MERCER LAKEHOUSE PERMIT PLAN SET

6236 SE 22ND ST, MERCER ISLAND, WA 98040

PARCEL NUMBERS 544230-0796 AND 544230-0765

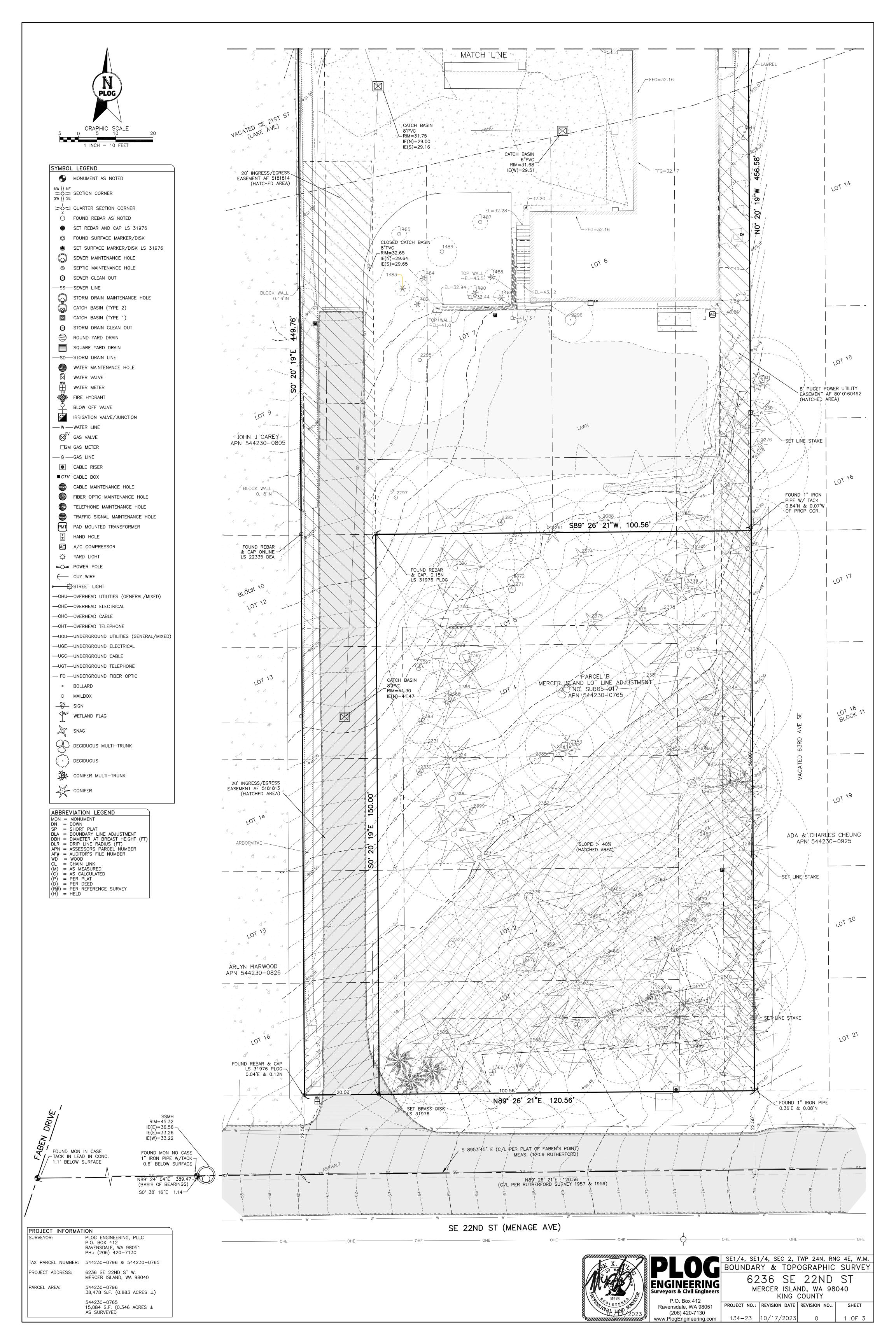
PROJECT NARRATIVE

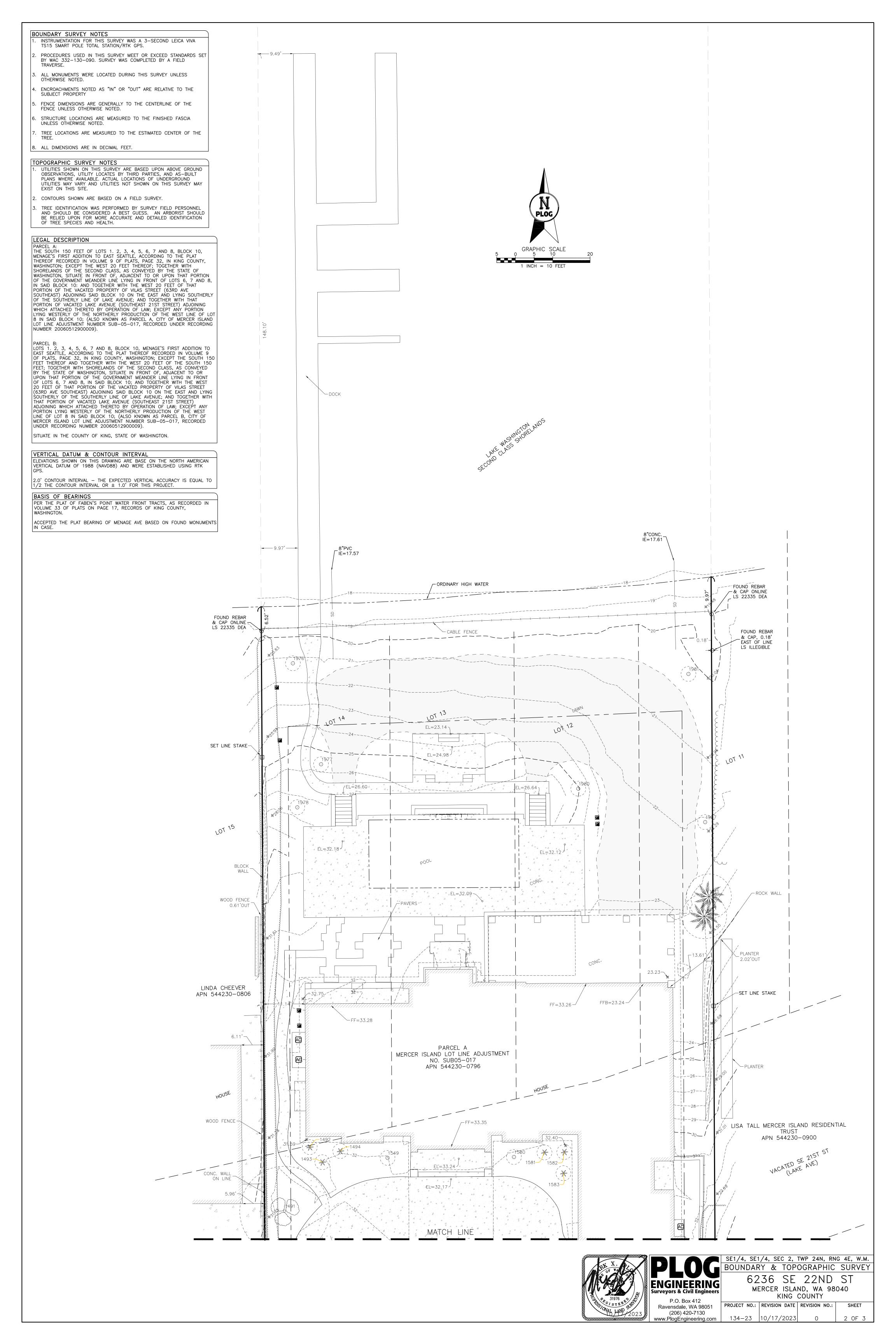
The project will consist of the following:

- •Lot consolidation of parcels 544230-0796 and 544230-0765 underway per existing permit #SUB24-001
- •Driveway realignment with associated landscaping improvements
- New sport court with associated retaining wall addition
- Site drainage improvements
- •New 6' high chain-link fence around property
- •New automatic driveway gate, 6' tall, not within front yard setback

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MERCER LAKEHOUSE MERCER ISLAND, WASHINGTON

LEGEND



LEGAL DESCRIPTION

THE SOUTH 150 FEET OF LOTS 1. 2, 3, 4, 5. 6. 7 AND 8. BLOCK 10. MENAGE'S FIRST ADDITION TO EAST SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 9 OF PLATS, PAGE 32, IN KING COUNTY, WASHINGTON; EXCEPT THE WEST 20 FEET THEREOF; TOGETHER WITH SHORELANDS OF THE SECOND CLASS, AS CONVEYED BY THE STATE OF WASHINGTON, SITUATE IN FRONT OF, ADJACENT TO OR UPON THAT PORTION OF THE GOVERNMENT MEANDER LINE LYING IN FRONT OF LOTS 6, 7 AND 8, IN SAID BLOCK 10: AND TOGETHER WITH THE WEST 20 FEET OF THAT PORTION OF THE VACATED PROPERTY OF VILAS STREET (63RD AVE SOUTHEAST) ADJOINING SAID BLOCK 10 ON THE EAST AND LYING SOUTHERLY OF THE SOUTHERLY LINE OF LAKE AVENUE; AND TOGETHER WITH THAT PORTION OF VACATED LAKE AVENUE (SOUTHEAST 21ST STREET) ADJOINING WHICH ATTACHED THERETO BY OPERATION OF LAW: EXCEPT ANY PORTION LYING WESTERLY OF THE NORTHERLY PRODUCTION OF THE WEST LINE OF LOT 8 IN SAID BLOCK 10; (ALSO KNOWN AS PARCEL A, CITY OF MERCER ISLAND LOT LINE ADJUSTMENT NUMBER SUB-05-017, RECORDED UNDER RECORDING NUMBER

LOTS 1. 2, 3, 4, 5, 6, 7 AND 8, BLOCK 10, MENAGE'S FIRST ADDITION TO EAST SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 9 OF PLATS, PAGE 32, IN KING COUNTY, WASHINGTON; EXCEPT THE SOUTH 150 FEET THEREOF AND TOGETHER WITH THE WEST 20 FEET OF THE SOUTH 150 FEET; TOGETHER WITH SHORELANDS OF THE SECOND CLASS, AS CONVEYED BY THE STATE OF WASHINGTON, SITUATE IN FRONT OF, ADJACENT TO OR UPON THAT PORTION OF THE GOVERNMENT MEANDER LINE LYING IN FRONT OF LOTS 6, 7 AND 8, IN SAID BLOCK 10; AND TOGETHER WITH THE WEST 20 FEET OF THAT PORTION OF THE VACATED PROPERTY OF VILAS STREET (63RD AVE SOUTHEAST) ADJOINING SAID BLOCK 10 ON THE EAST AND LYING SOUTHERLY OF THE SOUTHERLY LINE OF LAKE AVENUE; AND TOGETHER WITH THAT PORTION OF VACATED LAKE AVENUE (SOUTHEAST 21ST STREET) ADJOINING WHICH ATTACHED THERETO BY OPERATION OF LAW; EXCEPT ANY PORTION LYING WESTERLY OF THE NORTHERLY PRODUCTION OF THE WEST LINE OF LOT 8 IN SAID BLOCK 10; (ALSO KNOWN AS PARCEL B, CITY OF MERCER ISLAND LOT LINE ADJUSTMENT NUMBER SUB-05-017, RECORDED UNDER RECORDING NUMBER 20060512900009).

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

PER THE PLAT OF FABEN'S POINT WATER FRONT TRACTS. AS RECORDED IN VOLUME 33 OF PLATS ON PAGE 17, RECORDS OF KING COUNTY, WASHINGTON.

ACCEPTED THE PLAT BEARING OF MENAGE AVE BASED ON FOUND MONUMENTS IN

VERTICAL DATUM - BASIS OF ELEVATION

CONTRACTOR NOTE

ALL EXISTING UTILITIES SHOWN ON PLANS ARE TO BE VERIFIED

HORIZONTALLY AND VERTICALLY PRIOR TO ANY CONSTRUCTION.

ALL EXISTING FEATURES INCLUDING BURIED UTILITIES ARE

FURNISHED BY OTHERS. WE ASSUME NO LIABILITY FOR THE

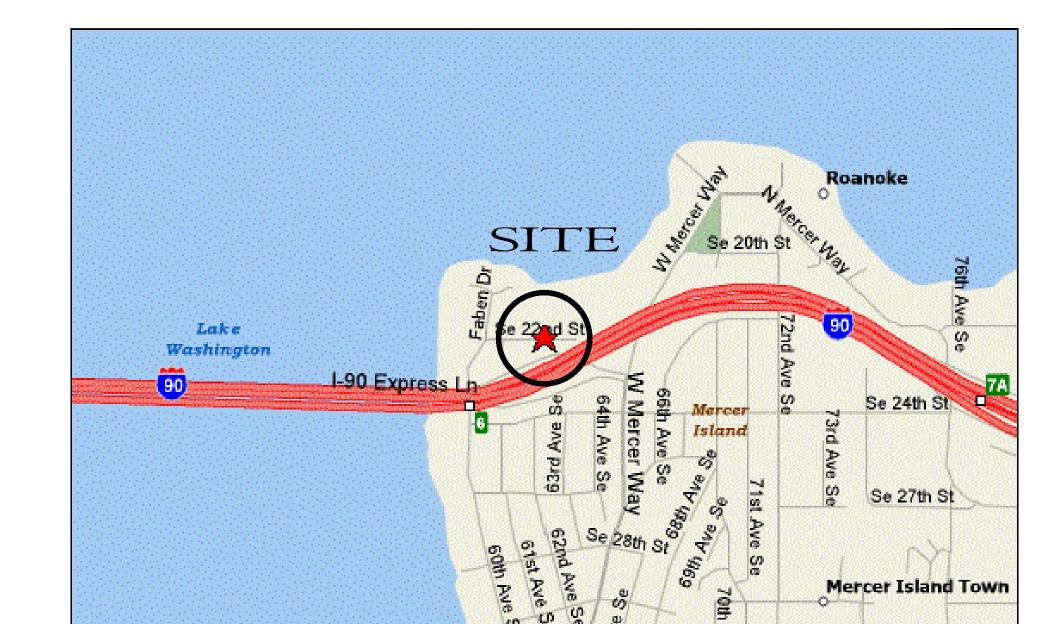
ACCURACY OF THOSE RECORDS AND SURVEY, FOR THE FINAL

SHOWN AS INDICATED ON RECORD MAPS AND SURVEY

LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO

CONSTRUCTION CONTACT THE UTILITY OWNER/AGENCY.

ELEVATIONS SHOWN ON THIS DRAWING ARE BASE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND WERE ESTABLISHED USING RTK GPS.





SCALE: N.T.S.

APPLICANT

DEFOREST ARCHITECTS, PLLC 1148 LEARY WY NW SEATTLE, WA 98107 (206) 258-5233 CONTACT: RILEY COGHLAN

ARCHITECT

DEFOREST ARCHITECTS, PLLC 1148 LEARY WY NW SEATTLE, WA 98107 (206) 258-5233 CONTACT: RILEY COGHLAN

LANDSCAPE ARCHITECT

ANNE JAMES LANDSCAPE ARCHITECTURE LLC 24539 NE 11TH ST. REDMOND, WA 98074 (425) 894-9857 CONTACT: ANNE JAMES

CIVIL ENGINEER

DCI ENGINEERS 818 STEWART STREET, SUITE 1000 SEATTLE, WA 98101 (206) 787-8940 CONTACT: MATTHEW FRISBY

GEOTECHNICAL ENGINEER

GEOTECH CONSULTANTS, INC. 2401 10TH AVE EAST SEATTLE, WA 98102 (425) 260-1116 CONTACT: MARC R. MCGINNIS

SURVEYOR

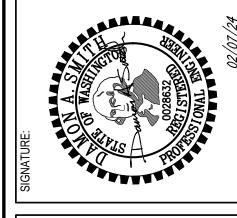
PLOG ENGINEERING P.O. BOX 412 RAVENSDALE, WA 98051 (206) 420 - 7130CONTACT: MARK PLOG

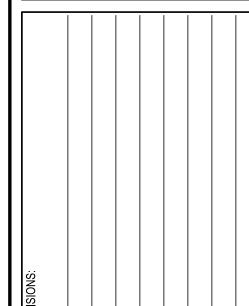
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	TITLE SHEET AND VICINITY MAP	C001
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	T.E.S.C. & DEMOLITION NOTES AND DETAILS	C101
	GRADING AND DRAINAGE PLAN	C200
	GRADING AND DRAINAGE PROFILE	C201
	GRADING AND DRAINAGE DETAILS	C202
	GRADING AND DRAINAGE DETAILS	C202

Know what's below. Call before you dig.





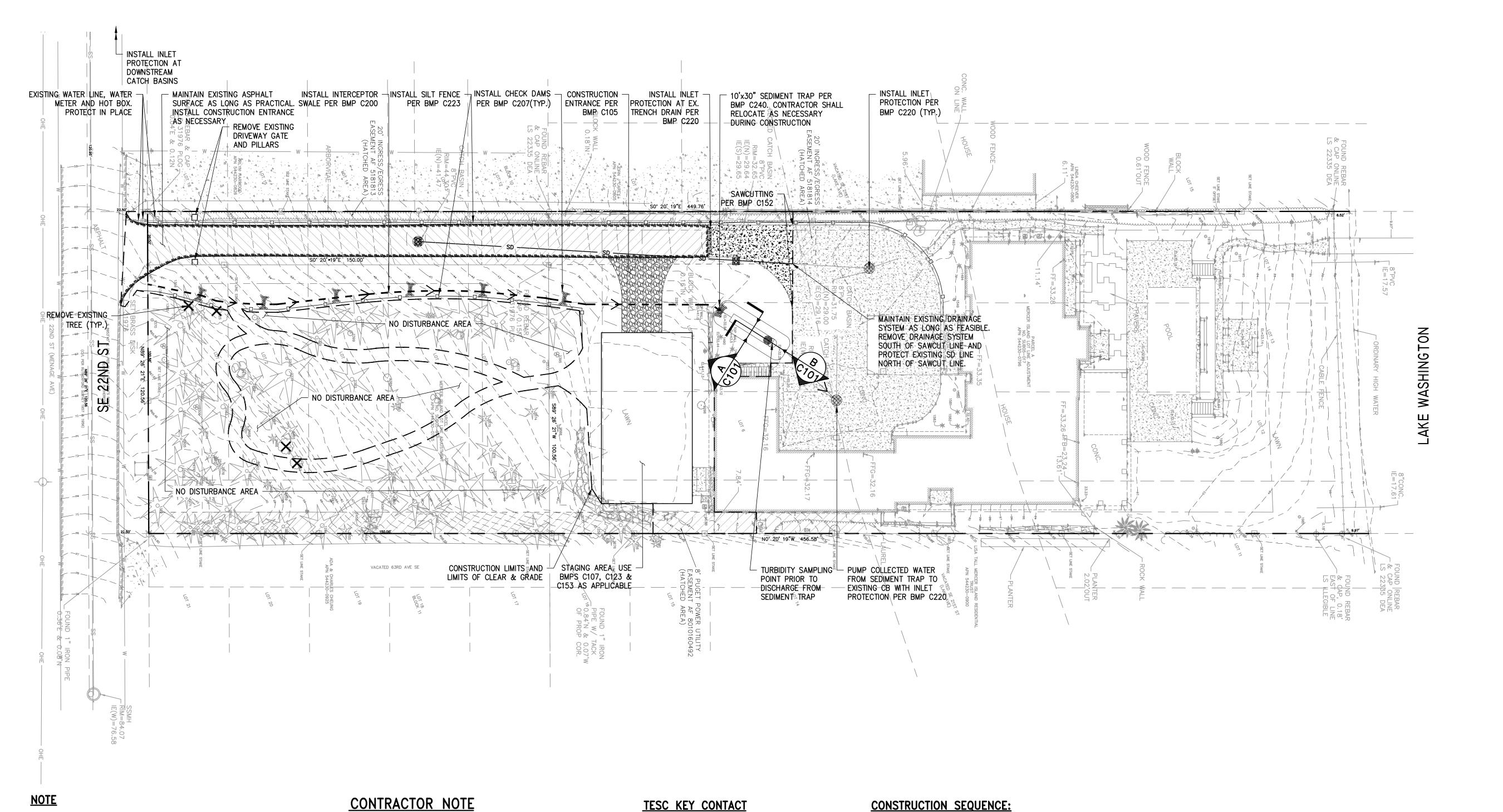


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COVER SHEET

C-001

CONIFER



THE TESC MEASURES SHOWN ON THIS SHEET ARE CONCEPTUAL IN NATURE AND ARE INTENDED TO CONTAIN ANY SURFACE WATER OR SPILL FROM LEAVING THE SITE. THE CONTRACTOR MAY AMEND, ADD, REMOVE, ETC. SPECIFIC ITEMS ACCORDING TO THE PROJECT'S CSWPPP REQUIREMENTS. AS THE PROJECT PROGRESSES THE CONTRACTOR SHALL CONTINUALLY UPDATE THE TESC MEASURES AND BMPS TO ENSURE COMPLIANCE WITH THE PROJECTS CSWPPP AND TURBIDITY DISCHARGE REQUIREMENTS.

ALL CATCH BASIN INLETS IN PLACE AT TIME OF DEMO SHALL HAVE INLET PROTECTION, TYP.

CONTRACTOR SHALL USE DUST CONTROL BMP C140 AS APPLICABLE FOR CONSTRUCTION DURING THE DRY SEASON.

CONTRACTOR NOTE

ALL EXISTING UTILITIES SHOWN ON PLANS ARE TO BE VERIFIED HORIZONTALLY PROVIDE AT PRECON AND VERTICALLY PRIOR TO ANY CONSTRUCTION. ALL EXISTING FEATURES INCLUDING BURIED UTILITIES ARE SHOWN AS INDICATED ON RECORD MAPS AND SURVEY FURNISHED BY OTHERS. WE ASSUME NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS AND SURVEY. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO CONSTRUCTION, CONTACT THE UTILITY OWNER/AGENCY.

AREA OF DISTRUBANCE

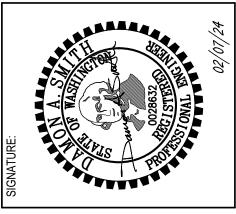
15,000± SF (0.34 AC)

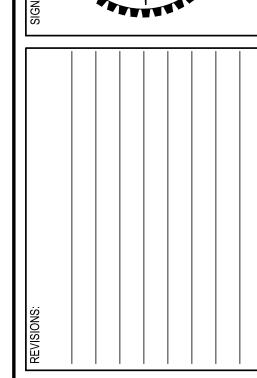
CONSTRUCTION SEQUENCE:

SEE CSWPP FOR MORE DETAILED SCHEDULE.

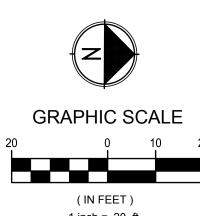
1.	PRECON WITH CITY OF MERCER ISLAND:	JUN. 2024
2.	MOBLIZATION:	JUN. 2024
3.	INSTALL TESC MEASURES:	JUN. 2024
4.	EARTH WORK:	JUL. 2024
5.	STORM UTILITY EXTENSION:	JUL. 2024
6.	DEMOLISH EXISTING DRIVEWAY	JUL. 2024
7.	INSTALL NEW DRIVEWAY	JUL. 2024
8.	LANDSCAPING/FINAL STABILIZATION:	JUL. 2024
9.	FINAL INSPECTIONS:	JUL. 2024
10.	PROJECT COMPLETE:	AUG.2024







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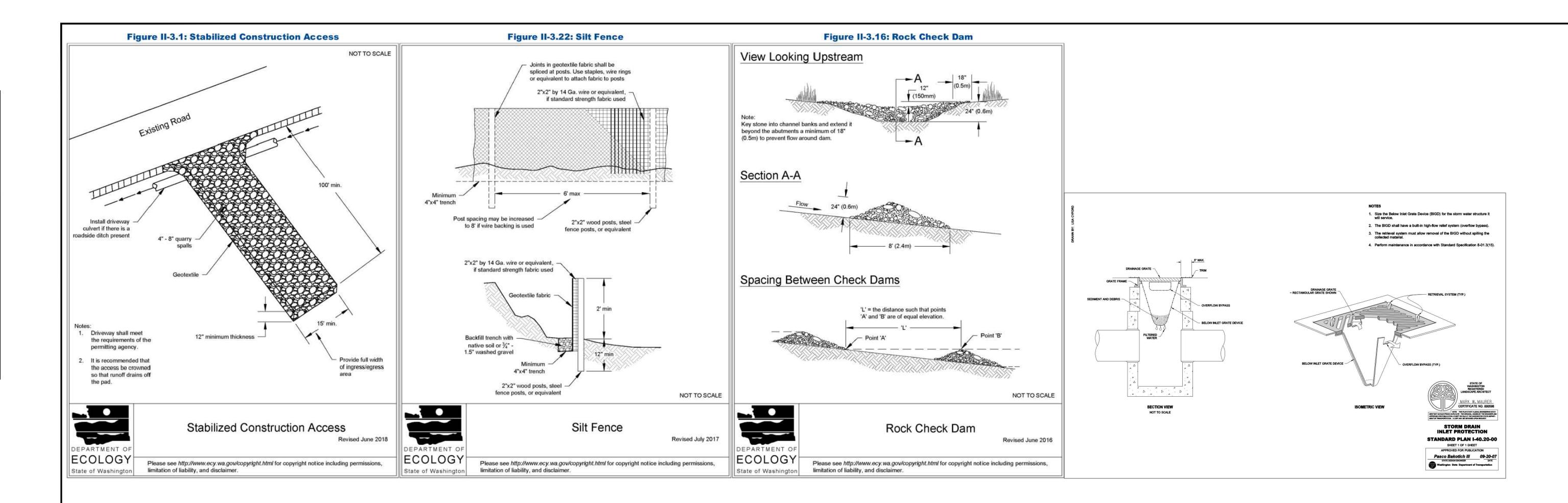






T.E.S.C & DEMO PLAN

C-100



PER PLAN

55 GAL. PERORATED —

BOTTOM OF SUMP ELEVATION PER PLAN - CONTRACTOR TO PROVIDE 3" PIPE

ROUTING & CONNECTION DETAILS

(5.) PLACE PUMP AND APPURTENANCES IN CENTER OF SUMP.

(1.) PUMP CLEAN WATER TO APPROVED DISCHARGE LOCATION.

(5.) PLACE PUMP AND APPURTENANCES IN CENTER OF TRAP.

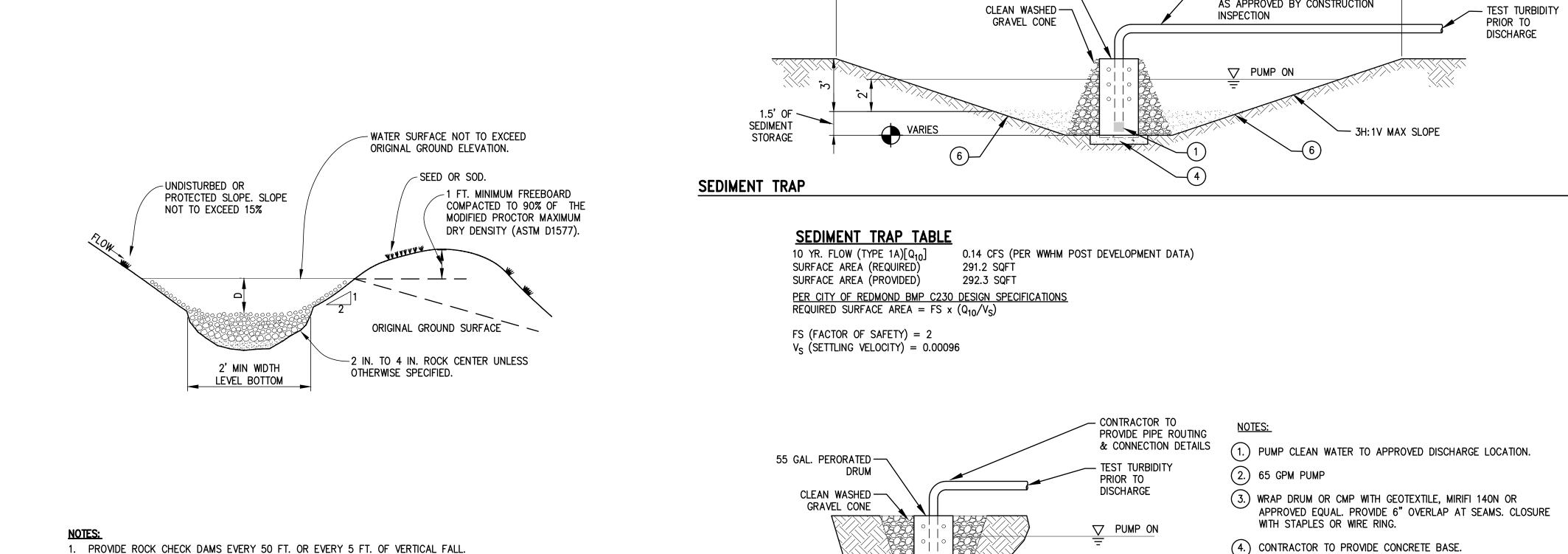
(6.) IMPERMEABLE GEOTEXTILE AT BASE OF SEDIMENT TRAP.

4.) CONTRACTOR TO PROVIDE CONCRETE BASE.

3.) WRAP DRUM WITH GEOTEXTILE, MIRIFI 100X OR APPROVED EQUAL.

PROVIDE 6" OVERLAP AT SEAMS. CLOSURE WITH STAPLES OR

2.) SIZE PER PLAN



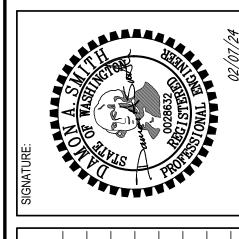
SUMP WITH PUMP

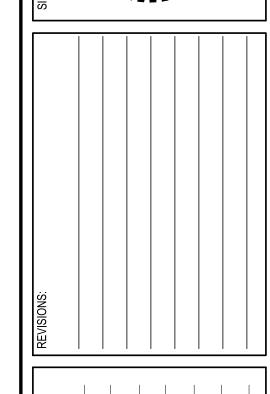
SCALE: NONE

SCALE : NTS

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T.E.S.C. DETAILS

C-101

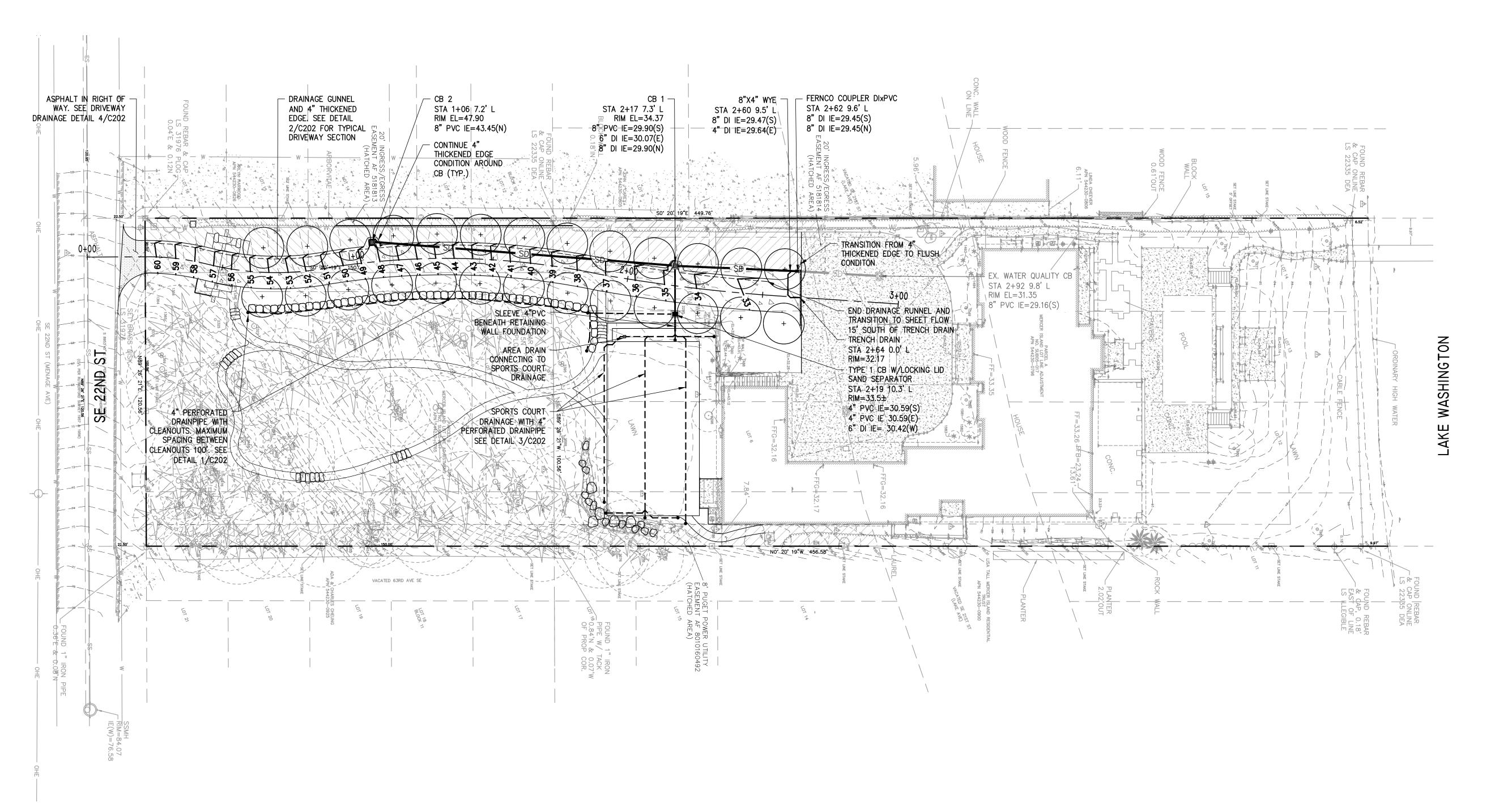
1. PROVIDE ROCK CHECK DAMS EVERY 50 FT. OR EVERY 5 FT. OF VERTICAL FALL.

3. OUTLET SHALL CONSIST OF RIPRAP DISCHARGING TO STABILIZED OUTLET, SEDIMENT

2. DIMENSIONS: 1 FT. MINIMUM DEPTH (D) BY 2 FT. MINIMUM BOTTOM WIDTH.

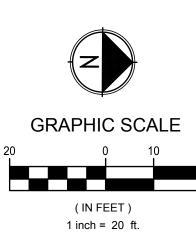
POND OR LEVEL SPREADER.

TEMPORARY INTERCEPTOR SWALE



STORM DRAINAGE GENERAL NOTES:

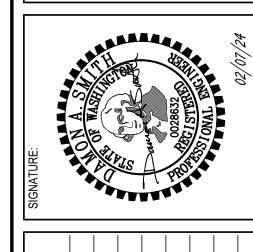
- 1. ALL WORK SHALL CONFORM TO THE CURRENT CITY OF MERCER ISLAND UTILITY STANDARDS.
- 2. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- 3. THE FOOTING DRAINAGE SYSTEM AND THE ROOF DOWNSPOUT SYSTEM SHALL NOT BE INTERCONNECTED UNLESS SUCH CONNECTION IS AT LEAST 1 FOOT BELOW THE FOOTING DRAINAGE SYSTEM AND DOWN SLOPE OF THE BUILDING FOUNDATION.
- 4. PROVIDE AND MAINTAIN TEMPORARY SEDIMENTATION COLLECTION FACILITIES TO ENSURE THAT SEDIMENT OR OTHER HAZARDOUS MATERIALS DO NOT ENTER THE STORM DRAINAGE SYSTEM.
- 5. PRIOR TO FINAL INSPECTION AND ACCEPTANCE OF STORM DRAINAGE WORK, PIPES AND STORM DRAIN STRUCTURES SHALL BE CLEANED AND FLUSHED. ANY OBSTRUCTIONS TO FLOW WITHIN THE STORM DRAIN SYSTEM, (SUCH AS RUBBLE, MORTAR AND WEDGED DEBRIS), SHALL BE REMOVED AT THE NEAREST STRUCTURE. WASH WATER OF ANY SORT SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM OR SURFACE WATERS.
- 6. ENDS OF EACH STORM DRAIN STUB AT THE PROPERTY LINE SHALL BE CAPPED AND LOCATED WITH AND 8' LONG 2"x4" BOARD, EMBEDDED TO THE STUB CAP AND EXTENDING AT LEAST 3 FEET ABOVE GRADE, AND MARKED PERMANENTLY "STORM". A COPPER 12. GA. LOCATED WIRE FIRMLY ATTACHED. THE STUB DEPTH SHALL BE INDICATED ON THE MARKER.
- 7. ALL GRATES IN ROADWAYS AND DRIVEWAYS SHALL BE CAPABLE OF SUPPORTING HS20 TRUCK LOADING. CONFIRM GRATE TYPE WITH ARCHITECT BEFORE INSTALLATION.





REPARED BY:

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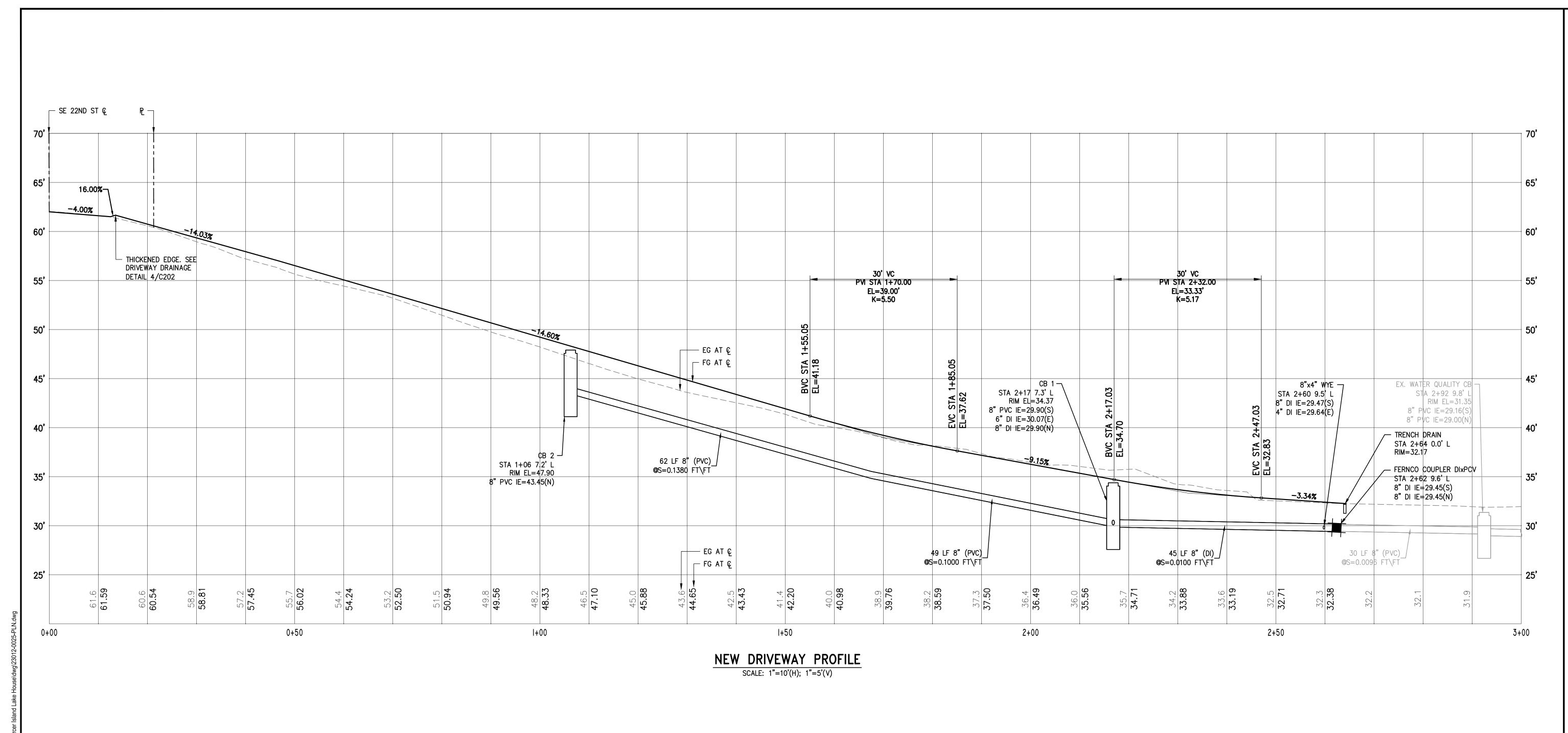
hecked: MJF

6236 SE 22ND ST MERCER ISLAND, WA 98040

HEET TITLE:

GRADING & DRAINAGE
PLAN

C-200



(IN FEET) 1 inch = 20 ft.



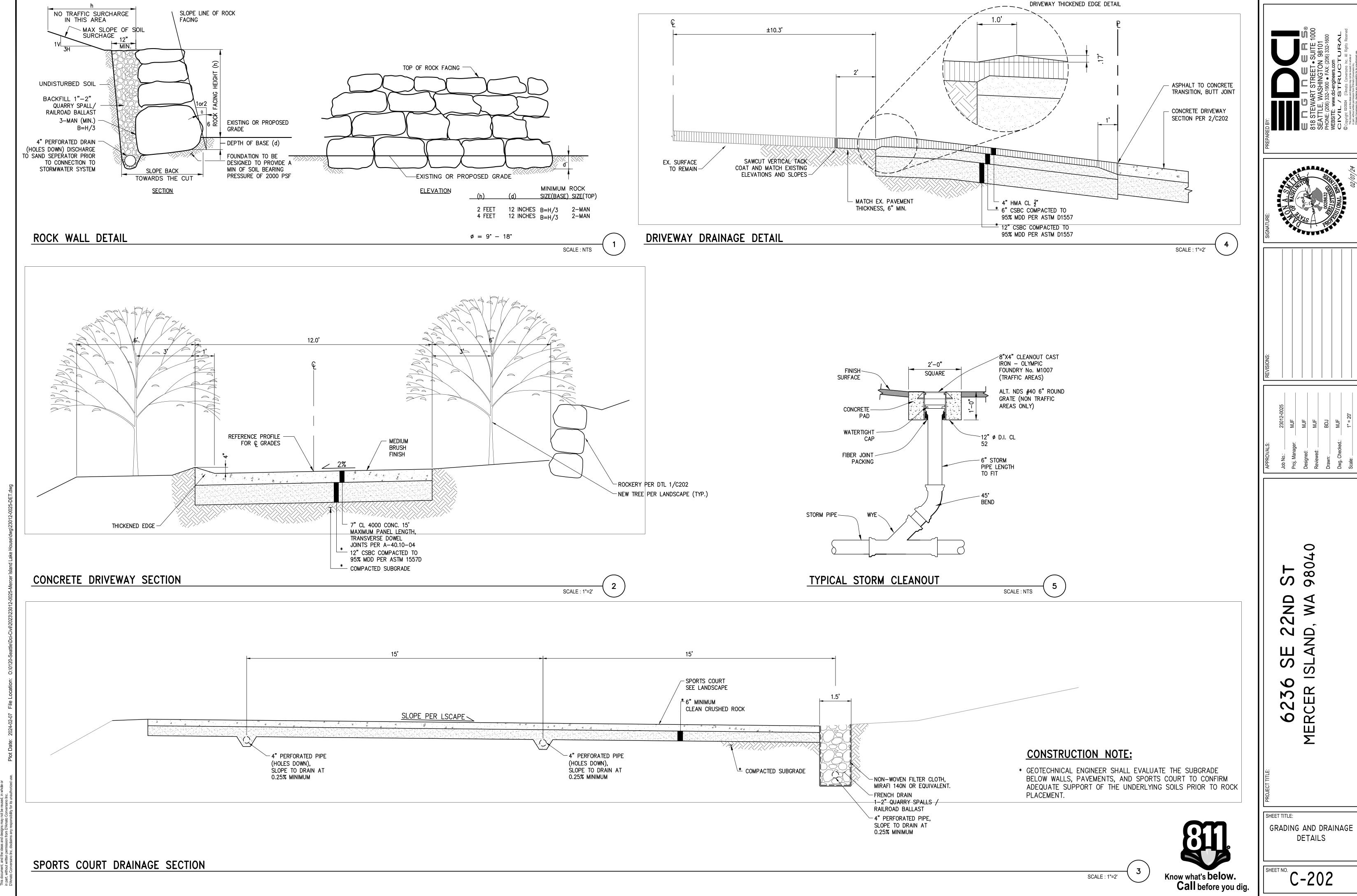
ST 98040 22ND ND, WA 6236 MERCER

GRADING & DRAINAGE PROFILE

C-201

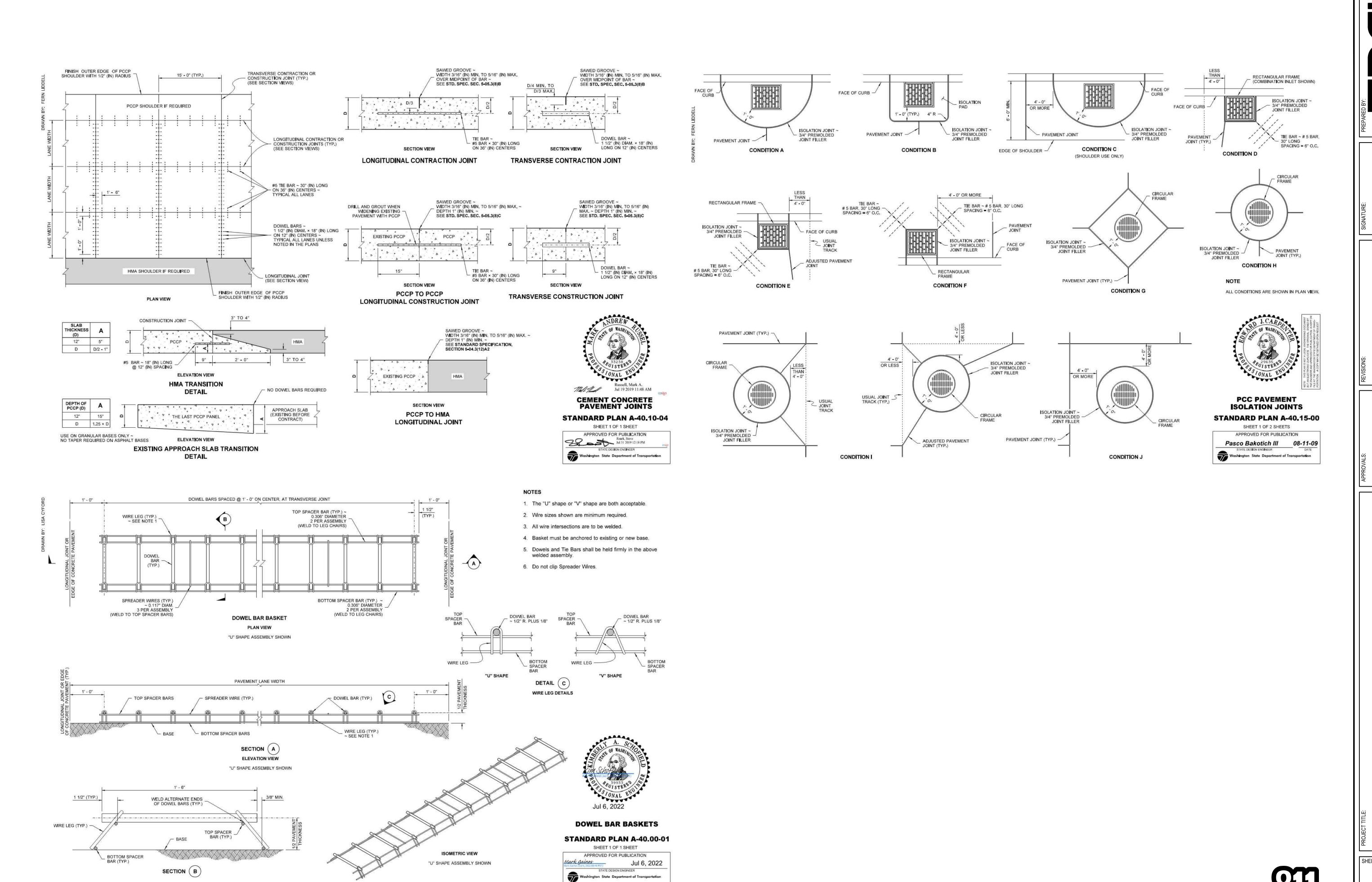
Plotted By: Matthew Frisby

SECTION 02, TOWNSHIP 24 NORTH, RANGE 04 EAST, W.M.



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80 0 Q **>** 9 9 М PAVING DETAILS Know what's below. Call before you dig. SECTION 02, TOWNSHIP 24 NORTH, RANGE 04 EAST, W.M.

ARREA.

Plotted By: Matthew Frisby

TREE RETENTION AND REMOVAL LEGEND

—— — PROPERTY LINE ---- FRONT AND SIDE YARD SETBACK STEEP SLOPE SETBACK ———— CHAIN LINK TREE PROTECTION FENCING PER MICC 19.10; FENCING TO BE INSPECTED BY THE PROJECT ARBORIST PRIOR TO COMMENCING WORK TREE TO REMAIN, REF ARBORIST REPORT FOR TREES INVENTORIED DRIPLINE ARBORIST INVENTORIED TREE RECOMMENDED

LIMIT OF DISTURBANCE (RLOD) ARBORIST INVENTORIED TREE MIN LIMIT OF DISTURBANCE (MLOD) ARBORIST INVENTORIED TREE ID SURVEY TREE NOT REGULATED — EXCEPTIONAL TREE 24" DSH OR GREATER

TREE TO BE REMOVED, SEE TREE REPLACEMENT PLANTING PLAN FOR TREE REPLACEMENT INFORMATION

TREE PROTECTION AND SITE PREPARATION NOTES

- LANDSCAPE DOCUMENTS ARE BASED ON A SURVEY BY PLOG ENGINEERING DATED 10/17/2023, AND BY FIELD OBSERVATIONS. CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO BEGINNING WORK. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IDENTIFIED ON SITE RELATED TO SURVEY INFORMATION PRIOR TO INSTALLATION.
- 2. TREE INFORMATION PROVIDED IN THIS PLAN IS BASED ON A REPORT BY TREE SOLUTIONS CONSULTING ARBORIST, DATED JANUARY
- ALL TREES INDICATED WITH ARBORIST INVENTORIED TREE ID ARE NOTED BY THE ARBORIST TO BE "REGULATED TREES" PER CITY OF MERCER ISLAND MUNICIPAL CODE. GROVE TREES ARE ALSO CONSIDERED "EXCEPTIONAL"
- TREES INDICATED AS "NR" ARE NOTED BY THE ARBORIST AS "SURVEYED TREE UNREGULATED". 5. ALL EXISTING TREES AND SHRUBS ON THE PROPERTY ARE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION, UNLESS OTHERWISE NOTED.
- CLEAR AND GRUB INVASIVE SPECIES, HAND TOOLS ONLY WITHIN TREE PROTECTION ZONES (TPZ).
- TREE PROTECTION FENCING: INSTALL TREE PROTECTION FENCING IN LOCATIONS INDICATED ON PLAN. ARBORIST TO INSPECT TREE PROTECTION FENCING PRIOR TO COMMENCING WORK.
- RESTRICTED ACTIVITIES IN TREE PROTECTION AREAS: CONSTRUCTION TRAILERS, TRAFFIC AND STORAGE AREAS SHALL REMAIN OUTSIDE THE FENCED AREAS AT ALL TIMES. NO EXCAVATION, GRADING, MATERIALS STORAGE, EQUIPMENT, SPOIL, WASTE OR WASHOUT/WASTEWATER (I.E., CEMENT, PAINT) MAY BE STORED, DEPOSITED, OR PARKED WITHIN THE TREE PROTECTION ZONE (FENCED AREA) AT ANY TIME. NO MACHINE / VEHICLE ACCESS IS PERMITTED. EXEMPTIONS MAY BE MADE BY THE LA TO STORE MATERIALS ON EXISTING PAVED AREAS UNDER TREES.
- 9. TEMPORARY ACCESS TO ROOT ZONES: WHERE CONSTRUCTION OPERATIONS UNAVOIDABLY REQUIRE TEMPORARY ACCESS OVER TREE ROOT ZONES OR OTHER SOIL PROTECTION AREAS, PROVIDE PROTECTION AS FOLLOWS: FOR FOOT ACCESS OR SIMILAR LIGHT SURFACE IMPACTS, APPLY A 6" LAYER OF ARBORIST WOOD CHIPS MULCH AND WATER REGULARLY TO MAINTAIN MOISTURE, CONTROL EROSION AND PROTECT ROOTS. UNDER NO CIRCUMSTANCES SHOULD MACHINERY BE USED TO EXCAVATE, GRADE OR TRANSPORT MATERIALS WITHIN THE TPZ.
- 10. PROTECTION FROM EQUIPMENT STABILIZERS: STEEL PLANKING, OR TIMBER PLANKING MADE OF 4-INCH THICK MATERIAL, EACH PLANK COVERING A MINIMUM OF 8 SQUARE FEET, SHALL BE USED TO SUPPORT BACKHOE/EQUIPMENT STABILIZERS WHEN SET WITHIN THE DRIP-LINE OF A TREE.
- 11. PRUNING: ALL EFFORTS SHALL BE MADE TO AVOID CONFLICTS WITH TREE LIMBS BY TEMPORARILY TYING UP LOW LIMBS IN THE WAY OF THE WORK. WHEN THE CONTRACTOR ANTICIPATES CONSTRUCTION OPERATIONS THAT WILL UNAVOIDABLY AFFECT TREE LIMBS, THE CONTRACTOR SHALL NOTIFY THE LA AT LEAST FIVE (5) WORKING DAYS IN ADVANCE OF ANY PRUNING NEEDED, AND SHALL NOTIFY THE LA OF THE PROPOSED METHOD AND THE AMOUNT OF PRUNING REQUIRED. PRUNING SHALL BE DONE BY AN ISA CERTIFIED ARBORIST. PRUNING SHALL NOT BE DONE BY THE GENERAL CONTRACTOR.
- 12. TRENCHING AND TUNNELING WITHIN THE RECOMMENDED LIMIT OF DISTURBANCE (RLOD): EXCAVATION WITHIN THE RLOD OF TREES SHALL BE BY HAND DIGGING OR AIR SPADE EXCAVATION.
- 13. TRENCHING AND TUNNELING OUTSIDE THE DRIP LINE: EXCAVATION AROUND ROOTS 2-INCHES IN DIAMETER AND GREATER REQUIRES HANDWORK OR AIR SPADING. ALL INDIVIDUAL TREE ROOTS 2-INCHES OR GREATER IN DIAMETER SHALL BE PROTECTED WHENEVER ENCOUNTERED. TREE ROOTS SMALLER THAN 2-INCHES IN DIAMETER SHALL BE CLEANLY CUT FLUSH WITH THE EDGE OF THE TRENCH OR TUNNEL WHEN NECESSARY. DISINFECT CUTTING TOOLS FREQUENTLY. RIPPING OR TEARING OF TREE ROOTS WILL NOT BE ALLOWED.
- 14. ROOT HYDRATION: EXPOSED ROOTS AT EXCAVATED AREAS TO BE KEPT HYDRATED DURING EXPOSURE TO AIR WITH WET NATURAL BURLAP LAID OVER THE ROOTS, WATERED AT LEAST ONCE DAILY.
- 15. SUPPLEMENTAL IRRIGATION IS REQUIRED INSIDE TREE PROTECTION AREAS DURING SUMMER MONTHS AND PROLONGED DRY
- 16. ALL REGULATED, EXCEPTIONAL, PRESERVED AND REPLACEMENT TREES SHALL BE MAINTAINED FOR A PERIOD OF THREE YEARS AFTER SITE DEVELOPMENT OR MITIGATION.

REPAIR, REPLACEMENT AND PAYMENT FOR DAMAGE

- 1. TREES OR OTHER PLANTS NOT ORDERED OR DESIGNATED TO BE REMOVED BUT THAT ARE DESTROYED OR IRREPARABLY DAMAGED BY CONTRACTOR OPERATIONS AS DETERMINED BY THE LANDSCAPE ARCHITECT, SHALL BE REPAIRED OR REPLACED IN KIND AND SIZE BY
- THE CONTRACTOR IN ACCORDANCE WITH THE LANDSCAPE ARCHITECT'S RECOMMENDATIONS. REPLACEMENTS SHALL BE OF THE SAME SPECIES AND AS NEARLY AS POSSIBLE OF THE SAME SIZE AS THE TREES TO BE REPLACED. THE CONTRACTOR SHALL ALLOW TEN (10) WORKING DAYS ADVANCE NOTICE FOR INSPECTION OF NURSERY STOCK REPLACEMENTS BY THE LANDSCAPE ARCHITECT.
- 4. PAYMENT: IN ADDITION TO THE CONTRACTOR'S RESTORATION APPROVED BY THE LANDSCAPE ARCHITECT, THE CONTRACTOR WILL BE ASSESSED DAMAGES FOR THE DIFFERENCE IN THE DOLLAR VALUE OF THE DAMAGED TREE, SHRUB, OR OTHER PLANTS, AND THE DOLLAR VALUE OF THE REPLACEMENT.
- 5. THE DOLLAR VALUE WILL BE DETERMINED BY THE ENGINEER FROM THE "GUIDE FOR ESTABLISHING VALUES OF TREES AND OTHER
- PLANTS," PREPARED BY THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS, CURRENT EDITION. DAMAGES ASSESSED WILL BE DEDUCTED FROM MONEYS DUE OR THAT MAY BECOME DUE TO THE CONTRACTOR.
- 6. PLANTING OF REPLACEMENT STOCK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS
- DURING THE FIRST FALL OR SPRING PLANTING PERIOD, WHICHEVER COMES FIRST. 7. ANY DAMAGE TO TREES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY SO THAT REMEDIAL ACTION CAN BE TAKEN
- TO THE AFFECTED TREE(S). TIMELINESS OF THE REMEDIAL ACTION CAN BE CRITICAL TO THE TREE'S HEALTH.
- 8. TREE AND SHRUB REMOVALS: CONFIRM ALL TREES AND SHRUBS TO BE REMOVED IN FIELD WITH LA BEFORE ANY REMOVALS ARE COMPLETED.
- 9. TREE AND SHRUB TRANSPLANTING: CONFIRM ALL TREES AND SHRUBS TO BE TRANSPLANTED IN FIELD WITH LANDSCAPE ARCHITECT (LA) BEFORE TRANSPLANTING BEGINS. TRANSPLANTING OF TREES SHOULD BE SCHEDULED WHEN TREES ARE DORMANT IN LATE FALL AND WINTER (END OCTOBER - FEBRUARY). SHRUBS TO BE TRANSPLANTED SHOULD IDEALLY BE PLANTED IN NEW LOCATIONS IMMEDIATELY AFTER DIGGING TO AVOID NEED FOR STORAGE, EXTRA CARE AND DOUBLE HANDLING. IF THIS IS NOT POSSIBLE, THEY SHOULD BE HEELED IN IN A PROTECTED, SHADED AREA, WITH ADEQUATE IRRIGATION AND MULCH AROUND THE ROOTS TO KEEP THEM HYDRATED.

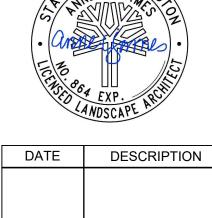
REGULATED TREE REMOVAL TABLE

- 1. CITY OF MERCER ISLAND DEFINES LARGE REGULATED TREE AS ANY TREE WITH A DIAMETER OF 10 INCHES OR MORE,
- AND ANY TREE THAT MEETS THE DEFINITION OF AN EXCEPTIONAL TREE.
- 2. REPLACEMENT TREES SHALL BE CONIFERS AT LEAST SIX FEET TALL AND/OR DECIDUOUS AT LEAST ONE AND ONE-HALF
- INCHES IN DIAMETER AT BASE, SEE MITIGATION PLANTING PLAN. 3. REFERENCE ARBORIST INVENTORY

TREE ID#	BOTANICAL NAME	COMMON NAME	DSH	EXCEPTIONAL TREE	TREE REPLACEMENT RATIO
401	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	19.6"	YES	2
405	ACER RUBRUM	RED MAPLE	18.7"	YES	2
421	PRUNUS LUSITANICA	PORTUGUESE CHERRY LAUREL	10.4"	YES	2
422	PRUNUS LUSITANICA	PORTUGUESE CHERRY LAUREL	10.9"	YES	2



24539 NE 11th Street Redmond, WA 98074 Phone (425) 894-9857 ANNEJAMESLA.com



ISSUE DATE:

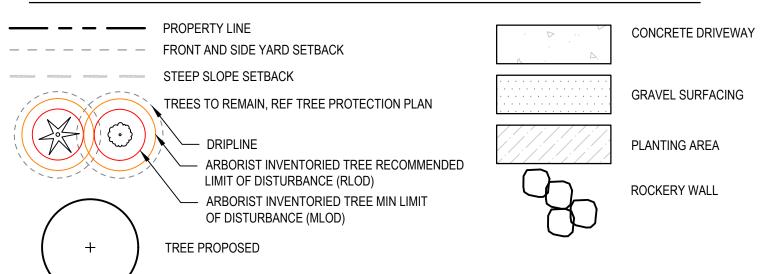
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02/05/2024 PERMIT

SHEET

TREE RETENTION PLAN





GENERAL ABBREVIATIONS

CAL	CALIPER
DIA	DIAMETER
DWG	DRAWINGS
EQ	EQUAL
EXST	EXISTING
HT	HEIGHT
L.A.	LANDSCAPE ARCHITECT
N.I.C.	NOT IN CONTRACT
O.C.	ON CENTER
PA	PLANTING AREA
R	RADIUS
SF	SQUARE FEET
SIM	SIMILAR
TYP	TYPICAL

GENERAL NOTES

- 1. LANDSCAPE DOCUMENTS ARE BASED ON A SURVEY BY TERRANE DATED 01.08.2020, AND BY FIELD OBSERVATIONS. CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO BEGINNING WORK. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IDENTIFIED ON SITE RELATED TO SURVEY INFORMATION PRIOR TO INSTALLATION.
- 2. FOR SITE REMOVALS AND TREE PROTECTION REFERENCE DEMOLITION PLANS.

GRADING LEGEND

<u>(1</u> 00)	EXISTING CONTOUR - 1 FT INTERVAL	FFE	FINISH FLOOR ELEVATION
100	PROPOSED MAJOR CONTOUR - 5 FT INTERVAL	FS FG	FINISH SURFACE ELEVATION (HARDSCAPE) FINISH GRADE ELEVATION (SOFTSCAPE)
99	PROPOSED MINOR CONTOUR -1 FT INTERVAL	RE	RIM ELEVATION
GB	GRADE BREAK	TW	TOP OF WALL ELEVATION
(+XXX.XX)	EXISTING SPOT ELEVATION	BW	BOTTOM OF WALL ELEVATION
+XXX.XX	SPOT ELEVATION	TS BS	TOP OF STAIR ELEVATION BOTTOM OF STAIR ELEVATION
XX%	SLOPE PERCENT, FOR REFERENCE ONLY	TC	TOP OF CURB ELEVATION
3:1	SLOPE RATIO (RUN:RISE), FOR REFERENCE ONLY	TE BE	TOP OF EDGING ELEVATION BOTTOM OF EDGING ELEVATION
GRADING NOTES			TOP OF ROCK / ROCKERY

- 1. SLOPES PROVIDED BY SLOPE ARROW ARE FOR REFERENCE ONLY.
- 2. ADJUST ALL INCIDENTAL STRUCTURES, MANHOLE LIDS, VALVE BOXES, ETC. TO FINISH GRADE.
- 3. ALL PLANTED AREAS TO SLOPE AWAY FROM BUILDINGS AT 2% MIN.



ANDSCAPE NECES						
DATE	DESCRIPTION					

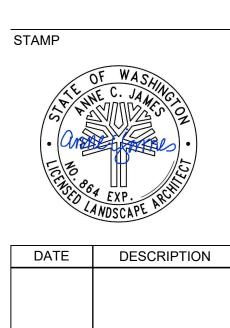
ISSUE DATE: 02/05/2024 PERMIT

SCALE: AS SHOWN

SHEET

OVERALL SITE PLAN

Anne James Landscape Architecture, LLC 24539 NE 11th Street Redmond, WA 98074



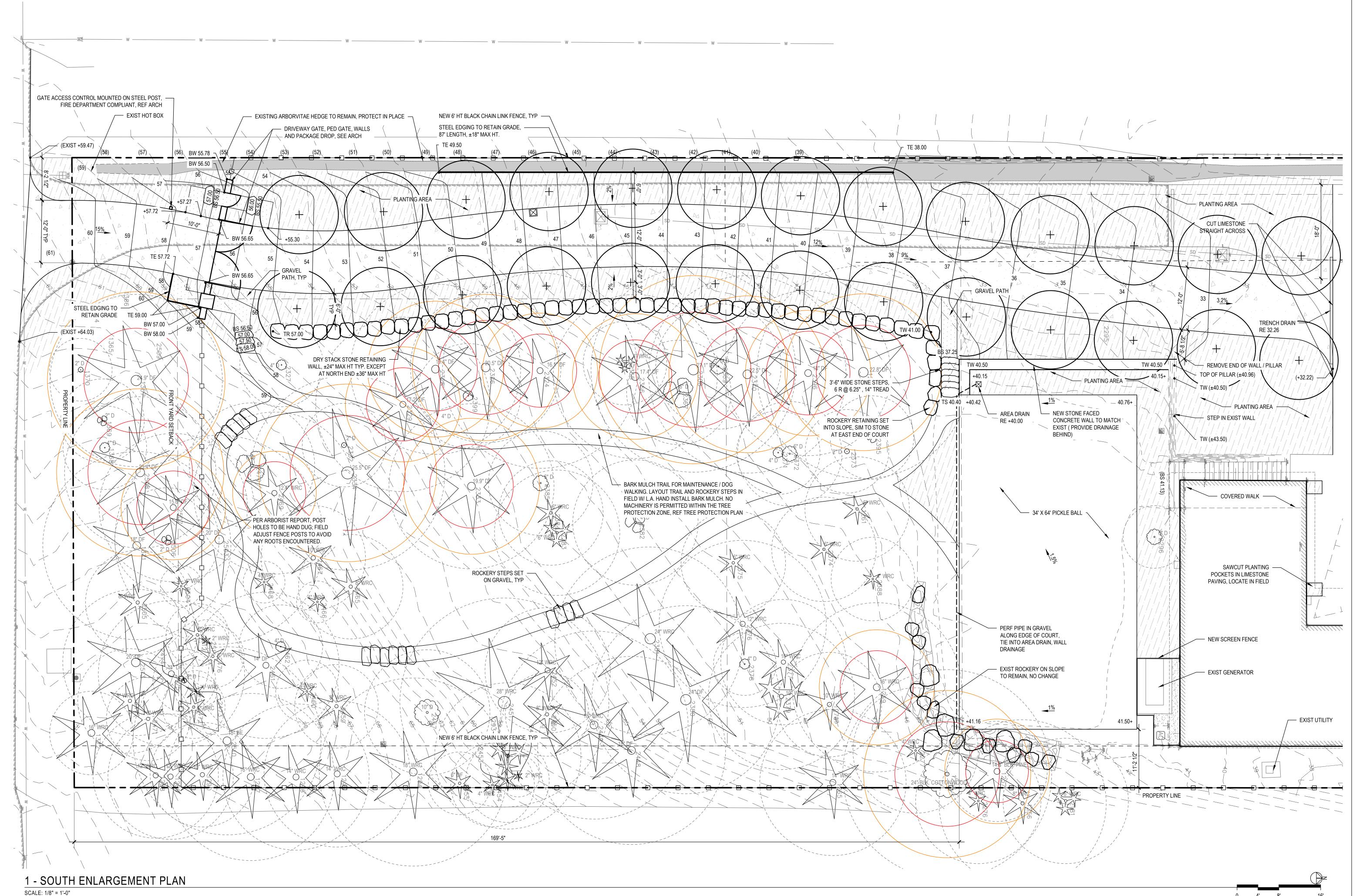
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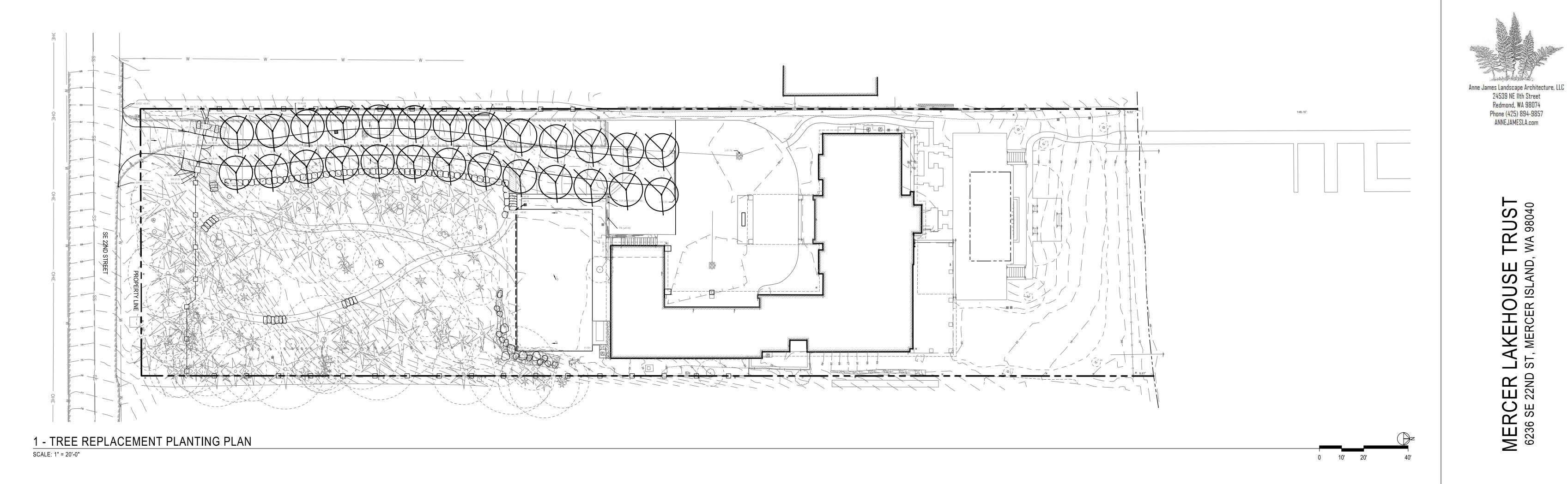
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SHEET

SOUTH ENLARGEMENT PLAN



TREE REPLACEMENT PLANTING PLAN



TREE REPLACEMENT PLANTING SCHEDULE

(24) REPLACEMENT TREES REQUIRED FOR MITIGATION. (26) REPLACEMENT TREES PROVIDED. REQUIREMENT MET.

REPLACEMENT TREES SHALL BE CONIFERS AT LEAST SIX FEET TALL AND/OR DECIDUOUS AT LEAST ONE AND ONE-HALF INCHES IN DIAMETER AT BASE. REPLACEMENT TREES ARE SPECIFIED TO BE 4" CALIPER. REQUIREMENT MET.

3. FOR TREE REMOVAL INFORMATION REFERENCE TREE RETENTION PLAN.

TREES

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	NOTES	QTY
	KATSURA	CERCIDIPHYLLUM JAPONICUM	KATSURA	AS SHOWN	4" CAL. / B&B SPECIMEN		26

PLANTING NOTES

1. DO NOT BEGIN PLANTING UNTIL IRRIGATION SYSTEM IS INSTALLED, TESTED AND APPROVED.

2. DO NOT BEGIN PLANTING UNTIL SOIL PREPARATION IS COMPLETE AND APPROVED. TOPSOIL DEPTH WITHIN SHRUB AREAS IS XX INCHES DEPTH WITH 2 INCHES MULCH TOP DRESSING. PLANTING SOIL WITHIN LAWN AREAS IS XX INCHES.

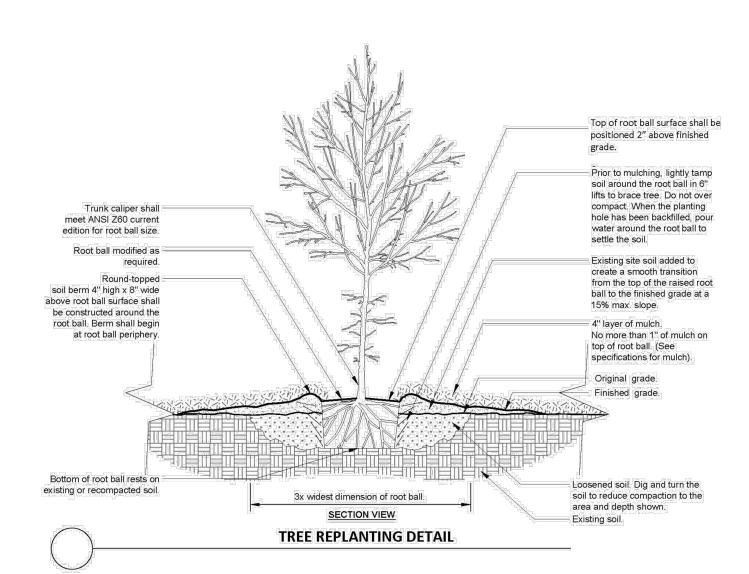
3. LOCATE PLANTS AS DIMENSIONED ON THE PLANS AND AS SHOWN IN THE PLANT SCHEDULE. PLANT SPACING IS MEASURED CENTER TO CENTER. PLANT LOCATIONS MAY BE ADJUSTED BY THE LANDSCAPE ARCHITECT TO MEET FIELD CONDITIONS.

4. VERIFY ALL QUANTITIES AND VARIETIES SHOWN ON THE DRAWINGS PRIOR TO ORDERING. OWNER MUST APPROVE ANY NECESSARY SUBSTITUTIONS DURING SUBMITTALS PROCESS. REVIEW PROCESS TO BE ESTABLISHED AT PRE-CONSTRUCTION MEETING.

5. THOROUGHLY WATER IN ALL PLANTS WITHIN 6 HOURS OF PLANTING.

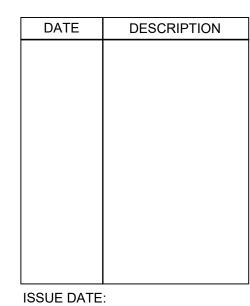
6. APPLY SPECIFIED MULCH OVER PLANTING AREAS WITHIN TWO DAYS OF INSTALLING PLANTS, UNLESS OTHERWISE NOTED.

7. ALL PLANTS ARE REQUIRED TO MEET AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1-2014.





MERCER I 6236 SE 22ND 8



02/05/2024 PERMIT

SCALE: AS SHOWN

LOT SLOPE CALCULATIONS



GROSS/NET LOT AREA: 53,562 SF
ALLOWED LOT COVERAGE AREA = 21,425 SF (40%)

EXISTING LOT COVERAGE AREA

MAIN STRUCTURE ROOF AREA: 9,348 SF

VEHICULAR USE: 6,545 SF

COVERED PATIOS / DECKS: 375 SF

TOTAL EXISTING LOT COVERAGE: 16,268 SF

TOTAL LOT COVERAGE AREA REMOVED: 3,060 SF

NEW LOT COVERAGE AREA

VEHICULAR USE: 2,945 SF

TOTAL NEW LOT COVERAGE: 2,945 SF

TOTAL PROJECT LOT COVERAGE: 16,153 SF PROPOSED LOT COVERAGE AREA= 30.1%



MERCER LAKEHOUSE TRUST

TAMP

DATE DESCRIPTION

ISSUE DATE:

SCALE: AS SHOWN

02/05/2024 PERMIT

SHEET

L-0.B LOT COVERAGE CALCULATIONS

GROSS/NET LOT AREA: 53,562 SF

AREA BORROWED FROM LOT COVERAGE: 5,272 SF

ALLOWED HARDSCAPE AREA = 10,093 SF (18.8%)

EXISTING HARDSCAPE AREA

UNCOVERED PATIOS: 1,733 SF

WALKWAYS: 652 SF

STAIRS: 179 SF

ROCKERIES AND RETAINING WALLS: 300 SF

OTHER (POOL): 746 SF

TOTAL EXISTING HARDSCAPE: 3,610 SF

TOTAL LOT COVERAGE AREA REMOVED: 15 SF

NEW HARDSCAPE AREA

WALKWAYS: 144 SF

STAIRS: 27 SF

ROCKERIES AND RETAINING WALLS: 463 SF

OTHER (SPORT COURT): 2,176

TOTAL NEW HARDSCAPE: 2,810 SF

TOTAL PROJECT HARDSCAPE: 6,405 SF
TOTAL PROJECT HARDSCAPE AREA= 11.9%



MERCER LAKEHOUSE TRUST

TAMP

DATE DESCRIPTION

ISSUE DATE:

02/05/2024 PERMIT

SCALE: AS SHOWN

SHEET

L-O.C

HARDSCAPE
CALCULATIONS

STRUCTURAL - GENERAL NOTES

GENERAL REQUIREMENTS

GOVERNING CODE: Per "International Residential Code" (IRC), 2018 Edition, Section R301.1.3, "Engineered design in accordance with the International Building Code is permitted for all buildings and structures, and parts thereof, included in the scope of this code." Therefore, this project's structural design and construction is governed by the 2018 edition of the International Building Code (IBC), (hereafter referred to as the IBC), as adopted and modified by the City of Mercer Island, WA understood to be the Authority Having Jurisdiction (AHJ).

REFERENCE STANDARDS: Refer to Chapter 35 of 2018 IBC. Where other Standards are noted in the drawings, use the latest edition of the standard unless a specific date is indicated. Reference to a specific section in a code does not relieve the contractor from compliance with the entire standard.

<u>DEFINITIONS</u>: The following definitions cover the meanings of certain terms used in these notes:

- (1) "Architect/Engineer" The Architect of Record and the Structural Engineer of Record.
- (2) "Structural Engineer of Record" (SER) The structural engineer who is licensed to stamp & sign the structural documents for the project. The SER is responsible for the design of the Primary Structural Sys-
- (3) "Submit for review" Submit to the Architect/SER for review prior to fabrication or construction.
- (4) "Per Plan" Indicates references to the structural plans, elevations and structural general notes.

OTHER DRAWINGS: Refer to the architectural, mechanical, electrical, civil and plumbing drawings for additional information including but not limited to: dimensions, elevations, slopes, finishes, drains, waterproofing, railings, and other nonstructural items.

STRUCTURAL DETAILS: The structural drawings are intended to show the general character and extent of the project and are not intended to show all details of the work. Use entire detail sheets and specific details referenced in the plans as "typical" wherever they apply. Similarly, use details on entire sheets with "typical" in the name

STRUCTURAL RESPONSIBILITIES: The structural engineer (SER) is responsible for the strength and stability of the primary structure in its completed form.

COORDINATION: The Contractor is responsible for coordinating details and accuracy of the work; for confirming and correlating all quantities and dimensions; for selecting fabrication processes; for techniques of assembly; and for performing work in a safe and secure manner.

MEANS, METHODS and SAFETY REQUIREMENTS: The contractor is responsible for the means and methods of construction and all job related safety standards such as OSHA and DOSH (Department of Occupational Safety and Health). The contractor is responsible for means and methods of construction related to the intermediate structural conditions (i.e. movement of the structure due to moisture and thermal effects; construction sequence; temporary bracing, etc).

BRACING/SHORING DESIGN ENGINEER: The contractor shall at their discretion employ an SSE, a registered professional engineer for the design of any temporary bracing and shoring.

TEMPORARY SHORING, BRACING: The contractor is responsible for the strength and stability of the structure during construction and shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is complete. It is the contractor's responsibility to be familiar with the work required in the construction documents and the requirements for executing it properly.

CONSTRUCTION LOADS: Loads on the structure during construction shall not exceed the design loads as noted in DESIGN CRITERIA & LOADS below or the capacity of partially completed construction as determined by the Contractor's SSE for Bracing/Shoring.

CHANGES IN LOADING: The contractor has the responsibility to notify the SER of any architectural, mechanical, electrical, or plumbing load imposed onto the structure that differs from, or that is not documented on the original Contract Documents (architectural / structural / mechanical / electrical or plumbing drawings). Provide documentation of location, load, size and anchorage of all undocumented loads in excess of 400 pounds. Provide marked-up structural plan indicating locations of any new equipment or loads. Submit plans to the Architect/Engineer for review prior to installation.

NOTE PRIORITIES: Plan and detail notes and specific loading data provided on individual plans and detail drawings supplements information in the Structural General Notes.

DISCREPANCIES: In case of discrepancies between the General Notes, Specifications, Plans/Details or Reference Standards, the Architect/Engineer shall determine which shall govern. Discrepancies shall be brought to the attention of the Architect/Engineer before proceeding with the work. Should any discrepancy be found in the Contract Documents, the Contractor will be deemed to have included in the price the most expensive way of completing the work, unless prior to the submission of the price, the Contractor asks for a decision from the Architect as to which shall govern. Accordingly, any conflict in or between the Contract Documents shall not be a basis for adjustment in the Contract Price.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site. Conflicts between the drawings and actual site conditions shall be brought to the attention of the Architect/Engineer before proceeding

ADJACENT UTILITIES: The contractor shall determine the location of all adjacent underground utilities prior to earthwork, foundations, shoring, and excavation. Any utility information shown on the drawings and details is approximate and not necessarily complete.

ALTERNATES: Alternate products of similar strength, nature and form for specified items may be submitted with adequate technical documentation (proper test report, etc.) to the Architect/Engineer for review. Alternate materials that are submitted without adequate technical documentation or that significantly deviate from the design intent of materials specified may be returned without review. Alternates that require substantial effort to review will not be reviewed unless authorized by the Owner.

SUBMITTALS

SUBMIT FOR REVIEW: SUBMITTALS of shop drawings, and product data are required for items noted in the individual materials sections and for bidder designed elements.

SUBMITTAL REVIEW PERIOD: Submittals shall be made in time to provide a minimum of TWO WEEKS or 10 WORKING DAYS for review by the Architect/Engineer prior to the onset of fabrication.

GENERAL CONTRACTOR'S PRIOR REVIEW: Prior to submission to the Architect/Engineer, the Contractor shall review the submittal for completeness. Dimensions and quantities are not reviewed by the SER, and therefore, must be verified by the General Contractor. Contractor shall provide any necessary dimensional details requested by the Detailer and provide the Contractor's review stamp and signature before forwarding to the Architect/ Engineer.

SHOP DRAWING REVIEW: Once the contractor has completed their review, the SER will review the submittal for general conformance with the design concept and the contract documents of the building and will stamp the submittal accordingly. Markings or comments shall not be construed as relieving the contractor from compliance with the project plans and specifications, nor departures there from. The SER will return submittals in the form they are submitted in (either hard copy or electronic). For hard copy submittals, the contractor is responsible for submitting the required number of copies to the SER for review.

SHOP DRAWING DEVIATIONS: When shop drawings (component design drawings) differ from or add to the requirements of the structural drawings they shall be designed and stamped by the responsible SSE.

INSPECTIONS, QUALITY ASSURANCE VERIFICATIONS AND TEST REQUIREMENTS

INSPECTIONS: Foundations, footings, under slab systems and framing are subject to inspection by the Building

Official in accordance with IBC 110.3. Contractor shall coordinate all required inspections with the Building Official.

SPECIAL INSPECTIONS, VERIFICATIONS and TESTS: Special Inspections, Verifications and Testing shall be done in accordance with IBC Chapter 17, the STATEMENT AND SCHEDULES OF SPECIAL INSPECTIONS listed in these drawings.

STRUCTURAL OBSERVATION: per IBC Section 1704.6

Structural Observation is the visual observation of the structural system by a registered design professional for general conformance to the approved construction documents. It is not always required on a project, does not include or waive the responsibility for the special inspections and tests required by a Special Inspector per IBC Chapter 17, is not continuous, and does not certify conformance with the approved construction documents.

Structural Observation for this project is not required per IBC Section 1704.6.

CONTRACTOR RESPONSIBILITY: Prior to issuance of the building permit, the Contractor is required to provide the Authority Having Jurisdiction a signed, written acknowledgement of the Contractor's responsibilities associated with the above Statement of Special Inspections addressing the requirements listed in IBC Section 1704.4. Contractor is referred to IBC Sections 1705.12.5 and 1705.12.6 for architectural and MEP building systems that may be subject to additional inspections (based on the building's designated Seismic Design Category listed in the CRI-TERIA), including anchorage of HVAC ductwork containing hazardous materials, piping systems and mechanical units containing flammable, combustible or highly toxic materials, electrical equipment used for emergency or standby power, exterior wall panels and suspended ceiling systems.

SOILS AND FOUNDATION

REFERENCE STANDARDS: Conform to IBC Chapter 18 "Soils and Foundations."

GEOTECHNICAL REPORT: Recommendations contained in Geotechnical and Critical Area Considerations Proposed Remodel Sport Court and Driveway Realignment JN235453 by Geotech Consultants Inc. dated January 26, 2024 were used for design.

CONTRACTOR'S RESPONSIBILITIES: Contractor shall be responsible to review the Geotechnical Report and shall follow the recommendations specified therein including, but not limited to, subgrade preparations, pile installation procedures, ground water management and steep slope Best Management Practices."

GEOTECHNICAL SUBGRADE INSPECTION: The Geotechnical Engineer shall inspect all sub-grades and prepared soil bearing surfaces, prior to placement of foundation reinforcing steel and concrete. Geotechnical Engineers shall provide a letter to the owner stating that soils are adequate to support the "Allowable Foundation Bearing Pressure(s)" shown below.

DESIGN SOIL VALUES:

S	afety Factor per Soils Report	1.5	
Α	llowable Foundation Bearing Pressure	2000	PSF – Native
Α	llowable Foundation Bearing Pressure	2000	PSF - Structural Fill
Ρ	assive Lateral Pressure	300	PSF/FT
Α	ctive Lateral Pressure (Geofoam Backfill)	5	PSF/FT
С	oefficient of Sliding Friction	0.40	

FOUNDATIONS and FOOTINGS: Foundations shall bear on either on competent native soil or compacted structural fill as per the geotechnical report. Exterior perimeter footings shall bear not less than 18 inches below finish grade, unless otherwise specified by the geotechnical engineer and/or the building official.

FOOTING DEPTH: Tops of footings shall be as shown on plans with vertical changes as indicated with steps in the footings; locations of steps shown as approximate and shall be coordinated with the civil grading plans.

SLABS-ON-GRADE: All slabs-on-grade shall bear on compacted structural fill or competent native soil per the geotechnical report. All moisture sensitive slabs-on-grade or those subject to receive moisture sensitive coatings/ covering shall be provided with an appropriate capillary break and vapor barrier/retardant over the subgrade prepared and installed as noted in the geotechnical report, barrier manufacturer's written recommendations and coordinated with the finishes specified by the Architect.

CAST-IN-PLACE CONCRETE

REFERENCE STANDARDS: Conform to:

- (1) ACI 301-16 "Specifications for Structural Concrete"
- (2) IBC Chapter 19 "Concrete"
- (3) ACI 318-14 "Building Code Requirements for Structural Concrete"
- (4) ACI 117-10 "Specifications for Tolerances for Concrete Construction and Materials" (5) ACI 332-14 "Residential Code Requirements For Structural Concrete"

FIELD REFERENCE: The contractor shall keep a copy of ACI Field Reference manual, SP-15, "Standard Specifications for Structural Concrete (ACI 301) with Selected ACI and ASTM References."

CONCRETE MIXTURES: Conform to ACI 301 Section 4 "Concrete Mixtures" and IBC Section 1904.1.

MATERIALS: Conform to ACI 301 Section 4.2.1 "Materials" for requirements for cementitious materials, aggregates, mixing water and admixtures.

(1) Provide all submittals required by ACI 301 Section 4.1.2. Submit mix designs for each mix in the table below. Substantiating strength results from past tests shall not be older than 24 months per ACI 318 Section

<u>TABLE OF MIX DESIGN REQUIREMENTS</u>

Member Type/Location	Strength f'c (psi)	Test Age (days)	Nominal Maximum Aggregate	Exposure Class	Max W/C Ratio	Air Con- tent	Notes (1 to 10 Typical UNO)
Footings	3000	28	1"	-	1	-	11
Site Retaining Walls	3000	28	1"	-	0.45	5%	11

Table of Mix Design Requirements Notes:

- (1) W/C Ratio: Water-cementitious material ratios shall be based on the total weight of cementitious materials. Maximum ratios are controlled by strength noted in the Table of Mix Design Requirements and durability requirements given in ACI 318 Section 19.3. W/C ratios may be exceeded with approval of SER as long as potential shrinkage impacts are accounted for.
- (2) Cementitious Materials:
- DCI encourages the reduction of cement content and/or the use of alternate cementitious materials. Where requirements of this section prohibit inclusion of any of these mixes, contact DCI for further co-
- Cementitious materials shall conform to the relevant ASTM standards listed in ACI 318 Section
- 26.4.1.1.1(a). The use of fly ash, other pozzolans, silica fume, or slag shall conform to ACI 318 Sections 19.3.2 and 26.4.2.2. Supplemental cementitious material (SCM) quantities shall meet requirements outlined in the table below. Approaching maximum cement replacement limits may affect concrete setting time and strength gain. Contractor and supplier shall coordinate on mix designs with regard to schedule, workability, shrinkage and finishability requirements. Where SCM quantities do not meet the following requirements, submit for SER approval. Concerns by the construction team with the mix design provided herein shall be brought to the SER's attention in the mix design submittal prior to pouring concrete.
- (3) Air Content: Conform to ACI 318 Section 19.3.3.1. Minimum standards for exposure class are noted in the table. If freezing and thawing class is not noted, air content given is that required by the SER. Tolerance is ±1-1/2%. Air content shall be measured at point of placement.
- (4) Aggregates shall conform to ASTM C33.
- (5) Slump: Conform to ACI 301 Section 4.2.2.2. Slump shall be determined at point of placement.
- (6) Chloride Content: Conform to ACI 318 Table 19.3.2.1.
- (7) Non-chloride accelerator: Non-chloride accelerating admixture may be used in concrete placed at ambient temperatures below 50°F at the contractor's option.
- (8) ACI 318, Section 19.3.1.1 exposure classes shall be assumed to be F0, S0, W0, and C0 unless different exposure classes are listed in the Table of Mix Design Requirements that modify these base requirements.
- (9) Recycled carbon dioxide (CO2) is permissible to be injected into the mix as an ingredient during mixing, such that CO2 is chemically mineralized into concrete. Carbon dioxide injected into the mix must be post-industrial CO2 sourced from an emitter.
- (10)Exposed landscape and feature elements require that the concrete supplier and installer are responsible for the look of the finished product. The mix design table sets basic requirements for the exposure, durability and the strength of the mix. Additional factors such as admixtures, fiber reinforcing, pigment, slump limits, test panels, curing, forming and finishing techniques required to achieve the desired architectural finish are to be coordinated with the design team and owner as necessary.
- (11)Structural design is based on strength of 2500 psi and therefore does not require special inspection. The 3000 psi compressive strength is specified for serviceability.

FORMWORK & RESHORING: Conform to ACI 301 Section 2 "Formwork and Form Accessories." Removal of Forms shall conform to Section 2.3.2 except strength indicated in Section 2.3.2.4 shall be 0.75 f' c.

MEASURING, MIXING, AND DELIVERY: Conform to ACI 301 Section 4.3.

HANDLING, PLACING, CONSTRUCTING AND CURING: Conform to ACI 301 Section 5. In addition, hot weather concreting shall conform to ACI 305R-10 and cold weather concreting shall conform to ACI 306R-10.

CONSTRUCTION JOINTS: Conform to ACI 301 Sections. 2.2.2.5 and 5.3.2.6. Construction joints shall be located and detailed as on the construction drawings. Submit alternate locations per ACI 301 Section 5.1.2.4(a) for review and approval by the SER two weeks minimum prior to forming. Use of an acceptable adhesive, surface retardant, portland cement grout or roughening the surface is not required unless specifically noted on the drawings.

CONCRETE PLACEMENT TOLERANCE: Conform to ACI 117-10 for concrete placement tolerance.

CONCRETE REINFORCEMENT

REFERENCE STANDARDS: Conform to:

- (1) ACI 301-16 "Standard Specifications for Structural Concrete", Section 3 "Reinforcement and Reinforcement
- (2) ACI SP-66(04) "ACI Detailing Manual"
- (3) CRSI MSP-09, 28th Edition, "Manual of Standard Practice."
- (4) ANSI/AWS D1.4: 2005, "Structural Welding Code Reinforcing Steel."
- (5) IBC Chapter 19-Concrete (6) ACI 318-14 "Building Code Requirements for Structural Concrete."
- (7) ACI 117-10 "Specifications for Tolerances for Concrete Construction and Materials" (8) ACI 332-14 "Residential Code Requirements for Structural Concrete".

SUBMITTALS: Conform to ACI 301 Section 3.1.2 "Submittals." Submit placing drawings showing fabrication dimensions and placement locations of reinforcement and reinforcement supports.

MATERIALS:

..ASTM A615. Grade 60. deformed bars. Reinforcing Bars .. Bar Supports. .. CRSI MSP-09, Chapter 3 "Bar Supports." .. 16 gage or heavier, black annealed. Tie Wire...

FABRICATION: Conform to ACI 301, Section 3.2.2. "Fabrication", and ACI SP-66 "ACI Detailing Manual."

WELDING: Bars shall not be welded unless authorized. When authorized, conform to ACI 301, Section 3.2.2.2. "Welding", AWS D1.4, and provide ASTM A706, grade 60 reinforcement.

PLACING: Conform to ACI 301, Section 3.3.2 "Placing." Placing tolerances shall conform to ACI 117

CONCRETE COVER: Conform to the following cover requirements unless noted otherwise in the drawings. Concrete cast against earth.

Bars in walls . SPLICES: Conform to ACI 301, Section 3.3.2.7, "Splices". Refer to "Typical Lap Splice and Development Length Schedule" for typical reinforcement splices. Splices indicated on individual sheets shall control over the schedule. Mechanical connections may be used when approved by the SER.

FIELD BENDING: Conform to ACI 301 Section 3.3.2.8. "Field Bending or Straightening." Bar sizes #3 through #5 may be field bent cold the first time. Subsequent bends and other bar sizes require preheating. Do not twist bars. Bars shall not be bent past 45 degrees.

SPECIAL INSPECTIONS

Concrete exposed to earth or weather

The following Statement and Schedules of Inspections are those Special Inspections and Tests that shall be performed for this project. Special Inspectors shall reference these plans and IBC Chapter 17 for all

special inspection requirements The owner shall retain a WABO accredited Special Inspections agency to provide special inspections for this project. Special Inspectors shall be qualified persons per IBC 1704.2.1.

Special inspection reports shall be provided on a weekly basis. Submit copies of all inspection reports to the Architect/Engineer and the Authority Having Jurisdiction for review. In addition to special inspection reports and tests, submit reports and certificates noted in IBC 1704.5 to the Authority Having Jurisdiction. Final special inspection reports will be required by each special inspection firm per IBC 1704.2.4.

STATEMENT OF SPECIAL INSPECTIONS:

This statement of Special Inspections has been written with the understanding that the Building Official

- Review and approve the qualifications of the Special Inspectors
- Monitor the special inspection activity on the project site to assure that Special Inspectors are qualified and performing their duty as state within this statement.
- Review all Special Inspection Reports submitted to them by the Special Inspector Perform inspections as required by IBC Section 110.3.

The following Special Inspections are applicable to this project:

Special Inspections for Wind Resistance

REQUIRED Special Inspections for Standard Buildings (per IBC 1705.1) Special Inspections for Seismic Resistance (per IBC 1705.12) NOT REQUIRED (per IBC 1705.13) NOT REQUIRED

SCHEDULES OF SPECIAL INSPECTIONS:

Testing for Seismic Resistance

TABLE 1705.6 - REQUIRED SPECIAL INSPECTIONS AND TEST OF SOILS

(per IBC 1705.11) NOT REQUIRED

ITEM	TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1	Verify materials below shallow foundations are adequate to achieve the design bearing capacity	-	х
2	Verify excavations are extended to proper depth and have reach proper material	-	х
3	Perform classification and testing of compacted fill materials	-	x
4	Verify use of proper materials, densities and list thickness during placement and compaction of compacted fill	×	-
5	Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly	-	Х

TABLE 1705.3 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUC-TION

ITE M	TYPE	CONTINUOUS SPECIAL IN- SPECTION	PERIODIC SPECIAL IN- SPECTION	REFERENCED STANDARD	IBC REFER- ENCE
1	Inspection, reinforcement and verify placement.	-	Х	ACI 318 Ch. 20, 25.2, 25.3, 26.6.1- 26.6.3	1908.4
2	Inspect anchors post-installed in hard- ened concrete members:				
	 Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads 	×	-	ACI 318: 17.8.2.4	-
	 b. Mechanical anchors and adhesive anchors not defined in 4.a 	-	Х	ACI 318: 17.8.2	
3	Verify use of required design mix	-	Х	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3

DRAWING LEGEND DESCRIPTION MARK DESCRIPTION FOOTING SYMBOL (REFER TO SPREAD INDICATES CONCRETE/TILT-UP F2.0 FOOTING SCHEDULE) CONCRETE WALL INDICATES BEARING WALL BELOW REVISION TRIANGLE **ELEVATION SYMBOL (T/ REFERS** INDICATES EXISTING WALL -T/FTG = X'-X" | TO COMPONENT THAT THE **ELEVATION REFERENCES)** INDICATES STEP IN FOOTING (REFER TO TYPICAL STEP IN FOOTING DETAIL) ■ DETAILS OR SECTION CUT (DETAIL NUMBER/SHEET NUMBER) ∖sx.x / 00 DETAILS OR SECTION CUT IN PLAN VIEW (DETAIL NUMBER/SHEET NUMBER)

ABBREVIATIONS

INDICATES LOCATION OF CONCRETE

WALLS, SHEAR WALLS OR BRACED

FRAME ELEVATIONS

XX/SXX.XX

L	Angle	EXCAV	Excavation	PJP	Partial Joint Penetration
AB	Anchor Bolt	FB	Factory-Built	PREFAB	Prefabricated
ADDL	Additional	FD	Floor Drain	PSF	Pounds per Square Foot
ADH	Adhesive	FDN	Foundation	PSI	Pounds Per Square Inch
ALT	Alternate	FIN	Finish	PSL	Parallel Strand Lumber
ARCH	Architectural	FLR	Floor	P-T	Post-Tensioned
B or BOT	Bottom	FRP	Fiberglass Reinforced Plastic	PT	Pressure Treated
B/	Bottom Of	FRT	Fire Retardant Treated	R	Radius
BLDG	Building	FTG	Footing	RD	Roof Drain
BLKG	•	F/	Face of	REF	Refer/Reference
	Blocking				
BMU	Brick Masonry Unit	GA	Gage	REINF	Reinforcing
BP	Baseplate	GALV	Galvanized	REQD	Required
BRBF	Buckling Restrained	GEOTECH	Geotechnical	RET	Retaining
	Braced Frame	GL	Glue Laminated Timber	SB	Site-Built
BRG	Bearing	GWB	Gypsum Wall Board	SCBF	Special Concentric
BTWN	_	HDR	Header	OODI	Braced Frame
	Between			001155	
C	Camber	HF	Hem-Fir	SCHED	Schedule
CB	Castellated Beam	HGR	Hanger	SER	Structural Engineer of
C'BORE	Counterbore	HD	Hold-down		Record
CL or &	Centerline	HORIZ	Horizontal	SFRS	Seismic Force-
CLT	Cross-Laminated Timber	HP	High Point	- · -	Resisting System
				CHTHO	
CIP	Cast in Place	HSS = TS	(Hollow Structural Section)	SHTHG	Sheathing
CFS	Cold Formed Steel	IBC	International Building Code	SIM	Similar
CJ	Construction or	ID	Inside Diameter	SLBB	Short Leg Back-to-Back
	Control Joint	ΙE	Invert Elevation	SMF	Special Moment Frame
CJP	Complete Joint	İF	Inside Face	SOG	Slab on Grade
	Penetration	INT	Interior	SP	Southern Pine
CLP				SPEC	
CLR	Clear	k	Kips		Specification
CLG	Ceiling	KSF	Kips Per Square Foot	SQ	Square
CMU	Concrete Masonry Unit	LF	Lineal Foot	SR	Studrail
COL	Column	LL	Live Load	SF	Square Foot
CONC	Concrete	LLBB	Long Leg Back-to-Back	SST	Stainless Steel
CONN	Connection	LLH	Long Leg Horizontal	STAGG	Stagger/Staggered
CONST		LLV		STD	
	Construction		Long Leg Vertical		Standard
CONT	Continuous	LP	Low Point	STIFF	Stiffener
C'SINK	Countersink	LONGIT	Longitudinal	STL	Steel
CTRD	Centered	LSL	Laminated Strand Lumber	STRUCT	Structural
DIA	Diameter	LVL	Laminated Veneer Lumber	SWWJ	Solid Web Wood Joist
DB	Drop Beam	MAS	Masonry	SYM	Symmetrical
	•	MAX		T	•
DBA	Deformed Bar Anchor		Maximum		Top
DBL	Double	MECH	Mechanical	T/	Top Of
DEMO	Demolish	MEP	Mechanical, Electrical,	T&B	Top & Bottom
DEV	Development		Plumbing	TC AX LD	Top Chord Axial Load
DF	Douglas Fir	MEZZ	Mezzanine	TCX	Top Chord Extension
DIAG	Diagonal	MFR	Manufacturer	TDS	Tie Down System
DIST	Distributed	MIN	Minimum	T&G	Tongue & Groove
					3
DL	Dead Load	MISC	Miscellaneous	THKND	Thickened
DN	Down	NIC	Not In Contract	THRD	Threaded
DO	Ditto	NLT	Nail-Laminated Timber	THRU	Through
DP	Depth/Deep	NTS	Not To Scale	TRANSV	Transverse
DWG	Drawing	OC	On Center	TYP	Typical
(E)	Existing	OCBF	Ordinary Concentric Braced	UNO	Unless Noted Otherwise
	_	וטטט	· · · · · · · · · · · · · · · · · · ·		
EA	Each	0.0	Frame	URM	Unreinforced Masonry
EF	Each Face	OD	Outside Diameter	=	Unit
EL	Elevation	OF	Outside Face	VERT	Vertical
ELEC	Electrical	OPNG	Opening	W	Wide
ELEV	Elevator	OPP	Opposite	W/	With
EMBED	Embedment	OWSJ	Open Web Steel Joist	W/O	Without
			•		
EQ	Equal	OWWJ	Open Web Wood Joist	WHS	Welded Headed Stud
EQUIP	Equipment	PL _	Plate	WP	Working Point
EW	Each Way	PAF	Powder Actuated Fastener	WWF	Welded Wire Fabric
EXP	Expansion	PC	Precast	±	Plus or Minus
EXP JT	Expansion Joint	PERP	Perpendicular		
EXT	Exterior	PLWD	Plywood		
L/\\ 1	EXCOTO		1 19 17000		

804

Z 2 7 S ШV 0 % R Ш C Ш

STRUCTURAL -GENERAL NOTES, LEGEND AND ABBREVIATIONS

3<u>.2%</u>

- / T/W (±43.50) /

EXITING WALL

40.76+ S200

CONC RETAINING WALL

— RETAINING WALL FTG

PER 3/S200

PER 3/S200

22" DF

6" WRC

4" WRC

◆ T/WALL PER PLAN

/- WALL VERT REINF PER SCHED

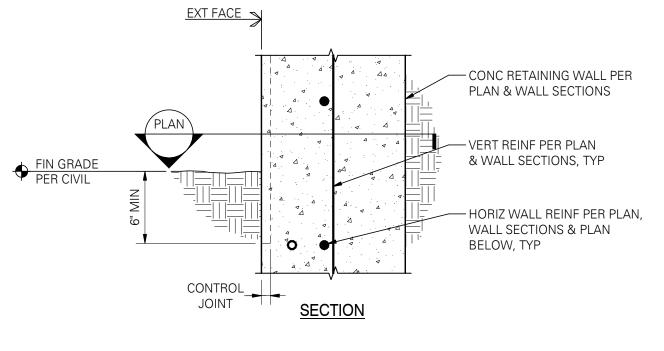
←WALL HORIZ REINF

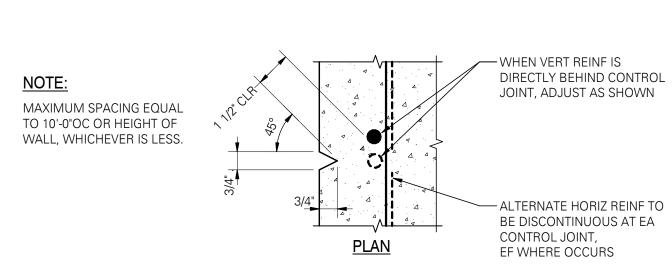
FIN GRADE PER CIVIL

PER SCHED

RETAINING WALL / FOOTING SCHEDULE WALL/FOOTING SIZES | WALL REINFORCEMENT FOOTING REINFORCEMENT TOE ts HEEL TOP/LONGIT BOT/LONGIT HORIZONTAL UP TO 8'-0" | 1'-0" | 8" | 2'-0" | 12" | (3) #4 (3) #4 #5 @ 18"OC

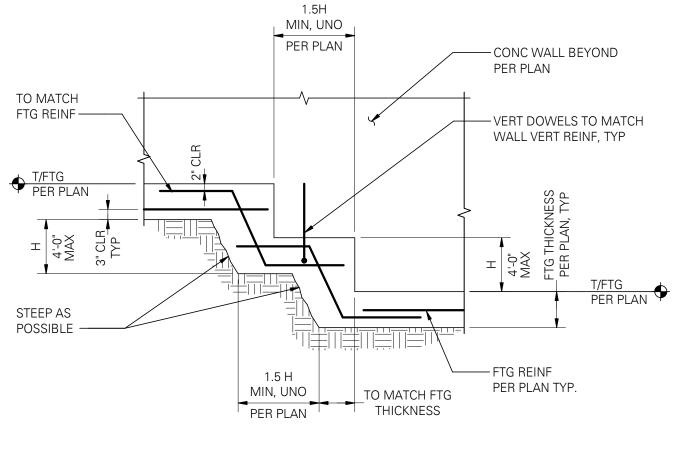
CANTILEVERED SITE RETAINING WALL AND SCHEDULE





VERTICAL CONTROL JOINT AT CONCRETE RETAINING WALLS

SCALE: 1 1/2" = 1'-0" (02310)



TYPICAL STEPPED FOOTING

LAP SPLICE PER SCHED	#5 DOWEL @ 32"OC DRILL & EPOXY INTO (E) WALL 4" MIN W/ HILTI HIT-HY 200
	- 7
RETAINING WALL PER 3/S200	
EXISTING WALL	

01403A GRADE 60 REINFORCING						
BAR	MISCELLANEOUS BARS		TOP BARS (see note #3)		HOOKED BARS	
SIZE	Ld	Splice	Ld	Splice	Ldh	
f'c = 3000psi						
#3	17	22	22	28	6	
#4	22	29	29	38	6	
#5	28	36	36	47	8	
#6	33	43	43	56	11	
#7	48	63	63	81	14	
#8	55	72	72	93	16	
#9	62	81	81	105	20	
#10	70	91	91	118	23	
#11	78	101	101	131	27	
#14	93	N/A	121	N/A	36	
#18	124	N/A	161	N/A	55	

- 2. ALL TABULATED VALUES ARE FOR UNCOATED REINFORCING AND NORMAL WEIGHT CONCRETE WITH CLEAR SPACING > db, CLEAR COVER > db AND MINIMUM STIRRUPS OR TIES THROUGHOUT Ld OR CLEAR SPACING > 2db AND CLEAR COVER > db.
- 3. TOP REINFORCING = HORIZONTAL REINFORCING WITH MORE THAN 12" OF FRESH CONCRETE BELOW OR AS NOTED ON DOCUMENTS AS "TOP BAR".

4. LAP SPLICE OF #14 AND #18 BARS IS NOT PERMITTED. LAP SPLICE OF SMALLER TO #14 AND #18 BARS IS

LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE

RETAINING WALL TO EXISTING WALL CONNECTION

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

7 98040

MERCEI NOTES: 1. ALL TABULATED VALUES ARE IN INCHES.

SHEET TITLE:
STRUCTURAL -RETAINING WALL PLAN AND DETAILS

AND

ISL

OUSE

Gate Plan

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

MLH

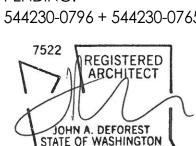
Mercer Lake House Gate

6236 SE 22ND ST MERCER ISLAND WA 98040

Permit No: N/A

Lot Consolidation Permit Number: SUB24-001

Assessor's Parcel No: LOT CONSOLIDATION PENDING: 544230-0796 + 544230-0765



Automatic Gate Permit Plan



DeForest Architects

1148 NW Leary Way Seattle, WA 98107 206.262.0820 deforestarchitects.com

Gate Permit Plan

HISTORY

ID SET NAME DATE

CD0

1 Permit Set 2/1/24

A2.0