Ogden Point Residence - Lot C

BUILDING PERMIT DOCUMENTS

plotted: 3/7/2018 5:07:43 PM

5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033 | 425.827.1700

DEMETRIOU
Architects PLLC

Drawn by :	No:	Revision Date:	Description:
ABS			
Project Start Date :			
02/15/18			
Purpose:			
building permit			

Project :

Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title :

cover sheet

drawing scale: 12" = 1'-0"

Project :
503.01

Sheet :
A0.1

Ogden Point Residence - Lot C - Mercer Island, WA

abbreviations:

&	and
<	angle
@	at
#	number, pounds
[	channel
A/C	air conditioning
AB	anchor bolt
ABV	above
AC	air conditioning
ADD	additional
ADJ	adjust, adjustable
AFF	above finish floor
AL	aluminum
ALT	alternate
ALUM	aluminum
ANOD	anodized
ARCH	architct, architecture
AUX	auxiliary
AVG	average
B/	bottom of
BK	back
BLDG	building
BLW	below
BM	beam, benchmark
BSBL	building setback line
BTM	bottom
CAB	cabinet
CB	catch basin, circuit breaker
CDF	control density fill
CF	cubic feet
CI	cast iron
CIP	cast in place
CJ	control joint, construction joint
CL	centerline
CLG	ceiling
CLR	clear, clearance
CMU	concrete masonry unit
CO	cleanout
COL	column
CONC	concrete
CONN	connection, connector
CONST	construction
CONT	continuous
CONTR	contractor, contract
CSMT	casement
CY	cubic yard
DBL	double
DD	deck drain
DET	detail
DIA	diameter
DIAG	diagonal, diagram
DIM	dimension, dimensional
DIV	divide, division
DN	down
DR	door
DS	downspout
DTL	detail
DW	dishwasher
DWG	drawing
E	east
EA	each
EF	exhaust fan
EL	elevator
ELEC	electrical
ELEV	elevation
ENCL	enclosure, enclose
ENGR	engineer
EQ	equal
EQP	equipment
ESMT	easement
EST	estimate, estimated
EW	each way
EXH	exhaust
EXIST	existing
EXP	expose, exposed, expansion
EXST	existing
EXT	exterior
F/	face of
FD	floor drain
FE	fire extinguisher
FIN	finish, finished
FLEX	flexible
FLR	floor
FND	foundation
FO	face of
FP	fireplace
FR	fire resistant
FT	foot, feet
FTG	footing
G	gas, gage
GA	gas, gauge
GALV	galvanized
GC	general contractor
GL	glass, glaze, glazing
GLB	glass block, glue-lam beam
GRD	grade
GWB	gypsum wallboard
GYP	gypsum, gypcrete
H	high
HB	hose bibb
HDR	header
HDWD	hardwood
HM	hollow metal
HOR	horizontal
HR	handrail
HSS	hollow steel section
HT	height
HVAC	heating, ventilation & air conditioning
HWT	hot water tank/heater
HYD	hydrant
ID	inner diameter
IN	inch
INCL	include(s) (ed) (ing)
INSL	insulate, insulation
INST	install, installed
INT	intersection, interior
INV	INVERT, INVERSE
JST	joist
JT	joint
L	left, long, length
LAM	laminate, laminated
LBL	label
LF	lineal feet
LT	light
LTG	lighting
LVL	level

M/L	match line
MAT	material
MAX	maximum
MECH	mechanical
MFR	manufacturer
MH	manhole(s)
MIN	minimum
MIR	mirror
MISC	miscellaneous
MO	masonry opening
MTL	metal
N	north
N/A	not applicable, not available
NAT	natural
NIC	not in contract
NO	number
NOM	nominal
NTS	not to scale
NUM	number
OA	overall
OC	on center
OD	outer diameter
OFCI	owner furnished contractor installed
OFOI	owner furnished owner installed
OH	overhead, overhang
OPP	opposite
OVFL	overflow
PAV	pave, pavers, pavement
PERF	perforate, perforated
PL	plate, property line
PLAM	plastic laminate
PLY	ply
PNL	panel
PNT	paint
PROP	property line
PT	point
PVC	poly vinyl chloride
R	riser, risers
RA	return air
RAD	radius
RD	roof drain
REBAR	reinforcing bar
REF	reference, refrigerator
REINF	reinforce, reinforcement
REM	remove
REPL	replace
REQ'D	required
RH	robe hook
RM	room
RO	rough opening
ROW	right of way
RT	right
S	south
SBK	setback
SC	solid core
SCHEM	schematic
SD	storm drain, smoke detector
SEC	section
SF	square feet
SG	safety glazing
SHT	sheet
SIM	similar
SL	slope
SOG	slab on grade
SPC	space(s)
SPEC	specifications
SQ	square
ST	street
STD	standard
STL	steel
STR	structural
SYS	system
T	tee, tempered
T/	top of
T&G	tongue & groove
TEL	telephone
TEMP	temporary, tempered
THK	thickness
TOL	tolerance
TV	television
TYP	typical
UG	underground
UL	underwriter's laboratory
UNO	unless noted otherwise
V	valve, volt, vent
V/VAR	variable, varies
VB	vapor barrier
VERT	vertical
VG	vertical grain
VTO	vent to outside
W	west, wide, width, water
W/D	variable, varies
WC	water closet
WD	wood
WIC	walk-in closet
WIN	window
WP	waterproof
WR	water resistant

general project notes:

GENERAL REQUIREMENTS

Applicable Codes and Regulations.

Building Code	-	International Residential Code (IRC) 2012 as adopted and modified by City of Mercer Island
Mechanical Code	-	International Mechanical Code (IMC) 2012
Gas Code	-	Liquefied Petroleum Gas Code (NFPA 58) and National Fuel Gas Code (NFPA 54) for LP gas 2012 and International Fuel Gas Code as adopted and modified by City of Mercer Island
Energy Code	-	WA State Energy Code
Fire Code	-	International Fire Code (IFC) 2012 as adopted and modified by City of Mercer Island
Electrical Code	-	Washington Cities Electrical Code
Zoning Code	-	City of Mercer Island Municipal Code

Contractor Responsibilities. It is the responsibility of the contractor to ensure compliance and conformance with the various provisions within these ordinances and codes in all of the work. The General Contractor is responsible for coordinating all work including additional permits and subcontractor work.

Dimensions. Dimensions that are not stated as "maximum" or "minimum" are absolute. All dimensions are subject to conventional industry tolerances. Verify and coordinate dimensions among all drawings prior to construction. Written dimensions take precedence over scaled lengths and heights in all cases. Do not scale drawings.

Discrepancies. In the event of discrepancies or contradictory information in the drawings, notes, or specifications, it is the obligation of the contractor to notify the architect of the same and to obtain clarification from the architect before proceeding with the work. Any work done by the contractor after discovery of such discrepancy shall be done at the contractor's risk.

Inspections. Contractor shall be responsible for coordinating all building inspections. Required building inspections per IRC section R109 and WSEC 105:

- *Foundation inspection* – after forms are erected and reinforcing steel is placed
- *Plumbing, mechanical, gas, and electrical systems inspection* – prior to covering/concealment
- *Frame and masonry inspection* – after the roof, masonry, firestopping, draftstopping, and bracing are in place and after plumbing, mechanical, and electrical rough inspections are approved.
- *Special inspections as required by Engineer of Record*
- *Wall Insulation Inspection* – after all wall insulation and vapor retarders in place and prior to wall covering.
- *Other inspections required by the Building Official*
- *Final inspection* – after the permitted work is complete and prior to occupancy.

Contract Documents. The Architect shall have final authority with regard to interpretation of the intent and spirit of the contract documents. The Project Manual is included by reference. All contract documents pertaining to this project are to be considered and interpreted for bidding and construction purposes as a complete whole. No part of the drawings or project manual shall be distributed, considered, or used in any way independent of the complete set of documents.

Typical Details. Project 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 to those provided shall be used - subject to review and approval by the architect and the structural engineer.

Work and Data by Others. The architect assumes no responsibility for, nor verifies the accuracy of, any engineering data supplied by others.

Submittals.
Shop drawings are required for the following components:

- Items required by consultants. See individual consultant documentation for any shop drawings required by their respective disciplines.
- Windows and doors
- Skylights and canopies
- Trellises not of wood
- Railing systems
- Gates and specialty doors
- Wine rack and shelving layouts
- Casework and built-ins
- Sauna and steam rooms
- Elevators
- Glass Floor Assemblies
- Other components called out in the Project Manual

Changes: Contractor initiated changes shall be submitted in writing to the architect and/or structural engineer for approval prior to fabrication or construction. Changes shown on shop drawings only do NOT satisfy this requirement.

All changes – whether drawing or field required – shall have revisions approved & filed for record w/ the city once the original submission has been approved and the permit issued. Charge will be made by city for all revision review and approvals including field inspections beyond that required under permit fees and paid for under estimated inspection fee

As-Built Drawings. Contractor and subcontractors shall mark drawings for as-built condition. Mechanical, electrical, plumbing, and fire-protection drawings shall be revised for as-built conditions by their respective authors. Final as-built reproducible drawings shall be submitted to Owner's representative.

Safety. Contractor shall be responsible for all required safety precautions and the methods, techniques, sequences, or procedures required to perform the work.

Site Maintenance. Contractor shall maintain a trash bin in an area designated by the owner's representative for the collection of all construction debris. Contractor shall dispose of all debris and remove trash bin prior to occupancy. All surfaces shall be cleaned prior to occupancy.

Demolition Permit. A separate demolition permit is required for the removal of any existing structure.

FIRE-RESISTANT CONSTRUCTION

Occupancy Separation. The garage shall be separated from the residence and its attic area by not less than 1/2" gypsum board applied to the garage side. Garages shall be separated from all habitable rooms above and all structures supporting the floor/ceiling assembly by not less than 5/8" Type X gypsum board or equivalent. (Table R302.6)

Doors between the garage and the residence shall be minimum 1 3/8" thick solid wood, or 20-minute fire rated, and shall be equipped with a self-closing device. (R302.5.1)

Ducts in the garage and ducts penetrating the separation assemblies shall be min. 26 gage sheet steel and shall have no openings into the garage (R302.5.2)

Under-Stair Protection. Enclosed accessible space under stairs shall be protected with minimum 1/2" gypsum board on the enclosed side. (R302.7)

Fire Blocking. Provide fire blocking in concealed wall spaces of stud walls and partitions vertically at ceiling and floor levels, at 10 feet max. horizontally, and at all interconnections of concealed vertical and horizontal spaces. Fire block concealed spaces between stair stringers at the top and bottom of run and between studs and in line with the run of the stairs if the walls under the stairs are unfinished. Fire stop with non-combustible materials in openings around all vents, pipes, ducts, chimneys, fireplaces, and similar openings which afford passage for fire at ceiling and floor levels. (R302.11 & R1003.19)

Draftstopping. Draft stop floor/ceiling assemblies greater than 1,000 SF into approximately equal areas with 1/2" gypsum board parallel to the floor framing members. (R302.12)

EGRESS

Egress Openings. Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 sq. ft. except the minimum net clear opening for emergency escape and rescue grade-floor openings shall be 5 sq. ft. Where provided, they shall have a sill no greater than 44" above the adjacent floor. The minimum net clear opening height shall be 24". The minimum net clear opening width shall be 20". (R310.1)

Handrails. One handrail shall be provided at every stairway having four or more risers and shall be continuous for the full length of the flight. Provide 2 handrails where indicated on plans. Handrail height, measured above stair tread nosings, or finish surface of ramp slope, shall be uniform, not less than 34" and not more than 38". Handrails with a circular cross section shall have an outside diameter of at least 1.25" and not greater than 2" or shall provide equivalent graspability. If the handrail is not circular, it shall have a perimeter dimension of at least 4" and not greater than 6.25" with a maximum cross-section dimension of 2.25". (R311.7.7)

Guards. Guards shall be located along open-sided walking surfaces, mezzanines, stairways, ramps and landings which are located more than 30" above the floor or grade below and within 36" of the edge of the open side. Guards shall be 36" high minimum except guards whose top rail also serves as a stair handrail shall have a height not less than 34" and not more than 38" measured vertically from the leading edge of the stair tread nosing. (R312)

Open guards shall have balusters or ornamental patterns such that a 4"-diameter sphere cannot pass through any opening except the triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall not allow passage of a sphere of 6" in diameter. Guards on the open side of stairs shall not have openings which allow passage of a sphere 4 3/8" in diameter. (R312.3)

FIRE PROTECTION SYSTEMS

Bidder Designed. Fire Protection systems shall be bidder designed. Designated subcontractors are responsible for the preparation of drawings and applications for appropriate required permits.

Sprinkler System: An NFPA 13 fire sprinkler system with monitored water flow and controls will be installed throughout this project. Provide a dry system at unheated garages and attic spaces. The system shall be designed and the plans stamped by a person holding a Washington State Certificate of Competency. Contractor shall submit design to the Fire Department for approval. The system shall be installed by a state licensed sprinkler contractor.

Smoke Alarm System. An approved automatic smoke alarm system shall be provided and installed in accordance with the warning equipment provisions of NFPA 72. Smoke alarms shall be provided inside of each sleeping room, outside of each sleeping area, and on each story of the dwelling. Required smoke alarms shall be hardwired, interconnected, and have a battery backup. (R314)

Carbon Monoxide Alarms. Provide approved carbon monoxide alarms outside of each separate sleeping area. (R315)

INTERIOR ENVIRONMENT

Attic Ventilation: The net free ventilating area of enclosed attics and rafter spaces shall not be less than 1/150 of the area of the space ventilated, except that 1/300 min. is permitted if 40% - 50% of the required ventilating area is provided by ventilators located in the upper portion of the space no more than 3' below the ridge or highest point of the space, with the balance provided by eave or cornice vents. Where eave or cornice vents are installed, provide minimum 1-inch clear space between insulation and roof sheathing and at the location of the vent. (R806)

Under-Floor Ventilation. Under-floor areas shall be provided with ventilation openings through foundation or exterior walls. The minimum net area of ventilation openings shall not be less than 1 square foot for each 300 square feet of crawl-space areas, or 1/1,500 where the ground surface is covered with an approved Class I vapor retarder and openings are placed to provide cross ventilation of the space. (R408.2)

Exhaust fans. Exhaust fans vented to the exterior are required in bathrooms, water closets, laundry rooms, kitchens, and other rooms where water vapor or cooking odor is produced. (M1507.4 and WAC 51-51-1507)

Provide 50 CFM minimum fan flow rating at bathrooms, laundries, and similar rooms. Provide 300 CFM minimum for kitchens.

Dryer exhaust ducts shall be not less than 4 inches in diameter, have a smooth interior surface, a back draft damper, and shall terminate outside of the building.

Crawlspace Access. Provide access to crawlspaces with a floor access opening of 18"x24" inches minimum or a perimeter wall access opening of 16"x24" minimum. (R408.4)

Attic Access. Provide access to any attic area having a clear height of over 30 inches and greater than 30 SF in size with an opening of 22"x30" minimum. A 30-inch minimum clear headroom in the attic space shall be provided at or above the access opening. Locate in a hallway or other readily-accessible location. (R807)

Wet Areas. Shower compartments and walls above bathtubs with installed shower heads shall be finished with a non-absorbent surface to a height not less than 72" above the floor. (R307.2)

Solid Blocking. Provide solid blocking in walls at connections points behind cabinets, wall shelving, towel and grab bars, and other wall-hung items.

Acoustical Insulation. Provide sound attenuation blankets at all bedroom, bathroom, toilet room, and powder room walls and other spaces as noted on plans. Provide sound attenuation blankets at all bedroom, bathroom, toilet room, and powder room floors and ceilings when these rooms occur above or below a habitable space.

Natural Light. Provide average illumination of 6 footcandles (65 lux) @ + 30" AFF at habitable spaces with glazing area less than 8% floor area (R303.1)

ENERGY EFFICIENCY

Insulation and Vapor Barriers. Application and installation of insulation and vapor barriers shall comply with Washington State thermal insulation standards. All insulating materials shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 450. (R302.10.1)

Air Leakage. The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of WSEC R402.4.1 through R402.4.4.

Testing. The building shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g.. Testing shall be performed at nay time after creation of all penetrations of the building thermal envelope. (WSEC R402.4.1.2)

Ducts, air handlers, and filter boxes shall be sealed. Ducts shall be leak tested in accordance with WSU RS-33, using the maximum duct leakage rates specified. (R403.2.2)

Air Barrier and Insulation. The air barriers and insulation in walls, floors, roofs, and any other enclosures of conditioned space shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, or the building shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour. (WSEC R402.4.1)

Weatherstripping. Access doors from conditioned spaces to unconditioned spaces shall be weatherstripped and insulated to a level equivalent to the insulation on surrounding surfaces. (WSEC R402.2.4)

Thermostat. Where the primary heating system is a forced-air furnace, at least one programmable thermostat shall be provided for each separate heating and cooling system. (WSEC R403.1)

Energy Certificate. A permanent certificate shall be posted on or within three feet of the electrical panel. The certificate shall be completed by the builder or registered design professional. The certificate shall list the R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, below-grade wall, and/or floor), and ducts outside the conditioned spaces; U-factors for fenestration; and the solar heat gain coefficient (SHGC) of fenestration; and the results from any required duct system and building envelope air leakage testing. Where more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the type and efficiency of heating, cooling, and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed, the certificate shall list this as appropriate. (WSEC R401.3)

STRUCTURAL SYSTEMS

Structural Systems: All structural systems (such as trusses) which are to be composed of components to be field erected shall be supervised by the supplier during manufacturing, delivery, handling, storage, and erection in accordance with instructions prepared by the supplier.

SOILS AND FOUNDATIONS

Soils: The architect assumes no responsibility as to the physical characteristics of the soils. The geotechnical engineer shall inspect all excavations prior to pouring concrete.

Damp-proofing: Except where required by Section R406.2 to be waterproofed, foundation walls that retain earth and enclose interior spaces below grade shall be dampproofed from the top of the footing to the finished grade in accordance with one of the following: bituminous coating; three pounds per square yard of acrylic modified cement; 1/8" coat of surface-bonding cement complying with ASTM C 887; any material permitted for waterproofing in Section R406.2. (R406.1)

Perimeter Drains: Provide continuous 6" round perforated drain in gravel fill with filter fabric wrap at all foundation walls. Provide clean-outs such that all portions of drainage system can be adequately cleaned. Locate bottoms of drain pipes at the lowest point of wall footings and tight-line perimeter drains to storm sewer or other approved discharge. Do not connect the perimeter / foundation drain tight-line to any other tight-lines or site drainage systems. (R405)

Provide a minimum 12" thick layer of continuous gravel fill from bottom of footing to within 12" of finish grade - typical at all walls. Approved gravel fill consists of washed, clean, free drainage gravel ranging from 1/4" to 3/4" in size.

Site drainage to conform to all local regulations and ordinances. Tight-line all roof drains to storm sewer system or approved discharge when storm sewers are not available. See Civil drawing for more information.

Finish Grade. at the building face to have a positive slope away from the building. All site hard surfaces to have a minimum slope of 1/8" in 12" to drains unless noted otherwise.

EXTERIOR WALLS

Exterior Wall. Exterior walls to be 2x6 wood studs at 16" o.c. unless indicated otherwise on plans. All exterior walls to be provided with R-21 min. batt insulation. Interior walls to be 2x4 studs at 16" o.c. unless noted otherwise on plans.

Exterior Structures. Exterior wood framed decks and other wood framed structures exposed to weather: all wood shall be pressure treated to current American Wood Preservers Institute standards. This includes all plywood, trusses, sawn members, glue-laminated members, etc., unless noted otherwise. All nails and connectors shall be heavy-coat galvanized.

Wood Protection. Wood framing members in contact with exterior concrete foundations shall be pressure treated. Wood siding, sheathing, and wall framing on the exterior of the building less than 6 inches from the ground or less than 2 inches from slabs, steps, and similar horiz surfaces shall be pressure treated. Ends of wood beams entering a concrete wall (pocket) shall have 1/2" clearance on top, sides, and ends. (R317)

Wall Flashing. Approved corrosion-resistant flashing shall be applied shingle-fashion in a manner to prevent entry of water into the wall. Self-adhered membrane flashings shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish. Flashing shall be installed at exterior window and door openings; intersections of chimneys or other masonry with frame or stucco walls; under and at the ends of masonry, wood or metal copings and sills; above projecting wood trim; where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction; at wall and roof intersections; at gutters. (R703.8 and WAC 51-51-703)

ROOF ASSEMBLIES AND STRUCTURES

Roof Flashings. Flashing shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction, at gutters, and around roof openings in a manner that prevents moisture from entering the wall and roof assemblies. A flashing shall be installed to divert the water away from where the eave of a sloped roof intersects a vertical side wall. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019". Self-adhered membranes shall comply with AAMA 711 (R903.2)

FIREPLACES AND CHIMNEYS

Factory-built Fireplaces. Factory-built fireplaces shall be UL 127-96 listed, labeled and installed in accordance with the conditions of their listing. They shall be installed with tight-fitting glass doors and outside source of combustion air (no less than 6 sq. in.) ducted to each firebox. (WSVIAQC 402.3 and R1004)

Factory-Built Chimneys. Factory-built chimneys shall be UL 127-96 listed, labeled, installed, and terminated in accordance with the manufacturer's installation instructions. (R1005)

Hearth extensions. Hearth extensions of approved factory-built fireplaces shall be installed in accordance with the listing of the fireplace and shall be readily distinguishable from the surrounding floor area. (R1004.2)

Flue clearances. Metal flues venting gas appliances shall have a minimum net clearance to combustible materials as required by the appliance manufacturer in accordance with the listing of the flue.

GLASS AND GLAZING

Glazing shall be in accordance with IRC section 308 and Washington State Safety Glass Law.

Exterior Glazing. All exterior wall glazing shall be double-glazed and comply with the Washington State Energy Code (WAC 51-11).

Safety Glazing. Install in areas subject to human impact (R308.4). Such hazardous locations include:

- Glazing in fixed and operable panels of swinging, sliding and bifold doors.
- Glazing in a fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24 inch arc of the door in a closed position and whose bottom edge is less than 60 inches above the floor or walking surface except for:
  - decorative glazing;
  - where there is an intervening wall;
  - glazing in the wall perpendicular to the latch side of the door;
  - adjacent to a closet door less than 3 feet deep (must comply with R308.4.3)
  - adjacent to the fixed panel of patio doors.
- Glazing in an individual or fixed panel that meets all of the following conditions:
  - Exposed area of an individual pane greater than 9 square feet.
  - Bottom edge less than 18 inches above the floor.
  - Top edge greater than 36 inches above the floor.
  - One or more walking surfaces within 36 inches horizontally of the glazing.
- All glazing in railings, regardless of an area or height above walking surface. Included are structural baluster panels and nonstructural in-fill panels.
- Glazing in walls, enclosures, or fences for hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and indoor or outdoor pools where the bottom exposed edge of the glazing is less than 60 inches above any standing or walking surface and within 60 inches horizontally of the water's edge.
- Glazing adjacent to stairways, landings, and ramps within 36 inches horizontally of a walking surface when the bottom exposed edge of the glass is less than 36 inches above the adjacent walking surface. Except when a rail is installed on the accessible side of the glazing 34" to 38" above the walking surface.
- Glazing adjacent to the landing at the bottom of a stairway within 60 inches horizontally of the bottom tread when the exposed surface of the glazing is less than 36 inches above the nose of the tread. Except when the glazing is protected by a guard complying with section R312 and the glass is more than 18" from the guard.

CONVEYING SYSTEMS

Elevators. Private residence elevators shall comply with ASME A17.1 (R323.1)

Installation and Permits. Elevator installation shall be performed by a Licensed Elevator Contractor employing an elevator mechanic per RCW 70.87. The Licensed Elevator Contractor is responsible for obtaining all permits required for the work, and for operation and maintenance of the elevator until the department has issued an operating permit.

Elevator Permit. Post the issued work permit in a conspicuous location at the site of the elevator. (RCW 70.87.080(3))

energy code compliance:

Building Thermal Envelope. The building thermal envelope shall meet the requirements of Sections R402.1.1 through R402.1.4. (WSEC R402.1)

Total UA Alternative. If the total building thermal envelope UA is less than or equal to the total UA resulting from using the prescribed U-factors, the building shall be considered to be in compliance. (WSEC R402.1.4)

PRESCRIPTIVE APPROACH

fenestration maximum U-factor:	0.25
skylight maximum U-factor:	0.50
required R-value at ceilings:	R-49
required R-value at single rafter- or joist-vaulted ceilings:	R-38
required R-value at wood framed walls:	R-21 int
required R-value at headers:	R-10
required R-value at mass walls:	R-21
required R-value at walls below grade:	R-10 exterior R-15 interior R-21 cavity + TB
required R-value at floors:	R-30
required R-value at slabs on grade:	R-10 perimeter
required R-value at heated slabs on grade:	R-10 continuous

Luminaires. Recessed luminaires installed in the building thermal envelope shall be Type IC-rated and certified as having an air leakage rates compliant with R402.4.4. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

A minimum of 75% of permanently installed lamps in lighting fixtures shall be high-efficacy lamps. (WSEC 404.1)

ADDITIONAL ENERGY EFFICIENCY REQUIREMENTS

Energy Credits Required: Each dwelling shall comply with sufficient options from Table R406.2 so as to achieve the following minimum number of credits:

Medium Dwelling Unit		3.5 credits
Energy Credits Provided:	See WSEC worksheet provided.	
1b	Efficient Building Envelope	1.0 credit
3b	High Efficiency HVAC equipment	1.0 credit
5c	Efficient Water Heating	1.5 credit
	Total =	3.5 credits

MECHANICAL SYSTEM CRITERIA

Bidder Designed. Mechanical systems, electrical systems, and plumbing systems shall be bidder designed. Subcontractors designated to accomplish the above will be responsible for the preparation of drawings and applications for appropriate required permits.

Equipment Sizing. Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. (WSEC R403.6)

Ventilation. Provide source specific and whole house ventilation as required by the IRC M1507 and IMC.

Whole House Ventilation: Intermittent whole house ventilation shall be integrated with the forced-air heating system per IMC 403.8.7 and M1507.3.5: Outdoor air shall be provided to the return side of the forced-air system no closer than 4 feet upstream of the unit. At a minimum, filtration shall be provided at the forced-air unit with adequate access to filters for maintenance and replacement. (IMC 403.8.8.2)

Mechanical ventilation system fans shall meet the efficacy requirements of WSEC Table R403.5.1 unless the fans are integral to tested and listed HVAC equipment and are powered by an electronically commutated motor. (WSEC R403.5.1)

Piping. Insulation for hot water pipe shall have a minimum thermal resistance of R-4 (WSEC R403.4.2). Cold water pipes located in unconditioned space shall be insulated in accordance with the Washington State Plumbing Code (Chapter 51-56 WAC).

Mechanical system piping capable of carrying fluids above 105° F or below 55° F shall be insulated to a minimum of R-6. (WSEC R403.3)

Areas of Moisture. When HVAC units or water heaters are placed in an area susceptible to moisture, all pilot lights, burners, switches, or heating elements shall be located at least 18" above the floor slab.

Water Heaters. Provide seismic anchor straps for all water heaters. (UPC 508.2)

All hot water tanks shall be equipped with:
- Thermal expansion tank if the water system is equipped with a check valve, backflow preventer, or any other normally closed device that prevents dissipation of building pressure back into the water main. (UPC 608.3)
- Combination pressure and temperature relief valve installed in an approved location based on the water-heating device's listing requirements and manufacturer's instructions. (UPC 608.3)

Heating Units. Every dwelling unit shall be provided with heating facilities capable of maintaining a minimum room temperature of 68° F at a point 3' above the floor and 2' from exterior walls in all habitable rooms at design temperature. (R303.9)

Fuel fired appliances shall not be located in or obtain combustion air from sleeping rooms, bathrooms, toilet rooms, storage closets, or in a space that opens only into such rooms unless the appliance is a direct-vent appliance that obtains combustion air from the outdoors or a solid fuel-fired appliance, or the room meets the required volume criteria of section 304.5. (IMC 303 and IFGC 303)

Appliances installed within compartments, alcoves, or basements shall be provided with access by an opening or door and an unobstructed passageway measuring not less than 24" wide and large enough to allow removal of the largest appliance in the space, provided that a level service space of not less than 30" deep and the height of the appliance, but not less than 30", is present at the front or service side of the appliance with the door open (IMC 306.2). All clearances shall be provided for warm air furnaces in accordance with the terms of their listings. Clearances and access, under floor spaces per IMC 306.4. Attics and/or furred spaces per IMC 306.3. Roofs and/or outside walls per IMC 306.5.

Combustion Air. When a gas furnace is installed in a confined space where the volume of the space is not greater than 50 cu. ft./1000 BTUH of the appliance input rating, openings may be used to connect indoor spaces. Two permanent openings shall be provided, one within 12" of the floor and one within 12" of the ceiling. Each opening shall have a minimum free area of 1 sq. in./1,000 BTUH of the total input rating of all appliances in the space, but not less than 100 sq. in. The minimum dimension of air openings shall be not less than 3". (IFGC 304.5)

Outside or return air for a forced-air heating system shall not be taken from a closet, bathroom, toilet room, kitchen, garage, mechanical room, boiler room, furnace room, or attic. (IFGC 618.5)

Gas venting. Gas venting system to be used shall be in accordance with IFGC sec. 503.

Vent connectors (of single-wall corrosion-resistant pipe) shall be installed per IFGC 503.7. Clearances per IFGC table 503.10.5.

Ductwork. Insulate ducts to a minimum of R-8. Ducts located completely inside the building thermal envelope may be excluded.

project data:

LOT DESCRIPTION

Project Address:	3675 W Mercer Island - Lot C Mercer Island, WA 98040
Parcel Number:	362350-0273

Legal Description:

LOTS A, B AND C OF MERCER ISLAND SHORT PLAT NUMBER MI-76-8-027, RECORDED UNDER RECORDING NUMBER 7702170577, AND AS AMENDED BY BOUNDARY LINE REVISION PER CITY OF MERCER ISLAND FILE NO. MI-81-08-15 AS RECORDED UNDER RECORDING NUMBER 8211169001, SAID SHORT PLAT BEING A PORTION OF BLOCK A, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON;

TOGETHER WITH SECOND CLASS SHORELANDS ADJACENT THERETO; AND

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER AN EXISTING PRIVATE ROADWAY LOCATED UPON PROPERTY ADJOINING AS CREATED BY EASEMENTS RECORDED UNDER RECORDING NUMBERS 3860939 AND 3927412, AND ALSO AS DELINEATED ON THE FACE OF SAID BOUNDARY LINE REVISION; AND

TOGETHER WITH PARKING INGRESS, EGRESS AND DRAINAGE EASEMENT AS ESTABLISHED BY PARKING AREA EASEMENT RECORDED UNDER RECORDING NUMBER 5094317 AND AS FURTHER DESCRIBED IN DEED RECORDED UNDER RECORDING NUMBER 8308170194; AND

TOGETHER WITH THAT CERTAIN EASEMENT FOR UNDERGROUND AND OVERHEAD UTILITIES AS ESTABLISHED BY UTILITY EASEMENT RECORDED UNDER RECORDING NUMBER 9304061280.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

Lot Area:	Lot C = 15,101SF
Zoning:	R-15
Shoreline Environment:	Urban Residential

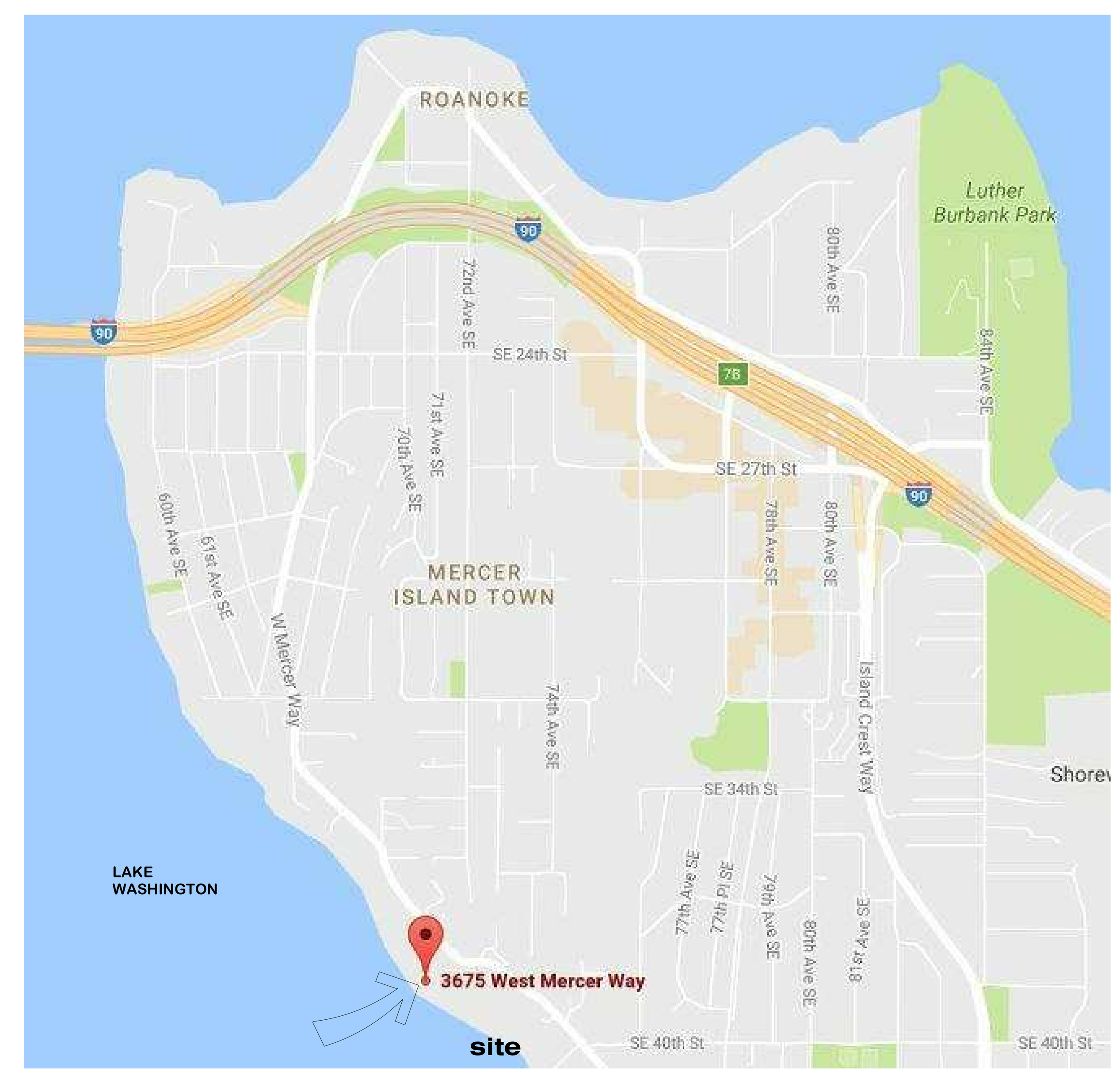
LOT CONSTRAINTS
(see sheet A2.2 site calculations)

Required Yards:	
Front:	20'-0"
Side:	
Shoreline:	25'-0" from ordinary high water
Shoreline Buffer:	25'-0" from shoreline setback
Average Building Elevation:	see A2.2 for calculation
Max. Building Height:	see A2.2 for calculation
Lot Slope:	47%
Impervious Coverage Area:	see A2.2 for calculation
Gross Floor Area:	see A2.2 for calculation

floor areas:

Main Floor	
Living Area:	1,083 SF
Mech. / Storage:	449 SF
Garage Area:	1,398 SF
Total Living Area:	1,083 SF
Total Floor Area:	2,930 SF

(See sheet A2.2 for floor area calcs)



vicinity map:

not to scale

project contacts:

Owner:	The Lady Bug Trust
Architect/Agent:	Demetriou Architects PLLC 5555 Lakeview Drive #200 Kirkland, WA 98034 Project Manager: Andrea Smith (425) 827-1700
Structural Engineer:	Swenson Say Faget 2124 Third Avenue #100 Seattle, WA 98121 Project Manager: Robert Henry (206) 443-6212
Civil Engineer:	Triad Associates 20300 Woodinville Snohomish Rd NE Suite A Woodinville, WA 98072 Contact: Adam Stricker (425) 415-2076
Surveyor:	Terrane 10801 Main Street #102 Bellevue, WA 98004 Contact: Mark A. Borys (425) 458-4488
Geotechnical Engineer:	Geotech Consultants, Inc. 14711 NE 29th Place #101 Bellevue, WA 98007 Contact: Marc McGinnis (425) 885-7877
Landscape Architect:	Ken Large Landscape Architects 21803 NE 17th Court Sammamish, WA 98074 Contact: Ken Large (425) 836-4578
Arborist	American Forest Management, Inc. 11415 NE 128th Street #100 Kirkland, WA 98034 Contact: Kelly Wilkinson (425) 820-3420

sheet index:

registered architect 2387 Vassos M. Demetriou State of Washington

No: | Revision Date: | Description:

Drawn by : ABS
Sheet Issue Date : 02/15/18
Purpose : building permit

DEMETRIOU Architects PLLC
5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033
(425) 827-1700
5555 Lakeview Drive, Suite 200, Kirkland Washington 98033 | (425) 827-1700

Project : **Ogden Point Residence - Lot C**
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title : **general information**

drawing scale: 12" = 1'-0"

Project : 503.01

Sheet : **A1.1**

plotted: 3/7/2018 5:07:43 PM

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER QUIT CLAIM DEED AFN 9405052361)
LOB B OF MERCER ISLAND SHORT PLAT NO. MI-76-8-027, AS RECORDED UNDER RECORDING NO. 7702170577, AND AS AMANDED BY BOUNDARY LINE REVISION PER CITY OF MERCER ISLAND FILE NO. MI-81-08-15 AS RECORDED UNDER RECORDING NO. 8211169001, SAID SHORT PLAT BEING A PORTION OF BLOCK A, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEROF RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON.

BASIS OF BEARINGS

HELD BEARING N 40°36'45" W, BETWEEN EXISTING TACKS SET IN LEAD BY H.W. RUTHERFORD IN 1959, AS SHOWN HEREON AND REFERENCED IN R1

REFERENCES

1. THIS SURVEY IS A DEPENDANT RETRACEMENT OF MERCER ISLAND B.L.R. NO. MI-82-08-15, AS RECORDED UNDER K.C.R.N. 8211169001. THIS SURVEY IS BASED UPON EXISTING POINTS RECOVERED, AND SHOWN THERREON.

VERTICAL DATUM

NAVD88 PER WGS SURVEY DATA WAREHOUSE
POINT DESIGNATION-8037, 2" BRASS CAP IN 4" CONC. MON (DN 0.3') WEST MERCER WAY AT JOG 100' SE OF INTX LAKE PL. 950' NW IF INTX SE 40TH ST
ELEV.=171.06'

SURVEYOR'S NOTES

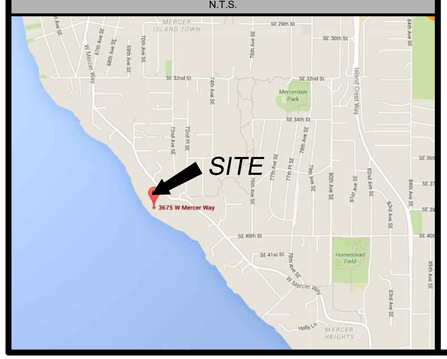
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN JULY OF 2016. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. GEODIMENSIONS ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1-800-424-5555 BEFORE CONSTRUCTION.
4. SUBJECT PROPERTY TAX PARCEL NO. 362350-0273, 362350-0274, 362350-0275.
5. TOTAL SUBJECT PROPERTY AREA PER THIS SURVEY IS 51,699± S.F. (1.19± ACRES)
6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. INSTRUMENTATION FOR THIS SURVEY WAS A TRIMBLE ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS STATE STANDARDS SET BY WAC 332-130-090.

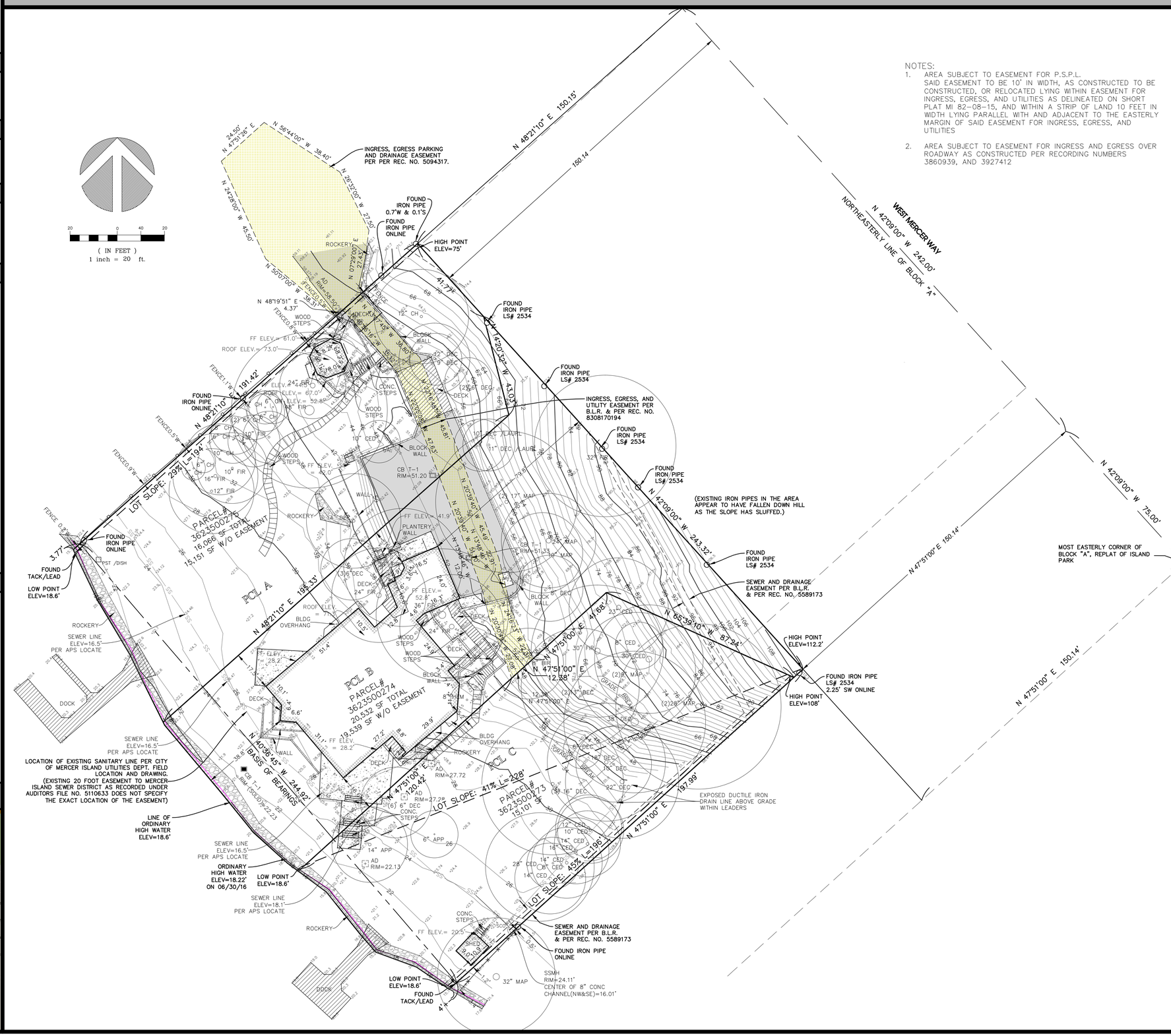
LEGEND

ASPHALT SURFACE
BUILDING
CENTERLINE ROW
CONCRETE SURFACE
CONCRETE WALL
DECK
FENCE LINE (CHAIN LINK)
FENCE LINE (WOOD)
ROCKERY
GAS METER
SIZE TYPE TREE (AS NOTED)
SS SEWER LINE
SCOo SEWER CLEAN OUT
SEWER MANHOLE

VICINITY MAP

N.T.S.





TOPOGRAPHIC & BOUNDARY SURVEY
SW 1/4 OF SW 1/4 SEC 12, TWP. 24N., RGE 04 E., W.M.
PARCEL NO. 3623500273, 3623500274, 3623500275

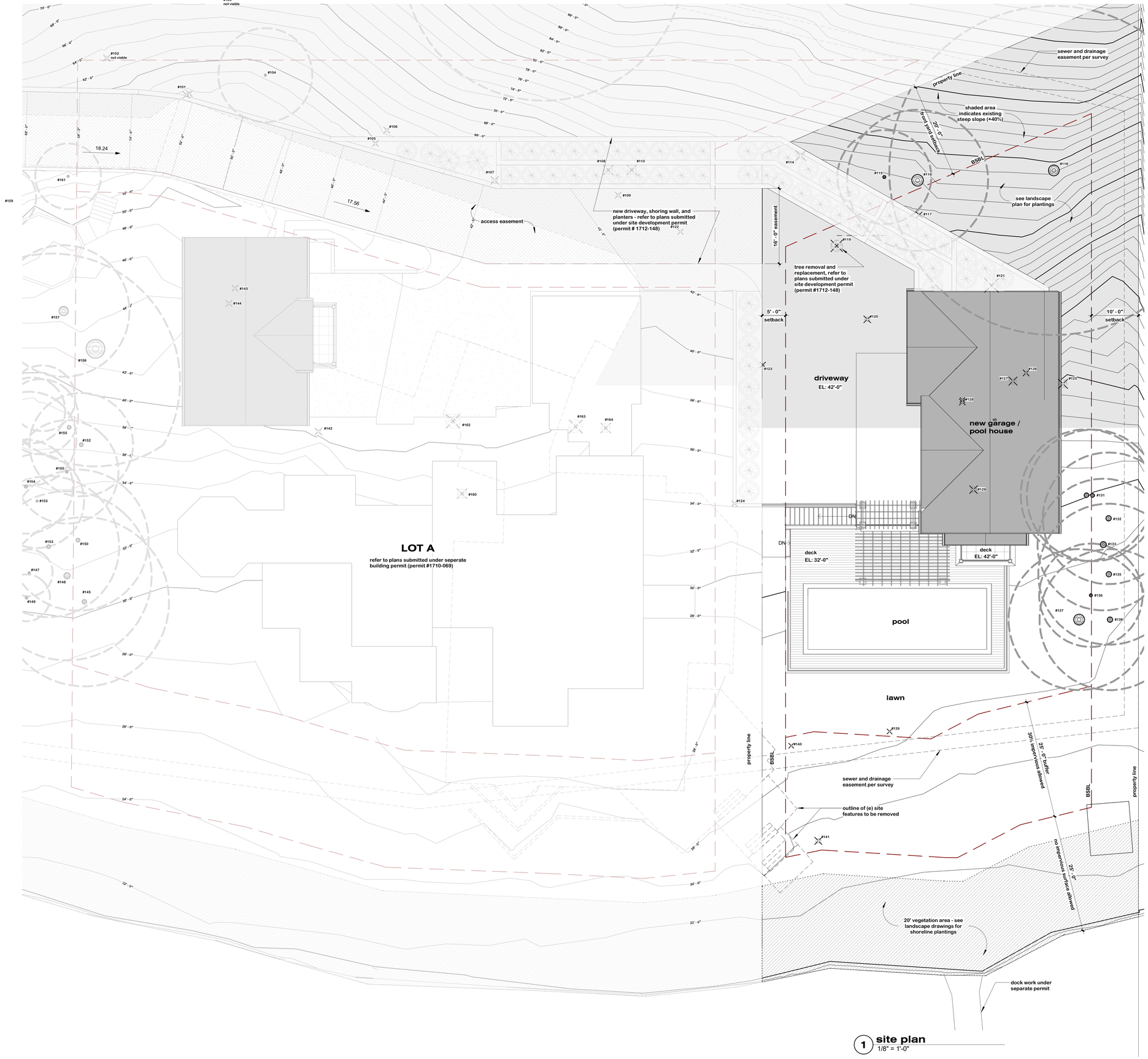
Ogden Point Project
3675 W MERCER ISLAND
MERCER ISLAND, WA 98040

Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

JOB NUMBER:	160681
DATE:	07/12/16
DRAFTED BY:	IDV- RSN
CHECKED BY:	MAB/TMM
SCALE:	1"= 20'

REVISION HISTORY	
8/17/16	WATER SHOT
9/19/17	ADDTL TOPO
10/13/17	ADDED SEWER LINE

SHEET NUMBER
1 OF 1



1 **site plan**
1/8" = 1'-0"

site plan notes

1. Final grading shall direct drainage away from all building structures.
2. Residence will have NFPA 13R sprinkler system. Include a monitored water flow alarm, fire coating in the crawlspaces, noncombustible roof and siding materials, and additional fire code alternate measures per fire marshal.
3. No structures shall be built over sewer easement.
4. See landscape drawings for planting, irrigation, site lighting, and other landscape design information.
5. Upgrade water service line to 8" supply, verify easements and provide to city prior to construction.

plotted: 3/7/2018 5:07:44 PM

DEMETRIOU Architecture PLLC
5555 Lakeview Drive, Suite 200, Kirkland, Washington 98033 | (425) 827-1700

No:	Revision Date:	Description:

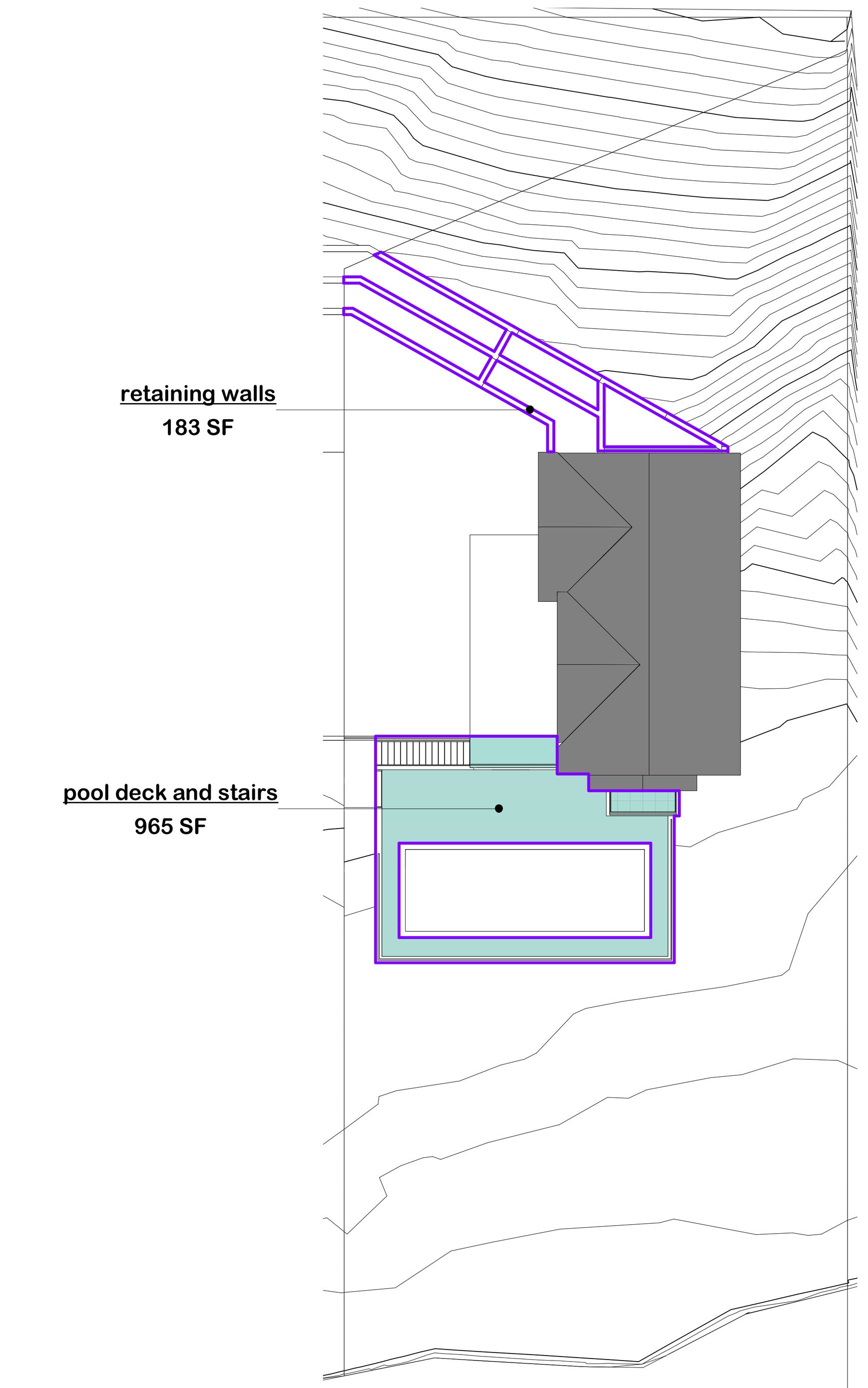
Drawn by : ABS
Submittal Date : 02/15/18
Purpose: building permit

Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title : **site plan**
drawing scale: 1/8" = 1'-0"

Project : **503.01**

Sheet : **A2.1**

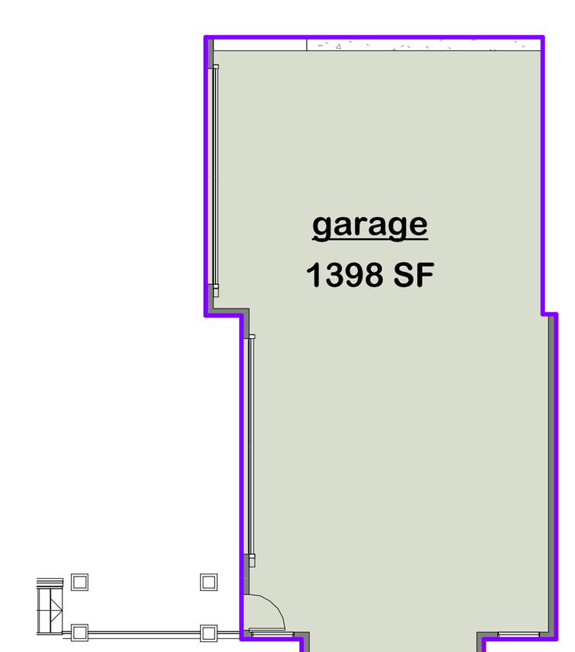


net lot area = 15,101 SF

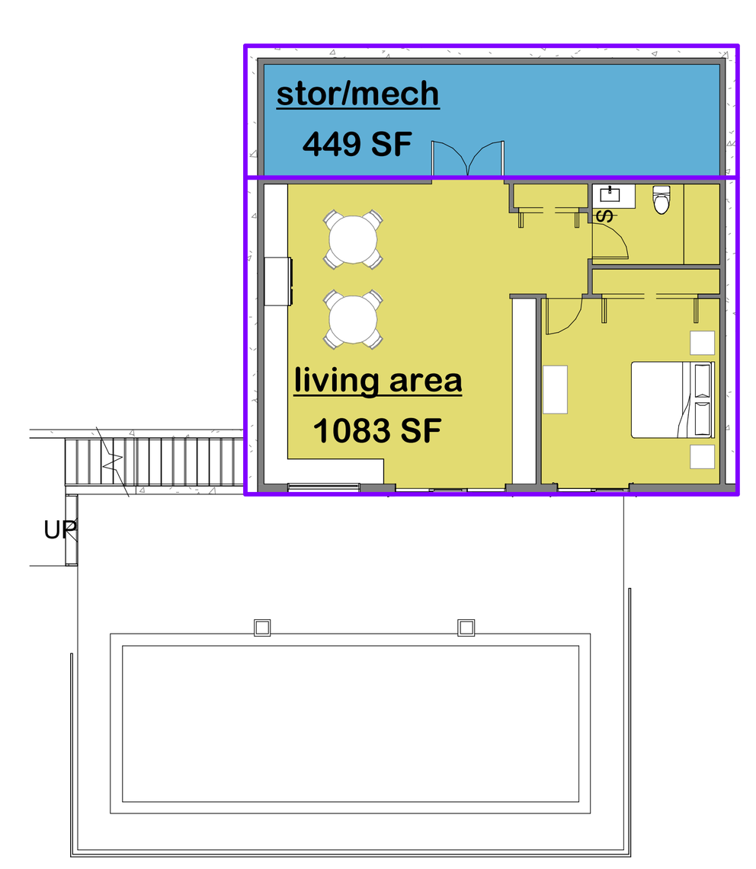
9% hardscape allowed = 1,359 SF

proposed hardscape = 1,148 SF

site - hardscape
1" = 20'-0"



motorcourt / garage
1/16" = 1'-0"



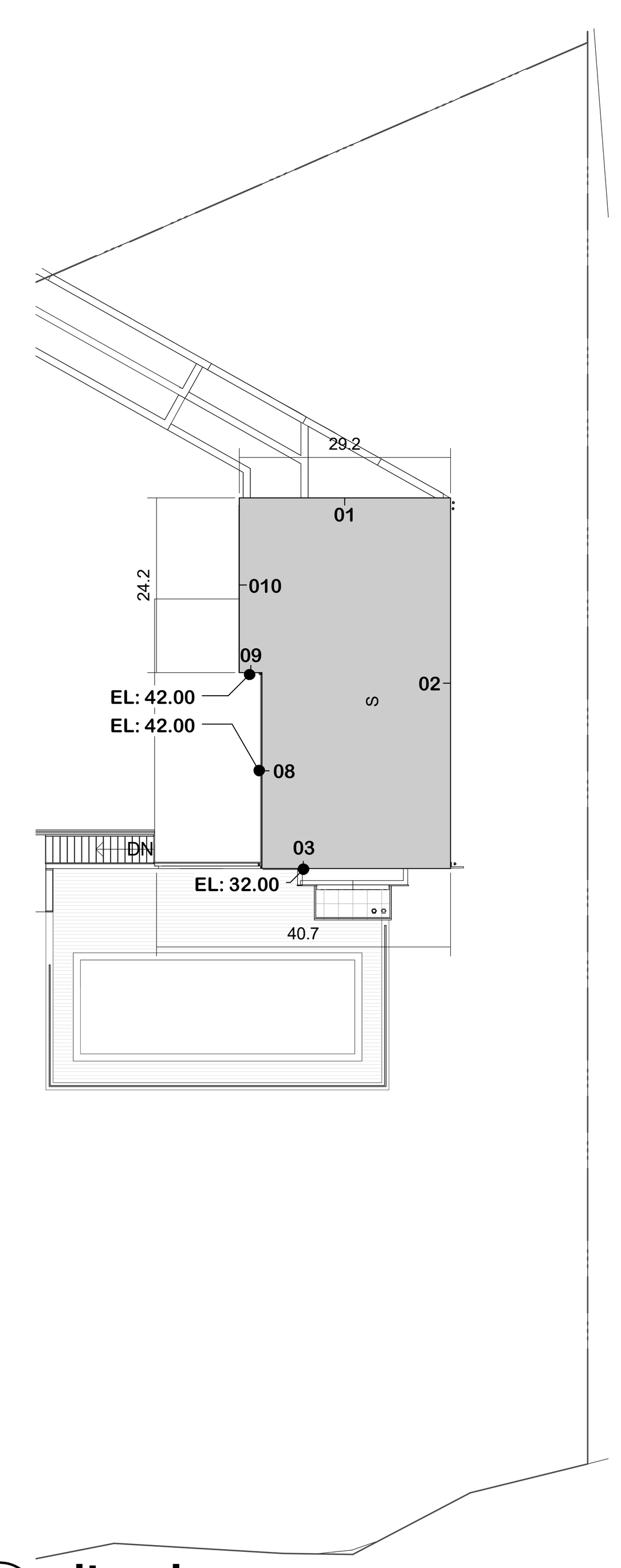
pool deck
1/16" = 1'-0"

Floor Areas

name	area
pool deck	
living area	1083 SF
stor/mech	449 SF
motorcourt / garage	
garage	1398 SF
	2930 SF

GROSS FLOOR AREA:

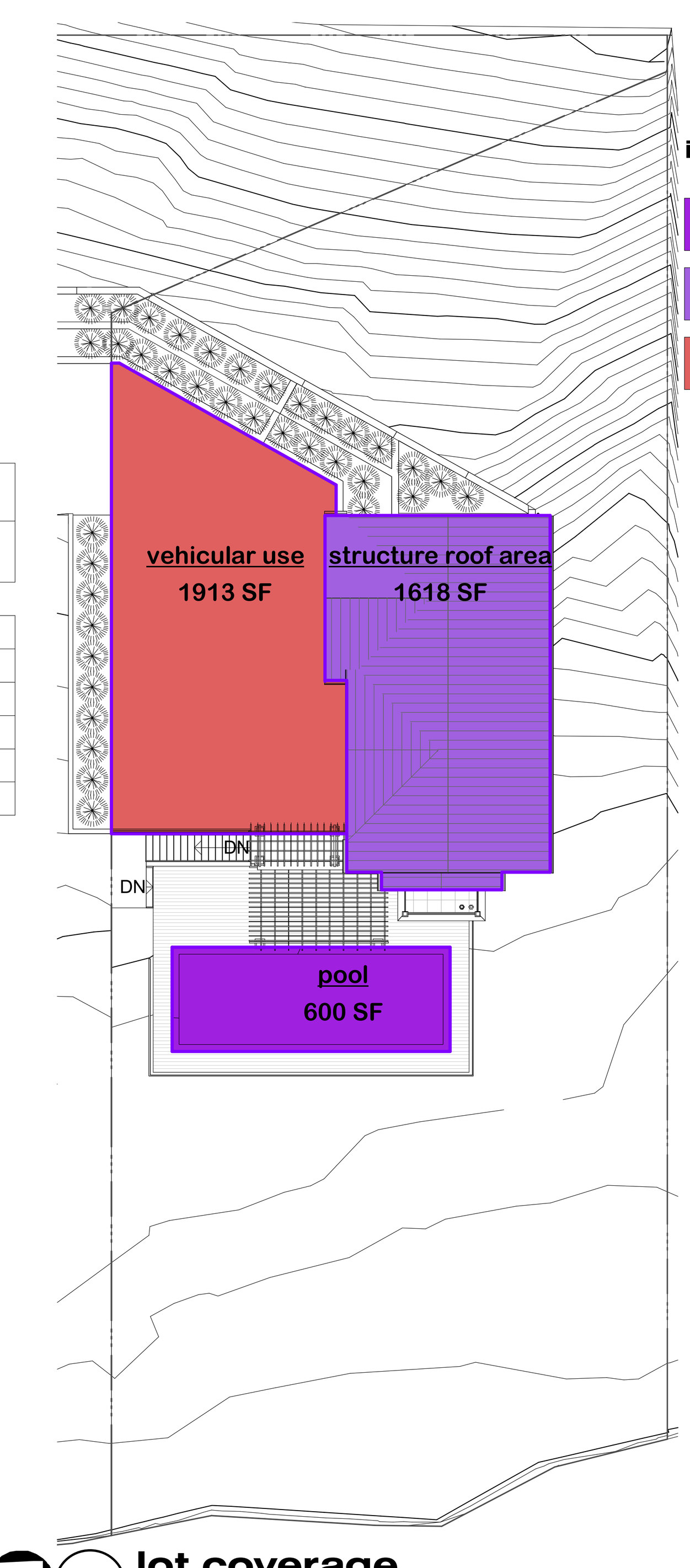
Gross Floor Area:	40% of lot area or 12,000 SF
40% of 15,101 =	6,040 SF
Proposed total foor area:	2,930 SF



site plan
1" = 20'-0"

ABE calcuation			
Mark	midpoint elevation	Length_Calc	ME*WL
01	57	350.7	19992.7
02	36.64	616.3	22579.4
03	32	488.4	15629.1
08	42	325.5	13671.0
09	42	37.5	1575.0
010	42	290.8	12211.5
		2109.2	85658.8

Total Midpoint Elevation * Wall Length	=	85,658.8
Total Length of Wall	=	2,109.2
Average Building Elevation (ABE)	=	40.6 ft



lot coverage
1" = 20'-0"

impervious areas

■ pool

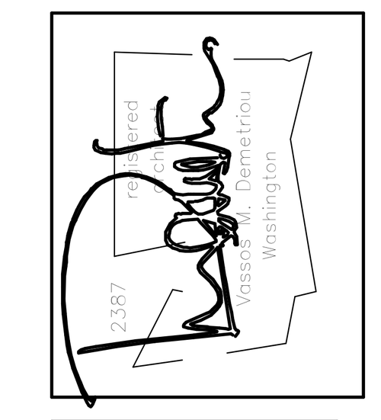
■ structure roof area

■ vehicular use

lot coverage: impervious surface

pool	600 SF
structure roof area	1618 SF
vehicular use	1913 SF
	4130 SF

lot C	=	15,101 SF
max. lot coverage	=	30 %
max. square footage	=	4,530 SF



No:	Revision Date:	Description:

Drawn by : ABS
Sheet Issue Date : 02/15/18
Purpose : building permit

5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033
(425)-827-1700
DEMETRIOU Architects PLLC
5555 Lakeview Drive, Suite 200, Kirkland Washington 98033 | (425)-827-1700

Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title :
site calculations
drawing scale: As indicated

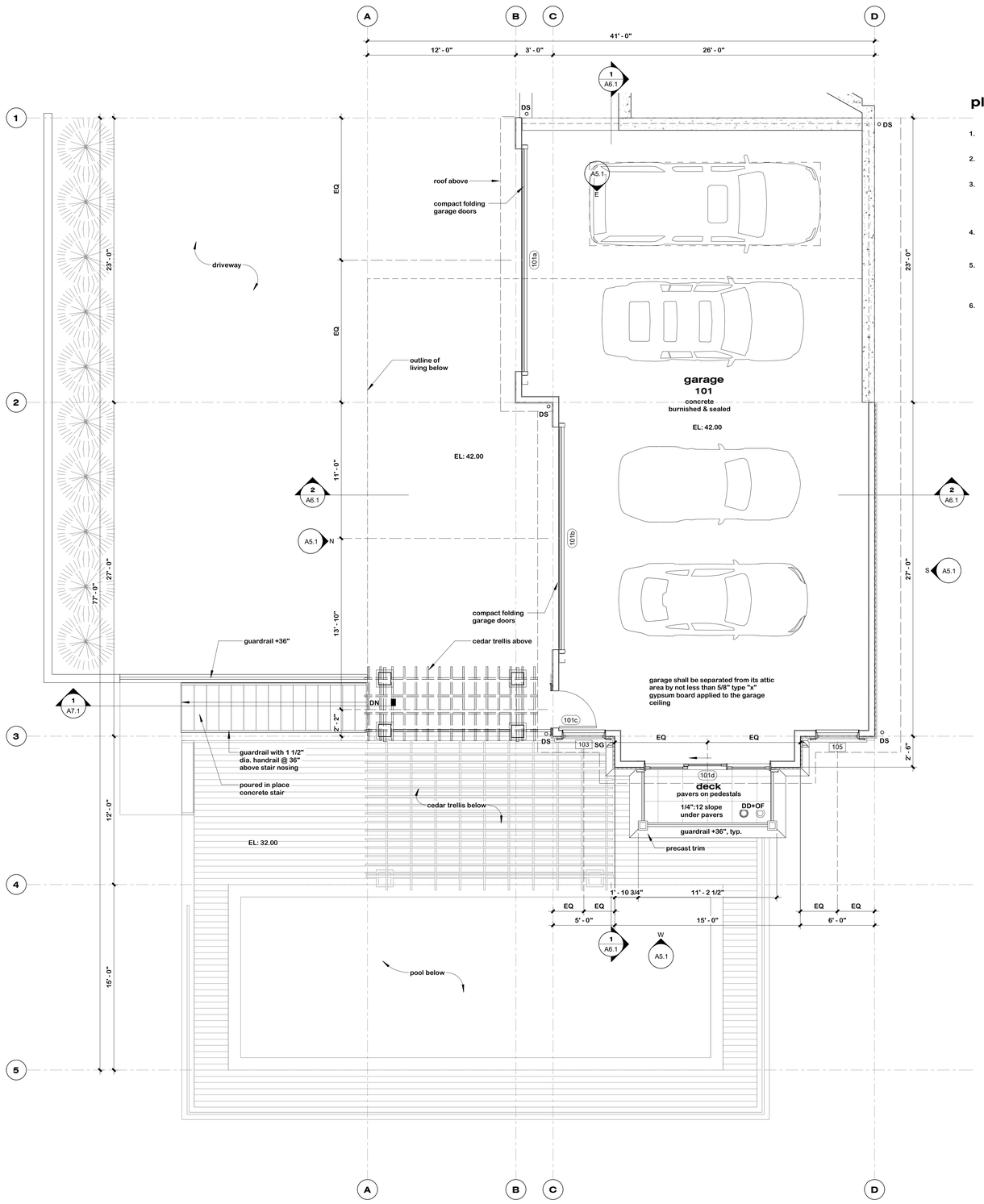
Project : 503.01

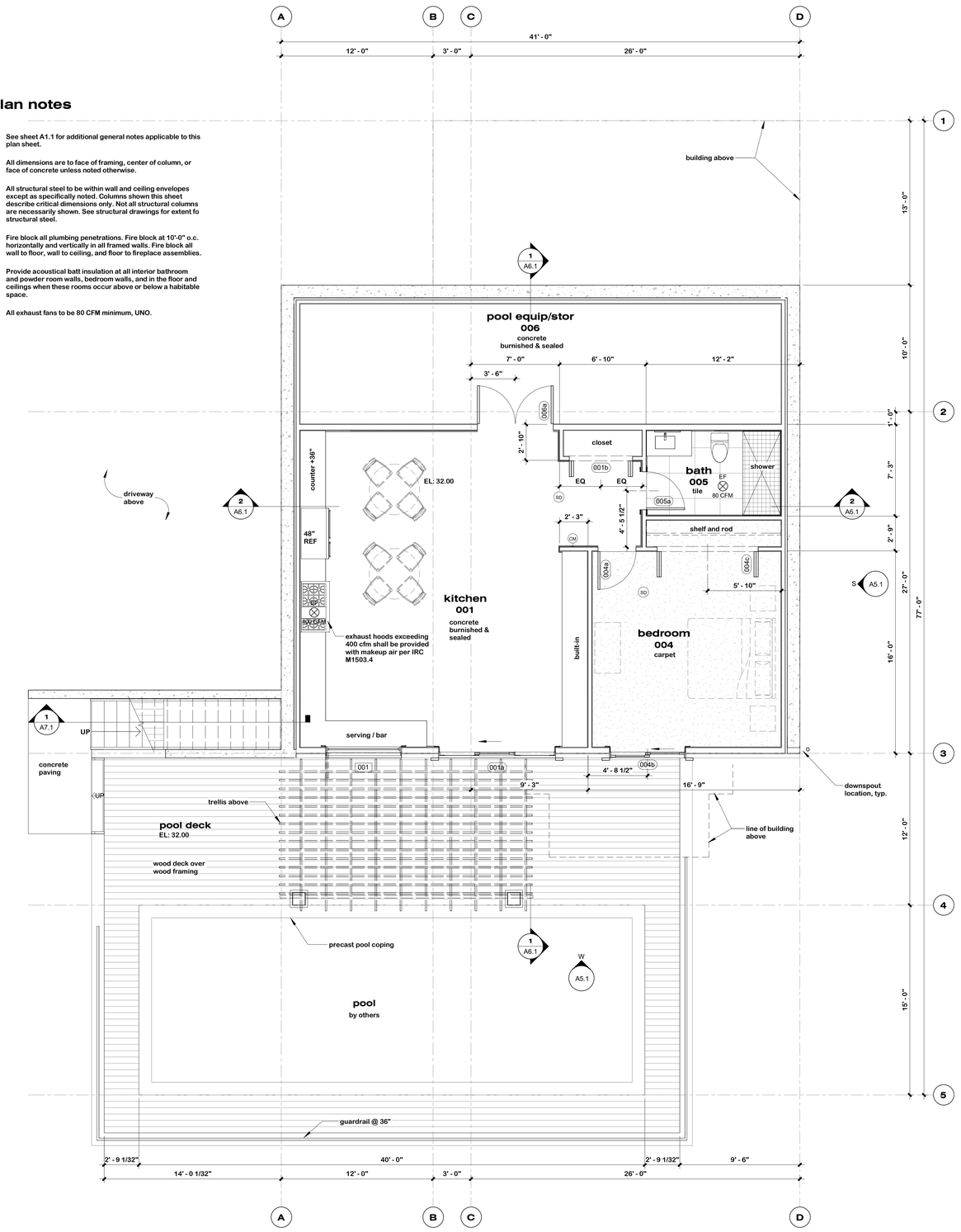
Sheet : A2.2

plotted: 3/7/2018 5:07:44 PM

plan notes

1. See sheet A1.1 for additional general notes applicable to this plan sheet.
2. All dimensions are to face of framing, center of column, or face of concrete unless noted otherwise.
3. All structural steel to be within wall and ceiling envelopes except as specifically noted. Columns shown this sheet describe critical dimensions only. Not all structural columns are necessarily shown. See structural drawings for extent fo structural steel.
4. Fire block all plumbing penetrations. Fire block at 10'-0" o.c. horizontally and vertically in all framed walls. Fire block all wall to floor, wall to ceiling, and floor to fireplace assemblies.
5. Provide acoustical batt insulation at all interior bathroom and powder room walls, bedroom walls, and in the floor and ceilings when these rooms occur above or below a habitable space.
6. All exhaust fans to be 80 CFM minimum, UNO.





2 garage level floor plan
1/4" = 1'-0"

1 pool level floor plan
1/4" = 1'-0"

plotted: 3/7/2018 5:07:45 PM

DEMETRIOU Architects PLLC
5555 Lakeview Drive, Suite 200 Kirkland, Washington 98033 | 425.827.1700

No:	Revision Date:	Description:

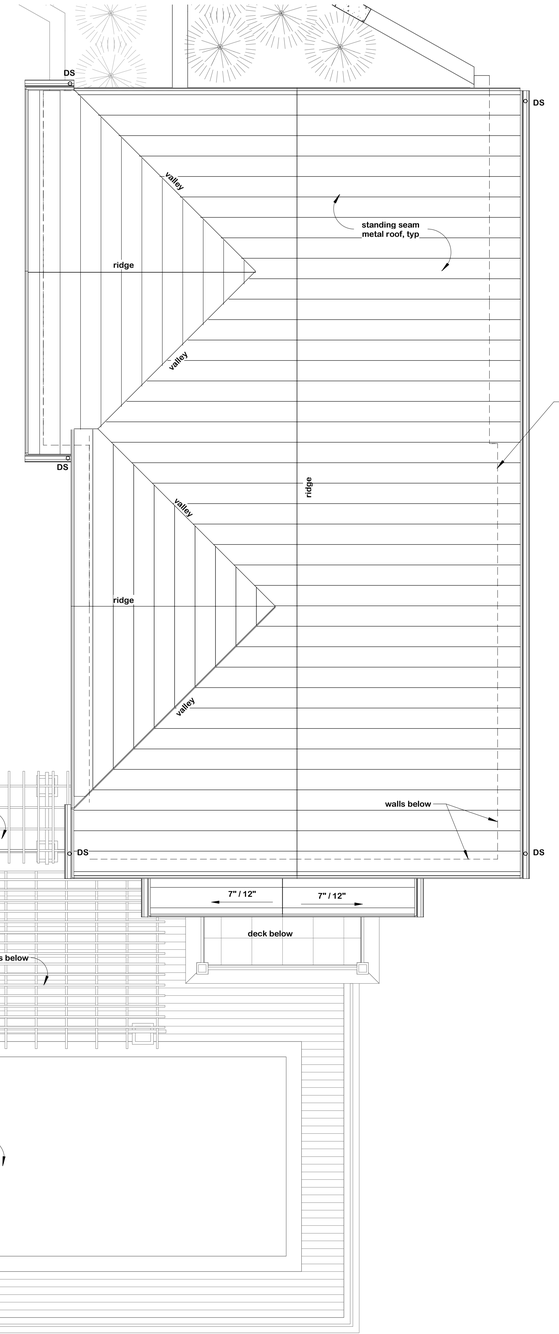
Drawn by : ABS
Revision Date : 02/15/18
Purpose: building permit

Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title :
floor plans
drawing scale: 1/4" = 1'-0"

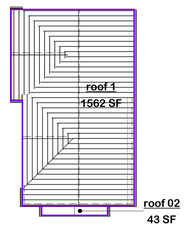
Project :
503.01

Sheet :
A3.1



roof plan notes

1. Roof slope at pitched roof areas to be 7":12", typ UNO.
2. Roof slope shall in no case be less than 1/4":12" at any location.
3. Plumbing risers and vents not shown on plans for clarity. Plumbing penetrations to be kept to a minimum and located on roof slopes not visible from the entry access.
4. Flash and counterflash all roof penetrations.
5. Provide balanced roof ventilation. It is recommended that the contractor coordinate with venting product suppliers to prevent imbalanced ventilation under severe weather conditions where infiltration could occur. Weather shield flashing may be required at these conditions.



roof 01
area = 1,562 SF
venting required = 1,499.52 sq in
proposed venting - soffit = 60'-6"
proposed venting - ridge = 76'-6"

venting provided - soffit = 544.5 sq in
venting provided - ridge = 1,032.75 sq in
total = 1,577.25 sq in

roof 02
no venting required

soffit vent = AirVent Inc, continuous soffit vent, 9 sq in per ft
ridge vent = Cor-A-Vent, V-300 ridge vent, 13.5 sq in per ft

2 **roof venting calculations**
1/16" = 1'-0"

1 **roof plan**
1/4" = 1'-0"

plotted: 3/7/2018 5:07:45 PM

5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033 | 425.827.1700
DEMETRIOU Architects PLLC

Drawn by : ABS
Submittal Date : 02/15/18
Purpose: building permit

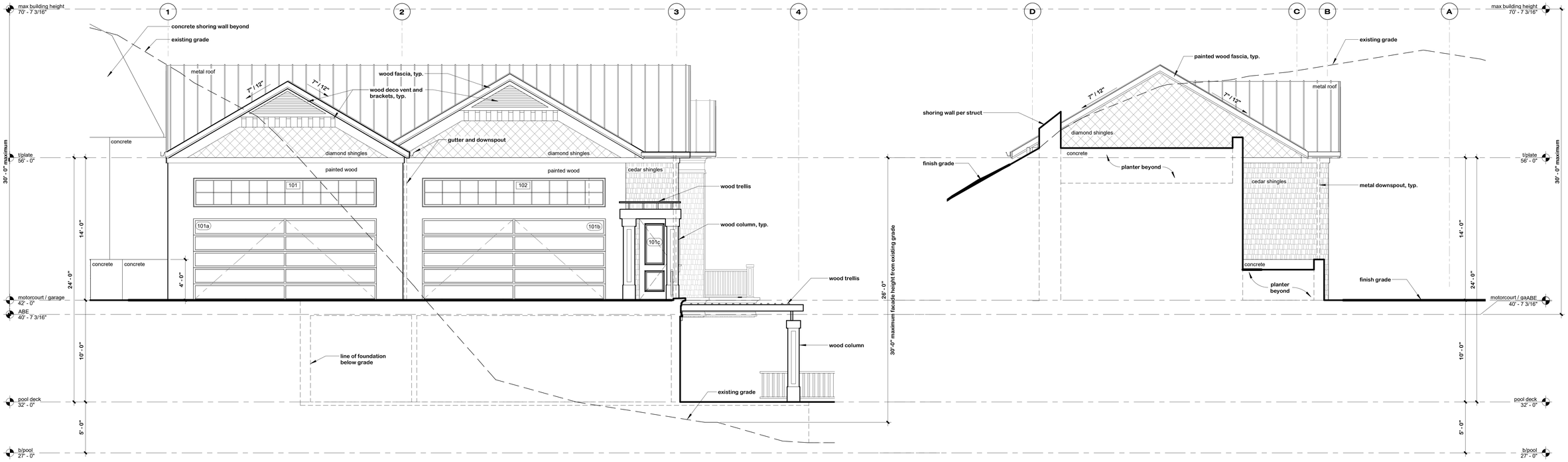
No:	Revision Date:	Description:

Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title :
roof plan
drawing scale: As indicated

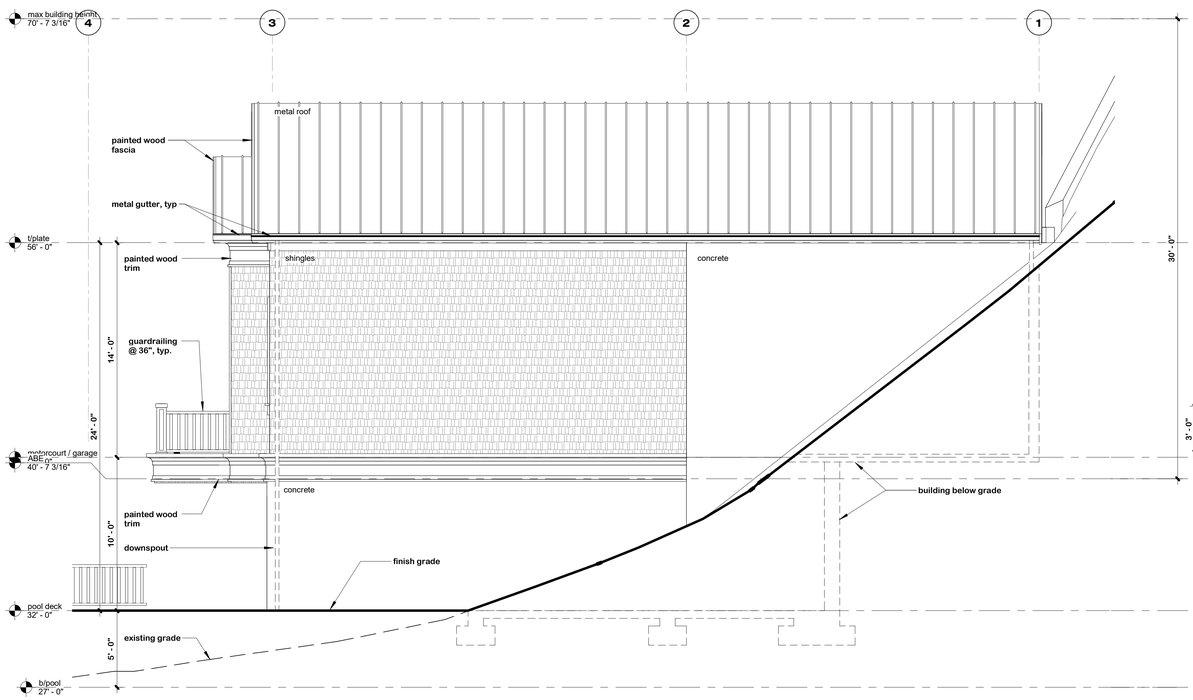
Project : 503.01

Sheet : **A4.1**

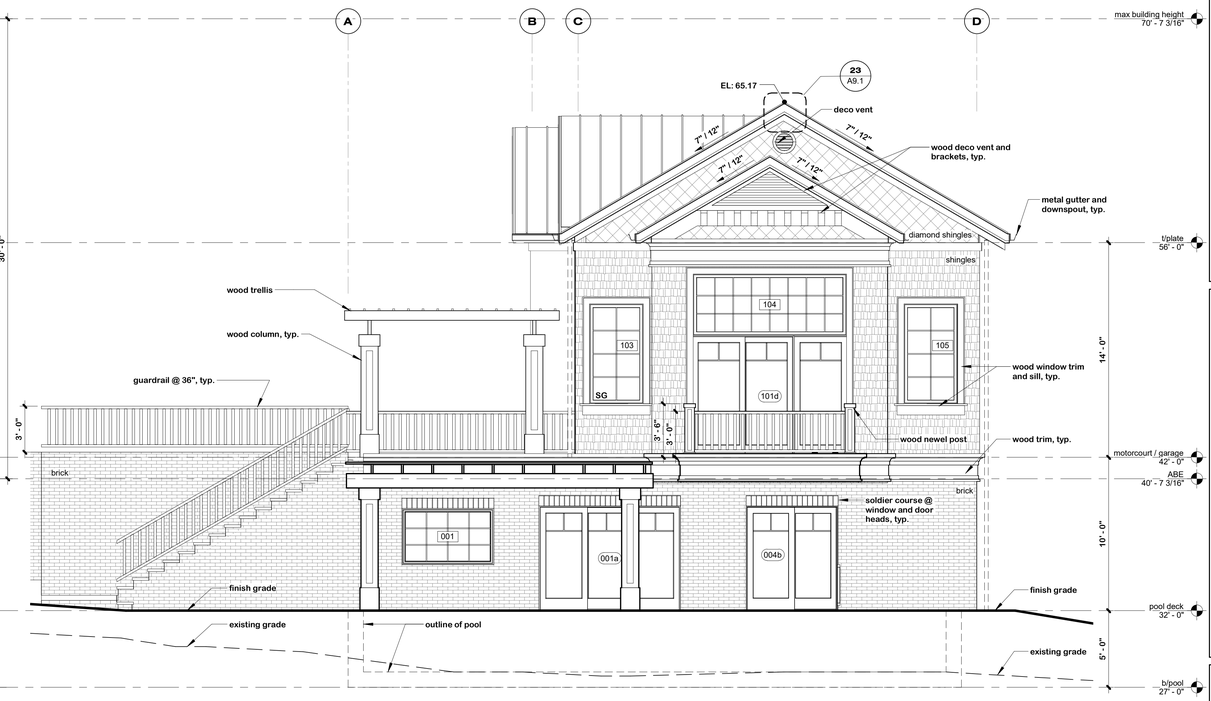


N **north elevation**
1/4" = 1'-0"

E **east elevation**
1/4" = 1'-0"



S **south elevation**
1/4" = 1'-0"



W **west elevation**
1/4" = 1'-0"

plotted: 3/7/2018 5:07:46 PM

DEMETRIOU Architecture PLLC
5555 Lakeview Drive, Suite 200, Kirkland, Washington 98033 | 425.827.1700

Drawn by : ABS
Submittal Date : 02/15/18
Purpose: building permit

No:	Revision Date:	Description:

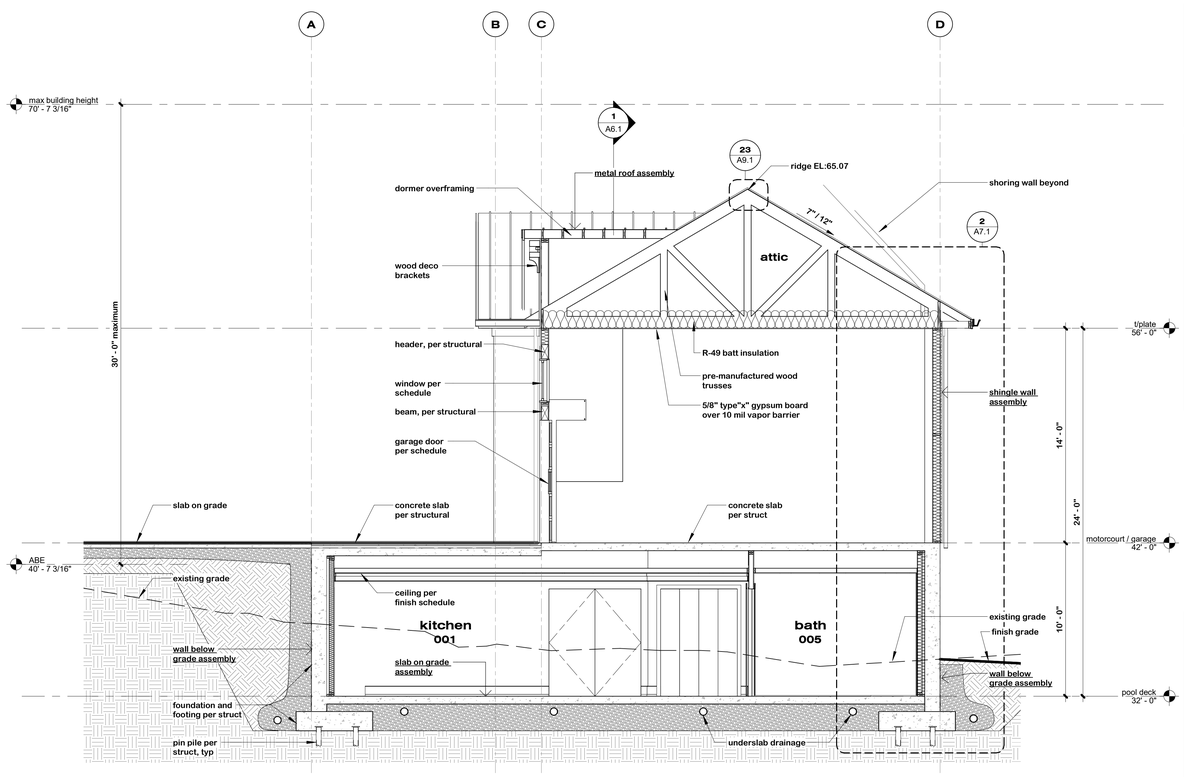
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Project :

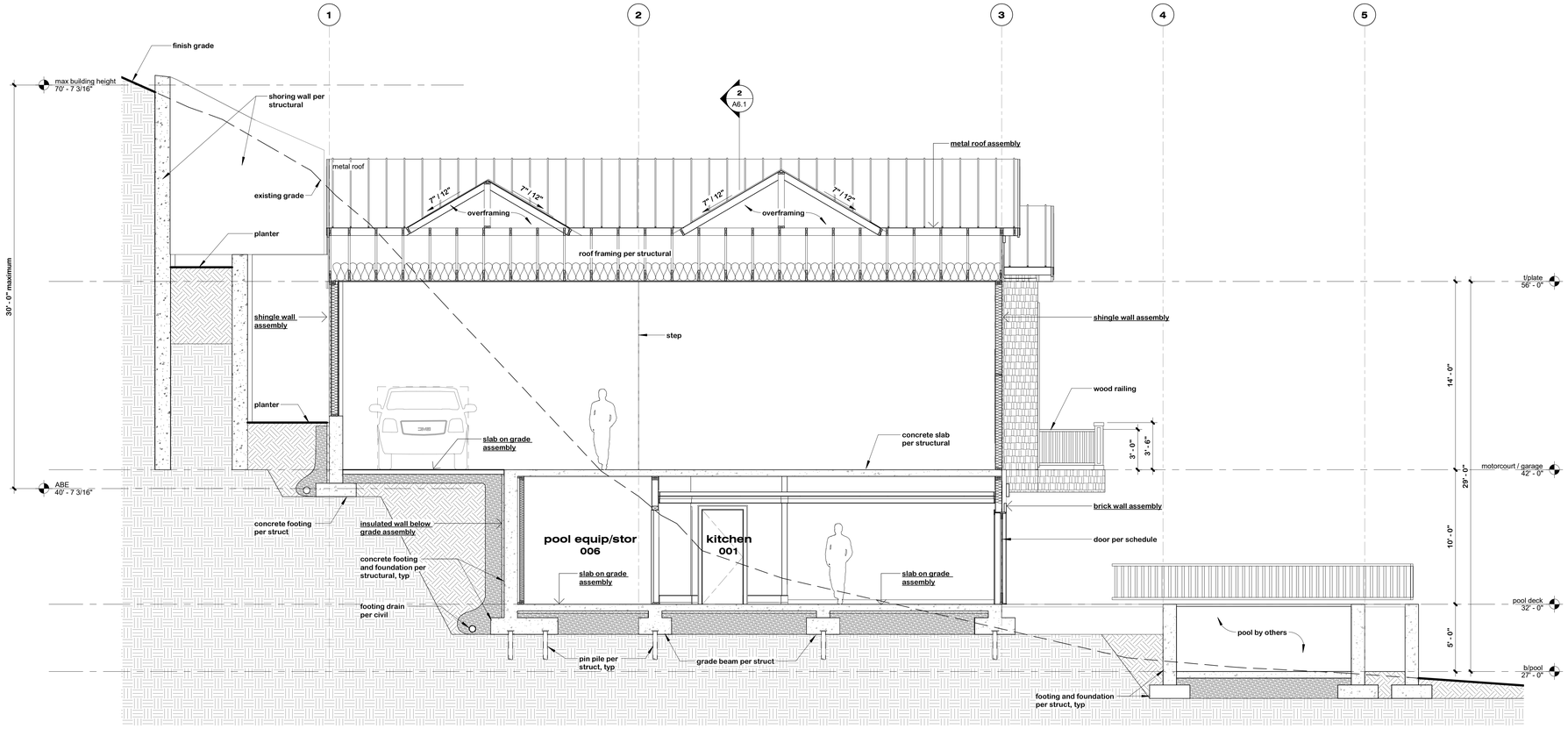
Sheet Title : **elevations**
drawing scale: 1/4" = 1'-0"

Project : **503.01**

Sheet : **A5.1**



2 **building section**
1/4" = 1'-0"



1 **building section**
1/4" = 1'-0"

plotted: 3/7/2018 5:07:48 PM

DEMETRIOU Architects PLLC
5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033
425.827.1700

No:	Revision Date:	Description:

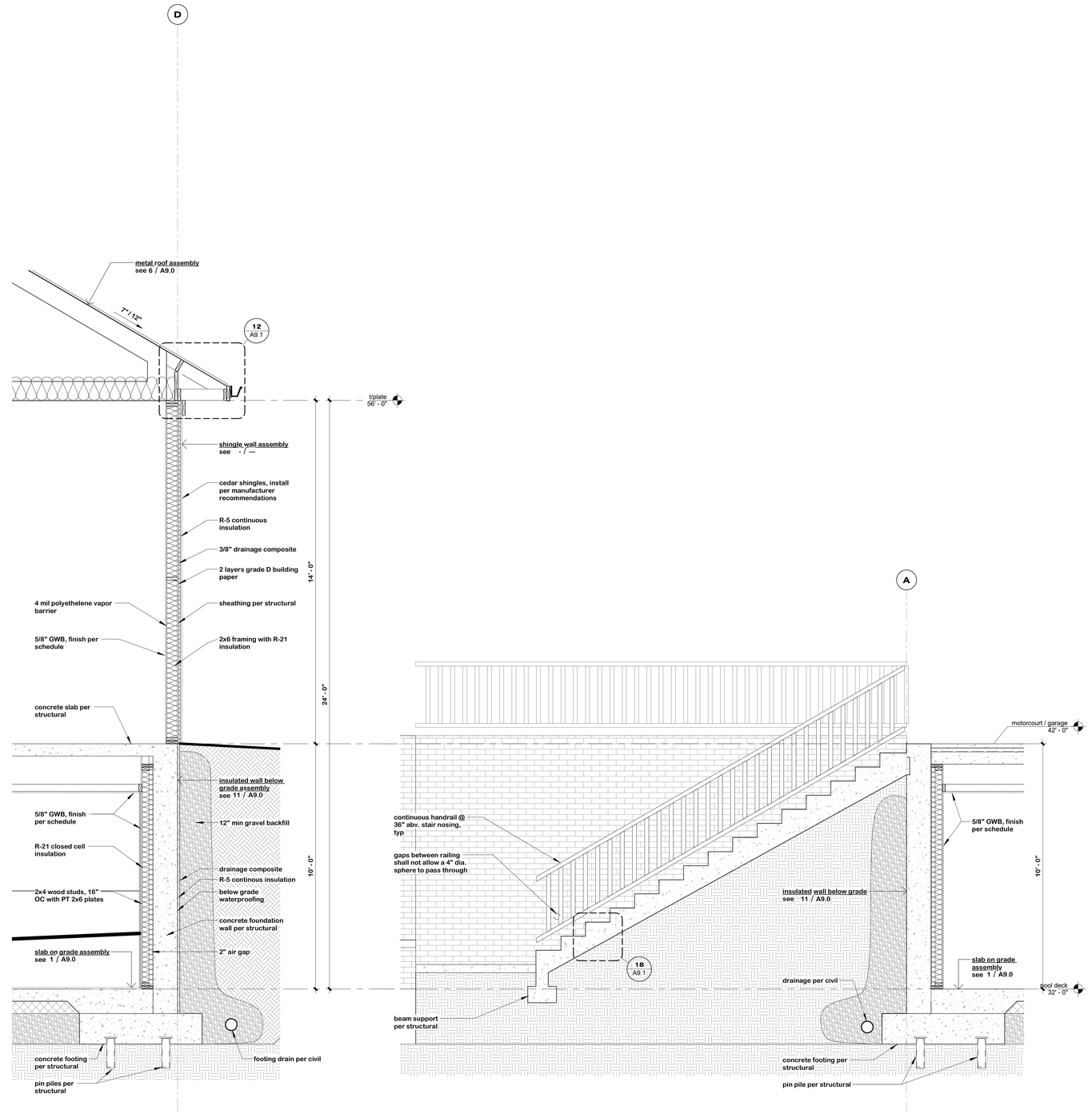
Drawn by :
ABS
Submittal Date :
02/15/18
Purpose:
building permit

Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title :
building sections
drawing scale: 1/4" = 1'-0"

Project :
503.01

Sheet :
A6.1



2 typical wall section
1/2" = 1'-0"

1 exterior stair
1/2" = 1'-0"

plotted: 3/7/2018 5:07:48 PM

5555 Lakeview Drive, Suite 200, Kirkland, Washington 98033 | 425.827.1700
DEMETRIOU Architects PLLC

Drawn by : ABS
Sheet Issue Date : 02/15/18
Purpose: building permit

No.	Revision Date:	Description:

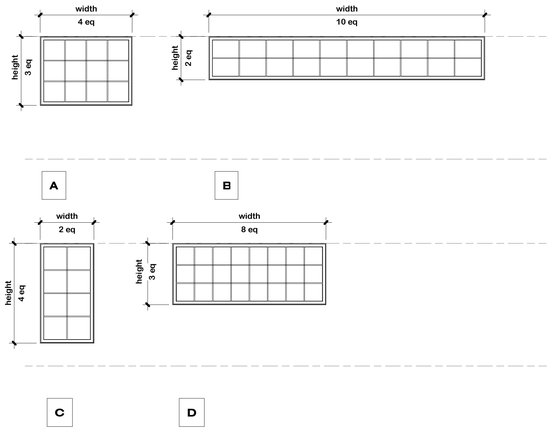
Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title :
wall and stair sections
drawing scale: 1/2" = 1'-0"

Project :
503.01

Sheet :
A7.1

window types



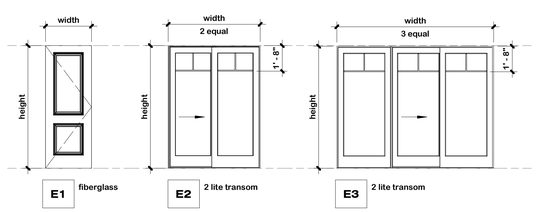
glazing notes

1. See sheet A1.1 for general notes
2. All glazing to have a U-factor of 0.25 max per WSEC prescriptive approach.
3. Window dimensions taken to frame UNO.
4. Safety glazing (SG) to be provided where required by the IRC. See plans for safety glazing locations as noted. Each pane of safety glazing to be identified in accordance with IRC.
5. Emergency escape and rescue openings shall be installed per IRC R310. See plans for locations. All emergency escape openings shall have a minimum net clear opening of 5.7 SF. The minimum net clear opening shall be no less than 24", clear opening width no less than 20", with a finished sill height not more than 44" above the floor.
6. Window supplier/manufacturer to field verify all rough openings, window divisions, and operation prior to production of windows.
7. All window finishes per architect. Window supplier to submit color smaple for approval by architect/owner.
8. All operable windows to be provided with screens.
9. Windows within 10'-0" of grade (or accessible deck) shall be capable of being locked.
10. All sill and head heights are taken from finish floor UNO.

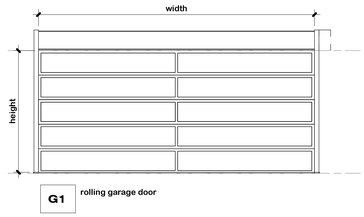
window schedule

Room Number	Room Name	no.	type	width	height	sill height	head height	manufacturer	model	Comments
pool deck										
001	kitchen	001	E	6' - 0"	3' - 8"	3' - 0"	6' - 8"			
motorcourt / garage										
		101	B	18' - 0"	2' - 10"	9' - 2"	12' - 0"			
		102	B	18' - 0"	2' - 10"	9' - 2"	12' - 0"			
		103	C	3' - 6"	6' - 6"	3' - 6"	10' - 0"			safety glazing
		104	D	10' - 0"	4' - 0"	7' - 11 1/2"	11' - 11 1/2"			
		105	C	3' - 6"	6' - 6"	3' - 6"	10' - 0"			

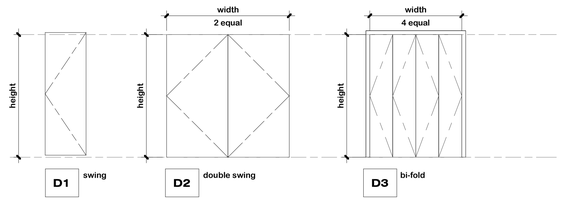
exterior door types



garage door types



interior door types



door notes

1. Safety glazing (SG) to be provided where required by IBC 2403. Refer to plans for safety glazing locations. Each pane of safety glazing shall be identified by a label in accordance with the IRC.
2. Door frames and frame anchorage shall be installed according to the conditions of their listings.
3. All exterior doors, except garage doors, to be provided with mortise lock and deadbolt. Minimum 1/2" throw deadbolt or dead latch for doors per IRC R329.
4. Opaque exterior doors to have a maximum U-factors per table WSEC R402.1.1. Glazed exterior doors to have a maximum U-factor of 0.25.
5. Fire doors, windows, and dampers shall have an approved label or listing mark, indicating fire-protection rating, which is visible for inspection and permanently affixed at teh time of manufacture.
6. All exterior, mechanical room, and crawl space doors shall be insulated with interlocking low-rise thresholds and weatherstripping.
7. Door thresholds shall not exceed 1/2" in height above finish floor.
8. All bedroom, bathroom, and powder rooms to be provided with privacy locks.
9. Operation, hinging, pocketing, or sliding per plans.

door schedule

	room no.	room name	type	material	finish	width	height	u-value	area	thickness	manufacturer	model	Comments
pool deck													
001a	001	kitchen	D6	aluminum	paint	9' - 2 3/4"	6' - 10"		63 SF	1 3/4"			
001b	001	kitchen	D3	MDF	paint	5' - 0"	7' - 6"		38 SF	1 3/4"			
004a	004	bedroom	D1	MDF	paint	3' - 0"	7' - 6"		23 SF	1 3/4"			
004b	004	bedroom	D7	aluminum clad	paint	6' - 0"	6' - 10"		41 SF	1 3/4"			
004c	004	bedroom	D3	MDF	paint	8' - 0"	8' - 0"		64 SF	1 3/4"			
005a	005	bath	17	MDF	paint	3' - 0"	7' - 0"		21 SF	1 3/4"			
006a	006	pool equip/stor	D4	MDF	paint	6' - 0"	7' - 0"		42 SF	2"			
motorcourt / garage													
101a			G1	aluminum clad	paint	18' - 0"	8' - 0"		144 SF	2"			
101b			G1	aluminum clad	paint	18' - 0"	8' - 0"		144 SF	2"			
101c			E1	fiberglass	paint	3' - 0"	8' - 0"		24 SF	1 3/4"			
101d			E3	aluminum clad	paint	10' - 2 3/4"	7' - 11 1/2"		81 SF	1 3/4"			
									684 SF				

DEMETRIOU Architects PLLC
5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033
t 425.827.1700
5555 Lakeview Drive, Suite 200 Kirkland Washington 98033 | t 425.827.1700

No:	Revision Date:	Description:

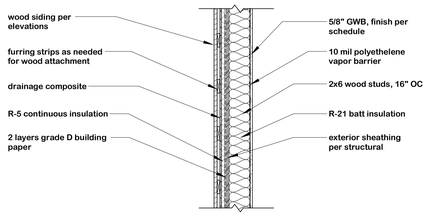
Drawn by :
ABS
Sheet Issue Date :
02/15/18
Purpose :
building permit

Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

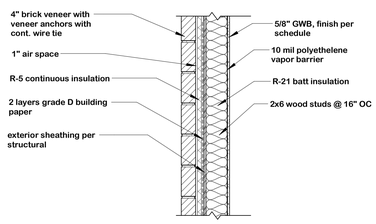
Sheet Title :
schedules
drawing scale: 1/4" = 1'-0"

Project :
503.01

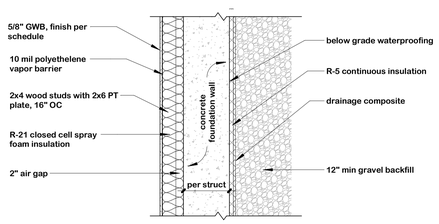
Sheet :
A8.1



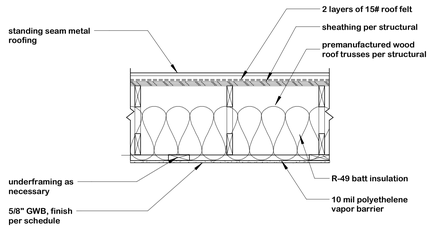
14 exterior wood wall
3/4" = 1'-0"



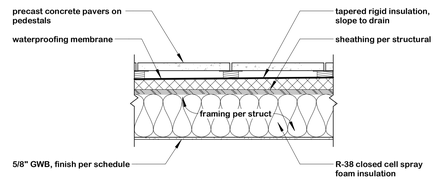
13 exterior brick veneer wall
3/4" = 1'-0"



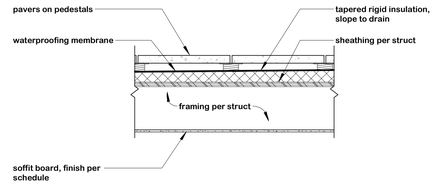
11 insulated below grade wall
3/4" = 1'-0"



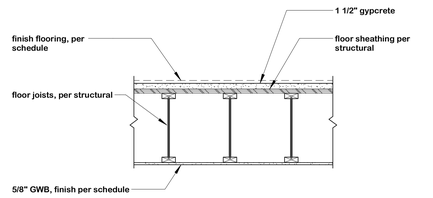
6 metal roof
3/4" = 1'-0"



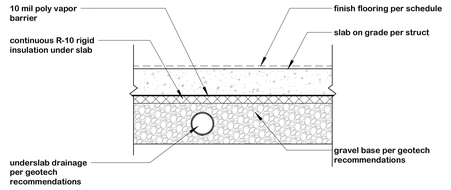
4 deck over living
3/4" = 1'-0"



3 typical deck
3/4" = 1'-0"



2 typical floor
3/4" = 1'-0"



slab on grade assembly

1 slab on grade
3/4" = 1'-0"

5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033 | 425.827.1700
DEMETRIOU Architects PLLC

Drawn by :
ABS
Check by :
Date :
02/15/18
Purpose:
building permit

No.	Revision Date:	Description:

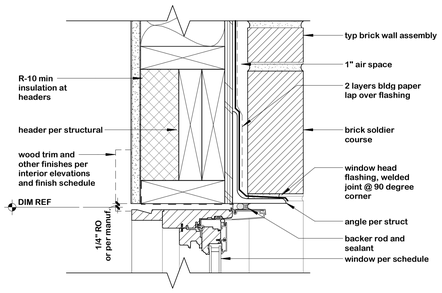
Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title :
assemblies
drawing scale: 3/4" = 1'-0"

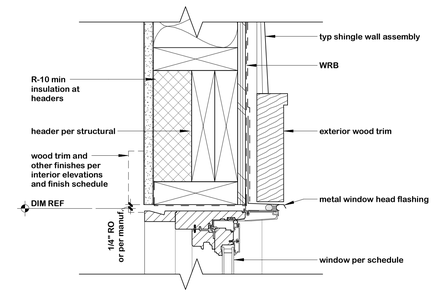
Project :
503.01

Sheet :
A9.0

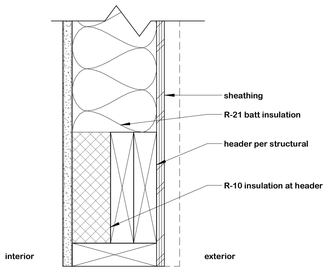
plotted: 3/7/2018 5:07:49 PM



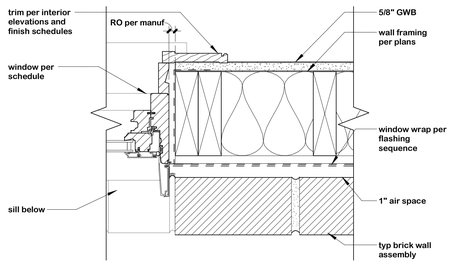
15 window head @ brick
3" = 1'-0"



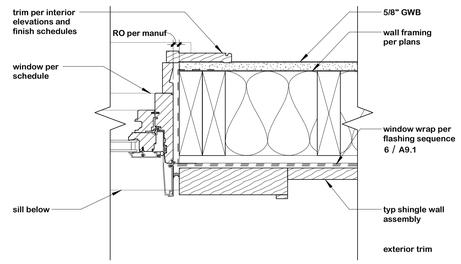
10 window head @ shingles
3" = 1'-0"



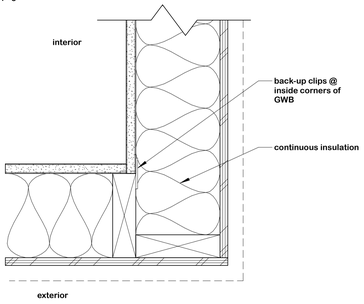
5 header framing stacked
3" = 1'-0"



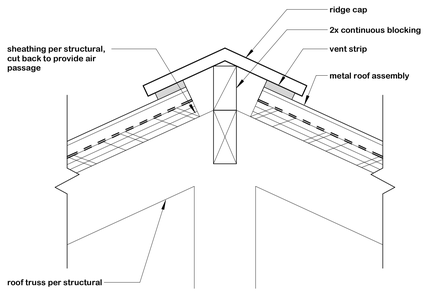
14 window jamb @ brick
3" = 1'-0"



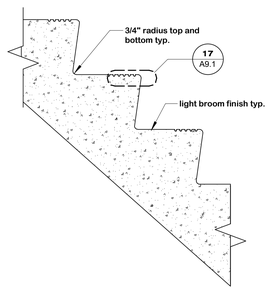
9 window jamb @ shingles
3" = 1'-0"



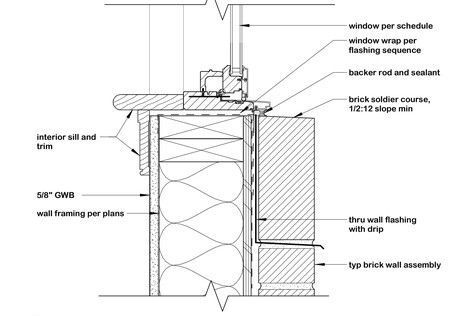
4 header framing
3" = 1'-0"



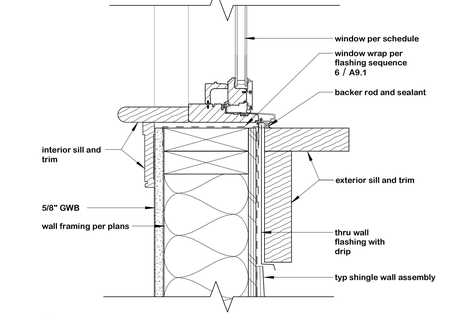
23 typical vented roof ridge
3" = 1'-0"



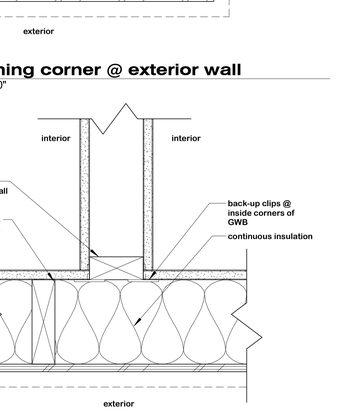
18 exterior concrete stair detail
3" = 1'-0"



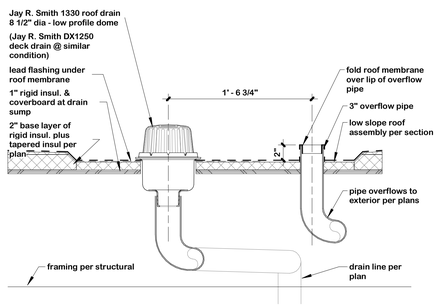
13 window sill @ brick
3" = 1'-0"



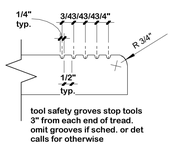
8 window sill @ shingles
3" = 1'-0"

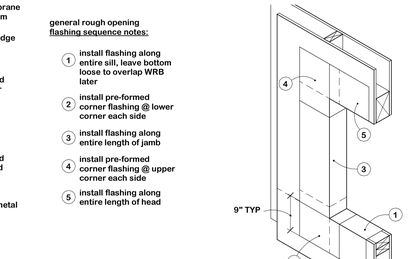


3 framing corner @ exterior wall
3" = 1'-0"



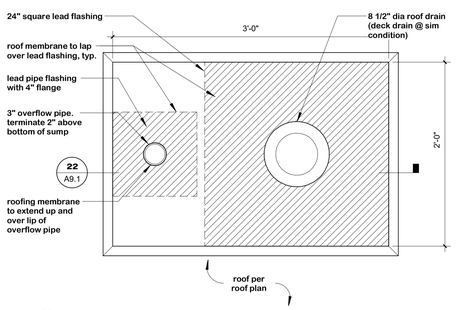
22 roof drain
1 1/2" = 1'-0"



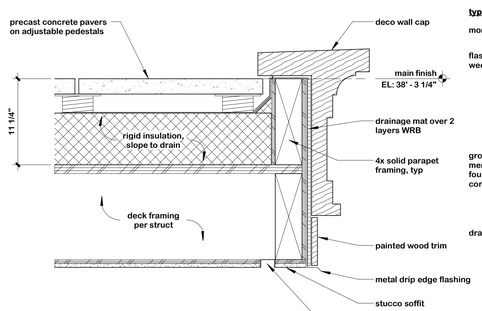


12 roof eave - typ.
1 1/2" = 1'-0"

6 window flashing sequence
3/4" = 1'-0"

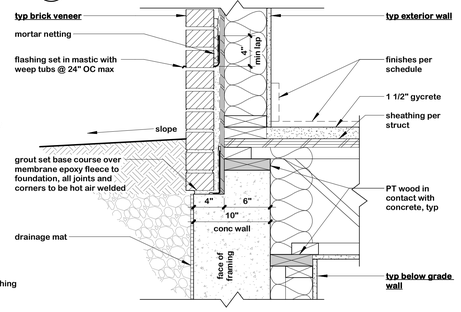


21 drain sump
1 1/2" = 1'-0"

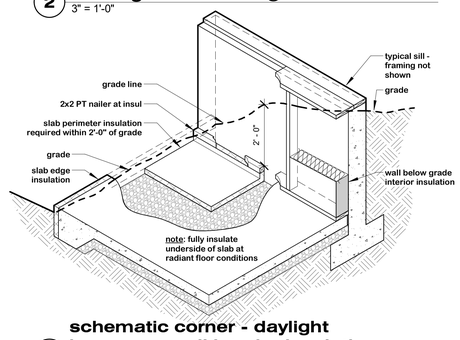


17 exterior conctrete stair nosing detail
3" = 1'-0"

16 deck edge detail
1 1/2" = 1'-0"



11 typ foundation @ brick
1 1/2" = 1'-0"



schematic corner - daylight basement wall interior insulation
1 1/2" = 1'-0"

DEMETRIOU Architects PLLC
5555 Lakeview Drive, Suite 200
Kirkland, Washington 98033
425.827.1700

Drawn by : ABS
Checked by : Date : 02/15/18
Purpose: building permit

No:	Revision Date:	Description:

Project :
Ogden Point Residence - Lot C
3675 W Mercer Way (Parcel #3623500273)
Mercer Island, WA 98040

Sheet Title : **details**
drawing scale: As indicated

Project : **503.01**

Sheet : **A9.1**

plotted: 3/7/2018 5:07:50 PM

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

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:
   RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS
   FLOOR LIVE LOAD . . . . 40 PSF
   ROOF
   ROOF LIVE LOAD . . . . 25 PSF
   GARAGES
   FLOOR LIVE LOAD (PASSENGER VEHICLES) . . . . 40 PSF
   FLOOR CONCENTRATED LOAD (PASSENGER VEHICLES) . . . . 3000 LBS
   MISCELLANEOUS LOADS
   DECKS . . . . 1.5 x AREA SERVED
   DEFLECTION CRITERIA
   LIVE LOAD DEFLECTION L/700
   TOTAL LOAD DEFLECTION L/500
   ENVIRONMENTAL LOADS
   WIND . . . . GCpi=0.18, 110 MPH, RISK CATEGORY II, EXPOSURE "C"
   EARTHQUAKE . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
   LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS, Vs = 35.7 KIPS
   SITE CLASS=D, Ss=1.4, Sds=.94, S1=.54, SD1=.54, Cs=0.144
   SDC D, Ie=1.0, R=6.5
   SEE PLANS FOR ADDITIONAL LOADING CRITERIA

3. 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.

4. 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.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS 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.

6. 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 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".

7. 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.

8. 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.

9. 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
   METAL DECKING
   STRUCTURAL STEEL

   CONTRACTOR SHALL SUBMIT WALL ELEVATION DRAWINGS OF AT LEAST 1/8" = 1'-0" SCALE INDICATING LOCATIONS OF CONNECTION EMBEDMENT'S 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.

10. 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

11. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL FABRICATION AND ERECTION	PER AISC 360
EPOXY GROUTED INSTALLATIONS	PER MANUFACTURER
DRIVEN DEEP FOUNDATION	PER GEOTECH REQUIREMENTS

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 ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.

12. UNLESS OTHERWISE NOTED, THE FOLLOWING ELEMENTS COMPRISE THE SEISMIC-FORCE-RESISTING SYSTEM AND ARE SUBJECT TO SPECIAL INSPECTION FOR SEISMIC RESISTANCE IN ACCORDANCE WITH SECTION 1705.12 OF THE INTERNATIONAL BUILDING CODE.

    A. STRUCTURAL STEEL MOMENT FRAMES AND BRACED FRAMES REQUIRE CONTINUOUS INSPECTION FOR WELDING PER AISC 341 EXCEPT SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16-INCH.

    B. STRUCTURAL WOOD SHEAR WALL SYSTEMS REQUIRE PERIODIC INSPECTION FOR FIELD GLUEING, NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE SEISMIC FORCE, RESISTING SYSTEM INCLUDING SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLDOWNS.

GEOTECHNICAL

13. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH OR COMPACTED STRUCTURAL FILL AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

    ALLOWABLE SOIL PRESSURE (NATIVE SOILS). 2500PSF
    LATERAL EARTH PRESSURE (UNRESTRAINED/ AT STEEP SLOPE). . . . . 40 PCF/ 60 PCF
    ACTIVE PRESSURE AT CATCHMENT WALL . . . . 100 PCF
    ALLOWABLE PASSIVE EARTH PRESSURE (ULTIMATE). . . . . 300 PCF
    COEFFICIENT OF FRICTION (ULTIMATE). 0.4
    SEISMIC SURCHARGE PRESSURE (UNIFORM LOAD) . . . . 8H PSF
    4" DIA. PILE CAPACITY (COMPRESSION/LATERAL) . . . . 10 T/ .5 T

    SOILS REPORT REFERENCE:
    GEOTECH CONSULTANTS, INC
    2401 10TH AVE E
    SEATTLE, WA. 98102
    425-747-5618
    JANUARY 3RD, 2017
    JN16543

14. PIN PILES SHOWN ON THE PLAN SHALL BE 4"DIAMETER SCHEDULE 80. THE MAXIMUM CAPACITY OF 4"PILES SHALL BE 10 TONS. ALL PILES SHALL BE DRIVEN TO REFUSAL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. AS A MINIMUM, PILE REFUSAL SHALL BE DEFINED AS 1 INCH OF PENETRATION IN 16 SECONDS DURING CONTINUOUS DRIVING OF A 850 LB HYDRAULIC JACK HAMMER. PILES USED IN COMMON TO RESIST LATERAL EARTH PRESSURES SHALL HAVE THE ADDITIONAL REQUIREMENT OF BEING EMBEDDED A MINIMUM OF 10 FEET BELOW RETAINED GRADE. THE MAXIMUM PILE ECCENTRICITY SHALL BE 2 INCHES. GEOTECHNICAL SPECIAL INSPECTION SHALL BE SUBJECT TO THE DISCRETION OF THE GEOTECHNICAL ENGINEER AND THE BUILDING DEPARTMENT. SEE PLANS FOR OTHER SIZES AND CRITERIA.

CONCRETE

15. 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 = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS f'c = 2,500 PSI.

16. A CONCRETE PERFORMANCE MIX SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 318, SECTION 5.3. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

17. 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 C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318, TABLE 19.3.2.1 MODERATE EXPOSURE, F1.

18. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.

19. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-99 AND 318-11. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-11, CLASS B. 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.

20. 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 WEATHER (#6 BARS OR LARGER) . . . . 2"
    FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER). . 1-1/2"
    COLUMN TIES OR SPIRALS AND BEAM STIRRUPS . . . . 1-1/2"
    SLABS AND WALLS (INT. FACE). . . GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

21. CONCRETE WALL REINFORCING--PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

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

22. 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.

23. 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

24. ALL ANCHORS EMBEDDED IN MASONRY OR CONCRETE SHALL BE A307 HEADED BOLTS OR A36 THREADED ROD WITH AN ASTM 563 HEAVY HEX NUT TACK WELDED ON THE EMBEDDED END.

25. EXPANSION BOLTS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "KWIK BOLT TZ" AS MANUFACTURED BY THE HILTI CORP., INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-1917, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SUBSTITUTES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. 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.

26. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "HIT RE 500-SD" AS MANUFACTURED BY HILTI CORP. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2322. MINIMUM BASE MATERIAL TEMPERATURE IS 41 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.

27. CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" HEAVY DUTY SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREW ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

28. DRIVE PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE (SERIES X-U, 0.157" DIAMETER (STEEL), UNLESS OTHERWISE NOTED) AS MANUFACTURED BY THE HILTI CORP. OR AN APPROVED EQUIVALENT IN STRENGTH AND EMBEDMENT. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-1663. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3" TO NEAREST CONCRETE EDGE.

MASONRY

29. MASONRY VENEER, 5" MAXIMUM THICKNESS, SHALL BE ANCHORED TO MASONRY BACKING WALLS PER SECTION 1405.6 OF THE INTERNATIONAL BUILDING CODE WITH 7/8" x 22 GAUGE CORRUGATED CORROSION RESISTANT SHEET METAL OR NO. 9 GAGE WIRE ANCHORS MINIMUM. ANCHOR TIES SHALL BE SPACED SO AS TO SUPPORT NOT MORE THAN TWO SQUARE FEET OF WALL AREA AND SHALL BE SPACED NOT MORE THAN 32" O.C. HORIZONTALLY AND 25" O.C. VERTICALLY. ATTACHMENTS SHALL BE WITH CORROSION RESISTANT FASTENERS AND CONNECT TO FRAMING MEMBERS OR CONCRETE OR MASONRY BACKING. TIES SHALL HAVE A LIP OR HOOK ON THE EXTENDED LEG THAT WILL ENGAGE OR ENCLOSE A NO. 9 GAGE REINFORCEMENT WIRE. JOINT REINFORCEMENT SHALL BE CONTINUOUS WITH BUTT SPLICES BETWEEN TIES PERMITTED.

STEEL

30. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON:

    A. AISC 360 AND SECTION 2205.2 OF THE INTERNATIONAL BUILDING CODE.
    B. APRIL 14, 2010 AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AMENDED AS FOLLOWS: AS NOTED IN THE CONTRACT DOCUMENTS, BY THE DELETION OF PARAGRAPH 4.4.1, AND REVISE REFERENCE FROM "STRUCTURAL DESIGN DRAWINGS" TO "CONTRACT DOCUMENTS" IN PARAGRAPH 3.1.
    C. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.

30. WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992, FY = 50 KSI. OTHER ROLLED SHAPES INCLUDING PLATES, SHALL CONFORM TO ASTM A36, FY = 36 KSI. STEEL PIPE SHALL CONFORM TO ASTM A-53, TYPE E OR S, GRADE B, Fy = 35 KSI. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B, FY = 42 KSI (ROUND), FY = 46 KSI (SQUARE AND RECTANGULAR). CONNECTION BOLTS SHALL CONFORM TO ASTM A307.

31. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

32. ALL STEEL EXPOSED TO THE WEATHER OR IN CONTACT WITH GROUND SHALL BE CORROSION PROTECTED BY GALVANIZATION OR PROVIDED WITH EXTERIOR PAINT SYSTEM, UNLESS OTHERWISE NOTED.

33. SHOP PRIME ALL STEEL EXCEPT:

    A. SURFACES TO BE WELDED.
    B. MEMBERS TO BE GALVANIZED.
    C. MEMBERS WHICH WILL BE CONCEALED BY INTERIOR FINISHES.
    D. SURFACES TO RECEIVE OTHER SPECIAL SHOP PRIMERS.

34. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT -20 DEGREES F AND 40 FT - LBS AT 70 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

35. METAL FLOOR AND ROOF DECKING SHALL BE IN ACCORDANCE TO THE FOLLOWING: PROVIDE SIZE, TYPE, GAUGE, AND ATTACHMENT TO THE SUPPORTING STRUCTURE AS SHOWN ON THE PLANS. ARC SEAM AND SPOT (PUDDLE) WELDS FOR FIELD ASSEMBLY OF METAL DECK SHALL BE MADE WITH MINIMUM E60XX ELECTRODES. DECK ALTERNATES MUST BE CONNECTED ACCORDING TO PUBLISHED ICC-ES CRITERIA FOR DIAPHRAGM SHEARS SHOWN. PROVIDE TEMPORARY SHORING WHERE REQUIRED PER MANUFACTURER'S PUBLISHED CRITERIA.

    A. NONCOMPOSITE STEEL FLOOR DECKS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ANSI/SDI-NC1.0.

WOOD

36. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD "GRADING RULES FOR WEST COAST LUMBER NO. 17", OR WWPA STANDARD, "WESTERN LUMBER GRADING RULES 2011". FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS AND BEAMS	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1000 PSI
BEAMS	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1350 PSI
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI
STUDS, PLATES & MISC. FRAMING:		DOUGLAS-FIR-LARCH OR HEM-FIR NO. 2

37. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA-EWS IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA-EWS CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv =265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS TO 3,500' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS.

38. 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 5 PSF
    TOTAL LOAD 40 PSF

    WIND UPLIFT (TOP CHORD) 5 PSF
    BOTTOM CHORD LIVE LOAD 10 PSF
    (BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF LIVE LOAD)

    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, HIPS, 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 TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

39. 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 RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

    ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

    FLOOR SHEATHING SHALL BE 1-1/8" (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 UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G 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.

40. 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.

41. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

42. 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	INTERIOR DRY	G90 GALVANIZED
CONTAINS AMMONIA CARRIER	INTERIOR DRY	G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653
CONTAINS AMMONIA CARRIER	INTERIOR WET	TYPE 304 OR 316 STAINLESS
CONTAINS AMMONIA CARRIER	EXTERIOR	TYPE 304 OR 316 STAINLESS
AZCA	ANY	TYPE 304 OR 316 STAINLESS

    INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

43. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-2015. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-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 "ITS" 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.

44. WOOD FASTENERS

    A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
8d	2-1/2"	0.131"
16d BOX	3-1/2"	0.135"

    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 DIGRESS WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

    B. 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.

46. 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.

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

47. 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 AF&PA "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.

    B. 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 2x8 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 7" 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 WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR W 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 UN-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.

    C. 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, STRUTS 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 UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G 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.

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

PROJECT TITLE:
Ogden Point
Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

ISSUE:
Permit

SHEET TITLE:
General Structural Notes

SCALE:
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO:
S1.1

NO: OF SHEETS:

Plan Notes

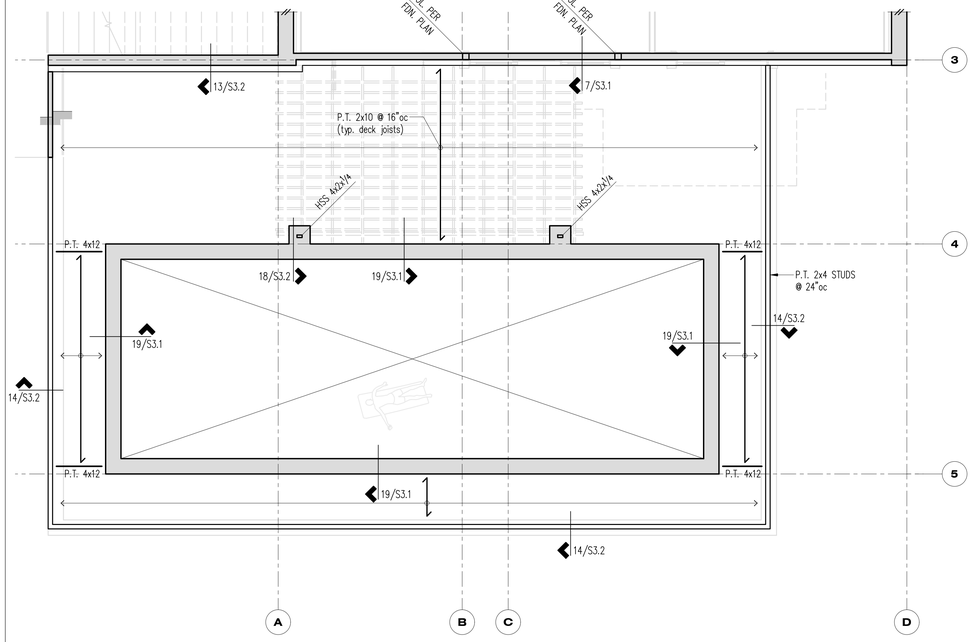
1. DO NOT SCALE DRAWINGS. REFER ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW GRADE. FOOTINGS AND GRADE BEAMS SHALL BE SURROUNDED BY LEVEL COMPACTED STRUCTURAL FILL PER THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
3. STRUCTURAL SLABS SHALL BE AS NOTED ON PLAN. REINFORCE PER PLAN. PROVIDE VAPOR BARRIER BELOW SLAB OVER OVER UNIFORM BASE PREPARED PER RECOMMENDATIONS IN GEOTECHNICAL REPORT. FOR ACTUAL TOP OF SLAB ELEVATIONS, REFER TO ARCHITECTURAL DRAWINGS.
4. PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO DIVIDE SLAB INTO RECTANGULAR AREAS OF 250 SQUARE FEET OR LESS. AREAS SHALL BE APPROXIMATELY SQUARE IN SHAPE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS MUST BE APPROVED BY THE ARCHITECT.
5. REFER TO DETAIL 4/S3.1 FOR MAXIMUM PIPE SLEEVE REQUIREMENTS THROUGH FOUNDATION WALLS AND FOOTINGS.
6. PROVIDE CORNER BARS AT ALL CONCRETE WALL INTERSECTIONS PER DETAIL 2/S3.1.
7. STEP GRADE BEAMS AS REQUIRED TO FOLLOW GRADE. REFER TO DETAIL 3/S3.1 FOR STEPPED GRADE BEAM REQUIREMENTS.
8. PIPE PILES SHALL BE CENTERED BELOW CONCRETE WALLS ABOVE UNLESS SHOWN OTHERWISE AND SHALL BE DRIVEN TO REFUSAL IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.
9. PROVIDE BRICK VENEER TIES PER DETAIL 17/S4.3.
10. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

- CONCRETE WALL
- CONCRETE FOOTING OR GRADE BEAM
- STRUCTURAL WALL ABOVE
- EXTENTS OF SLAB
- SPAN & DIRECTION OF STRUCTURAL CONCRETE SLAB
- Cx — COLUMN ABOVE PER SCHEDULE
- 4"ø STD. PIPE PILE DRIVEN TO REFUSAL
- HDx — HOLDOWN PER SCHEDULE
- STEP IN SLAB ELEVATION

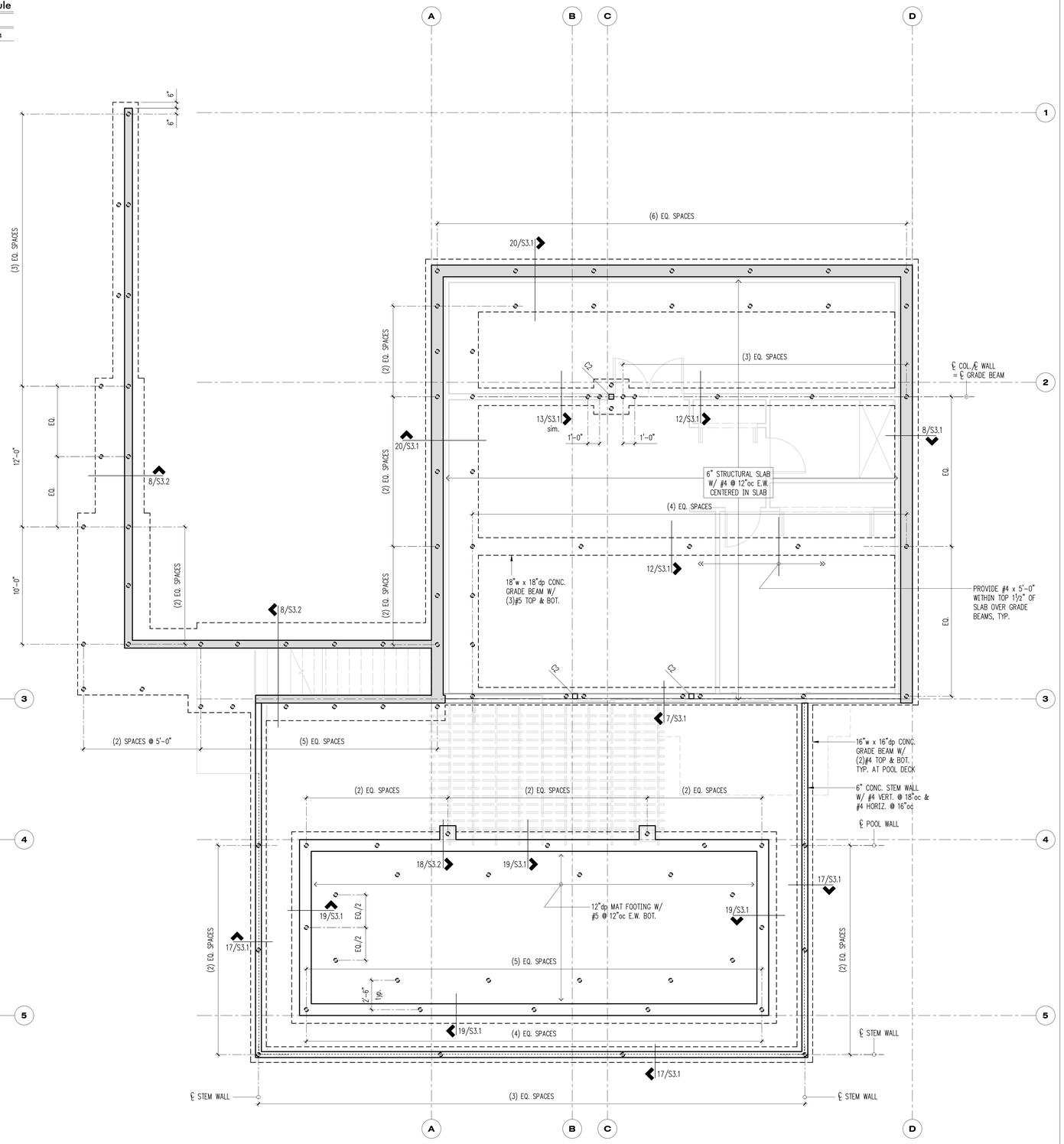
Column Schedule

Mark	Column
C1	PSL 5¼x5¼
C2	HSS 5x5x¼



Lot C Pool Deck Framing Plan

Scale: ¼" = 1'-0"



Lot C Foundation Plan

Scale: ¼" = 1'-0"

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

RYAN H. KEICHMAN — STATE OF WASHINGTON — 47141 — REGISTERED PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

PROJECT TITLE:

Ogden Point
Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

ISSUE:

Permit

SHEET TITLE:

Lot C
Pool Deck Framing &
Foundation Plans

SCALE: 1/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO:

S2.1

NO: OF SHEETS:

Plan Notes

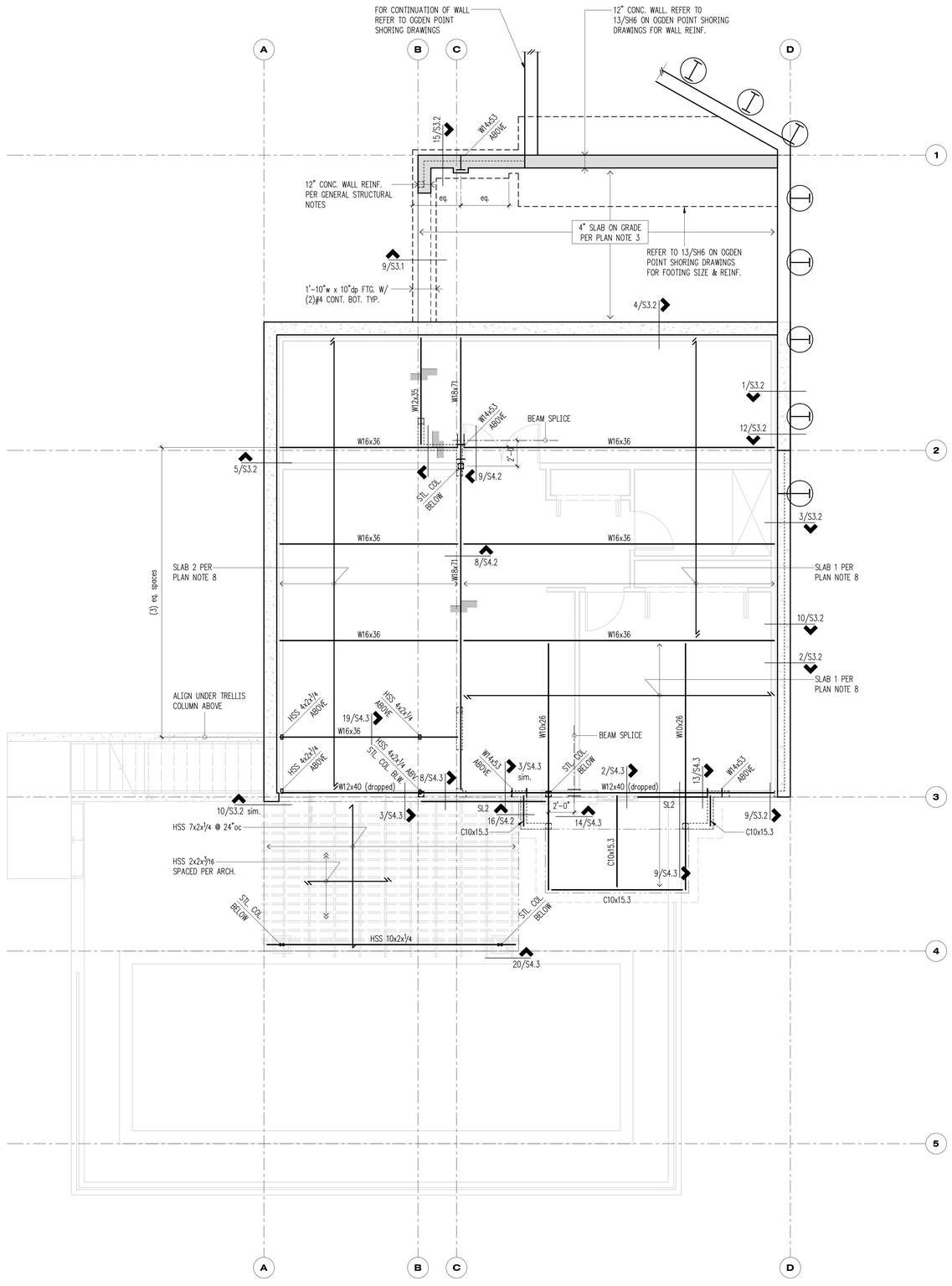
1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. ALL NEW FOOTINGS SHALL BEAR ON FIRM UNDISTURBED NATIVE SOILS AT A MINIMUM DEPTH OF 18" BELOW FINISH GRADE.
3. GARAGE SLAB SHALL BE 4" MINIMUM THICKNESS. REINFORCE WITH 6x6 W1.4xW1.4 WWM CENTERED IN SLAB. PROVIDE VAPOR BARRIER BELOW SLAB OVER 4" MINIMUM FREE DRAINING GRAVEL OVER FIRM NATIVE SOILS OR STRUCTURAL FILL.
4. REFER TO DETAIL 3/S3.1 FOR STEPPED FOOTING REQUIREMENTS.
5. REFER TO DETAIL 4/S3.1 FOR FOOTING REQUIREMENTS AT MECHANICAL PIPING CONFLICTS AT FOUNDATIONS/SLABS.
6. REFER TO DETAIL 2/S3 .1 FOR CORNER BAR REINFORCEMENT AT WALLS AND FOOTINGS.
7. PROVIDE BRICK VENEER TIES PER DETAIL 12/S4.1.
8. SLAB 1: 20ga W2 METAL DECK W/ 2" NW CONCRETE TOPPING (4" TOTAL DEPTH) WITH 2" CONCRETE TOPPING PER 18/S4.2
   SLAB 2: 20ga W2 METAL DECK W/ 6" CONCRETE TOPPING (8" TOTAL DEPTH) REINFORCED WITH #5 @ 10"oc E.W. TOP & BOTTOM PER 18/S4.2
9. SLAB 2 HAS BEEN DESIGNED FOR 75,000lbs VEHICLE LOAD DISTRIBUTED EQUALLY BETWEEN (4) WHEELBASE. WHEEL CONCENTRATED LOADS ASSUMED TO ACT OVER AREA OF 4½" x 4½". LOADING CRITERIA TO BE VERIFIED BY LOCAL FIRE JURISDICTION.
10. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

- STRUCTURAL WALL BELOW
- NON-STRUCTURAL WALL BELOW
- CONCRETE WALL
- CONCRETE FOOTING OR GRADE BEAM
- STRUCTURAL WALL ABOVE
- EXTENTS OF FRAMING
- SPAN & DIRECTION OF FRAMING
- Cx — COLUMN PER SCHEDULE
- STEP IN SLAB ELEVATION
- 4"ø STD. PIPE PILE DRIVEN TO REFUSAL
- SLx — STEEL LINTEL VENEER SUPPORT PER SCHEDULE 17/S4.1

Column Schedule

Mark	Column
C1	PSL 5¼x5¼
C2	HSS 5x5x¼



Main Floor Framing Plan

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

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

RYAN H. KEICHMAN — STATE OF WASHINGTON — 47141 — REGISTERED PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

PROJECT TITLE:
Ogden Point
Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

ISSUE:
Permit

SHEET TITLE:
Lot C
Main Floor
Framing Plan

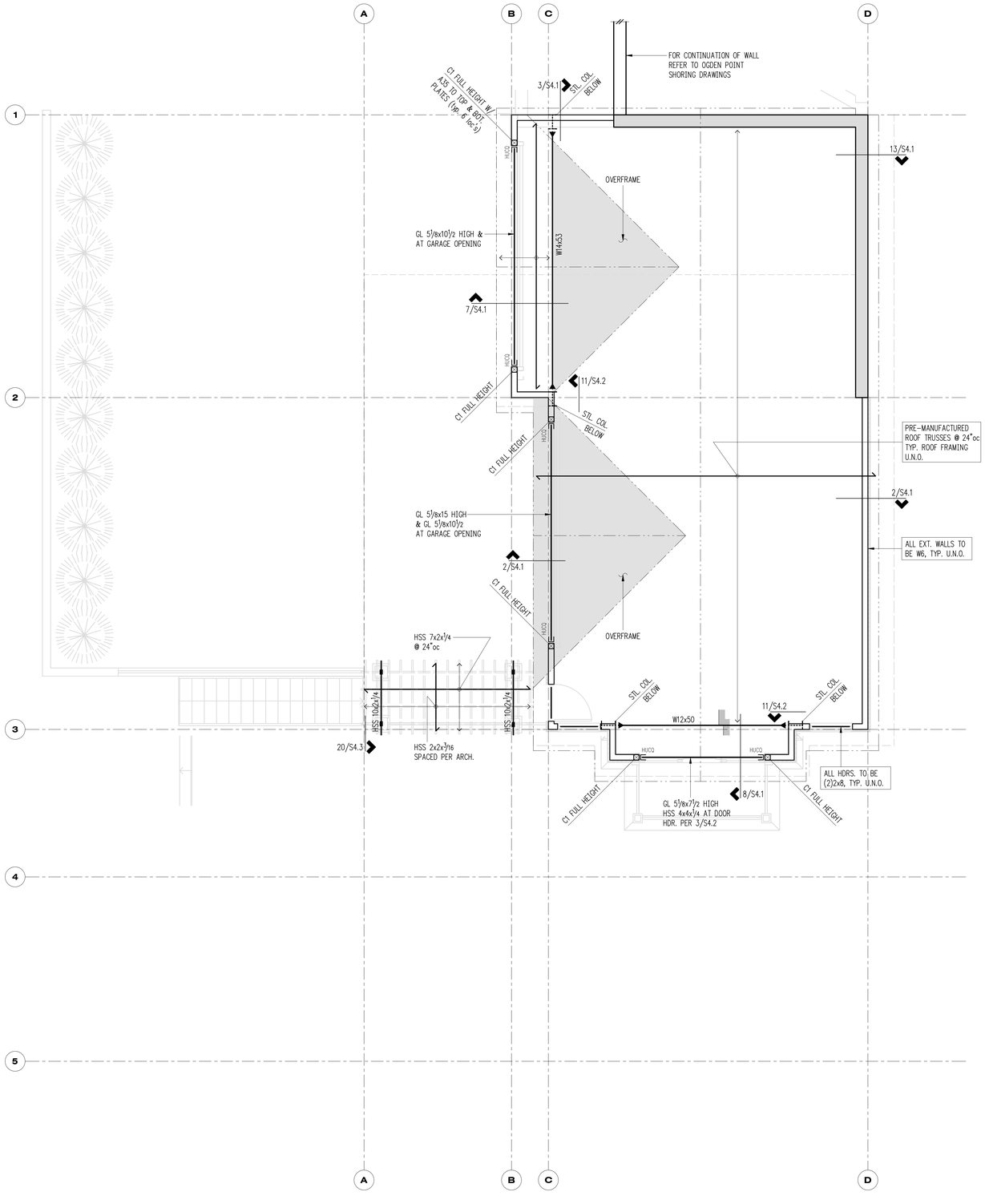
SCALE: 1/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO:
S2.2
NO: OF SHEETS:

Plan Notes

1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. TYPICAL WOOD ROOF FRAMING CONSISTS OF 1/2" CDX PLYWOOD, FACE GRAIN PERPENDICULAR TO SUPPORTS OVER SUPPORTS PER PLAN. NAIL SHEATHING WITH 8d AT 6"oc EDGES AND OVER SHEAR WALLS, 12"oc FIELD. SEE PLANS FOR ADDITIONAL JOIST REQUIREMENTS.
3. PROVIDE AC, ACE, PC, EPC, LPC, OR LCE COLUMN CAP AND BASE AT ALL BEAM TO ISOLATED COLUMN CONNECTIONS U.N.O.
4. ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
5. "W_" INDICATES NEW PLYWOOD SHEAR WALL BELOW FRAMING SHOWN. REFER TO SHEAR WALL SCHEDULE DETAIL 20/S4.1 FOR WALL ATTACHMENTS. ALL EXTERIOR WOOD FRAMED WALLS ARE W6, U.N.O.
6. ALL WOOD HEADERS SHALL BE (2)2x8, U.N.O. PROVIDE (2) BEARING STUDS AT EACH END OF ALL HEADERS AND BEAMS U.N.O.
7. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

- STRUCTURAL WALL BELOW
- NON-STRUCTURAL WALL BELOW
- EXTENTS OF FRAMING
- SPAN & DIRECTION OF FRAMING
- Wx — SHEARWALL PER SCHEDULE 20/S4.1
- Hx — BEAM/JOIST HANGER
- (X) — NUMBER OF BUNDLED STUDS IN BUILT-UP COLUMN
- Cx — COLUMN PER SCHEDULE



Lot C Roof Framing Plan

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

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

RYAN H. KETCHMAN — STATE OF WASHINGTON — 47141 — REGISTERED PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

PROJECT TITLE:
Ogden Point
Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

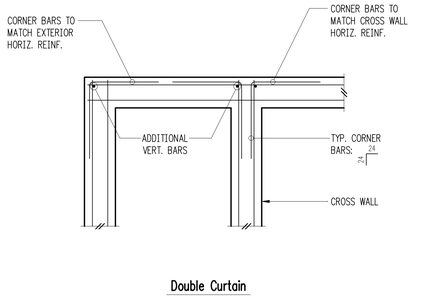
ISSUE:
Permit

SHEET TITLE:
Lot C
Roof Framing
Plan

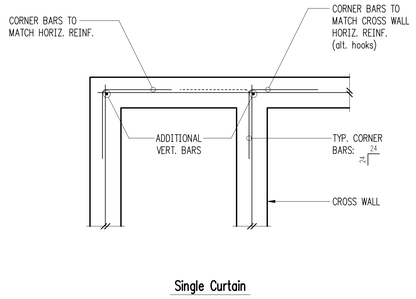
SCALE: 1/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO:

S2.3

NO: OF SHEETS:

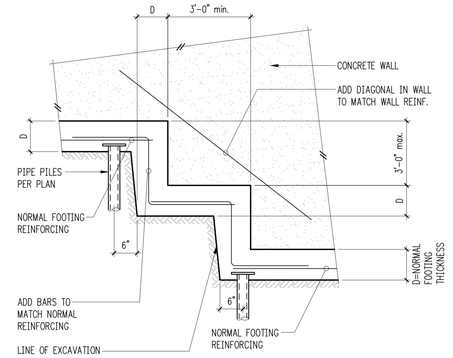


Double Curtain

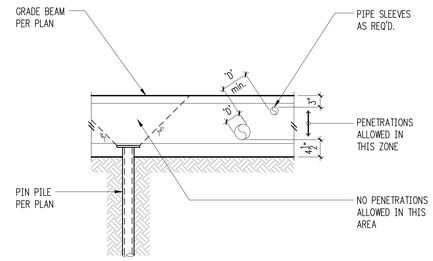


Single Curtain

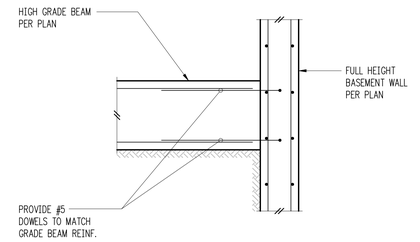
Typical Corner Bars at Concrete Walls and Footings 2



Typical Stepped Footing 3

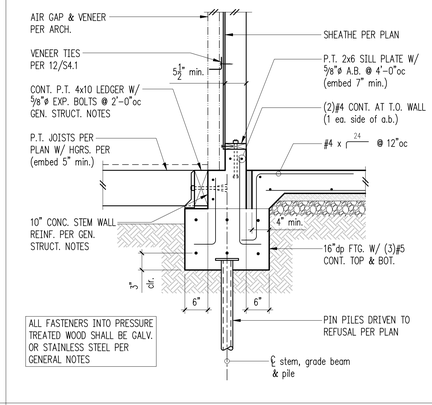


Pipe Penetration Locations 4

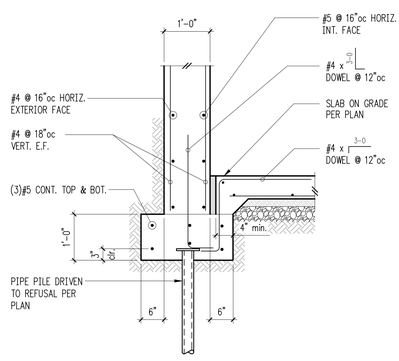


Intersection of High Grade Beam to Basement Conc. Wall 5

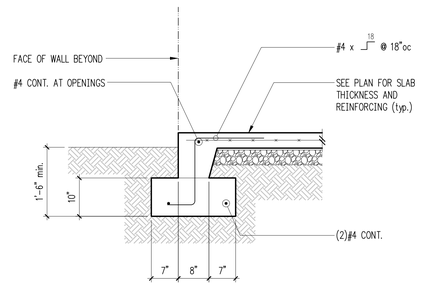
6



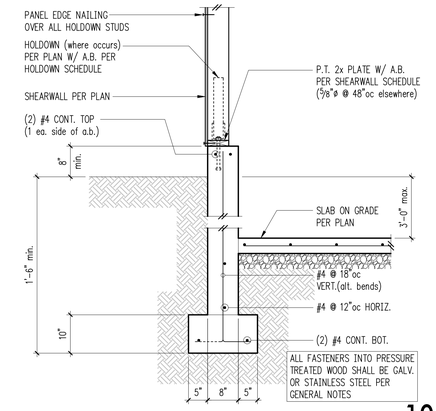
7



8

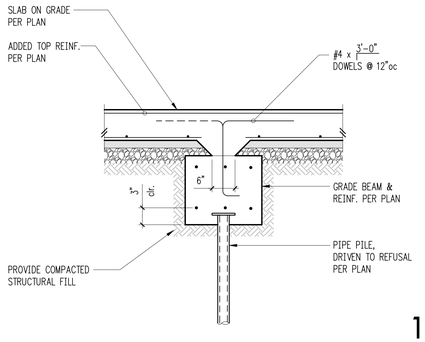


Typical Turned-Down Slab Edge 9

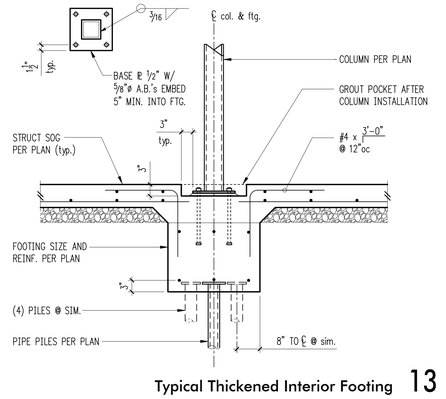


Exterior Wall w/ Slab on Grade & High Grade 10

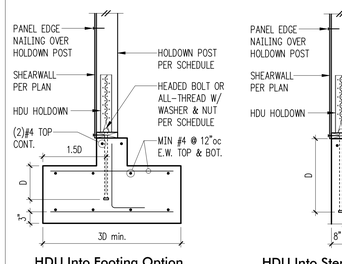
11



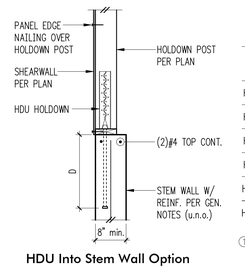
12



Typical Thickened Interior Footing 13



HDU Into Footing Option



HDU Into Stem Wall Option

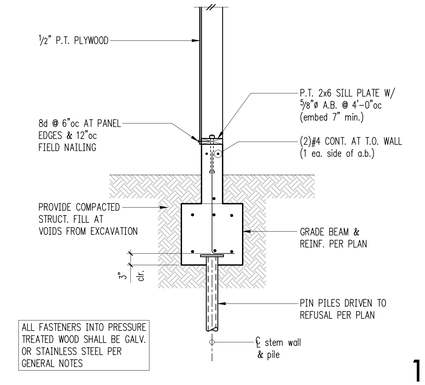
Holdown Schedule

Plan Mark	Screws	Anchor Bolt	Min. A.B. Embed (D) Stem Wall	Min. A.B. Embed (D) Footing	Holdown Post ① if 2x4	Holdown Post ① if 2x6
HDU2-SDS2.5	(6)SDS ¼"x2½"	⅝"ø	12"	4"	(2) 2x4	(2) 2x6
HDU4-SDS2.5	(10)SDS ¼"x2½"	⅝"ø	18"	6"	4x4	4x6
HDU5-SDS2.5	(14)SDS ¼"x2½"	⅝"ø	SB⅝x24	7"	4x4	4x6
HDU8-SDS2.5	(20)SDS ¼"x2½"	⅞"ø	SSTB28	8"	4x6	6x6
HDU11-SDS2.5	(30)SDS ¼"x2½"	1"ø	SB1x30	10"	4x8	6x8
HDU14-SDS2.5	(36)SDS ¼"x2½"	1"ø	N/A	12"	4x8	6x6

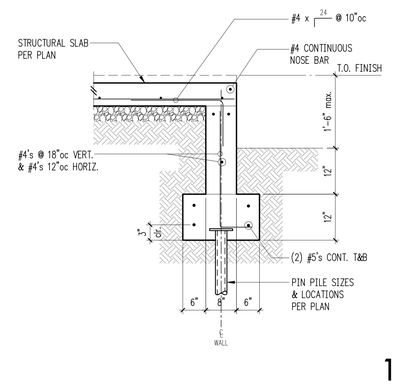
① MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.

Typical HDU Holdown 15

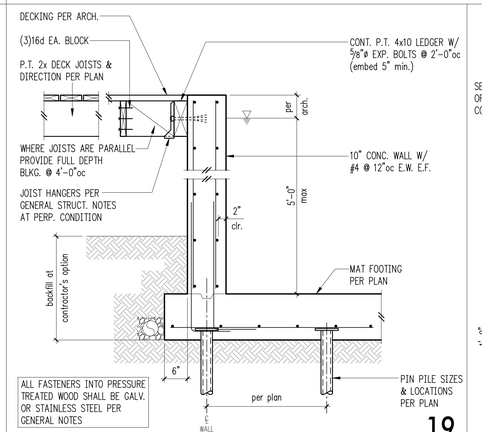
16



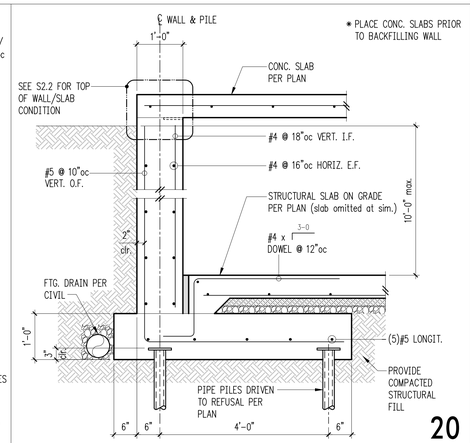
17



18



19



20

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

RYAN H. KETCHMAN — STATE OF WASHINGTON — 47141 — REGISTERED PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

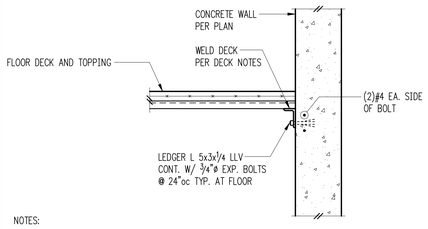
PROJECT TITLE:
Ogden Point Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

ISSUE:
Permit

SHEET TITLE:
Concrete Details

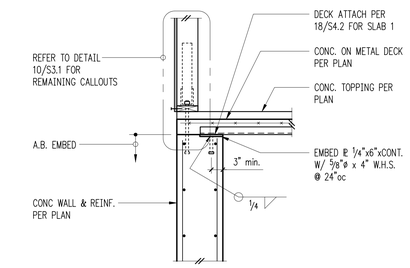
SCALE: 3/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO: S3.1
NO: OF SHEETS:



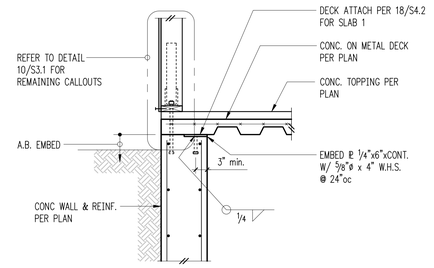
NOTES:

- 3/4"ø A307 ANCHOR BOLTS MAY BE SUBSTITUTED ON AN EQUAL BASIS WITH EXP. BOLTS
- TYPICAL DECK LEDGER TO OCCUR AT ALL INTERSECTIONS OF FLOOR DECK AND CONCRETE WALLS, U.O.N.
- COORDINATE BOLT LOCATIONS W/ WALL REINF, LAYOUT.

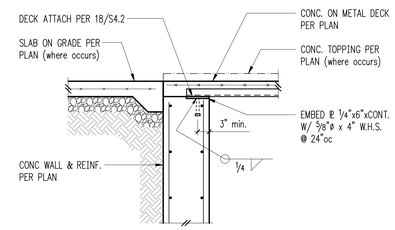
Typical Deck Ledger 1



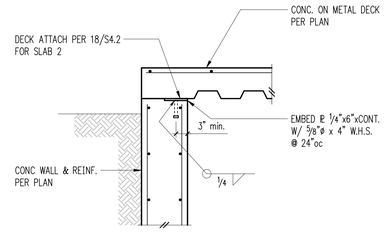
2



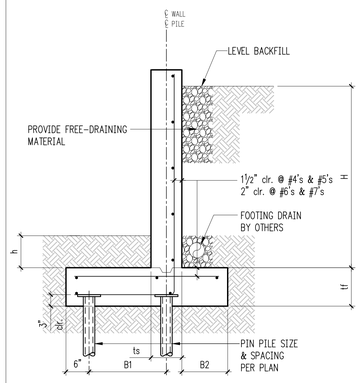
3



4



5



6

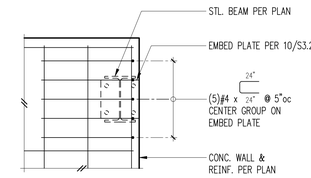
Retaining Wall Schedule

H (ft.)	h	B1	ts	B2	tf	Stem Reinforcing		Footing Reinforcing	
						Vert.	Horiz.	Top	Longit.
4'-0"	1'-6"	1'-6"	8"	6"	12"	#4 @ 18"oc	#4 @ 12"oc	#4 @ 18"oc	(6)#4
6'-0"	1'-6"	2'-6"	8"	1'-0"	12"	#5 @ 12"oc	#4 @ 12"oc	#5 @ 12"oc	(5)#4
8'-0"	2'-0"	4'-0"	8"	1'-6"	12"	#6 @ 10"oc	#4 @ 12"oc	#6 @ 10"oc	(6)#5
10'-0"	2'-6"	6'-0"	10"	1'-9"	14"	#7 @ 9"oc	#4 @ 12"oc	#7 @ 9"oc	(8)#5

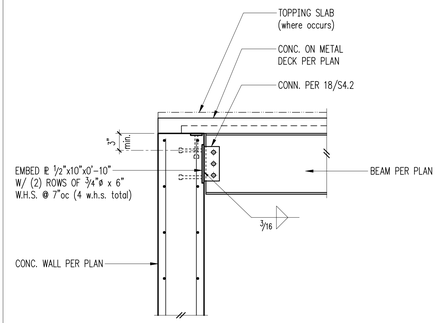
SHEARWALL DESIGN CRITERIA:

- HEAVY VEHICLE SURCHARGE = 3x ACTIVE F.P. (psf)
- SEISMIC SURCHARGE = 8Hpsf
- SOIL DENSITY = 130pcf
- ACTIVE E.F.P. = 40pcf
- PASSIVE SOIL RESISTANCE = 300pcf
- COEFFICIENT OF FRICTION = 0.40
- F.S. SLIDING = 1.5
- F.S. O.T. = 1.5

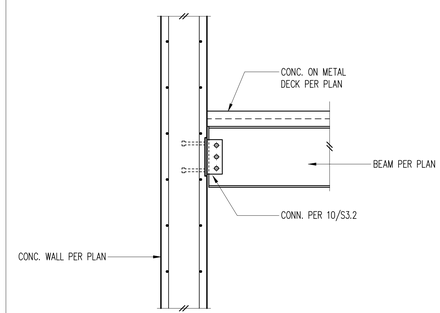
8



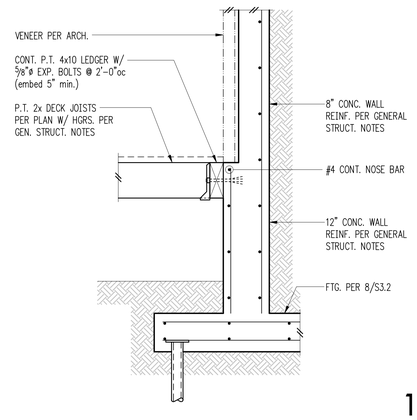
9



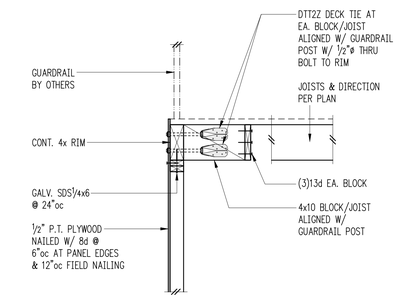
10



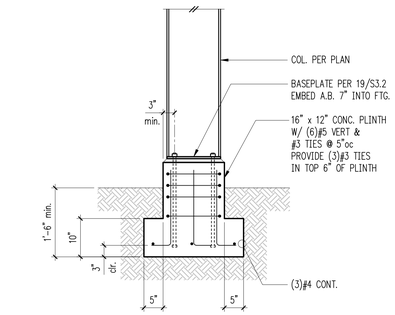
12



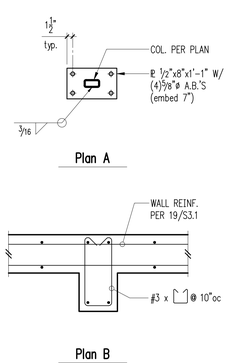
13



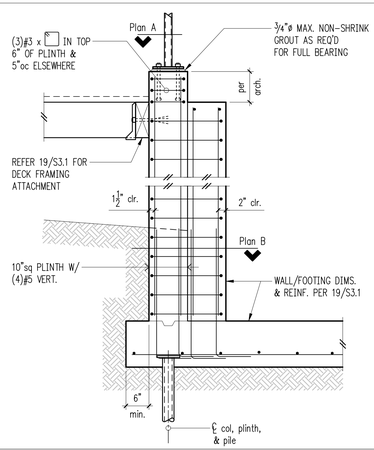
14



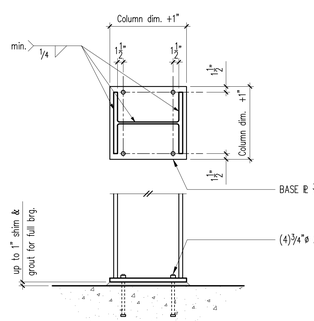
15



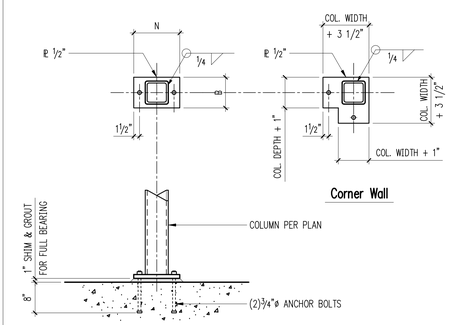
16



18



Baseplate - WF Columns (4)Bolts (Non-Lateral System) 19



Baseplate - HSS Column 20

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

REAL H. KEICHMAN — REGISTERED PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

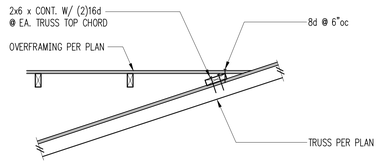
PROJECT TITLE:
Ogden Point
Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

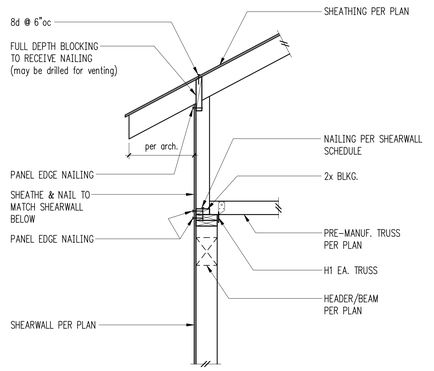
ISSUE:
Permit

SHEET TITLE:
Concrete Details

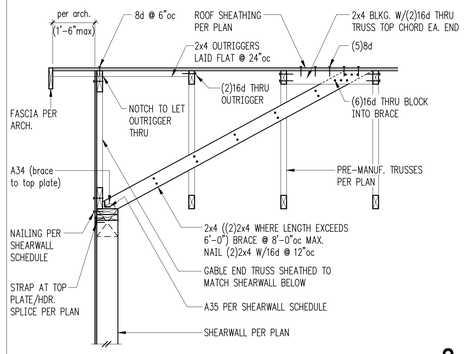
SCALE: 3/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO:
S3.2
NO: OF SHEETS:



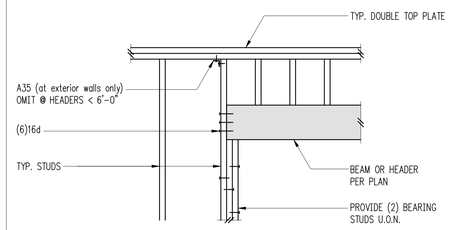
Overframing Connection 1



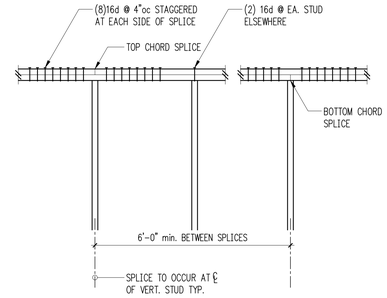
Raised Heel Exterior Bearing Wall 2



Exterior Non-Bearing Wall 3

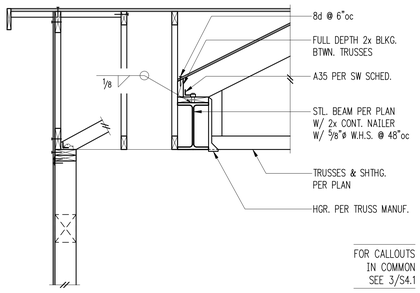


Typical Header Support W/2 Bearing Studs 4



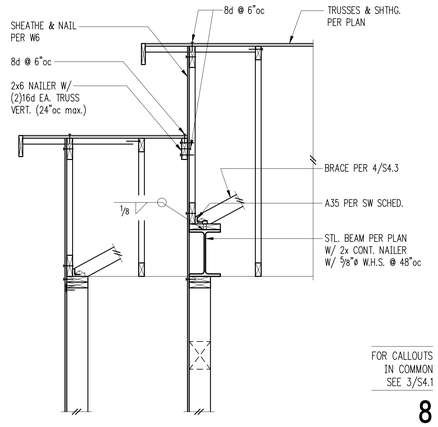
Typical Top Plate Splice 5

6



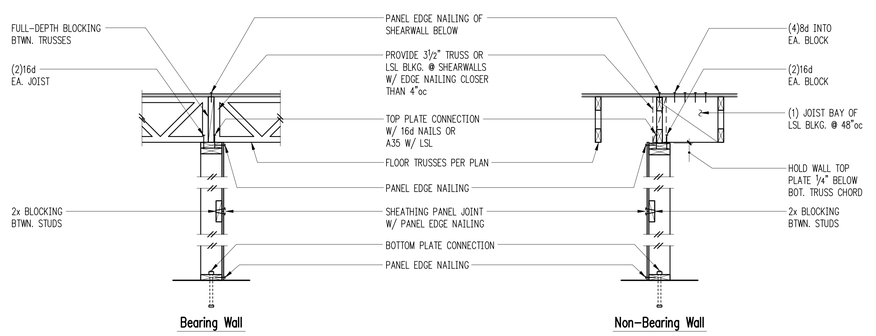
FOR CALLOUTS
IN COMMON
SEE 3/S4.1

7



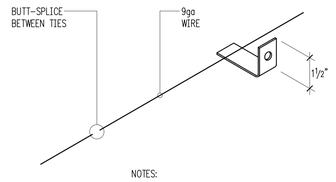
FOR CALLOUTS
IN COMMON
SEE 3/S4.1

8



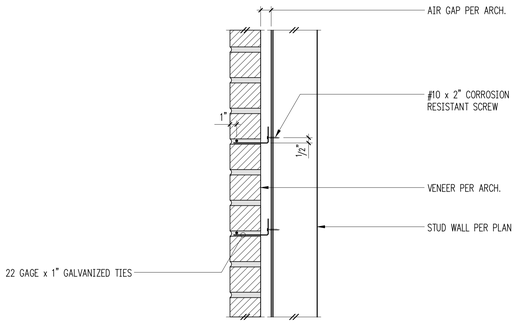
NOTE:
SEE SHEARWALL SCHEDULE FOR ALL NAILING AND
CONNECTIONS, NOT OTHERWISE NOTED

Typical Shearwall Construction 10

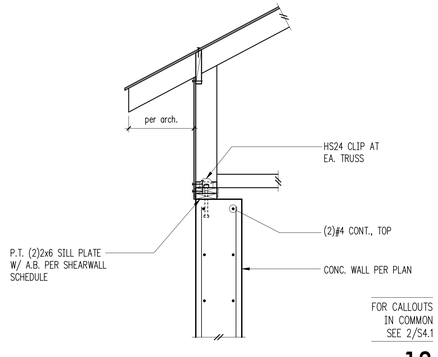


NOTES:

- VENEER TIES SHALL BE SPACED SO AS TO SUPPORT NOT MORE THAN TWO SQUARE FEET OF WALL AREA AND SHALL NOT BE SPACED MORE THAN 32"oc HORIZONTALLY AND 18"oc VERTICALLY

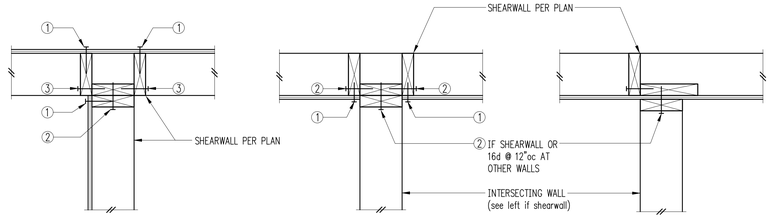


Brick Veneer Ties 12



FOR CALLOUTS
IN COMMON
SEE 2/S4.1

13



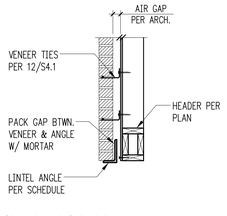
① PLYWOOD PANEL EDGE NAILING PER SHEARWALL SCHEDULE

② BASE PLATE NAILING PER SHEARWALL SCHEDULE

③ 16d @ 8"oc

Typical Shearwall Intersections 15

16



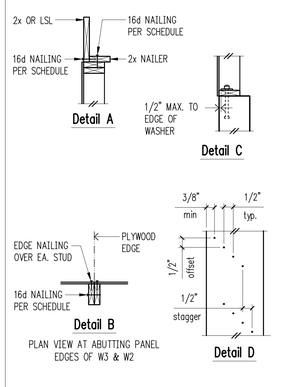
Steel Lintel Schedule

MARK	SIZE	MIN. BEARING REQD. AT END
SL1	L4x3½x¼ (LLV)	6"
SL2	L6x3½x⅝ (LLV)	8"

UNLESS NOTED OTHERWISE ALL
LINTELS SHALL BE SL1

17

18



PLAN VIEW AT ABUTTING PANEL
EDGES OF W3 & W2

Shearwall Schedule ①②③⑥⑦⑧

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection		Base Plate Connection	
			if TJI	if 2x or LSL⑤	at Wood⑬	at Concrete
W6	15/32" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc⑨	16d @ 6"oc	⅝"ø A.B. @ 48"oc
W4	15/32" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc⑨	16d @ 4"oc	⅝"ø A.B. @ 32"oc
W3④	15/32" CDX PLYWOOD	8d @ 3"oc	(2)rows 16d @ 4"oc⑫	A35 @ 12"oc⑨	(2)rows 16d @ 6"oc⑪	⅝"ø A.B. @ 24"oc
W2④	15/32" CDX PLYWOOD	8d @ 2"oc	(2)rows 16d @ 4"oc⑫	A35 @ 9"oc⑨	(2)rows 16d @ 4"oc⑫	⅝"ø A.B. @ 16"oc
2W3⑤	15/32" CDX PLYWD. EA. SIDE	8d @ 3"oc EA. SIDE	n/a	A35 @ 6"oc	(3)rows 16d @ 4"oc⑫	⅝"ø A.B. @ 16"oc
2W2⑤	15/32" CDX PLYWD. EA. SIDE	8d @ 2"oc EA. SIDE	n/a	HGA10 @ 8"oc	(3)rows 16d @ 4"oc⑫	⅝"ø A.B. @ 12"oc
2W2-10⑤	15/32" CDX PLYWD. EA. SIDE	10d @ 2"oc EA. SIDE	n/a	HGA10 @ 6"oc	(4)rows 16d @ 4"oc⑫	⅝"ø A.B. @ 12"oc

① BLOCK PANEL EDGES WITH 2x MIN. LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"o.c.
② 8d NAILS SHALL BE 0.131"ø x 2 1/2" (common) – 16d NAILS SHALL BE 0.135"ø x 3 1/2" (box) – 10d NAILS SHALL BE 0.148"ø x 3" (common).
③ 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.
④ 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.
⑤ 3x FOUNDATION SILL PLATES ARE REQUIRED FOR 2W3 AND 2W2. 3x STUDS ARE REQUIRED AT ABUTTING PANEL EDGES AND PANEL JOINTS SHALL BE OFFSET EACH SIDE OF WALL. STAGGER NAILS AT ADJOINING PANEL EDGES. 3x STUD, MIN., REQUIRED AT END OF SHEARWALL.
⑥ TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SINGLE-SIDED SHEARWALLS. ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
⑦ ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
⑧ 7/16" O.S.B. MAY BE SUBSTITUTED FOR 15/32" CDX.
⑨ LTP4's W/ 8d COMMON MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
⑩ A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
⑪ STAGGER NAILS IN ROW W/ 1/2" MIN. OFFSET.
⑫ MINIMUM OFFSET BETWEEN ROWS AND ROW SPACING 1/2", STAGGER NAILS 1/2" BETWEEN ROWS, AND MINIMUM RIM OR JOIST 3 1/2" WIDE. SEE DETAIL D
⑬ LVL RIMS PERMITTED AT W6 WALL ONLY

Shearwall Schedule - (Sheathed One & Two Sides) 20

SSF STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

RYAN H. KEICHMAN — STATE OF WASHINGTON — 21724 — REGISTERED PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

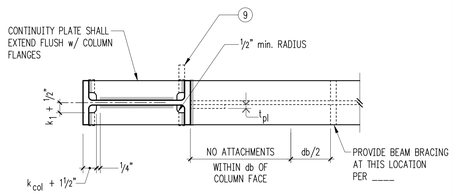
PROJECT TITLE:
Ogden Point
Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

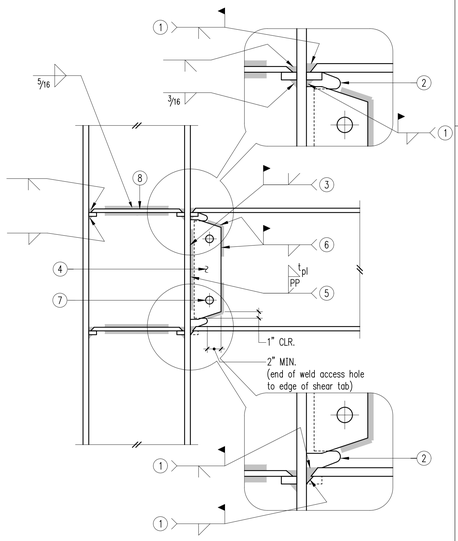
ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

ISSUE:
Permit

SHEET TITLE:
Typical
Wood
Framing

SCALE: 3/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO:
S4.1
NO: OF SHEETS:

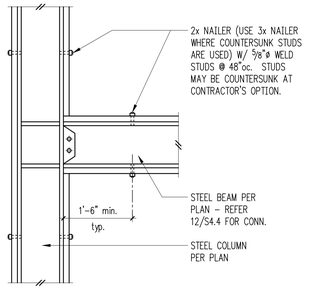




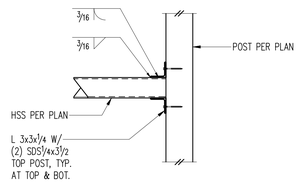
NOTES:

1. CJP GROOVE WELD AT TOP AND BOTTOM FLANGES. AT BOTTOM FLANGE REMOVE WELD BACKING, BACKGOUGE, GRIND SMOOTH AND ADD 5/16" MINIMUM FILLET WELD. AT TOP FLANGE. STEEL WELD BACKING MAY BE LEFT IN PLACE. ADD 5/16" MIN. FILLET WELD BELOW BACKER BAR. BACKING SHALL NOT BE WELDED (INCLUDING TACK WELDING) TO THE UNDERSIDE OF THE BEAM FLANGE.
2. WELD ACCESS HOLE, SEE DETAIL 12/S4.2.
3. CJP GROOVE WELD FULL LENGTH OF BEAM WEB BETWEEN WELD ACCESS HOLES. WELD TABS ARE NOT REQUIRED.
4. SHEAR TAB: THICKNESS (tpl) ≥ BEAM WEB THICKNESS. SHEAR TAB LENGTH SHALL BE AS TO ALLOW 1/4" MIN., 1/2" MAX. OVERLAP WITH THE WELD ACCESS HOLE AT TOP AND BOTTOM, AND THE WIDTH SHALL EXTEND 2" MINIMUM BACK ALONG THE BEAM, BEYOND THE END OF THE WELD ACCESS HOLE.
5. FULL-DEPTH PARTIAL PENETRATION SHEAR TAB TO COLUMN FROM FAR SIDE.
6. FILLET WELD SHEAR TAB TO BEAM WEB. WELD SIZE SHALL BE EQUAL TO THE THICKNESS OF THE SHEAR TAB MINUS 1/16". WELD SHALL EXTEND OVER THE TOP AND BOTTOM ONE-THIRD OF THE SHEAR TAB HEIGHT AND ACROSS THE TOP AND BOTTOM. TERMINATE WELD BETWEEN 1/2" & 1" FROM WELD ACCESS HOLE.
7. (2) 3/4"ø BOLTS FOR ERECTION. IN STANDARD OR SHORT SLOTTED HOLES.
8. CONTINUITY PLATE THICKNESS ≥ BEAM FLANGE THICKNESS. PLATE SHALL BE 50ksi STEEL.
9. REMOVE WELD TABS TO 1/4" MAXIMUM FROM EDGE OF CONTINUITY PLATE. GRIND END OF WELD SMOOTH (500 μ-in), NOT FLUSH. DO NOT GOUGE COLUMN FLANGE.

Typical Moment Connection - WUFW 11

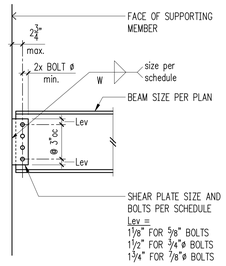


Nailer Plate to Moment Frame 2



1" = 1'-0"

3



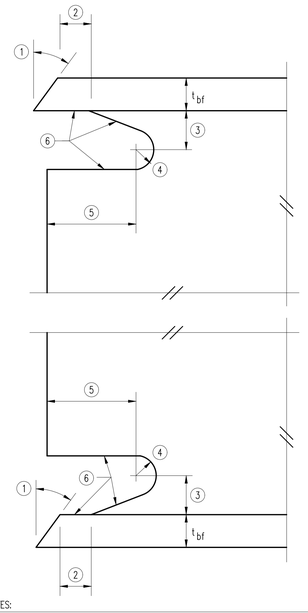
Shear Plate Schedule

Beam Size	No. of Bolts	Bolt Size	Plate Thickness	Weld Size
C6, W6, MC7	2	5/8"ø @ 2" SPACING	1/4"	5/16"
MC8, MC9, MC10 C7, C8, C9, C10, W8, W10	2	5/8"ø	1/4"	5/16"
C12, C15, MC12, W12, W14	3	3/4"ø	1/4"	5/16"
W16	4	3/4"ø	1/4"	5/16"
W18	4	3/4"ø	5/16"	1/4"
W21	4	7/8"ø	3/8"	5/16"
W24	5	7/8"ø	3/8"	5/16"
W27	6	7/8"ø	3/8"	5/16"
W30	7	7/8"ø	3/8"	5/16"

NOTES:

1. STANDARD OR SLOTTED HOLES MAY BE USED.
2. BOLT TYPE A325N.
3. PL MATERIAL - A36
4. SEE EXTENDED PL DETAIL FOR COLUMN WEB CONNECTIONS.

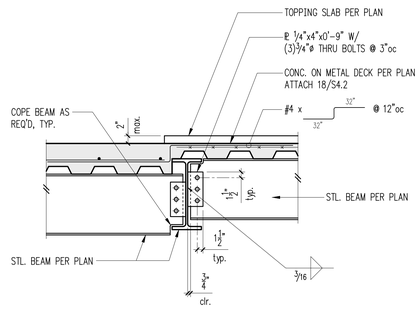
Typical Single Shear Plate Connection and Schedule 5



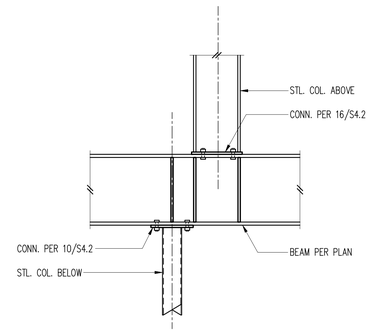
NOTES:

1. BEVEL 30°
2. LARGER OF BEAM FLANGE THICKNESS (t_{bf}) OR 1/2". (PLUS 1/2 t_{bf}, OR MINUS 1/4 t_{bf})
3. LARGER OF 3/4 t_{bf} OR 3/4" MAXIMUM t_{bf} PLUS 1/4"
4. 1/2" MINIMUM RADIUS PLUS UNLIMITED
5. 3 t_{bf}. (± 1/2")
6. SURFACES SHALL BE FREE OF NOTCHES AND SHALL HAVE A SURFACE ROUGHNESS OF NOT MORE THAN 500 μ -in.
7. TOLERANCES SHALL NOT ACCUMULATE TO THE EXTENT THAT THE ANGLE OF THE ACCESS HOLE CUT TO THE FLANGE SURFACE EXCEEDS 25°

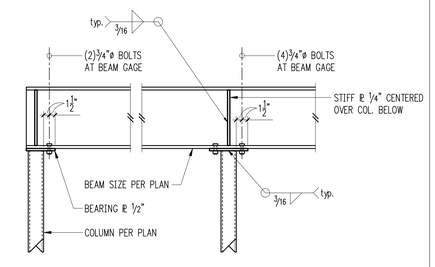
Moment Frame Access Hole 12



8



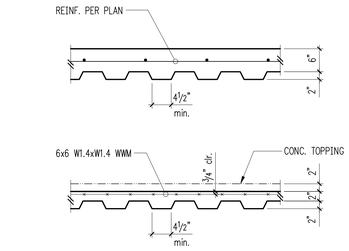
9



Where Beam Stops Where Beam Continues

NOTE:
BEARING PLATE THICKNESS SHALL BE 3/4" WHERE DEPTH OF SUPPORTED MEMBER EXCEEDS 24"

Typical Beam Bearing on HSS or Pipe Column 10



Verco W2 Formlock, G60 Coating w/Following Min. Properties

PANEL WIDTH = 36"

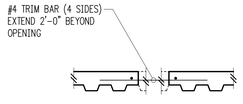
20 GA.
$I = .422\ in.^4$
$S = .323\ in.^3$
$Fy = 50\ ksi$

SHEAR CAPACITY REQ'D = 2800 #/ft

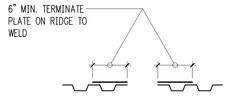
1. USE 20 GA. DECK AS NOTED TO THE LEFT. DECK SHALL HAVE 100 PSF SUPERIMPOSED LOAD CAPACITY. SPAN CONDITIONS EXCEEDING 9'-6" EA. SPAN. MAXIMUM SPAN OF 20 GA. DECK IS 9'-0" FOR SINGLE, 10'-0" DOUBLE SPAN CONDITIONS AND 10'-6" FOR TRIPLE SPAN CONDITIONS.
2. NOTE 1 ASSUMES SHORING WILL NOT BE USED.
3. PROVIDE (4)1/2" DIAMETER EFFECTIVE PUDDLE WELDS PER SHEET TO ALL SUPPORTS PERPENDICULAR TO DECK FLUTES.
4. PROVIDE 1/2" DIAMETER PUDDLE WELDS AT _"oc WHERE DECK ORIENTATION CHANGES AND OTHER SUPPORTS PARALLEL TO DECK FLUTES.
5. CONNECT DECK SEAMS WITH BUTTON PUNCHES @ 36"oc.
6. DECK TYPE MUST STRICTLY MEET CRITERIA LISTED ABOVE INCLUDING RESEARCH REPORT ALLOWABLE SHEAR AND SUPERIMPOSED LOADS. SUBMIT DECK INFORMATION TO ENGINEER PRIOR TO BEGINNING SHOP DRAWINGS.
7. REINFORCE DECK OPENINGS PER 20/S4.2.
8. AT CONTRACTORS OPTION, .145"ø DRIVE PINS OR SDI RECOGNIZED #10 SELF DRILLING SCREWS MAY BE SUBSTITUTED AT SUPPORTS AND SIDELAP CONNECTIONS.

2" + 2 1/2" Floor Deck 18

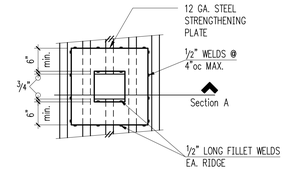
1. FOR HOLES 4" DIA. OR LESS OR 4" SQUARE OR LESS:
   NO STRENGTHENING IS REQUIRED PROVIDED THAT HOLES ARE NOT CLOSER THAN 12"oc
2. FOR HOLES GREATER THAN 4" UP TO 8" DIA. OR 8" SQUARE:
   PROVIDED HOLES ARE NOT CLOSER THAN 3'-0"oc



Section at Deck With Concrete Fill

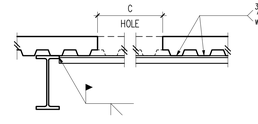


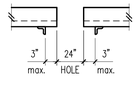
Section A

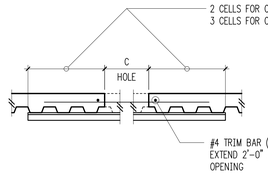


Square or Round Holes of Deck Without Concrete Fill

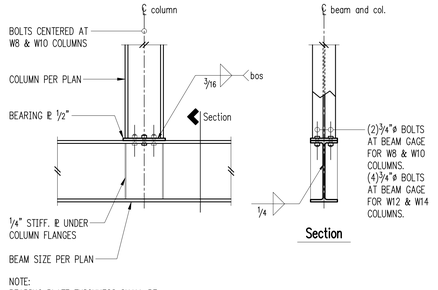
3. FOR HOLES GREATER THAN 8" UP TO 24" DIA. OR 24" SQUARE:
   PROVIDE L 2x2x3/16 AS SHOWN BELOW:





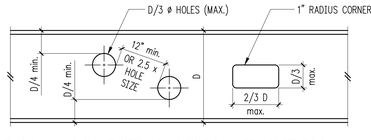


Floor Deck Reinforcement at Small Openings 20



NOTE:
BEARING PLATE THICKNESS SHALL BE 3/4" WHERE COLUMN IS W14

Beam Supporting WF Column 16



1. CONTRACTOR SHALL COORDINATE SIZES AND LOCATIONS OF ALL BEAM PENETRATIONS WITH MECHANICAL DRAWINGS. ALL PENETRATIONS LARGER THAN 2"ø SHALL BE SHOWN ON SHOP DRAWINGS OR SKETCHES AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. FIELD CUTTING NOT PERMITTED WITHOUT APPROVAL.
2. OPENINGS MAY OCCUR IN MIDDLE HALF OF BEAM LENGTH ONLY.
3. NO CUTTING MAY OCCUR IN TOP OR BOTTOM QUARTER OF BEAM DEPTH.
4. ADJACENT OPENINGS MUST BE SPACED AT THE LESSER OF, 12" OR 2.5 x LARGER OPENING SIZE, EDGE TO EDGE.
5. MAXIMUM SIZES OF OPENINGS SHALL BE D/3 ø OR D/3 x 2D/3 AS SHOWN.
6. NO OPENINGS SHALL OCCUR WITHIN 12" OF AN ADJACENT BEAM CONNECTION.
7. REQUIRED OPENINGS NOT MEETING ABOVE CRITERIA SHALL BE SUBMITTED TO ENGINEER FOR REINFORCING DESIGN.

Steel Beam Penetrations 17

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212
ssfengineers.com

RYAN H. KETCHMAN — STATE OF WASHINGTON — 47141 — REGISTERED PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

PROJECT TITLE:
Ogden Point Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

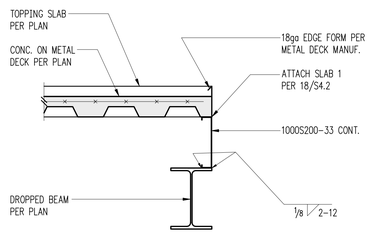
ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

ISSUE: Permit

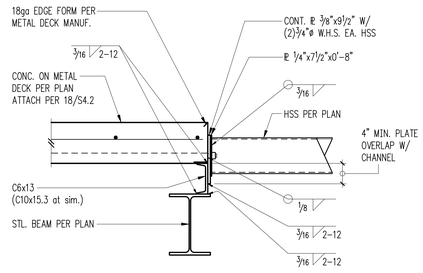
SHEET TITLE: Framing Details

SCALE: 3/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO: S4.2
NO: OF SHEETS:

1



1" = 1'-0" 2



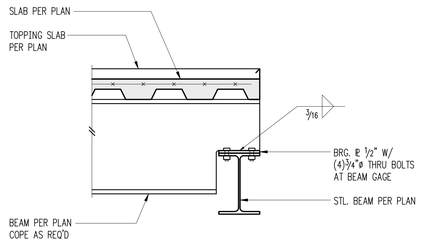
1" = 1'-0" 3

4

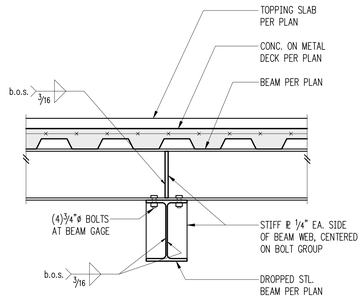
5

6

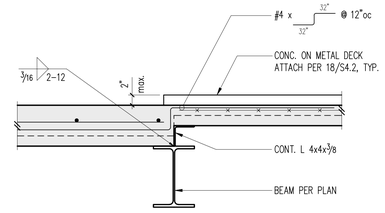
7



1" = 1'-0" 8



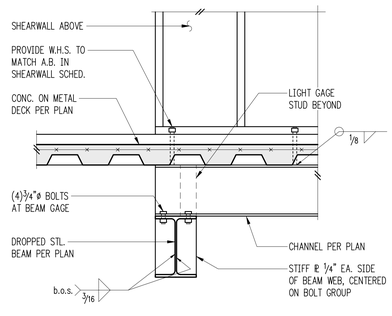
1" = 1'-0" 9



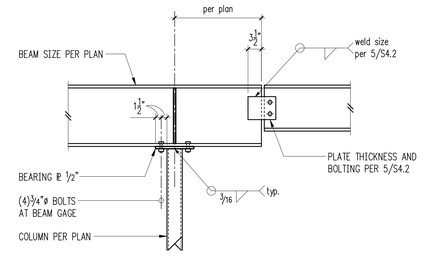
1" = 1'-0" 10

11

12



1" = 1'-0" 13



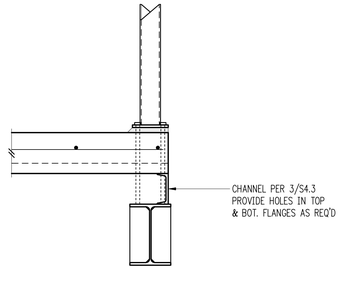
NOTE:
BEARING PLATE THICKNESS SHALL BE
3/4" WHERE DEPTH OF SUPPORTED
MEMBER EXCEEDS 24"

Beam Bearing on HSS or Pipe Column 14

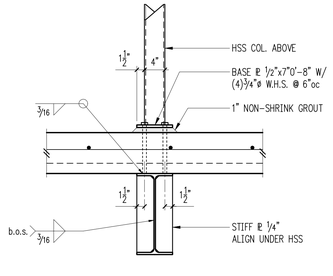
15

16

17

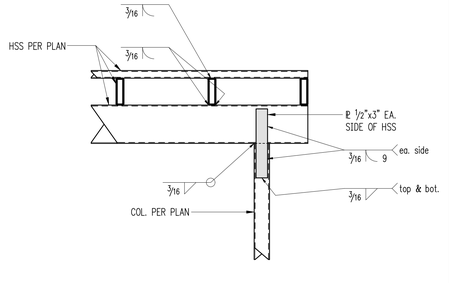


At W12 Beam



At W16 Beam

1" = 1'-0" 19



20

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

RYAN H. KEICHMAN
STATE OF WASHINGTON
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

DRAWN: KMB
DESIGN: RDH/JWJ
CHECKED: RDH
APPROVED: RHR

REVISIONS:

DPD:

PROJECT TITLE:
Ogden Point
Residence - Lot C
3675 W Mercer Way
Mercer Island, WA 98040

ARCHITECT:
Demetriou Architects
5555 Lakeview Drive, Suite 200
Kirkland, WA 98033
PH 425-827-170

ISSUE:
Permit

SHEET TITLE:
Framing Details

SCALE: 3/4" = 1'-0" U.N.O.
DATE: January 23, 2018
PROJECT NO: 00641-2017-01
SHEET NO:

S4.3

NO: OF SHEETS:

POR. OF GOV. LOT 2, SW 1/4, SW 1/4, SEC. 12, TWP. 24N., RGE 4E., W.M.

OGDEN POINT RESIDENCE

LOT 2 BUILDING PERMIT

LEGAL DESCRIPTION
(AFTER PROPOSED CONSOLIDATION)

LOT 1

LOTS A AND B, MERCER ISLAND SHORT PLAT NUMBER MI-76-8-027, RECORDED UNDER RECORDING NUMBER 7702170577, AND AS AMENDED BY BOUNDARY LINE REVISION PER CITY OF MERCER ISLAND FILE NO. MI-81-08-15 AS RECORDED UNDER RECORDING NUMBER 8211169001, SAID SHORT PLAT BEING A PORIONT OF BLOCK A, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON;

TOGETHER WITH SECOND CLASS SHORELANDS ADJACENT THERETO;

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER AN EXISTING PRIVATE ROADWAY LOCATED UPON PROPERTY ADJOINING AS CREATED BY EASEMENTS RECORDED UNDER RECORDING NUMBERS 3860939 AND 3927412, AND ALSO AS DELINEATED ON THE FACE OF SAID BOUNDARY LINE REVISION; AND

TOGETHER WITH PARKING INGRESS, EGRESS AND DRAINAGE EASEMENT AS ESTABLISHED BY PARKING AREA EASEMENT RECORDED UNDER RECORDING NUMBER 5094317 AND AS FURTHER DESCRIBED IN DEED RECORDED UNDER RECORDING NUMBER 8308170194; AND

TOGETHER WITH THAT CERTAIN EASEMENT FOR UNDERGROUND AND OVERHEAD UTILITIES AS ESTABLISHED BY UTILITY EASEMENT RECORDED UNDER RECORDING NUMBER 9304061280.

LOT 2

LOT C, MERCER ISLAND SHORT PLAT NUMBER MI-76-8-027, RECORDED UNDER RECORDING NUMBER 7702170577, AND AS AMENDED BY BOUNDARY LINE REVISION PER CITY OF MERCER ISLAND FILE NO. MI-81-08-15 AS RECORDED UNDER RECORDING NUMBER 8211169001, SAID SHORT PLAT BEING A PORIONT OF BLOCK A, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON;

TOGETHER WITH SECOND CLASS SHORELANDS ADJACENT THERETO;

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER AN EXISTING PRIVATE ROADWAY LOCATED UPON PROPERTY ADJOINING AS CREATED BY EASEMENTS RECORDED UNDER RECORDING NUMBERS 3860939 AND 3927412, AND ALSO AS DELINEATED ON THE FACE OF SAID BOUNDARY LINE REVISION; AND

TOGETHER WITH PARKING INGRESS, EGRESS AND DRAINAGE EASEMENT AS ESTABLISHED BY PARKING AREA EASEMENT RECORDED UNDER RECORDING NUMBER 5094317 AND AS FURTHER DESCRIBED IN DEED RECORDED UNDER RECORDING NUMBER 8308170194; AND

TOGETHER WITH THAT CERTAIN EASEMENT FOR UNDERGROUND AND OVERHEAD UTILITIES AS ESTABLISHED BY UTILITY EASEMENT RECORDED UNDER RECORDING NUMBER 9304061280.

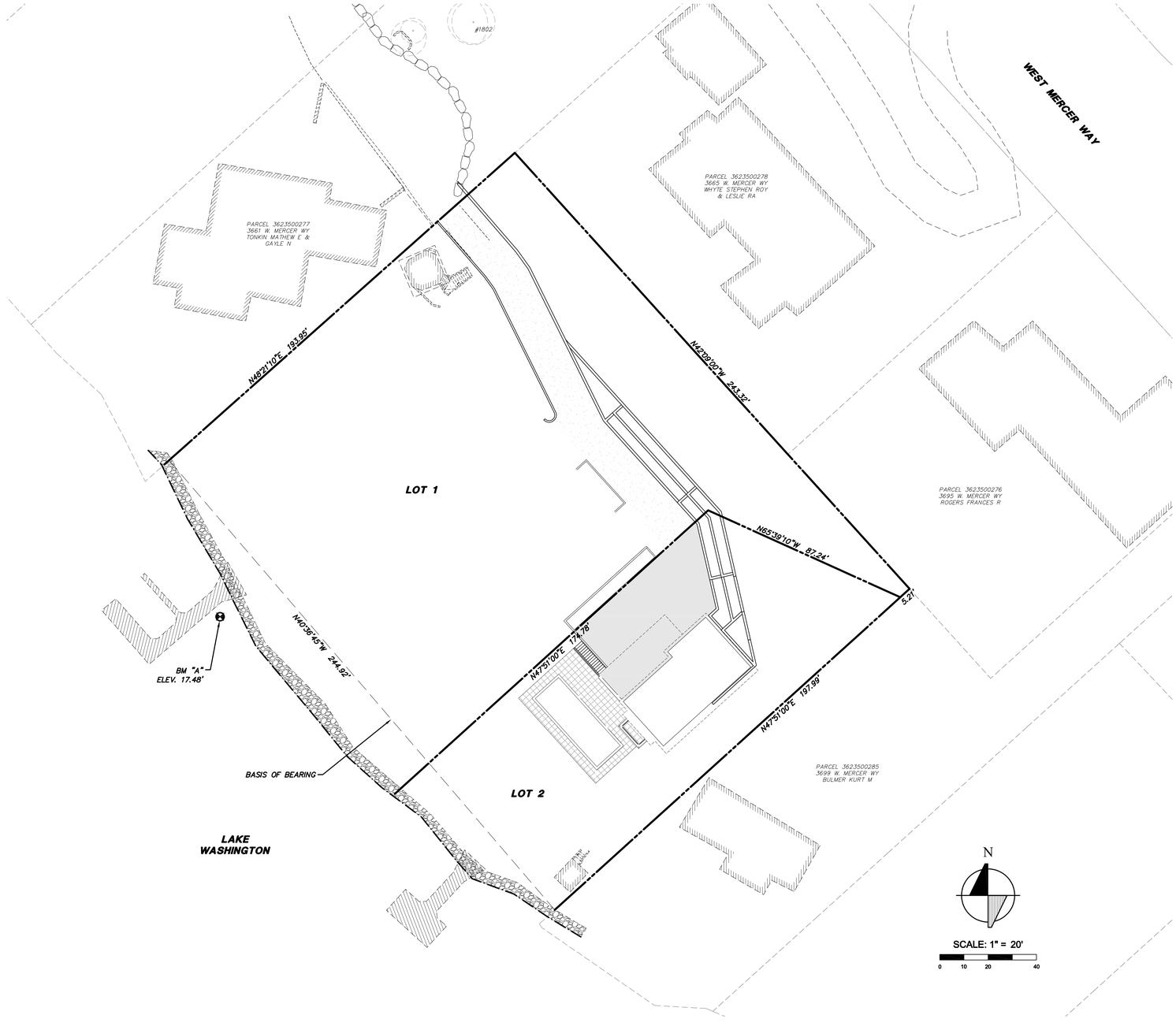
BASIS OF BEARING
HELD BEARING OF NORTH 40°36'45" WEST BETWEEN EXISTING TACKS SET IN LEAD BY H.W. RUTHERFORD IN 1959, AS SHOWN HEREON AND REFERENCED.

HORIZONTAL DATUM
ASSUMED

VERTICAL DATUM
NAVD88

BENCH MARK
ORIGINAL BENCHMARK:
WGS SURVEY DATA WAREHOUSE POINT DESIGNATION--8037, 2" BRASS CAP IN 4" CONC. MON (DN 0.3') WEST MERCER WAY AT JOG100' SE OF INTERSECTION OF LAKE PL. 950' NW OF INTERSECTION SE 40TH ST.
ELEV 171.06'

BM "A": SET TACK ON CENTERLINE OF DOCK ON LOT A ±10 FROM SHORE.
ELEVATION = 17.48'



VICINITY MAP
NOT TO SCALE

OWNER
THE LADYBUG TRUST

PROJECT ENGINEER/SURVEYOR
TRIAD
20300 WOODINVILLE SNOHOMISH ROAD NE
SUITE 200, WOODINVILLE, WA 98072
PHONE: (425) 415-2000
FAX: (425) 486-5059
CONTACTS: MARY MCDOWELL, PLS (SURVEYOR)
ADAM STRICKER, PE (ENGINEER)

PROJECT ARCHITECT
DEMETRIOU ARCHITECTS, PLLC
5555 LAKEVIEW DRIVE, SUITE 200,
KIRKLAND, WA 98033
PHONE: (425) 827-1700
CONTACT: DAVID JAFFE

LANDSCAPE ARCHITECT
KEN LARGE LANDSCAPE ARCHITECTS
21803 NE 17TH COURT
SAMMAMISH, WA 98074
PHONE: (425) 836-4578
CONTACT: KEN LARGE

GEOTECHNICAL ENGINEER
GEOTECH CONSULTANTS INC.
13256 NE 20TH ST., SUITE 16
BELLEVUE, WA 98005
PHONE: (425) 747-5618
CONTACT: THOR CHRISTENSEN

SHEET INDEX

CAUTION
LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 1-800-424-5555 NOT LESS THAN TWO FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

triad
20300 Woodinville Snohomish Rd NE
Suite A • Woodinville, WA 98072
p: 425.415.2000 f: 425.486.5059
w: triadassociates.net

LOT 2 BUILDING PERMIT
COVER SHEET

THE LADYBUG TRUST

OGDEN POINT RESIDENCE
BUILDING PERMIT

CITY OF MERCER ISLAND, WASHINGTON

REVISED BY: NO.	DATE	EXTENSION	DATE:	BY	CK

RICHARD A. TOMKINS, PE
PROJECT MANAGER
MARY MCDOWELL, PLS
PROJECT SURVEYOR
ADAM STRICKER, PE
PROJECT ENGINEER
PROJECT LANDSCAPE ARCHITECT
FIRST SUBMITTAL DATE:
SCALE: HORZ.: 1"=20' VERT.: N/A

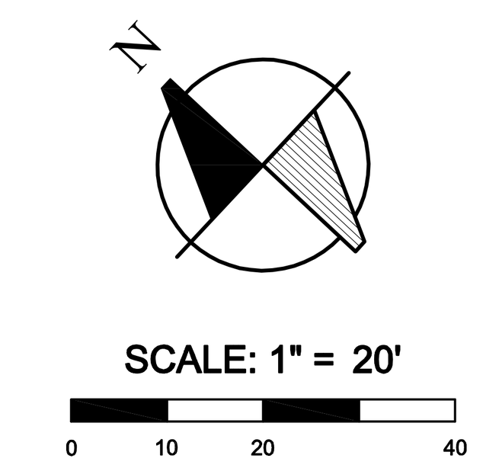
ADAM Y. STRICKER
STATE OF WASHINGTON
21803
REGISTERED
PROFESSIONAL ENGINEER
2/15/2018

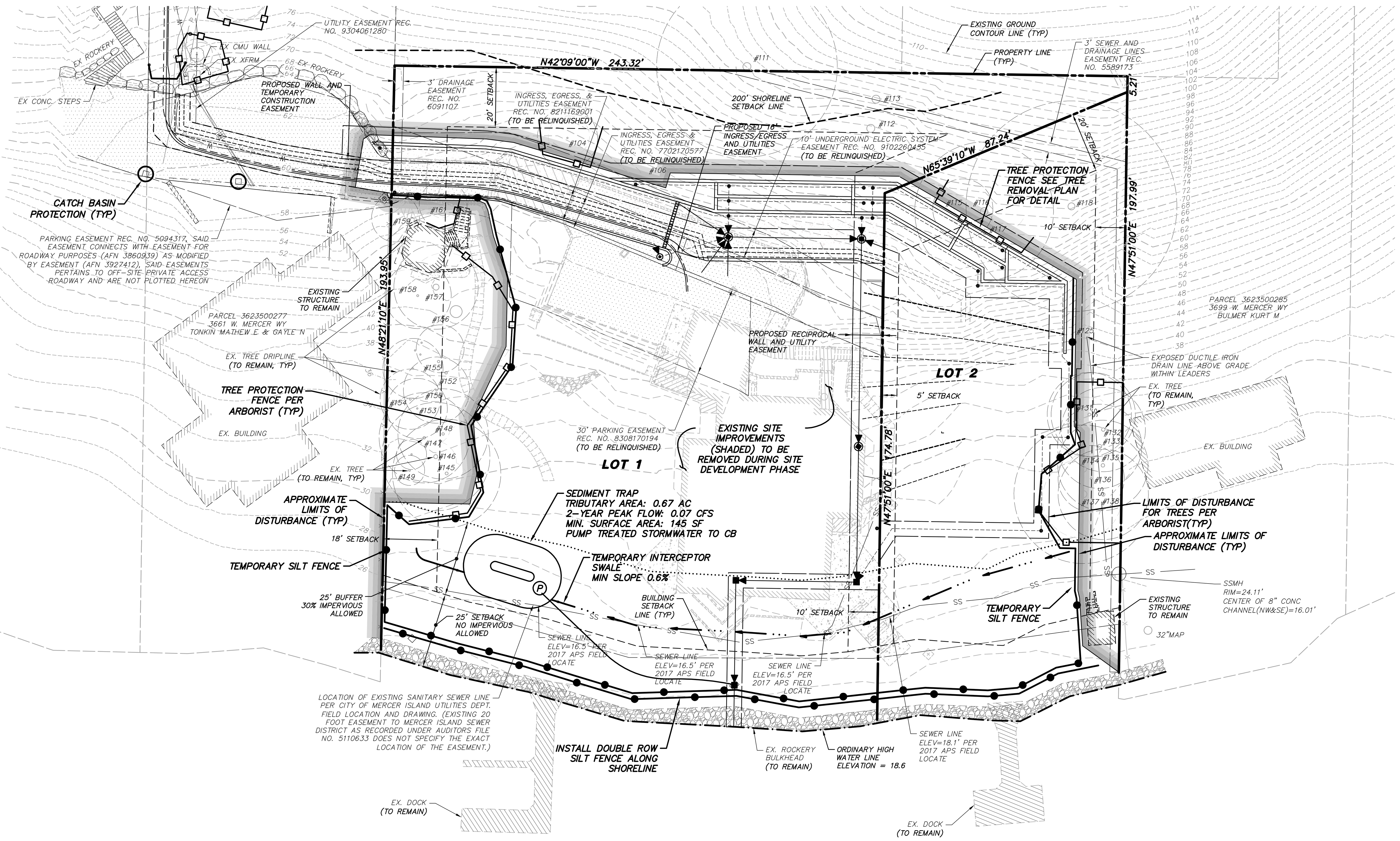
STAMP NOT VALID
UNLESS SIGNED AND DATED

JOB NO. LDYB0002

SHEET NO. C1 OF 4

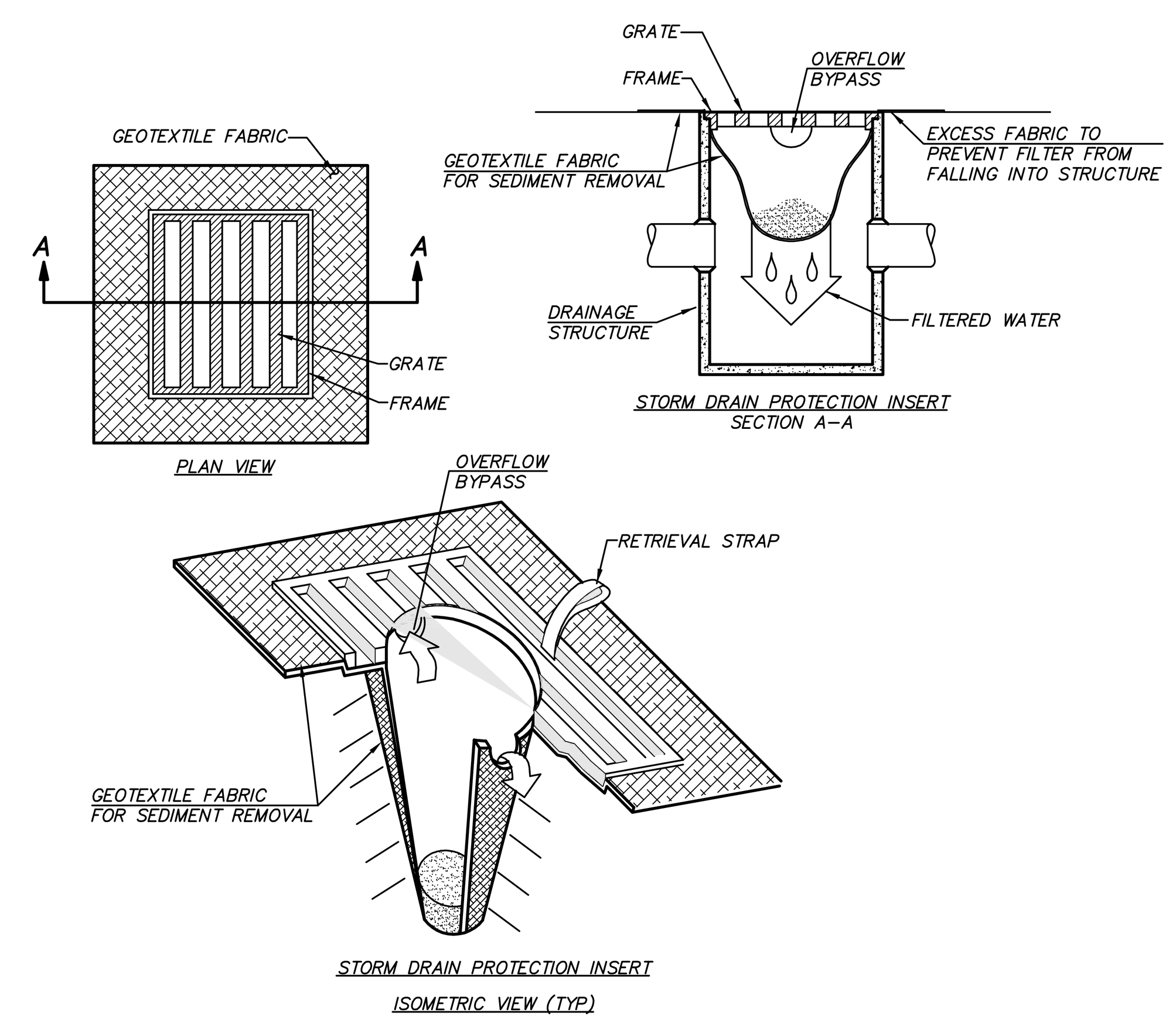
POR. OF GOV. LOT 2, SW 1/4, SW 1/4, SEC. 12, TWP. 24N., RGE 4E., W.M.



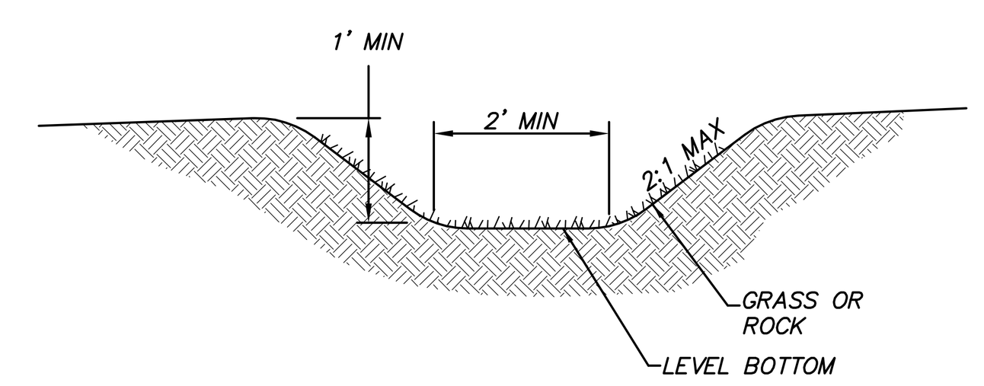


EROSION AND SEDIMENT CONTROL NOTES

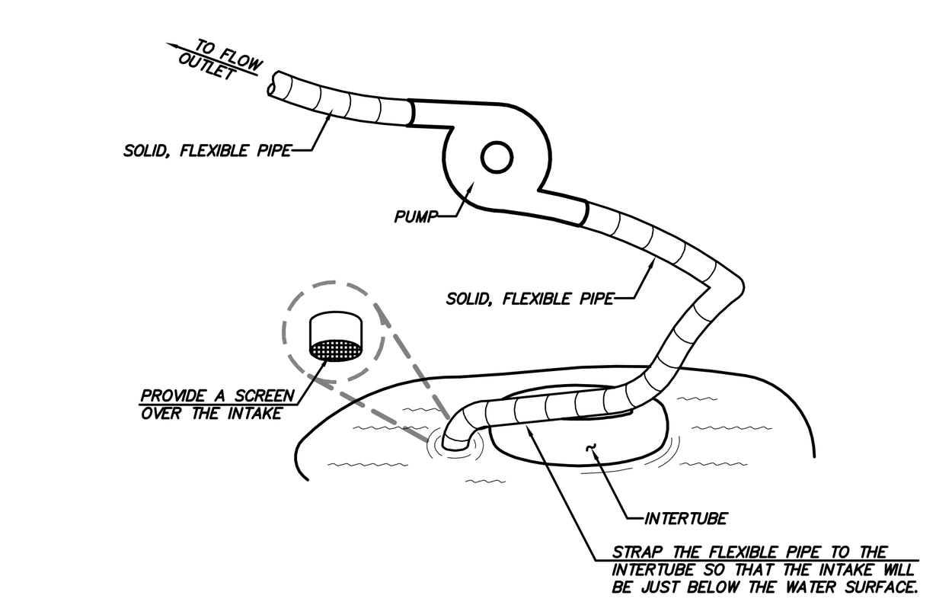
1. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CESCL UNTIL ALL CONSTRUCTION IS APPROVED.
2. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY TAPE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/CESCL FOR THE DURATION OF CONSTRUCTION.
3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
4. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
5. ANY AREA NEEDING ESC MEASURES NOT REQUIRING IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS OF STORM EVENT.
6. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.
7. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
8. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
10. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE CITY INSPECTOR. THE CITY INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.



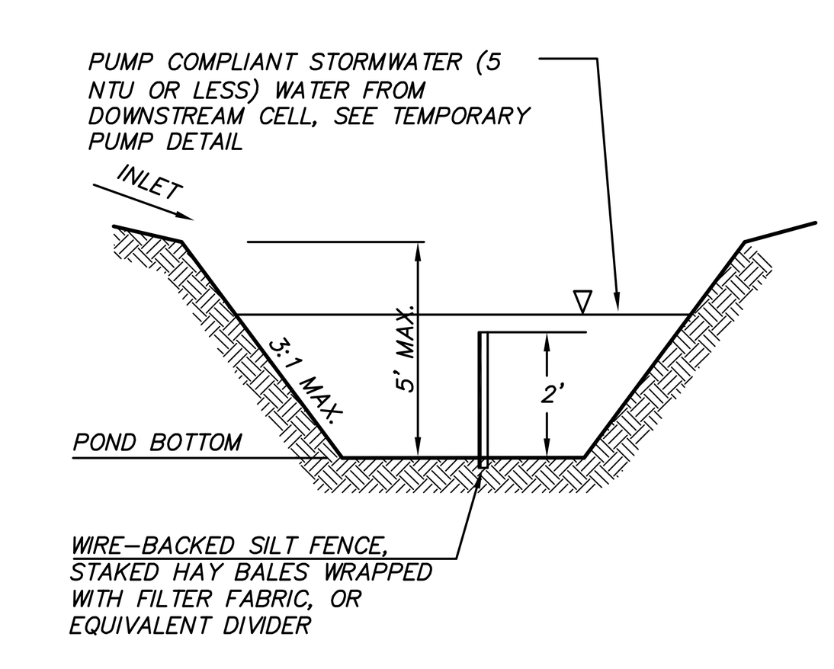
CATCH BASIN TEMPORARY EROSION CONTROL FILTER
NOT TO SCALE



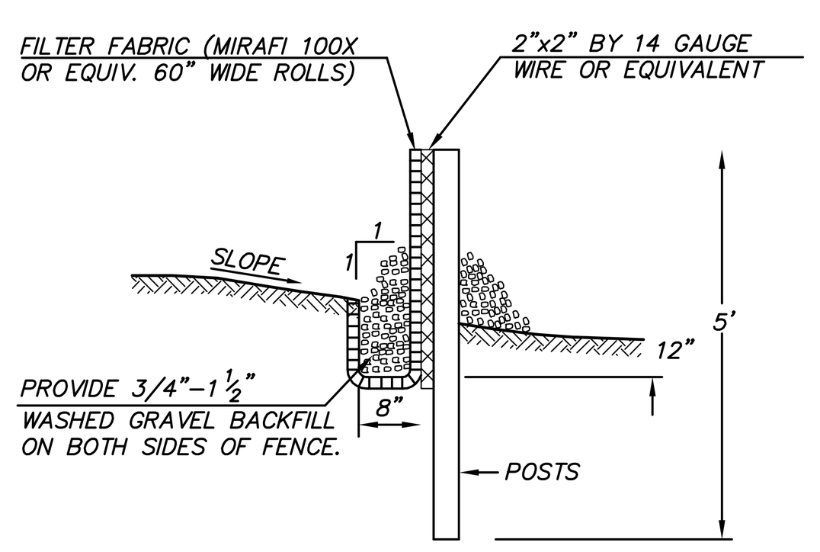
TEMPORARY INTERCEPTOR SWALE
NOT TO SCALE



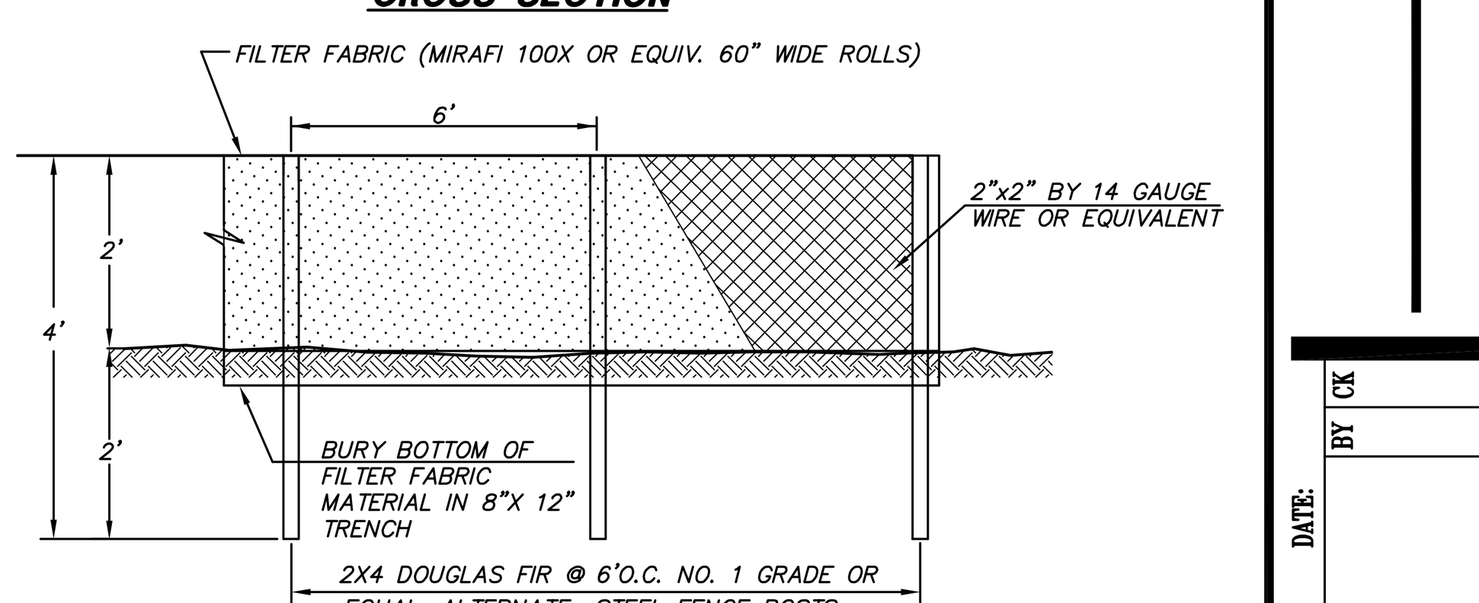
TEMPORARY PUMP DETAIL
NOT TO SCALE



SEDIMENT TRAP CROSS SECTION
NOT TO SCALE



CROSS SECTION



SILT FENCE DETAIL
NOT TO SCALE

FOLLOWING DEMOLITION AND PRIOR TO CONSTRUCTION, PROPOSED BUILDING WITH EXCAVATION LIMITS SHALL BE MARKED IN THE FIELD.

CONTRACTOR MAY RELOCATE TESC FACILITIES (SEDIMENT TRAP AND INTERCEPTOR SWALE) AS NEEDED TO FACILITATE CONSTRUCTION.

TOTAL DISTURBED AREA:
27,500 SQUARE FEET

TREES WITH DIAMETERS LESS THAN SIX INCHES ARE CONSIDERED NON-SIGNIFICANT.

TREE LEGEND	
#101	EXISTING TREE (WITH DRIP LINE) TO BE SAVED
#102	EXISTING TREE TO BE REMOVED
—□—□—	TREE PROTECTION FENCE.

CAUTION
LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 1-800-424-5555 NOT LESS THAN TWO FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

triad
20300 Woodinville Snohomish Rd NE
Suite A • Woodinville, WA 98072
p: 425.415.2000 f: 425.486.5059
w: triadassociates.net

TESC PLAN AND DETAILS

THE LADYBUG TRUST
OGDEN POINT RESIDENCE
BUILDING PERMIT

CITY OF MERCER ISLAND, WASHINGTON

REVIEWED BY: DATE:

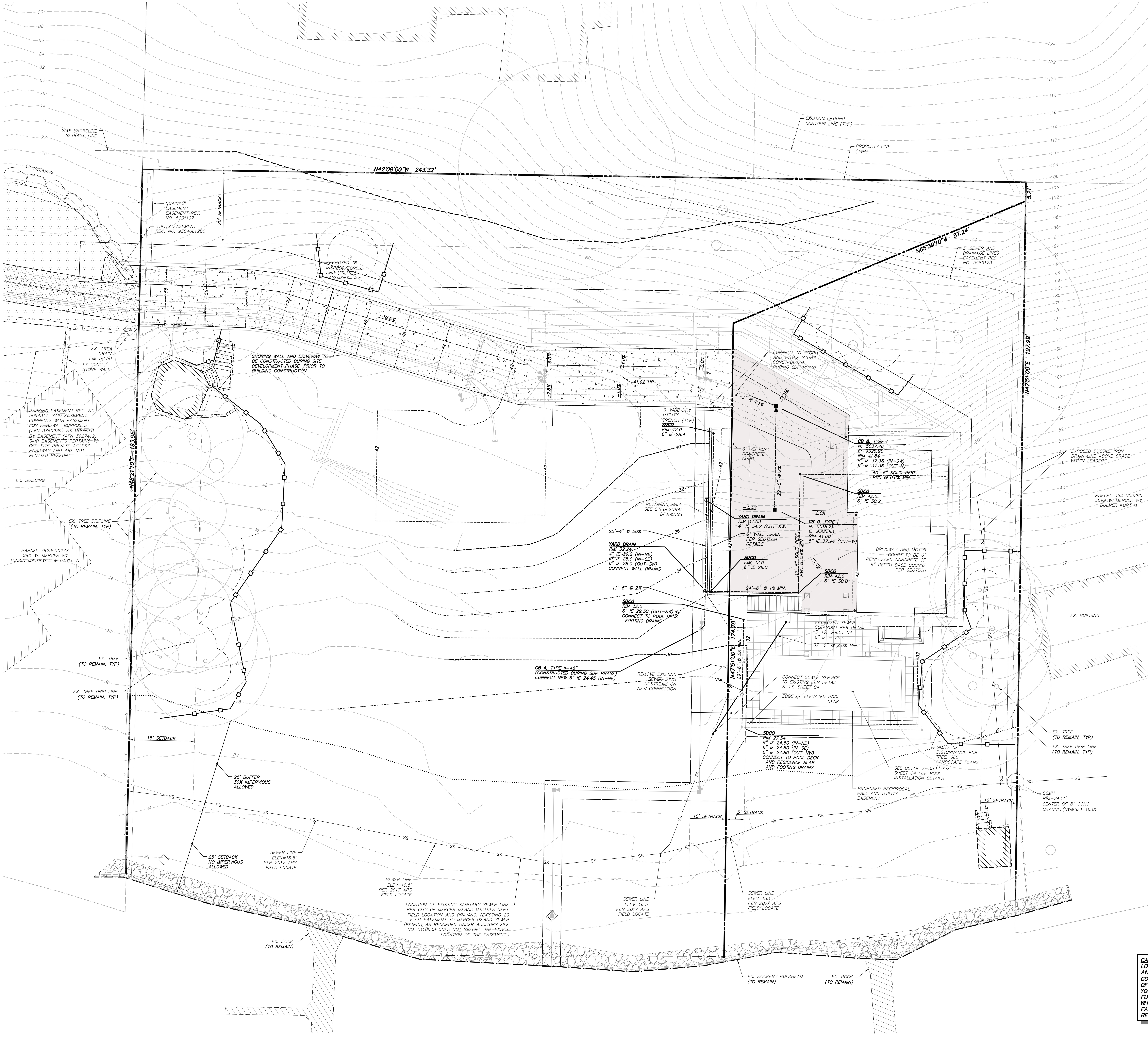
NO.	DATE	REVISION	BY	CK

RICHARD A. TOMKINS, PE
PROJECT MANAGER
MARY MCDOWELL, PLS
PROJECT SURVEYOR
ADAM STRICKER, PE
PROJECT ENGINEER
PROJECT LANDSCAPE ARCHITECT
FIRST SUBMITTAL DATE:
SCALE: HORIZ.: 1"=20' VERT.: N/A

STAMP NOT VALID UNLESS SIGNED AND DATED

JOB NO. LDYB0002
SHEET NO. C2 OF 4

POR. OF GOV. LOT 2, SW 1/4, SW 1/4, SEC. 12, TWP. 24N., RGE 4E., W.M.



N

SCALE: 1" = 10'

0 5 10 20

FF ELEVATIONS:

MAIN HOUSE

LOWER	32.0'
MOTORCOURT	42.0'

ALL STORMDRAIN PIPES TO BE PVC ASTM D-3034, SDR-35 UNLESS OTHERWISE NOTED

YARD DRAIN (YD) SPECIFICATION:
YARD DRAINS SHALL BE 15" NYLOPLAST DRAIN BASIN WITH CONCRETE BOTTOM AND WITH INTEGRATED DUCTILE IRON FRAME AND GRATE (OR ALTERNATE, APPROVED BY OWNER). ROOF AND FOUNDATION DRAIN CONNECTS TO BE MADE TO YARD DRAINS VIA STACKED 18"x6" TEE FITTINGS.

CAUTION
LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 1-800-424-5555 NOT LESS THAN TWO FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

triad
20300 Woodinville Snohomish Rd NE
Suite A • Woodinville, WA 98072
p: 425.415.2000 f: 425.486.5059
w: triadassociates.net

LOT 2 BUILDING PERMIT
GRADING, PAVING, AND UTILITY PLAN

THE LADYBUG TRUST
OGDEN POINT RESIDENCE
BUILDING PERMIT

CITY OF MERCER ISLAND, WASHINGTON

REVIEWED BY: DATE:

NO.	DATE	REVISION	BY	CK

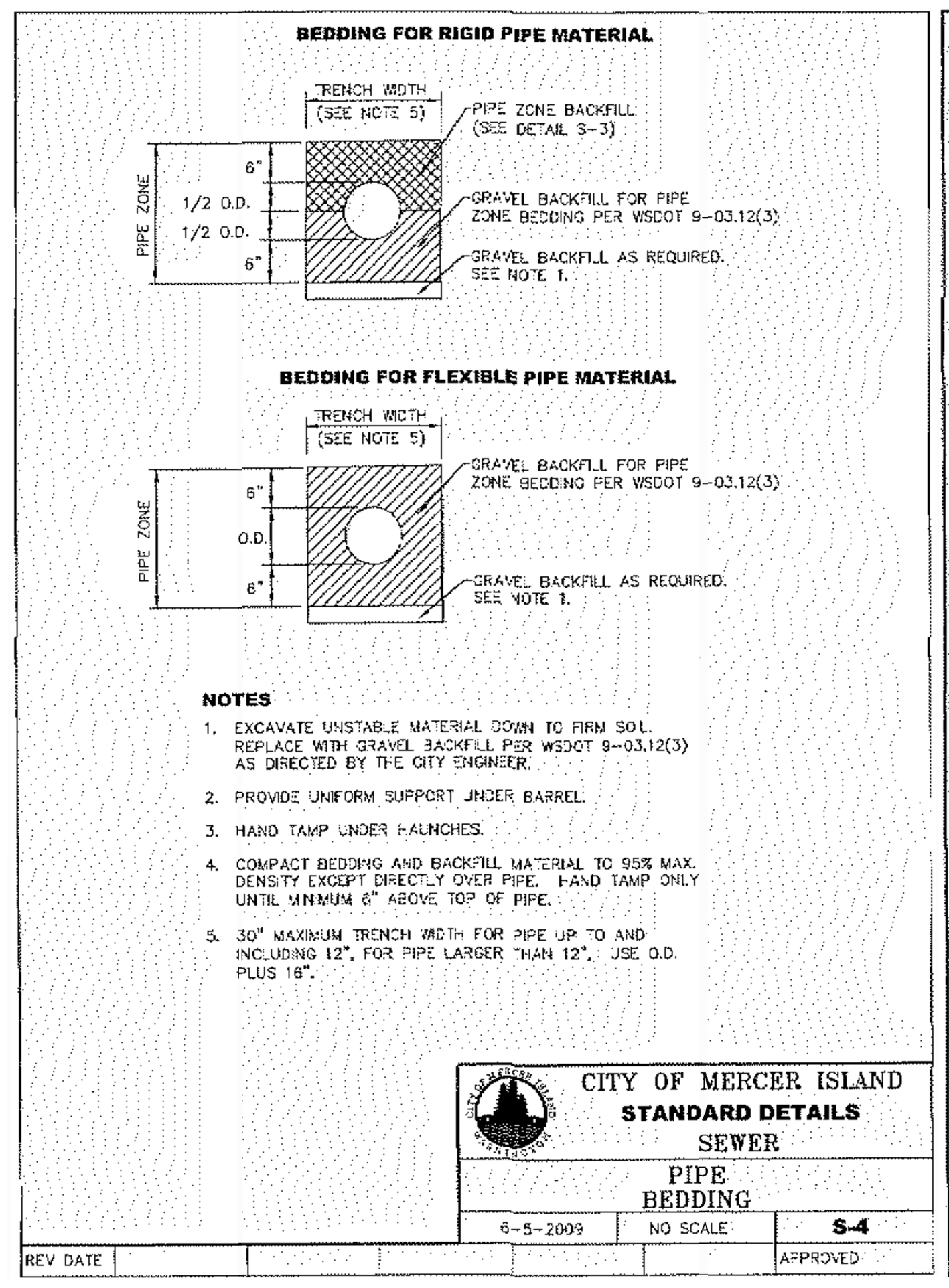
RICHARD A. TOMKINS, PE
PROJECT MANAGER
MARY MCDOWELL, PLS
PROJECT SURVEYOR
ADAM STRICKER, PE
PROJECT ENGINEER
PROJECT LANDSCAPE ARCHITECT
FIRST SUBMITTAL DATE:
SCALE: HORIZ.: 1"=10' VERT.: N/A

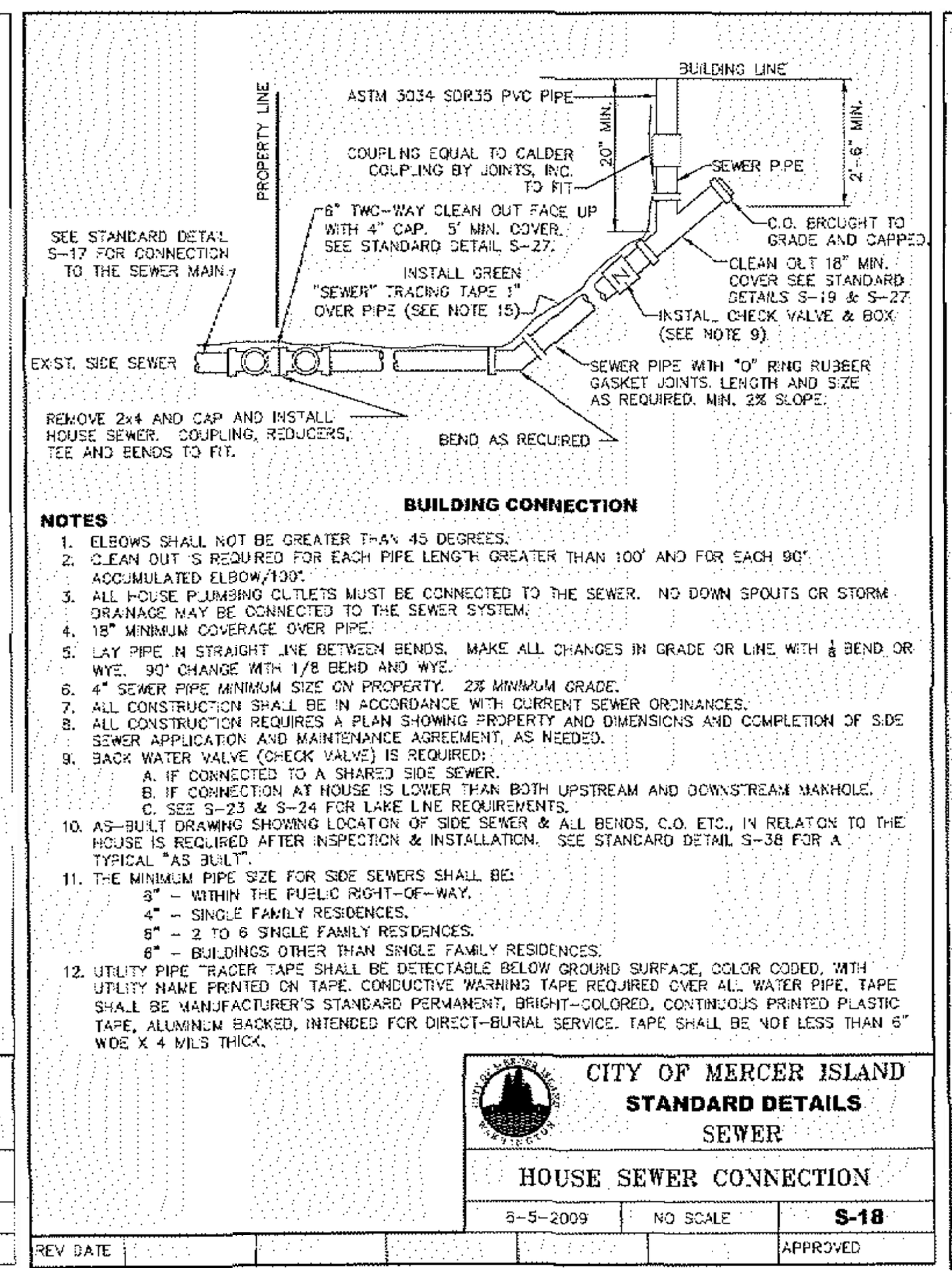
STAMP NOT VALID UNLESS SIGNED AND DATED

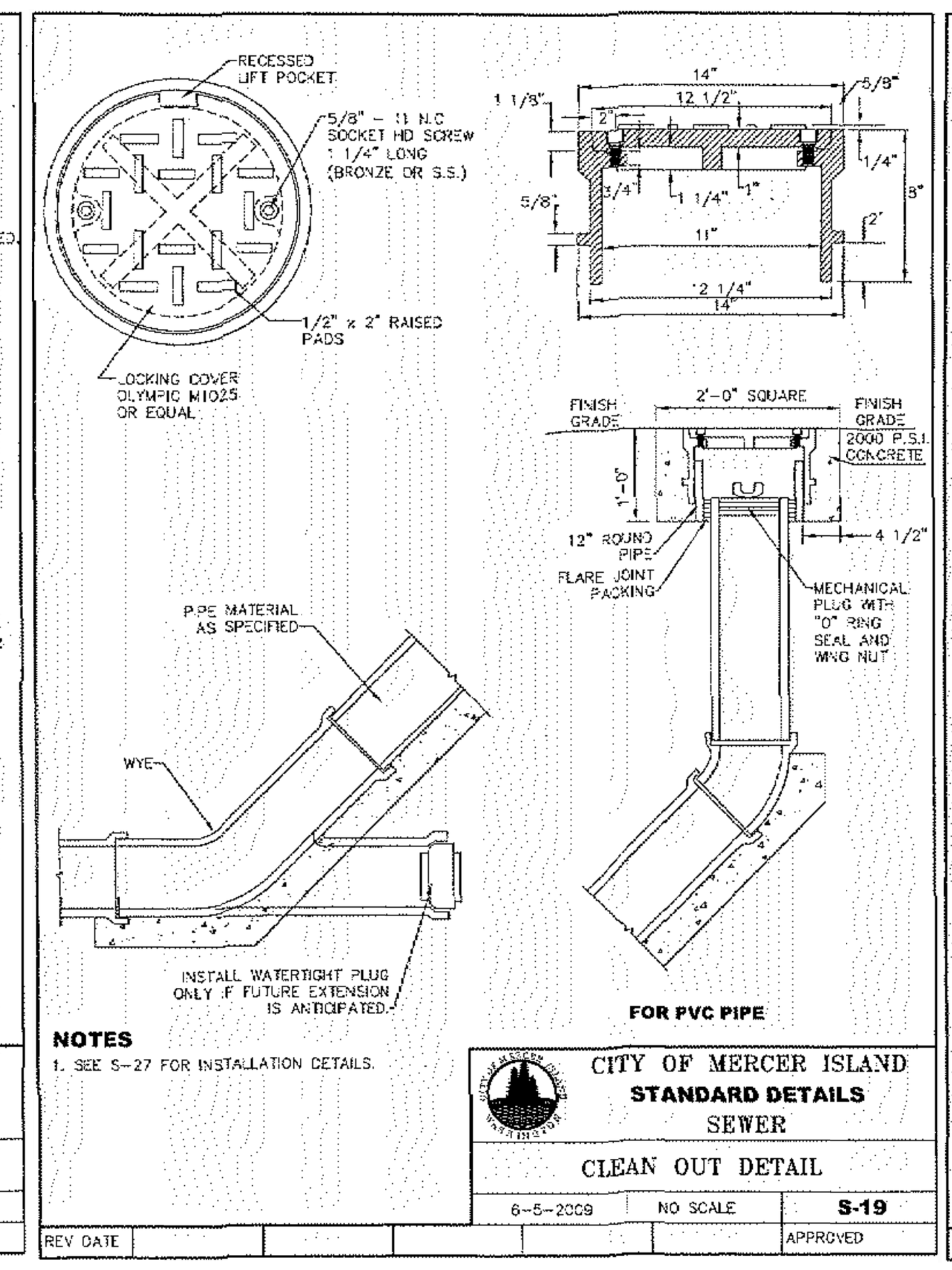
JOB NO. LDYB0002

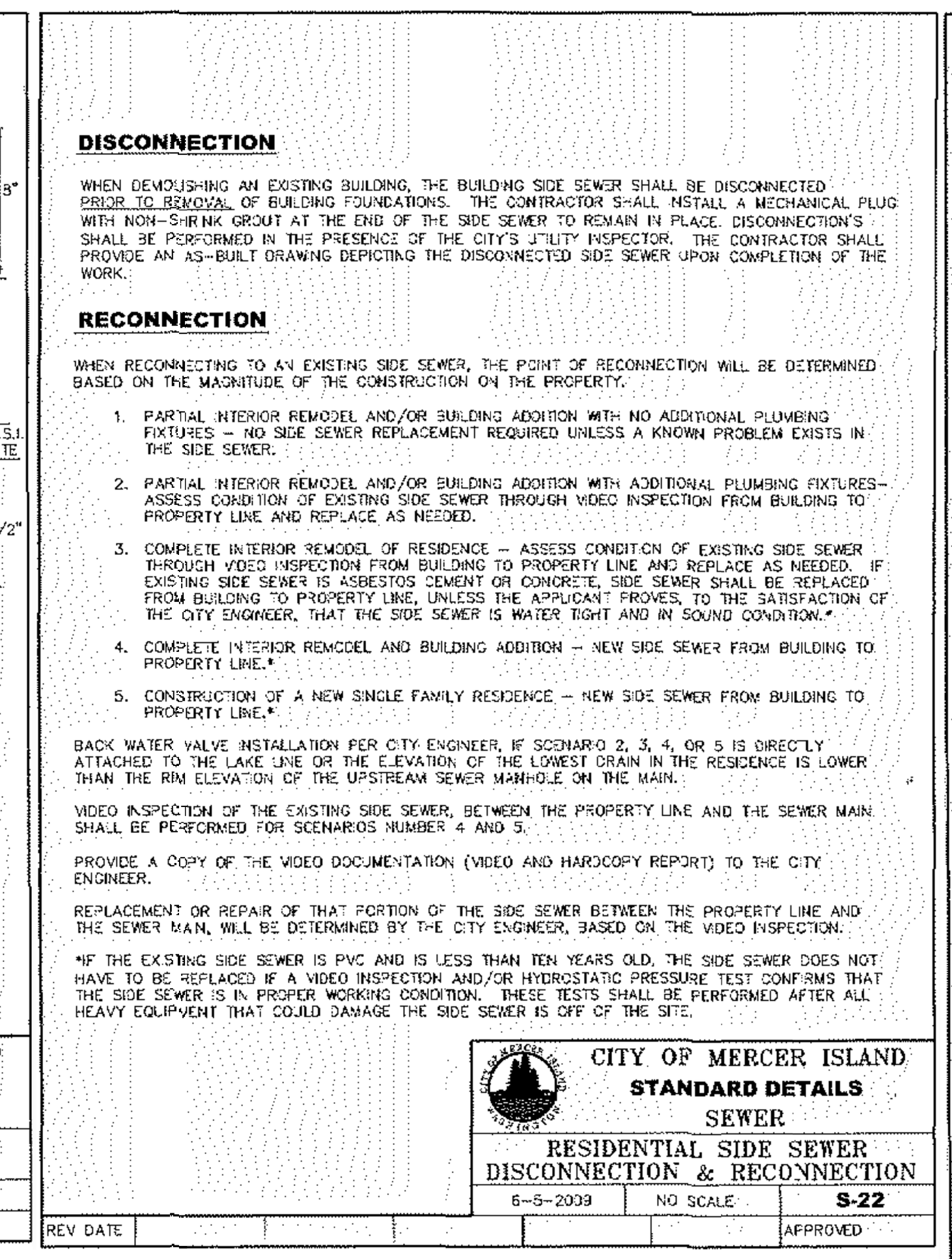
SHEET NO. C3 OF 4

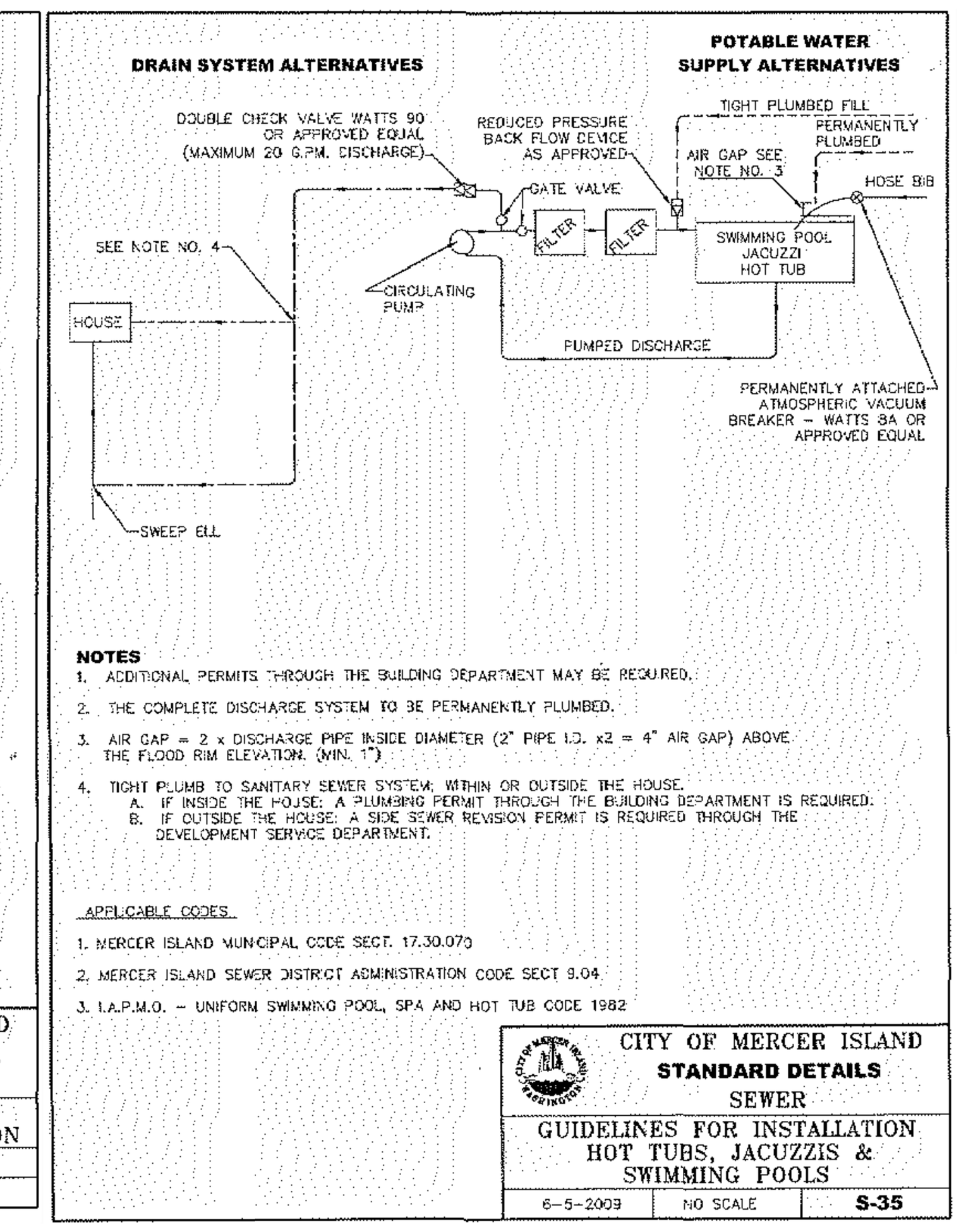
POR. OF GOV. LOT 2, SW 1/4, SW 1/4, SEC. 12, TWP. 24N., RGE 4E., W.M.

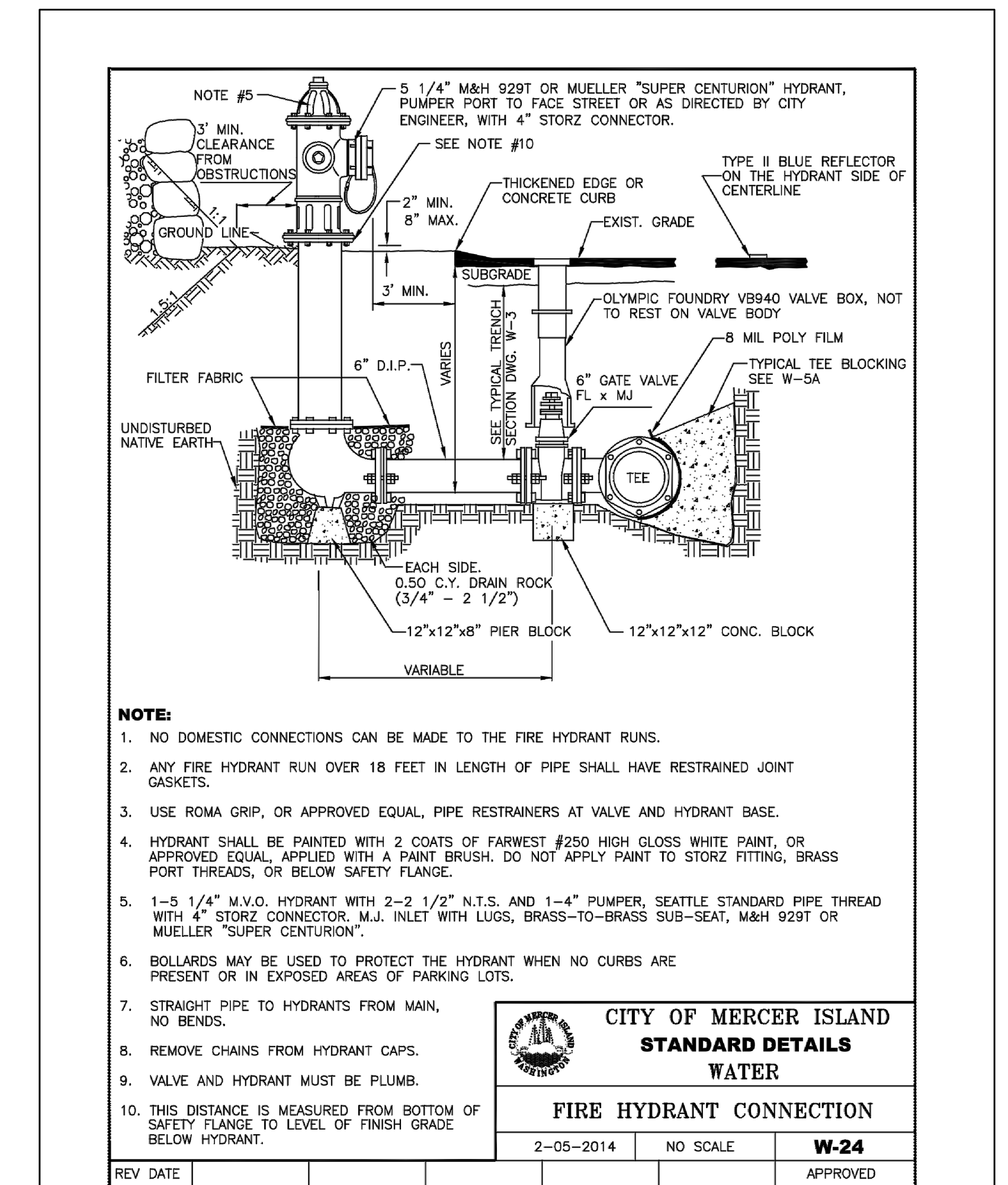


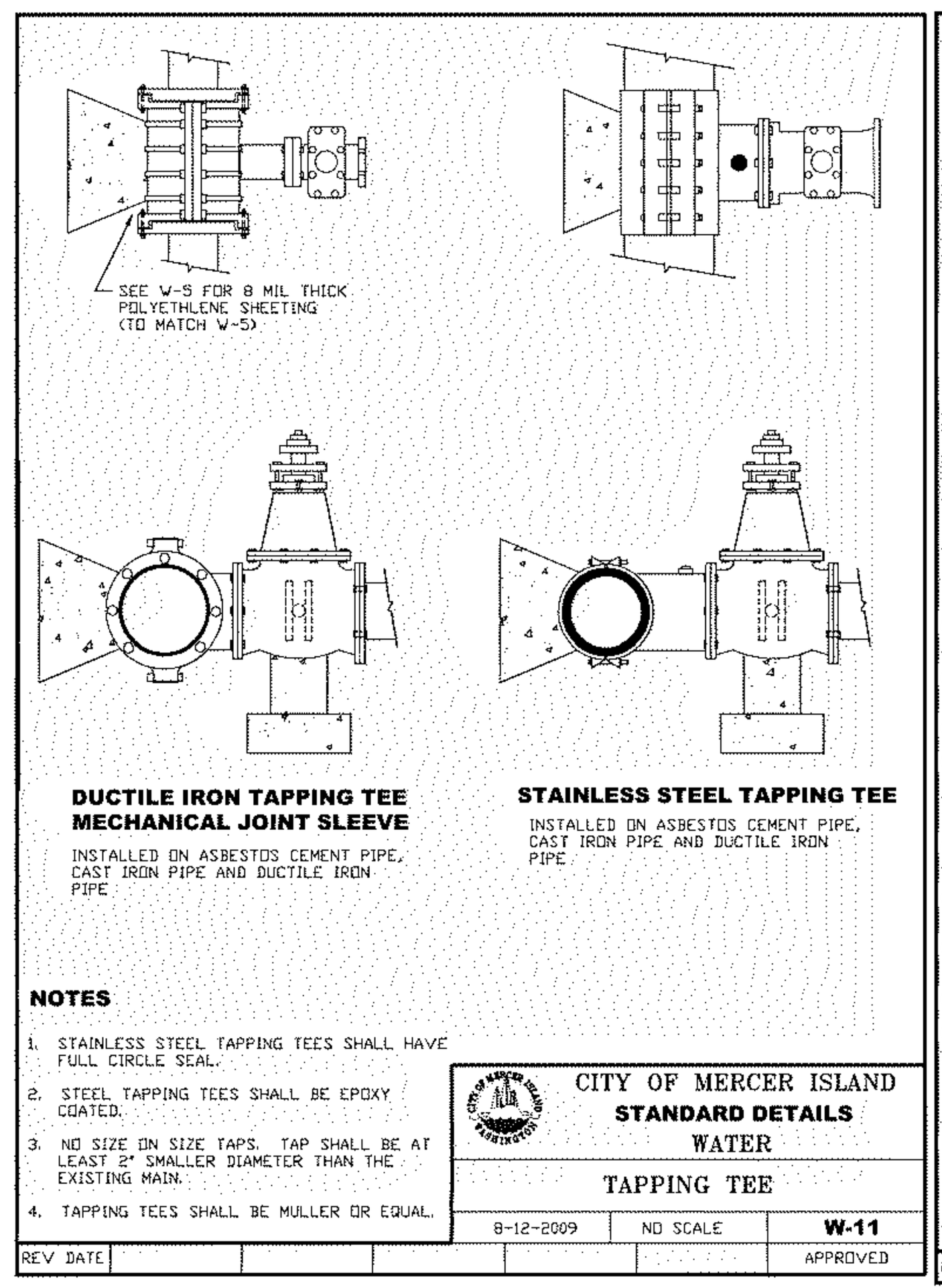


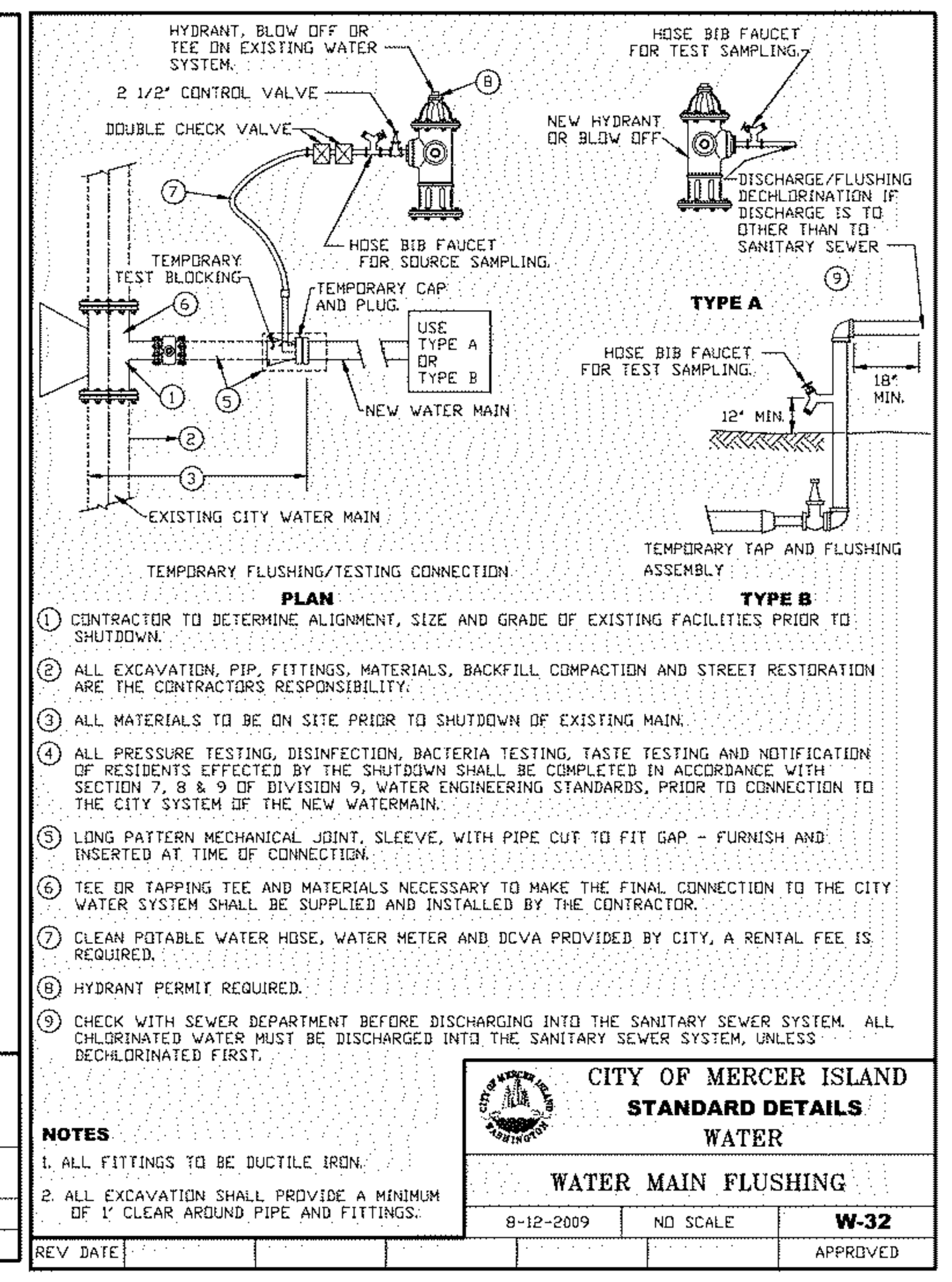


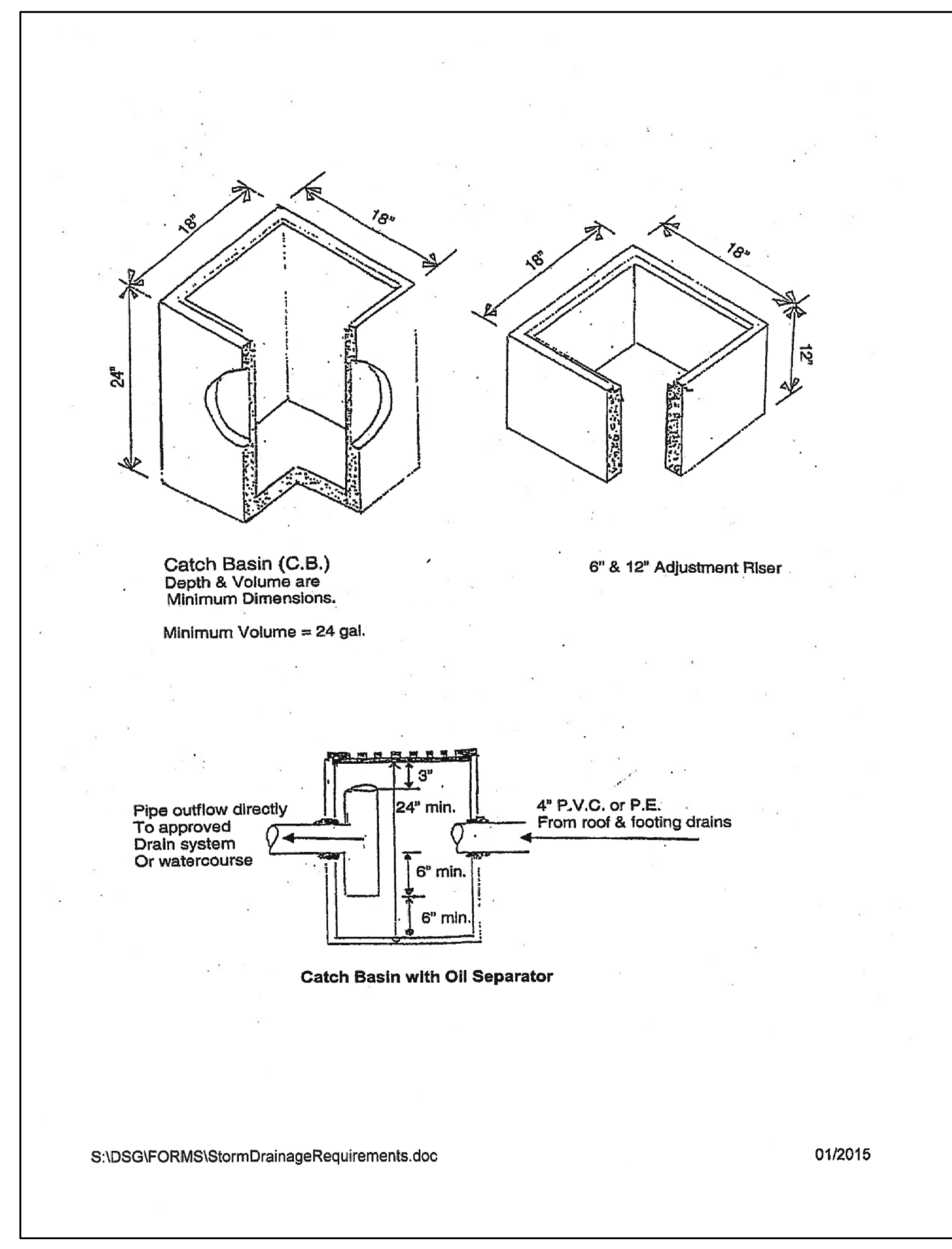


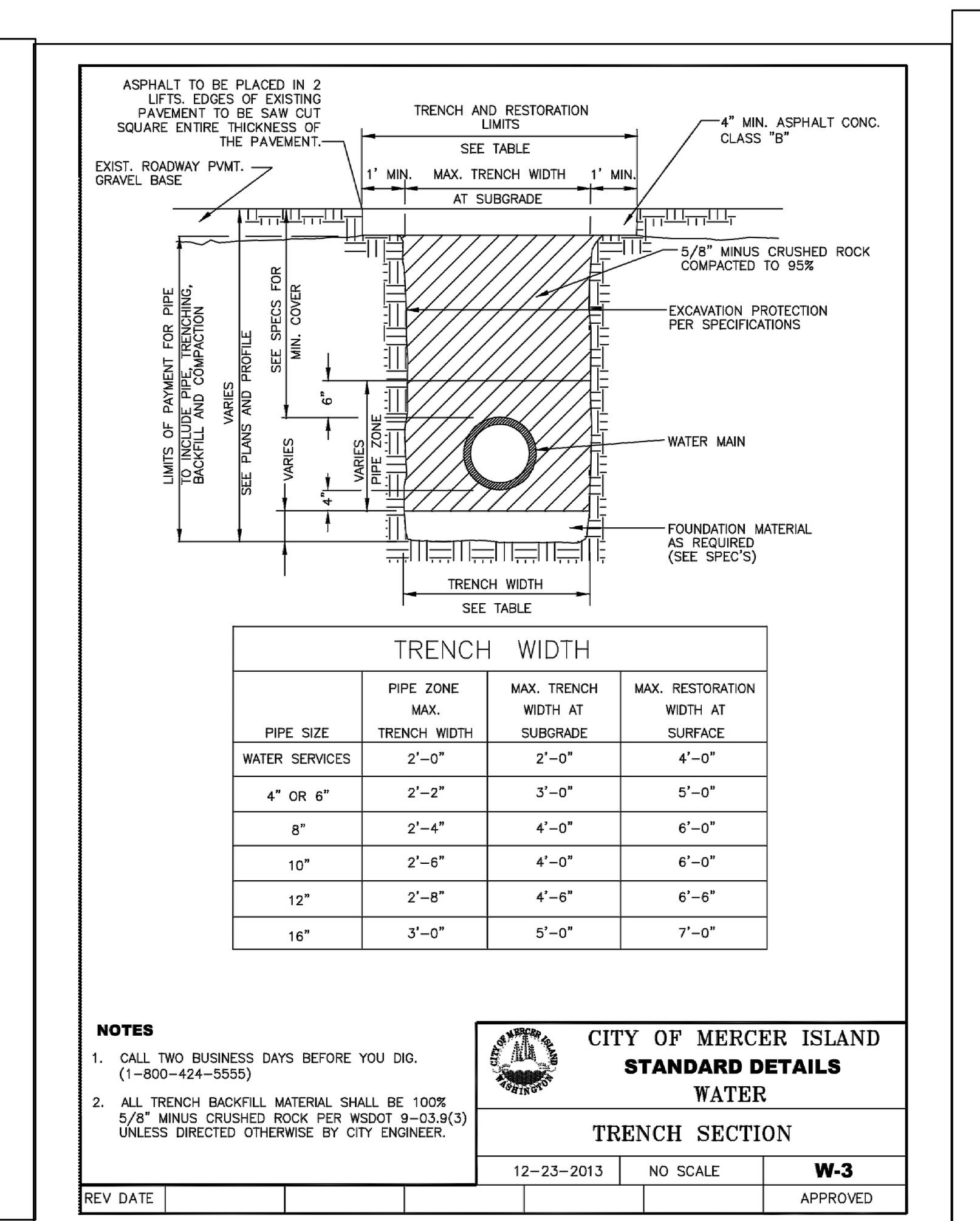


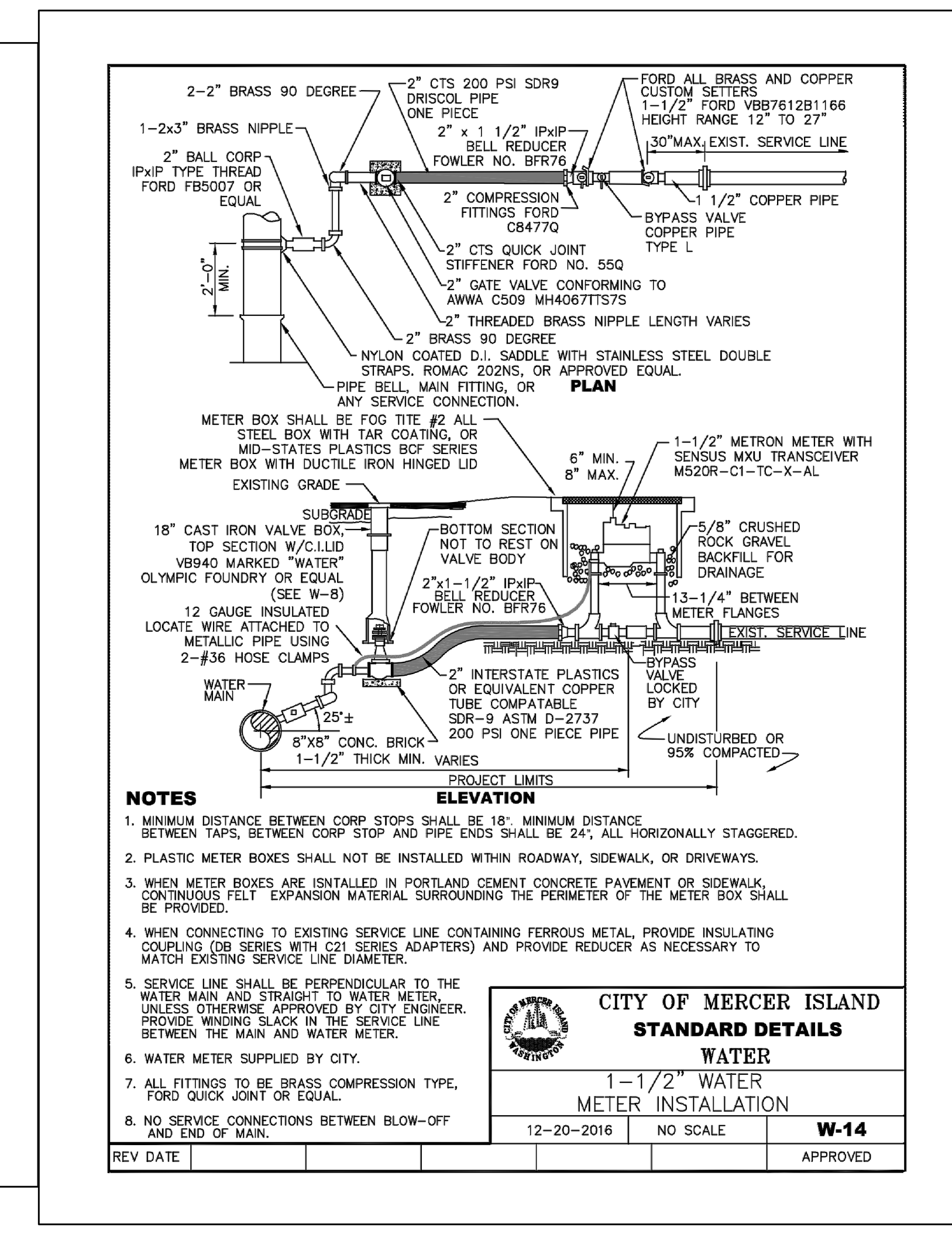


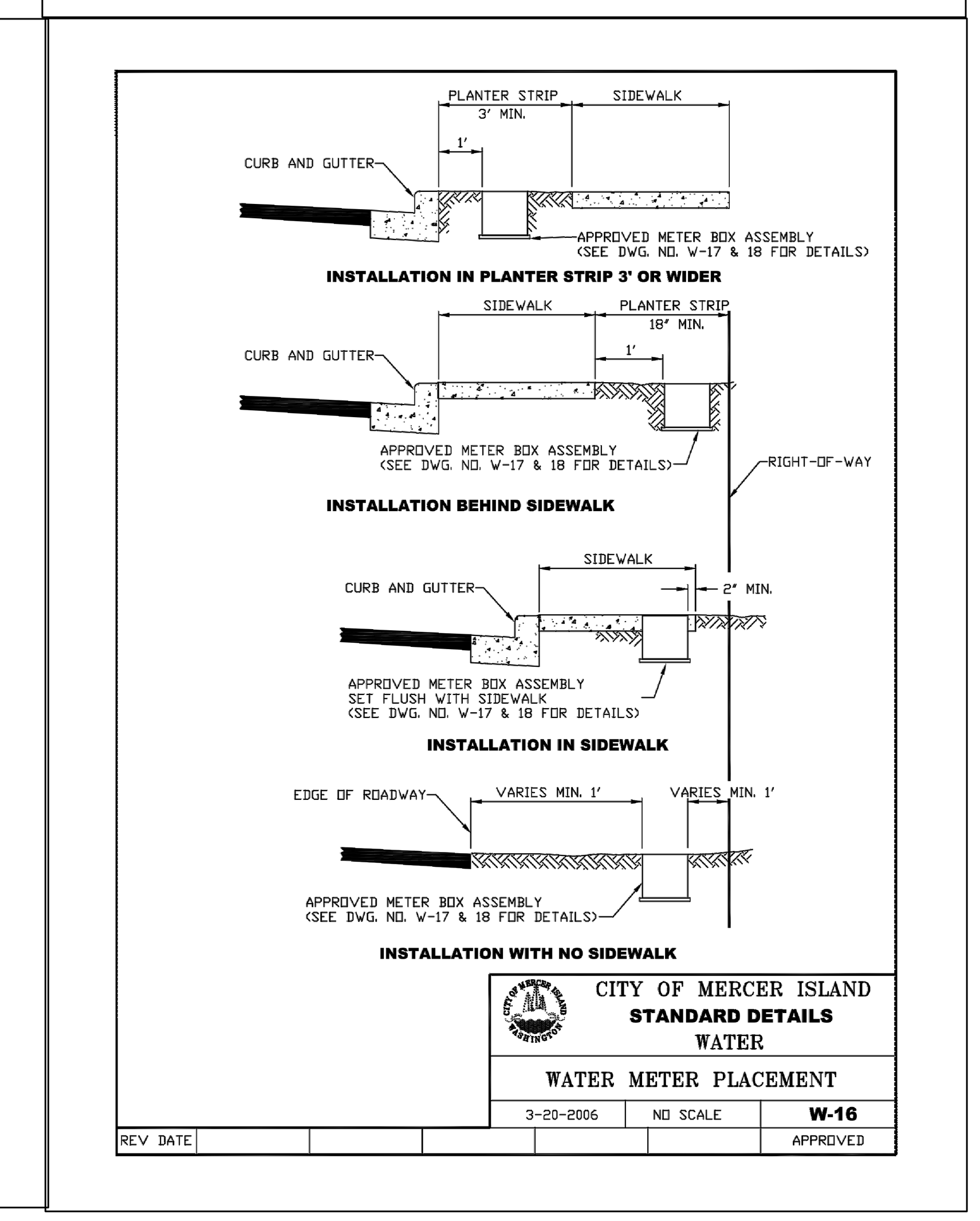












CONSTRUCTION SEQUENCE

1. INSTALL NEW STORM DRAINAGE OUTFALL.
2. INSTALL FILTER FENCE AND TREE PROTECTION FENCING AS SHOWN ON PLAN.
3. REMOVE EXISTING STRUCTURES AND HARDSCAPE AND CLEAR TREES AND LANDSCAPING PER TEMPORARY EROSION AND SEDIMENT CONTROL PLAN, SHEET C2. EXISTING DRIVEWAY TO REMAIN TO PROVIDE ACCESS TO NEIGHBORING PROPERTY UNTIL NEW DRIVEWAY IS CONSTRUCTED.
4. GRADE SITE, BUILD RETAINING WALLS, EXTEND STORM DRAINAGE AND INSTALL UTILITIES.
5. INSTALL TEMPORARY EROSION CONTROL FILTER IN ALL CATCH BASINS AND AREA DRAINS WITH GRATES.
6. MAINTAIN ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL LANDSCAPING IS COMPLETE AND SITE IS STABILIZED.

triad
20300 Woodinville Snohomish Rd NE
Suite A • Woodinville, WA 98072
p: 425.415.2000 f: 425.486.5059
w: triadassociates.net

NOTES AND DETAILS

THE LADYBUG TRUST
OGDEN POINT RESIDENCE
BUILDING PERMIT

CITY OF MERCER ISLAND, WASHINGTON

REVIEWED BY: DATE:

NO.	DATE	REVISION	BY	CK

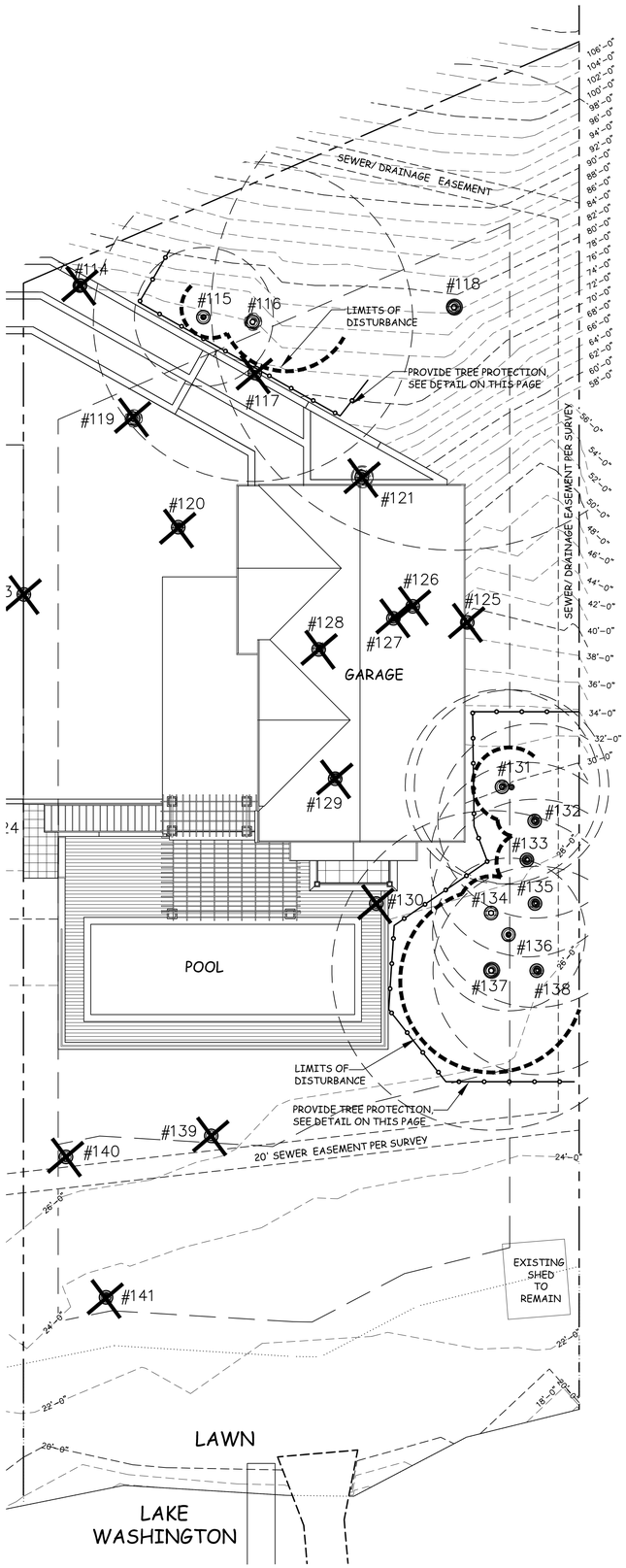
RICHARD A. TOMKINS, PE
PROJECT MANAGER
MARY MCDOWELL, PLS
PROJECT SURVEYOR
ADAM STRICKER, PE
PROJECT ENGINEER
PROJECT LANDSCAPE ARCHITECT

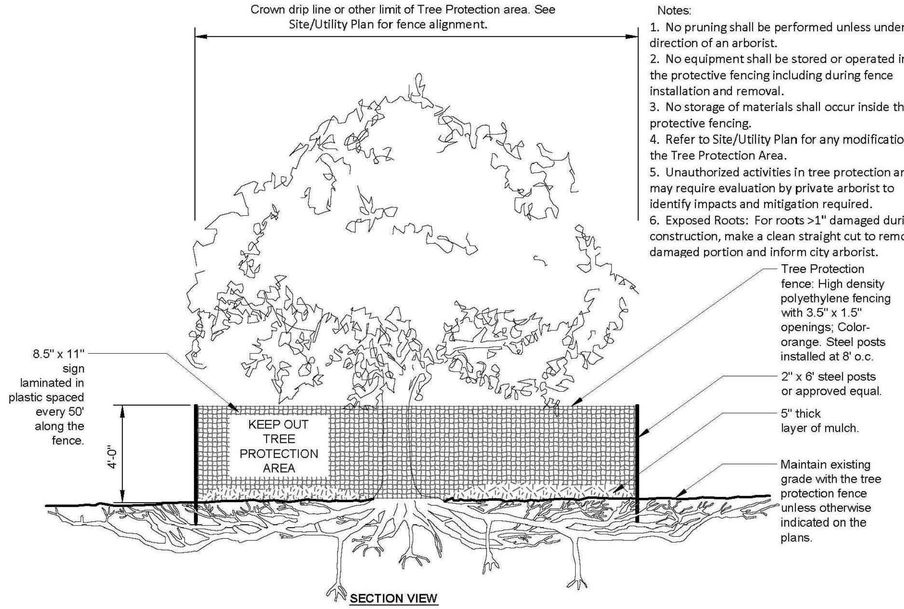
FIRST SUBMITTAL DATE:
SCALE: HORIZ.: N/A VERT.: N/A

STAMP NOT VALID UNLESS SIGNED AND DATED

JOB NO. LDYB0002
SHEET NO. C4 OF 4

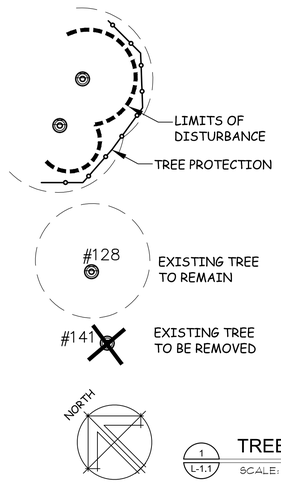
ays, Jan 31, 2018 – 11:21am
P:\L\LDYB00000002\0400CAD\EC\SHEETS\Road and Utilities\EC-DT-LDYB0002.dwg, C04, EC-BDR-LDYB0002, S-18 – HOUSE SS CONNECTION.tif S-19 – SSCO.tif S-22 – RES SS CONNECTION.tif S-35 – INSTALL POOL.tif S-4 – PIPE BEDDING.tif W-11–TAPPINGTEE.tif W-32–WATERMAINFLUSHING.tif





Notes:
1. No pruning shall be performed unless under the direction of an arborist.
2. No equipment shall be stored or operated inside the protective fencing including during fence installation and removal.
3. No storage of materials shall occur inside the protective fencing.
4. Refer to Site/Utility Plan for any modifications to the Tree Protection Area.
5. Unauthorized activities in tree protection area may require evaluation by private arborist to identify impacts and mitigation required.
6. Exposed Roots: For roots >1" damaged during construction, make a clean straight cut to removed damaged portion and inform city arborist.

TREE PROTECTION DETAIL



TREE REMOVAL FORM LOT 3

3675 west Mercer Way Lot Three

February 26, 2018

TREE NUMBER	TREE TYPE	CALIPER INCHES MULTI-TRUNK SHOWN WITH COMMA	NOTE/ REPLACEMENT TREE QUANTITY PER 19.10 11/17
114	CEDAR	26	6:1
117	MAPLE	16/14	6:1
119	DOUGLAS FIR	32	6:1
120	MADRONE	13,15	3:1
121	MADRONE	28,32	6:1
125	Horse chestnut	21	6:1
126	HORSE CHESTNUT	12	6:1
127	HORSE CHESTNUT	16,10,5	6:1
128	HORSE CHESTNUT	8,4	0
129	POPLAR	33.20	6:1
130	YELLOW WOOD	7,5,5,4	2:1
139	APPLE	3,4,4	0
140	MULBERRY?	3,3,4,4,5.5.5	2:1
141	APPLE	8,6,4	2:1
		TOTAL TREES	57

TOTAL NUMBER OF TREES TO BE REPLACED: 12 WITH A MINIMUM OF 57 NEW TREES.
TREES PROVIDED; 31

1 L-1.1 TREE REMOVAL PLAN
SCALE: 1" = 10'-0"

KEN LARGE
Landscape Architect
21803 NE 17th Court
Sammamish, Wa. 98074
Office: 425-836-4578 Cell: 206-396-7617
E-mail: klla@comcast.net
FAX: 425-898-8923

SEAL:
STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT
KENNETH E. LARGE
ASLA #000248 REGISTERED
CERTIFICATE #2447

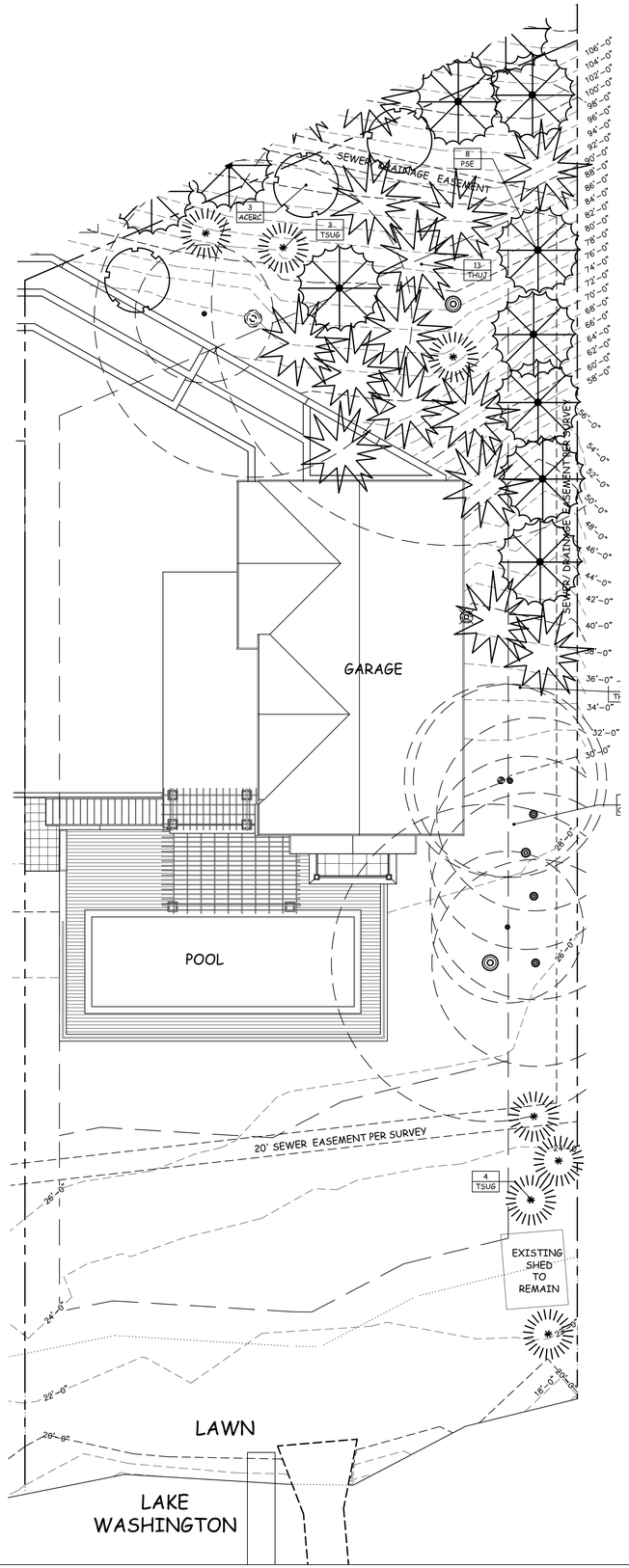
OGDEN POINT
3675 W. MERCER WAY
MERCER ISLAND, WASHINGTON

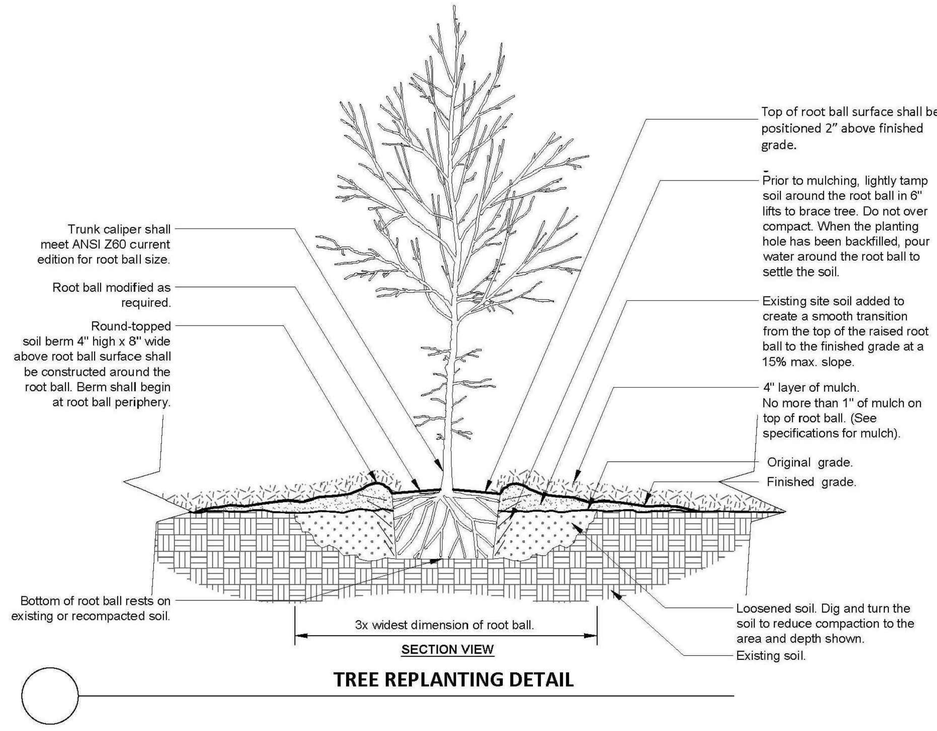
JOB NUMBER:
DRAWN: KEL
CHECKED:
DATE: JULY 26, 2017
REVISIONS:

1	08/14/17 PLAN REVIEW
2	10/25/17 PLAN UPDATE
3	11/20/17 PLAN UPDATE
4	12/11/17 PLAN UPDATE
5	02/28/18 DOCK PERMIT

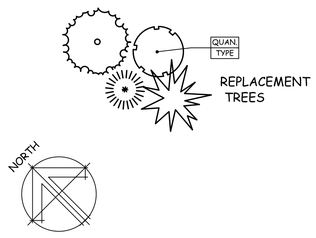
SHEET TITLE:
TREE REMOVAL PLAN LOT 03
PERMIT SET

SHEET NUMBER:
L-1.1





TREE REPLANTING DETAIL



1 L-2.0 TREE REPLACEMENT PLAN-LOT 3

SCALE: 1" = 10'-0"

REPLACEMENT TREE PLANTINGS LOT 3

MINIMUM NUMBER OF REPLACEMENT TREES REQUIRED: 57, PROVIDED: 31

QUANTITY	SYMBOL	PLANT NAME	SIZE/SPACING
3	ACERC	ACER CIRCINATUM/ VINE MAPLE	6' MULTI-TRUNKED @ Nursery Trees.com Snohomish
8	PSE	PSEUDTOSUGA MENZEISII/ DOUGLAS FIR	5-6' B/B
13	THUJ	THUJA PLICATA/ WESTERN RED CEDAR	1-2' B/B
7	TSUGA	TSUGA HETEROPHYLLA/ LOWLAND HEMLOCK	4-5' B/B

KEN LARGE
Landscape Architect
21803 NE 17th Court
Sammamish, Wa. 98074
Office: 425-836-4578 Cell: 206-396-7617
E-mail: klla@comcast.net
FAX: 425-898-8923

SEAL:

STATE OF WASHINGTON
REGISTERED LANDSCAPE ARCHITECT
KENNETH E. LARGE
KEN LARGE
CERTIFICATE #247

OGDEN POINT
3675 W. MERCER WAY
MERCER ISLAND, WASHINGTON

JOB NUMBER:
DRAWN: KEL
CHECKED:
DATE: JULY 26, 2017

REVISIONS:

1	08/14/17 PLAN REVIEW
2	10/25/17 PLAN UPDATE
3	11/20/17 PLAN UPDATE
4	12/11/17 PLAN UPDATE
5	02/28/18 DOCK PERMIT

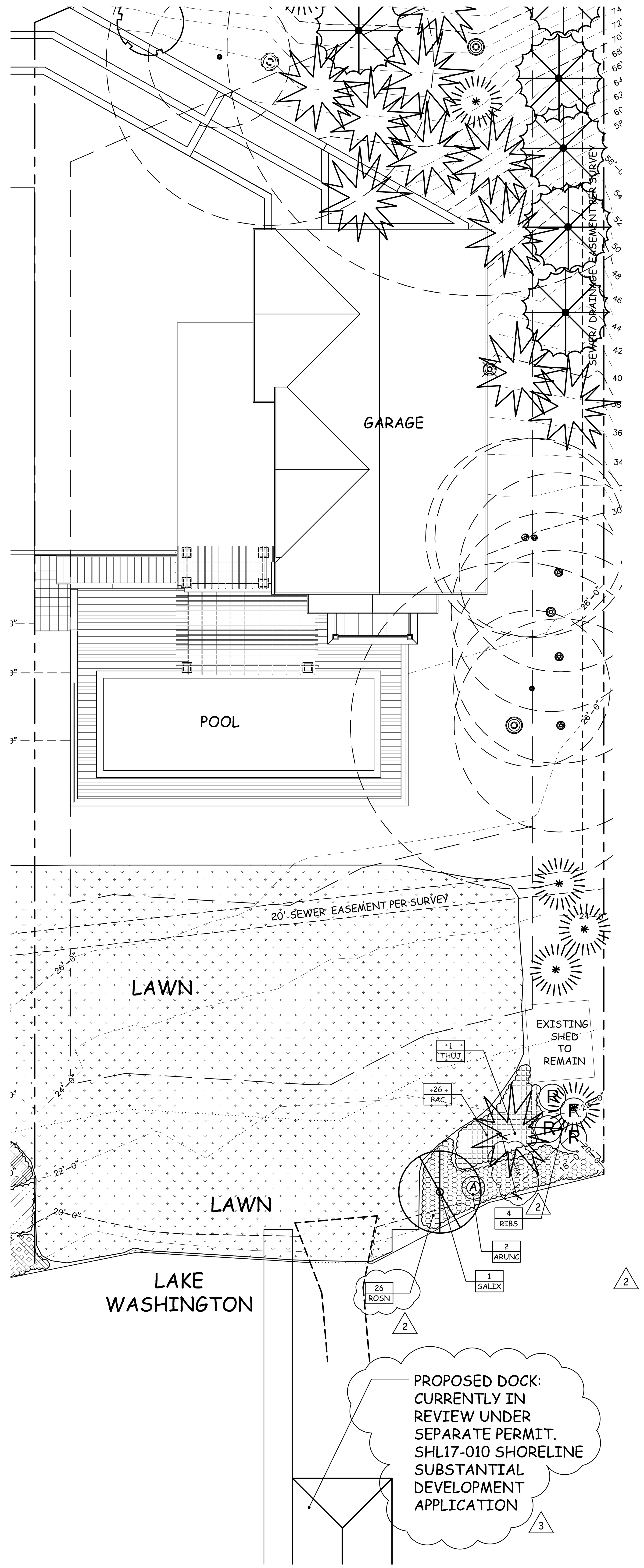
SHEET TITLE:

TREE REPLACEMENT PLAN LOT 3

PERMIT SET

SHEET NUMBER:

L-2.1



SHORELINE PLANT LIST

April 11, 2017 October 21, 2017 *INDICATES NATIVE PLANT

QUAN	SYMBOL	PLANT NAME	SIZE SPACING COMMENT
2	ARNUC*	ARUNCUS DIOICUS/ GOATSBEARD	1 GALLON CAN 18" TRI SP
26	ROSN*	ROSA NUTKANA/ NOOTKA ROSE	1 GALLON CAN OR 12-15" IF WINTER
26	PAC*	PACHISTIMA MYRSINITES/ OREGON BOXWOOD	1 GALLON CAN 24" TRI SP
4	RIBS*	RIBES SANGUINNEUM RED FLOWERING CURRENT	2 GALLON CAN
1	SALIX*	SALIX PURPUREA PURPLE WILLOW	1 GALLON CAN
1	THUJ*	THUJA PLICATA/ WESTERN RED CEDAR	5-6' B/B

NORTH

1 L-3.1 SHORELINE PLANTING

SCALE: 1" = 10'-0"

KEN LARGE
Landscape Architect
21803 NE 17th Court
Sammamish, Wa. 98074
Office: 425-836-4578, Cell: 206-396-7617
E-mail: klla@comcast.net
FAX: 425-898-8923

SEAL:

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
Ken Large
KENNETH E. LARGE
KLLA LANDSCAPE ARCHITECTS, INC.
CERTIFICATE #301

OGDEN POINT
3675 W. MERCER WAY
MERCER ISLAND, WASHINGTON

JOB NUMBER:
DRAWN: KEL
CHECKED:
DATE: JULY 26, 2017
REVISIONS:

	1	08/14/17 PLAN REVIEW
2	2	10/25/17 PLAN UPDATE
	3	11/20/17 PLAN UPDATE
	4	12/11/17 PLAN UPDATE
3	5	02/28/18 DOCK PERMIT

SHEET TITLE:

SHORELINE PLANTING PLAN LOT 3

PERMIT SET

SHEET NUMBER:

L-3.1