



GENERAL NOTES

- THESE DRAWINGS ARE THE EXCLUSIVE PROPERTY OF THE ARCHITECT AND MAY ONLY BE REPRODUCED WITH THE WRITTEN PERMISSION OF THE ARCHITECT. AUTHORIZED REPRODUCTIONS MUST BEAR THE NAME OF THE ARCHITECT. COPYRIGHT 2020 BY TCA ARCHITECTURE-PLANNING, THESE DRAWINGS ARE FULLY PROTECTED BY FEDERAL AND STATE COPYRIGHT LAWS. ANY INFRINGEMENT OF THESE LAWS WILL BE PROSECUTED. ALL CONSTRUCTION SHALL CONFORM TO THE 2015 INTERNATIONAL RESIDENTIAL CODE, MERCER ISLAND MUNICIPAL CODE AND 2015 WASHINGTON STATE ENERGY CODE AND BE IN ACCORDANCE WITH ALL WASHINGTON STATE LAWS AND REGULATIONS AND ALL CODES IMPOSED BY LOCAL AUTHORITIES. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY WORK KNOWINGLY PERFORMED CONTRARY TO SUCH LAWS, ORDINANCES OR REGULATIONS.
- THE CONTRACTOR SHALL CHECK ALL DRAWINGS AND VERIFY ALL DIMENSIONS (INCLUDING ROUGH OPENINGS), DATUMS, LEVELS, AND STRUCTURAL MEMBER SIZES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ARCHITECT OF ANY DISCREPANCIES IN THE DRAWINGS OR WITH THE CODES. CHANGES INITIATED BY THE CONTRACTOR SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH FABRICATION OR CONSTRUCTION. CHANGES INDICATED SOLELY ON THE DRAWINGS WILL NOT SATISFY THIS REQUIREMENT. IN CASES OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN DIRECTIONS FROM THE ARCHITECT PRIOR TO PROCEEDING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM HIS OR HER WORK, AS WELL AS BEING RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS. STRUCTURAL SYSTEMS WHICH ARE COMPOSED OF COMPONENTS TO BE ERECTED IN THE FIELD, SHALL BE ACCOMPANIED BY SUPPLIER SUPERVISION DURING MANUFACTURE, DELIVERY, HANDLING, STORAGE AND ERECTION ACCORDING TO THE INSTRUCTIONS PREPARED BY THE SUPPLIER.
- CONTRACTOR SHALL BE FAMILIAR WITH ANY GENERAL STRUCTURAL NOTES ELSEWHERE IN THESE DOCUMENTS WHERE CONFLICTS BETWEEN THESE GENERAL NOTES AND STRUCTURAL NOTES, THE GENERAL STRUCTURAL NOTES SHALL SUPERCEDE.
- NOTED DIMENSIONS AND VERIFIED EXISTING DIMENSIONAL CONDITIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
- REPETITIVE FEATURES DRAWN OR NOTED ONLY ONCE SHALL BE COMPLETELY PROVIDED AS IF DRAWN OR NOTED IN FULL.
- INTERIOR DIMENSIONS ARE TO SURFACE OF FINISH UNLESS NOTED OTHERWISE ON THE DRAWINGS. EXTERIOR DIMENSIONS ARE FACE OF STUD UNLESS NOTED OTHERWISE ON DRAWINGS. DOORS, WINDOWS AND COLUMNS ARE DIMENSIONED TO THE CENTERLINE UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- EACH SUBCONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK WITH ALL OTHER TRADES AND SHALL VERIFY ALL FIELD DIMENSIONS WITH CONDITIONS FOR ITEMS FURNISHED AND INSTALLED BY HIMSELF.
- EACH SUBCONTRACTOR, AT THE COMPLETION OF HIS WORK, SHALL REMOVE ALL DEBRIS RESULTING FROM HIS WORK.
- EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE DOES TO ADJACENT WORK AND SHALL MAKE GOOD SUCH DAMAGE AT HIS OWN EXPENSE. EXTERIOR AREAS DAMAGED AS A RESULT OF WORK DONE UNDER THIS CONTRACT SHALL BE REPAIRED AND FINISHED TO MATCH ADJACENT FINISHES.
- FIRE-STOP WALLS, FLOORS AND HURRED AREAS PER 2015 IRC SECTION R302
- ALL DUCTS, EQUIPMENT, UTILITY LINES AND CONDUITS SHALL BE HELD AS CLOSE AS POSSIBLE TO STRUCTURAL CEILING AND BEAMS.
- GENERAL CODE NOTES:
A. FIRE DAMPER DUCTWORK PASSING THROUGH RATED WALLS AND FLOORS SHALL COMPLY W/ IRC SECTION R302.4
B. PROVIDE SAFETY GLASS PER IRC SECTION R308
C. FLAME SPREAD OF CARPETING AND INTERIOR FINISHES SHALL COMPLY W/ IRC SECTION R302.4
- PRIOR TO CONSTRUCTION THERE SHALL BE A PRE-CONSTRUCTION CONFERENCE ARRANGED BY THE APPLICANT WITH GEOTECHNICAL ENGINEERS, SITE INSPECTOR, PROJECT SPECIAL INSPECTORS AND CONTRACTOR AND ALL OTHER ENGINEERS OR INSPECTORS
- FIRST DFD SITE INSPECTION IS REQUIRED FOR TEMPORARY EROSION AND SEDIMENT CONTROL AND MUST BE SCHEDULED PRIOR TO STARTING ANY CONSTRUCTION ACTIVITY.

CONSTRUCTION NOTES

- ALL INTERIOR SLABS-ON-GRADE SHOULD BE UNDERLAIN BY A CAPILLARY BREAK DRAINAGE LAYER CONSISTING OF A MINIMUM 4-INCH THICKNESS OF CLEAN GRAVEL OR CRUSHED ROCK THAT HAS A FINES CONTENT (PERCENT PASSING THE NO. 200 SIEVE) OF LESS THAN 3 PERCENT AND A SAND CONTENT (PERCENT PASSING THE NO. 4 SIEVE) OF NO MORE THAN 10 PERCENT. PEA GRAVEL OR CRUSHED ROCK ARE TYPICALLY USED FOR THIS LAYER. SLOPE ALL DECKS, WALKS, DRIVEWAYS AND PATIOS AWAY FROM BUILDINGS.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. PRESSURE TREATED WOOD SHALL ALSO BE USED FOR WOOD MEMBERS WHICH FORM THE STRUCTURAL SUPPORT OF BALCONIES, PORCHES, ETC. WHEN SUCH MEMBERS ARE EXPOSED TO THE WEATHER
- ALL EXPOSED EXTERIOR METAL SHALL BE GALVANIZED.
PROVIDE FIRE BLOCKS AND DRAFT STOPS PER APPLICABLE CODES.
- PROVIDE AND INSTALL SMOKE DETECTORS. CARBON MONOXIDE DETECTORS, SMOKE DETECTORS SHALL RECEIVE PRIMARY POWER FROM BUILDING WIRING AND BE EQUIPPED WITH BATTERY BACK-UP.
- KITCHEN RANGE AND CLOTHES DRYER SHALL EXHAUST DIRECTLY TO OUTSIDE. VENTS SHALL BE SMOOTH NON-COMBUSTIBLE, NON-ABSORBENT AND EQUIPPED WITH BACKDRAFT DAMPER. (SEE MECHANICAL NOTES)
- EXTERIOR JOINTS SHALL BE SEALED, CALKED, GASKETED, OR HEATHER-STRIPPED IN SUCH A MANNER TO MAKE THEM WEATHERTIGHT AT THE FOLLOWING LOCATIONS: WINDOW AND DOOR FRAMES, OPENINGS BETWEEN HALL AND FOUNDATION, OPENINGS BETWEEN HALL AND ROOF, OPENINGS AT PENETRATION OF UTILITY SERVICES, ALL OTHER OPENINGS IN THE BUILDING ENVELOPE.
- BRIDGING CROSSBRACINGS, PROVIDE SOLID BLOCKING OVER BEARING PARTITIONS, WALLS, AND BEAMS.
- COLUMNS AND POSTS, FRAMED TO TRUE AND BEARING ADEQUATELY ANCHORED AT THE TOP AND BOTTOM, WITH A POSITIVE DIRECT CONNECTION TO ASSURE AGAINST UPLIFT AND LATERAL DISPLACEMENT.
- WHEN DECKS, LANDINGS OR PORCHES ARE MORE THAN 30 INCHES ABOVE GRADE, PROVIDE GUARDRAILS NOT LESS THAN 36 INCHES HIGH W/ INTERMEDIATE MEMBERS SPACED SUCH THAT A SHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. GUARDRAILS TO BE DESIGNED TO WITHSTAND A HORIZONTAL FORCE OF 20 POUNDS PER LINEAL FOOT WHEN APPLIED AT A RIGHT ANGLE TO THE TOP OF THE RAILING.
- PLYWOOD ROOF SHEATHING EXPOSED ON THE UNDERSIDE SHALL BE BONDED WITH EXTERIOR GLUE.
- APPLICATION OF ROOF COVERING MATERIALS SHALL BE IN ACCORDANCE PER IRC SECTION R312.
- EXTERIOR WALL COVERINGS SHALL BE APPLIED PER MANUFACTURER SPECIFICATIONS.
- ANCHORED MASONRY VENEER SHALL COMPLY WITH PROVISIONS OF IRC SECTION R103.9
- ADHERED MASONRY VENEER SHALL COMPLY WITH PROVISIONS OF IRC SECTION R103.12
- VENEER SHALL SUPPORT NO LOAD OTHER THAN ITS OWN HEIGHT AND THE VERTICAL DEAD LOAD OF VENEER ABOVE.
- MASONRY SHALL NOT BE SUPPORTED BY WOOD MEMBERS EXCEPT AS PROVIDED FOR IN IRC.

BATHROOMS

- ALL TUB AND SHOWER STALLS SHALL HAVE FIRE BLOCKING BETWEEN STUDS.
- WALL GLAZING WITHIN 60" OF DRAIN INLET SHALL BE SAFETY GLASS.
- SHOWER STALL MAINSCOT SHALL BE 6'-0" (MIN) HIGH SURROUND WITH WATER RESISTANT BACKING.
- SHOWERS SHALL BE EQUIPPED WITH FLOW CONTROL DEVICES THAT LIMIT THE WATER FLOW TO 2.5 GPM.

STAIRS

- HEADROOM 6'-8" (MIN), WIDTH 3'-0" (MIN)
- WHERE A GUARD RAIL OCCURS, THE CLEAR SPACE BETWEEN INTERMEDIATE RAILS SHALL NOT ALLOW A SHERE 4" IN DIAMETER PASS THROUGH
- TREAD 10" MINIMUM, RISER 7 3/4" MAXIMUM.
- TOP OF HANDRAIL SHALL BE 34" (MIN) AND 38" (MAX) ABOVE THE STAIR NOSING. WINDOW SHALL BE SPACED NOT LESS THAN 1'-1/2" FROM HALL AND MAY PROJECT INTO THE REQUIRED STAIR WIDTH 3'-1/2" (MAX) RETURN ENDS OF HANDRAILS OR TERMINATE IN NEEL POST. HANDRAIL SHALL BE 1 1/2" (MIN) AND 2" (MAX) IN CROSS SECTION.
- INSTALL FIRE BLOCKING IN CONCEALED SPACES BETWEEN STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF THE STAIRS. COVER USABLE SPACE UNDER STAIR WITH 1/2" GHD PER IRC SECTION R302.1

ATTIC

- PROVIDE ATTIC VENTILATION AS INDICATED ON ROOF FRAMING PLAN. THE MINIMUM NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 SQ. FT. PER 150 SQ. FT. OF ATTIC AREA (OR 1 SQ. FT. PER 300 SQ. FT. IF 50% OF THE REQUIRED VENTILATING AREA IS AT LEAST 3 FT. ABOVE THE EAVE VENTS OR 1 SQ. FT. PER 300 SQ. FT. OF ATTIC AREA IF A VAPOR RETARDER HAVING A TRANSMISSION RATE NOT EXCEEDING 1/10 PERH IS INSTALLED ON THE WARM SIDE OF THE ATTIC INSULATION). IRC SECTION I508
- IN ATTIC SPACES WITH 30" OR MORE OF HEIGHT, PROVIDE ATTIC ACCESS, 22" X 30" (MIN) WITH 30" MIN. HEADROOM. THE OPENING SHALL BE UNOBSTRUCTED AND READILY ACCESSIBLE PER APPLICABLE CODE.

GLAZING - IRC SECTION R308.4

- GLAZING SHALL COMPLY WITH THE WA. STATE SAFETY GLASS LAW. GLAZING IN LOCATIONS SUBJECT TO HUMAN IMPACT, SUCH AS PANES IN DOORS, WITHIN 24" EITHER SIDE OF A DOOR OPENING, CLOSER THAN 18" TO THE FLOOR, ON SHOWER DOORS AND ON TUB ENCLOSURES, SHALL BE HIRE REINFORCED, TEMPERED GLASS, LAMINATED SAFETY GLASS OR SHATTER RESISTANT PLASTIC. SLIDING GLASS DOORS TO BE SAFETY GLAZING, LAMINATED, OR TEMPERED GLASS. SHOWER ENCLOSURES TO BE MADE OF APPROVED HIRE REINFORCED, TEMPERED, OR LAMINATED SAFETY GLASS, OR SHATTER RESISTANT PLASTIC.
- GLAZING WITHIN 18" OF THE FLOOR AND GREATER THAN 18" IN THE LEAST DIMENSION SHALL COMPLY WITH IMPACT LOADS.
- ALL EXTERIOR HALL GLAZING SHALL BE DOUBLE GLAZED.
- SKYLIGHTS SHALL BE BE OF LAMINATED GLASS, 1/32" THICKNESS (MIN) AND A 30 MIL (MIN) APPROVED.
- EGRESS WINDOWS: EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE WINDOW WITH A NET CLEAR OPENING OF 5 1/2 SQ. FT. THE OPENABLE HEIGHT SHALL BE 24" (MIN) AND WIDTH 20" (MIN) WITH A FINISHED SILL HEIGHT NOT MORE THAN 44" A.F.F.

FIREPLACE AND CHIMNEY

- ALL CHIMNEYS SHALL EXTEND AT LEAST 2 FT. ABOVE THE HIGHEST ELEVATION OF ANY PART OF THE BUILDING WITHIN 10 FT. AND AT LEAST 3 FT. ABOVE ANY ROOF LESS THAN 3:12 SLOPE.
- CHIMNEYS SHALL BE ENCLOSED ABOVE THE STORY IN WHICH THE APPLIANCE SERVED IS LOCATED PER THE REQUIREMENTS OF M.M.C. CHAPTER 8, AND THE INTERPRETATION OF THE GOVERNING JURISDICTION.
- PROVIDE FIRE BLOCKING AT CHIMNEY PER APPLICABLE CODE.
- INSTALL METAL FIREPLACES PER MANUFACTURERS SPECIFICATIONS AND UL LISTING REQUIREMENTS. GAS VENTING PER APPLICABLE CODE.
- COMBUSTIBLE FRAMING MATERIAL SHALL NOT BE PLACED WITHIN 2 INCHES OF FIREPLACE, SMOKE CHAMBER, OR CHIMNEY WALL FOR INTERIOR INSTALLATION AND WITHIN 1 INCH FOR EXTERIOR INSTALLATION. NO COMBUSTIBLE MATERIAL SHALL BE PLACED WITHIN 6 INCHES OF THE FIREPLACE OPENING. COMBUSTIBLE MATERIAL WITHIN 12 INCHES OF THE FIREPLACE OPENING SHALL NOT EXTEND 20 INCHES IN FRONT OF AND 12 INCHES TO EACH SIDE (MIN).
- THE HEARTH SHALL EXTEND AT LEAST 16 INCHES IN FRONT OF AND 8 INCHES TO EACH SIDE OF THE FIREPLACE OPENING WHEN THE OPENING IS SMALLER THAN 6 SQ. FT. IF THE OPENING IS 6 SQ. FT. OR LARGER, THE HEARTH SHALL EXTEND 20 INCHES IN FRONT AND 12 INCHES TO EACH SIDE MIN.
- PROVIDE FRESH AIR INTAKE WITH A 6 SQ. IN. DUCT, WITH DAMPER, FROM THE OUTSIDE TO THE FIREBOX PER MANUFACTURERS REQUIREMENTS
- PROVIDE TIGHT-FITTING GLASS OR METAL DOORS, TIGHT-FITTING FLUE DAMPER WITH MANUAL OR AUTOMATIC CONTROLS (FIREPLACE) AND AN OUTSIDE SOURCE OF COMBUSTION AIR (DIRECT TO FIREBOX FOR FIREPLACE).

SITE

- PIPE ALL STORM DRAINAGE FROM THE BUILDING TO A DISPOSAL POINT APPROVED BY THE BUILDING DEPARTMENT AND AUTHORITIES HAVING JURISDICTION. PROVIDE 4" INDEPENDENT TIGHTLINE FOR ALL ROOF DRAINAGE AROUND PERIMETER TO APPROVED STORM DRAINAGE SYSTEM. DOWNSPOUTS SHALL BE CAPPED AT RISER CONNECTIONS. FOOTING DRAINS SHALL BE 4" PERFORATED PIPE WRAPPED IN FILTER FABRIC SET IN CLEAN FREE DRAINING GRAVEL FILL. FOOTING DRAINS SHALL BE PLACED AT THE BASE OF THE FOOTING AND CONNECT INTO AN APPROVED STORM DRAINAGE SYSTEM DRAINS AND TIGHTLINES SHALL SLOPE AT A MINIMUM OF 1/8"/FT.
- BOUNDARY AND TOPOGRAPHY INFORMATION HAS BEEN PROVIDED BY THE OWNER. THE ARCHITECT SHALL NOT BE HELD RESPONSIBLE LIABLE FOR THE ACCURACY OF THIS INFORMATION. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SITE CONDITIONS INCLUDING ANY FILL PLACED ON THE SITE PRIOR TO WORK. THE CONTRACTOR MUST INFORM THE ARCHITECT OF ANY POTENTIAL FIELD MODIFICATIONS NOT SPECIFIED ON THE PLANS PRIOR TO WORK.
- MAXIMUM NON-STABILIZED FILL NOT TO EXCEED 2:1 SLOPE PER GEOTECH REPORT.
- CUT SLOPES FOR PERMANENT EXCAVATIONS SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL AND SLOPES FOR PERMANENT FILLS SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL UNLESS SUBSTANTIATING DATA JUSTIFYING STEEPER SLOPES ARE SUBMITTED. DEVIATION FROM THE FOREGOING LIMITATIONS FOR SLOPES SHALL BE PERMITTED ONLY UPON THE PRESENTATION OF A SOIL INVESTIGATION REPORT ACCEPTABLE TO THE BUILDING OFFICIAL.
- EXCAVATION MATERIAL REMAINING ON SITE IS TO BE CONTAINED BY AN APPROVED SEDIMENT BARRIER. THE CONTRACTOR MUST VERIFY LOCATION WITH APPROPRIATE BUILDING OFFICIAL. PROTECT ALL STOCK PILED MATERIAL FROM EROSION
- FOUNDATION SETBACKS FROM ASCENDING AND DESCENDING SLOPES SHALL COMPLY WITH SECTIONS R403.1.1 AND R403.1.2 S.R.C.

INSULATION

ALL INSULATION MATERIALS, INCLUDING FACINGS SUCH AS VAPOR BARRIERS OR BREATHER PAPERS, INSTALLED WITHIN FLOOR/CEILING ASSEMBLIES, ROOF/CEILING ASSEMBLIES, WALLS, GRAVEL SPACES OR ATTICS SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH APPLICABLE CODES. WHEN SUCH MATERIALS ARE INSTALLED IN CONCEALED SPACES, THE FLAME SPREAD AND SMOKE-DEVELOPED LIMITATIONS DO NOT APPLY TO THE FACING, PROVIDED THAT THE FACINGS IS INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING, FLOOR, OR WALL FINISH.

- CEILING (R-44 BATT INSULATION U.O.U)
 - THE ROOF AND CEILING SHALL BE INSULATED WITH R-44 BATT INSULATION WHERE POSSIBLE. PROVIDE INSULATION IN THE GELING AND IN THE RAFTERS. IF A VAULTED CEILING CONDITION OCCURS, PROVIDE R-38 INSULATION.
 - MAINTAIN A MINIMUM OF 1" CLEARANCE BETWEEN TOP OF INSULATION AND BOTTOM OF SHEATHING FOR VENTING. VENTING MUST OCCUR IN EACH JOIST SPACE. WHERE CONTINUOUS VENTING WITHIN A JOIST SPACE IS INTERRUPTED BY A HEADER (I.E. AT A SKYLIGHT OR HIP END), PROVIDE (2) 1 1/2" VENTING HOLES AT THE TOP OF THE RAFTER AT THE HEADER TO ALLOW FOR CONTINUAL THROUGH-VENTING INTO THE NEXT JOIST SPACE.
 - CEILINGS TO HAVE INSULATION BAFFLES. BAFFLES ARE TO EXTEND 6" ABOVE BATT INSULATION, 12" ABOVE BLOXX INSULATION.
- WALLS (R-21 INSULATION U.O.U)
 - RIGID BOARD INSULATION IS TO BE PLACED BEHIND ALL RECESSED FIXTURES IN EXTERIOR WALLS.
 - INSULATE BEHIND TUB/SHOWER PARTITIONS AND CORNERS.
- FLOORS (R-30 BATT, U.O.U)
 - FACED BATTS ARE LAPPED AND SHALL BE FACE STAPLED TO FACE OF JOISTS.
- SOUND INSULATION
 - PROVIDE 3 1/2" FRICTION FIT SOUND INSULATION BATTS AS NOTED ON PLANS AND AROUND ALL WALL GLAZING WITHIN 60" OF DRAIN INLET AND 5' FLOORS
 - PROVIDE FULL DEPTH SOUND INSULATION BATTS IN ALL INTERMEDIATE FRAMED FLOORS AND IN BATHROOM AND CLOSET WALLS.
- GENERAL
 - INSULATION SHALL BE PROVIDED WITH CLEARANCES FOR VENTING, CHIMNEYS, LIGHTS, FANS, ETC. IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

MOISTURE CONTROL

- ATTIC ACCESS AND GRAVEL SPACE ACCESS DOORS ARE TO BE BAFFLED, HEATHER-STRIPPED, AND INSULATED.
- EXTERIOR DOORS AND WINDOWS ARE TO BE CALKED AND HEATHER-STRIPPED.
- RECESSED LIGHT FIXTURES TO LIMIT AIR LEAKAGE PER WEG 502.4.4
- ALL PLUMBING, ELECTRICAL, AND HVAC PENETRATIONS IN FLOORS, WALLS, AND CEILING ARE TO BE CALKED AND SEALED.
- ELECTRICAL OUTLET AND LIGHT SWITCH BOXES ON EXTERIOR WALLS MUST BE SEALED AT THE BACK OF THE RECEPTACLE WITH A FACE PLATE GASKET.
- SILLPLATE TO BE CALKED OR GLEED TO SUB-FLOOR.
- CALK/SEAL RIM JOISTS BETWEEN STORIES.
- WHEN PENETRATIONS NEED FIRESTOPPING, REVEAL AND DISCUSS WITH BUILDING DEPARTMENT INSPECTOR.
- AN APPROVED VAPOR BARRIER SHALL BE INSTALLED AT EXTERIOR WALLS (EXCEPT FOR BASEMENT WALLS PER WA. ENERGY CODE PRESCRIPTIVE CHECKLIST SECTION R402.2.2), ROOF DECKS, BELOW ENCLOSED JOIST SPACES WHERE CEILING FINISHES ARE DIRECTLY INSTALLED TO JOISTS, AND ANY OTHER WALL OR CEILING SURFACE WHICH RECEIVES INSULATION. THE VAPOR BARRIER MAY BE COMPONENT OF THE INSULATION MATERIAL. APPLICATION AND INSTALLATION OF INSULATION AND VAPOR BARRIERS SHALL COMPLY WITH APPLICABLE CODES.
- WHEN GYPSUM IS USED AS A BASE FOR TILE OR PANELS FOR TUB, SHOWER OR WATER CLOSET COMPARTMENT WALLS, WATER RESISTANT GYPSUM BACKING SHALL BE USED. REGULAR GYPSUM WALLBOARD IS PERMITTED UNDER THE RIM OR WALL PANELS IN OTHER WALL AND CEILING AREAS WHEN INSTALLED IN ACCORDANCE WITH TABLE 25-6 AND TILE COUNCIL OF AMERICA STANDARDS WATER RESISTANT GYPSUM BOARD SHALL NOT BE USED IN THE FOLLOWING AREAS:
 - OVER A VAPOR BARRIER.
 - IN AREAS SUBJECT TO CONTINUOUS HUMIDITY, SUCH AS SAUNAS, STEAM ROOMS OR TILED SHOWER ROOMS.
 - ON CEILING WHERE FRAME SPACING EXCEEDS 12 INCHES ON CENTER
- USE INSTALLATION METHOD "AI" AS DESCRIBED IN "FORTIFIBER" BUILDING PRODUCT SYSTEMS INSTALLATION GUIDE FOR DOORS AND WINDOWS

FIRE PROTECTION

PROVIDE FIRE PROTECTION AT ALL PENETRATIONS OF FIRE-RATED ELEMENTS AS REQUIRED BY CODE AND/OR BUILDING OFFICIAL.

PROVIDE FIRE SPRINKLER SYSTEM THROUGHOUT RESIDENCE IN COMPLIANCE WITH ALL APPLICABLE CODES.

FINISHES

- ALL PAINT, WALL COVERINGS AND WALL PANELS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- SAMPLES OF ALL FINISH COLORS SPECIFIED SHALL BE SUBMITTED FOR APPROVAL TO THE ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- FLOOR COVERING IN CLOSETS SHALL BE THE SAME AS THAT OF THE SPACE INTO WHICH THE CLOSET DOOR OPENS, U.O.U.
- PREPARE FLOOR PER FLOORING AND CARPET MANUFACTURER'S RECOMMENDATIONS TO PROVIDE LEVEL AREA FOR FLOORING INSTALLATION AND LEVEL FLOORING TRANSITIONS.

MILLWORK

- ALL MILLWORK (WOODWORK AND CABINERY) SPECIFIED ON THESE DRAWINGS SHALL BE FURNISHED AND INSTALLED BY THE MILLWORK CONTRACTOR(S) U.O.U.
- MILLWORK CONTRACTOR SHALL BE RESPONSIBLE FOR FINISHING ALL MILLWORK IN HISHER SHOP. FINISH SHALL MATCH SAMPLE TO BE PROVIDED BY ARCHITECT IN COLOR AND GLOSS LEVEL. DO NOT FIELD FINISH.
- MILLWORK CONTRACTOR SHALL SUBMIT (2) FINISH SAMPLES FOR ARCHITECT PRIOR TO FABRICATION.
- MILLWORK CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR ARCHITECT APPROVAL PRIOR TO FABRICATION. ARCHITECT RESERVES THE RIGHT TO REJECT ANY MILLWORK ITEMS THAT HAVE BEEN FABRICATED WITHOUT APPROVED SHOP DRAWINGS.
- ALL MATERIALS AND WORKMANSHIP MUST BE EQUAL IN ALL RESPECTS TO THE STANDARDS SET FORTH IN THE ARCHITECTURAL WOODWORK QUALITY STANDARDS AND ARCHITECTURAL WOODWORK INSTITUTE (A.A.W.), MOST CURRENT EDITION.
- PLYWOOD SHALL BEAR THE GRADE AND TRADEMARK IDENTIFICATION OF THE AMERICAN PLYWOOD ASSOCIATION (A.P.A.). PLYWOOD 3/4" THICK U.O.U.
- ALL VENEERS WITHIN PANEL FACES SHALL BE ONE PIECE FLITCHES. SHOULD JOINTS BE REQUIRED, THEY SHALL BE END MATCHED AND/OR SLIP MATCHED AS APPROVED BY ARCHITECT.
- HAND SELECT ALL EXPOSED HARDWOODS, SOLID STOCK AND VENEERS FOR GRAIN APPEARANCE CONFORMING TO ARCHITECT'S APPROVED SAMPLES. SUBMIT SAMPLES TO ARCHITECT FOR APPROVAL TO SHOW GRAIN VARIATION PRIOR TO PROCEEDING.
- PROVIDE CUT-OUTS IN MILLWORK AS DETAILED AND REQUIRED FOR ALL PLUMBING FIXTURES, KITCHEN EQUIPMENT, AND ELECTRICAL ITEMS BASED ON INFORMATION SUPPLIED FROM THE PLUMBING AND ELECTRICAL CONTRACTORS. VERIFY ALL REQUIREMENTS PRIOR TO FABRICATION.
- CUT-OUTS AND OPENINGS FOR ALL KITCHEN EQUIPMENT SHALL FOLLOW TEMPLATES OBTAINED FROM EQUIPMENT INSTALLERS.
- SPECIAL METAL WORK AND FINISHING ITEMS SHALL BE FABRICATED BY COMPETENT MECHANICS SKILLED IN METAL WORK. WORKMANSHIP SHALL BE EQUAL IN ALL RESPECTS TO THE BEST QUALITY FOR THIS TYPE OF WORK. GRIND ALL HELDS SMOOTH.
- FIT AND SECURE CABINET HARDWARE PER MANUFACTURER'S PRINTED INSTRUCTIONS. EXERCISE CAUTION NOT TO MAR OR INJURE SURFACES. REPAIR ANY AND ALL DAMAGED SURFACES TO LIKE-NEW CONDITIONS.
- GLASS MIRRORS: MIRROR-QUALITY FLOAT GLASS, 1/4" THICKNESS, U.O.U.
- ALL MILLWORK ELECTRICAL MATERIAL, WORKMANSHIP, AND INSTALLATION SHALL BE IN CONFORMANCE WITH APPLICABLE LOCAL, STATE, AND NATIONAL ORDINANCES AND CODES. ALL MATERIAL TO BE UL APPROVED.
- GENERAL CONTRACTOR TO FURNISH ALL WOOD BLOCKING. THIS SHALL INCLUDE BLOCKING TO SECURELY MOUNT ALL CASES, EQUIPMENT, AND ACCESSORIES INDICATED ON THE DRAWINGS.
- ALL FINISHED HARDWOOD VENEERS TO BE RIFT CUT U.O.U.

FURNACE AND WATER HEATING

- PROVIDE SCHEDULE 'C' WATER SUPPLY PIPING THROUGH OUT.
- PROVIDE FROST FREE HOSE BIBBS WITH ANTI-SIPHON DEVICE, SHUT OFF AND DRAIN.
- ALL HEATING DUCTS IN UNCONDITIONED SPACE SHALL BE INSULATED TO A R-8 (MIN). DUCTWORK SEAM JOINTS ARE TO BE TAPED, SEALED, AND FASTENED WITH A MINIMUM OF FASTENERS.
- PROVIDE A READILY ACCESSIBLE, AUTOMATIC OR MANUAL SHUT-OFF SWITCH AND THERMOSTAT TO FURNACE.
- WATER HEATER STORAGE TANK AND BOILERS TO BE LABELLED
- WATER HEATER STORAGE TANK PLACED ON CONCRETE SLAB MUST HAVE RIGID INSULATION (R-10) BETWEEN TANK AND FLOOR.
- LAVATORIES, TUBS, AND SHOWERS SHALL HAVE FLOW RESTRICTIONS LIMITING WATER FLOW TO 2.5 GPM.
- PROVIDE A RECIRCULATING RHP SYSTEM HOT WATER PLUMBING LINE. ALL HOT WATER PIPING SHALL BE INSULATED WITH R-4 INSULATION. ALL COLD WATER PIPING IN UNCONDITIONED SPACE SHALL BE INSULATED WITH R-3 INSULATION
- SEISMICALLY BRACE ALL WATER HEATERS AND BOILERS
- APPLIANCES DESIGNED TO BE IN A FIXED POSITION SHALL BE SECURELY FASTENED IN PLACE. SUPPORTS FOR APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO SUSTAIN VERTICAL AND HORIZONTAL LOADS WITHIN THE STRESS LIMITATION IN THE BUILDING CODE.
- APPLIANCES INTENDED FOR INSTALLATION IN CLOSETS, ALCOVES OR CONFINED SPACES SHALL BE 50 LISTED.
- ALL WARM AIR FURNACES SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY AND INSTALLED TO LISTED SPECIFICATIONS.
- NO WARM AIR FURNACE SHALL BE INSTALLED IN A CLOSET OR ALCOVE LESS THAN 12 INCHES WIDER THAN THE FURNACE OR FURNACES INSTALLED THEREIN WITH A MINIMUM CLEAR WORKING SPACE LESS THAN 8 INCHES ALONG THE SIDES, BACK AND TOP OF THE FURNACE.
- HEATING EQUIPMENT LOCATED WITHIN THE BUILDING ENVELOPE SHALL BE THERMALLY ISOLATED FROM THE HEATED AREA.
- APPLIANCES INSTALLED IN GARAGES OR OTHER AREAS THAT MAY BE SUBJECTED TO MECHANICAL DAMAGE, SHALL BE SUBSTANTIALLY GUARDED AGAINST SUCH DAMAGE BY BEING INSTALLED BEHIND PROTECTIVE BARRIERS OR BY BEING ELEVATED OR LOCATED OUT OF THE NORMAL PATH OF VEHICLES.
- HEATING AND COOLING EQUIPMENT LOCATED IN GARAGE AND WHICH GENERATES A GLOW, SPARK, OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPOR SHALL BE INSTALLED WITH THE PILOTS AND BURNERS OR HEATING ELEMENTS AND SWITCHES AT LEAST 18 INCHES ABOVE THE FLOOR LEVEL.
- GAS FURNACE TO HAVE MINIMUM AFUE OF 88%

VENTILATION NOTES

ALL MECHANICAL SYSTEMS SHALL COMPLY WITH TITLE 24, INTL. MECHANICAL CODE AND INTL. PLUMBING CODE

- SOURCE-SPECIFIED VENTILATION REQUIREMENTS
 - EXHAUST FAN REQUIREMENTS
 - BATHS, LAUNDRIES AND POWDER ROOMS: 50 CFM AT 025 H.G. MIN.
 - KITCHENS: 100 CFM AT 025 H.G. MIN.
 - EXHAUST DUCT REQUIREMENTS
 - BE INSULATED TO R-4 IN UNCONDITIONED SPACES.
 - BE EQUIPPED WITH A BACK DRAFT DAMPER.
 - TERMINATE OUTSIDE THE BUILDING.
- DESIGN / BUILD WHOLE HOUSE VENTILATION SYSTEM TO BE PROVIDED
- UNDER FLOOR SPACE SHALL BE VENTILATED PER IRC SECTION R408.01 W/ MIN. (1) SQ. FT. NET FREE VENTILATING AREA PER 150 SQ. FT. SPACE VENTILATED.
- ATTIC AND ENCLOSED RAFTER SPACE SHALL BE VENTILATED PER IRC 206.1 W/ MIN. (1) SQ. FT. NET FREE VENTILATING AREA PER 150 SQ. FT. SPACE VENTILATED WITH WITH VAPOR BARRIER.

MECHANICAL/ ELECTRICAL/ PLUMBING

- NO PENETRATIONS OF PLUMBING OR ELECTRICAL OR MECHANICAL ALLOWED IN STAIR ENCLOSURES.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PROPER FUNCTION OF PLUMBING, HVAC AND ELECTRICAL SYSTEMS. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY PLAN CHANGES REQUIRED FOR PROPER DESIGN AND FUNCTION OF PLUMBING, HVAC AND ELECTRICAL.
- MECHANICAL AND ELECTRICAL CONTRACTORS SHALL BE RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH APPLICABLE CODES AND STANDARDS. OBTAIN ALL NECESSARY PERMITS AND APPROVALS.
- DEVIATIONS FROM DIMENSIONED LOCATIONS MUST BE APPROVED BY THE ARCHITECT.
- SPECIAL MOUNTING HEIGHTS FOR ELECTRICAL OUTLETS ARE NOTED ADJACENT TO THE OUTLET.
- DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONTRACT DOCUMENTS SHOULD BE CALLED TO THE ATTENTION OF THE ARCHITECT.
- CONTRACTOR TO COORDINATE AND INSTALL ELECTRICAL SERVICE ENTRANCE.
- DUCT SYSTEMS SHALL BE OF METAL PER S.M.C. TABLE 603.4 OR FACTORY-MADE DUCTS COMPLYING WITH S.M.C. SECTIONS 603. ALL JOINTS AND SEAMS SHALL BE SUBSTANTIALLY AIRTIGHT. DUCTS IN UNHEATED SPACES SHALL BE INSULATED PER WEG TABLE 2.1.
- MOISTURE EXHAUST DUCTS FOR CLOTHES DRYERS SHALL TERMINATE ON THE OUTSIDE OR THE BUILDING AND SHALL BE EQUIPPED WITH A BACK-DRAFT DAMPER. SCREENS SHALL NOT BE INSTALLED AT THE DUCT TERMINATION. DUCTS FOR EXHAUSTING CLOTHES DRYERS SHALL NOT BE CONNECTED OR INSTALLED WITH SHEET METAL SCREWS OR OTHER FASTENERS WHICH WILL OBSTRUCT THE FLOW. CLOTHES DRYERS MOISTURE EXHAUST DUCTS SHALL NOT BE CONNECTED TO A GAS VENT OR CHIMNEY. CLOTHES DRYER MOISTURE EXHAUST SHALL NOT EXTEND THROUGH DUCTS OR FLENNIES.
- LENGTH LIMITATION. UNLESS OTHERWISE PERMITTED OR REQUIRED BY THE DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPROVED BY THE LOCAL BUILDING OFFICIAL, DOMESTIC DRYER MOISTURE EXHAUST DUCTS SHALL NOT EXCEED A TOTAL CORNERED HORIZONTAL AND VERTICAL LENGTH OF 35 FEET. 2 1/2 FEET DEDUCTED FOR EACH 45 DEGREE BEND AND 5 FEET FOR EACH 90 DEGREE BEND. IRC SECTION M102.4.5.1
- UNLESS OTHERWISE ADOPTED BY LOCAL AUTHORITIES, ALL SOLID FUEL BURNING APPLIANCES SHALL COMPLY WITH THE PROVISIONS OF IRC CHAPTER 11, 18, AND SECTION M306.
- LISTED APPLIANCES: THE INSTALLER SHALL LEAVE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS ATTACHED TO THE APPLIANCE. CLEARANCES OF LISTED APPLIANCES FROM COMBUSTIBLE MATERIALS SHALL BE AS IN THE LISTING OR ON THE RATINGS PLATE. IRC SECTION M107.1 & M400.1
- EVERY APPLIANCE DESIGNED TO BE VENTED SHALL BE CONNECTED TO A VENTING SYSTEM COMPLYING WITH IRC CHAPTER 18.
- EVERY FACTORY BUILT CHIMNEY, TYPE L VENT, TYPE B GAS VENT, OR TYPE BH GAS VENT SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF ITS LISTING, MANUFACTURER'S INSTRUCTIONS, AND THE APPLICABLE PROVISIONS OF IRC CHAPTER 18.
- VENT CONNECTORS SHALL BE INSTALLED WITHIN THE SPACE OR AREA IN WHICH THE APPLIANCE IS LOCATED AND SHALL BE CONNECTED TO A CHIMNEY OR VENT IN SUCH A MANNER AS TO MAINTAIN THE CLEARANCE TO COMBUSTIBLES PER IRC CHAPTER 18, AND SECTION 624.2.
- GAS VENT CAPS HAVING AN INTERNAL DIAMETER GREATER THAN 12 INCHES SHALL TERMINATE NOT LESS THAN 2 FEET ABOVE THE HIGHEST POINT WHERE THE VENT PASSES THROUGH THE ROOF AND NOT LESS THAN 2 FEET ABOVE OR 10 FEET AWAY FROM ANY OTHER PORTION OF A BUILDING WHICH EXTENDS AT AN ANGLE MORE THAN 45 DEGREES UPWARD FROM THE HORIZONTAL.
- GAS VENT CAPS HAVING AN INTERNAL DIAMETER OF 12 INCHES OR LESS SHALL TERMINATE AT LEAST 2 FEET ABOVE OR 8 FEET AWAY FROM ANY PORTION OF A BUILDING WHICH EXTENDS AT AN ANGLE MORE THAN 45 DEGREES UPWARD FROM THE HORIZONTAL. GAS VENT CAPS MAY TERMINATE IN ACCORDANCE WITH TABLE 6-A, PROVIDED THAT IN NO CASE SHALL ANY DISCHARGE OPENING ON THE CAP BE LESS THAN 2 FEET HORIZONTALLY FROM THE ROOF SURFACE.
- PROVIDE COMBUSTION AIR FOR FUEL BURNING APPLIANCES PER IRC CHAPTER 11. APPLIANCES LOCATED WITHIN THE BUILDING ENVELOPE SHALL OBTAIN COMBUSTION AIR FROM OUTDOORS.

PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

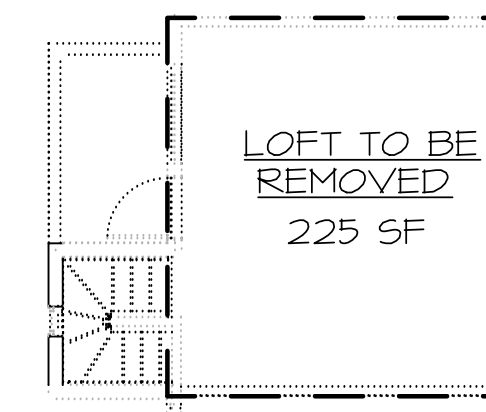
Modifications to
LAWLER RESIDENCE
 8466 N MERCER WAY,
 MERCER ISLAND, WA, 98040

Sheet Title:
GENERAL NOTES

Scale: NOT TO SCALE
20-05

Date: 06/30/2020

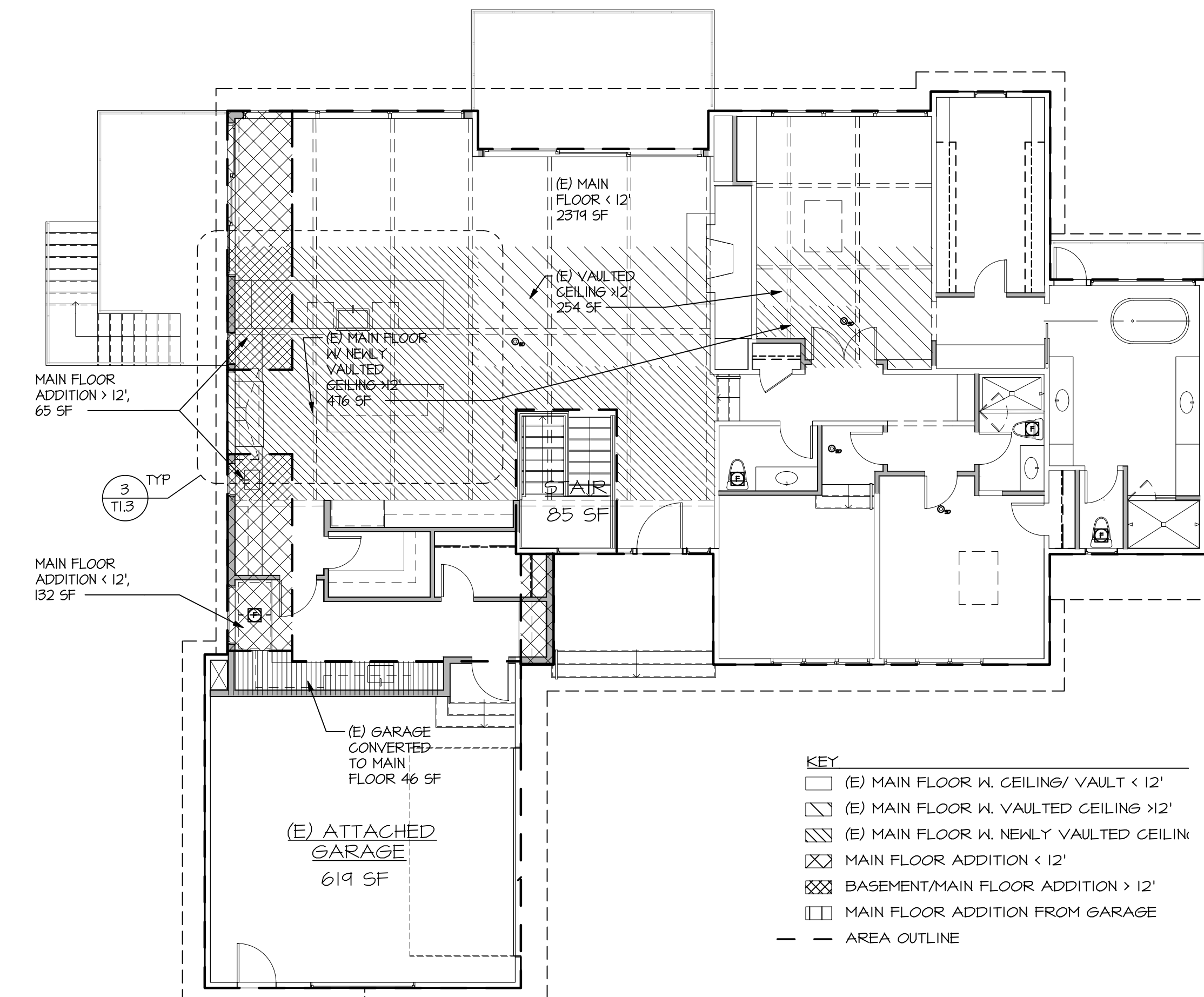
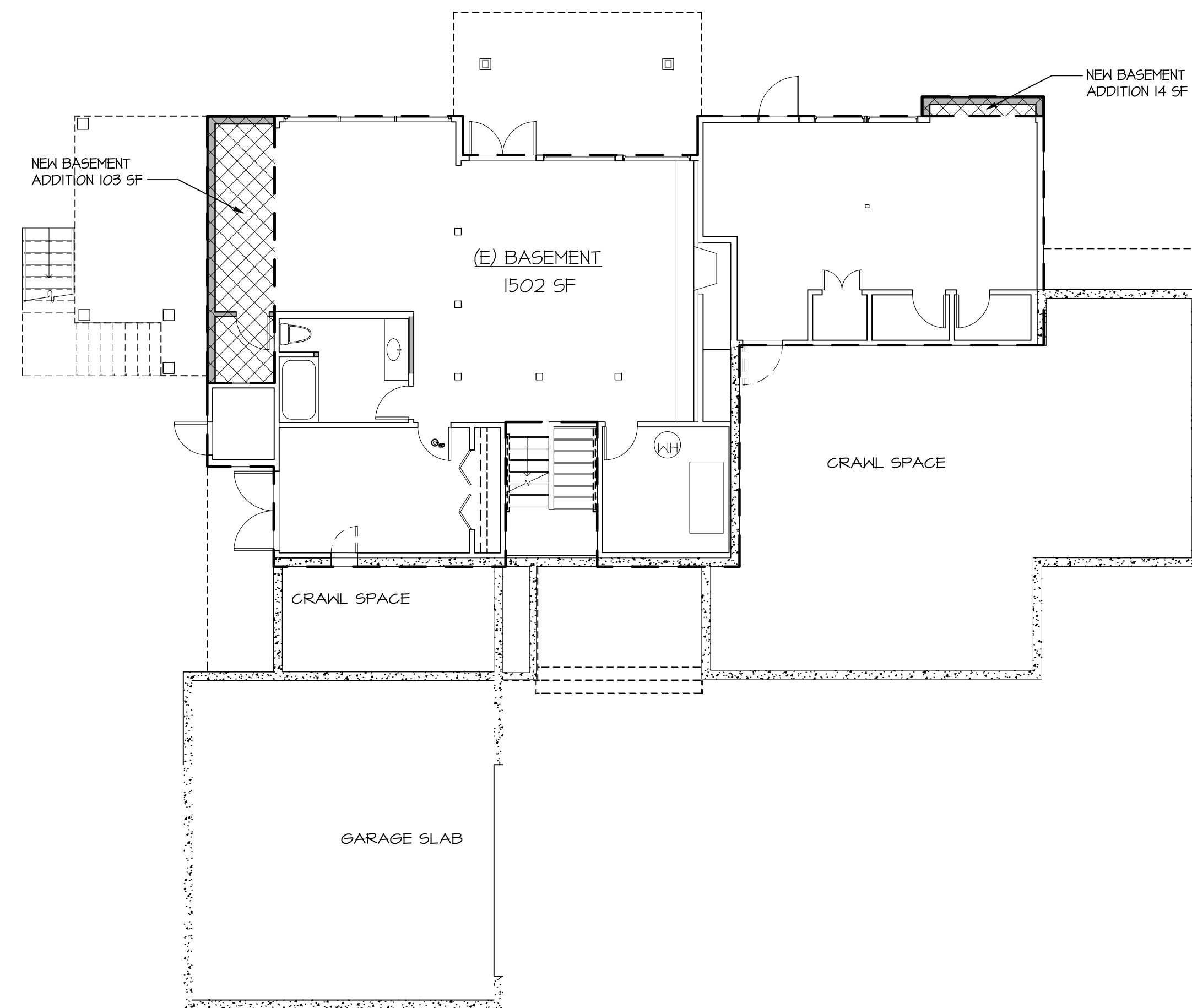
Sheet Number: _____



GROSS FLOOR AREA CALCULATION

LOT AREA = 16,866 SF	
ALLOWED GROSS FLOOR AREA:	40%
ALLOWED GROSS FLOOR AREA:	0.4 (16,866 SF) = 6,746.4
(E) UPPER FLOOR GFA:	225 SF
(E) UPPER FLOOR TO BE DEMO	225 SF
(E) MAIN FLOOR GFA < 12'	2,244 SF
(E) MAIN FLOOR GFA > 12'	(254 SF) 1.5 = 381
(E) MAIN FLOOR GFA NEWLY VAULTED > 12'	(476 SF) 1.5 = 714 SF
(E) GARAGE FLOOR AREA	619 SF
GARAGE FLOOR AREA TO MAIN FLOOR	46 SF
(E) BASEMENT GFA:	1,502 SF
(E) STAIR CASE	85 SF
NEW BASEMENT ADDITION < 12'	117 SF
NEW MAIN FLOOR ADDITION < 12'	178 SF
NEW MAIN FLOOR ADDITION > 12'	(65 SF) 1.5 = 97.5 SF
TOTAL GROSS FLOOR AREA:	6,023.5 SF
225SF - 225SF + 2,244SF - 476SF + 381SF + (619SF - 46SF) + 1,502SF + 85SF + 117SF + 178SF + 97.5SF = 5,465.5 SF	
5,465.5 SF < 6,746.4 SF	
(5,465.5 SF / 16,866 SF) 100% = 32.40 = 32%	

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



- KEY
- (E) MAIN FLOOR W. CEILING/ VAULT < 12'
 - ▨ (E) MAIN FLOOR W. VAULTED CEILING > 12'
 - ▩ (E) MAIN FLOOR W. NEWLY VAULTED CEILING
 - ⊠ MAIN FLOOR ADDITION < 12'
 - ⊞ BASEMENT/MAIN FLOOR ADDITION > 12'
 - ▭ MAIN FLOOR ADDITION FROM GARAGE
 - - - AREA OUTLINE

1 BSMT. PLAN
SCALE: 1/8" = 1'-0"

2 FIRST FLR. ADD./MODIFICATION
SCALE: 1/8" = 1'-0"

PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

Modifications to
LAWLER RESIDENCE
8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

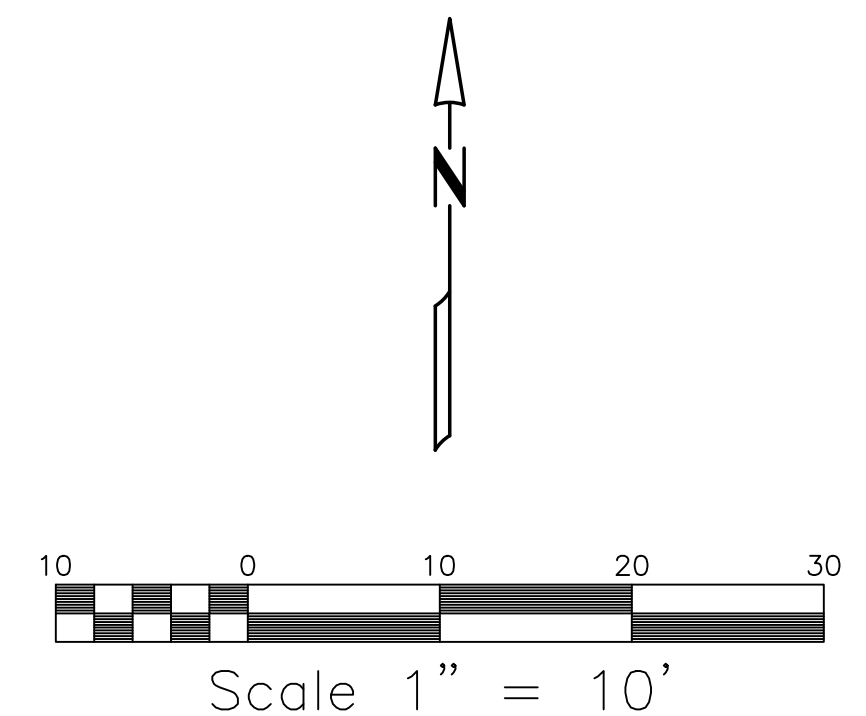
Sheet Title:
GROSS FLR. AREA PLANS & CALCS

Scale: 1/8" = 1'-0"
20-05

Date: 06/30/2020

Sheet Number:

T1.3



MERIDIAN

ASSUMED

DATUM

NAVD 88

CONTOUR INTERVAL = 2'

EQUIPMENT & PROCEDURES

FIELD SURVEY CONDUCTED USING A COMBINATION OF GPS USING A REFERENCE NETWORK AND A 5" ELECTRONIC TOTAL STATION WAS USED FOR THIS FIELD TRAVERSE SURVEY. SURVEY PROCEDURES MEET OR EXCEED STATE STANDARDS AS SPECIFIED BY W.A.C. 332-130 WITH REGARD TO LINEAR AND ANGULAR CLOSURES. ALL MEASURING INSTRUMENTS FOR THIS SURVEY HAVE BEEN MAINTAINED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND HAVE BEEN COMPARED WITH A NATIONAL GEODETIC SURVEY CALIBRATED BASELINE WITHIN THE LAST 12 MONTHS.

BENCHMARKS

ORIGINAL BM: FOUND INVERTED NAIL IN 2" IRON PIPE EAST OF INTERSECTION OF 90TH PL SE AND SHOREWOOD DR. ELEV. = 108.93

TBM - A: SET MAG NAIL. ELEV. = 42.31

TBM - B: SET HUB + MAG NAIL. ELEV. = 36.37

GENERAL NOTES

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. UNDERGROUND UTILITIES WERE LOCATED BASED ON THE SURFACE EVIDENCE OF UTILITIES (I.E. PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS ETC.) THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. TREE SIZES WERE LOCATED & SPECIES DETERMINED TO THE BEST OF OUR ABILITY; HOWEVER, TREE SURVEYORS DOES NOT WARRANT THE ACCURACY OF SIZE & SPECIES SHOWN HEREON. ANY TREES CONSIDERED TO BE CRITICAL SHOULD BE VERIFIED BY A TRAINED ARBORIST.
4. LOCATION OF GRASS IS APPROXIMATE ONLY.
5. NO PROPERTY CORNERS WERE SET IN CONJUNCTION WITH THIS SURVEY.
6. THE BOUNDARY FOR THIS SURVEY WAS COMPUTED FROM FOUND MONUMENTATION, THE PLAT OF MERCER PARK LANE, RECORDED IN VOL. 92 OF PLATS, PG. 37, SURVEY AS RECORDED IN VOLUME 328 OF SURVEYS, PAGE 147, ALL IN RECORDS OF KING COUNTY, WASHINGTON.

LEGAL DESCRIPTION

LOT 10, MERCER PARK LANE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 92 OF PLATS, PAGE 37, IN KING COUNTY, WASHINGTON.

EXCEPT THAT PORTION THEREOF MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHERLY CORNER OF SAID LOT 10; THENCE NORTH 55°50'02" WEST ALONG THE SOUTHWESTERLY LINE THEREOF 141.87 FEET; THENCE SOUTH 73°58'00" EAST 62.59 FEET; THENCE SOUTH 42°31'53" EAST 84.66 FEET TO THE POINT OF BEGINNING.

LEGEND:

- GM GAS METER
 - LP LAMP POST
 - PM POWER METER
 - TR TELEPHONE RISER
 - WM WATER METER
 - YD YARD DRAIN
 - AP APPLE
 - C CEDAR
 - D DECIDUOUS
 - F FIR
-
- CONCRETE HATCH
 - DECK HATCH
 - GAS LINE

HOUSE TO BOUNDARY TIES

LINE	BEARING	DISTANCE
L1	N 38°11'05" W	23.98
L2	N 48°18'31" E	24.12
L3	N 48°18'31" E	37.00
L4	N 47°18'06" W	43.65
L5	N 47°18'06" W	45.32
L6	N 35°32'43" E	9.04
L7	N 48°40'00" E	45.53



TOPOGRAPHIC SURVEY
for
MIDORI LAWLER
8456 N MERCER WAY
MERCER ISLAND, WASHINGTON 98040

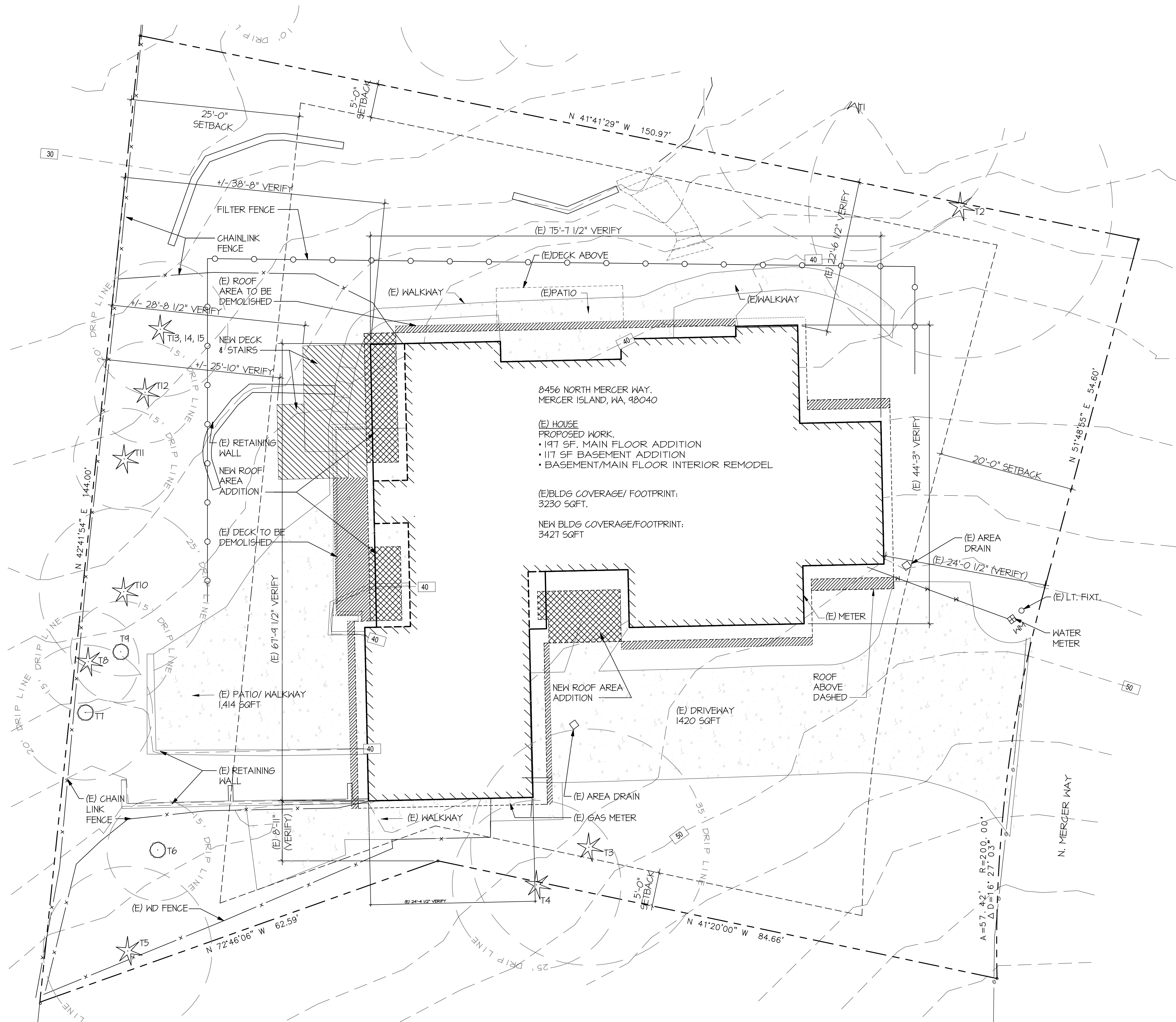
PARCEL # 545260010008
SW1/4, NW1/4, SEC. 7, T. 24 N., R. 5 E., W.M.
MERCER ISLAND, WASHINGTON

Tye Surveyors
PROFESSIONAL LAND SURVEYORS
10007 GREENWOOD AV. N. SEATTLE, WA. 98133 206-525-3660

DRAWN BY: RG	DATE: 3-3-2020	JOB NO.: 20030
CHKD BY: TG	SCALE: 1" = 10'	SHEET: 1 OF 1

GENERAL SITE PLAN NOTES:

1. ALL INTERIOR DIMENSIONS ARE TO FACE OF FINISH, U.O.N.
2. ALL EXTERIOR DIMENSIONS ARE TO FACE OF STUD OR FACE OF CONCRETE, U.O.N.
3. REFER TO SURVEY SHEET FOR GRADING AND SITE UTILITIES.
4. CONTRACTOR TO VERIFY ANY DISCREPANCIES WITH ARCHITECT PRIOR TO START OF CONSTRUCTION AND CONFIRM LOCATION OF (E) UTILITIES.
5. LIGHTING PROVIDED @ ALL EXTERIOR DOORS.
6. PROVIDE TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES TO CONTROL AND PREVENT EROSION TRANSPORT OF SEDIMENT OR OTHER POLLUTANTS FROM SITE. TO INCLUDE BUT NOT LIMITED TO: MINIMIZE OPEN TRENCHES AND UNCOVERED SOIL, COVER STOCKPILE SOIL, PROVIDE FILTER FABRIC FENCE AT DOWN HILL SLOPE OF CONSTRUCTION, RETAIN TOP LAYER AND NATIVE VEGETATION, PROTECT VEGETATION AND TREES.
7. REPLACE AND REPAIR (E) LANDSCAPING, CONCRETE AND IRRIGATION THAT IS DAMAGED DURING CONSTRUCTION.
8. SITE COVERAGE INFORMATION IS INCLUDED ON MERCER ISLAND SITE DEVELOPMENT INFORMATION WORKSHEET AND T1J



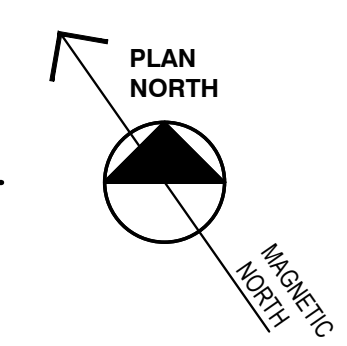
8456 NORTH MERCER WAY,
MERCER ISLAND, WA, 98040

(E) HOUSE
PROPOSED WORK:
• 197 SF. MAIN FLOOR ADDITION
• 117 SF. BASEMENT ADDITION
• BASEMENT/MAIN FLOOR INTERIOR REMODEL

(E)BLDG COVERAGE/ FOOTPRINT:
3230 SQFT.

NEW BLDG COVERAGE/FOOTPRINT:
3421 SQFT

- LEGEND
- (E) ASPHALT PAVING
 - (E) CONCRETE PAVING
 - (E) BUILDING FOOTPRINT
 - ROOF ABOVE
 - (E) DECK/ ROOF TO BE DEMO
 - NEW BUILDING/ ROOF ADDITION
 - NEW DECK
 - PROPERTY LINE
 - 2' TOPOGRAPHY
 - WATER LINE



PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

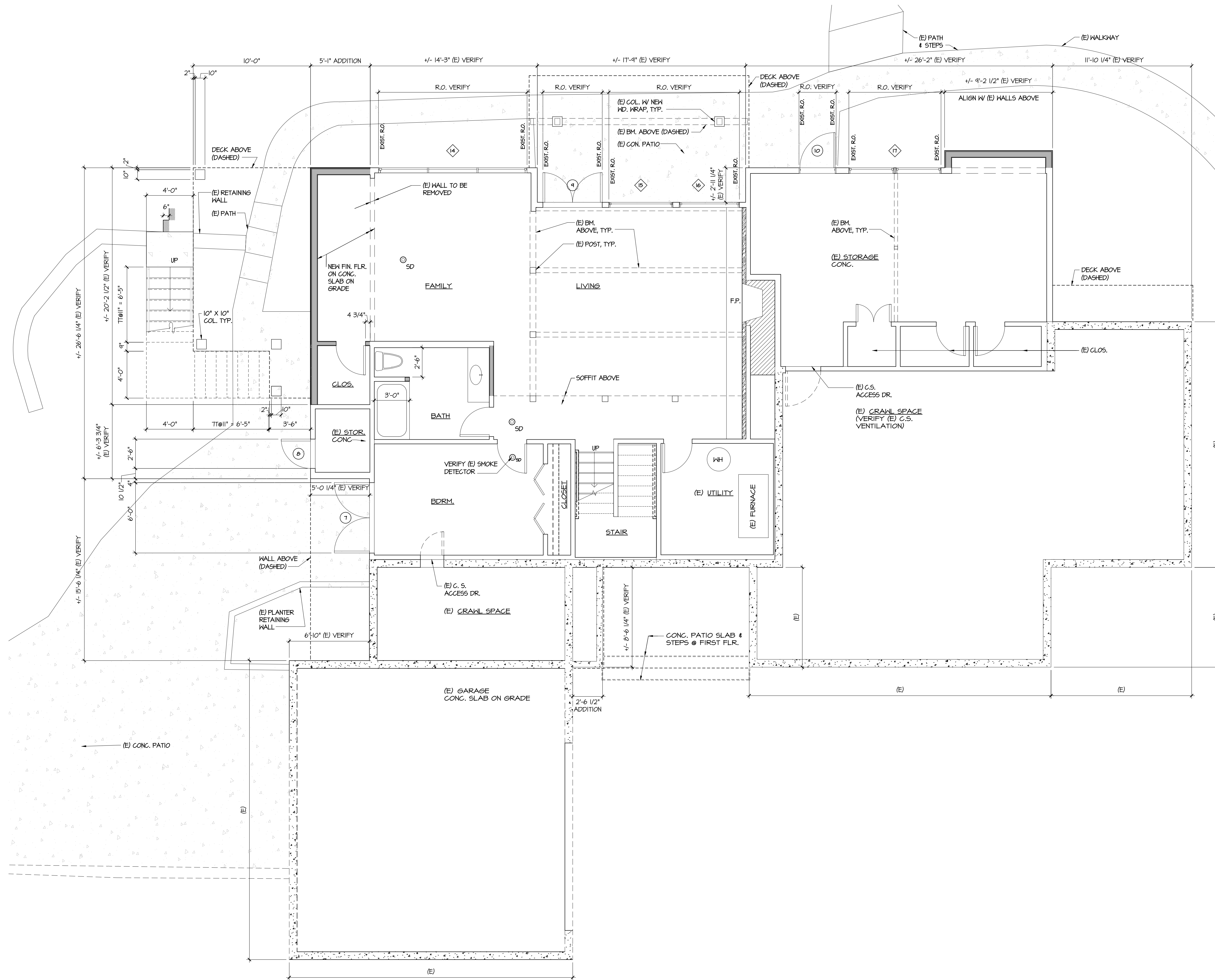
Modifications to
LAWLER RESIDENCE
8456 N MERCER WAY,
MERCER ISLAND, WA, 98040

Sheet Title:
SITE PLAN

Scale: 1/8" = 1'-0"
20-05

Date: 06/30/2020

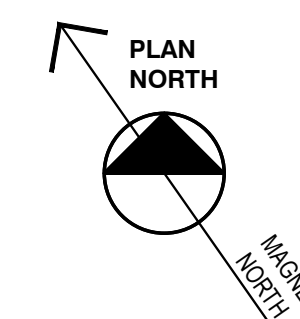
Sheet Number:



WALL TYPE LEGEND

	<p>NEW TYP. EXT. 2 X 6 WALL CONST. UNO.</p> <ul style="list-style-type: none"> BOARD AND BATTEN SIDING WEATHER BARRIER 1/2" PLY. WD. SHEATHING 2X6 STUDS @ 16" O.C. MAX W/ R-21 BATT. INSUL. 1/2" GYP. BD. W/ PVA PAINT
	<p>NEW TYP. INT. 2 X 6 WALL CONST. UNO.</p> <ul style="list-style-type: none"> 1/2" GYP. BD. 2X6 STUDS @ 16" O.C. MAX W/ R-21 BATT. INSUL. 1/2" GYP. BD.
	<p>NEW TYP. INT. 2 X 4 WALL CONST. UNO.</p> <ul style="list-style-type: none"> 1/2" GYP. BD. 2X4 STUDS @ 16" O.C. 1/2" GYP. BD.
	<p>(E) EXT. 2 X 4 WALL CONST. UNO.</p> <ul style="list-style-type: none"> (E) BOARD AND BATTEN SIDING, TO REMAIN (E) WEATHER BARRIER, TO REMAIN (E) 1/2" PLY. WD. SHEATHING (E) 2X4 STUDS @ 16" O.C. ADD R-21 BATT INSULATION IN EXPOSED CAVITIES. (E) GYP. BD.
	<p>(E) INT. 2 X 4 WALL CONST. UNO.</p> <ul style="list-style-type: none"> (E) GYP. BD. (E) 2X4 STUDS @ 16" O.C. (E) GYP. BD.
	<p>(E) FOUNDATION WALL</p> <ul style="list-style-type: none"> (E) FOUNDATION WALL, TO REMAIN
	<p>(E) INT. BRICK WALL CONST. UNO.</p> <ul style="list-style-type: none"> (E) 4"(VERIFY) BRICK. (E) MORTAR (E) CEMENT BD. (E) 2X4 STUDS @ 16" O.C. (E) GYP. BD.

1 BSMT. PLAN
SCALE: 1/4" = 1'-0"



PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

Modifications to
LAWLER RESIDENCE
8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

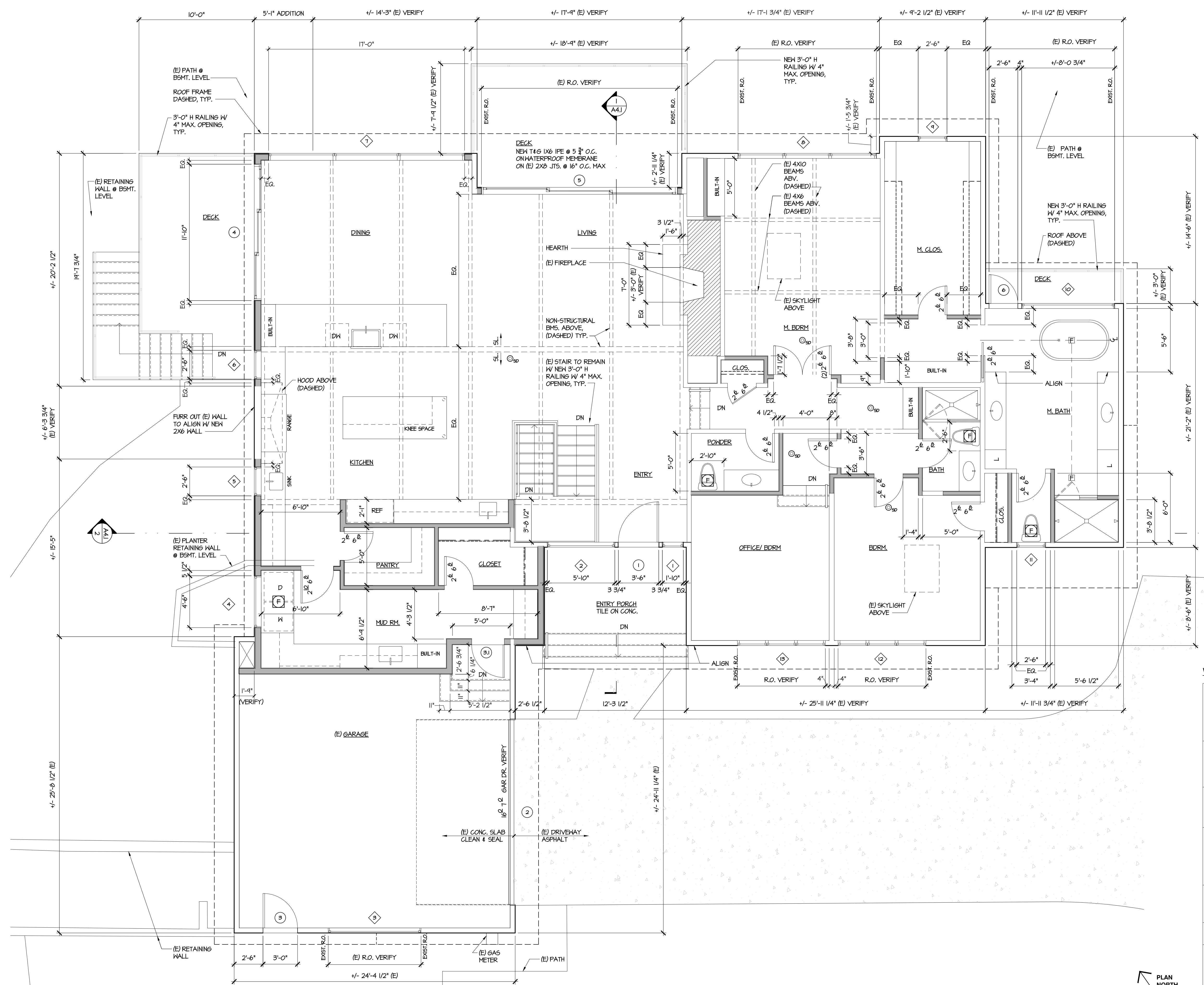
Sheet Title:
BSMT. FLOOR PLAN

Scale: 1/4" = 1'-0"
20-05

Date: 06/30/2020

Sheet Number:

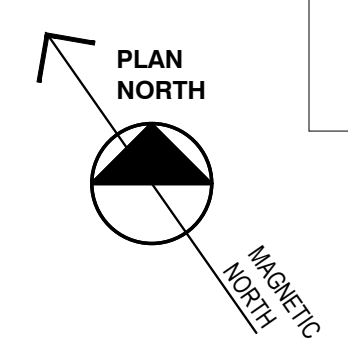
A2.1



WALL TYPE LEGEND

	NEW TYP. EXT. 2 X 6 WALL CONST. UNO. • BOARD AND BATTEN SIDING • WEATHER BARRIER • 1/2" FLY. WD. SHEATHING • 2X6 STUDS @ 16" O.C. MAX W/ R-21 BATT. INSUL. • 1/2" GYP. BD. W/ PVA PAINT
	NEW TYP. INT. 2 X 6 WALL CONST. UNO. • 1/2" GYP. BD. • 2X6 STUDS @ 16" O.C. MAX W/ R-21 BATT. INSUL. • 1/2" GYP. BD.
	NEW TYP. INT. 2 X 4 WALL CONST. UNO. • 1/2" GYP. BD. • 2X4 STUDS @ 16" O.C. • 1/2" GYP. BD.
	(E) EXT. 2 X 4 WALL CONST. UNO. • (E) BOARD AND BATTEN SIDING TO REMAIN • (E) WEATHER BARRIER TO REMAIN • (E) 1/2" FLY. WD. SHEATHING • (E) 2X4 STUDS @ 16" O.C. ADD R-21 BATT INSULATION IN EXPOSED CAVITIES. • (E) GYP. BD.
	(E) INT. 2 X 4 WALL CONST. UNO. • (E) GYP. BD. • (E) 2X4 STUDS @ 16" O.C. • (E) GYP. BD.
	(E) FOUNDATION WALL • (E) FOUNDATION WALL TO REMAIN
	(E) INT. BRICK WALL CONST. UNO. • (E) 4" (VERIFY) BRICK. • (E) MORTAR • (E) CEMENT BD. • (E) 2X4 STUDS @ 16" O.C. • (E) GYP. BD.

1 FIRST FLR. PLAN
SCALE: 1/4" = 1'-0"



PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

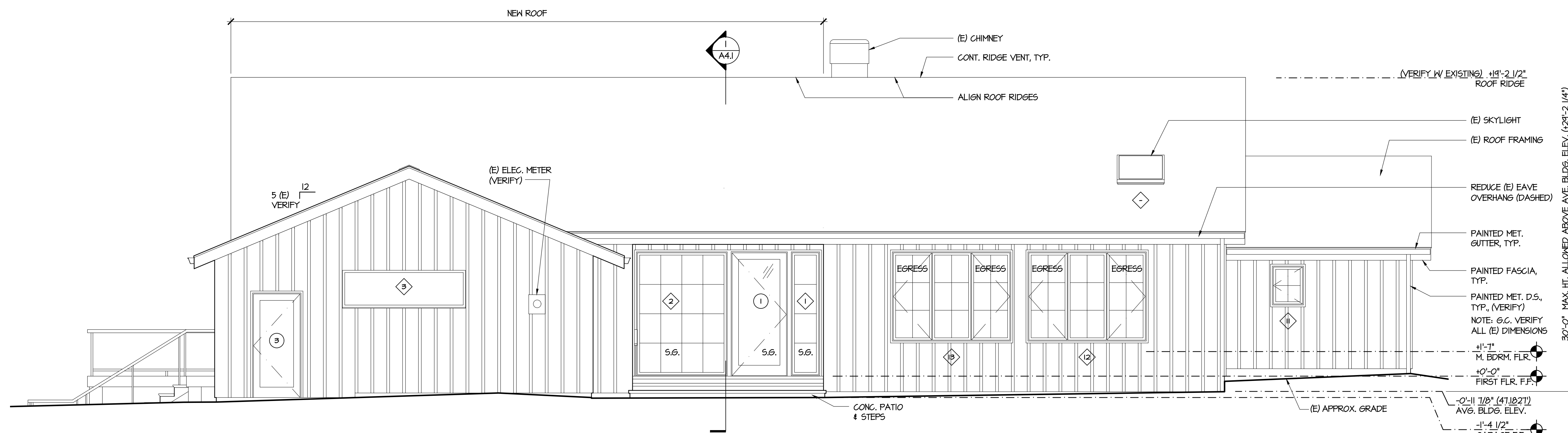
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8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

Sheet Title:
FIRST FLR. PLAN

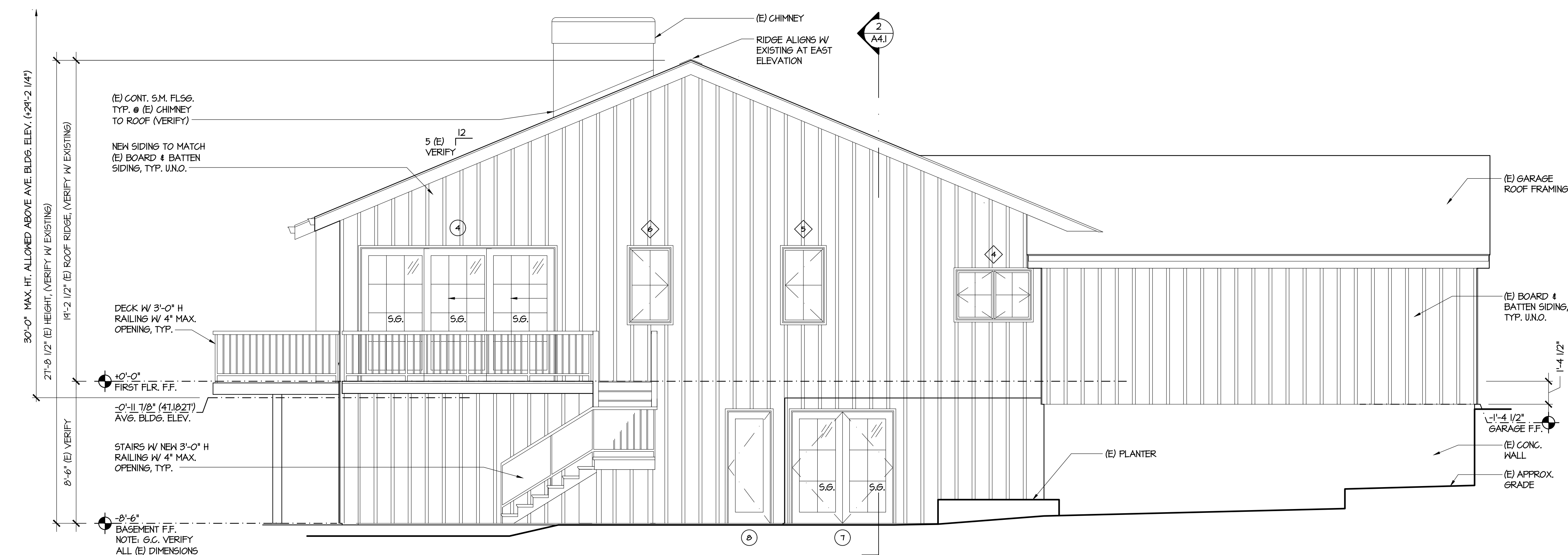
Scale: 1/4" = 1'-0"
20-05

Date: 06/30/2020

Sheet Number:



1 S. ELEVATION
SCALE: 1/4" = 1'-0"



2 W. ELEVATION
SCALE: 1/4" = 1'-0"

PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

Modifications to
LAWLER RESIDENCE
8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

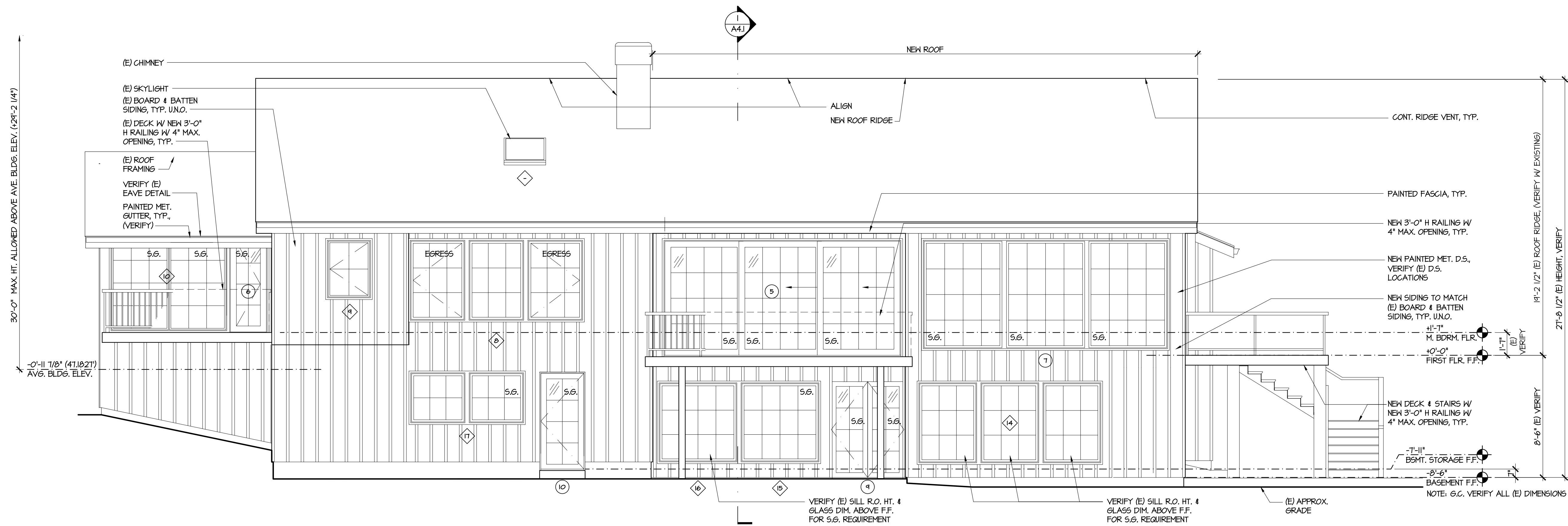
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20-05

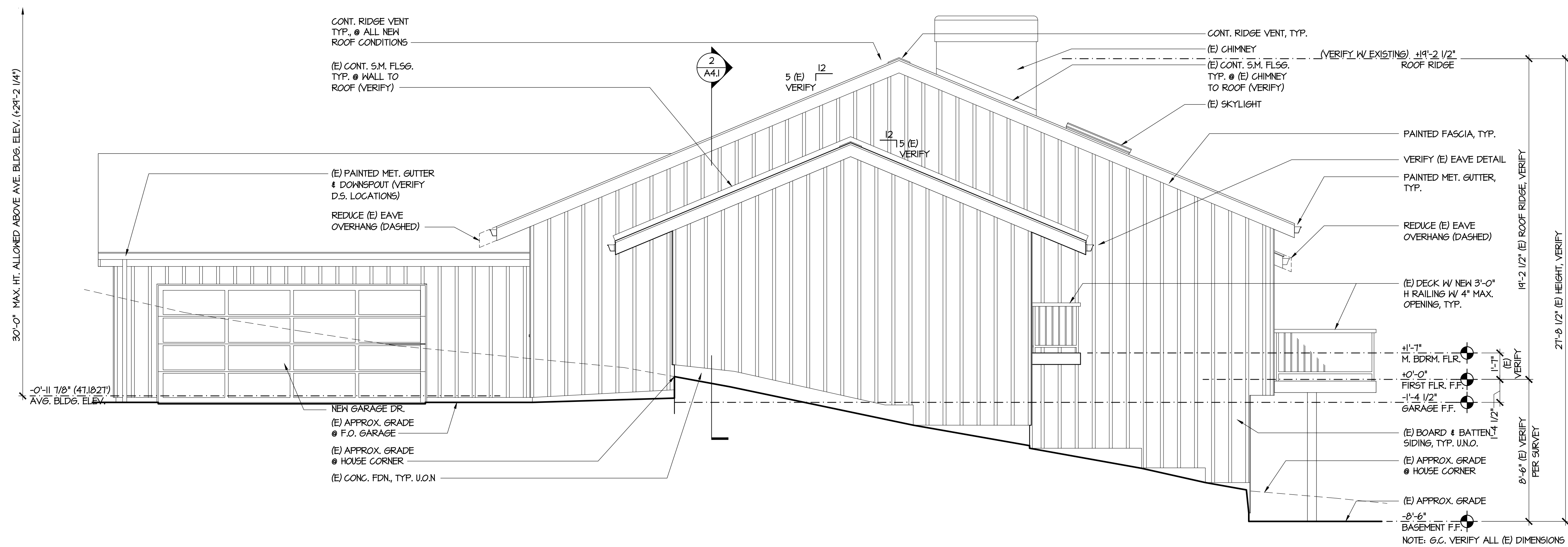
Date: 06/30/2020

Sheet Number: _____

A3.1



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



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

PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

Modifications to
LAWLER RESIDENCE
8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

Sheet Title:
EXT. ELEVATIONS

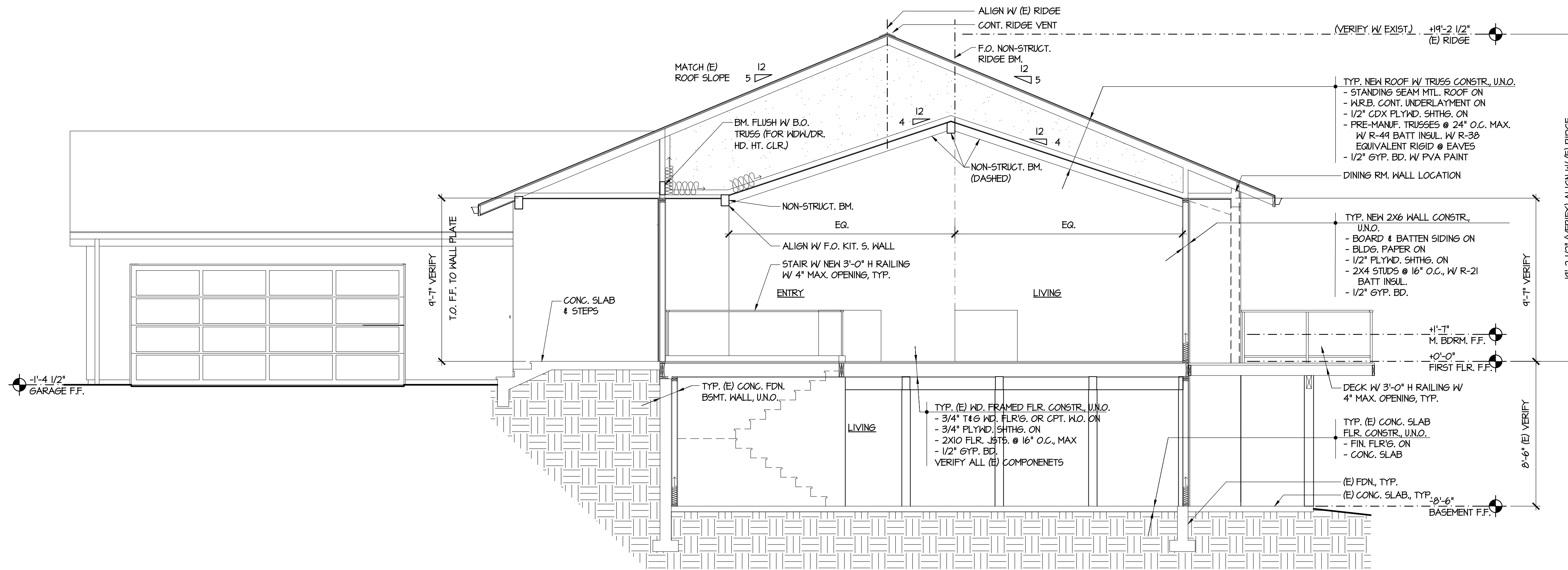
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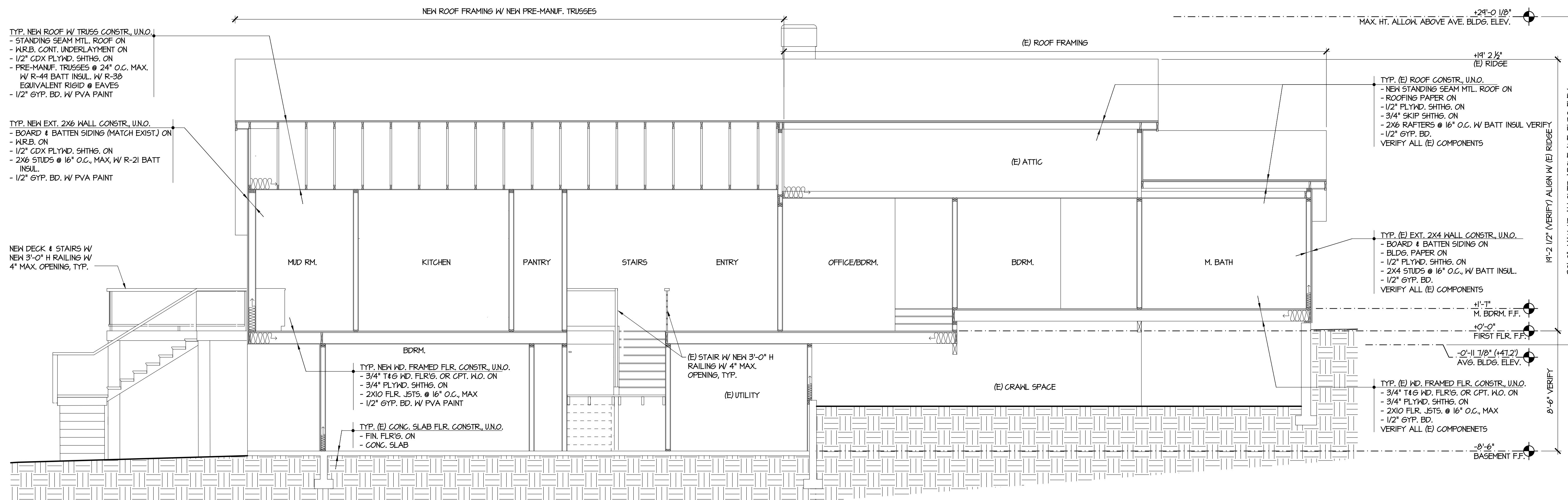
Date: 06/30/2020

Sheet Number: _____

A3.2



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



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

PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

Modifications to
LAWLER RESIDENCE
8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

Sheet Title:
BLDG. SECTIONS

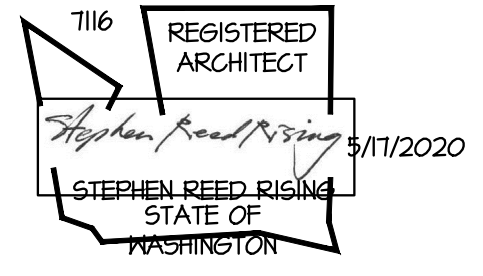
Scale: NOT TO SCALE

20-05

Date: 06/30/2020

Sheet Number: _____

A4.1



Alterations Worksheet 2015 Washington State Energy Code

Project Information
 Lawler Residence Remodel & Addition
 Site Address: 8456 N. Mercer Way
 Mercer Island, WA 98040

Contact Information
 Architect: TCA Architecture
 6211 Roosevelt Way NE Seattle, WA 98115
 (206) 522-3830 (attn: Stephen Rising)

The Washington State Energy Code requirements for alterations are located in Chapter 5
Alterations (remodels) do not need to obtain energy credits from Table R406.2

Additions must meet the requirements for new construction. This includes nonconditioned space being altered to become conditioned space.

Will the wall cavities be exposed? Yes No
 If yes: Exposed wall cavities must be insulated -
 2 X 4 wall studs require **R-15** insulation
 2 X 6 wall studs require **R-21** insulation

Will the roof/ceiling framing cavities or attic be exposed? Yes No
 If yes: Exposed roof/ceiling assemblies must be insulated -
 Vaulted ceilings: Insulate to the full depth of the framing member while allowing for the minimum 1" ventilated space
 Flat ceilings: Install R-49 insulation or what the attic space can accommodate based on the roof pitch

Will the floor framing cavities be exposed? Yes No
 If yes: Exposed floor cavities must be insulated to R-30

Are the windows and/or doors being replaced? Yes No
 If yes: New windows and doors must have an area weighted average U-factor of ≤0.30

Will the heating or cooling system be replaced? Yes No
 If yes: New equipment must meet current requirements and ducts need to be tested

Will the hot water system be altered? Yes No
 If yes: New water heating equipment must meet current code requirements

Are more than 50% of the light fixtures being changed? Yes No
 If yes: 75% of all lamps must be high efficacy (LED or CFL)

RS03.1.1 Building envelope. Building envelope assemblies that are part of the alteration shall comply with Section R402.1.1 or R402.1.4, Sections R402.2.1 through R402.2.11, R402.3.1, R402.3.2, R402.4.3 and R402.4.4.
Exception: The following alterations need not comply with the requirements for new construction provided the energy use of the building is not increased:
 1. Storm windows installed over existing fenestration.
 2. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation. 2x4 framed walls shall be insulated to a minimum of R-15 and 2x6 framed walls shall be insulated to a minimum of R-21.
 3. Construction where the existing roof, wall or floor cavity is not exposed.
 4. Roof recover.
 5. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.
 6. Surface-applied window film installed on existing single pane fenestration assemblies to reduce solar heat gain provided the code does not require the glazing fenestration to be replaced.

RS03.1.1.1 Replacement fenestration. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for U-factor and SHGC in Table R402.1.1.

RS02.1.1.2 Heating and cooling systems. New heating, cooling and duct systems that are part of the addition shall comply with Sections R403.1, R403.2, R403.3, R403.5 and R403.6.
Exception: The following need not comply with the testing requirements of Section R403.3.3:
 1. Additions of less than 750 square feet.
 2. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in WSU RS-33.
 3. Ducts with less than 40 linear feet in unconditioned spaces.
 4. Existing duct systems constructed, insulated or sealed with asbestos.

RS03.1.3 Service hot water systems. New service hot water systems that are part of the alteration shall comply with Section R403.4.

RS03.1.4 Lighting. New lighting systems that are part of the alteration shall comply with Section R404.1.
Exception: Alterations that replace less than 50 percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power.

RS03.2 Change in space conditioning. Any nonconditioned or low-energy space that is altered to become *conditioned space* shall be required to be brought into full compliance with this code.

WINDOW / SKYLIGHT SCHEDULE

NO.	NOMINAL UNIT SIZE	ROUGH OPENING		R.O. HD. HT. ABV. FINISH FL. (INCLUDES TRANSOM W/O.)	1/2" FRAME HT. OF FIXED TRANSOM (FACTORY MULL TO UNIT BELOW)	TYPE	FRAME	SCREENS	DETAILS				REMARKS	(ARGON + LOW E) NFRC CERTIFIED U-VALUE
		WIDTH	HEIGHT						HEAD	JAMB	MULL	SILL		
1	3'-6" x 7'-11 1/2"	3'-6 3/4"	8'-0 3/4"	8'-1 1/4"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					HD. HT. ALIGNS W/ DR.	0.21	
2	5'-10 1/2" x 7'-11 1/2"	5'-11"	8'-0 3/4"	8'-1 1/4"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					HD. HT. ALIGNS W/ DR.	0.21	
3	1/2'-0" x 1/2'-2'-4 1/4" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		FIXED	ALUM. CLAD / WD.					VERIFY (E) R.O. # UNIT SIZE	0.21	
4	4'-6" x 3'-0"	4'-6 3/4"	3'-1 1/4"	6'-4 1/4"		CSMNT./CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.29	
5	2'-6" x 4'-6"	2'-6 3/4"	4'-7 1/4"	8'-1 1/4"		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.						0.29	
6	2'-6" x 4'-6"	2'-6 3/4"	4'-7 1/4"	8'-1 1/4"		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.						0.29	
7	17'-0" x 7'-6 1/4"	17'-0 3/4"	7'-7 3/4"	8'-1 1/4"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
8	1/2'-12'-0" x 1/2'-5'-6 3/4" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		CSMNT./FIXED/CSMNT. W/ S.D.L., S.G.	ALUM. CLAD / WD.					EGRESS / FACTORY MULL	0.29	
9	2'-6" x 4'-0"	2'-6 3/4"	4'-1 1/4"	6'-4 1/4"		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.29	
10	8'-0 3/4" x 6'-7 1/4"	8'-1 1/4"	6'-8 3/4"	6'-4 1/4"		FIXED/FIXED W/ S.D.L.	ALUM. CLAD / WD.						0.21	
11	2'-0" x 2'-6"	2'-0 3/4"	2'-7 1/4"	6'-4 1/4"		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.						0.29	
12	1/2'-7'-1 1/4" x 1/2'-5'-8 3/4" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		CSMNT./FIXED/CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					EGRESS / FACTORY MULL	0.29	
13	1/2'-7'-1 1/4" x 1/2'-5'-8 3/4" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		CSMNT./FIXED/CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					EGRESS / FACTORY MULL	0.29	
14	1/2'-12'-0" x 1/2'-5'-6 3/4" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		FIXED/FIXED/FIXED W/ S.D.L.	ALUM. CLAD / WD.						0.21	
15	1/2'-5'-5 1/4" x 1/2'-5'-6 3/4" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		FIXED W/ S.D.L.	ALUM. CLAD / WD.						0.21	
16	1/2'-5'-5 1/4" x 1/2'-5'-6 3/4" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		FIXED W/ S.D.L.	ALUM. CLAD / WD.						0.21	
17	1/2'-7'-10 1/4" x 1/2'-3'-6" VERIFY (E) OPNS.	(E) VERIFY	(E) VERIFY	(E) VERIFY		FIXED/FIXED W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.21	

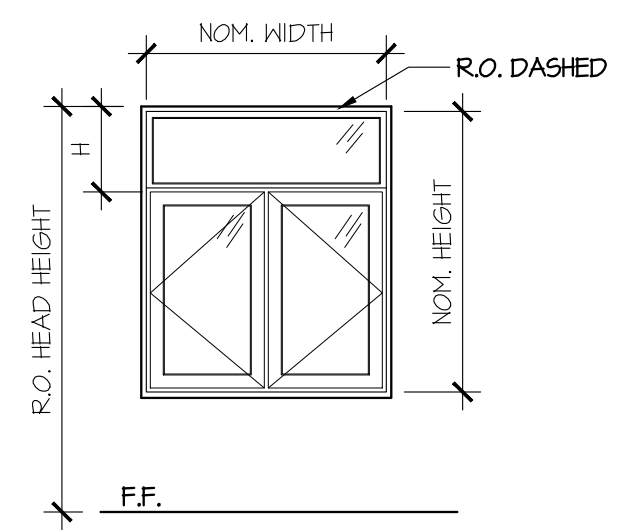
EXTERIOR DOOR SCHEDULE

NO.	NOMINAL SIZE	ROUGH OPENING		1/2" FRAME HT. OF FIXED TRANSOM (FACTORY MULL TO UNIT BELOW)	TYPE	THK.	FRAME	FINISH	DETAILS			REMARKS	NFRC CERTIFIED U-VALUE
		WIDTH	HEIGHT						HEAD	JAMB	SILL		
1	3'-6" x 8'-0"	3'-8"	8'-1 1/4"		SINGLE			WD/ALUM. CLAD				INSWING, FULL GLAZED TEMPERED	0.30
2	16'-0" x 7'-0"	VERIFY	VERIFY		OVERHEAD GARAGE			ALUMINUM				OVERHEAD, GLAZED, TEMP. (E) OPENING	
3	3'-0" x 6'-8"	3'-2"	6'-4 1/4"		SINGLE			WD. / PT.				INSWING, NOT GLAZED	0.20
3.1	2'-10" x 6'-8"	3'-0"	6'-4 1/4"		SINGLE			WD. / PT.				OUTSWING, NOT GLAZED, 20 MIN. SOLID CORE	0.20
4	(3 LEAF) 11'-10" x 8'-0"	12'-0"	8'-1 1/4"		(3) LEAF SLIDE			WD/ALUM. CLAD				(3) LEAF, SLIDING FULL GLAZED TEMP.	0.30
5	(3 LEAF) 17'-0" x 8'-0"	VERIFY	VERIFY		(3) LEAF SLIDE			WD/ALUM. CLAD				(3) LEAF, SLIDING FULL GLAZED TEMP. (E) OPENING	0.30
6	3'-0" x 6'-8"	3'-2 1/2"	6'-4 1/4"		FRENCH			WD/ALUM. CLAD				OUTSWING, FULL GLAZED TEMP.	0.30
7	(2) 3'-0" x 6'-8"	VERIFY	VERIFY		(2) FRENCH			WD/ALUM. CLAD				OUTSWING, FULL GLAZED TEMP. (E) OPENING	0.30
8	2'-6" x 6'-8"	3'-2 1/2"	6'-4 1/4"		SINGLE			WD. / PT.				OUTSWING, NOT GLAZED	0.20
9	(2) 2'-6" x 6'-8"	VERIFY	VERIFY		(2) FRENCH			WD/ALUM. CLAD				OUTSWING, FULL GLAZED TEMP. (E) OPENING	0.30
10	3'-0" x 6'-8"	VERIFY	VERIFY		SINGLE			WD. / PT.				OUTSWING, NOT GLAZED (E) OPENING	0.30

- NOTES:**
- ALL DIMS. TO BE VERIFIED PRIOR TO CONSTR.
 - WEATHER SHIELD, CONTINGENTARY COLLECTION WINDOWS USED FOR BASIS OF DESIGN FOR ALL WINDOWS, TERRACE DR.S AND LIFT SLIDE DR. SYSTEMS AND ACCORDION DR. SYSTEMS.
 - CASEMENT WINDOWS TO BE MIN. EGRESS WIDTH OF 2'-4 1/2" WITHIN CSMT. TYPE.
 - CRYSTALLITE SKYLIGHTS USED FOR DESIGN BASIS.

- ENERGY CALCULATION NOTES:**
- 2015 WSEC (ALTERATIONS), MERCER ISLAND, PRESCRIPTIVE CODE COMPLIANCE**
- ALL VERT. GLAZING TO HAVE A MAX. U-VALUE OF 0.30
 - ALL OVERHEAD GLAZING IS TO HAVE A MAX. U-VALUE OF 0.50
 - ALL SOLID PANEL DR.S ARE TO HAVE A MAX. U-VALUE OF 0.20 (EXCEPT GLAZE DR.S, MAX. U-VALUE OF 0.30)
 - ALL CLG.S AT EXT. ROOFS ARE TO HAVE A MIN. INSUL. VALUE OF R-49, SINGLE RAFTER OR JOIST-VAULTED CLG.S MAY REDUCE INSUL. TO R-30
 - FOR VENTED ATTICS, A BAFFLE SHALL BE INSTALLED ADJACENT TO SOFFITS AND EAVE VENTS
 - ALL EXT. WALLS ABOVE GRADE TO HAVE A MIN. INSUL. VALUE OF R-21
 - ALL FRAMED FLRS R-30
 - ALL BSMT. BELOW GRADE WALLS SHALL BE INSULATED PER 10/15/21-TB (WSEC, TABLE R402.1.1)
 - NEW HEATED SLABS ON GRADE TO HAVE CONT. MIN. INSUL. VALUE OF R-10
 - IF GREATER THAN 50% OF LIGHT FIXTURES REPLACED 75% OF LAMPS MUST BE LED
 - NEW HOT WATER TANK MUST MEET CURRENT CODE REQUIREMENTS
 - NEW HVAC EQUIPMENT MUST MEET CURRENT CODE REQUIREMENTS

WINDOW DIMENSION REFERENCE DIAGRAM



PERMIT SET

Revisions: _____ Date: _____

Project Title: _____

Modifications to
LAWLER RESIDENCE
 8456 N. MERCER WAY,
 MERCER ISLAND, WA, 98040

Sheet Title:
 WINDOW SCHEDULE
 ENERGY CODE WORKSHEET

Scale: _____
 20-05

Date: 06/30/2020

Sheet Number: _____

A9.1

GENERAL STRUCTURAL NOTES
(THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE PLANS)

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2015 EDITION).	
2. DESIGN LOADING CRITERIA: HANDRAILS AND GUARDS GUARDRAILS/BALCONY RAILS 50 PLF GUARDRAILS/BALCONY RAILS CONCENTRATED LOAD 200 LBS RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS FLOOR LIVE LOAD 40 PSF MISCELLANEOUS LOADS DECKS 15 x AREA SERVED DEFLECTION CRITERIA LIVE LOAD DEFLECTION L/360 TOTAL LOAD DEFLECTION L/240 ENVIRONMENTAL LOADS SNOW C _s =1.0, I _s =1.0, C _t =1.1, P _g =25 PSF, P _f =20 PSF WIND ASCE 7-16, 10 MIN. RISK CATEGORY II, EXPOSURE 'C', K _{z1} =1 EARTHQUAKE ANALYSIS PROCEDURE, EQUIVALENT LATERAL FORCE PROCEDURE LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS, SITE CLASS-D, S _s =1.375, S _{ds} =0.912, S ₁ =0.524, S ₀₁ =0.524, C _s =0.141, SDG D, I _e =1.0, R _w =6.5	

SEE PLANS FOR ADDITIONAL LOADING CRITERIA

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
- PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTOR'S WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 31-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".
- CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.
- SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS:
CONNECTOR PLATE WOOD ROOF TRUSSES
CONTRACTOR SHALL SUBMIT WALL ELEVATION DRAWINGS OF AT LEAST 1/8" = 1'-0" SCALE INDICATING LOCATIONS OF CONNECTION EMBEDMENTS AND WALL OPENINGS FOR REVIEW PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WALL ELEVATION DRAWINGS WITH REINFORCEMENT SHOP DRAWINGS.
APPROVED SETS OF ALL SHOP DRAWINGS SHALL ALSO BE SUBMITTED TO THE BUILDING DEPARTMENT.
- SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY, REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

QUALITY ASSURANCE

CONCRETE CONSTRUCTION	PER TABLE 1705.3
SOIL CONDITIONS, FILL PLACEMENT, AND DENSITY	PER TABLE 1705.6
DRIVEN DEEP FOUNDATION	PER TABLE 1705.1
EXPANSION BOLTS AND THREADED EXPANSION INSERTS	PER MANUFACTURER
EPOXY GROUTED INSTALLATIONS	PER MANUFACTURER
PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.	
CONTINUOUS INSPECTION: INSPECTOR SHALL BE ON-SITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.	

GEOTECHNICAL

- FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.
FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.
BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.
ALLOWABLE SOIL PRESSURE 1500 PSF
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED) 55 PCF/25 PCF
ALLOWABLE PASSIVE EARTH PRESSURE (FS OF 15 INCLUDED) 300 PCF
COEFFICIENT OF FRICTION (FS OF 15 INCLUDED) 0.3

RENOVATION

- DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.
- CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.
- CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL AREAS OF NEW WORK. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

CONCRETE

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF F_c = 3000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 BAGS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 3" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1004 OF THE IBC. DESIGN STRENGTH IS F_c = 2500 PSI.
- ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C773. AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 308-14, TABLE 18.3.2.1 MODERATE EXPOSURE, FI.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, F_y = 60,000 PSI.
- DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-14 AND 318-14. LAP ALL REINFORCEMENTS IN ACCORDANCE WITH THE REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.
- CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
FORMED SURFACES EXPOSED TO EARTH OR HEATHER (6 BARS OR LARGER) 2"
FORMED SURFACES EXPOSED TO EARTH OR HEATHER (6 BARS OR SMALLER) 1-1/2"
COLUMN TIES OR SPIRALS AND BEAM STRIPS 1-1/2"
SLABS AND WALLS (INT. FACE) GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

- CONCRETE WALL REINFORCING—PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:
6" WALLS #4 @ 16 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN
8" WALLS #4 @ 12 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN
10" WALLS #4 @ 18 HORIZ. #4 @ 18 VERTICAL 2 CURTAINS
12" WALLS #4 @ 16 HORIZ. #4 @ 18 VERTICAL 2 CURTAINS
- CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.
- NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3000 PSI MINIMUM).

ANCHORAGE

- EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICG-ES REPORT NUMBER ESR-3037, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR LOCATION, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.
- EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BARS) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "AT-XP" AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICG-ES REPORT NO. ESR-0281. MINIMUM BASE MATERIAL TEMPERATURE IS 14 DEGREES F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURES, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.
- CONCRETE SCREIN ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" HEAVY DUTY SCREIN ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICG-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREIN ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

WOOD

- FRAMING LUMBER SHALL BE #2-DRY, KD, OR MC-1R, AND GRADED AND MARKED IN CONFORMANCE WITH NGLB STANDARD "GRADING RULES FOR WEST COAST LUMBER NO. 17", OR NFPA STANDARD, "WESTERN LUMBER GRADING RULES 2011". FURNISH TO THE FOLLOWING MINIMUM STANDARDS:
JOISTS (2X 4 X MEMBERS) AND BEAMS HEM-FIR NO. 2
MINIMUM BASE VALUE, F_b = 850 PSI
DOUGLAS FIR-LARCH NO. 1
MINIMUM BASE VALUE, F_b = 1000 PSI
BEAMS (INCL. 6X AND LARGER) DOUGLAS FIR-LARCH NO. 1
MINIMUM BASE VALUE, F_b = 1850 PSI
POSTS (4X MEMBERS) DOUGLAS FIR-LARCH NO. 2
MINIMUM BASE VALUE, F_c = 1850 PSI
DOUGLAS FIR-LARCH NO. 1
MINIMUM BASE VALUE, F_c = 1000 PSI
STUDS, PLATES & MISC. FRAMING: DOUGLAS FIR-LARCH NO. 2
OR HEM-FIR NO. 2
- GLUE LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA-EM5 IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA-EM5 CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, F_b = 2400 PSI, F_v = 265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, F_b = 2400 PSI, F_v = 265 PSI. CAMBER ALL SIMPLE SPAN GULLIAM BEAMS, WITH SPANS OVER 30', TO 300' RADII, UNLESS SHOWN OTHERWISE ON THE PLANS.
- MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE HEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICG-ES REPORT ESR-1801. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
PSL (2/2E) F_b = 2400 PSI, E = 2000 KSI, F_v = 240 PSI
LVL (2/2E) F_b = 2600 PSI, E = 2000 KSI, F_v = 285 PSI
LSL (1/55E) F_b = 2325 PSI, E = 1550 KSI, F_v = 310 PSI

- ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICG-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.
MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

- PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:
TOP CHORD LIVE LOAD 25 PSF
TOP CHORD DEAD LOAD 10 PSF
BOTTOM CHORD DEAD LOAD 10 PSF
TOTAL LOAD 45 PSF
WIND UPLIFT (TOP CHORD) 5 PSF
BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF LIVE LOAD) 10 PSF

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

- PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATINGS AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.
ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/6.
FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.
WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.
PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TIG JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.
REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.
- PRESERVATIVE TREATED WOOD SHALL BE TREATED PER ANPA STANDARD II TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO ANPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO ANPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO ANPA UC4B.

- WOOD TREATED FOR FIRE RESISTANCE SHALL MEET THE REQUIREMENTS OF ASTM E 84 OR UL 723 AND HAVE A LISTED FLAME SPREAD INDEX OF 25 OR LESS. FIRE RETARDANT TREATED LUMBER AND WOOD STRUCTURAL PANELS SHALL BE LABELED IN ACCORDANCE WITH IBC 2305.2.4. WOOD TREATED FOR FIRE PROTECTION FOR USE IN INTERIOR ABOVE GROUND CONSTRUCTION AND CONTINUOUSLY PROTECTED FROM WEATHER AND OTHER SOURCES OF MOISTURE SHALL BE TREATED TO ANPA UC4A. WOOD TREATED FOR FIRE PROTECTION FOR USE IN EXTERIOR ABOVE GROUND CONSTRUCTION AND SUBJECT TO WETTING OR OTHER SOURCES OF MOISTURE SHALL BE TREATED TO ANPA UC4B.

- FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

WOOD TREATMENT	CONDITION	PROTECTION
HAS NO AMMONIA CARRIER CONTAINS AMMONIA CARRIER	INTERIOR DRY INTERIOR DRY	6/10 GALVANIZED 6/10S OR A19S HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653
CONTAINS AMMONIA CARRIER CONTAINS AMMONIA CARRIER	INTERIOR WET EXTERIOR ANY	TYPE 304 OR 316 STAINLESS TYPE 304 OR 316 STAINLESS TYPE 304 OR 316 STAINLESS

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 18%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 18%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

- TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICG-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

- ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH 'LUS' SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH 'TIS' SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH 'MIT' SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

- ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

- WOOD FASTENERS
A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:
SIZE LENGTH DIAMETER
6d 2" 0.131"
8d 2-1/2" 0.131"
10d 3" 0.148"
12d 3-1/4" 0.148"
16d BOX 3-1/2" 0.195"
IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

- ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

- NOTCHES AND HOLES IN WOOD FRAMING:
A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.
B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

- NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

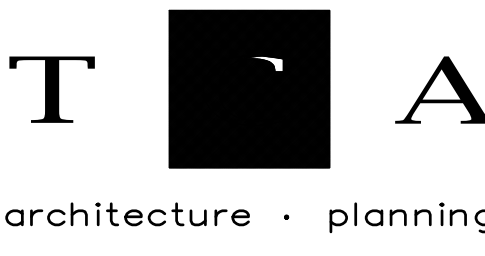
- WOOD FRAMING NOTES—THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:
A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AVG "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

- WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x6 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.
ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d @ 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS @ 4" O.C. EACH SIDE JOINT.

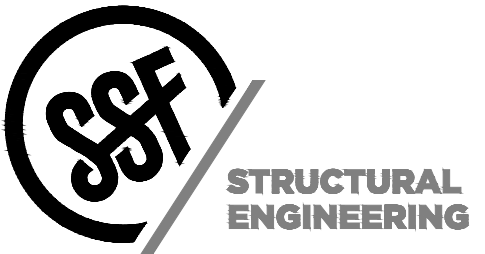
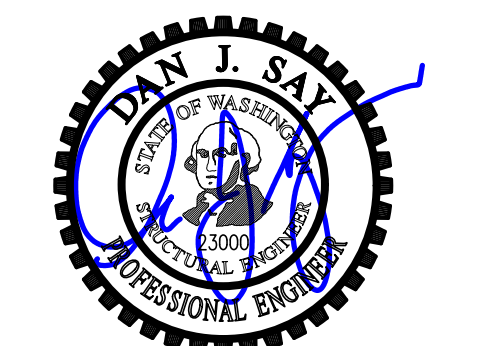
- ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 1" MINIMUM, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH TWO ROWS OF 16d #12 ON-CENTER. UNLESS OTHERWISE NOTED, GYPSUM HALFBBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 x 1-1/4" TYPE 5 OR H SCREWS @ 8" ON-CENTER. UNLESS INDICATED OTHERWISE, 1/2" (NOMINAL) APA RATED SHEATHING (SPAN RATING 24/0) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS @ 6" ON-CENTER AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK IN SUPPORTED EDGES) AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS @ 12" ON-CENTER ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

- FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRIPS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TIG JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER UNLESS OTHERWISE NOTED.



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Modifications to
LAWLER RESIDENCE
 8466 N MERCER WAY,
 MERCER ISLAND, WA, 98040

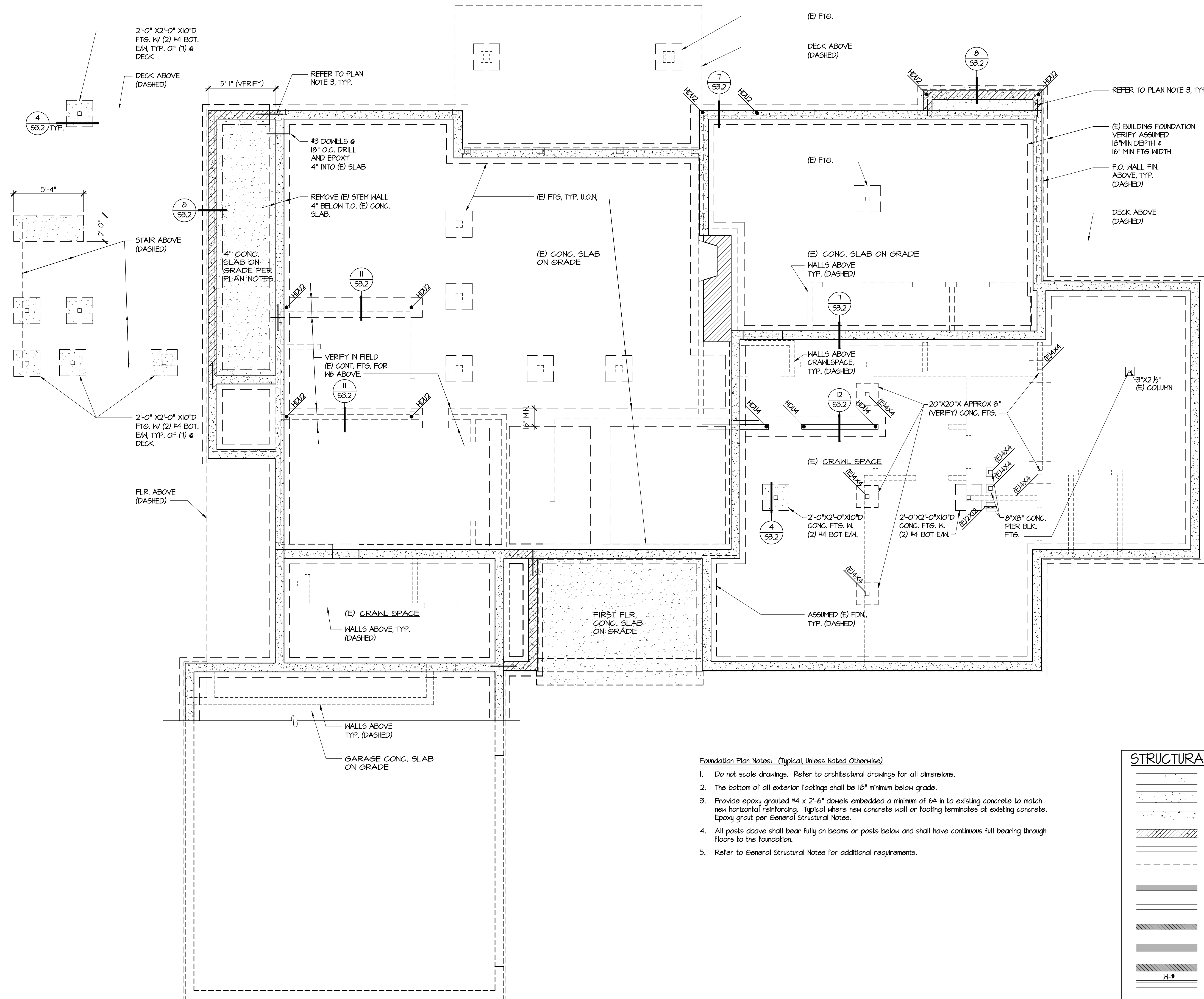
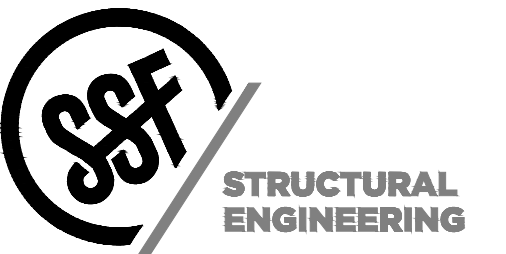
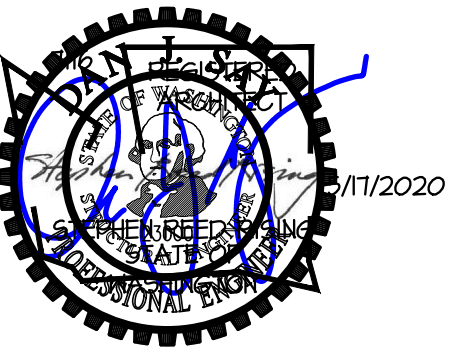
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Scale: _____
20-05

Date: 06/30/2020

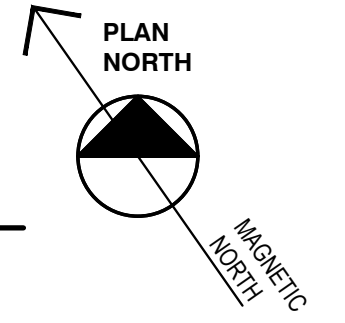
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S1.1



- Foundation Plan Notes:** (Typical, Unless Noted Otherwise)
1. Do not scale drawings. Refer to architectural drawings for all dimensions.
 2. The bottom of all exterior footings shall be 18" minimum below grade.
 3. Provide epoxy grouted #4 x 2'-6" dowels embedded a minimum of 6" in to existing concrete to match new horizontal reinforcing. Typical where new concrete wall or footing terminates at existing concrete. Epoxy grout per General Structural Notes.
 4. All posts above shall bear fully on beams or posts below and shall have continuous full bearing through floors to the foundation.
 5. Refer to General Structural Notes for additional requirements.

STRUCTURAL LEGEND			
	(E) CONG. SLAB (FOR REFERENCE ONLY)		INDICATES BEAM/HANGER
	CONG. SLAB (FOR REFERENCE ONLY)		INDICATES TRUSS/HANGER
	(E) CONG. WALL (FOR REFERENCE ONLY)		INDICATES INTERIOR HEADER
	CONG. WALL (FOR REFERENCE ONLY)		POST BELOW (FOR REFERENCE ONLY)
	WALL BELOW (FOR REFERENCE ONLY)		POST ABOVE (FOR REFERENCE ONLY)
	WALL ABOVE (FOR REFERENCE ONLY)		INDICATES SPAN & DIRECTION OF FRAMING
	STRUCTURAL BEARING WALL BELOW		INDICATES EXTENT OF FRAMING
	(E) 2X4 NON BEARING WALL		C516 STRAP OVER PLYWOOD, NAIL STRAP THROUGH PLYWOOD TO FRAMING BELOW REFER TO 5/54.1
	NEW 2X4 BEARING WALL		
	(E) 2X6 BEARING WALL		
	NEW 2X6 BEARING WALL		
	SHEAR WALL, REFER TO 12/54.1		



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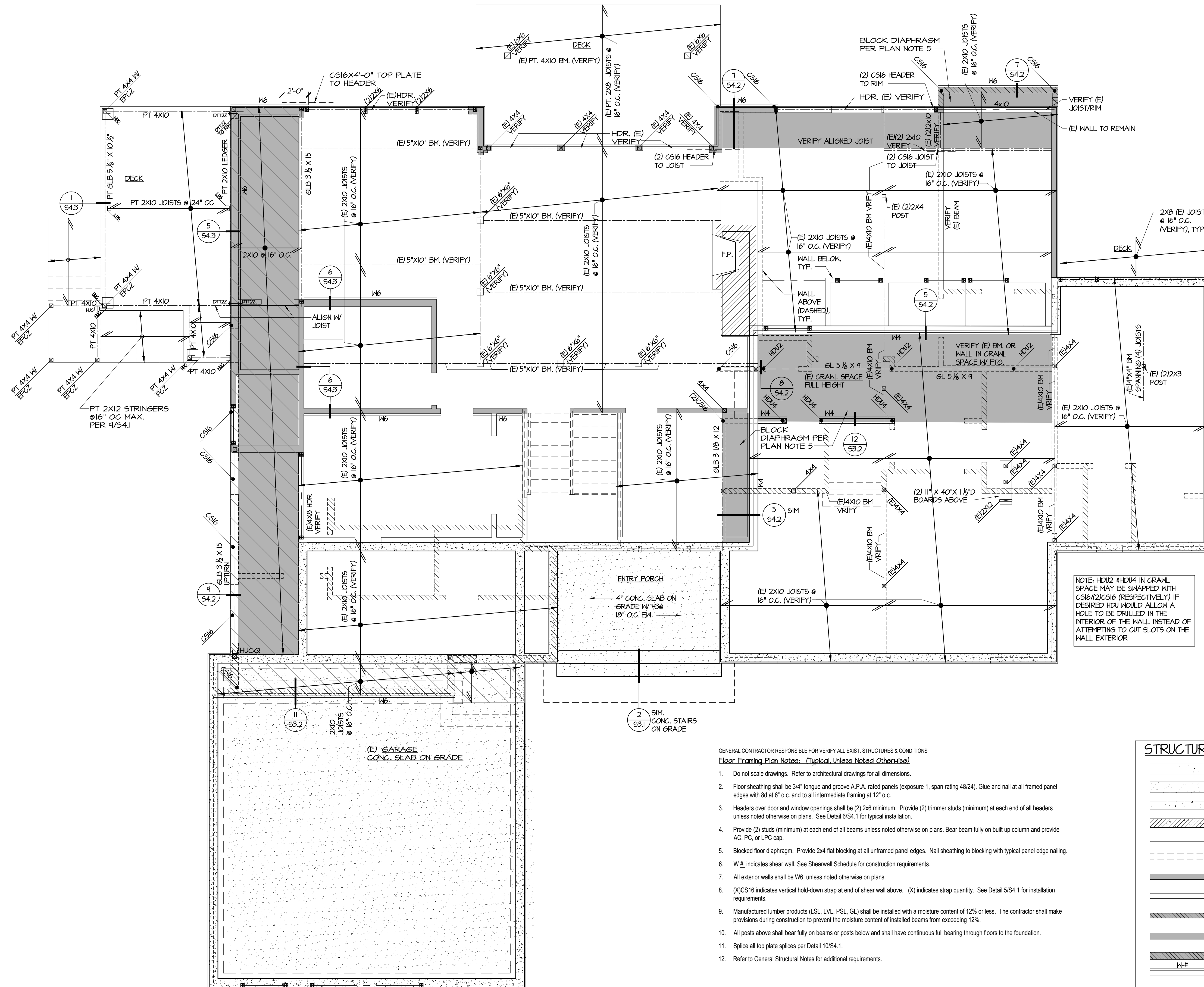
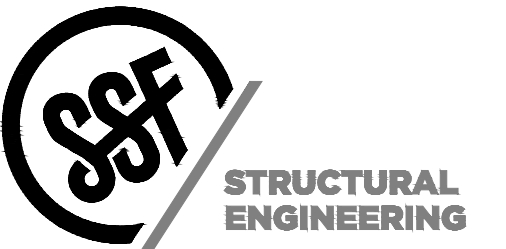
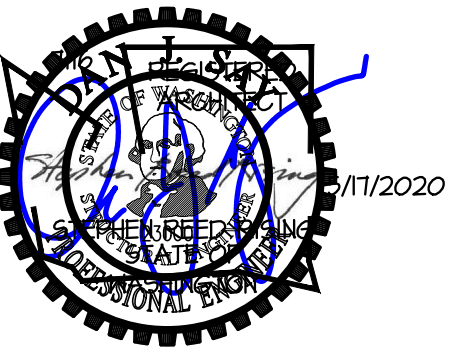
Modifications to
LAWLER RESIDENCE
8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

Sheet Title:
BSMT. FOUNDATION PLAN

Scale: 1/4" = 1'-0"
20-05

Date: 06/30/2020

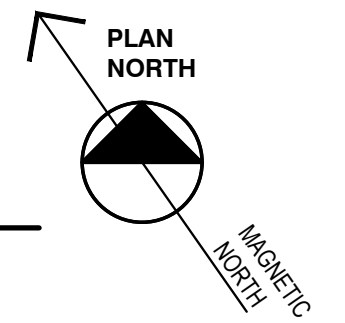
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- GENERAL CONTRACTOR RESPONSIBLE FOR VERIFY ALL EXIST. STRUCTURES & CONDITIONS
Floor Framing Plan Notes: (Typical Unless Noted Otherwise)
- Do not scale drawings. Refer to architectural drawings for all dimensions.
 - Floor sheathing shall be 3/4" tongue and groove A.P.A. rated panels (exposure 1, span rating 48/24). Glue and nail at all framed panel edges with 8d at 6" o.c. and to all intermediate framing at 12" o.c.
 - Headers over door and window openings shall be (2) 2x6 minimum. Provide (2) trimmer studs (minimum) at each end of all headers unless noted otherwise on plans. See Detail 6/S4.1 for typical installation.
 - Provide (2) studs (minimum) at each end of all beams unless noted otherwise on plans. Bear beam fully on built up column and provide AC, PC, or LPC cap.
 - Blocked floor diaphragm. Provide 2x4 flat blocking at all unframed panel edges. Nail sheathing to blocking with typical panel edge nailing.
 - W # indicates shear wall. See Shearwall Schedule for construction requirements.
 - All exterior walls shall be W6, unless noted otherwise on plans.
 - (X)CS16 indicates vertical hold-down strap at end of shear wall above. (X) indicates strap quantity. See Detail 5/S4.1 for installation requirements.
 - Manufactured lumber products (LSL, LVL, PSL, GL) shall be installed with a moisture content of 12% or less. The contractor shall make provisions during construction to prevent the moisture content of installed beams from exceeding 12%.
 - All posts above shall bear fully on beams or posts below and shall have continuous full bearing through floors to the foundation.
 - Splice all top plate splices per Detail 10/S4.1.
 - Refer to General Structural Notes for additional requirements.

STRUCTURAL LEGEND	
(E) CONG. SLAB (FOR REFERENCE ONLY)	INDICATES BEAM/HANGER
CONG. SLAB (FOR REFERENCE ONLY)	INDICATES TRUSS/HANGER
(E) CONG. WALL (FOR REFERENCE ONLY)	INDICATES INTERIOR HEADER
CONG. WALL (FOR REFERENCE ONLY)	POST BELOW (FOR REFERENCE ONLY)
WALL BELOW (FOR REFERENCE ONLY)	POST ABOVE (FOR REFERENCE ONLY)
WALL ABOVE (FOR REFERENCE ONLY)	INDICATES SPAN & DIRECTION OF FRAMING
STRUCTURAL BEARING WALL BELOW	INDICATES EXTENT OF FRAMING
(E) 2X4 NON BEARING WALL	CS16 STRAP OVER PLYWOOD. NAIL STRAP THROUGH PLYWOOD TO FRAMING BELOW REFER TO 5/S4.1
NEW 2X4 BEARING WALL	
(E) 2X6 BEARING WALL	
NEW 2X6 BEARING WALL	
W-#	SHEAR WALL, REFER TO 12/S4.1

1 FIRST FLR. FRAMING/FNDN. PLAN
SCALE: 1/4" = 1'-0"



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Modifications to
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8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

Sheet Title:
FIRST FLOOR FRAMING PLAN/
FDN. PLAN

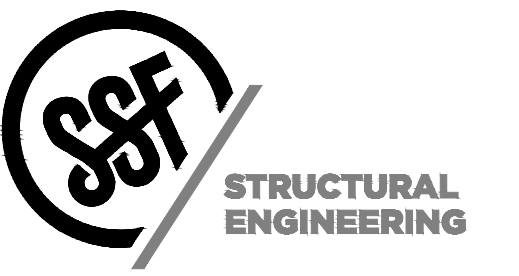
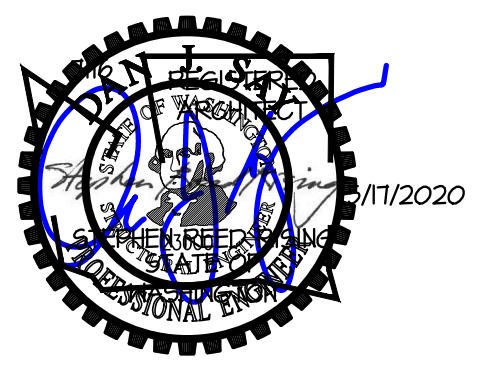
Scale: 1/4" = 1'-0"

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Date: 06/30/2020

Sheet Number:

S2.2



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Modifications to
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8466 N MERCER WAY,
MERCER ISLAND, WA, 98040

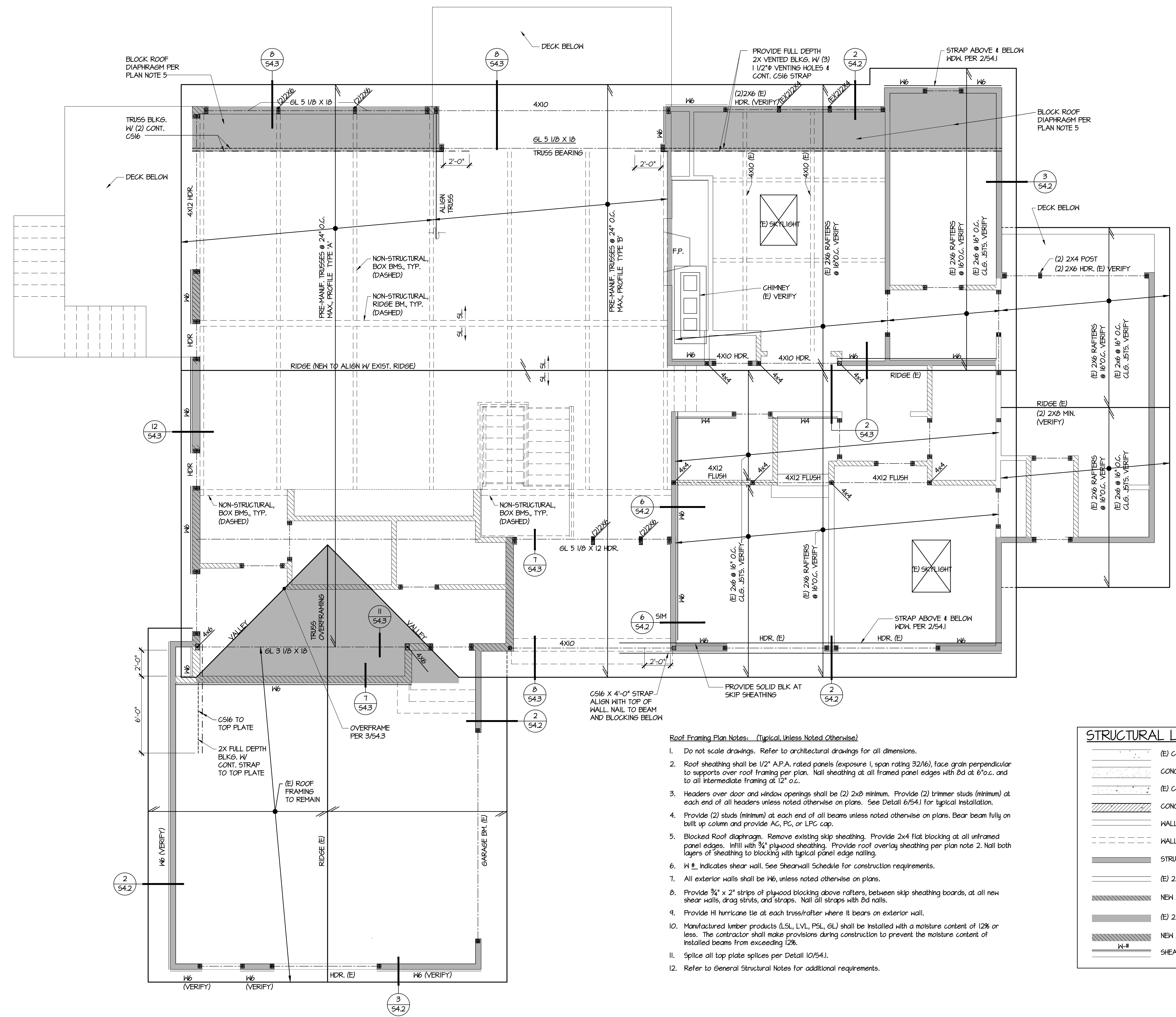
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ROOF FRAMING PLAN

Scale: 1/4" = 1'-0"
20-05

Date: 06/30/2020

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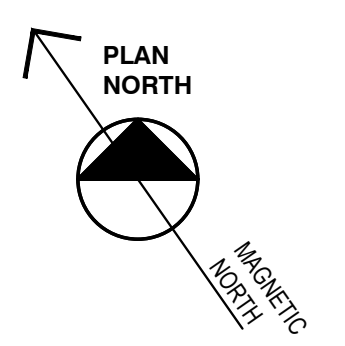
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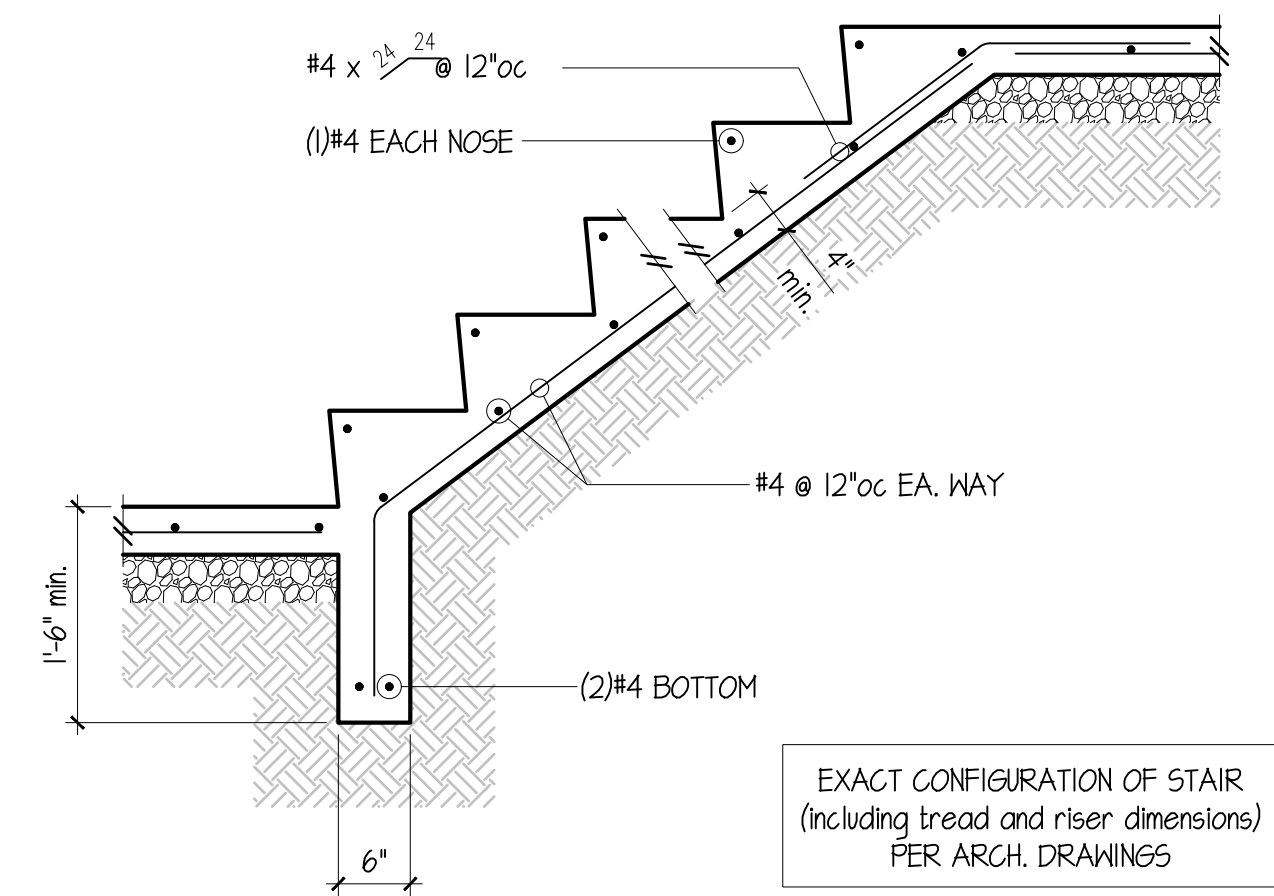


- Roof Framing Plan Notes - (Typical Unless Noted Otherwise)**
- Do not scale drawings. Refer to architectural drawings for all dimensions.
 - Roof sheathing shall be 1/2" A.P.A. rated panels (exposure 1, span rating 32/16), face grain perpendicular to supports over roof framing per plan. Nail sheathing at all framed panel edges with 8d at 6" o.c. and to all intermediate framing at 12" o.c.
 - Headers over door and window openings shall be (2) 2x8 minimum. Provide (2) trimmer studs (minimum) at each end of all headers unless noted otherwise on plans. See Detail 6/54.1 for typical installation.
 - Provide (2) studs (minimum) at each end of all beams unless noted otherwise on plans. Bear beam fully on built up column and provide AC, PC, or LPC cap.
 - Blocked Roof diaphragm. Remove existing skip sheathing. Provide 2x4 flat blocking at all unframed panel edges. Infill with 3/4" plywood sheathing. Provide roof overlay sheathing per plan note 2. Nail both layers of sheathing to blocking with typical panel edge nailing.
 - W # indicates shear wall. See Shearwall Schedule for construction requirements.
 - All exterior walls shall be W6, unless noted otherwise on plans.
 - Provide 3/4" x 2" strips of plywood blocking above rafters, between skip sheathing boards, at all new shear walls, drag struts, and straps. Nail all straps with 8d nails.
 - Provide HI hurricane tie at each truss/rafter where it bears on exterior wall.
 - Manufactured lumber products (LSL, LVL, PSL, GL) shall be installed with a moisture content of 12% or less. The contractor shall make provisions during construction to prevent the moisture content of installed beams from exceeding 12%.
 - Splice all top plate splices per Detail 10/54.1.
 - Refer to General Structural Notes for additional requirements.

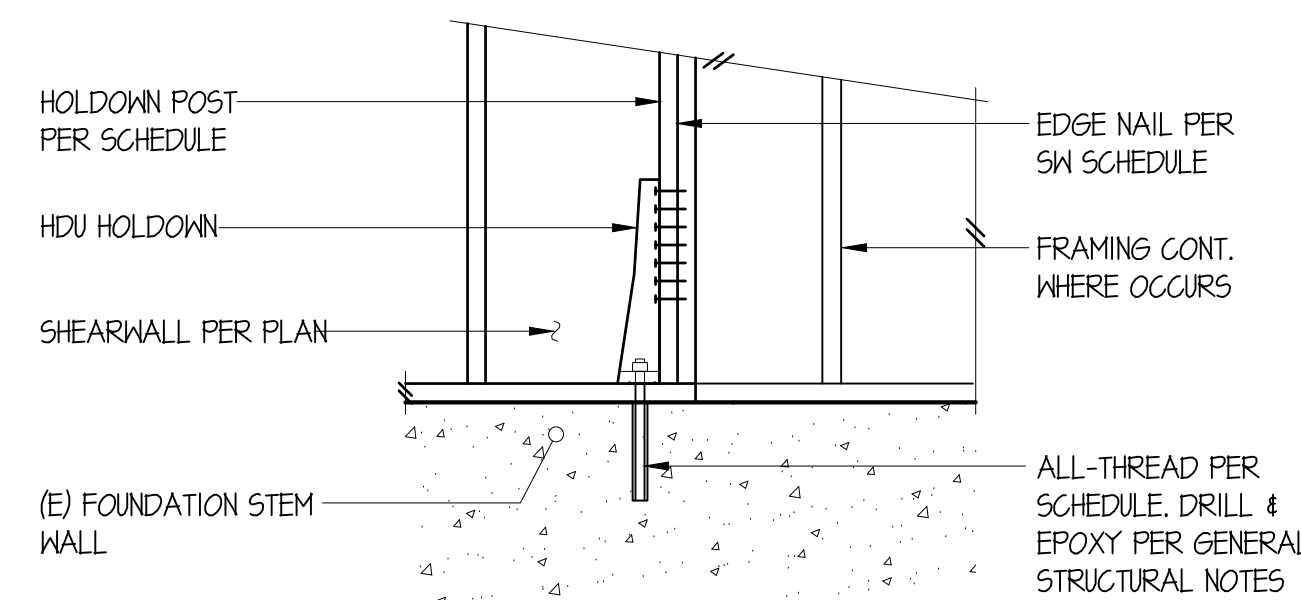
STRUCTURAL LEGEND			
	(E) CONG. SLAB (FOR REFERENCE ONLY)		INDICATES BEAM/HANGER
	CONG. SLAB (FOR REFERENCE ONLY)		INDICATES TRUSS/HANGER
	(E) CONG. WALL (FOR REFERENCE ONLY)		INDICATES INTERIOR HEADER
	CONG. WALL (FOR REFERENCE ONLY)		POST BELOW (FOR REFERENCE ONLY)
	WALL BELOW (FOR REFERENCE ONLY)		POST ABOVE (FOR REFERENCE ONLY)
	WALL ABOVE (FOR REFERENCE ONLY)		INDICATES SPAN & DIRECTION OF FRAMING
	STRUCTURAL BEARING WALL BELOW		INDICATES EXTENT OF FRAMING
	(E) 2X4 NON BEARING WALL		CS6 STRAP OVER PLYWOOD. NAIL STRAP THROUGH PLYWOOD TO FRAMING BELOW REFER TO 5/54.1
	NEW 2X4 BEARING WALL		
	(E) 2X6 BEARING WALL		
	NEW 2X6 BEARING WALL		
	SHEAR WALL, REFER TO 12/54.1		

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





2 TYPICAL STAIR ON GRADE
SCALE: 3/4" = 1'-0"

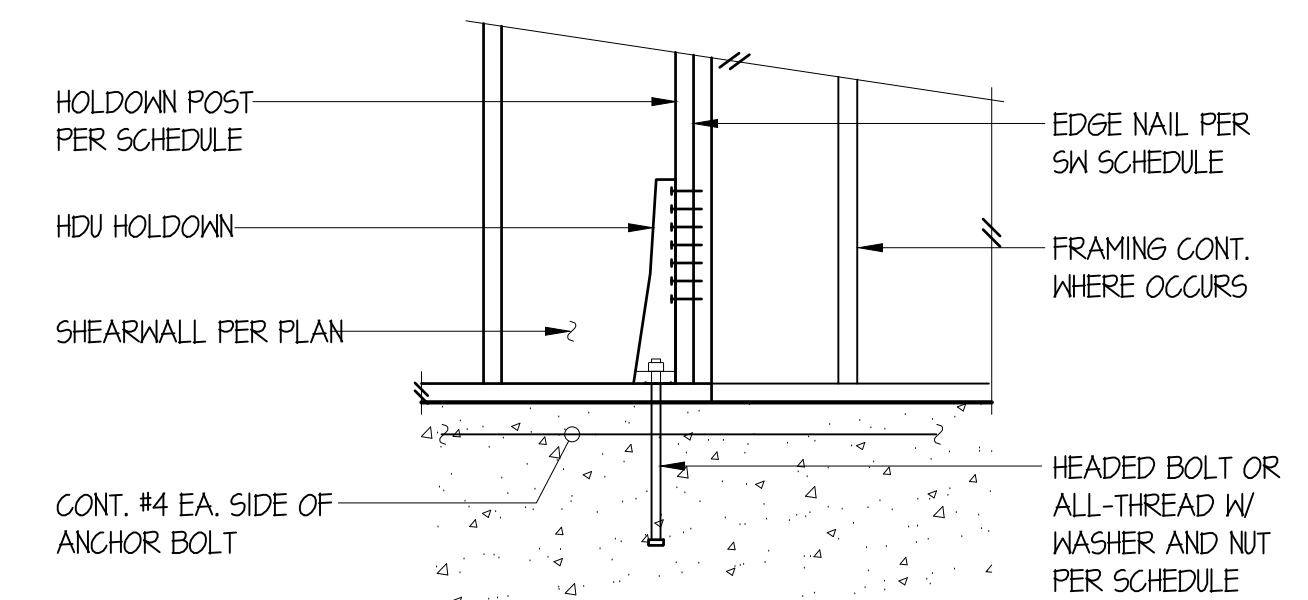


Holdown Schedule

Plan Mark	Screws	Anchor Bolt	A.B. Embed	Holdown Post ¹ if 2x4	if 2x6
HDU2-SDS25	(6)SDS 2"x2"	2"φ	8"	(2) 2x4	(2) 2x6
HDU4-SDS25	(10)SDS 2"x2"	2"φ	10"	4x4	4x6

¹ MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.

3 EPOXIED HDU HOLDOWN
SCALE: 3/4" = 1'-0"

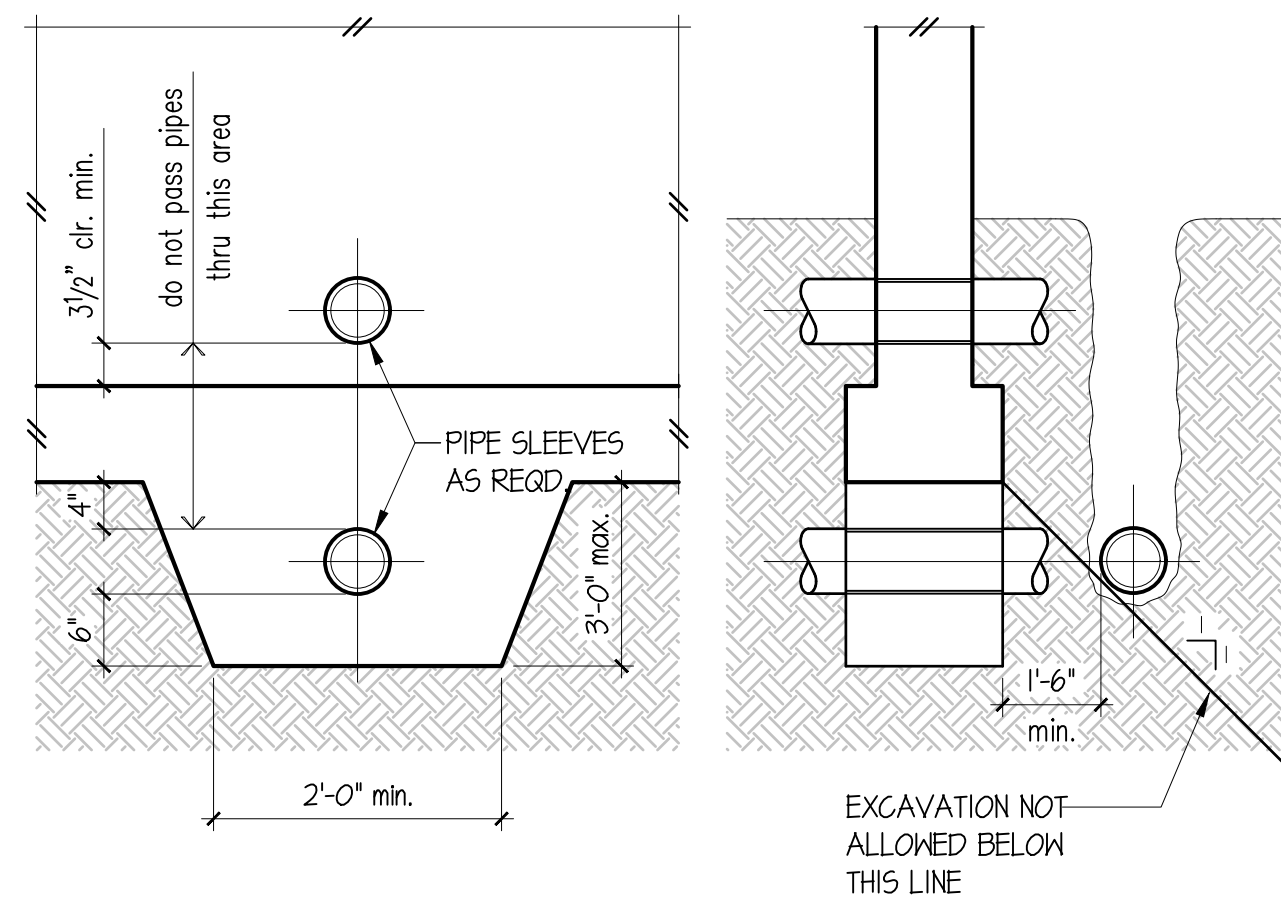


Holdown Schedule

Plan Mark	Screws	Anchor Bolt	A.B. Embed	Holdown Post ¹ if 2x4	if 2x6
HDU2-SDS25	(6)SDS 2"x2"	2"φ	12"	(2) 2x4	(2) 2x6
HDU4-SDS25	(10)SDS 2"x2"	2"φ	16"	4x4	4x6

¹ MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.

4 TYPICAL HDU HOLDOWN
SCALE: 3/4" = 1'-0"



5 PIPE & TRENCH LOCATIONS
SCALE: 3/4" = 1'-0"

Reinforcing Splice and Development Length Schedule

For f'c = 3000 psi, Grade 60 Reinforcing

(I) Minimum Straight Development Length (d)

Bar Size	Top Bars	Other Bars
#3	21"	16"
#4	28"	22"
#5	36"	27"
#6	43"	33"
#7	62"	48"
#8	71"	55"
#9	80"	62"
#10	90"	70"
#11	100"	77"

(II) Minimum Lap Splice Length (s)

Bar Size	Top Bars	Other Bars
#3	28"	21"
#4	31"	28"
#5	46"	36"
#6	56"	43"
#7	81"	62"
#8	93"	71"
#9	104"	80"
#10	118"	90"
#11	131"	100"

TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM.

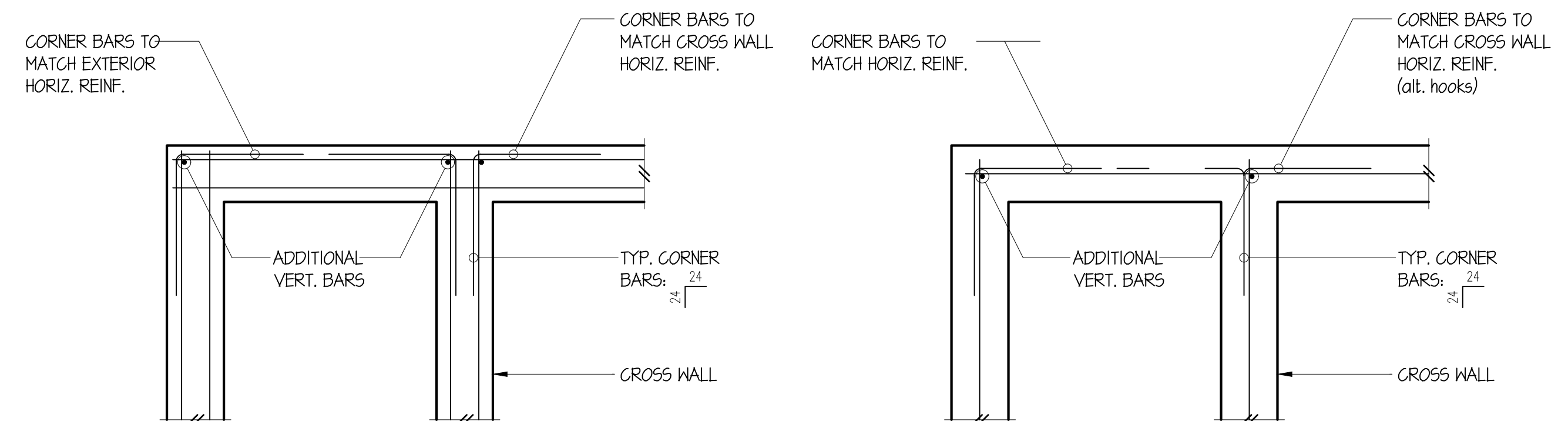
IF CLEAR CONCRETE COVER IS NOT GREATER THAN THE DIAMETER OF THE BAR, OR THE CENTER TO CENTER SPACING IS NOT GREATER THAN 3 BAR DIAMETERS, THEN LENGTHS SHALL BE INCREASED BY 50%

(III) Minimum Embedment Length (dh) For Standard End Hooks

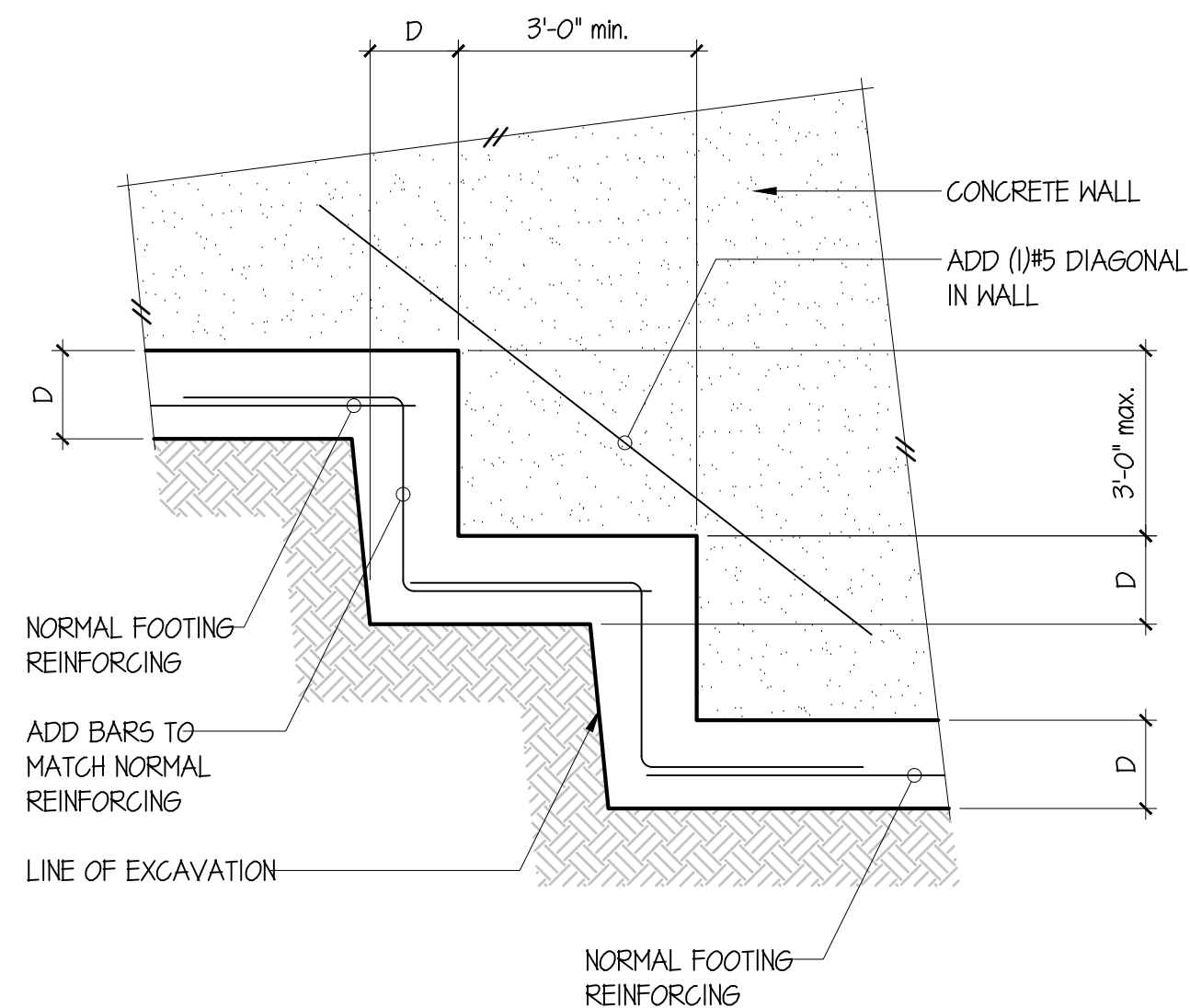
Bar Size	Length
#3	6"
#4	8"
#5	10"
#6	12"
#7	13"
#8	15"
#9	17"
#10	19"
#11	22"

- SIDE COVER MUST BE EQUAL TO OR GREATER THAN 2"
- END COVER FOR 90° HOOKS MUST BE EQUAL TO OR GREATER THAN 2"

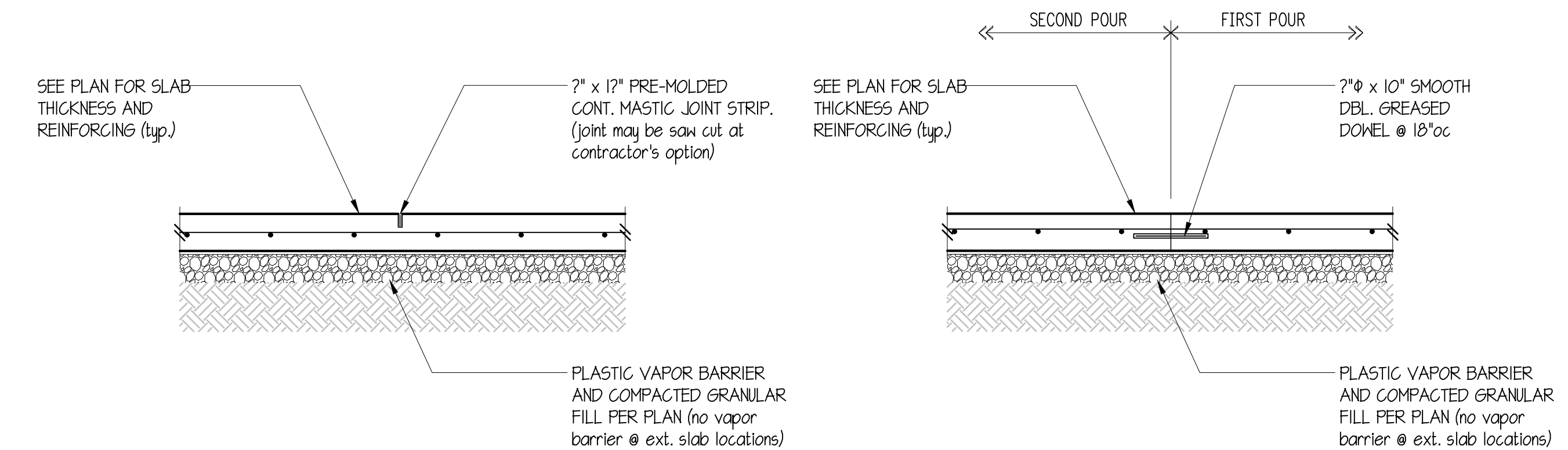
10 REINFORCING SPLICE LENGTH & DEVELOPMENT LENGTH (3000 PSI)
SCALE: 3/4" = 1'-0"



8 TYPICAL CORNER BARS AT CONCRETE WALLS AND FOOTINGS
SCALE: 3/4" = 1'-0"

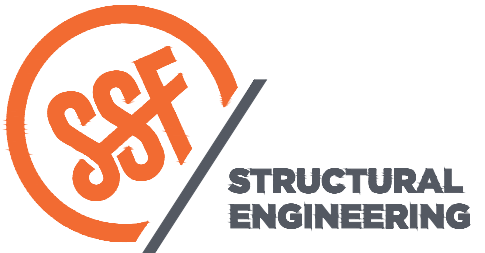
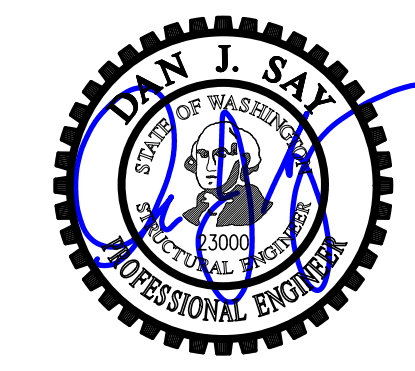


9 TYPICAL STEPPED FOOTING
SCALE: 3/4" = 1'-0"



12 TYPICAL SLAB JOINTS
SCALE: 3/4" = 1'-0"

PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 250 SQUARE FEET OR LESS. AREAS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.



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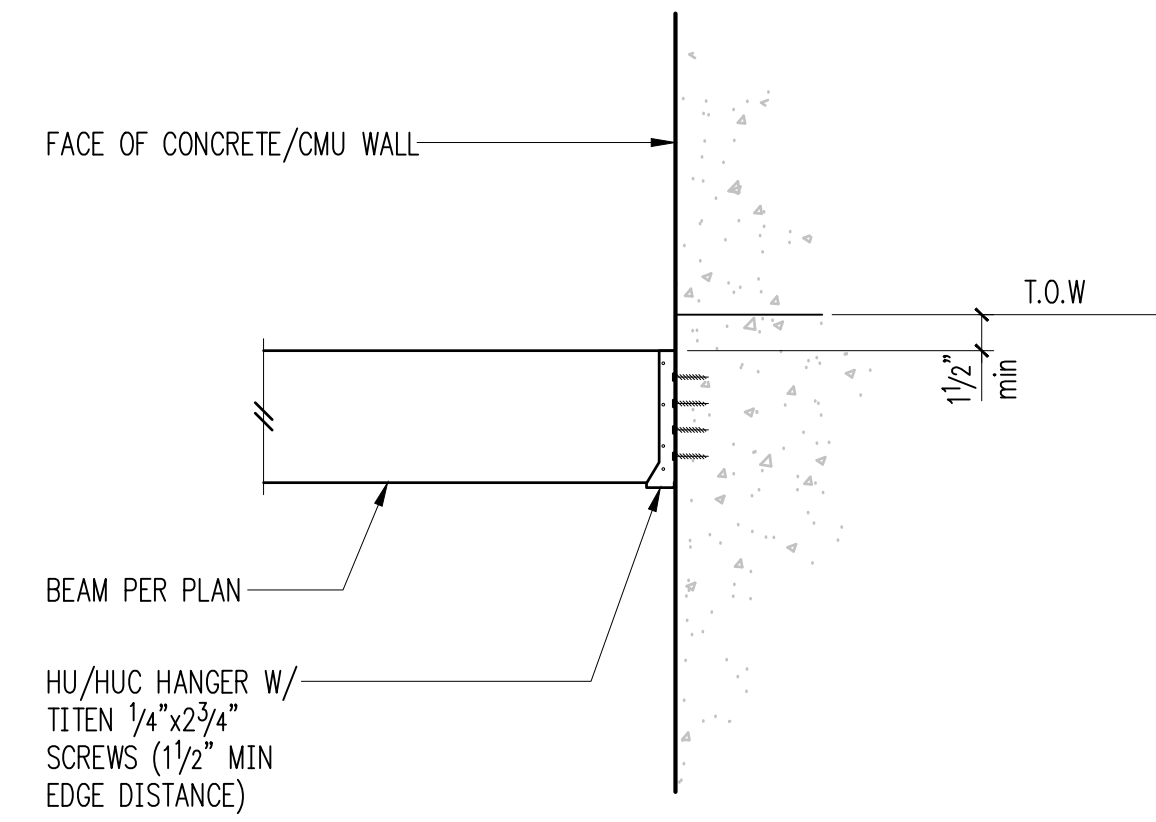
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CONCRETE STRUCTURAL DETAILS

Scale: **SCALE VARIES**
20-05

Date: 06/30/2020

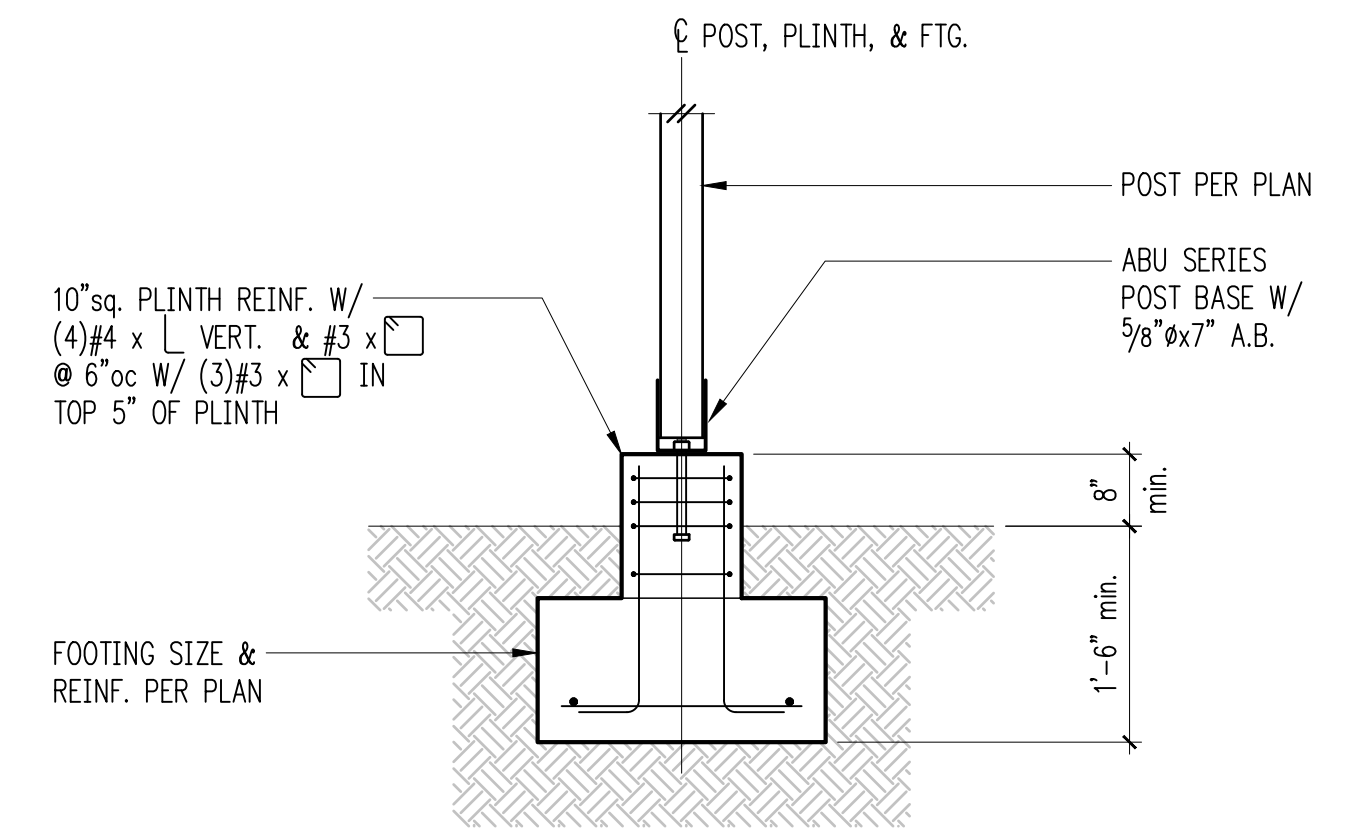
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S3.1



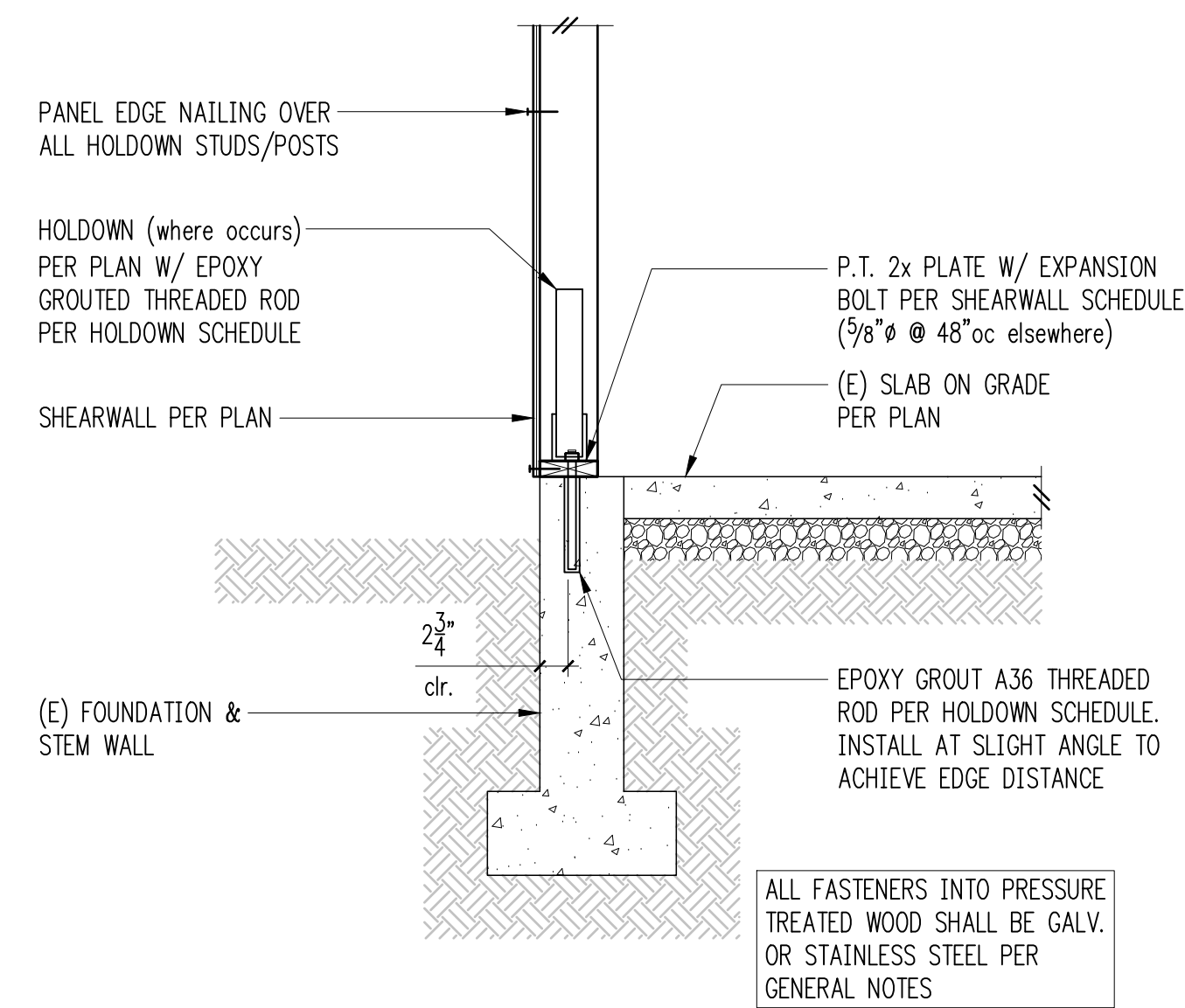
3 HU BEAM CONNECTION TO CONCRETE WALL

SCALE: 3/4" = 1'-0"



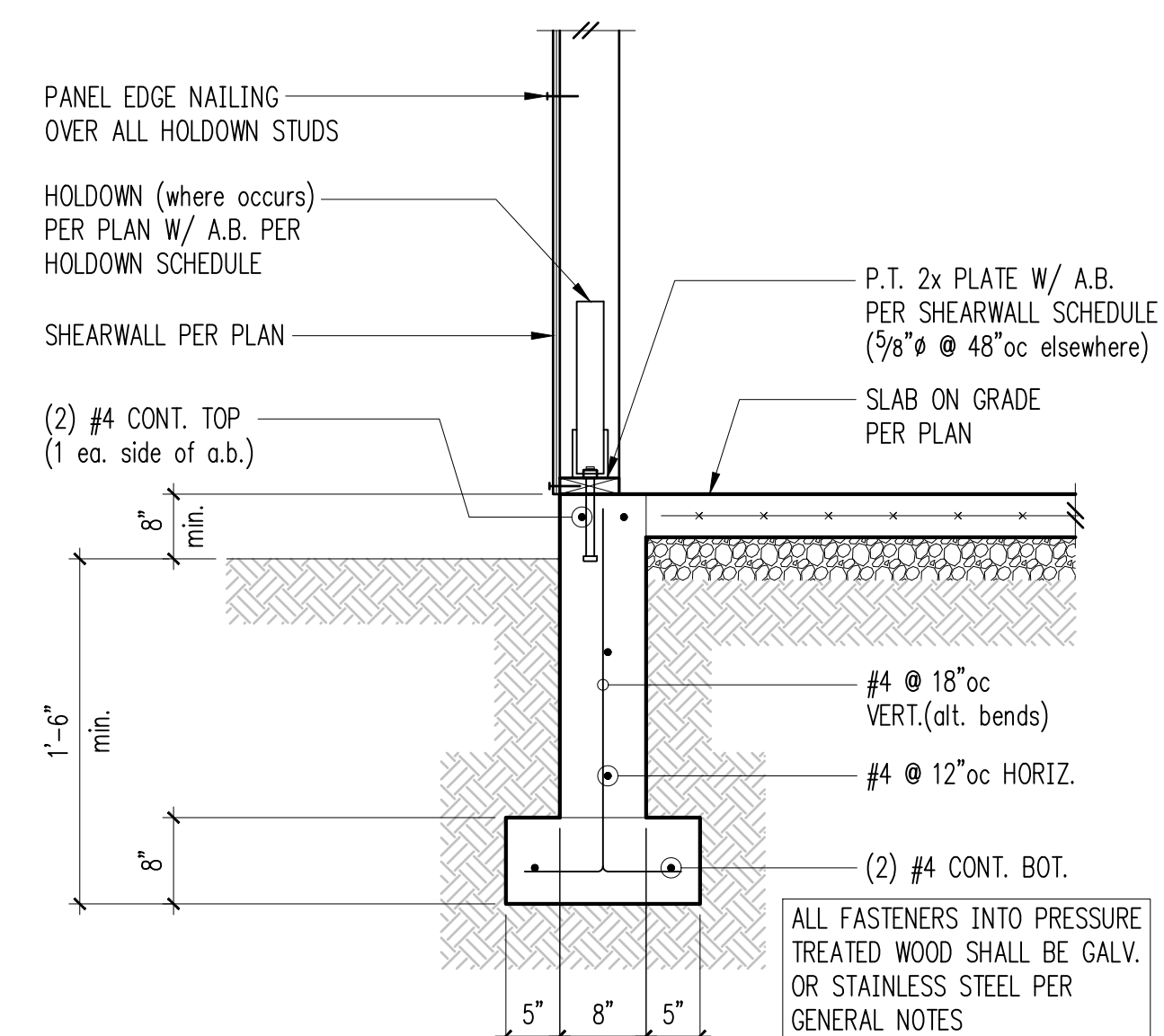
4 DECK OR CANOPY POST FOOTING - SQUARE

SCALE: 3/4" = 1'-0"



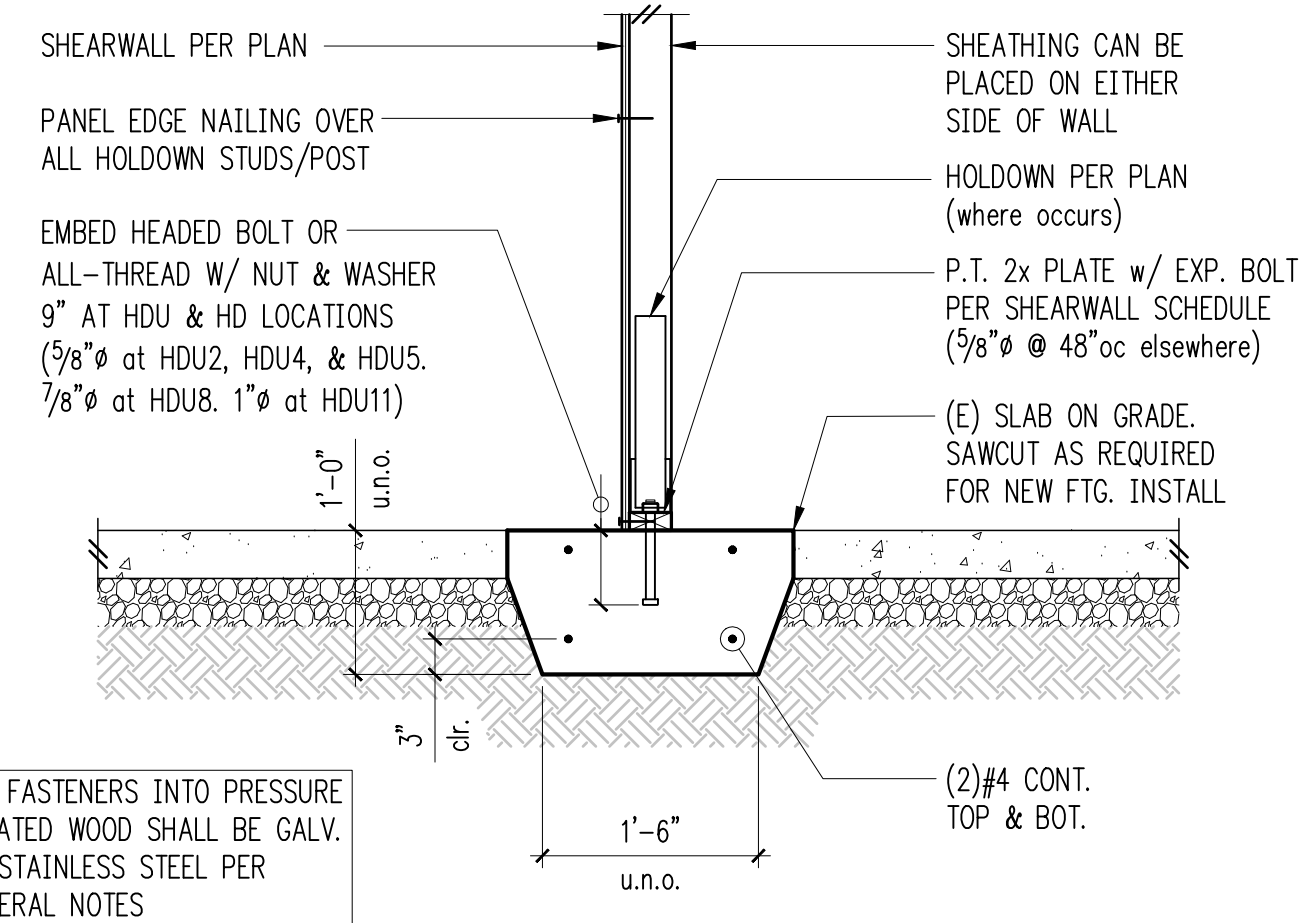
7 NEW EXTERIOR WALL W/ EXISTING SLAB & FOUNDATION

SCALE: 3/4" = 1'-0"



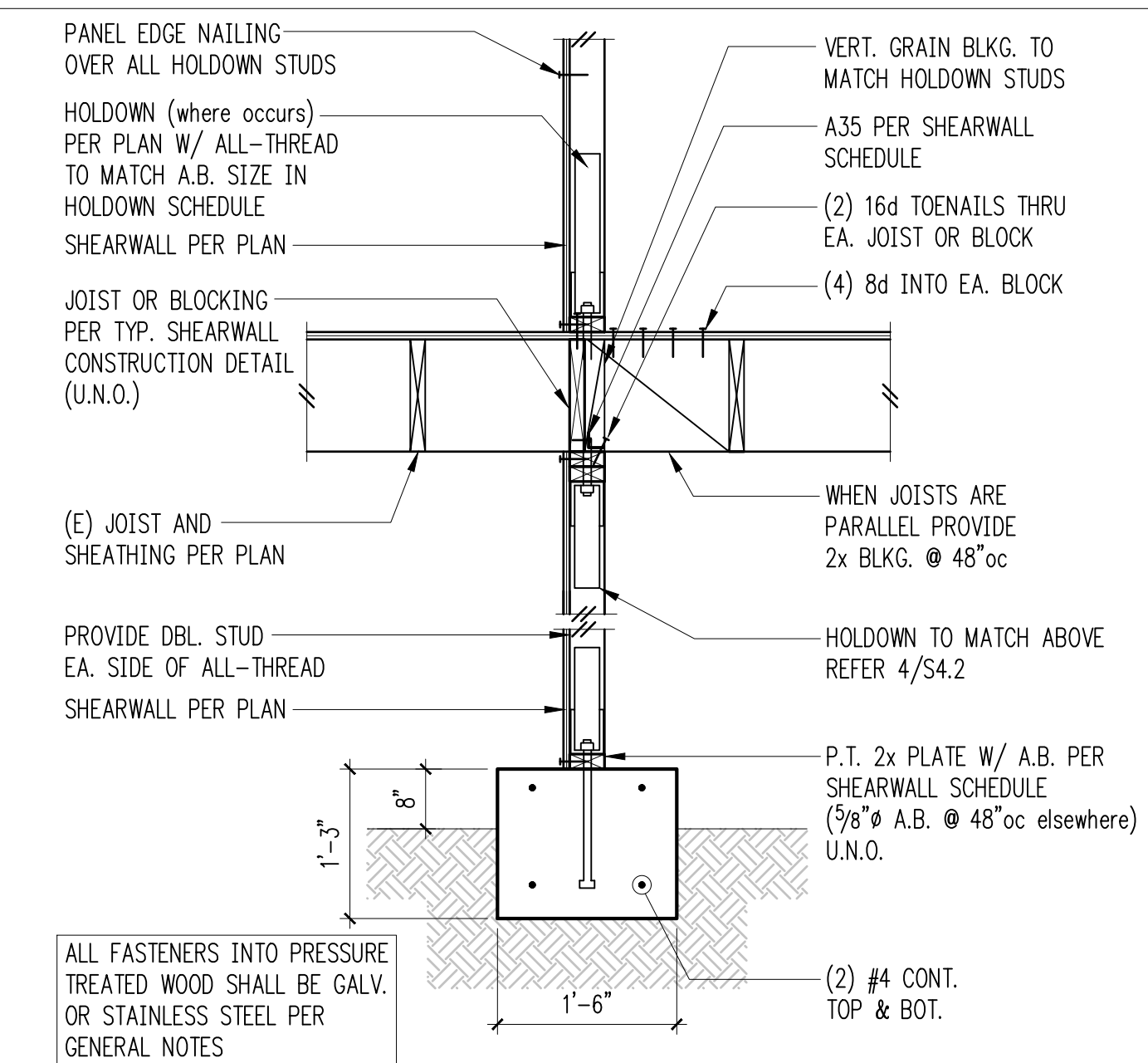
8 EXTERIOR WALL W/ SLAB ON GRADE

SCALE: 3/4" = 1'-0"



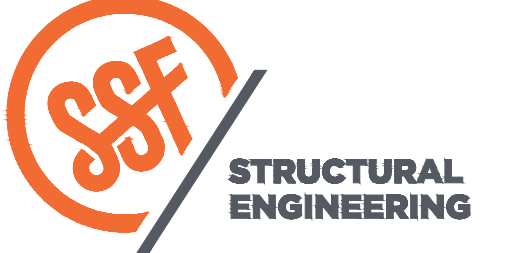
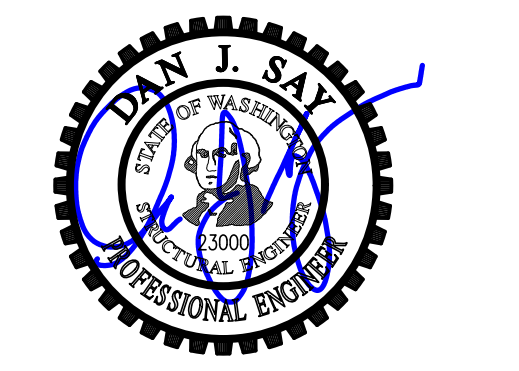
11 NEW INTERIOR WALL & FOUNDATION W/ EXISTING SLAB

SCALE: 3/4" = 1'-0"



12 INTERIOR CRIPPLE WALL AT CRAWL SPACE

SCALE: 3/4" = 1'-0"



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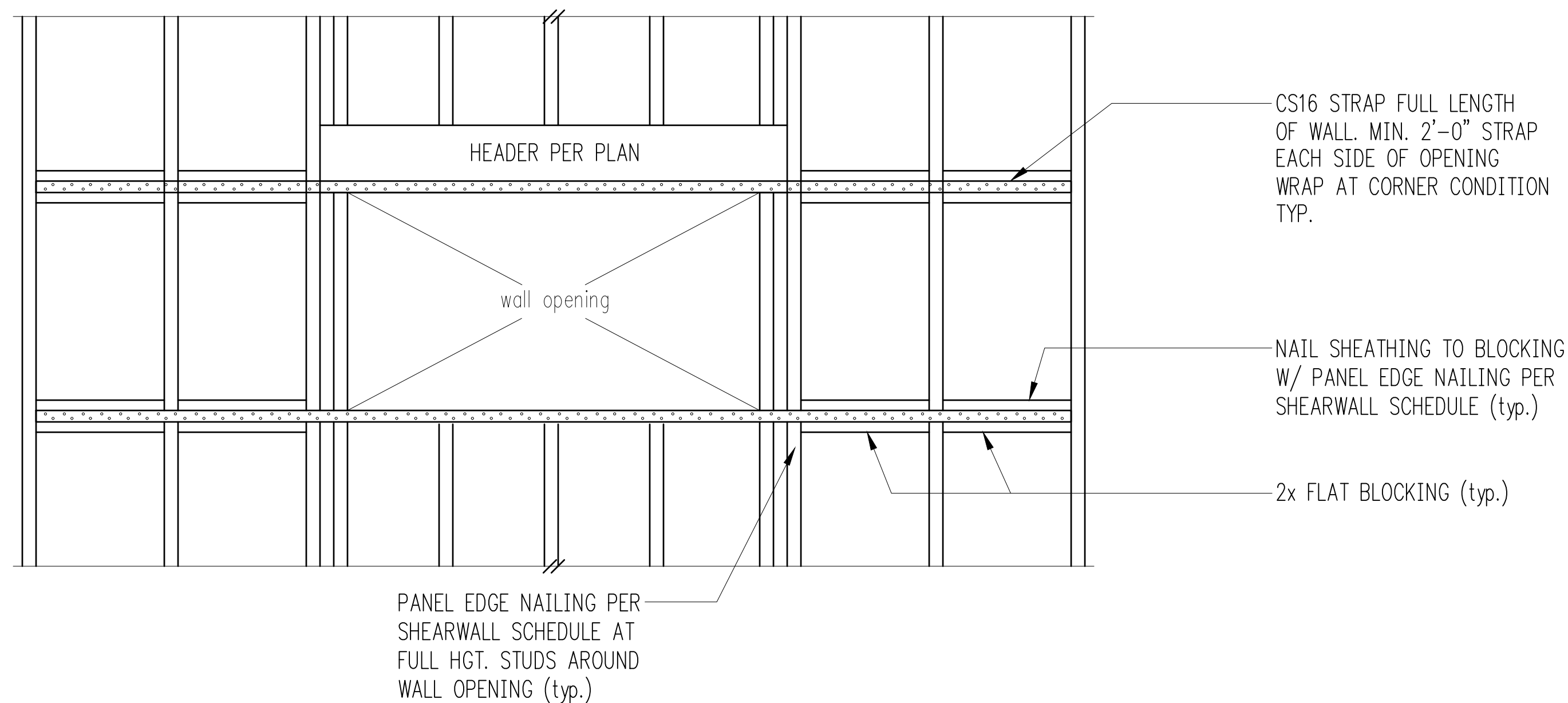
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CONCRETE STRUCTURAL DETAILS

Scale: SCALE VARIES
20-05

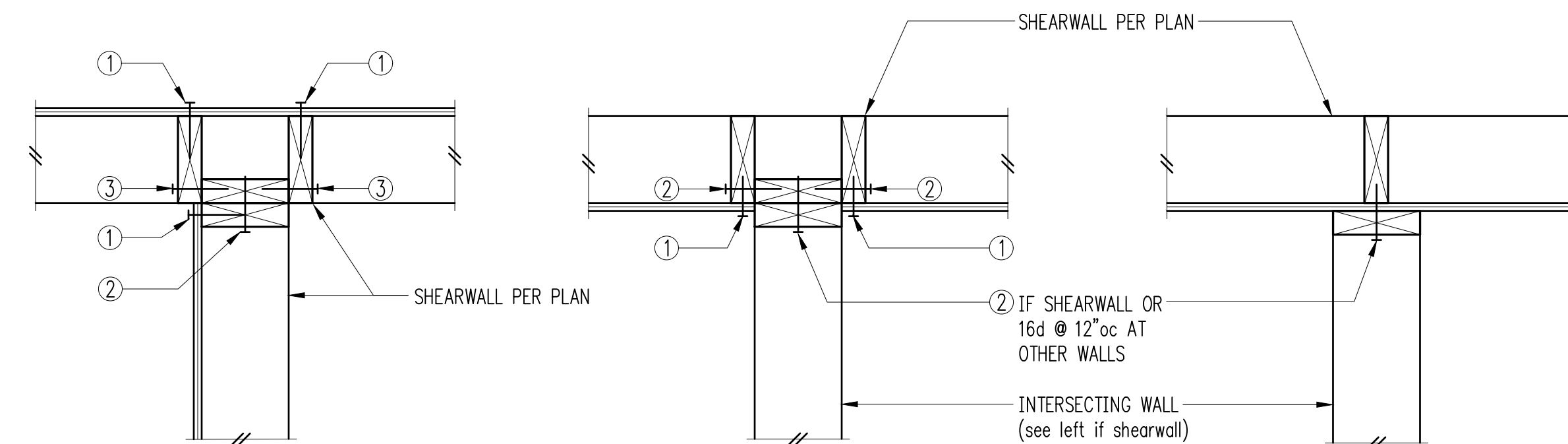
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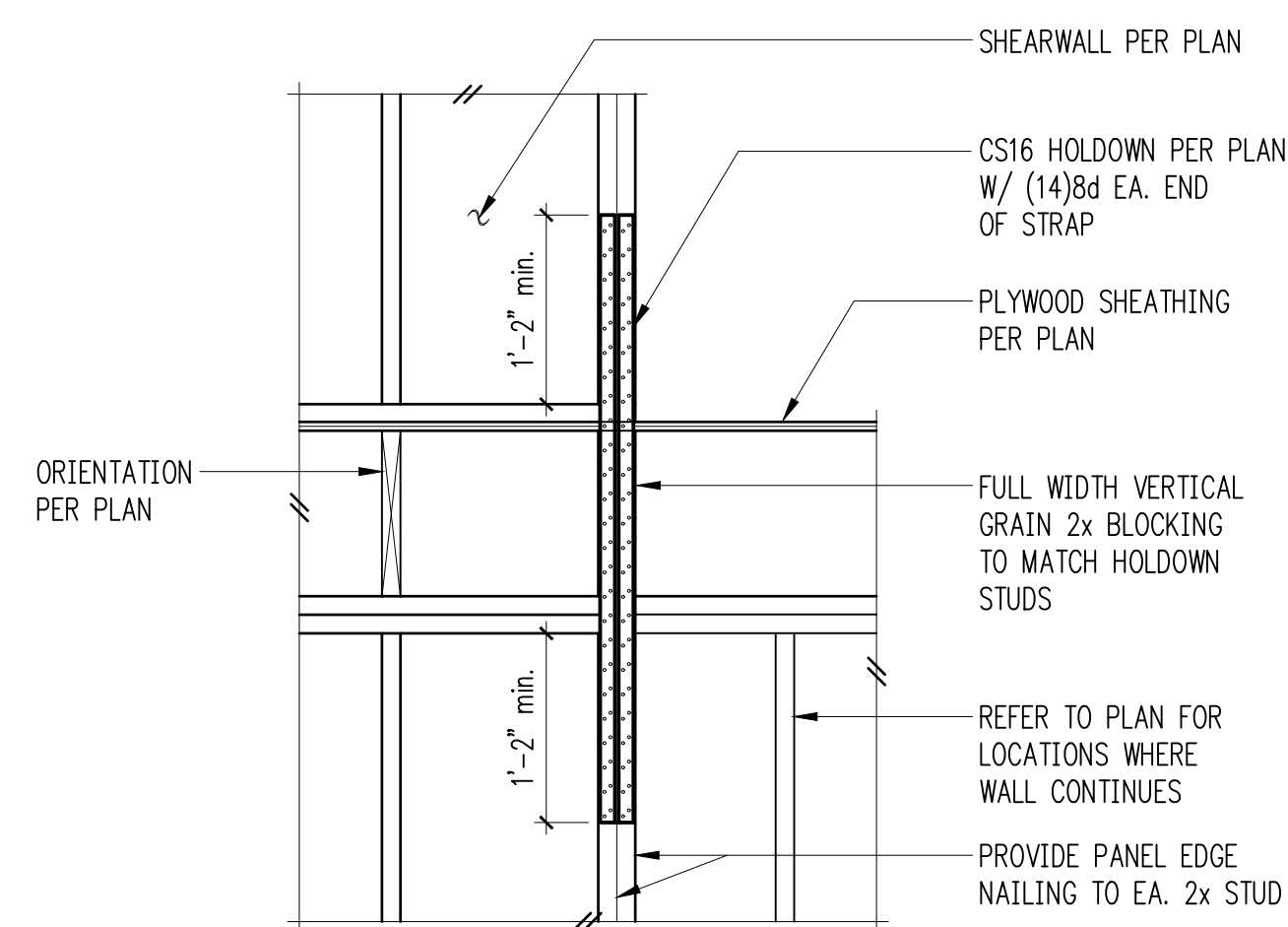
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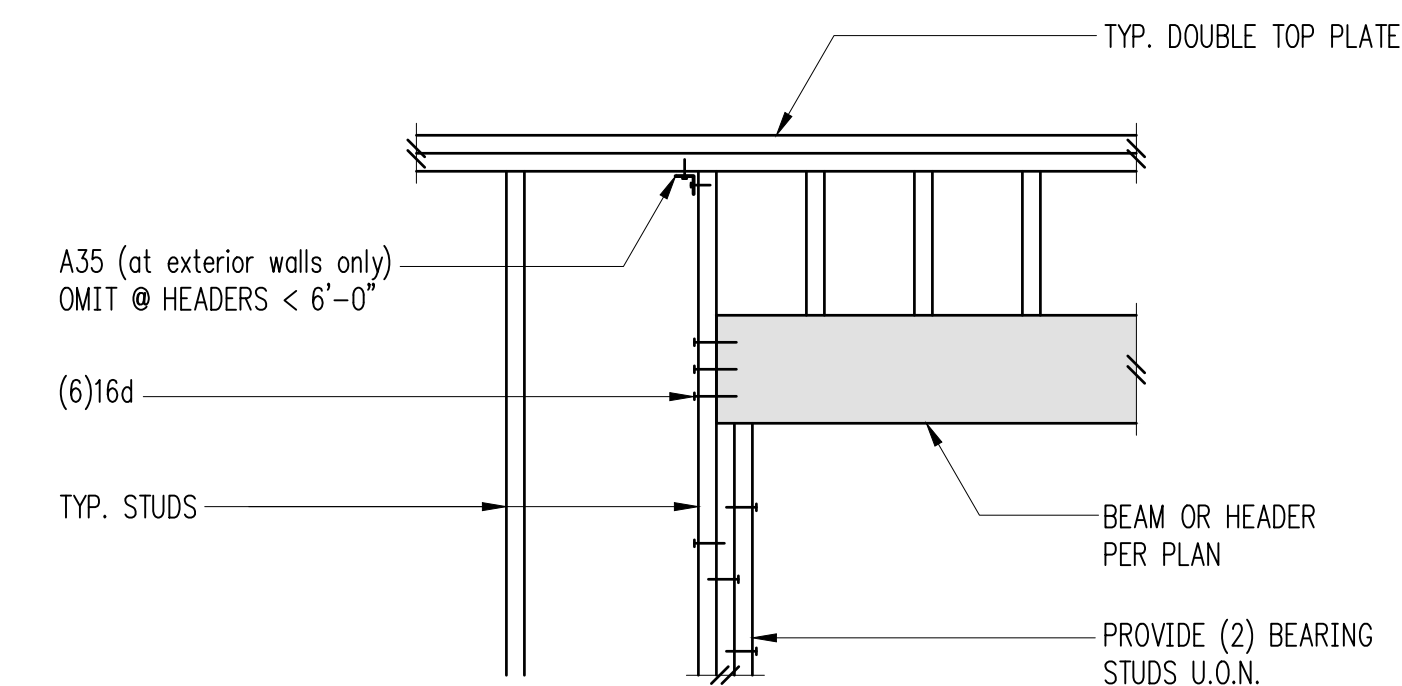
2 CONTINUOUS STRAPS AT WALL OPENING (ABOVE & BELOW)
SCALE: 1" = 1'-0"



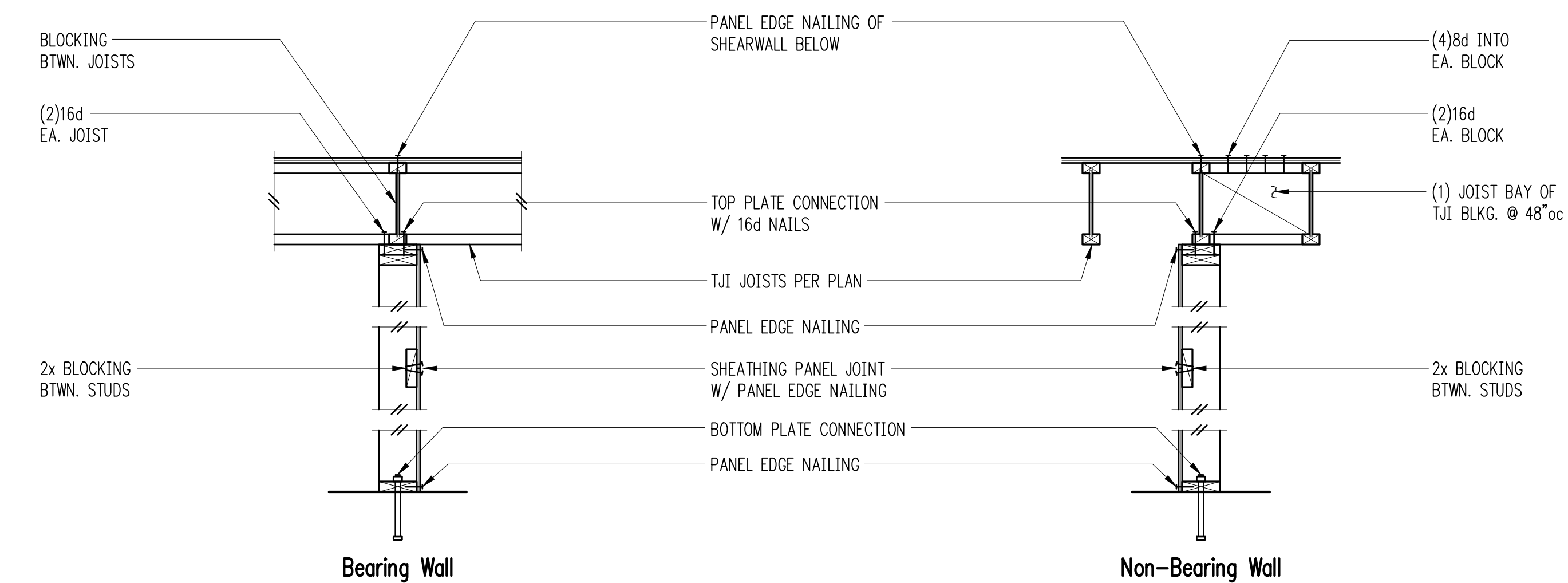
4 TYPICAL SHEARWALL INTERSECTION
SCALE: 3/4" = 1'-0"



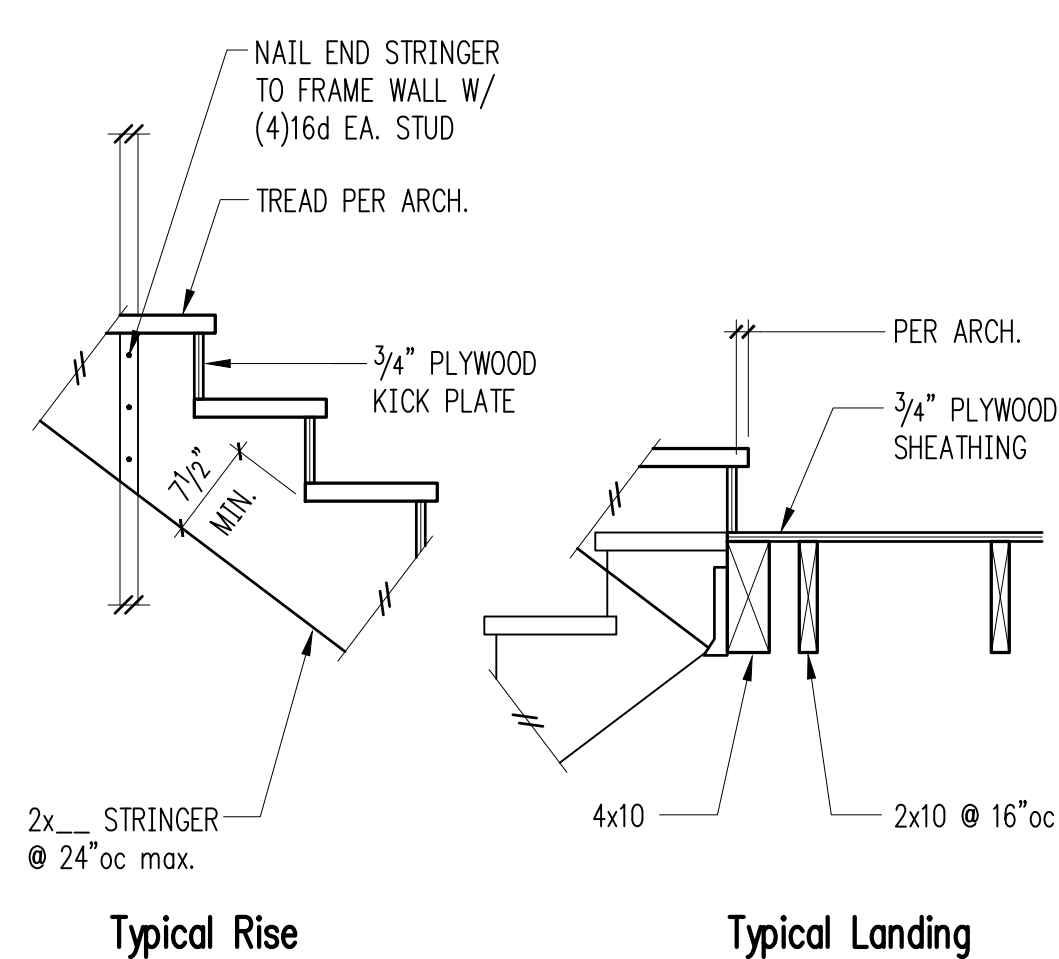
5 TYPICAL CS16 HOLDDOWN
SCALE: 3/4" = 1'-0"



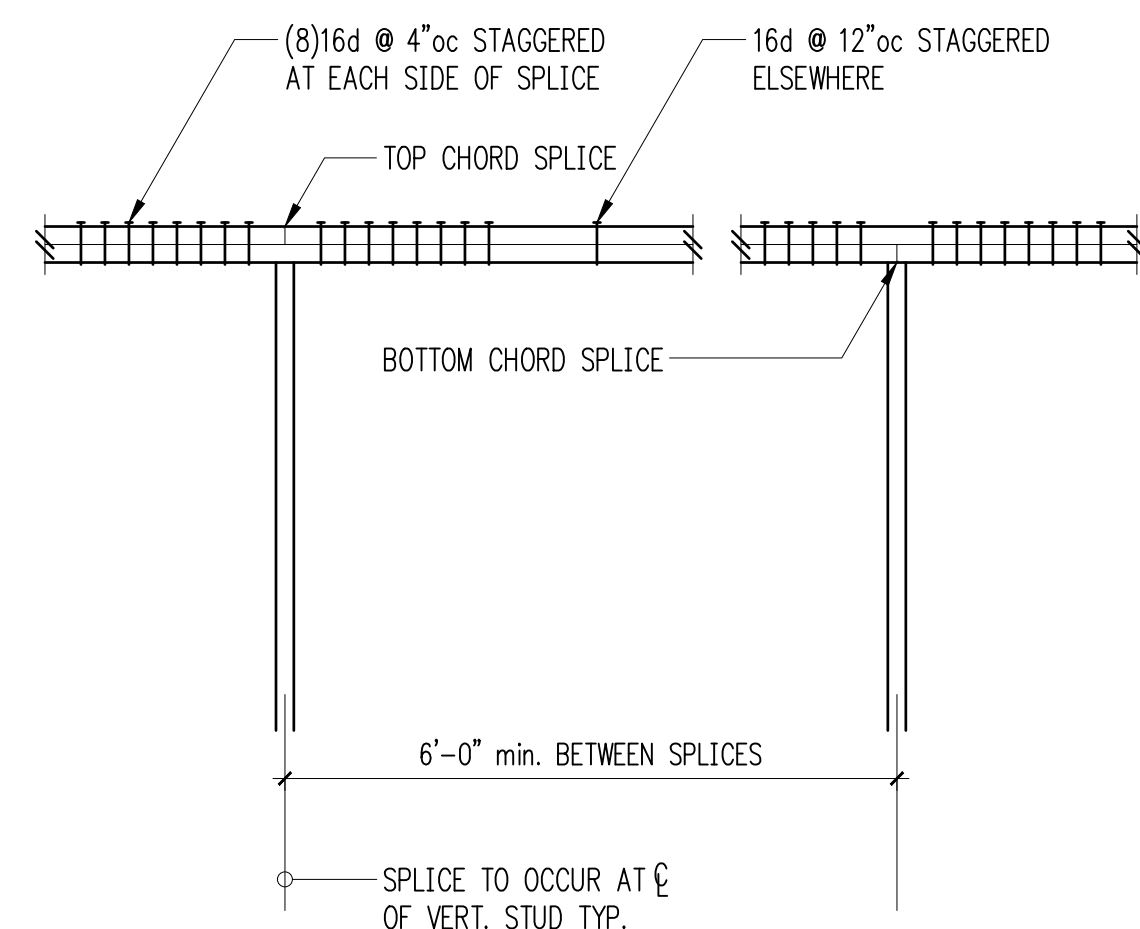
6 TYPICAL HEADER SUPPORT W/ 2 BEARING STUDS
SCALE: 3/4" = 1'-0"



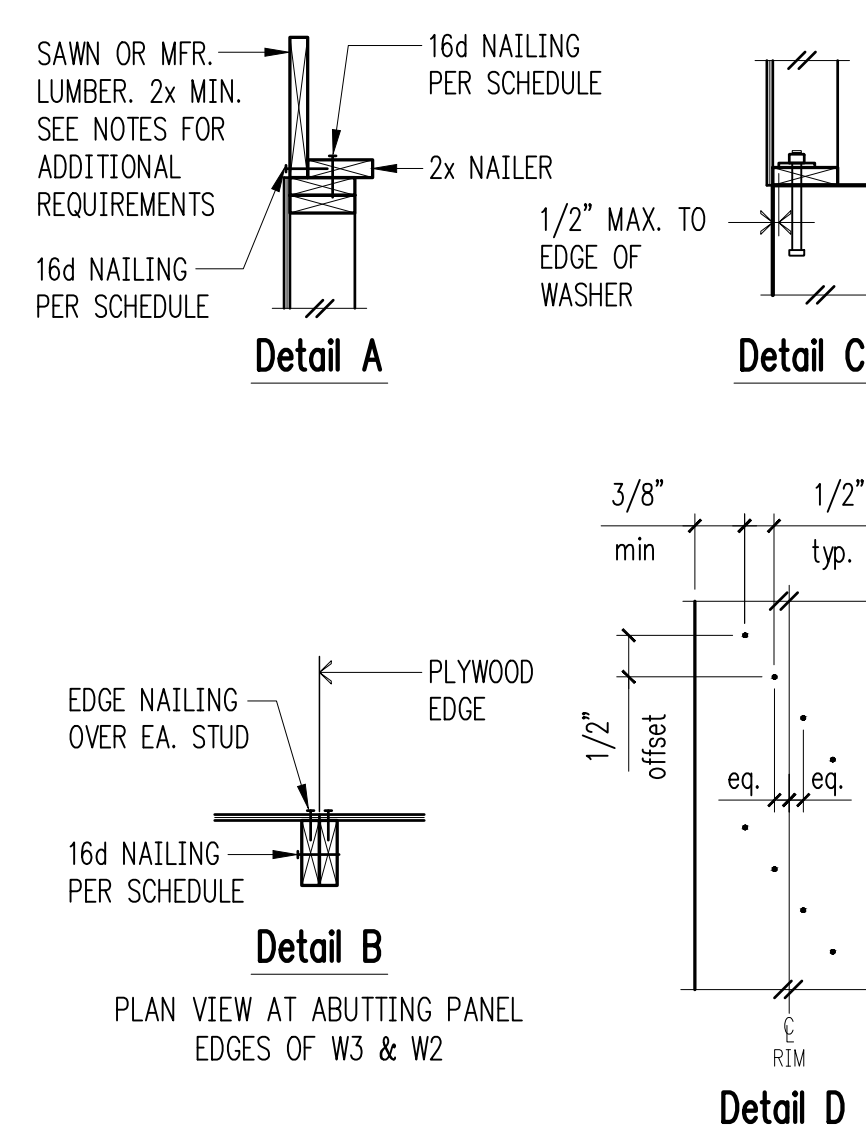
8 TYPICAL SHEARWALL CONSTRUCTION (W/ TJI'S)
SCALE: 3/4" = 1'-0"



9 TYPICAL STAIR AND LANDING DETAIL
SCALE: 3/4" = 1'-0"



10 TYPICAL TOP PLATE SPLICE
SCALE: 3/4" = 1'-0"

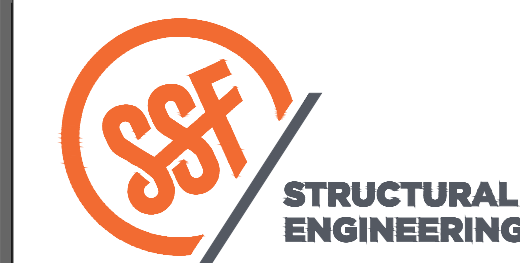
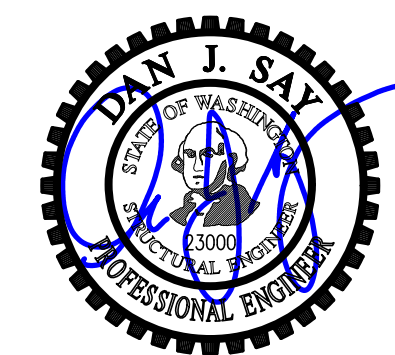


12 SHEARWALL SCHEDULE - (SHEATHING ONE SIDE)
SCALE: 3/4" = 1'-0"

Shearwall Schedule

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection if TJI	Top Plate Connection if Wood	Base Plate Connection at Wood	Base Plate Connection at Concrete
W6	15/32" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc	16d @ 6"oc	5/8" A.B. @ 48"oc
W4	15/32" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc	(2)rows 16d @ 6"oc	5/8" A.B. @ 32"oc
W3	15/32" CDX PLYWOOD	8d @ 3"oc	(2)rows 16d @ 4"oc	A35 @ 12"oc	(2)rows 16d @ 6"oc	5/8" A.B. @ 24"oc
W2	15/32" CDX PLYWOOD	8d @ 2"oc	(2)rows 16d @ 4"oc	A35 @ 9"oc	(2)rows 16d @ 4"oc	5/8" A.B. @ 16"oc

- BLOCK PANEL EDGES WITH 2x MIN. LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"oc.
- 8d NAILS SHALL BE 0.131"Ø x 2 1/2" (common) - 16d NAILS SHALL BE 0.135"Ø x 3 1/2" (box)
- EMBED ANCHOR BOLTS AT LEAST 7". EXPANSION BOLTS MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 4" EMBEDMENT. TITEN HD SCREW ANCHORS MAY BE SUBSTITUTED FOR ANCHOR BOLTS W/ 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" MIN. PLATE WASHERS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. SEE DETAIL C.
- 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF W3 AND W2. SEE DETAIL B. WHERE 3x STUDS ARE USED FOR W2, STAGGER NAILS AT ADJOINING PANEL EDGES.
- TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SHEARWALLS AND ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
- ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
- 7/16" O.S.B. MAY BE SUBSTITUTED FOR 15/32" CDX.
- LTP4's (HORIZONTAL ORIENTATION) W/ 8d COMMON MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- AT MULTI-ROW NAILING, MINIMUM OFFSET BETWEEN ROWS AND ROW SPACING 1/2", SEE DETAIL D.
- PROVIDE (3) ROWS 16d @ 6"oc AT LVL RIMS.



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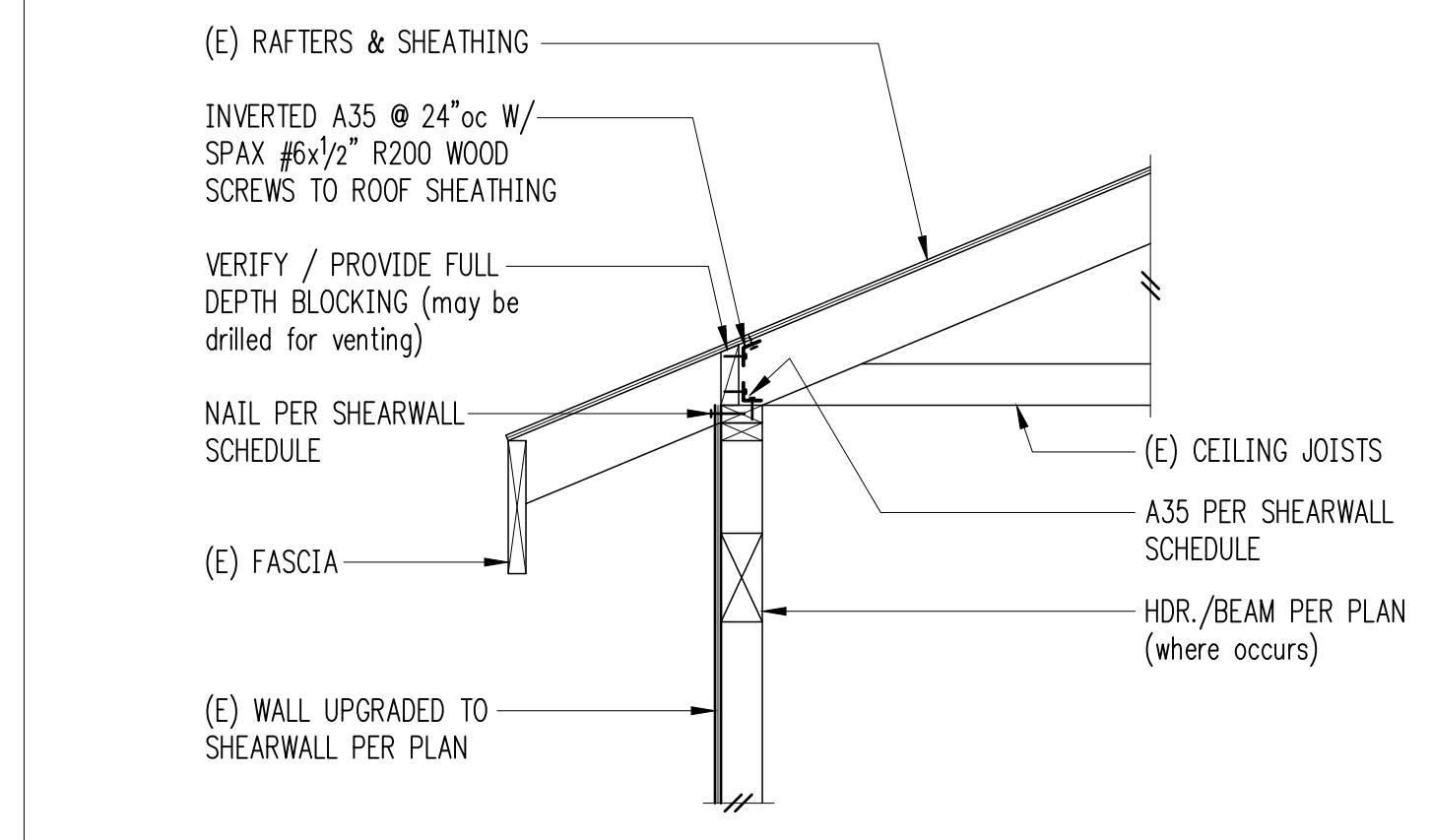
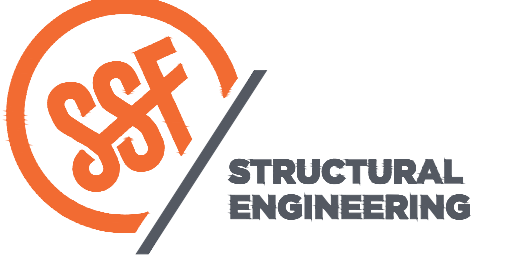
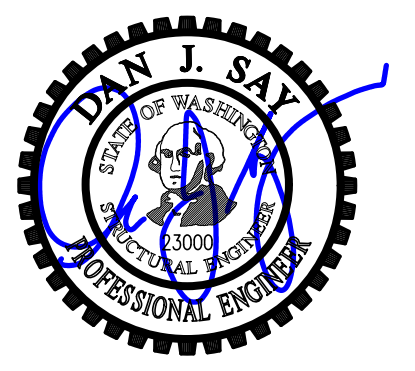
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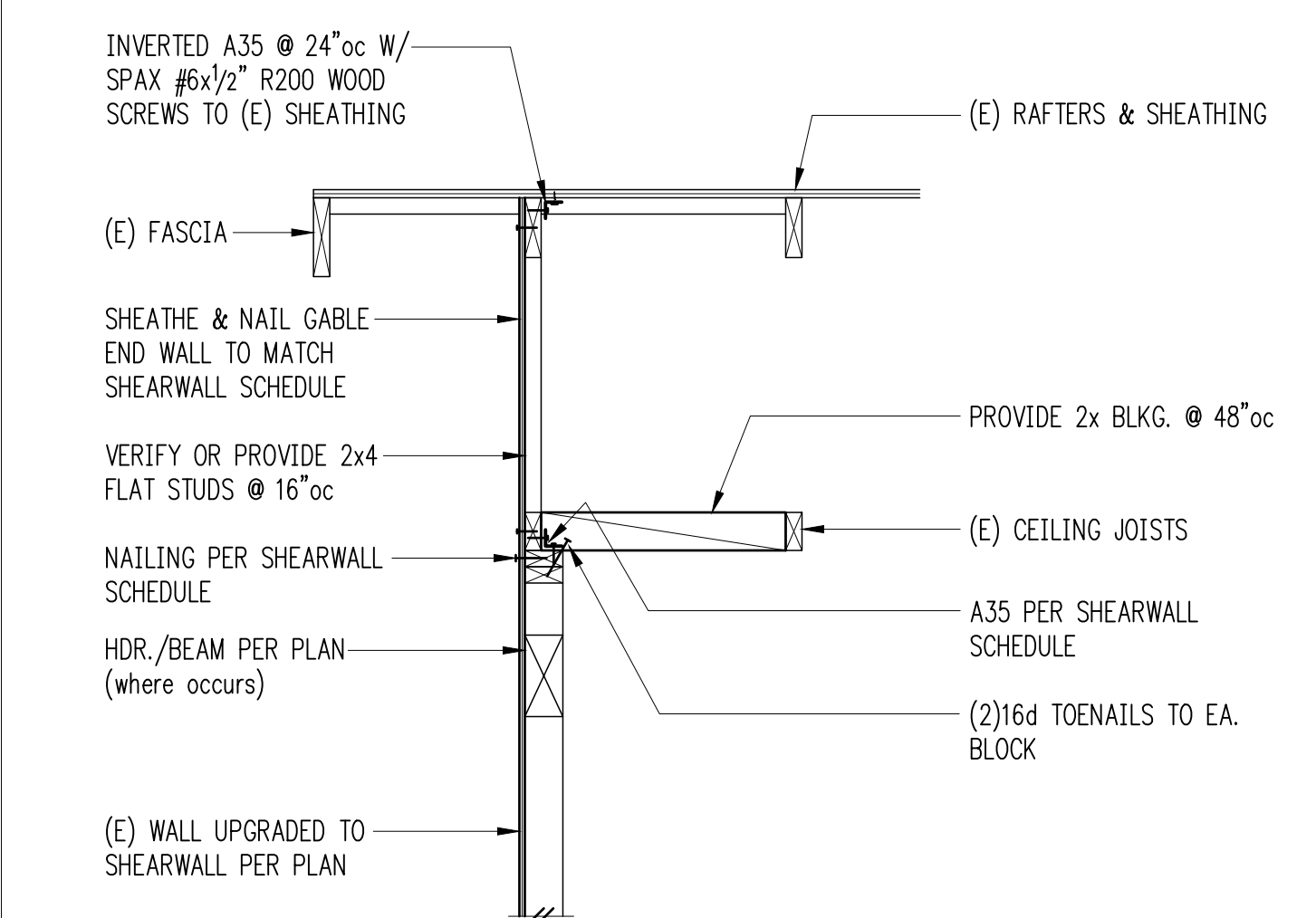
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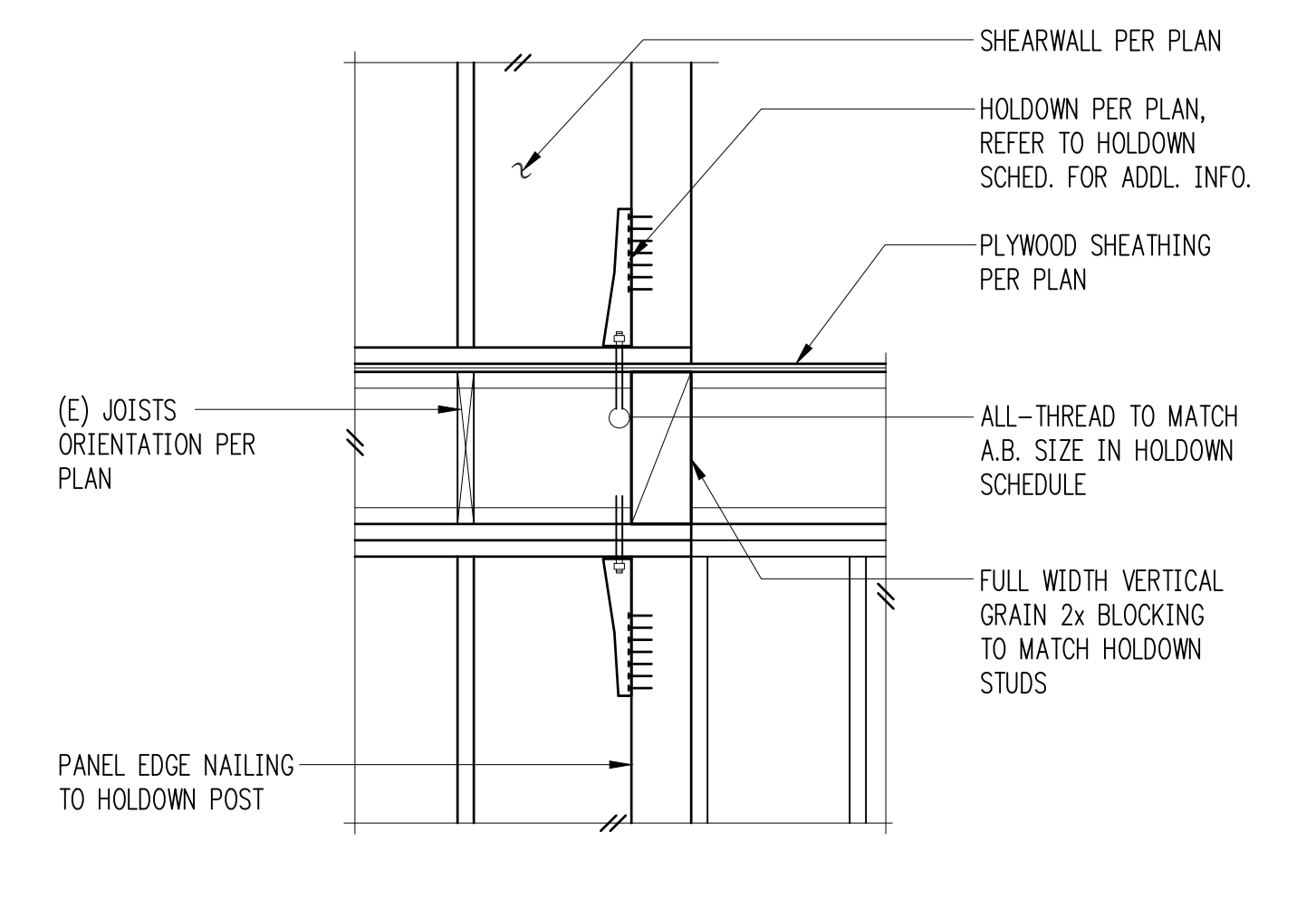
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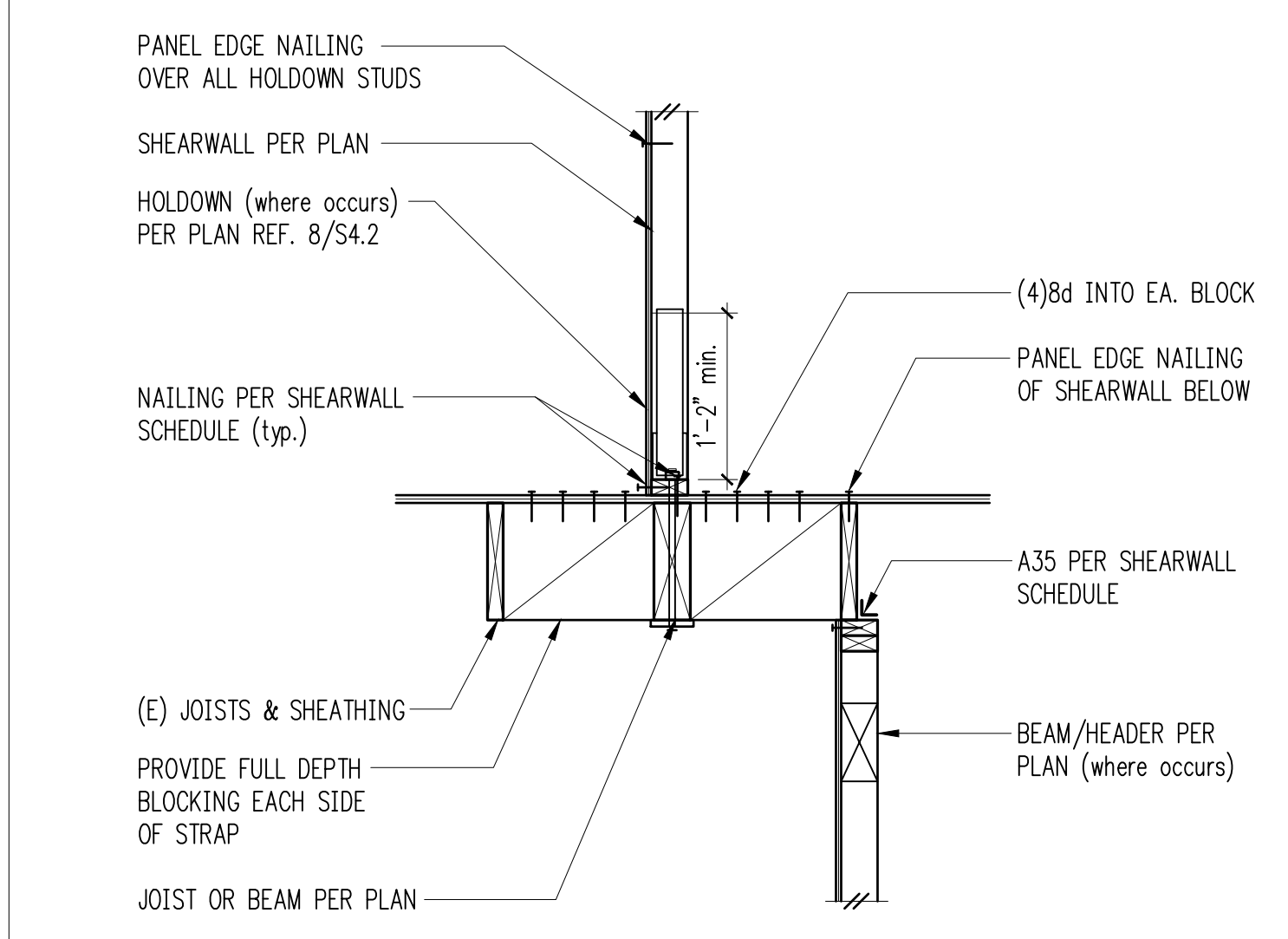
2 EXISTING EXTERIOR ROOF BEARING
SCALE: 3/4" = 1'-0"



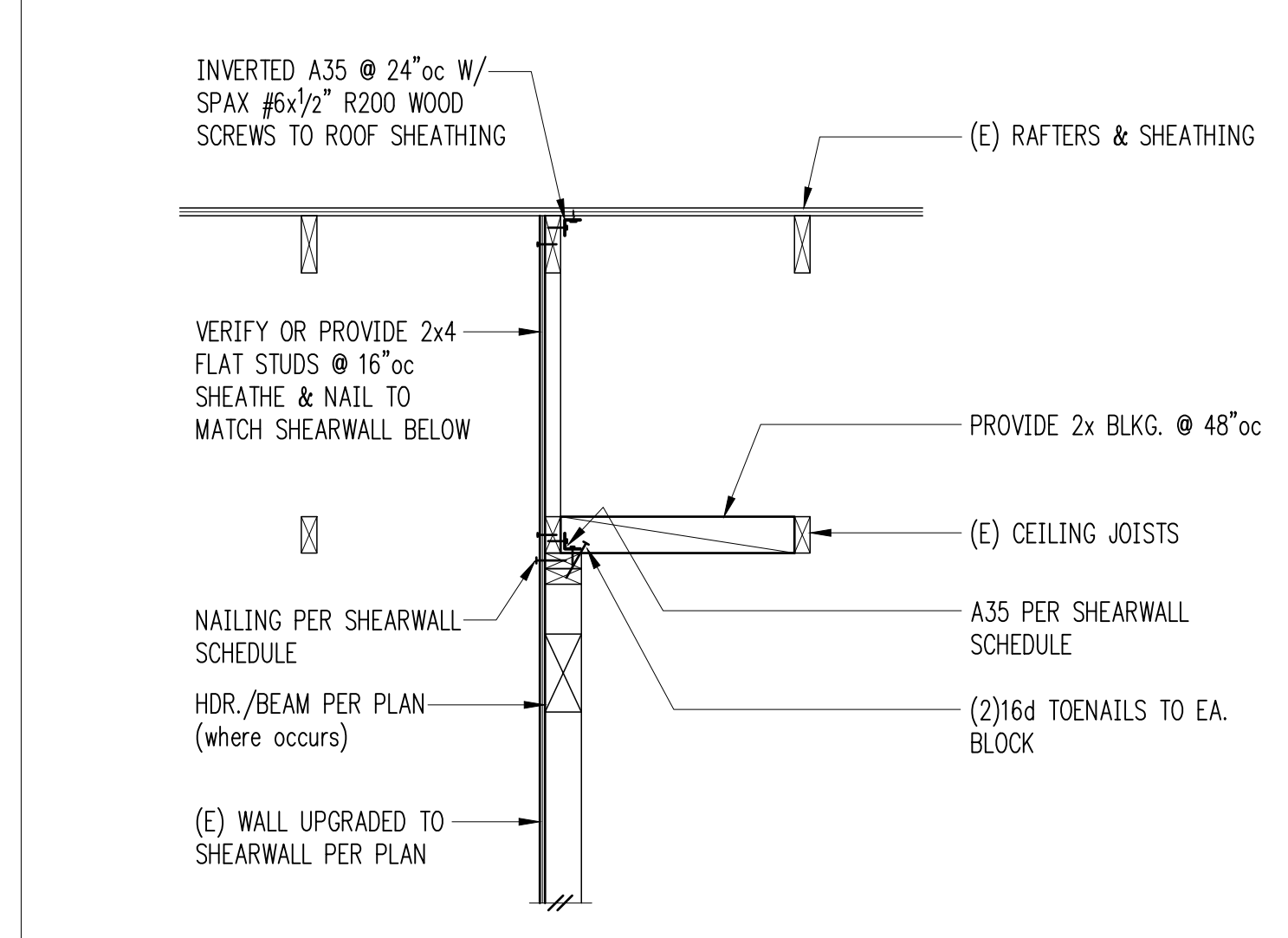
3 EXISTING EXTERIOR ROOF NON-BEARING
SCALE: 3/4" = 1'-0"



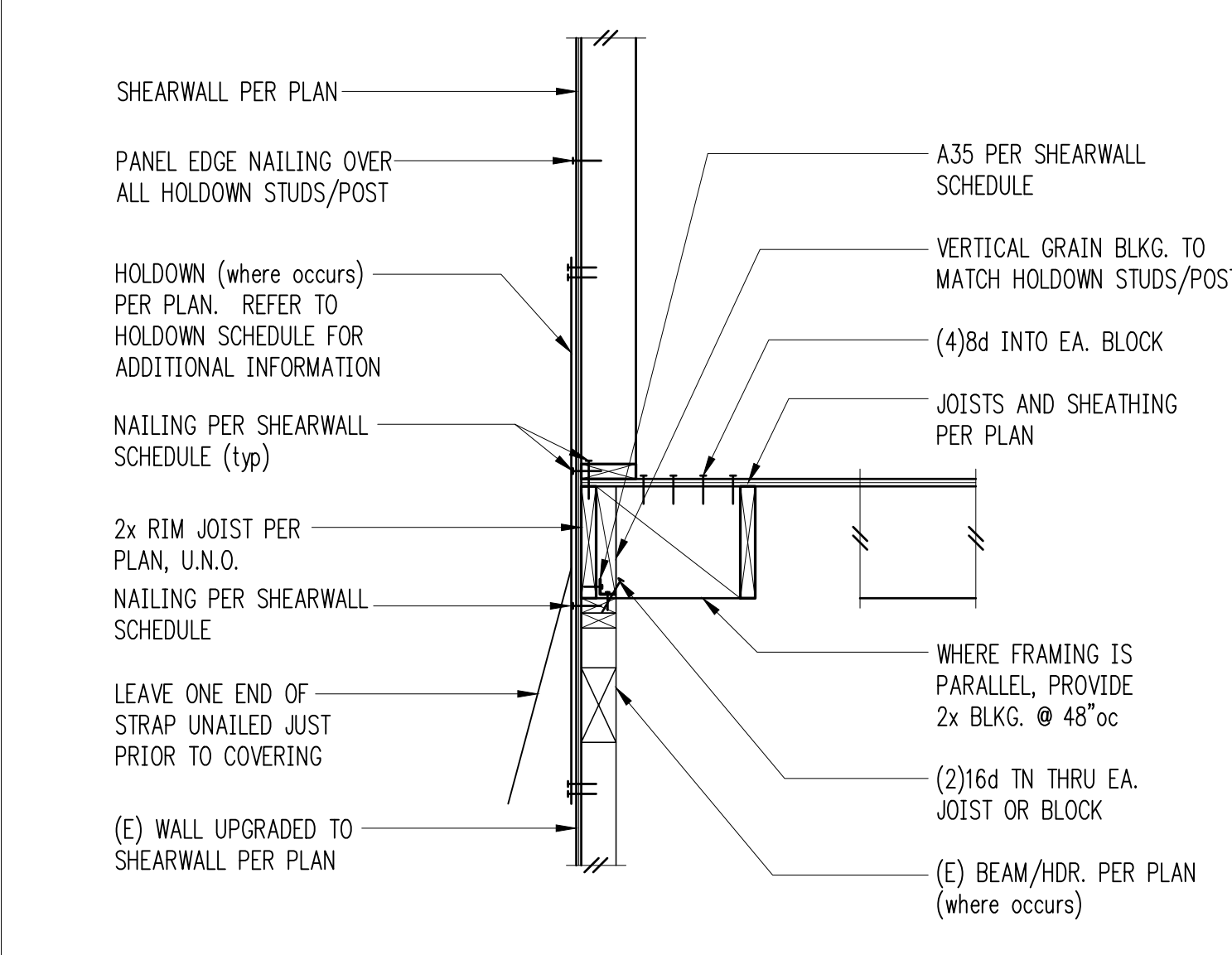
4 TYPICAL HDU HOLDOWNS
SCALE: 3/4" = 1'-0"



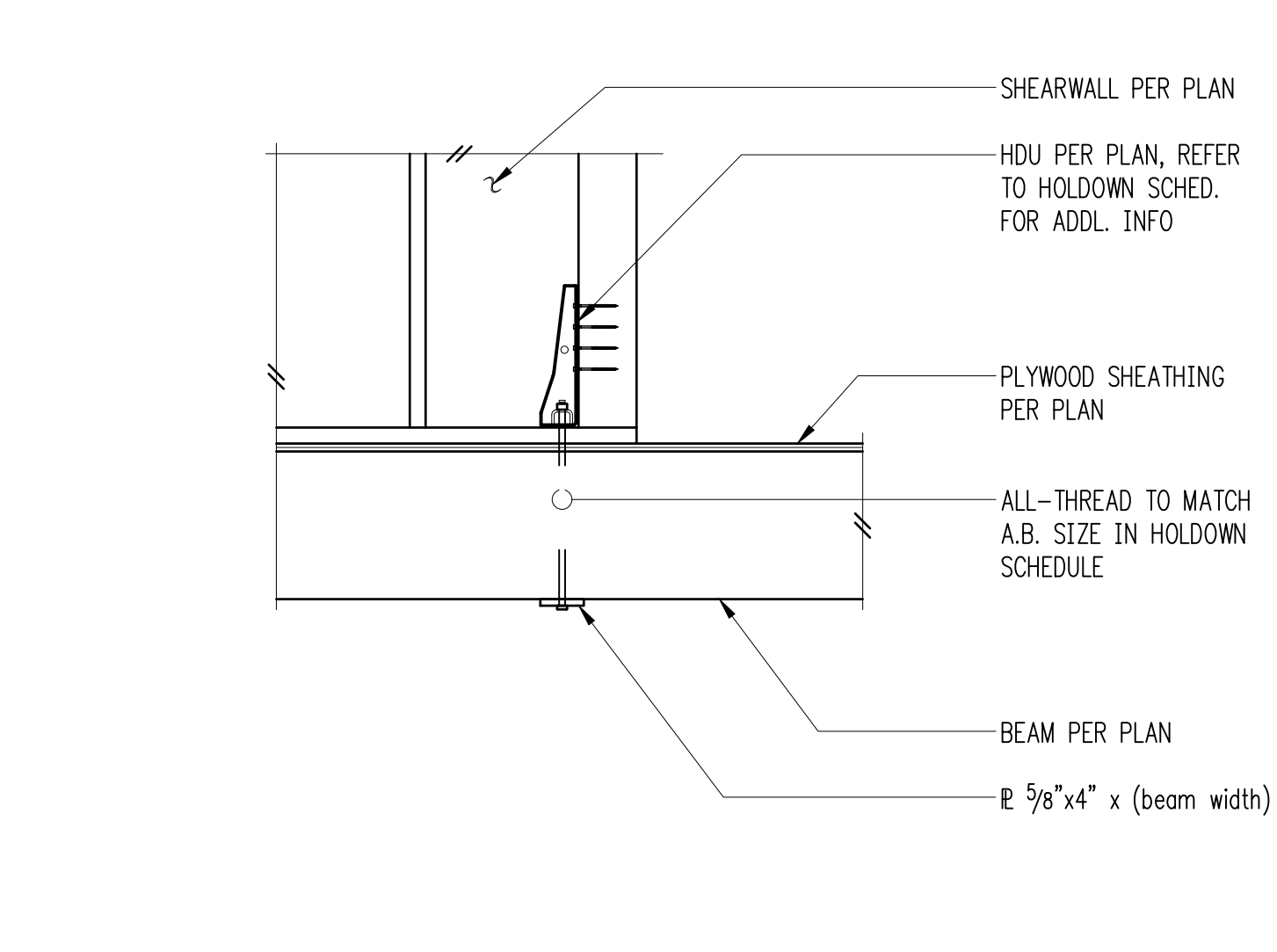
5 OFFSET INTERIOR SHEARWALL
SCALE: 3/4" = 1'-0"



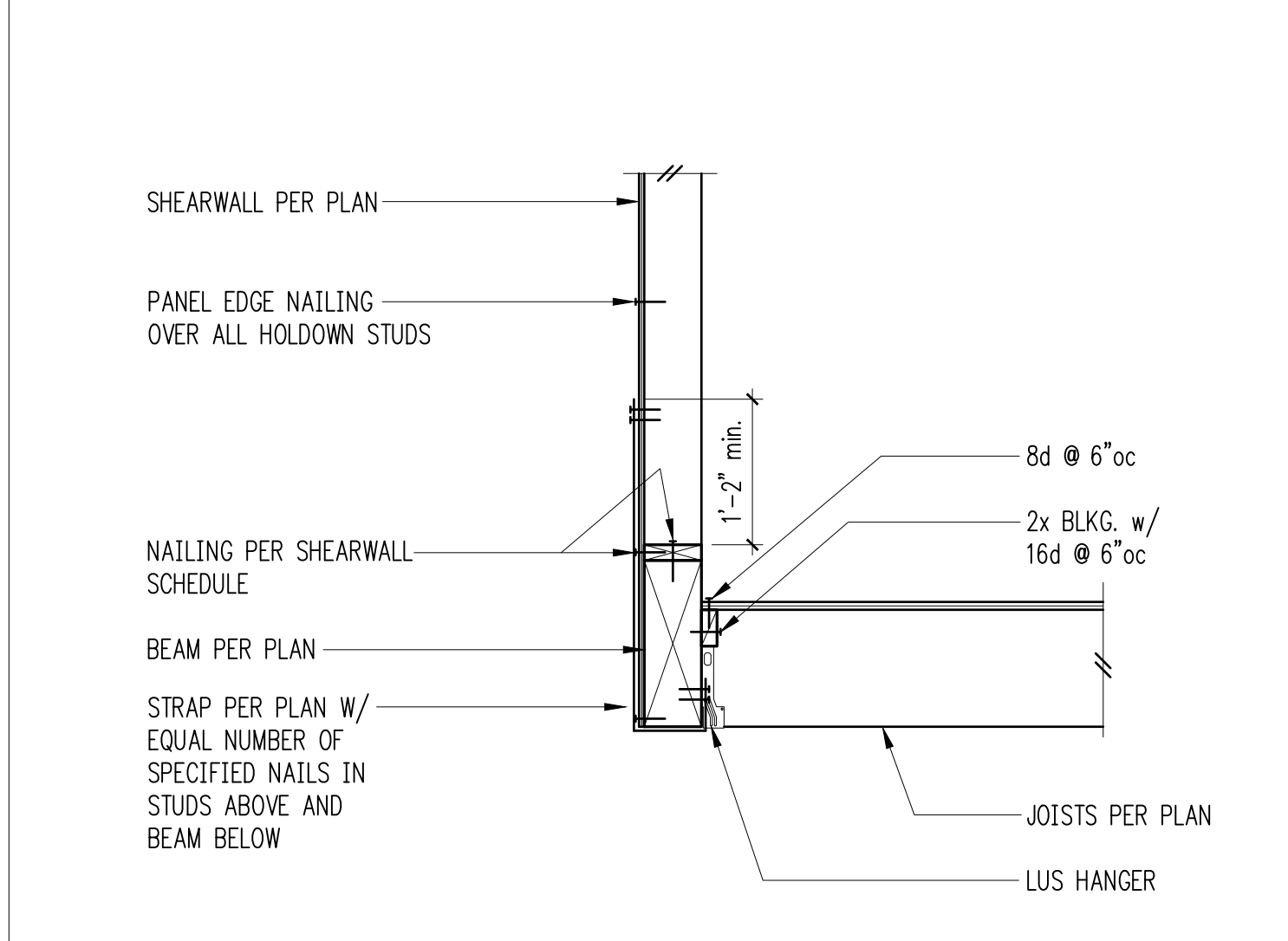
6 INTERIOR SHEAR WALL BELOW EXISTING ROOF FRAMING
SCALE: 3/4" = 1'-0"



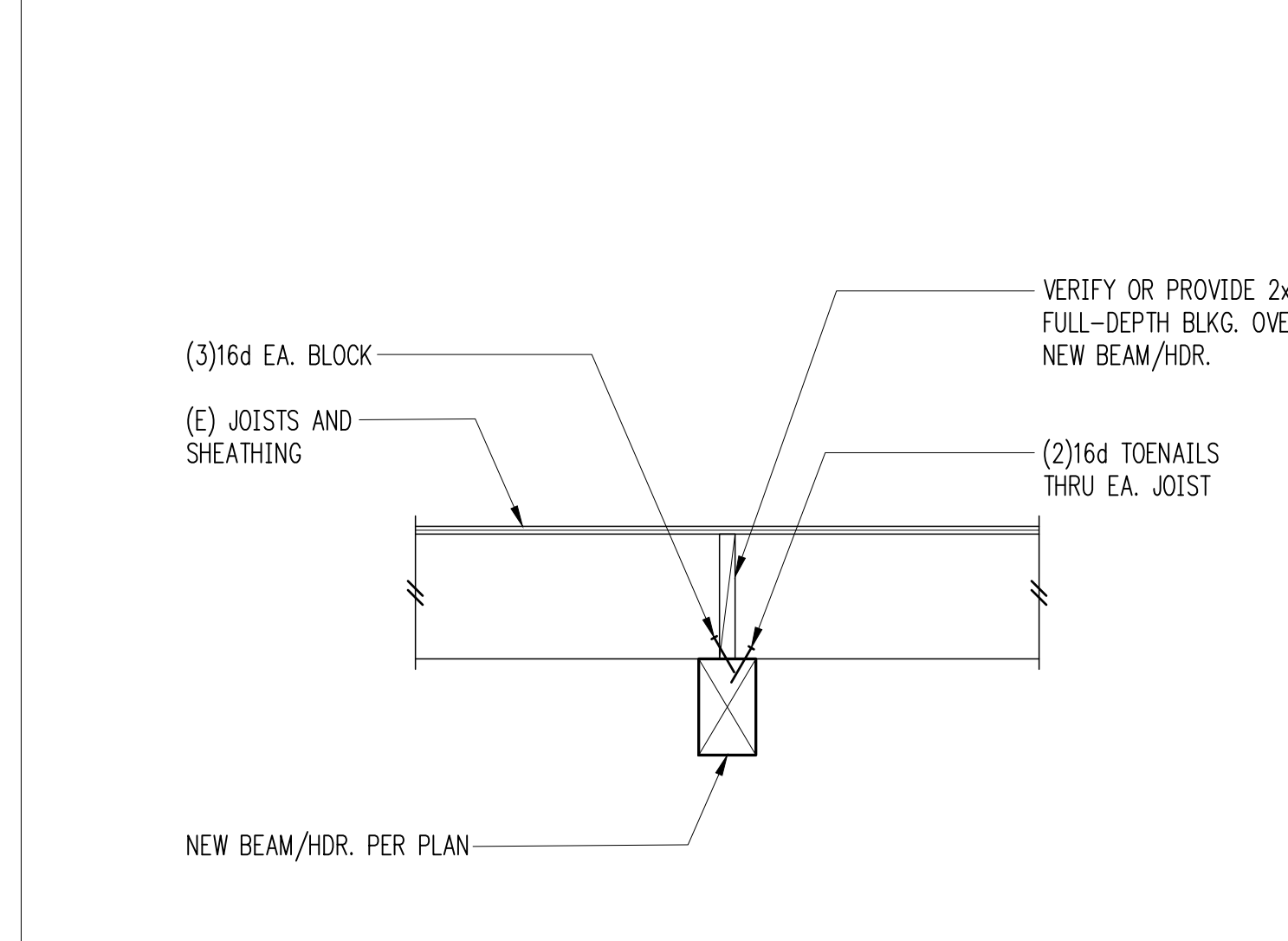
7 EXTERIOR FLOOR FRAMING
SCALE: 3/4" = 1'-0"



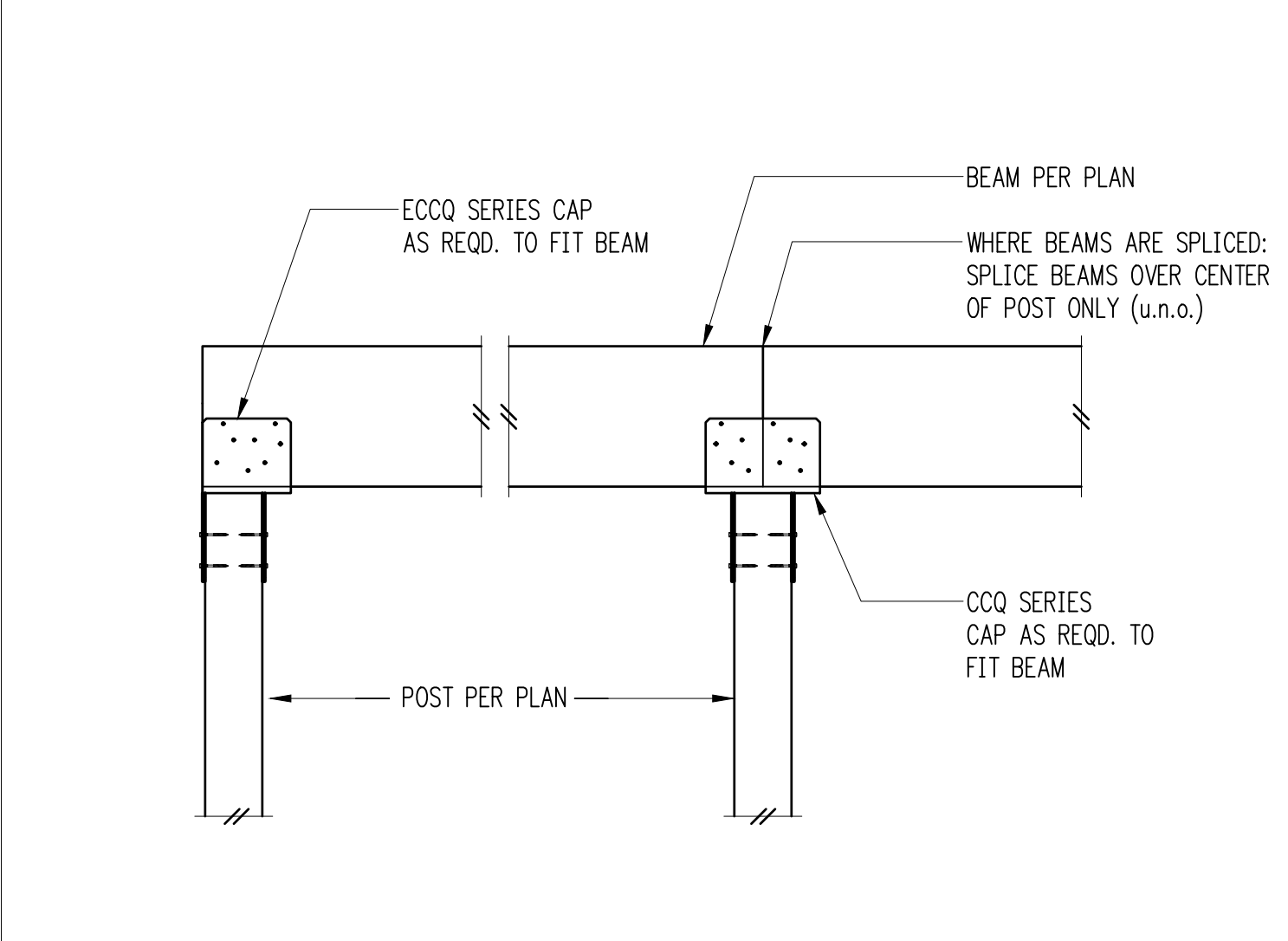
8 HDU AT FLOOR BEAMS
SCALE: 3/4" = 1'-0"



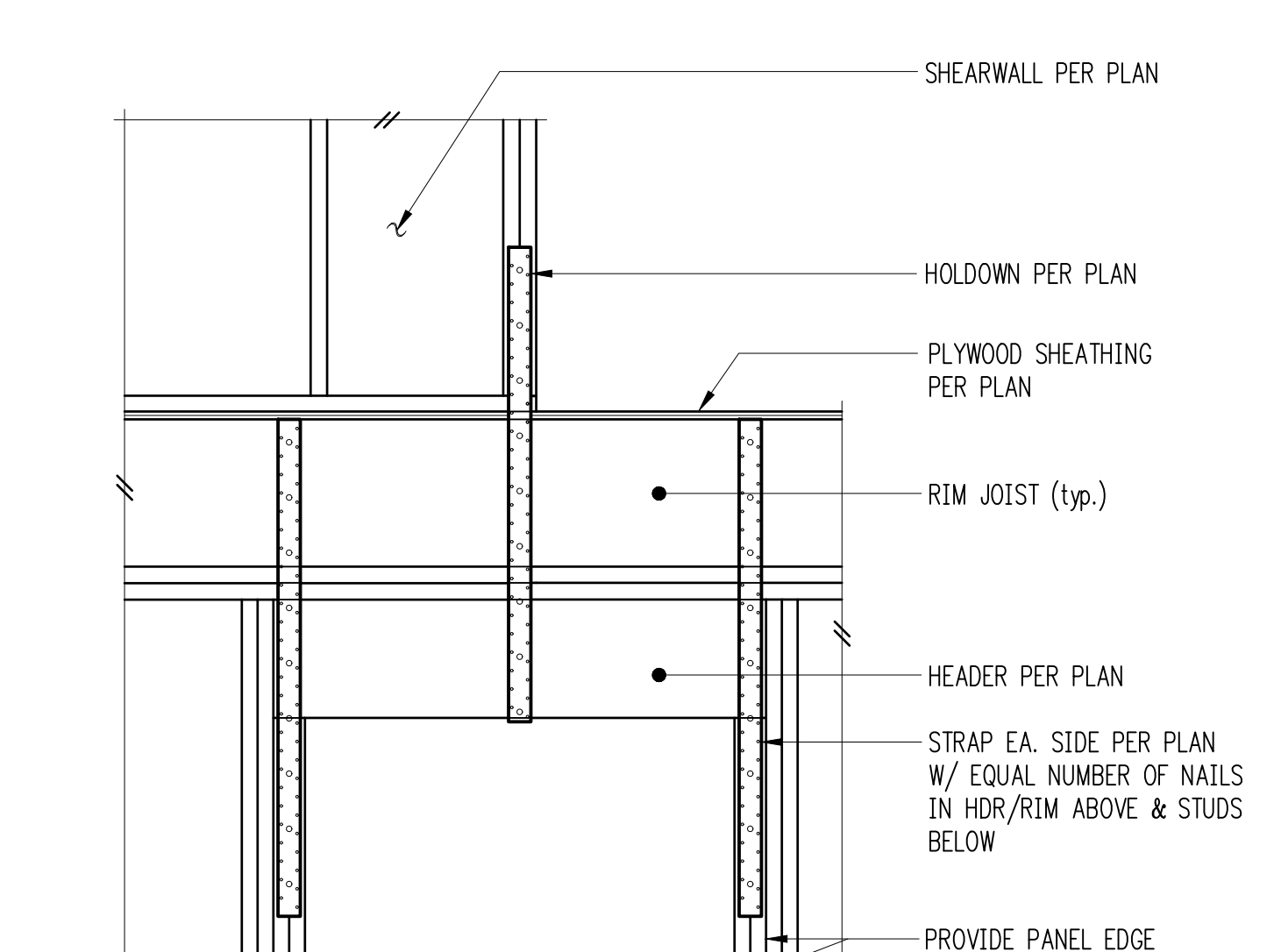
9 EXTERIOR UPTURNED FLOOR BEAM - JOIST PERPENDICULAR
SCALE: 3/4" = 1'-0"



10 NEW TYPICAL HEADER BEAM W/ EXISTING JOISTS
SCALE: 3/4" = 1'-0"



11 CC/CCQ SERIES CONNECTION
SCALE: 3/4" = 1'-0"



12 TYPICAL STRAP OVER BEAM
SCALE: 3/4" = 1'-0"

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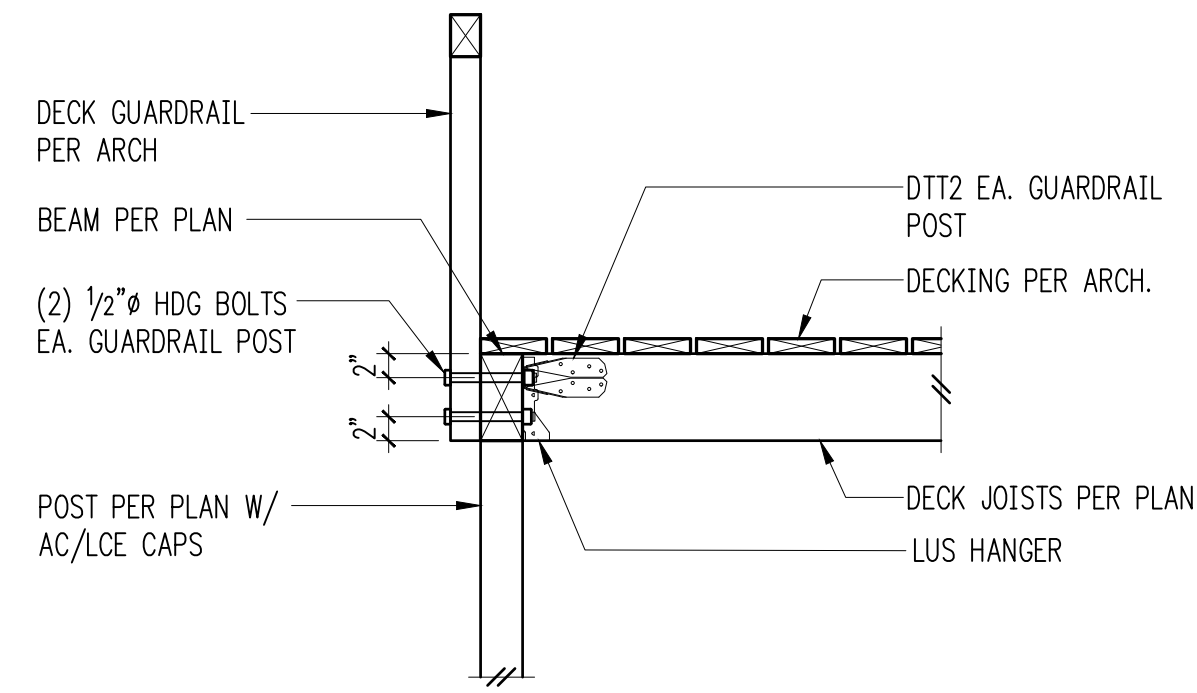
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STRUCTURAL DETAILS

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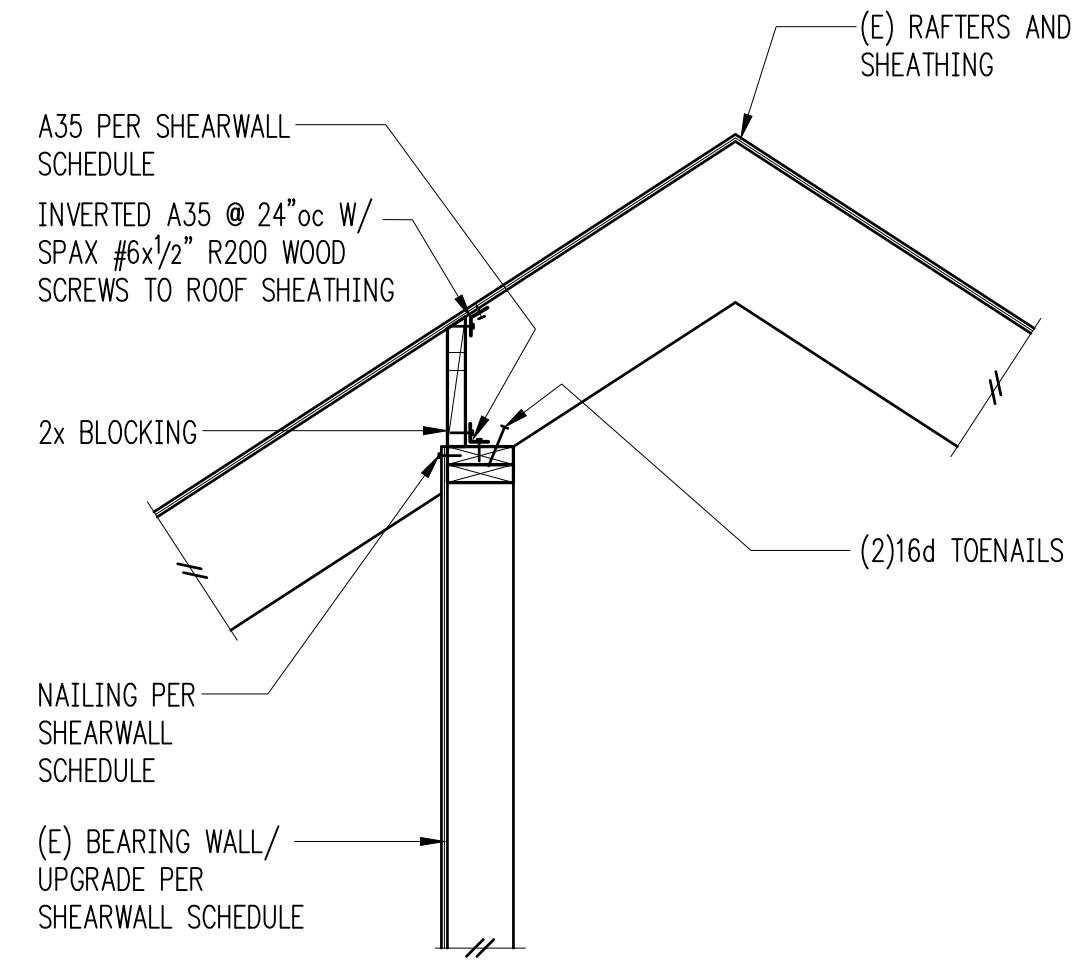
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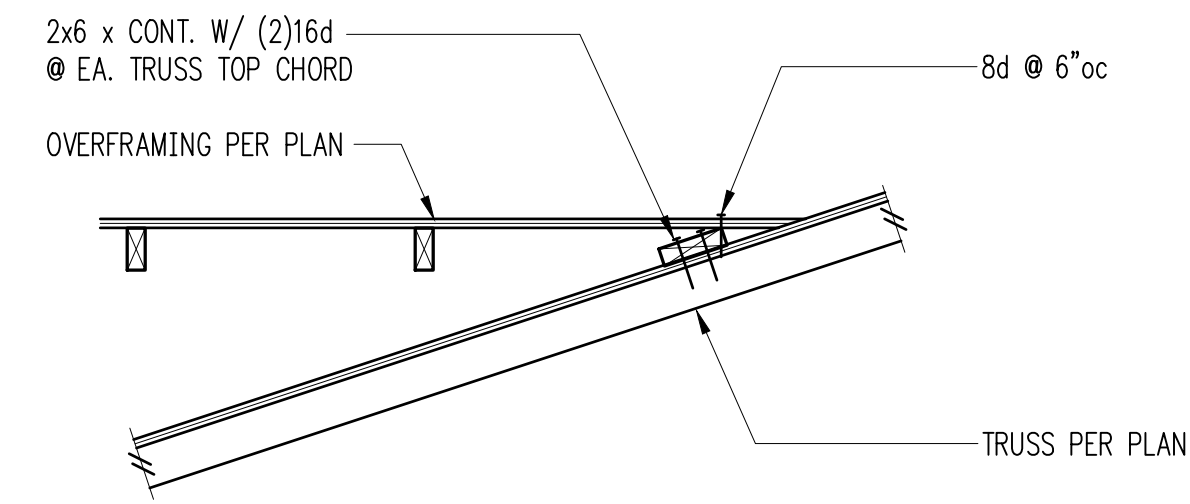
1 TYPICAL DECK W/ GUARDRAIL DETAIL

SCALE: 3/4" = 1'-0"



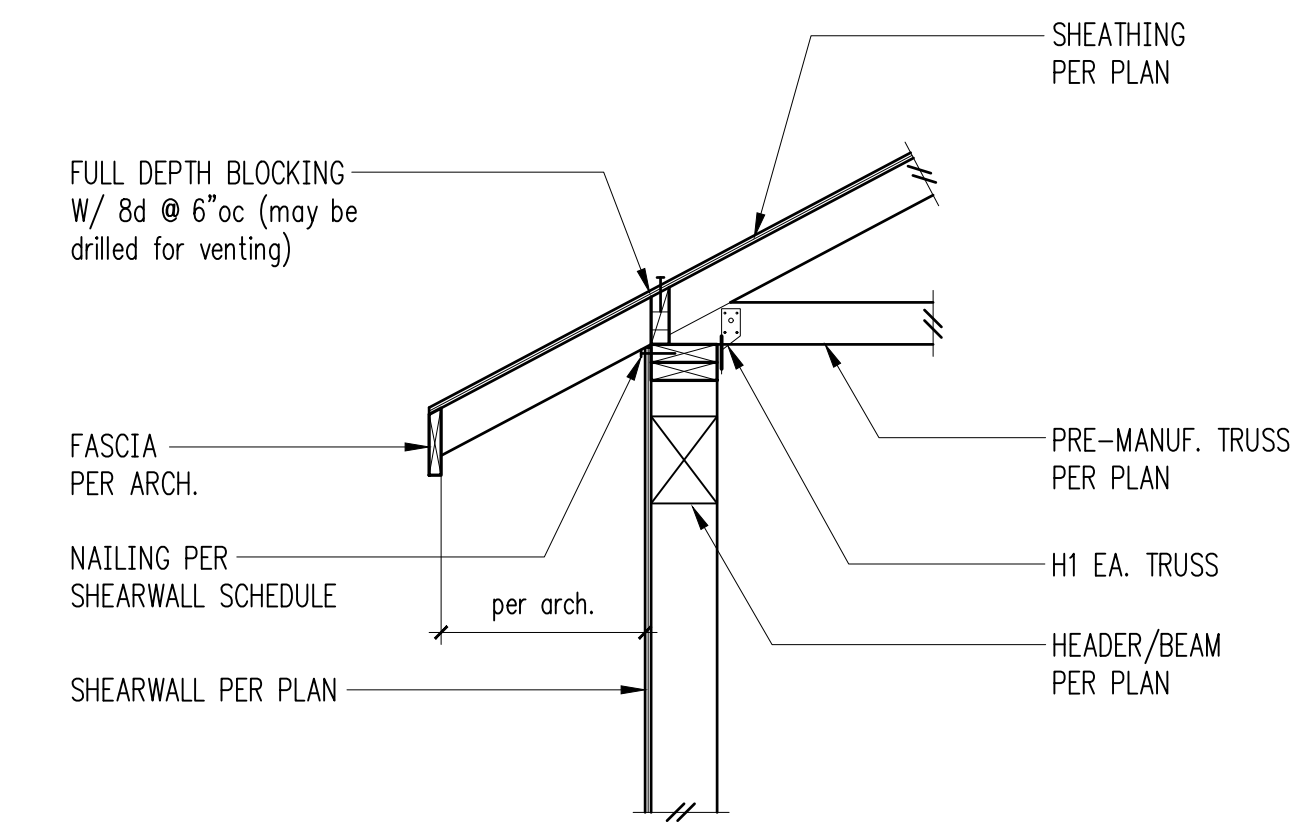
2 (E) OFFSET RIDGE

SCALE: 3/4" = 1'-0"



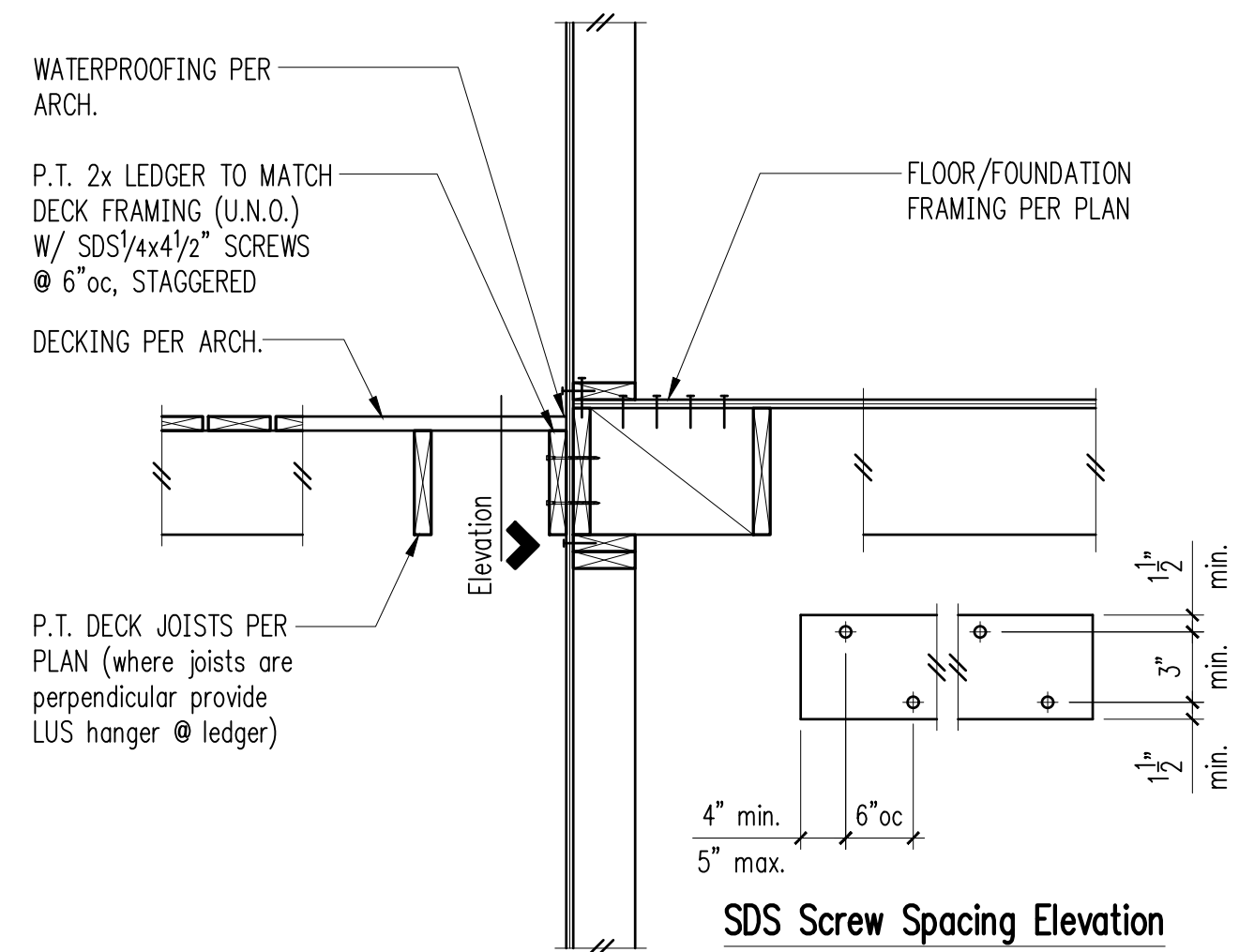
3 OVERFRAMING CONNECTION

SCALE: 3/4" = 1'-0"



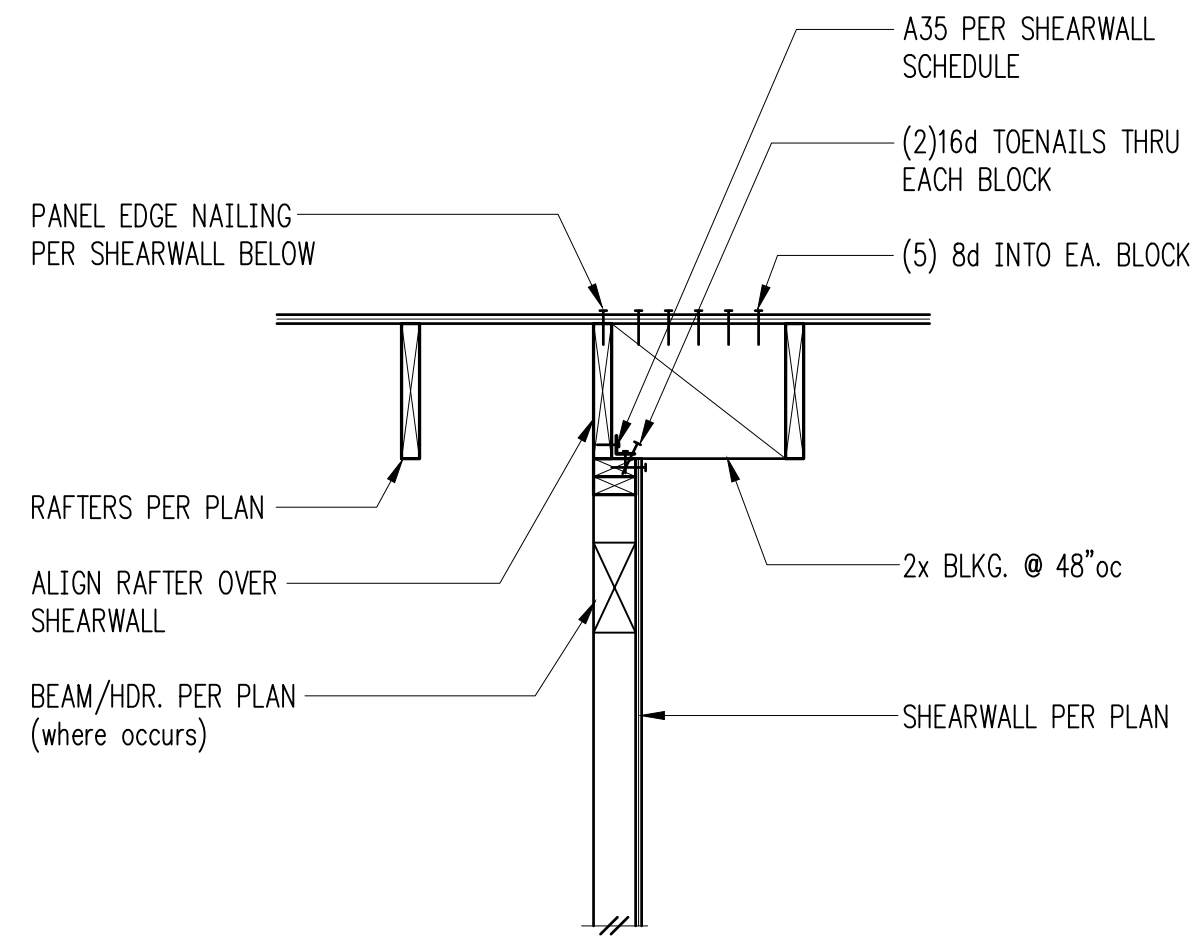
4 EXTERIOR BEARING WALL

SCALE: 3/4" = 1'-0"



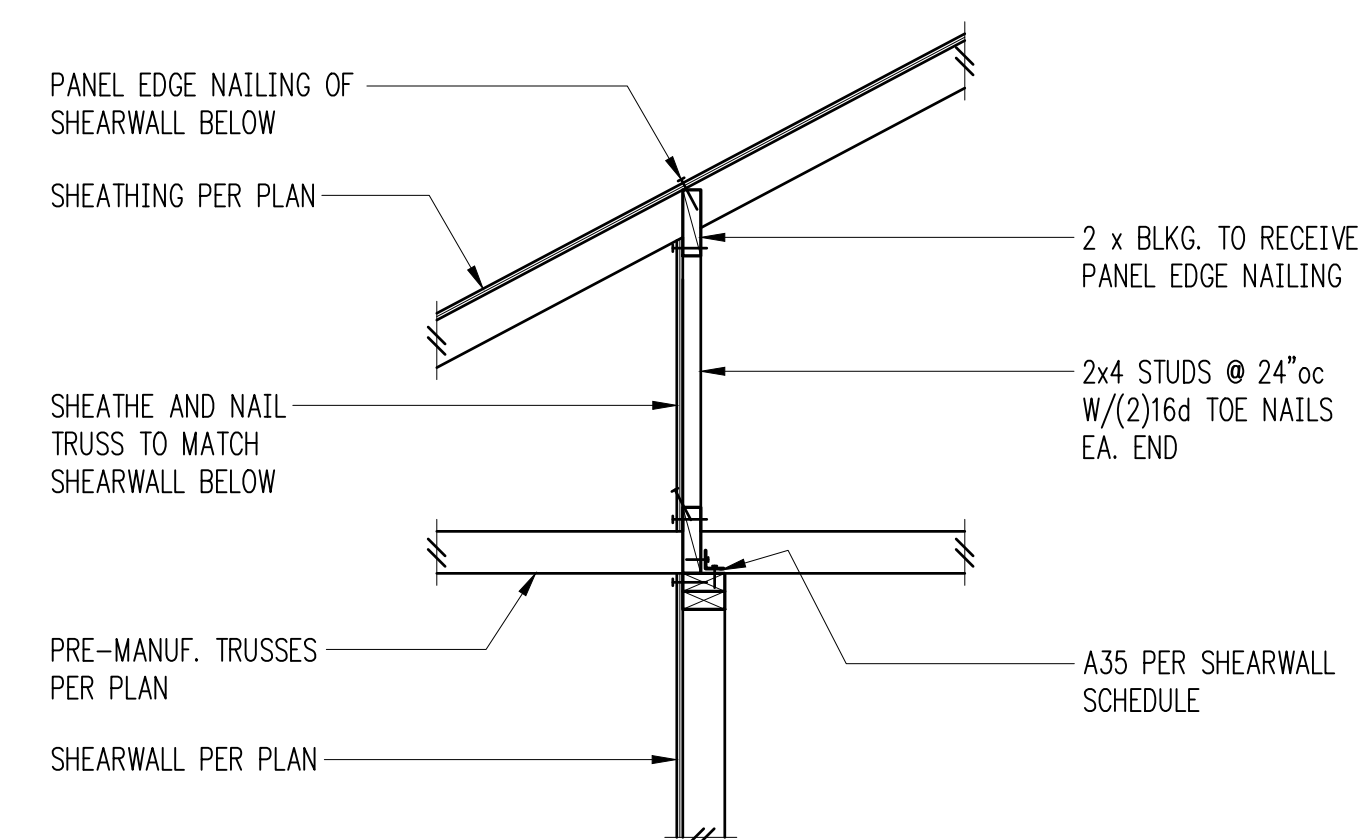
5 TYPICAL DECK LEDGER DETAIL

SCALE: 3/4" = 1'-0"



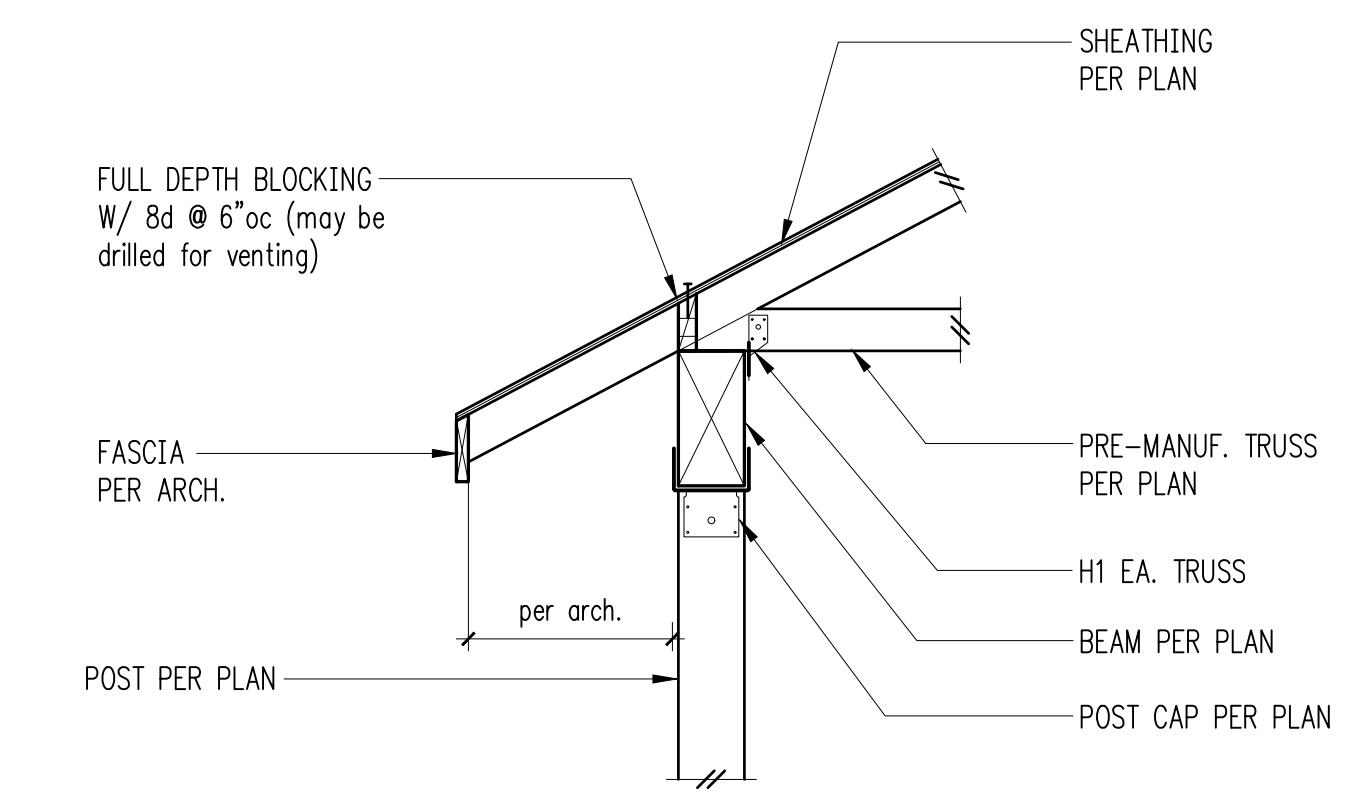
6 SHEAR WALL BELOW

SCALE: 3/4" = 1'-0"



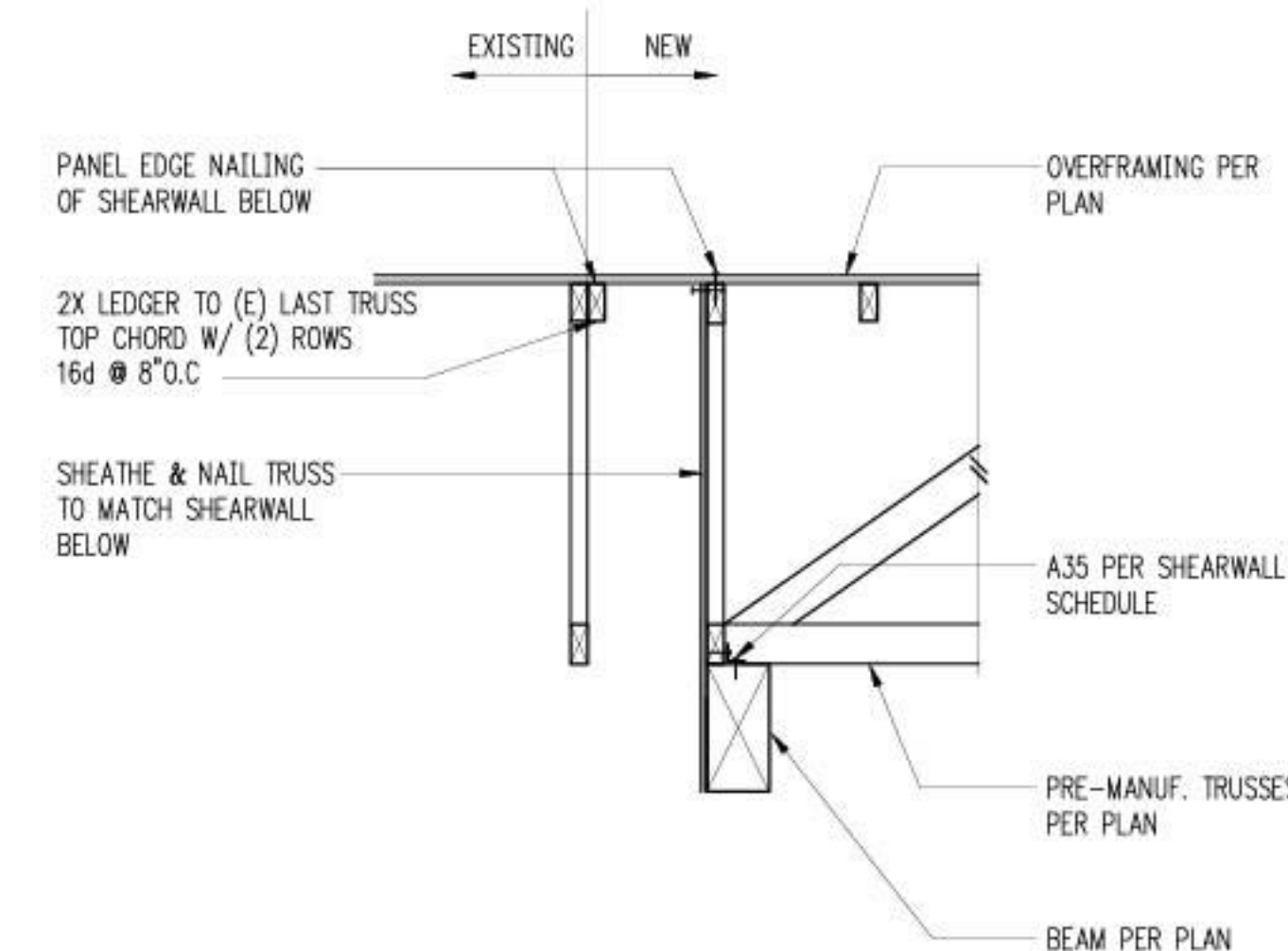
7 SHEARWALL EXTENSION THRU TRUSS DEPTH (PERPENDICULAR TO TRUSS)

SCALE: 3/4" = 1'-0"



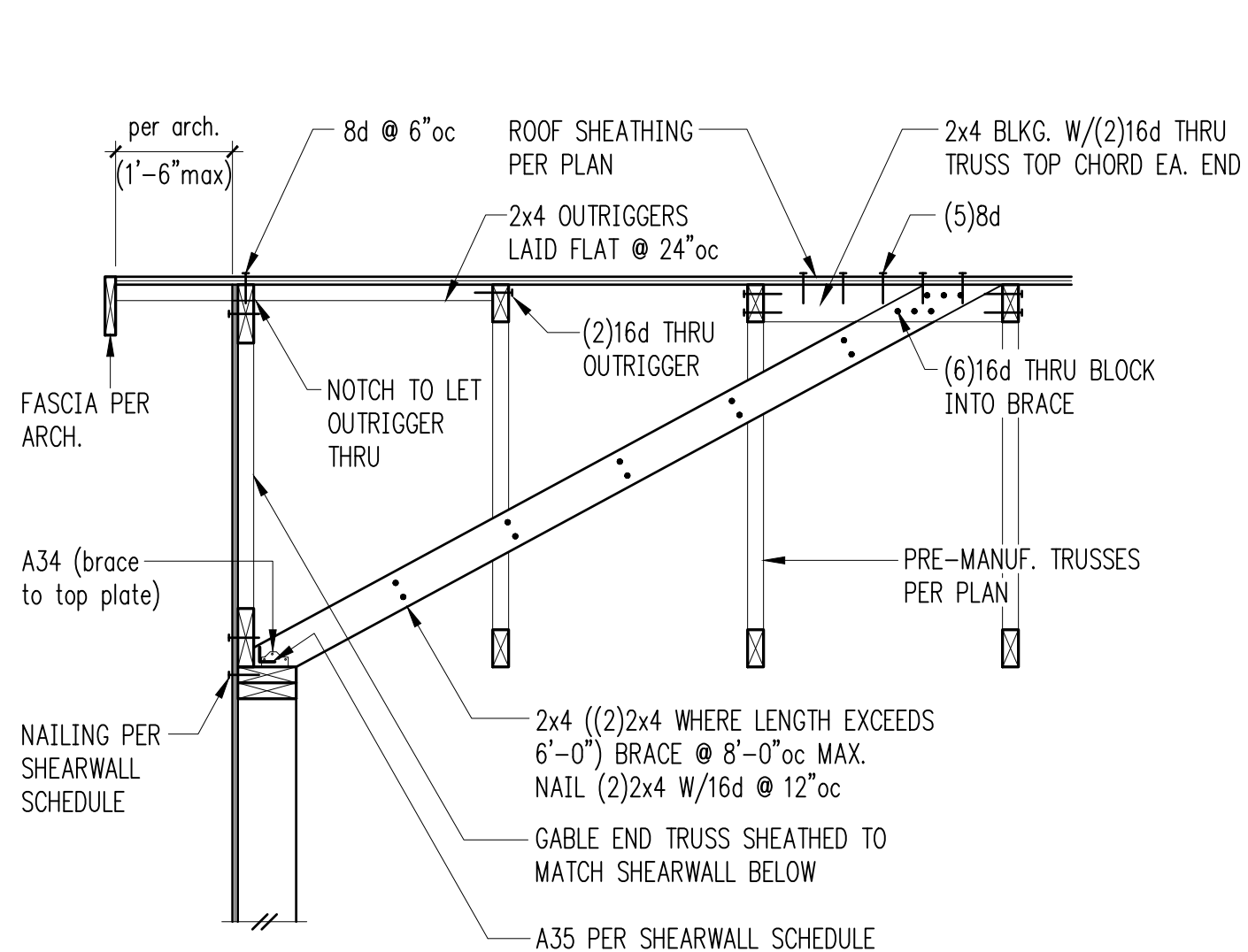
8 BEAM & POST

SCALE: 3/4" = 1'-0"



11 CHANGE IN TRUSS DIRECTION OVER SHEARWALL

SCALE: 3/4" = 1'-0"



12 EXTERIOR NON - BEARING WALL

SCALE: 3/4" = 1'-0"