIGHT SERVED. FOR LANDINGS OF SHAPES OTHER THAN SQUARE OR RECTANGULAR, THE DEPTH AT THE WALK LINE AND THE TOTAL AREA SHALL BE NOT LESS THAN THAT OF A QUARTER CIRCLE WITH A RADIUS EQUAL TO THE REQUIRED LANDING WIDTH WHERE THE STAIRWAY HAS A STRAIGHT RUN. THE DEPTH IN THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN 36 INCHES (914 MM). EXCEPTION: A FLOOR OR LANDING IS NOT REQUIRED AT THE TOP OF AN INTERIOR FLIGHT OF STAIRS, INCLUDING STAIRS IN AN ENCLOSED GARAGE, PROVIDED THAT A DOOR DOES NOT SWING OVER THE STAIRS.

R311.1.7 STAIRWAY WALKING SURFACE. THE WALKING SURFACE OF TREADS AND LANDINGS OF STAIRWAYS SHALL BE SLOPED NOT STEEPER THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2-PERCENT SLOPE).

R311.1.8 HANDRAILS. HANDRAILS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF EACH FLIGHT OF STAIRS WITH FOUR OR MORE RISERS.

R311.1.8.1 HEIGHT. HANDRAIL HEIGHT MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FINISH SURFACE OF RAMP SLOPE SHALL BE NOT LESS THAN 34 INCHES (864 MM) AND NOT MORE THAN 38 INCHES (965 MM).

EXCEPTIONS:
THE USE OF A VOLUTE, TURNOUT OR STARTING EASING SHALL BE ALLOWED OVER THE LOWEST TREAD.
WHERE HANDRAIL FITTINGS OR BENDINGS ARE USED TO PROVIDE CONTINUOUS TRANSITION BETWEEN FLIGHTS, TRANSITIONS AT UNDER TREADS, THE TRANSITION FROM HANDRAIL TO GUARD, OR USED AT THE START OF A FLIGHT, THE HANDRAIL HEIGHT AT THE FITTINGS OR BENDINGS SHALL BE PERMITTED TO EXCEED 38 INCHES (965 MM).

R311.1.8.2 HANDRAIL PROJECTION. HANDRAILS SHALL NOT PROJECT MORE THAN 4 1/2 INCHES (114 MM) ON EITHER SIDE OF THE STAIRWAY.
EXCEPTION: WHERE NOSINGS OF LANDINGS, FLOORS OR PASSING FLIGHTS PROJECT INTO THE STAIRWAY REDUCING THE CLEARANCE AT PASSING HANDRAILS, HANDRAILS SHALL PROJECT NOT MORE THAN 6 1/2 INCHES (165 MM) INTO THE STAIRWAY, PROVIDED THAT THE STAIR WIDTH AND HANDRAIL CLEARANCE ARE NOT REDUCED TO LESS THAN THAT REQUIRED.

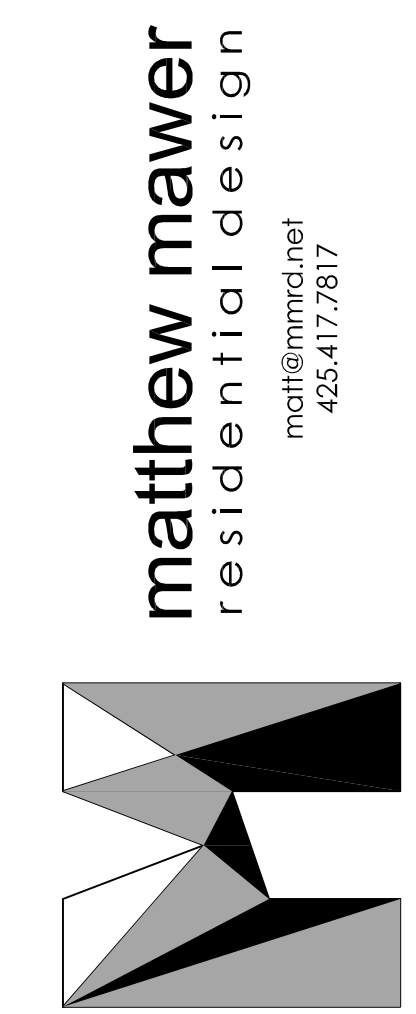
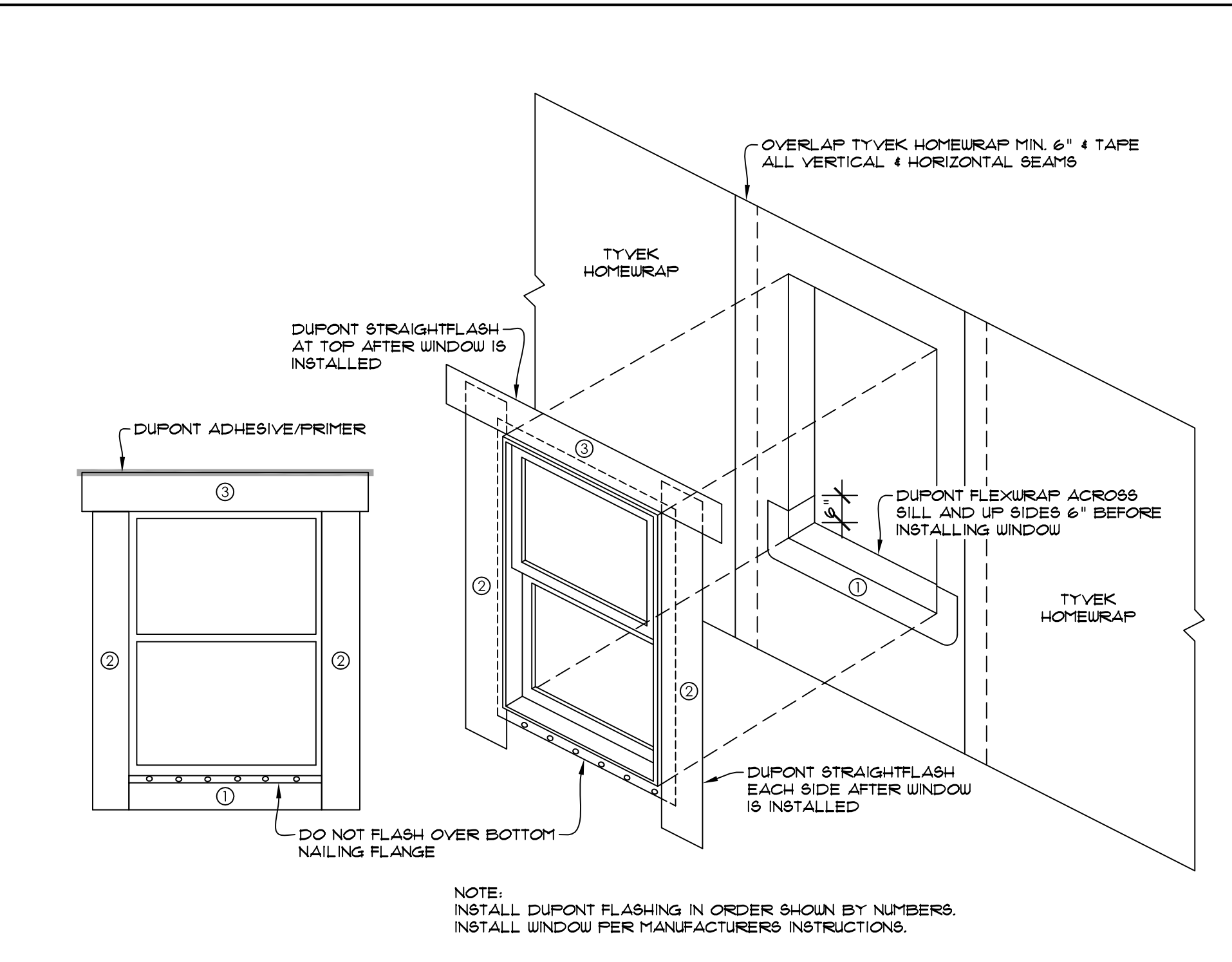
R311.1.8.3 HANDRAIL CLEARANCE. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES (38 MM) BETWEEN THE WALL AND THE HANDRAILS.

R311.1.8.4 HANDRAIL CLEARANCE. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES (38 MM) BETWEEN THE WALL AND THE HANDRAILS.

PRESCRIPTIVE ENERGY CODE COMPLIANCE FOR ALL CLIMATE ZONES IN WASHINGTON PER 2021 USBC:

- MEDIUM DWELLING UNIT: 8 CREDITS
- HEATING OPTION 4 - HEAT PUMP (3.0 CREDITS)
- ENERGY OPTIONS:
- 12 - EFFICIENT BUILDING ENVELOPE (10 CREDITS):
VERTICAL PENETRATION U + 0.25
FLOOR R-38
SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB
BELOW GRADE SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB
- 21 - AIR LEAKAGE CONTROL 4 EFFICIENT VENTILATION (10 CREDITS)
REDUCE THE TESTED AIR LEAKAGE TO 2.0 AIR CHANGES PER HOUR MAXIMUM AT 50 Pascals and ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M105.3 OF THE INTERNATIONAL RESIDENTIAL CODE SHALL BE MET WITH A HEAT RECOVERY VENTILATION SYSTEM WITH MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 65%
- 3/6 - HIGH EFFICIENCY HVAC EQUIPMENT (10 CREDITS):
AIR-SOURCED, CENTRALLY DUCTED HEAT PUMP WITH A MINIMUM HSPF 2 OF 9.4 (HSPF OF 11.0)
- 5/6 - EFFICIENT WATER HEATING (2.0 CREDITS):
ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEMA'S ADVANCED WATER HEATING SPECIFICATION

FLANGED WINDOW FLASHING INSTALLATION AFTER TYVEK (OR EQUIVALENT) HOMEWRAP



HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

JOB NO: 23-012
DATE: 1/30/25
DRWN. BY: MMMG
REVISED:

SHEET NO.
A0.4

HACKETT RESIDENCE

2965 74TH AVE SE, MERCER ISLAND, WA 98040

SHEET INDEX

Sheet Number	Sheet Title
C-101	CIVIL COVER SHEET
C-102	CIVIL GENERAL NOTES AND LEGEND
C-201	DEMOLITION AND TESC PLAN
C-301	GRADING AND DRAINAGE PLAN
C-401	UTILITY PLAN
C-501	CIVIL DETAILS



1102 A STREET SUITE 317
TACOMA, WA 98402
PHONE: 253.208.6303

WWW.AXEAACIVIL.COM



PROJECT

HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

REVISIONS

DESIGNED BY: RB
REVIEWED BY: RB
TITLE: CIVIL COVER SHEET

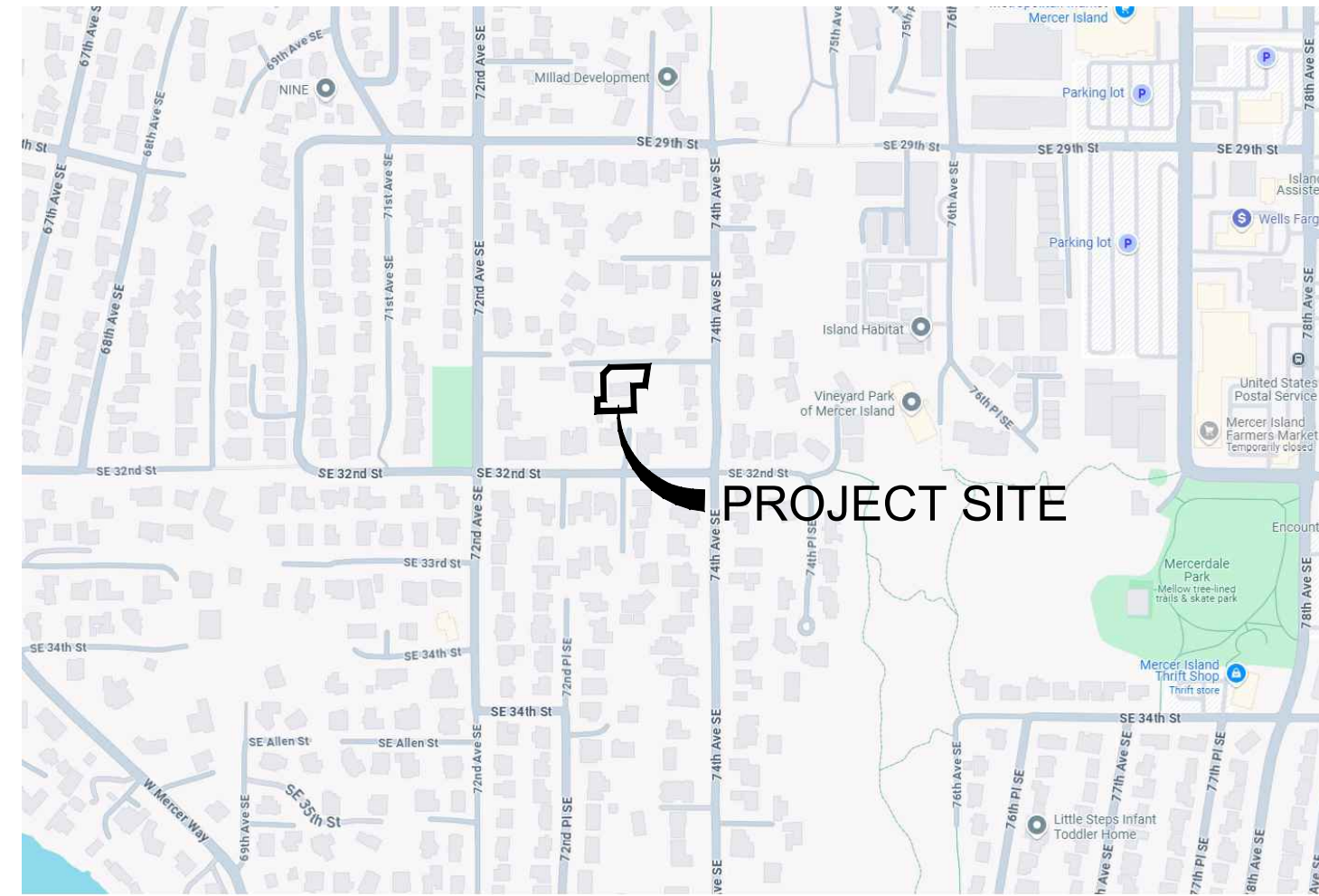


DATE: 08.20.2025
PROJECT NUMBER: 24021

DATE: 08.20.2025
PROJECT NUMBER: 24021
SHEET: C-101

DATE: 08.20.2025
PROJECT NUMBER: 24021
SHEET: C-101

DATE: 08.20.2025
PROJECT NUMBER: 24021
SHEET: C-101



VICINITY MAP

SCALE: NTS

ABBREVIATIONS

AC	ACRE	G	GAS	R	RADIUS
APPROX	APPROXIMATELY	GRVL	GRAVEL	RCW	REVISED CODE OF WASHINGTON
APWA	AMERICAN PUBLIC WORKS ASSOCIATION	GV	GAS VALVE	ROW	RIGHT-OF-WAY
ARCH	ARCHITECTURAL	H	HEIGHT	RT	RIGHT
ASPH	ASPHALT	HDPE	HIGH DENSITY POLYETHYLENE	SC	SOUTH
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	HMA	HOT MIX ASPHALT	SD	STORM CEPTOR
AVE	AVENUE	HORIZ	HORIZONTAL	SDR	STANDARD DIMENSION RATIO
BLDG	BUILDING	ID	INSIDE DIAMETER	SF	SQUARE FEET
BMP	BEST MANAGEMENT PRACTICE	IE	INVERT ELEVATION	SQ YD	SQUARE YARD
BG	BOTTOM OF GRADE	IN	INCH	SS	SANITARY SEWER
BTM	BOTTOM OF PIPE	L	LENGTH	SSCO	SANITARY SEWER CLEANOUT
BW	BOTTOM OF WALL	LAT	LATITUDE	ST	STREET
€	CENTERLINE	LF	LINEAR FEET	STA	STATION
CB	CATCH BASIN	LON	LONGITUDE	STD	STANDARD
CI	CAST IRON	LT	LONGITUDE LEFT	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
CL	CLASS	MAX	MAXIMUM	T	TELEPHONE
COMP	CORRUGATED METAL PIPE	MH	MANHOLE	TC	TOP OF CURB
CO	CLEAN OUT	MIN	MINIMUM	TEMP	TEMPORARY
COR	CITY OF REDMOND	MISC	MISCELLANEOUS	TESC	TEMPORARY EROSION & SEDIMENT CONTROL
CONC	CONCRETE	MJ	MECHANICAL JOINT	TG	TOP OF GRADE
CPEP	CORRUGATED POLYETHYLENE PIPE	MON	MONUMENT	TP	TOP OF PAVEMENT
CR	CROWN OF PIPE	N	NORTH	TW	TOP OF WALL
CSTC	CRUSHED SURFACING TOP COURSE	NC	NO CURB	TYP	TYPICAL
DEPT	DEPARTMENT	NTS	NOT TO SCALE	UG	UNDER GROUND
DI	DUCTILE IRON	OC	ON CENTER	UIC	UNDER GROUND INJECTION CONTROL
E	EAST	OD	OUTSIDE DIAMETER	U.O.N.	UNLESS OTHERWISE NOTED
EA	EACH	OFF	OFFSET	UP	UTILITY POLE
EC	EXTRUDED CURB	PC	POINT OF CURVATURE	V	VERTICAL
EG	EXISTING GRADE	PCC	POINT OF COMPOUND CURVE	W	WEST
ELV	ELEVATION	PI	POINT OF INTERSECTION	W/	WITH
EP	EDGE OF PAVEMENT	PL	PROPERTY LINE	WAC	WASHINGTON ADMINISTRATIVE CODE
ESC	EROSION & SEDIMENT CONTROL	PP	POWER POLE	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
EXIST	EXISTING	PRC	POINT OF REVERSE CURVE	WV	WATER VALVE
FFE	FINISH FLOOR ELEVATION	PROP	PROPOSED	YD	YARD DRAIN
FG	FINISHED GRADE	PT	POINT OF TANGENCY		
FL	FLANGED	PVC	POLYVINYL CHLORIDE		
		PVMT	PAVEMENT		

SURVEY INFORMATION

SURVEY BY TERRANE, DATED NOVEMBER 2023

LEGAL DESCRIPTION
(PER STATUTORY WARRANTY DEED RECORDING NO. 20230906000422)

PARCEL NO. C OF SHORT PLAT NO. M1-76-01-003, RECORDED UNDER AUDITOR'S FILE NO. 7603190486 AND BEING A SHORT PLAT OF THAT PORTION OF LOTS 5 AND 8, BLOCK 9, MCGILVRA'S ISLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 16 PLATS, PAGE 58, RECORDS OF KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH LINE AND SAID LOT 5, 140 FEET EAST OF THE NORTHWEST CORNER THEREOF, THENCE SOUTH PARALLEL WITH THE WEST LINE OF SAID LOT, 113 FEET, THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID LOT, 60 FEET, THENCE SOUTH 75 FEET, THENCE EAST 110 FEET PARALLEL WITH THE SOUTH LINE OF SAID LOT 5, THENCE SOUTH TO THE SOUTHEAST CORNER THEREOF, THENCE EAST ALONG SOUTH LINE OF SAID LOT 8 TO A POINT 194 FEET WEST OF THE SOUTHEAST CORNER THEREOF, THENCE NORTH 72 FEET 2 INCHES, THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID LOT TO A POINT 160 FEET WEST OF THE EAST LINE OF SAID LOT, THENCE NORTHEASTERLY ON A STRAIGHT LINE TO A POINT ON A LINE DRAWN PARALLEL WITH AND 20 FEET SOUTH OF THE NORTH LINE OF SAID LOT AND 150 FEET WEST OF THE EAST LINE OF SAID LOT, SAID POINT HERE AND AFTER REFERRED TO AS POINT A, THENCE NORTH 20 FEET, THENCE WEST ALONG THE NORTH LINE OF SAID LOTS 8 AND 5, 320 FEET TO POINT OF BEGINNING.

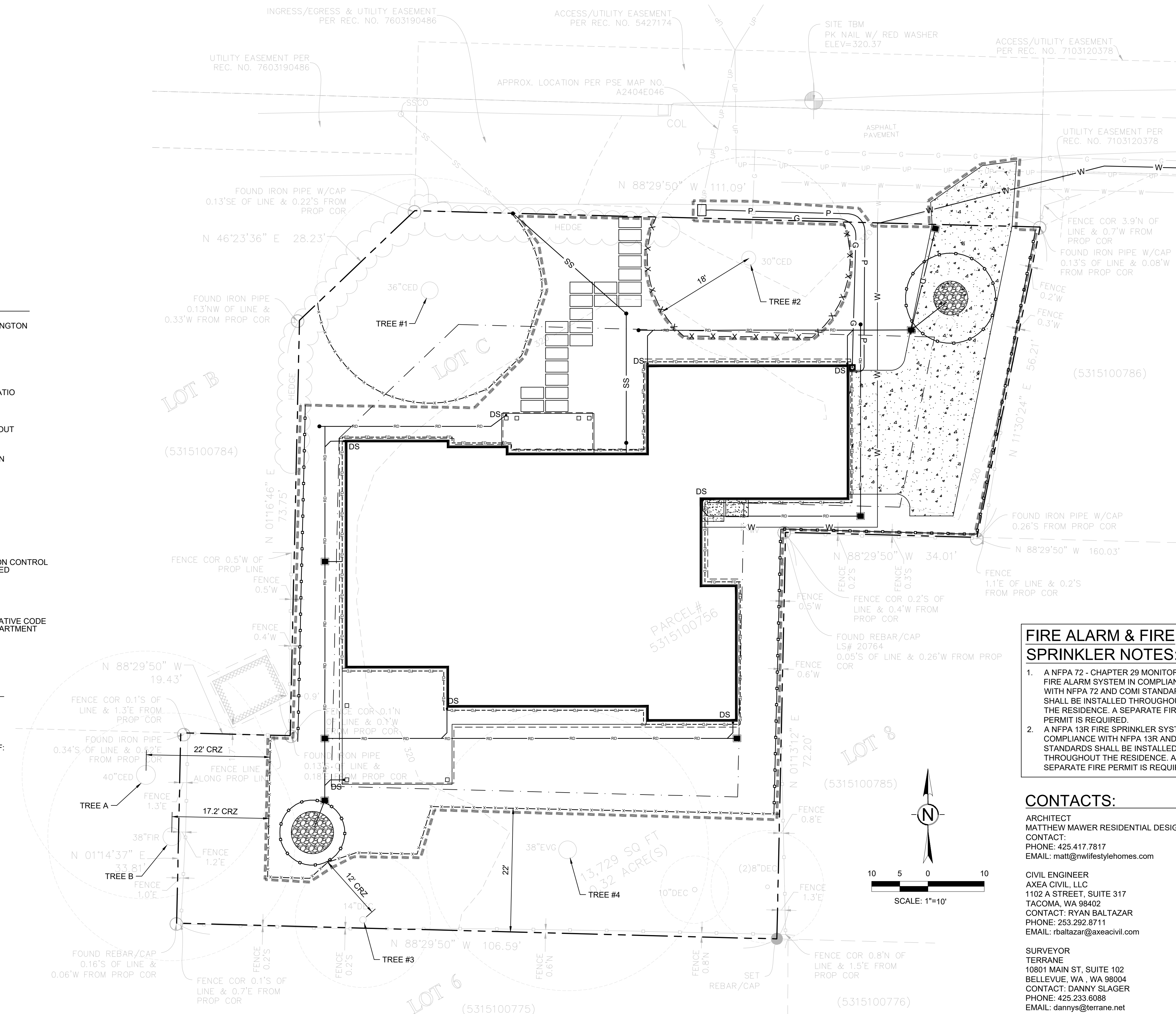
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

VERTICAL DATUM
NAVD 88 PER GPS OBSERVATIONS

TEMPORARY SITE BENCHMARK
SITE TEMP. BENCHMARK
DESCRIPTION: SET PK W/ RED WASHER IN ASPHALT
LOCATION: N SIDE OF DRIVEWAY, N OF SITE
ELEVATION: 320.37

BASE OF BEARING
ACCEPTED A BEARING OF N 01°13'59" E BETWEEN MONUMENTS FOUND ALONG THE CENTERLINE OF 74TH AVE SE, CALCULATED USING NAD 83(2011) WASHINGTON STATE PLANE COORDINATES PER GPS OBSERVATIONS.

REFERENCES
R1. MCGILVRA'S ISLAND ADDITION, VOL. 16 OF PLATS, PG. 58, RECORDS OF KING COUNTY, WASHINGTON.
R2. RECORD OF SURVEY, VOL. 96, PG. 253, RECORDS OF KING COUNTY, WASHINGTON.



FIRE ALARM & FIRE SPRINKLER NOTES:

1. A NFPA 72 - CHAPTER 29 MONITORED FIRE ALARM SYSTEM IN COMPLIANCE WITH NFPA 72 AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.
2. A NFPA 13R FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13R AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

CONTACTS:

ARCHITECT
MATTHEW MAWER RESIDENTIAL DESIGN
CONTACT:
PHONE: 425.417.7817
EMAIL: matt@mawerresidentialhomes.com

CIVIL ENGINEER
AXEA CIVIL, LLC
1102 A STREET, SUITE 317
TACOMA, WA 98402
CONTACT: RYAN BALTAZAR
PHONE: 253.292.8711
EMAIL: rbaltazar@axeacivil.com

SURVEYOR
TERRANE
10801 MAIN ST, SUITE 102
BELLEVUE, WA, WA 98004
CONTACT: DANNY SLAGER
PHONE: 425.233.6088
EMAIL: danny@terrane.net

GEOTECHNICAL ENGINEER
COBALT GEOSCIENCES
P.O. BOX 1792
NORTH BEND, WA 98405
CONTACT: PHIL HABERMAN
PHONE: 206.331.1097
EMAIL: phil@cobaltgeo.com

PROJECT INFORMATION

ADDRESS: 2965 74TH AVE SE, MERCER ISLAND, WA 98040
PARCEL NO: 5315100756
PARCEL AREA: 13,731 SF / 0.32 ACRES
ZONING: R-9.6
MAX IMPERVIOUS COVERAGE ALLOWED (50%)
AREA OF DISTURBANCE: 10,417 SF / 0.239 ACRES

LOT COVERAGE

DEVELOPMENT STANARD	AREA SF
LOT AREA	13731
HOUSE ROOF COVERAGE	4596
CONCRETE DRIVEWAY	1010
TOTAL LOT COVERAGE	5841
PERCENTAGE OF LOT COVERAGE	42.54%

DATE PLOTTED: 8/20/2025 3:02:58 PM FILENAME: 24021C-101-102.DWG



Call before you dig.
PERMIT SET

AXEA DEMOLITION NOTES:

- REMOVE AND LEGALLY DISPOSE OF ALL EXISTING IMPROVEMENTS NECESSARY TO ACCOMMODATE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
- ALL CONSTRUCTION MATERIALS SHALL BE NEW EXCEPT FOR THOSE IDENTIFIED TO BE RELOCATED ON THE PLANS. RESTORE ANY ITEMS DAMAGED DURING CONSTRUCTION TO THE PRECONSTRUCTION CONDITION.
- REMOVE ALL EXISTING UTILITIES WITHIN 10 FEET OF THE BUILDING PAD AND BUILDING APPURTENANCES. PIPES THAT WILL SERVE NO PURPOSE WITH THIS PROPOSED PROJECT WITH MORE THAN 3' OF COVER IN THE FINAL CONDITION AND DO NOT CONFLICT WITH NEW UTILITIES, STRUCTURES, ETC. MAY BE DECOMMISSIONED AND ABANDONED IN PLACE. ABANDONED UTILITY PIPES MAY BE FILLED WITH SAND, GROUTED AND CAPPED. BACKFILL TRENCHES AND COMPACT TO 95% MAX DRY DENSITY, UNLESS OTHERWISE NOTED. OTHERWISE COORDINATE WITH UTILITY PURVEYORS TO ADDRESS CONNECTIONS AT MAINS IN ACCORDANCE WITH UTILITY PURVEYOR STANDARDS.
- LIMITS OF DISTURBANCE ARE SHOWN PAST THE PROPERTY LINE FOR CLARITY. LAND DISTURBING ACTIVITY SHOULD NOT EXTEND ONTO ADJACENT PROPERTIES UNLESS OTHERWISE NOTED.

AXEA TEMPORARY EROSION AND SEDIMENT CONTROL NOTES:

THIS PROJECT REQUIRES COVERAGE UNDER THE WASHINGTON STATE CONSTRUCTION STORMWATER GENERAL PERMIT; CONTRACTOR MUST MAINTAIN A COPY OF THE LATEST SAID PERMIT AND ITS SOLELY RESPONSIBLE FOR COMPLIANCE WITH SAID PERMIT.

- EROSION AND SEDIMENT CONTROL (ESC) MEASURES SHALL BE IN PLACE PRIOR TO THE BEGINNING OF CONSTRUCTION.
- ESC MEASURES ARE NOT LIMITED TO THE ITEMS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL ESC MEASURES. SILTATION OF EXISTING OR PROPOSED DRAINAGE FACILITIES SHALL NOT BE ALLOWED.
- THE CONTRACTOR SHALL MAKE A DAILY SURVEILLANCE OF ALL ESC MEASURES AS REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL ESC MEASURES AS DETERMINED NECESSARY BY THE PROJECT ENGINEER, OWNER OR INSPECTOR. FAILURE TO COMPLY WITH ALL LOCAL AND STATE ESC REQUIREMENTS MAY RESULT IN CIVIL PENALTIES BEING LEVIED AGAINST THE CONTRACTOR.
- DURING THE WET SEASON (OCTOBER 1ST THROUGH APRIL 30TH), ALL DISTURBED SOILS SHALL BE STABILIZED WITHIN 48 HOURS AFTER STOP OF WORK. DURING THE DRY SEASON (MAY 1ST THROUGH SEPTEMBER 30TH), ALL SOILS THAT WILL BE UNCOVERED OR UNWORKED FOR 7 DAYS SHALL BE COVERED OR STABILIZED. <NOTE: COMPARED TO SWMM VOL 2 PG 3-16> STABILIZATION MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO COVERING THE AFFECTED AREA (INCLUDING SPOIL PILES) WITH PLASTIC SHEETING, STRAW MATTING, JUTE MATTING, STRAW MULCH OR WOOD CHIPS. SEEDING OF THE DISTURBED AREAS SHALL TAKE PLACE AS WEATHER PERMITS.
- TRENCH DEWATERING DEVICES SHALL BE DISCHARGED IN A MANNER THAT WILL NOT ADVERSELY AFFECT STREAMS, DRAINAGE SYSTEMS, OR OFFSITE PROPERTIES.
- STORM SEWER INLETS RECEIVING RUNOFF FROM THE PROJECT DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER WILL BE FILTERED BEFORE ENTERING THE CONVEYANCE SYSTEM.
- ALL CATCH BASINS IMMEDIATELY ADJACENT TO AND DOWNSTREAM WITHIN 500 FEET OF THE PROPOSED PROJECT SITE SHALL BE PROTECTED FROM SILTATION.
- ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL ENSURE THAT COMPLETE COVERAGE OF THE DISTURBED AREAS IS PROVIDED AND THAT GROWTH OF THE VEGETATION IS ESTABLISHED. REFER TO DOE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON VOLUME II, BMP C120 FOR TEMPORARY AND PERMANENT SEEDING.

AXEA UTILITY NOTES:

- FIRE PROTECTION LINES AND STRUCTURES ARE SHOWN FOR BIDDING AND FOR REFERENCE ONLY. FIRE PROTECTION DESIGN TO BE COMPLETED BY FIRE PROTECTION ENGINEER IN ACCORDANCE WITH WAC 212-80. PIPE SHALL BE DUCTILE IRON (DI) IN ACCORDANCE WITH WSDOT STD. SPEC. 7-09 WITH RESTRAINED JOINTS FOR ENTIRE LENGTH. FIRE SERVICE LINE SIZE SHALL BE VERIFIED BY CONTRACTOR'S FIRE PROTECTION ENGINEER PRIOR TO CONSTRUCTION. OBTAIN ALL REQUIRED PERMITS FOR INSTALLATION AND MODIFICATION OF THE UNDERGROUND SPRINKLER SYSTEM SUPPLY LINE BEYOND THE WATER MAIN, INCLUDING THE UNDERGROUND FIRE DEPARTMENT CONNECTION (FDC) PIPING. ALL WORK SHALL COMPLY WITH THE LATEST INTERNATIONAL FIRE CODE (IFC) AS AMENDED BY WASHINGTON STATE, CITY OF TACOMA, AND NFPA 24.
- PROPOSED POWER / COMMUNICATION LINE ROUTING AND POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO ELECTRICAL PLANS FOR DETAILS AND SPECIFICATIONS.
- INSTALL PIPES IN ACCORDANCE WITH WSDOT STD. SPEC. 7-08 AND TRENCH SECTION DETAIL.
- REFER TO MECHANICAL PLUMBING AND ELECTRICAL PLANS FOR HORIZONTAL AND VERTICAL LOCATION OF UTILITY STUBS FROM BUILDING.
- ALL EXISTING WATER SERVICE LINES AND METERS THAT WILL NOT BE UTILIZED ARE TO BE RETIRED IN ACCORDANCE WITH TACOMA WATER SPECIFICATIONS. COORDINATE IMPROVEMENTS WORK WITH TACOMA WATER.
- PROVIDE AND TEST SANITARY SEWERS IN ACCORDANCE WITH WSDOT STD. SPEC. 7-17 AND TRENCH SECTION DETAIL.
- PROVIDE AND TEST WATER SERVICES IN ACCORDANCE WITH WSDOT STD. SPEC. 7-15 AND TRENCH SECTION DETAIL.
- COT NOTE: PROPOSED DOMESTIC WATER AND FIRE WATER SERVICE LINE SIZES ARE APPROXIMATE. ACTUAL LINE AND METER SIZE TO BE DETERMINED BY TACOMA WATER. COORDINATE IMPROVEMENTS WITH TACOMA WATER.

AXEA GENERAL NOTES:

- ALL WORK, MATERIALS, AND TESTING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION ISSUED PRIOR TO BID DATE OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (WSDOT STD. SPEC.). DELETE MEASUREMENT AND PAYMENT PROVISIONS, AND WSDOT STANDARDS PLANS (WSDOT STD. PLANS), EXCEPT AS MODIFIED BY THE CONTRACT DOCUMENTS. ALL REFERENCES TO OTHER STANDARDS AND SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION ISSUED PRIOR TO BID DATE.
- EXISTING TOPOGRAPHY AND BOUNDARY INFORMATION PROVIDED BY CORE DESIGN, FEBRUARY 2024.
- CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE SITE AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO UNDERTAKING THE AFFECTED WORK.
- ANY DISCREPANCY IN THESE DRAWINGS, SPECIFICATIONS, AND/OR THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER, WHO SHALL ADDRESS SUCH DISCREPANCY IN WRITING AFTER REVIEWING ANY CHANGES. ANY WORK DONE BY THE CONTRACTOR AFTER THE DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE CONTRACTOR'S RISK. VERIFY AND COORDINATE THE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK.
- BURIED UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATION. PRIOR TO INSTALLATION OF ANY PROJECT IMPROVEMENTS, VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES. IN THE EVENT OF ANY DISCREPANCY FROM THE INFORMATION PRESENTED ON THESE PLANS, CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
 - THE LOCATION OF EXISTING UTILITIES SHOWN MAY DIFFER FROM ACTUAL LOCATION. CONTRACTOR SHOULD NOT ASSUME UTILITIES SHOWN WILL BE THE ONLY UTILITIES/OBSTACLES THAT MAY BE PRESENT ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO UTILITY PURVEYORS REGARDING DEMOLITION AND REMOVAL OF SERVICE LINES AND CAP LINES BEFORE PROCEEDING WITH FURTHER WORK.
- AS-BUILT RECORDS: KEEP THREE SETS OF DRAWINGS ONSITE AT ALL TIMES FOR RECORDING AS-BUILT INFORMATION. ONE SET SHALL BE PROVIDED TO THE ENGINEER AND ONE TO THE AGENCY HAVING JURISDICTION (AHJ). ONE ELECTRONIC SET OF AS-BUILT DRAWINGS IN PORTABLE DOCUMENT FORMAT (PDF) MAY BE PROVIDED IN LIEU OF MULTIPLE COPIES. SURVEYED AS-BUILT INFORMATION IN AUTOCAD AND PDF FORMAT SHALL BE PROVIDED FOR THE FOLLOWING:
 - STORM AND/OR SANITARY SEWER STRUCTURE LOCATIONS (STATION AND OFFSET IF APPLICABLE) INVERT AND RIM ELEVATIONS TO THE NEAREST 0.01 FOOT.
 - DRIVEWAY/ROAD CENTERLINE AND GUTTER PROFILES AT BEGINNING AND ENDING STATIONS AND END OF RADII.
 - WATER SYSTEM LOCATION (VALVES, FIRE HYDRANTS, BLOWOFF, AIR VAC ASSEMBLIES, ETC.) TO THE NEAREST 0.10 FEET.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DEVELOPING, EXECUTING AND ENFORCING A SAFETY PLAN TO PROTECT WORKERS AND THE PUBLIC FROM INJURY OR HARM. THE PLAN SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL REGULATIONS AND INCLUDE THE FOLLOWING:
 - CONTRACTOR SHALL CONSULT WITH THEIR OWN GEOTECHNICAL ENGINEERING EXPERT FOR DETERMINING SOIL CLASSIFICATION RELATIVE TO SAFE SLOPING OF SOILS.
 - CONTRACTOR SHALL DETERMINE SAFE EXCAVATION AND DEWATERING METHODS, MONITOR EXCAVATIONS AND EARTHWORK OPERATIONS FOR SAFETY CONCERNS AND PROVIDE SHORING AND OTHER PROTECTION AS REQUIRED TO PROTECT WORKERS.
 - IT IS NOT THE INTENT OF THE CONSTRUCTION DOCUMENTS TO DICTATE ANY UNSAFE CONSTRUCTION MEANS OR METHODS; CONTRACTOR SHALL DETERMINE MEANS AND METHODS OF CONSTRUCTION CONFORMING TO THEIR SAFETY PLAN AS REQUIRED TO CONSTRUCT WORK SHOWN ON THE CONTRACT DOCUMENTS.
- PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, AND/OR OTHER APPROPRIATE BEST MANAGEMENT PRACTICES; COORDINATE MEASURES WITH OWNER AND AHJ.
- CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES FOR THE DURATION OF THE PROJECT.

AXEA GRADING NOTES:

- ADA COMPLIANCE:
 - SHALL BE IN ACCORDANCE WITH CFR 28, PART 35;
 - FOR WORK IN THE RIGHT-OF-WAY, CFR 28, PART 35 SHALL BE SUPPLEMENTED BY THE PUBLIC WORKS RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG);
 - ALL SITE IMPROVEMENTS SUBJECT TO THE AMERICAN WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN SHALL MEET THE FOLLOWING MAXIMUM SLOPES. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND REPLACE IMPROVEMENTS OUT OF COMPLIANCE WITH THE ADA STANDARDS.
- THE FOLLOWING MAXIMUM SLOPES SHALL NOT BE EXCEEDED UNLESS NOTED ON THE PLAN AS A "MAXIMUM EXTENT FEASIBLE" (MEF) LOCATION:
- LONGITUDINAL/RUNNING SLOPE OF WALKWAYS AND CROSSWALKS: 5.00%
 - CROSS SLOPE OF SIDEWALK: 2.00%
 - LONGITUDINAL/RUNNING SLOPE OF RAMP: 8.33%
 - CROSS SLOPE OF RAMP: 2.00%
 - LONGITUDINAL/RUNNING SLOPE OF LANDING: 2.00%
 - CROSS SLOPE OF LANDING: 2.00%
 - TOP OF CURB SLOPE AT RAMP FLARE: 10.00%
 - FLOW LINE SLOPE AT PEDESTRIAN CROSSING: 2.00%

- REFER TO GEOTECHNICAL ENGINEERING REPORT BY TERRA ASSOCIATES, DATED MARCH 28, 2024, FOR INFORMATION ON EXISTING SITE CONDITIONS AS WELL AS SITE AND SOIL REQUIREMENTS FOR THIS PROJECT.
- THE SPOT ELEVATIONS INDICATED ON THIS PLAN REPRESENT THE DESIGN TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS AND GRADE ALL AREAS TO PRECLUDE PONDING OF WATER.
- ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURES, VALVE BOXES, VAULT LIDS AND UTILITY ACCESS STRUCTURES THAT WILL BE PRESERVED TO FINISHED GRADE WITHIN AREAS AFFECTED BY CONSTRUCTION.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE TOPSOIL PER THE LANDSCAPE PLANS.

AXEA STORM DRAINAGE NOTES:

- ALLOWABLE GRAVITY STORM DRAINAGE CONVEYANCE PIPES AND FITTINGS (STORM DRAIN LINE/ROOF DRAIN LINE) CONFORMING TO 2020 CITY OF REDMOND STANDARD SPECIFICATIONS AND 2022 CITY OF REDMOND STORMWATER TECHNICAL NOTEBOOK FOR A LIST OF APPROVED PIPE MATERIALS. THE FOLLOWING MATERIALS MAY BE USED, UNLESS OTHERWISE IDENTIFIED SPECIFICALLY ON THE PLANS:
 - SOLID WALL PVC STORM PIPE AND FITTINGS (PVC). MINIMUM COVER SHALL BE 3.00'.
 - CORRUGATED POLYETHYLENE STORM SEWER PIPE AND FITTINGS (CPEP) - PRIVATE USE ONLY. MINIMUM COVER SHALL BE 2.00'.
 - DUCTILE IRON SEWER PIPE AND FITTINGS, CLASS 52 (DI). MINIMUM COVER SHALL BE 1.50'.
- ALLOWABLE PRESSURE STORM DRAINAGE SYSTEM PIPES AND FITTINGS. THE FOLLOWING MATERIALS MAY BE USED, UNLESS OTHERWISE IDENTIFIED SPECIFICALLY ON THE PLANS:
 - HIGH DENSITY POLYETHYLENE (HDPE) HDPE CONFORMING TO ANSII/AWWA C900
- ALLOWABLE UNDERDRAIN PIPES AND FITTINGS (FOOTING DRAIN LINE) CONFORMING TO WSDOT STD. SPEC 7-01:
 - PERFORATED POLYVINYL CHLORIDE UNDERDRAIN PIPE (PERF. PVC).
 - PERFORATED CORRUGATED POLYETHYLENE (PE) UNDERDRAIN PIPE (PERF. CPEP) - PRIVATE USE ONLY.
- INSTALL ALL ROOF DRAIN LINES AT MINIMUM 1.00% SLOPE WITH 3.00' MINIMUM COVER. ROOF DRAIN LINES TO BE 4" PVC UNLESS OTHERWISE NOTED.
- ROOF AND FOOTING DRAIN LINES ARE LOCATED ON PLANS FOR CLARITY AND ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD PRACTICE AND APPLICABLE CODES.
- ALL STORM DRAINAGE AND ROOF DRAIN LINE CLEANOUTS MUST COMPLY WITH THE CLEANOUT DETAIL.
- ALL CATCH BASINS ARE TO BE SITUATED SUCH THAT THE OUTSIDE EDGE OF GRATE FRAME IS AT TOE OF CURB OR FLOW LINE OF GUTTER (WHERE APPLICABLE).
- STATION AND OFFSET CALLOUTS FOR STORM ARE TO CENTER OF STRUCTURE.
- PIPE LENGTHS NOTED ON THE PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- INSTALL ALL STORM DRAINAGE CATCH BASINS AND MANHOLES IN PAVED AREAS FLUSH WITH PAVEMENT. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISHED GRADE. LIDS SHALL BE LABELED "STORM."
- PROVIDE CATCH BASINS AND MANHOLES IN ACCORDANCE WITH WSDOT STD. SPEC. 7-05.
- REMOVE ALL SILT AND DEBRIS FROM EXISTING DRAINAGE PIPES AFTER CONTRIBUTING BASIN AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILTATION FENCE NOTES:

- THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SILT FENCES AT THE LOCATIONS SHOWN IN THE PLANS.
- CONSTRUCT SILT FENCES IN AREAS OF CLEARING, GRADING, OR DRAINAGE PRIOR TO STARTING THOSE ACTIVITIES.
- THE SILT FENCE SHALL HAVE A 2-FEET MIN. AND A 2½-FEET MAX. HEIGHT ABOVE THE ORIGINAL GROUND SURFACE.
- THE FILTER FABRIC SHALL BE SEWN TOGETHER AT THE POINT OF MANUFACTURE TO FORM FILTER FABRIC LENGTHS AS REQUIRED. LOCATE ALL SEWN SEAMS AT SUPPORT POSTS. ALTERNATIVELY, TWO SECTIONS OF SILT FENCE CAN BE OVERLAPPED, PROVIDED THE CONTRACTOR CAN DEMONSTRATE, TO THE SATISFACTION OF THE ENGINEER, THAT THE OVERLAP IS LONG ENOUGH AND THAT THE ADJACENT FENCE SECTIONS ARE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP.
- ATTACH THE FILTER FABRIC ON THE UP-SLOPE SIDE OF THE POSTS AND SECURE WITH STAPLES, WIRE, OR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ATTACH THE FILTER FABRIC TO THE POSTS IN A MANNER THAT REDUCES THE POTENTIAL FOR TEARING.
- SUPPORT THE FILTER FABRIC WITH WIRE OR PLASTIC MESH, DEPENDENT ON THE PROPERTIES OF THE GEOTEXTILE SELECTED FOR USE. IF WIRE OR PLASTIC MESH IS USED, FASTEN THE MESH SECURELY TO THE UP-SLOPE SIDE OF THE POSTS WITH THE FILTER FABRIC UP-SLOPE OF THE MESH.
- MESH SUPPORT, IF USED, SHALL CONSIST OF STEEL WIRE WITH A MAXIMUM MESH SPACING OF 2-INCHES, OR A PREFABRICATED POLYMERIC MESH. THE STRENGTH OF THE WIRE OR POLYMERIC MESH SHALL BE EQUIVALENT TO OR GREATER THAN 180 LBS. GRAB TENSILE STRENGTH. THE POLYMERIC MESH MUST BE AS RESISTANT TO THE SAME LEVEL OF ULTRAVIOLET RADIATION AS THE FILTER FABRIC IT SUPPORTS.
- BURY THE BOTTOM OF THE FILTER FABRIC 4-INCHES MIN. BELOW THE GROUND SURFACE. BACKFILL AND TAMP SOIL IN PLACE OVER THE BURIED PORTION OF THE FILTER FABRIC, SO THAT NO FLOW CAN PASS BENEATH THE FENCE AND SCOURING CANNOT OCCUR. WHEN WIRE OR POLYMERIC BACK-UP SUPPORT MESH IS USED, THE WIRE OR POLYMERIC MESH SHALL EXTEND INTO THE GROUND 3-INCHES MIN.
- DRIVE OR PLACE THE FENCE POSTS INTO THE GROUND 18-INCHES MIN. A 12-INCH MIN. DEPTH IS ALLOWED IF TOPSOIL OR OTHER SOFT SUBGRADE SOIL IS NOT PRESENT AND 18-INCHES CANNOT BE REACHED. INCREASE FENCE POST MIN. DEPTHS BY 6 INCHES IF THE FENCE IS LOCATED ON SLOPES OF 3H:1V OR STEEPER AND THE SLOPE IS PERPENDICULAR TO THE FENCE. IF REQUIRED POST DEPTHS CANNOT BE OBTAINED, THE POSTS SHALL BE ADEQUATELY SECURED BY BRACING OR GUYING TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT LOADING.
- USE STEEL OR EQUIVALENT POSTS. THE SPACING OF THE SUPPORT POSTS SHALL BE A MAXIMUM OF 6 FEET. POSTS SHALL CONSIST OF EITHER:
 - NO. 6 STEEL REBAR OR LARGER;
 - ASTM A 120 STEEL PIPE WITH A MINIMUM DIAMETER OF 1-INCH.
 - U, T, L, OR C SHAPE STEEL POSTS WITH A MINIMUM WEIGHT OF 1.35 LBS./FT.
 - OTHER STEEL POSTS HAVING EQUIVALENT STRENGTH AND BENDING RESISTANCE TO THE POST SIZES LISTED ABOVE.
- LOCATE SILT FENCES ON CONTOUR AS MUCH AS POSSIBLE, EXCEPT AT THE ENDS OF THE FENCE, WHERE THE FENCE SHALL BE TURNED UPHILL SUCH THAT THE SILT FENCE CAPTURES THE RUNOFF WATER AND PREVENTS WATER FROM FLOWING AROUND THE END OF THE FENCE.
- IF THE FENCE MUST CROSS CONTOURS, WITH THE EXCEPTION OF THE ENDS OF THE FENCE, PLACE GRAVEL CHECK DAMS PERPENDICULAR TO THE BACK OF THE FENCE TO MINIMIZE CONCENTRATED FLOW AND EROSION. THE SLOPE OF THE FENCE LINE WHERE CONTOURS MUST BE CROSSED SHALL NOT BE STEEPER THAN 3H:1V.
 - GRAVEL CHECK DAMS SHALL BE APPROXIMATELY 1-FOOT DEEP AT THE BACK OF THE FENCE. GRAVEL CHECK DAMS SHALL BE CONTINUED PERPENDICULAR TO THE FENCE AT THE SAME ELEVATION UNTIL THE TOP OF THE CHECK DAM INTERCEPTS THE GROUND SURFACE BEHIND THE FENCE.
 - GRAVEL CHECK DAMS SHALL CONSIST OF CRUSHED SURFACING BASE COURSE, GRAVEL BACKFILL FOR WALLS, OR SHOULDER BALLAST. GRAVEL CHECK DAMS SHALL BE LOCATED EVERY 10 FEET ALONG THE FENCE WHERE THE FENCE MUST CROSS CONTOURS.

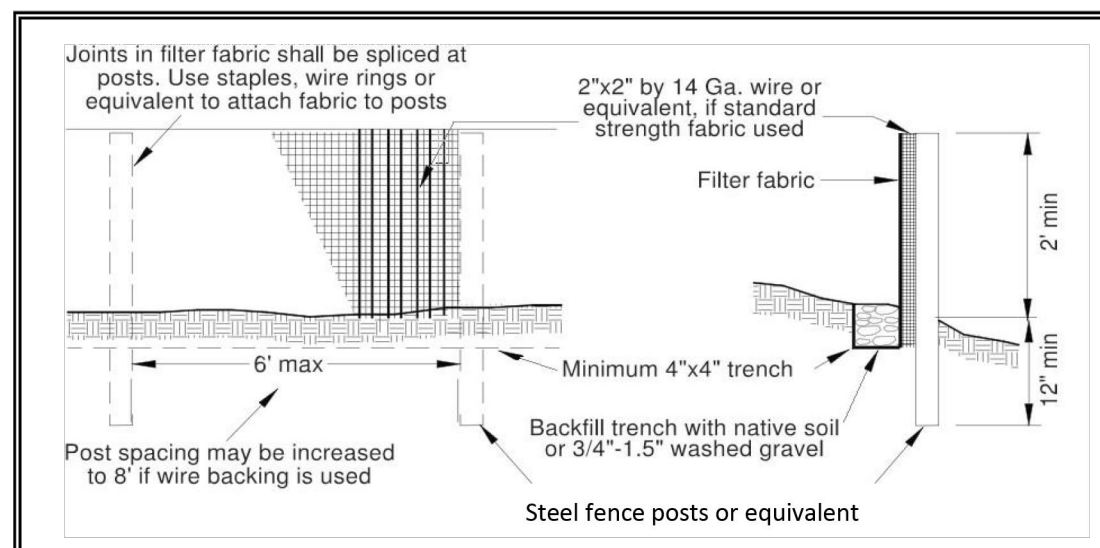
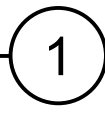


Figure 4.2.12 – Silt Fence

BMP C233 SILT FENCE

SCALE: NTS



TREE PROTECTION CONSTRUCTION NOTES:

THE FOLLOWING RECOMMENDATIONS ARE PROVIDED TO TRANSFER TO SITE PLANS AS CONSTRUCTION NOTES WITH THE INTENT OF MINIMIZING DAMAGE TO TREE ROOTS, TRUNKS, AND OTHER TREE PARTS AND TO STAY WITHIN THE ACCEPTABLE THRESHOLDS FOR ROOT LOSS, PRESENTED IN ORDER OF CONSTRUCTION SEQUENCING AS FOLLOWS:

TREE PROTECTION FENCE

INSTALL TREE PROTECTION FENCE AT RECOMMENDED LOCATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THAT SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT. ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED OUTSIDE OF THE FENCED AREAS. IF CONSTRUCTION SEQUENCING CHANGES, ADDITIONAL TREE PROTECTION FENCING MAY BE REQUIRED TO PREVENT TREE DAMAGE. FENCING SHALL MEET CITY OF MERCER ISLAND STANDARDS (FIGURE 1).

AIR EXCAVATIONS

BECAUSE THE GARAGE SLAB, FOOTING DRAIN, AND UTILITY EXCAVATIONS WITHIN TREE #1 CRZ CANNOT BE AVOIDED, EFFORTS NEED TO BE MADE TO IDENTIFY TREE ROOT LOCATIONS AND UTILIZE PROPER ROOT PRUNING METHODS TO REDUCE INADVERTENT ROOT LOSS, PRESERVE THE STRUCTURAL INTEGRITY OF TREES, AND REGENERATE NEW ROOTS. THE FOLLOWING NOTES INTEND TO CLARIFY THE CONSTRUCTION SEQUENCE AND SPECIAL INSTRUCTIONS FOR EXPOSING ROOTS USING HIGH-PRESSURE AIR (PNEUMATIC) TOOLS.

- TREE #1/SOUTH ROOTS. CONDUCT AIR SPADE EXCAVATIONS AT THE TREE PROTECTION FENCE LINE ADJACENT TO THE PROPOSED GARAGE NORTH WALL TO PROPERLY PRUNE ROOTS EXTENDING TOWARDS THE GARAGE.
- AIR EXCAVATIONS SHOULD CONTINUE TO AT LEAST 12 INCHES BELOW THE SOIL SURFACE TO ASSESS ROOTS ON THE SOUTH SIDE OF TREE #1, ADJACENT TO THE GARAGE.
- KEEP EQUIPMENT AND EXCAVATED SPOILS OUTSIDE OF THE DESIGNATED CRZ. PROTECT ADJACENT AREAS FROM ROCK-THROW WITH PLYWOOD PANELS AND KEEP SOIL MOIST TO MINIMIZE DUST.
- BACKFILL SHOULD BE REPLACED THE SAME DAY IT WAS EXCAVATED TO REDUCE ROOT DESICCATION. BACKFILL MAY CONSIST OF NATIVE OR AMENDED SOIL. DURING COOLER, WET WEATHER, COVER EXPOSED ROOTS WITH WET BURLAP IMMEDIATELY. BURLAP SHOULD BE KEPT MOIST UNTIL BACKFILLED. CHEMICALS, DEBRIS, TRASH, OR OTHER MATERIALS SHOULD NOT BE MIXED WITH BACKFILL. BACKFILLED SOIL SHOULD MATCH AND NOT EXCEED THE COMPACTION OF THE SURROUNDING SOIL.
- WATER THE TREE'S CRZ. MULCH WITH ARBORIST WOODCHIPS AT 4-6-INCH DEPTHS, TAKING CARE TO AVOID MULCH DIRECTLY CONTACTING THE TRUNK.

ROOT PRUNING

SPECIFIC ROOT LOCATION IS UNCERTAIN UNTIL EXPOSED. FACET RECOMMENDS CAREFUL AND INTENTIONAL ROOT PRUNING AT THE SOUTH BOUNDARY OF TREE #1'S TREE PROTECTION FENCE TO MINIMIZE ROOT DAMAGE CLOSER TO THE TREE, WHICH TYPICALLY RESULTS FROM HEAVY EQUIPMENT EXCAVATIONS OR TRENCHING WITHOUT ROOT PRUNING.

- NO MORE THAN 20% ROOT LOSS RESULTING FROM PROPER PRUNING CUTS SHALL OCCUR.
- ANY EXPOSED ROOTS OVER ONE INCH SHOULD BE CLEAN-CUT BY HAND (VERSUS REMOVAL WITH SOIL BY EXCAVATOR BUCKET).
- ALL ROOT PRUNING SHOULD BE OVERSEEN BY THE PROJECT ARBORIST. FACET CAN PROVIDE NAMES/CONTACT INFORMATION FOR EXPERIENCED AIR EXCAVATOR/ROOT PRUNING CONTRACTORS UPON REQUEST.

TUNNEL/BORE INSTEAD OF TRENCHING

IF NO ALTERNATIVE PATH FOR UNDERGROUND UTILITIES IS POSSIBLE OUTSIDE TREE #1 CRZ, TUNNEL OR HYDROBORE (VERSUS TRADITIONAL TRENCHING METHODS THAT SEVER ROOTS) UNDERNEATH ROOTS TO THE MINIMUM DEPTH REQUIRED BY THE UTILITY TO REDUCE TREE #1 ROOT LOSS. RELOCATE OR INSTALL BELOW-GRADE UTILITIES BY:

- TEMPORARILY ALLOWING ACCESS WITHIN TREE PROTECTION FENCE.
- EXPOSING ROOTS VIA AIR SPADE EXCAVATIONS, HYDRO-BORE, VECTOR OR OTHER NON-INJURIOUS METHODS.
- INSTALLING OR RELOCATING CONDUIT, BACKFILL AND REPLACE TREE PROTECTION FENCE IN ITS APPROVED LOCATION.

LEGEND

---	PROPERTY/BOUNDARY LINE
- - - - -	BUILDING SETBACK LINE
[Pattern]	CEMENT CONCRETE SIDEWALK/PATIO
[Pattern]	CEMENT CONCRETE DRIVEWAY
--- ---	CLEARING LIMITS / LIMITS OF DISTURBANCE
---o---o---	SILTATION FENCE
---x---x---	TREE PROTECTION FENCE
---RD---	ROOF DRAIN LINE
---FD---	FOOTING DRAIN LINE
●	CLEAN OUT
■	AREA DRAIN
■DS	DOWNSPOUT
[Pattern]	DRY WELL
P	POWER SERVICE LINE
SS	SANITARY SEWER SERVICE LINE
W	WATER SERVICE LINE
■	WATER METER
G	GAS SERVICE LINE
■	GAS METER
295	MAJOR CONTOUR
292	MINOR CONTOUR
294.50	SPOT ELEVATION
2.0%	SLOPE ARROW
---	GRADE BREAK
[Pattern]	REMOVE CEMENT CONCRETE PAVEMENT
- / - / - / - / - / - / - / - /	REMOVE EXISTING UTILITY
X	REMOVE EXISTING TREE

EXISTING

+	BENCHMARK
⊕	BRASS DISC (FOUND)
---	CENTERLINE ROW
---	FENCE LINE (WOOD)
⊙	IRON PIPE (FOUND)
⊕	MONUMENT (IN CASE, FOUND)
⊕	MONUMENT (SURFACE, FOUND)
---	PROPERTY LINES (ADJACENT)
---	PROPERTY LINE (SUBJECT)
●	REBAR & CAP (SET)
○	REBAR AS NOTED (FOUND)
[Pattern]	RETAINING WALL
[Pattern]	BUILDING
[Pattern]	CONCRETE SURFACE
SIZE TYPE	TREE (AS NOTED)
[Pattern]	HEDGE FOLIAGE LINE
G	GAS METER
G	GAS LINE
RD	STORM DRAIN LINE
PD	POWER METER
P	POWER (OVERHEAD)
UP	POWER (UNDERGROUND)
CO	CLEANOUT
○	SEWER MANHOLE
SS	SEWER LINE
WV	WATER VALVE
W	WATER LINE
C.C.	CENTER CHANNEL
CONC	CONCRETE
COR	CORNER
DEC	DECIDUOUS
FF	FINISH FLOOR
G	GAS
MON	MONUMENT
OHP	OVERHEAD POWER
PROP	PROPERTY
CO	CLEANOUT
COL	COLUMN
ROW	RIGHT OF WAY

1102 A STREET SUITE 317
TACOMA, WA 98402
PHONE: 253.208.6303
WWW.AXEA CIVIL.COM

SEAL

08/21/2025

PROJECT

HACKETT RESIDENCE

2965 74TH AVE SE
MERCER ISLAND, WA 98040

REVISIONS

--	--

© 2024 AXEA CIVIL, LLC - TACOMA, WA

DRAWN BY: BDS
DESIGNED BY: RB
REVIEWED BY: RB
TITLE: CIVIL GENERAL NOTES AND LEGEND

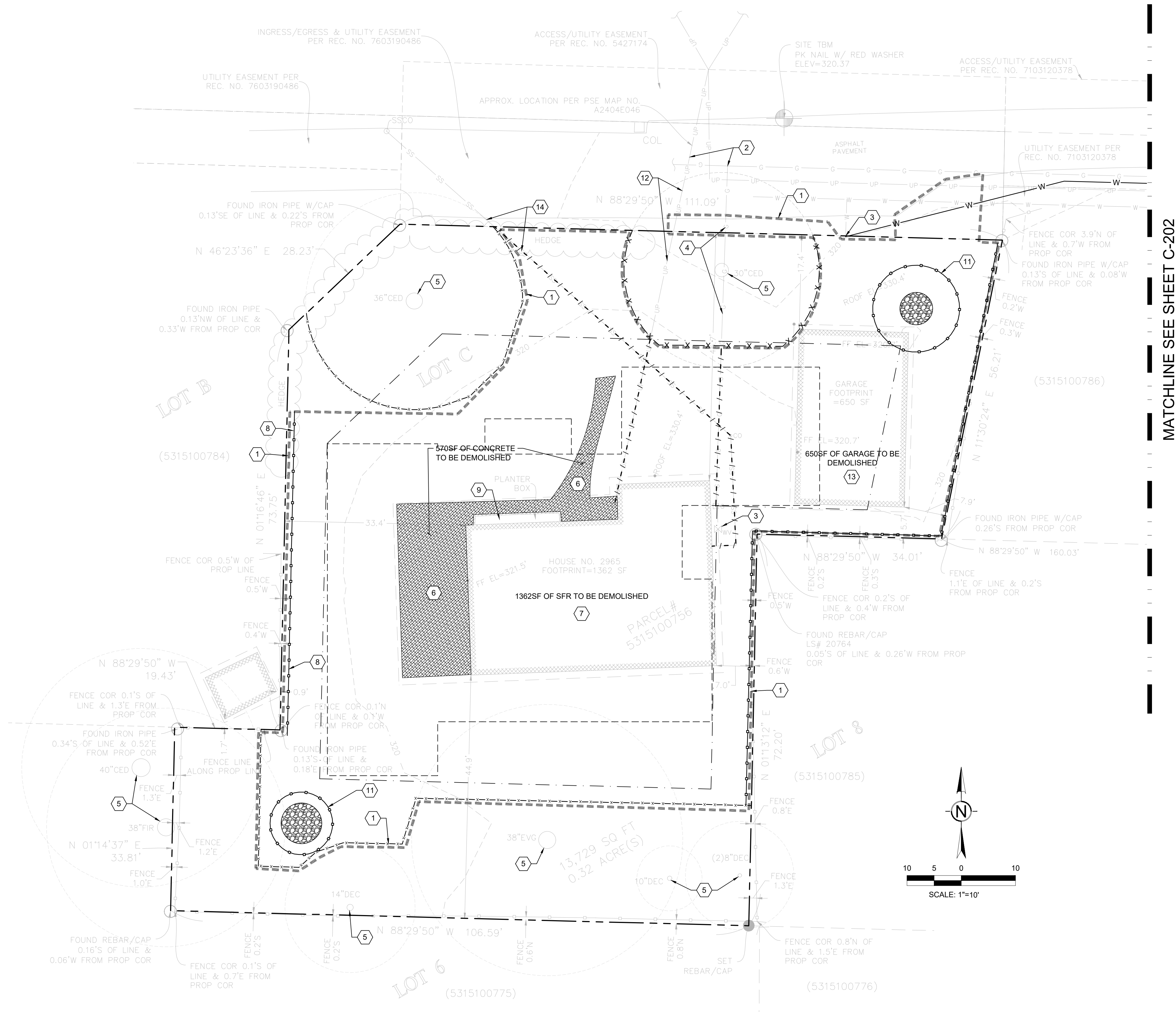
DATE: 08.20.2025
PROJECT NUMBER: 24021
SHEET:



C-102

PERMIT SET

DATE PLOTTED: 8/20/2025 3:03:08 PM FILENAME: 24021C-201.DWG



MATCHLINE SEE SHEET C-202

SHEET NOTES

- 1 LIMITS OF DISTURBANCE. DISTURBED AREA ±10,158.75 SF.
- 2 PROTECT EXISTING UNDERGROUND UTILITY LINES.
- 3 PROTECT EXISTING WATER SERVICE LINE AND METER TO REMAIN. EXISTING LOCATION NOT SURVEYED. REFER TO UTILITY PLAN.
- 4 PROTECT EXISTING GAS SERVICE LINE TO REMAIN. COORDINATE NEW HOUSE ENTRY WITH BUILDING/OWNER. REFER TO UTILITY PLAN.
- 5 PROTECT EXISTING TREES PER DETAIL AND PER ARBORIST REPORT
- 6 REMOVE EXISTING CONCRETE PAVEMENT.
- 7 DEMOLISH EXISTING HOUSE AND ASSOCIATED APPURTENANCES.
- 8 SILT FENCE PER BMP C233 ¹/_{C-102}
- 9 REMOVE EXISTING LANDSCAPE PLANTER.
- 10 NOT USED.
- 11 PROTECT DRYWELL AND BUFFER DURING CONSTRUCTION. PROPOSED STORM SYSTEM SHOWN FOR REFERENCE ONLY. REFER TO SITE PLAN.
- 12 PROTECT EXISTING UNDERGROUND POWER SERVICE LINE TO REMAIN. COORDINATE NEW HOUSE ENTRY WITH BUILDING/OWNER. REFER TO UTILITY PLAN.
- 13 DEMOLISH EXISTING GARAGE.
- 14 PROTECT EXISTING SIDE SEWER. COORDINATE NEW HOUSE ENTRY WITH BUILDER/OWNER. REFER TO UTILITY PLAN.

AXEA
 1102 A STREET SUITE 317
 TACOMA, WA 98402
 PHONE: 253.208.6303
 WWW.AXEACIVIL.COM

SEAL
 JUSTIN IAN GORMAN
 REGISTERED PROFESSIONAL ENGINEER
 LICENSE NO. 43432
 STATE OF WASHINGTON
 08/21/2025

PROJECT
HACKETT RESIDENCE
 2965 74TH AVE SE
 MERCER ISLAND, WA 98040

REVISIONS

NO.	DESCRIPTION

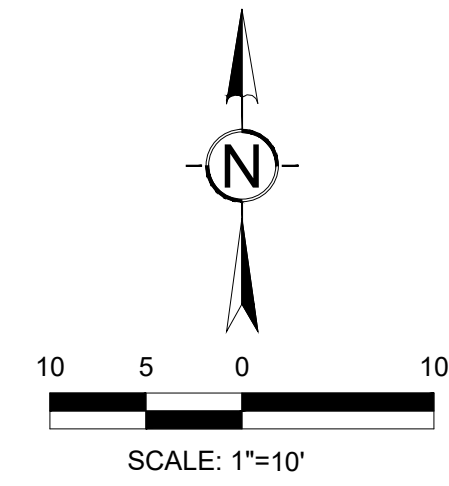
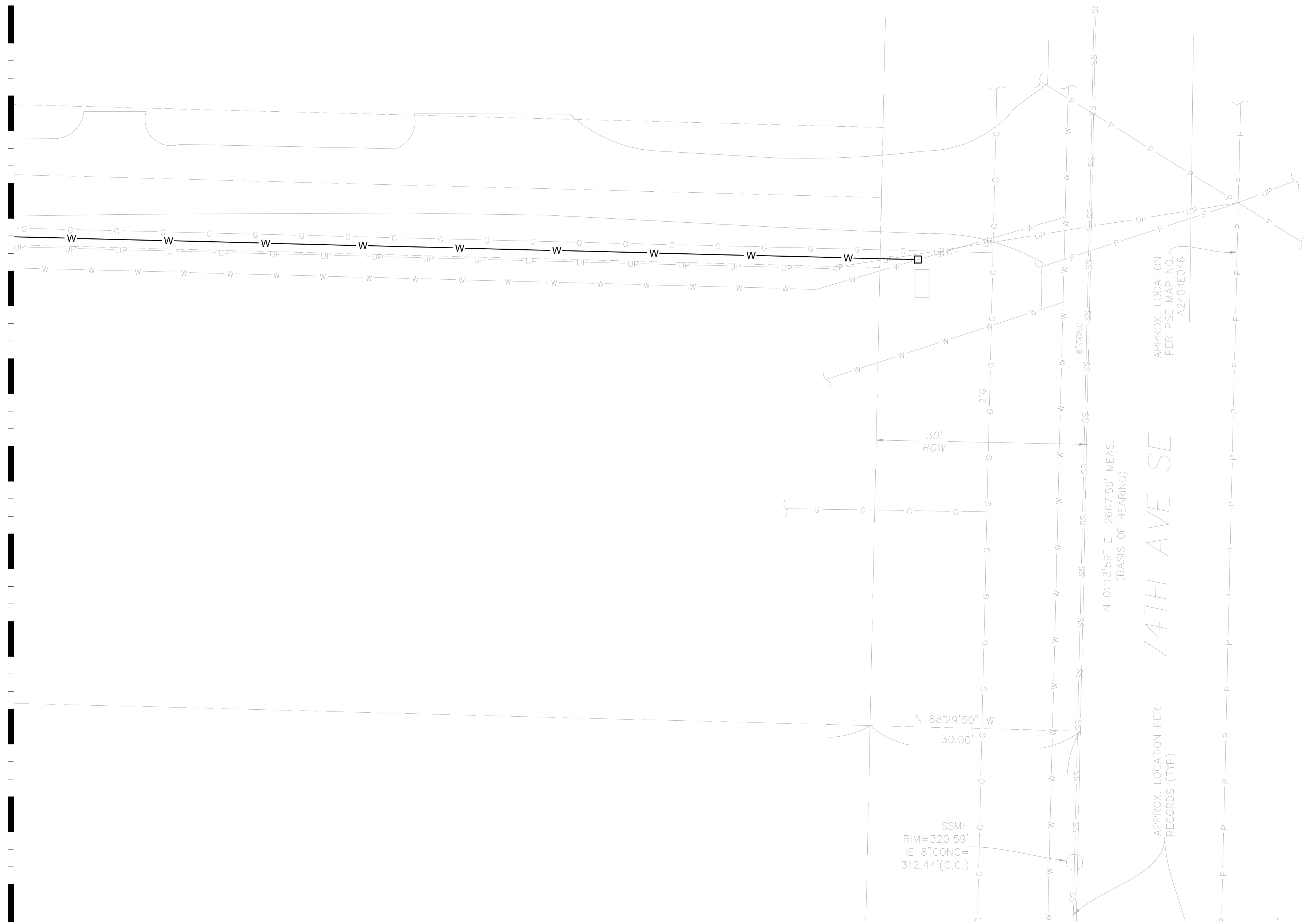
© 2024 AXEA CIVIL, LLC - TACOMA, WA

DRAWN BY: BDS
 DESIGNED BY: RB
 REVIEWED BY: RB
 TITLE:
DEMOLITION AND TESC PLAN

DATE:
 08.20.2025
 PROJECT NUMBER:
 24021
 SHEET:
C-201
 PERMIT SET



MATCHLINE SEE SHEET C-201



SHEET NOTES

- 1 LIMITS OF DISTURBANCE. DISTURBED AREA ±10,158.75 SF.
- 2 PROTECT EXISTING UNDERGROUND UTILITY LINES.
- 3 PROTECT EXISTING WATER SERVICE LINE AND METER TO REMAIN. EXISTING LOCATION NOT SURVEYED. REFER TO UTILITY PLAN.
- 4 PROTECT EXISTING GAS SERVICE LINE TO REMAIN. COORDINATE NEW HOUSE ENTRY WITH BUILDING/OWNER. REFER TO UTILITY PLAN.
- 5 PROTECT EXISTING TREES PER DETAIL AND PER ARBORIST REPORT
- 6 REMOVE EXISTING CONCRETE PAVEMENT.
- 7 DEMOLISH EXISTING HOUSE AND ASSOCIATED APPURTENANCES.
- 8 SILT FENCE PER BMP C233 1
C-102
- 9 REMOVE EXISTING LANDSCAPE PLANTER.
- 10 NOT USED.
- 11 PROTECT DRYWELL AND BUFFER DURING CONSTRUCTION. PROPOSED STORM SYSTEM SHOWN FOR REFERENCE ONLY. REFER TO SITE PLAN.
- 12 PROTECT EXISTING UNDERGROUND POWER SERVICE LINE TO REMAIN. COORDINATE NEW HOUSE ENTRY WITH BUILDING/OWNER. REFER TO UTILITY PLAN.
- 13 DEMOLISH EXISTING GARAGE.
- 14 PROTECT EXISTING SIDE SEWER. COORDINATE NEW HOUSE ENTRY WITH BUILDER/OWNER. REFER TO UTILITY PLAN.



AXEA
 1102 A STREET SUITE 317
 TACOMA, WA 98402
 PHONE: 253.208.6303
 WWW.AXEACIVIL.COM

SEAL



08/21/2025

PROJECT
HACKETT RESIDENCE
 2966 74TH AVE SE
 MERCER ISLAND, WA 98040

REVISIONS




© 2024 AXEA CIVIL, LLC - TACOMA, WA

DRAWN BY: BDS
 DESIGNED BY: RB
 REVIEWED BY: RB
 TITLE
**DEMOLITION AND
 TESC PLAN**

DATE
 08.20.2025

PROJECT NUMBER
 24021

SHEET



C-202
 PERMIT SET



PROJECT
HACKETT RESIDENCE
 2965 74TH AVE SE
 MERCER ISLAND, WA 98040

REVISIONS

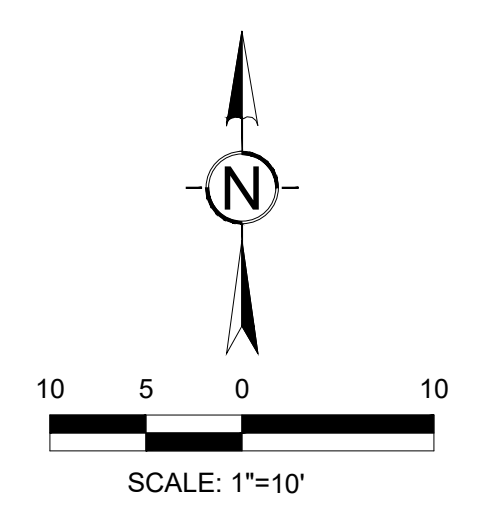
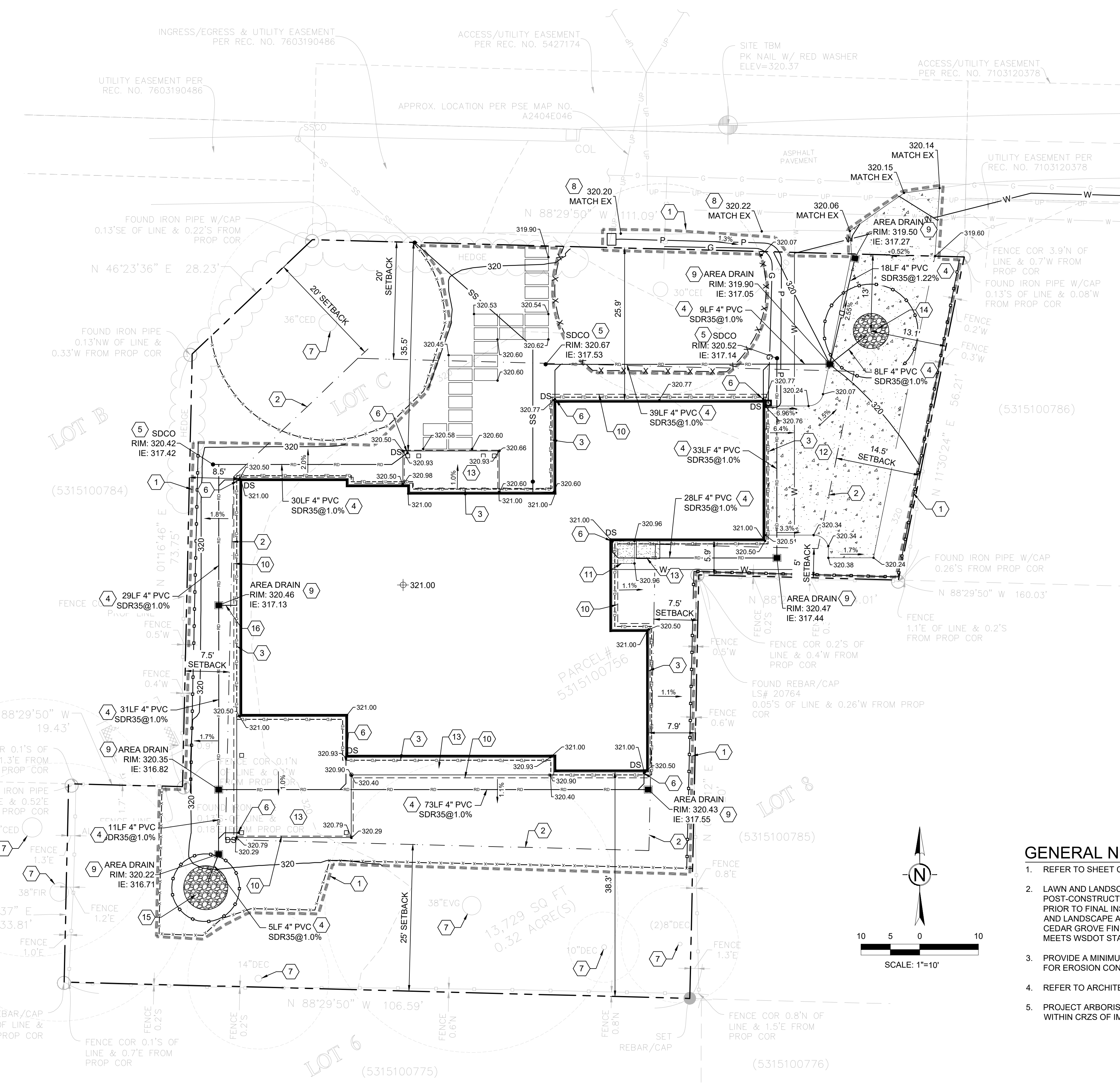
--	--

DRAWN BY: BDS
 DESIGNED BY: RB
 REVIEWED BY: RB
 TITLE
GRADING AND DRAINAGE PLAN

DATE
 08.20.2025

PROJECT NUMBER
 24021

SHEET
C-301
 PERMIT SET



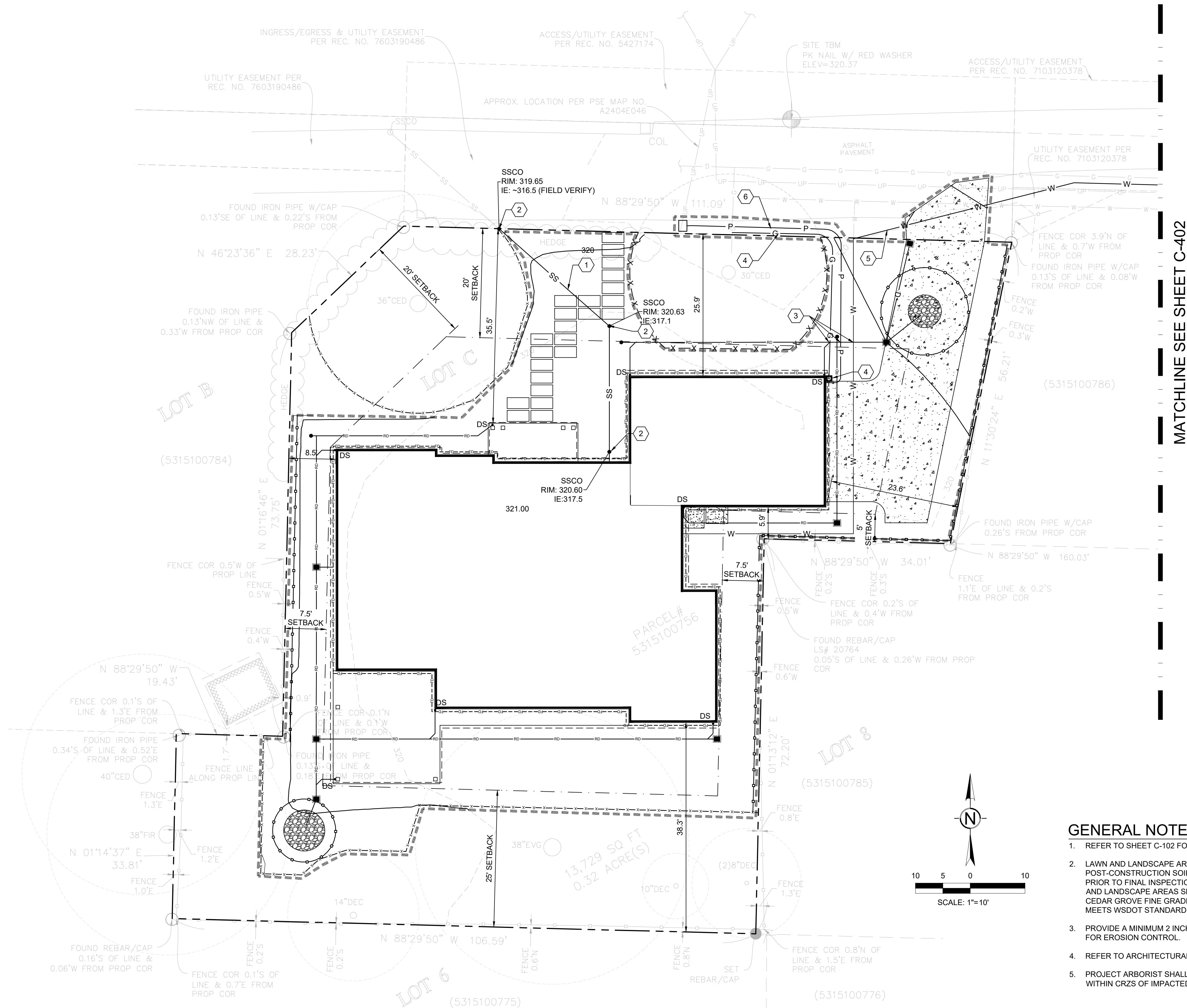
GENERAL NOTES

- REFER TO SHEET C-102 FOR STANDARD ESC PLAN NOTES.
- LAWN AND LANDSCAPE AREAS SHALL MEET THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS PRIOR TO FINAL INSPECTION OF THE PROJECT. PROPOSED LAWN AND LANDSCAPE AREAS SHALL RECEIVE TOPSOIL AMENDED WITH CEDAR GROVE FINE GRADE COMPOST OR OTHER COMPOST THAT MEETS WSDOT STANDARD SPEC 9-14.5(B).
- PROVIDE A MINIMUM 2 INCH LIFT OF MULCH IN ALL PLANTING AREAS FOR EROSION CONTROL.
- REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS.
- PROJECT ARBORIST SHALL BE ON-SITE TO OBSERVE ALL WORK WITHIN CRZS OF IMPACTED TREES.

SHEET NOTES

- LIMITS OF DISTURBANCE.
- BUILDING SETBACK.
- 4" PVC PERFORATED FOOTING DRAIN PIPE PER DETAIL. SURROUND WITH MINIMUM 6" OF DRAIN ROCK WRAPPED IN A NON-WOVEN GEOSYNTHETIC FILTER FABRIC.
- PVC SDR35 ROOF DRAIN AT 1.0% MINIMUM SLOPE.
- ROOF DRAIN CLEANOUT PER DETAIL.
- DOWNSPOUT CONNECTION PER DETAIL.
- PROTECT EXISTING TREES PER DETAIL AND ARBORIST REPORT.
- MATCH GRADES AT EXISTING ROADWAY.
- AREA DRAIN PER DETAIL. PROVIDE INLET PROTECTION DURING CONSTRUCTION.
- ROOF OVERHANG. REFER TO ARCHITECTURAL PLANS.
- PAD FOR HVAC EQUIPMENT. REFER TO ARCHITECTURAL PLANS.
- CEMENT CONCRETE PAVEMENT
- CEMENT CONCRETE WALKWAY/PATIO/STOOP
- INFILTRATION DRYWELL "A" AND AREA DRAIN PER DETAIL. TRIBUTARY IMPERVIOUS AREA: 2142SF. SIZING (SOIL MEDIUM SANDS): 90CF/1000SF OF TRIBUTARY AREA. REQUIRED VOLUME: 204.66CF. VOLUME PROVIDED: 212CF (6" DIA HOLE, 7.5' DEEP).
- INFILTRATION DRYWELL "B" AND AREA DRAIN PER DETAIL. TRIBUTARY IMPERVIOUS AREA: 3699SF. SIZING (SOIL MEDIUM SANDS): 90CF/1000SF OF TRIBUTARY AREA. REQUIRED VOLUME: 321.03CF. VOLUME PROVIDED: 331CF (7.5" DIA HOLE, 7.5' DEEP).
- 4" PVC SDR35 FOOTING DRAIN TIGHT-LINE. CONNECT TO AREA DRAIN MINIMUM 1' BELOW BOTTOM OF FOOTING.

DATE PLOTTED: 8/20/2025 3:03:25 PM FILENAME: 24021C-401.DWG



MATCHLINE SEE SHEET C-402

GENERAL NOTES

- REFER TO SHEET C-102 FOR STANDARD ESC PLAN NOTES.
- LAWN AND LANDSCAPE AREAS SHALL MEET THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS PRIOR TO FINAL INSPECTION OF THE PROJECT. PROPOSED LAWN AND LANDSCAPE AREAS SHALL RECEIVE TOPSOIL AMENDED WITH CEDAR GROVE FINE GRADE COMPOST OR OTHER COMPOST THAT MEETS WSDOT STANDARD SPEC 9-14.5(B).
- PROVIDE A MINIMUM 2 INCH LIFT OF MULCH IN ALL PLANTING AREAS FOR EROSION CONTROL.
- REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS.
- PROJECT ARBORIST SHALL BE ON-SITE TO OBSERVE ALL WORK WITHIN CRZS OF IMPACTED TREES.

SHEET NOTES

- SIDE SEWER INSTALLATION PER DETAIL. CONNECT TO EXISTING SEWER STUB. SEWER STUB NOT SURVEYED. FIELD VERIFY LOCATION. (5 C-501)
- SIDE SEWER CLEANOUT. CONNECT TO EXISTING SERVICE LINE. EXISTING LINE NOT SURVEYED. CONTRACTOR TO FIELD LOCATE EXISTING LINE PRIOR TO CONSTRUCTION. (4 C-501)
- PROVIDE MINIMUM 1" VERTICAL SEPERATION AT UTILITY CROSSING, TYP.
- EXISTING NATURAL GAS SERVICE. COORDINATE HOUSE ENTRY WITH BUILDING/OWNER.
- LOCATION OF EXISTING SERVICE LINE NOT SURVEYED. CONTRACTOR TO FIELD LOCATE PRIOR TO CONSTRUCTION. COORDINATE HOUSE ENTRY WITH OWNER/BUILDER.
- EXISTING UNDERGROUND POWER SERVICE. COORDINATE HOUSE ENTRY WITH OWNER/BUILDER.

AXEA
 1102 A STREET SUITE 317
 TACOMA, WA 98402
 PHONE: 253.208.6303
 WWW.AXEACIVIL.COM

SEAL
 JUSTIN IAN GORMAN
 LICENSE NO. 43432
 REGISTERED PROFESSIONAL ENGINEER
 08/21/2025

PROJECT
HACKETT RESIDENCE
 2965 74TH AVE SE
 MERCER ISLAND, WA 98040

REVISIONS

--	--

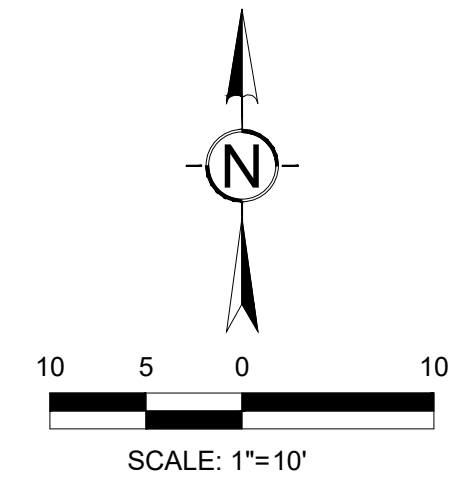
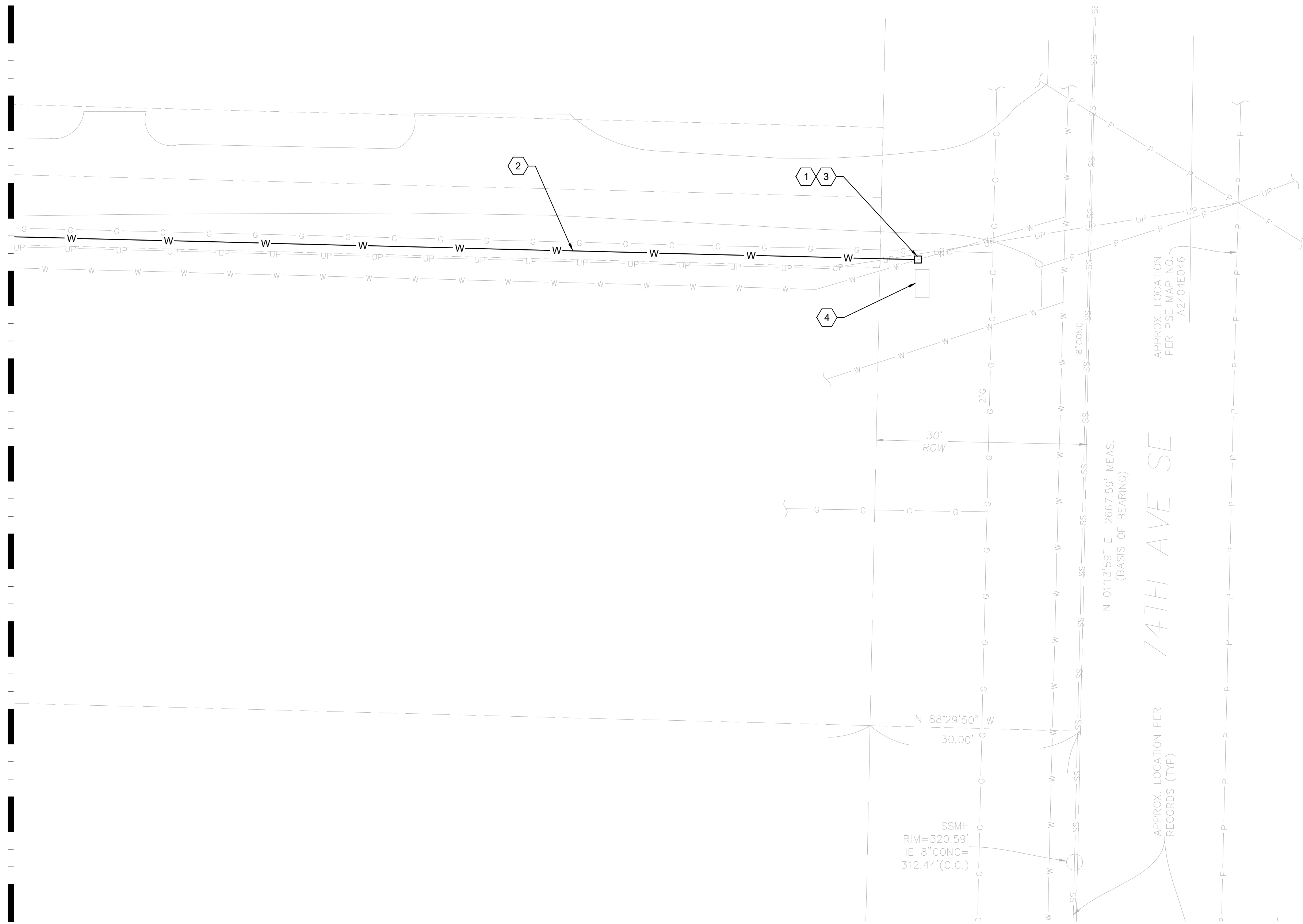
© 2024 AXEA CIVIL, LLC - TACOMA, WA

DRAWN BY: BDS
 DESIGNED BY: RB
 REVIEWED BY: RB
 TITLE
UTILITY PLAN

DATE
 08.20.2025
 PROJECT NUMBER
 24021
 SHEET
C-401
 PERMIT SET



MATCHLINE SEE SHEET C-401



GENERAL NOTES

1. REFER TO SHEET C-102 FOR STANDARD ESC PLAN NOTES.
2. LAWN AND LANDSCAPE AREAS SHALL MEET THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS PRIOR TO FINAL INSPECTION OF THE PROJECT. PROPOSED LAWN AND LANDSCAPE AREAS SHALL RECEIVE TOPSOIL AMENDED WITH CEDAR GROVE FINE GRADE COMPOST OR OTHER COMPOST THAT MEETS WSDOT STANDARD SPEC 9-14.5(B).
3. PROVIDE A MINIMUM 2 INCH LIFT OF MULCH IN ALL PLANTING AREAS FOR EROSION CONTROL.
4. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS.
5. PROJECT ARBORIST SHALL BE ON-SITE TO OBSERVE ALL WORK WITHIN CRZS OF IMPACTED TREES.

SHEET NOTES

1. NEW 1.5" WATER METER SERVICE PER STANDARD DETAIL W-14. WATER METER PLACEMENT PER STANDARD DETAIL W-16.
2. NEW 2" SERVICE LINE RECENTLY INSTALLED WHEN ADJACENT PROPERTY UPGRADED WATER SERVICE. CONTRACTOR TO FIELD VERIFY LOCATION OF WATER SERVICE LINE FOR HACKETT RESIDENCE. THIS 2" WATER LINE MUST BE EXPOSED TO VERIFY IF THE PIPE SIZE, MATERIAL AND INSTALLATION ARE MEETING THE CODE.
3. CONNECT RECENTLY INSTALLED 2" SERVICE LINE TO NEW 1.5" METER
4. APPROXIMATE LOCATION OF EXISTING MAIL BOXES.



AXEA
 1102 A STREET SUITE 317
 TACOMA, WA 98402
 PHONE: 253.208.6303
 WWW.AXEACIVIL.COM

SEAL



JUSTIN JAN
 REGISTERED PROFESSIONAL ENGINEER
 43432
 08/21/2025

PROJECT
HACKETT RESIDENCE
 2966 74TH AVE SE
 MERCER ISLAND, WA 98040

REVISIONS



© 2024 AXEA CIVIL, LLC - TACOMA, WA

DRAWN BY: BDS
 DESIGNED BY: RB
 REVIEWED BY: RB
 TITLE
UTILITY PLAN

DATE
 08.20.2025

PROJECT NUMBER
 24021

SHEET



C-402
 PERMIT SET

TREE PROTECTION AREA (TPZ)

KEEP OUT!

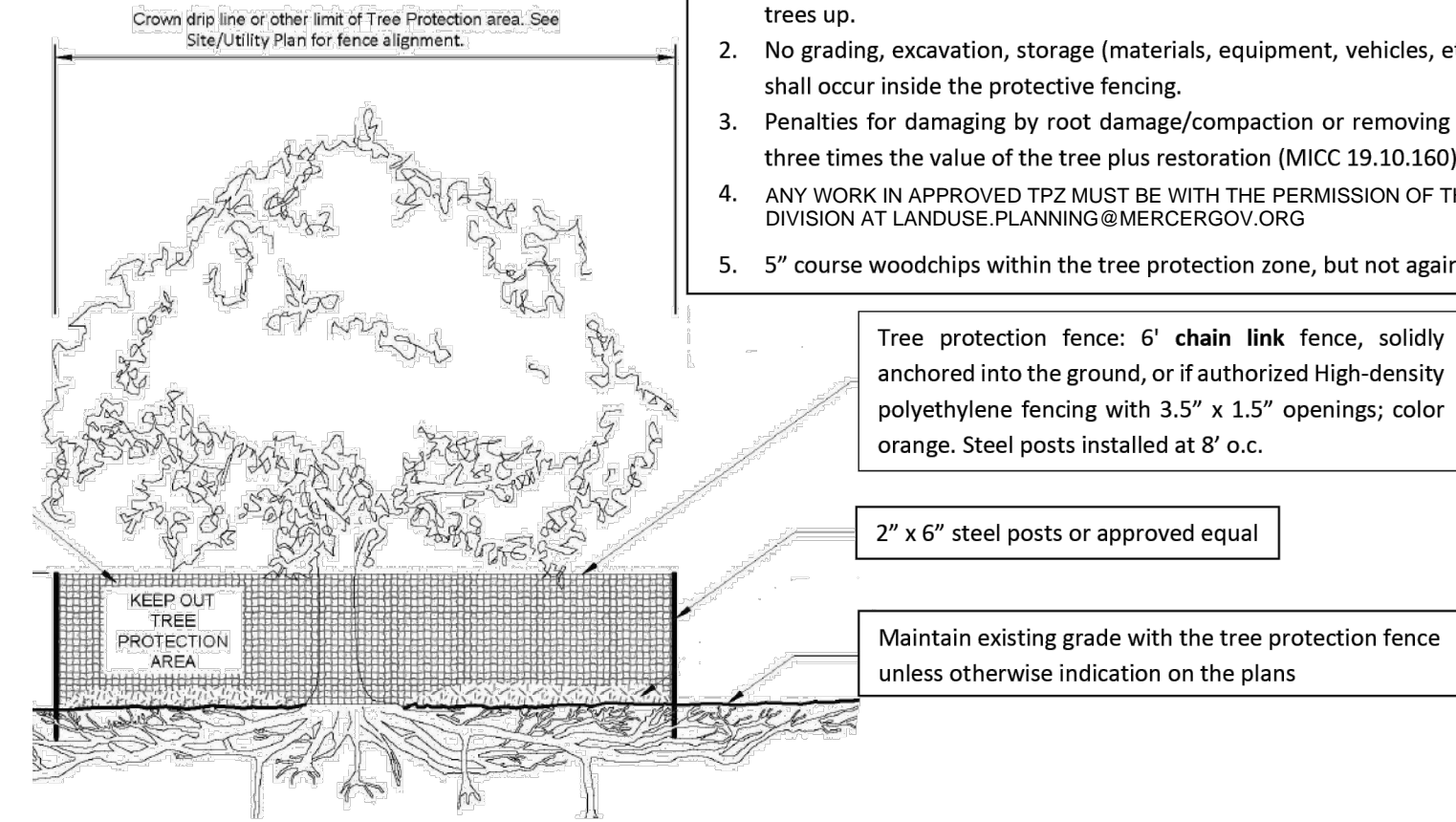
DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees/financial penalties
3. Arborist reports recommending mitigation

Notes

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
4. ANY WORK IN APPROVED TPZ MUST BE WITH THE PERMISSION OF THE LAND USE AND PLANNING DIVISION AT LANDUSE.PLANNING@MERCERGOV.ORG
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.

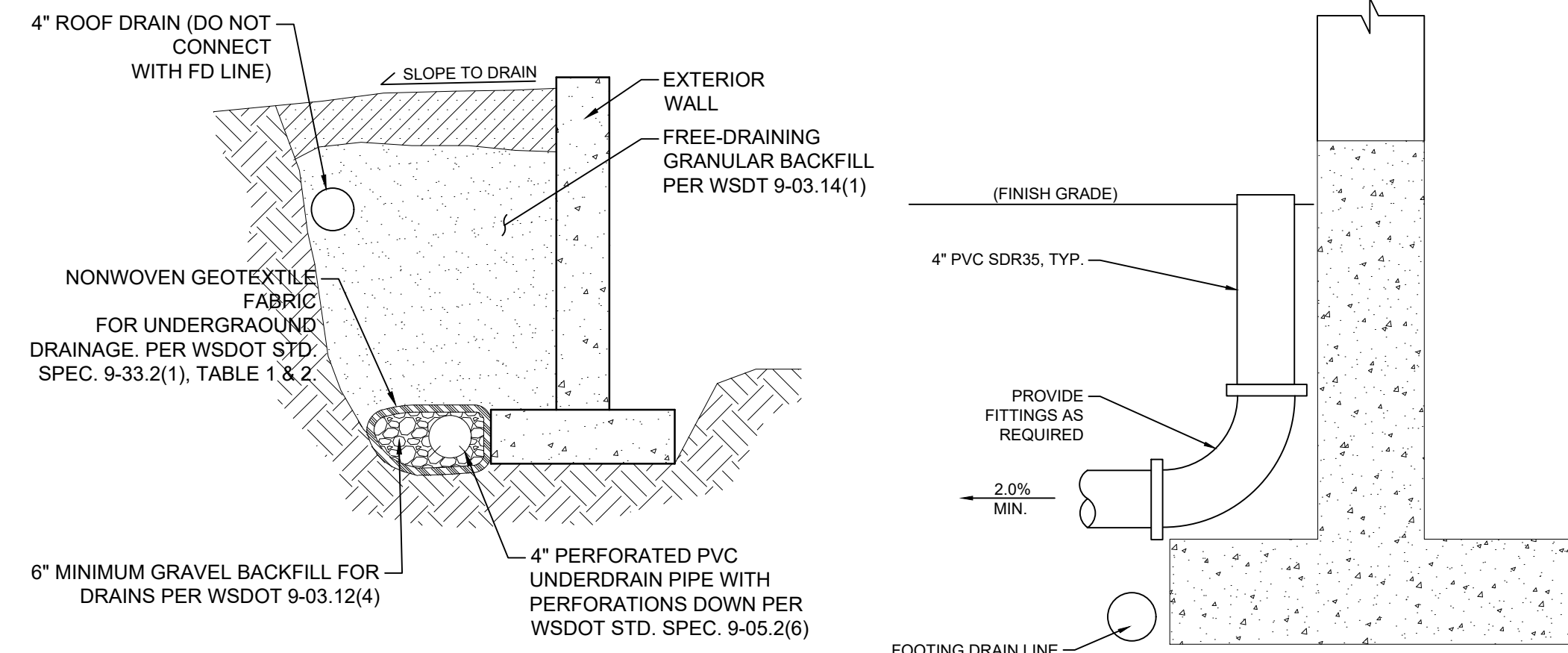


ANY WORK IN THE PROHIBITED AREA MUST BE WITH THE PERMISSION OF THE LAND USE AND PLANNING DIVISION AT LANDUSE.PLANNING@MERCERGOV.ORG

TREE PROTECTION

SCALE: NTS

1



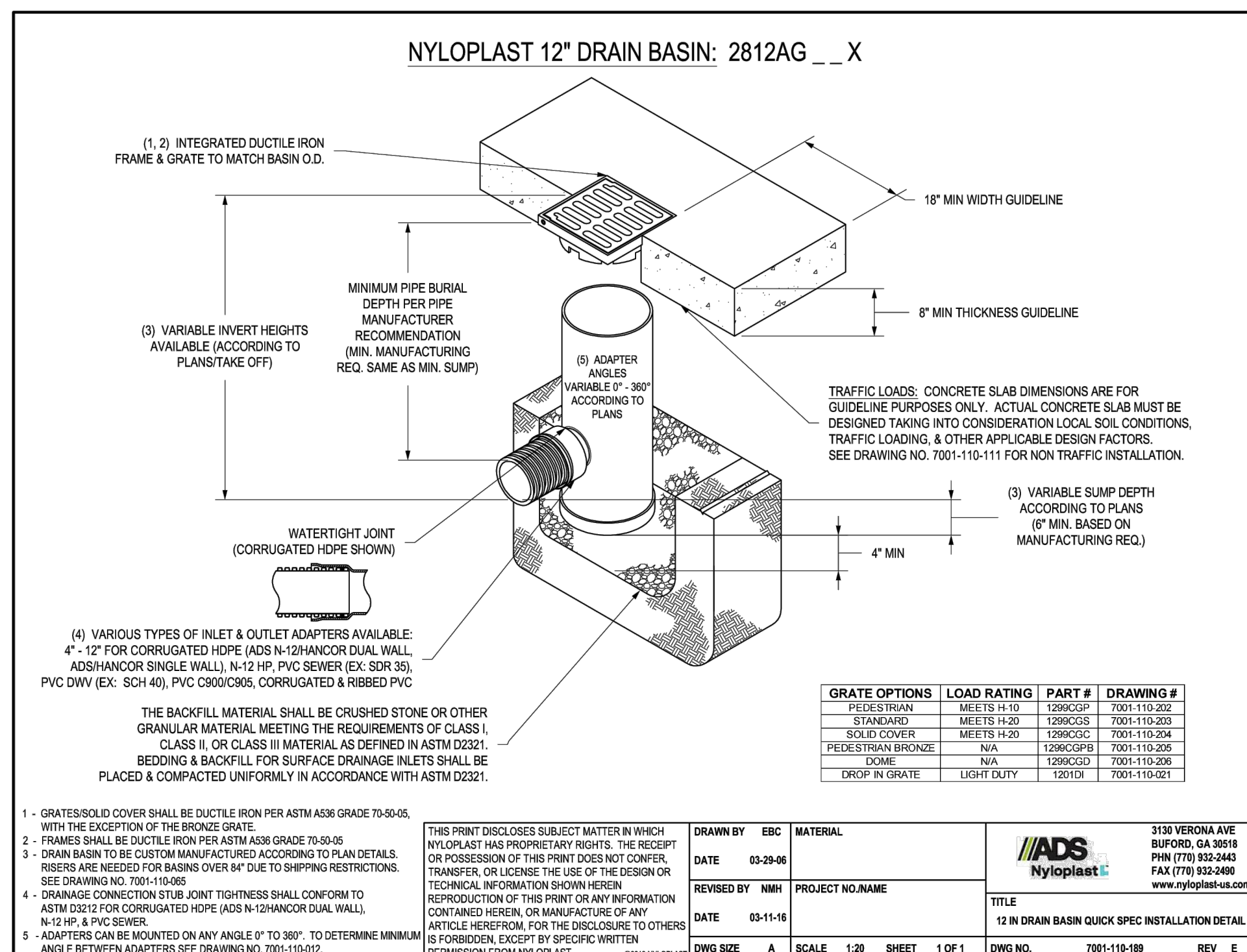
ROOF AND FOOTING DRAINS

SCALE: NTS

DOWNSPOUT CONNECTION

SCALE: NTS

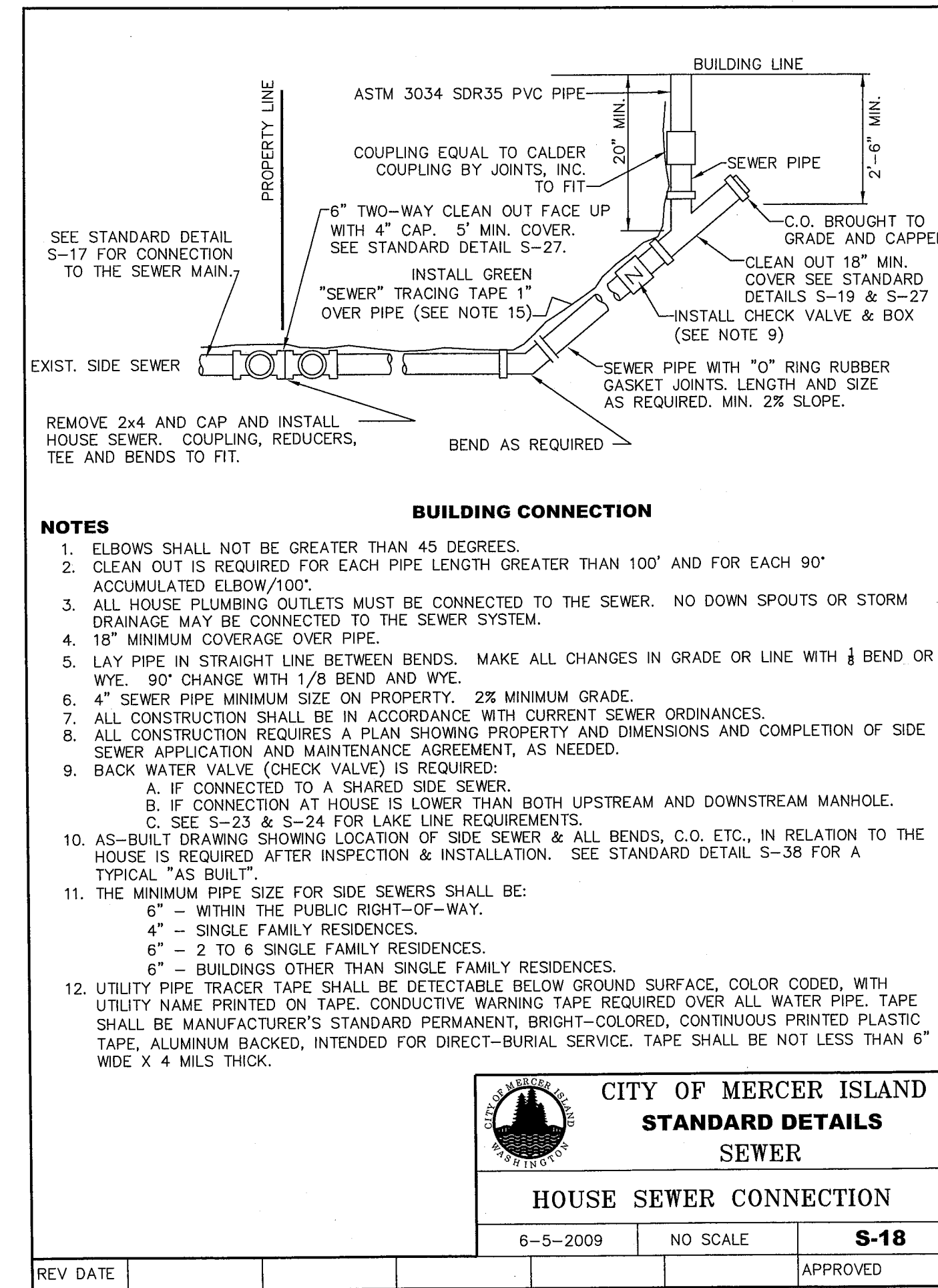
3



AREA DRAIN

SCALE: NTS

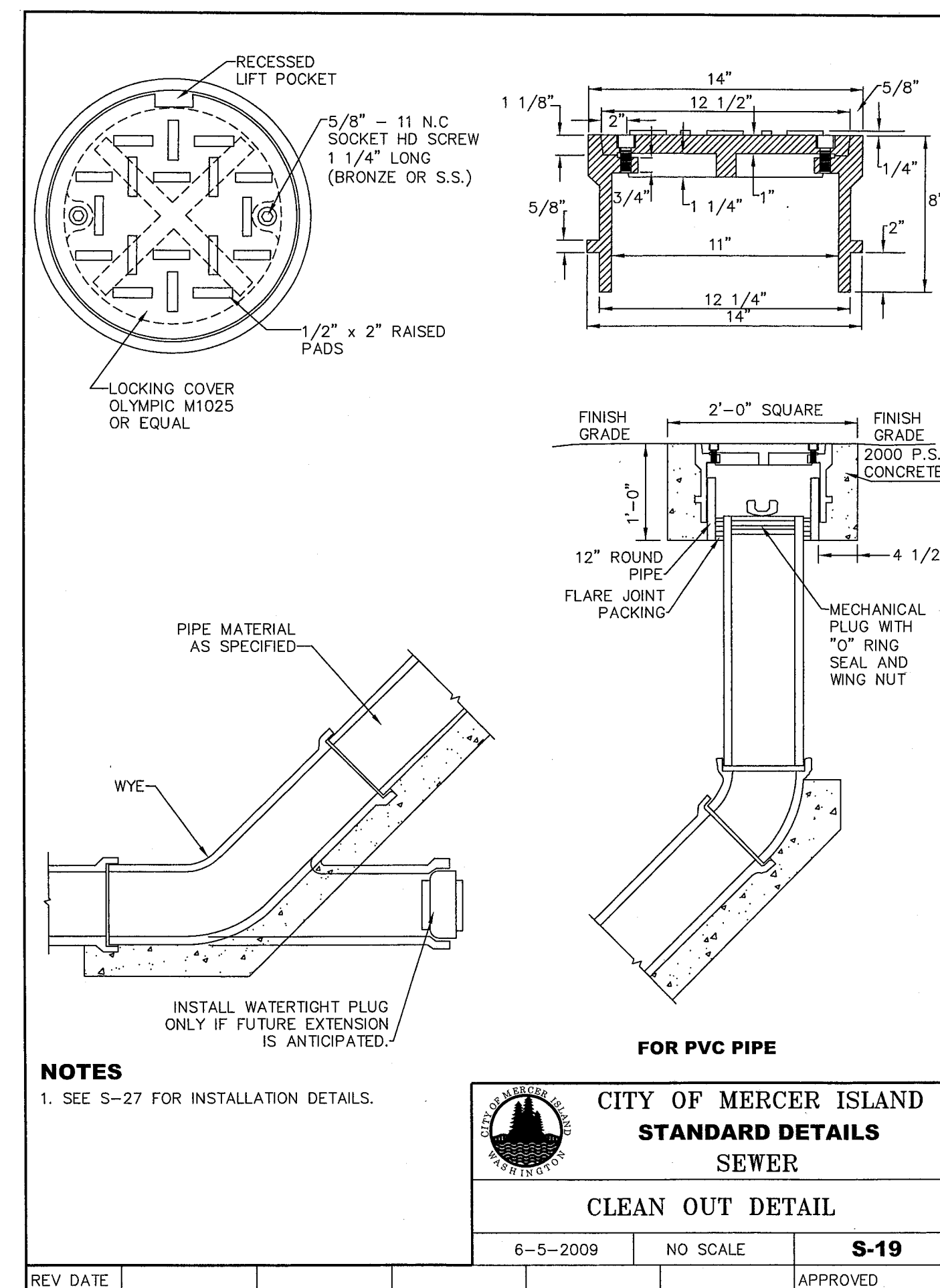
8



SEWER CONNECTION

SCALE: NTS

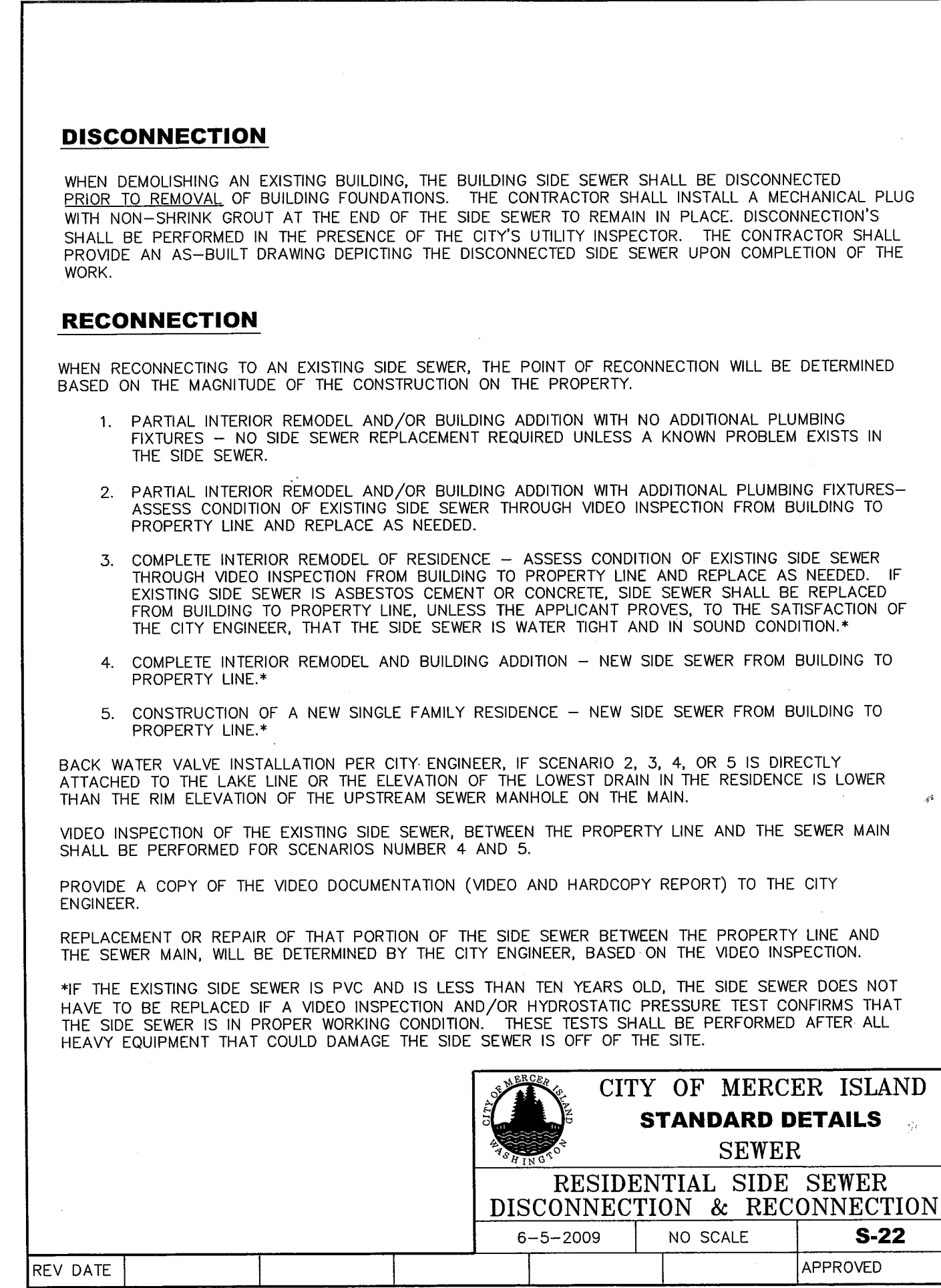
4



CLEANOUT

SCALE: NTS

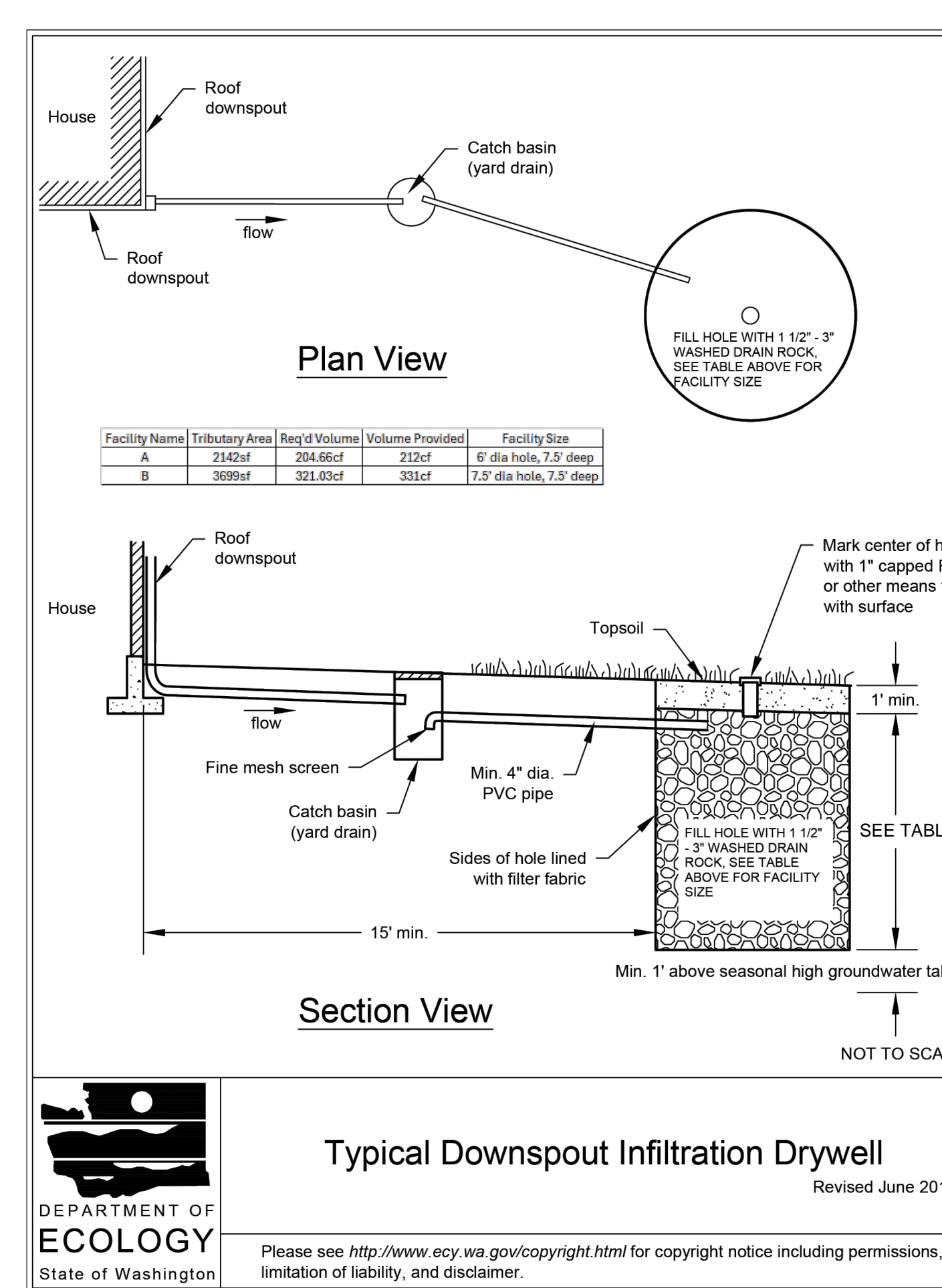
6



SIDE SEWER

SCALE: NTS

5



Typical Downspout Infiltration Drywell

Revised June 2016

DEPARTMENT OF ECOLOGY
State of Washington

Please see <http://www.ecy.wa.gov/copyright.html> for copyright notice including permissions, limitation of liability, and disclaimer.

INFILTRATION DRYWELL

SCALE: NTS

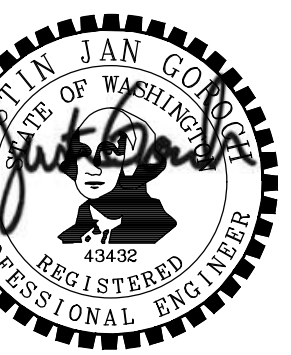
7



1102 A STREET SUITE 317
TACOMA, WA 98402
PHONE: 253.208.6303

WWW.AXEACIVIL.COM

SEAL



08/21/2025

PROJECT
HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

REVISIONS



DRAWN BY: BDS
DESIGNED BY: RB
REVIEWED BY: RB
TITLE:
CIVIL DETAILS

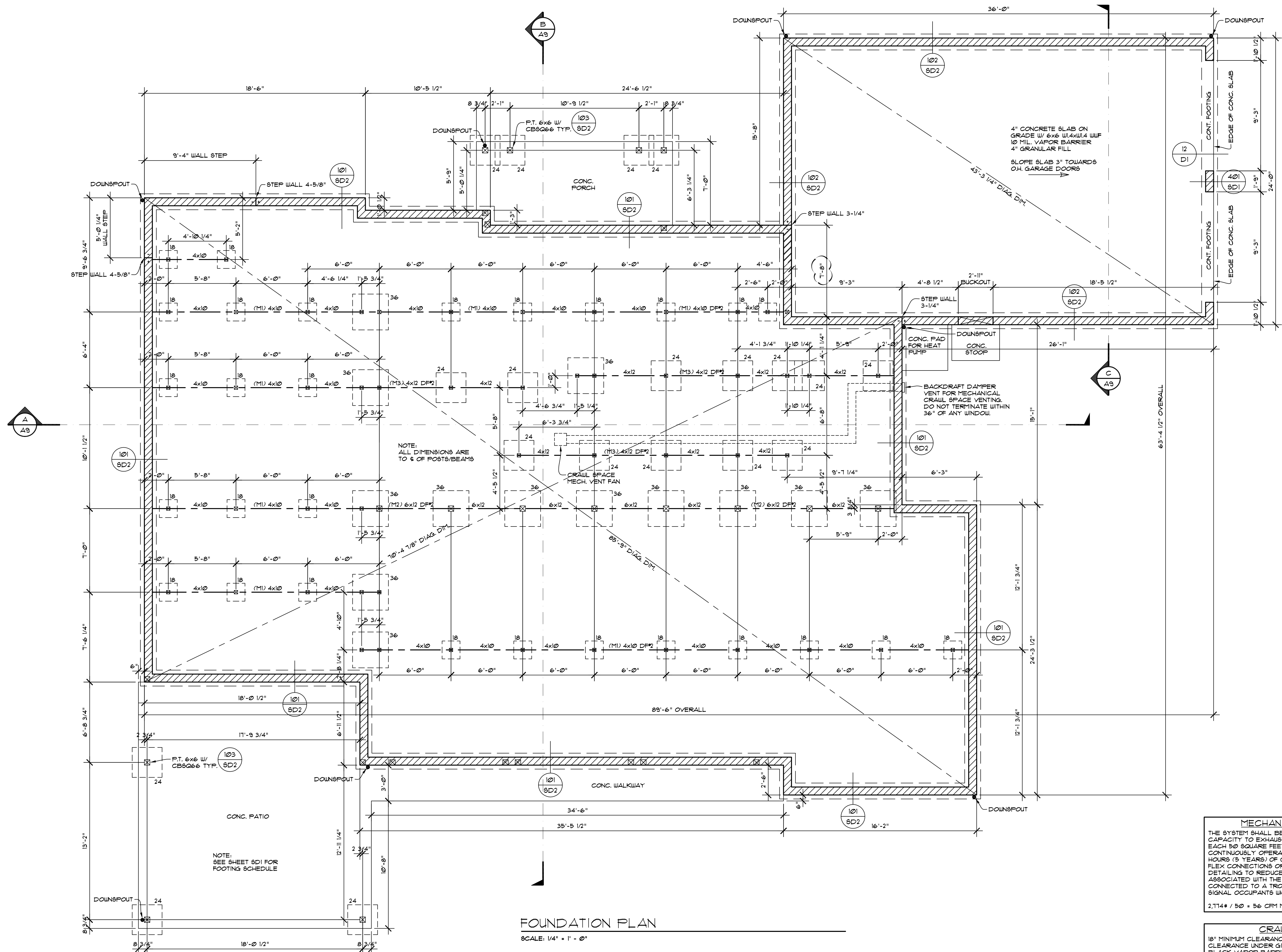
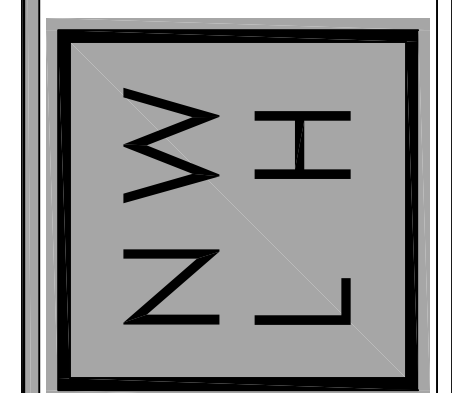
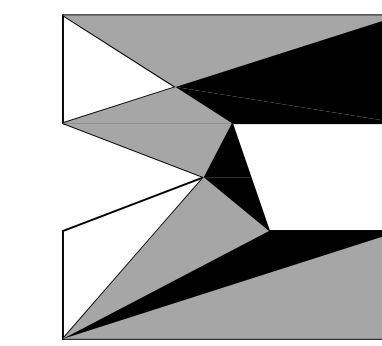
DATE:
08.20.2025

PROJECT NUMBER:
24021

SHEET

C-501

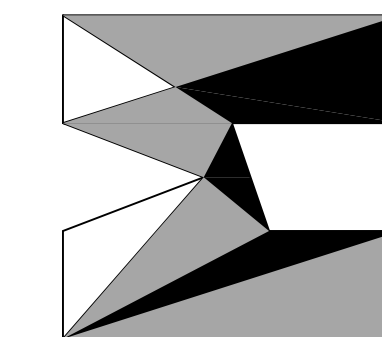
PERMIT SET



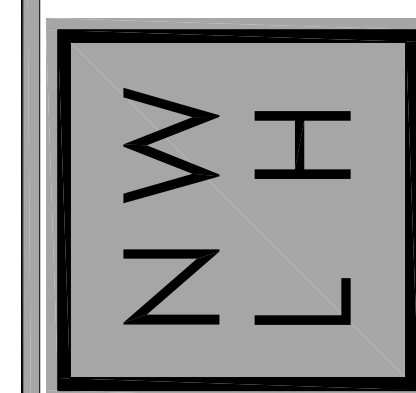
FOUNDATION PLAN
SCALE: 1/4" = 1' - 0"

MECHANICAL VENTING:
THE SYSTEM SHALL BE DESIGNED TO HAVE THE CAPACITY TO EXHAUST A MINIMUM OF 10 CFM FOR EACH 50 SQUARE FEET OF UNDER FLOOR AREA W/ A CONTINUOUSLY OPERATED FAN RATED FOR 44,000 HOURS (5 YEARS) OF CONTINUOUS OPERATION WITH FLEX CONNECTIONS OR OTHER INSTALLATION DETAILING TO REDUCE VIBRATION AND NOISE ASSOCIATED WITH THE FAN. THE FAN MUST BE CONNECTED TO A TROUBLE LIGHT OR AN ALARM TO SIGNAL OCCUPANTS WHEN THE FAN FAILS.
2,114* / 50 = 56 CFM MINIMUM CONTINUOUS FAN.

CRAWL SPACE:
18" MINIMUM CLEARANCE UNDER JOISTS & 12" MINIMUM CLEARANCE UNDER GIRDERS W/ 6 MIL. CLASS 1 BLACK VAPOR BARRIER THROUGHOUT. LAP BEAMS 12" MINIMUM & EXTEND 12" MINIMUM UP THE FOUNDATION WALL (R4081). ALL POSTS MUST BE PLACED & OR WITHIN 10% OF PIER SIZE.



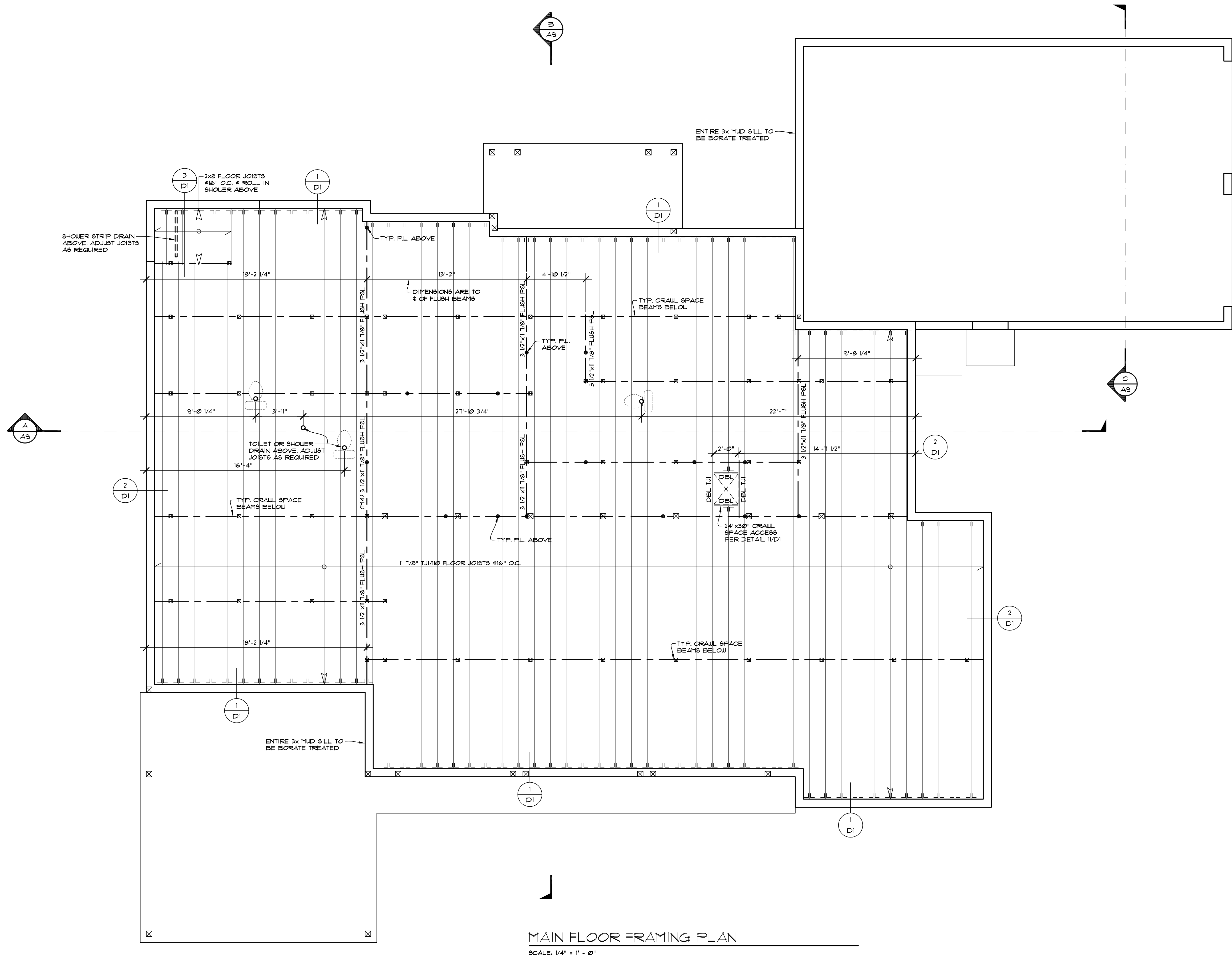
nw
lifestyle
homes
www.nwlifestylehomes.com



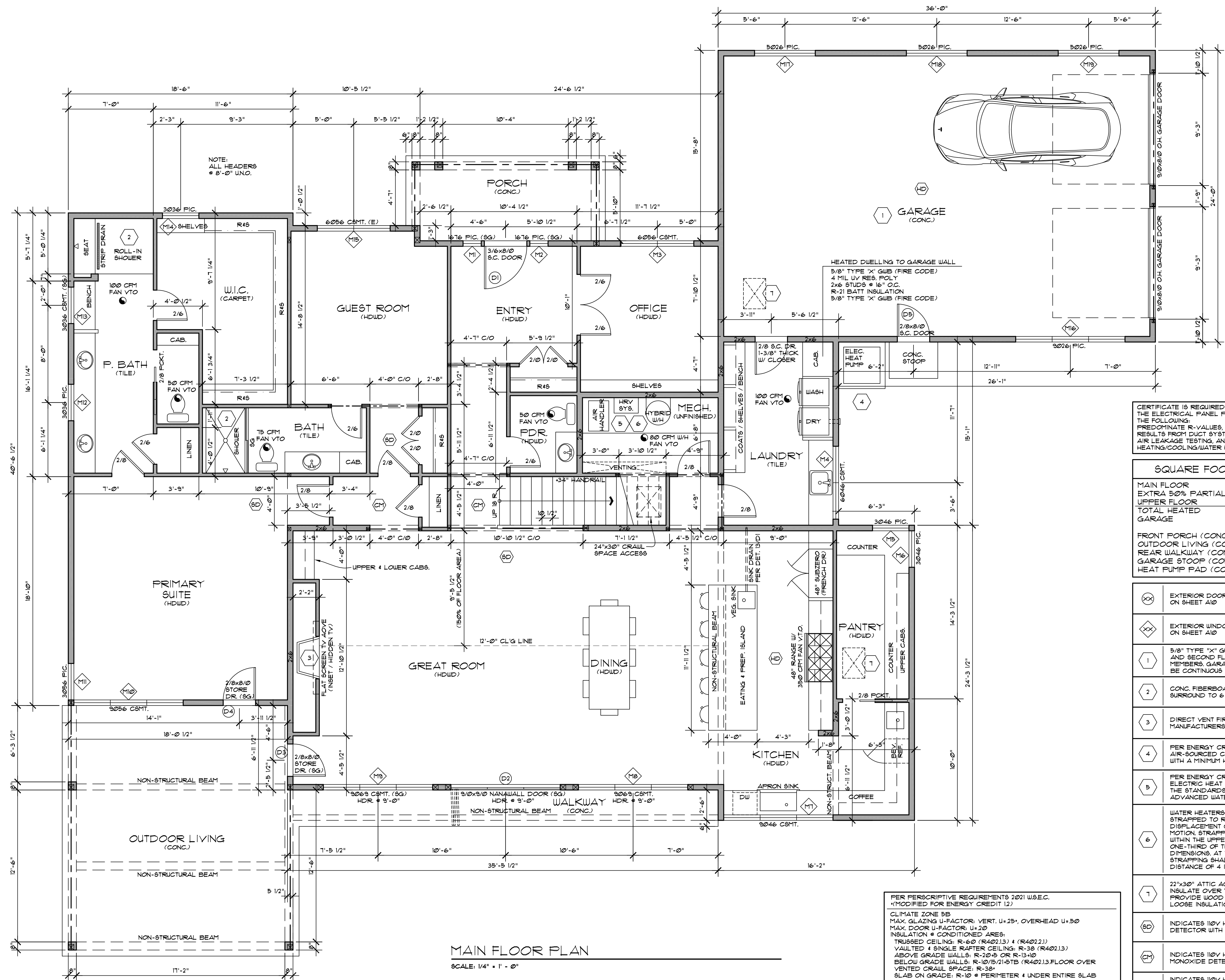
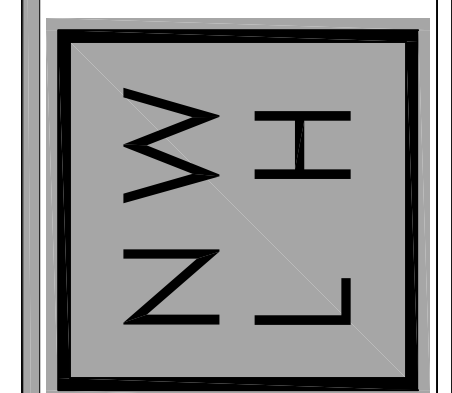
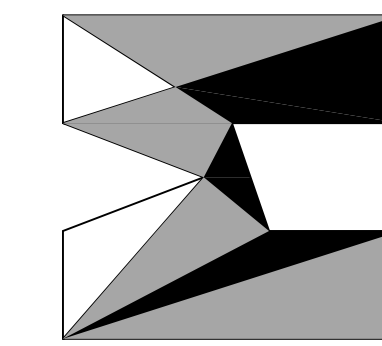
HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

JOB NO: 23-012
DATE: 1/30/25
DRN. BY: MM/MG
REVISED: 1/17/25

SHEET NO.
A2



MAIN FLOOR FRAMING PLAN
SCALE: 1/4" = 1' - 0"



NOTE:
ALL HEADERS
@ 2'-0" UNO.

CERTIFICATE IS REQUIRED TO BE POSTED WITHIN 3' OF THE ELECTRICAL PANEL PER WSEC R4013 AND INCLUDE THE FOLLOWING:
PREDOMINATE R-VALUES, U-VALUES OF PENETRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, AND EFFICIENCIES OF HEATING/COOLING/WATER HEATING EQUIPMENT.

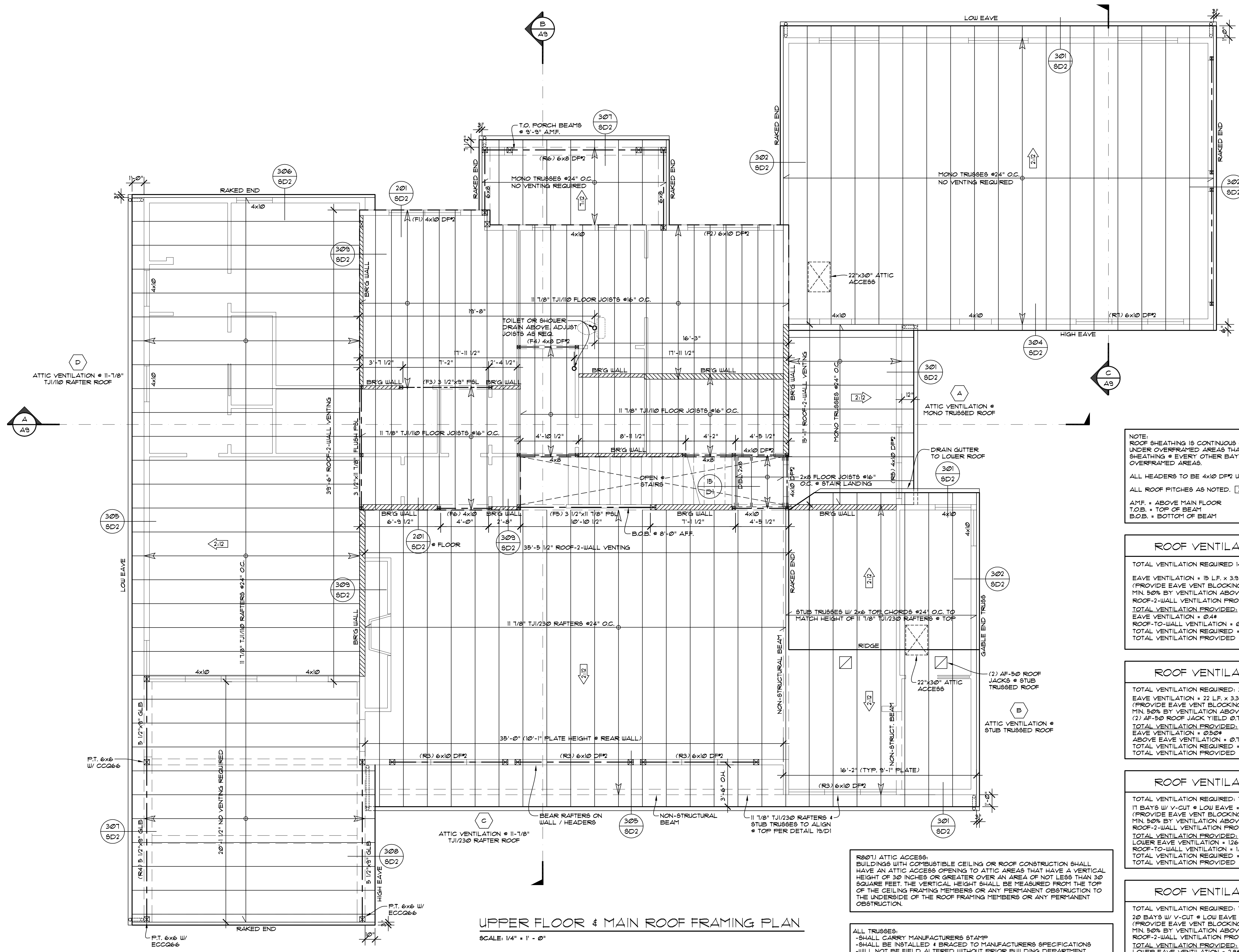
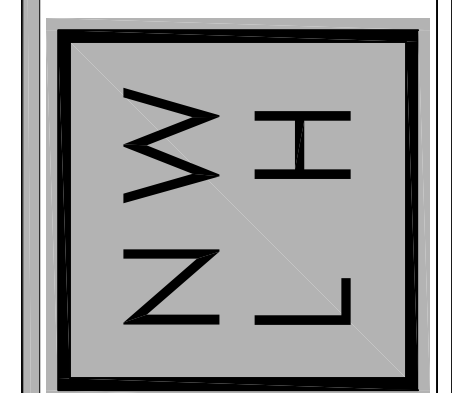
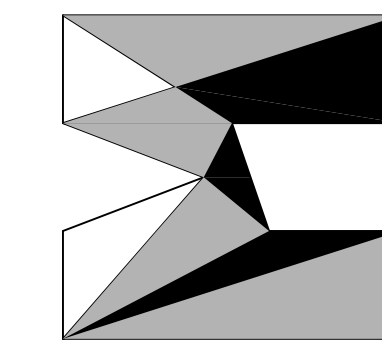
SQUARE FOOTAGE SUMMARY	
MAIN FLOOR	2,900#
EXTRA 50% PARTIAL GREAT ROOM	160#
UPPER FLOOR	822#
TOTAL HEATED	3,882#
GARAGE	860#
FRONT PORCH (CONC.) 114#	
OUTDOOR LIVING (CONC.) 396#	
REAR WALKWAY (CONC.) 104#	
GARAGE STOOP (CONC.) 12#	
HEAT PUMP PAD (CONC.) 15#	

⊗	EXTERIOR DOOR TAG. SEE DOOR SCHEDULE ON SHEET A10
⊗	EXTERIOR WINDOW TAG. SEE WINDOW SCHEDULE ON SHEET A10
1	5/8" TYPE "X" GUB OVER ALL WARM WALLS AND SECOND FLOOR FRAMING & SUPPORT MEMBERS. GARAGE CEILING PROTECTION TO BE CONTINUOUS ABOVE GARAGE.
2	CONC. FIBERBOARD @ TUB & SHOWER SURROUND TO 6" ABOVE DRAIN
3	DIRECT VENT FIREPLACE. INSTALL PER MANUFACTURER'S SPECIFICATIONS
4	PER ENERGY CREDIT 3.6: AIR-SOURCED CENTRALLY DUCTED HEAT PUMP WITH A MINIMUM HSPFF 2 OF 9.4 (HSPFF OF 11.0)
5	PER ENERGY CREDIT 5.6: ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NAEAA'S ADVANCED WATER HEATING SPECIFICATION
6	WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENT CAUSED BY EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-THIRD AND LOWER ONE-THIRD OF THE APPLIANCE'S VERTICAL DIMENSIONS. AT THE LOWER POINT, THE STRAPPING SHALL MAINTAIN A MINIMUM DISTANCE OF 4 INCHES ABOVE THE CONTROLS
7	22"x30" ATTIC ACCESS. WEATHERSTRIP & INSULATE OVER TO EQUAL CEILING INSULATION. PROVIDE WOOD SUBSOUND TO PREVENT LOOSE INSULATION SPILLAGE TO LIVING SPACE
⊗D	INDICATES 110V HARD WIRED SMOKE DETECTOR WITH BATTERY BACKUP
⊗CH	INDICATES 110V HARD WIRED SMOKE & CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP
⊗HD	INDICATES 110V HARD WIRED HEAT DETECTOR WITH BATTERY BACKUP INTERCONNECTED TO CARBON MONOXIDE DETECTORS AT TOP & BOTTOM OF STAIRS

PER PERSCRIPTIVE REQUIREMENTS 2021 W.S.E.C. (MODIFIED FOR ENERGY CREDIT 12)
CLIMATE ZONE 5B
MAX. GLAZING U-FACTOR: VERT. U+.25, OVERHEAD U+.50
MAX. DOOR U-FACTOR: U+.20
INSULATION @ CONDITIONED AREAS:
TRUSSED CEILING: R-60 (R4021.3) & (R4022.1)
VAULTED & SINGLE RAFTER CEILING: R-38 (R4021.3)
ABOVE GRADE WALLS: R-20.5 OR R-13+10
BELOW GRADE WALLS: R-10/15/21+5TB (R4021.3 FLOOR OVER VENTED CRAWL SPACE: R-38)
SLAB ON GRADE: R-10 @ PERIMETER & UNDER ENTIRE SLAB

PERCENT GLAZING 688.4 (8% GLAZING AREA) @ 18.4%
CALCULATIONS: 3781 (8% FLOOR AREA)

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



NOTE:
ROOF SHEATHING IS CONTINUOUS ON ROOF TRUSSES/RAFTERS EXTENDING UNDER OVERFRAMED AREAS THAT ARE SHADED UNO. CUT 2"x2" HOLES IN SHEATHING • EVERY OTHER BAY TO ALLOW FOR CROSS VENTILATION INTO OVERFRAMED AREAS.
ALL HEADERS TO BE 4x10 DFP2 UNO.
ALL ROOF PITCHES AS NOTED: [X/12] INDICATES DOWN SLOPE
AMF = ABOVE MAIN FLOOR
T.O.B. = TOP OF BEAM
B.O.B. = BOTTOM OF BEAM

ROOF VENTILATION CALCULATIONS

TOTAL VENTILATION REQUIRED: 143* / 300 = 0.48* NET FREE

EAVE VENTILATION = 15 L.F. x 3.9 SQ. IN./L.F. = 0.4*
(PROVIDE EAVE VENT BLOCKING • EVERY BAY)
MIN. 50% BY VENTILATION ABOVE EAVE = 0.48* x 0.5 = 0.24*

ROOF-2-WALL VENTILATION PROVIDED = 15 L.F. x 6.15 SQ. IN./L.F. = 0.10*

TOTAL VENTILATION PROVIDED:
EAVE VENTILATION = 0.4*
ROOF-TO-WALL VENTILATION = 0.10*
TOTAL VENTILATION REQUIRED = 0.48*
TOTAL VENTILATION PROVIDED = 1*
NOTE: USE COR-A-VENT ROOF-2-WALL VENT

ROOF VENTILATION CALCULATIONS

TOTAL VENTILATION REQUIRED: 383* / 300 = 1.28* NET FREE

EAVE VENTILATION = 22 L.F. x 3.3 SQ. IN./L.F. = 0.50*
(PROVIDE EAVE VENT BLOCKING • EVERY BAY)
MIN. 50% BY VENTILATION ABOVE EAVE = 1.28* x 0.5 = 0.64*

(2) AF-50 ROOF JACK YIELD 0.10* (0.35* NET FREE EACH)

TOTAL VENTILATION PROVIDED:
EAVE VENTILATION = 0.50*
ABOVE EAVE VENTILATION = 0.10*
TOTAL VENTILATION REQUIRED = 1.28*
TOTAL VENTILATION PROVIDED = 1.2*

ROOF VENTILATION CALCULATIONS

TOTAL VENTILATION REQUIRED: 151* / 300 = 2.52* NET FREE

11 BAYS W/ V-CUT • LOW EAVE = 11 V-CUTS x 0.14* PER V-CUT = 2.38*
(PROVIDE EAVE VENT BLOCKING • EVERY BAY)
MIN. 50% BY VENTILATION ABOVE EAVE = 2.52* x 0.5 = 1.26*

ROOF-2-WALL VENTILATION PROVIDED = 35 L.F. x 6.15 SQ. IN./L.F. = 1.6*

TOTAL VENTILATION PROVIDED:
LOWER EAVE VENTILATION = 1.26*
ROOF-TO-WALL VENTILATION = 1.6*
TOTAL VENTILATION REQUIRED = 2.52*
TOTAL VENTILATION PROVIDED = 2.86*

ROOF VENTILATION CALCULATIONS

TOTAL VENTILATION REQUIRED: 131* / 300 = 2.44* NET FREE

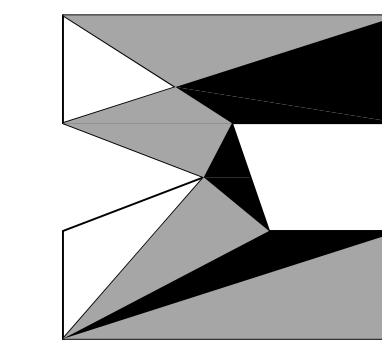
20 BAYS W/ V-CUT • LOW EAVE = 20 V-CUTS x 0.14* PER V-CUT = 2.8*
(PROVIDE EAVE VENT BLOCKING • EVERY BAY)
MIN. 50% BY VENTILATION ABOVE EAVE = 2.52* x 0.5 = 1.26*

ROOF-2-WALL VENTILATION PROVIDED = 35 L.F. x 6.15 SQ. IN./L.F. = 1.8*

TOTAL VENTILATION PROVIDED:
LOWER EAVE VENTILATION = 2.8*
ROOF-TO-WALL VENTILATION = 1.8*
TOTAL VENTILATION REQUIRED = 2.44*
TOTAL VENTILATION PROVIDED = 4.6*

R8071 ATTIC ACCESS:
BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT HAVE A VERTICAL HEIGHT OF 30 INCHES OR GREATER OVER AN AREA OF NOT LESS THAN 30 SQUARE FEET. THE VERTICAL HEIGHT SHALL BE MEASURED FROM THE TOP OF THE CEILING FRAMING MEMBERS OR ANY PERMANENT OBSTRUCTION TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS OR ANY PERMANENT OBSTRUCTION.

ALL TRUSSES:
-SHALL CARRY MANUFACTURER'S STAMP
-SHALL BE INSTALLED & BRACED TO MANUFACTURER'S SPECIFICATIONS
-WILL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPARTMENT APPROVAL OF ENGINEERING CALCULATIONS
-SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION



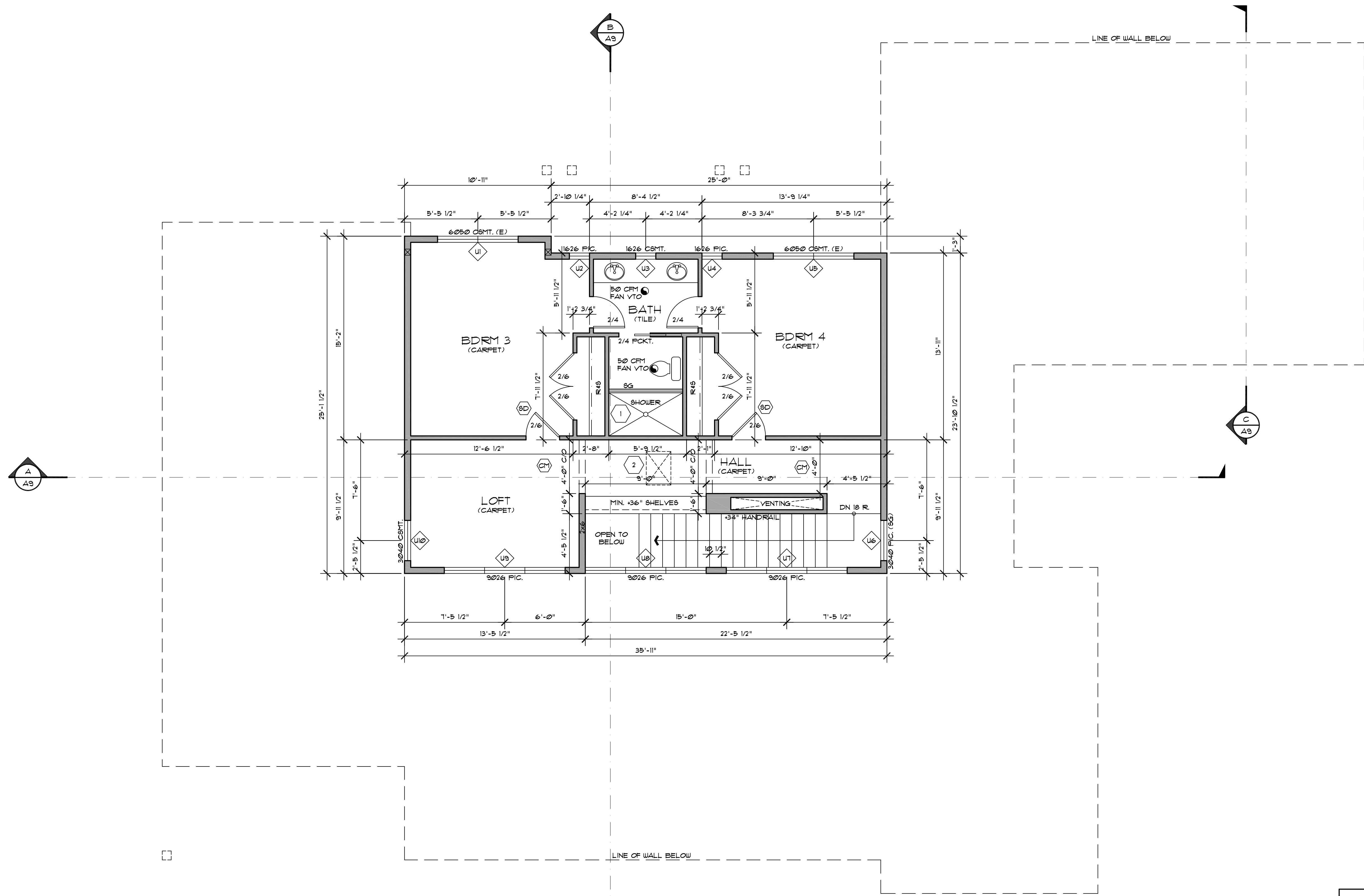
nw
lifestyle
homes
www.nwlifestylehomes.com

N W L H

HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

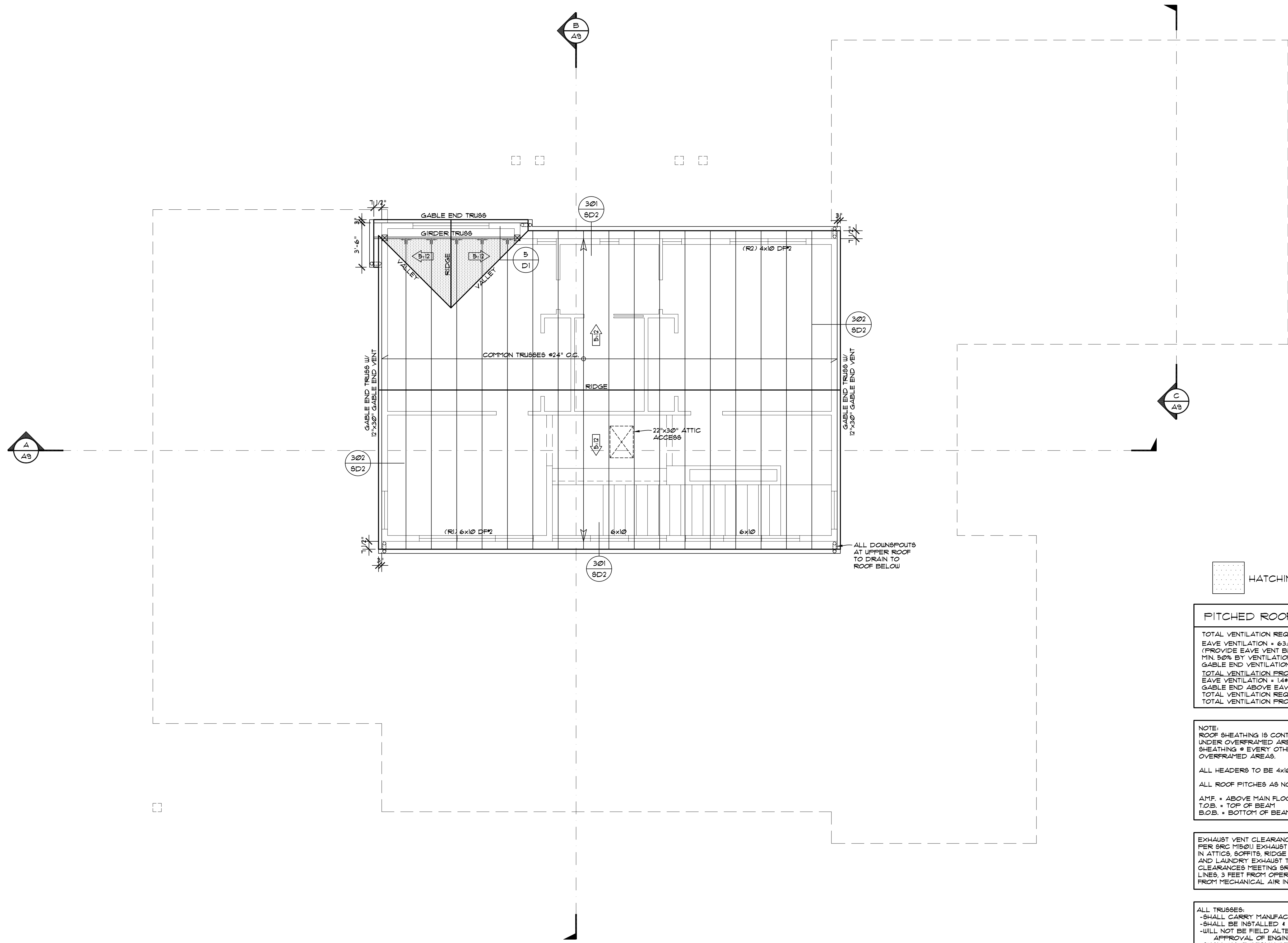
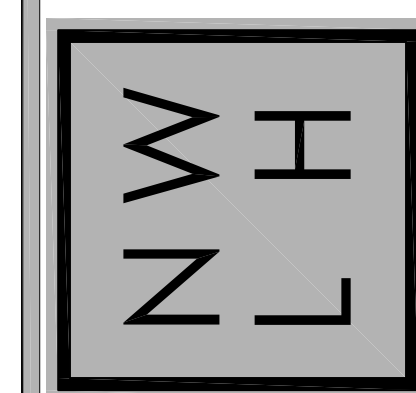
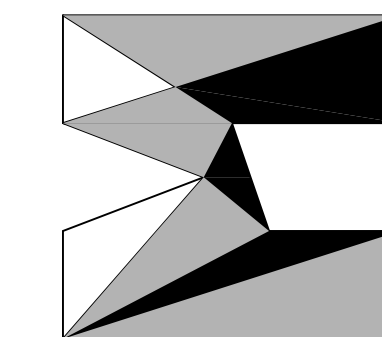
JOB NO: 23-012
DATE: 1/30/25
DRWN. BY: MM/MG
REVISED: 1/17/25

SHEET NO.
A5



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

⊗	EXTERIOR DOOR TAG. SEE DOOR SCHEDULE ON SHEET A10
⊗	EXTERIOR WINDOW TAG. SEE WINDOW SCHEDULE ON SHEET A10
1	CONC. FIBERBOARD # TUB & SHOWER SURROUND TO 6" ABOVE DRAIN
2	22"x30" ATTIC ACCESS. WEATHERSTRIP & INSULATE OVER TO EQUAL CEILING INSULATION. PROVIDE WOOD SURROUND TO PREVENT LOOSE INSULATION SPILLAGE TO LIVING SPACE
SD	INDICATES 110V HARD WIRED SMOKE DETECTOR WITH BATTERY BACKUP
CH	INDICATES 110V HARD WIRED SMOKE & CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP



HATCHING DENOTES 2x OVERFRAMING

PITCHED ROOF VENTILATION CALCULATIONS

TOTAL VENTILATION REQUIRED: 871# / 3200 = 2.9# NET FREE
 EAVE VENTILATION = 63.0 L.F. x 3.3 SQ. IN./L.F. = 14#
 (PROVIDE EAVE VENT BLOCKING @ EVERY BAY)
 MIN. 50% BY VENTILATION ABOVE EAVE = 2.9 x 0.5 = 1.45#
 GABLE END VENTILATION ABOVE EAVE = (2) 12"x30" VENTS = 3.75# NET FREE
TOTAL VENTILATION PROVIDED:
 EAVE VENTILATION = 14#
 GABLE END ABOVE EAVE VENTILATION = 3.75#
 TOTAL VENTILATION REQUIRED = 2.9#
TOTAL VENTILATION PROVIDED = 5.15#

NOTE:
 ROOF SHEATHING IS CONTINUOUS ON ROOF TRUSSES/RAFTERS EXTENDING UNDER OVERFRAMED AREAS THAT ARE SHADED UNO CUT 12"x12" HOLES IN SHEATHING @ EVERY OTHER BAY TO ALLOW FOR CROSS VENTILATION INTO OVERFRAMED AREAS.

ALL HEADERS TO BE 4x10 DFP2 UNO.
 ALL ROOF PITCHES AS NOTED. INDICATES DOWN SLOPE

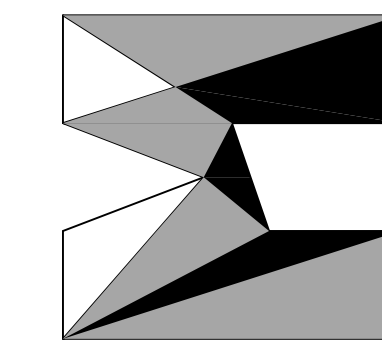
AMF = ABOVE MAIN FLOOR
 T.O.B. = TOP OF BEAM
 B.O.B. = BOTTOM OF BEAM

EXHAUST VENT CLEARANCES:
 PER IRC M1501 EXHAUST FAN VENTS SHALL TERMINATE OUTDOORS AND NOT IN ATTICS, SOFFITS, RIDGE VENTS, OR CRAWL SPACES, KITCHEN, BATHROOMS, AND LAUNDRY EXHAUST TERMINATIONS TO EXIT THE STRUCTURE WITH CLEARANCES MEETING IRC M1506.3, NOT LESS THAN 3 FEET FROM PROPERTY LINES, 3 FEET FROM OPERABLE OPENINGS IN THE BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKES.

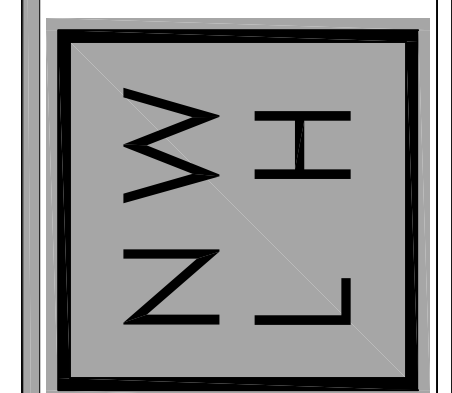
ALL TRUSSES:
 -SHALL CARRY MANUFACTURERS STAMP
 -SHALL BE INSTALLED & BRACED TO MANUFACTURERS SPECIFICATIONS
 -WILL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPARTMENT APPROVAL OF ENGINEERING CALCULATIONS
 -SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION

R301 ATTIC ACCESS:
 BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT HAVE A VERTICAL HEIGHT OF 30 INCHES OR GREATER OVER AN AREA OF NOT LESS THAN 30 SQUARE FEET. THE VERTICAL HEIGHT SHALL BE MEASURED FROM THE TOP OF THE CEILING FRAMING MEMBERS OR ANY PERMANENT OBSTRUCTION TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS OR ANY PERMANENT OBSTRUCTION.

UPPER ROOF FRAMING PLAN
 SCALE: 1/4" = 1' - 0"



nw
lifestyle
homes
www.nwlifestylehomes.com



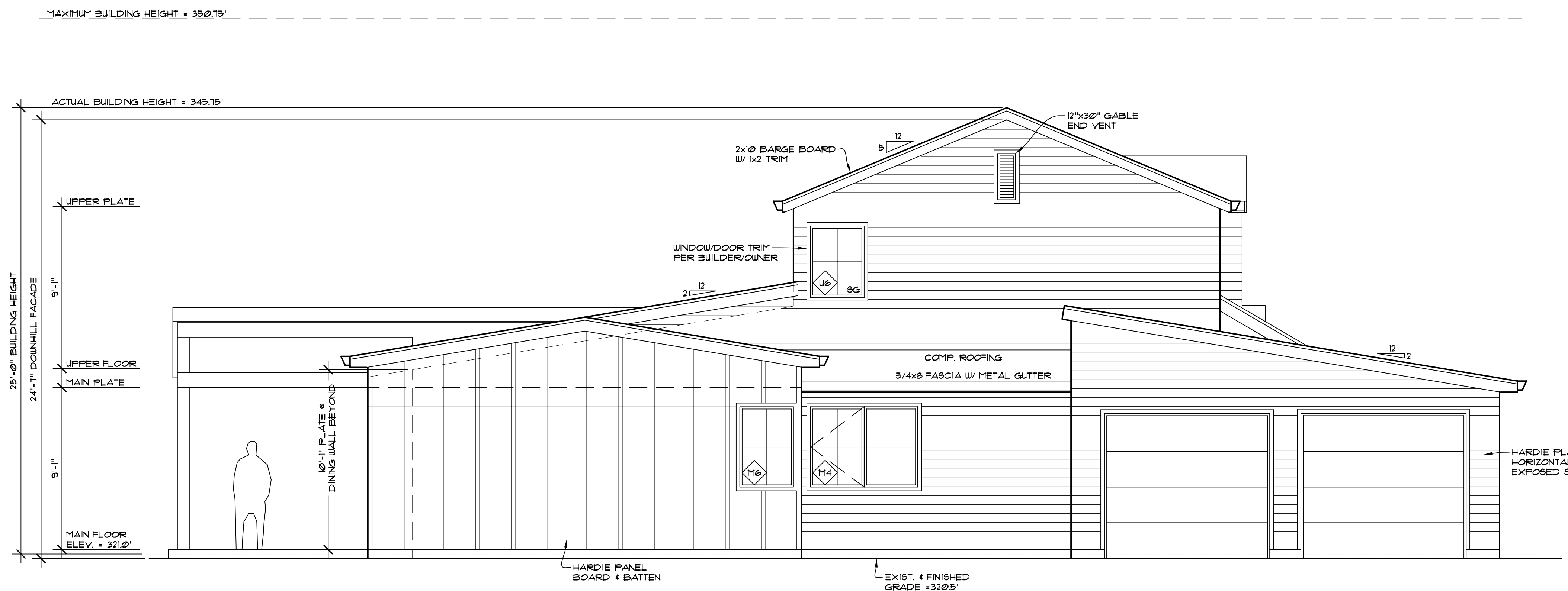
HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

JOB NO: 23-012
DATE: 1/30/25
DRWN. BY: MM/MG
REVISED: 1/17/25

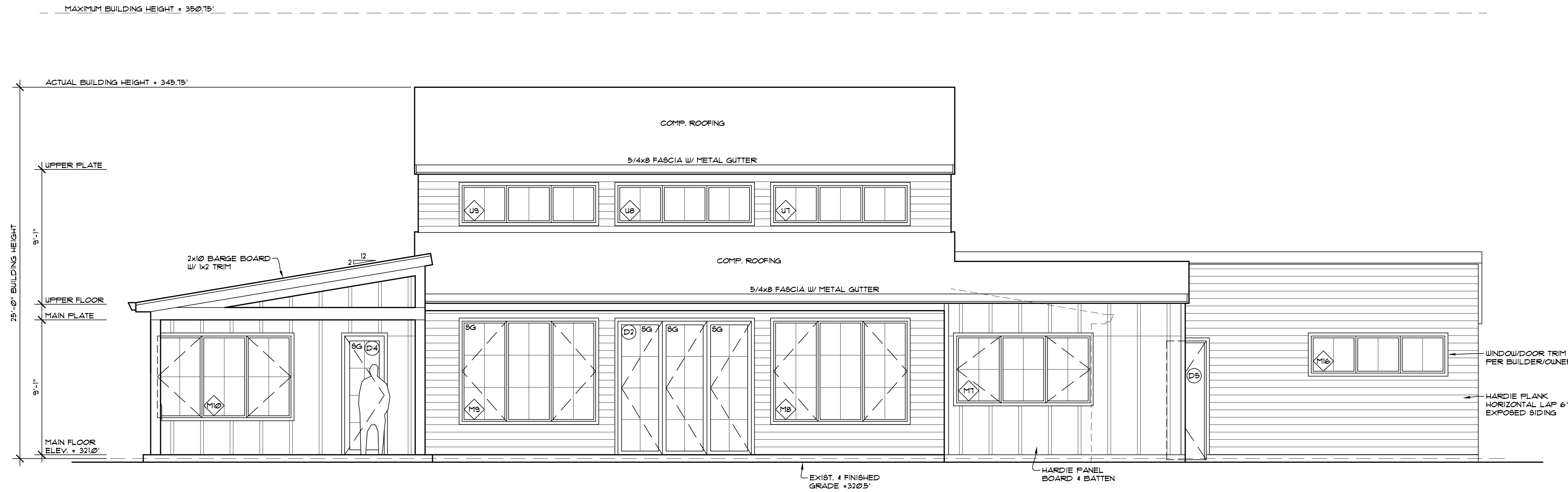
SHEET NO.
A7



FRONT BUILDING ELEVATION
SCALE: 1/4" = 1' - 0"

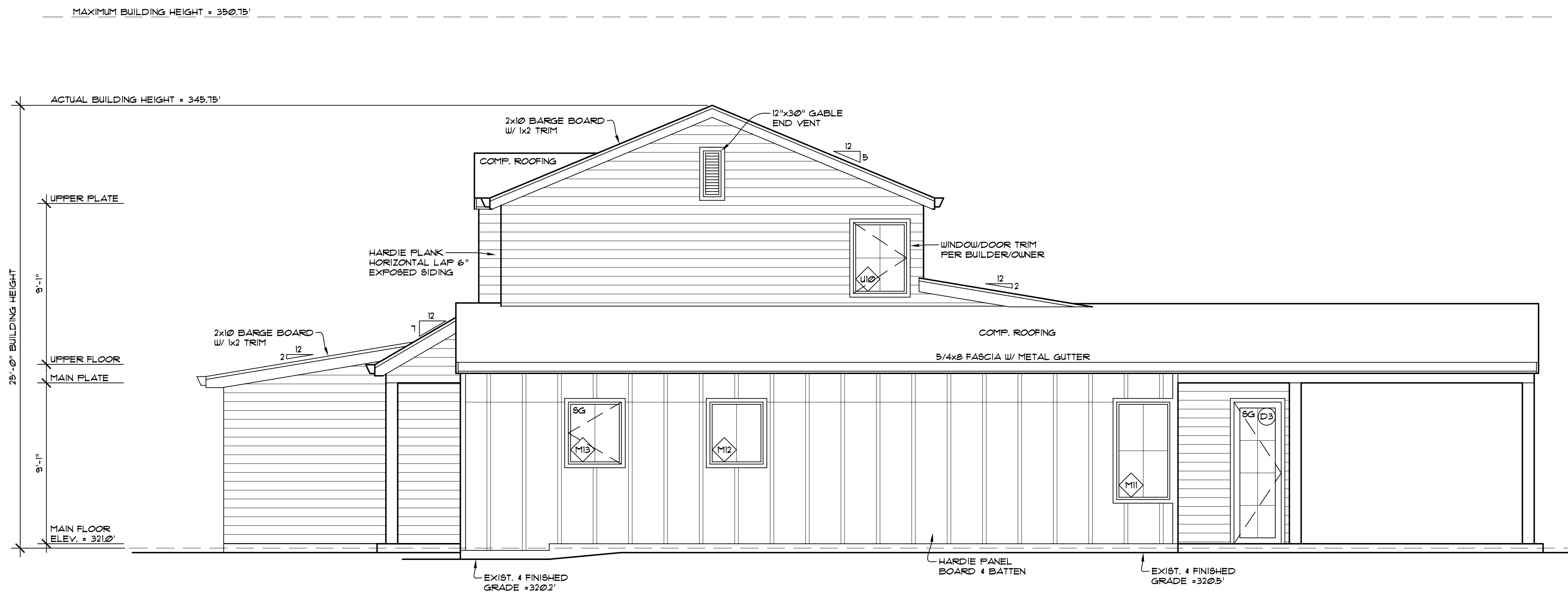


LEFT BUILDING ELEVATION
SCALE: 1/4" = 1' - 0"



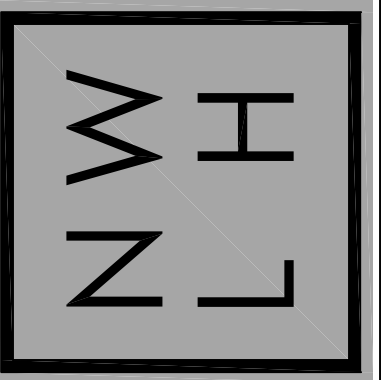
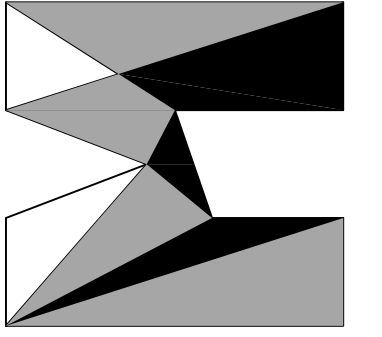
REAR BUILDING ELEVATION

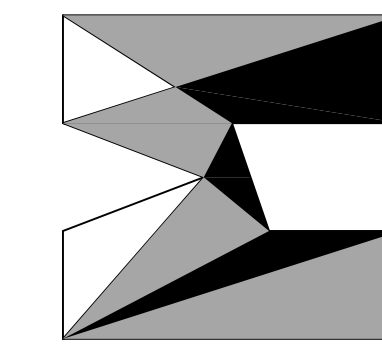
SCALE: 1/4" = 1' - 0"



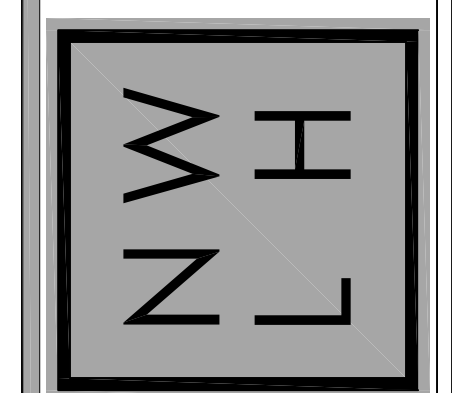
RIGHT BUILDING ELEVATION

SCALE: 1/4" = 1' - 0"





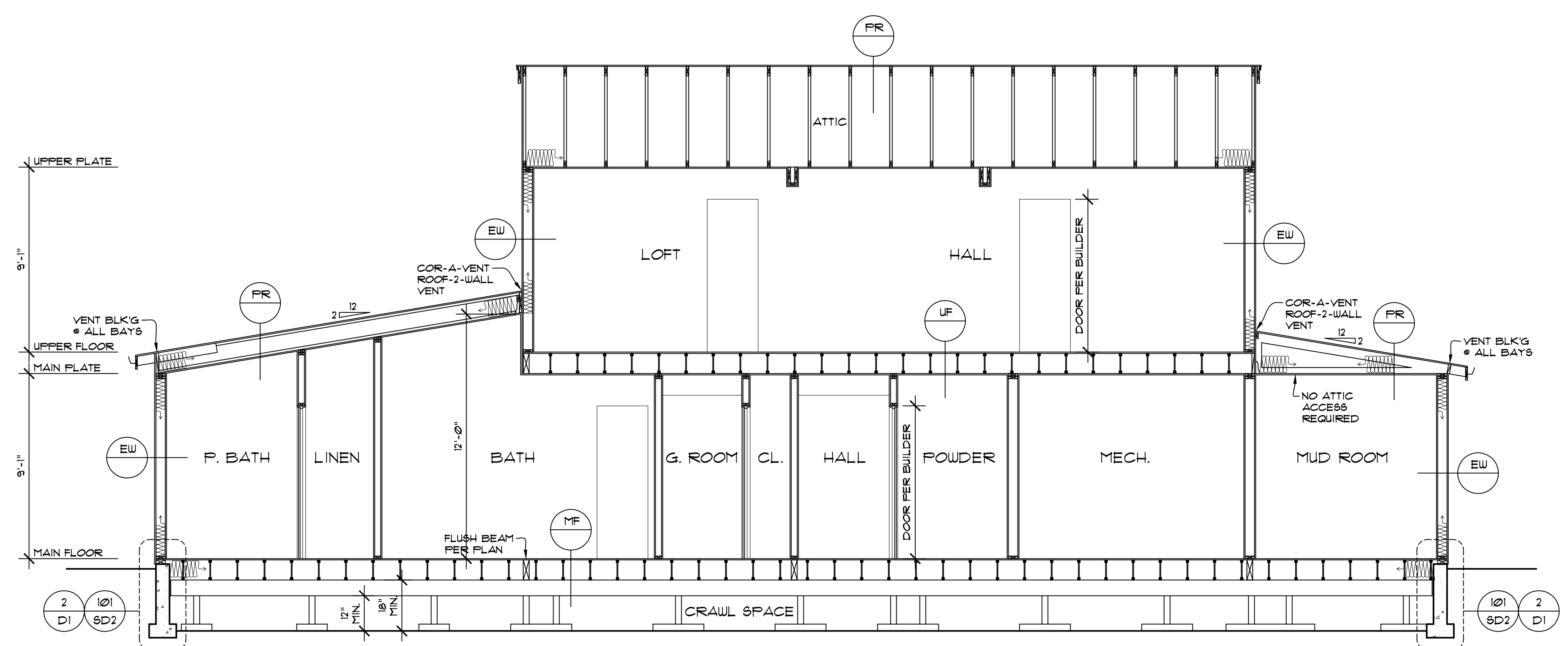
nw lifestyle homes
www.nwlifestylehomes.com



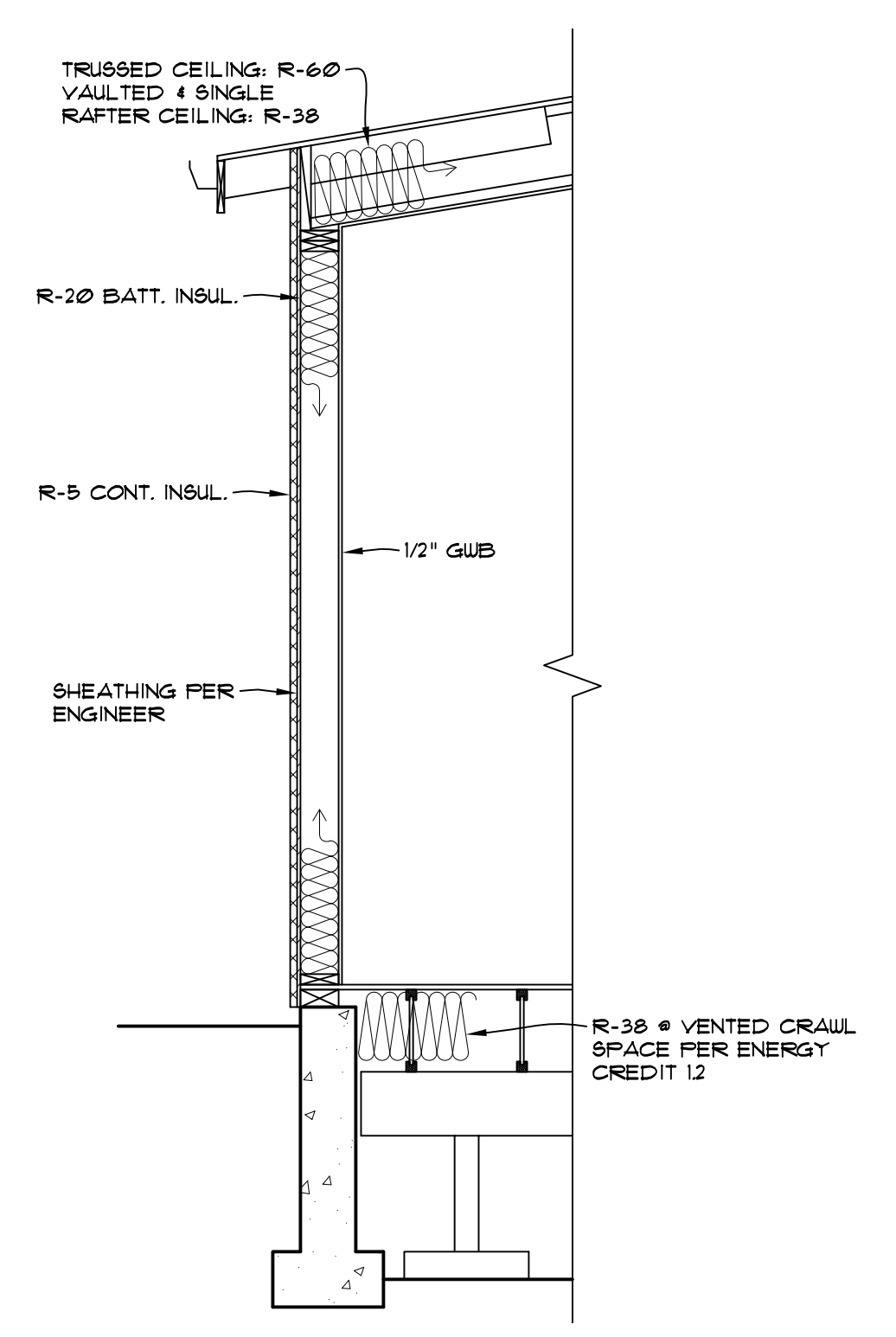
HACKETT RESIDENCE
2965 74TH AVE SE
MERCER ISLAND, WA 98040

JOB NO: 23-012
DATE: 1/30/25
DRW. BY: MM/MG
REVISED: 1/17/25

SHEET NO.
A9

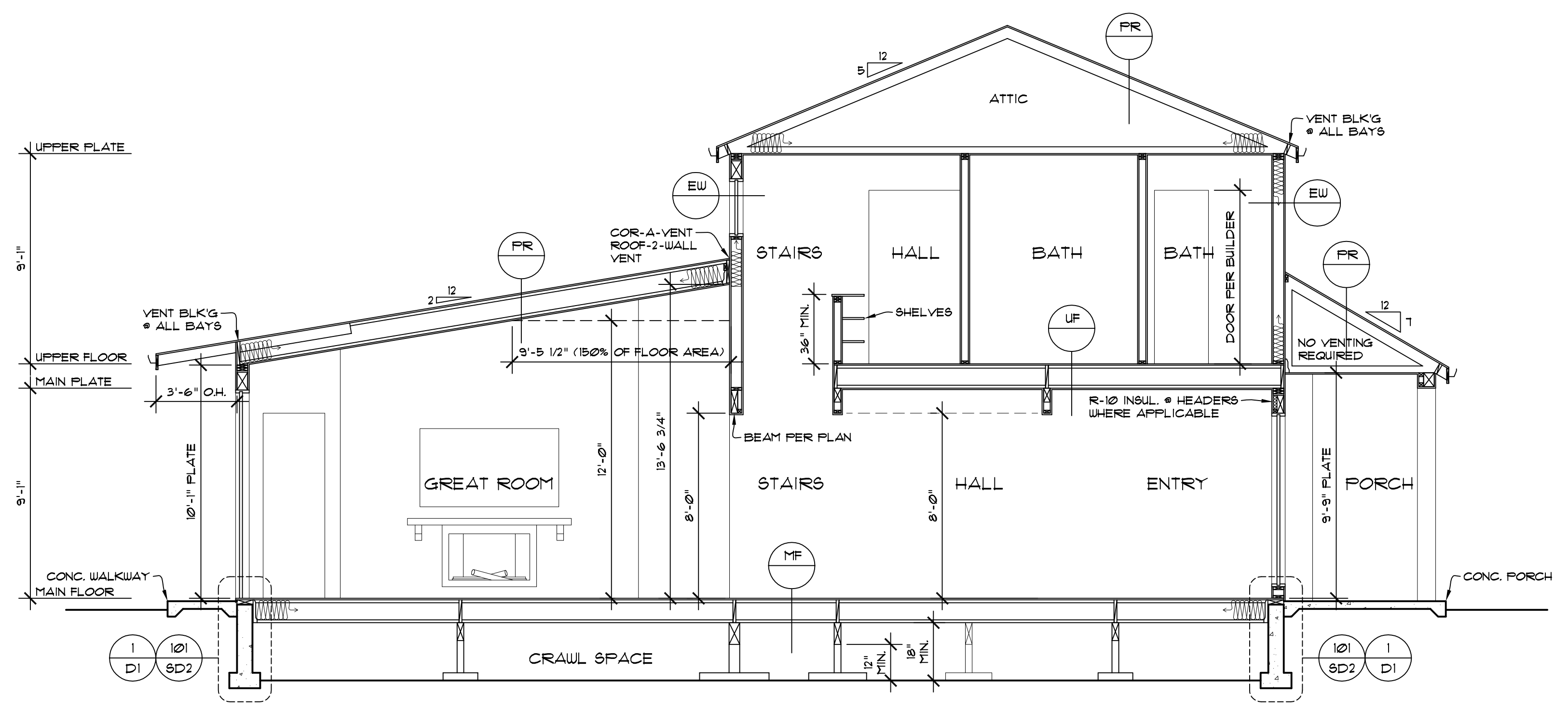


BUILDING SECTION 'A'
SCALE: 1/4" = 1' - 0"

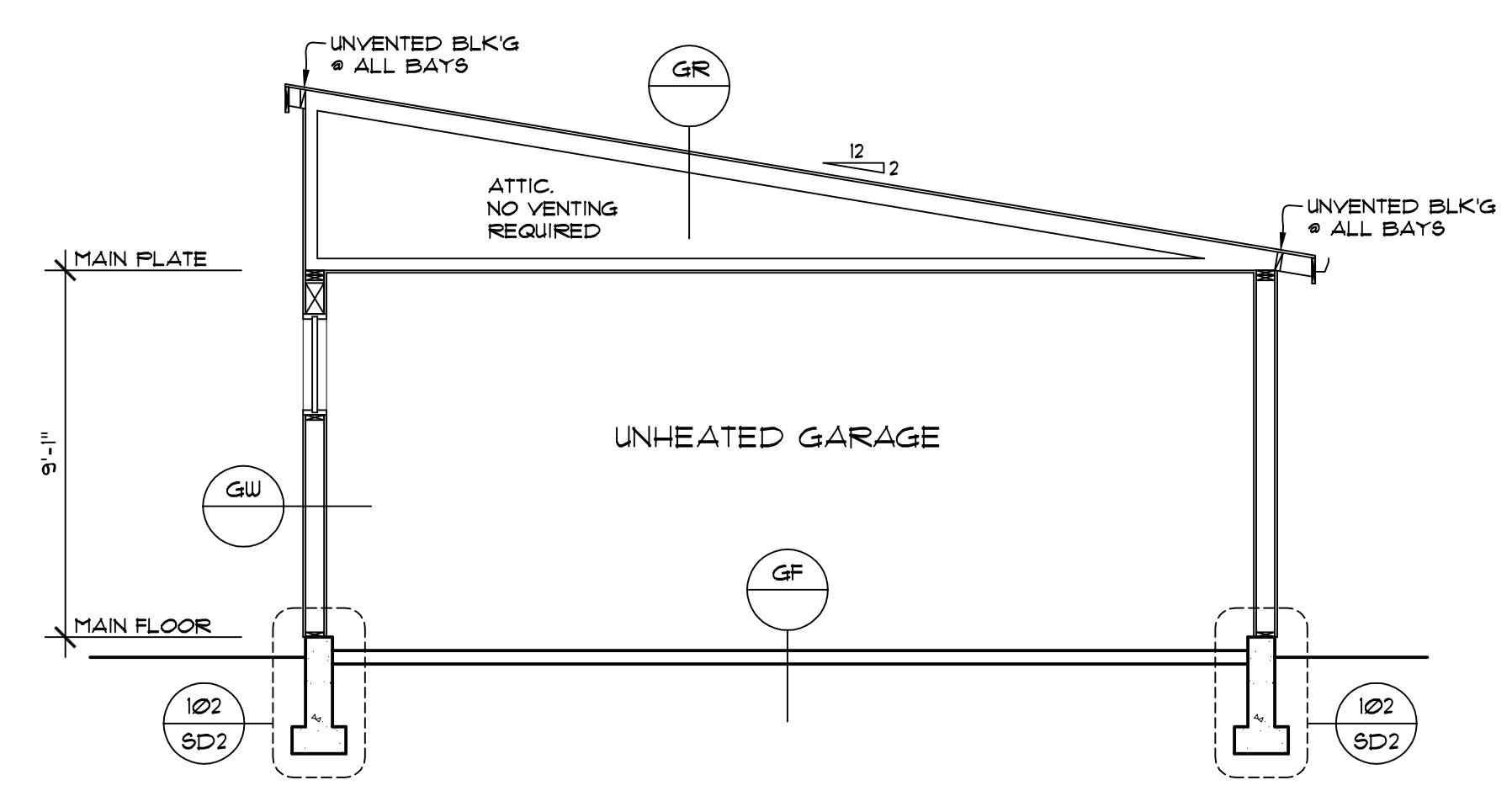


TYP. EXTERIOR WALL SECTION
SCALE: 1/2" = 1' - 0"

FR	PITCHED ROOF - HEATED AREA ROOFING PER ELEVATIONS 3/8" BUILDING PAPER (2 LAYERS @ 2:12) SHEATHING PER STRUCTURAL ENGINEER TRUSSES OR TJI RAFTERS PER PLAN R-60 BATT. INSUL. • TRUSSED ROOF R-38 BATT. INSUL. • SINGLE RAFTER ROOF 4 MIL. UV. POLY. 1/2" GUB	EW	EXTERIOR CONDITIONED WALL 1/2" GUB 2x6 STUDS @ 16" O.C. W/ R-20 BATT INSULATION + R-5 CONT. 4 MIL UV RES. POLY SHEATHING PER SHEAR WALL SCHED. BUILDING PAPER SIDING PER ELEVATIONS	MF	MAIN FLOOR FINISH FLOOR 3/4" T&G FLYWOOD SUB-FLOOR (GLUE + NAIL) FLOOR JOISTS PER PLAN R-38 BATT. INSULATION • AREAS OVER UNHEATED SPACE 1/2" GUB
GR	UNHEATED GARAGE ROOF ROOFING PER ELEVATIONS 3/8" BUILDING PAPER (2 LAYERS @ 2:12) SHEATHING PER STRUCTURAL ENGINEER TRUSSES PER PLAN 1/2" GUB	GU	EXTERIOR UNHEATED GARAGE WALL 1/2" GUB 4 MIL UV RES. POLY 2x6 STUDS @ 16" O.C. SHEATHING PER SHEAR WALL SCHED. BUILDING PAPER SIDING PER ELEVATIONS	UF	UPPER FLOOR FINISH FLOOR 3/4" T&G FLYWOOD SUB-FLOOR (GLUE + NAIL) FLOOR JOISTS PER PLAN R-38 BATT. INSULATION • AREAS OVER UNHEATED SPACE 1/2" GUB
		GF		GF	UNHEATED GARAGE FLOOR SLOPED 4" CONCRETE SLAB ON GRADE W/ 6x6 W.4x10.4 WLF 10 MIL. VAPOR BARRIER 4" GRANULAR FILL



BUILDING SECTION 'B'
SCALE: 1/4" = 1' - 0"



BUILDING SECTION 'C'
SCALE: 1/4" = 1' - 0"

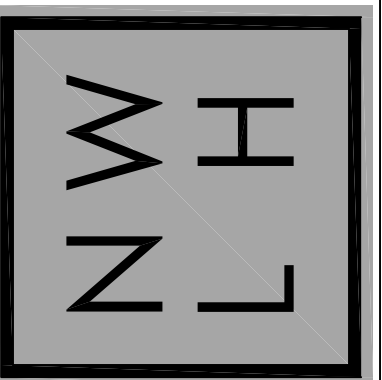
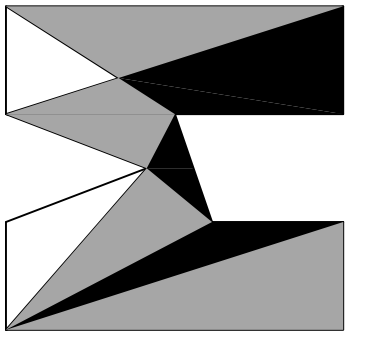
WINDOW SCHEDULE

MAIN FLOOR WINDOWS		UPPER FLOOR WINDOWS	
M1, M2 1616 PIC. ENTRY HDR. HT. 8'-0"		M11 3056 PIC. P. SUITE HDR. HT. 8'-0"	U1 6050 CSMT. BEDROOM 3 HDR. HT. 8'-0"
M3 6056 CSMT. OFFICE HDR. HT. 8'-0"		M12 3036 PIC. P. BATH HDR. HT. 8'-0"	U2 1626 PIC. BEDROOM 3 HDR. HT. 8'-0"
M4 6046 CSMT. LAUNDRY HDR. HT. 8'-0"		M13 3036 CSMT. P. BATH HDR. HT. 8'-0"	U3 1626 CSMT. BATH HDR. HT. 8'-0"
M5, M6 3046 PIC. PANTRY HDR. HT. 8'-0"		M14 3036 PIC. W.I.C. HDR. HT. 8'-0"	U4 1626 PIC. BEDROOM 4 HDR. HT. 8'-0"
M7 3046 CSMT. KITCHEN HDR. HT. 8'-0"		M15 6056 CSMT. GUEST RM. HDR. HT. 8'-0"	U5 6050 CSMT. BEDROOM 4 HDR. HT. 8'-0"
M8 3069 CSMT. DINING HDR. HT. 9'-0"		M16 3026 PIC. GARAGE HDR. HT. 8'-0"	U6 3040 PIC. STAIRS HDR. HT. 8'-0"
M9 3069 CSMT. GREAT RM. HDR. HT. 9'-0"		M17, M18, M19 5026 PIC. GARAGE HDR. HT. 8'-0"	U7, U8 3026 PIC. STAIRS HDR. HT. 8'-0"
M10 3056 CSMT. P. SUITE HDR. HT. 8'-0"		SG = SAFETY GLASS E = EGRESS WINDOW U-FACTOR FOR ALL WINDOWS = 0.25	
		U9 3026 PIC. LOFT HDR. HT. 8'-0"	U10 3040 CSMT. LOFT HDR. HT. 8'-0"

DOOR SCHEDULE

EXTERIOR DOORS	
D1 3/6x8/0 S.C. ENTRY	
D2 9/0x9/0 NANAWALL DOOR GREAT RM.	
D3 2/8x8/0 STORE DOOR GREAT RM.	
D4 2/8x8/0 STORE DOOR P. SUITE	
D5 2/8x8/0 S.C. DOOR GARAGE	

WINDOW & DOOR SCHEDULES



STRUCTURAL NOTES

CODES AND SPECIFICATIONS

- INTERNATIONAL BUILDING CODE, 2021 EDITION, ASCE 7-22
- INTERNATIONAL RESIDENTIAL CODE, 2021 EDITION
- SIMPSON STRONG TIE WOOD CONSTRUCTION CONNECTORS 2024-2025 FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE STAINLESS STEEL, ZMAX(G185HDG PER ASTM A653). BATCH/POST HOT-DIP GALVANIZED (PER ASTM B695, CLASS 55 OR GREATER). UNCOATED AND PAINTED PRODUCTS SHOULD NOT BE USED WITH TREATED WOOD. WHEN USING STAINLESS STEEL HOT-DIP GALVANIZED CONNECTORS, THE CONNECTORS AND FASTENERS SHOULD BE MADE OF THE SAME MATERIAL.

DESIGN CRITERIA

- WIND LOAD: INTERNATIONAL BUILDING CODE, 2021, ASCE 7-22, ALTERNATE ALL-HEIGHTS METHOD, ULTIMATE DESIGN WIND SPEED = 110 MPH, NOMINAL DESIGN WIND SPEED = 85 MPH, EXPOSURE B, Kzt = 1.6
- SEISMIC: INTERNATIONAL BUILDING CODE, 2021, ASCE 7-22 RISK CATEGORY II, SEISMIC IMPORTANCE CATEGORY, I_e=1.0 MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS, S_s=1.5, S₁=0.5 SITE CLASS D DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS, S_{ds}=1.0g, S_d=0.5g SEISMIC DESIGN CATEGORY, D2 BASIC SEISMIC FORCE-RESISTING SYSTEM: LIGHT FRAME WALLS WITH WOOD SHEAR WALLS DESIGN BASE SHEAR, V + F(S_{ds})(W)/R = 0.1846W RESPONSE MODIFICATION COEFFICIENT, R=6.5 ANALYSIS PROCEDURE USED: SIMPLIFIED ALTERNATIVE STRUCTURAL DESIGN FOR SIMPLE BEARING WALL SYSTEMS
- ROOF LOAD: DL = 15 PSF LL = 25 PSF (ROOF SNOW LOAD)
- FLOOR LOAD: DL = 10 PSF LL = 40 PSF
- DECK LOAD: DL = 10 PSF LL = 60 PSF
- SOILS: ASSUMED 1500 PSF ALLOWABLE SOIL BEARING 35 PCF ACTIVE SOIL PRESSURE, 250 PCF PASSIVE PRESSURE, 0.35 COEFFICIENT OF FRICTION ALL FOOTINGS AND SLABS SHALL BEAR ON UNDISTURBED SOIL OR FILL COMPACTED TO 95% MODIFIED PROCTOR.
- CONCRETE: 3000 PSI @ 28 DAYS (2500 PSI USED FOR DESIGN) GRADE 40 REINFORCEMENT MINIMUM 3" COVER FOR ALL REINFORCEMENT EXCEPT AS NOTED AT RETAINING WALL OR OTHER DETAILS.

TIMBER CONSTRUCTION DETAILS

- LUMBER GRADES AND ALLOWABLE STRESSES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON PLANS:
ALL SAWN LUMBER HF#2 OR BETTER, F_b = 875 PSI, F_v = 75 PSI, E = 1,300,000
GLULAM BEAMS 24F-V4, F_b = 2400 PSI, F_v = 165 PSI, E = 1,800,000
MICROLAM, LVL F_b = 2600 PSI, F_v = 285 PSI, E = 1,900,000
PARALLAMS, PSL F_b = 2600 PSI, F_v = 290 PSI, E = 2,900,000
- WHEN TOP PLATE IS INTERRUPTED BY HEADER, HEADER SHALL HAVE STRAP CONNECTORS TO THE TOP PLATE EACH END. USE 2-SIMPSON MSTA24 CONNECTORS, UNLESS NOTED OTHERWISE.
- ALL SHEAR WALL SHEATHING, NAILS AND ANCHORS SHALL BE AS DETAILED ON THE DRAWINGS AND AS NOTED IN THE SHEAR WALL SCHEDULE.
- FLOOR SHEATHING SHALL BE 5/8" MINIMUM APA RATED FLOOR SHEATHING WITH 10d COMMON @ 6"OC AT ALL SUPPORTED PANEL EDGES AND 10d @ 12"OC AT INTERMEDIATE SUPPORTS.
- ROOF SHEATHING SHALL BE 5/8" MINIMUM APA RATED ROOF SHEATHING WITH 8d COMMON @ 6"OC AT ALL SUPPORTED PANEL EDGES AND 8d @ 12"OC AT INTERMEDIATE SUPPORTS.

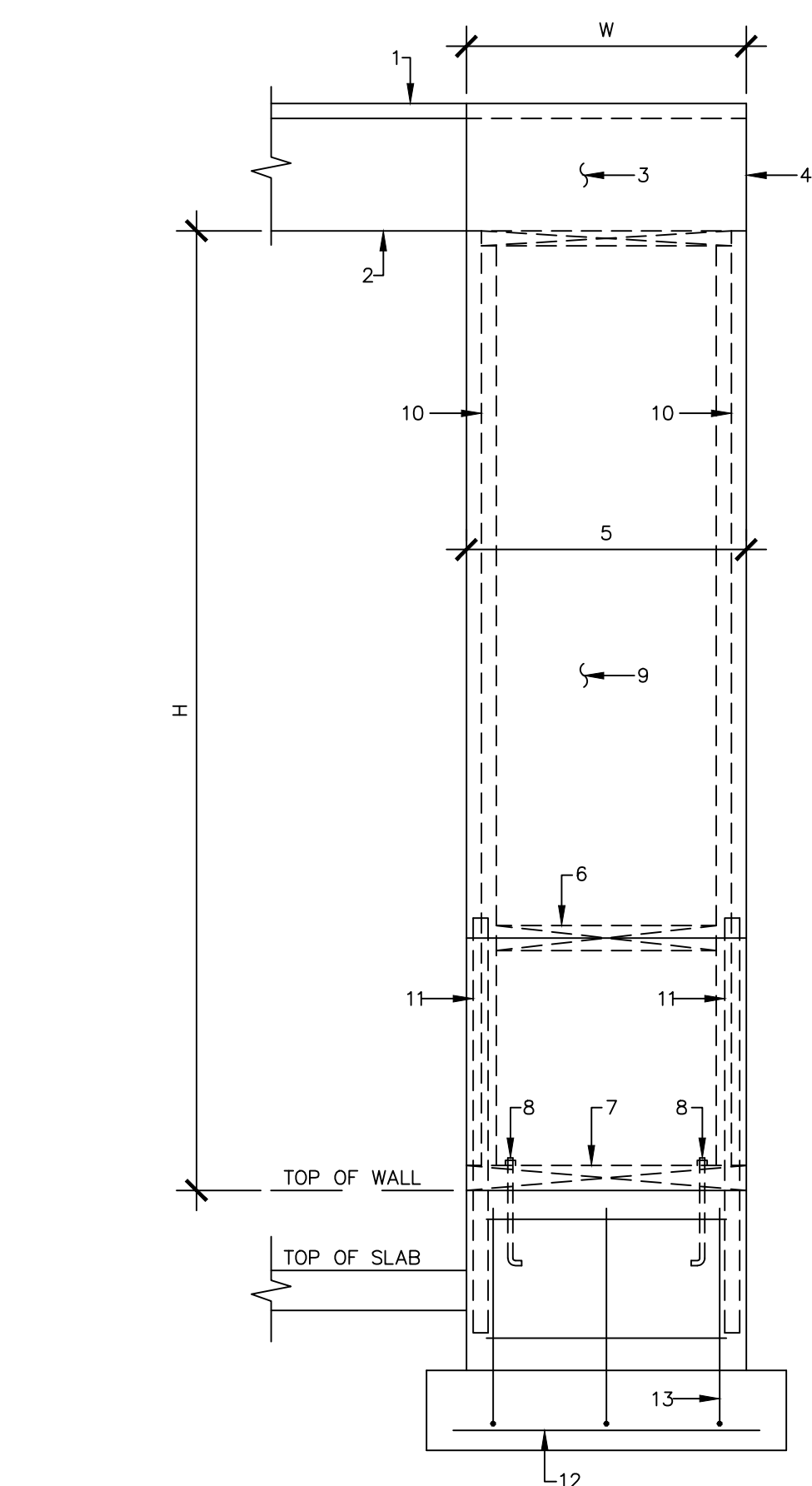
GENERAL CONSTRUCTION NOTES

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD. ANY VARIATIONS FROM THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER OR THE ENGINEER OF RECORD.
- ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION SHALL BE PROVIDED.
- ANY PROPOSED FIELD CHANGES MUST HAVE THE APPROVAL OF THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

SHEAR WALL SCHEDULE

SHEAR WALL TYPE	SHEATHING (NOTE 5)	FASTENER SPACING (COMMON OR GALVANIZED BOX NAILS)	BOTTOM PLATE NAILING OR ANCHOR BOLTS	FRAMING ANCHORS (NOTES 7 & 8)	ALLOWABLE SHEAR	NOTES
1A	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 6" DC	16d @ 8" DC OR 1/2" A.B. @ 5'-6" DC	RBC @ 32" DC LTP4 @ 48" DC A35 @ 48" DC	130 PLF	1, 2, 3, 11
1	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 6" DC	16d @ 6" DC OR 1/2" A.B. @ 3'-2" DC OR 1/2" A.B. @ 5'-0" DC	RBC @ 18" DC LTP4 @ 30" DC A35 @ 30" DC	242 PLF	1, 2, 3, 11
2	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 4" DC	16d @ 4" DC OR 1/2" A.B. @ 2'-2" DC OR 1/2" A.B. @ 3'-4" DC	RBC @ 12" DC LTP4 @ 18" DC A35 @ 18" DC	353 PLF	1, 2, 3, 11
3	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 3" DC	1/2" X 5" LAG SCREW @ 8" DC OR 1/2" A.B. @ 3'-2" DC OR 1/2" A.B. @ 5'-0" DC	RBC @ 10" DC LTP4 @ 15" DC A35 @ 15" DC	456 PLF	1, 2, 3, 4, 9, 10, 11
4	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	10d @ 3" DC	1/2" X 5" LAG SCREW @ 6" DC OR 1/2" A.B. @ 1'-4" DC OR 1/2" A.B. @ 2'-0" DC	RBC @ 8" DC LTP4 @ 12" DC A35 @ 12" DC	558 PLF	1, 2, 3, 4, 9, 10, 11
5	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	10d @ 2" DC	1/2" X 5" LAG SCREW @ 5" DC OR 1/2" A.B. @ 1'-0" DC OR 1/2" A.B. @ 1'-8" DC	RBC @ 6" DC LTP4 @ 10" DC A35 @ 10" DC	716 PLF	1, 2, 3, 4, 9, 10, 11
6	19/32" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 BOTH SIDES	10d @ 2" DC	1/2" X 5" LAG SCREW @ 2" DC OR 1/2" A.B. @ 1'-0" DC	LTP4 @ 6" DC A35 @ 6" DC	1618 PLF	1, 2, 3, 4, 6, 9, 10, 11

- ALL FASTENERS SHALL MEET THE FOLLOWING CRITERIA: 8d COMMON = 0.131" DIAMETER X 2 1/2", 8d GALVANIZED BOX = 0.113 DIAMETER X 2 1/2", 10d COMMON = 0.148 DIAMETER X 3", 10d GALVANIZED BOX = 0.128" X 3", 16d COMMON = 0.162" X 3 1/2".
- PANEL EDGES SHALL BE BACKED WITH 2" NOMINAL OR WIDER FRAMING. SPACE FASTENERS @ 12" DC ON INTERMEDIATE SUPPORTS.
- PROVIDE ALL ANCHOR BOLTS WITH 3" X 3" X 1/4" PLATE WASHERS. LOCATE WITHIN 1/2" OF SHEATHING.
- AT GARAGE JAMBS, REFER TO LATERAL RESTRAINT PANEL DETAIL 401/S1.
- PROVIDE 5/8" APA RATED SHEATHING (PLYWOOD OR OSB) OR APA RATED SIDING 303 OR INNER SEAL OSB RATED PANEL SIDING ON ALL EXTERIOR WALLS DESIGNATED AS SHEAR WALLS.
- WHERE PANELS ARE APPLIED ON BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" DC ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.
- REFER TO TYPICAL SHEAR WALL DETAILS ON STRUCTURAL DETAIL SHEET FOR LOCATION OF FRAMING ANCHORS.
- AT UPPER FLOOR INTERIOR SHEAR WALLS, REFER TO DETAIL 303/S2 OR 304/S2.
- AT SHEAR WALL TYPES 3, 4, 5 AND 6, ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A SINGLE 3X MEMBER OR (2) 2X MEMBERS. FOR EXAMPLE, PROVIDE A 3X STUD AT VERTICAL JOINTS IN THE SHEATHING.
- AT SHEAR WALL TYPES 3, 4, 5 AND 6, FOUNDATION SILL PLATES AND BOTTOM PLATES OF SHEAR WALLS SHALL NOT BE LESS THAN A SINGLE 3X MEMBER OR (2) 2X MEMBERS. ALSO, PROVIDE A 3X MINIMUM WIDTH MEMBER BELOW SHEAR WALL TO RECEIVE LAG SCREWS SUCH AS A 3X RIM JOIST, 3X JOIST OR BEAM OR BLOCKING BELOW SHEAR WALL.
- FASTENERS AT PRESSURE PRESERVATIVE AND FIRE RETARDANT TREATED WOOD SHALL BE STAINLESS STEEL, G185 HDG, BATCH/POST HOT-DIP GALVANIZED OR MECHANICALLY GALVANIZED.



- 2x4 TOP PLATE
 - GARAGE DOOR HEADER
 - NAIL SHEATHING TO HEADER @3" O.C. EACH WAY
 - 8d NAILS @3" O.C. @ ALL PLATES, HEADERS & STUDS
 - PANEL WIDTH: $2'-7''$ @ 9' WALL, $2'-4''$ @ 8' WALL
 - (2) 2x BLOCKING @ ANY PLYWOOD JOINTS
 - (2) 2x PLATE
 - (2) 1/2" DIA. ANCHOR BOLTS MINIMUM 7" EMBEDMENT
 - APA RATED SHEATHING PER SHEARWALL SCHEDULE
 - (2) 2x STUDS, NAIL SHEATHING TO EACH STUD
 - SIMPSON HOLDOWN PER PLAN
 - (2) #4 REBAR
 - #4 L @16" O.C. VERTICAL - 3 MIN. #4 @ 10" O.C. HORIZONTAL - 2 MIN.
 - RAISE ELEVATION OF CONCRETE STEM WALL TO PROVIDE A MINIMUM H/W RATIO OF 3.5 / 1
- WHERE "W" = 2'-0", MAX. "H" = 7'-0"

401 LATERAL RESTRAINT PANEL N.T.S.

FOOTING SCHEDULE				
MARK	SIZE	DEPTH	REINFORCING	ALLOWABLE LOAD
18	18"x18"	8"	(2) #4 EACH WAY	3375#
24	24"x24"	10"	(3) #4 EACH WAY	6000#
30	30"x30"	10"	(3) #5 EACH WAY	9375#
36	36"x36"	10"	(3) #5 EACH WAY	13500#
42	42"x42"	10"	(3) #5 EACH WAY	18375#
48	48"x48"	12"	(4) #5 EACH WAY	24000#
54	54"x54"	12"	(5) #5 EACH WAY	30375#
60	60"x60"	12"	(5) #5 EACH WAY	37500#
66	66"x66"	12"	(6) #5 EACH WAY	45375#
72	72"x72"	12"	(7) #5 EACH WAY	54000#

NOTE: FOOTING DESIGN IS BASED ON 2500 PSI CONCRETE AND AN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF

General Notes

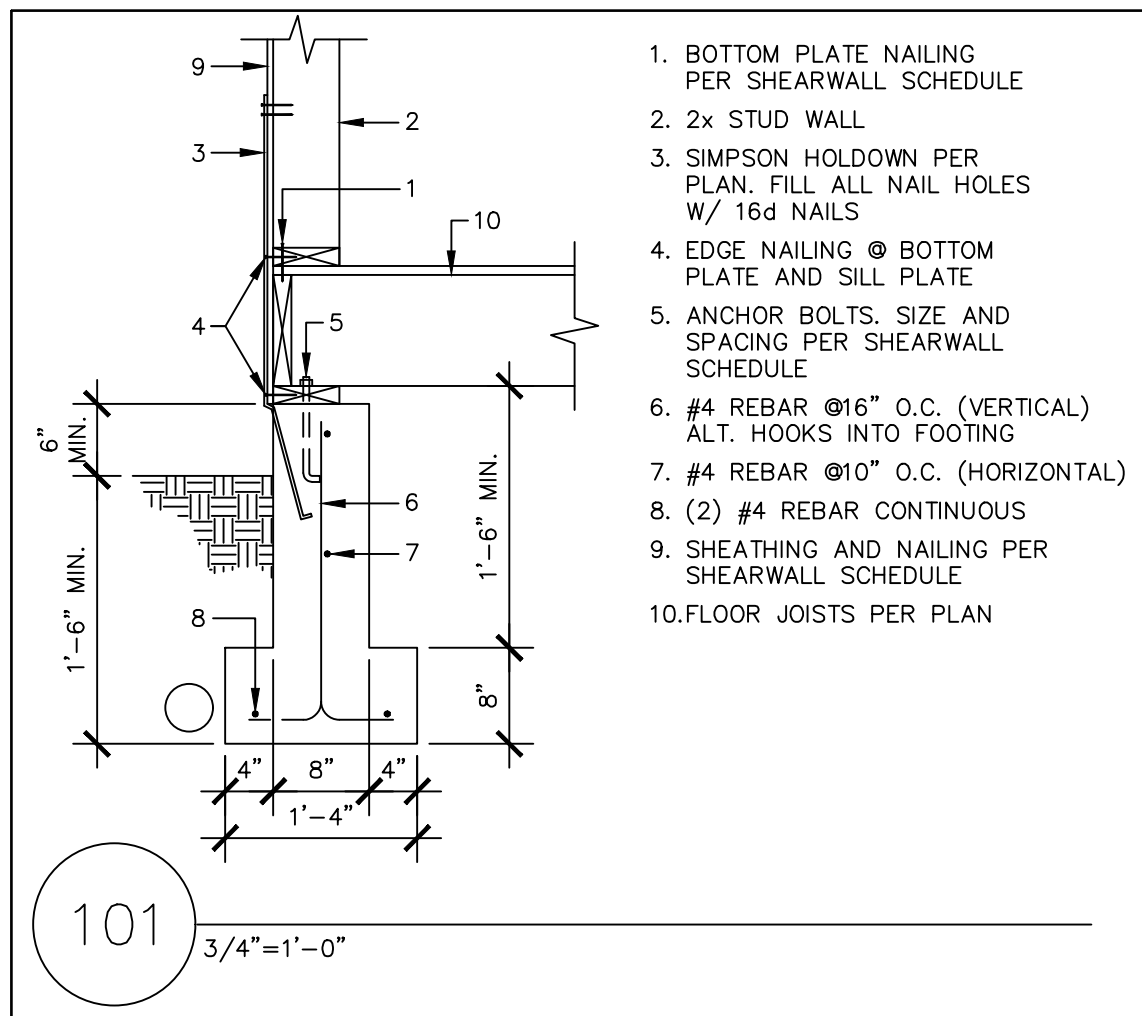


No.	Revision/Issue	Date

Firm Name and Address
MDT ENGINEERING
 31403 44TH AVE S
 AUBURN, WA 98001
 253-709-9852
 MD.THOMPSON@EARTHLINK.NET

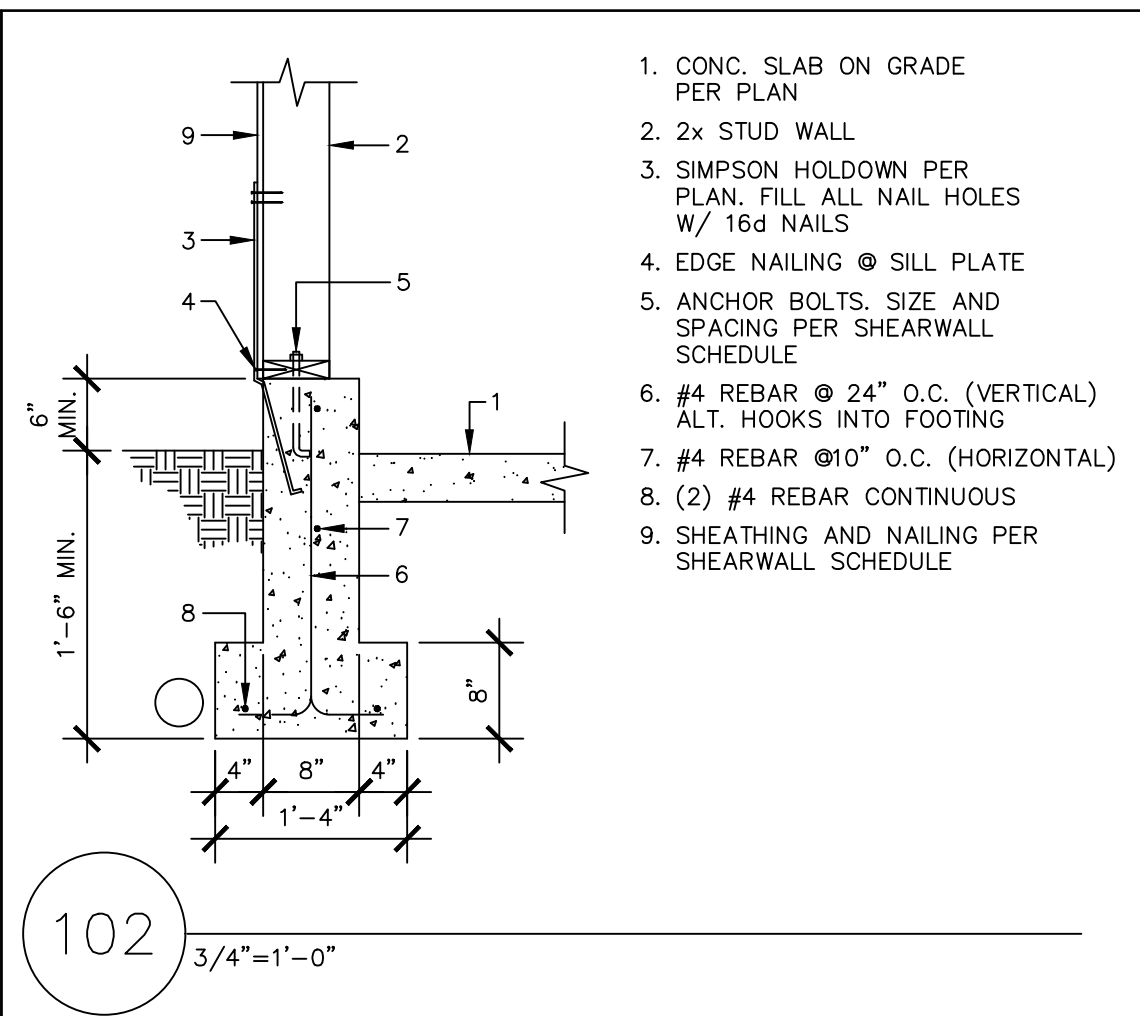
Project Name and Address
MAWER-HACKETT
 2965 74TH AVE SE
 MERCER ISLAND, WA
 98040

Project	Sheet
MAWER-HACKETT	SD1
Date	10-2-24
Scale	AS NOTED



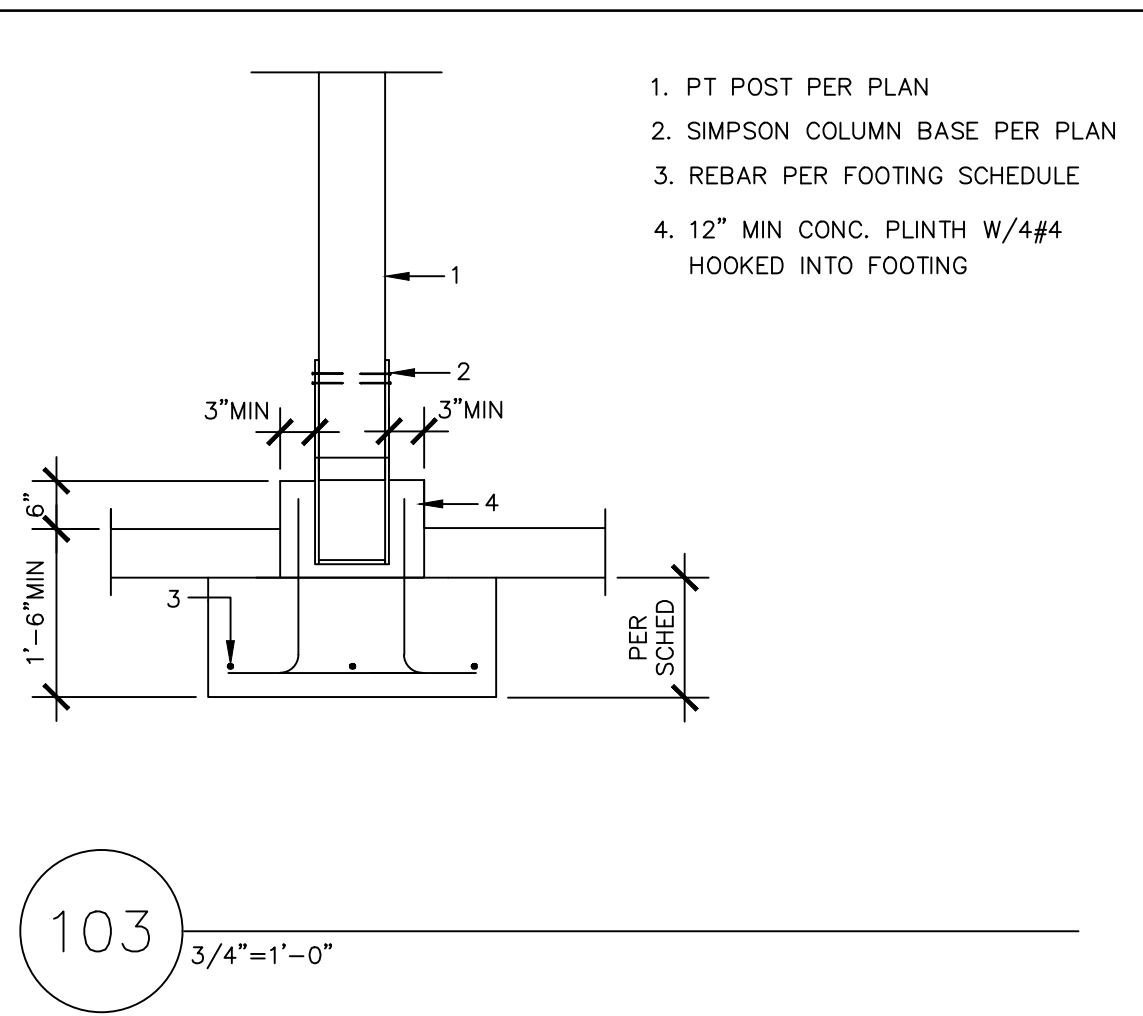
1. BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
2. 2x STUD WALL
3. SIMPSON HOLDOWN PER PLAN. FILL ALL NAIL HOLES W/ 16d NAILS
4. EDGE NAILING @ BOTTOM PLATE AND SILL PLATE
5. ANCHOR BOLTS. SIZE AND SPACING PER SHEARWALL SCHEDULE
6. #4 REBAR @16" O.C. (VERTICAL) ALT. HOOKS INTO FOOTING
7. #4 REBAR @10" O.C. (HORIZONTAL)
8. (2) #4 REBAR CONTINUOUS
9. SHEATHING AND NAILING PER SHEARWALL SCHEDULE
10. FLOOR JOISTS PER PLAN

101
3/4"=1'-0"



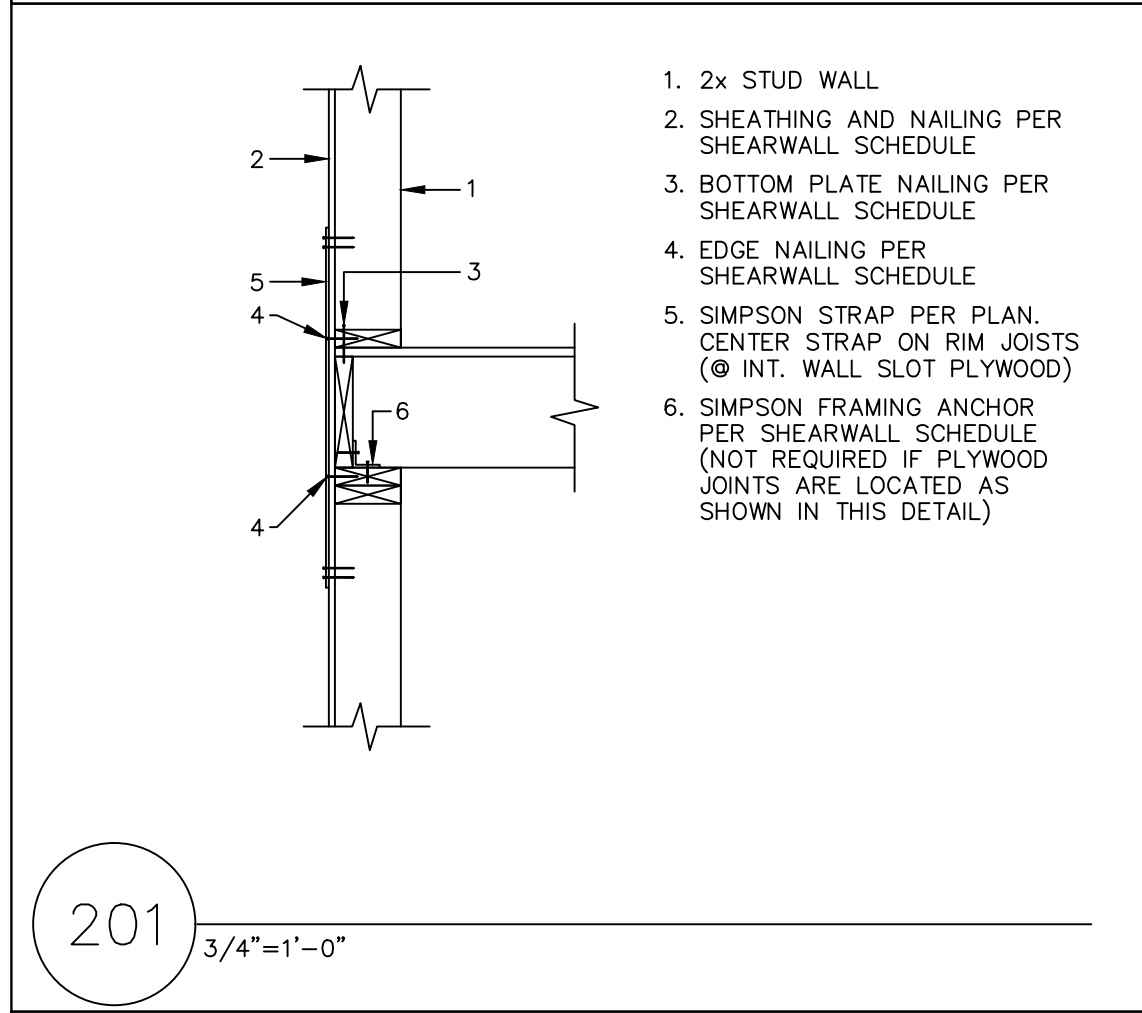
1. CONC. SLAB ON GRADE PER PLAN
2. 2x STUD WALL
3. SIMPSON HOLDOWN PER PLAN. FILL ALL NAIL HOLES W/ 16d NAILS
4. EDGE NAILING @ SILL PLATE
5. ANCHOR BOLTS. SIZE AND SPACING PER SHEARWALL SCHEDULE
6. #4 REBAR @ 24" O.C. (VERTICAL) ALT. HOOKS INTO FOOTING
7. #4 REBAR @10" O.C. (HORIZONTAL)
8. (2) #4 REBAR CONTINUOUS
9. SHEATHING AND NAILING PER SHEARWALL SCHEDULE

102
3/4"=1'-0"



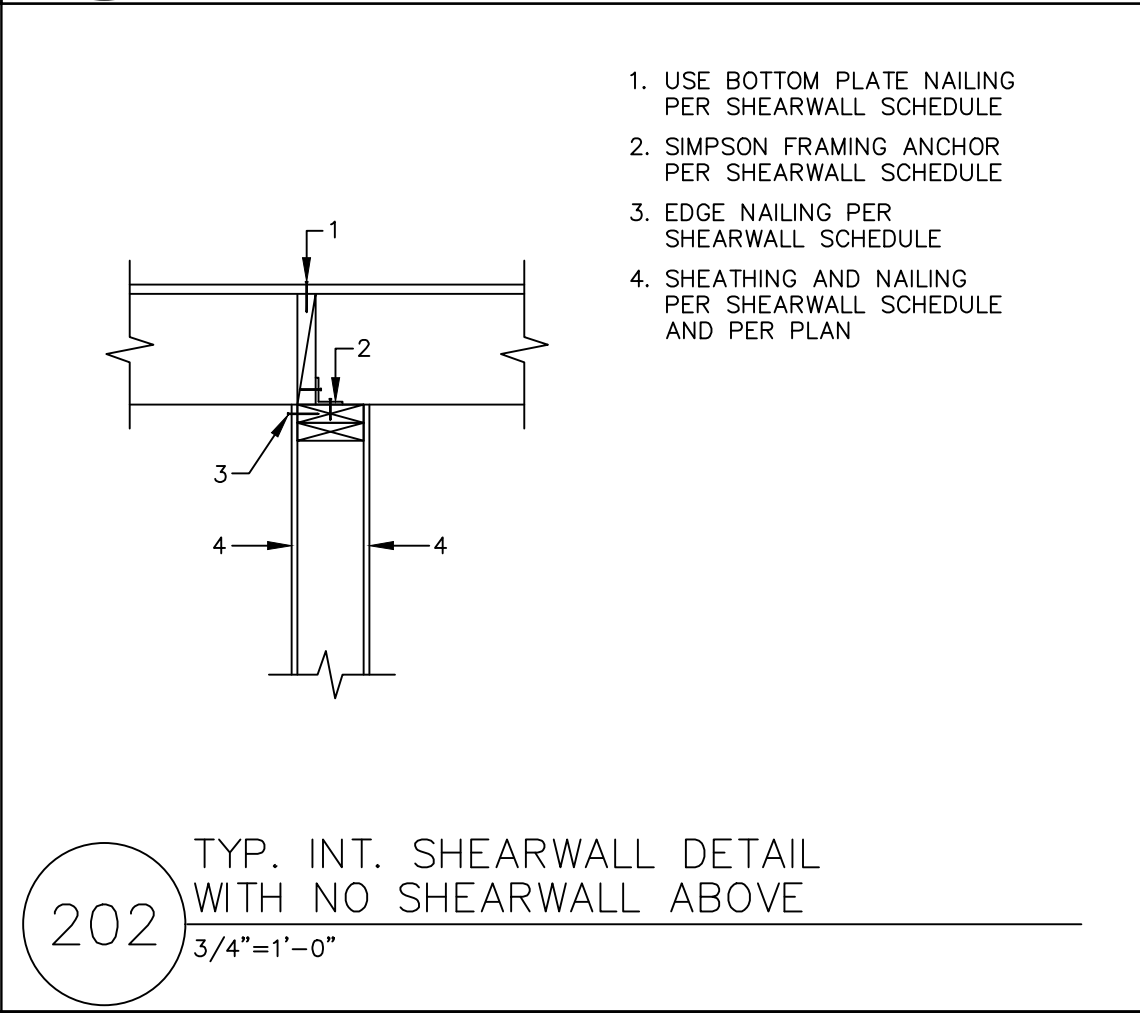
1. PT POST PER PLAN
2. SIMPSON COLUMN BASE PER PLAN
3. REBAR PER FOOTING SCHEDULE
4. 12" MIN CONC. PLINTH W/4#4 HOOKED INTO FOOTING

103
3/4"=1'-0"



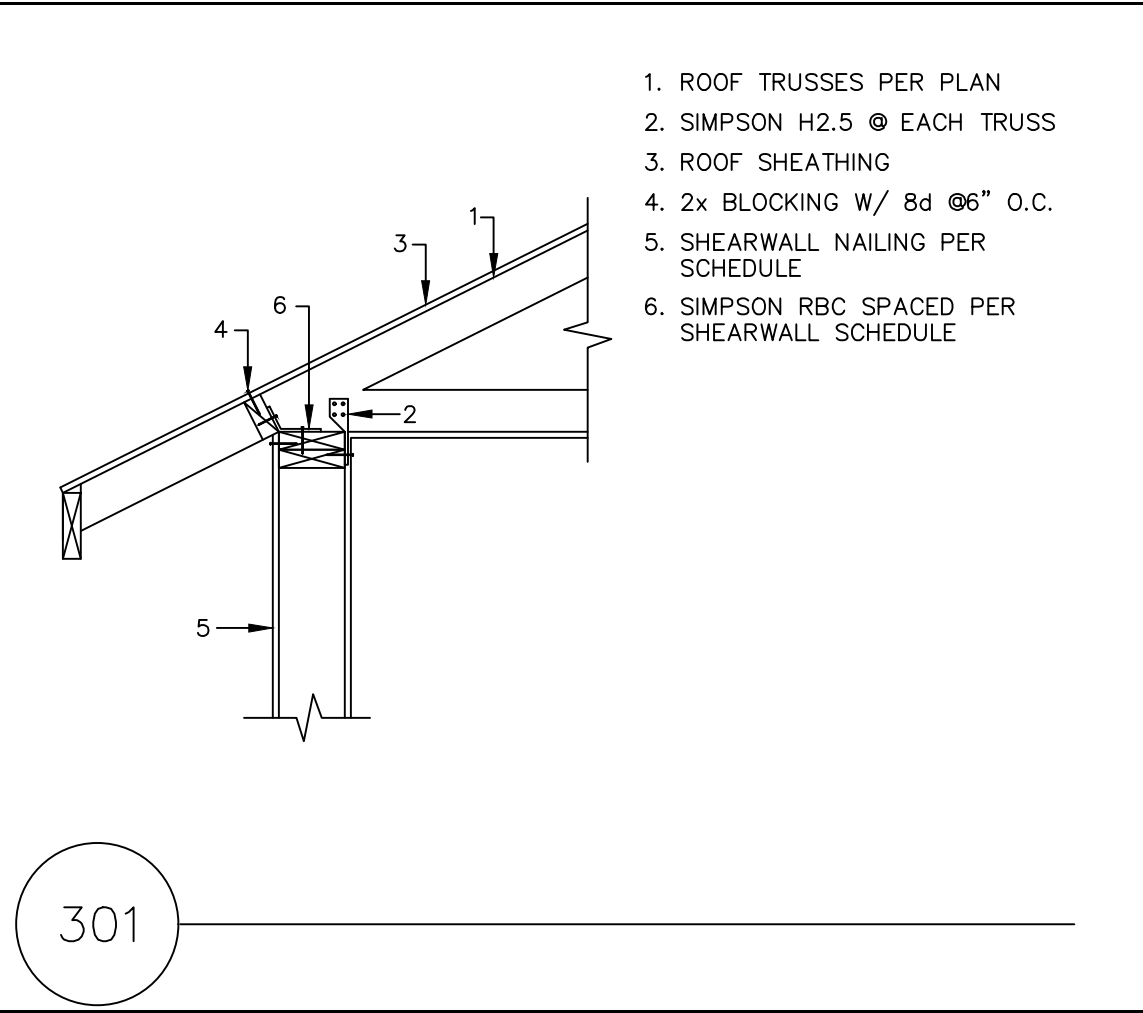
1. 2x STUD WALL
2. SHEATHING AND NAILING PER SHEARWALL SCHEDULE
3. BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
4. EDGE NAILING PER SHEARWALL SCHEDULE
5. SIMPSON STRAP PER PLAN. CENTER STRAP ON RIM JOISTS @ INT. WALL SLOT PLYWOOD)
6. SIMPSON FRAMING ANCHOR PER SHEARWALL SCHEDULE (NOT REQUIRED IF PLYWOOD JOINTS ARE LOCATED AS SHOWN IN THIS DETAIL)

201
3/4"=1'-0"



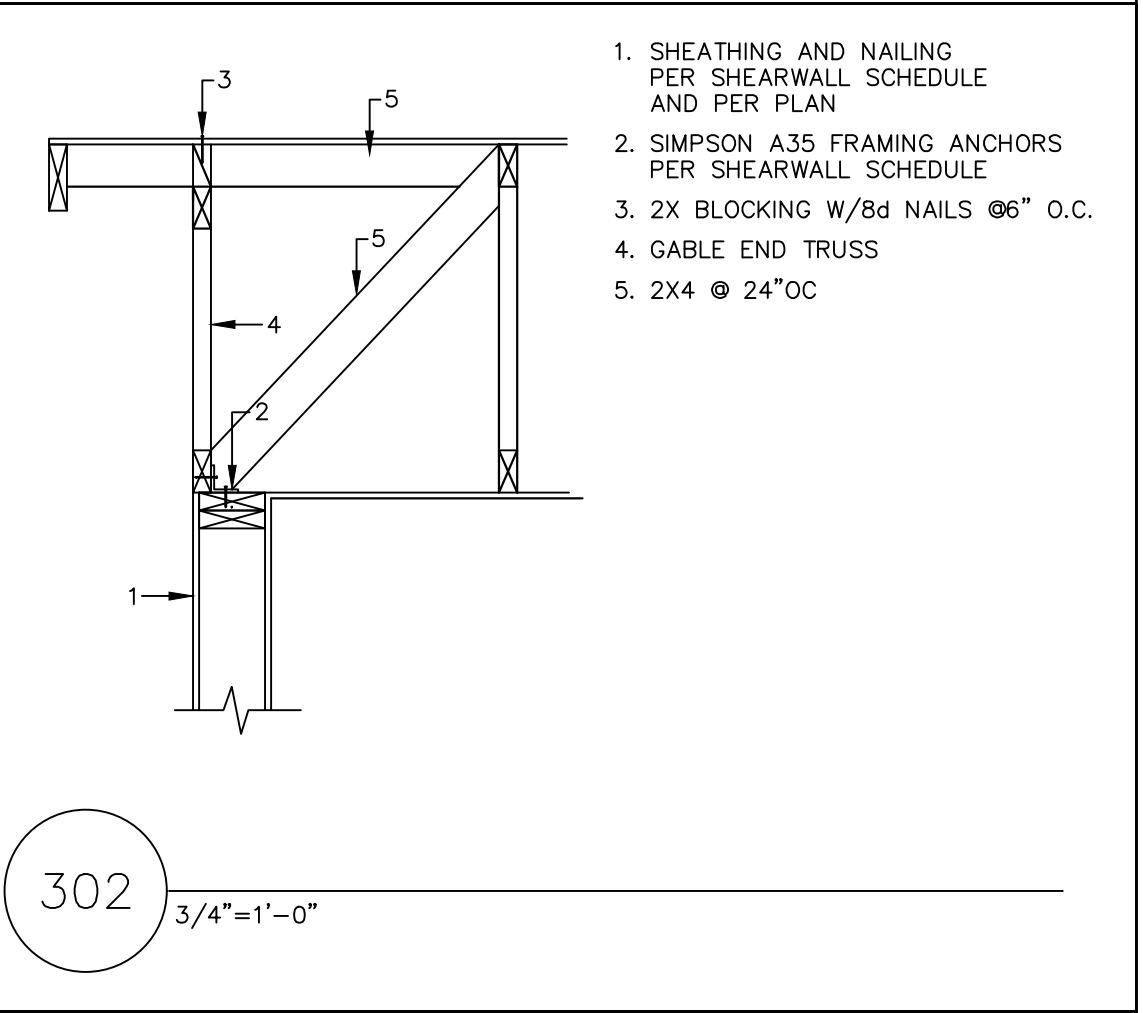
1. USE BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
2. SIMPSON FRAMING ANCHOR PER SHEARWALL SCHEDULE
3. EDGE NAILING PER SHEARWALL SCHEDULE
4. SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN

202
TYP. INT. SHEARWALL DETAIL WITH NO SHEARWALL ABOVE
3/4"=1'-0"



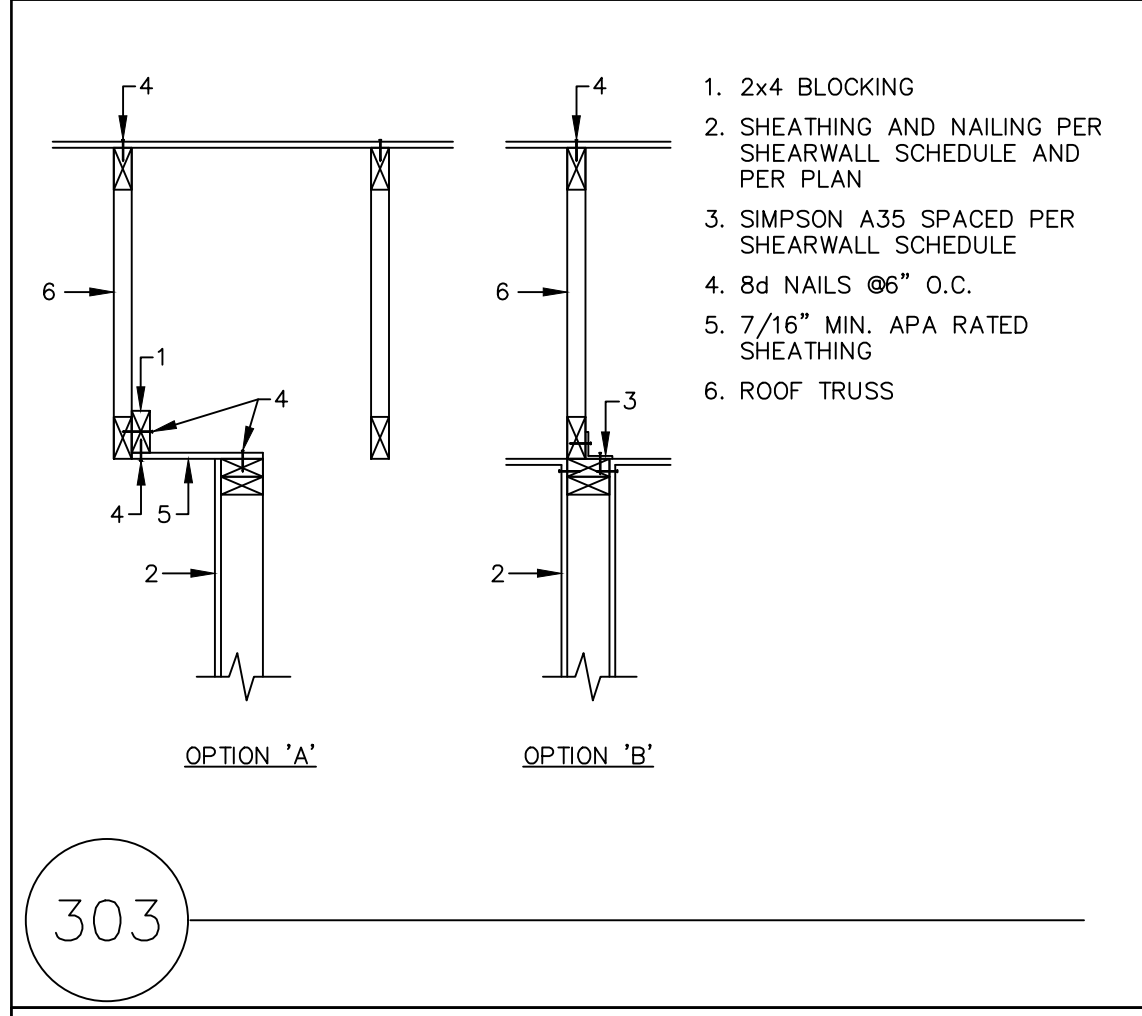
1. ROOF TRUSSES PER PLAN
2. SIMPSON H2.5 @ EACH TRUSS
3. ROOF SHEATHING
4. 2x BLOCKING W/ 8d @6" O.C.
5. SHEARWALL NAILING PER SCHEDULE
6. SIMPSON RBC SPACED PER SHEARWALL SCHEDULE

301
3/4"=1'-0"



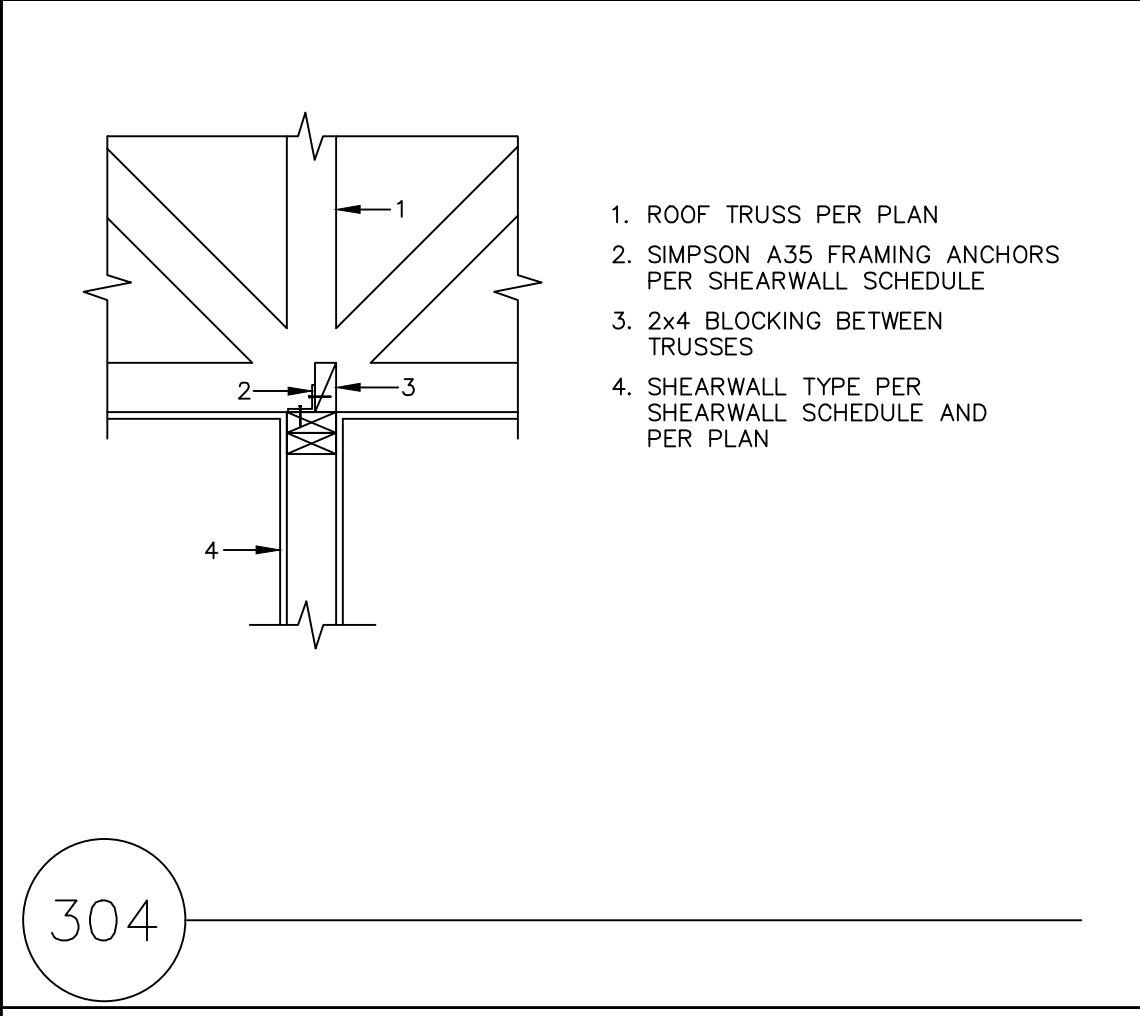
1. SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN
2. SIMPSON A35 FRAMING ANCHORS PER SHEARWALL SCHEDULE
3. 2x BLOCKING W/8d NAILS @6" O.C.
4. GABLE END TRUSS
5. 2X4 @ 24"OC

302
3/4"=1'-0"



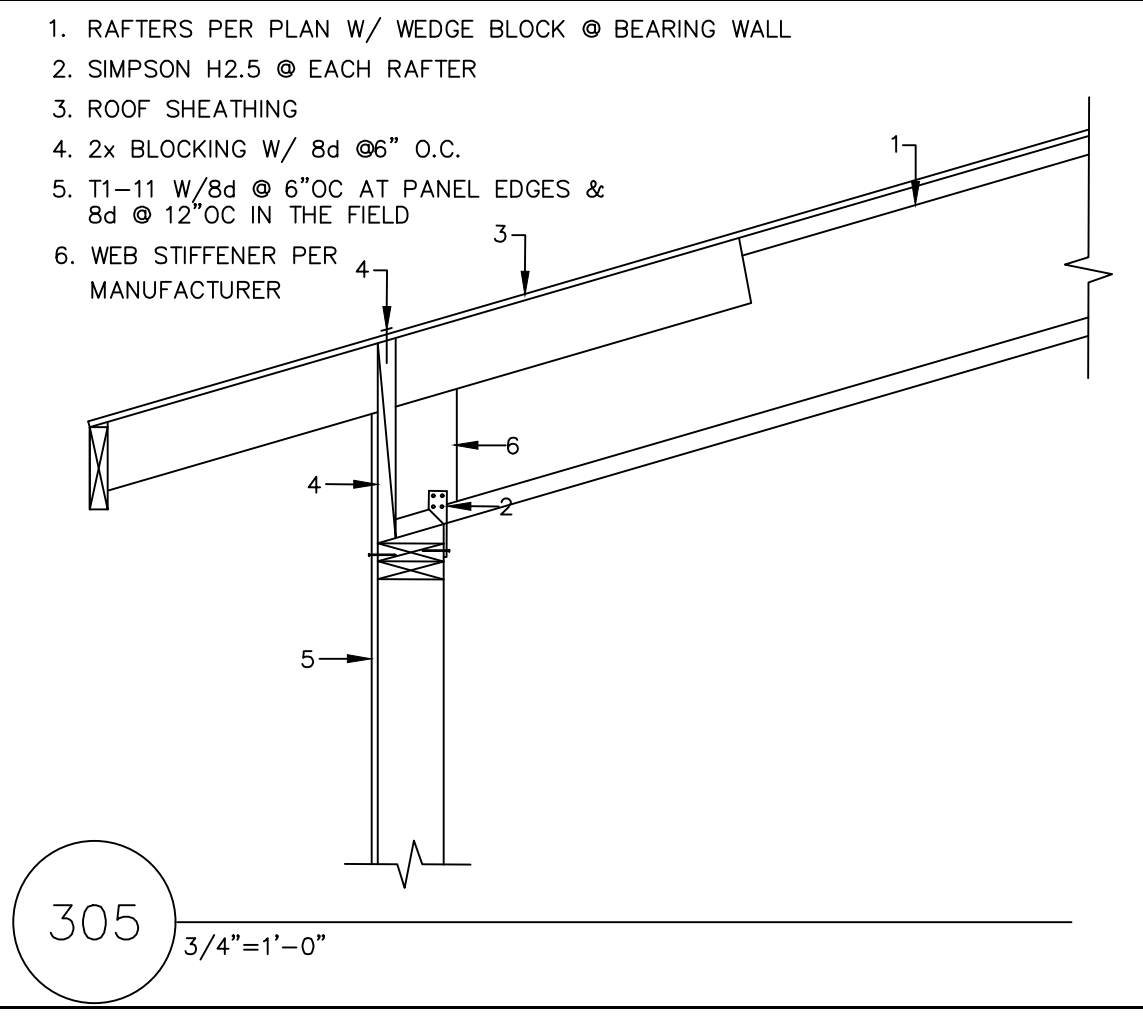
1. 2x4 BLOCKING
2. SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN
3. SIMPSON A35 SPACED PER SHEARWALL SCHEDULE
4. 8d NAILS @6" O.C.
5. 7/16" MIN. APA RATED SHEATHING
6. ROOF TRUSS

303
3/4"=1'-0"



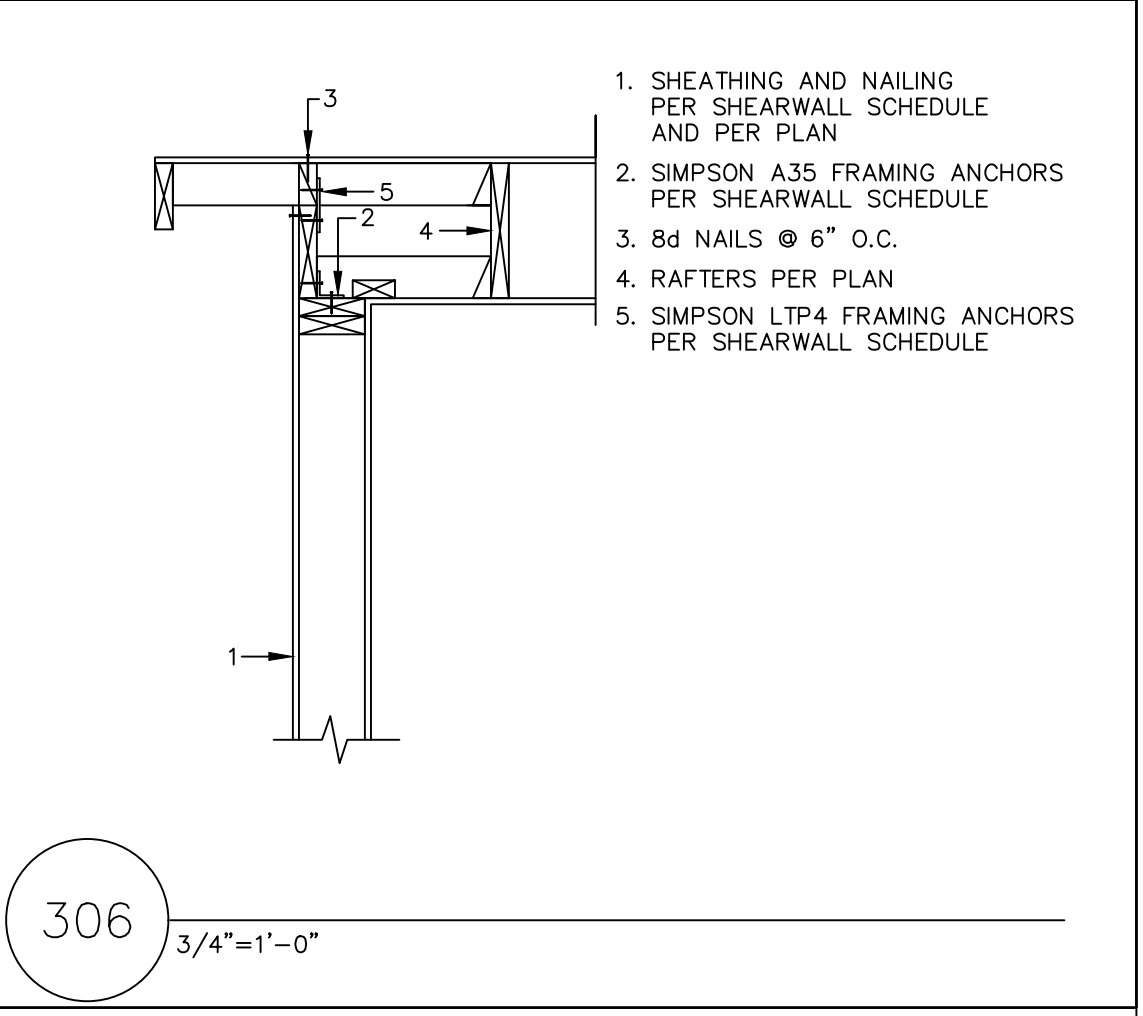
1. ROOF TRUSS PER PLAN
2. SIMPSON A35 FRAMING ANCHORS PER SHEARWALL SCHEDULE
3. 2x4 BLOCKING BETWEEN TRUSSES
4. SHEARWALL TYPE PER SHEARWALL SCHEDULE AND PER PLAN

304
3/4"=1'-0"



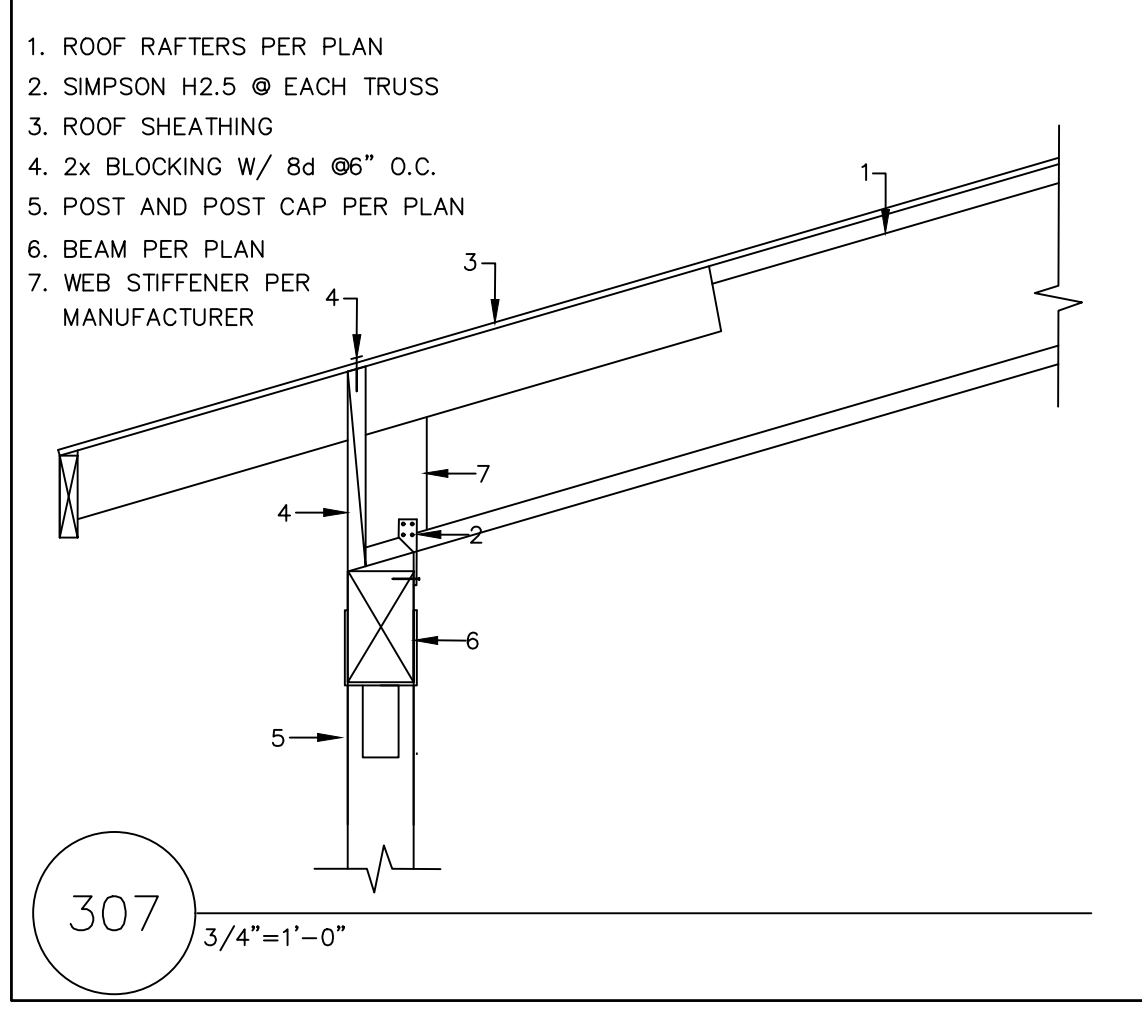
1. RAFTERS PER PLAN W/ WEDGE BLOCK @ BEARING WALL
2. SIMPSON H2.5 @ EACH RAFTER
3. ROOF SHEATHING
4. 2x BLOCKING W/ 8d @6" O.C.
5. T1-11 W/8d @ 6"OC AT PANEL EDGES & 8d @ 12"OC IN THE FIELD
6. WEB STIFFENER PER MANUFACTURER

305
3/4"=1'-0"



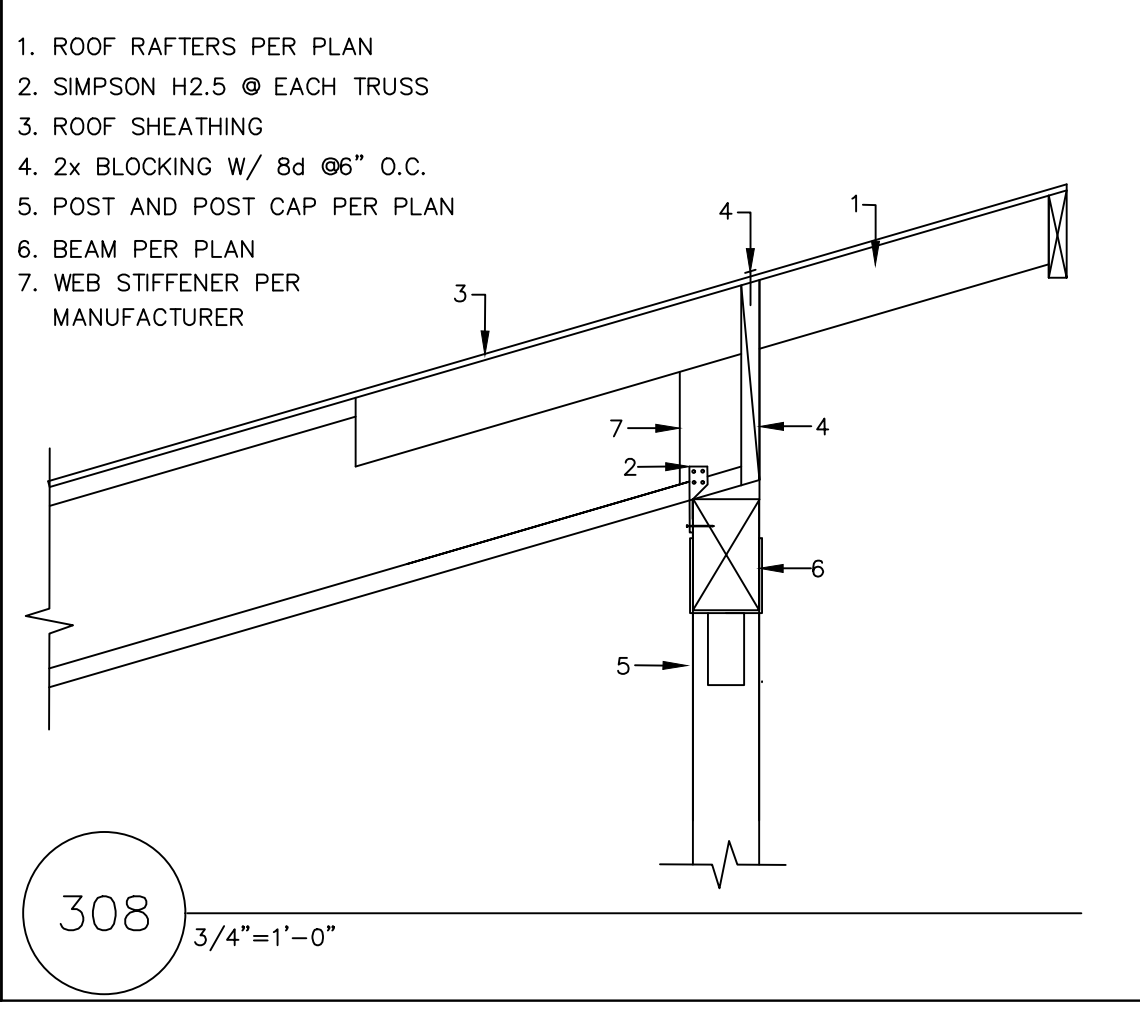
1. SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN
2. SIMPSON A35 FRAMING ANCHORS PER SHEARWALL SCHEDULE
3. 8d NAILS @ 6" O.C.
4. RAFTERS PER PLAN
5. SIMPSON LTP4 FRAMING ANCHORS PER SHEARWALL SCHEDULE

306
3/4"=1'-0"



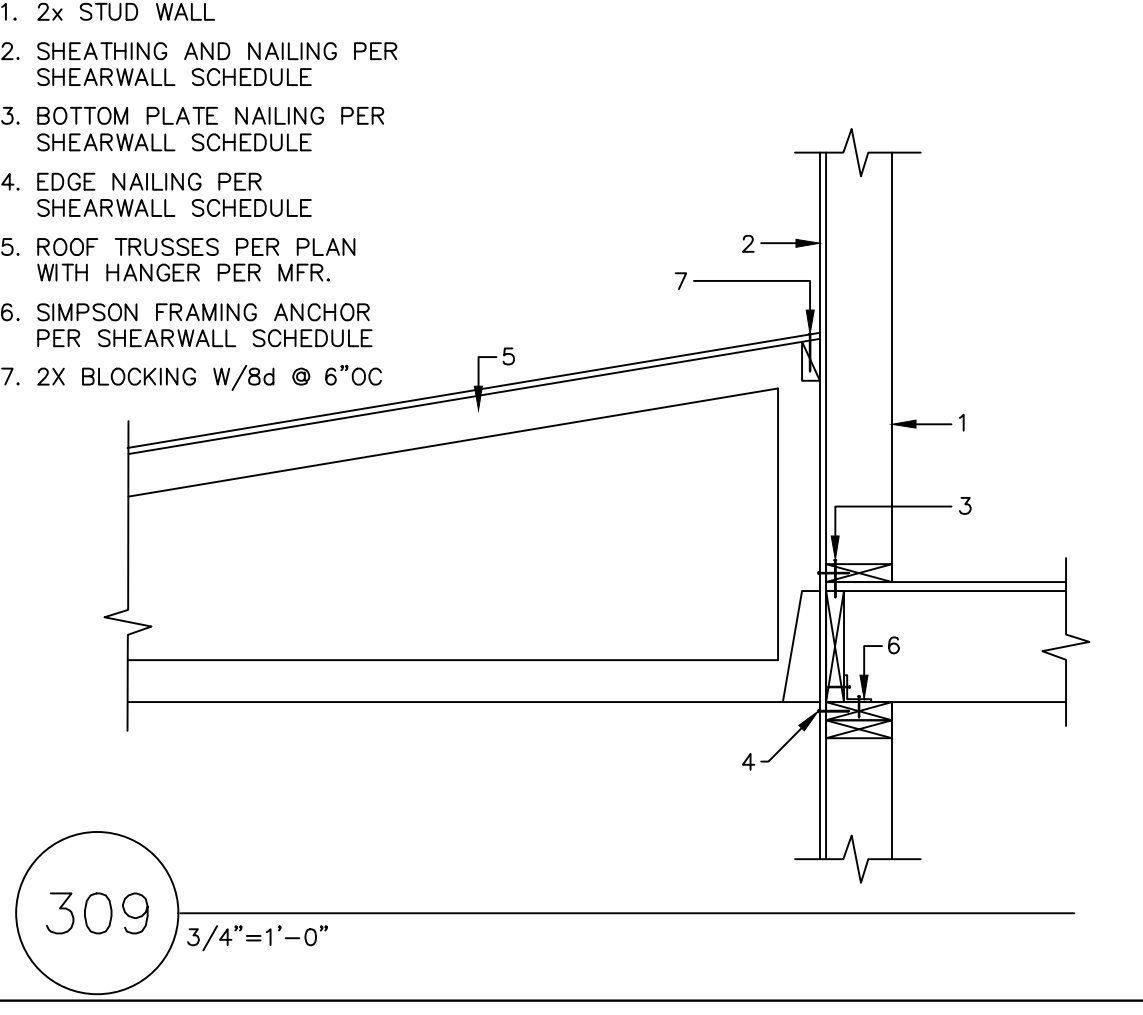
1. ROOF RAFTERS PER PLAN
2. SIMPSON H2.5 @ EACH TRUSS
3. ROOF SHEATHING
4. 2x BLOCKING W/ 8d @6" O.C.
5. POST AND POST CAP PER PLAN
6. BEAM PER PLAN
7. WEB STIFFENER PER MANUFACTURER

307
3/4"=1'-0"



1. ROOF RAFTERS PER PLAN
2. SIMPSON H2.5 @ EACH TRUSS
3. ROOF SHEATHING
4. 2x BLOCKING W/ 8d @6" O.C.
5. POST AND POST CAP PER PLAN
6. BEAM PER PLAN
7. WEB STIFFENER PER MANUFACTURER

308
3/4"=1'-0"



1. 2x STUD WALL
2. SHEATHING AND NAILING PER SHEARWALL SCHEDULE
3. BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
4. EDGE NAILING PER SHEARWALL SCHEDULE
5. ROOF TRUSSES PER PLAN WITH HANGER PER MFR.
6. SIMPSON FRAMING ANCHOR PER SHEARWALL SCHEDULE
7. 2x BLOCKING W/8d @ 6"OC

309
3/4"=1'-0"

General Notes

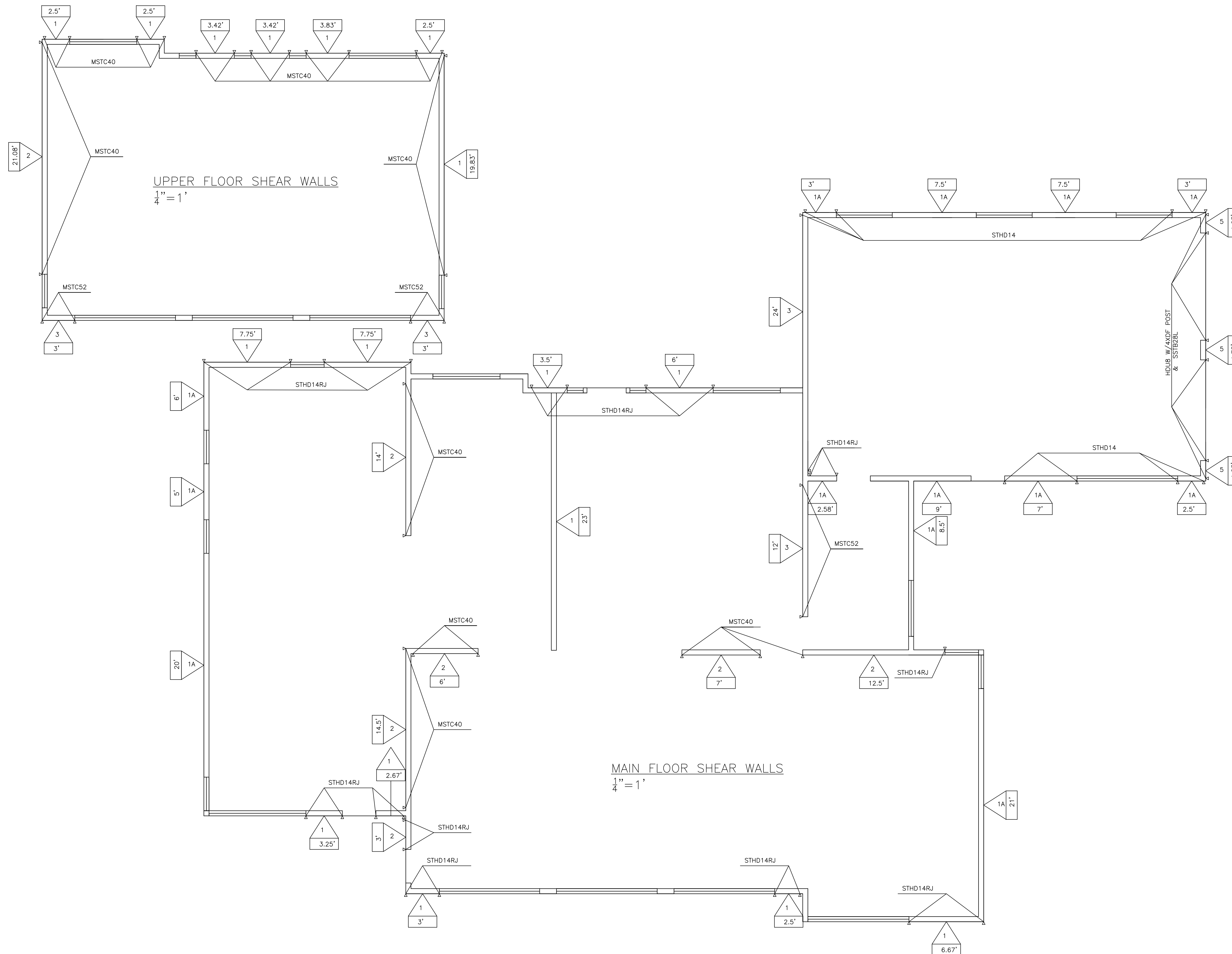


REV. 6-6-25		
No.	Revision/Issue	Date

Firm Name and Address
 MDT ENGINEERING
 31403 44TH AVE S
 AUBURN, WA 98001
 253-709-9852
 MD.THOMPSON@EARTHLINK.NET

Project Name and Address
 MAWER-HACKETT
 2965 74TH AVE SE
 MERCER ISLAND, WA
 98040

Project	MAWER-HACKETT	Sheet	SD2
Date	10-2-24		
Scale	AS NOTED		



UPPER FLOOR SHEAR WALLS
1/4" = 1'

MAIN FLOOR SHEAR WALLS
1/4" = 1'

General Notes



	REV. 6-6-25	
	REV. 3-24-25	
No.	Revision/Issue	Date

Firm Name and Address
 MDT ENGINEERING
 31403 44TH AVE S
 AUBURN, WA 98001
 253-709-9852
 MD.THOMPSON@EARTHLINK.NET

Project Name and Address
 MAWER-HACKETT
 2965 74TH AVE SE
 MERCER ISLAND, WA
 98040

Project MAWER-HACKETT	Sheet SD3
Date 10-2-24	
Scale AS NOTED	