

**Tree Summary Table**  
For: 3453 74th Ave SE-Neighboring Trees  
City of Mercer Island  
Date: 11/25/2020  
Inspector: Layton

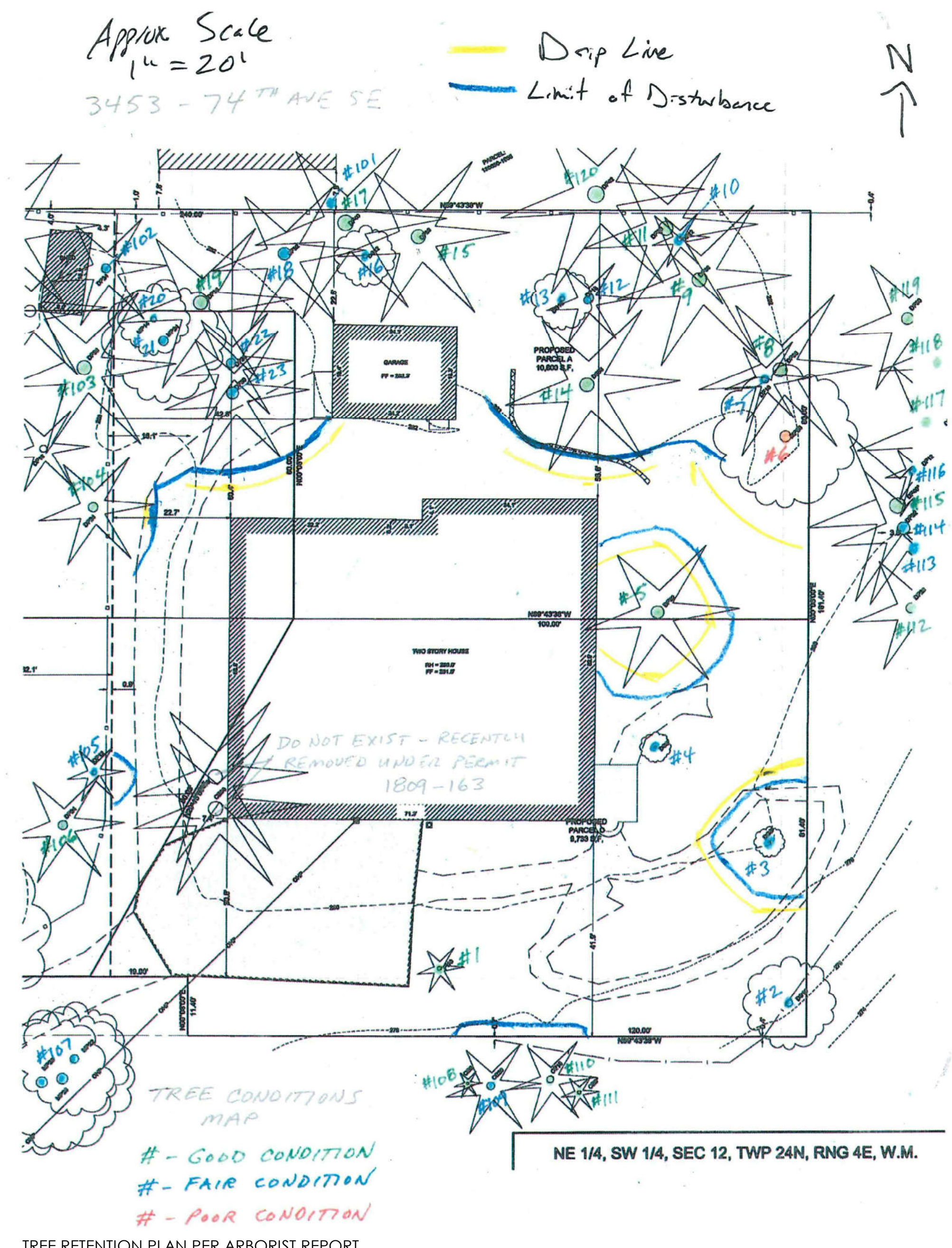
Tree/Tag #	Species	Exceptional	DBH (inches)	Height (feet)	Drip-Line / Limits of Disturbance (feet)			Condition	Proposal	Comments	
					N	S	E				
101	Douglas fr	yes	12	60			0/10	far	Protect	Suppressed, cannot isolate	
102	Douglas fr	yes	19	109			4/10	far	Protect	behind rock 2' from root crown	
103	Douglas fr	yes	30	125			4/5	good	Protect	no concerns	
104	Douglas fr	yes	23	98			4/6	good	Protect	no concerns	
105	Douglas fr	no	10	48			4/4	far	Protect	old broken top, regrown	
106	Douglas fr	no	20	96			2/2	good	Protect	approx 8' off pt	
107	leafy maple	yes	21,23,23 (DB)	95	16	na	22	30	far	Protect	approx 8' off driveway
108	lawson cypress	no	4	30			0/0	good	Protect	lean	
109	lawson cypress	no	16	50			0/2	far	Protect	lean	
110	lawson cypress	no	16	52			2/4	good	Protect	good	
111	lawson cypress	no	10	42			2/2	good	Protect	good	
112	Douglas fr	yes	22	86			19	17/16	good	natural lean southwest	
113	Douglas fr	yes	24	95				12/14	far	Protect	old broken top
114	Douglas fr	yes	21	62				19/14	far	Protect	lean southwest, root decay column
115	Douglas fr	yes	38	145				15/16	good	Protect	good
116	Douglas fr	yes	11	67				10/8	far	Protect	suppressed
117	Douglas fr	yes	38	130				19/14	good	Protect	good taper
118	Douglas fr	yes	35	132				19/18	good	Protect	good
119	Douglas fr	yes	24	113				14/14	good	Protect	good
120	Douglas fr	yes	36	130				14/16	good	Protect	good

Trees on neighboring properties - Drip-Line and Limits of Disturbance measurements from property line, except for #112-#119, face of trunk  
Calculated DBH: the DBH is parenthesis in the square root of the sum of the dbh for each individual stem squared  
(example with 3 stems: dbh = square root [(stem1)² + (stem2)² + (stem3)²])

**Tree Summary Table**  
For: 3453 74th Ave SE-Property Trees  
City of Mercer Island  
Date: 11/25/2020  
Inspector: Layton

Tree/Tag #	Species	Exceptional	DBH (inches)	Height (feet)	Drip-Line / Limits of Disturbance (feet)			Condition	Proposal	Comments			
					N	S	E						
1	Japanese white pine	no	8	28			10	11	12	good	Retain	No concerns	
2	red alder	no	15	63			13	14	16	7	far	Retain	Learn via declining top
3	Pacific dogwood	yes	9	37			8	12	10/10	far	Remove	antennae infection. Exceptional tree/height 8'	
4	Pacific dogwood	yes	5.6 (DB)	31			7	8	5	12	far	Remove	antennae infection. Exceptional tree/height 24'
5	white fir	yes	27	93			10/14	10/14	10/14	10/14	good	Retain	Exceptional due to size. 70% for. Grove tree.
6	leafy maple	no	24	83			9	24	4	16	year	Retain	Exceptional due to size. 60% for. Grove tree.
7	Douglas fr	yes	15	78			6	10	4	12	far	Retain	Natural lean west. Exceptional minor decay column.
8	Douglas fr	yes	32	116			14	14	16	12	good	Retain	Exceptional due to size. 60% for. Grove tree.
9	Douglas fr	yes	33	140			15	14	19	10	good	Retain	Exceptional due to size. 60% for. Grove tree.
10	Douglas fr	yes	12	33			7	8	10	6	far	Retain	Grove tree.
11	Douglas fr	yes	36	144			11	13	18	18	good	Retain	Exceptional due to size. 70% for. Grove tree.
12	Douglas fr	yes	20	85			9	11	11	11	far	Retain	Old broken top. Grove tree.
13	Pacific dogwood	yes	11	55			10	19	14	12	far	Retain	Exceptional due to size. 70% for. Grove tree.
14	Douglas fr	yes	37	127			12	12	16	14/13	good	Retain	Natural lean west. Grove tree.
15	Douglas fr	yes	28	120			12	8	12	8	good	Retain	Exceptional due to size. 60% for. Grove tree.
16	Pacific dogwood	yes	11	48			12	16	14	16	far	Retain	Exceptional due to size. 60% for. Grove tree.
17	Douglas fr	yes	32	128			12	16	12	12	good	Retain	Exceptional due to size. 70% for. Grove tree.
18	Douglas fr	yes	27	112			10	11	12	10	far	Retain	80% for. old broken top. 60% for. Grove tree.
19	Douglas fr	yes	33	118			14	12	12	10	good	Retain	Exceptional due to size. 60% for. Grove tree.
20	leafy maple	yes	12	40			20	12	16	16	far-poor	Retain	Old broken top. Grove tree.
21	leafy maple	yes	19	68			14	18	13	15	far	Retain	Old broken top. Grove tree.
22	Douglas fr	yes	22	87			12	8	10	10	far	Retain	Old broken top. Grove tree.
23	Douglas fr	yes	24	90			8	13/12	14	10	far	Retain	Old broken top. Grove tree.

Parcel Trees - Drip-Line and Limits of Disturbance measurements from face of trunk  
Trees on neighboring properties - Drip-Line and Limits of Disturbance measurements from property line  
Calculated DBH: the DBH is parenthesis in the square root of the sum of the dbh for each individual stem squared  
(example with 3 stems: dbh = square root [(stem1)² + (stem2)² + (stem3)²])



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- GENERAL NOTES:**
- ALL CODE COMPLIANCE TO BE VERIFIED PRIOR TO CONSTRUCTION BY ARCHITECT AND ADA EXPERT.
  - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS, AND LEVELS PRIOR TO THE START OF WORK.
  - ALL REVISIONS SHOWN TO BE VERIFIED BY ARCHITECT TO COMPLY WITH ALL BUILDING CODES AND STANDARDS.
  - MILLWORKER TO CONFIRM ALL CLEARANCES.
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  - ALL GLAZING TEMPERED SAFETY GLASS UNLESS OTHERWISE NOTED.
  - ELECTRICAL & LIGHTING DRAWINGS FOR DESIGN PURPOSES ONLY. SUBCONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCIES OR NON-COMPLIANCE OF BUILDING CODES.

DATE: 11/25/2020  
SCALE: 1" = 10'-0"  
DRAWN BY: Author  
CHECKED BY: Checker

**'FOO' RESIDENCE**

3453 74th Ave SE  
Mercer Island, WA  
98040

REV	DATE	ISSUE/REVISION
1		

PROJECT: **'FOO' RESIDENCE**

SHEET TITLE: **TREE PLAN**

REVISION NO.: **1**

SHEET NO.: **G001**

1 TREE RETENTION PLAN AND DEMO PLAN  
1" = 10'-0"

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DATE 11/25/2020

SCALE 1" = 10'-0"

DRAWN BY AHP

CHECKED BY GCW

PROJECT

**'FOO' RESIDENCE**

3453 74th Ave SE  
Mercer Island, WA  
98040

REV DATE ISSUE/REVISION

1

DPD DEDICATED APPROVAL STAMP SPACE

SHEET TITLE

**SITE PLAN AND DEVELOPMENT INFORMATION**

REVISION NO.

1

SUPERSEDES ALL PREVIOUS REVISIONS

SHEET NO.

**G002**

**LOT SLOPE CALCULATIONS**

HIGHEST ELEVATION POINT OF LOT: 283.00 FT  
LOWEST ELEVATION POINT OF LOT: 275.00 FT  
ELEVATION DIFFERENCE: 8.00 FT  
HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS: 173.19 FT  
LOT SLOPE: 4.62%

**LOT COVERAGE CALCULATIONS**

A. ALLOWED LOT COVERAGE 40% OF LOT  
B. ALLOWED LOT COVERAGE AREA 8,647.2 SF  
C. NET LOT AREA 21,618 SF  
D. NET LOT AREA 21,618 SF  
E. MAIN STRUCTURE ROOF AREA 3,657.79 SF  
F. ACCESSORY BUILDING ROOF AREA 294.56 SF  
G. VEHICULAR USE(DRIVEWAY, ACCESS EASEMENTS, PARKING) 1,782.24 SF  
H. TOTAL EXISTING LOT COVERAGE AREA 7,395 SF  
I. (TOTAL LOT COVERAGE AREA REMOVED) 7,395 SF  
J. TOTAL NEW LOT COVERAGE AREA 5,734.59 SF  
K. TOTAL PROJECT LOT COVERAGE AREA = (H-I) + J 5,734.59 SF  
L. PROPOSED LOT COVERAGE = (K/D)X100 26.53% OF LOT

**HARDSCAPE**

TOTAL AREA HARDSCAPE ON PROPERTY 4,777.97 SF  
TOTAL AREA DECKS ON PROPERTY 0 SF  
9% OF NET LOT AREA 1,945.62 SF  
UNUSED LOT COVERAGE 2,912.61 SF  
TOTAL ALLOWABLE HARDSCAPE AREA 4,858.23 SF

**BUILDING AREA**

	EXISTING AREA	REMOVED AREA	NEW AREA	TOTAL
MAIN FLOOR	0 SF	0 SF	1,657 SF	1,657 SF
GROSS BASEMENT AREA	4,330 SF	4,330 SF	2,488 SF	2,488 SF
GARAGE / CARPORT	0 SF	0 SF	866 SF	866 SF
<b>TOTAL AREA FLOOR</b>	<b>4,366 SF</b>	<b>4,366 SF</b>	<b>5,571 SF</b>	<b>5,571 SF</b>

**ACCESSORY BUILDINGS**

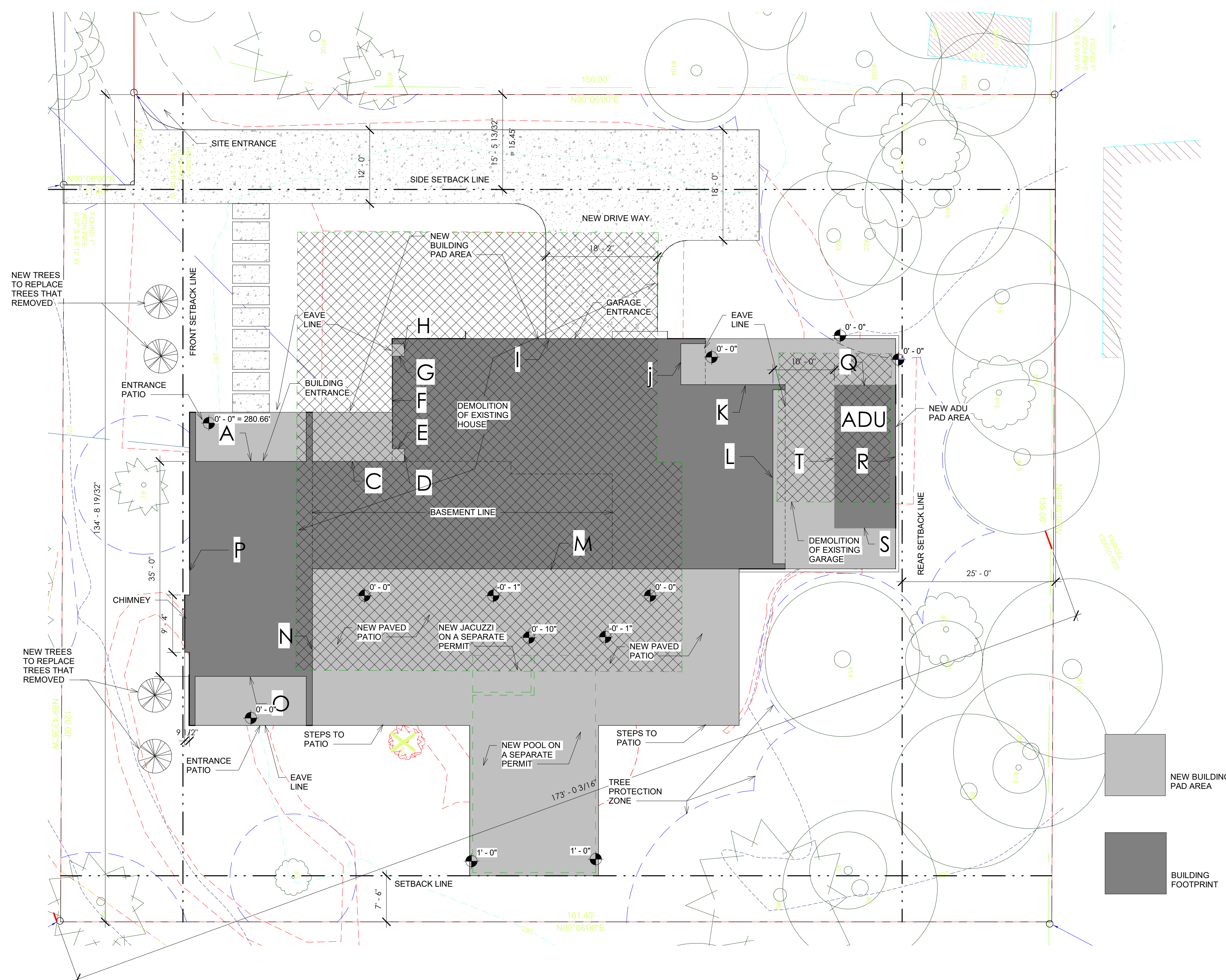
BASEMENT AREA EXCLUDED	0 SF	0 SF	866 SF	866 SF
150% GFA MODIFIER	0 SF	0 SF	61 SF	61 SF
200% GFA MODIFIER	0 SF	0 SF	0 SF	0 SF
STAIRCASE GFA MODIFIER	0 SF	0 SF	0 SF	0 SF
<b>TOTAL BUILDING AREA</b>	<b>4,766 SF</b>	<b>4,766 SF</b>	<b>5,000 SF</b>	<b>5,000 SF</b>

**GROSS FLOOR AREA (GFA)**

A. LOT AREA 21,618 SF  
B. ALLOWED GROSS FLOOR AREA 5,000 SF  
C. PROPOSED GROSS FLOOR AREA 5,000 SF

AVERAGE BUILDING ELEVATION				
WALL ID	MIDPOINT ELEVATION (FT)	LENGTH ID	WALL SEGMENT LENGTH (FT)	ELEV x LENGTH
A	280.10	a	20.00	5602.00
C	280.30	c	13.00	3643.90
D	280.30	d	2.00	560.60
E	280.30	e	2.00	560.60
F	280.30	f	16.00	4538.8
G	280.50	g	2.00	561.00
H	280.50	h	2.00	561.00
I	281.00	i	51.00	14331.00
J	281.70	j	7.50	2112.75
K	281.80	k	13.00	3663.40
L	282.00	l	30.00	8460.00
M	281.70	m	77.00	21675.50
N	280.50	n	25.50	7152.75
O	280.00	o	20.00	5600.00
P	279.70	p	35.00	9789.50
TOTAL			316	88774.2
ABE			(ELEVxLENGTH)/LENGTH	280.93
HIGHEST BUILDING ELEVATION			(ABE + 30.00')	310.93

AVERAGE BUILDING ELEVATION				
WALL ID	MIDPOINT ELEVATION (FT)	LENGTH ID	WALL SEGMENT LENGTH (FT)	ELEV x LENGTH
Q	282.00	q	10.00	2820.00
R	282.20	r	23.40	6603.48
S	282.20	s	10.00	2822.00
T	282.00	t	23.40	6598.8
TOTAL			382.80	18844.28
ABE			(ELEVxLENGTH)/LENGTH	282.10
HIGHEST BUILDING ELEVATION			(ABE + 17.00')	299.10



1 GFA CALCS  
1" = 10'-0"

# BUILDING PERMIT PLANS FOR

# 3453 74TH AVE W

## FOR JIMMY & SHANNON FOO

### VERTICAL DATUM, BENCHMARK & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

POINT ID NO. 238

ELEVATION: 324.56 FEET (98.926 METERS) NAVD88

2" BRASS CAP IN MONUMENT CASE AT THE INTERSECTION OF SE 32ND ST & 74TH AVE SE

2.0" CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0" FOR THIS PROJECT.

### BASIS OF BEARING

HELD RECORD OF SURVEY BY MS WEBB SURVEYING AS RECORDED IN VOLUME 135 OF SURVEYS, PAGE 243, RECORDS OF KING COUNTY, WASHINGTON AND RECORDED UNDER RECORDING NUMBER 200000215900011. ACCEPTED A BEARING OF N 90°00'00" W FOR THE CENTERLINE OF SE 32ND STREET BASED ON FOUND MONUMENTS IN CASE.

### SURVEY NOTES

THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.

INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NIVO 5.C TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.

THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN JUNE 2018 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.

ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

### LEGAL DESCRIPTION

PARCEL: 130030-1965  
 LOTS 16 THROUGH 20 AND THE EAST 15 FEET OF LOTS 21 THROUGH 25, BLOCK 7, C.C. CALKINS FIRST ADDITION TO EAST SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 4 OF PLATS, PAGE 88, RECORDS OF KING COUNTY, WASHINGTON, TOGETHER WITH THE WEST HALF OF VACATED 74TH PLACE SE LYING NORTH OF THE SOUTH MARGIN OF SAID PLAT AND SOUTH OF THE EASTERLY EXTENSION OF THE NORTH LINE OF SAID LOT 16, AND TOGETHER WITH THAT PORTION OF VACATED SE 36TH STREET, LYING WITHIN SAID PLAT AND WEST OF THE CENTERLINE OF 74TH PLACE SE AND EAST OF THE SOUTHERLY EXTENSION OF THE WEST LINE OF SAID LOT 20.

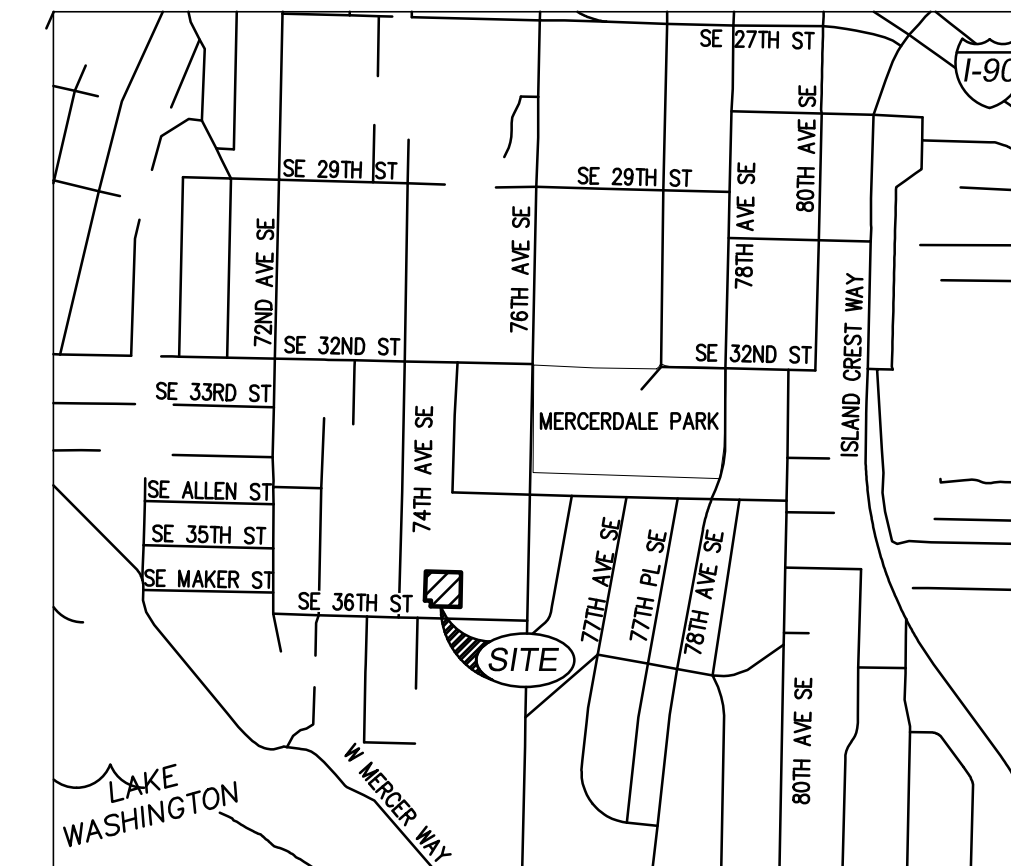
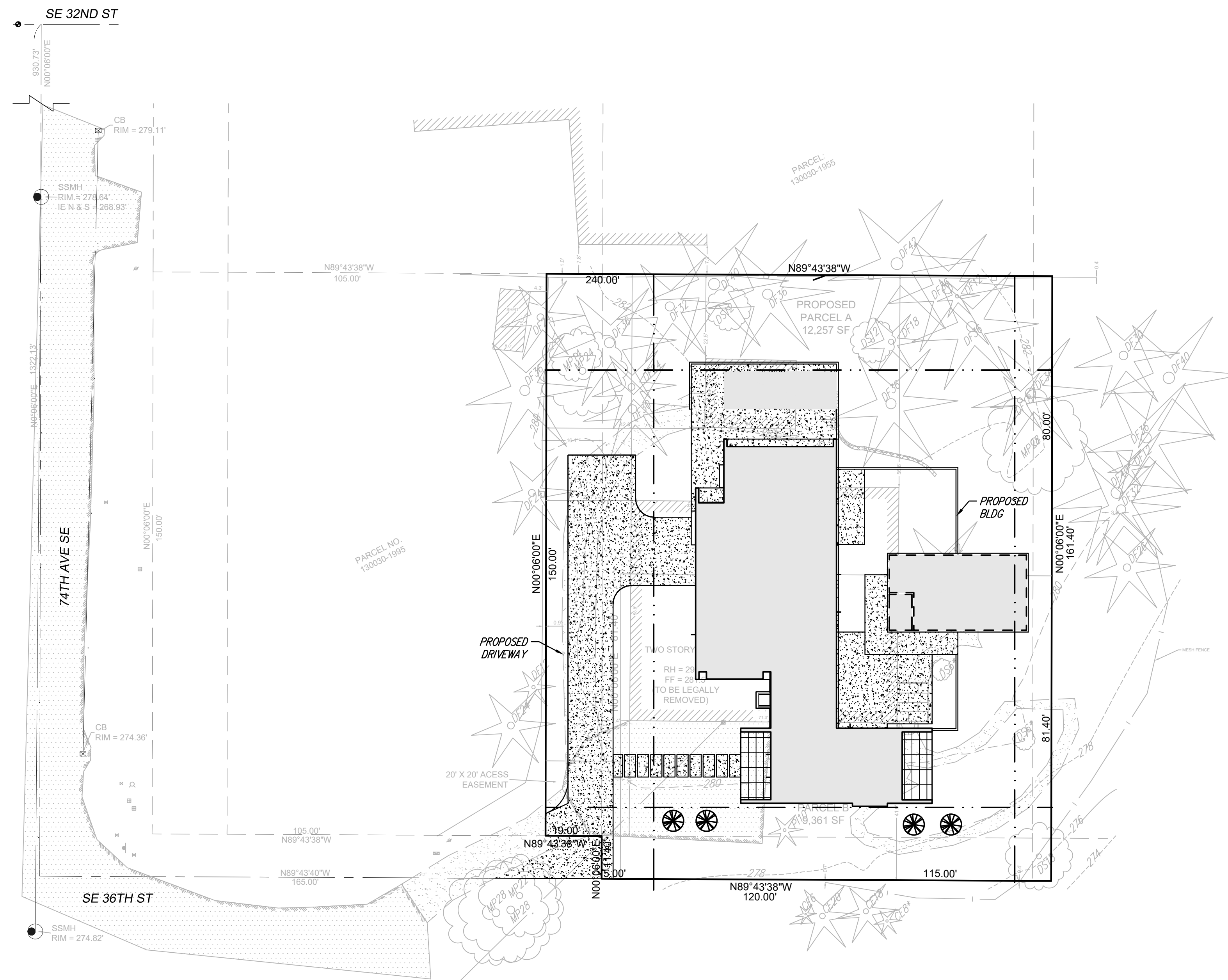
SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

### SITE STATISTICS

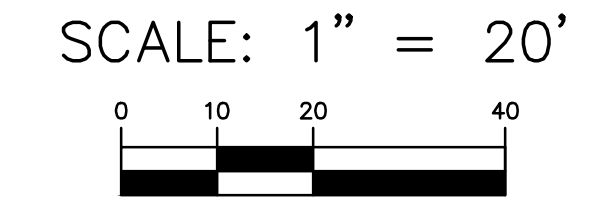
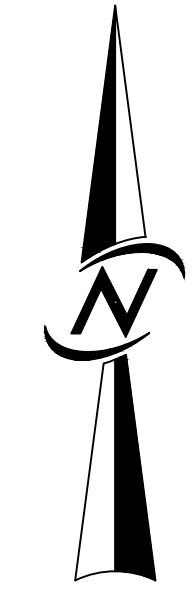
ZONING: R-8.4 (RESIDENTIAL-SINGLE FAMILY)  
 SITE AREA: 21,618 SF (±0.496 ACRES)  
 TAX PARCEL: 130030-1965

### LEGEND

EXISTING	
	FOUND MONUMENT AS DESCRIBED
	FOUND REBAR AS DESCRIBED
	TACK IN LEAD FOUND
	SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP
	POWER METER
	UTILITY POLE
	GAS METER
	SANITARY SEWER MANHOLE
	WATER VALVE
	FIRE HYDRANT
	WATER METER
	SIGN
	APPROXIMATE LOCATION SANITARY SEWER LINE
	APPROXIMATE LOCATION STORM DRAIN LINE
	OVERHEAD POWER
	OVERHEAD UTILITIES
	CHAINLINK FENCE
	WOOD FENCE
	CONCRETE WALL
	ROCKERY
	ASPHALT SURFACE
	GRAVEL SURFACE
	SEQUOIA
	CEDAR
	DOUGLAS FIR
	HEMLOCK
	MAPLE
	PINE
	SPRUCE
	DECIDUOUS
	DENOTES MULTI-TRUNK



VICINITY MAP  
SCALE: 1:1000



### OWNER:

JIMMY & SHANNON FOO  
 2820 29TH AVE W  
 SEATTLE, WA 98199  
 CONTACT: SHANNON FOO  
 PHONE: (306) 613-5505

### ENGINEER:

CORE DESIGN INC  
 12100 NE 195TH ST, SUITE 300  
 BOTHELL, WASHINGTON 98011  
 (425) 885-7877  
 CONTACT: MICHAEL A. MOODY, P.E.

### SURVEY:

SITE SURVEYING INC  
 21923 NE 11TH ST  
 SAMMAMISH, WASHINGTON 98074  
 (425) 298-4412

### SHEET INDEX

C1.01	COVER SHEET
C1.02	TOPOGRAPHIC SURVEY
C1.03	SITE PLAN
C1.31	STORMWATER DRAINAGE DETAIL
C2.01	TESS PLAN

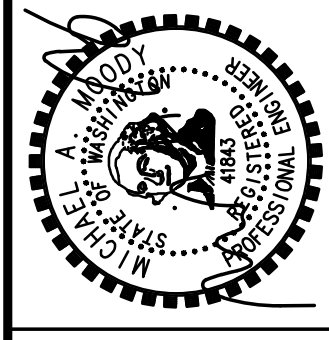
**UNDERGROUND LOCATOR SERVICE**  
 CALL BEFORE YOU DIG!  
 811

PERMIT #XXXX-XXX

DATE	DESIGNED	FLAVIO R. BAINOTTI	DATE	DESIGNED	FLAVIO R. BAINOTTI
REVISIONS	DRAWN	MARY MOORE	SHEET	OF	
NO.	APPROVED	MICHAEL A. MOODY, PE	C1.01	5	
		JOSHUA BEARD	PROJECT NUMBER		
		PROJECT MANAGER	20034		

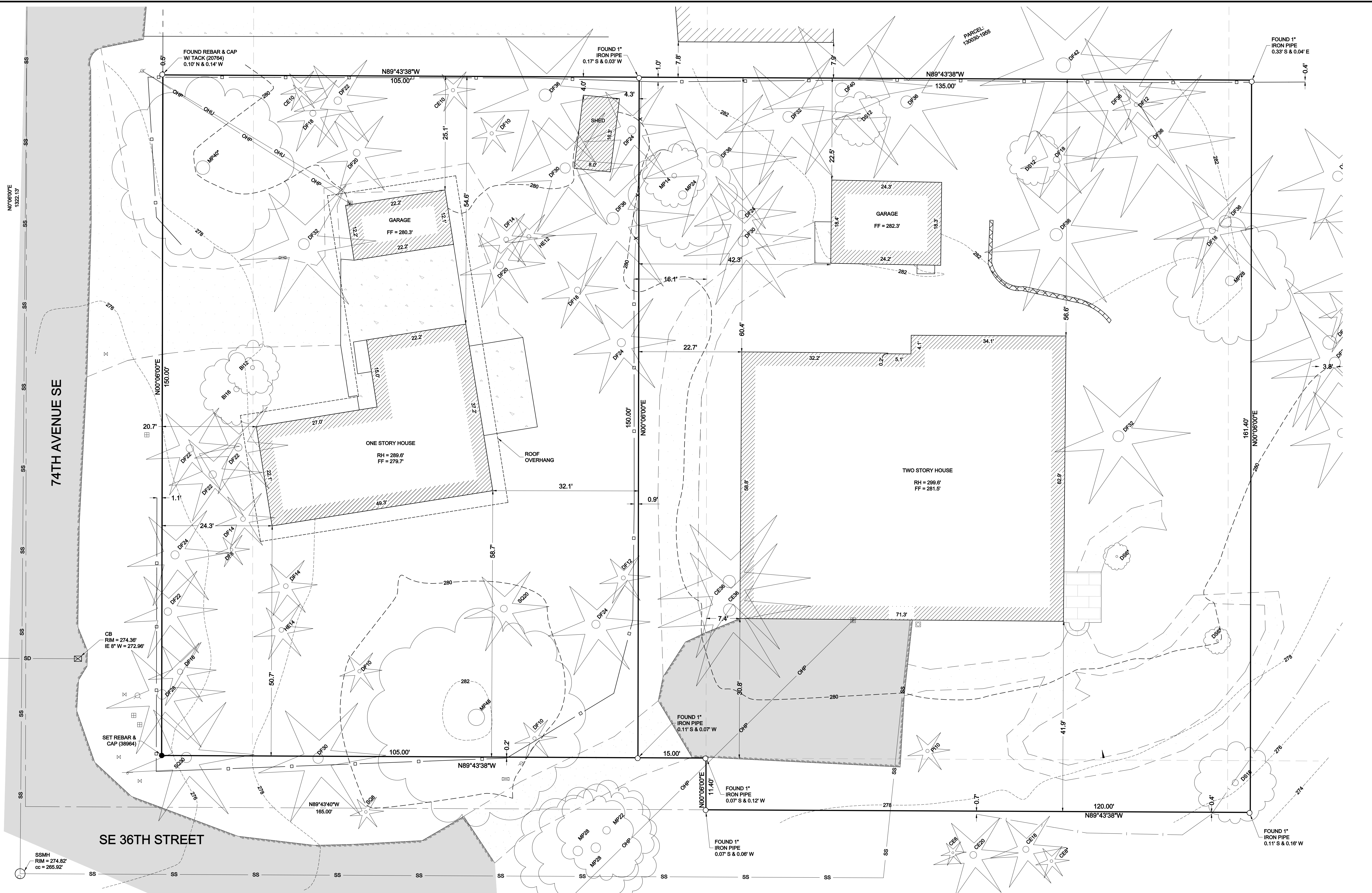
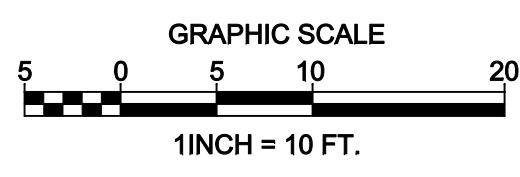
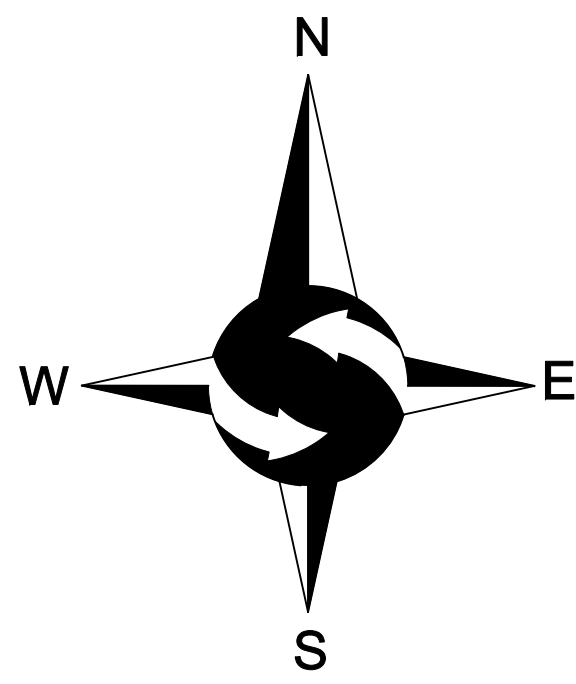
**SITE PLAN**  
**3453 74TH AVE SE**  
**JIMMY & SHANNON FOO**  
 2820 29TH AVE W  
 SEATTLE, WA 98199

**CORE DESIGN**  
 CIVIL ENGINEERING  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 SURVEYING  
 12100 NE 195TH ST, SUITE 300  
 BOTHELL, WASHINGTON 98011 425.885.7877



12-10-20

12/11/2020 8:02 AM A:\2020\20034\ENGINEERING\FINAL\SHR\15\20034\_C1.01.DWG



74TH AVENUE SE

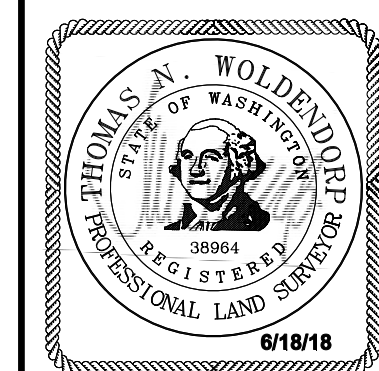
SE 36TH STREET

NE 1/4, SW 1/4, SEC 12, TWP 24N, RNG 4E, W.M.

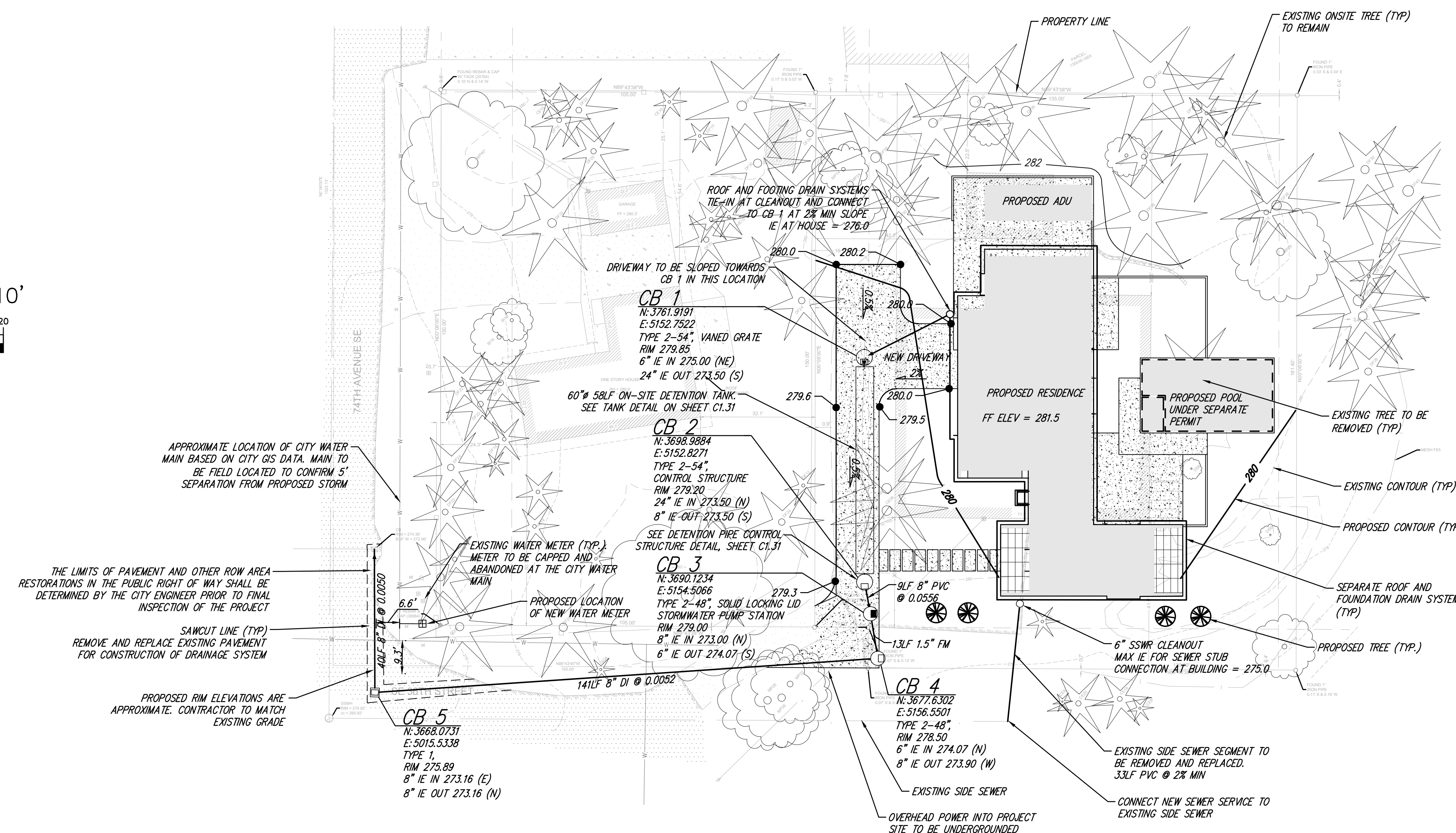
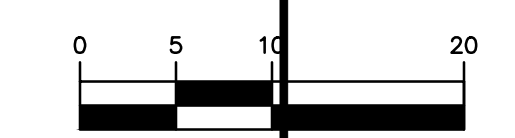
PROJECT NO. 18-243  
 DRAWN BY: EFJ  
 CHECKED BY: TNW  
 DATE: 6/14/18  
 SHEET 1 OF 2

**TOPOGRAPHIC SURVEY**  
**DAVID ARMITAGE**  
 3450 & 3453 74TH AVENUE SE  
 MERCER ISLAND, WA 98040

DATE	REVISION	DRN



SCALE: 1" = 10'



**LOT COVERAGE PROPOSED**

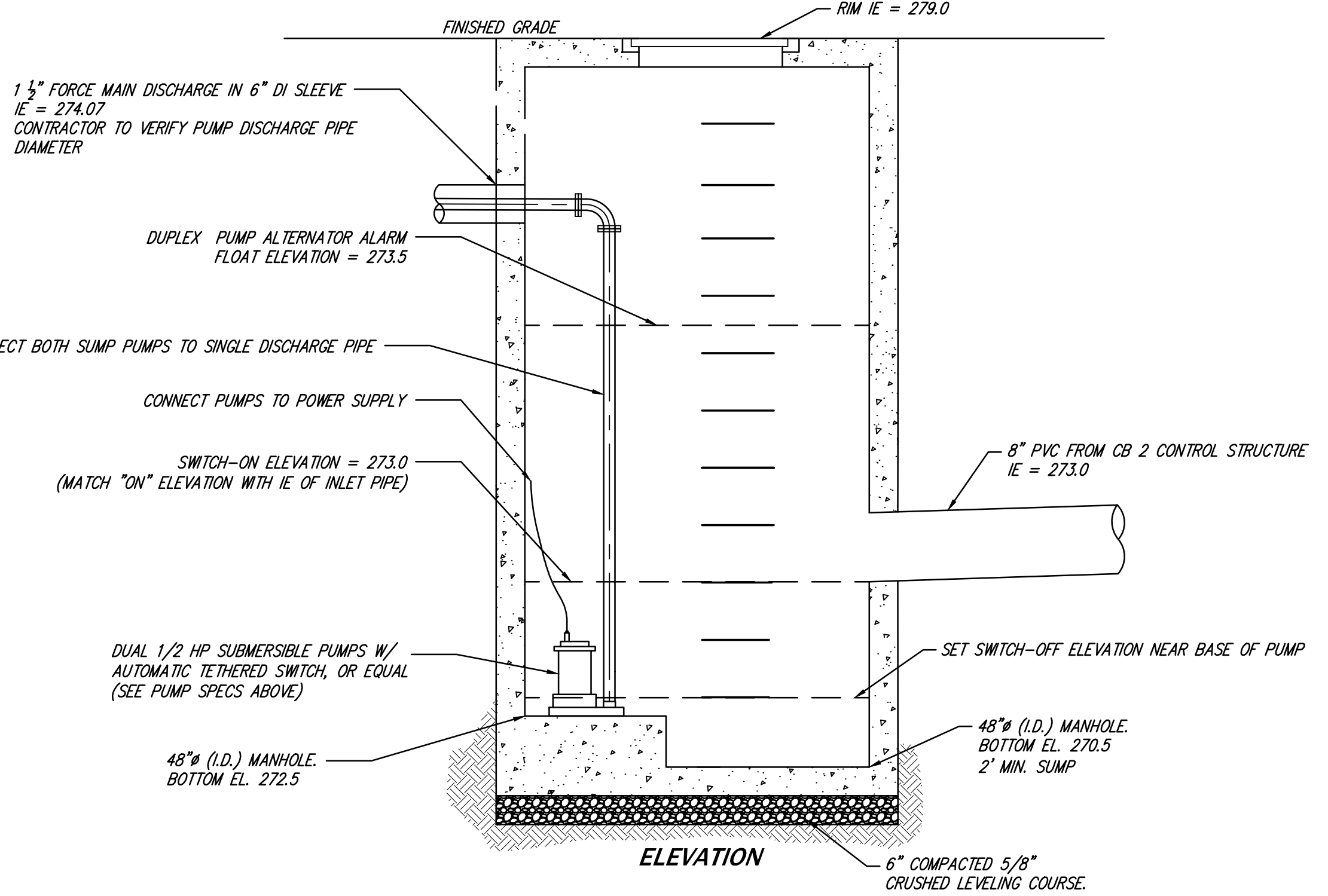
LOT	21,618 SQ.FT.
ROOF AREA=	4,053 SQ.FT.
DRIVE / WALK =	5,370 SQ.FT.
TOTAL IMPERVIOUS =	9,423 SQ.FT.
PROPOSED IMPERVIOUS =	43.6%

**BMP T5.13: POST-CONSTRUCTION SOIL QUALITY AND DEPTH DESIGN GUIDELINES**

- SOIL RETENTION. RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.
  - SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
    - A TOPSOIL LAYER WITH MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A pH FROM 6.0 TO 8.0 OR MATCHING THE pH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
    - USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
      - THE ORGANIC CONTENT FROM "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATIONS FOR BMP T7.30: BIORETENTION CELLS, SWALES, AND PLANTER BOXES, WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
      - CALCULATED AMENDMENT RATES MAY BE MET THROUGH THE USE OF COMPOSTED MATERIAL (A) ABOVE, OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAINMENT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.
- THE RESULTING SOIL SHOULD BE CONDUCTIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.
- IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:
    - LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
    - AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
    - IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.
- MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

**PUMP SPECIFICATIONS AND DETAILS**

- INSTALL (2) 1/2-HORSEPOWER THERMOPLASTIC SUBMERSIBLE SUMP PUMPS WITH SEPARATE TETHERED AUTOMATIC ON-OFF SWITCH
- MINIMUM PUMP REQUIREMENTS:
- DISCHARGE FLOW OF AT LEAST 55.6 GALLONS PER MINUTE (0.124 CFS FOR 25-YEAR STORM) AT 7 FEET DYNAMIC HEAD (PUMP "OFF" ELEVATION TO OUTLET ELEVATION AT FINISHED GRADE)
  - MUST FUNCTION AUTOMATICALLY
  - MUST BE SUBMERSIBLE
- INSTALL DUPLEX PUMP ALTERNATOR WITH ALARM
- PROVIDE ON-SITE BACK-UP POWER SUPPLY TO PUMP SYSTEM
- PUMP SYSTEM SHALL BE OWNED, OPERATED, MAINTAINED, REPAIRED AND REPLACED (AS NEEDED) BY PROPERTY OWNERS SERVED BY SUCH SYSTEM.
- PROPERTY OWNERS SERVED BY THE PUMP SYSTEM SHALL BE RESPONSIBLE FOR ANY AND ALL CLAIMS FOR INJURIES AND DAMAGE DUE TO THE OPERATION OR NON-OPERATION OF THE PUMP SYSTEM.



**CB 2 STORMWATER PUMP LIFT STATION DETAIL**

NO SCALE

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PERMIT #XXXX-XXX

DATE	DESIGNED	FLAVIO R. BAINOTTI
REVISIONS	DRAWN	MARY MOORE
NO.	APPROVED	MICHAEL A. WOODY, PE
		JOSHUA BEARD
		PROJECT MANAGER

**CIVIL ENGINEERING**  
**LANDSCAPE ARCHITECTURE**  
**PLANNING**  
**SURVEYING**

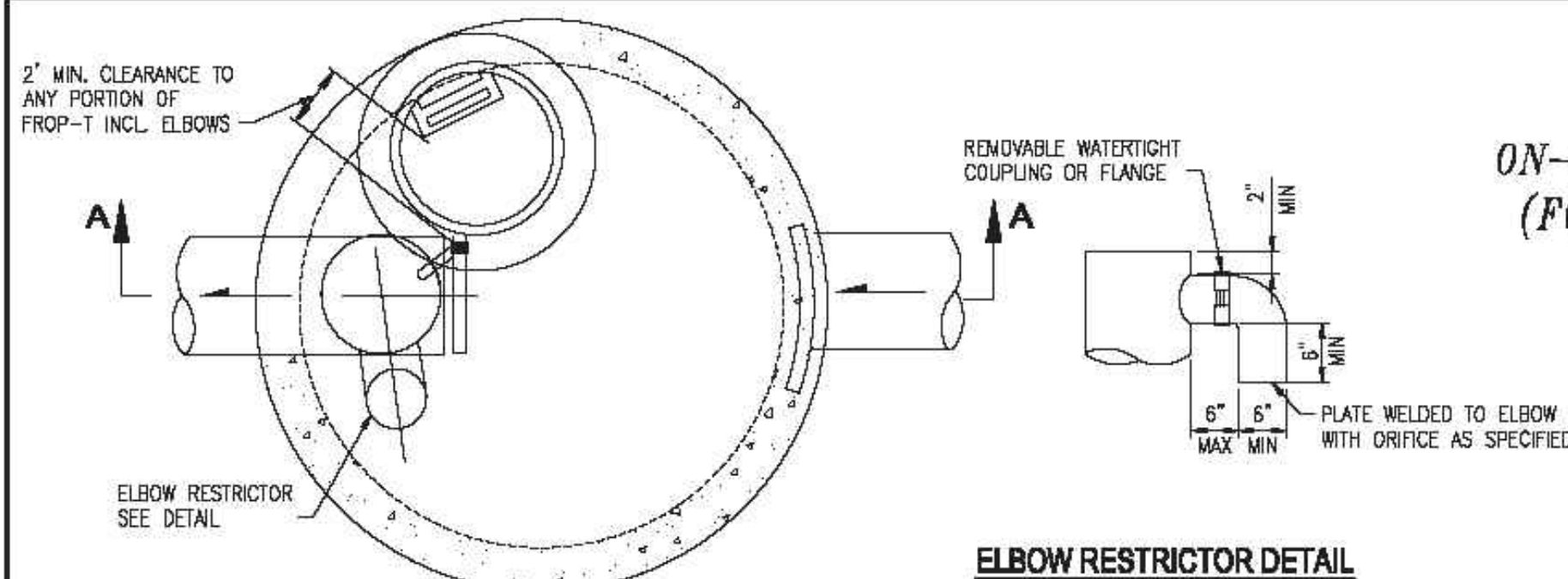
**CORE DESIGN**

12100 NE 195th St, Suite 300, Bothell, Washington 98011 425.885.7877

**SITE PLAN**  
**3453 74TH AVE SE**  
**JIMMY & SHANNON FOO**  
2820 29TH AVE W  
SEATTLE, WA 98199

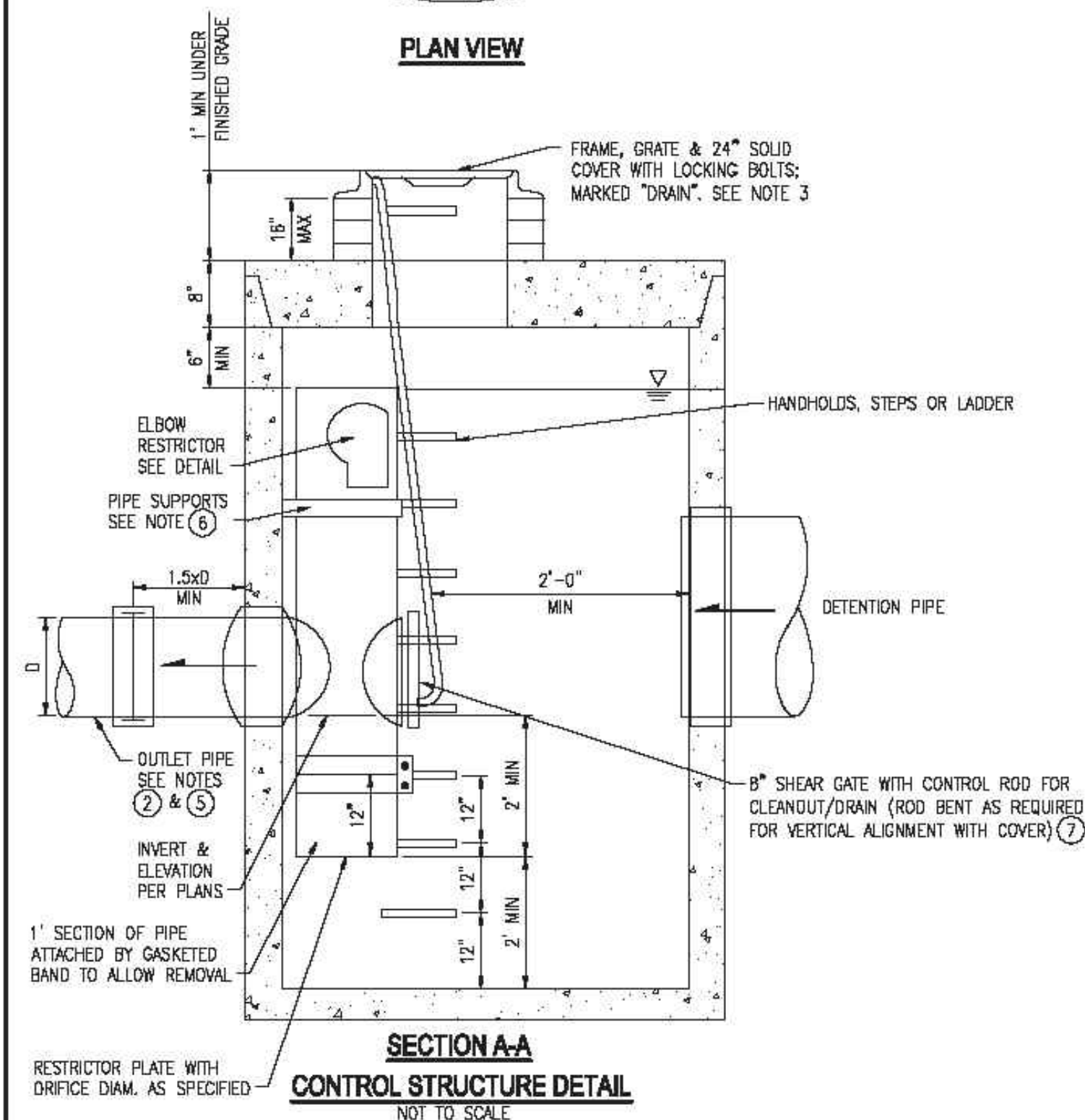
DATE	SEE STAMP DATE
SHEET	OF
<b>C1.03</b>	<b>5</b>
PROJECT NUMBER	20034

**ATTACHMENT 1**  
**CITY OF MERCER ISLAND**  
**ON-SITE DETENTION SYSTEM WORKSHEET**  
**(FOR NEW PLUS REPLACED IMPERVIOUS**  
**AREA OF 9,500 SF OR LESS)**

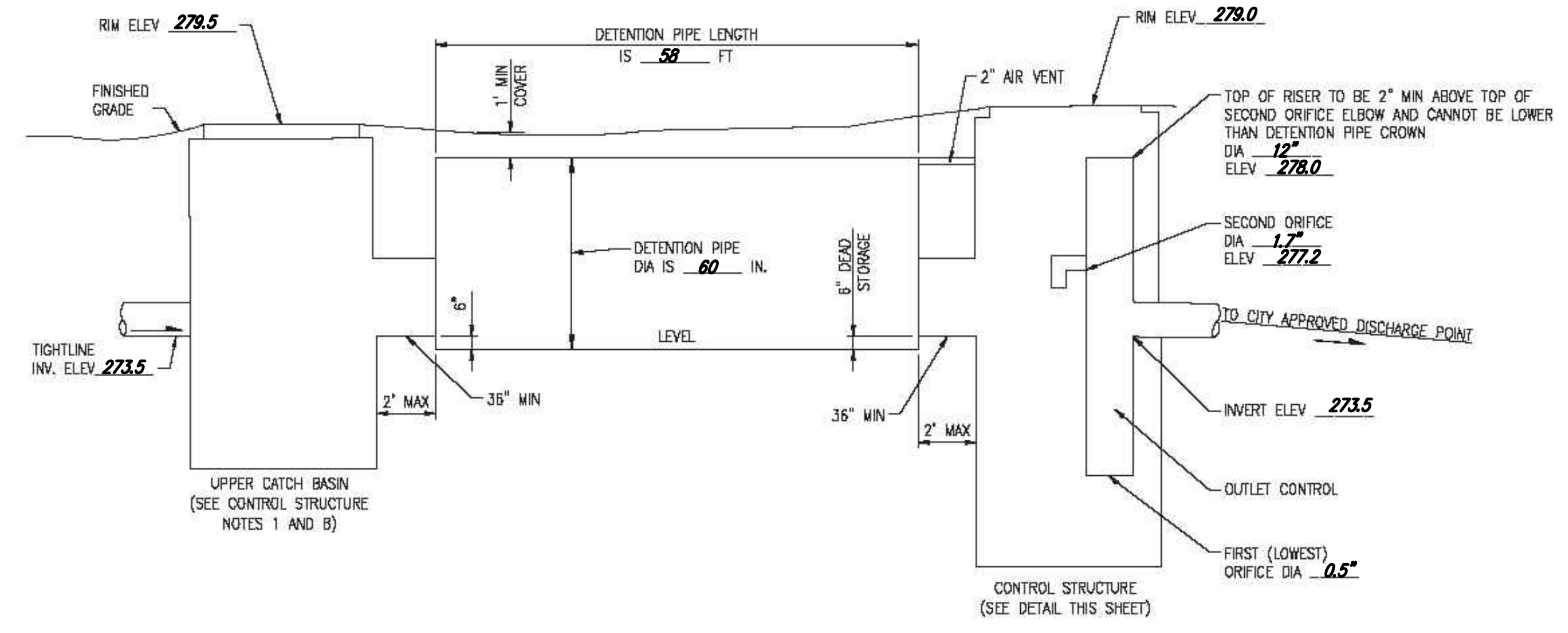


**ELBOW RESTRICTOR DETAIL**

OWNER: <u>JIMMY AND SHANNON FOO</u>	ADDRESS: <u>3453 74TH AVE W.</u>	PREPARED BY: <u>MICHAEL WOODY, P.E.</u>
PERMIT #:	<u>MERCER ISLAND, WA 98040</u>	PHONE: <u>425-885-7877</u>
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): <u>9,205</u>	DETENTION PIPE DIA (INCH): <u>60"</u>	DETENTION PIPE LENGTH (FT): <u>58</u>
SOIL TYPE: <u>C</u>	PIPE MATERIAL: <u>CMP</u>	ORIFICE #1 DIA <u>0.5"</u> INCH, ELEV <u>273.5</u>
		ORIFICE #2 DIA <u>1.2"</u> INCH, ELEV <u>277.2</u>
		DATE: <u>12/9/2020</u>



**SECTION A-A CONTROL STRUCTURE DETAIL**  
NOT TO SCALE



**ON-SITE DETENTION SYSTEM**  
NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

**CONTROL STRUCTURE NOTES:**

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
  - A. CLEANOUT GATE IS VISIBLE FROM TOP;
  - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
  - C. FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
6. PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION Z032A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION). IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

**ON-SITE DETENTION SYSTEM NOTES:**

1. CALL DEVELOPMENT SERVICES (206-275-7805) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTANANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LDFE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

NO.	REVISIONS	DATE

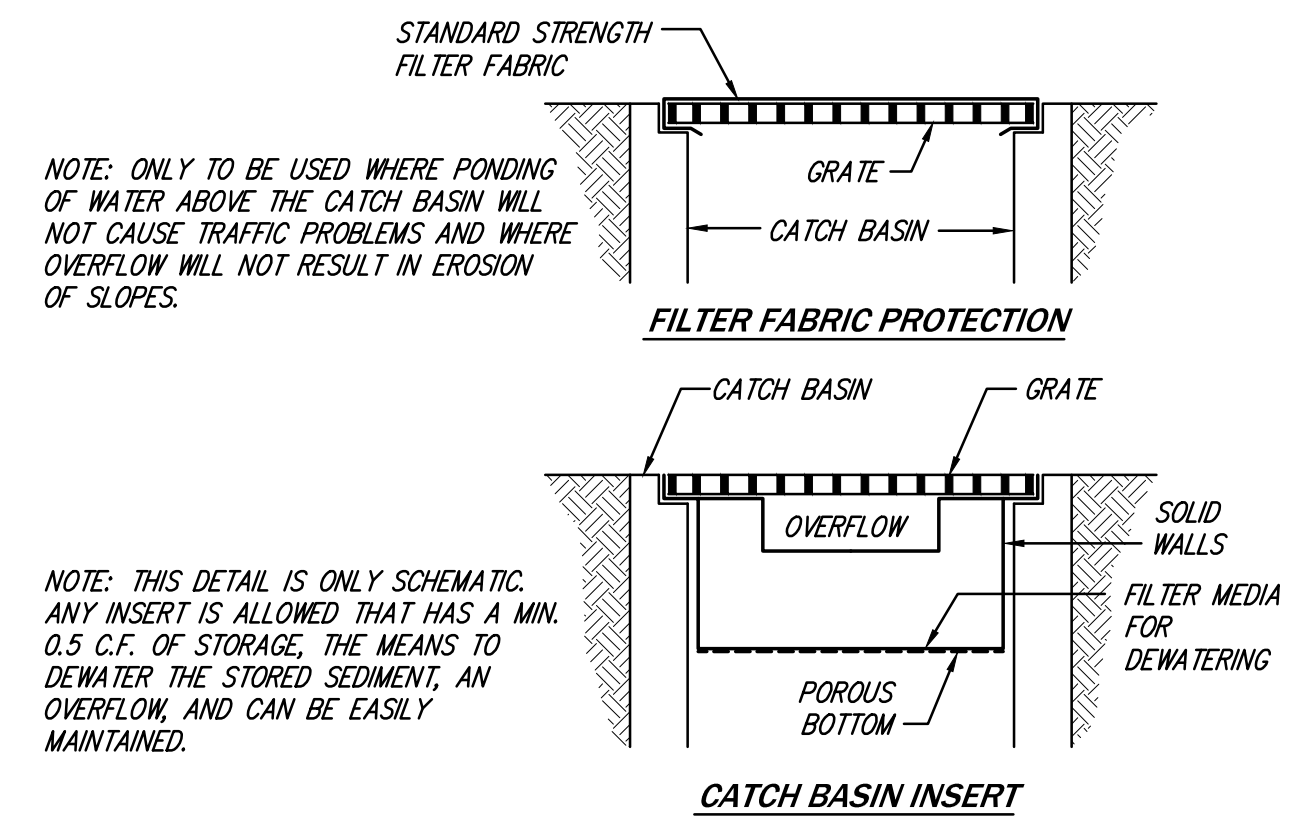
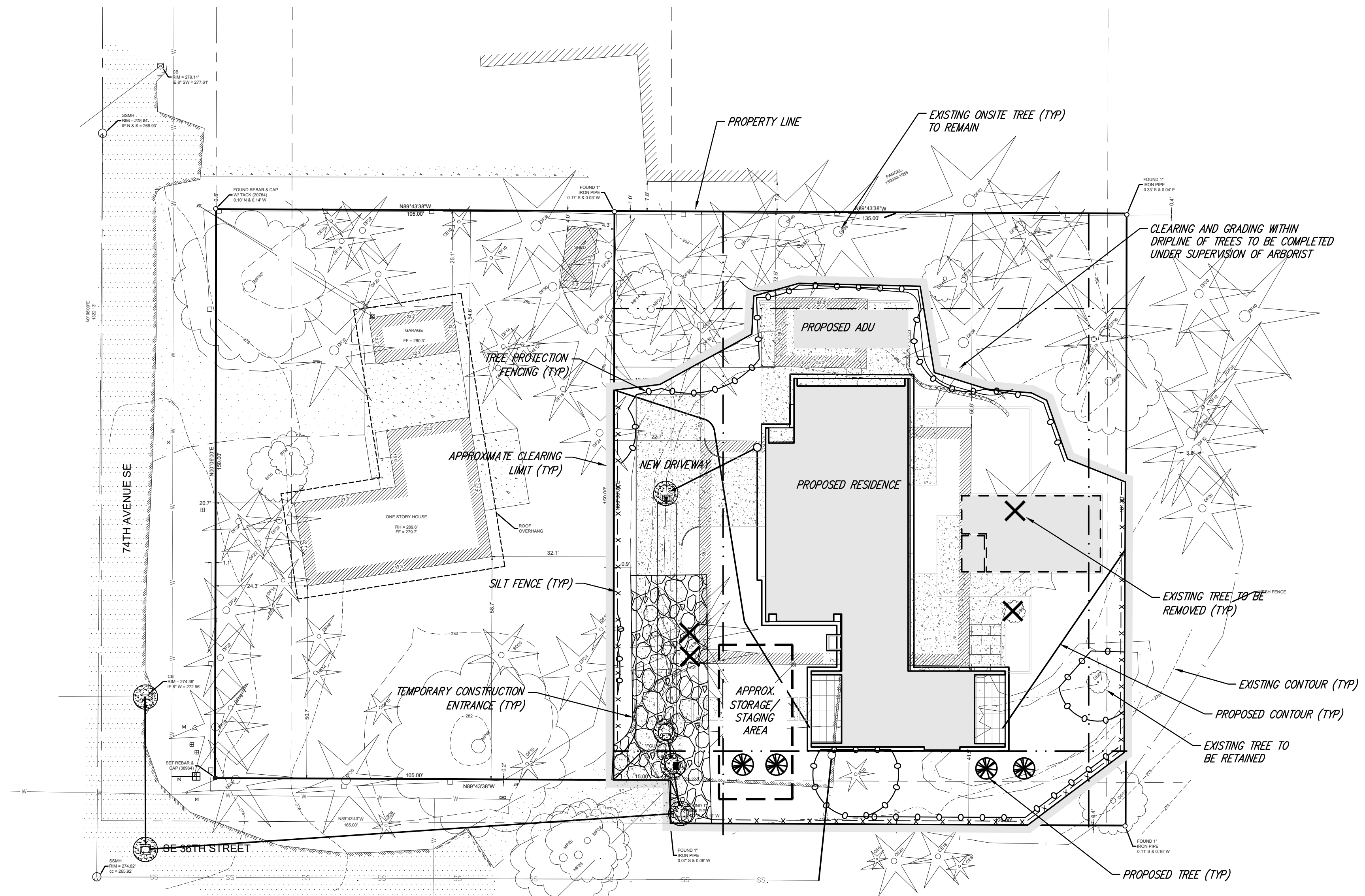
**CORE DESIGN**  
 CIVIL ENGINEERING  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 SURVEYING  
 12100 NE 195th St, Suite 300, Bothell, Washington 98011 425.885.7877

**STORMWATER DETAILS**  
**3453 74TH AVE SE**  
**JIMMY & SHANNON FOO**  
 2820 29TH AVE W  
 SEATTLE, WA 98199

DATE	SEE STAMP DATE
DESIGNED	FLAVIO R. BAINOTTI
DRAWN	MARY MOORE
APPROVED	MICHAEL A. WOODY, PE
	JOSHUA BEARD
	PROJECT MANAGER
SHEET	OF
<b>C1.31</b>	<b>5</b>
PROJECT NUMBER	20034

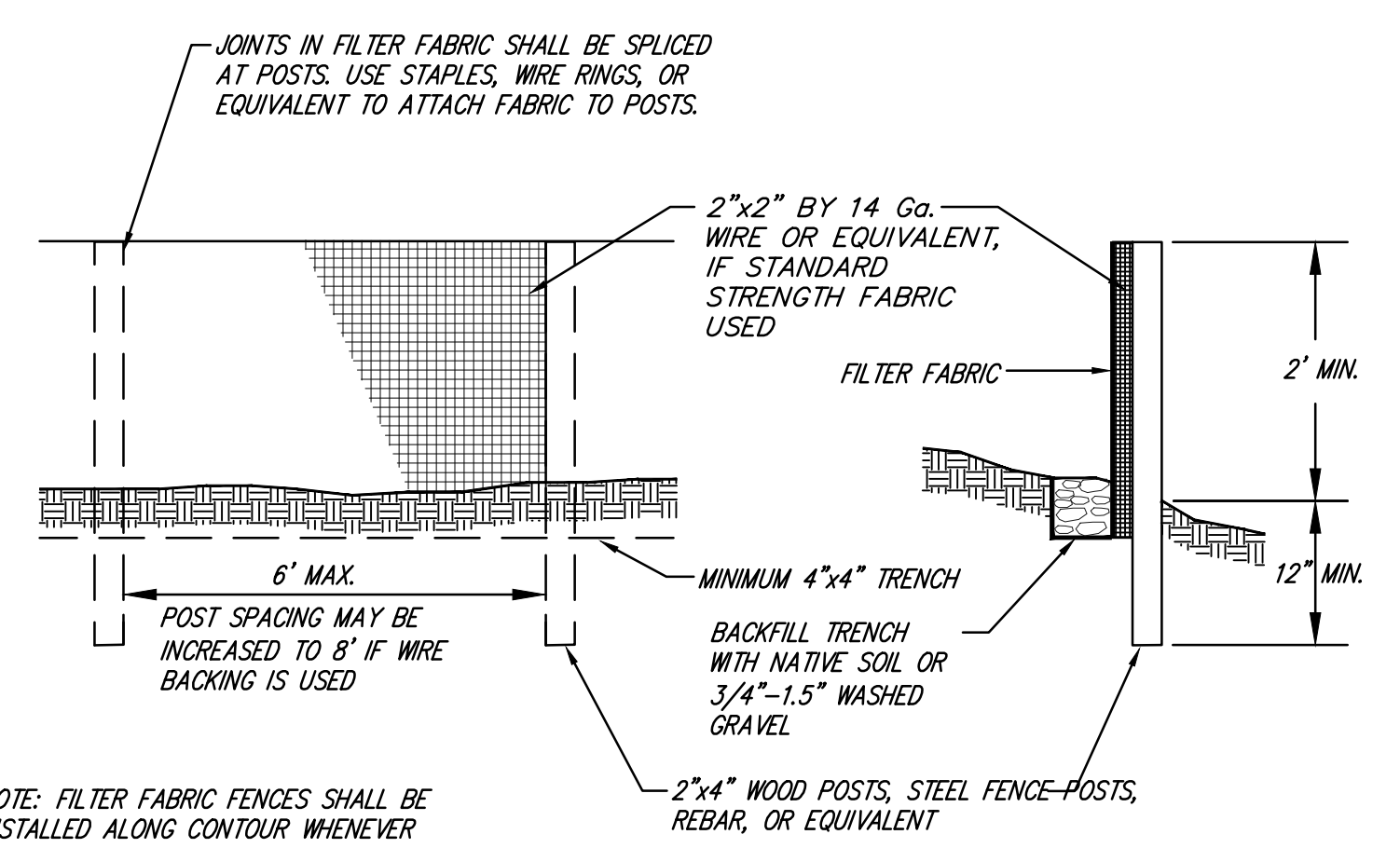
**UNDERGROUND LOCATOR SERVICE**  
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**PERMIT #XXXX-XXX**

12/10/2020 9:20 AM A:\2020\20034\ENGINEERING\FINAL\SHEETS\20034 STORMWATER DETAILS.DWG



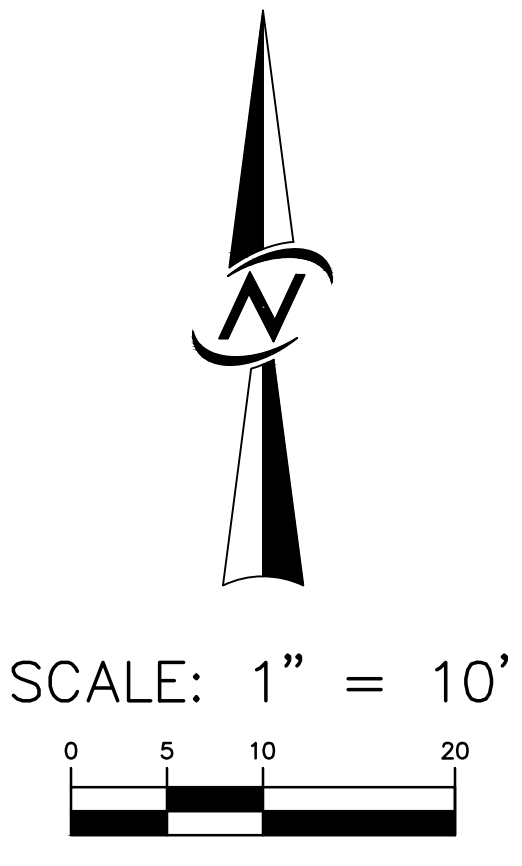
**FILTER FABRIC PROTECTION FOR CB'S**

NO SCALE



**FILTER FABRIC FENCE DETAIL**

NO SCALE



**LEGEND**

- SEE SHEET C2.31 FOR DETAILS, NOTES AND CONSTRUCTION SEQUENCE.
- INLET FILTER (M.S.D.O.T. STD. DTL. 1-40.20-00)
  - FILTER FABRIC FENCE
  - CONSTRUCTION ACCESS
  - CLEARING LIMITS
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - EX TREE TO BE REMOVED

DATE	REVISIONS
NO.	
CIVIL ENGINEERING LANDSCAPE ARCHITECTURE PLANNING SURVEYING <b>CORE DESIGN</b> 12100 NE 195th St, Suite 300, Bothell, Washington 98011 425.885.7877	
<b>TESC PLAN</b> <b>3453 74TH AVE SE</b> <b>JIMMY &amp; SHANNON FOO</b> 2820 29TH AVE W SEATTLE, WA 98199	
DATE	SEE STAMP DATE
DESIGNED	FLAVIO R. BAINOTTI
DRAWN	MARY MOORE
APPROVED	MICHAEL A. WOODY, PE
	JOSHUA BEARD
	PROJECT MANAGER
SHEET	OF
<b>C2.01</b>	<b>5</b>
PROJECT NUMBER	
<b>20034</b>	

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**PERMIT #XXXX-XXX**

12/11/2020 8:04 AM v. 1 (2020) 20034 [ENGINEERING] FINAL (SHEET) 20034 TESC.DWG