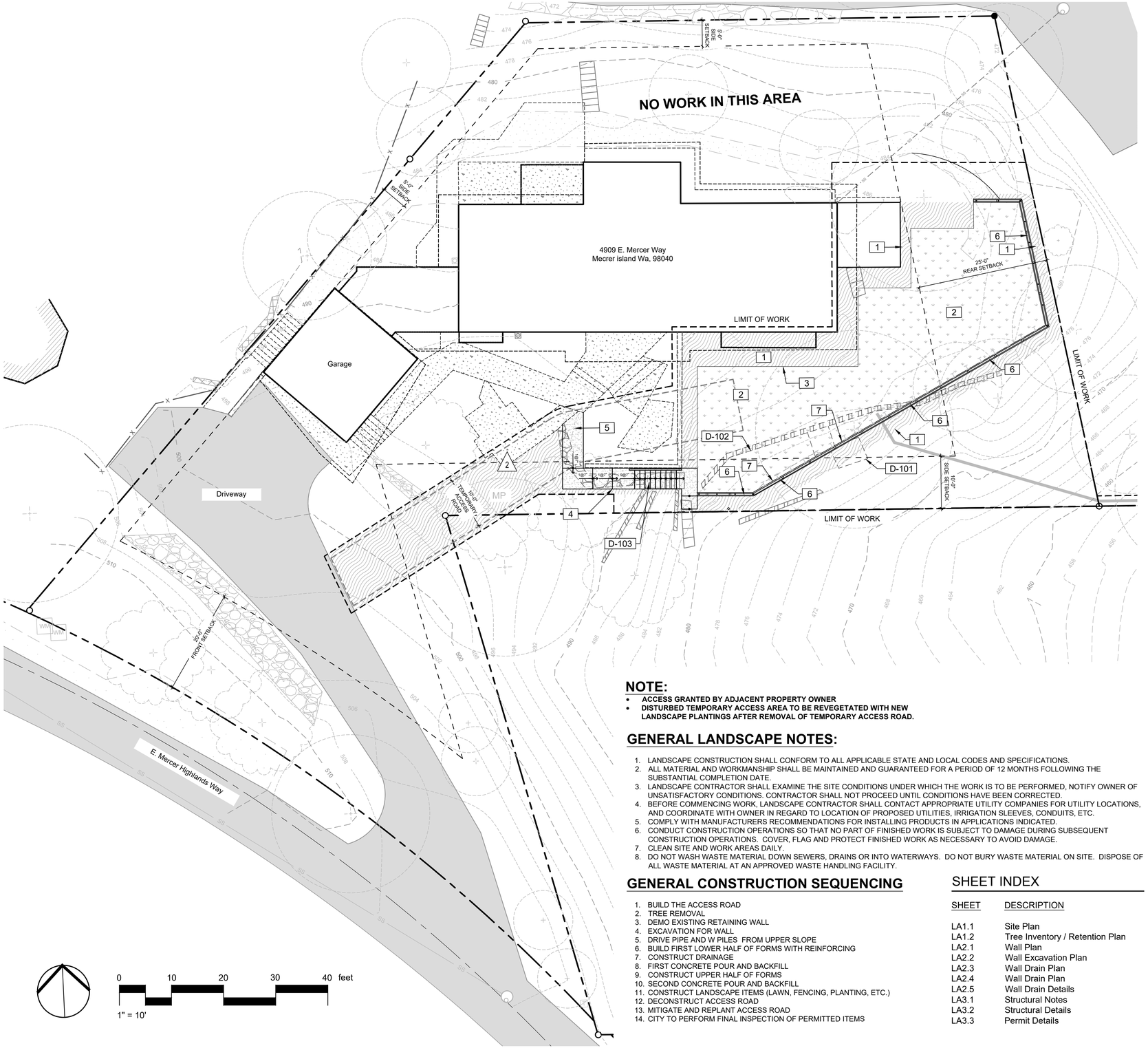


PROJECT DATA:
PARCEL#: 2162000230
ZONING: R-15
SITE ADDRESS: 4909 E. MERCER WAY.
MERCER ISLAND, WA 98059
EAST MERCER HIGHLANDS
ADD LESS POR ELY OF LN BEG 18 FT W OF NE COR TH S
09-26-31 E 96.13 FT TO SE COR & UND INT IN PVT RD

LOT SLOPE CALCULATIONS:

HIGHEST ELEVATION OF LOT:	510'
LOWEST ELEVATION OF LOT:	454'
ELEVATION DIFFERENCE:	56'
HORIZONTAL DISTANCE:	238'
LOT SLOPE:	24%

LOT COVERAGE CALCULATIONS:

A.	GROSS LOT AREA:	17,425 S.F.
B.	NET LOT AREA:	17,425 S.F.
C.	ALLOWED LOT COVERAGE AREA:	6,099 S.F.
D.	ALLOWED LOT COVERAGE:	35%
E.	EXISTING LOT COVERAGE AREA:	
	1. MAIN STRUCTURE ROOF AREA:	3,625
	2. ACCESSORY BUILDING ROOF AREA:	N/A
	3. VEHICULAR USE DRIVEWAY	1,830
	4. COVERED PATIOS / DECKS	N/A
	5. TOTAL EXIST LOT COVERAGE (E1+E2+E3+E4)	5,455
F.	LOT COVERAGE AREA REMOVED:	N/A
G.	PROPOSED ADJUST FOR SINGLE STORY:	N/A
H.	PROPOSED ADJUST FOR FLAG LOT:	N/A
I.	TOTAL NEW LOT COVERAGE AREA:	
	1. MAIN STRUCTURE ROOF AREA:	0
	2. ACCESSORY BUILDING ROOF AREA:	0
	3. VEHICULAR USE AREA :	0
	4. COVERED PATIO / DECKS:	0
	5. TOTAL NEW LOT COVERAGE AREA (I1+I2+I3+I4)	5,455 S.F.
J.	TOTAL PROJECT LOT COVERAGE AREA (E5-F)+I5	5,455 S.F.
K.	PROPOSED LOT COVERAGE (J/B)X100	31.31%

HARDSCAPE CALCULATIONS:

A.	GROSS LOT AREA:	17,425 S.F.
B.	NET LOT AREA:	17,425 S.F.
C.	AREA BORROWED FROM LOT COVERAGE	2,644 S.F.
D.	ALLOWED HARDSCAPE AREA (9% OF LOT AREA+C):	12.69% OF LOT
E.	ALLOWED HARDSCAPE AREA	2,212
F.	TOTAL EXISTING HARDSCAPE AREA:	
	1. UNCOVERED DECKS:	455
	2. UNCOVERED PATIOS:	0
	3. WALKWAYS:	1,315
	4. STAIRS:	40
	5. ROCKERIES AND RETAINING WALLS:	316
	6. OTHER: RR TIE RETAINING WALL	57
	7. TOTAL EXIST HARDSCAPE AREA (F1+F2+F3+F4+F5+F6):	2,183
G.	HARDSCAPE AREA REMOVED:	209
H.	TOTAL NEW HARDSCAPE AREA:	
	1. UNCOVERED DECKS:	0 S.F.
	2. UNCOVERED PATIOS:	0
	3. WALKWAYS:	0
	4. STAIRS:	152
	5. ROCKERIES AND RETAINING WALLS:	78
	6. OTHER:	0
	7. TOTAL NEW HARDSCAPE: (H1+H2+H3+H4+H4+H5+H6)	230 S.F.
I.	TOTAL PROJECT HARDSCAPE: (F7-G)+H7	2,204 S.F.
J.	TOTAL PROJECT HARDSCAPE: (I/B)X100	12.64%

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
1	PLANTING AREA	1,325 SF	
2	LAWN TERRACE	1,543 SF	
3	LANDSCAPE EDGING | PERMALOC CLEANLINE	104 LF	
4	MILD STEEL STEPS WITH CRUSHED GRANITE INFILL	152 LF	3/LA3.3
5	CRUSHED GRANITE PATH | 4" DEPTH	160 SF	3/LA3.3
6	PROPOSED C.I.P. CONCRETE RETAINING WALL | NATURAL COLOR AND FINISH | SEE SHEET LA3.1 & LA3.2 FOR DETAILS	220 LF	
7	CABLE GUARD RAIL AND GATE | MILD STEEL | RUSTED FINISH | STAINLESS STEEL WIRE AND HARDWARE	52 LF	1/LA3.3

DEMOLITION

SYMBOL	DESCRIPTION	QTY	DETAIL
D-101	REMOVE EXISTING PLAY STRUCTURE		
D-102	REMOVE FAILING RAILROAD TIE RETAINING WALL		
D-103	REMOVE WOOD STAIRS		

NOTE:

- **ACCESS GRANTED BY ADJACENT PROPERTY OWNER**
- **DISTURBED TEMPORARY ACCESS AREA TO BE REVEGETATED WITH NEW LANDSCAPE PLANTINGS AFTER REMOVAL OF TEMPORARY ACCESS ROAD.**

GENERAL LANDSCAPE NOTES:

1. LANDSCAPE CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES AND SPECIFICATIONS.
2. ALL MATERIAL AND WORKMANSHIP SHALL BE MAINTAINED AND GUARANTEED FOR A PERIOD OF 12 MONTHS FOLLOWING THE SUBSTANTIAL COMPLETION DATE.
3. LANDSCAPE CONTRACTOR SHALL EXAMINE THE SITE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, NOTIFY OWNER OF UNSATISFACTORY CONDITIONS. CONTRACTOR SHALL NOT PROCEED UNTIL CONDITIONS HAVE BEEN CORRECTED.
4. BEFORE COMMENCING WORK, LANDSCAPE CONTRACTOR SHALL CONTACT APPROPRIATE UTILITY COMPANIES FOR UTILITY LOCATIONS, AND COORDINATE WITH OWNER IN REGARD TO LOCATION OF PROPOSED UTILITIES, IRRIGATION SLEEVES, CONDUITS, ETC.
5. COMPLY WITH MANUFACTURERS RECOMMENDATIONS FOR INSTALLING PRODUCTS IN APPLICATIONS INDICATED.
6. CONDUCT CONSTRUCTION OPERATIONS SO THAT NO PART OF FINISHED WORK IS SUBJECT TO DAMAGE DURING SUBSEQUENT CONSTRUCTION OPERATIONS. COVER, FLAG AND PROTECT FINISHED WORK AS NECESSARY TO AVOID DAMAGE.
7. CLEAN SITE AND WORK AREAS DAILY.
8. DO NOT WASH WASTE MATERIAL DOWN SEWERS, DRAINS OR INTO WATERWAYS. DO NOT BURY WASTE MATERIAL ON SITE. DISPOSE OF ALL WASTE MATERIAL AT AN APPROVED WASTE HANDLING FACILITY.

GENERAL CONSTRUCTION SEQUENCING

1. BUILD THE ACCESS ROAD
2. TREE REMOVAL
3. DEMO EXISTING RETAINING WALL
4. EXCAVATION FOR WALL
5. DRIVE PIPE AND W PILES FROM UPPER SLOPE
6. BUILD FIRST LOWER HALF OF FORMS WITH REINFORCING
7. CONSTRUCT DRAINAGE
8. FIRST CONCRETE POUR AND BACKFILL
9. CONSTRUCT UPPER HALF OF FORMS
10. SECOND CONCRETE POUR AND BACKFILL
11. CONSTRUCT LANDSCAPE ITEMS (LAWN, FENCING, PLANTING, ETC.)
12. DECONSTRUCT ACCESS ROAD
13. MITIGATE AND REPLANT ACCESS ROAD
14. CITY TO PERFORM FINAL INSPECTION OF PERMITTED ITEMS

SHEET INDEX

REVISIONS	DATE	BY
PERMIT PLAN	10/17/2019	KJ
PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

SHEET TITLE: Site Plan

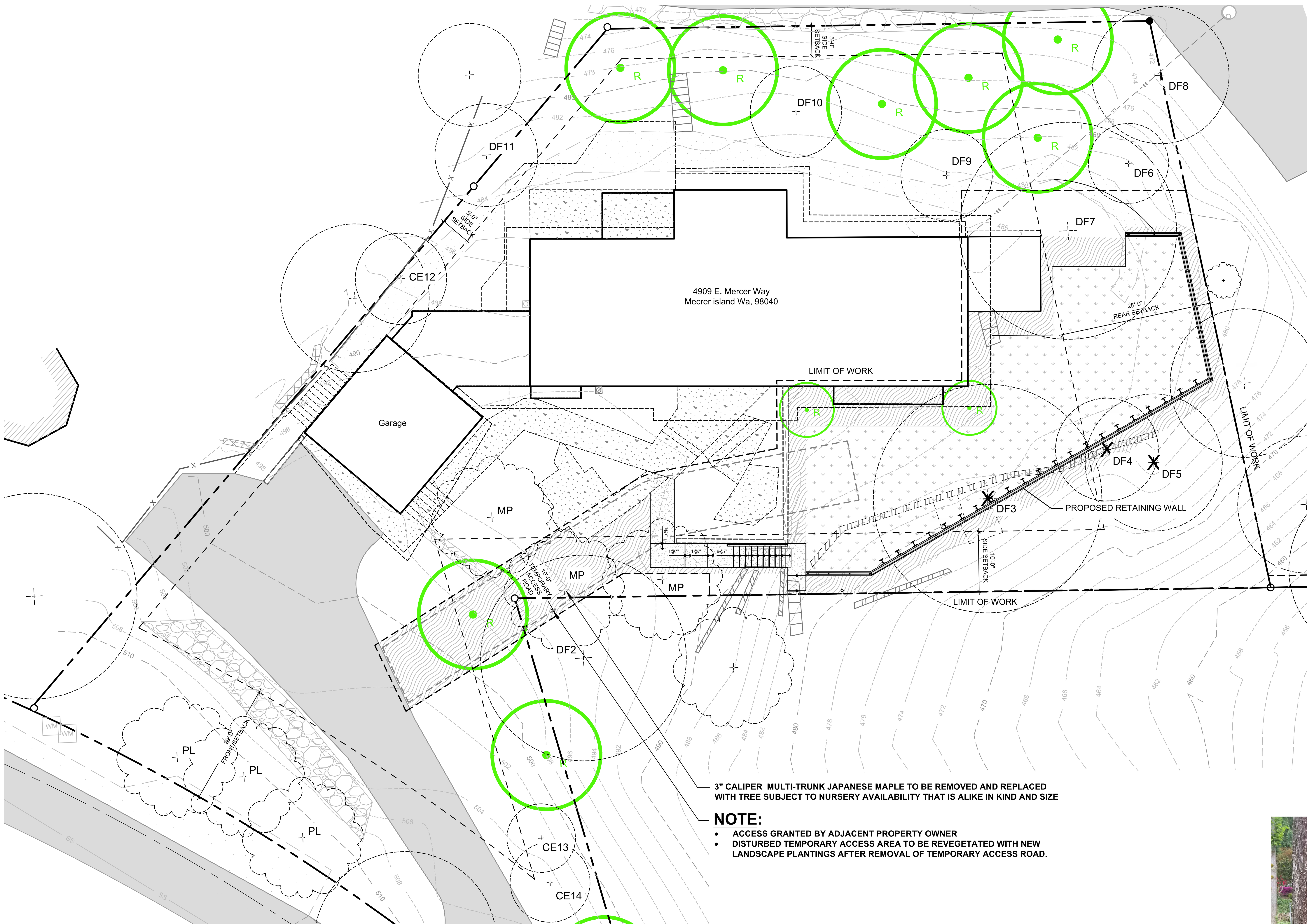
PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL:

STATE OF WASHINGTON
MARK S. GARFF
LICENSED LANDSCAPE ARCHITECT
NO. 888 EXP. 01/05/21

DESIGNER:	KJ
DRAWN BY:	KJ
APPROVED BY:	MG
DATE:	FEBRUARY 2021
JOB No:	2551
DRAWING FILE No:	
DRAWING No:	LA1.1
SHEET No:	1 OF 10

Feb 16, 2021 1:07:52pm – User: mdekath.rongo
N:\PROJECTS\2551 SARAH & AMIR BASTAWROUS\2551.01 THE MAPLE GROVE RESIDENCE\PHASE 03 – PERMIT ASSISTANCE\CAD\2551-LA1.1 SITE PLAN-MAPLE PERMIT.DWG



3" CALIPER MULTI-TRUNK JAPANESE MAPLE TO BE REMOVED AND REPLACED WITH TREE SUBJECT TO NURSERY AVAILABILITY THAT IS ALIKE IN KIND AND SIZE

NOTE:

- ACCESS GRANTED BY ADJACENT PROPERTY OWNER
- DISTURBED TEMPORARY ACCESS AREA TO BE REVEGETATED WITH NEW LANDSCAPE PLANTINGS AFTER REMOVAL OF TEMPORARY ACCESS ROAD.

Tree Inventory / Retention Schedule

Tree #	Species	Latin Name	DBH	Appr Ht.	Condition	Drip line Radius	Req'd Replacement Trees	Retain yes/no
DF1	Fir	*Pseudotsuga menziesii*	32"	110'	Fair	13'	N/A	YES
DF2	Fir	*Pseudotsuga menziesii*	44"	120'	Good	18'	N/A	YES
DF3	Fir	Pseudotsuga menziesii	43"	120'	Good	18'	6	NO
DF4	Fir	Pseudotsuga menziesii	17"	90'	Fair	10'	2	NO
DF5	Fir	Pseudotsuga menziesii	25"	95'	Fair	13'	3	NO
DF6	Fir	*Pseudotsuga menziesii*	13"	65'	Fair	11'	N/A	YES
DF7	Fir	*Pseudotsuga menziesii*	38"	120'	Good	18'	N/A	YES
DF8	Fir	*Pseudotsuga menziesii*	23"	95'	Fair	13'	N/A	YES
DF9	Fir	*Pseudotsuga menziesii*	16"	85'	Fair	11'	N/A	YES
DF10	Fir	*Pseudotsuga menziesii*	25"	80'	Good	13'	N/A	YES
DF11	Fir	*Pseudotsuga menziesii*	18"	85'	Fair	11'	N/A	YES
CE12	Cedar	*Thuja plicata*	16"	75'	Good	10'	N/A	YES
CE13	Cedar	*Thuja plicata*	18"	60'	Fair	8'	N/A	YES
CE14	Cedar	*Thuja plicata*	20"	70'	Good	10'	N/A	YES
CE15	Cedar	*Thuja plicata*	18"	60'	Fair	8'	N/A	YES
CE16	Cedar	*Thuja plicata*	16"	60'	Fair	8'	N/A	YES

Note: Replacement trees shall be conifers at least 6' tall and / or deciduous trees at least 1-1/2" Caliper

CE = CEDAR

DF= DOUGLAS FIR

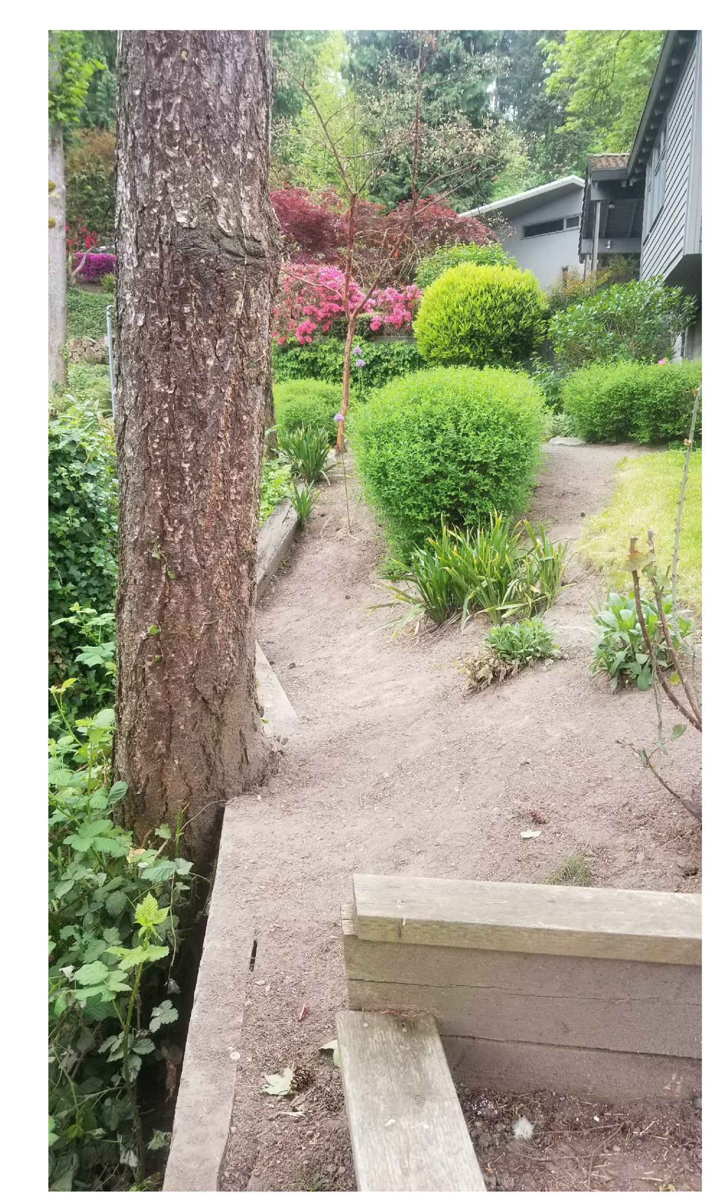
MP=MAPLE

PL-PLUM

VISIBLE FAILURE OF SLOPE

TREES #3,#4, & #5

TREES #3



TREES #4,

TREES #5

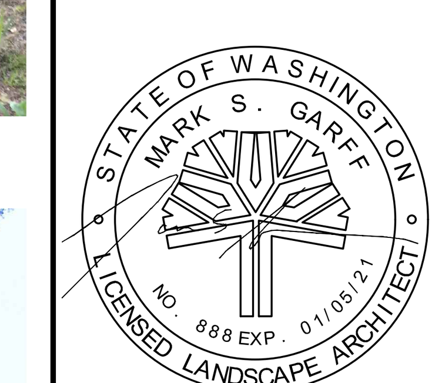
BY	DATE	REVISIONS
KJ	10/17/2019	PERMIT PLAN
RR	11/23/2020	PERMIT PLAN - SECOND SUBMITTAL
RR	2/16/2021	PERMIT PLAN - THIRD SUBMITTAL

SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

SHEET TITLE: Tree Inventory / Retention Plan

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL:



DESIGNER: KJ

DRAWN BY: KJ

APPROVED BY: MG

DATE: FEBRUARY 2021

JOB No: 2551

DRAWING FILE No:

DRAWING No: LA1.2

WALL SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
W-01	C.I.P. RETAINING WALL | 8"W TYP.	109 LF	LA3.1 & LA3.2
W-02	C.I.P. FOOTING | WIDTH VARIES	109 LF	4/LA3.2
W-03	2" DIA. SCH. 80 PIPE PILE DRIVEN TO REFUSAL | PLACE AS SHOWN ON PLAN	13	LA3.1 & LA3.2
W-04	4" DIA. SCH 80 PVC DRAIN |	104 LF	LA3.1 & LA3.2
W-05	W-PILES | W8 X 25 X 33' LONG OR W12 X 26' X33' LONG | X 21 (25' OF EMBEDDED PILE + 8' OF STICK UP BETWEEN FG AND BOE = TOTAL LENGTH)		3/LA3.2

3

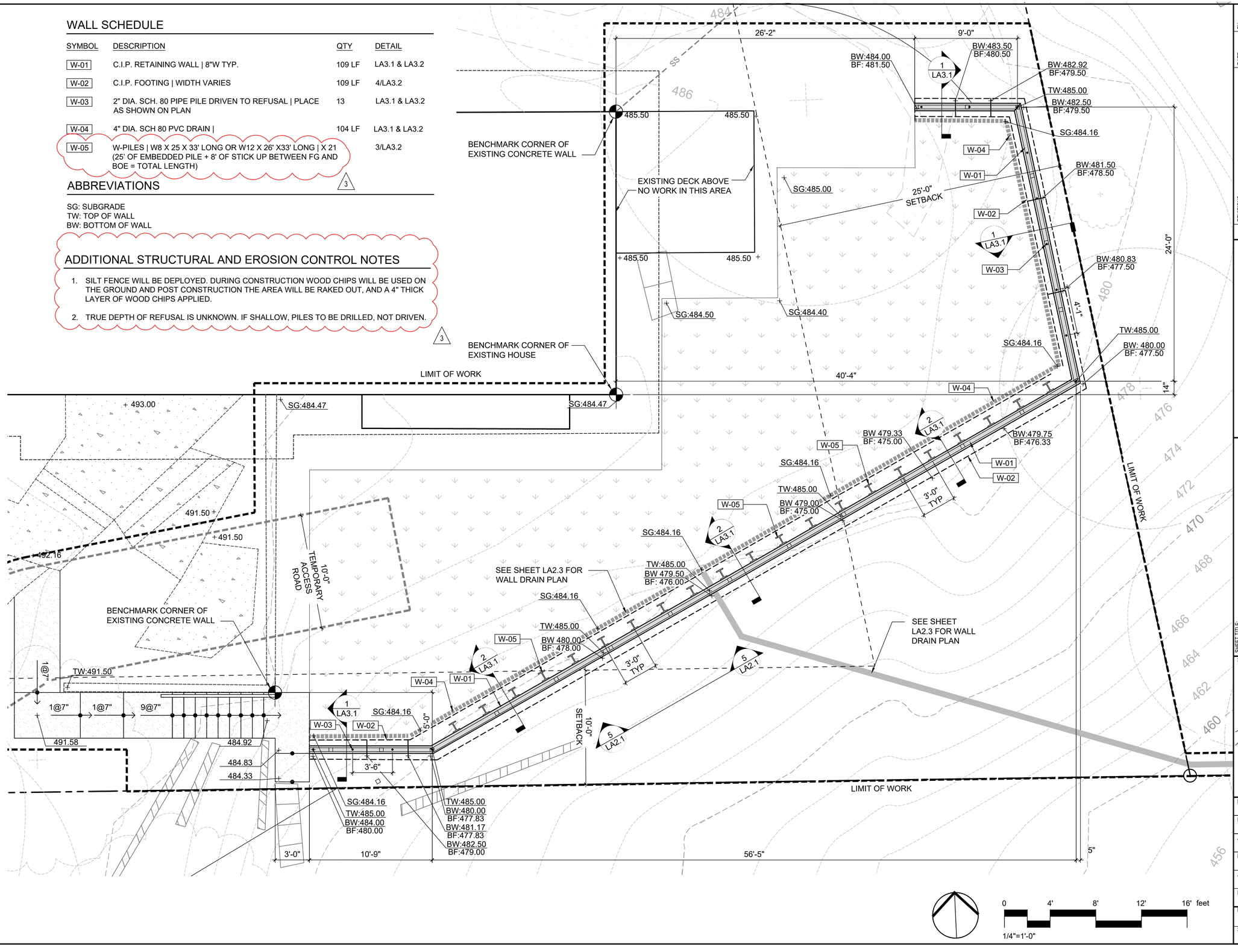
ABBREVIATIONS

SG: SUBGRADE
TW: TOP OF WALL
BW: BOTTOM OF WALL

ADDITIONAL STRUCTURAL AND EROSION CONTROL NOTES

1. SILT FENCE WILL BE DEPLOYED. DURING CONSTRUCTION WOOD CHIPS WILL BE USED ON THE GROUND AND POST CONSTRUCTION THE AREA WILL BE RAKED OUT, AND A 4" THICK LAYER OF WOOD CHIPS APPLIED.
2. TRUE DEPTH OF REFUSAL IS UNKNOWN. IF SHALLOW, PILES TO BE DRILLED, NOT DRIVEN.

3



0 4' 8' 12' 16' feet
1/4"=1'-0"

REVISIONS	DATE	BY
1 PERMIT PLAN	10/17/2019	KJ
2 PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
3 PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

SHEET TITLE: Wall Plan

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL:
STATE OF WASHINGTON
MARK S. GARFF
WA 888 EXP. 01/05/21
LICENSED LANDSCAPE ARCHITECT

DESIGNER:	KJ
DRAWN BY:	KJ
APPROVED BY:	MG
DATE:	FEBRUARY 2021
JOB No:	2551
DRAWING FILE No:	
DRAWING No:	LA2.1
SHEET No:	3 OF 10

WALL SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
W-01	C.I.P. RETAINING WALL | 8"W TYP.	109 LF	LA3.1 & LA3.2
W-02	C.I.P. FOOTING | WIDTH VARIES	109 LF	4/LA3.2
W-03	2" DIA. SCH. 80 PIPE PILE DRIVEN TO REFUSAL | PLACE AS SHOWN ON PLAN	13	
W-04	4" DIA. SCH 80 PVC DRAIN |	104 LF	
W-05	W-PILES | W8 X 25 X 33' LONG OR W12 X 26' X33' LONG | X 21 (25' OF EMBEDDED PILE + 8' OF STICK UP BETWEEN FG AND BOE = TOTAL LENGTH)		3/LA3.2

3

EXCAVATION SCHEDULE

[hatched area]	STOCKPILE AREA (NOT SHOWN) 300' SF AREA IN DRIVEWAY TO BE ALLOCATED FOR FOR STOCKPILE USE	SEE DETAIL 1, THIS SHEET
X—X—X	SILT FENCE	SEE DETAIL 2, THIS SHEET
▼—▼—▼	LIMIT OF CUT	

ABBREVIATIONS

SG: SUBGRADE
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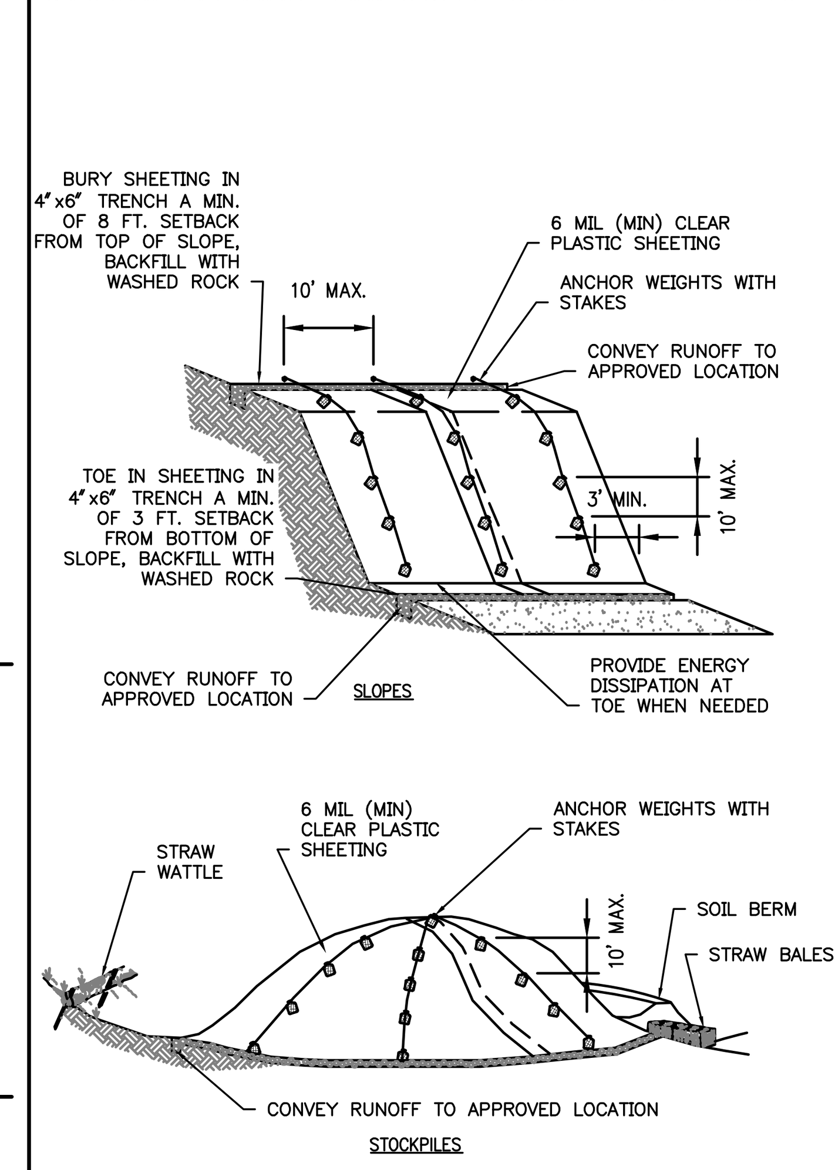
BF: BOTTOM OF FOOTING

ADDITIONAL STRUCTURAL AND EROSION CONTROL NOTES

1. SILT FENCE WILL BE DEPLOYED. DURING CONSTRUCTION WOOD CHIPS WILL BE USED ON THE GROUND AND POST CONSTRUCTION THE AREA WILL BE RAKED OUT, AND A 4" THICK LAYER OF WOOD CHIPS APPLIED.

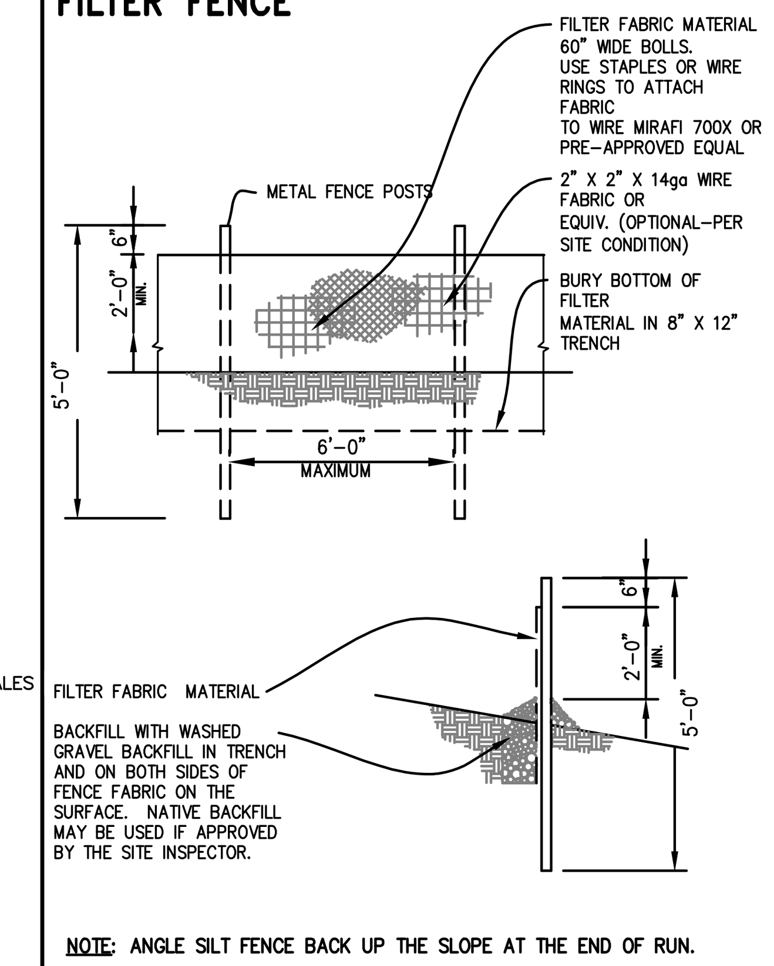
3

STOCKPILE AND EXPOSED SLOPE COVERING

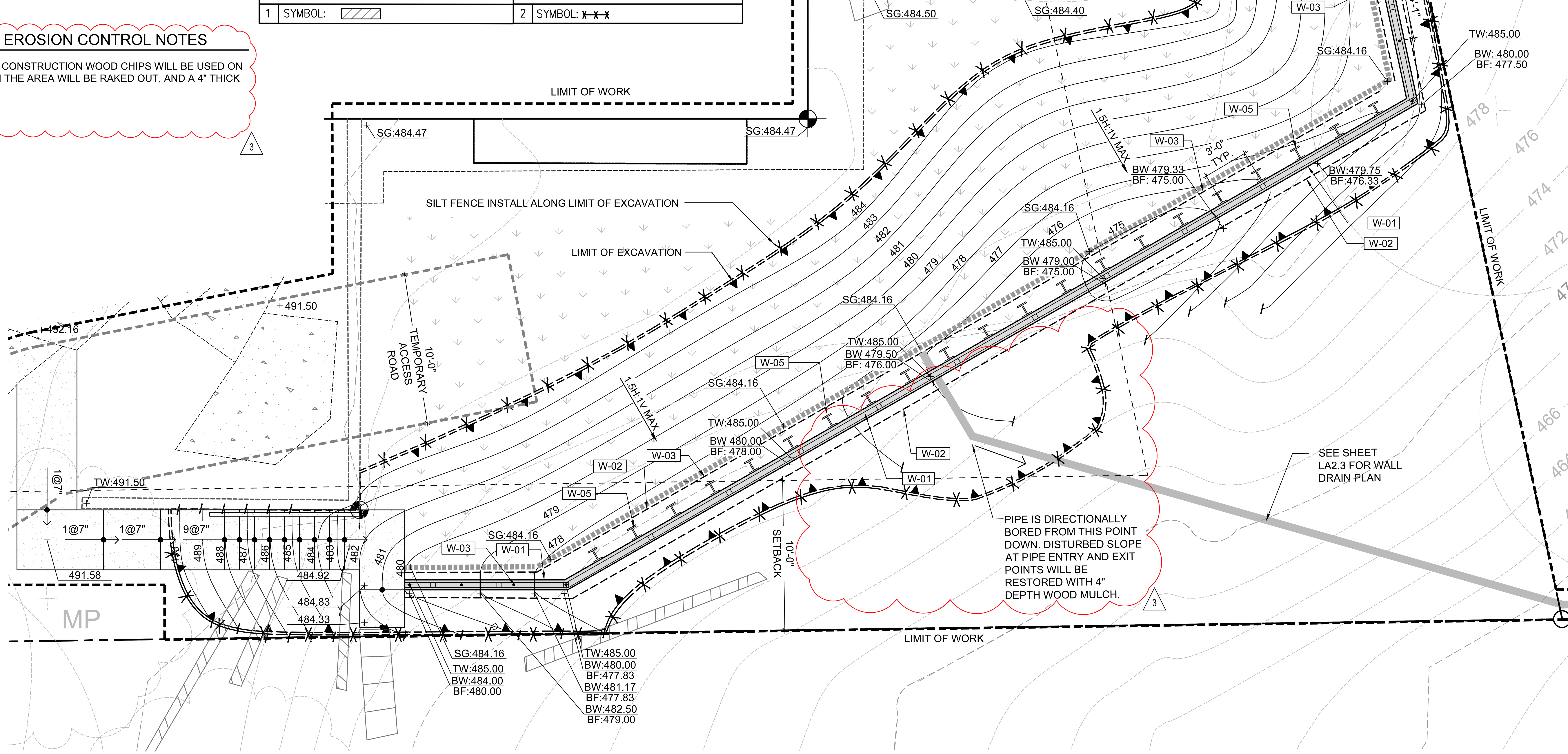


1 SYMBOL: [hatch]

FILTER FENCE



2 SYMBOL: X—X—X



0 4' 8' 12' 16' feet
1/4"=1'-0"

REVISIONS	DATE	BY
PERMIT PLAN	10/17/2019	KJ
PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

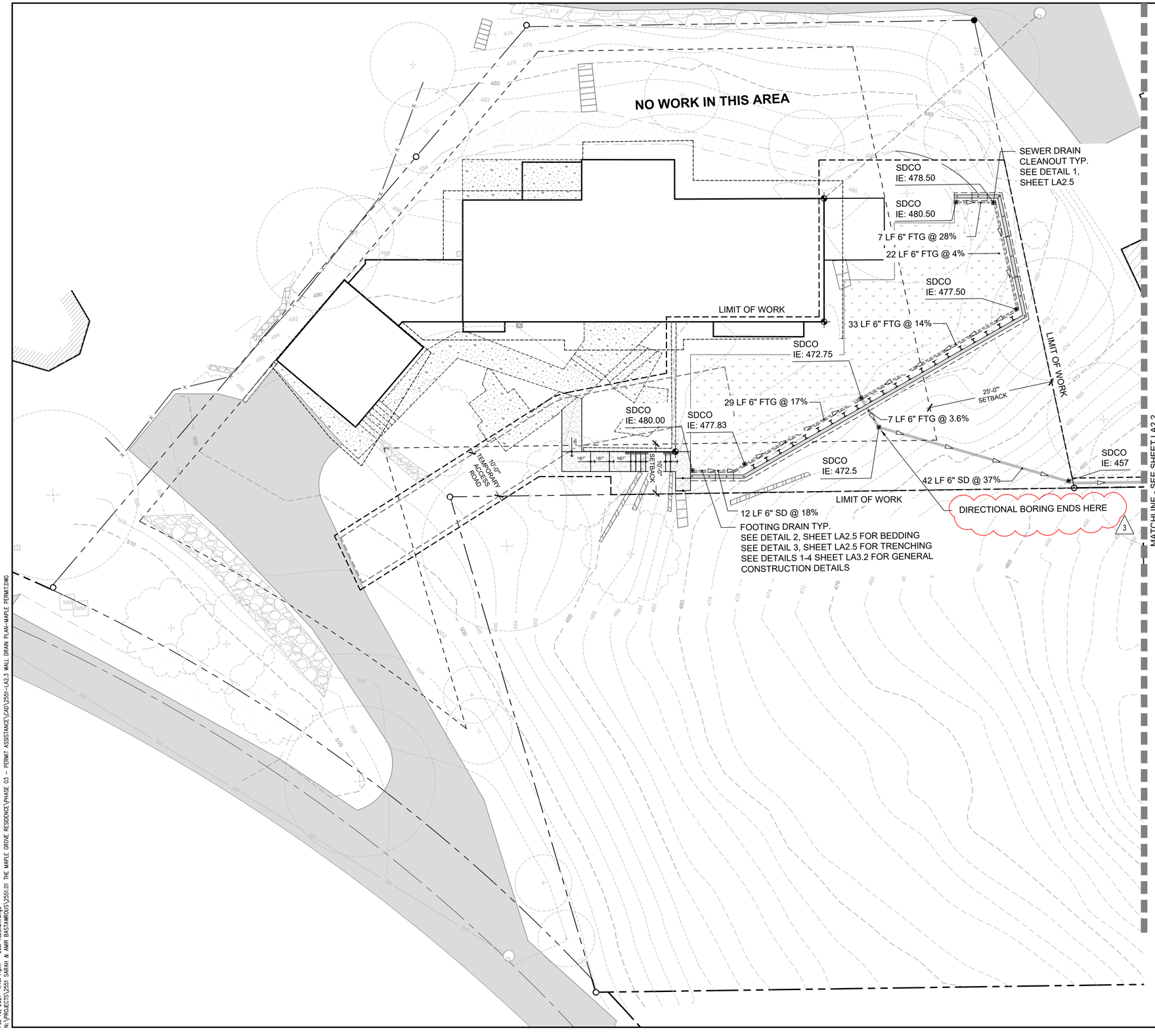
SCJ STUDIO LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

SHEET TITLE: Wall Excavation Plan

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL: STATE OF WASHINGTON, MARK S. GARFF, LICENSED LANDSCAPE ARCHITECT

DESIGNER: KJ
DRAWN BY: KJ
APPROVED BY: MG
DATE: FEBRUARY 2021
JOB No: 2551
DRAWING FILE No:
DRAWING No: LA2.2
SHEET No: 4 OF 10



ABBREVIATIONS:

CB: CATCH BASIN
FTG: FOOTING DRAIN LINE
IE: INVERT ELEVATION
LF: LINEAR FEET
SD: STORM DRAIN LINE
SDCO: STORM DRAIN CLEANOUT

NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CITY OF MERCER ISLAND CURRENT STANDARD SPECIFICATINOS
2. CONTRACTOR TO PROVIDE AS-BUILT STORM SEWER SYSTEM TO CITY OF MERCER ISLAND UPON COMPLETION
3. UNLESS OTHERWISE NOTED SD PIPE SHALL BE 6" HDPE PIPE RIGID W/ SMOOTH WALL INTERIOR, SD SHALL BE AT 2.0% MINIMUM
3. UNLESS OTHERWISE NOTED FTG PIPE SHALL BE 6" SCH 80 PERFORATED DRAIN PIPE, FTG PIPE SHALL BE AT 2.0% MINIMUM
4. CONTRACTOR TO DIRECTIONAL BORE ALL PROPOSED PIPE LOCATIONS THAT ARE OFF PROPERTY
5. CONTRACTOR TO TUNNEL BORE OR AIR EXCAVATE WITHIN DRIPLINE OF TREES
6. CONTRACTOR TO ENGAGE CITY OF MERCER ISLAND ARBORIST WHILE PERFORMING GRADING WITHIN DRIPLINE OF TREES
7. ALL EXCAVATED SOILS NOT USED IN THE BACKFILL OF THE DRAINAGE TRENCH WILL NOT BE ALLOWED TO REMAIN ON THE SLOPE.
8. ALL DRILLING FLUID AND CUTTINGS ASSOCIATED WITH DIRECTIONAL DRILLING CANNOT BE DISPOSED OF ON SITE.

3

0 10 20 30 40 feet
1" = 10'

REVISIONS	DATE	BY
1 PERMIT PLAN	10/17/2019	KJ
2 PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
3 PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

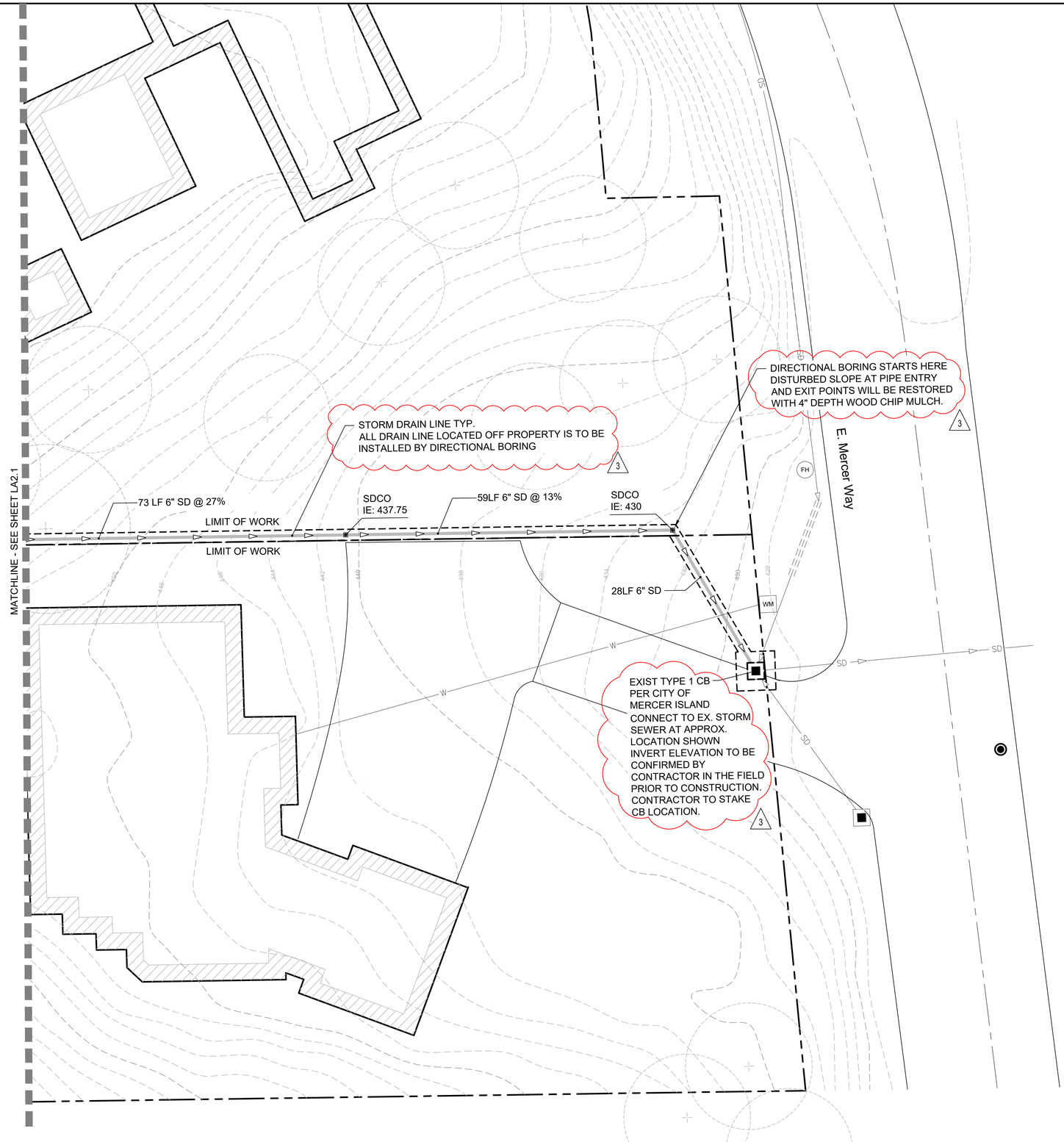
SHEET TITLE: Wall Drain Plan

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL:

STATE OF WASHINGTON · MARK S. GARFF · No. 888 EXP. 01/05/21 · LICENSED LANDSCAPE ARCHITECT

DESIGNER:	KJ
DRAWN BY:	KJ
APPROVED BY:	MG
DATE:	FEBRUARY 2021
JOB No:	2551
DRAWING FILE No:	
DRAWING No:	LA2.3
SHEET No:	5 OF 10



ABBREVIATIONS:

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3

0 10 20 30 40 feet
1" = 10'

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SHEET TITLE: Wall Drain Plan

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL:

STATE OF WASHINGTON
MARK S. GARFF
LICENSED LANDSCAPE ARCHITECT
NO. 888 EXP. 01/05/21

DESIGNER:	KJ
DRAWN BY:	KJ
APPROVED BY:	MG
DATE:	FEBRUARY 2021
JOB No:	2551
DRAWING FILE No:	
DRAWING No:	LA2.4
SHEET No:	6 OF 10

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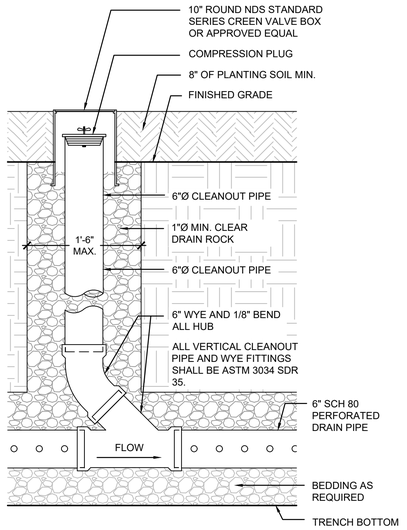
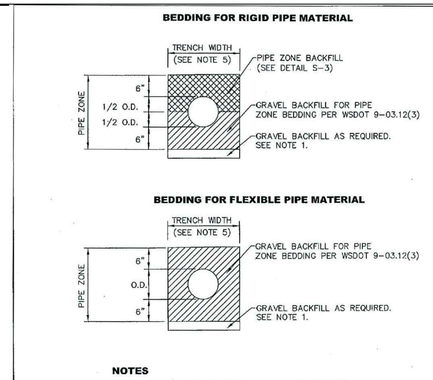


1 STORM DRAIN CLEANOUT

1" = 1'-0" P-RE-MAP1-16



NOTES

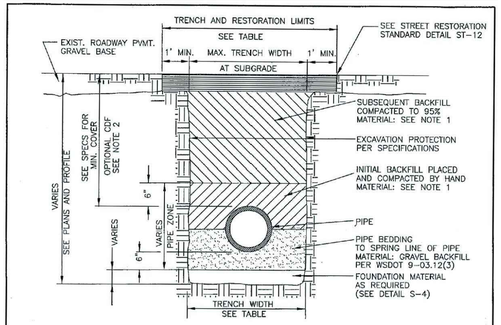
1. EXCAVATE UNSTABLE MATERIAL DOWN TO FIRM SOIL. REPLACE WITH GRAVEL BACKFILL PER WSDOT 9-03.12(3) AS DIRECTED BY THE CITY ENGINEER.
2. PROVIDE UNIFORM SUPPORT UNDER BARREL.
3. HAND TAMP UNDER HAUNCHES.
4. COMPACT BEDDING AND BACKFILL MATERIAL TO 95% MAX. DENSITY EXCEPT DIRECTLY OVER PIPE. HAND TAMP ONLY UNTIL MINIMUM 6" ABOVE TOP OF PIPE.
5. 30" MAXIMUM TRENCH WIDTH FOR PIPE UP TO AND INCLUDING 12", FOR PIPE LARGER THAN 12", USE O.D. PLUS 16".

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
PIPE BEDDING

REV DATE						APPROVED
				6-5-2009	NO SCALE	S-4

2 STORM DRAIN PIPE BEDDING

1" = 1'-0" P-RE-MAP1-17



NOTES

1. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-09.9(3) OR BANK RUN GRAVEL PER WSDOT 9-03.19, COMPACTED IN 6" LIFTS.
2. CDF FOR BACKFILL MAY BE REQUIRED BY CITY ENGINEER WHEN PROPER COMPACTION AROUND EXISTING UTILITIES MAY NOT BE POSSIBLE. CDF SHALL BE PER WSDOT 2-09.3(1)E.
3. SEE S-4 FOR PIPE BEDDING DETAILS.

TRENCH WIDTH

PIPE SIZE	PIPE ZONE MAX. TRENCH WIDTH	MAX. TRENCH WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
SIDE SEWER	2'-0"	2'-0"	6'-0"
4" OR 6"	2'-2"	3'-0"	8'-0"
8"	2'-4"	4'-0"	8'-0"
10"	2'-6"	4'-0"	8'-0"
12"	2'-8"	4'-6"	8'-6"

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SEWER TRENCH DETAIL

REV DATE						APPROVED
				6-5-2009	NO SCALE	S-3

3 STORM DRAIN PIPE TRENCHING

1" = 1'-0" P-RE-MAP1-18

REVISIONS	DATE	BY
1 PERMIT PLAN	10/17/2019	KJ
2 PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
3 PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

SHEET TITLE: Wall Drain Details

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL:

STATE OF WASHINGTON · MARK S. GARFF · 888 EXP. 01/08/21 · LICENSED LANDSCAPE ARCHITECT

DESIGNER:	KJ
DRAWN BY:	KJ
APPROVED BY:	MG
DATE:	FEBRUARY 2021
JOB No:	2551
DRAWING FILE No:	
DRAWING No:	LA2.5
SHEET No:	7 OF 10

GENERAL NOTES

(The following apply unless shown otherwise on the plan)

1. **CODE REQUIREMENTS:**

ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE 2015 IBC, AND THE LATEST EDITION OF THE PTI DOCUMENT, "RECOMMENDATIONS FOR PRE-STRESSED ROCK AND SOIL ANCHORS".

2. **REFERENCE DOCUMENTS:**

TOPOGRAPHIC AND BOUNDARY SURVEY INFORMATION BY SCJ STUDIO.
REPORT ON GEOTECHNICAL INVESTIGATION BY EARTH SOLUTIONS NW, ES-6510 DATED 10-3-19.

3. **GENERAL REQUIREMENTS:**

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTOR'S WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL OR ACTUAL SUPERVISORY AUTHORITY 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 AT THE PROJECT SITE.

UTILITY LOCATION: THE SHORING CONTRACTOR SHALL DETERMINE THE HORIZONTAL AND VERTICAL LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRIVING PILES OR TIEBACK ANCHORS. THE UTILITIES INFORMATION SHOWN ON THE PLANS MAY NOT BE COMPLETE. THIS INCLUDES CALLING UTILITY LOCATE AT 1-800-424-5555 AND THEN POTHOLING ALL UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM DEPTHS AND LOCATIONS AND TO VERIFY THAT THERE ARE NO CONFLICTS WITH THE PILE AND TIEBACK CROSSING ELEVATIONS. PILES AND TIEBACKS SHALL MAINTAIN A MINIMUM OF 12" CLEARANCE TO ANY EXISTING UTILITIES TO REMAIN. CONTRACTOR SHALL RESOLVE ANY PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF EXISTING STRUCTURES IN THE FIELD AND SHALL NOTIFY THE ENGINEER OF ALL FIELD CHANGES PRIOR TO FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBER.

ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATIONS, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ENGINEER AND ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. SHOULD ANY DISCREPANCIES BE FOUND IN THE PROJECT DOCUMENTS, THE CONTRACTOR WILL BE DEEMED TO HAVE INCLUDED IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK, UNLESS PRIOR TO SUBMISSION OF THE PRICE THE CONTRACTOR ASKS FOR A DECISION FROM THE ENGINEER AND ARCHITECT AS TO WHICH SHALL GOVERN. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.

4. **GEOTECHNICAL INFORMATION AND CRITERIA:**

INSTALLATION OF PILES AND TIEBACKS, SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION AND FILLING REQUIREMENTS SHALL CONFORM WITH THE RECOMMENDATIONS CONTAINED IN THE SOILS REPORT AND/OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE SUBSURFACE CHARACTERIZATIONS USED TO DESIGN THE SHORING ARE CONTAINED IN THE SOILS REPORT AS REFERENCED ABOVE.

EXCAVATIONS FOR FOUNDATIONS SHALL BE PER PLAN DOWN PER THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS. OVER EXCAVATED AREAS SHALL BE BACKFILLED WITH LEAN CONCRETE OR PER GEOTECHNICAL RECOMMENDATIONS AT THE CONTRACTOR'S EXPENSE. EXCAVATION SLOPES SHALL BE SAFE AND SHALL NOT BE GREATER THAN THE LIMITS SPECIFIED BY LOCAL, STATE, AND NATIONAL SAFETY REGULATIONS. CONTRACTOR SHALL PROTECT CUT SLOPES AS NECESSARY IF CONSTRUCTION OCCURS DURING WET WEATHER, AND SHALL CONTROL AND MANAGE RUNOFF TO MINIMIZE EFFECTS ON CONSTRUCTION.

DESIGN LOADS ARE DETERMINED BY THE GEOTECHNICAL ENGINEER. THE SOIL PRESSURES INDICATED ON THE SOIL PRESSURE DIAGRAM WERE USED FOR DESIGN, IN ADDITION TO THE DEAD AND LIVE LOADS. SEE REPORT OF GEOTECHNICAL INVESTIGATION FOR MORE COMPLETE INFORMATION, INCLUDING RECOMMENDATIONS FOR PILES AND TIEBACKS IN GENERAL, MONITORING, EXCAVATION, AND DRAINAGE.

DESIGN PARAMETERS AS APPR0VED BY THE GEOTECHNICAL ENGINEER ARE AS FOLLOWS:

LATERAL EARTH PRESSURES (EQUIVALENT FLUID PRESSURE)	E.F.P.
ACTIVE EARTH PRESSURE (YIELDING)	35 PCF
ACTIVE EARTH PRESSURE WITH 3' WIDTH OF GEOFOAM	15 PCF
SEISMIC SURCHARGE PRESSURE (UNIFORM LOAD)	6H PSF
PASSIVE EARTH PRESSURE (4:1SLOPE/2:1SLOPE)	250 PCF/100 PCF
HELICAL ANCHORS: REFER SECTION ON HELICAL ANCHORS	
PILE CAPACITY: 2IN DIAMETER SCHEDULE 80 PIPE	3 TON

PILE AND TIEBACK DURATION: THE PILES AND TIEBACKS ARE PERMANENT.

PILES SHALL BE GALVANIZED

5. **SHOP DRAWINGS:**

SHOP DRAWINGS ARE REQUIRED FOR THE FOLLOWING ITEMS:

STRUCTURAL STEEL
MISCELLANEOUS METALS
HELICAL ANCHORS

CONTRACTOR SHALL ALSO COORDINATE APPROVED SHORING SUBMITTALS WITH BUILDING DEPARTMENT REQUIREMENTS.

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 STRUCTURAL DESIGN. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE DESIGN TEAM AND/OR THE OWNER'S REPRESENTATIVE. ELECTRONIC SUBMISSIONS MAY ALSO BE DEEMED TO MEET THE SUBMITTAL REQUIREMENTS NOTED ABOVE.

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.

6. **INSPECTIONS:**

THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL INSPECTIONS REQUIRED BY THE LOCAL BUILDING DEPARTMENT. IN ADDITION TO INSPECTIONS REQUIRED BY THE LOCAL BUILDING DEPARTMENT, THE OWNER OR A REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS FOR ITEMS NOTED IN THE SPECIFICATIONS AND IBC SECTIONS 108 AND 1704. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE STRUCTURAL ENGINEER IMMEDIATELY AND PRIOR TO COMPLETION OF THAT PHASE OF WORK.

SOILS INSPECTION: INSPECTION BY THE SOILS ENGINEER SHALL BE PERFORMED FOR PILE PLACEMENT, EXCAVATION, AND TIEBACK PLACING AND STRESSING. THE GEOTECHNICAL ENGINEER SHALL ALSO ADVISE ON WATER CONTROL AND SLAB ON GRADE CONSTRUCTION.

PILE AND ANCHOR INSTALLATION AS WELL AS REQUIRED TESTING SHALL BE PERFORMED UNDER DIRECT AND CONTINUOUS OBSERVATION OF THE GEOTECHNICAL SPECIAL INSPECTOR.

TESTING AND SPECIAL INSPECTION REPORTS ARE TO BE DISTRIBUTED TO THE ARCHITECT, OWNER, BUILDING DEPARTMENT AND STRUCTURAL ENGINEER WITHIN TWO WEEKS OF COMPLETION OF EACH PHASE OF WORK UNLESS DISCREPANCIES ARE NOT CORRECTED AS NOTED ABOVE.

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTIONS:

CONSTRUCTION TYPE	TYPE OF INSPECTION
CONCRETE CONSTRUCTION	PER TABLE 1704.4
STRUCTURAL STEEL FABRICATION AND ERECTION	PER TABLE 1704.3
DRIVEN PILE INSTALLATION	CONTINUOUS
TIEBACK CONSTRUCTION	CONTINUOUS
EXCAVATION AND GRADING	PERIODIC

PERIODIC INSPECTION ALLOWS INSPECTION AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS. CONTINUOUS SPECIAL INSPECTION REQUIRES THAT THE INSPECTOR BE ONSITE AT ALL TIMES THAT WORK REQUIRING SPECIAL INSPECTION IS PERFORMED.

7. **CONCRETE:**

CONCRETE CONSTRUCTION SHALL CONFORM TO ALL REQUIREMENTS OF IBC CHAPTER 19 AND THE ACI STANDARD 318-02 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 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 IBC SECTION 1904. DESIGN STRENGTH IS f'c = 2,500 PSI.

8. **REINFORCING STEEL** SHALL CONFORM TO ASTM A615, GRADE 60, FY = 60,000 PSI.

9. **STEEL:**

STEEL SPECIFICATIONS: DESIGN, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL, AISC 360 AND IBC SECTION 2205.

STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
OTHER SHAPES, PLATES, AND RODS	A36	36 KSI
PIPE COLUMNS	A53 (E OR S, GR.B)	35 KSI
CONNECTION BOLTS	A307	

ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND A.W.S. STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY A.W.S.) 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.

10. **HELICAL ANCHORS:**

HELICAL ANCHORS REMOVED FROM PLANS

11. **PROOF TESTS:**

ALL ANCHORS NOT PERFORMANCE TESTED SHALL BE INSTALLED TO 200 PERCENT OF THE DESIGN LOAD AS PERFORMED BY THE TORQUE METHOD WHEN APPROVED BY THE STRUCTURAL AND GEOTECHNICAL ENGINEERS.

12. **TORQUE METHOD INSTALLATION:**

ANCHORS INSTALLED BY THE TORQUE METHOD MUST FIRST MEET THE EMBEDMENT REQUIREMENTS NOTED ON THE STRUCTURAL DRAWINGS OR APPROVED BY BOTH THE STRUCTURAL AND GEOTECHNICAL ENGINEER IN WRITING. ONCE THE REQUIRED MINIMUM EMBEDMENT HAS BEEN MET, THE CONTRACTOR SHALL PROVIDE GAUGES OR SHEAR BOLTS TO DETERMINE THAT THE ANCHOR HAS BEEN TORQUED TO A MINIMUM OF 200 PERCENT OF THE DESIGN LOAD BASED ON THE EMPIRICAL RELATIONSHIP THAT THE 200 PERCENT LOAD MEASURED IN POUNDS IS APPROXIMATELY EQUAL TO 10 TIMES THE INSTALLATION TORQUE AS MEASURED IN FOOT POUNDS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE EXTENSIONS TO ADVANCE HELICALS DEEPER INTO THE SOILS UNTIL THE REQUIRED INSTALLATION TORQUE HAS BEEN MET. INSTALLATION SHALL BE CONDUCTED UNDER THE OBSERVATION OF THE GEOTECHNICAL SPECIAL INSPECTOR.

13. **PIN PILES:**

PIN PILES SHOWN ON THE PLAN SHALL BE 2" DIAMETER SCHEDULE 80 AND GALVANIZED. THE MAXIMUM CAPACITY OF 2" PILES SHALL BE 3 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 60 SECONDS DURING CONTINUOUS DRIVING OF A 90 LB JACK HAMMER UNDER THE FULL WEIGHT AND EFFORT OF THE OPERATOR OR THE CONVENTIONAL DRIVING OF A RHINO PD-140. PILES 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 IS REQUIRED.
TRUE DEPTH OF REFUSAL IS UNKNOWN. IF SHALLOW, PILES TO BE DRILLED, NOT DRIVEN. 3

14. **ANCHORAGE**

EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037. 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.

15. PILE TESTING

LOAD TESTS TO 200 PERCENT OF THE DESIGN CAPACITY ARE REQUIRED TO SUBSTANTIATE THE ALLOWABLE PILE LOAD. THE APPROPRIATE NUMBER OF LOAD TEST SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AT THE TIME THE CONTRACTOR AND INSTALLATION METHOD ARE CHOSEN. AS A MINIMUM, LOAD TESTS SHALL BE REQUIRED ON AT LEAST 3 PERCENT OF ALL PILES INSTALLED AT THE SITE, WITH A MINIMUM OF FIVE TESTS. ALL TESTS MUST CONFORM TO THE QUICKLOAD TEST METHOD ACCORDING TO THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) D-1143.

DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH ACI 315-99 AND 318-11. LAP ALL CONTINUOUS REINFORCEMENT 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS AND LAP 2'-0" MINIMUM.

16. DRIVEN PILE RECOMMENDATIONS

DUE TO THE PROXIMITY OF ADJACENT LOTS AND STRUCTURES, THE PILE INSTALLATION MONITORING PROGRAM SHOULD CONSIST OF OPTICAL SURVEYING DURING DRIVEN PILE INSTALLATION. A VIDEO SURVEY SHOULD BE PERFORMED PRIOR TO BEGINNING THE EXCAVATION TO DOCUMENT THE CURRENT CONDITIONS OF THE SURROUNDING FEATURES. INITIAL SURVEY POINTS SHOULD BE PLACED AT STRATEGIC LOCATIONS ALONG ADJACENT LOT ALIGNMENTS AND BUILDINGS THAT WILL ALLOW FOR PERIODIC MEASUREMENTS DURING AND AFTER DRIVEN PILE INSTALLATION. SUCH STRATEGIC PLACEMENT WILL ALLOW FOR EFFICIENT MONITORING OF THE SITE; EXCESSIVE DEFLECTIONS AND/OR EXCAVATION-RELATED MOVEMENTS CAN BE IDENTIFIED AND REMEDIATED, SHOULD THEY OCCUR.

VIBRATION MONITORING EQUIPMENT AND PLANS SHOULD ALSO BE ESTABLISHED PRIOR TO BEGINNING THE EXCAVATION AND DRIVEN PILE INSTALLATION, DUE TO THE PROXIMITY OF ADJACENT LOTS AND STRUCTURES. ESNW CAN FACILITATE COMPLETION OF A VIBRATION MONITORING PROGRAM, UPON REQUEST.

FOLLOWING INSTALLATION OF THE DRIVEN PILES, MONITORING POINTS SHOULD BE ESTABLISHED ON THE TOP OF EVERY THIRD PILE PRIOR TO PROCEEDING WITH THE EXCAVATION. INITIAL BASELINE READINGS OF THE SURVEY POINTS SHOULD BE ACQUIRED PRIOR TO PROCEEDING WITH THE EXCAVATION. READINGS SHOULD BE ACQUIRED TWICE WEEKLY DURING THE EXCAVATION PHASE OF CONSTRUCTION. READINGS MAY BE REDUCED TO ONCE WEEKLY AFTER THE EXCAVATION HAS BEEN COMPLETED AND IF THE MONITORING DATA INDICATES THE WALL SYSTEM IS STABLE. ESNW SHOULD REVIEW THE OPTICAL SURVEY DATA AS IT BECOMES AVAILABLE DURING CONSTRUCTION. THE MONITORING PROGRAM SHOULD BE SUPPLEMENTED WITH PERIODIC OBSERVATIONS BY ESNW REPRESENTATIVES DURING THE EXCAVATION PHASE OF CONSTRUCTION.

AN ESNW REPRESENTATIVE SHOULD OBSERVE TEMPORARY EXCAVATIONS TO VERIFY ADJACENT IMPROVEMENTS ARE NOT ADVERSELY AFFECTED. ESNW SHOULD ALSO OBSERVE INSTALLATION OF THE SHORING SYSTEM TO VERIFY ADEQUATE SOIL CONDITIONS, INSTALLATION METHODS, AND PIPE PILE REFUSAL.

IF MODIFIED INSTALLATION METHODS AND/OR EQUIPMENT ARE USED DURING CONSTRUCTION, ESNW SHOULD BE NOTIFIED TO REVIEW THESE RECOMMENDATIONS. TYPICALLY, PILES ARE ALTERNATIVELY DRIVEN WITH RESPECT TO OTHER PILES IN A ROW, SO THAT THE TEMPORARY LOSS OF SOIL STRENGTH DURING INSTALLATION, WHICH MAY AFFECT SUBSEQUENT PILE INSTALLATIONS, WILL BE MINIMAL. AN ESNW REPRESENTATIVE SHOULD OBSERVE THE PIPE PILE INSTALLATIONS TO VERIFY ACHIEVEMENT OF ADEQUATE REFUSAL CRITERIA.

3

Feb 16, 2021 1:55:16pm – User rebekah.rongo
N:\PROJECTS\2551 SARAH & AMIR BASTAWROUS\2551.01 THE MAPLE GROVE RESIDENCE\PHASE 03 – PERMIT ASSISTANCE\CAD\2551–LA3.1 DETAILS–MAPLE PERMIT.DWG

REVISIONS	DATE	BY
PERMIT PLAN	10/17/2019	KJ
PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

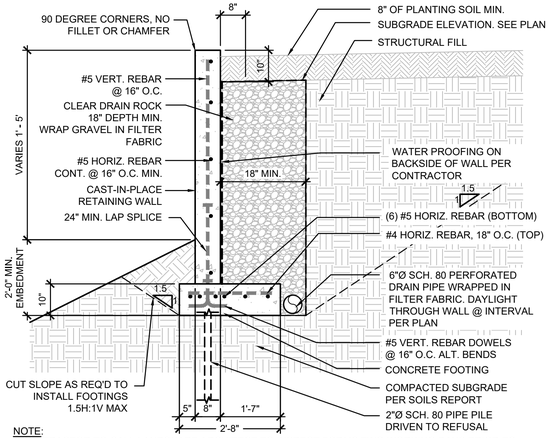
SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

SHEET TITLE: Structural Notes

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL: STATE OF WASHINGTON – MARK S. GARFF – LICENSED LANDSCAPE ARCHITECT – NO. 888 EXP. 01/05/21

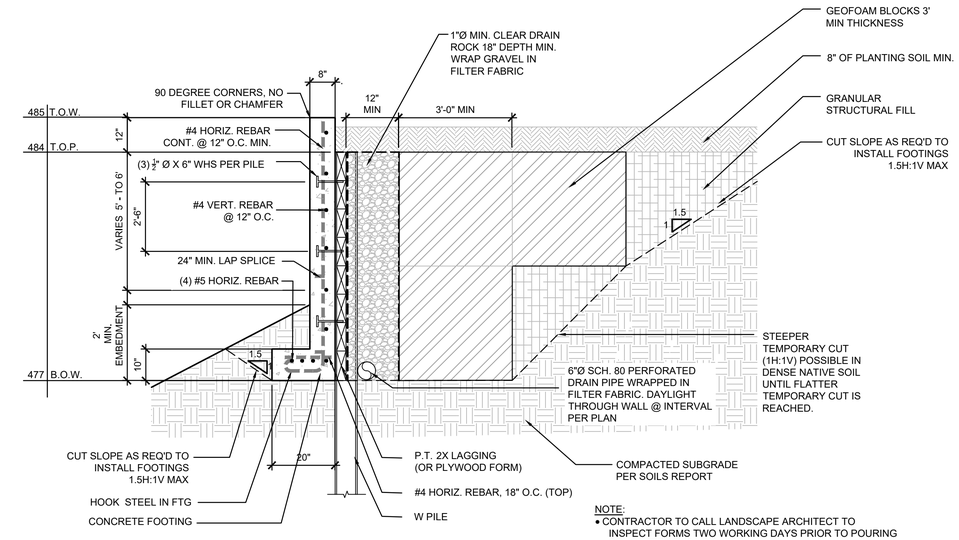
DESIGNER: KJ
DRAWN BY: KJ
APPROVED BY: MG
DATE: FEBRUARY 2021
JOB No: 2551
DRAWING FILE No:
DRAWING No: LA3.1
SHEET No: 8 OF 10



NOTE:
- CONTRACTOR TO CALL LANDSCAPE ARCHITECT TO INSPECT FORMS TWO WORKING DAYS PRIOR TO POURING CONCRETE AT 206.708.1862

1 CAST-IN-PLACE RETAINING WALL - WITH PIPE PILE

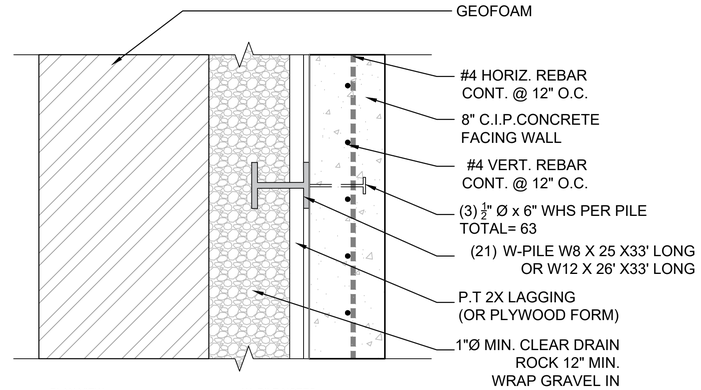
1/2" = 1'-0" P-RE-MAP1-01



NOTE:
- CONTRACTOR TO CALL LANDSCAPE ARCHITECT TO INSPECT FORMS TWO WORKING DAYS PRIOR TO POURING CONCRETE AT 206.708.1862

2 CAST-IN-PLACE RETAINING WALL - WITH W PILE

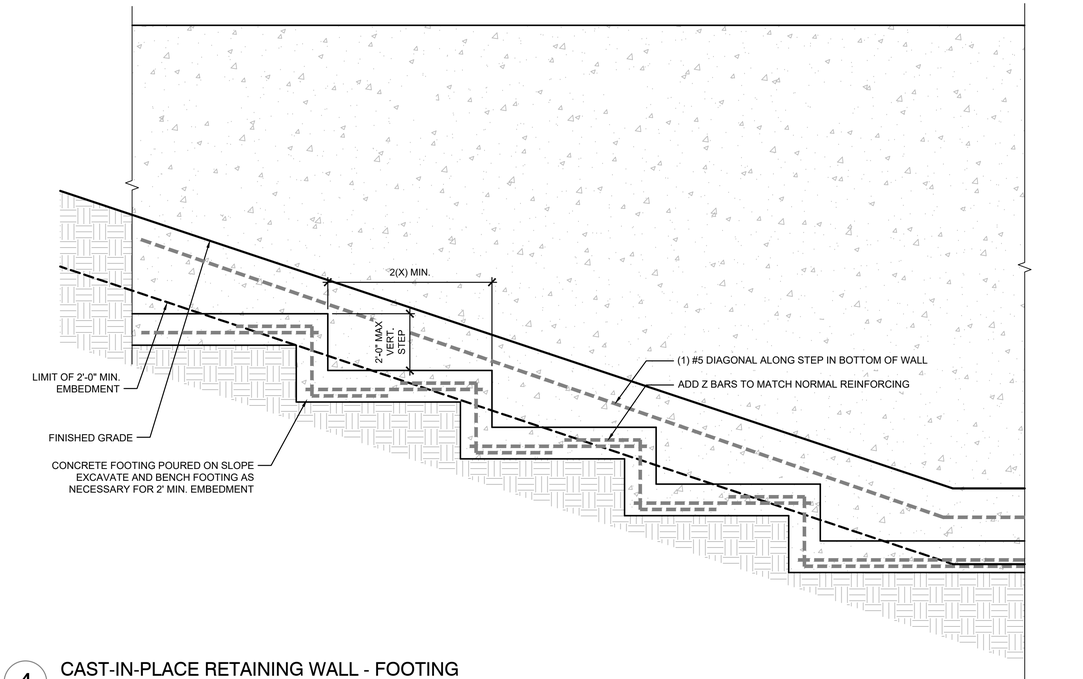
1/2" = 1'-0" P-RE-MAP1-03



W- PILE NOTES:
- STRUCTURAL ENGINEER TO PROVIDE WIDTH SPECIFICATIONS
- WHS TO BE SPACED 2'- 6" APART

3 W-PILE SHORING DETAIL

3/4" = 1'-0" P-RE-MAP1-15



4 CAST-IN-PLACE RETAINING WALL - FOOTING

1/2" = 1'-0" P-RE-MAP1-05

REVISIONS	DATE	BY
PERMIT PLAN	10/17/2019	KJ
PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

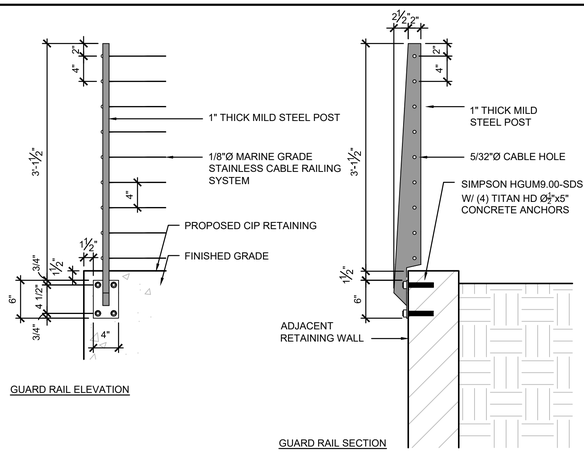
SHEET TITLE: Structural Details

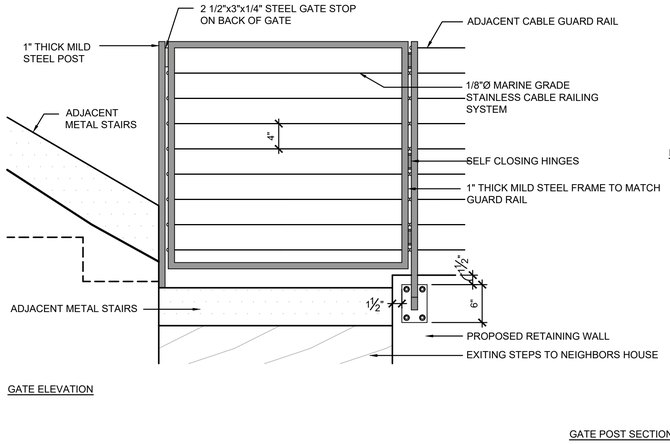
PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

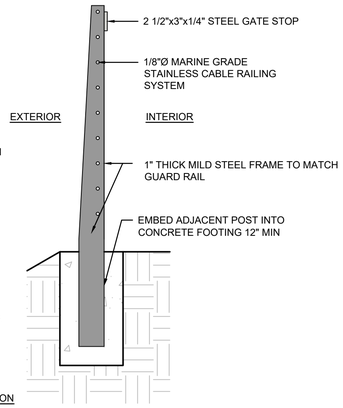
SEAL:

STATE OF WASHINGTON · MARK S. GARFF · No. 988 EXP. 01/05/21 · LICENSED LANDSCAPE ARCHITECT

DESIGNER:	KJ
DRAWN BY:	KJ
APPROVED BY:	MG
DATE:	FEBRUARY 2021
JOB No:	2551
DRAWING FILE No:	
DRAWING No:	LA3.2
SHEET No:	9 OF 10



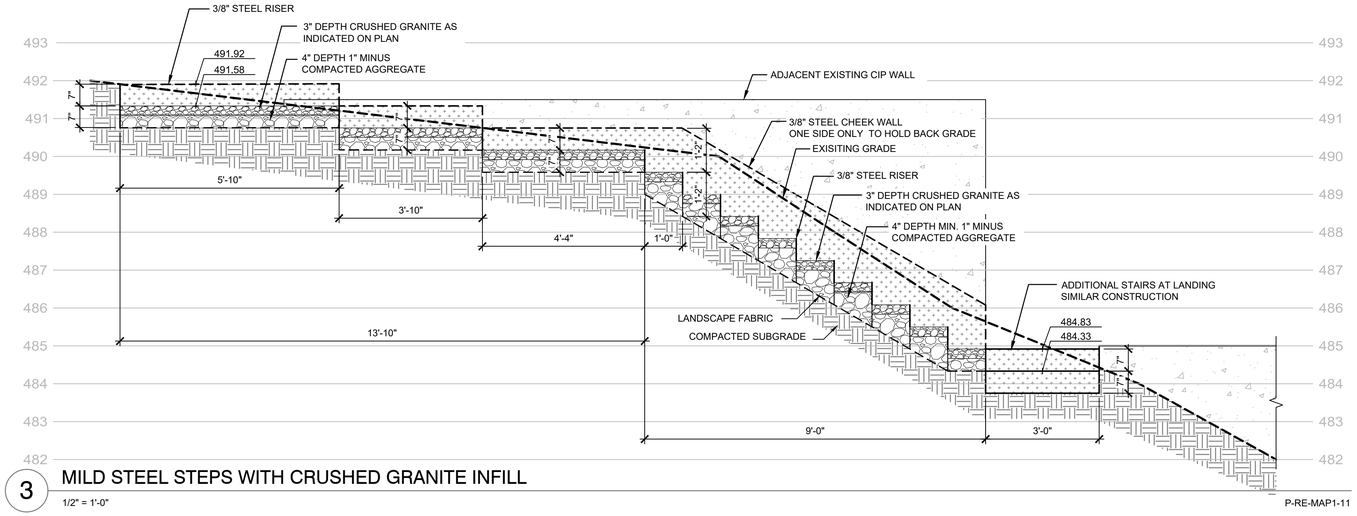




1 CABLE GUARD RAIL AND GATE

1" = 1'-0"

P-RE-MAP1-12



3 MILD STEEL STEPS WITH CRUSHED GRANITE INFILL

1/2" = 1'-0"

P-RE-MAP1-11

REVISIONS	DATE	BY
PERMIT PLAN	10/17/2019	KJ
PERMIT PLAN - SECOND SUBMITTAL	11/23/2020	RR
PERMIT PLAN - THIRD SUBMITTAL	2/16/2021	RR

SCJ STUDIO
LANDSCAPE ARCHITECTURE
1148 NW LEARY WAY, SEATTLE, WA 98107
P: 206-708-1862
SCJSTUDIOLA.COM

SHEET TITLE: Permit Details

PROJECT NAME: Maple Grove Residence
4909 E. Mercer Way
Mercer Island, WA 98040

SEAL:

STATE OF WASHINGTON
MARK S. GARFF
LICENSED LANDSCAPE ARCHITECT
NO. 888 EXP. 01/05/21

DESIGNER:	KJ
DRAWN BY:	KJ
APPROVED BY:	MG
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