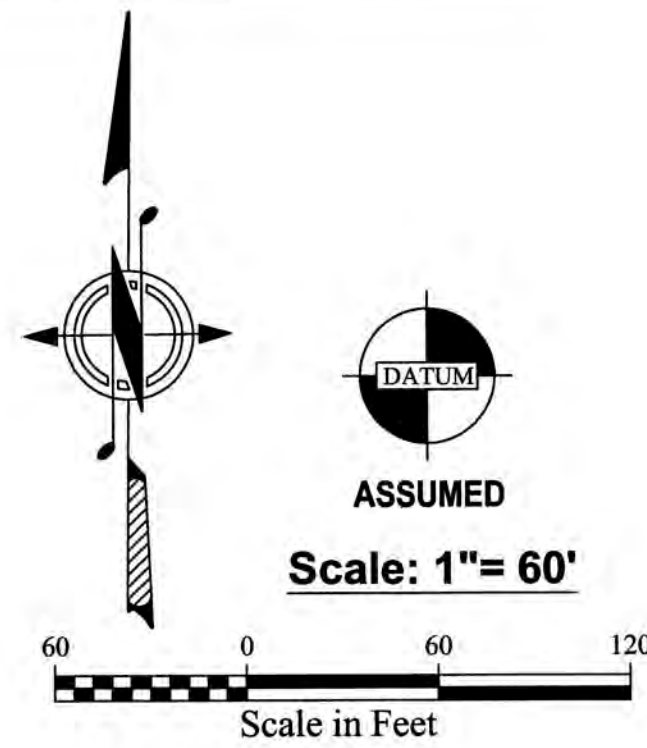


RED BARN LANE
PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT



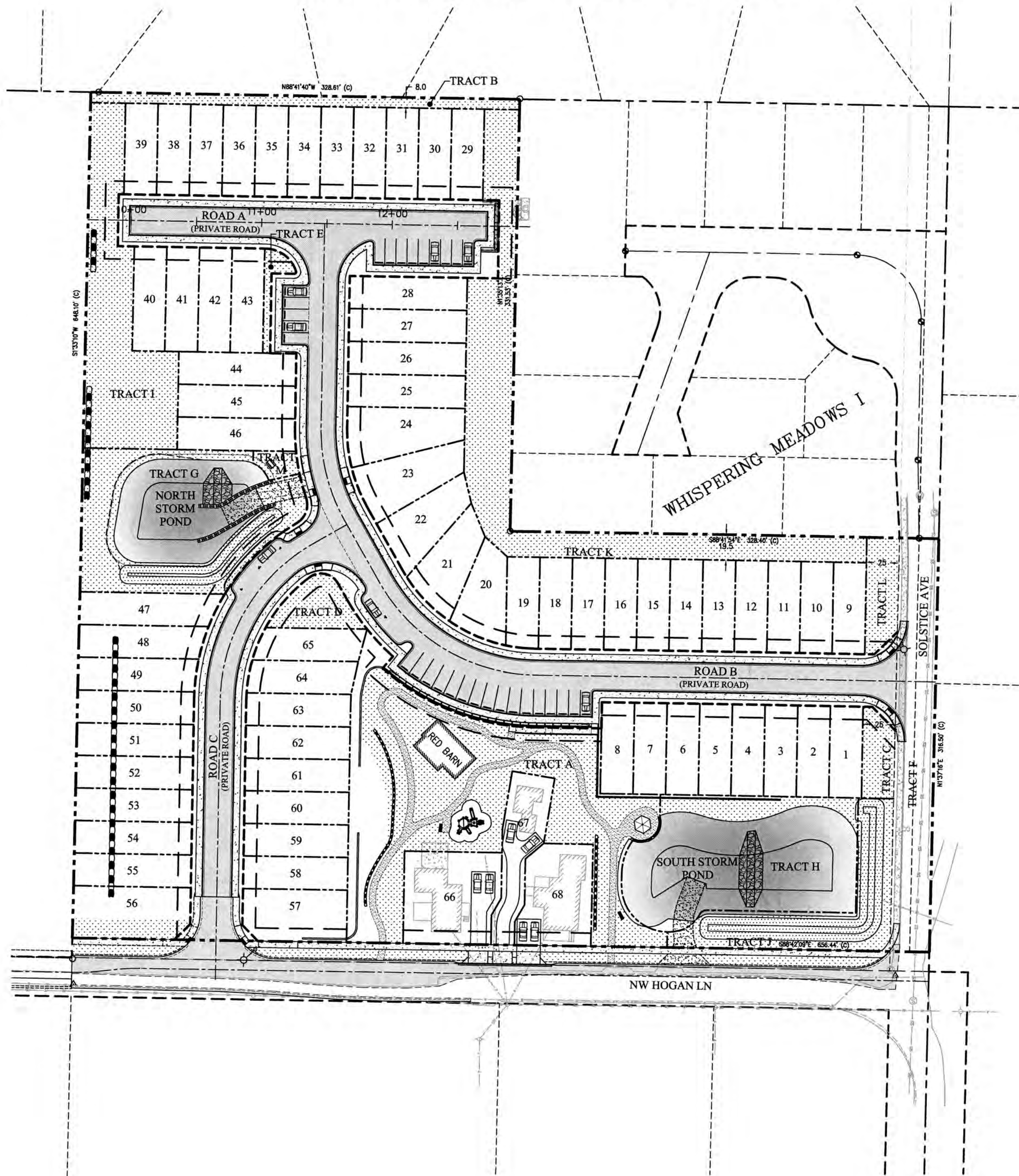
SITE DATA

SITE ADDRESS:	880 & 950 NW HOGAN LANE
TAX NUMBER:	152501-3-095-2009 & 152501-3-095-2009
EXISTING ZONING:	UM URBAN MEDIUM RESIDENTIAL 10-18
SANITARY SEWER:	KITSAP COUNTY
WATER SUPPLY:	SILVERDALE WATER DISTRICT
SCHOOL DISTRICT:	CENTRAL KITSAP
FIRE DISTRICT:	CENTRAL KITSAP FIRE AND RESCUE
UGA:	SILVERDALE
TOTAL SITE AREA:	316,747 SF (7.27 ACRES)
TRACT A (REC OPEN SPACE)	26,529 SF (0.61 ACRES) (8.38% OF GROSS AREA)
TRACT B (BUFFER)	2,631 SF (0.06 ACRES)
TRACT C (BUFFER)	1,580 SF (0.04 ACRES)
TRACT D (OPEN SPACE)	1,991 SF (0.05 ACRES)
TRACT E (OPEN SPACE)	694 SF (0.02 ACRES)
TRACT F (INGRESS, EGRESS & UTILITIES)	9,495 SF (0.22 ACRES)
TRACT G (STORM)	15,986 SF (0.37 ACRES)
TRACT H (POND)	15,467 SF (0.36 ACRES)
TRACT I (OPEN SPACE)	11,068 SF (0.25 ACRES)
TRACT J (OPEN SPACE)	6,999 SF (0.16 ACRES)
TRACT K (OPEN SPACE)	15,058 SF (0.35 ACRES)
TRACT L (BUFFER)	2,071 SF (0.05 ACRES)
TRACT M (REC OPEN SPACE)	608 SF (0.01 ACRES)
PRIVATE ROAD A, B, & C ROW TRACT	60,770 SF (1.40 ACRES)
TOTAL PROPOSED LOTS	68 LOTS (LOTS 66-68 EX RESIDENCE)
GROSS DENSITY (68/7.27)	9.22 D.U. PER ACRE (INCLUDES LOTS 66-68)
NET DENSITY (68/3.34)	20.36 D.U. PER ACRE (INCLUDES LOTS 66-68)
OPEN SPACE INCLUDING TRACT H POND	78,414 SF (1.80 ACRES) (24.76% OF GROSS AREA)
OPEN SPACE EXCLUDING TRACT H POND	62,947 SF (1.45 ACRES) (19.87% OF GROSS AREA)
TOTAL REC OPEN SPACE	27,137 SF (0.62 ACRES) (8.57% OF GROSS AREA)
TOTAL REC OPEN SPACE PER LOT	27,137 SF/68 LOTS=399 SF PER LOT (>390 SF/LOT)

ON STREET PARKING	
STREET PARALLEL	4
STREET PERPENDICULAR	30
TOTAL	34 (34 REQUIRED)

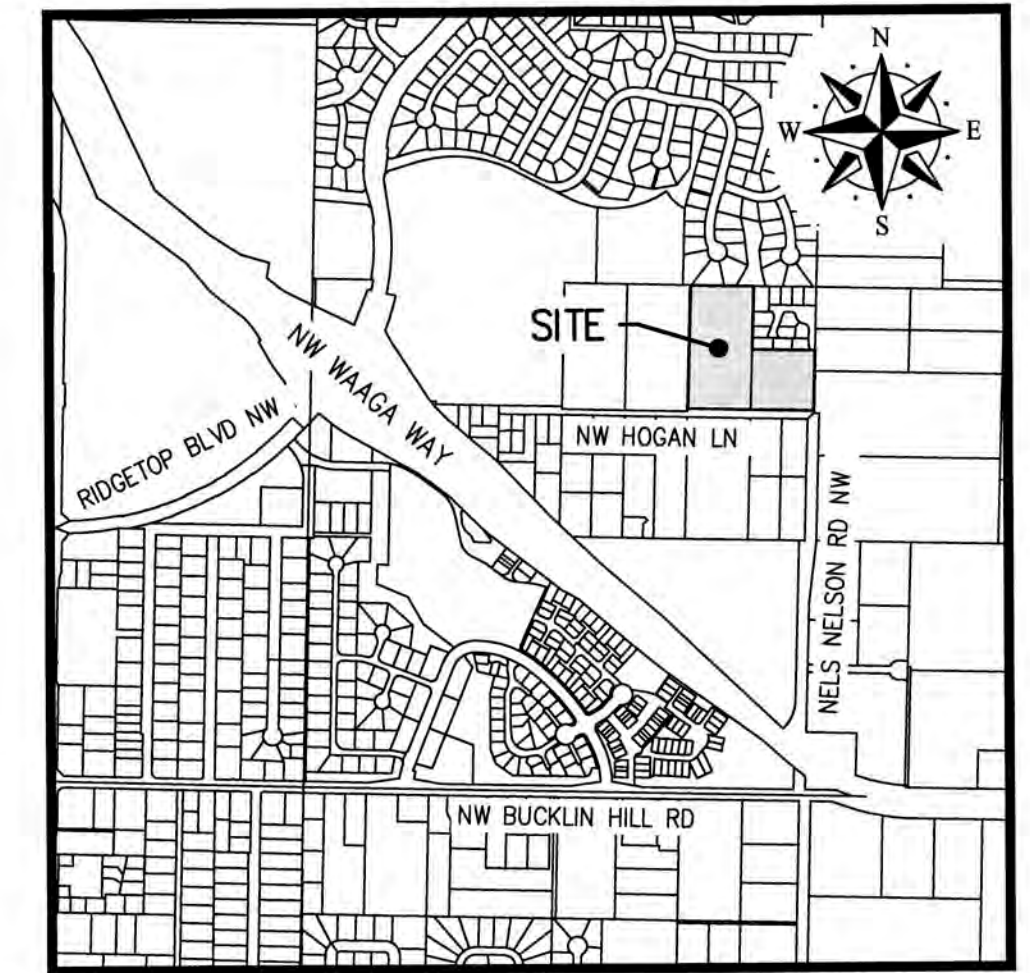
EARTHWORK

CUT	28,000 Cu Yd
FILL	28,000 Cu Yd
NOTE: CONTRACTOR TO VERIFY QUANTITIES SHOWN, NOT TO BE USED FOR BID PURPOSES	



LEGEND:

	PROPOSED ASPHALT CONCRETE		EXISTING MINOR GROUND CONTOUR (2' INTERVAL)
	PROPOSED CONCRETE		EXISTING MAJOR GROUND CONTOUR (10' INTERVAL)
	SITE BOUNDARY		EXISTING CATCH BASIN
	PROPOSED ROW		EXISTING SANITARY SEWER MANHOLE
	PROPOSED LOT LINE		EXISTING UTILITY POLE
	PROPOSED EASEMENT		EXISTING ELECTRICAL BOX
	PROPOSED FIRE HYDRANT		EXISTING GUY ANCHOR
	PROPOSED WATER LINE		EXISTING GAS VALVE
	PROPOSED TYPE 1 CATCH BASIN		EXISTING TELEPHONE RISER
	PROPOSED TYPE 2 CATCH BASIN		EXISTING WATER METER
	PROPOSED SDMH		EXISTING SIGN
	PROPOSED DITCH		EXISTING OVERHEAD UTILITY LINES
	PROPOSED BIORETENTION CELL		EXISTING CULVERT
	PROPOSED STORM PIPE		BURIED UTILITIES PER LOCATOR PAINT MARKS
	PROPOSED RIP-RAP		EXISTING GAS LINE
	PROPOSED STREET LIGHT		EXISTING TELEPHONE CABLE
	PROPOSED SSMH		EXISTING WATER LINE
	PROPOSED SSCO		
	PROPOSED SEWER PIPE		
	PROPOSED GRAVEL PATH		
	PROPOSED SILT FENCE		



VICINITY MAP

SCALE: 1"=1000'
SECT 15, T 25N, R 1E

SHEET INDEX

SHEET	DESCRIPTION
C1.00	COVER SHEET
C2.00	SITE PLAN
C2.01	HORIZONTAL CONTROL PLAN
C3.00	TOPOGRAPHIC SURVEY & EXISTING CONDITIONS
C3.10	DEMOLITION & T.E.S.C. PLAN
C3.11	T.E.S.C. NOTES & DETAILS 1
C3.12	T.E.S.C. NOTES & DETAILS 2
C4.00	GRADING PLAN
C4.01	INTERSECTION GRADING PLANS
C4.02	TRACT A PARK GRADING PLANS
C4.10	ROAD A & ROAD C PROFILE & ROAD SECTIONS
C4.11	ROAD B PROFILE & ROAD SECTIONS
C4.12	POND SECTIONS
C4.13	HOGAN LANE CROSS SECTIONS
C4.20	SITE DETAILS
C4.21	SIDEWALK DETAILS
C4.22	SITE DETAILS 2
C5.00	STORM PLAN
C5.01	STORM INDEX
C5.02	SECONDARY STORM PLAN
C5.10	STORM PROFILES 1
C5.11	STORM PROFILES 2
C5.12	STORM PROFILES 3
C5.20	STORM NOTES & DETAILS
C5.21	STORM DETAILS
C5.22	BIORETENTION CELL NOTES & DETAILS
C5.23	SOUTH BIORETENTION CELL DETAILS
C6.00	SANITARY SEWER PLAN
C6.10	SANITARY SEWER PROFILES 1
C6.20	SEWER NOTES & DETAILS
C7.00	WATER PLAN
C7.10	WATER NOTES & DETAILS 1
C7.11	WATER NOTES & DETAILS 2

NOTE

THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.

CALL 48 HOURS
BEFORE YOU DIG
811

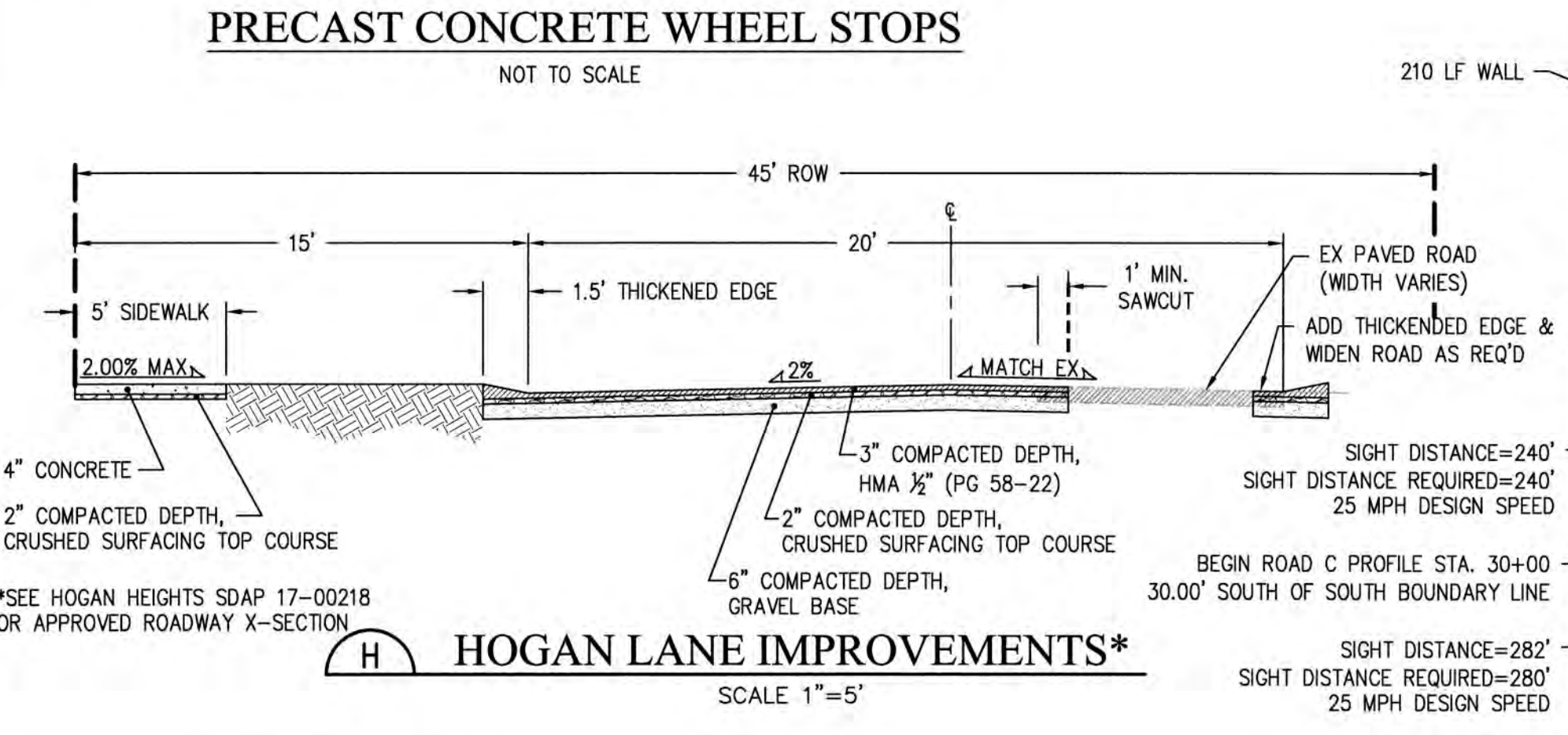
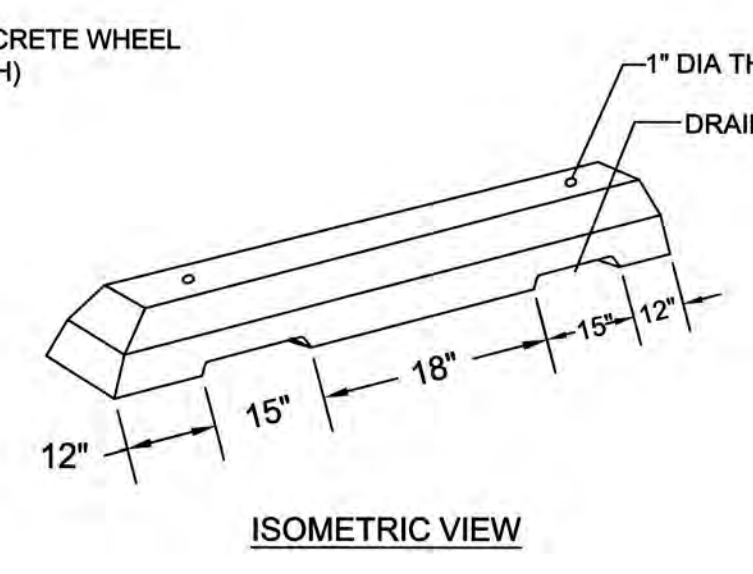
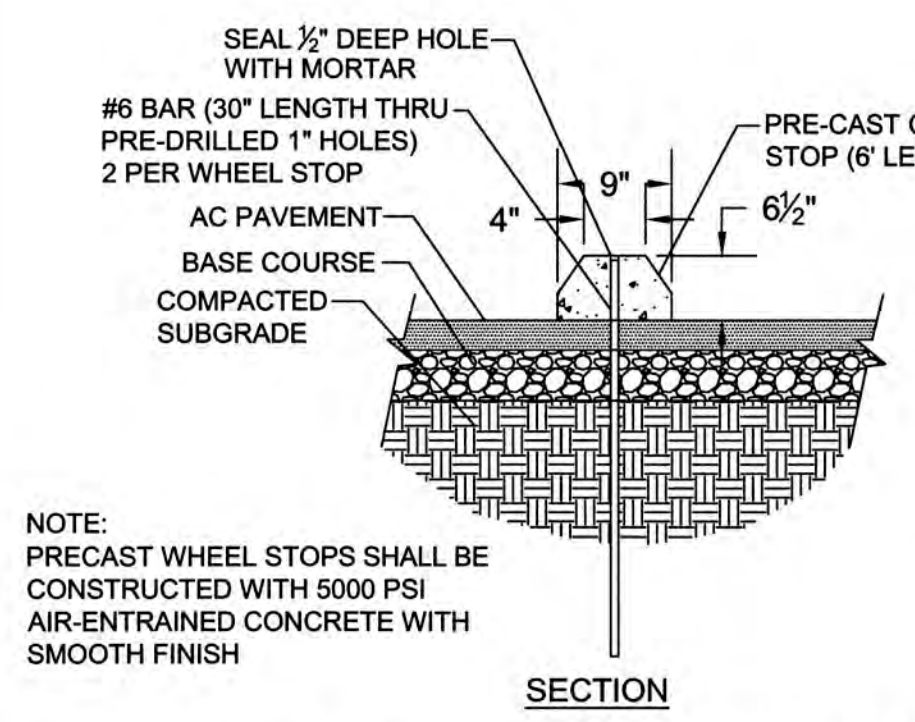
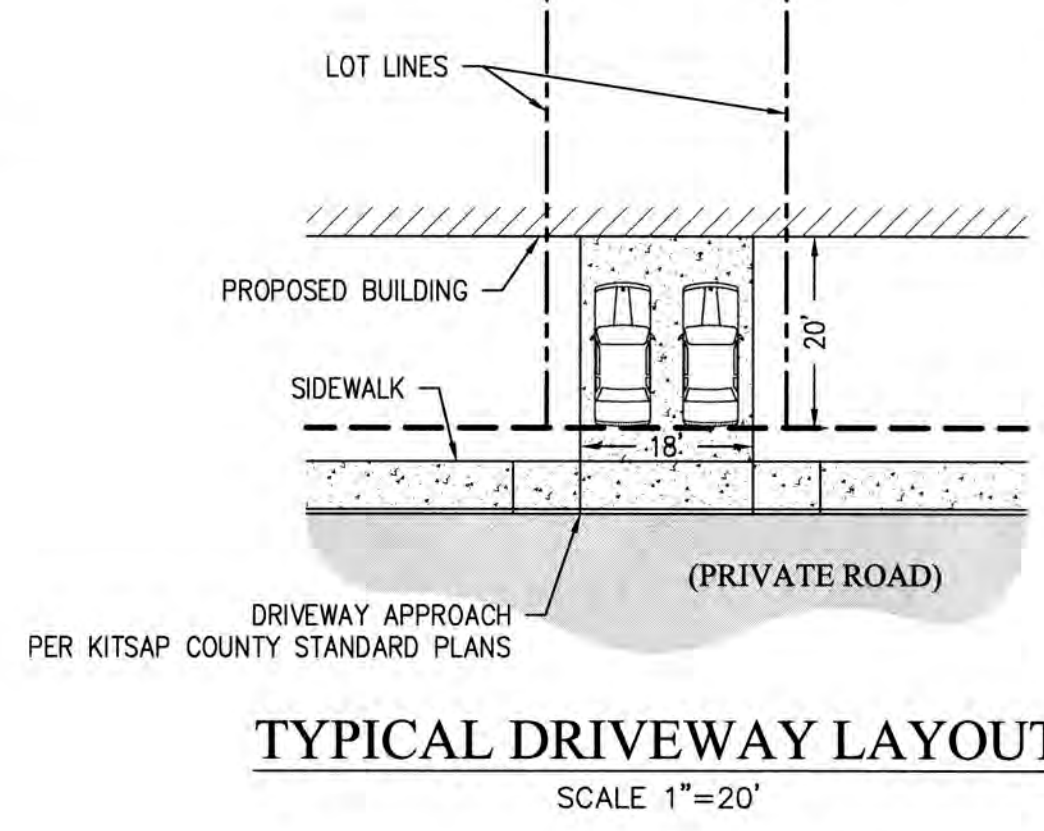
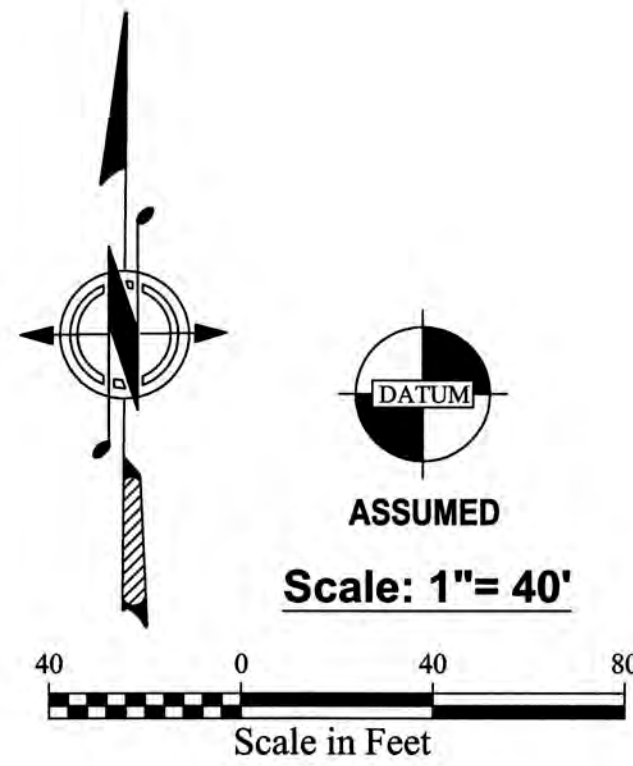
N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying

(360) 895-2350 or (360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



FOR : **Nathan Glen Properties LLC**
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146



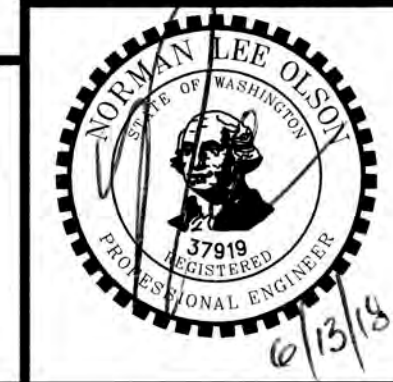
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CALL 48 HOURS BEFORE YOU DIG 811

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	DRAWN	8/17
2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018	CHECKED	8/17
				APPROVED	
				ACCEPTED	

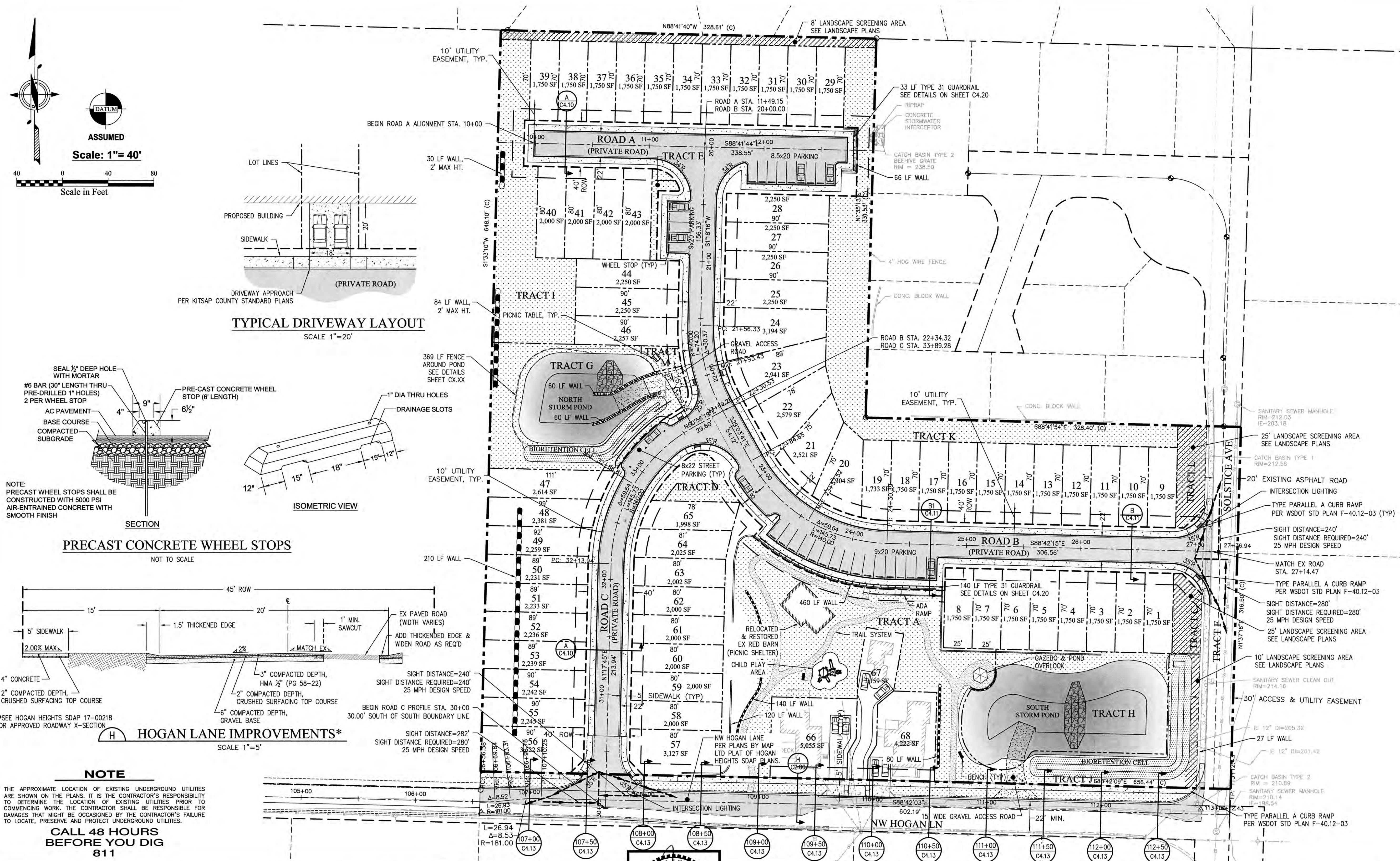
N.L.Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



SITE PLAN
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR: **Nathan Glen Properties LLC**
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER: **9582**
SHEET C2.00



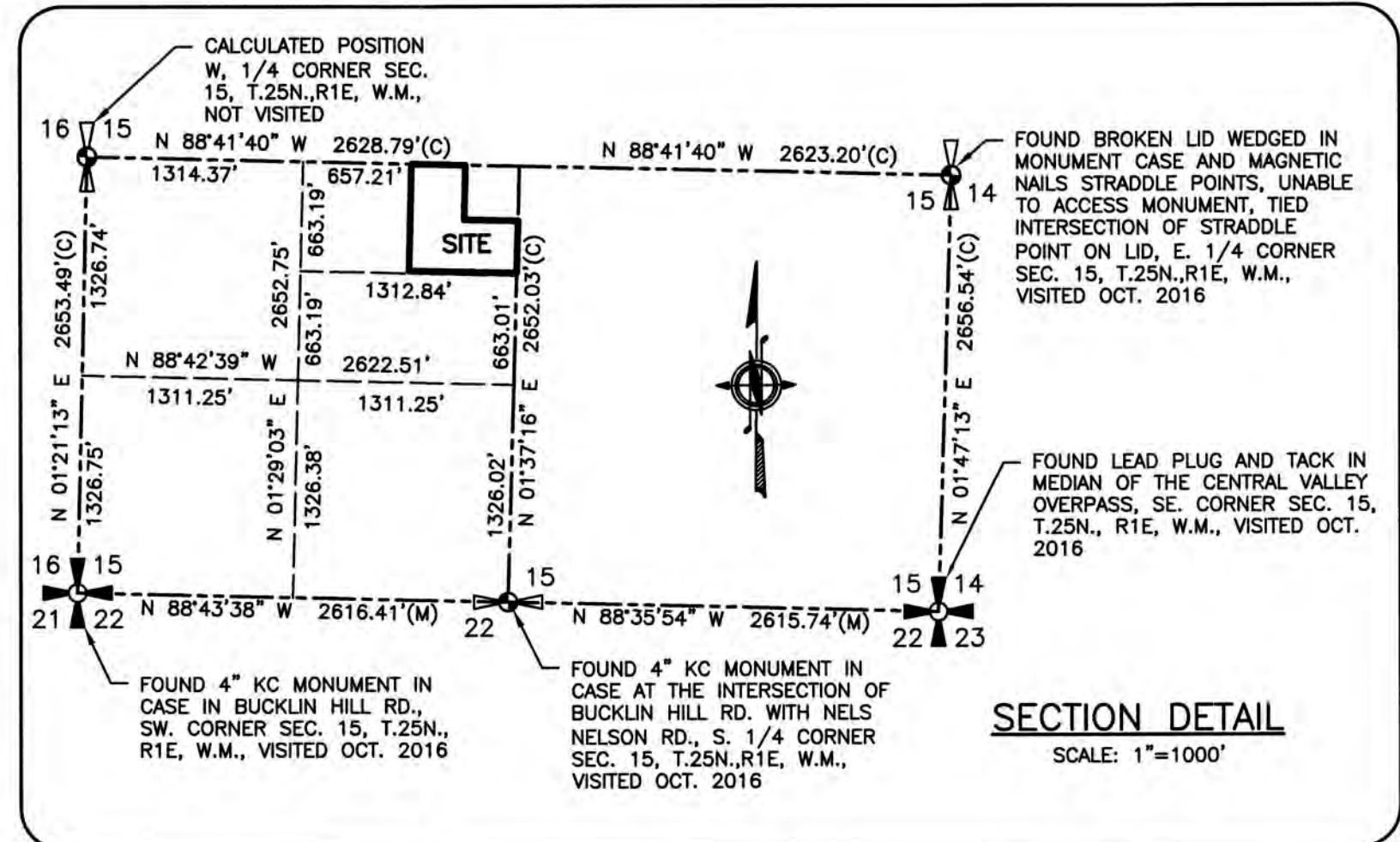
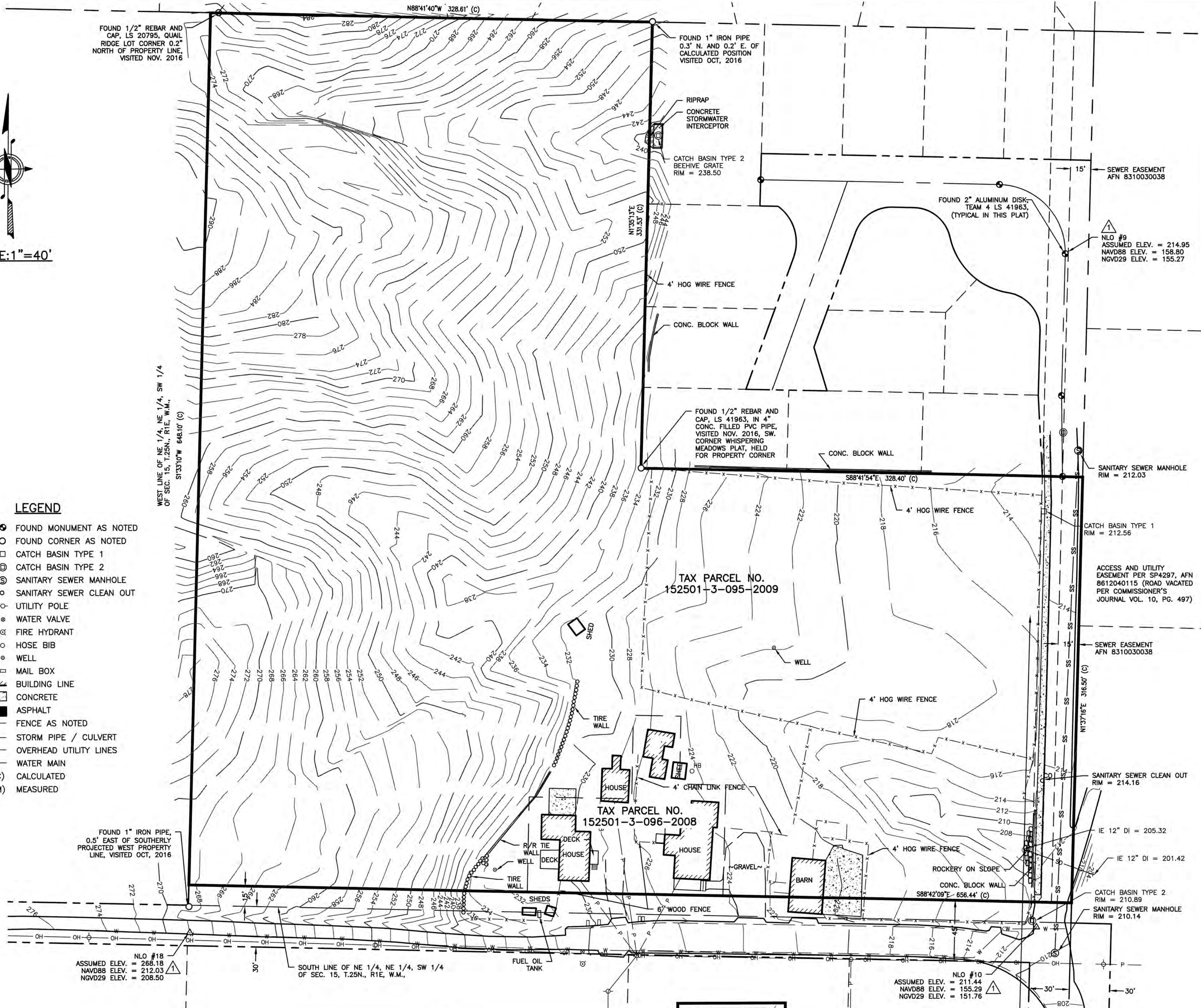
\\SERVER\A\AutoCAD Projects\9582 JV\GRP - HOGAN\9582 C3.00 TOPO SURVEY.dwg, 6/12/2018 3:05:48 PM, jthompson



SCALE: 1"=40'

LEGEND

- FOUND MONUMENT AS NOTED
- FOUND CORNER AS NOTED
- CATCH BASIN TYPE 1
- ⊕ CATCH BASIN TYPE 2
- ⊙ SANITARY SEWER MANHOLE
- ⊖ SANITARY SEWER CLEAN OUT
- UTILITY POLE
- ⊙ WATER VALVE
- ⊙ FIRE HYDRANT
- ⊙ HOSE BIB
- ⊙ WELL
- MAIL BOX
- ▨ BUILDING LINE
- ▨ CONCRETE
- ▨ ASPHALT
- - - FENCE AS NOTED
- - - SD STORM PIPE / CULVERT
- - - OH OVERHEAD UTILITY LINES
- - - W WATER MAIN
- (C) CALCULATED
- (M) MEASURED



NOTES

- HORIZONTAL DATUM: WASHINGTON STATE COORDINATE SYSTEM, NAD83 (2011), NORTH ZONE PER GPS TIES TO THE WASHINGTON STATE RESOURCE NETWORK (WSRN).
- VERTICAL DATUM; ASSUMED ELEVATION CONVERSIONS: ASSUMED TO NAVD88 = -56.15; ASSUMED TO NGVD29 = -59.68
- N.L. OLSON SURVEY CONTROL:
 - NLO #9
FOUND FND 2" ALUMINUM DISK, STAMPED TEAM 4 LS 41963, MOST NORTHERLY AND EASTERLY MONUMENT IN SOLSTICE AVENUE N 245106.937 E 1190042.125 ASSUMED ELEV. = 214.95 NAVD88 ELEV. = 158.80; NGVD29 ELEV. = 155.27
 - NLO #10
SET MAGNETIC NAIL WITH PLASTIC TAG IN ASPHALT 6.0' SE. OF CATCH BASIN TYPE 2 IN THE INTERSECTION OF HOGAN LANE NW AND NELS NELSON ROAD NW
N 244606.431 E 1190019.616 ASSUMED ELEV. = 211.44 NAVD88 ELEV. = 155.29; NGVD29 ELEV. = 151.76
 - NLO #18
SET MAGNETIC NAIL WITH PLASTIC TAG IN ASPHALT OF NW. HOGAN LANE NW. POINT IS 19.5' SOUTH OF A FOUND 1" IRON PIPE, WHICH IS 15'± SOUTH OF THE SOUTHWEST CORNER OF SUBJECT PROPERTY.
N 24460.868 E 1189390.063 ASSUMED ELEV. = 268.18 NAVD88 ELEV. = 212.03; NGVD29 ELEV. = 208.50
- REFERENCES: ALL AUDITOR'S RECORDS OF KITSAP COUNTY, WASHINGTON.
 - A. DEEDS:
 - STATUTORY WARRANTY DEED AFN 201610140189
 - STATUTORY WARRANTY DEED AFN 201611040157
 - B. SHORT PLAT NO. 4297, AFN 8612040115

DESCRIPTIONS

TAX PARCEL 152501-3-095-2009
RESULTANT PARCEL 1 OF BOUNDARY LINE ADJUSTMENT RECORDED UNDER AUDITOR'S FILE NO. 201612190077, RECORDS OF KITSAP COUNTY, WASHINGTON, BEING A PORTION OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 15, TOWNSHIP 25 NORTH, RANGE 1 EAST, W.M., IN KITSAP COUNTY, WASHINGTON.

SUBJECT TO A SEWER EASEMENT PER AUDITOR'S FILE NO. 8310030068, AND SUBJECT TO VACATION OF ROAD PER COMMISSIONERS JOURNAL VOLUME 10, PAGE 497.

TAX PARCEL 152501-3-096-2008
RESULTANT PARCEL 2 OF BOUNDARY LINE ADJUSTMENT RECORDED UNDER AUDITOR'S FILE NO. 201612190077, RECORDS OF KITSAP COUNTY, WASHINGTON, BEING A PORTION OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 15, TOWNSHIP 25 NORTH, RANGE 1 EAST, W.M., IN KITSAP COUNTY, WASHINGTON.

Scale in Feet

REVISIONS

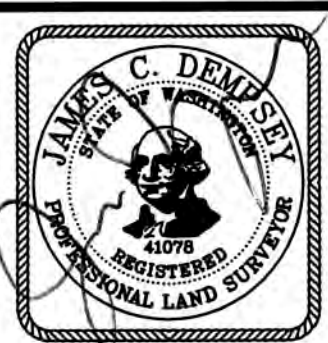
NO.	DATE	BY	DESCRIPTION

DESIGNED	BY	DATE
DRAWN	SBR	4/18
CHECKED	JCD	12/16
APPROVED		
ACCEPTED		



N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



TOPOGRAPHIC SURVEY

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C3.00

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

THE FOLLOWING EROSION AND SEDIMENTATION CONTROL NOTES APPLY TO ALL CONSTRUCTION SITE ACTIVITIES AT ALL TIMES, UNLESS OTHERWISE SPECIFIED ON THESE PLANS:

- APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL PLAN DOES NOT CONSTITUTE AN ACCEPTANCE OF THE PERMANENT ROAD OR DRAINAGE DESIGN.
- THE OWNER AND HIS/HER CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PREVENTING SILT-LADEN RUNOFF FROM DISCHARGING FROM THE PROJECT SITE. FAILURE BY THE OWNER AND/OR CONTRACTOR CAN RESULT IN A FINE. THE DESIGNATED TEMPORARY CONTACT PERSON NOTED ON THIS PLAN MUST BE AVAILABLE FOR CONTACT BY TELEPHONE ON A 24 HOUR BASIS THROUGHOUT CONSTRUCTION AND UNTIL THE PROJECT HAS BEEN COMPLETED AND ACCEPTED BY THE COUNTY.
- THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR FROM THE BEGINNING OF CONSTRUCTION UNTIL ALL CONSTRUCTION IS COMPLETED AND ACCEPTED BY THE COUNTY AND THE SITE IS STABILIZED.
- PRIOR TO BEGINNING ANY WORK ON THE PROJECT SITE, A PRE-CONSTRUCTION CONFERENCE MUST BE HELD, AND SHALL BE ATTENDED BY THE GENERAL CONTRACTOR, THE PROJECT ENGINEER, REPRESENTATIVES FROM THE AFFECTED UTILITIES, AND A REPRESENTATIVE OF KITSAP COUNTY.
- THE EROSION AND SEDIMENTATION CONTROL FACILITIES SHOWN ON THIS PLAN ARE TO BE CONSIDERED ADEQUATE BASIC REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. DURING CONSTRUCTION, DEVIATIONS FROM THIS PLAN MAY BE NECESSARY IN ORDER TO MAINTAIN WATER QUALITY. MINOR DEPARTURES FROM THIS PLAN ARE PERMITTED SUBJECT TO THE APPROVAL OF THE COUNTY INSPECTOR. HOWEVER EXCEPT FOR EMERGENCY SITUATIONS, ALL OTHER DEVIATIONS FROM THIS PLAN MUST BE DESIGNED BY THE PROJECT ENGINEER AND APPROVED BY KITSAP COUNTY PRIOR TO INSTALLATION.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER AND/OR CONTRACTOR ON A FREQUENT BASIS AND IMMEDIATELY AFTER EACH RAINFALL, AND MAINTAINED AS NECESSARY TO INSURE THEIR CONTINUED FUNCTIONING. ALL SEDIMENT MUST BE REMOVED FROM THE SILT FENCES, STRAW BALES, SEDIMENT PONDS, ETC. PRIOR TO THE SEDIMENT REACHING 1/2 ITS MAXIMUM POTENTIAL DEPTH.
- AT NO TIME SHALL CONCRETE, CONCRETE BYPRODUCTS, VEHICLE FLUIDS, PAINT, CHEMICALS, OR OTHER POLLUTING MATTER BE PERMITTED TO DISCHARGE TO THE TEMPORARY OR PERMANENT DRAINAGE SYSTEM, OR TO DISCHARGE FROM THE PROJECT SITE.
- PERMANENT DETENTION/RETENTION PONDS, PIPES, TANKS OR VAULTS MAY ONLY BE USED FOR SEDIMENT CONTAINMENT WHEN SPECIFICALLY INDICATED ON THESE PLANS.

TEMPORARY & PERMANENT HYDROSEEDING

- ALL AREAS CLEARED OR OTHERWISE DISTURBED SHALL BE APPROPRIATELY STABILIZED IN ACCORDANCE WITH THE NOTES & DETAILS SPECIFIED HEREWTH, AND THE TIMES SPECIFIED BY SECTION 8-01.3 OF THE CURRENT EDITION OF THE W.S.D.O.T. STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
- PERMANENT HYDROSEEDING – IN AREAS NOT INCLUDED WITHIN THE PROJECT BOUNDARY OR NOT INCLUDED IN THE PROPOSED LANDSCAPE PLAN SHALL ADHERE TO THE FOLLOWING SPECS:

MINIMUM 80 LBS./ACRE MIXTURE OF:
15% KENTUCKY BLUEGRASS
40% TALL FESCUE
30% PERENNIAL RYE
15% CHEWINGS FESCUE
FERTILIZER – 400 LBS./ACRE OF 10-20-20
MULCH – 2000 LBS./ACRE
- TEMPORARY HYDROSEEDING – IN ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL RECEIVE PERMANENT LANDSCAPING SHALL BE SEEDED WITH RYE GRASS AS REQUIRED TO PRODUCE A SUITABLE TEMPORARY GROUND COVER.

DRAINAGE NOTES

- THE CONTRACTOR SHALL ENSURE THAT THE DRAINAGE IS INSTALLED AND OPERATIONAL PRIOR TO COMMENCEMENT OF PAVING WORK.
- ALL STEEL PIPE AND PARTS SHALL BE GALVANIZED. ALL SUBMERGED STEEL PIPES AND PARTS SHALL BE GALVANIZED AND HAVE ASPHALT TREATMENT #1 OR BETTER.
- DRAINAGE STUB OUTS ON INDIVIDUAL LOTS SHALL BE LOCATED WITH A FIVE FOOT HIGH 2"x4" STAKE MARKED "STORM". THE STUB OUT SHALL EXTEND ABOVE SURFACE LEVEL AND BE SECURED TO THE STAKE.

MINIMUM EROSION AND SEDIMENTATION CONTROL REQUIREMENTS

- STABILIZATION AND SEDIMENT TRAPPING. ALL EXPOSED AND UNWORKED SOILS, INCLUDING SOIL STOCKPILES, SHALL BE STABILIZED BY SUITABLE APPLICATION OF BMP'S WHICH PROTECT SOIL FROM THE EROSIIVE FORCES OF RAINDROP IMPACT AND FLOWING WATER. APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO VEGETATIVE ESTABLISHMENT, MULCHING, PLASTIC COVERING, AND THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED. FROM OCTOBER 1 TO APRIL 30, NO SOILS SHALL REMAIN UNSTABILIZED FOR MORE THAN 2 DAYS. FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL REMAIN UNSTABILIZED FOR MORE THAN 7 DAYS.
- AT ALL TIMES OF THE YEAR, THE CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS, EQUIPMENT AND LABOR ON-SITE TO STABILIZE AND PREVENT EROSION FROM ALL DENUIDED AREAS WITHIN 12-HOURS AS SITE AND WEATHER CONDITIONS DICTATE.
- FROM OCTOBER 1ST TO APRIL 30TH, THE PROJECT ENGINEER SHALL VISIT THE DEVELOPMENT SITE A MINIMUM OF ONCE PER WEEK FOR THE PURPOSE OF INSPECTING THE EROSION AND SEDIMENTATION CONTROL FACILITIES, REVIEWING THE PROGRESS OF CONSTRUCTION, AND VERIFYING THE EFFECTIVENESS OF THE EROSION CONTROL MEASURES BEING UNDERTAKEN. THE PROJECT ENGINEER SHALL IMMEDIATELY INFORM THE DIRECTOR OF ANY PROBLEMS OBSERVED DURING SAID SITE VISITS, AS WELL AS OF ANY RECOMMENDED CHANGES IN THE EROSION CONTROL MEASURES TO BE UNDERTAKEN. WHEN REQUESTED BY THE DIRECTOR, THE PROJECT ENGINEER SHALL PROVIDE THE DIRECTOR WITH WRITTEN RECORDS OF SAID WEEKLY SITE VISITS, INCLUDING DATES OF VISITS AND NOTED SITE OBSERVATIONS.
- IN THE EVENT THAT THE GROUND ON A PROJECT SITE IS LEFT BARE AFTER SEPTEMBER 30TH, THE COUNTY MAY ISSUE A STOP WORK ORDER FOR THE ENTIRE PROJECT UNTIL SATISFACTORY CONSTRUCTION ENTRANCE. IN ADDITION, THE OWNER WILL BE SUBJECT TO THE PENALTIES PROVIDED IN SECTION 10 AND SECTION 11 OF THE KITSAP COUNTY STORMWATER ORDINANCE.
- IN THE EVENT THAT GROUND ON A PROJECT SITE IS LEFT BARE AFTER SEPTEMBER 30TH, AND THE COUNTY IS UNSUCCESSFUL IN CONTACTING THE OWNER OR HIS/HER DESIGNATED EMERGENCY CONTACT PERSON, THE COUNTY MAY ENTER THE PROJECT SITE AND INSTALL TEMPORARY GROUND COVER MEASURES AND BILL THE OWNER FOR ALL EXPENSES INCURRED BY THE COUNTY. THESE COSTS WILL BE IN ADDITION TO ANY MONETARY PENALTIES LEVIED AGAINST THE OWNER.
- DELINEATION OF CLEARING AND EASEMENT LIMITS, CLEARING LIMITS, SETBACKS, BUFFERS AND SENSITIVE OR CRITICAL AREAS SUCH AS STEEP SLOPES, WETLANDS AND RIPARIAN CORRIDORS SHALL BE CLEARLY MARKED IN THE FIELD AND INSPECTED BY KITSAP COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT PRIOR TO COMMENCEMENT OF LAND CLEARING ACTIVITIES.
- PROTECTION OF ADJACENT PROPERTIES. ADJACENT PROPERTIES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION BY APPROPRIATE USE OF VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES OR MULCHING, OR BY A COMBINATION OF THESE MEASURES AND OTHER APPROPRIATE BMP'S.
- TIMING AND STABILIZATION OF SEDIMENT TRAPPING MEASURES. SEDIMENT PONDS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER BMP'S INTENDED TO TRAP SEDIMENT ON-SITE SHALL BE CONSTRUCTED AS A FIRST STEP IN GRADING. THIS BMP'S SHALL BE FUNCTIONAL BEFORE LAND DISTURBING ACTIVITIES TAKE PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS SHALL BE STABILIZED ACCORDING TO THE TIMING INDICATED IN ITEM (1) ABOVE.
- SLOPE STABILIZATION. CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. ROUGHENED SOIL SURFACES ARE PREFERRED TO SMOOTH SURFACES. INTERCEPTORS SHOULD BE CONSTRUCTED AT THE TOP OF LONG, STEEP SLOPES WHICH HAVE SIGNIFICANT AREAS ABOVE THAT CONTRIBUTE RUNOFF. CONCENTRATED RUNOFF SHOULD NOT BE ALLOWED TO FLOW DOWN THE FACE OF A CUT OR FILL SLOPE UNLESS CONTAINED WITHIN AN ADEQUATE CHANNEL OR PIPE SLOPE DRAIN. WHEREVER A SLOPE FACE CROSSES A WATER SEEPAGE PLANE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHOULD BE PROVIDED. IN ADDITION, SLOPES SHOULD BE STABILIZED IN ACCORDANCE WITH ITEM (1) ABOVE.
- CONTROLLING OFF-SITE EROSION. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VOLUME, VELOCITY, AND PEAK FLOW RATE OF STORMWATER RUNOFF FROM THE DEVELOPMENT SITE BY THE IMPLEMENTATION OF APPROPRIATE BMP'S TO MINIMIZE ADVERSE DOWNSTREAM IMPACTS.

CONSTRUCTION SEQUENCE

- APPLY FOR AND PICK UP ANY REQUIRED ROAD APPROACH, OR RIGHT OF WAY PERMITS FROM KITSAP COUNTY DEPT. OF PUBLIC WORKS.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S).
- CONSTRUCT FILTER FENCE BARRIERS.
- CONSTRUCT SEDIMENTATION BASINS AND DISCHARGE PIPES
- CONSTRUCT RUNOFF INTERCEPTION AND DIVERSION DITCHES.
- CLEAR AND GRADE PER PLAN. CARE MUST BE TAKEN TO ENSURE TESC BMP'S AND STAND BY MATERIALS ARE ADEQUATE TO THE AREA CLEARED SUCH THAT EROSION CONTROL BMP'S CAN BE TEMPORARILY IMPLEMENTED IN THE EVENT OF UNEXPECTED HEAVY RAINFALL.
- PROVIDE TEMPORARY HYDROSEEDING OR OTHER SOURCE CONTROL STABILIZATION MEASURES ON ALL DISTURBED SOILS.
- MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL FACILITIES TO PROVIDE THE REQUIRED PROTECTION OF DOWNSTREAM WATER QUALITY.
- PROVIDE PERMANENT SITE STABILIZATION.
- EROSION AND SEDIMENTATION CONTROL FACILITIES SHALL NOT BE REMOVED UNTIL CONSTRUCTION IS COMPLETE AND ACCEPTED BY KITSAP COUNTY.

- STABILIZATION OF TEMPORARY CONVEYANCE CHANNELS AND OUTLETS. ALL TEMPORARY ON-SITE CONVEYANCE CHANNELS SHALL BE DESIGNED, CONSTRUCTED AND STABILIZED TO PREVENT EROSION FROM THE EXPECTED FLOW VELOCITY FROM A 2-YR FREQUENCY, 24-HOUR DURATION STORM FOR THE POST-DEVELOPMENTAL CONDITION. STABILIZATION ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES AND DOWNSTREAM REACHES SHALL BE PROVIDED AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.
- STORM DRAIN INLET PROTECTION. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT STORMWATER RUNOFF SHALL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT. AFTER PROPER WRITTEN APPLICATION, THE REQUIREMENT FOR INLET PROTECTION MAY BE WAIVED BY THE DIRECTOR ON A SITE-SPECIFIC BASIS WHEN THE CONVEYANCE SYSTEM DOWNSTREAM OF THE INLET DISCHARGES TO AN APPROPRIATE SEDIMENT CONTAINMENT BMP AND THE CONVEYANCE SYSTEM CAN BE ADEQUATELY CLEANED FOLLOWING SITE STABILIZATION.
- UNDERGROUND UTILITY CONSTRUCTION. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE LIMITED, WHERE FEASIBLE, TO NO MORE THAN 500 FEET OF OPEN TRENCH AT ANY ONE TIME, WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH. DEWATERING DEVICES SHALL DISCHARGE TO AN APPROPRIATE SEDIMENT TRAP OR POND, PRECEDED BY ADEQUATE ENERGY DISSIPATION, PRIOR TO RUNOFF LEAVING THE SITE.
- CONSTRUCTED ACCESS ROUTES. WHEREVER CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS MUST BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) ONTO THE PAVED ROAD BY USE OF APPROPRIATE BMP'S SUCH AS STABILIZED CONSTRUCTION ENTRANCE. IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE ROADS SHALL BE CLEANED THOROUGHLY, AS A MINIMUM, AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- REMOVAL OF TEMPORARY BMP'S. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON-SITE. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY BMP'S SHALL BE PERMANENTLY STABILIZED. THE REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S MAY NOT BE REQUIRED FOR THOSE PROJECTS, SUCH AS SINGLE FAMILY PLATS, THAT WILL BE FOLLOWED BY ADDITIONAL CONSTRUCTION UNDER A DIFFERENT PERMIT. IN THESE CIRCUMSTANCES, THE NEED FOR REMOVING OR RETAINING THE MEASURES WILL BE EVALUATED ON A SITE-SPECIFIC BASIS.
- DEWATERING CONSTRUCTION SITES. DEWATERING DEVICES SHALL DISCHARGE INTO AN APPROPRIATE SEDIMENT TRAP OR POND, DESIGNED TO ACCEPT SUCH A DISCHARGE, PRECEDED BY ADEQUATE ENERGY DISSIPATION, PRIOR TO RUNOFF LEAVING THE SITE.
- CONTROL OF POLLUTANTS OTHER THAN SEDIMENT ON CONSTRUCTION SITES. ALL POLLUTANTS OTHER THAN SEDIMENTS THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND LEGALLY DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORM OR SURFACE WATERS. POLLUTANTS OF CONCERN INCLUDE, BUT ARE NOT LIMITED TO, FUELS, LUBRICANTS, SOLVENTS, CONCRETE BYPRODUCTS AND CONSTRUCTION MATERIALS.
- MAINTENANCE. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO INSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL MAINTENANCE AND REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUAL. THE APPLICANT SHALL BE RESPONSIBLE FOR ASSURING THAT ANY SUCH FACILITIES DAMAGED DURING FLOODS, STORMS OR OTHER ADVERSE WEATHER CONDITIONS ARE IMMEDIATELY RETURNED TO NORMAL OPERATING CONDITION.
- FINANCIAL LIABILITY. A PERFORMANCE COVENANT OR PERFORMANCE SURETY SHALL BE REQUIRED FOR ALL PROJECTS TO ENSURE COMPLIANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, AS OUTLINED IN SECTION 4.0 OF THE KITSAP COUNTY STORMWATER ORDINANCE.

GENERAL NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE MOST CURRENT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION PREPARED BY WSDOT AND APWA AS ADOPTED BY THE KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS (KCDPW).
- ANY REVISIONS TO THE ACCEPTED CONSTRUCTION PLANS SHALL BE REVIEWED AND APPROVED BY KCDPW PRIOR TO IMPLEMENTATION IN FIELD.
- THE CONTRACTOR SHALL MAINTAIN A SET OF ACCEPTED CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES WHILE CONSTRUCTION IS IN PROGRESS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS FROM THE KCDPW PRIOR TO COMMENCING ANY WORK WITHIN COUNTY RIGHT-OF-WAY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE TRAFFIC CONTROL AT ALL TIMES DURING CONSTRUCTION ALONGSIDE OR WITHIN ALL PUBLIC ROADWAYS. TRAFFIC FLOW ON EXISTING PUBLIC ROADWAYS SHALL BE MAINTAINED AT ALL TIMES, UNLESS PERMISSION IS OBTAINED FROM THE KCDPW FOR ROAD CLOSURE AND/OR DETOURS.

INSPECTION SCHEDULE

- THE CONTRACTOR SHALL NOTIFY COMMUNITY DEVELOPMENT TO ARRANGE FOR INSPECTION OF THE VARIOUS PHASES OF WORK CHECKED BELOW. ALL INSPECTIONS SHALL BE COMPLETED PRIOR TO PROCEEDING WITH THE NEXT PHASE OF WORK.

✓

LOCATION OF THE ROAD APPROACH

✓

CLEARING LIMITS

✓

IMPLEMENTATION OF THE VARIOUS PHASES OF THE EROSION AND SEDIMENTATION CONTROL PLAN

✓

PLACEMENT OF DRAINAGE STRUCTURES PRIOR TO BACK FILLING, INCLUDING POND EMBANKMENTS

✓

PRIOR TO PLACEMENT OF THE DETENTION OUTLET CONTROL STRUCTURE

✓

INSPECTION OF PREPARED SUB-GRADE

✓

INSPECTION OF GRAVEL BASE PLACEMENT

✓

INSPECTION OF FINE-GRAIDING PRIOR TO PAVING

✓

INSPECTION OF PAVING OPERATIONS

✓

FINAL INSPECTION
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK PERFORMED AND SHALL ENSURE THAT CONSTRUCTION IS ACCEPTABLE TO KITSAP COUNTY.
- IF INSPECTION IS NOT CALLED FOR PRIOR TO COMPLETION OF ANY ITEM OF WORK SO DESIGNATED, SPECIAL DESTRUCTIVE AND/OR NON-DESTRUCTIVE TESTING PROCEDURES MAY BE REQUIRED TO ENSURE THE ACCEPTABILITY OF THE WORK. IF SUCH PROCEDURES ARE REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE TESTING AND/OR RESTORATION OF THE WORK.

T. E. S. C. MAINTENANCE REQUIREMENTS

- EROSION AND SEDIMENTATION CONTROL FACILITIES SHALL BE INSPECTED AFTER EACH STORM EVENT AND DAILY DURING PROLONGED RAINFALL.
- NECESSARY REPAIRS OR REPLACEMENT OF FACILITIES SHALL BE ACCOMPLISHED PROMPTLY.
- SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF OF THE MAXIMUM POTENTIAL DEPTH.
- SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE ESC FACILITIES ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
- TEMPORARY EROSION AND SEDIMENTATION CONTROL FACILITIES SHALL BE MAINTAINED BY:

EMERGENCY PHONE NUMBER

EMERGENCY PHONE NUMBER

EMERGENCY PHONE NUMBER

THE OWNER'S REPRESENTATIVE SHALL BE:

EMERGENCY PHONE NUMBER

- THE LOCATIONS OF EXISTING UTILITIES ON THIS PLAN IS APPROXIMATE ONLY. THE CONTRACTOR SHALL CONTACT THE "UNDERGROUND LOCATE" CENTER AT PH: 1-800-424-5555, AND NON-SUBSCRIBING INDIVIDUAL UTILITY COMPANIES 48 HOURS IN ADVANCE OF THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL PROVIDE FOR PROTECTION OF EXISTING UTILITIES FROM DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.
- ROCKERIES OR OTHER RETAINING FACILITIES EXCEEDING 4 FT. IN HEIGHT REQUIRE A SEPARATE PERMIT FROM KITSAP COUNTY BUILDING DEPARTMENT.
- A "FORESTRY PRACTICES" PERMIT MAY BE REQUIRED PRIOR TO CLEARING OF THE SITE. CONTACT KITSAP COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT FOR FURTHER INFORMATION.

NOTE

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CALL 48 HOURS
BEFORE YOU DIG
811

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION		
				DESIGNED	RPJ 8/17
				DRAWN	JAT 8/17
				CHECKED	NLOH 8/17
				APPROVED	
				ACCEPTED	



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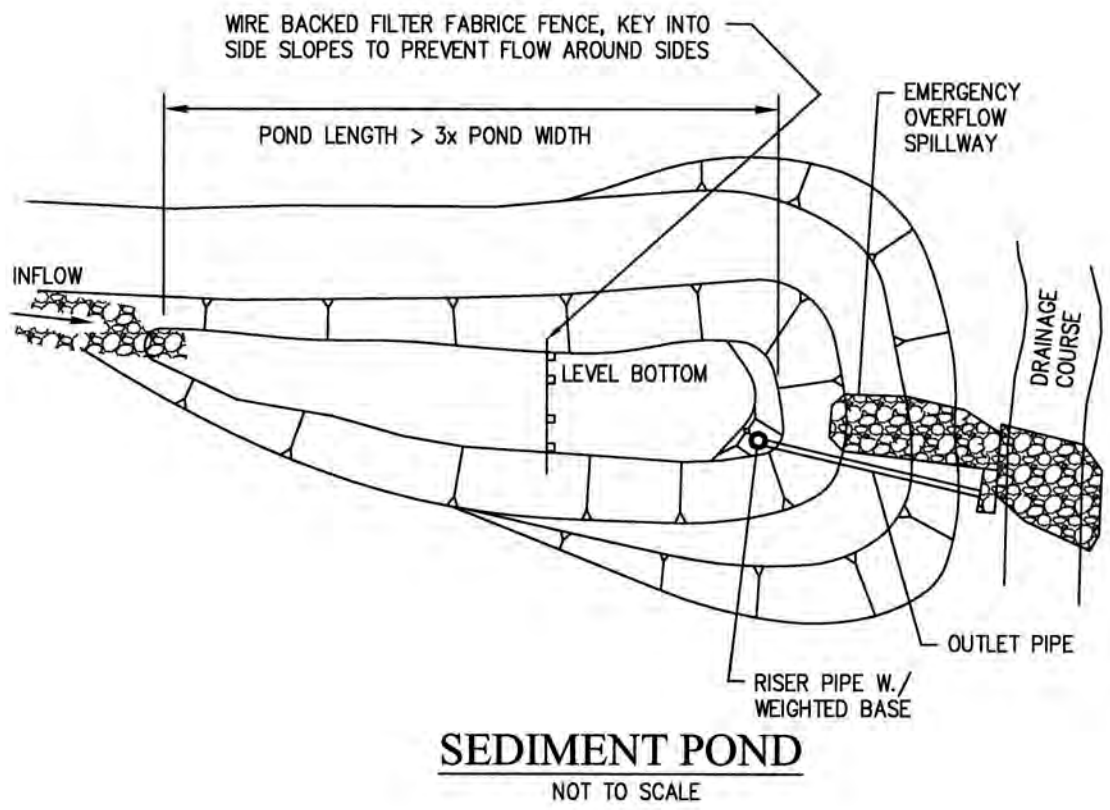
T.E.S.C. NOTES
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

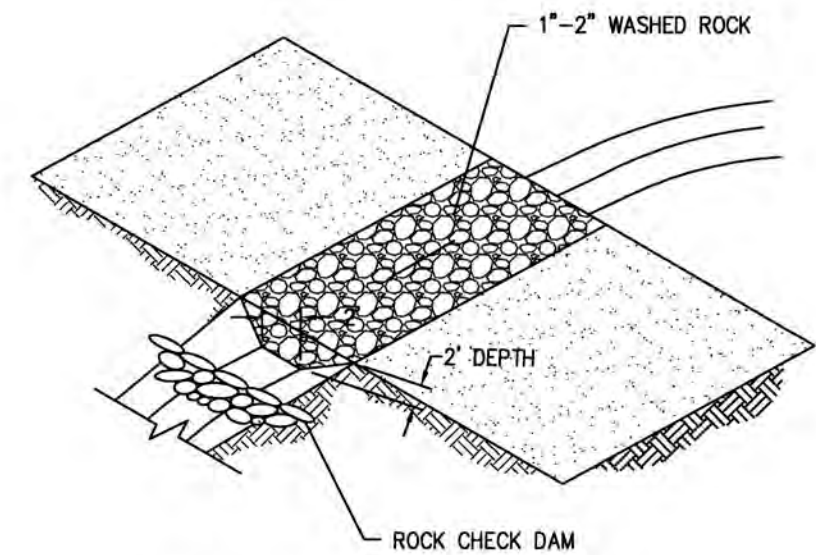
FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

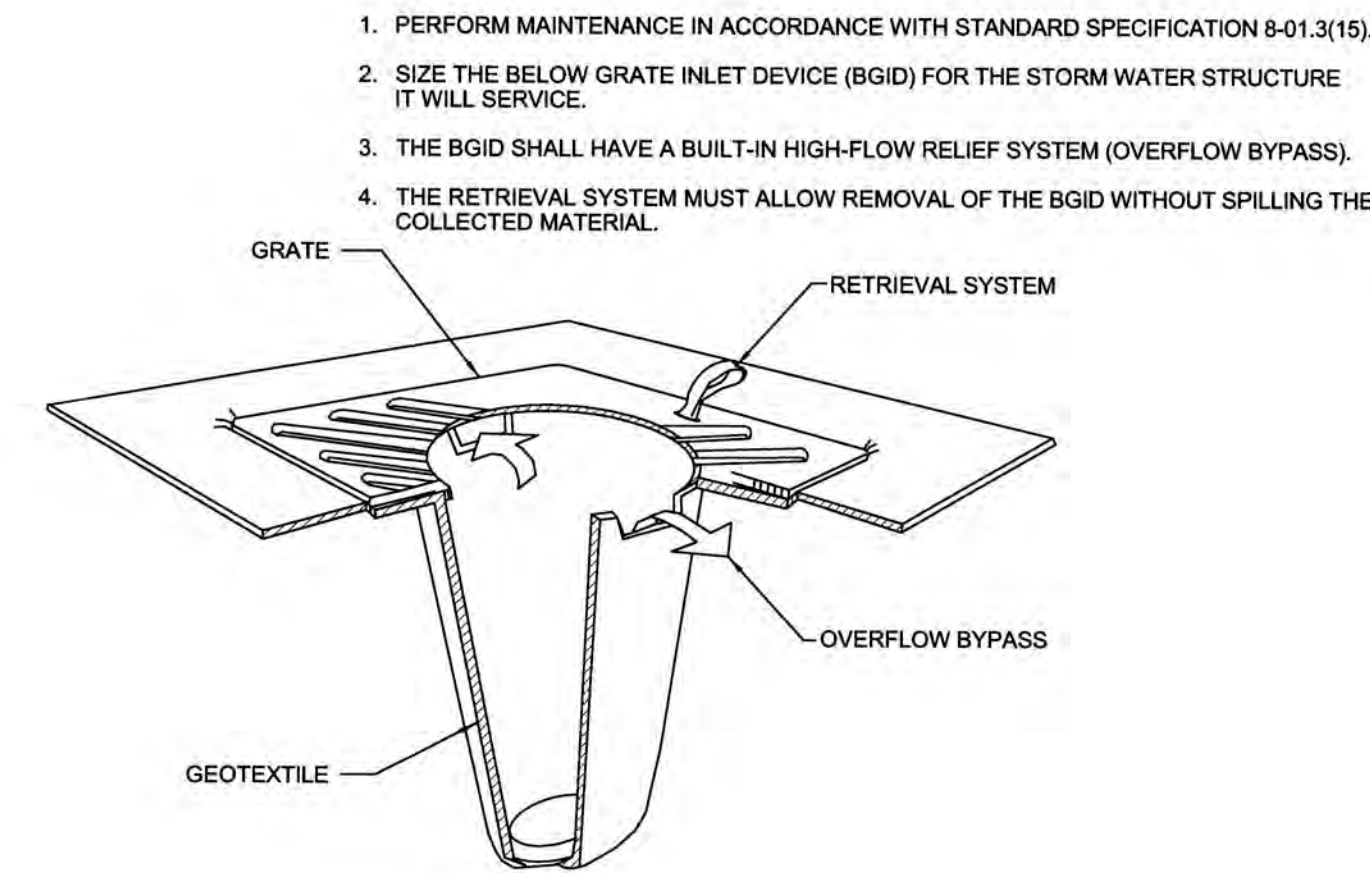
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DRAWING NUMBER:	9582
SHEET	C3.11



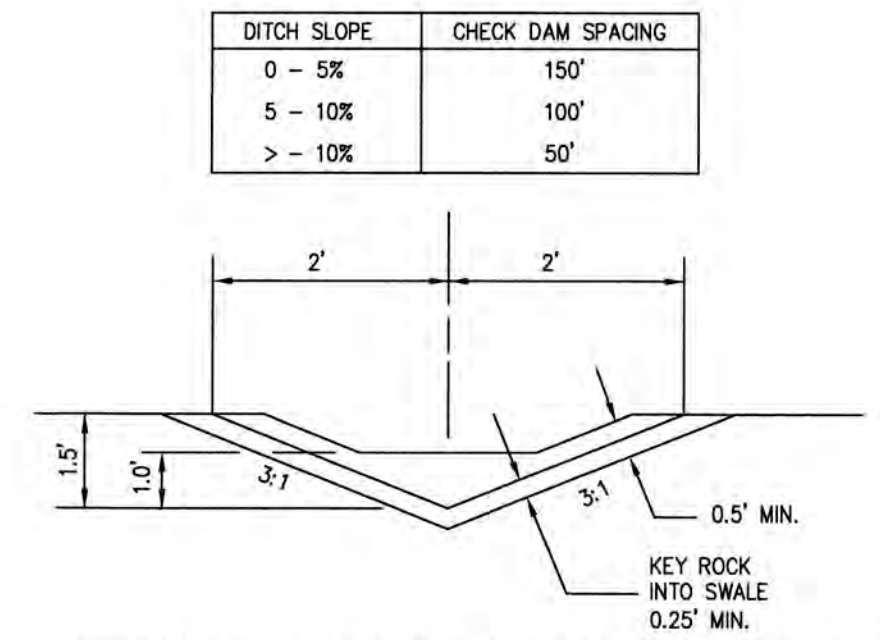
SEDIMENT POND
NOT TO SCALE



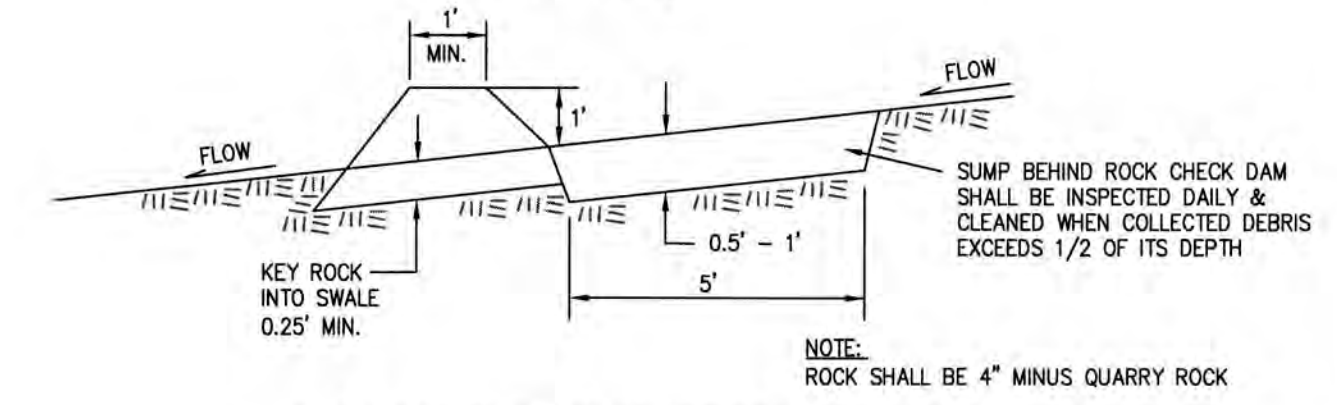
CUT-OFF TRENCH WITH
GRAVEL FILTER DIKE DETAIL
NOT TO SCALE



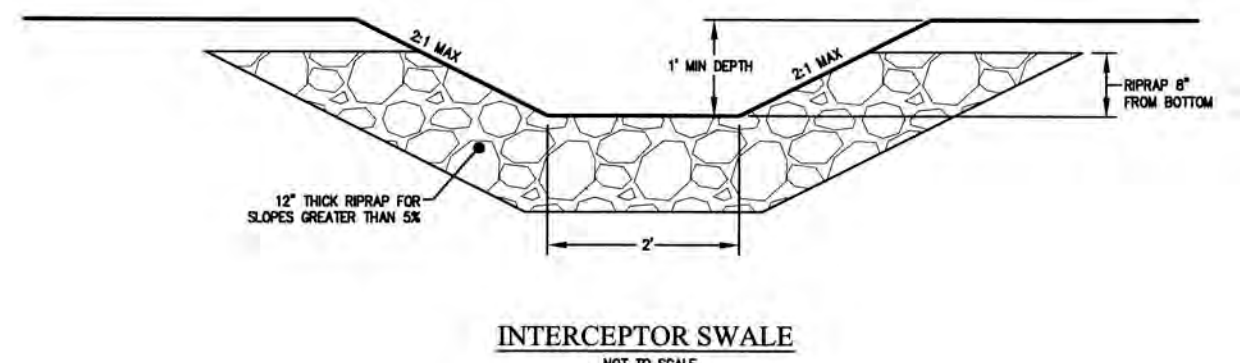
INLET PROTECTION DETAIL
NOT TO SCALE



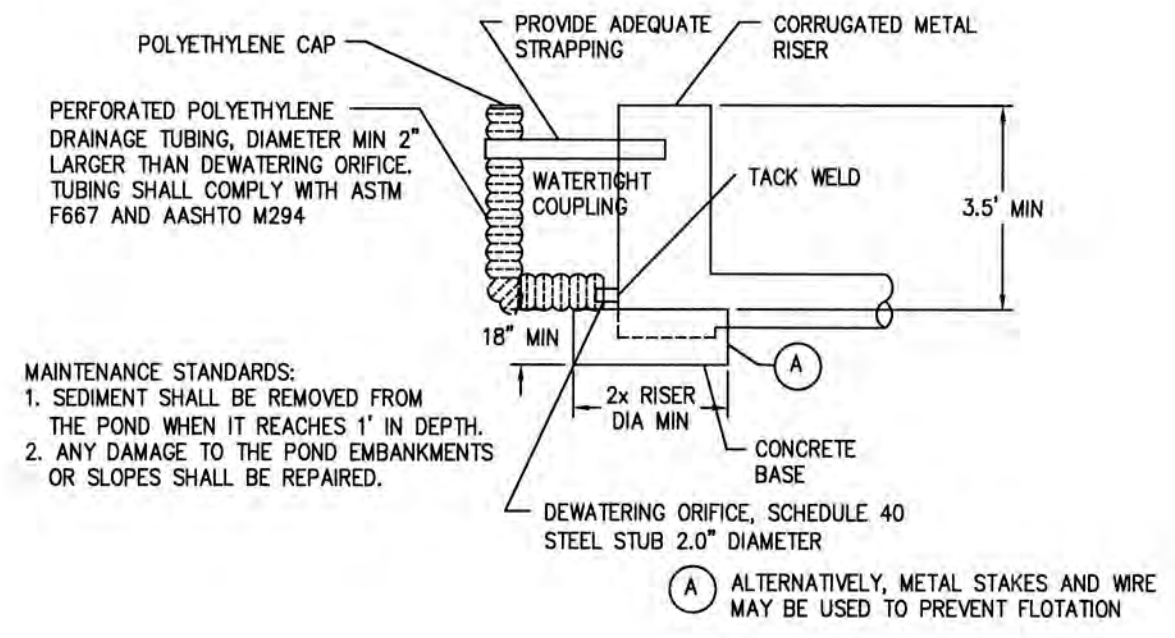
INTERCEPTOR DITCH X-SECTION & ROCK CHECK DAM
(FRONT VIEW)



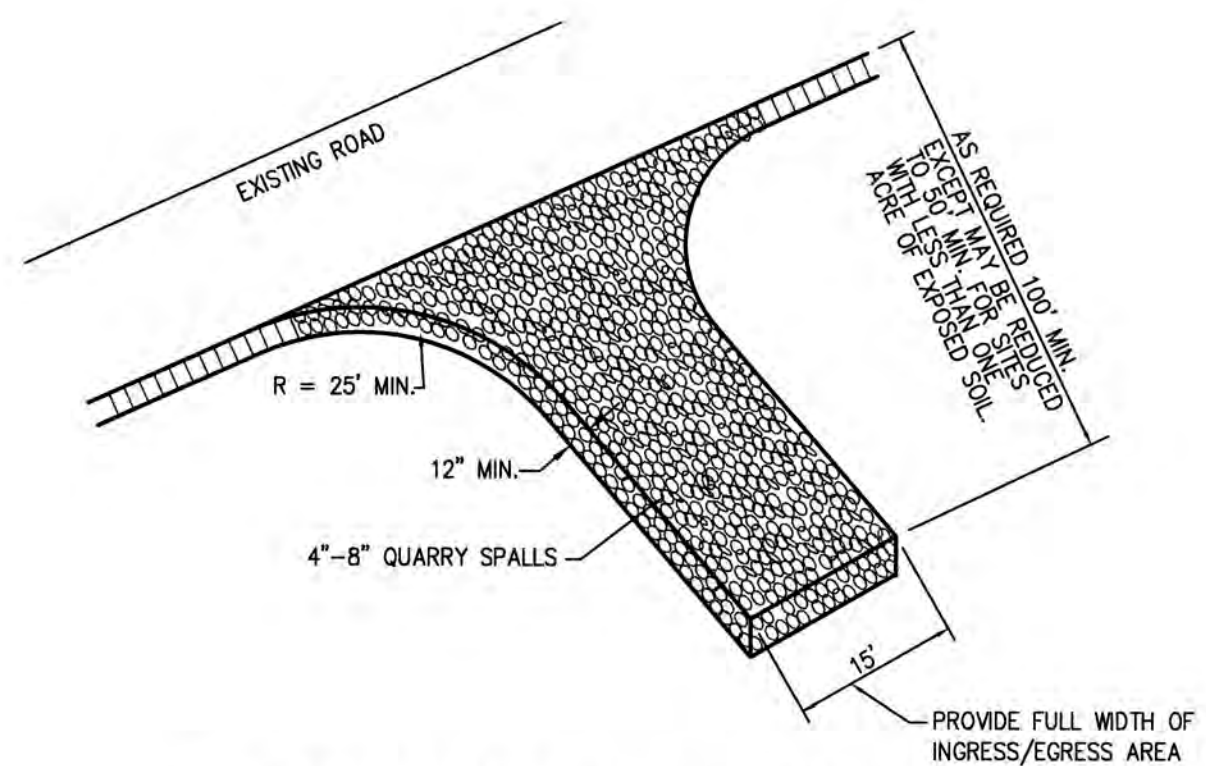
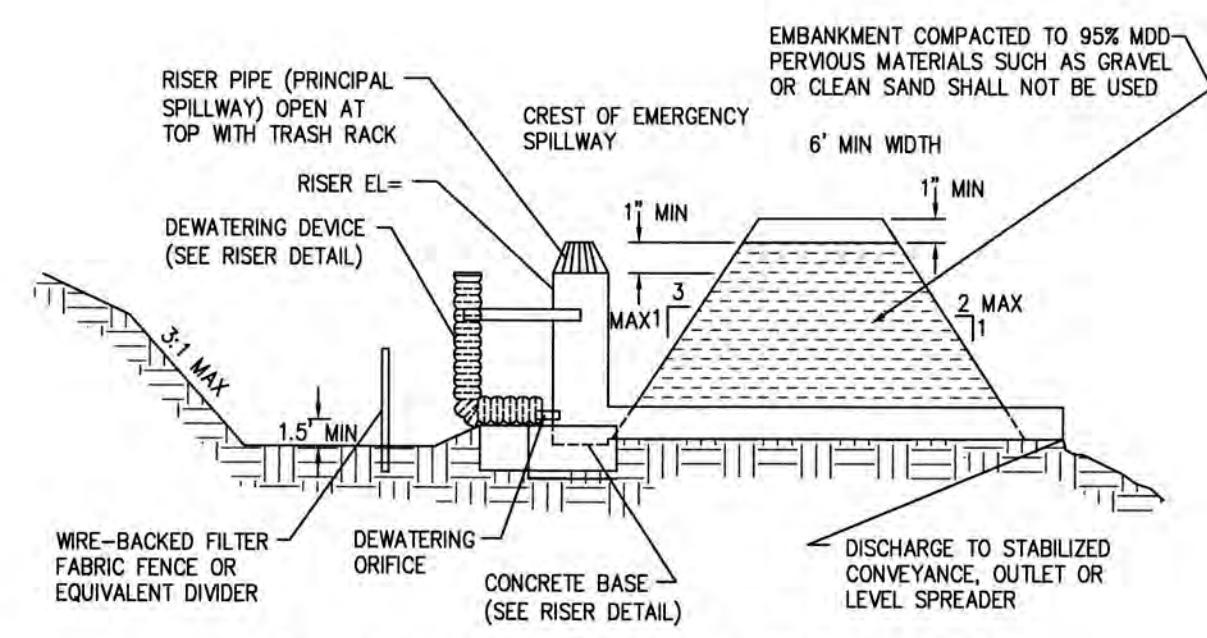
ROCK CHECK DAM X-SECTION
(SIDE VIEW)
TYPICAL INTERCEPTOR DITCH W/ROCK CHECK DAM
NOT TO SCALE



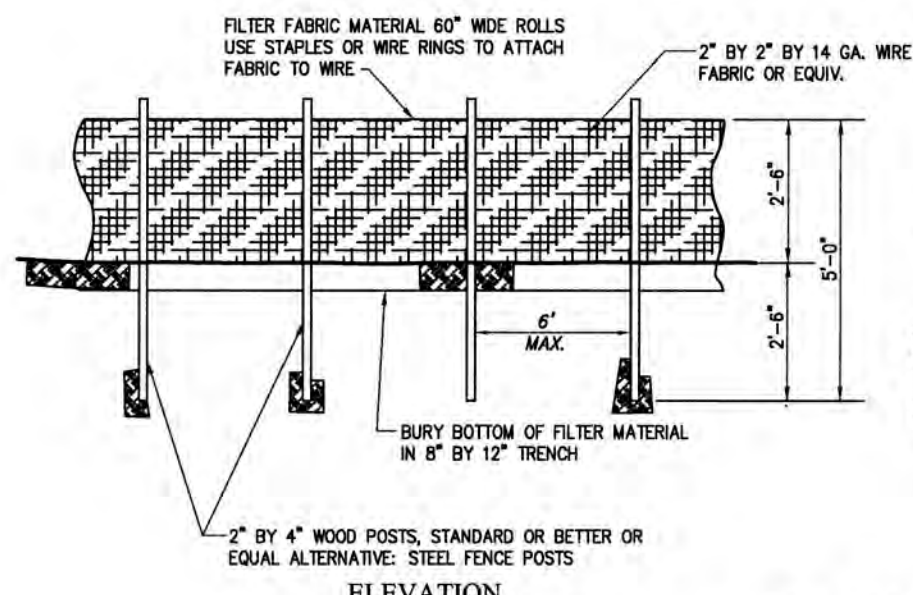
INTERCEPTOR SWALE
NOT TO SCALE



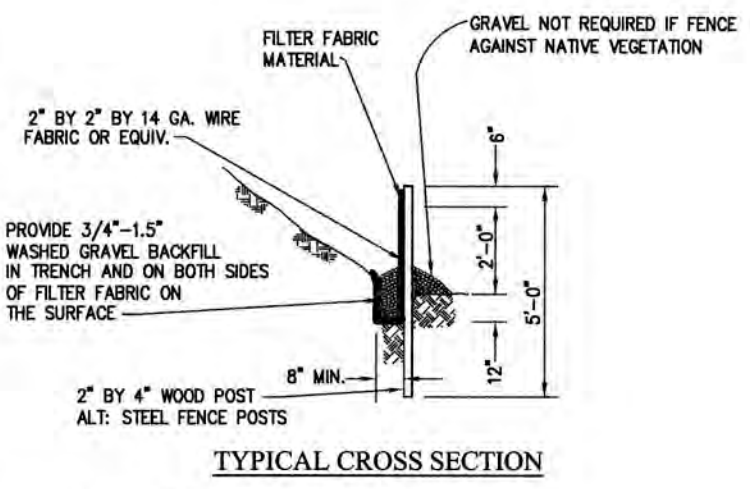
SEDIMENT POND CROSS SECTION
NOT TO SCALE



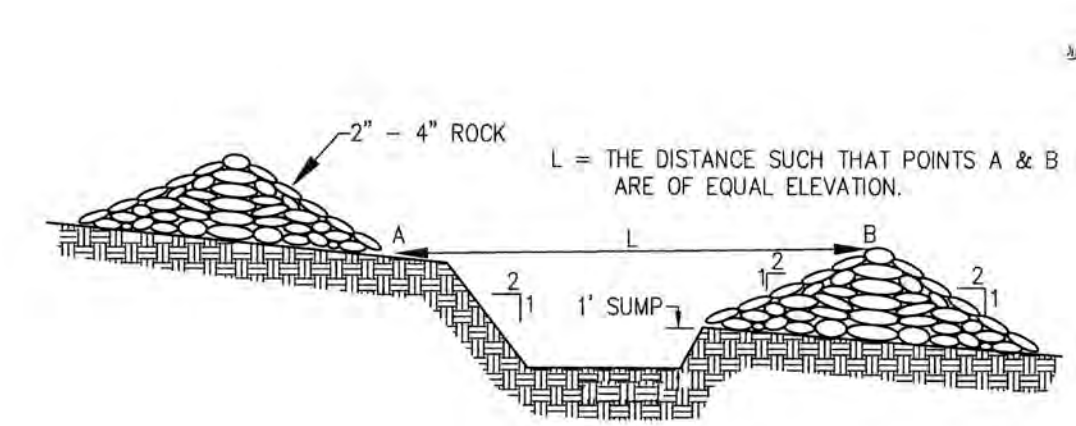
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE
(BMP E2.10)



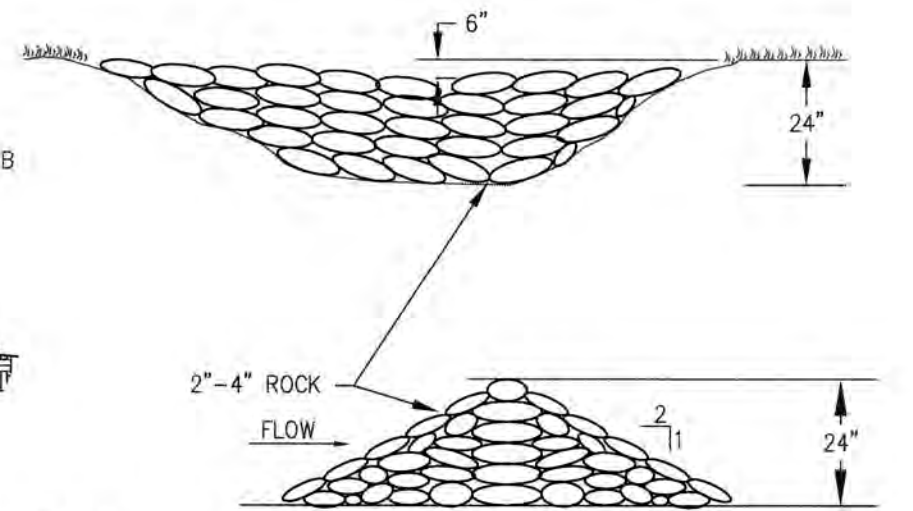
FILTER FABRIC FENCE
NOT TO SCALE
(BMP E3.10)



TYPICAL CROSS SECTION



CHECK DAMS
NOT TO SCALE
(BMP E2.60)



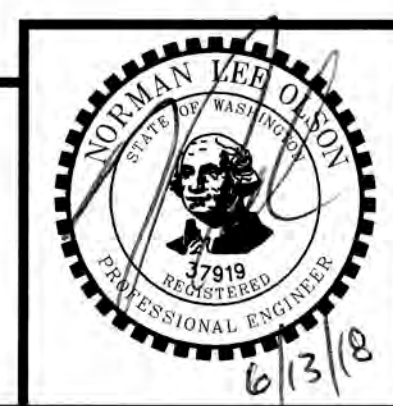
NOTE

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CALL 48 HOURS
BEFORE YOU DIG
811

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ 8/17
				DRAWN	JAT 8/17
				CHECKED	NLOI 8/17
				APPROVED	
				ACCEPTED	

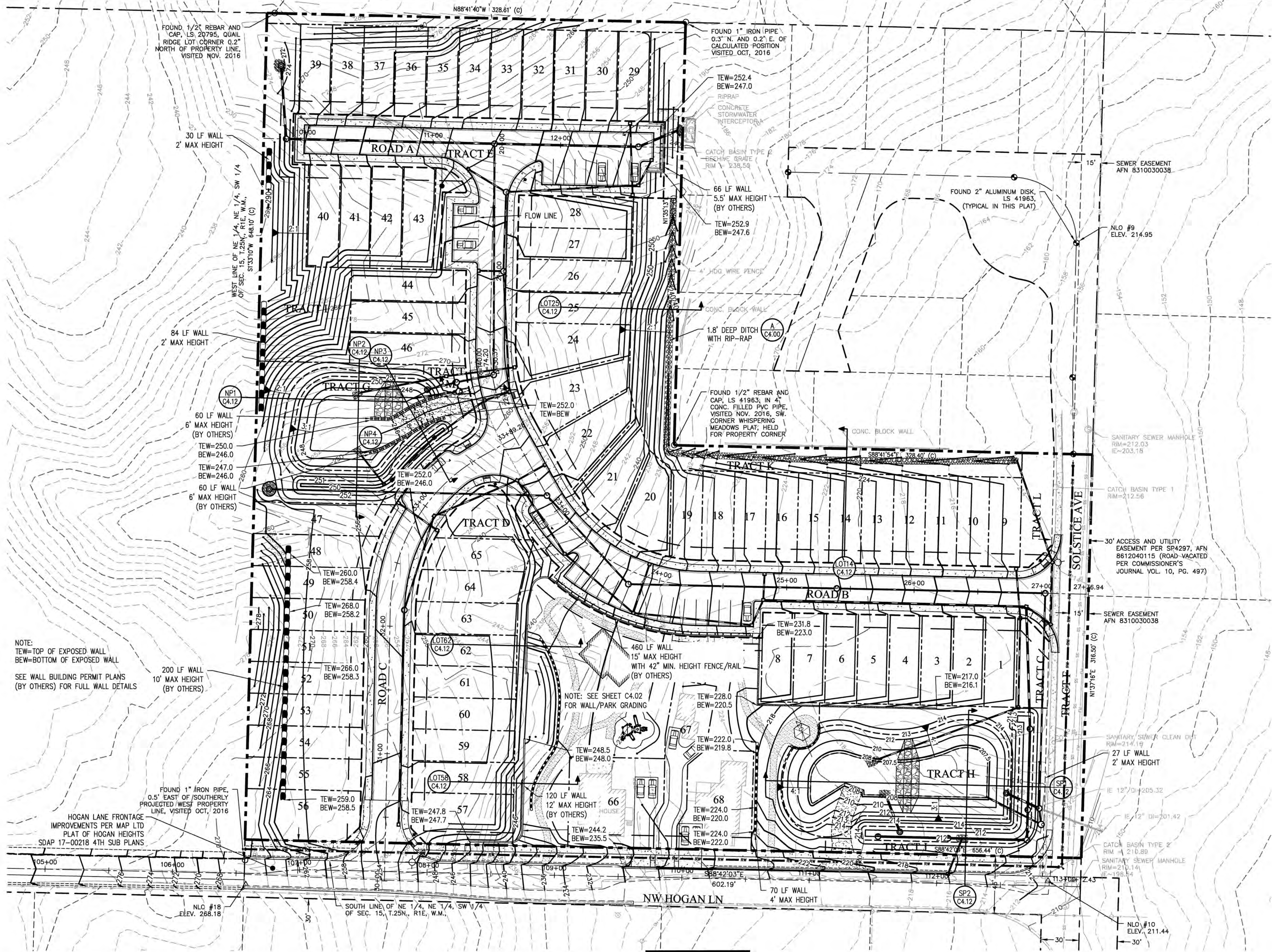
N.L.Olson & Associates, Inc.
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(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



T.E.S.C. DETAILS
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:	Nathan Glen Properties LLC 3599 NW Carlton Street, Suite 201 Silverdale, WA 98383 (360) 626-1146	SCALE: AS SHOWN DATE: June 14, 2018 DRAWING NUMBER: 9582 SHEET C3.12
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\\SERVER\AutoCAD Projects\9582 JVU GRP - HOGAN\9582 HOGAN FINAL\9582P C4.00 GRADING PLAN.dwg, 6/12/2018 3:09:48 PM, jthompson



NOTE

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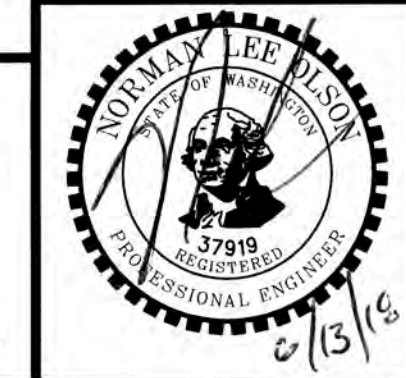
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DITCH DETAIL
SCALE 1"=5'

Scale in Feet

REVISIONS				DESIGNED	BY	DATE
NO.	DATE	BY	DESCRIPTION	RPJ	8/17	
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	JAT	8/17	
2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018	NLOII	8/17	
				APPROVED		
				ACCEPTED		

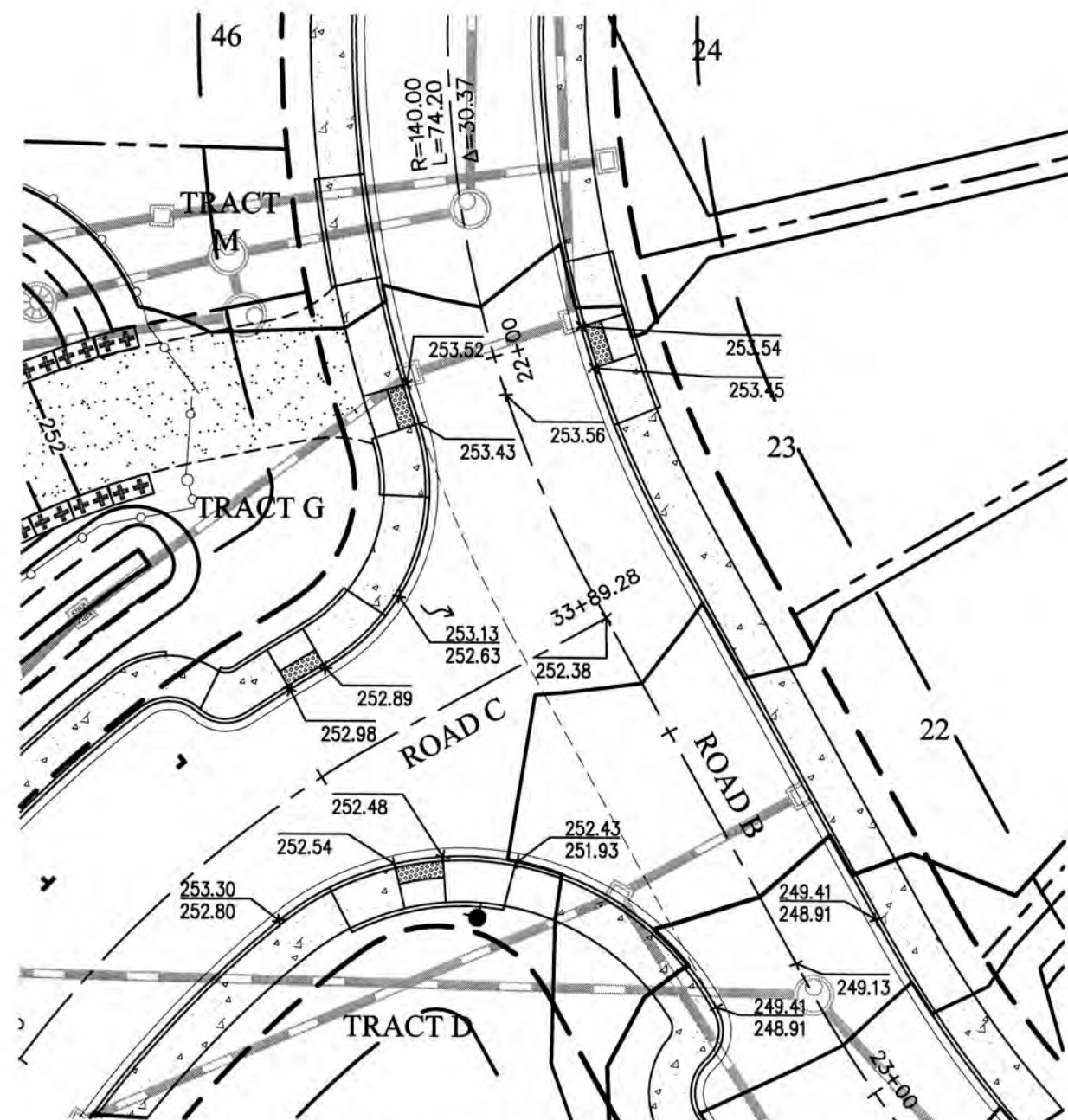
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2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



GRADING PLAN
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

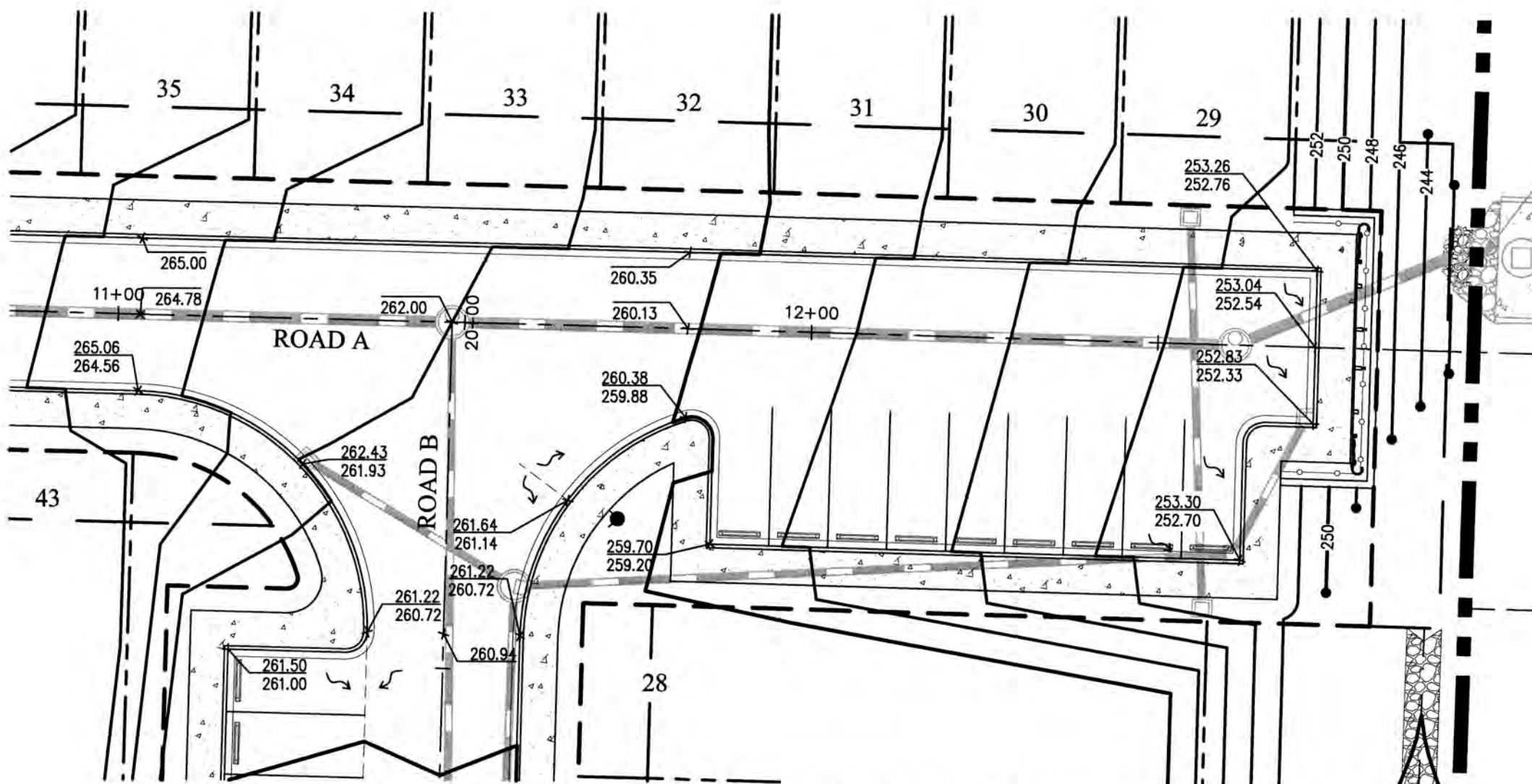
FOR: **Nathan Glen Properties LLC**
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER: **9582**
SHEET C4.00



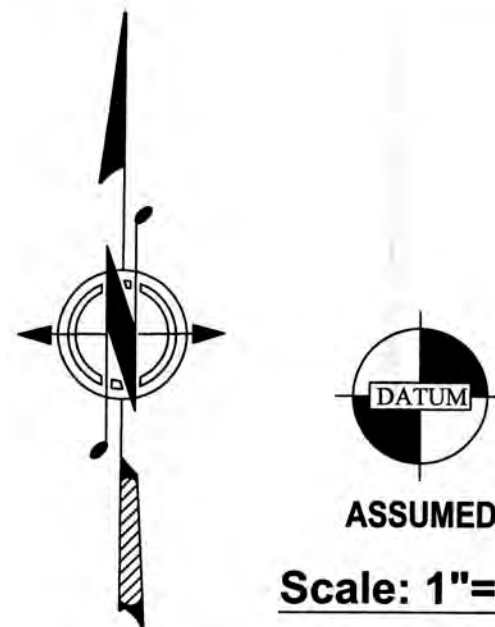
ROAD B & ROAD C INTERSECTION

SCALE: 1"=20'



ROAD A & ROAD B INTERSECTION & PARKING

SCALE: 1"=20'



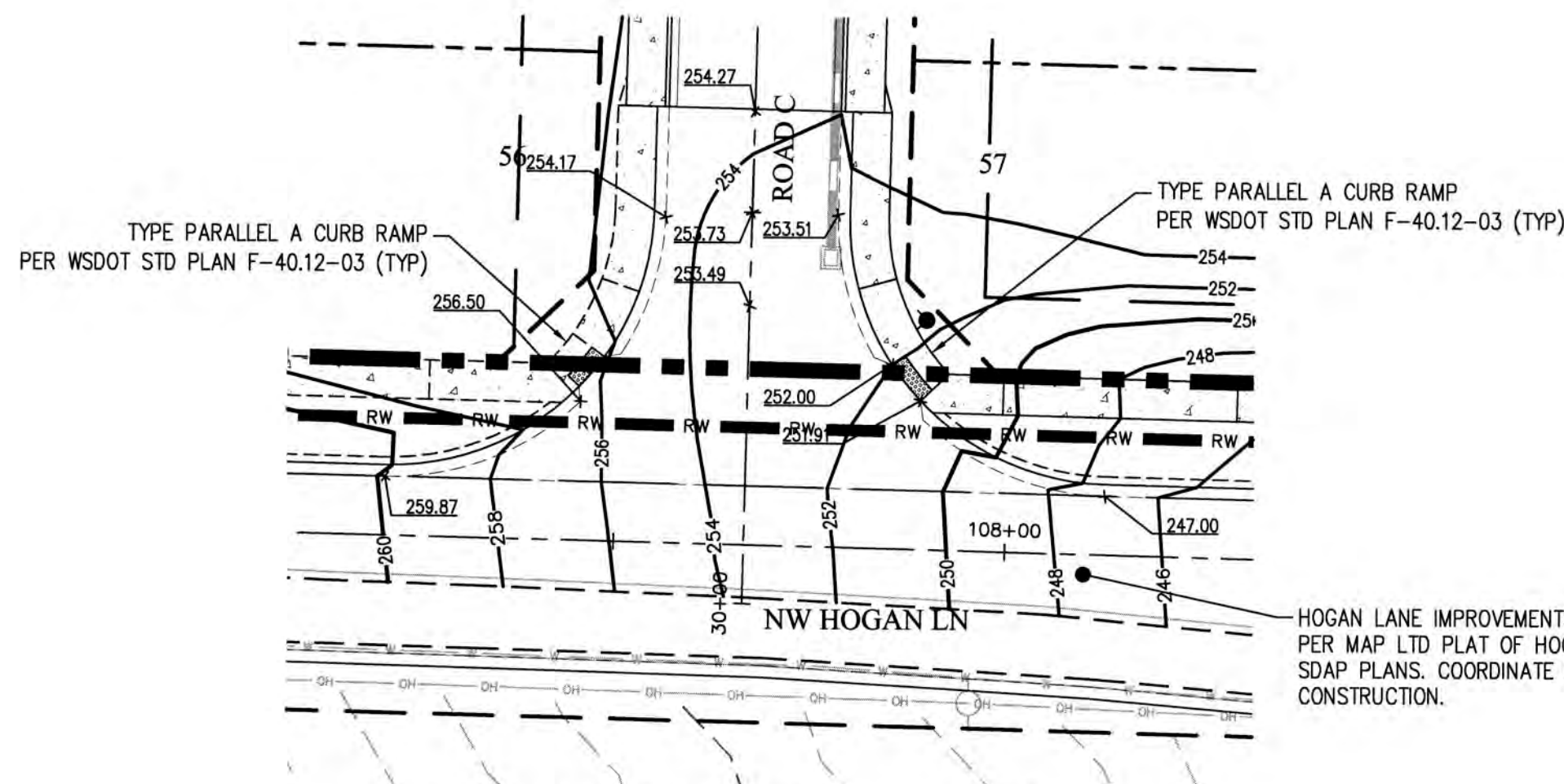
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Scale: 1"= 20'

NOTE

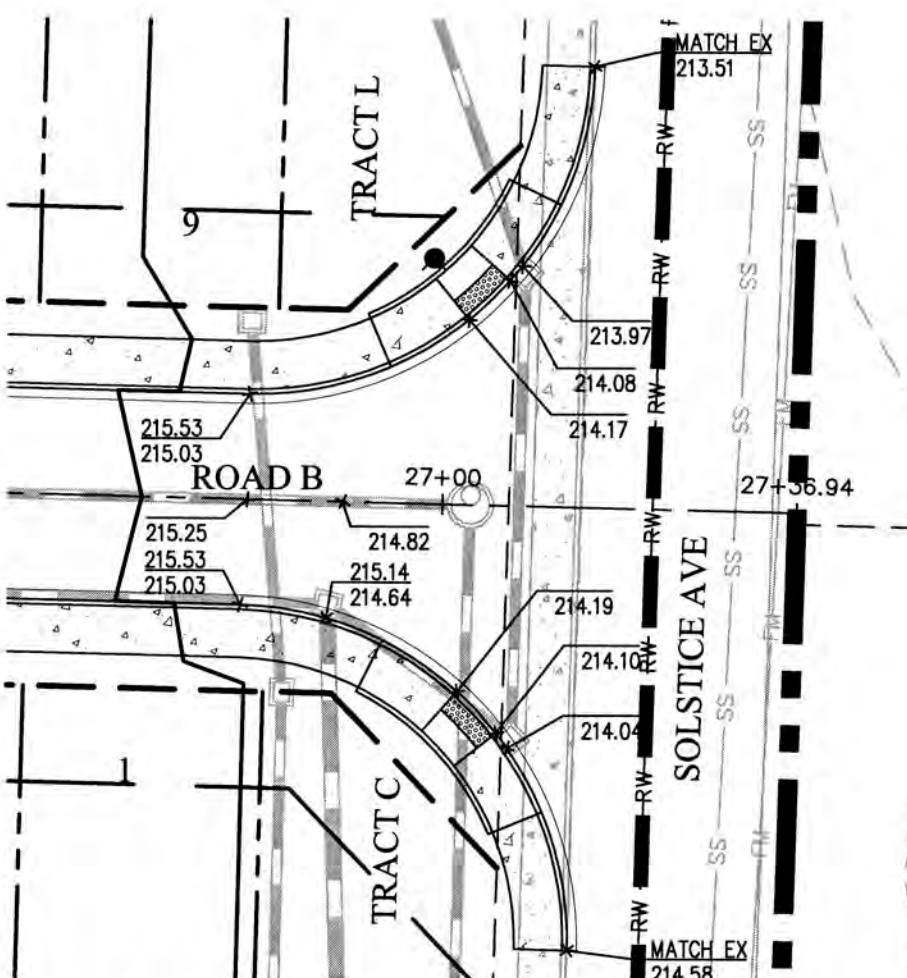
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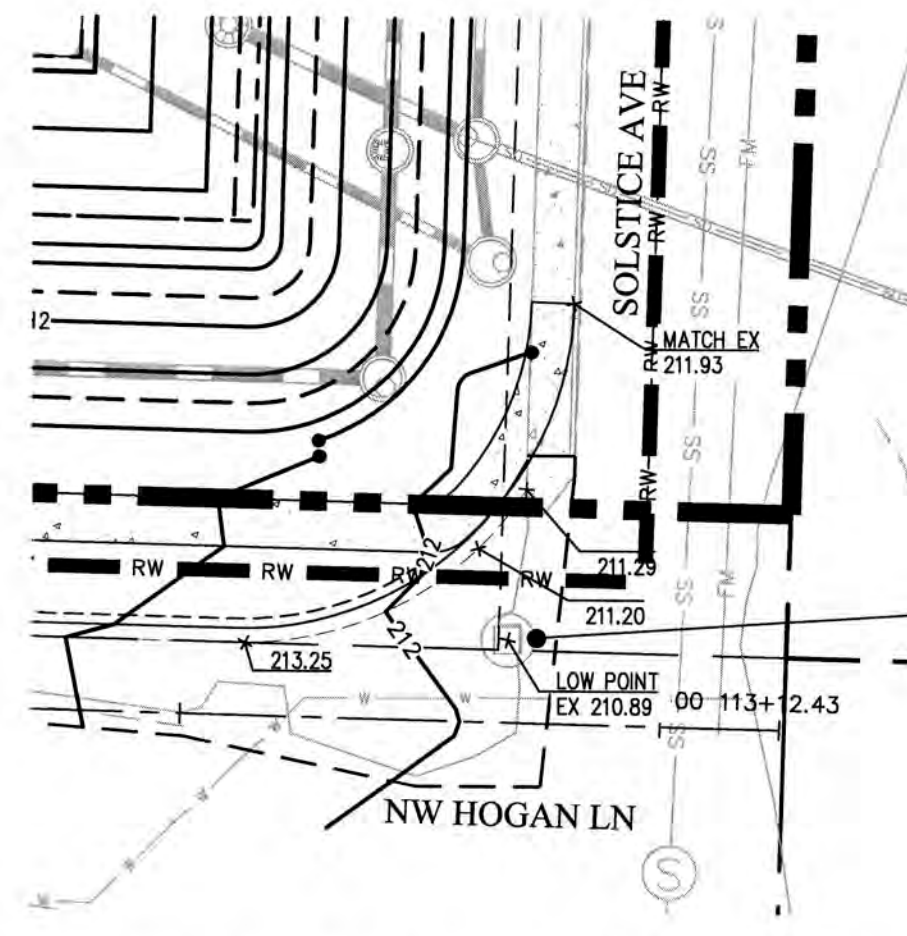
ROAD C & NW HOGAN LN INTERSECTION

SCALE: 1"=20'



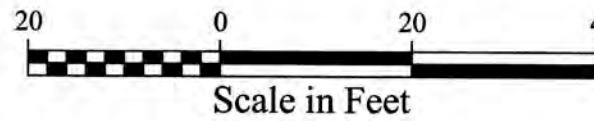
ROAD B & SOLSTICE AVE INTERSECTION

SCALE: 1"=20'



NW HOGAN LN & SOLSTICE AVE INTERSECTION

SCALE: 1"=20'



REVISIONS						BY	DATE
NO.	DATE	BY	DESCRIPTION				
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018		DESIGNED	RPJ	8/17
2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018		DRAWN	JAT	8/17
					CHECKED	NLOI	8/17
					APPROVED		
					ACCEPTED		



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INTERSECTION GRADING PLAN

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

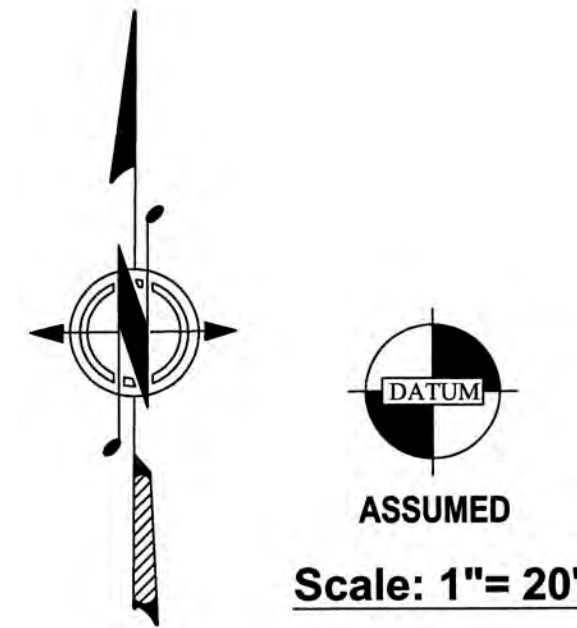
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DATE: June 14, 2018

DRAWING NUMBER:

9582

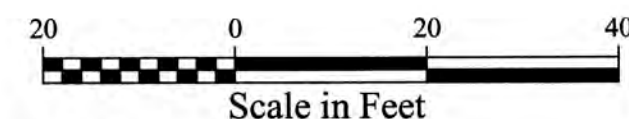
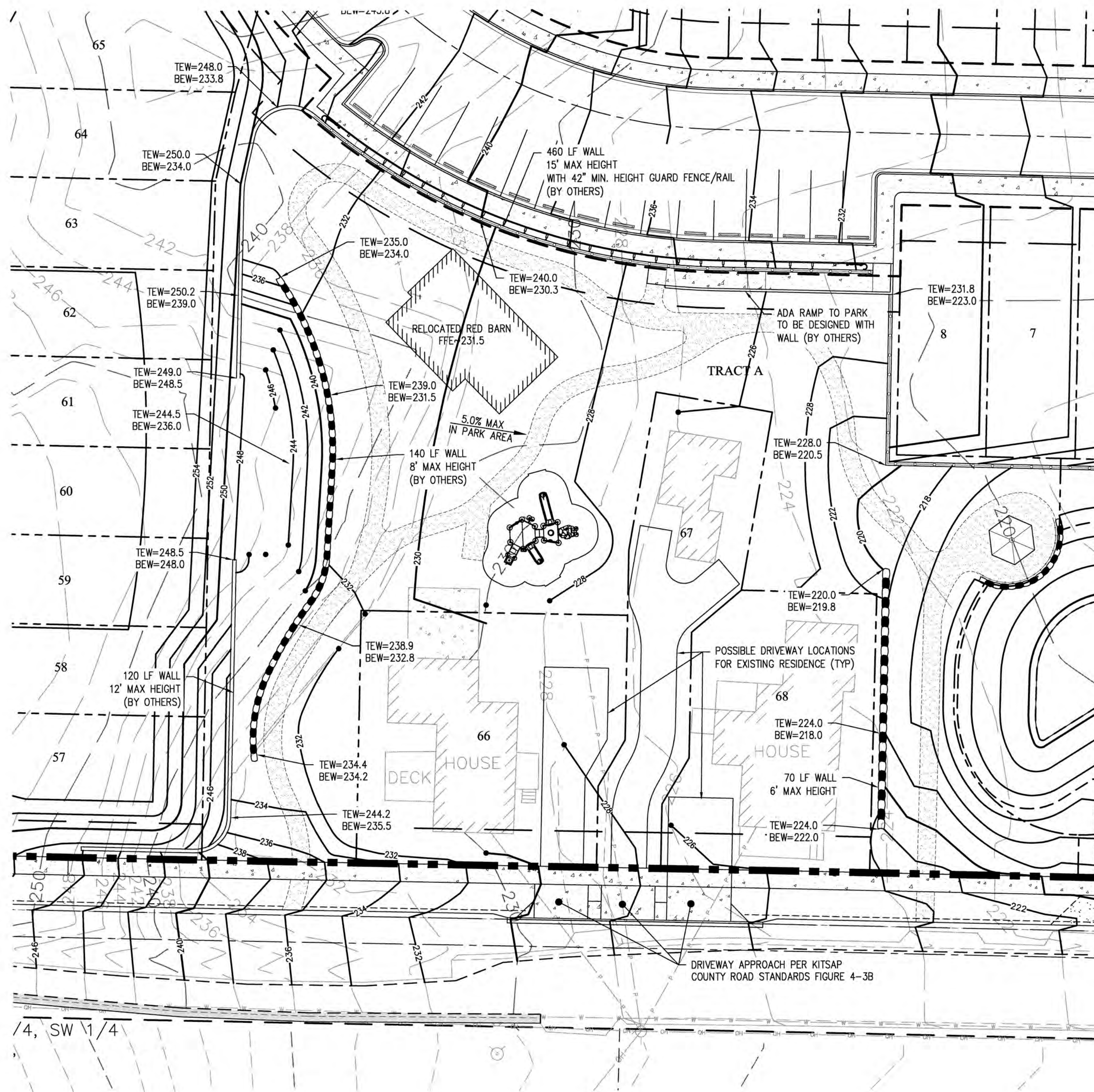
SHEET C4.01



NOTE

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CALL 48 HOURS BEFORE YOU DIG 811



REVISIONS					BY	DATE
NO.	DATE	BY	DESCRIPTION		DESIGNED	RPJ 8/17
1	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018		DRAWN	JAT 8/17
					CHECKED	NLOH 8/17
					APPROVED	
					ACCEPTED	

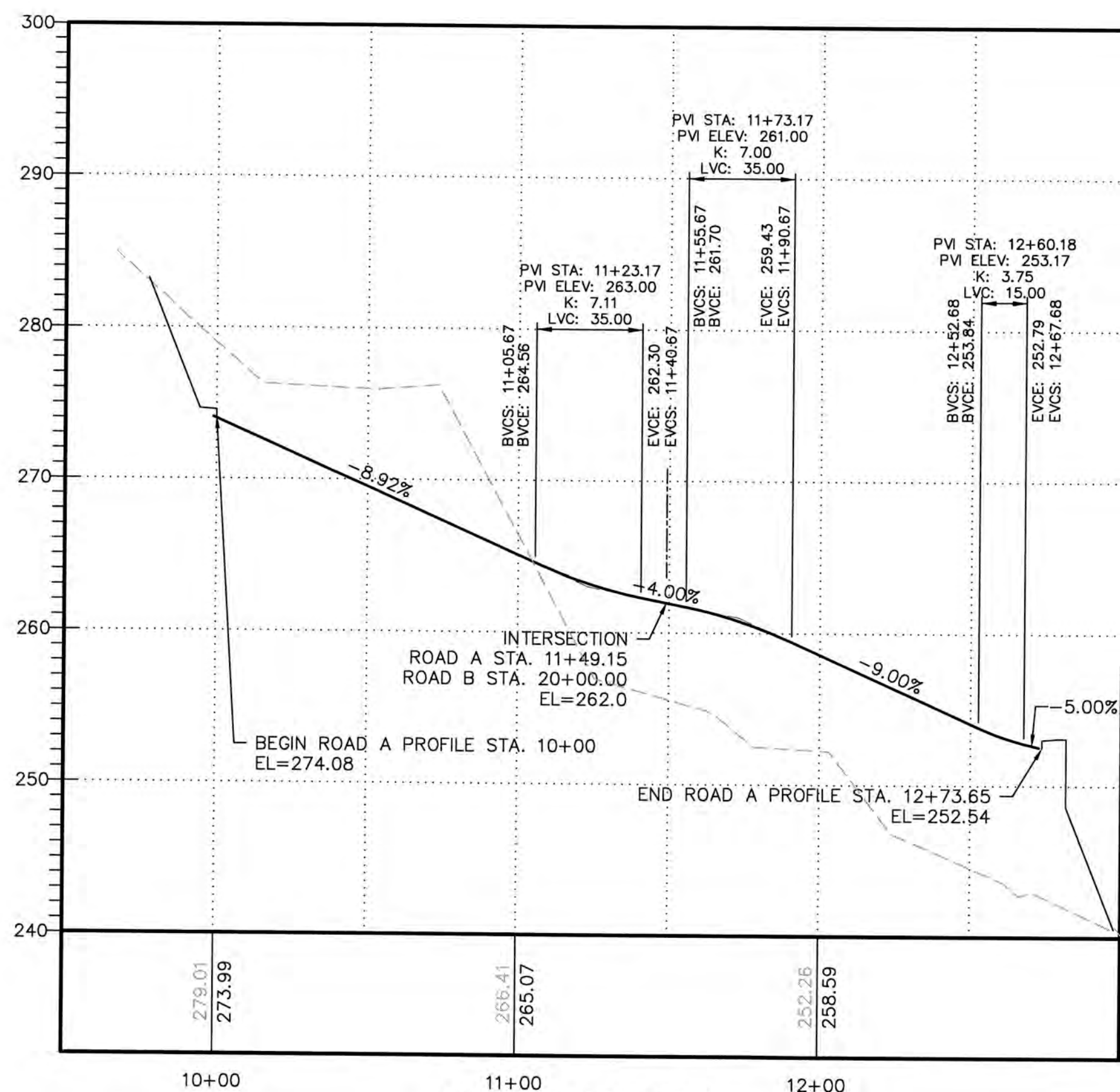
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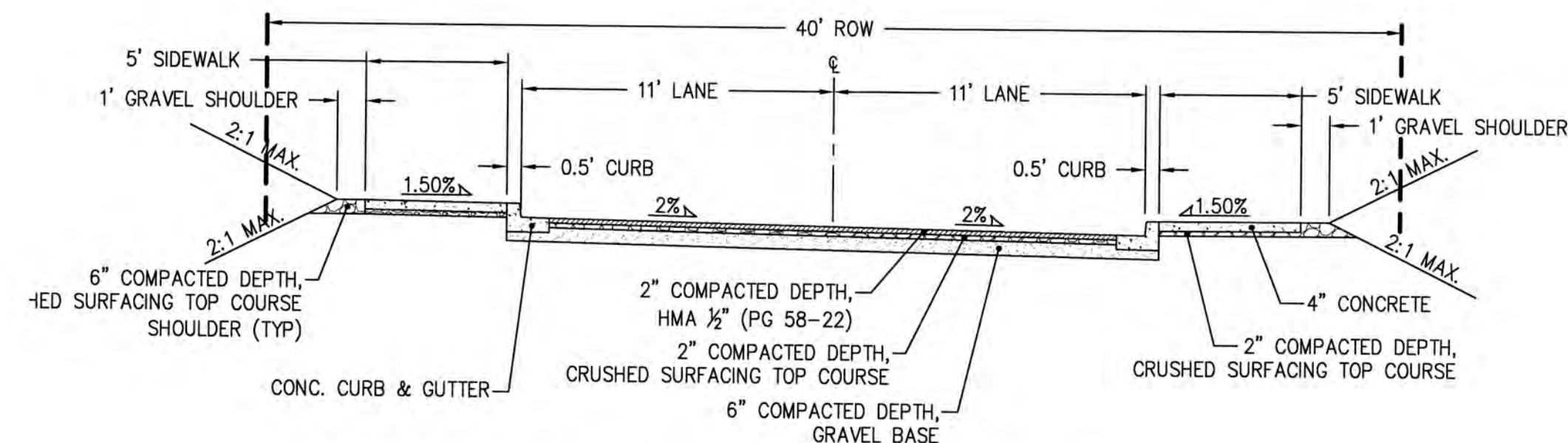
TRACT A PARK GRADING
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

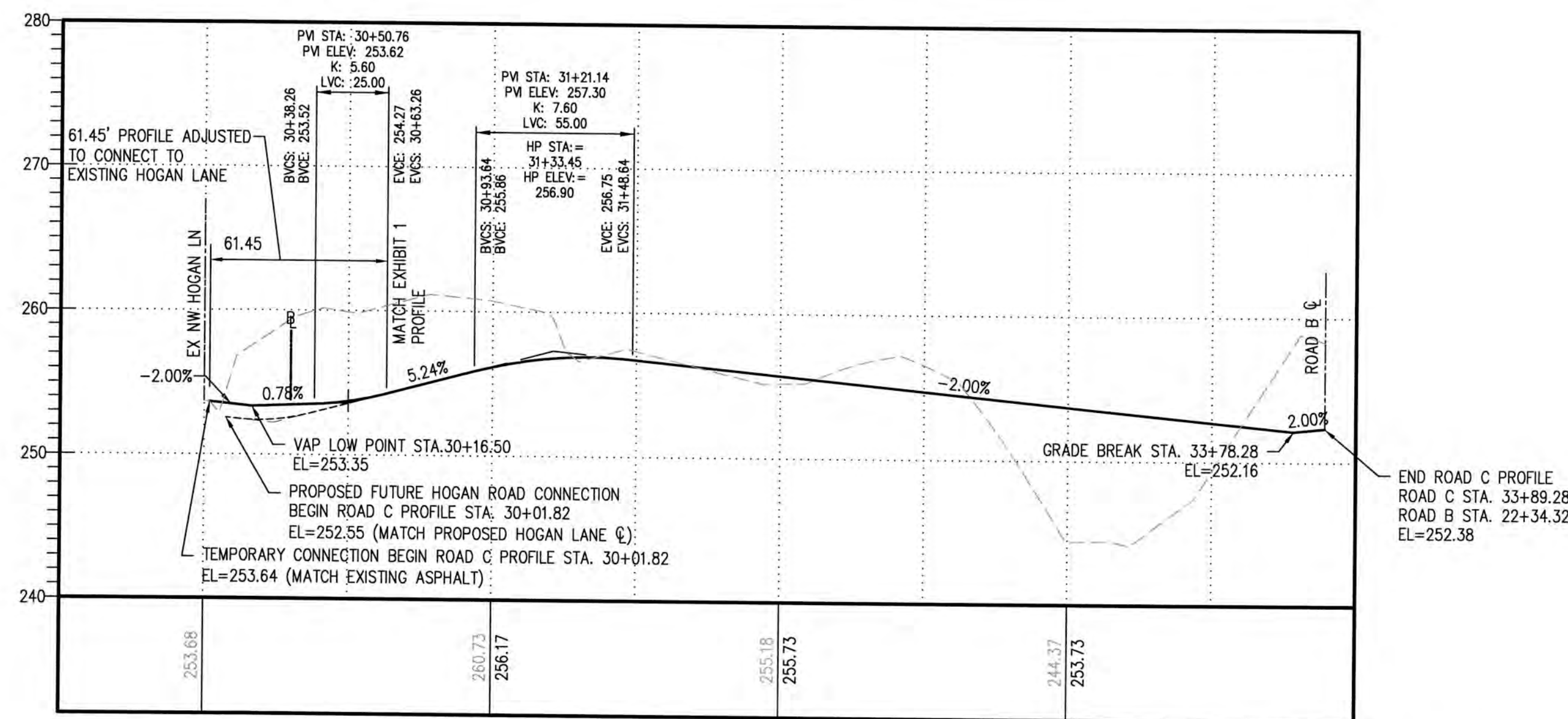
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DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C4.02



ROAD A PROFILE
SCALE HORIZ: 1"=40'
VERT: 1"=8'



ROAD A & C SECTION
SCALE 1"=5'



ROAD C PROFILE CONNECTING TO EXISTING HOGAN LANE
SCALE HORIZ: 1"=40'
VERT: 1"=8'

NOTE: THIS ROAD C PROFILE SHOWS CONNECTION TO THE EXISTING HOGAN LANE, THE DASHED LINE SHOWS CONNECTION TO THE PROPOSED HOGAN LANE BY MAP LTD PLAT OF HOGAN HEIGHTS SDAP PLANS AS SHOWN ON EXHIBIT 1.



ASSUMED
Scale: 1"= 40'
Scale in Feet

NOTE

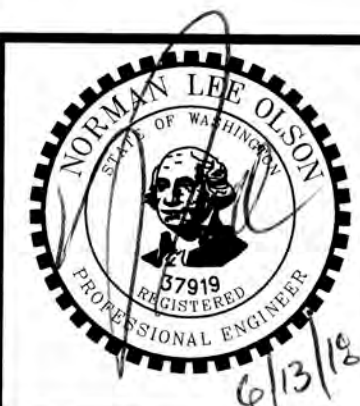
THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.

CALL 48 HOURS
BEFORE YOU DIG
811

REVISIONS

NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ	8/17
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	DRAWN	JAT	8/17
				CHECKED	NLOI	8/17
				APPROVED		
				ACCEPTED		

N.L.Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



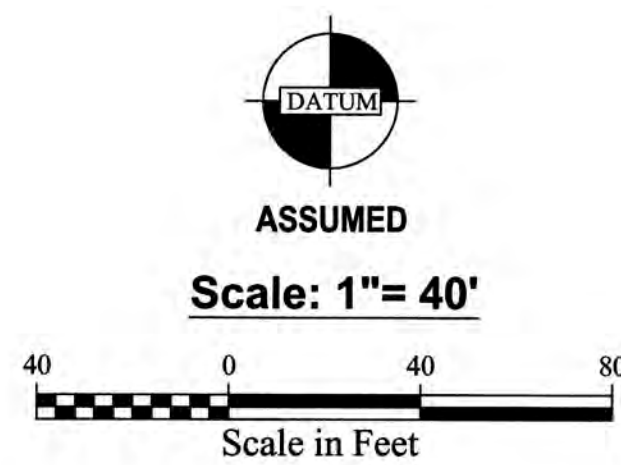
ROAD A & ROAD C PROFILES AND SECTIONS

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

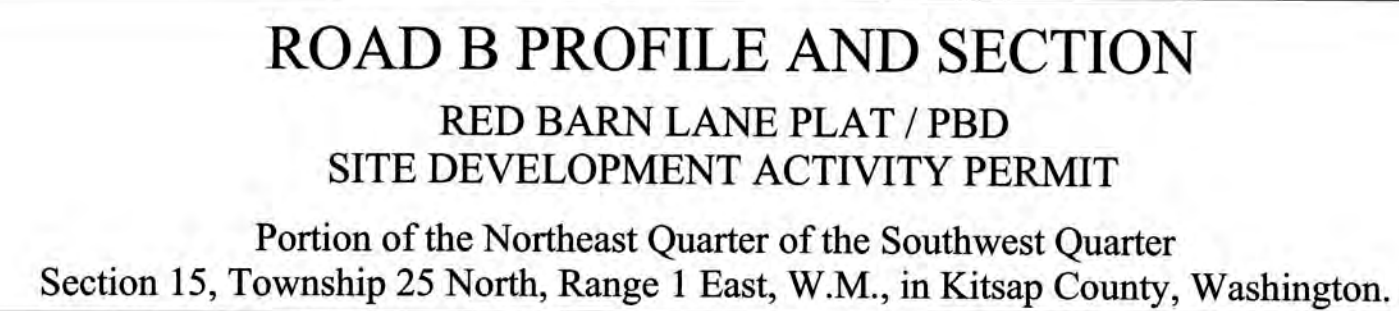
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER: 9582
SHEET C4.10



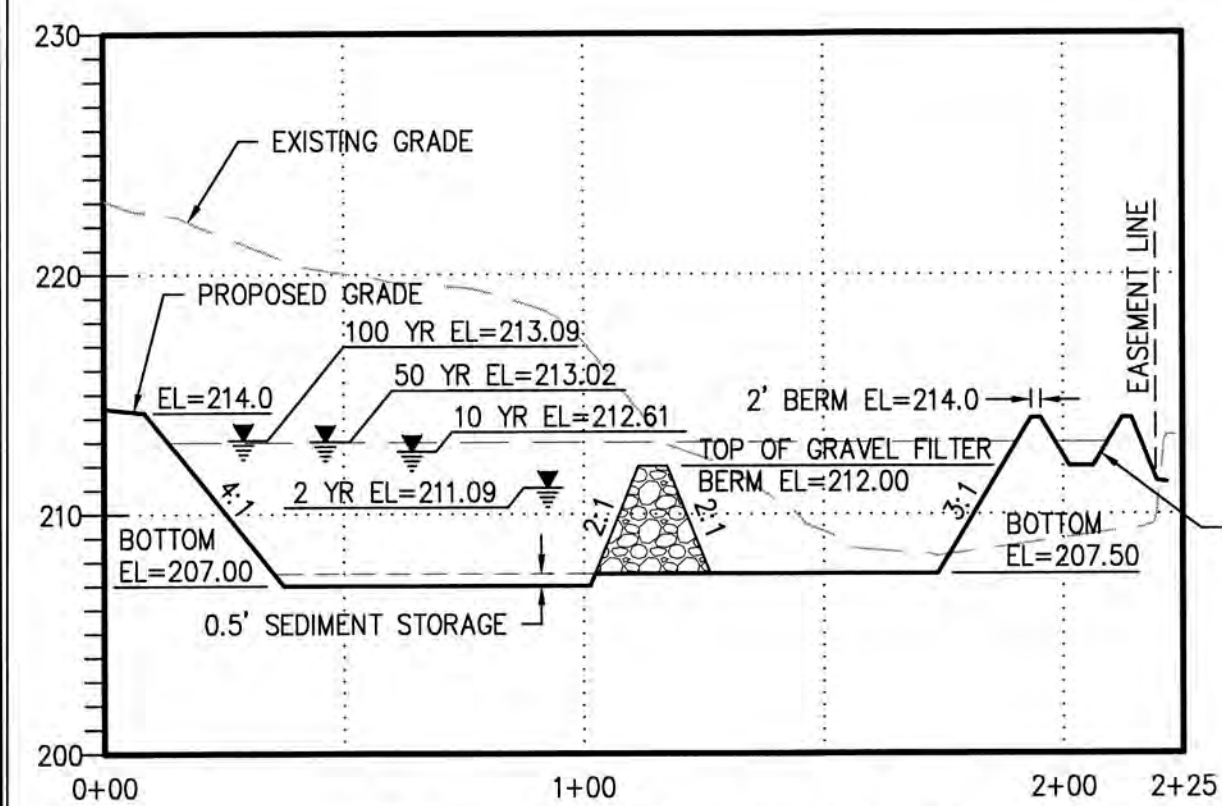
**CALL 48 HOURS
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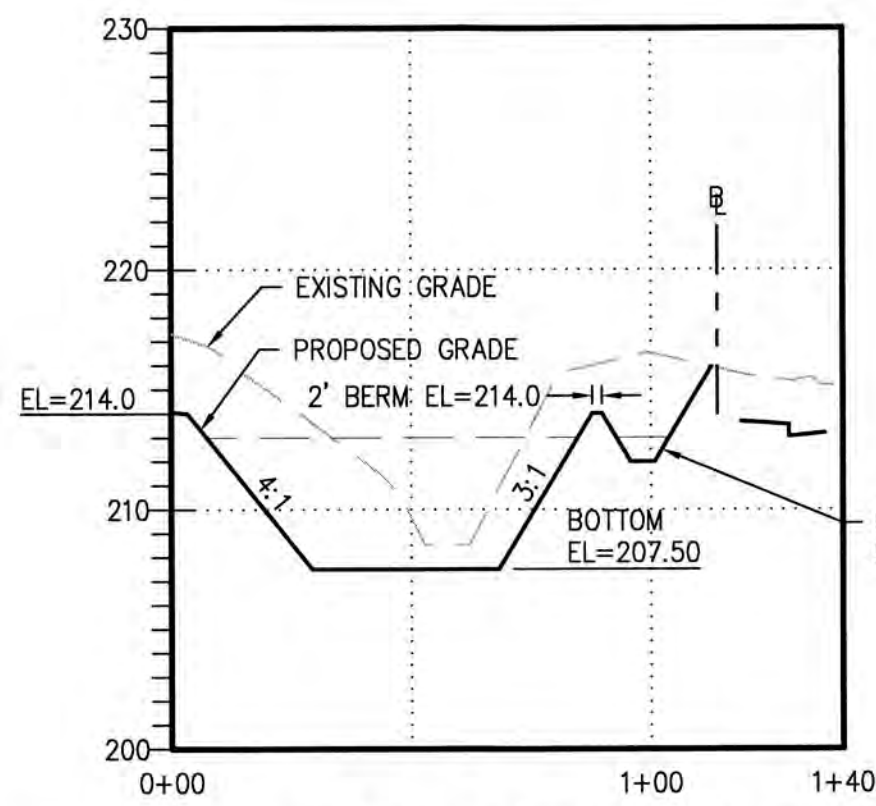
FOR: **Nathan Glen Properties LLC**
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

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DATE:	June 14, 2018
DRAWING NUMBER:	9582
SHEET	C4.11

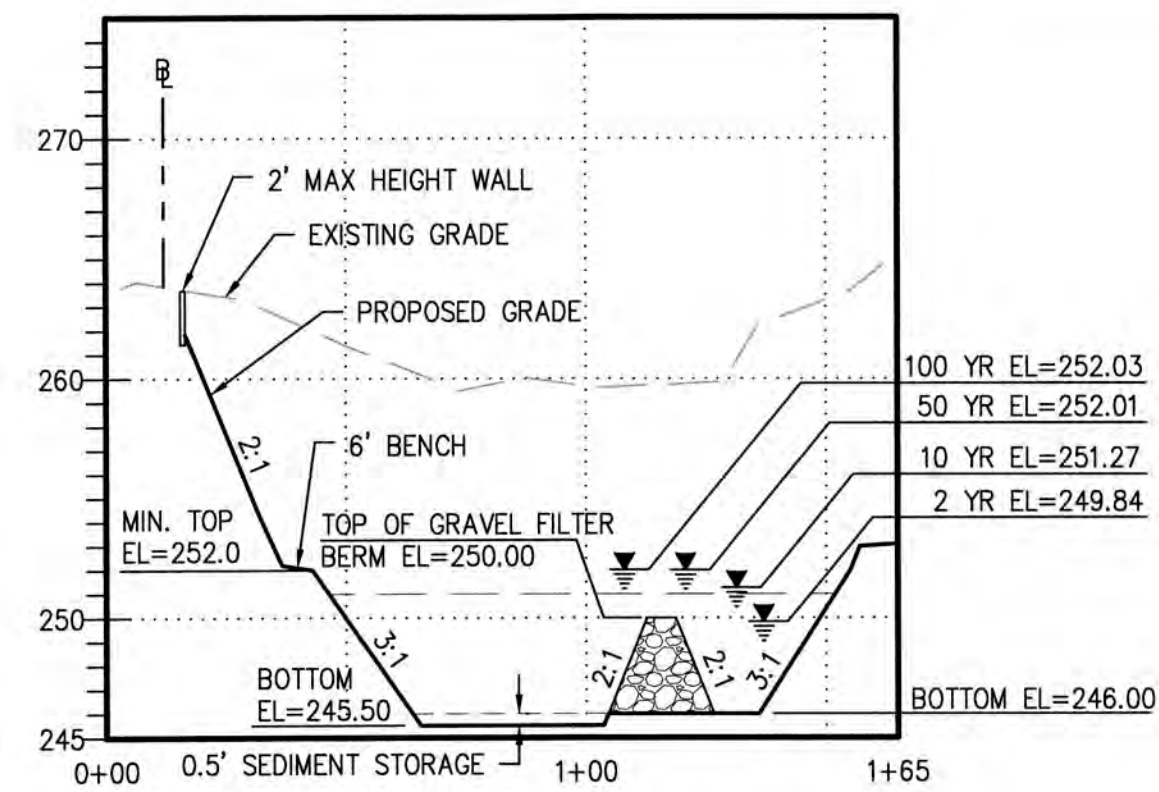


SOUTH POND SECTION SP1
SCALE HORIZ: 1"=40'
VERT.=1"=8'

SOUTH POND
VOLUME 43,200cf

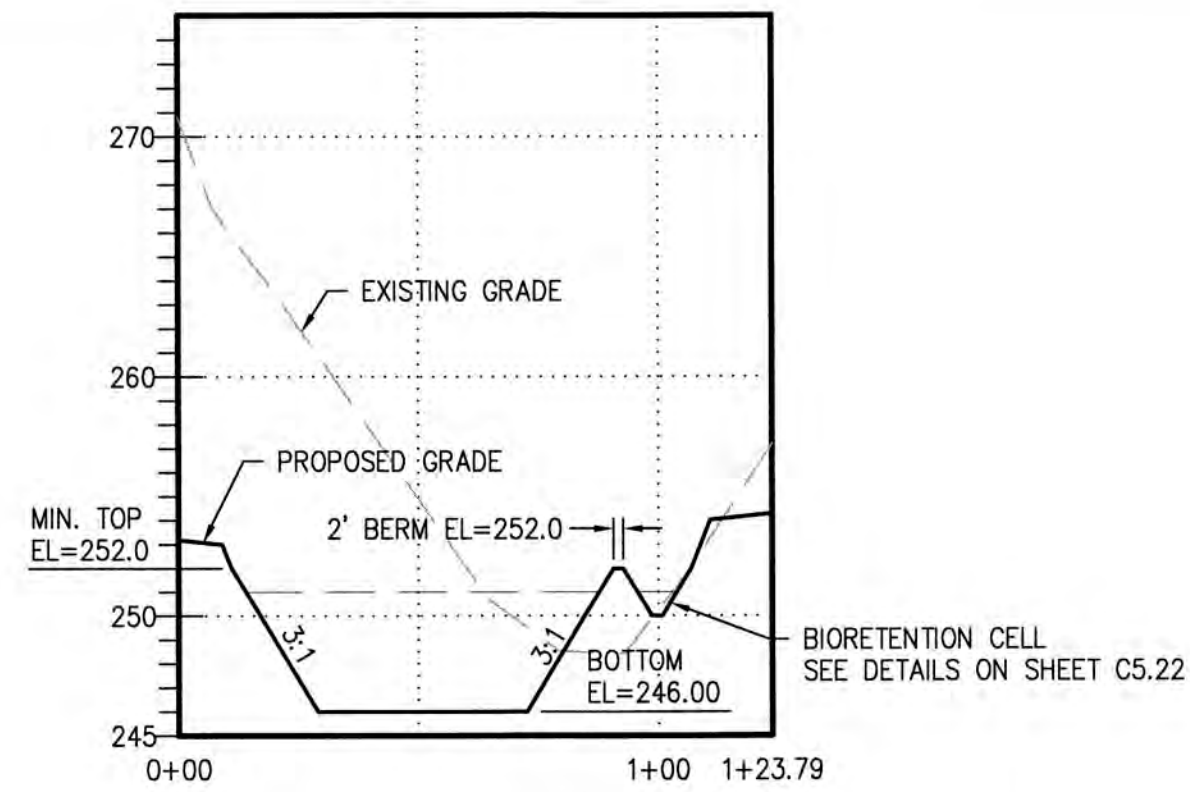


SOUTH POND SECTION SP2
SCALE HORIZ: 1"=40'
VERT.=1"=8'

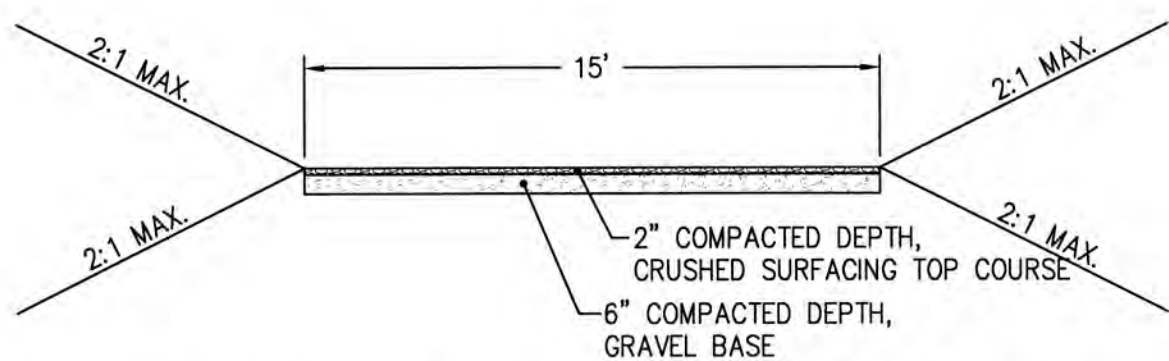


NORTH POND SECTION NP1
SCALE HORIZ: 1"=40'
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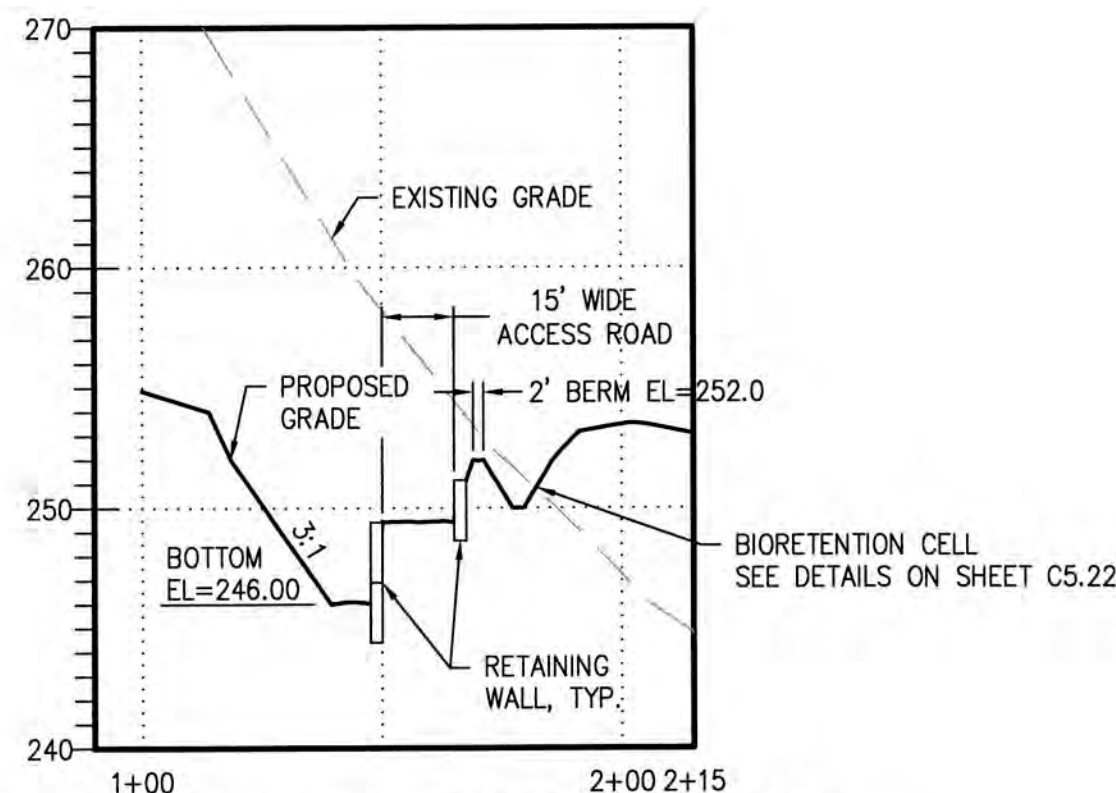
NORTH POND
VOLUME 29,800cf



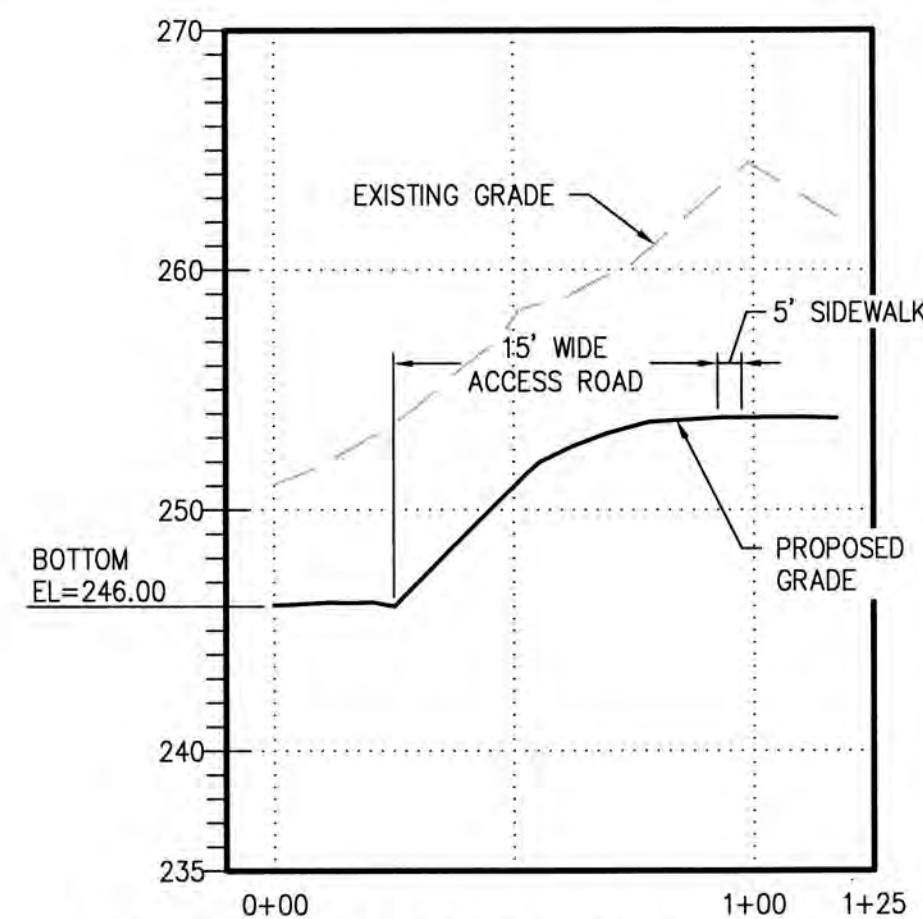
NORTH POND SECTION NP2
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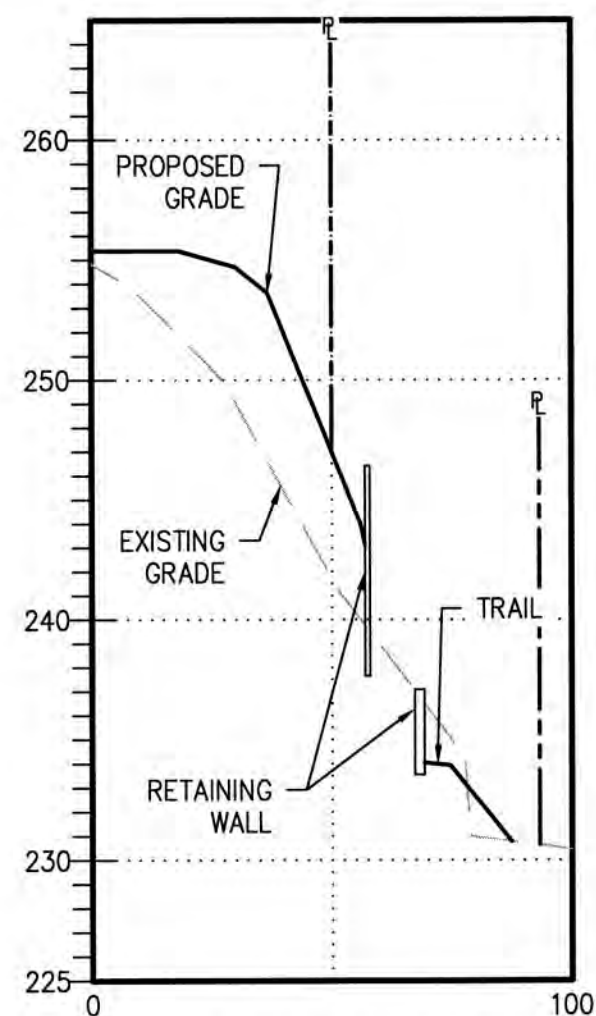
TYPICAL GRAVEL POND ACCESS ROAD SECTION
SCALE 1"=5'



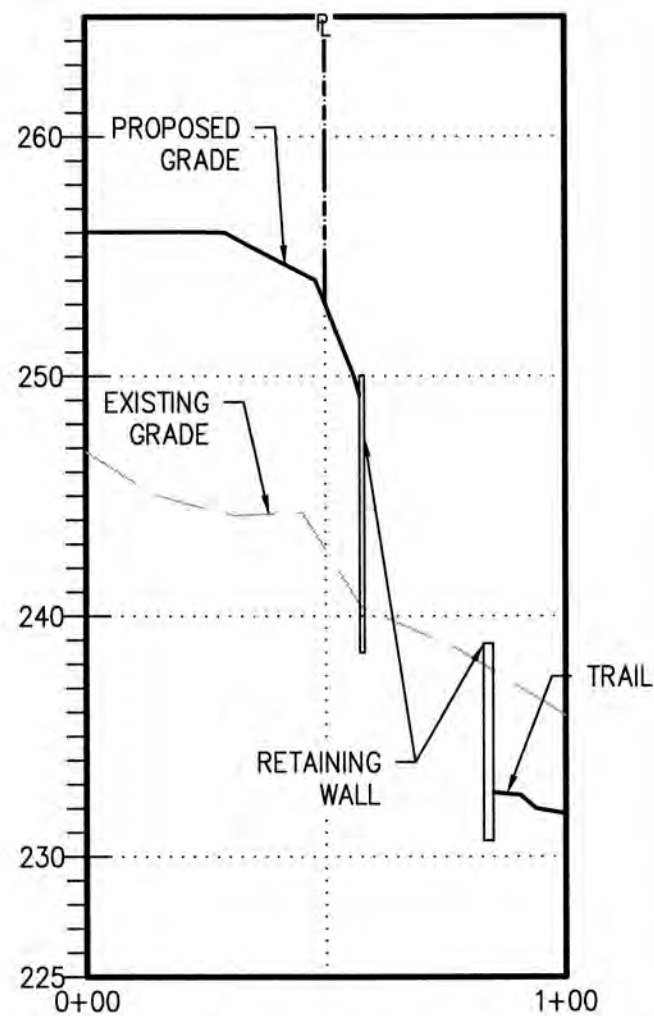
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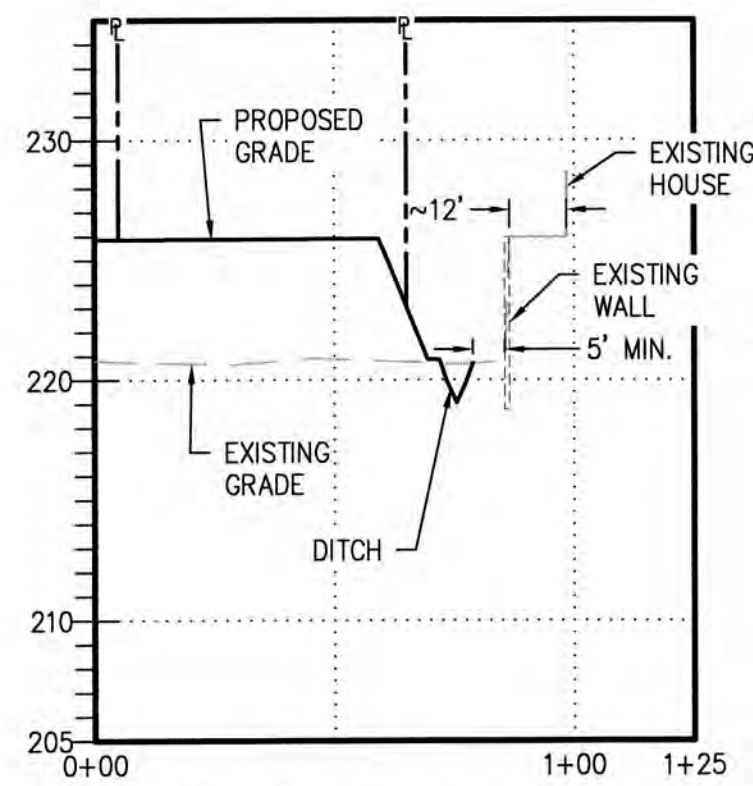
NORTH POND ACCESS ROAD SECTION NP4
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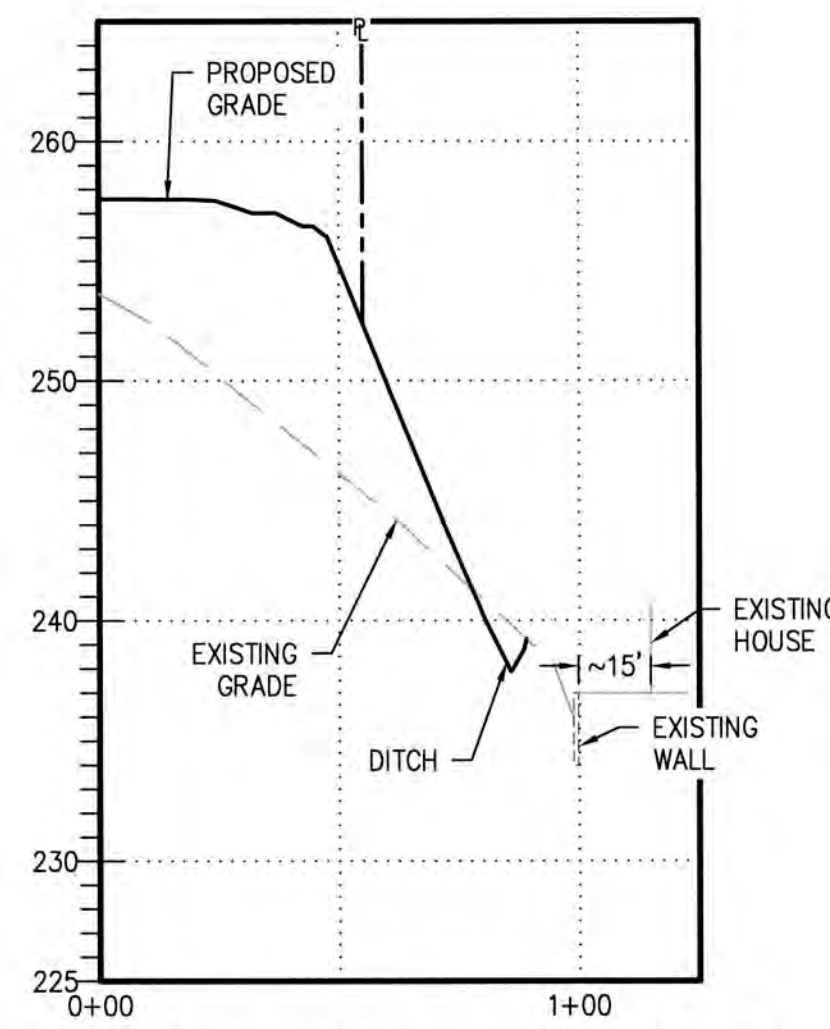
LOT GRADING CROSS SECTION LOT58
SCALE HORIZ: 1"=40'
VERT.=1"=8'



LOT GRADING CROSS SECTION LOT62
SCALE HORIZ: 1"=40'
VERT.=1"=8'



LOT GRADING CROSS SECTION LOT14
SCALE HORIZ: 1"=40'
VERT.=1"=8'



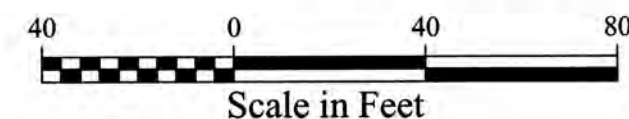
LOT GRADING CROSS SECTION LOT25
SCALE HORIZ: 1"=40'
VERT.=1"=8'

NOTE
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CALL 48 HOURS BEFORE YOU DIG 811



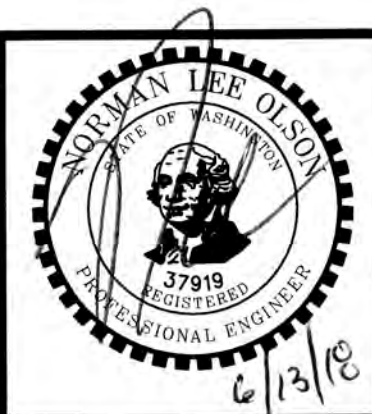
ASSUMED

Scale: 1"= 40'



REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	RPJ	8/17
2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018	SBR	3/18
				CHECKED	NLOI 8/17
				APPROVED	
				ACCEPTED	

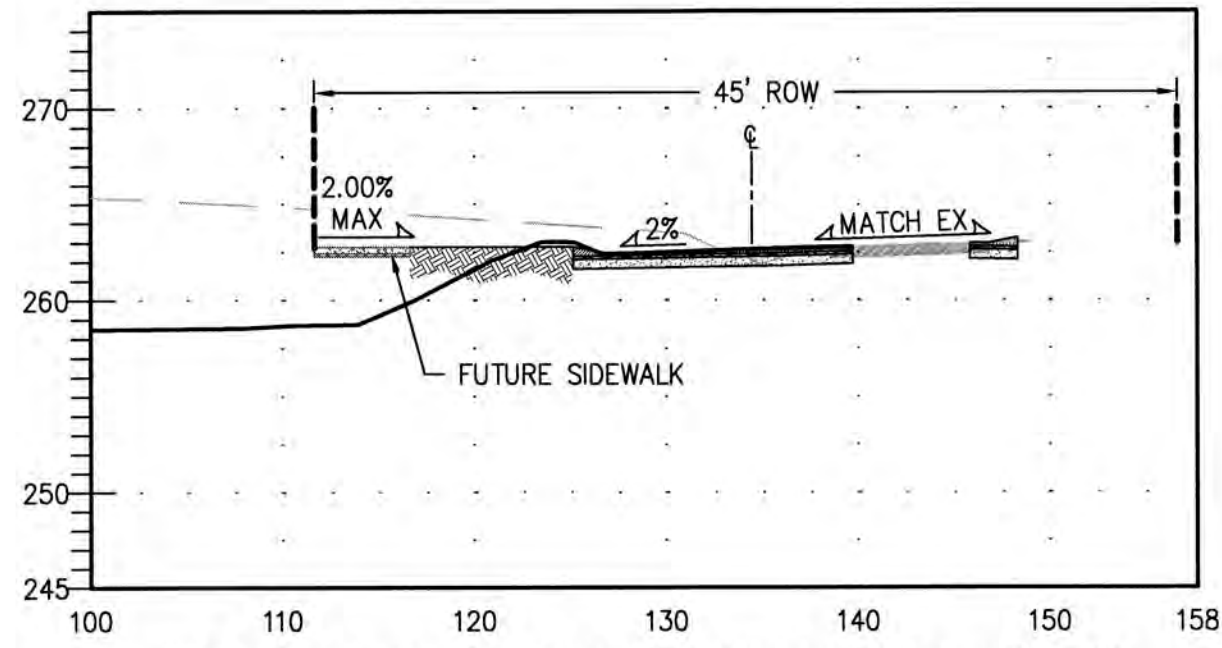
N.L.Olson & Associates, Inc.
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2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



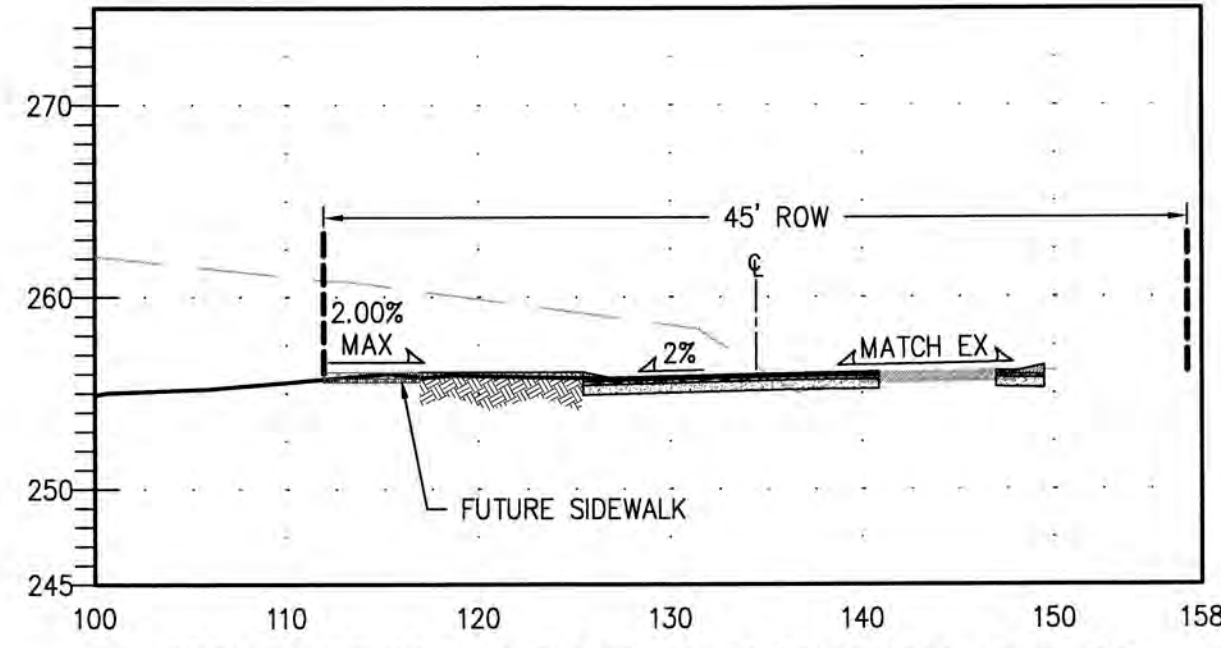
POND SECTIONS
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

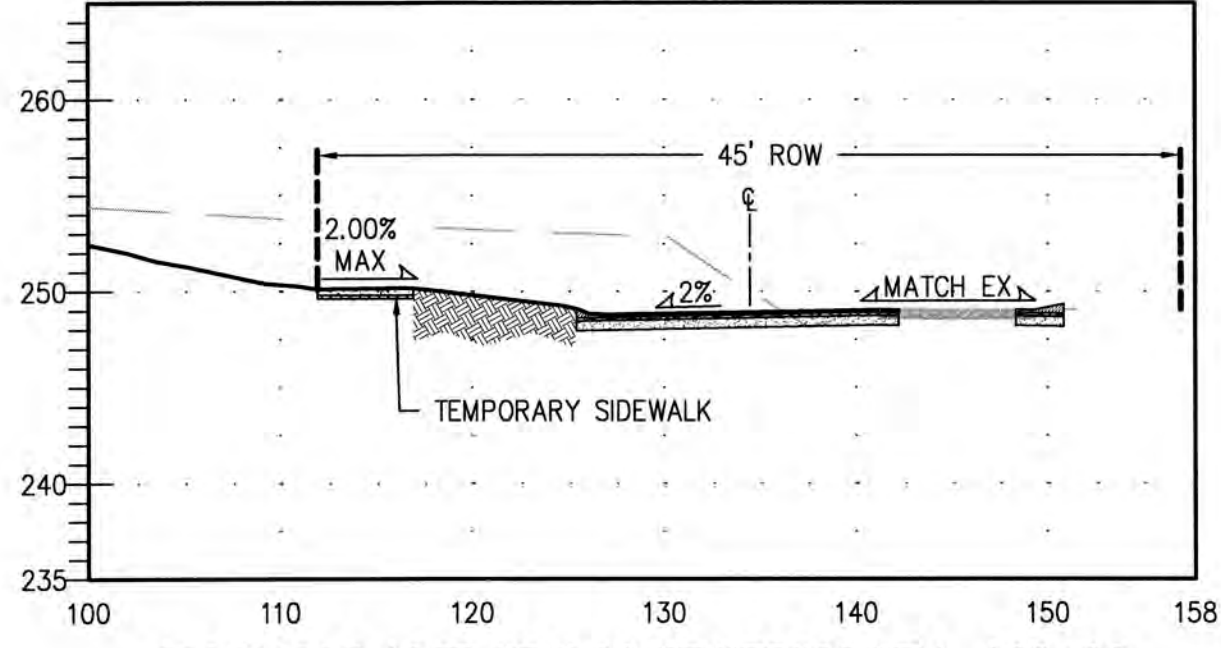
SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C4.12



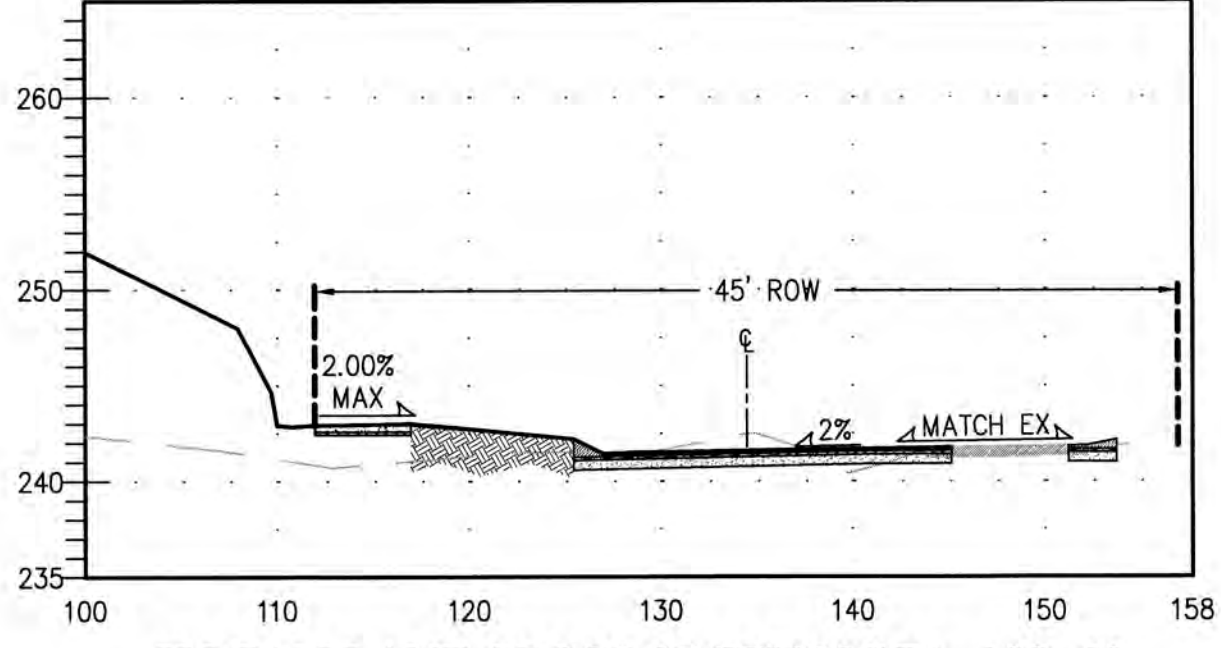
HOGAN LANE CROSS SECTION STA. 107+00
SCALE HORIZ: 1"=10'
VERT.=1"=10'



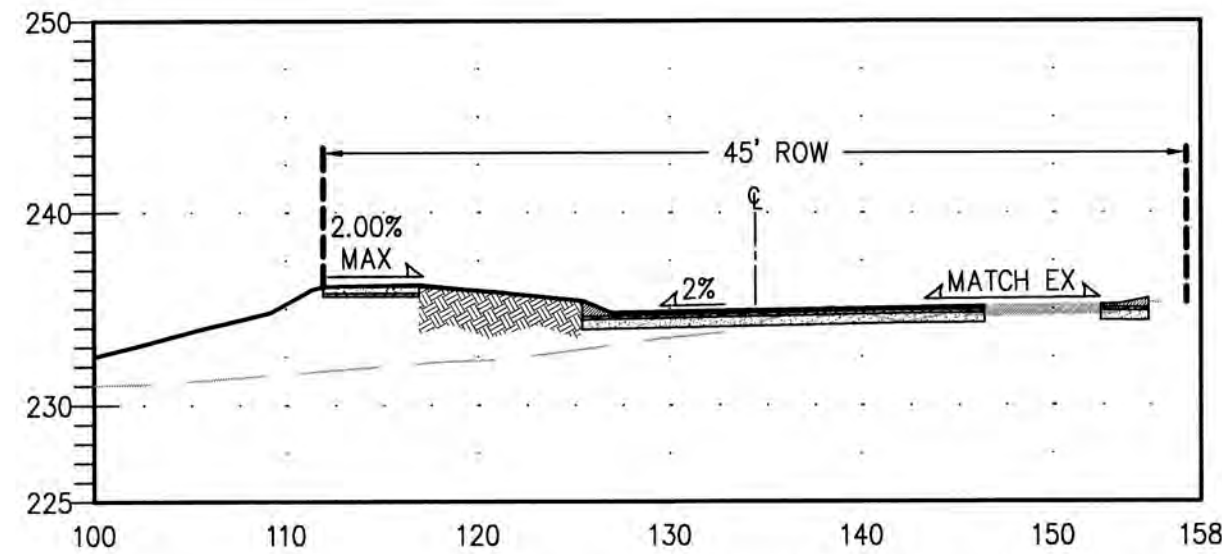
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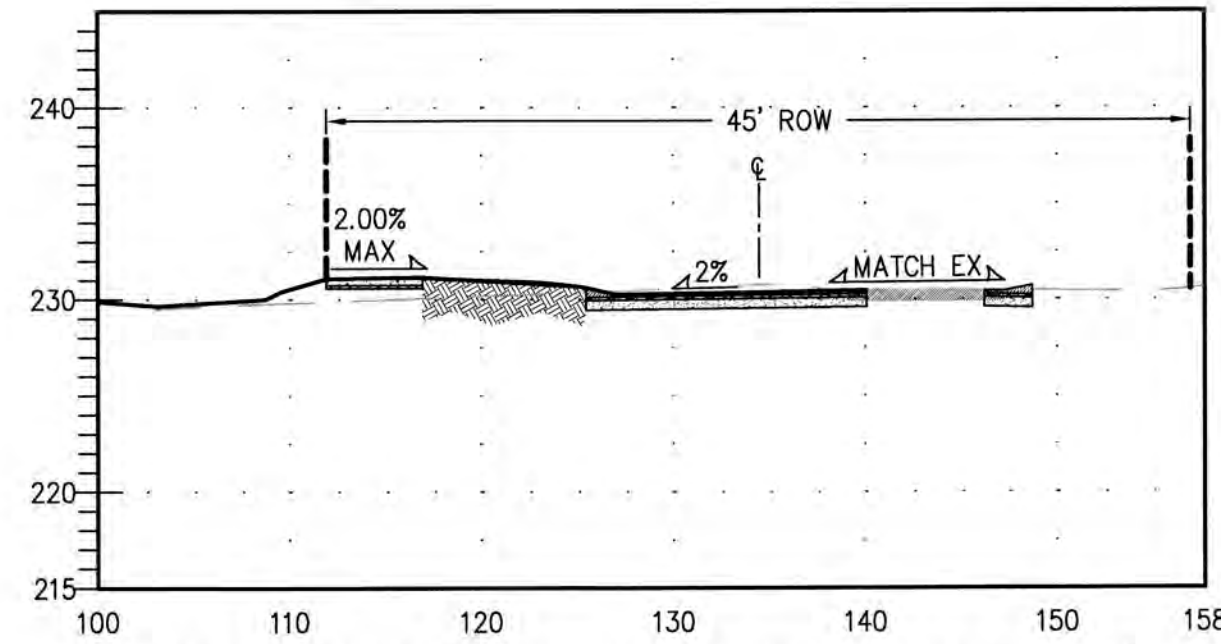
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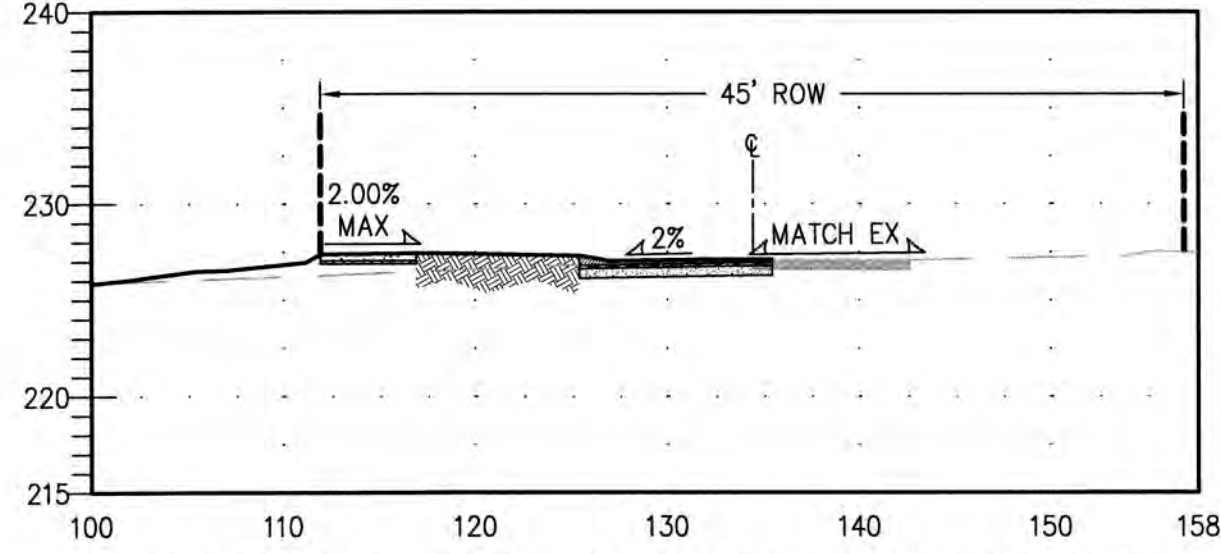
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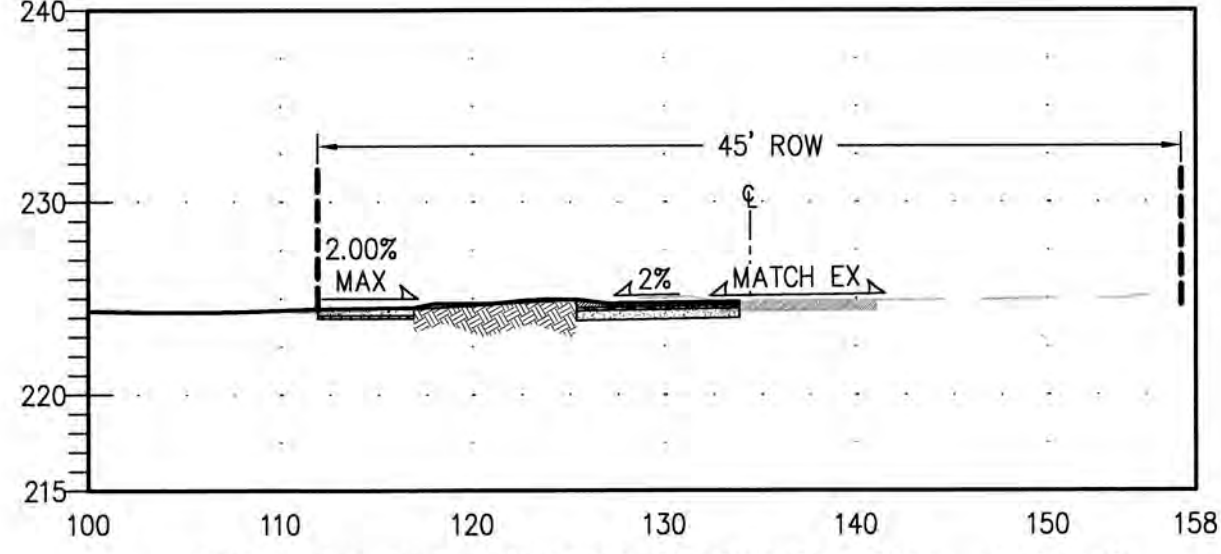
HOGAN LANE CROSS SECTION STA. 109+00
SCALE HORIZ: 1"=10'
VERT.=1"=10'



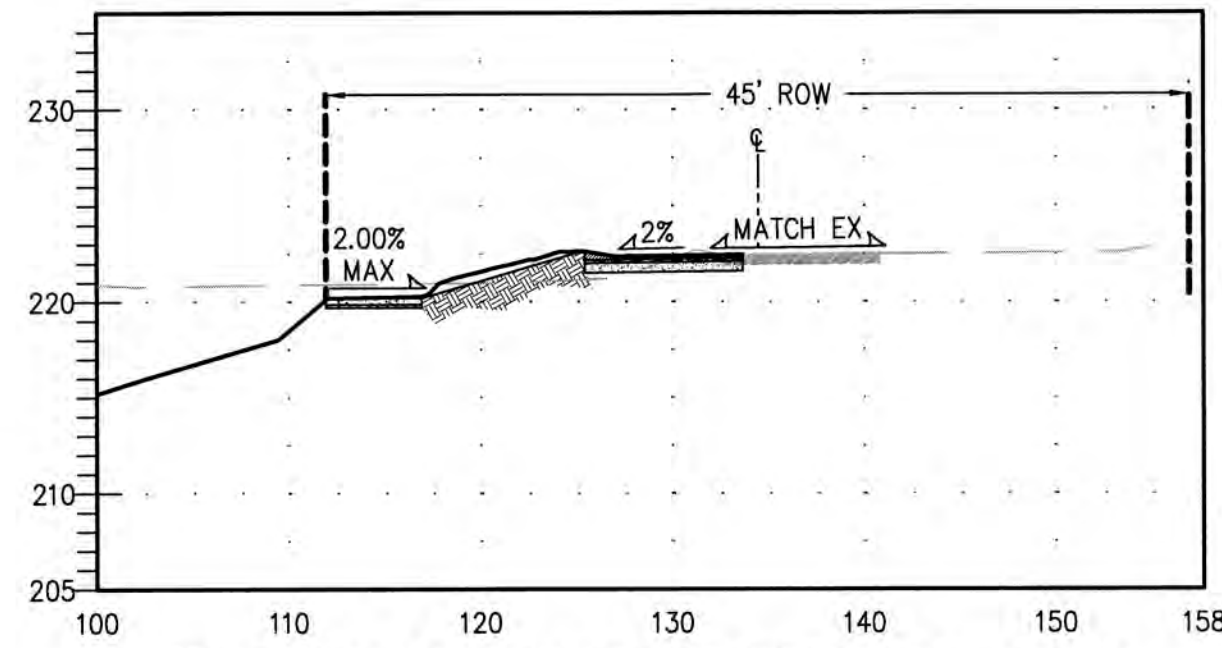
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SCALE HORIZ: 1"=10'
VERT.=1"=10'



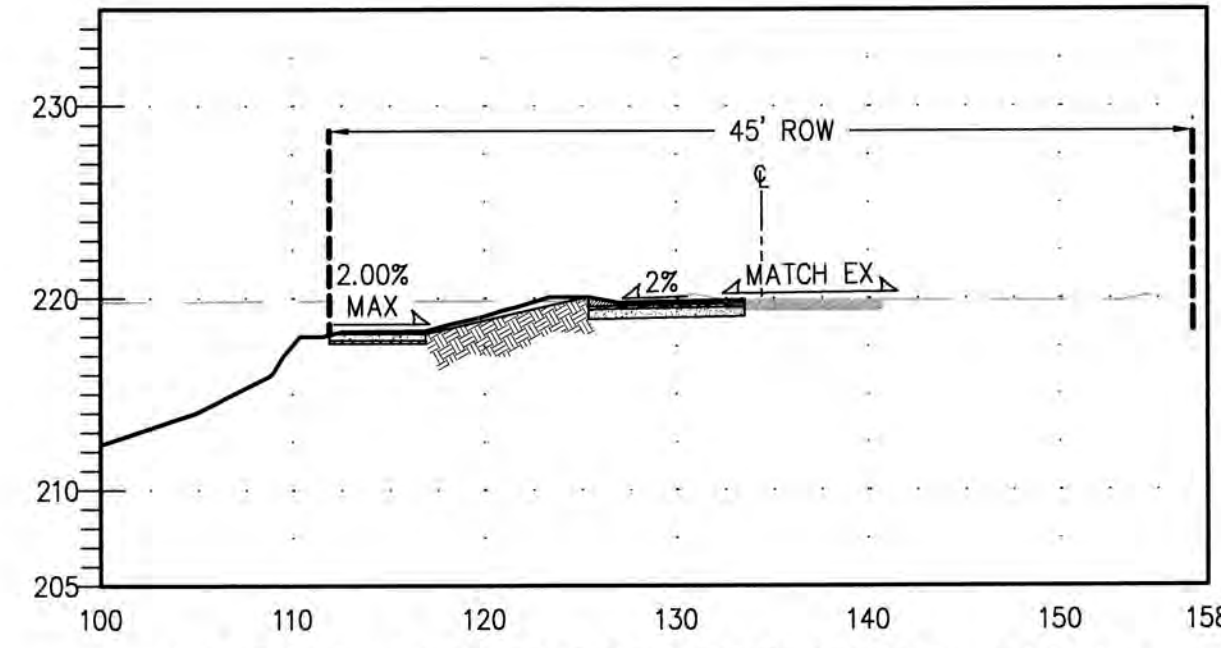
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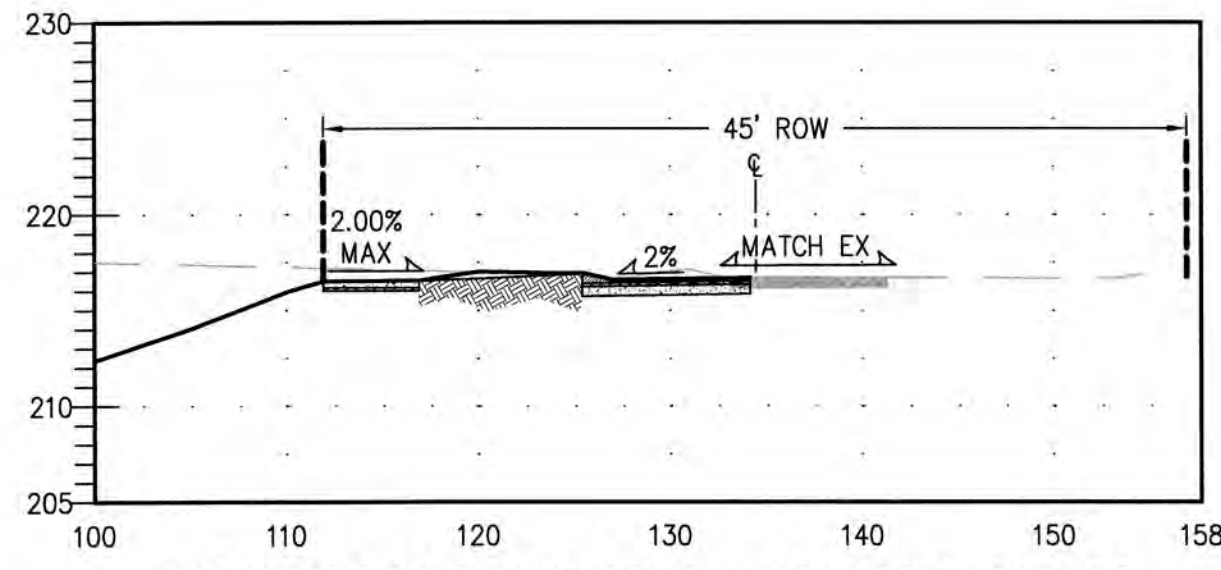
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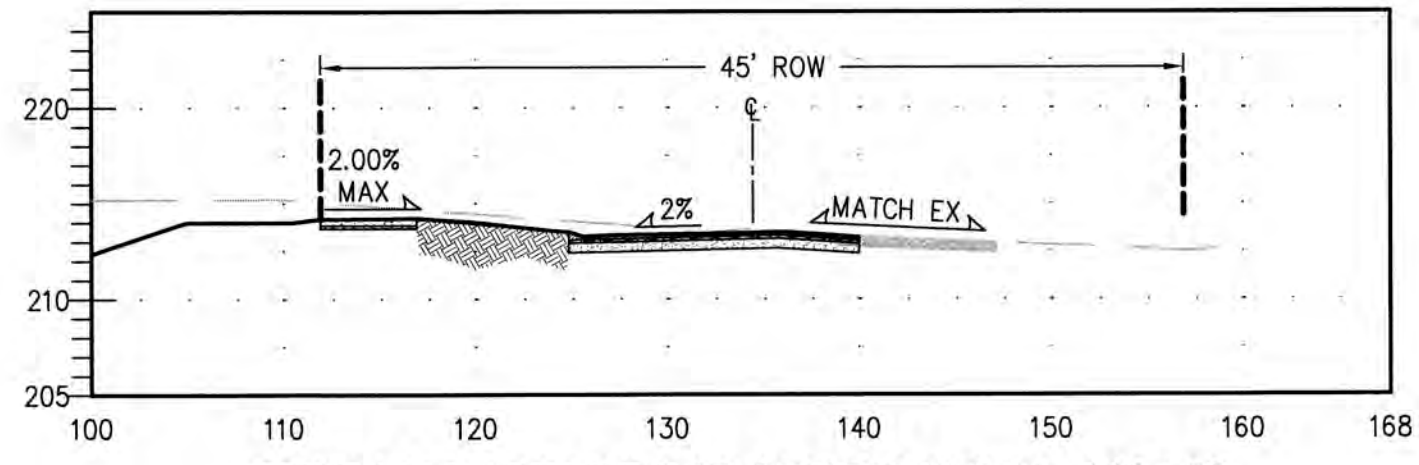
HOGAN LANE CROSS SECTION STA. 111+00
SCALE HORIZ: 1"=10'
VERT.=1"=10'



HOGAN LANE CROSS SECTION STA. 111+50
SCALE HORIZ: 1"=10'
VERT.=1"=10'



HOGAN LANE CROSS SECTION STA. 112+00
SCALE HORIZ: 1"=10'
VERT.=1"=10'



HOGAN LANE CROSS SECTION STA. 112+50
SCALE HORIZ: 1"=10'
VERT.=1"=10'

NOTE

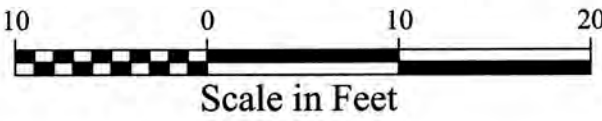
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**CALL 48 HOURS
BEFORE YOU DIG
811**



ASSUMED

Scale: 1"= 10'



SCALE:	1"=10'
DATE:	June 14, 2018
DRAWING NUMBER:	9582
SHEET	C4.13

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ 8/17
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	DRAWN	SBR 3/18
				CHECKED	NLOI 8/17
				APPROVED	
				ACCEPTED	

N.L.Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



HOGAN LANE CROSS SECTIONS

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

STORM AND GRADING MATERIAL SPECIFICATIONS

1. CATCH BASIN TYPE I, W.S.D.O.T. STANDARD PLAN B-5.20-00 TYPE II, W.S.D.O.T. STANDARD PLAN B-5.40-00 TYPE III, W.S.D.O.T. STANDARD PLAN B-10.20-00 STORM DRAIN MANHOLE TYPE I, W.S.D.O.T. STANDARD PLAN B-15.20-00
2. FRAME & GRATE: VANED GRATE, W.S.D.O.T. STANDARD PLAN B-2b (AS NOTED ON PLANS). STANDARD FRAME AND GRATE, W.S.D.O.T. STANDARD B-30.50-00 CURB INLET WSDOT STANDARD PLAN B-25.20-00 BEEHIVE GRATE OLYMPIC FOUNDRY, INC. PART NO. 60BH (OR EQ.)
3. SOLID METAL COVER: 3 BOLT LOCKING TYPE, OLYMPIC FOUNDRY TYPE MH 300/11 OR EQUAL FOR TYPE II CATCH BASINS. OLYMPIC FOUNDRY TYPE SM 605 OR W.S.D.O.T. STANDARD PLAN B-30.70-00 (OR EQUAL) FOR TYPE I CATCH BASINS.
4. STORM SEWER PIPE *CORRUGATED METAL PIPE n=0.024 (CMP) PER W.S.D.O.T. 9-05.9 *CONCRETE PIPE PER W.S.D.O.T. 9-05.7(1) & 9-05.7(2) n=0.012 *CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE), ADS N-12 OR HANCOR HI-Q (ASSHTO M294 TYPE S) n=0.012
5. DOWN SPOUT TIGHTLINE: ADS N-12 (OR EQUAL)
6. PIPE BEDDING W.S.D.O.T. 9-03.12(3) GRAVEL BACKFILL FOR PIPE BEDDING.
7. INITIAL BACKFILL: NATIVE MATERIAL OBTAINED FROM EXCAVATION PER W.S.D.O.T. 7-08.3(3)
8. REMAINING BACKFILL: NATIVE MATERIAL OBTAINED FROM EXCAVATION PER W.S.D.O.T. 2-09.3(1)E.
9. SPALLS: W.S.D.O.T. 9-13.1, LOOSE RIPRAP IN SIZES RANGING FROM 3" TO 1/3 CUBIC FOOT.
10. PAVEMENT SECTION: HOT MIX ASPHALT (HMA) W.S.D.O.T. 5-04 TOP COURSE, W.S.D.O.T. 9-03.9(3) BASE COURSE, W.S.D.O.T. 9-03.10

CONSTRUCTION NOTES

1. ALL WORK SHALL BE IN CONFORMANCE WITH THE LATEST REVISION OF THE "2000" STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" AS JOINTLY ADOPTED BY WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND THE AMERICAN PUBLIC WORKS ASSOCIATION (WASHINGTON STATE CHAPTER).
2. ANY REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED BY CITY OF PORT ORCHARD PRIOR TO ANY IMPLEMENTATION IN THE FIELD.
3. THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN IS APPROXIMATE ONLY. THE CONTRACTOR SHALL CONTACT THE "UNDERGROUND LOCATE" CENTER AND NONSUBSCRIBING INDIVIDUAL UTILITY COMPANIES 48 HOURS IN ADVANCE OF THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY (PHONE #1-800-424-5555). THE CONTRACTOR SHALL PROVIDE PROTECTION OF EXISTING UTILITIES FROM DAMAGED CAUSED BY CONTRACTOR OPERATIONS.
4. DRAINAGE SYSTEM SHALL BE INSTALLED AND FUNCTIONING PRIOR TO INSTALLATION OF PAVING.
5. CONTRACTOR SHALL HAVE AVAILABLE, AT THE SITE AT ALL TIMES DURING CONSTRUCTION, A SET OF APPROVED FINAL CONSTRUCTION PLANS.
6. BEFORE WORKING IN COUNTY RIGHT-OF-WAY, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY KITSAP COUNTY.
7. ALL SLOPES SHALL BE AS NOTED ON THE PLANS.
8. CONTRACTOR WILL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL REQUIRED AS A RESULT OF HIS/HER OPERATIONS.
9. CONTRACTOR SHALL USE A PROFESSIONAL LAND SURVEYOR FOR ALL CONSTRUCTION STAKING.
10. UNLESS OTHERWISE INDICATED ON PLANS, ALL STORM SEWER PIPE HAS BEEN SIZED TO MEET MANNING'S ROUGHNESS COEFFICIENT, N = 0.012. THE CONTRACTOR SHALL HAVE THE OPTION TO:
A. INSTALL STORM SEWER PIPE AS INDICATED ON PLANS USING PIPE WHICH MEETS, n=0.012
B. OR PROVIDE "ENGINEER" W/REVISED PLANS W/DIAMETERS AND OR SLOPE ADJUSTMENTS AS REQUIRED.

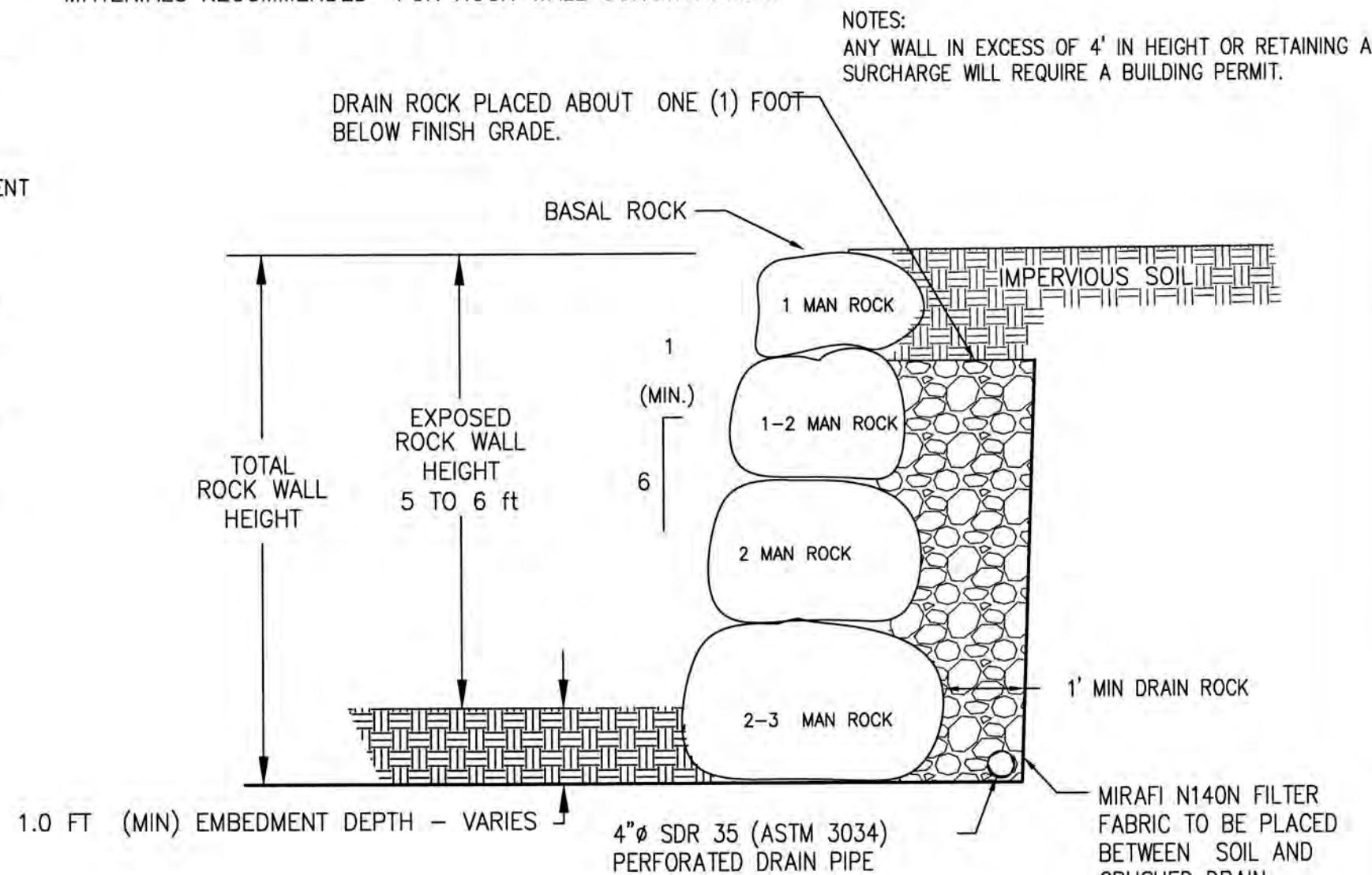
ROAD & STORM DRAINAGE CONSTRUCTION INSPECTION REQUIREMENTS AND SCHEDULES

1. THE CONTRACTOR SHALL NOTIFY KITSAP COUNTY TO ARRANGE INSPECTION SCHEDULES FOR THOSE PHASES OF WORK CHECKED BELOW. INSPECTION SCHEDULES SHALL BE ARRANGED PRIOR TO PROCEEDING TO THE NEXT PHASE OF WORK. INSPECTIONS IN ADDITION TO THOSE INDICATED MAY BE REQUIRED BY THE CITY. THE CONTRACTOR SHALL VERIFY THE INSPECTIONS REQUIRED WITH KITSAP COUNTY AND SHALL ARRANGE INSPECTIONS SCHEDULES BY CONTACTING KITSAP COUNTY.
- A. IMPLEMENTATION OF VARIOUS PHASES OF TEMPORARY EROSION AND SEDIMENTATION CONTROL PLANS.
- B. PLACEMENT OF THE MAJOR DRAINAGE STRUCTURES PRIOR TO BACKFILLING, INCLUDING DETENTION POND DIKES.
- C. PRIOR TO THE INSTALLATION OF ORIFICE CONTROL STRUCTURE.
- D. COMPLETION OF SUBGRADE PREPARATION
- E. COMPLETION OF PLACEMENT OF GRAVEL BASE.
- F. COMPLETION OF FINE GRADING PRIOR TO PAVING.
- G. COMPLETION OF PAVEMENT INSTALLATIONS.
2. IF ADEQUATE INSPECTION IS NOT CALLED FOR BEFORE COMPLETION OF THE PAVEMENT CONSTRUCTION, IT MAY BE NECESSARY FOR CORE DRILLING AND TESTING TO BE PERFORMED TO ASSURE AN ACCEPTABLE QUALITY OF ROADWAY. WHEN CORE DRILLING IS FOUND TO BE NECESSARY, THE CONTRACTOR WILL BE BILLED AND HELD RESPONSIBLE FOR ALL COSTS INCURRED.

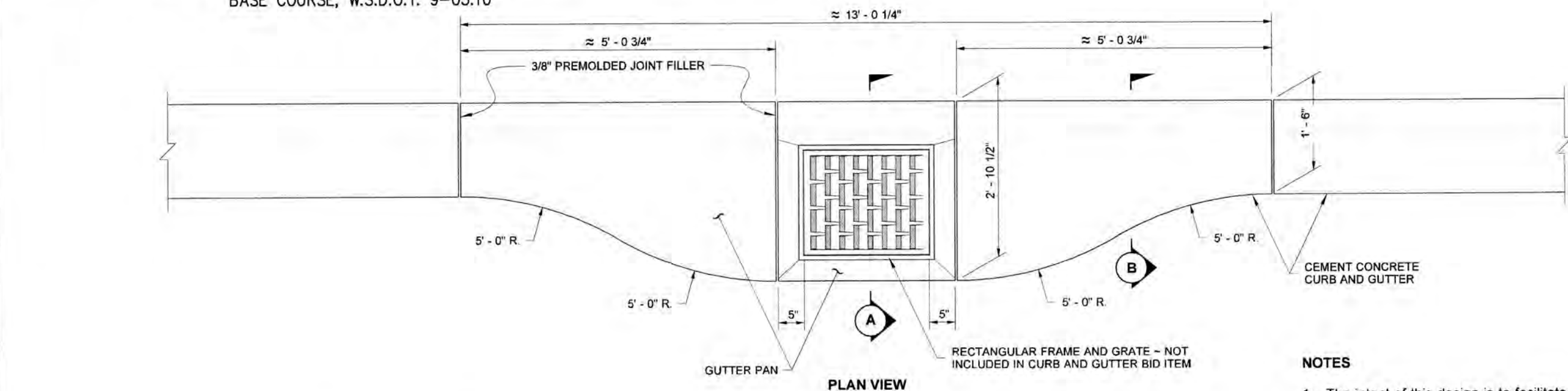
GRADING NOTES

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN THE EVENT OF DISCOVERY OF POOR SOILS, GROUNDWATER OR DISCREPANCIES IN THE EXISTING CONDITIONS AS NOTED ON THE PLANS.
2. MAXIMUM SLOPE STEEPNESS SHALL BE 2:1 HORIZONTAL:VERTICAL FOR CUT AND FILL SLOPES.
3. UNLESS OTHERWISE SPECIFIED, ALL EMBANKMENTS IN THE PLAN SET SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 2-03.3(14)B OF THE WSDOT STANDARD SPECIFICATIONS. EMBANKMENT COMPACTIONS SHALL CONFORM TO SECTION 2-03.3(14)C, METHOD B OF SAID STANDARD SPECIFICATION.
4. EMBANKMENTS DESIGNED TO IMPOUND WATER SHALL BE COMPACTED TO 95% MAXIMUM DENSITY PER SECTION 2-03.3(14)C, METHOD C OF WSDOT STANDARD SPECIFICATIONS.
5. ALL AREAS RECEIVING FILL MATERIAL SHALL BE PREPARED BY REMOVING VEGETATION, NONCOMPLYING FILL, TOPSOIL AND OTHER UNSUITABLE MATERIAL, BY SCARIFYING THE SURFACE TO PROVIDE A BOND WITH THE NEW FILL, AND WHERE THE SLOPES ARE STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL AND THE HEIGHT IS GREATER THAN 5 FT., BY BENCHING INTO SOUND COMPETENT MATERIAL AS DETERMINED BY A SOILS ENGINEER.

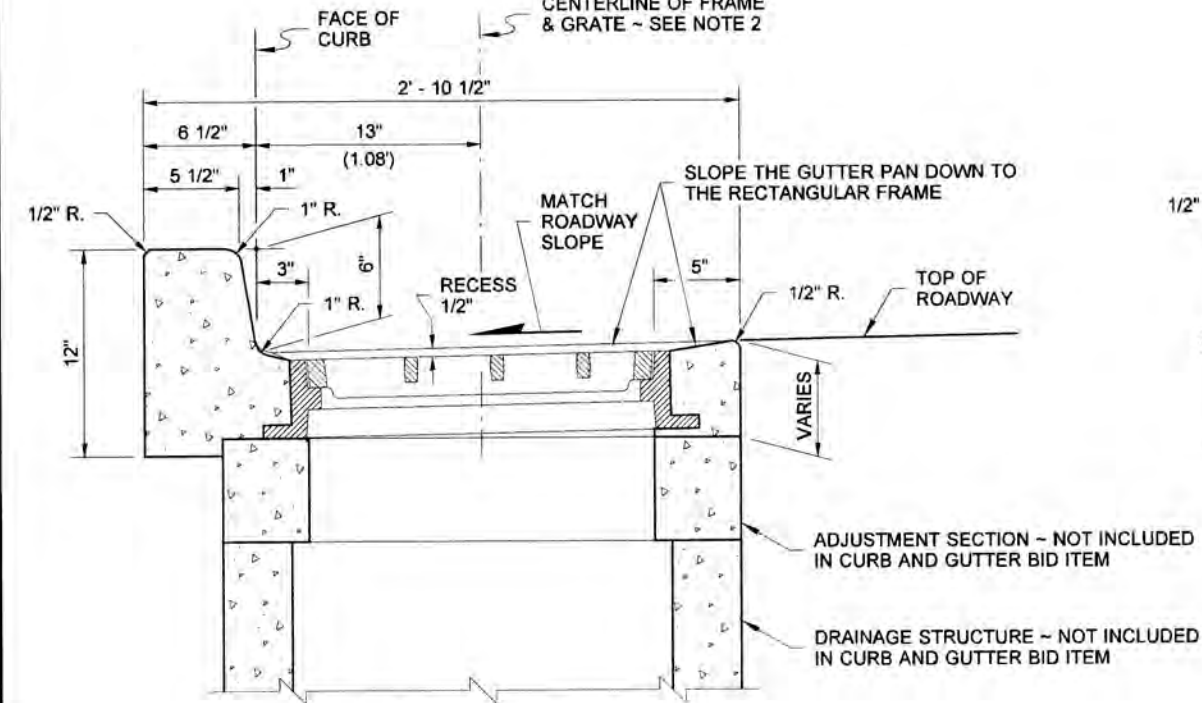
WARNING: THE DISTRIBUTOR IS NOT THE AUTHORITY ON WHAT MATERIALS SHALL BE USED FOR ROCK WALL CONSTRUCTION. PLEASE CONSULT WITH NLO PRIOR TO SUBSTITUTING MATERIALS RECOMMENDED FOR ROCK WALL CONSTRUCTION.



REINFORCED ROCK WALL SECTION 5 TO 6 FEET



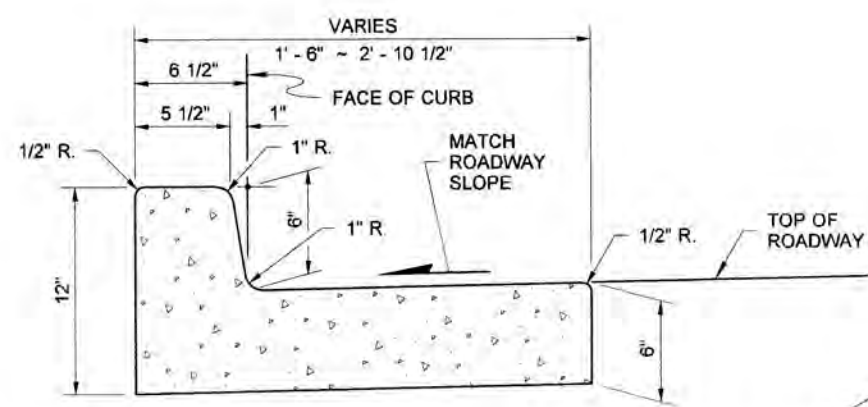
CATCH BASIN GUTTER PAN



SECTION A

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CALL 48 HOURS BEFORE YOU DIG 811

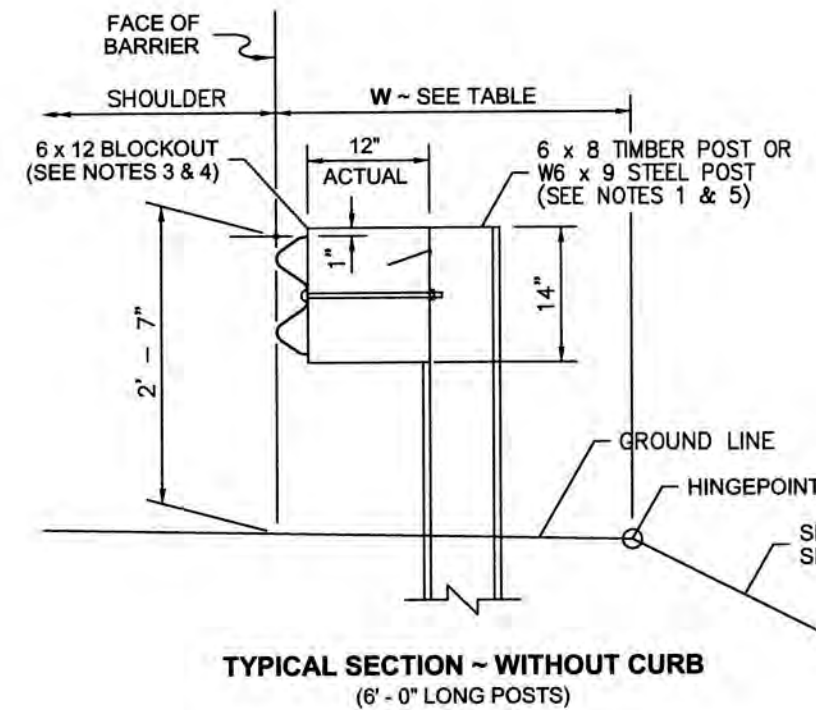


SECTION B

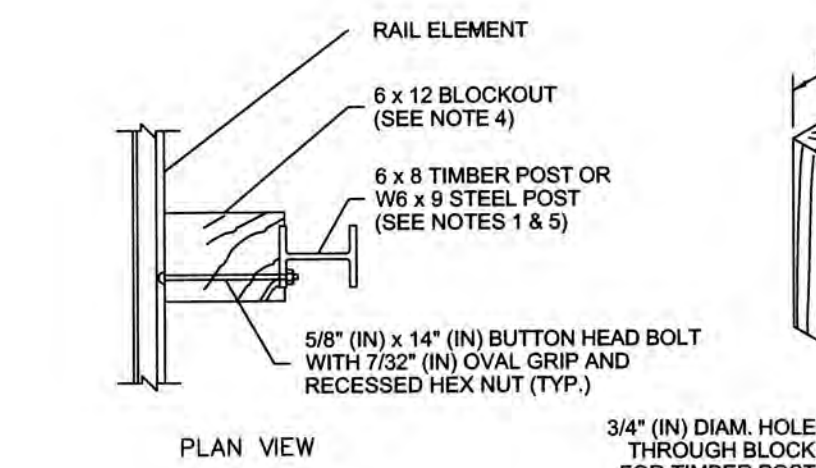
CEMENT CONCRETE CURB & GUTTER PER WSDOT STANDARD PLAN F-10.16-00

NOTES

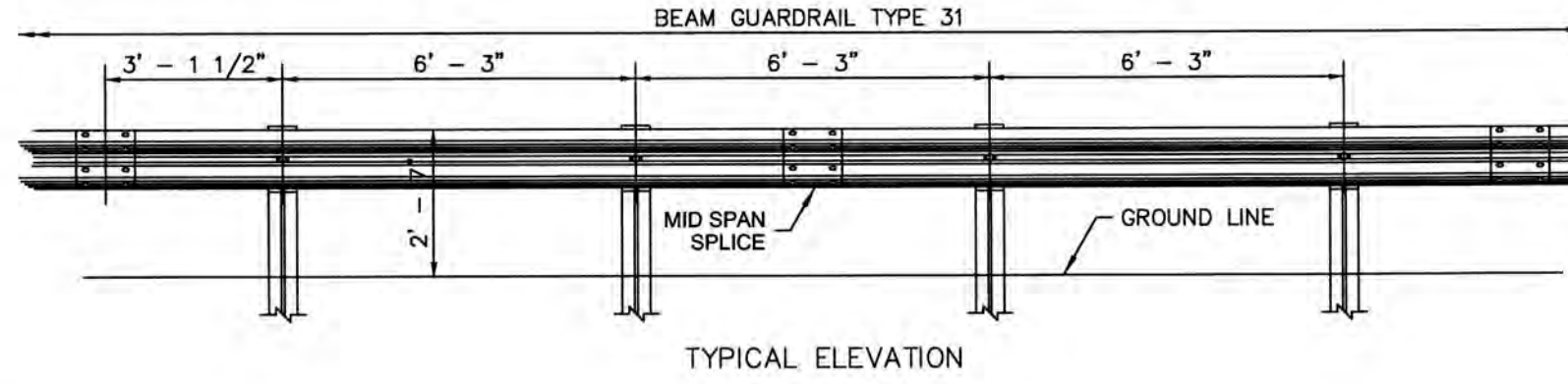
1. The intent of this design is to facilitate the compaction of Hot Mix Asphalt pavement adjacent to a drainage structure.
2. The centerline of the drainage structure may differ from the centerline of the frame and grate.



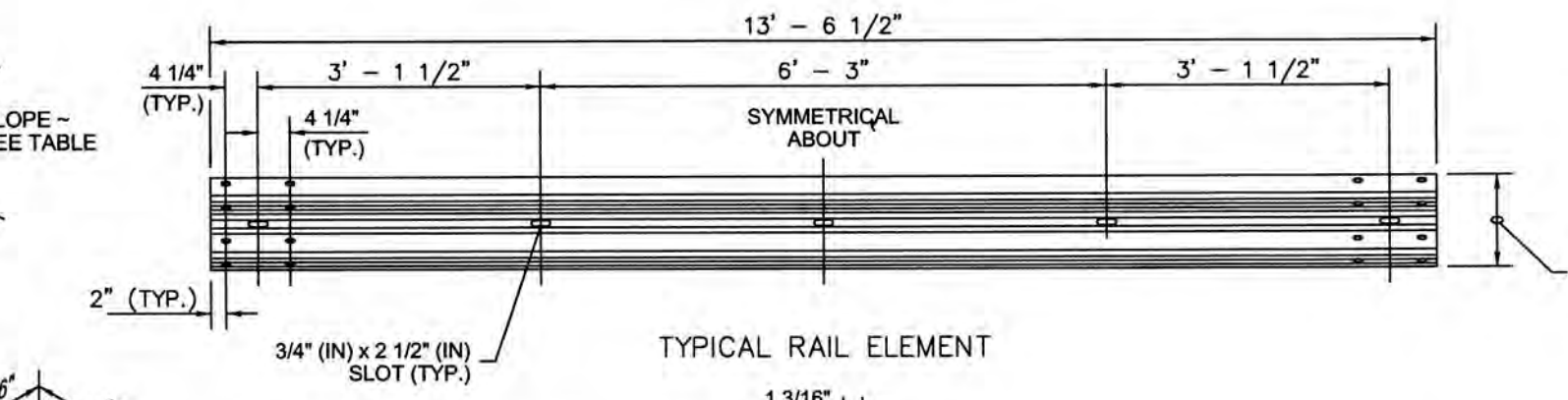
TYPICAL SECTION - WITHOUT CURB (6' - 0\"/>



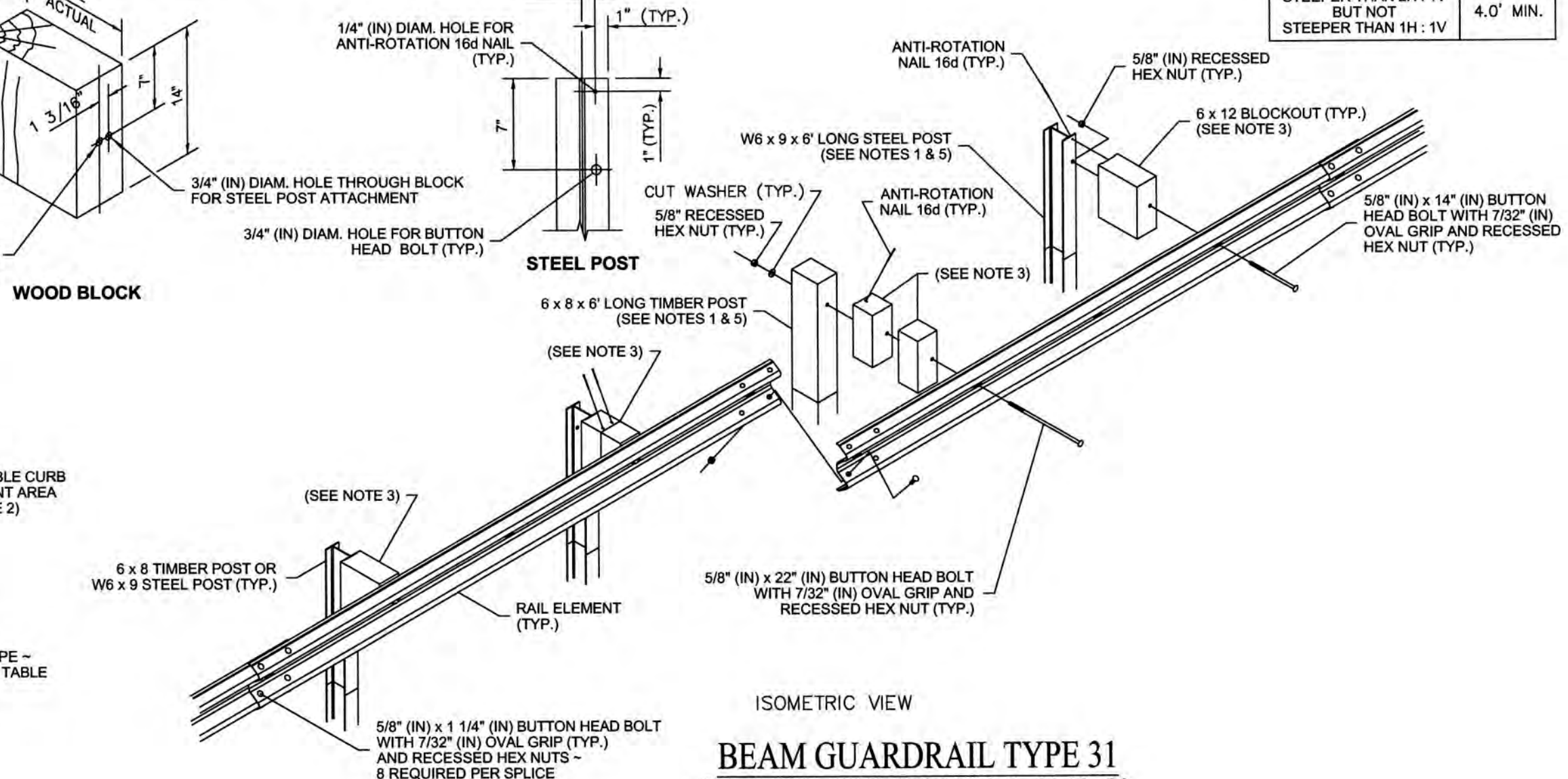
TYPICAL SECTION - WITH CURB (6' - 0\"/>



TYPICAL RAIL ELEMENT



STEEL POST



BEAM GUARDRAIL TYPE 31 PER WSDOT STANDARD PLAN C-20.10-02

NOTES

1. REFER TO STANDARD PLANS C-1 AND C-18 FOR ADDITIONAL DETAILS NOT SHOWN ON THIS PLAN.
2. EXTEND SHOULDER PAVEMENT TO PROVIDE A BASE FOR THE EXTRUDED CURB. SEE CONTRACT PLANS FOR EXCEPTIONS TO DISTANCES SHOWN.
3. USE A SINGLE BLOCK OR COMBINATION OF BLOCKS (NO MORE THAN 2) TO ACHIEVE THE ACTUAL 12\"/>

SLOPE \ EMBANKMENT TABLE	
SLOPE	W (FT)
2H:1V OR FLATTER	2.5' MIN.
STEEPER THAN 2H:1V BUT NOT STEEPER THAN 1H:1V	4.0' MIN.

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ 8/17
				DRAWN	JAT 8/17
				CHECKED	NLOH 8/17
				APPROVED	
				ACCEPTED	

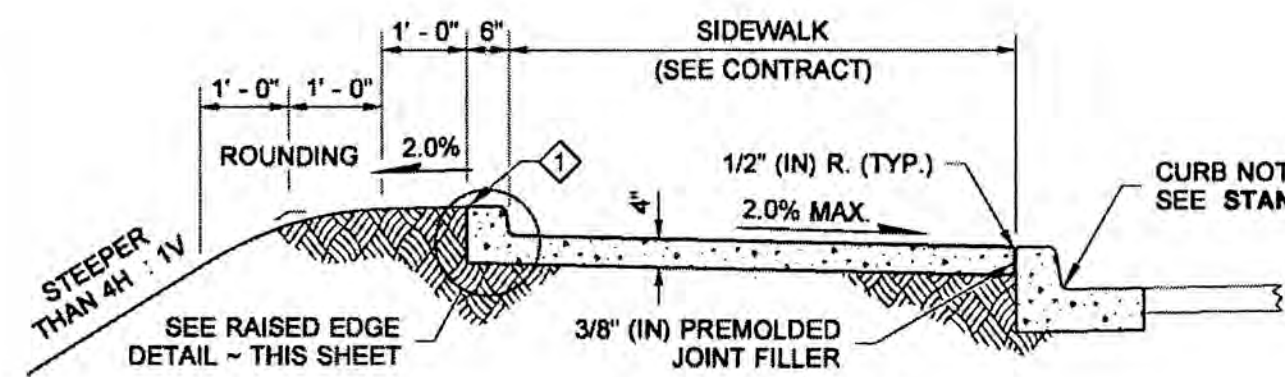
N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



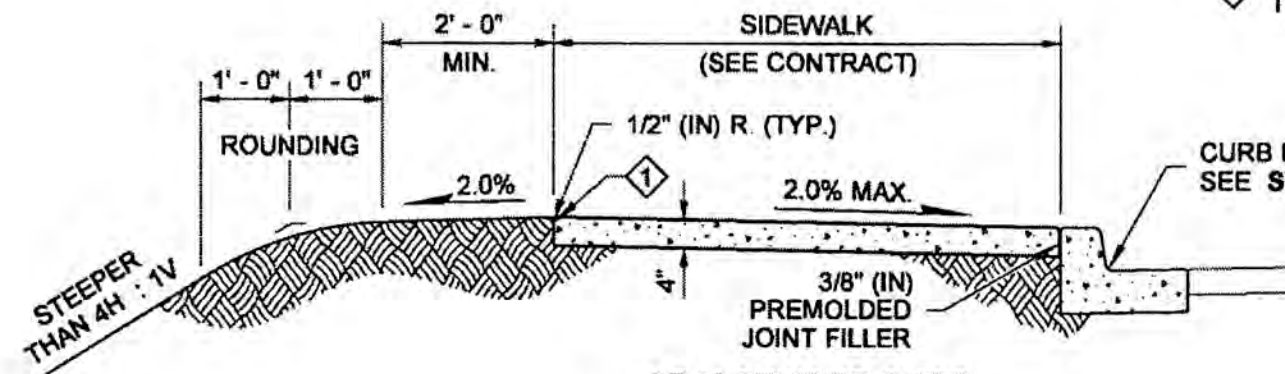
SITE DETAILS
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR: **Nathan Glen Properties LLC**
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

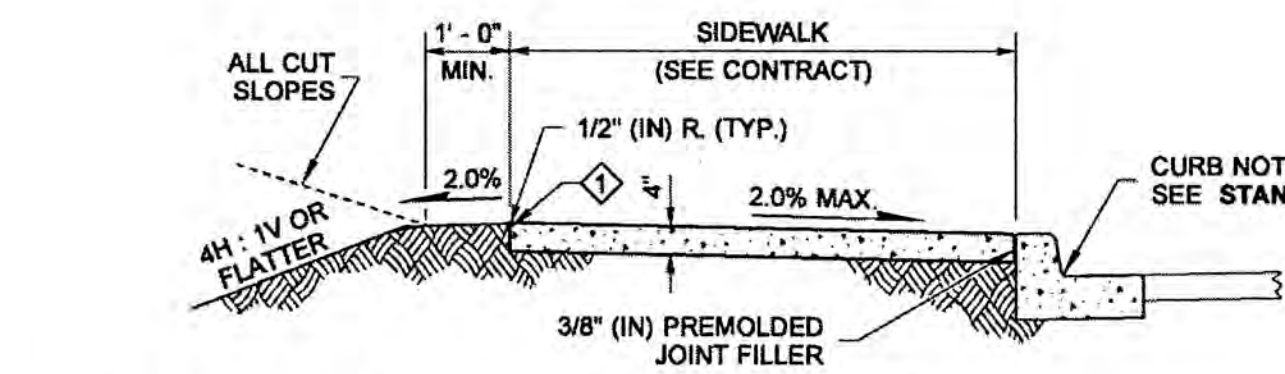
SCALE: 1"=40'
DATE: Apr. 03, 2018
DRAWING NUMBER:
9582
SHEET C4.20



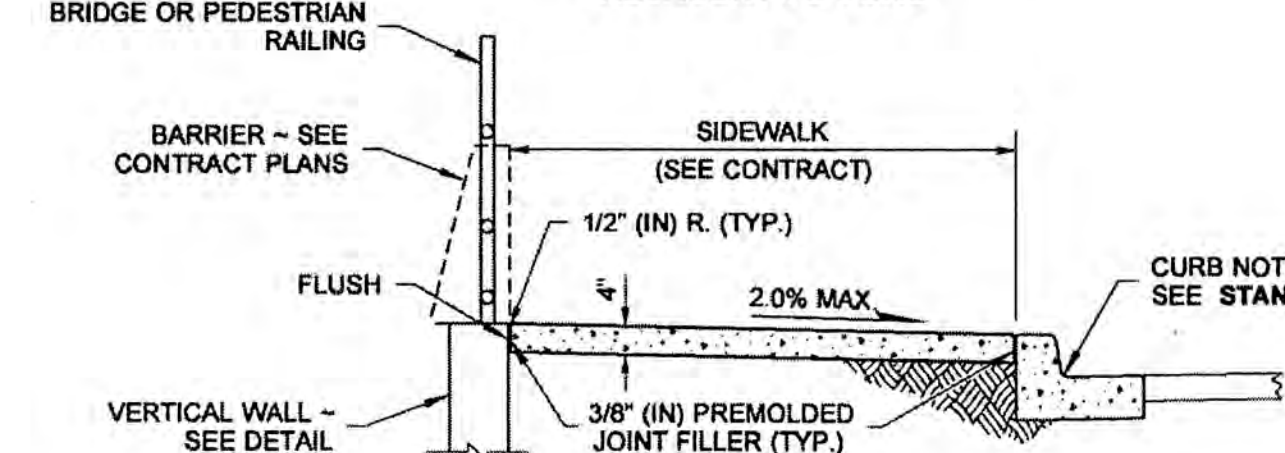
WITH RAISED EDGE



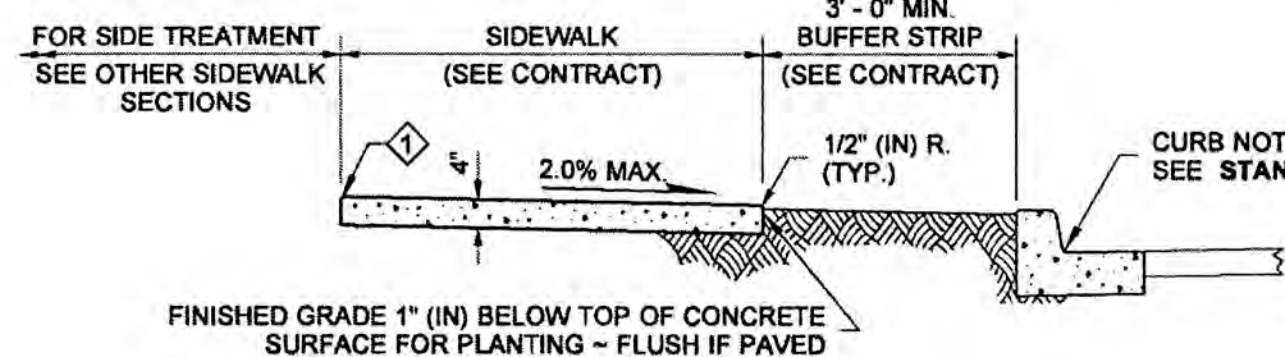
ADJACENT TO CURB
(STEEP FILL SLOPES)



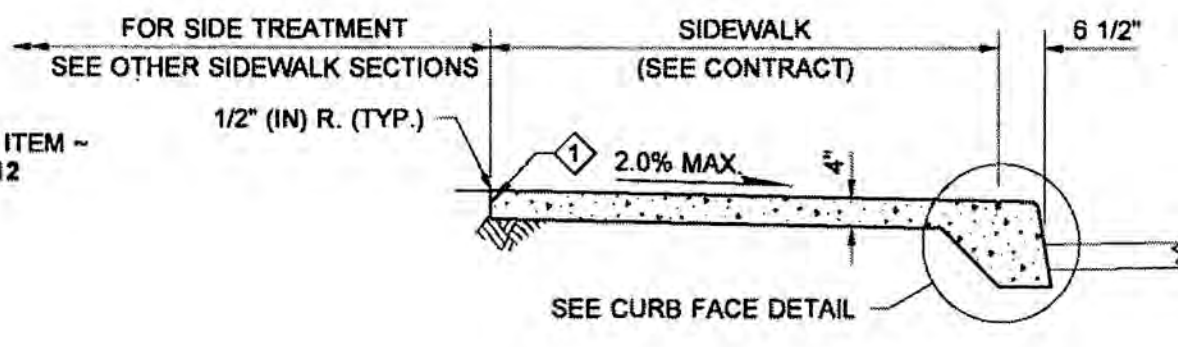
ADJACENT TO CURB



ADJACENT TO CURB AND RAILING OR WALL



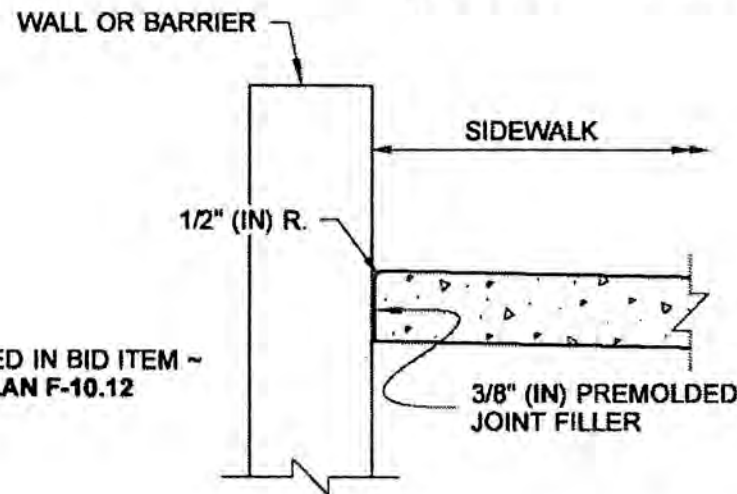
ADJACENT TO BUFFER STRIP



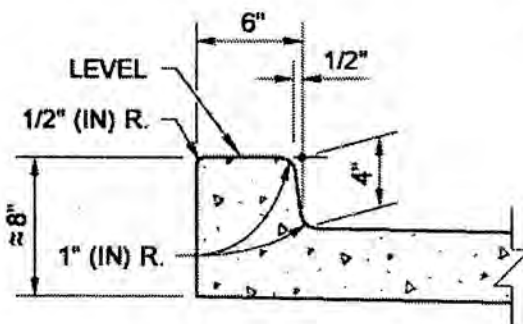
MONOLITHIC CEMENT CONCRETE
CURB AND SIDEWALK

NOTE

- Four feet of the sidewalk width shall be the minimum pedestrian accessible route free of vertical and horizontal obstructions. Gratings, Access Covers, Junction Boxes, Cable Vaults, Pull Boxes and other appurtenances within the sidewalk must have slip resistant surfaces, be flush with surface, and match grade of the sidewalk.

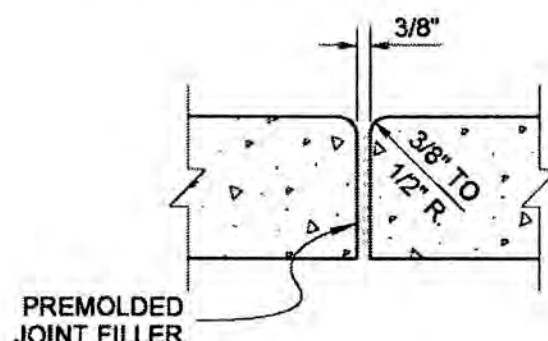


SIDEWALK ADJACENT TO WALL DETAIL

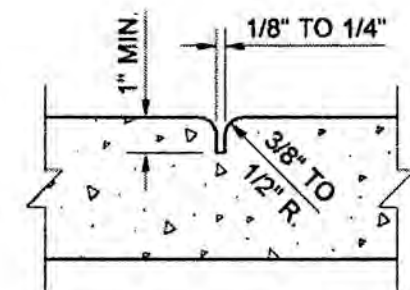


RAISED EDGE DETAIL

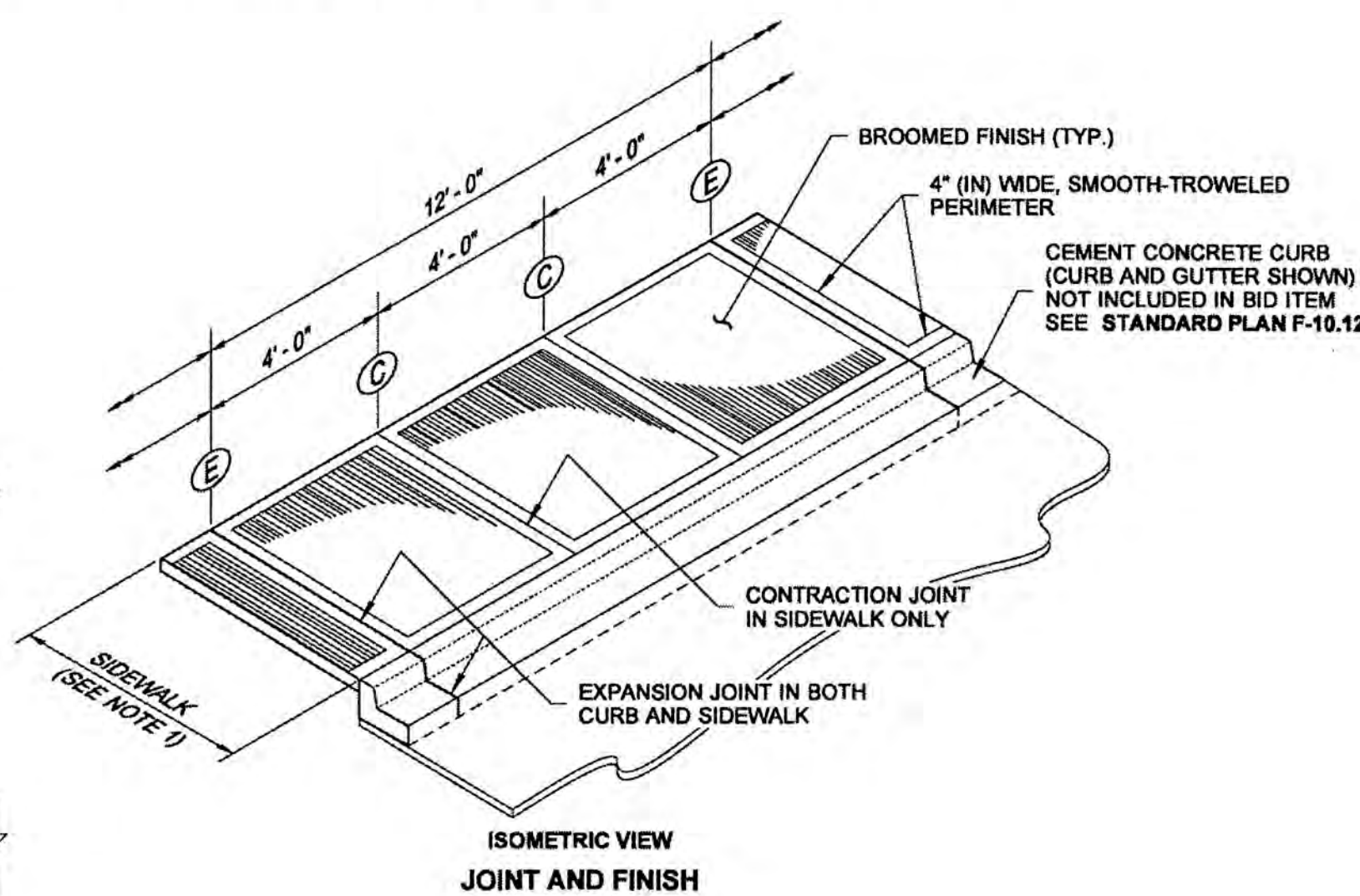
EXTEND SIDEWALK TRANSVERSE JOINTS TO INCLUDE RAISED EDGE



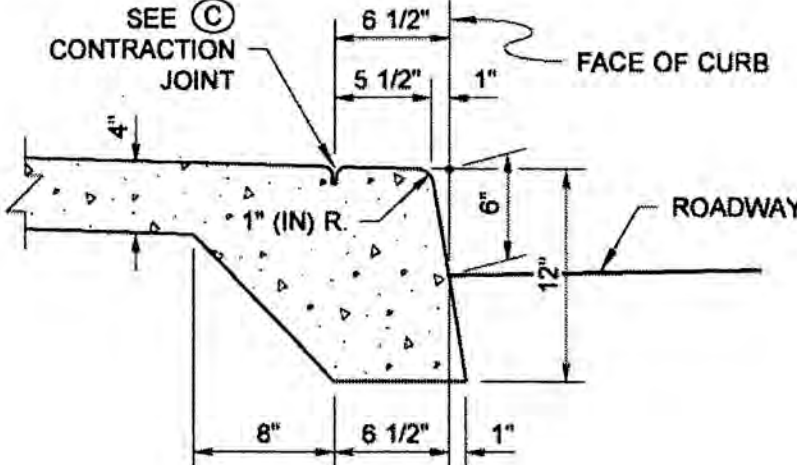
EXPANSION JOINT



CONTRACTION JOINT

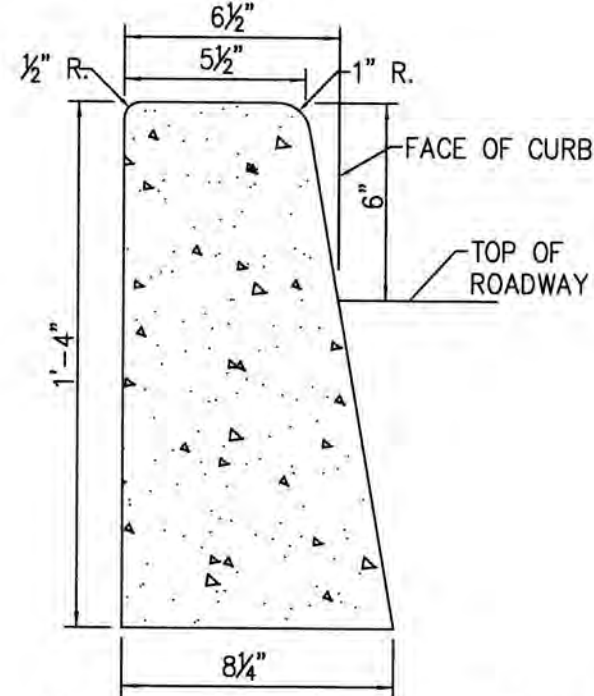


ISOMETRIC VIEW
JOINT AND FINISH
DETAIL



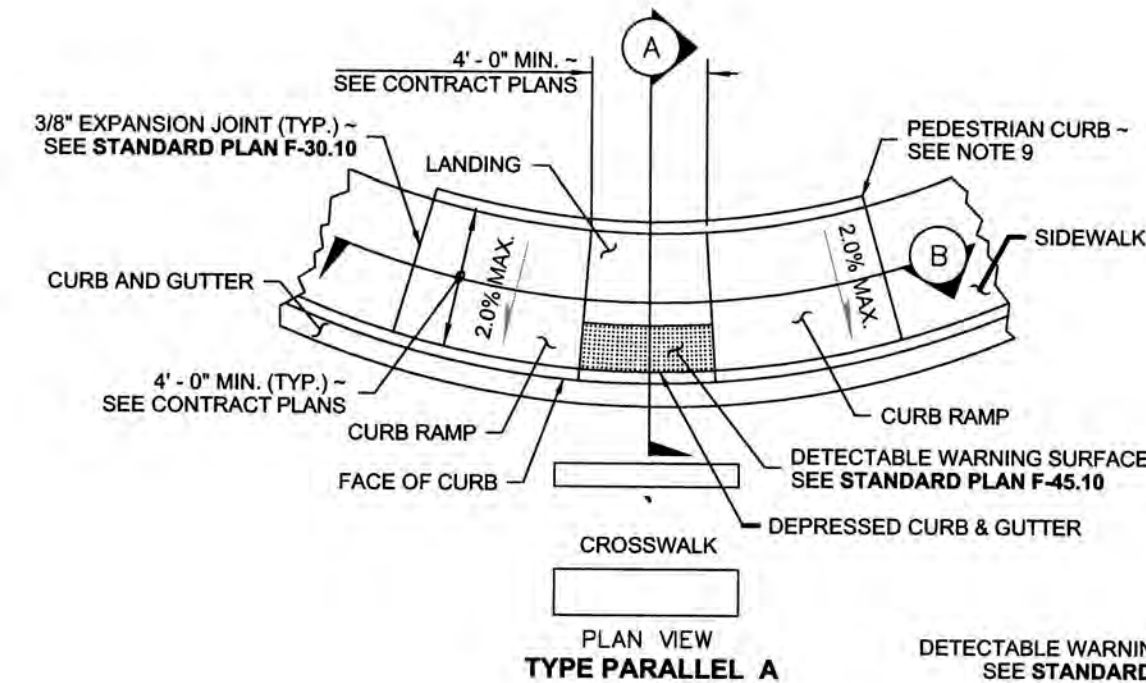
CURB FACE DETAIL

EXTEND SIDEWALK TRANSVERSE EXPANSION JOINTS TO INCLUDE CURB (FULL DEPTH)

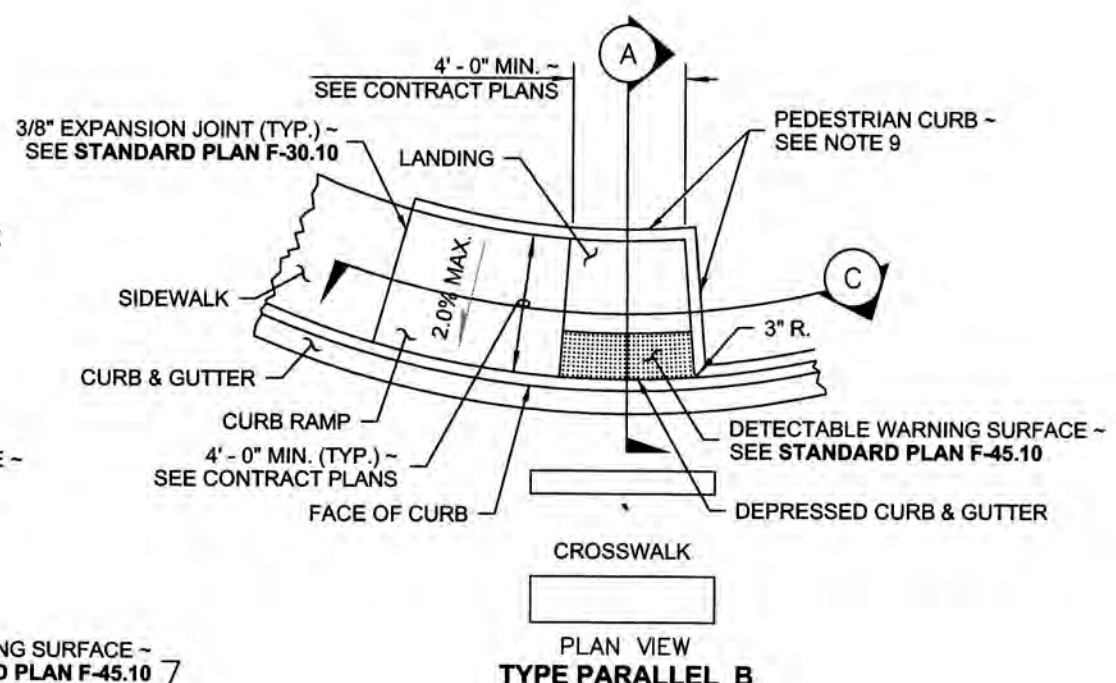


CEMENT CONCRETE TRAFFIC CURB
WSDOT STD PLAN F-10.12-03

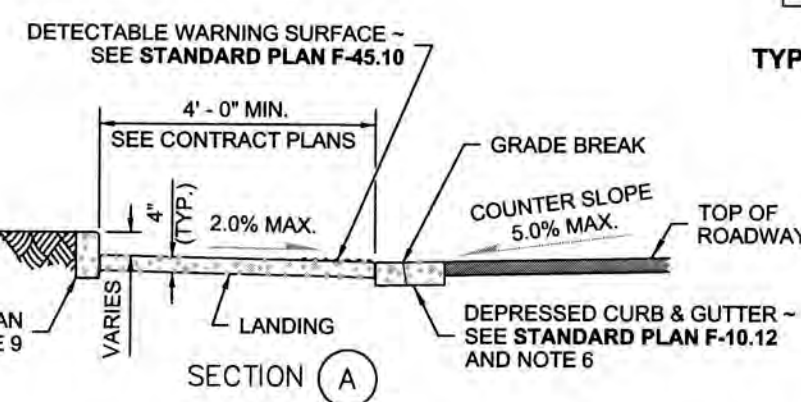
- This plan is to be used where pedestrian crossing in one direction is not permitted.
- Curb ramp location shall be placed within the width of the associated crosswalk, or as shown in the Contract Plans.
- Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
- Do not place gratings, junction boxes, access covers or other appurtenances in front of the curb ramp or on any part of the curb ramp or landing.
- See the Contract Documents for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter and Pedestrian Curb details.
- See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See contract plans for width and placement of sidewalk.
- The bid item "Cement Concrete Curb Ramp Type" does not include the adjacent Curb or (Curb and Gutter), Depressed Curb and Gutter, Pedestrian Curb or Sidewalk, or the pedestrian crossing closure sign.
- The curb ramp maximum running slope shall not require the ramp length to exceed 15 feet to avoid chasing the slope indefinitely when connecting to steep grades. When applying the 15 foot maximum length, the running slope of the curb ramp shall be as flat as feasible.
- Curb ramps and landings shall receive broom finish.
- See **Standard Specifications 8-14**.
- Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or landing will be at the same elevation as the Curb Ramp or Landing and there will be no material to retain.



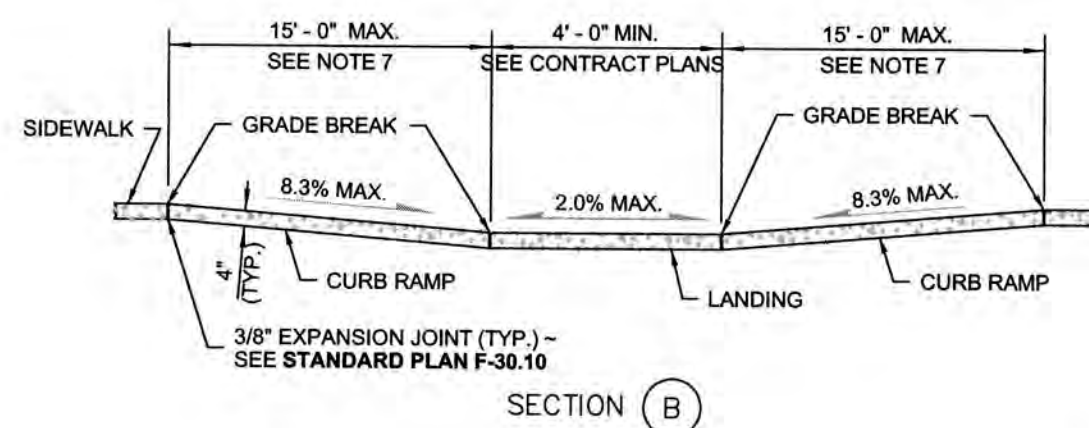
PLAN VIEW
TYPE PARALLEL A



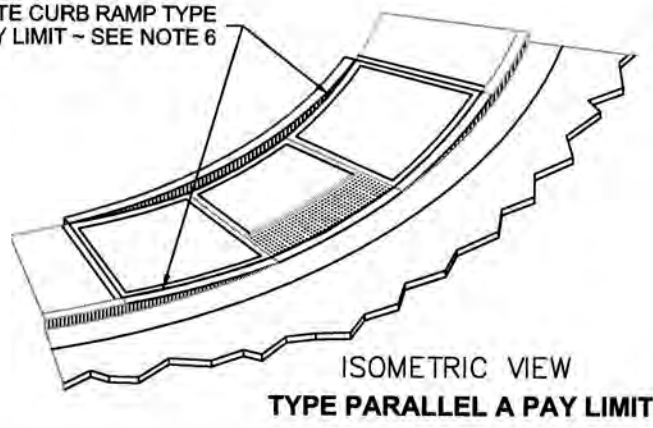
PLAN VIEW
TYPE PARALLEL B



SECTION A



SECTION B



ISOMETRIC VIEW
TYPE PARALLEL A PAY LIMIT

WSDOT STD PLAN F-40.12-02
SIDEWALK RAMP TYPE PARALLEL A & B
NOT TO SCALE

NOTE

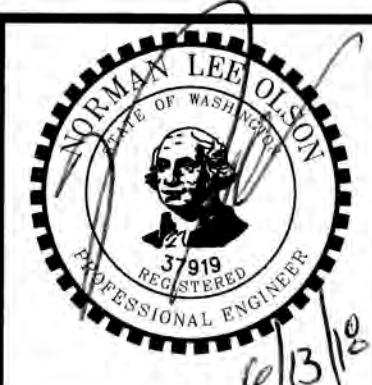
THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.

CALL 48 HOURS
BEFORE YOU DIG
811

CEMENT CONCRETE SIDEWALK
WSDOT STANDARD PLAN F-30.10-03

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION		
				DESIGNED	RPJ 8/17
				DRAWN	JAT 8/17
				CHECKED	NLOI 8/17
				APPROVED	
				ACCEPTED	

N.L. Olson & Associates, Inc.
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(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



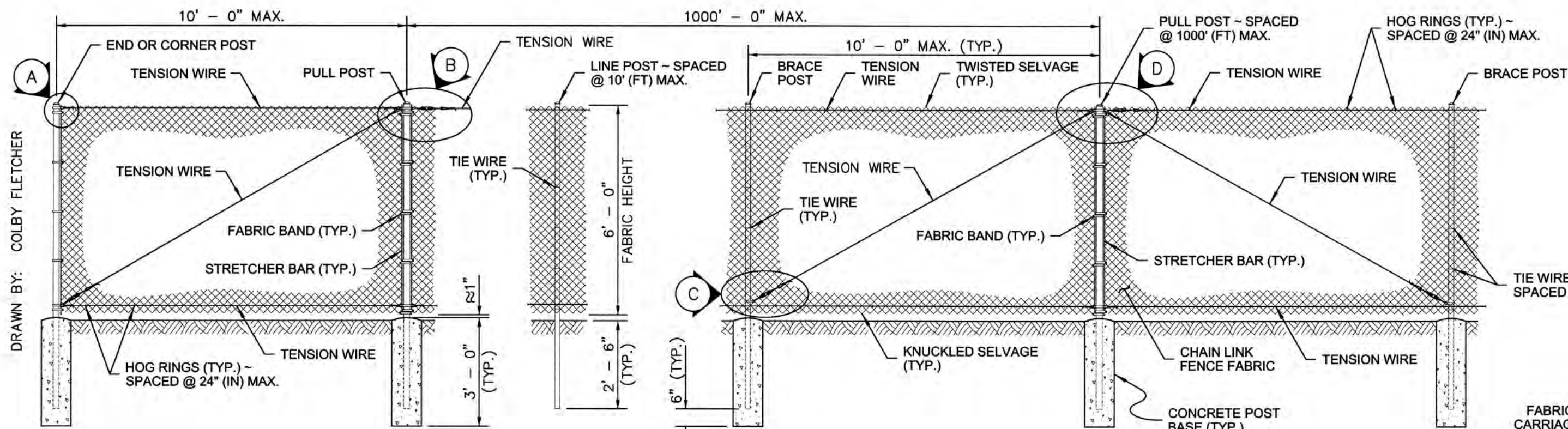
SIDEWALK DETAILS
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C4.21

FENCING NOTES

- FENCING SHALL CONSIST OF A MINIMUM 6' HIGH CHAIN LINK FENCE.
- A MINIMUM OF ONE LOCKING ACCESS ROAD GATE SHALL BE PROVIDED THAT IS 16' WIDE CONSISTING OF TWO SWINGING SECTIONS 8' IN WIDTH.
- FENCE MATERIAL SHALL BE NO. 11 GAUGE GALVANIZED STEEL FABRIC WITH BONDED VINYL COATING. VINYL COATING SHALL BE GREEN IN OPEN AREAS AND BLACK IN WOODED AREAS.
- ALL POSTS, CROSS BARS, AND GATES SHALL BE PAINTED OR CODED THE SAME COLOR AS THE VINYL CLAD FENCE.



TYPE 3

POST AND RAIL SPECIFICATIONS			
POST	PIPE	ROLL FORMED	
	NOM. SIZE (SCH. 40) I.D.	SECTION	WEIGHT (lb/ft)
END, CORNER, OR PULL POST	2 1/2" DIAM.	(Y)	5.10
LINE OR BRACE POST	2" DIAM.	(Z)	1.85

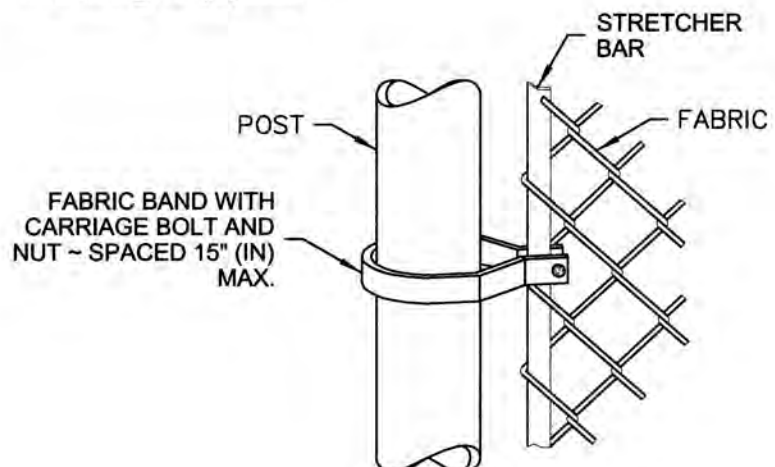
FABRIC LOOP - 2 SIDES (Y)

FENCE LINE (Z)

CHAINLINK FENCE TYPE 3
PER WSDOT STANDARD PLAN L-20.10-03

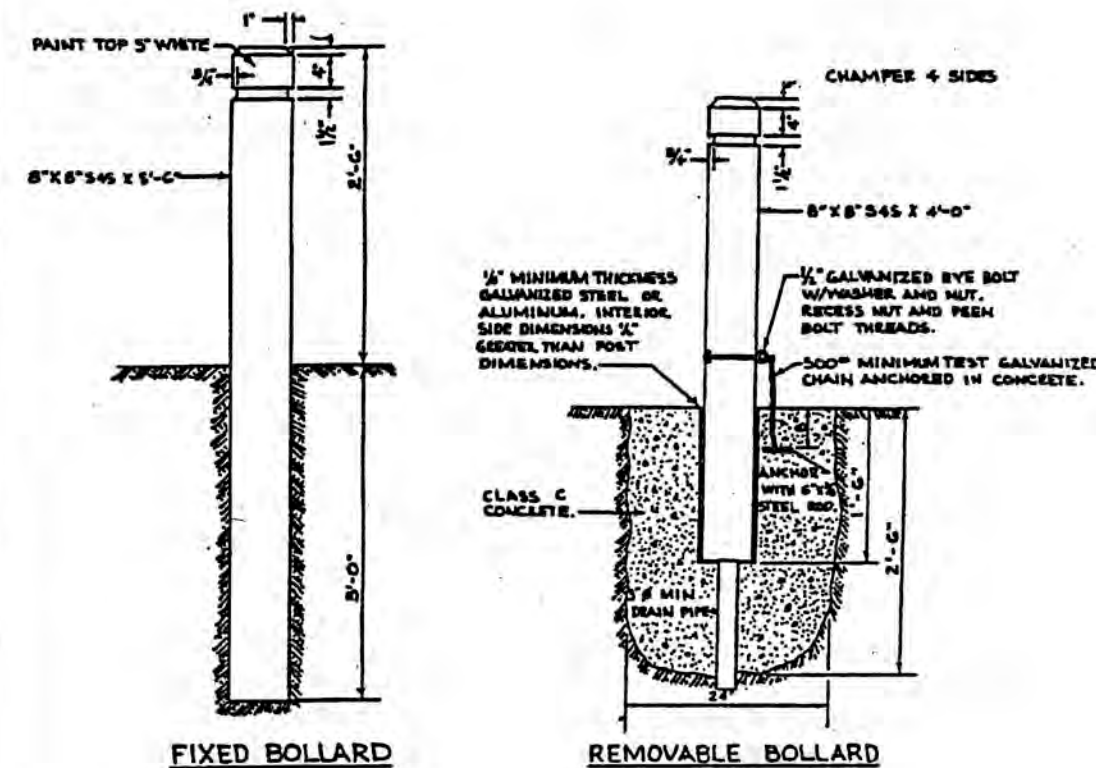
NOTES

- All concrete post bases shall be 10" (in) minimum diameter.
- Along the top and bottom, using Hog Rings, fasten the Chain Link Fence Fabric to the Tension Wire within the limits of the first full fabric weave.
- Details are illustrative and shall not limit hardware design or post selection of any particular fence type.
- Fencing shall be used for security and boundary delineation only.



METHOD OF FASTENING
STRETCHER BAR TO POST

Figure 5-15 BOLLARDS



NOTES:

- TIMBER SHALL BE DOUGLAS FIR, DENSE CONSTRUCTION GRADE, AND SHALL BE PENTACHLOROPHENOL PRESSURE TREATED BY EMPTY CELL PROCESS WITH MINIMUM NET RETENTION OF 0.05 LBS./CU. FOOT OF THE DRY SALT. (USE LIGHT PETROLEUM SOLVENT.)
- STEEL TUBE SHALL CONFORM TO ASTM A53 OR ASTM A53 GRADE A.
- NUTS, BOLTS, & WASHERS SHALL CONFORM TO ASTM A307.
- ALL STEEL PARTS SHALL BE GALVANIZED.
- CONCRETE SHALL BE CLASS C.

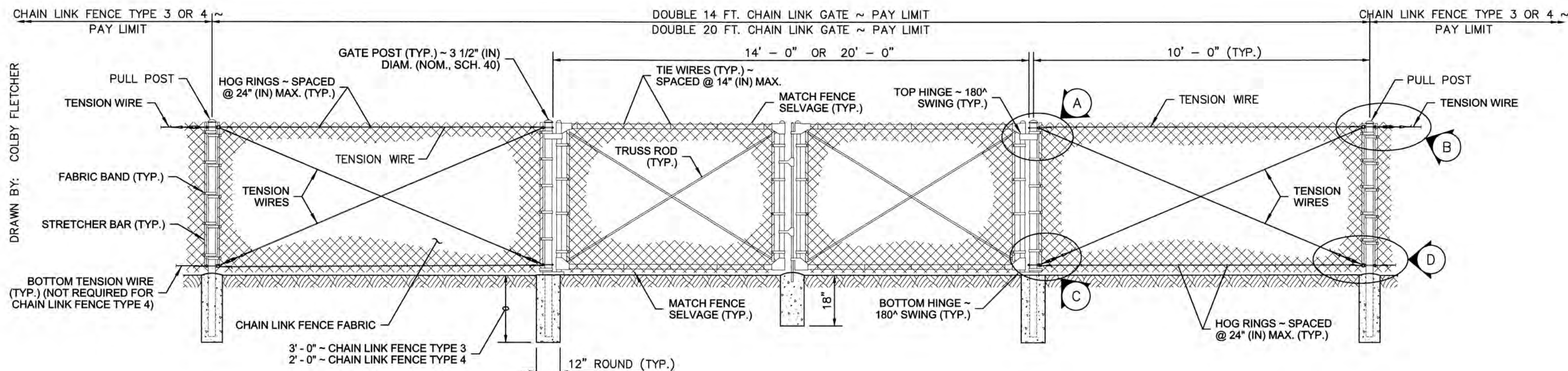
REV 10/21/96

5-33

REMOVABLE BOLLARD DETAIL
PER KITSAP COUNTY STANDARD PLAN 5-33

NOTES

- Materials shall meet the requirements of Standard Specification 9-16.



DOUBLE GATE

CHAINLINK GATE
PER WSDOT STANDARD PLAN L-30.10-02

NOTE

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CALL 48 HOURS
BEFORE YOU DIG
811

REVISIONS

NO.	DATE	BY	DESCRIPTION	DESIGNED	BY	DATE
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	RPJ	8/17	
				SBR	4/18	
				NLOII	8/17	

N.L.Olson & Associates, Inc.
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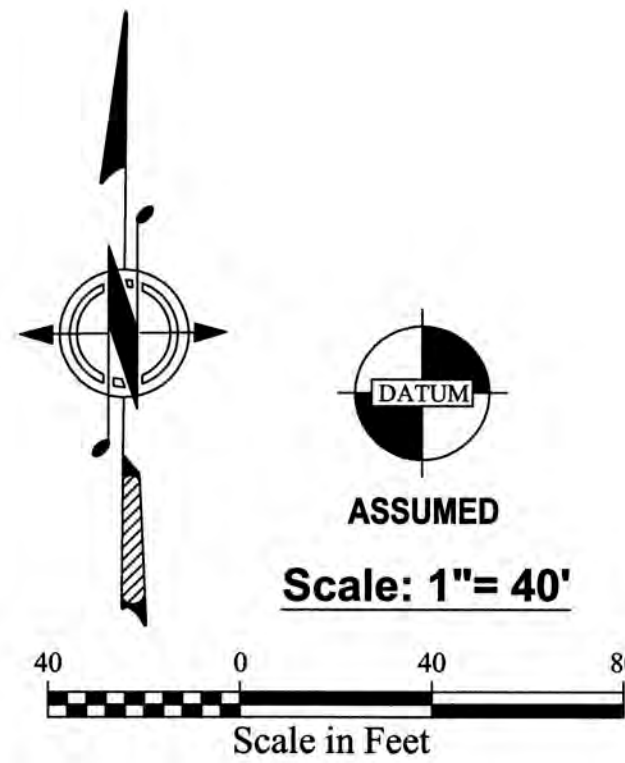
SITE DETAILS 2
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C4.22



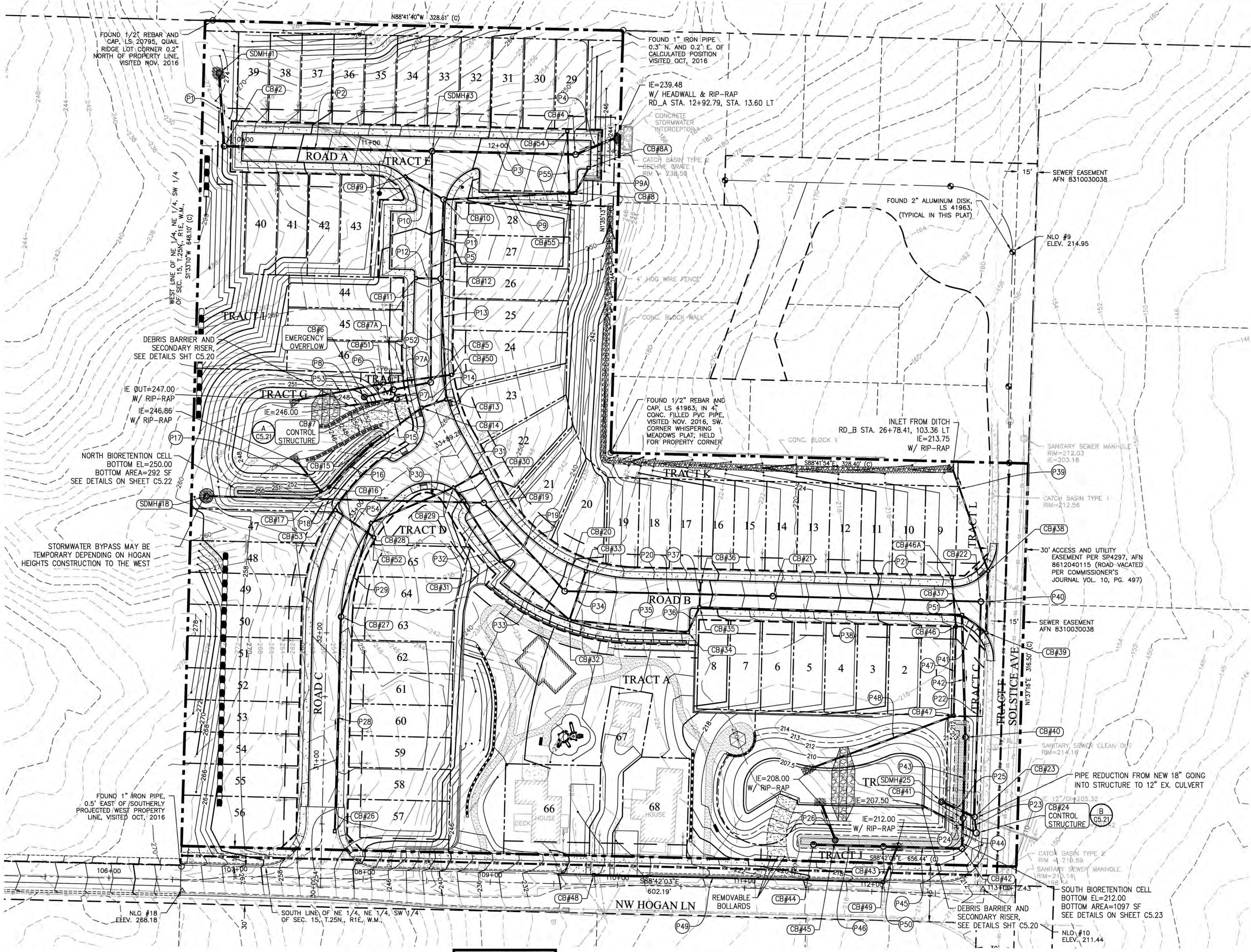
SECONDARY STORM LEGEND
6" CPEP (ADS N-12 OR EQ.) FOR ROOFTOP DRAINS
6" CLEANOUT
4" CPEP (ADS N-12 OR EQ.) STORM STUB FOR ROOFTOP DRAINS WITH MARKER

NOTE: SEE SHEET C5.01 FOR STORM INDEX

NOTE

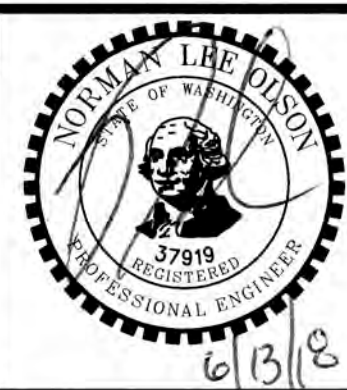
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CALL 48 HOURS BEFORE YOU DIG
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REVISIONS						BY	DATE
NO.	DATE	BY	DESCRIPTION		DESIGNED	RPJ	8/17
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018		DRAWN	JAT	8/17
2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018		CHECKED	NLOII	8/17
					APPROVED		
					ACCEPTED		

 **N.L.Olson & Associates, Inc.**
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



STORM PLAN
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C5.00

STORM CB INDEX

SDMH#1 TYPE 3 48"ø W/ ROUND BEEHIVE GRATE RD_A STA. 9+79.35, 57.50L RIM=271.00 IE OUT 18" S=266.50	CB#13 TYPE 1 W/ STD GRATE RD_B STA. 21+98.29, 10.16L RIM=253.56 IE IN 12" N=248.64 IE OUT 12" W=248.64	CB#27 TYPE 1 W/ STD GRATE RD_C STA. 32+12.94, 11.07R RIM=255.25 IE IN 12" S=249.75 IE OUT 12" N=249.75	CB#42 TYPE II 48"ø W/ SOLID LID STA. 26+92.84, 194.02R RIM=214.00 IE IN 18" N=205.00 IE OUT 18" W=205.00
CB#2 TYPE II 48"ø W/ SOLID LID RD_A STA. 9+84.67, 0.00 RIM=280.00 IE IN 18" N=266.10 IE OUT 18" E=266.10	CB#14 TYPE 1 W/ STD GRATE RD_B STA. 21+99.22, 10.17R RIM=253.52 IE IN 12" E=248.54 IE OUT 12" SW=248.54	CB#28 TYPE 1 W/ STD GRATE RD_C STA. 32+97.80, 10.17R RIM=253.57 IE IN 12" S=248.57 IE OUT 12" NE=248.57	CB#43 TYPE II 48"ø W/ SQUARE BEEHIVE GRATE BIORETENTION CELL BUBBLE UP INLET RD_B STA. 26+30.95, 194.02R RIM=212.50 IE IN 18" E=205.00 IE OUT 18" W=205.00
SDMH#3 TYPE 3 48"ø W/ SOLID LID RD_A STA. 11+48.18, 0.00 RIM=262.00 IE IN 18" W=244.90 IE IN 12" S=244.90 IE OUT 18" E=244.90	CB#15 TYPE 1 W/ BEEHIVE GRATE BIORETENTION CELL BUBBLE-UP INLET RD_B STA. 22+11.24, 57.02R RIM=250.50 IE IN 12" NE=246.24 IE OUT 12" SW=246.24	CB#29 TYPE 1 W/ STD GRATE RD_B STA. 22+64.25, 14.71R RIM=250.40 IE IN 12" SW=245.41 IE OUT 12" NE=245.41 IE OUT 12" SE=245.41	CB#44 TYPE II 48"ø W/ SQUARE BEEHIVE GRATE BIORETENTION CELL BUBBLE UP INLET RD_B STA. 25+75.95, 194.02R RIM=212.50 IE IN 18" E=205.00
CB#4 TYPE II 48"ø W/ SOLID LID RD_A STA. 12+61.13, 0.00 RIM=253.18 IE IN 18" W=240.15 IE OUT 18" NE=240.15	CB#16 TYPE 1 W/ BEEHIVE GRATE BIORETENTION CELL BUBBLE-UP INLET RD_B STA. 22+22.31, 100.69R RIM=250.50 IE IN 12" NE=246.00	CB#30 TYPE 1 W/ STD GRATE RD_B STA. 22+64.25, 10.17L RIM=250.50 IE IN 12" SW=244.50	CB#45 TYPE II 48"ø W/ ROUND BEEHIVE GRATE BIORETENTION CELL OUTLET RD_B STA. 25+93.01, 190.02R RIM=213.00 IE OUT 18" N=208.29
CB#5 TYPE II 48"ø W/ SOLID LID RD_B STA. 21+81.92, 1.06L RIM=254.46 IE IN 12" W=245.81 IE OUT 12" N=245.81	CB#17 TYPE 1 W/ BEEHIVE GRATE BIORETENTION CELL OUTLET RD_C STA. 32+95.61, 36.27L RIM=251.00 IE OUT 12" NW=247.00	CB#31 TYPE 1 W/ STD GRATE RD_B STA. 23+27.97, 17.46R RIM=244.31 IE IN 12" NW=239.32 IE OUT 12" SE=239.32	CB#46 TYPE 1 W/ SOLID LID STA. 26+83.80, 20.00R RIM=215.50 6" IE IN 12" N=211.75 6"ø CPEP ROOF DRAINS IN IE=210.50 IE OUT 12" S=211.75
CB#6 TYPE II 48"ø W/ ROUND BEEHIVE GRATE RD_B STA. 21+84.16, 52.28R RIM=251.00 IE OUT 12" E=246.08	SDMH#18 TYPE 3 48"ø W/ ROUND BEEHIVE GRATE RD_C STA. 32+65.28, 113.96L RIM=254.20 IE OUT 12" E=244.00	CB#32 TYPE 1 W/ STD GRATE RD_B STA. 23+88.35, 30.17R RIM=238.32 IE IN 12" N=233.33 IE IN 12" NW=233.33 IE OUT 12" E=233.33	CB#46A TYPE 1 W/ STD GRATE RD_B STA. 26+79.68, 18.58L RIM=238.32 IE OUT 12" S=211.94
CB#7 TYPE II 54"ø W/ SOLID LID CONTROL STRUCTURE RD_B STA. 21+88.92, 28.02R RIM=254.50 IE IN 12" W=246.00 IE OUT 12" N=246.00	CB#19 TYPE 1 W/ SOLID LID RD_B STA. 22+86.13, 0.00 RIM=248.70 IE IN 12" W=242.20 IE OUT 12" SE=242.20	CB#33 TYPE 1 W/ STD GRATE RD_B STA. 23+88.34, 10.17L RIM=238.32 IE OUT 12" S=233.53	CB#47 TYPE 1 W/ SOLID LID STA. 26+83.80, 90.00R RIM=214.20 IE IN 12" N=209.20 IE OUT 12" W=209.20
CB#7A TYPE II 48"ø W/ SOLID LID RD_B STA. 21+82.75, 28.59R RIM=254.50 IE IN 12" W=245.96 IE IN 12" S=245.96 IE OUT 12" E=245.96	CB#20 TYPE II 48"ø W/ SOLID LID RD_B STA. 23+78.26, 10.30R RIM=239.40 IE IN 12" NW=232.41 IE OUT 12" E=232.41	CB#34 TYPE 1 W/ STD GRATE RD_B STA. 24+73.30, 30.17R RIM=231.31 IE IN 12" N=226.30 IE OUT 12" NE=226.30	CB#48 TYPE 1 W/ VANED GRATE STA. 109+81.31, 7.52L RIM=228.00 IE OUT 12" E=224.00
CB#8A TYPE 1 W/ COMBINATION INLET RD_A STA. 12+71.68, 10.17R RIM=252.33 IE OUT 12" SW=250.05	CB#21 TYPE II 48"ø W/ SOLID LID RD_B STA. 25+39.32, 0.00 RIM=226.26 IE IN 12" W=219.26 IE OUT 12" E=219.26	CB#35 TYPE 1 W/ STD GRATE RD_B STA. 24+81.88, 10.17R RIM=230.61 IE IN 12" SW=225.75 IE IN 12" N=225.75 IE OUT 12" E=225.75	CB#49 TYPE 1 W/ VANED GRATE STA. 112+08.76, 7.53L RIM=216.00 IE IN 12" W=212.15 IE OUT 12" N=212.15
CB#8 TYPE 1 W/ COMBINATION INLET RD_A STA. 12+61.68, 30.17R RIM=252.70 IE IN 12" NE=249.94 IE OUT 12" W=249.94	CB#22 TYPE II 48"ø W/ SOLID LID RD_B STA. 27+02.94, 0.00 RIM=214.53 IE IN 12" W=208.53 IE OUT 12" S=208.53	CB#36 TYPE 1 W/ STD GRATE RD_B STA. 24+82.45, 10.17L RIM=230.57 IE OUT 12" S=225.85	CB#50 TYPE 1 W/ STD GRATE RD_B STA. 21+78.23, 18.18L RIM=254.99 IE OUT 12" W=250.49
CB#9 TYPE 1 W/ STD GRATE RD_B STA. 20+20.36, 20.38R RIM=261.93 IE OUT 12" SE=256.93	CB#23 TYPE II 48"ø W/ SOLID LID RD_B STA. 27+01.97, 168.95R RIM=214.00 IE IN 12" N=205.11 IE IN 12" S=207.21 IE IN 18" NW=207.07 IE OUT 12" E=205.11	CB#37 TYPE 1L W/ STD GRATE RD_B STA. 26+88.30, 10.67R RIM=214.64 IE IN 12" W=209.64 IE IN 12" SE=210.14 IE OUT 18" S=209.64	CB#51 TYPE 1 W/ STD GRATE RD_B STA. 21+78.00, 35.85R RIM=254.16 IE IN 12" E=249.16 IE OUT 12" W=249.16
CB#10 TYPE II 48"ø W/ SOLID LID RD_B STA. 20+37.81, 9.98L RIM=260.95 IE IN 12" E=249.42 IE IN 12" NW=254.83 IE OUT 12" S=249.42	CB#24 TYPE II 54"ø W/ SOLID LID CONTROL STRUCTURE RD_B STA. 27+03.79, 181.49R RIM=215.50 IE IN 12" NW=207.50 IE OUT 12" N=207.50	CB#38 TYPE 1 W/ STD GRATE RD_B STA. 27+08.06, 24.12L RIM=213.97 IE IN 12" N=210.50 IE OUT 12" S=210.50	CB#52 TYPE 1 W/ STD GRATE RD_C STA. 32+88.85, 18.48R RIM=254.35 IE OUT 12" NW=250.35
CB#11 TYPE 1 W/ STD GRATE RD_B STA. 21+00.00, 10.17R RIM=258.12 IE OUT 12" E=253.14	SDMH#25 TYPE 3 48"ø W/ ROUND BEEHIVE GRATE RD_B STA. 26+75.82, 157.69R RIM=214.15 IE OUT 18" SE=207.35	CB#39 TYPE 1 W/ STD GRATE RD_B STA. 27+07.86, 24.18R RIM=214.04 IE IN 12" N=210.26 IE OUT 12" NW=210.26	CB#53 TYPE 1 W/ STD GRATE RD_C STA. 32+90.65, 18.61L RIM=254.71 IE IN 12" SE=250.16
CB#12 TYPE II 48"ø W/ SOLID LID RD_B STA. 21+00.00, 9.26L RIM=258.14 IE IN 12" W=253.04 IE IN 12" N=249.11 IE OUT 12" S=249.11	CB#41 TYPE II 48"ø W/ SQUARE BEEHIVE GRATE BIORETENTION CELL BUBBLE UP INLET RD_B STA. 26+93.34, 106.60R RIM=212.50 IE IN 18" N=205.00 IE OUT 18" S=205.00	CB#40 TYPE II 48"ø W/ SQUARE BEEHIVE GRATE BIORETENTION CELL BUBBLE UP INLET RD_B STA. 26+92.98, 170.24R RIM=212.50 IE IN 18" N=205.00 IE OUT 18" S=205.00	CB#54 TYPE 1 W/ STD GRATE ??? STA. ???, ?????? RIM=254.25 IE OUT 12" S=249.25
			CB#55 TYPE 1 W/ STD GRATE RD_A STA. 12+57.39, 38.08R RIM=253.10 IE IN 12" N=248.10

STORM PIPE INDEX

P1 58 LF 18"ø CPEP S=0.70% IE IN=266.50 IE OUT=266.10	P19 94 LF 12"ø CPEP S=10.38% IE IN=242.20 IE OUT=232.41	P40 48 LF 12"ø CPEP S=0.50% IE IN=210.50 IE OUT=210.26
P2 164 LF 18"ø CPEP S=12.97% IE IN=266.10 IE OUT=244.90	P20 164 LF 12"ø CPEP S=8.04% IE IN=232.41 IE OUT=219.26	P41 24 LF 12"ø CPEP S=0.50% IE IN=210.26 IE OUT=210.14
P3 113 LF 18"ø CPEP S=4.21% IE IN=244.90 IE OUT=240.15	P21 164 LF 12"ø CPEP S=6.56% IE IN=219.26 IE OUT=208.53	P42 96 LF 18"ø CPEP S=4.83% IE IN=209.64 IE OUT=205.00
P4 34 LF 18"ø CPEP S=2.00% IE IN=240.15 IE OUT=239.48 W/ HEADWALL & RIP-RAP	P22 169 LF 12"ø CPEP S=2.02% IE IN=208.53 IE OUT=205.11	P43 64 LF 18"ø CPEP S=0.00% IE IN=205.00 IE OUT=205.00
P5 182 LF 12"ø CPEP S=0.50% IE IN=245.81 IE OUT=244.90	P23 13 LF 12"ø CPEP S=2.32% IE IN=207.50 IE OUT=207.21	P44 24 LF 18"ø CPEP S=0.00% IE IN=205.00 IE OUT=205.00
P6 24 LF 12"ø CPEP S=0.50% IE IN=246.08 IE OUT=245.96	P24 48 LF 12"ø CPEP S=0.00% IE IN=207.50 IE OUT=207.50	P45 62 LF 18"ø CPEP S=0.00% IE IN=205.00 IE OUT=205.00
P7 7 LF 12"ø CPEP S=0.50% IE IN=246.00 IE OUT=245.96	P25 28 LF 18"ø CPEP S=1.00% IE IN=207.35 IE OUT=207.07	P46 55 LF 18"ø CPEP S=0.00% IE IN=205.00 IE OUT=205.00
P7A 30 LF 12"ø CPEP S=0.50% IE IN=245.96 IE OUT=245.81	P26 29 LF 18"ø CPEP S=1.00% IE IN=208.29 IE OUT=208.00 W/ RIP-RAP	P47 70 LF 12"ø CPEP S=3.64% IE IN=211.75 IE OUT=209.20
P8 37 LF 12"ø CPEP S=0.00% IE IN=246.00 IE OUT=246.00	P28 168 LF 12"ø CPEP S=0.50% IE IN=250.59 IE OUT=249.75	P48 117 LF 12"ø CPEP S=1.03% IE IN=209.20 IE OUT=208.00
P9A 22 LF 12"ø CPEP S=0.50% IE IN=250.05 IE OUT=249.94	P29 77 LF 12"ø CPEP S=1.53% IE IN=249.75 IE OUT=248.57	P49 227 LF 12"ø CPEP S=5.21% IE IN=224.00 IE OUT=212.15
P9 104 LF 12"ø CPEP S=0.46% IE IN=249.94 IE OUT=249.42	P30 71 LF 12"ø CPEP S=4.46% IE IN=248.57 IE OUT=245.41	P50 30 LF 12"ø CPEP S=0.50% IE IN=212.15 IE OUT=212.00
P10 35 LF 12"ø CPEP S=6.00% IE IN=256.93 IE OUT=254.83	P31 25 LF 12"ø CPEP S=3.66% IE IN=245.41 IE OUT=244.50	P51 39 LF 12"ø CPEP S=0.49% IE IN=211.94 IE OUT=211.75
P11 62 LF 12"ø CPEP S=0.50% IE IN=249.42 IE OUT=249.11	P32 69 LF 12"ø CPEP S=8.89% IE IN=245.41 IE OUT=239.32	P52 54 LF 12"ø CPEP S=2.46% IE IN=250.49 IE OUT=249.16
P12 19 LF 12"ø CPEP S=0.50% IE IN=253.14 IE OUT=253.04	P33 71 LF 12"ø CPEP S=8.41% IE IN=239.32 IE OUT=233.33	P53 69 LF 12"ø CPEP S=3.15% IE IN=249.16 IE OUT=247.00
P13 95 LF 12"ø CPEP S=0.50% IE IN=249.11 IE OUT=248.64	P34 40 LF 12"ø CPEP S=0.50% IE IN=233.53 IE OUT=233.33	P54 37 LF 12"ø CPEP S=0.50% IE IN=250.35 IE OUT=250.16
P14 20 LF 12"ø CPEP S=0.50% IE IN=248.64 IE OUT=248.54	P35 94 LF 12"ø CPEP S=7.51% IE IN=233.33 IE OUT=226.30	P55 56 LF 12"ø CPEP S=2.04% IE IN=249.25 IE OUT=248.10
P15 49 LF 12"ø CPEP S=4.68% IE IN=248.54 IE OUT=246.24	P36 22 LF 12"ø CPEP S=2.53% IE IN=226.30 IE OUT=225.75	
P16 47 LF 12"ø CPEP S=0.50% IE IN=246.24 IE OUT=246.00 W/ RIP-RAP	P37 20 LF 12"ø CPEP S=0.50% IE IN=225.85 IE OUT=225.75	
P17 29 LF 12"ø CPEP S=0.50% IE IN=247.00 IE OUT=246.86 W/ RIP-RAP	P38 206 LF 12"ø CPEP S=7.80% IE IN=225.75 IE OUT=209.64	
P18 218 LF 12"ø CPEP S=0.83% IE IN=244.00 IE OUT=242.20	P39 85 LF 12"ø CPEP S=3.84% IE IN=213.75 IE OUT=210.50	

NOTE

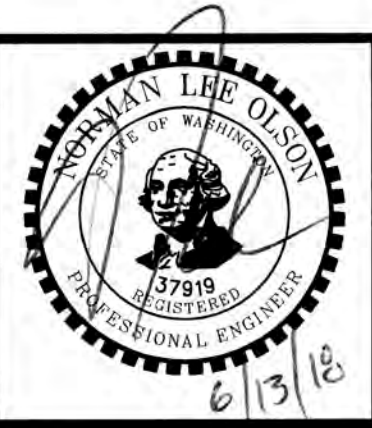
THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.

CALL 48 HOURS
BEFORE YOU DIG
811

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ 8/17
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	DRAWN	JAT 8/17
2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018	CHECKED	NLOII 8/17
				APPROVED	
				ACCEPTED	

N.L.Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



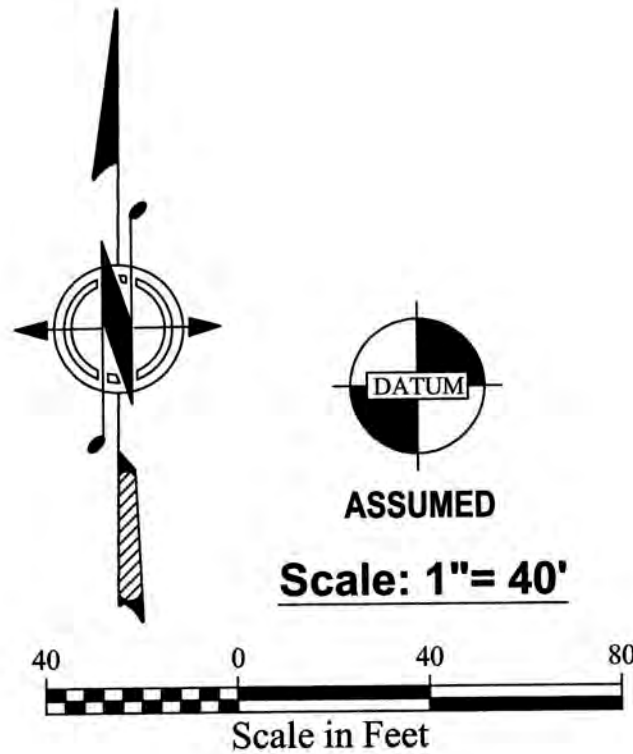
STORM INDEX
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE:	1"=40'
DATE:	June 14, 2018
DRAWING NUMBER:	9582
SHEET	C5.01



SECONDARY STORM LEGEND
6" CPEP (ADS N-12 OR EQ.) FOR ROOFTOP DRAINS
6" CLEANOUT
4" CPEP (ADS N-12 OR EQ.) STORM STUB FOR ROOFTOP DRAINS WITH MARKER

NOTE

THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.

**CALL 48 HOURS
BEFORE YOU DIG
811**

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018
2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018

BY	DATE
DESIGNED	RPJ 8/17
DRAWN	JAT 8/17
CHECKED	NLOH 8/17
APPROVED	
ACCEPTED	



N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



SECONDARY STORM PLAN

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

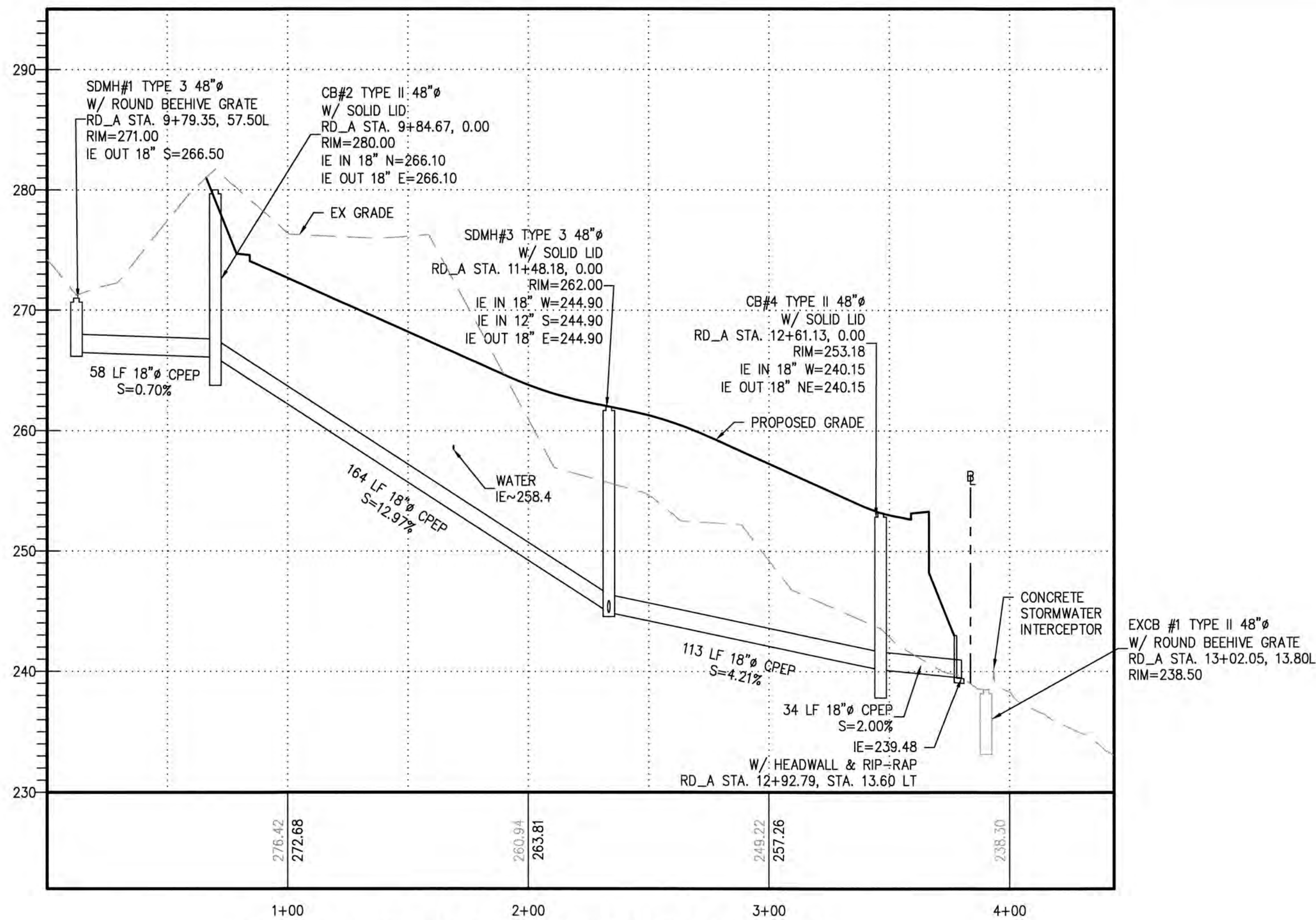
SCALE: 1"=40'

DATE: June 14, 2018

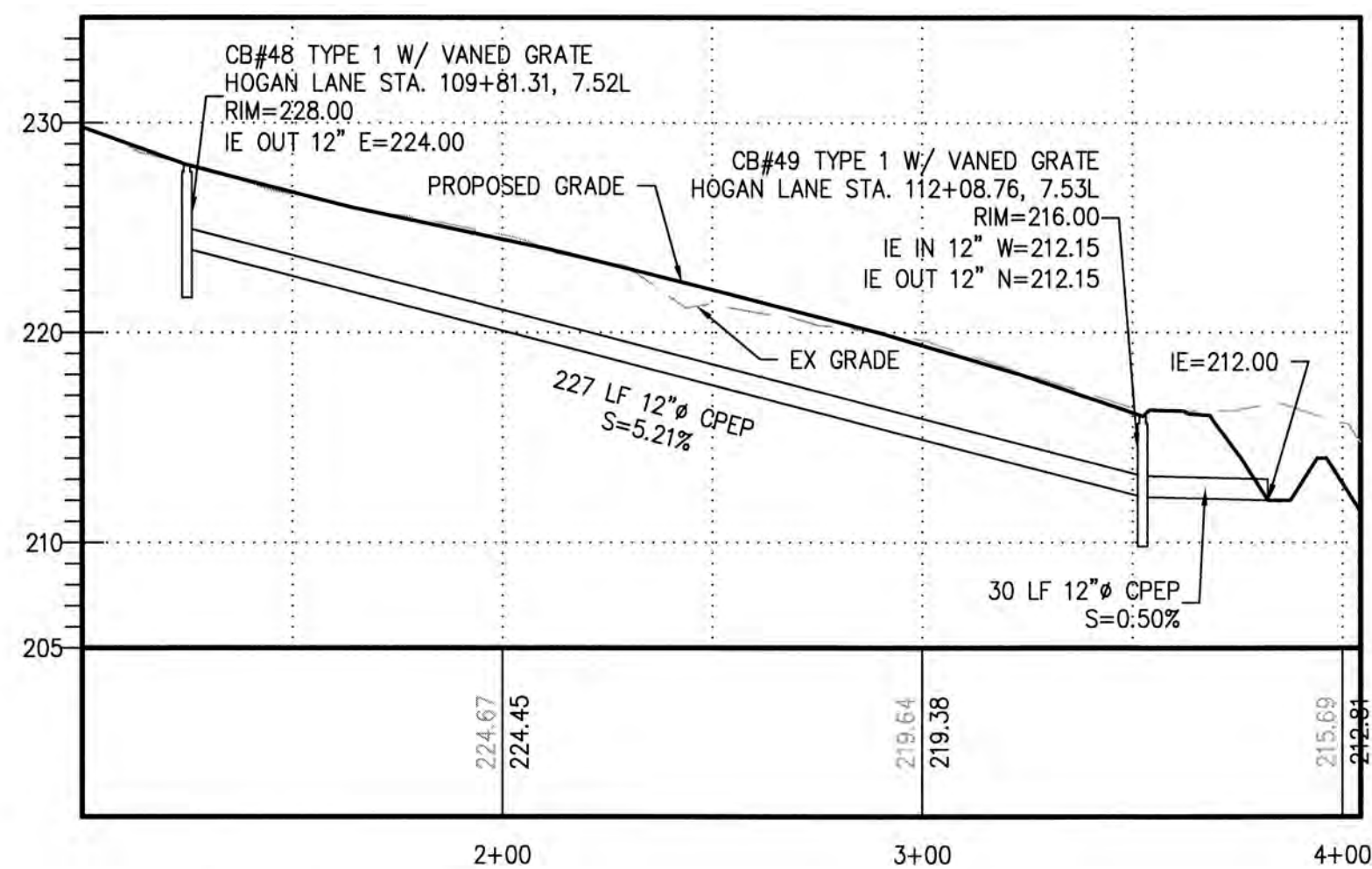
DRAWING NUMBER:

9582

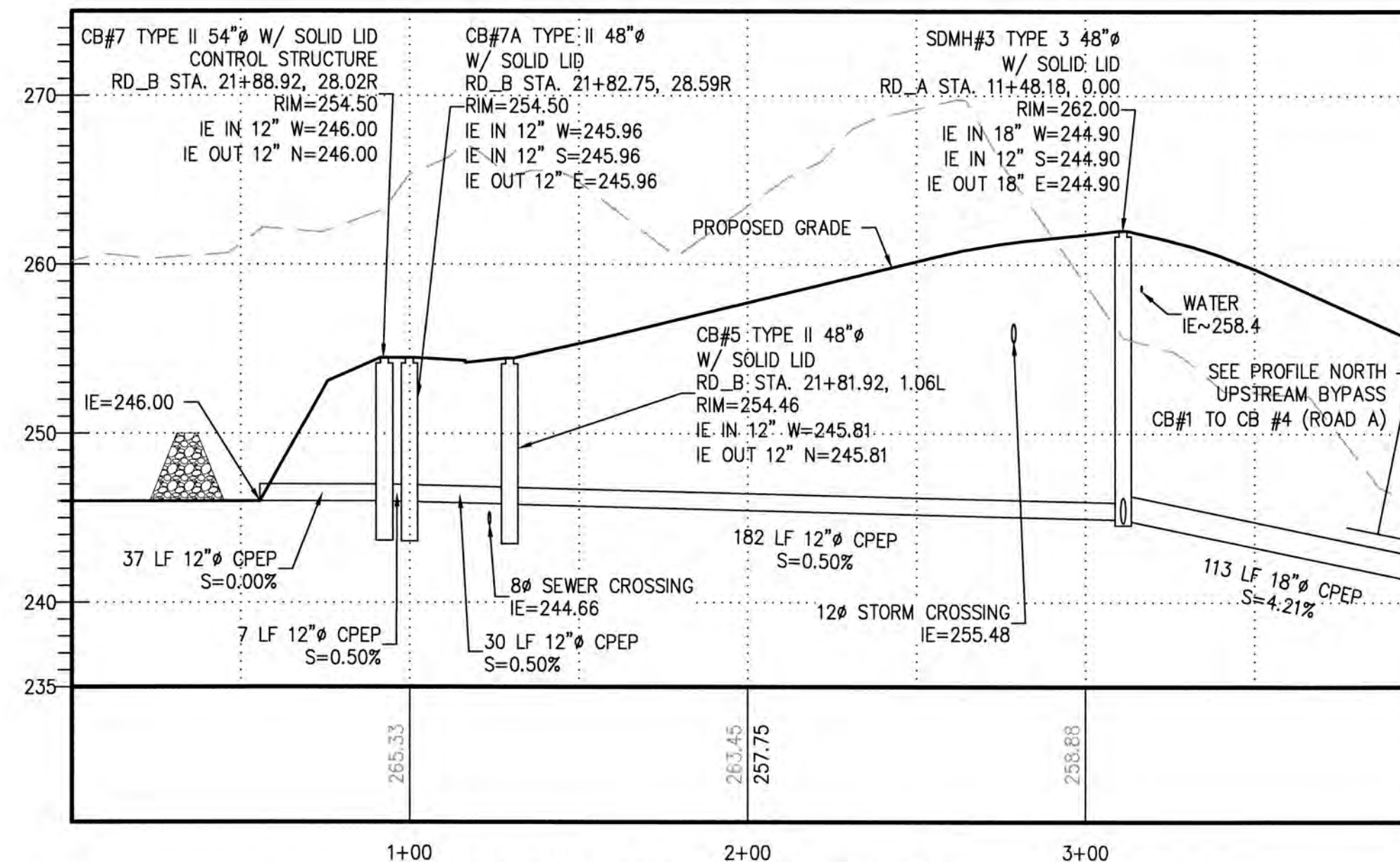
SHEET C5.02



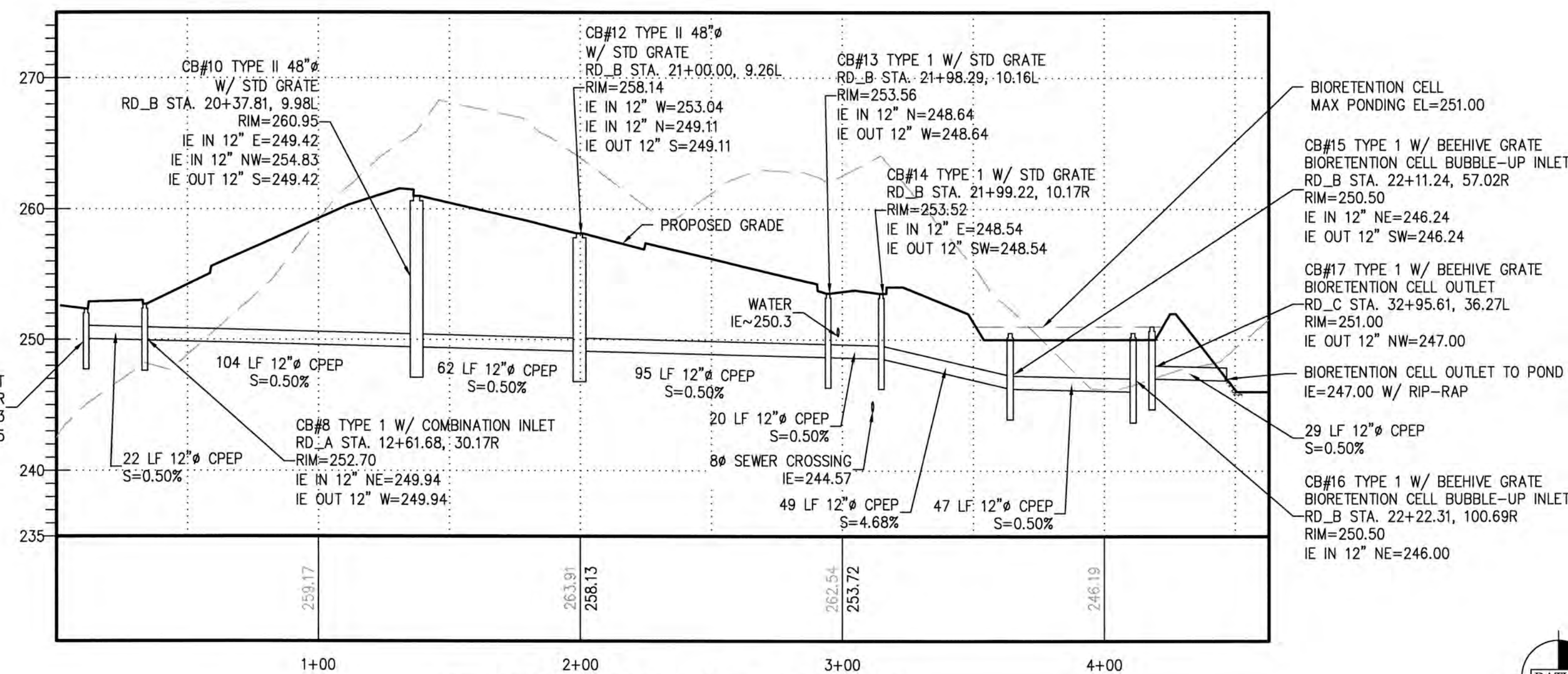
NORTH UPSTREAM BYPASS CB#1 TO CB #4 (ROAD A)
SCALE HORIZ: 1"=40'
VERT.=1"=8'



CB#48 TO SOUTH BIORETENTION CELL (HOGAN LN)
SCALE HORIZ: 1"=40'
VERT.=1"=8'



NORTH POND TO CB#3 (ROAD B)
SCALE HORIZ: 1"=40'
VERT.=1"=8'



CB#8A TO NORTH POND (ROAD A & B)
SCALE HORIZ: 1"=40'
VERT.=1"=8'

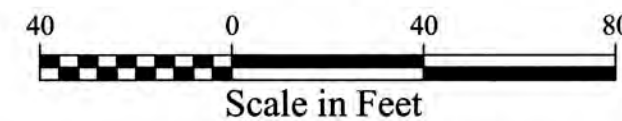
NOTE

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**CALL 48 HOURS
BEFORE YOU DIG
811**

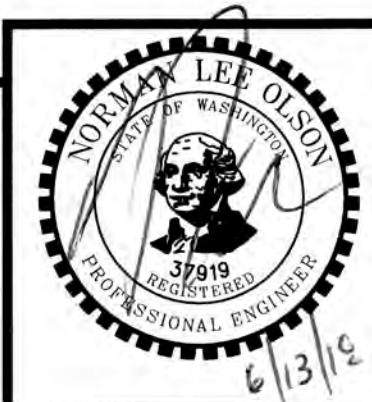


ASSUMED
Scale: 1"= 40'



REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ 8/17
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	DRAWN	JAT 8/17
				CHECKED	NLOII 8/17
				APPROVED	
				ACCEPTED	

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(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

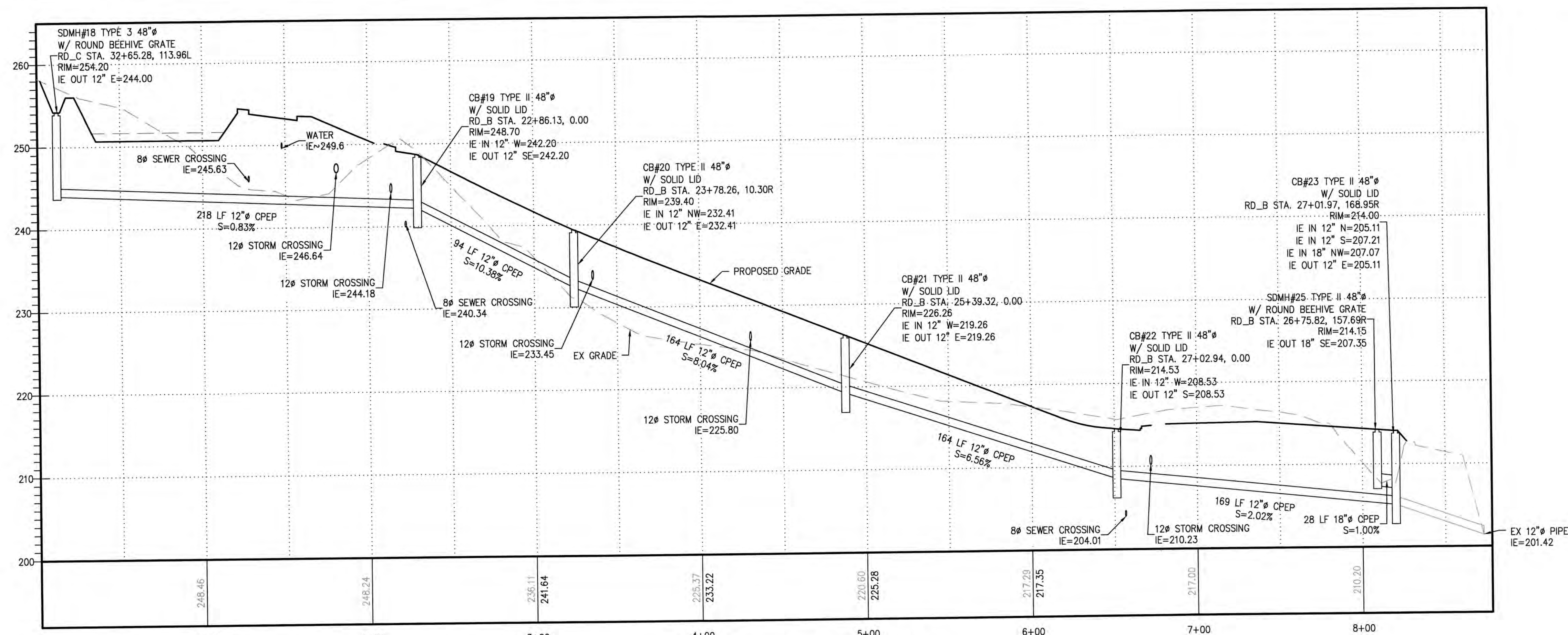


STORM PROFILES 1
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

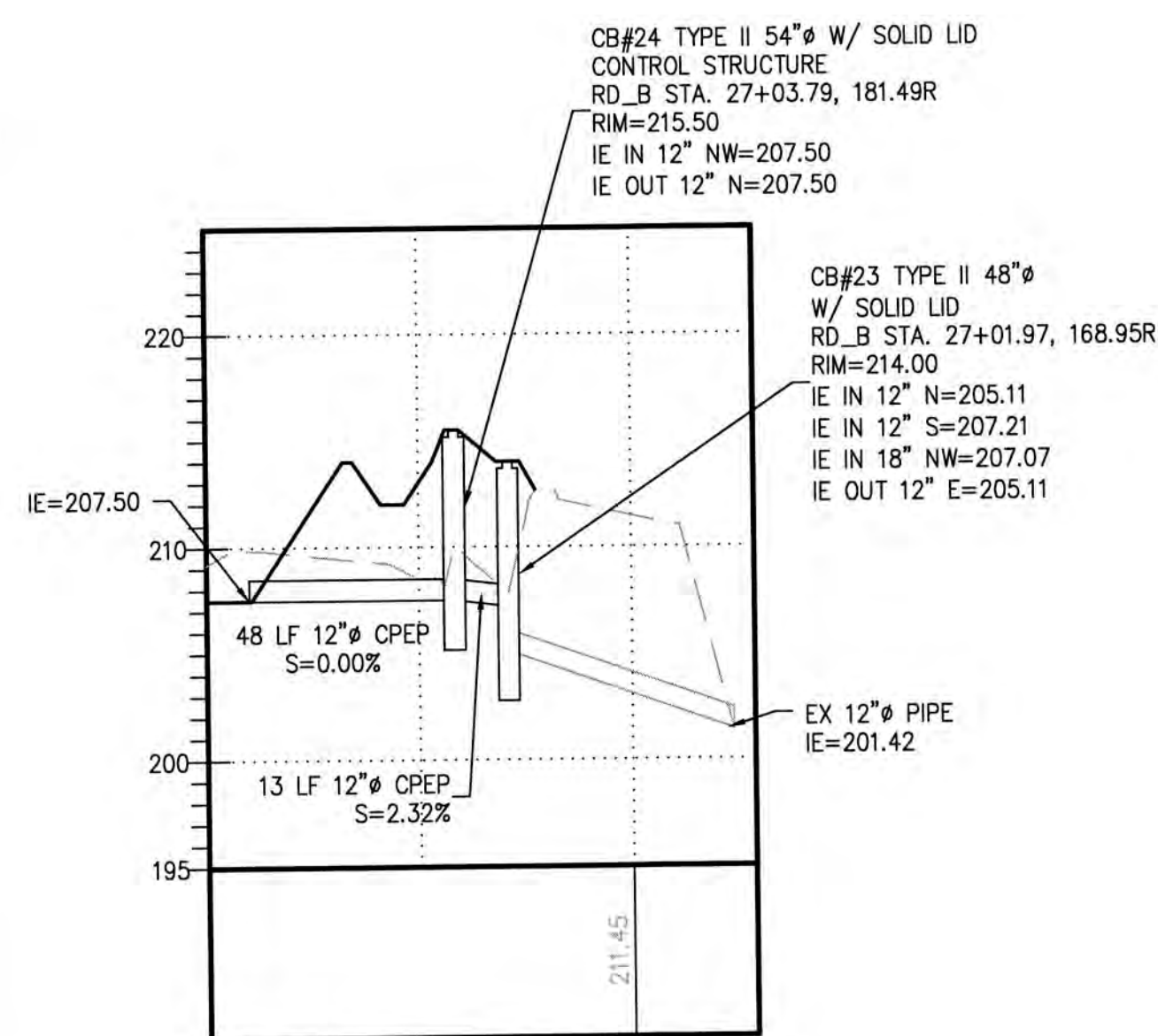
SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C5.10

NOTE
THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.
CALL 48 HOURS BEFORE YOU DIG
811



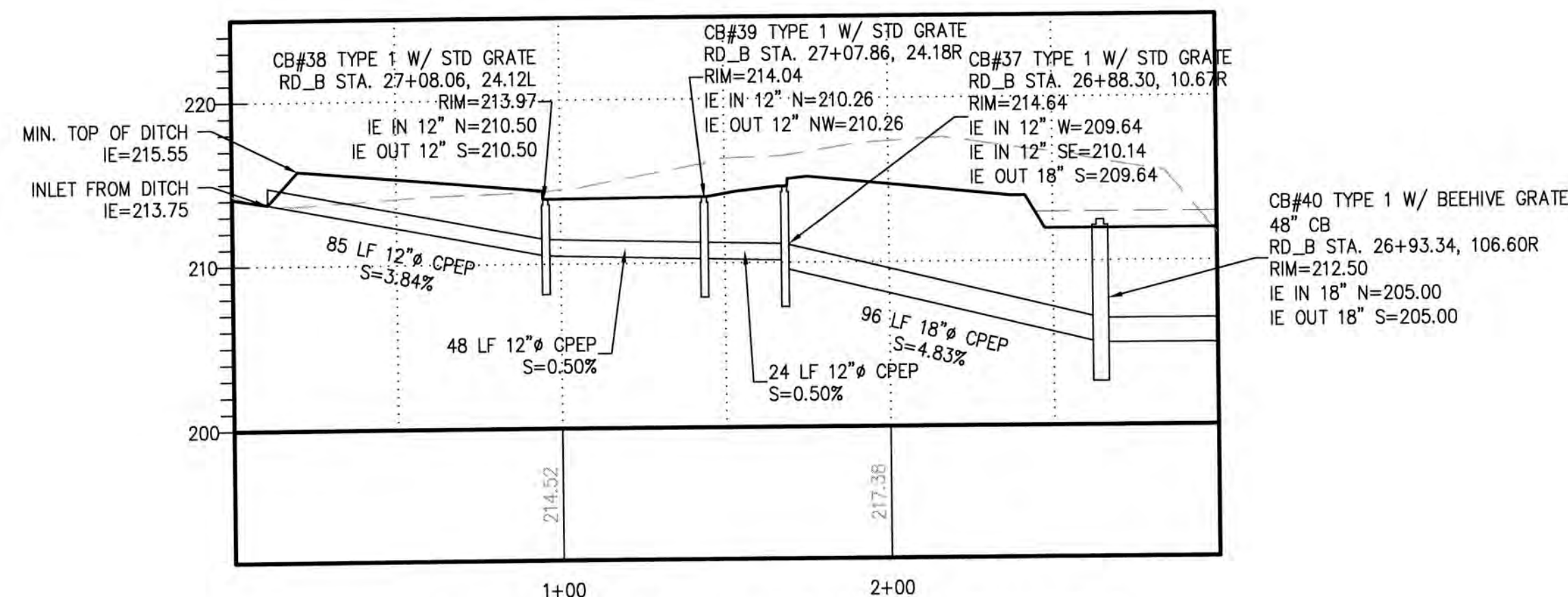
SOUTH UPSTREAM BYPASS CB#18 TO CB #23 (ROAD B)

SCALE HORIZ: 1"=40'
VERT.=1"=8'



SOUTH POND OUTLET

SCALE HORIZ: 1"=40'
VERT.=1"=8'

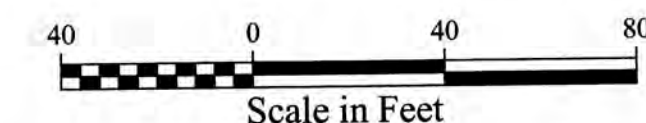


TRACT L DITCH TO SOUTH BIORETENTION CELL

SCALE HORIZ: 1"=40'
VERT.=1"=8'

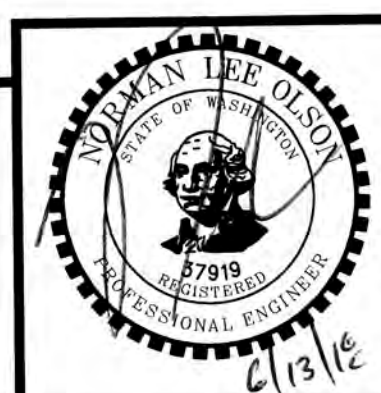


Scale: 1"= 40'



REVISIONS					BY	DATE
NO.	DATE	BY	DESCRIPTION		DESIGNED	RPJ 8/17
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018		DRAWN	JAT 8/17
					CHECKED	NLOH 8/17
					APPROVED	
					ACCEPTED	

N.L.Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



STORM PROFILES 2
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

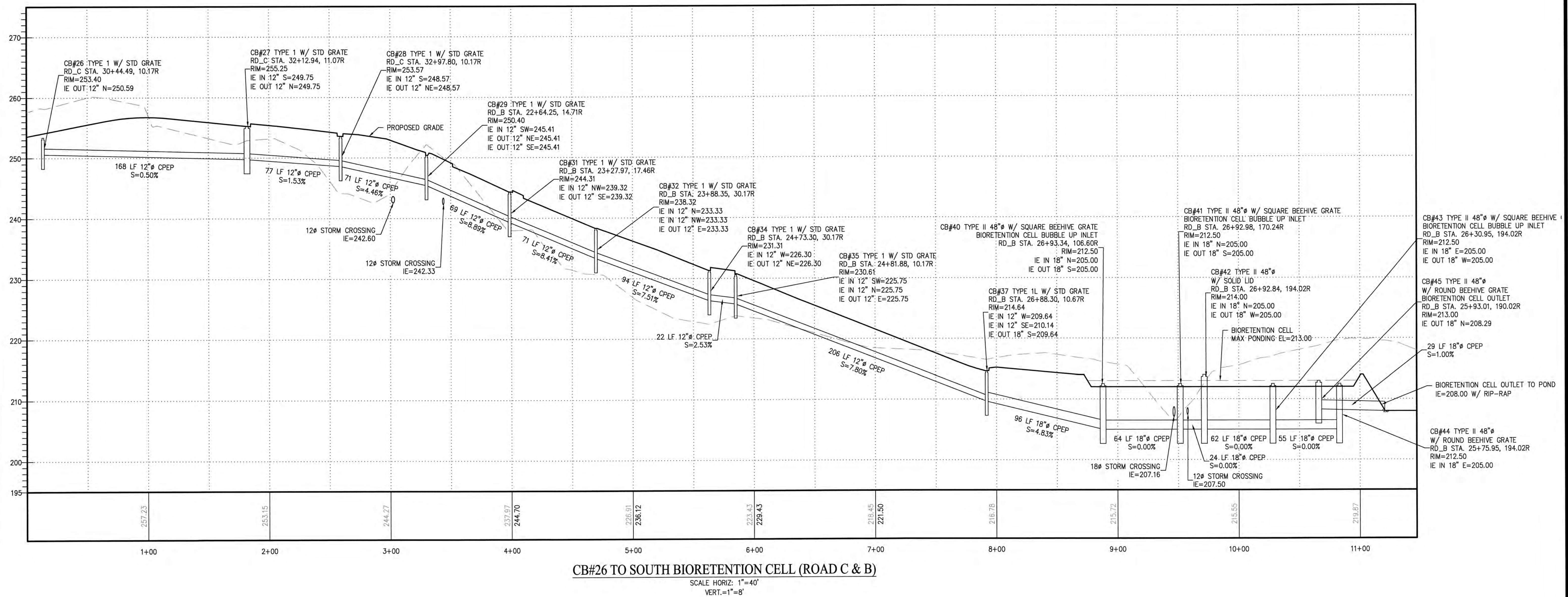
FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C5.11

NOTE

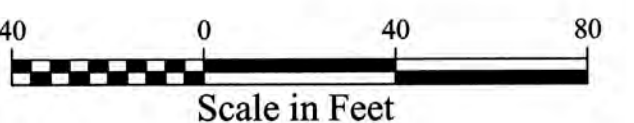
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**CALL 48 HOURS
BEFORE YOU DIG
811**



ASSUMED

Scale: 1"= 40'



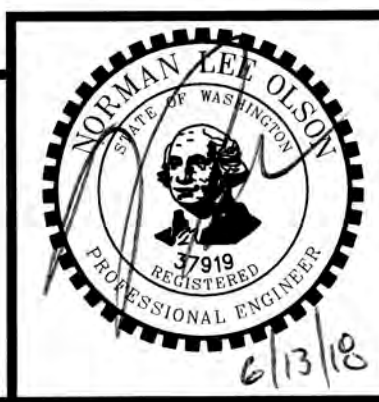
Scale in Feet

REVISIONS					BY	DATE
NO.	DATE	BY	DESCRIPTION		DESIGNED	
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018		DRAWN	8/17
					CHECKED	NLOH 8/17
					APPROVED	
					ACCEPTED	



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STORM PROFILES 3
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE:	1"=40'
DATE:	June 14, 2018
DRAWING NUMBER:	9582
SHEET	C5.12

GRADING NOTES

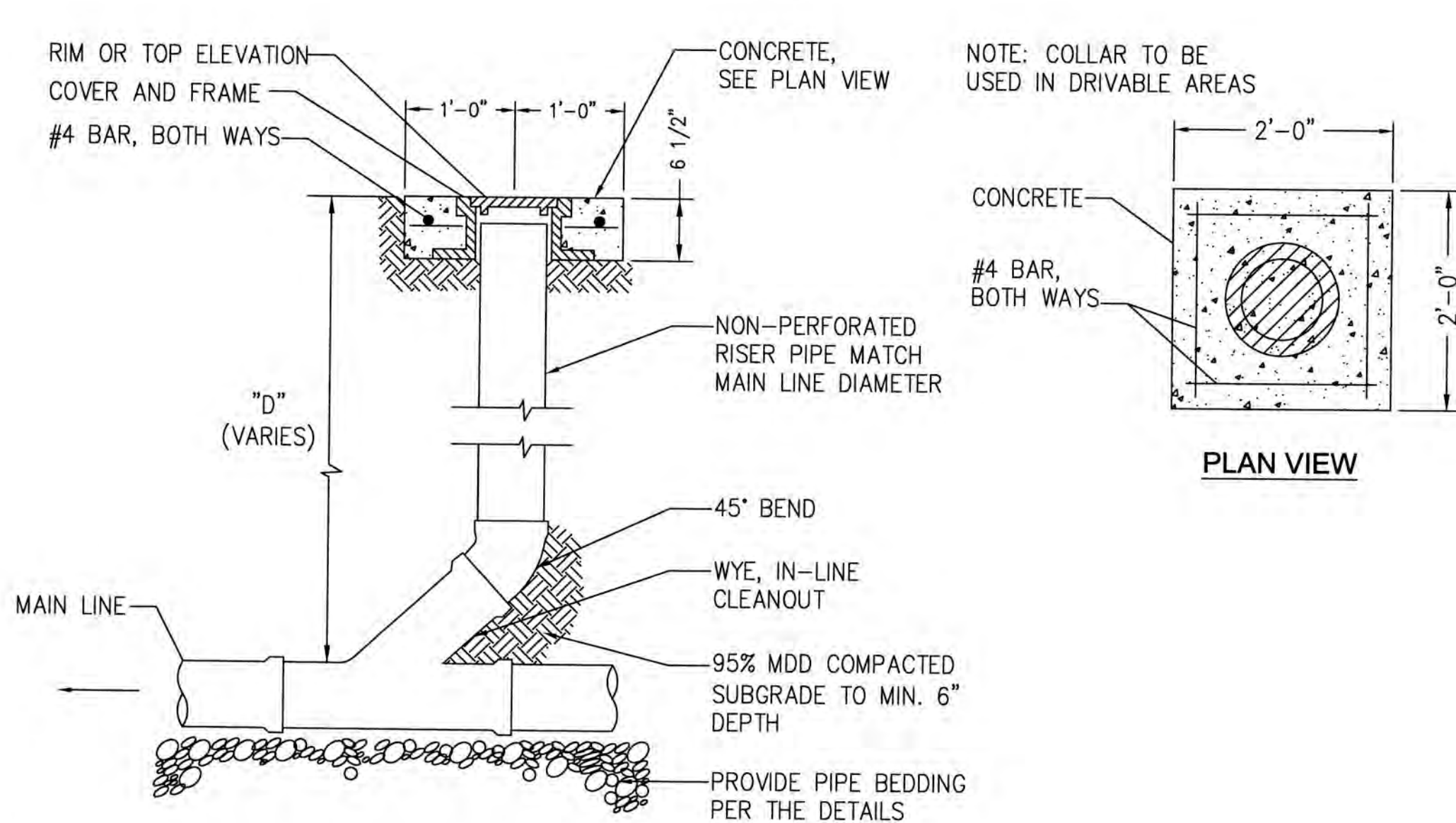
1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN THE EVENT OR DISCOVERY OF POOR SOILS, GROUNDWATER OR DISCREPANCIES IN THE EXISTING CONDITIONS AS NOTED ON THE PLANS.
2. MAXIMUM SLOPE STEEPNESS SHALL BE 2:1 HORIZONTAL:VERTICAL FOR CUT AND FILL SLOPES.
3. UNLESS OTHERWISE SPECIFIED, ALL EMBANKMENTS IN THE PLAN SET SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 2-03.3(14)B OF THE WSDOT STANDARD SPECIFICATIONS. EMBANKMENT COMPACTIONS SHALL CONFORM TO SECTION 2-03.3(14)C, METHOD B OF SAID STANDARD SPECIFICATION.
4. EMBANKMENTS DESIGNED TO IMPOUND WATER SHALL BE COMPACTED TO 95% MAXIMUM DENSITY PER SECTION 2-03.3(14)C, METHOD C OF WSDOT STANDARD SPECIFICATIONS.
5. ALL AREAS RECEIVING FILL MATERIAL SHALL BE PREPARED BY REMOVING VEGETATION, NONCOMPLYING FILL, TOPSOIL AND OTHER UNSUITABLE MATERIAL, BY SCARIFYING THE SURFACE TO PROVIDE A BOND WITH THE NEW FILL, AND WHERE THE SLOPES ARE STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL AND THE HEIGHT IS GREATER THAN 5 FT., BY BENCHING INTO SOUND COMPETENT MATERIAL AS DETERMINED BY THE ENGINEER.

CONSTRUCTION NOTES

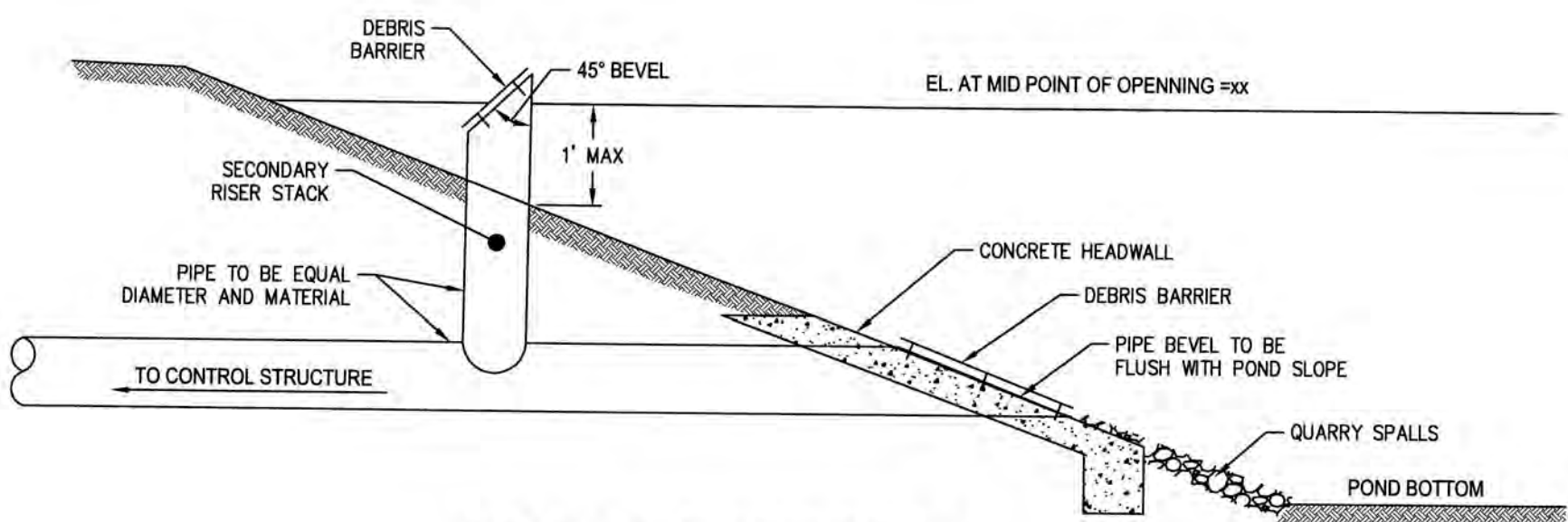
1. ALL WORK SHALL BE IN CONFORMANCE WITH THE LATEST REVISION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" AS JOINTLY ADOPTED BY WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND THE AMERICAN PUBLIC WORKS ASSOCIATION (WASHINGTON STATE CHAPTER).
2. ANY REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED BY KITSAP COUNTY PRIOR TO ANY IMPLEMENTATION IN THE FIELD.
3. THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN IS APPROXIMATE ONLY. THE CONTRACTOR SHALL CONTACT THE "UNDERGROUND LOCATE" CENTER AND NONSUBSCRIBING INDIVIDUAL UTILITY COMPANIES 48 HOURS IN ADVANCE OF THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY (PHONE #1-800-424-5555). THE CONTRACTOR SHALL PROVIDE PROTECTION OF EXISTING UTILITIES FROM DAMAGE CAUSED BY CONTRACTOR OPERATIONS.
4. CONTRACTOR SHALL HAVE AVAILABLE, AT THE SITE AT ALL TIMES DURING CONSTRUCTION, A SET OF APPROVED FINAL CONSTRUCTION PLANS.
5. ALL SLOPES SHALL BE AS NOTED ON THE PLANS.
6. CONTRACTOR WILL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL REQUIRED AS A RESULT OF HIS/HER OPERATIONS.

STORM AND GRADING MATERIAL SPECIFICATIONS

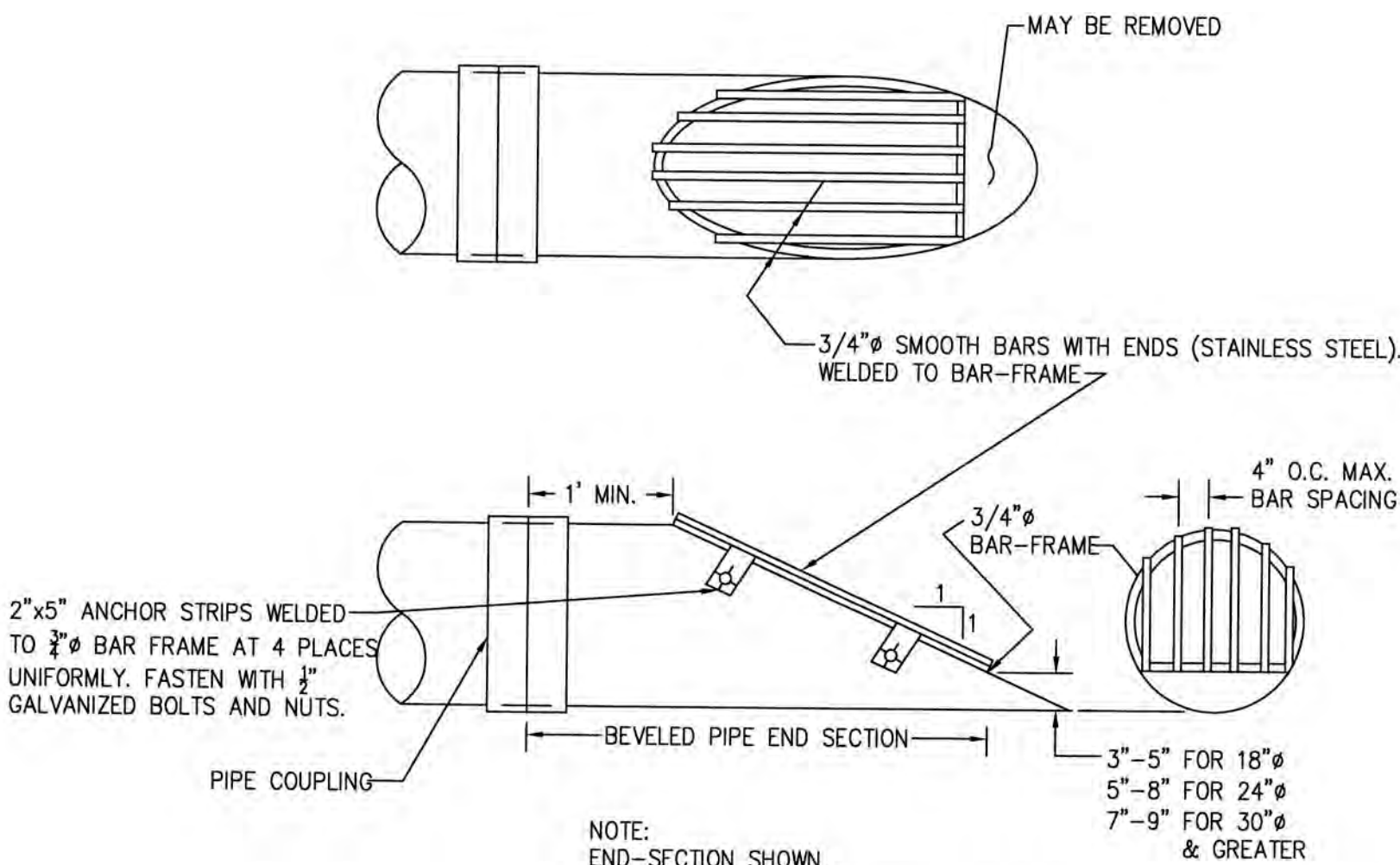
1. CATCH BASIN: TYPE I, W.S.D.O.T. STANDARD PLAN B-5.20-00
TYPE II, W.S.D.O.T. STANDARD PLAN B-5.40-00
TYPE III, W.S.D.O.T. STANDARD PLAN B-10.20-00
STORM DRAIN MANHOLE
TYPE I, W.S.D.O.T. STANDARD PLAN B-15.20-00
2. FRAME & GRATE: VANED GRATE, W.S.D.O.T. STANDARD PLAN B-2b (AS NOTED ON PLANS).
STANDARD FRAME AND GRATE, W.S.D.O.T. STANDARD B-30.50-00
CURB INLET WSDOT STANDARD PLAN B-25.20-00
3. SOLID METAL COVER: 3 BOLT LOCKING TYPE, OLYMPIC FOUNDARY
TYPE MH 30D/T OR EQUAL FOR TYPE II CATCH BASINS.
OLYMPIC FOUNDARY TYPE SM 605 OR W.S.D.O.T. STANDARD PLAN B-30.70-00 (OR EQUAL) FOR TYPE I CATCH BASINS.
4. STORM SEWER PIPE: *CORRUGATED METAL PIPE n=0.024 (CMP) PER W.S.D.O.T. 9-05.9
*CONCRETE PIPE PER W.S.D.O.T. 9-05.7(1) & 9-05.7(2) n=0.012
*CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE), ADS N-12 OR HANCOR HI-Q (ASSHTO M294 TYPE S) n=0.012
5. DOWN SPOUT TIGHTLINE: ADS N-12 (OR EQUAL)
6. PIPE BEDDING: W.S.D.O.T. 9-03.12(3) GRAVEL BACKFILL FOR PIPE BEDDING.
7. INITIAL BACKFILL: NATIVE MATERIAL OBTAINED FROM EXCAVATION PER W.S.D.O.T. 7-08.3(3)
8. REMAINING BACKFILL: NATIVE MATERIAL OBTAINED FROM EXCAVATION PER W.S.D.O.T. 2-09.3(1)E.
9. SPALLS: W.S.D.O.T. 9-13.1, LOOSE RIPRAP IN SIZES RANGING FROM 3" TO 1 1/3 CUBIC FOOT.
10. PAVEMENT SECTION: HOT MIX ASPHALT (HMA) W.S.D.O.T. 5-04 TOP COURSE, W.S.D.O.T. 9-03.9(3) BASE COURSE, W.S.D.O.T. 9-03.10



STORM DRAIN CLEANOUT
NOT TO SCALE

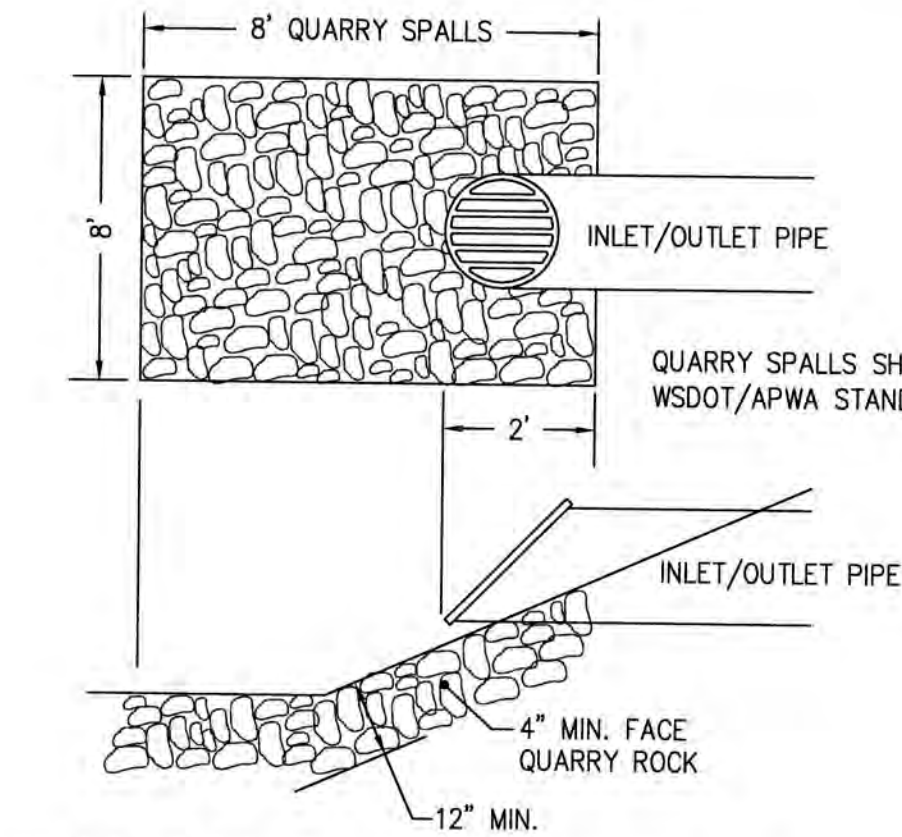
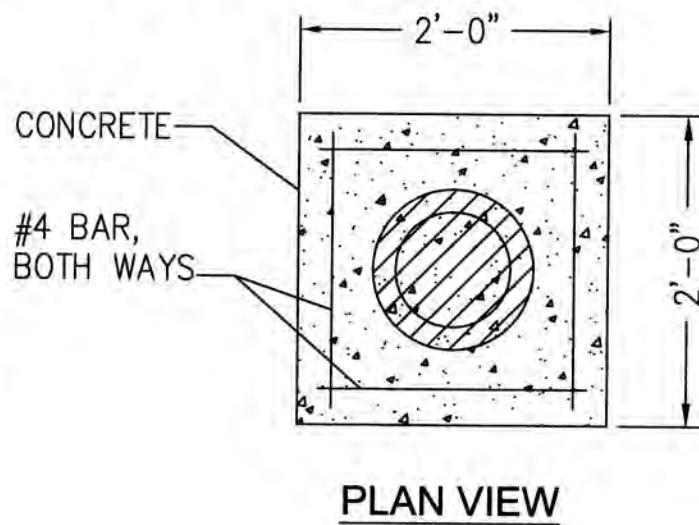


POND OUTLET DETAIL
NOT TO SCALE



DEBRIS BARRIER
NOT TO SCALE

NOTE: COLLAR TO BE USED IN DRIVABLE AREAS



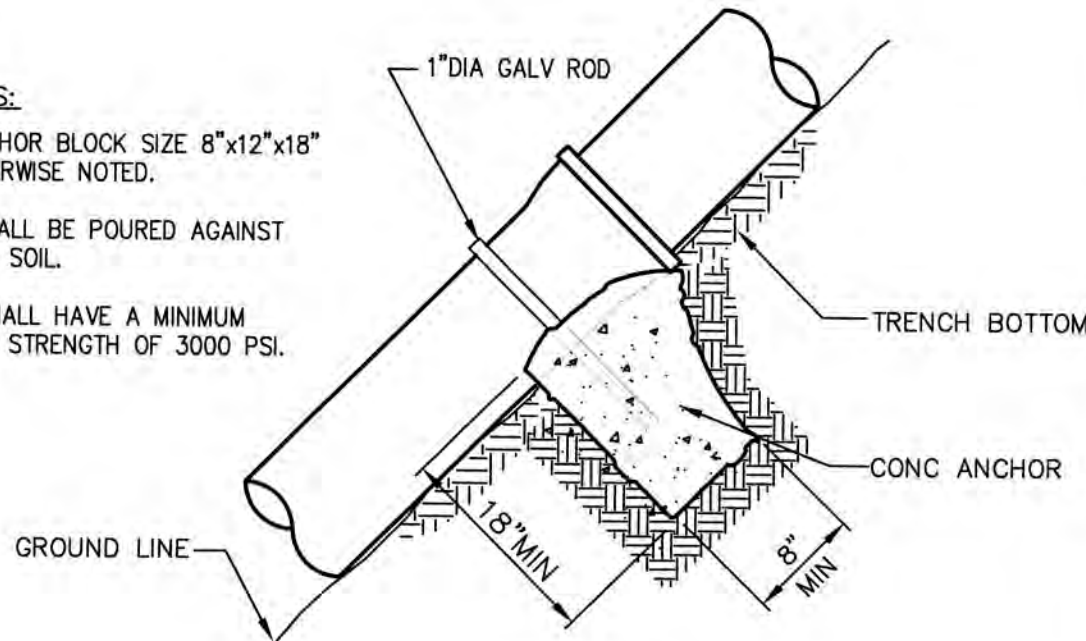
QUARRY SPALL PAD DETAIL
NOT TO SCALE

NOTE
THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.

CALL 48 HOURS BEFORE YOU DIG 811

GENERAL NOTES:

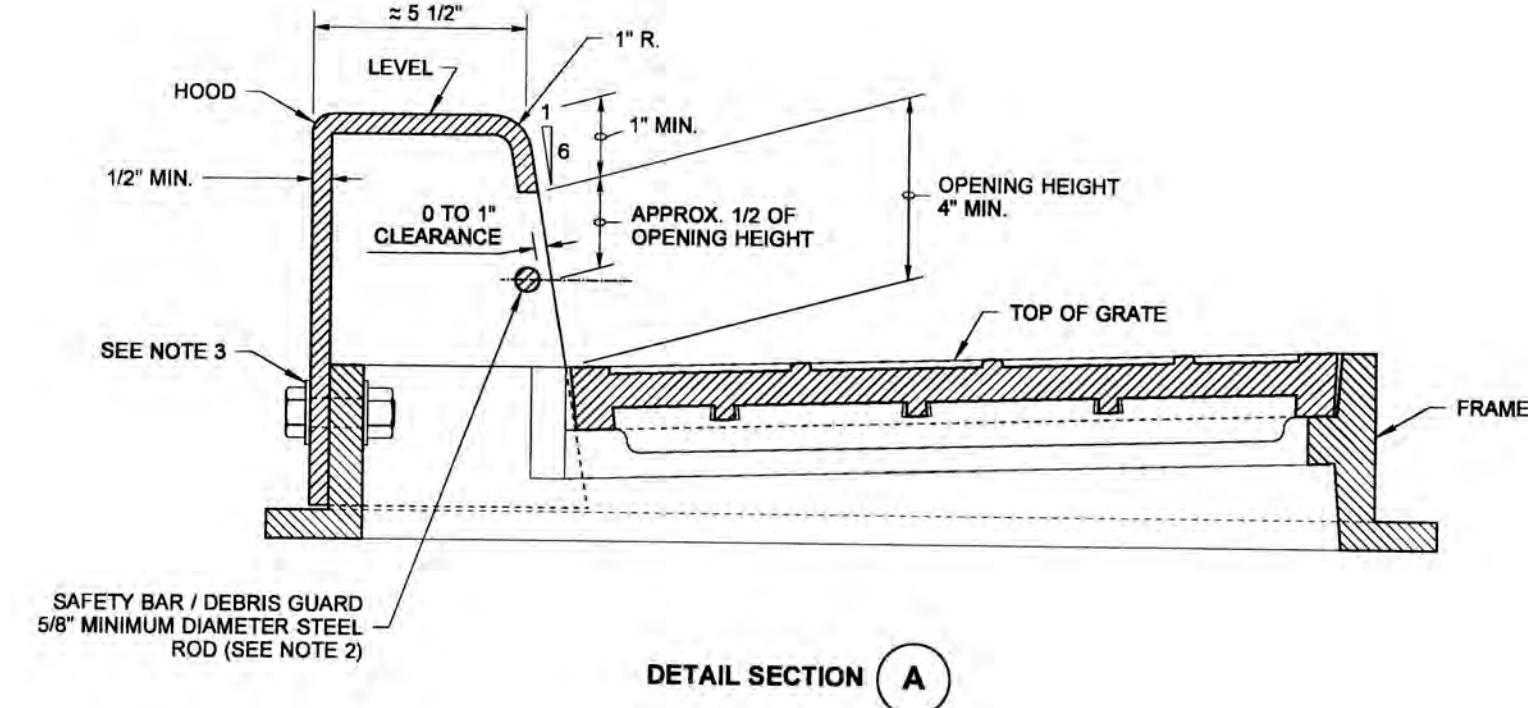
1. MINIMUM ANCHOR BLOCK SIZE 8"x12"x18" UNLESS OTHERWISE NOTED.
2. BLOCKING SHALL BE POURED AGAINST UNDISTURBED SOIL.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.



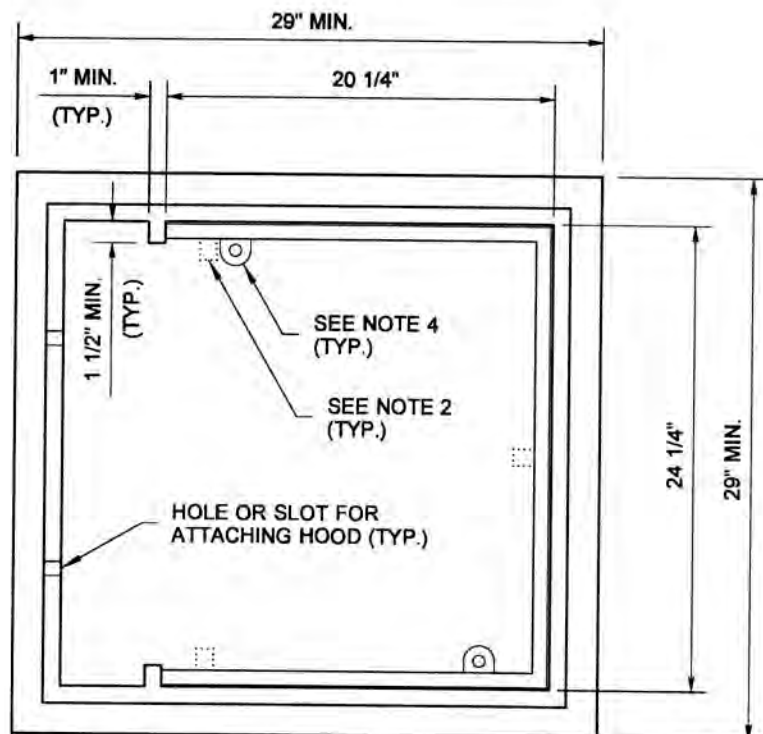
PIPE ANCHOR
NOT TO SCALE

NOTES

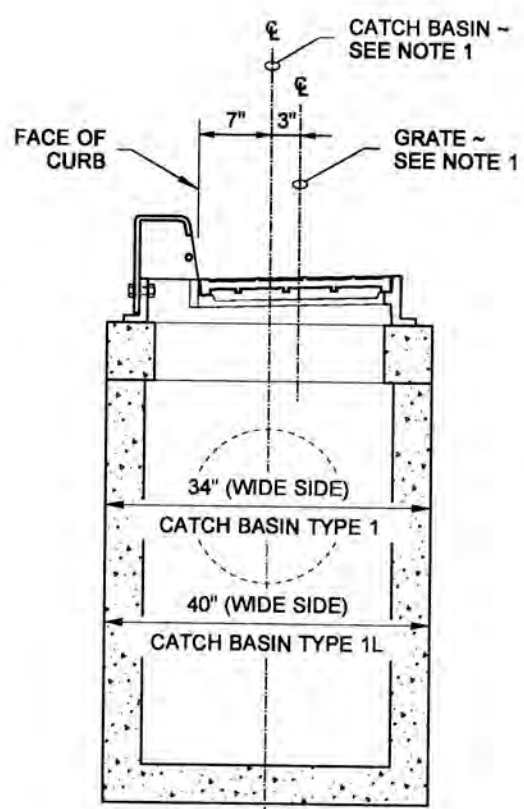
1. This inlet requires the precast catch basin unit to be rotated 90 degrees so that the narrow side is parallel to the curb line. When calculating offsets from curb to CL of the precast catch basin, please note that the CL of the grate is not the CL of the precast catch basin. See **Section A**
2. The dimensions of the frame and hood may vary slightly among different manufacturers. The Frame may have cast features intended to support a debris guard. Hood units may be mounted inside or outside of the frame. The methods for fastening the safety bar / debris guard rod to the hood may vary. The hood may include casting lugs. The top of the hood may be cast with a pattern.
3. Attach the hood to the frame with two 3/4" x 2" hex head bolts, nuts, and oversize washers. The washers shall have diameters adequate to ensure full bearing across the slots.
4. Bolt-down capability is required on all frames, grates and covers, unless specified in the contract. Provide two holes in the frame that are vertically aligned with the grate slots. The frame shall accept the 5/8" x 11 NC x 2" allen head cap screw by being tapped, or other approved mechanism. The location of bolt-down holes varies among manufacturers. See **BOLT-DOWN DETAIL, Standard Plan B-30.10**.
5. Only ductile iron Vaned Grates shall be used. See **Standard Plans B-30.30 and B-30.40** for grate details. Refer to **Standard Specification 9-05.15(2)** for additional requirements.
6. This plan is intended to show the installation details of a manufactured product. This plan is not intended to show the specific details necessary to fabricate the castings depicted in this drawing.



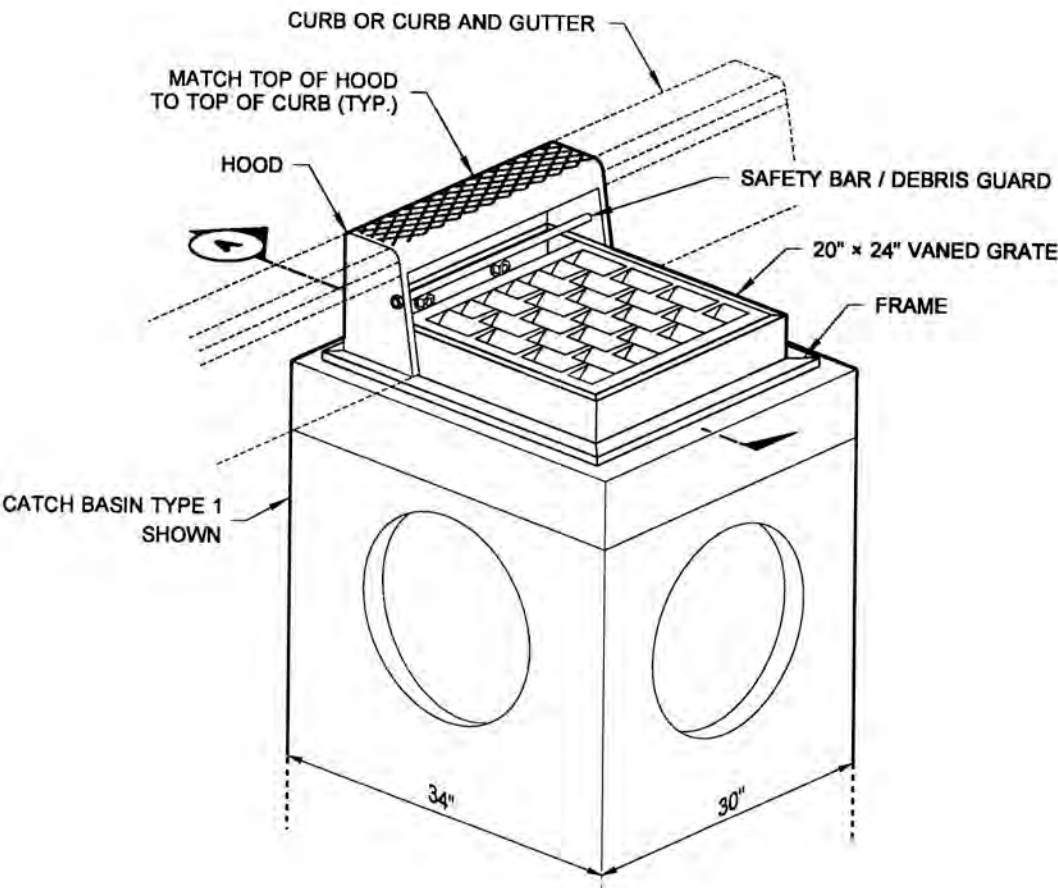
DETAIL SECTION A



TOP VIEW
FRAME DETAIL



SECTION A



ISOMETRIC VIEW
COMBINATION INLET
FRAME, HOOD, AND VANED GRATE

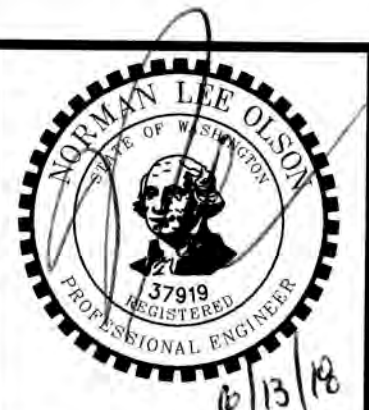


**COMBINATION INLET
STANDARD PLAN B-25.20-01**

SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Pasco Bakotich III 03-15-12
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ 8/17
				DRAWN	JAT 8/17
				CHECKED	NLOII 8/17
				APPROVED	
				ACCEPTED	

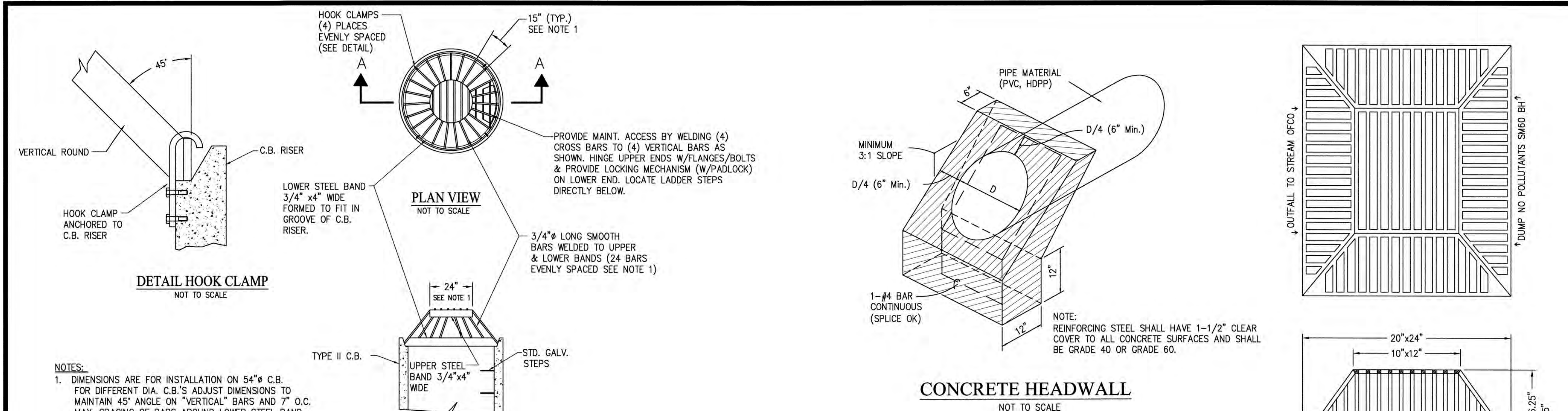
N.L.Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



STORM DETAILS
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C5.20



- CONTROL STRUCTURE NOTES**
- THE PIPE SUPPORTS AND THE FLOW RESTRICTOR SHALL BE CONSTRUCTED OF THE SAME MATERIAL AND BE ANCHORED AT A MAXIMUM SPACING OF 36". ATTACH THE PIPE SUPPORTS TO THE MANHOLE WITH 5/8" STAINLESS STEEL EXPANSION BOLTS OR EMBED THE SUPPORTS INTO THE MANHOLE WALL 2".
 - THE VERTICAL RISER STEM OF THE FLOW RESTRICTOR SHALL BE THE SAME DIAMETER AS THE HORIZONTAL OUTLET PIPE WITH A MINIMUM DIAMETER OF 8".
 - THE FLOW RESTRICTOR SHALL BE FABRICATED FROM ONE OF THE FOLLOWING MATERIALS:
0.060" CORRUGATED ALUMINUM ALLOY DRAIN PIPE
0.064" CORRUGATED GALVANIZED STEEL DRAIN PIPE WITH TREATMENT 1
0.064" CORRUGATED ALUMINIZED STEEL DRAIN PIPE
0.060" ALUMINUM ALLOY FLAT SHEET, IN ACCORDANCE WITH ASTM B 209, 5052 H32 OR EPS HIGH DENSITY POLYETHYLENE STORM SEWER PIPE
 - THE FRAME AND LADDER OR STEPS ARE TO BE OFFSET SO THAT: THE SHEAR GATE IS VISIBLE FROM THE TOP; THE CLIMB-DOWN SPACE IS CLEAR OF THE RISER AND GATE; THE FRAME IS CLEAR OF THE CURB.
 - THE MULTI-ORIFICE ELBOWS MAY BE LOCATED AS SHOWN, OR ALL PLACED ON ONE SIDE OF THE RISER TO ASSURE LADDER CLEARANCE. THE SIZE OF THE ELBOWS AND THEIR PLACEMENT SHALL BE SPECIFIED IN THE CONTRACT.
 - RESTRICTOR PLATE WITH ORIFICE AS SPECIFIED IN THE CONTRACT. THE OPENING IS TO BE CUT ROUND AND SMOOTH.
 - THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26 AND ASTM B 275, DESIGNATION ZG32; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B.

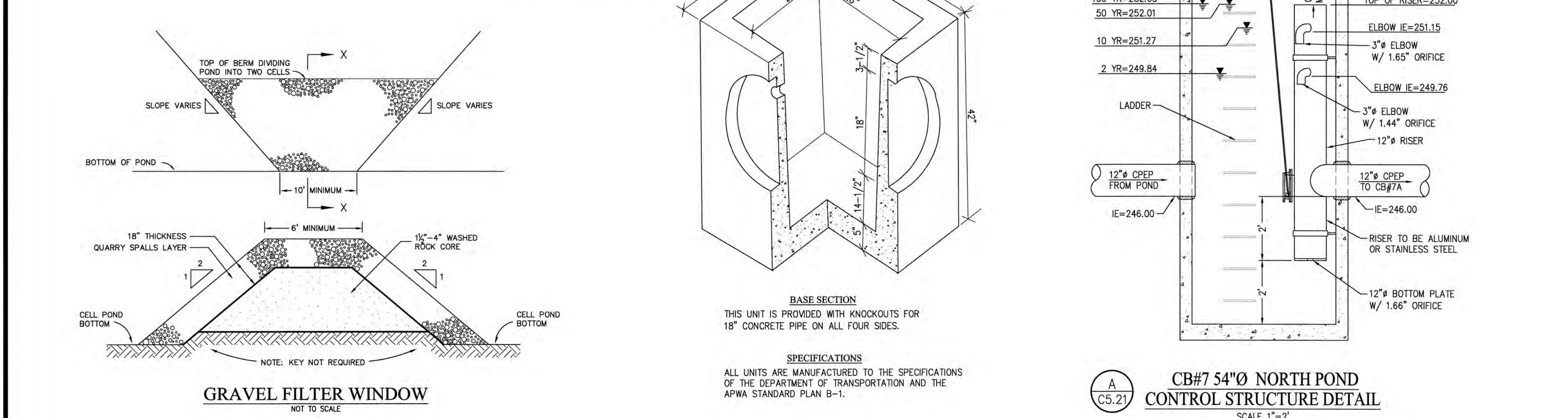
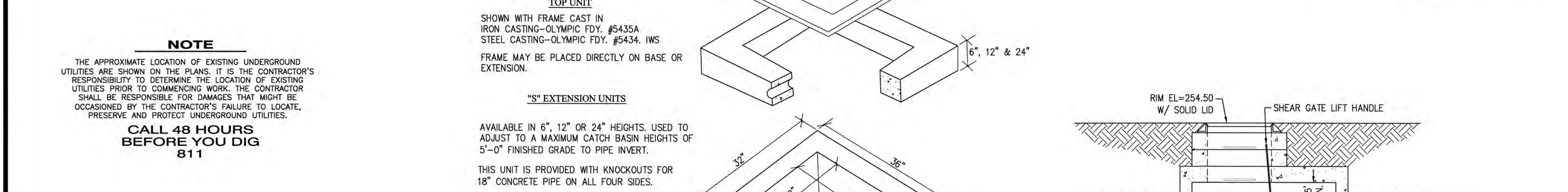
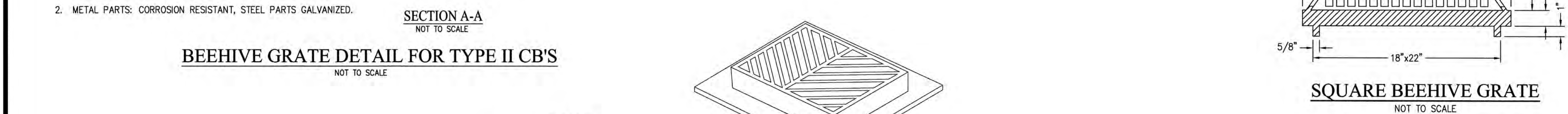
THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED.

A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE.

INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED.

THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT.

ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
 - THE SHEAR GATE MAXIMUM OPENING SHALL BE CONTROLLED BY LIMITED HINGE MOVEMENT, A STOP TAB, OR SOME OTHER DEVICE.
 - ALTERNATIVE SHEAR GATE DESIGNS ARE ACCEPTABLE IF MATERIAL SPECIFICATIONS ARE MET AND FLANGE BOLT PATTERN MATCHES.



REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED RPJ 8/17
DRAWN JAT 8/17
CHECKED NLO 8/17
APPROVED
ACCEPTED

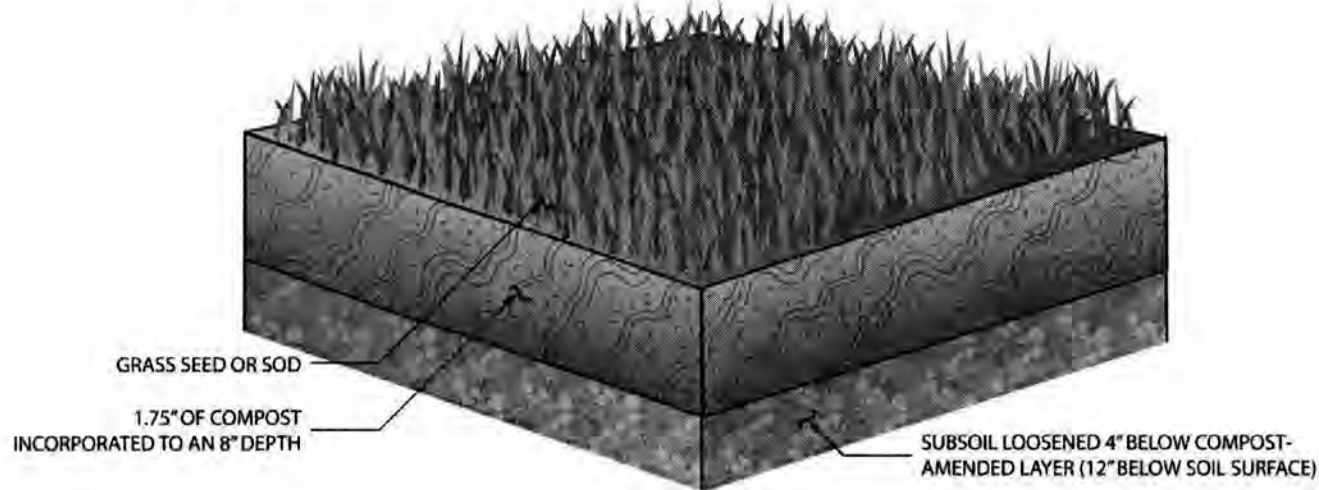
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2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

STORM NOTES & DETAILS
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:
Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C5.21

AMENDED SOILS SPECIFICATIONS



Soil Quality

All areas subject to clearing and grading that have not been covered by impervious surface, incorporated into a drainage facility or engineered as structural fill or slope shall, at project completion, demonstrate the following:

- A topsoil layer meeting these requirements:
 - Topsoil shall have a minimum organic matter content by the loss-on-ignition test of 8 percent dry weight in planting beds, or 4 percent organic matter content in turf areas, and a pH from 6.0 to 8.0 or matching the pH of the original undisturbed soil. (Acceptable test methods for determining loss-on-ignition soil organic matter include the most current version of ASTM D2974 "Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils" and TMECC 05.07A "Loss-On-Ignition Organic Matter Method");
 - The topsoil layer shall have a minimum depth of 8 inches;
 - Where tree roots limit the depth of incorporation of amendments, those root zones are exempted from this requirement only if they are fenced and protected from stripping of soil, grading, or compaction to the maximum extent practical;
 - Subsoils below the topsoil layer should be scarified at least 4 inches, for a finished minimum depth of 12 inches of uncompacted soil, with some incorporation of the upper material to avoid stratified layers, where feasible;

General Installation Requirements

Implementation Options

The soil quality design guidelines listed above can be met by using one of the four methods listed below:

- Leave undisturbed vegetation and soil, protect from compaction by fencing and keeping materials storage and equipment off these areas during construction;
- Amend existing site topsoil or subsoil either at default "pre-approved" rates, or at custom calculated rates to meet the soil quality guidelines above based on specifiers' tests of the soil and amendment. The default pre-approved rates are:
 - In planting beds, place 3 inches of compost and till in to an 8 inch depth;
 - In turf areas, place 1.75 inches of compost and till in to an 8 inch depth;
- Stockpile existing topsoil during grading, and replace it prior to planting. Stockpiled topsoil must also be amended if needed to meet the organic matter or depth requirements, either at the default "pre-approved" rate or at a custom calculated rate (see Building Soil manual or website, below, for custom calculation method);
- Import topsoil mix of sufficient organic content and depth to meet the requirements. Imported soils should not contain excessive clay or silt fines (excessive is defined as more than 5% passing the No. 200 sieve) because that could restrict stormwater infiltration. The default pre-approved rates for imported topsoils are:
 - For planting beds, a mix by volume of 35 percent compost with 65 percent mineral soil is pre-approved to achieve the requirement of 8 percent organic matter by loss-on-ignition test;
 - For turf areas, a mix by volume of 20 percent compost with 80 percent mineral soil is pre-approved to achieve the requirement of 4 percent organic matter by loss-on-ignition test.

More than one method may be used on different portions of the same site. Soil that already meets the depth and organic matter quality standards, and is not compacted, does not need to be amended.

Construction Specifications and Criteria

Minimum construction requirements include the following:

- Soil quality and depth should be established toward the end of construction and once established, should be protected from compaction, such as from large machinery use, and from erosion;
- Soil should be planted and mulched after installation;
- Inspection and verification procedures will include:
 - Inspection of delivery tickets for compost, amended soil, and mulch to verify types and quantities match those specified on the Soil Management Plan;
 - Digging or coring several holes to verify appearance of compost-amended soil to a minimum 8-inch depth and subsoil scarification or uncompacted soil to a minimum 12-inch depth;
 - Use of a rod penetrometer (3/8 inch rod with handle) every 20 feet across site, to verify that the rod can b pushed into the soil at least 12 inches by the inspector's weight;
 - Use of a shovel to scrape aside mulch on planting beds in several places to verify a minimum 2-inch mulch depth;
 - Sample forms for Field Verification, can be found in the Building Soil manual or on the www.soilsforsalmon.org website;

BIORETENTION CELL SPECIFICATIONS

BIORETENTION SOIL MIX (BSM)

BIORETENTION SOIL SHALL BE A WELL BLENDED MIXTURE OF MINERAL AGGREGATE AND COMPOST MEASURED ON A VOLUME BASIS.

BIORETENTION SOIL MIX (BSM) SHALL CONSIST OF TWO PARTS COMPOST (APPROXIMATELY 35 TO 40 PERCENT) BY VOLUME AND THREE PARTS MINERAL AGGREGATE (APPROXIMATELY 60 TO 65 PERCENT), BY VOLUME. THE MIXTURE SHALL BE WELL BLENDED TO PRODUCE A HOMOGENEOUS MIX. ORGANIC MATTER CONTENT SHALL BE 8 TO 10 PERCENT, WITH THE FINAL MIX TO BE DETERMINED BY THE ENGINEER BASED ON SAMPLES AND TEST RESULTS SUBMITTED.

MINERAL AGGREGATE FOR BIORETENTION SOIL

MINERAL AGGREGATE SHALL BE FREE OF WOOD, WASTE, COATING, OR ANY OTHER DELETERIOUS MATERIAL. ALL MINERAL AGGREGATE PASSING THE NO. 200 SIEVE SIZE SHALL BE NON-PLASTIC. MINERAL AGGREGATE FOR TURF AND LANDSCAPE BIORETENTION SOILS SHALL BE ANALYZED BY AN ACCREDITED LAB USING THE SIEVE SIZES NOTED BELOW, AND SHALL MEET THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT PASSING
1 INCH	100
NO. 4	60-100
NO. 10	40-100
NO. 40	15-50
NO. 200	2-5

EFFORTS SHOULD BE MADE TO HAVE THE MINERAL AGGREGATE FOR TURF AND LANDSCAPE BIORETENTION SOILS MEET THE FOLLOWING GRADATION COEFFICIENTS: COEFFICIENT OF UNIFORMITY (CU = D60/D10) EQUAL TO OR GREATER THAN 6; AND COEFFICIENT OF CURVE (CC = D30 2/D60D10) GREATER THAN OR EQUAL TO 1 AND LESS THAN OR EQUAL TO 3.

COMPOST

COMPOST PRODUCTS SHALL BE THE RESULT OF THE BIOLOGICAL DEGRADATION AND TRANSFORMATION OF TYPE I OR III FEEDSTOCKS UNDER CONTROLLED CONDITIONS DESIGNED TO PROMOTE AEROBIC DECOMPOSITION, PER WAC 173-350-220, WHICH IS AVAILABLE AT [HTTP://WWW.ECY.WA.GOV/PROGRAMS/SWFA/COMPOST](http://www.ecy.wa.gov/programs/swfa/compost). COMPOST SHALL BE STABLE WITH REGARD TO OXYGEN CONSUMPTION AND CARBON DIOXIDE GENERATION. COMPOST SHALL BE MATURE WITH REGARD TO ITS SUITABILITY FOR SERVING AS A SOIL AMENDMENT OR AN EROSION CONTROL BMP AS DEFINED BELOW. THE COMPOST SHALL HAVE A MOISTURE CONTENT THAT HAS NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING THE MATERIAL.

COMPOST PRODUCTION AND QUALITY SHALL COMPLY WITH CHAPTER 173-350 WAC, AND MEET THE FOLLOWING PHYSICAL CRITERIA:

- COMPOST MATERIAL SHALL BE TESTED IN ACCORDANCE WITH TESTING METHODS FOR THE EXAMINATION OF COMPOST AND COMPOSTING (TMECC) TEST METHOD 02.02-B, "SAMPLE SIEVING FOR AGGREGATE SIZE CLASSIFICATION".

	MIN.	MAX.
PERCENT PASSING 1"	99%	100%
PERCENT PASSING 5/8"	90%	100%
PERCENT PASSING 1/4"	40%	90%
- THE PH SHALL BE BETWEEN 5.5 AND 8.0 WHEN TESTED IN ACCORDANCE WITH TMECC 04.11-A, "1:5 SLURRY PH".
- MANUFACTURED INERT MATERIAL (PLASTIC, CONCRETE, CERAMICS, METAL, ETC.) SHALL BE LESS THAN 1.0 PERCENT BY WEIGHT AS DETERMINED BY TMECC 03.08-A "PERCENT DRY WEIGHT BASIS".
- ORGANIC MATTER CONTENT SHOULD BE BETWEEN 45 AND 65 PERCENT DRY WEIGHT BASIS AS DETERMINED BY TMECC 05.07A, "LOSS-ON-IGNITION ORGANIC MATTER METHOD".
- SOLUBLE SALT CONTENTS SHALL BE LESS THAN 6.0 MMHOS/CM TESTED IN ACCORDANCE WITH TMECC 04.10-A, "1:5 SLURRY METHOD, MASS BASIS".
- MATURITY SHALL BE GREATER THAN 80% IN ACCORDANCE WITH TMECC 05.05-A, "GERMINATION AND VIGOR".
- STABILITY SHALL BE 7 OR BELOW IN ACCORDANCE WITH TMECC 05.08-B, CARBON DIOXIDE EVOLUTION RATE
- THE COMPOST PRODUCT MUST ORIGINATE A MINIMUM OF 65 PERCENT BY VOLUME FROM RECYCLED PLANT WASTE AS DEFINED IN WAC 173-350-100 AS "TYPE 1 FEEDSTOCKS". A MAXIMUM OF 35 PERCENT BY VOLUME OF OTHER APPROVED ORGANIC WASTE AS DEFINED IN WAC 173-350-100 AS "TYPE III", INCLUDING POST-CONSUMER FOOD WASTE, BUT NOT INCLUDING BIOSOLIDS, MAY BE SUBSTITUTED FOR RECYCLED PLANT WASTE. THE SUPPLIER SHALL PROVIDE WRITTEN VERIFICATION OF FEEDSTOCK SOURCES.
- CARBON TO NITROGEN RATIO SHALL BE LESS THAN 25:1 AS DETERMINED USING TMECC 04.01 "TOTAL CARBON" AND TMECC 04.02D "TOTAL KJELHAL NITROGEN". THE ENGINEER MAY SPECIFY A C:N RATIO UP TO 35:1 FOR PROJECTS WHERE THE PLANTS SELECTED ARE ENTIRELY PUGET SOUND NATIVE SPECIES.
- THE ENGINEER MAY ALSO EVALUATE COMPOST FOR MATURITY USING THE SOLVITA COMPOST MATURITY TEST AT TIME OF DELIVERY. COMPOST SHALL SCORE A NUMBER 6 OR ABOVE ON THE SOLVITA COMPOST MATURITY TEST.

THE COMPOST SUPPLIER SHALL TEST ALL COMPOST PRODUCTS WITHIN 90 CALENDAR DAYS PRIOR TO APPLICATION. SAMPLES SHALL BE COLLECTED USING THE SEAL OF TESTING ASSURANCE (STA) SAMPLE COLLECTION PROTOCOL. THE SAMPLE COLLECTION PROTOCOL CAN BE OBTAINED FROM THE U.S. COMPOSTING COUNCIL, 4250 VETERANS MEMORIAL HIGHWAY, SUITE 275, HOLBROOK, NY 11741 PHONE: 631-737-4931, WWW.COMPOSTINGCOUNCIL.ORG. THE SAMPLE SHALL BE SENT TO AN INDEPENDENT STA PROGRAM APPROVED LABORATORY. THE COMPOST SUPPLIER SHALL PAY FOR THE TEST. A COPY OF THE APPROVED INDEPENDENT STA PROGRAM LABORATORY TEST REPORT SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO INITIAL APPLICATION OF THE COMPOST. SEVEN DAYS PRIOR TO APPLICATION, THE CONTRACTOR SHALL SUBMIT A SAMPLE OF EACH TYPE OF COMPOST TO BE USED ON THE PROJECT TO THE ENGINEER.

COMPOST NOT CONFORMING TO THE ABOVE REQUIREMENTS OR TAKEN FROM A SOURCE OTHER THAN THOSE TESTED AND ACCEPTED SHALL BE IMMEDIATELY REMOVED FROM THE PROJECT AND REPLACED AT NO COST TO THE OWNER.

THE CONTRACTOR SHALL SUBMIT THE FOLLOWING INFORMATION TO THE ENGINEER FOR APPROVAL:

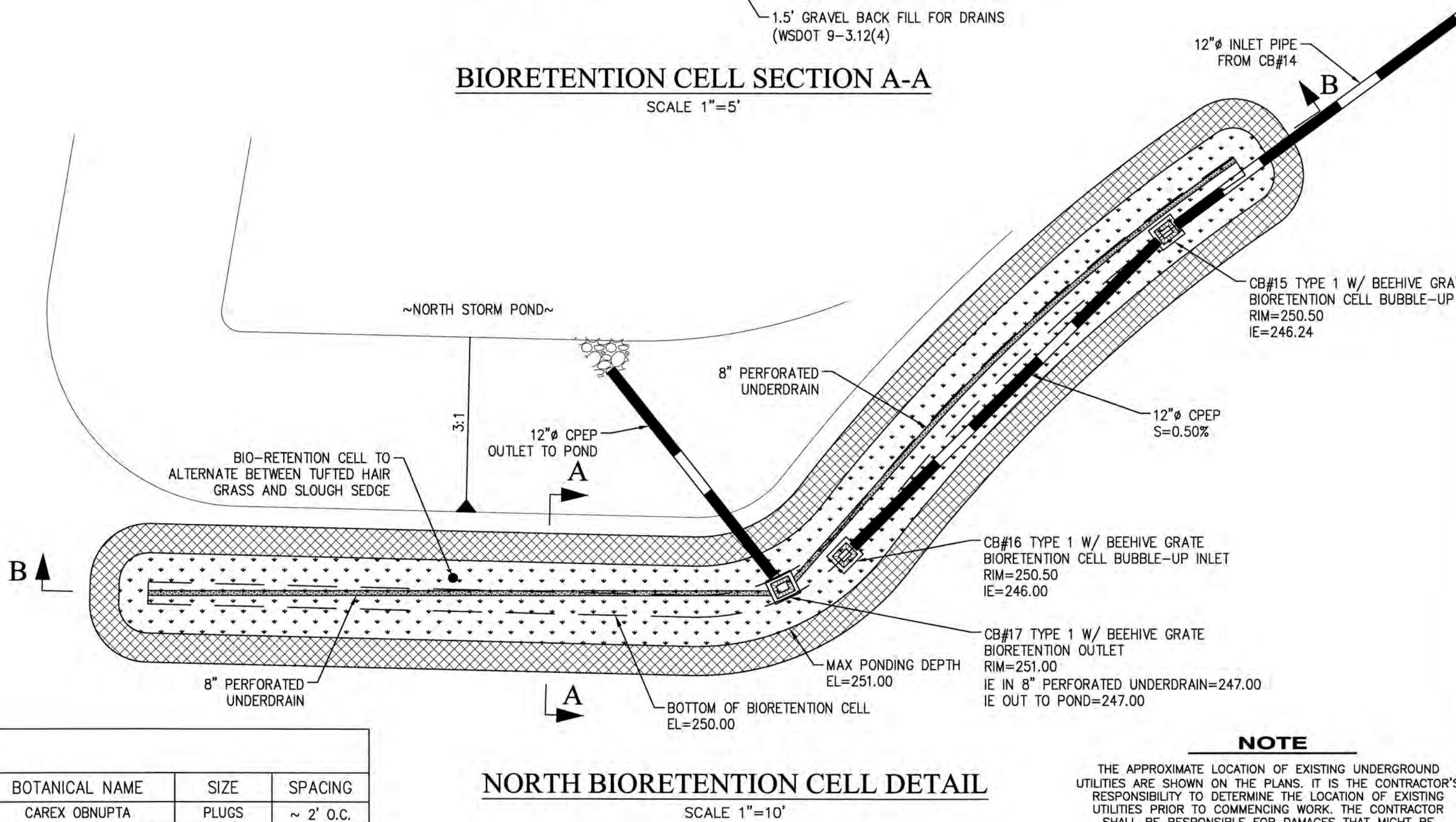
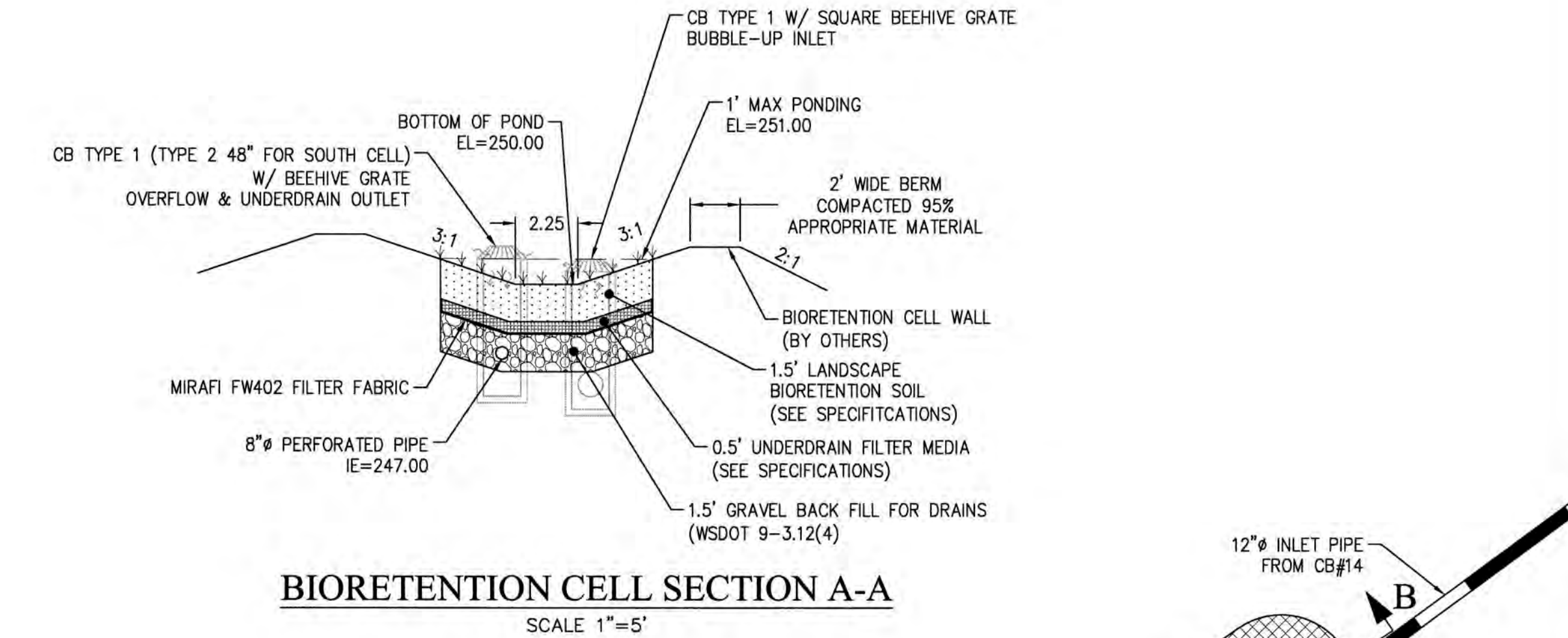
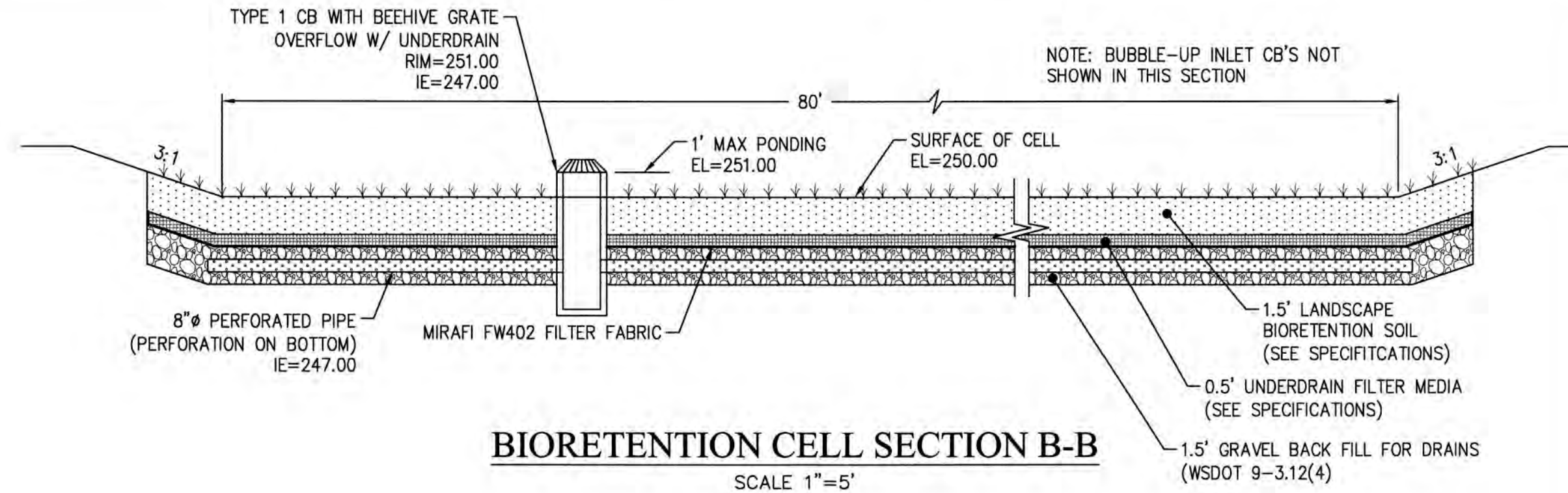
- A COPY OF THE SOLID WASTE HANDLING PERMIT ISSUED TO THE SUPPLIER BY THE JURISDICTIONAL HEALTH DEPARTMENT AS PER WAC 173-350 (MINIMUM FUNCTIONAL STANDARDS FOR SOLID WASTE HANDLING).
- THE SUPPLIER SHALL VERIFY IN WRITING, AND PROVIDE LAB ANALYSES THAT THE MATERIALS COMPLY WITH THE PROCESSES, TESTING, AND STANDARDS SPECIFIED IN WAC 173-350 AND THESE SPECIFICATIONS. AN INDEPENDENT STA PROGRAM CERTIFIED LABORATORY SHALL PERFORM THE ANALYSIS.
- A LIST OF THE FEEDSTOCK BY PERCENTAGE PRESENT IN THE FINAL COMPOST PRODUCT.
- A COPY OF THE PRODUCER'S STA CERTIFICATION AS ISSUED BY THE U.S. COMPOSTING COUNCIL.

ACCEPTANCE SHALL BE BASED UPON A SATISFACTORY TEST REPORT FROM AN INDEPENDENT STA PROGRAM CERTIFIED LABORATORY AND THE SAMPLE(S) SUBMITTED TO THE ENGINEER.

UNDERDRAIN FILTER MEDIA

UNDERDRAIN FILTER MEDIA SHALL MEET THE FOLLOWING REQUIREMENTS FOR GRADATION:

SIEVE SIZE	PERCENT PASSING
3/4"	100
1/4"	30-60
U.S. NO. 8	20-50
U.S. NO. 50	3-12
U.S. NO. 200	0-1



SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	SPACING
	SLOUGH SEDGE	CAREX OBNUPTA	PLUGS	~ 2' O.C.
	TUFTED HAIRGRASS	DESCHAMPSIA CESPITOSA	1 GALLON	~ 2' O.C.

BIORETENTION CELL NOTES & DETAILS

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC

3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: AS SHOWN

DATE: Apr. 03, 2018

DRAWING NUMBER:

9582

SHEET C5.22

REVISIONS

NO.	DATE	BY	DESCRIPTION	DESIGNED	BY	DATE
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	DRAWN	JAT	8/17
				CHECKED	NLOII	8/17
				APPROVED		
				ACCEPTED		



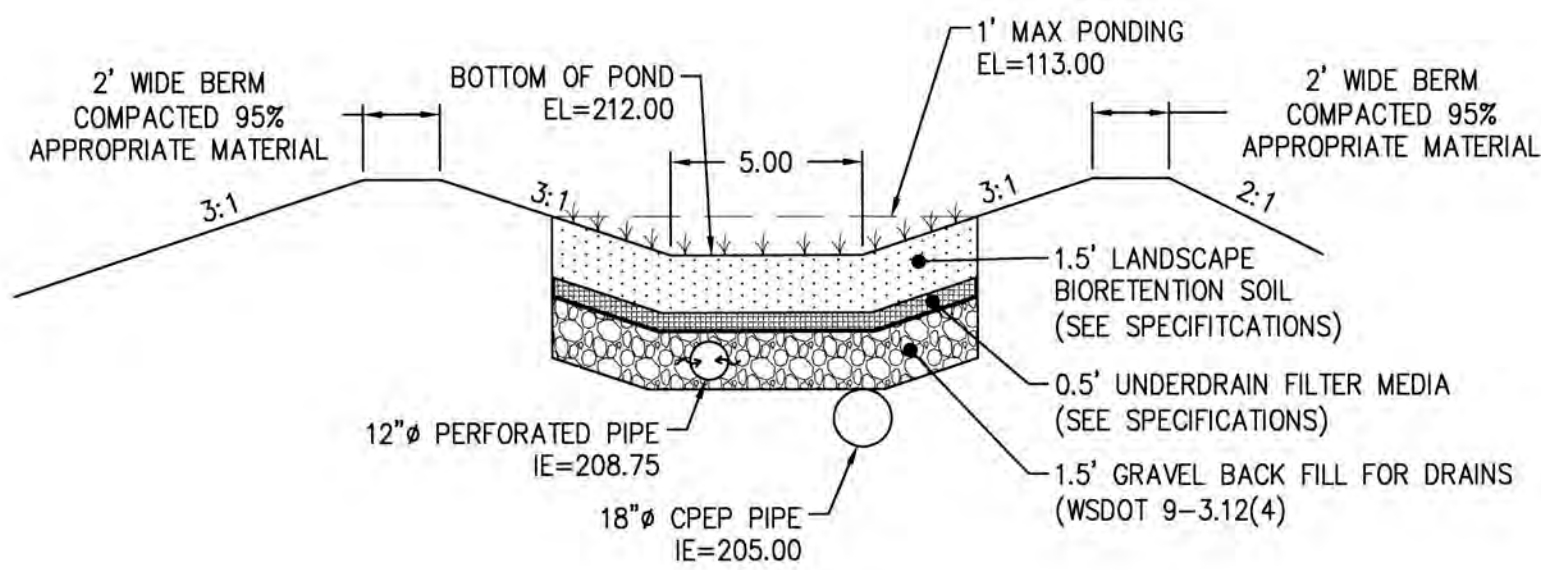
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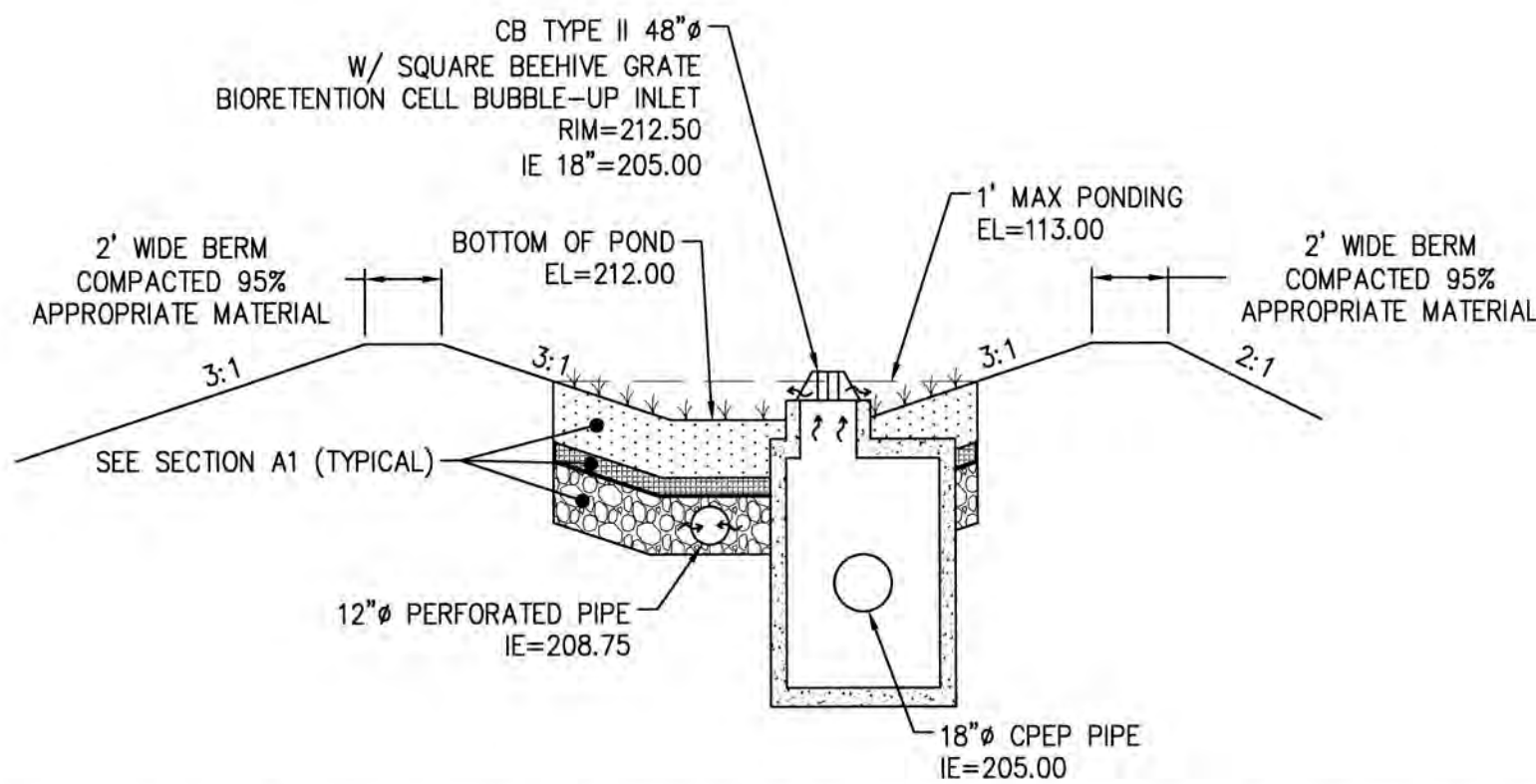
(360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

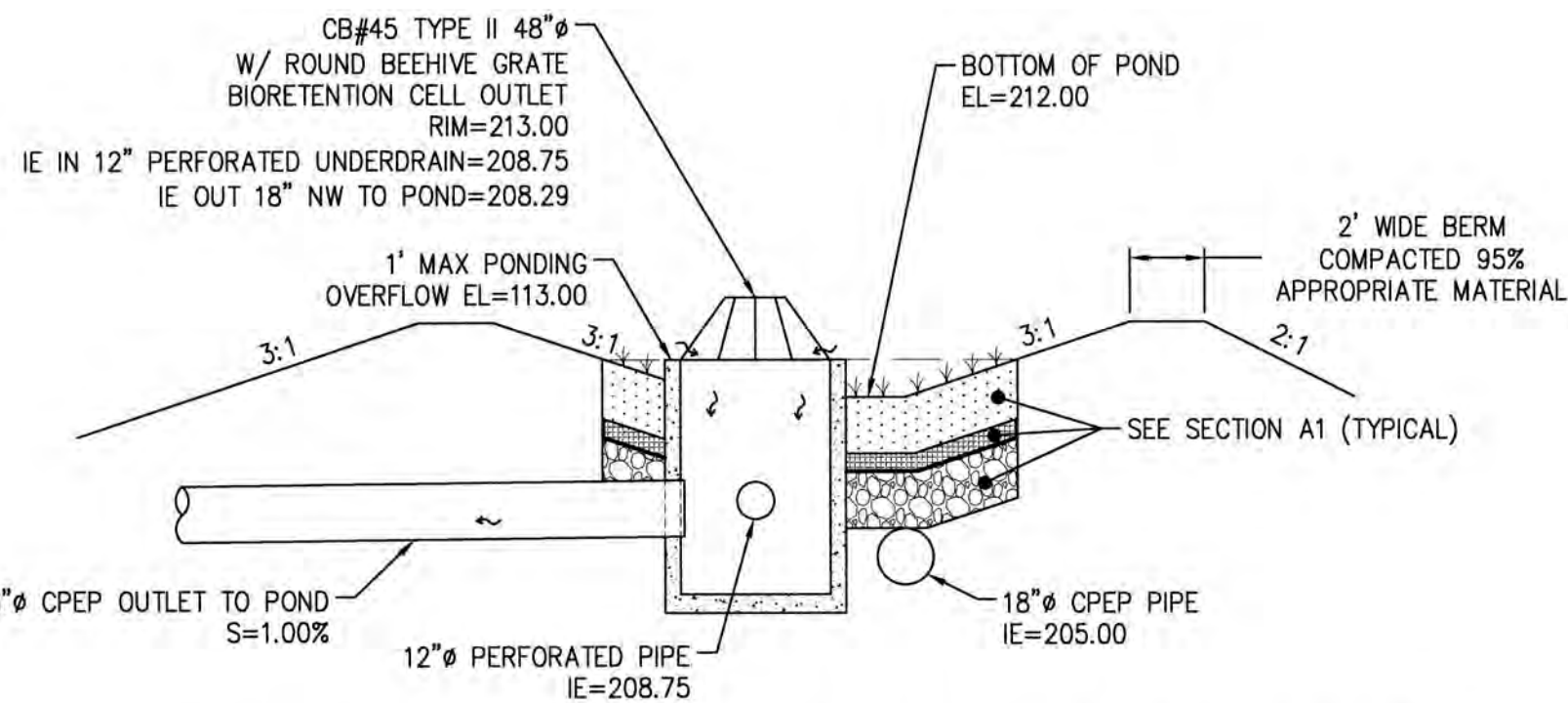




SOUTH BIORETENTION CELL SECTION A1 (TYPICAL)
SCALE 1"=5'



SOUTH BIORETENTION CELL SECTION A2 (BUBBLE-UP INLET)
SCALE 1"=5'

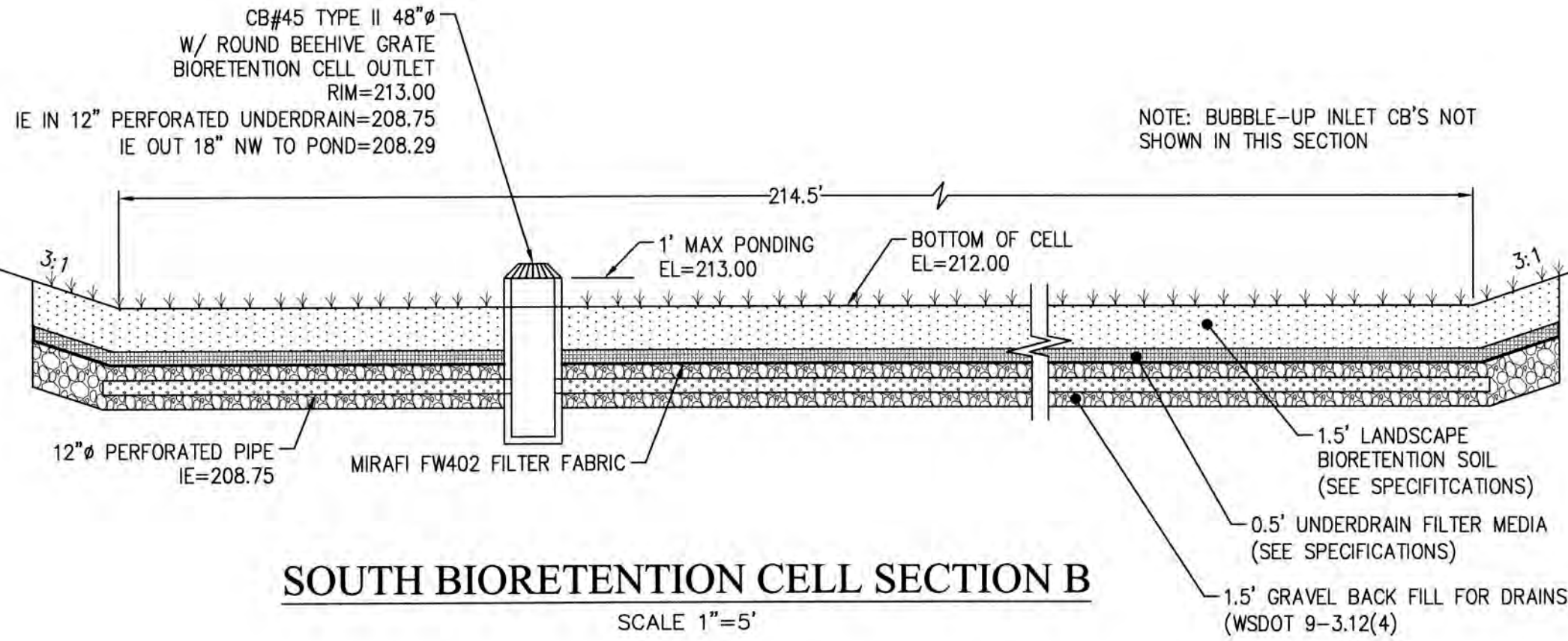


SOUTH BIORETENTION CELL SECTION A3 (OUTLET)
SCALE 1"=5'

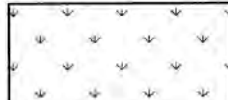
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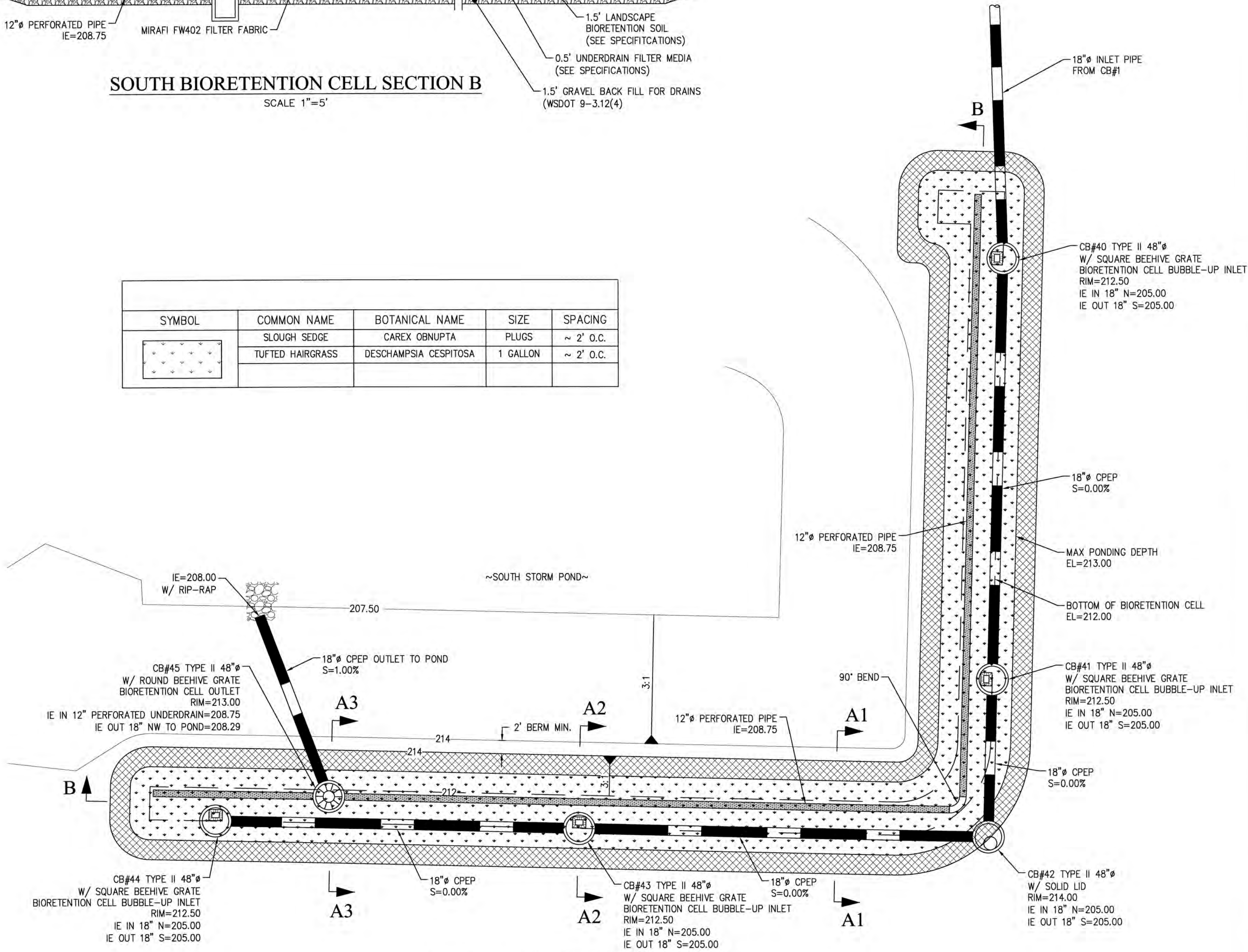
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CALL 48 HOURS BEFORE YOU DIG
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SOUTH BIORETENTION CELL SECTION B
SCALE 1"=5'

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	SPACING
	SLOUGH SEDGE	CAREX OBNUPA	PLUGS	~ 2' O.C.
	TUFTED HAIRGRASS	DESCHAMPSIA CESPITOSA	1 GALLON	~ 2' O.C.



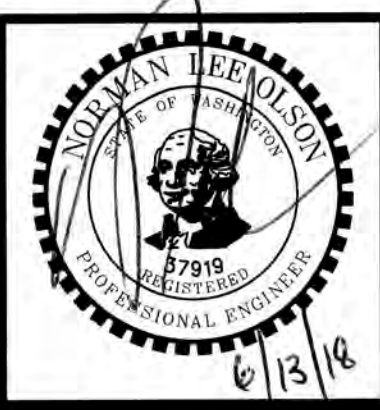
SOUTH BIORETENTION CELL DETAIL
SCALE 1"=10'

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	RPJ 8/17
1	3/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 1/24/2018	DRAWN	JAT 8/17
				CHECKED	NLOH 8/17
				APPROVED	
				ACCEPTED	



N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



SOUTH BIORETENTION CELL DETAILS

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

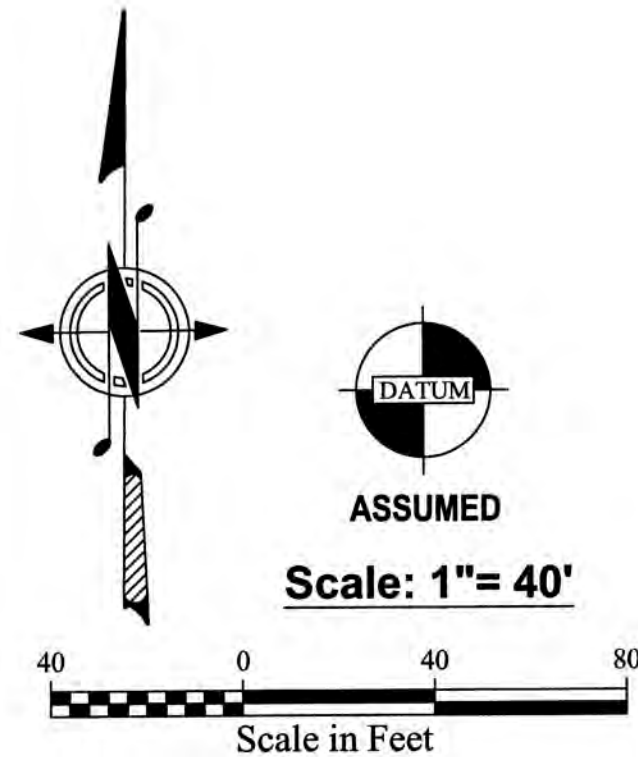
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC

3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE:	AS SHOWN
DATE:	June 14, 2018
DRAWING NUMBER:	9582
SHEET	C5.23

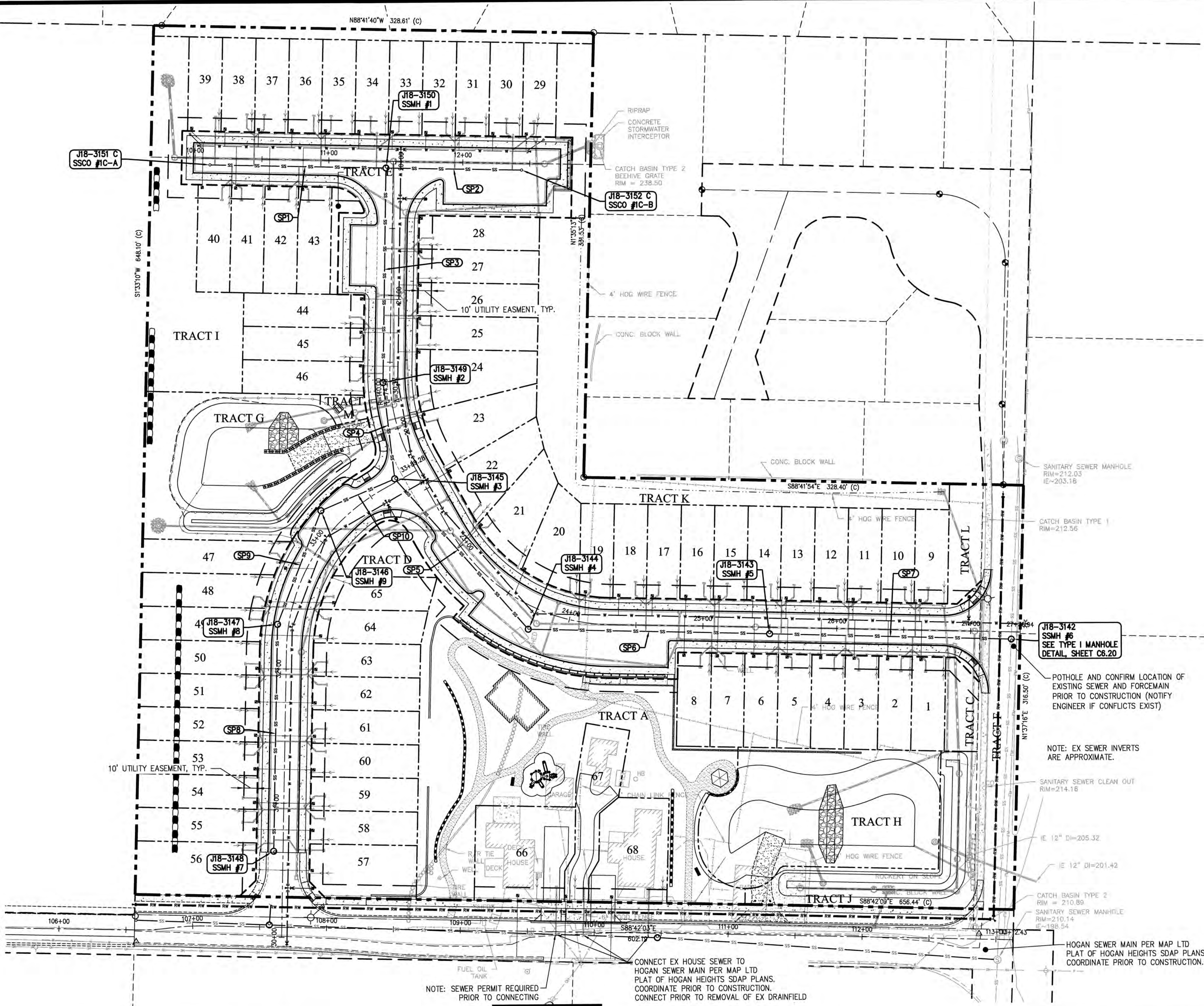


SEWER PIPE INDEX	
SP1	131 LF 8" PVC, S=12.22%
SP2	101 LF 8" PVC, S=1.00%
SP3	160 LF 8" PVC, S=1.98%
SP4	72 LF 8" PVC, S=0.50%
SP5	150 LF 8" PVC, S=8.29%
SP6	180 LF 8" PVC, S=7.94%
SP7	181 LF 8" PVC, S=8.71%
SP8	169 LF 8" PVC, S=0.50%
SP9	91 LF 8" PVC, S=2.12%
SP10	60 LF 8" PVC, S=1.40%

SEWER PLAN LEGEND	
	SEWER PIPE LABLE SEE SEWER PIPE INDEX FOR DATA
	SEWER MANHOLE/CLEANOUT LABLE SEE SEWER MH & CO INDEX FOR DATA
	SECONDARY SEWER
	WATER SERVICE WITH METER
	SECONDARY STORM
	STORM LINES DIMMED FOR CLARITY

NOTE
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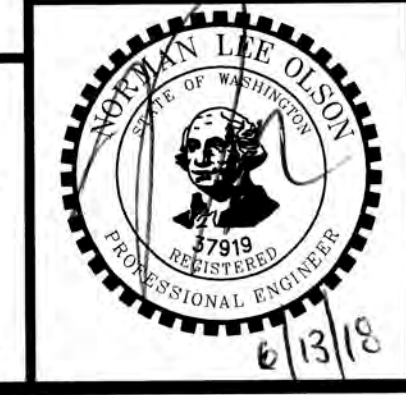
**CALL 48 HOURS
BEFORE YOU DIG
811**



SEWER MH & CO INDEX	
J18-3151 C SSCO #1C-A	SSCO #1C-A RD_A STA. 10+11.19, 5.05RT RIM=272.89 IE OUT E=264.19 8" PVC
J18-3152 C SSCO #1C-B	SSCO #1C-B RD_A STA. 12+44.02, 4.96RT RIM=254.59 IE OUT W=249.13 8" PVC
J18-3150 SSMH #1	SSMH #1 RD_A STA. 11+42.68, 5.00RT RIM=262.12 IE IN W=248.12 8" PVC IE IN E=248.12 8" PVC IE OUT S=248.02 8" PVC
J18-3149 SSMH #2	SSMH #2 RD_B STA. 21+64.96, 5.24RT RIM=255.10 IE IN N=244.85 8" PVC IE OUT S=244.75 8" PVC
J18-3145 SSMH #3	SSMH #3 RD_C STA. 33+72.13, 2.57LT RIM=252.33 IE IN N=244.39 8" PVC IE IN SW=244.39 8" PVC IE OUT SE=244.29 8" PVC
J18-3144 SSMH #4	SSMH #4 RD_B STA. 23+74.60, 16.61RT RIM=239.75 IE IN NW=231.85 8" PVC IE OUT E=231.75 8" PVC
J18-3143 SSMH #5	SSMH #5 RD_B STA. 25+49.86, 4.88RT RIM=225.33 IE IN W=217.43 8" PVC IE OUT E=217.33 8" PVC
J18-3142 SSMH #6	SSMH #6 RD_B STA. 27+30.41, 5.41RT RIM=214.21 IE IN W=201.61 8" PVC CONNECT TO EX IE~201.51 CONTRACTOR TO POTHOLE AND VERIFY PRIOR TO CONSTRUCTION, NOTIFY ENGINEER IF CONFLICTS EXIST
J18-3148 SSMH #7	SSMH #7 RD_C STA. 30+64.06, 7.00LT RIM=254.45 IE OUT N=248.20 8" PVC
J18-3147 SSMH #8	SSMH #8 RD_C STA. 32+32.25, 8.27LT RIM=255.25 IE IN S=247.35 8" PVC IE OUT N=247.25 8" PVC
J18-3146 SSMH #9	SSMH #9 RD_C STA. 33+16.61, 16.21LT RIM=253.07 IE IN S=245.33 8" PVC IE OUT NE=245.23 8" PVC

REVISIONS				BY	DATE
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2	6/18	RPJ	REVISED PER KITSAP COUNTY COMMENTS DATED 5/30/2018	CHECKED	NLOI 8/17
				APPROVED	
				ACCEPTED	

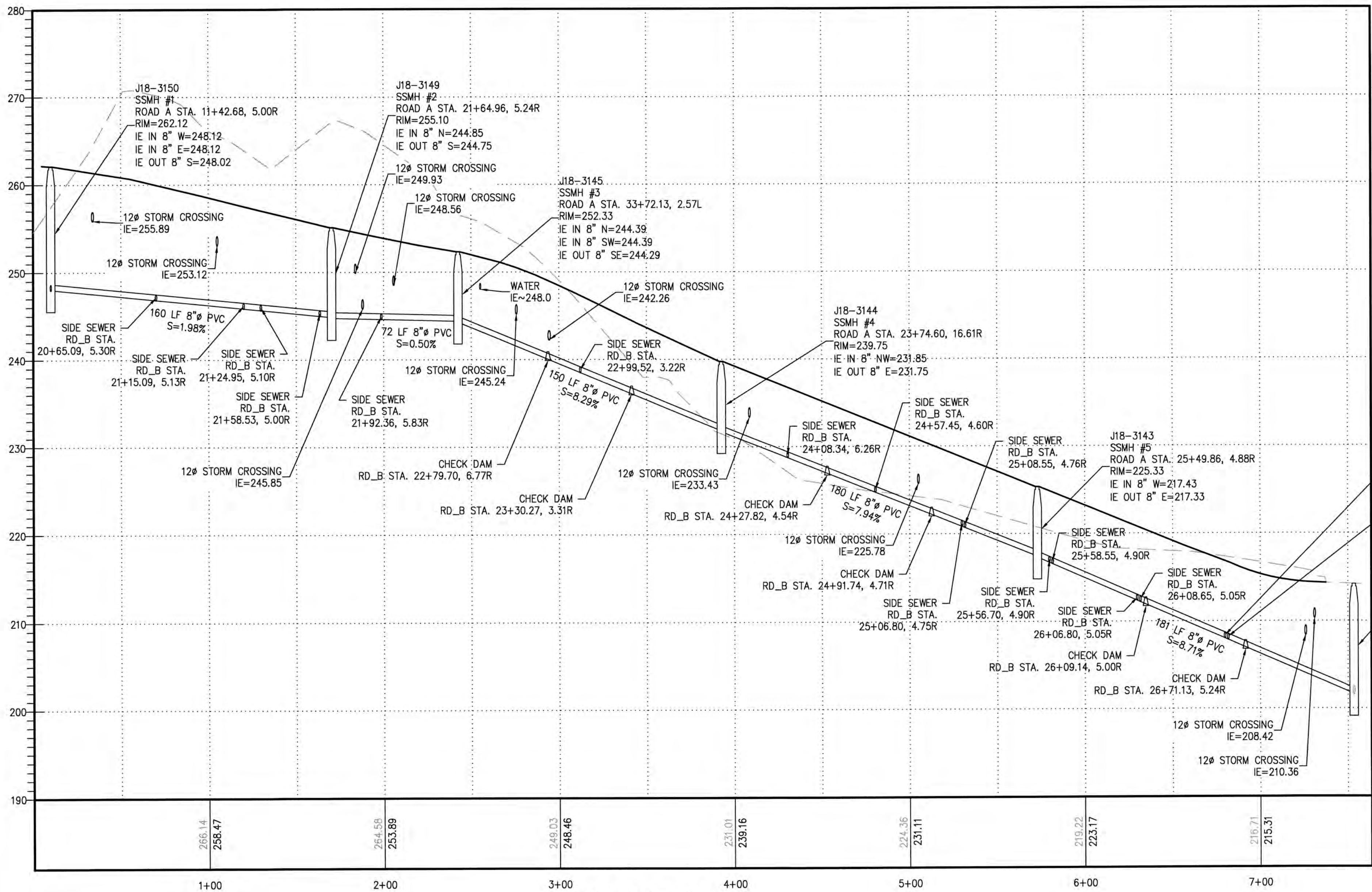
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2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



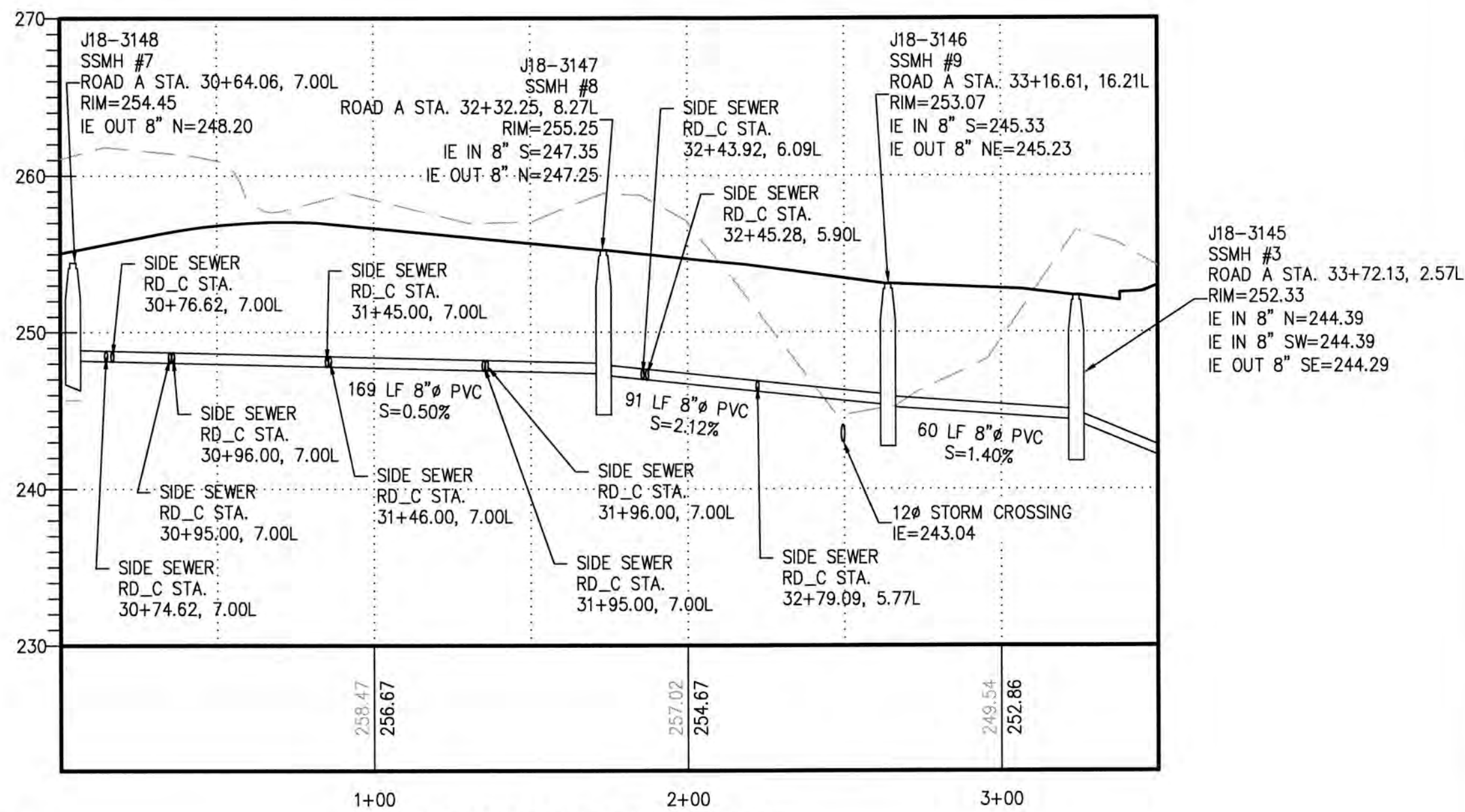
SEWER PLAN
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT
Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR: **Nathan Glen Properties LLC**
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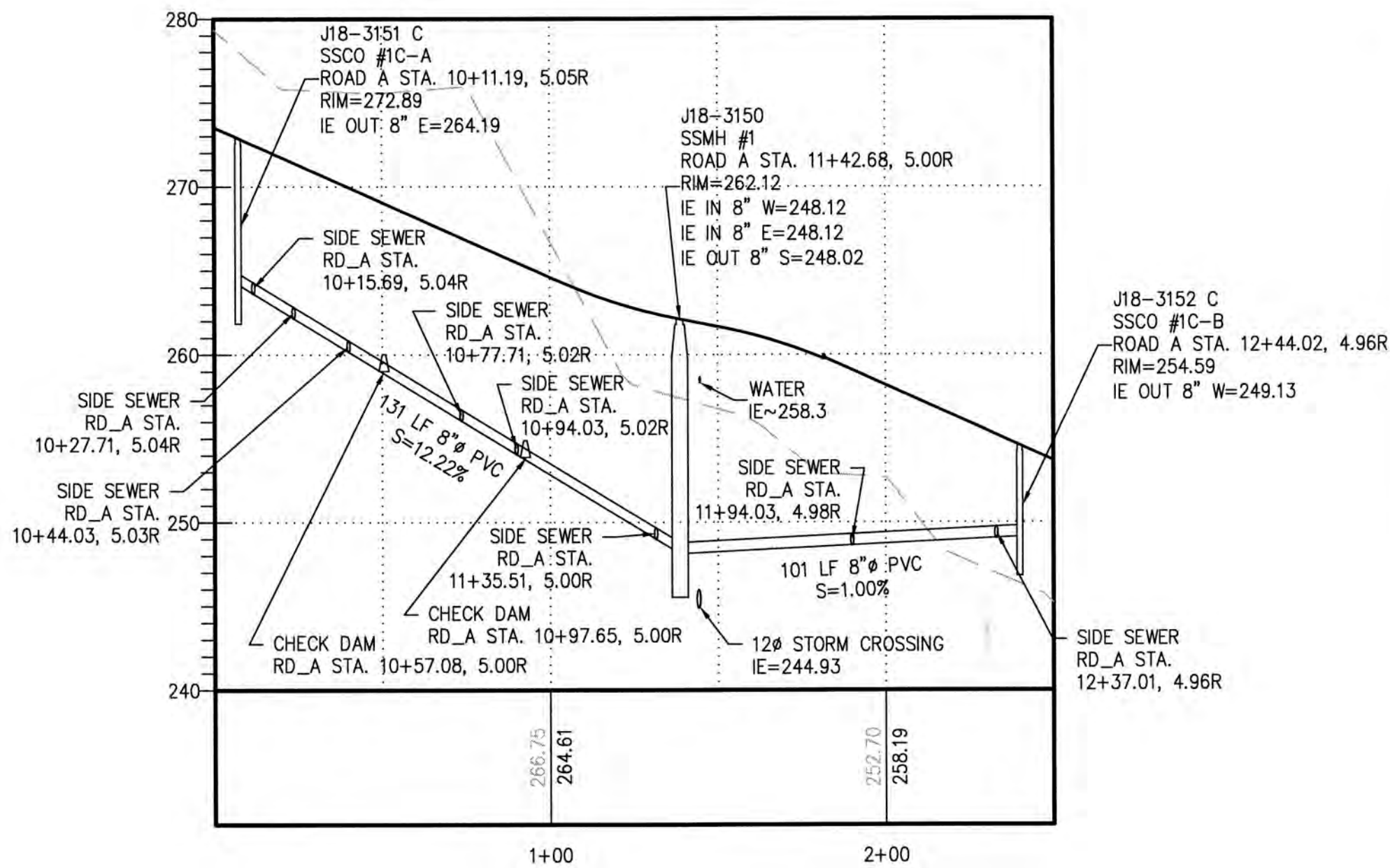
SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER: 9582
SHEET C6.00



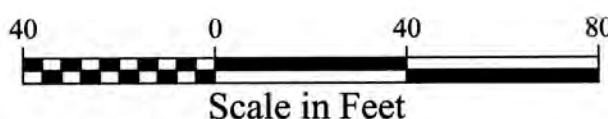
ROAD B SEWER PROFILE
SCALE HORIZ: 1"=40'
VERT.=1"=8'



ROAD C SEWER PROFILE
SCALE HORIZ: 1"=40'
VERT.=1"=8'



ROAD A SEWER PROFILE
SCALE HORIZ: 1"=40'
VERT.=1"=8'



NOTE

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REVISIONS

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				APPROVED		
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SEWER PROFILES

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'

DATE: Apr. 03, 2018

DRAWING NUMBER:

9582

SHEET C6.10

1. CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENT EDITION OF "KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS STANDARDS FOR SANITARY SEWER EXTENSIONS" IN CONJUNCTION WITH THE MOST RECENT EDITION OF "THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" PREPARED BY THE WASHINGTON STATE CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION.
2. THE CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION CONFERENCE PRIOR TO COMMENCING CONSTRUCTION. THE ENGINEER AND/OR INSPECTOR FOR THE WASTEWATER DIVISION OF THE KITSAP COUNTY PUBLIC WORKS DEPARTMENT SHALL BE IN ATTENDANCE.
3. ALL SEWER INSTALLATION INSPECTIONS AND TEST OBSERVATIONS SHALL BE MADE BY KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS WASTEWATER DIVISION. THE COUNTY INSPECTOR SHALL BE NOTIFIED TWO DAYS IN ADVANCE OF COMMENCING WORK ON A SANITARY SEWER EXTENSION. PRIOR TO FINAL ACCEPTANCE OF ALL INSTALLATIONS, THE COUNTY SHALL CONDUCT AN INSPECTION OF ALL MAIN LINES BY THE USE OF TELEVISION EQUIPMENT. FINAL ACCEPTANCE OF SEWER INSTALLATIONS WILL NOT BE MADE UNTIL TESTS AND INSPECTIONS ARE COMPLETE AND PROVE SATISFACTORY.
4. (PIPE REQUIREMENTS) *SEE SPECIFICATIONS, KITSAP COUNTY PUBLIC WORKS STANDARDS FOR SANITARY SEWER EXTENSIONS
5. (BEDDING REQUIREMENTS)
6. (BACKFILL MATERIAL AND COMPACTION REQUIREMENTS)
7. THE PHYSICAL CONNECTION TO AN EXISTING MANHOLE OR SEWER SHALL NOT BE MADE UNTIL AUTHORIZED BY THE COUNTY. SUCH AUTHORIZATION WILL NOT BE GIVEN UNTIL ALL UPSTREAM LINES HAVE BEEN COMPLETELY CLEANED AND ALL DEBRIS REMOVED.
8. GRAVITY MAINS SHALL BE TESTED BY THE LOW PRESSURE AIR METHOD. PRESSURE MAINS SHALL BE TESTED BY THE HYDROSTATIC TEST METHOD. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE COUNTY INSPECTOR.
9. DROP MANHOLES SHALL, IN ALL RESPECTS, BE CONSTRUCTED AS A STANDARD MANHOLE WITH THE EXCEPTION OF THE OUTSIDE DROP CONNECTION AS SHOWN ON THE STANDARD PLAN "DROP MANHOLE CONNECTION".
10. MANHOLES SHALL BE PRECAST REINFORCED CONCRETE UNITS WITH ECCENTRIC CONES CONFORMING TO THE STANDARD PLAN "TYPE 1 MANHOLE". JOINTS BETWEEN PRECAST WALL SECTIONS SHALL BE CONFINED O-RING TYPE.
11. MANHOLE FRAME AND COVERS SHALL BE CAST IRON, THREE BOLT LOCKING TYPE, OLYMPIC FOUNDRY TYPE MH30D/T, OR EQUAL. BOLTS SHALL BE 5/8" STAINLESS STEEL SOCKET HEAD, COUNTERSUNK. THE COVER SHALL HAVE THE WORD "SEWER" IN 2" RAISED LETTERS CAST IN IT.
12. CLEANOUT FRAME AND COVERS SHALL BE CAST IRON TWO BOLT LOCKING TYPE, OLYMPIC FOUNDRY TYPE M102S, OR EQUAL. BOLTS SHALL BE 5/8" STAINLESS STEEL SOCKET HEAD, COUNTERSUNK.
13. ALL SIDE SEWERS SHALL BE 6" DIAMETER MINIMUM AND LAID ON A MINIMUM SLOPE OF 2 PERCENT. ALL SIDE SEWERS SHALL BE PROVIDED WITH A CLEANOUT AND TEST TEES FOR EACH LOT TO BE SERVED.
14. CHECK DAMS SHALL BE PLACED AT 100 FOOT INTERVALS ON GRAVITY MAINS LAID ON 6 PERCENT OR GREATER SLOPES.
15. CONCRETE PIPE ANCHORS SHALL BE PLACED ON SEWER MAINS WHERE SLOPES EXCEED 20 PERCENT. ANCHORS SHALL BE PLACED ON 36 FOOT CENTERS FOR SLOPES 20 TO 35 PERCENT, ON 24 FOOT CENTERS FOR SLOPES 35 TO 50 PERCENT, AND ON 16 FOOT CENTERS FOR SLOPES 50 PERCENT AND GREATER.

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[illegible]

LOCKING CLEAN-OUT RING & COVER WITH TWO 5/8" STAINLESS STEEL CAP SCREWS. COVER TO HAVE CAST IN PLACE HANDLE. SEAL BOTH SIDES WITH AR 400W PAVING ASPHALT CEMENT.

FINISHED GRADE

14"

6"

6"

6" X 24" DIA. CONCRETE COLLAR

ASPHALT PAVEMENT

GROUT

STREET USE COVER

FINISHED GRADE

SEE STREET USE COVER (OR SEE NOTE 3)

6" X 24" DIA.

PIPE BEDDING FOR TRENCH BACK FILL MATERIAL

45° BENDS

PIPE MATERIAL SAME AS MAIN LINE

UNDISTURBED EARTH

CLEANOUT AND STREET USE COVER

NOT TO SCALE

EDGE OF TRENCH

CHECK DAM

PIPE

1' MIN AT TOP

CLAY, BENTONITE OR CDF MATERIAL

3' MIN

WATER TABLE

UNDISTURBED EARTH

PIPE

1' MINIMUM

SLOPE MAY VARY

WATER TABLE

TOP OF PIPE

TRENCH BOTTOM

2' MIN.

SECTION A-A

NON-SHRINK GROUT INSIDE & OUT

MANHOLE FRAME AND COVER

HANDHOLDS

ADJUSTMENT SECTION (LEVELING BRICKS OR GRADE RING OPTIONAL)

PRECAST CONE (ECCENTRIC UNLESS OTHERWISE SPECIFIED)

STEPS

RUBBER GASKETS BETWEEN PRECAST SECTIONS

PRECAST RISER SECTIONS

SLOPE = $1/2"/ft$ (TYP)

CONSTRUCT IN FIELD CHANNEL AND SHELF TO THE CROWN OF THE PIPE

MORTAR FILLET

REINFORCING STEEL (FOR PRECAST BASE WITH INTEGRAL RISER)

REINFORCING STEEL (FOR SEPARATE BASE ONLY)

PRECAST BASE WITH INTEGRAL RISER

GRAVEL BACKFILL FOR PIPE BEDDING. 6" MIN COMPACTED DEPTH. FOR PRECAST BASES ONLY

SEPARATE CAST-IN-PLACE OR SEPARATE PRECAST BASE

MIN HEIGHT 8'

MAX HEIGHT 25'

28" MAX

22" MAX

15" MAX

5" MIN

24"

12" TYP.

48" OR 54"

48" DIA = 6"

54" DIA = 8"

6"*

12"

DESIGN NOTES:

HEIGHT: 8' TO 12': SOIL BEARING VALUE EQUALS $3300\#/ft^2$ (MIN)

HEIGHT: OVER 12' TO 25': SOIL BEARING VALUE EQUALS $3800\#/ft^2$ (MIN)

* FOR SEPARATE CAST-IN-PLACE ONLY

NOTE: END OF STUB TO BE ~5'-6' BELOW FINISH GRADE AS APPLICABLE (MAINTAIN MIN. 2% SLOPE)

2x4 STUB MARKER 12" ABOVE GROUND (TYP)

6"x6"x6" TEST TEE BELOW GRADE

PROPERTY OR EASEMENT LINE

6' MIN

6" WYE

THREADED PLUG AND BLOCK

CLEANOUT RING & COVER AT FINISH GRADE

P SEWER PIPE (TYP)

6' MIN

PLUG AND BLOCK (TYP)

TO MAIN

2x4 STUB MARKER 12" ABOVE GROUND (TYP)

6"x6"x6" TEST TEE BELOW GRADE

PROPERTY OR EASEMENT LINE

6' MIN

6" WYE

THREADED PLUG AND BLOCK

CLEANOUT RING & COVER AT FINISH GRADE

TO MAIN

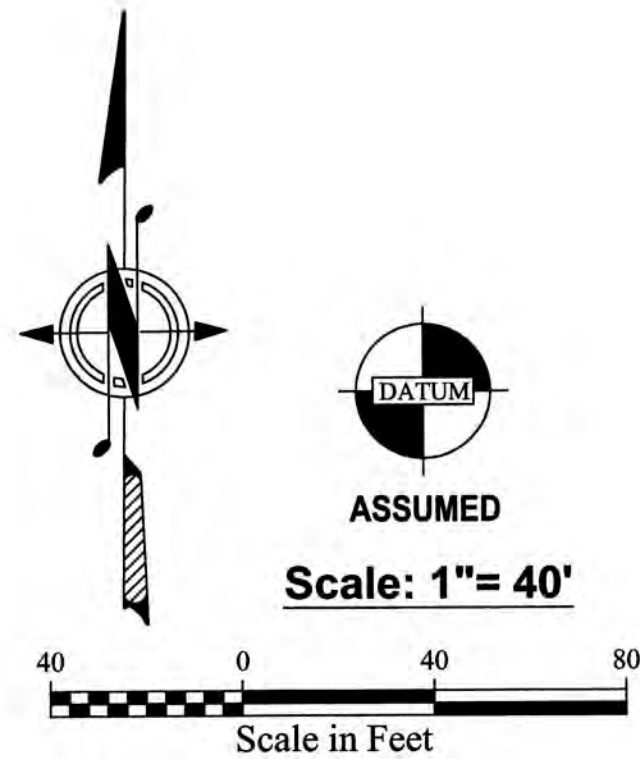
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Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'
DATE: June 14, 2018
DRAWING NUMBER:
9582
SHEET C6.20



FOUND 1/2" REBAR AND
CAP, LS 20795, QUAL
RIDGE LOT CORNER 0.2"
NORTH OF PROPERTY LINE,
VISITED NOV. 2016

FOUND 1" IRON PIPE
0.3' N. AND 0.2' E. OF
CALCULATED POSITION
VISITED OCT, 2016

RIPRAP
CONCRETE
STORMWATER
INTERCEPTOR

CATCH BASIN TYPE 2
BEEHIVE GRATE
RIM = 238.50

FOUND 2" ALUMINUM DISK,
LS 41963,
(TYPICAL IN THIS PLAT)

SEWER EASEMENT
AFN 8310030038
NLO #9
ELEV. 214.95

SANITARY SEWER MANHOLE
RIM=212.03
IE=203.18

CATCH BASIN TYPE 1
RIM=212.56

19 LF 6" DI CL-50
30' ACCESS AND UTILITY
EASEMENT PER SP4297, AFN
8612040115 (ROAD VACATED
PER COMMISSIONER'S
JOURNAL VOL. 10, PG. 497)

~42 LF 8" DI CL-50
SEWER EASEMENT
AFN 8310030038

APPROX. LOCATION EX 10" DI WATER MAIN
CONTRACTOR TO VERIFY LOCATION AND
ANY REQUIRED EASEMENT TO CONNECT WATER.

313 LF 16" DI CL-50
RECYCLED WATER

SANITARY SEWER CLEAN OUT
RIM=214.16

IE 12" DI=205.32

IE 12" DI=201.42

CATCH BASIN TYPE 2
RIM = 210.89
SANITARY SEWER MANHOLE
RIM=210.14
IE=198.54

NLO #10
ELEV. 211.44

NOTE: MEGALUGS & FIELDLOK GAKETS
TO BE USED ON ALL MJ JOINTS

WATER SCHEDULE

- W1 CONNECT TO EX 10" DI WATER MAIN
10"x10"x8" TAPPING TEE
8" GATE VALVE
W/ THRUST BLOCK & MEGALUGS
- W2 HYDRANT ASSEMBLY
- W3 8"x8"x6" TEE (MjxMjxFL) W/ THRUST BLOCK & MEGALUGS
6" GV (FLxMJ) W/ MEGALUGS
- W4 8" 11.25' BEND (MJ)
W/ THRUST BLOCK & MEGALUGS
- W5 8" 22.5' BEND (MJ)
W/ THRUST BLOCK & MEGALUGS
- W6 8" 45' BEND (MJ)
W/ THRUST BLOCK & MEGALUGS
- W7 8" TEE (FL) W/ THRUST BLOCK & MEGALUGS
(2) 8" GV (MjxFL)
8" ADAPTOR (FLxMJ) W/ MEGALUGS
- W8 NOT USED
- W9 8" TEE (FL)
8" ADAPTOR (MjxFL)
(2) 8"x4" REDUCER (FLxMJ)
- W10 4" CAP (MJ)
W/ 2" BLOWOFF ASSEMBLY
W/ TIEBACK BLOCKING
- W11 CONNECT TO 8" EX WATER MAIN
8"x8" SST TAPING TEE
8" GATE VALVE
W/ THRUST BLOCK & MEGALUGS

RECYCLED WATER SCHEDULE

- W12 16" DI 16" CAP (MJ)
W/ TIEBACK BLOCKING
- W13 16" DI 90° BEND (MJ)
W/ THRUST BLOCK

WATER PLAN LEGEND

- W1 WATER FITTINGS
SEE WATER SCHEDULE
- SECONDARY SEWER
- WATER SERVICE WITH METER
- SECONDARY STORM
- STORM LINES DIMMED FOR CLARITY

NOTE

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FOUND 1" IRON PIPE,
0.5' EAST OF SOUTHERLY
PROJECTED WEST PROPERTY
LINE, VISITED OCT, 2016

NLO #18
ELEV. 268.18

SOUTH LINE OF NE 1/4, NE 1/4, SW 1/4
OF SEC. 15, T.25N., R.1E., W.M.,

NOTE: INSTALL WATER METERS PRIOR
TO REMOVAL OF EX WELL (FOR LOTS 66-68)

REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION	DESIGNED	8/17
1	6/18	RPJ	REVISED PER SILVERDALE WATER DISTRICT REDLINES DATED 4/10/2018	DRAWN	8/17
				CHECKED	8/17
				APPROVED	
				ACCEPTED	

BY	DATE
DESIGNED	8/17
DRAWN	8/17
CHECKED	8/17
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ACCEPTED	

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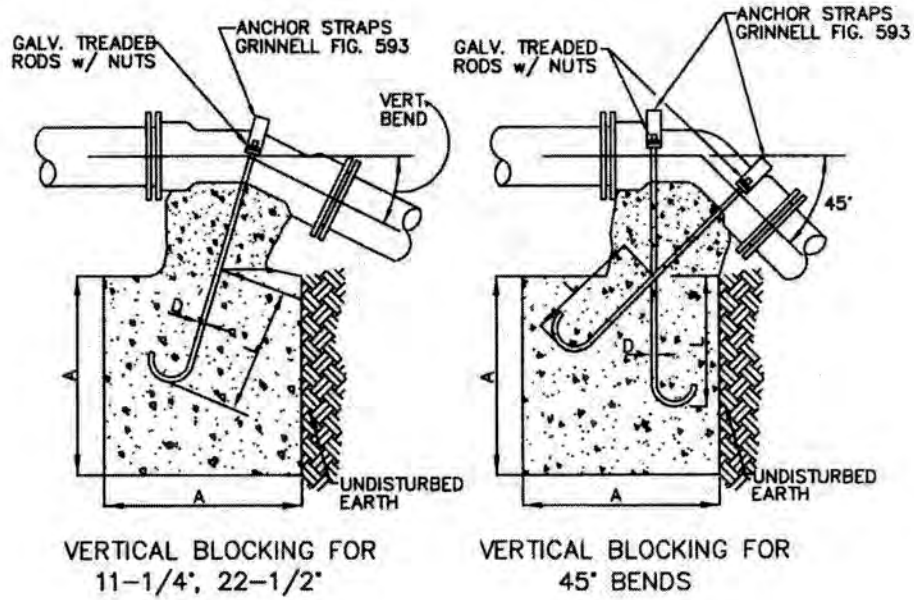
WATER PLAN
RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

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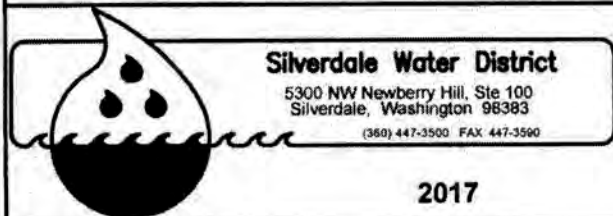
SCALE:	1"=40'
DATE:	June 14, 2018
DRAWING NUMBER:	9582
SHEET	C7.00



VERTICAL BLOCKING FOR 11-1/4", 22-1/2", 30" BEND					
PIPE SIZE	V.B.	CJ.	A	D	L
4"	11-1/4"	8	2.0"	3/4"	1.5'
6"	22-1/2"	11	2.2"		2.0'
8"	11-1/4"	11	2.2"	3/4"	2.0'
10"	22-1/2"	25	2.9"		2.0'
12"	11-1/4"	16	2.3"	3/4"	2.0'
14"	22-1/2"	47	3.6"		2.0'
16"	11-1/4"	24	2.85"	3/4"	2.0'
18"	22-1/2"	68	4.05"		2.5'
20"	11-1/4"	32	3.2"	3/4"	2.0'
22"	22-1/2"	68	4.5"	7/8"	3.0'
24"	11-1/4"	70	4.1"	7/8"	3.0'
26"	22-1/2"	164	5.7"	1-1/8"	4.0'
28"	11-1/4"	91	4.5"	7/8"	3.0'
30"	22-1/2"	225	6.1"	1-1/4"	4.0'
32"	11-1/4"	128	5.0"	1"	3.5'
34"	22-1/2"	320	6.8"	1-3/8"	4.5'

VERTICAL BLOCKING FOR 45° BENDS					
PIPE SIZE	V.B.	CJ.	A	D	L
4"	45"	30	3.1"	3/4"	2.0'
6"		68	4.1"		
8"		123	5.0"		
10"		178	5.8"	3/4"	2.5'
12"		232	6.1"	3/4"	2.5'
14"		478	7.8"	1-1/8"	4.0'
16"		580	8.2"	1-1/4"	
18"		620	8.4"	1-3/8"	4.5'

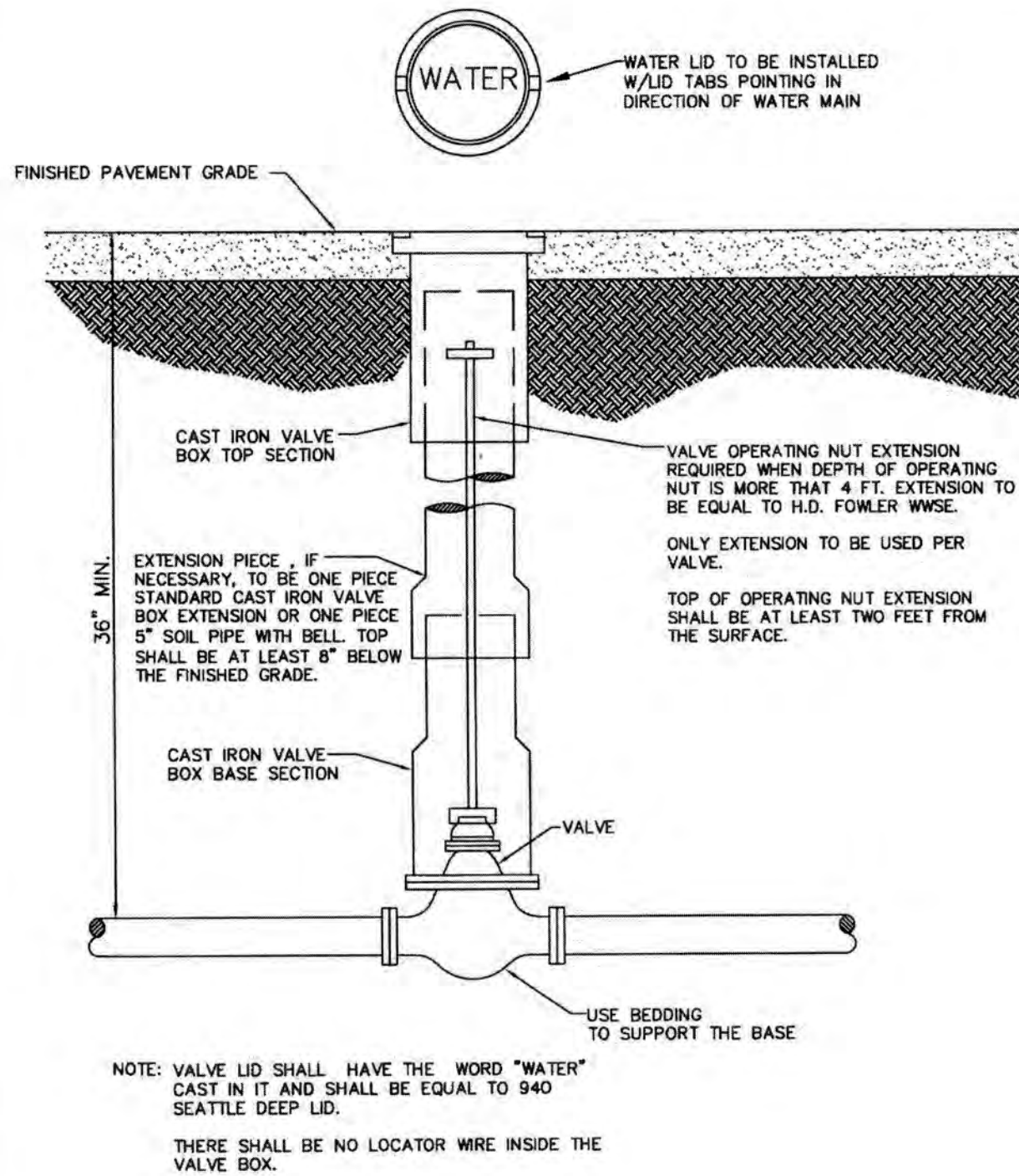
A=LENGTH, WIDTH & DEPTH
NOTE: CONCRETE BLOCKING IS BASED ON 200 PSI PRESSURE AND 2,500 PSI CONCRETE
NOTE: CONCRETE TO BE CLEAR OF JOINTS TO PERMIT DISMANTLING OF JOINT.
TIGHTEN NUTS ON STRAPS 24 HRS. AFTER CONC. IS POURED



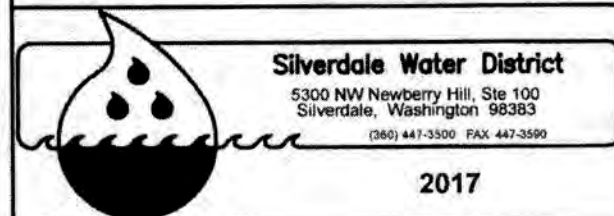
2017

VERTICAL CONCRETE
BLOCKING

STANDARD DETAIL # 12



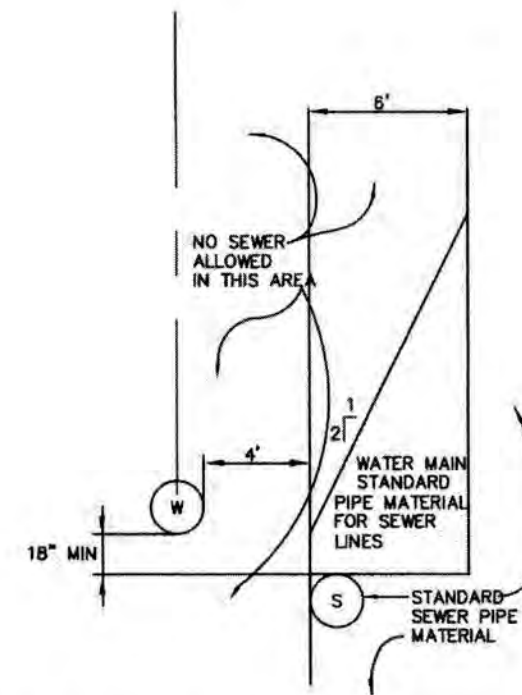
NOTE: VALVE LID SHALL HAVE THE WORD "WATER" CAST IN IT AND SHALL BE EQUAL TO 940 SEATTLE DEEP LID.
THERE SHALL BE NO LOCATOR WIRE INSIDE THE VALVE BOX.



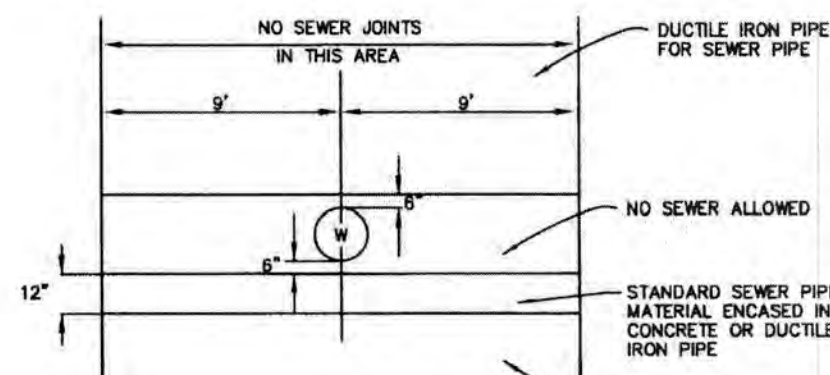
2017

VALVE BOX ON
PAVED ROAD

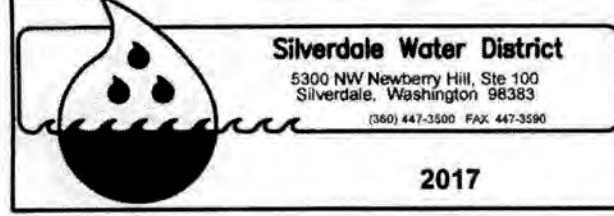
STANDARD DETAIL # 13



PARALLEL CONSTRUCTION



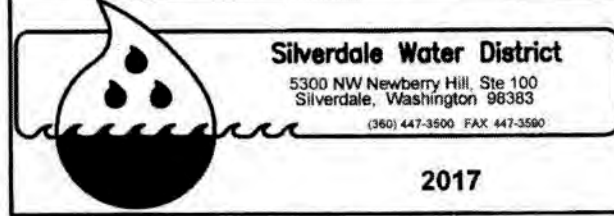
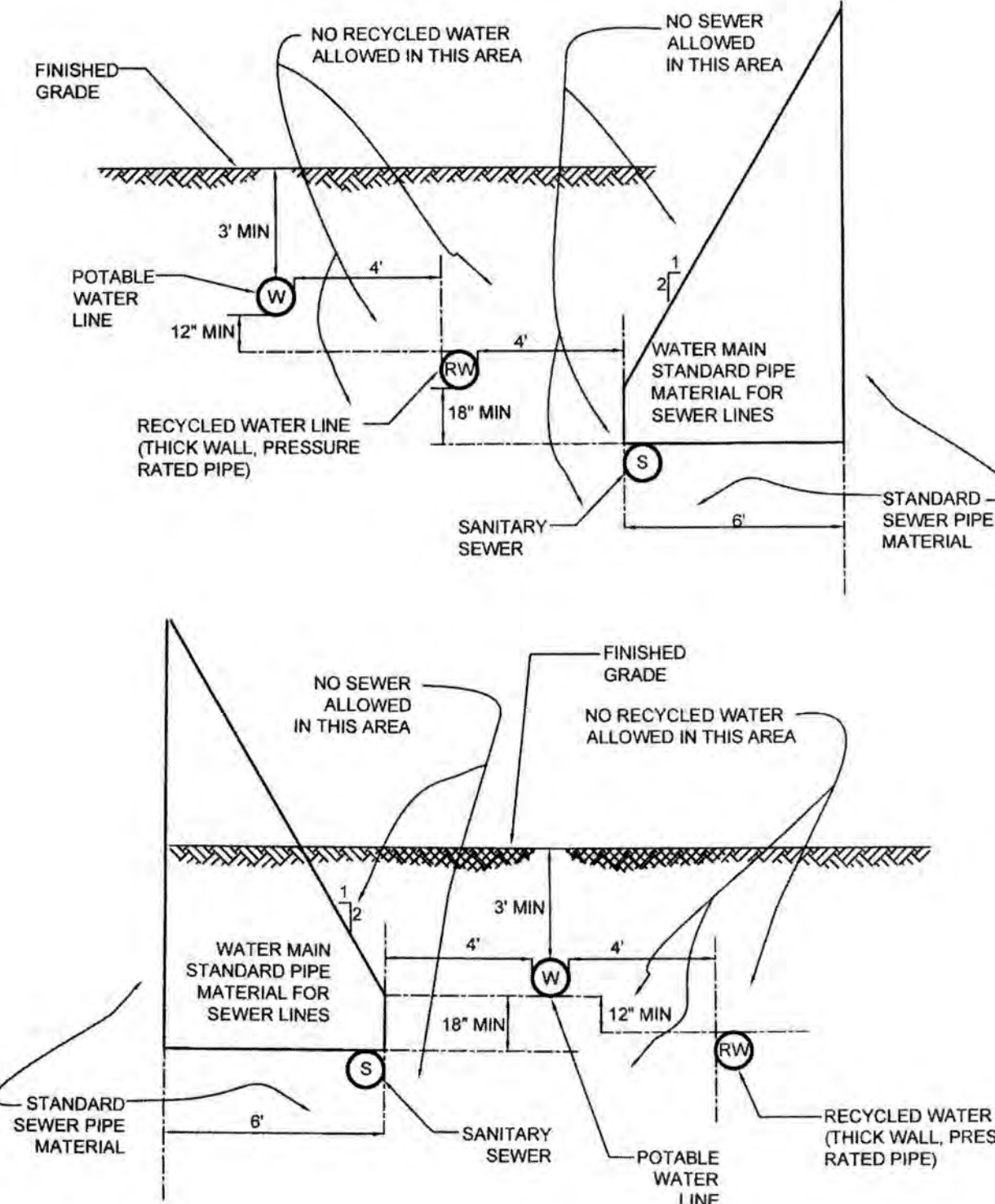
CROSSING CONSTRUCTION



2017

REQUIRED SEPARATION BETWEEN
WATER LINES & GRAVITY
SANITARY SEWERS

STANDARD DETAIL # 17



2017

POTABLE, RECYCLED, & SANITARY SEWER MAIN
HORIZONTAL SEPARATIONS

STANDARD DETAIL # 18

NOTE

THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE, PRESERVE AND PROTECT UNDERGROUND UTILITIES.

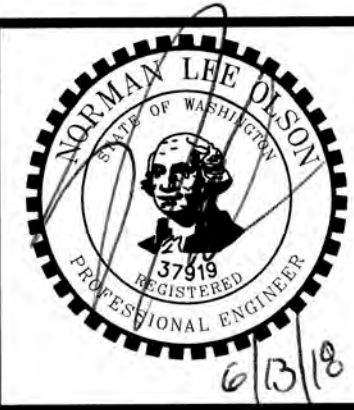
CALL 48 HOURS
BEFORE YOU DIG
811

REVISIONS

NO.	DATE	BY	DESCRIPTION
		DESIGNED	RPJ 8/17
		DRAWN	JAT 8/17
		CHECKED	NLOH 8/17
		APPROVED	
		ACCEPTED	

N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366



WATER NOTES & DETAILS 1

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

Portion of the Northeast Quarter of the Southwest Quarter
Section 15, Township 25 North, Range 1 East, W.M., in Kitsap County, Washington.

FOR:

Nathan Glen Properties LLC
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383
(360) 626-1146

SCALE: 1"=40'

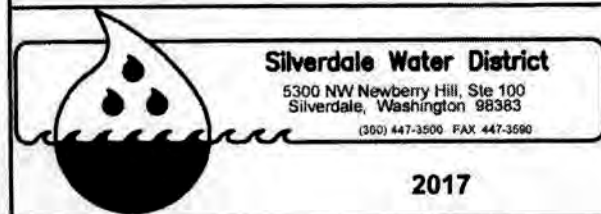
DATE: June 14, 2018

DRAWING NUMBER:

9582

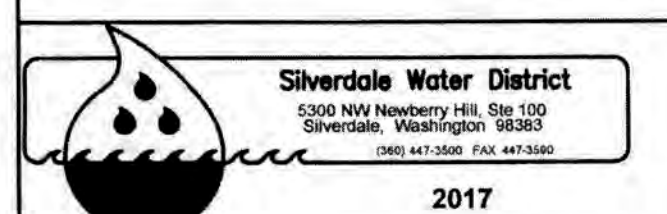
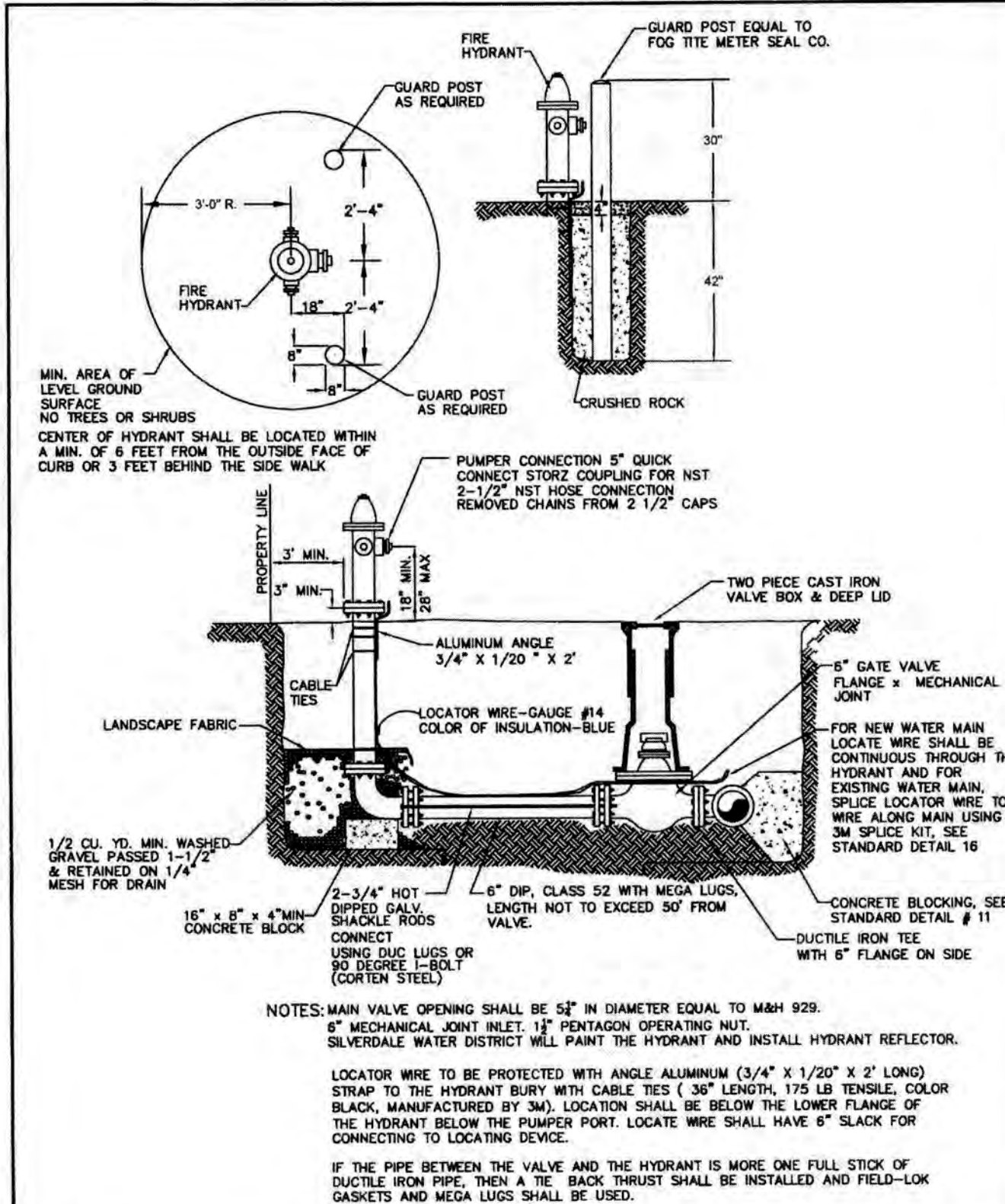
SHEET C7.10

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH SILVERDALE WATER DISTRICT OF KITSAP COUNTY, "CONDITIONS AND STANDARDS FOR CONSTRUCTING IMPROVEMENTS TO THE WATER SYSTEM", THE LATEST REVISIONS OF AWWA STANDARD SPECIFICATION, AND THE LATEST REVISION OF STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION BY WASHINGTON STATE D.O.T. AND WASHINGTON STATE CHAPTER, A.P.W.A.
2. THE CONTRACTOR SHALL COMPLY WITH ALL THE REQUIREMENTS OF STATE AND LOCAL HEALTH AUTHORITIES.
3. THE ROAD AND STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE AND INTENDED TO SHOW THE RELATIVE LOCATION OF THE PROPOSED WATER SYSTEM ONLY.
4. ALL LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXACT LOCATION TO AVOID DAMAGE OR DISTURBANCE.
5. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE CEMENT LINED.
6. THE MINIMUM COVER FOR WATER MAINS SHALL BE 3' AND SHALL BE MAINTAINED AT ALL POINTS.
7. INSTALLATION OF WATER MAINS AND SERVICE LINES SHALL INCLUDE LOCATOR WIRE BURIED ALONG THE ENTIRE LENGTH OF THE PIPE. LOCATOR WIRE TO BE 14 GAUGE. LOCATOR WIRE TO BE RUN TO 12" ABOVE GROUND AT EACH METER, BLOW OFF, AND AIR/VACUUM VALVE. ALL SPLICES IN THE LOCATOR WIRE SHALL BE MADE USING A 3M DIRECT BURY SPLICE KIT, MODEL DBY. THE KIT SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. THE WIRES SHALL BE TIED IN A KNOT 6" TO 8" FROM THE SPLICE.
8. ALL FIRE HYDRANTS SHALL INCLUDE AN APPROVED 5" STORZ ADAPTER ON THE PUMPER PORT.
9. GATE VALVES SHALL BE RESILIENT-SEATED GATE VALVES CONFORMING TO AWWA C-509. ALL EXISTING VALVES SHALL BE PRESSURE TESTED BY THE CONTRACTOR PRIOR TO CONNECTION.
10. ALL CUTTING, TAPPING, REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PIPE SHALL BE IN CONFORMANCE WITH THE CURRENT POLICIES AND PROCEDURES OF THE KITSAP COUNTY HEALTH DEPARTMENT, THE PUGET SOUND AIR POLLUTION CONTROL AGENCY AND OTHER PUBLIC OFFICES WITH JURISDICTION IN THIS MATTER. AT THIS TIME THE POLICY IS THAT:
 - A. PIPE SHALL BE "SNAPPED OFF" RATHER THAN BEING CUT WITH ABRASIVE SAW.
 - B. ABANDONED PIPE SHALL BE LEFT IN THE TRENCH OR DISPOSED OF IN AN APPROVED METHOD.
11. ABANDONED WATER MAINS SHALL BE LEFT IN THE GROUND UNLESS THEY MUST BE REMOVED BECAUSE OF CONFLICT. THE ENDS SHALL BE PLUGGED WITH CONCRETE.
12. ABANDONED VALVES SHALL HAVE THE OPERATOR NUT CUT OFF AND THE VALVE BOX REMOVED.



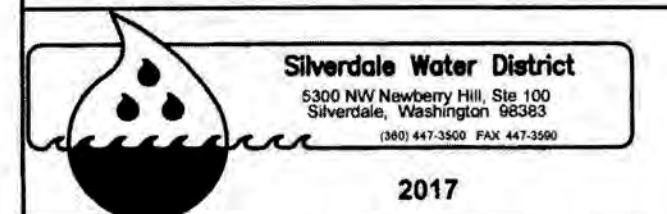
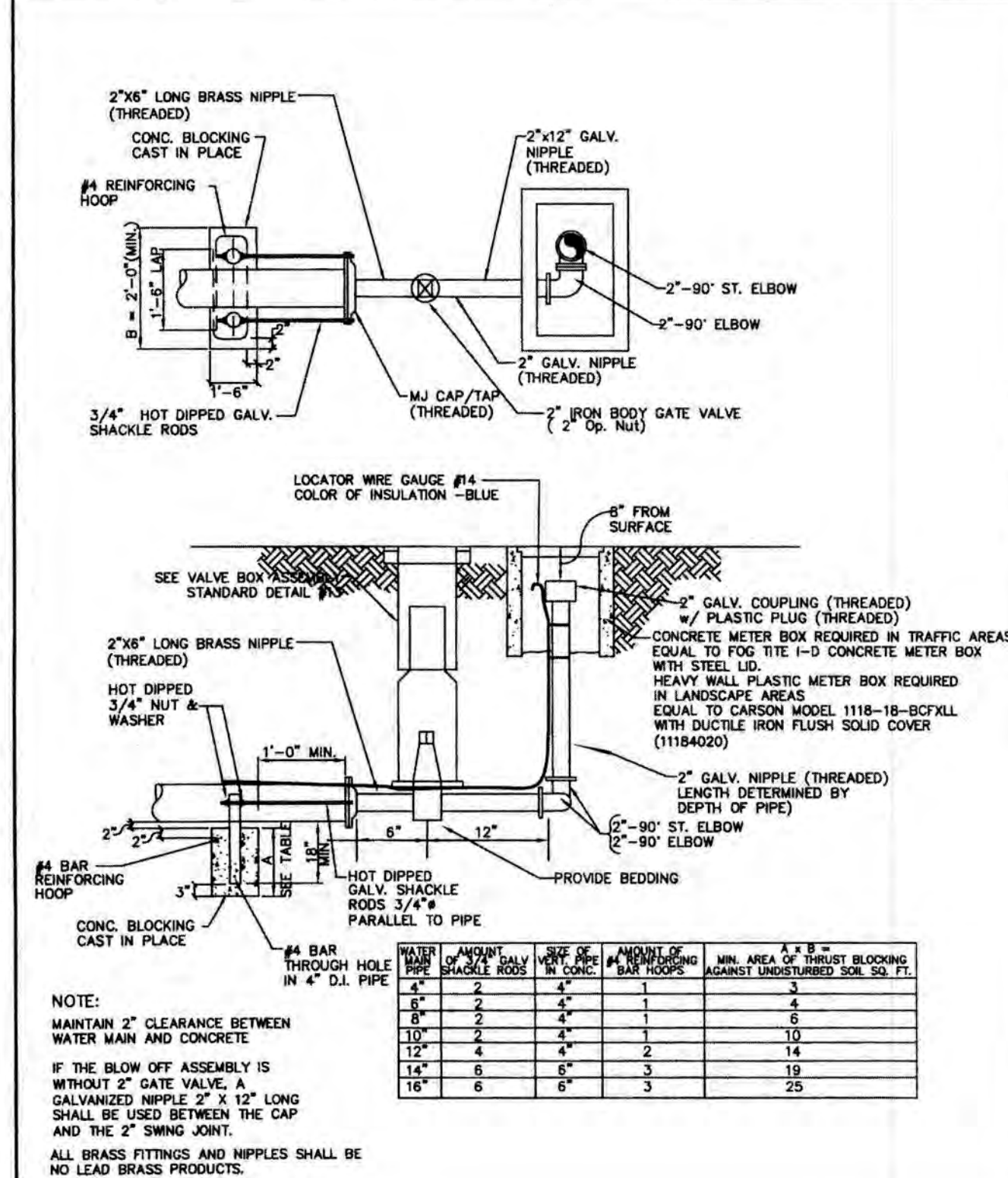
GENERAL NOTES

2017



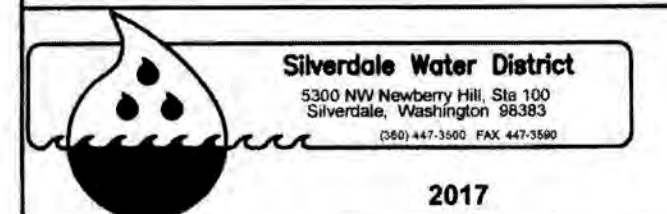
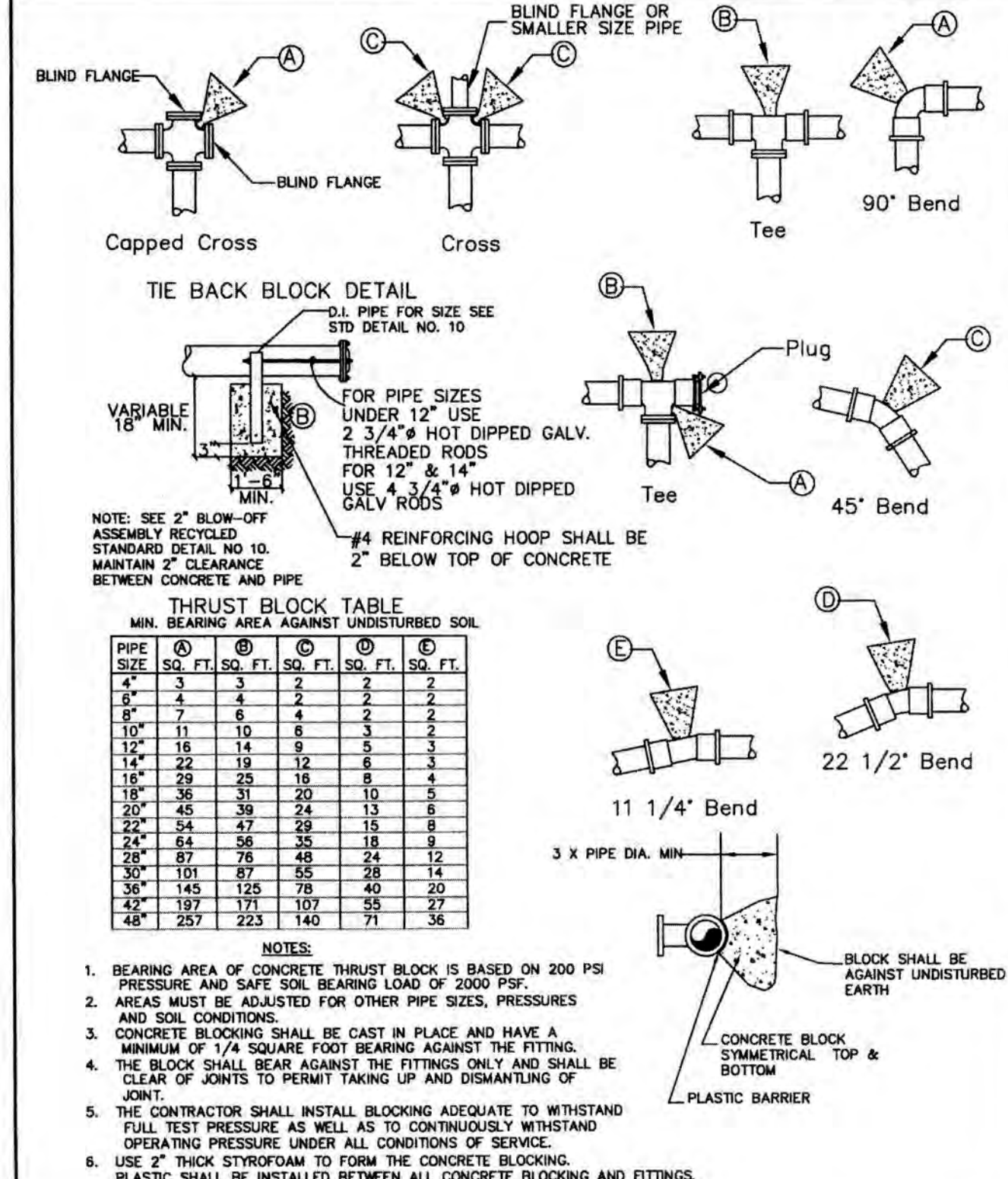
FIRE HYDRANT

2017 STANDARD DETAIL # 1



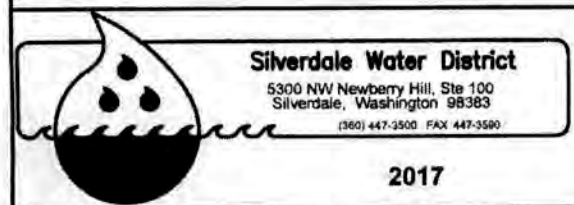
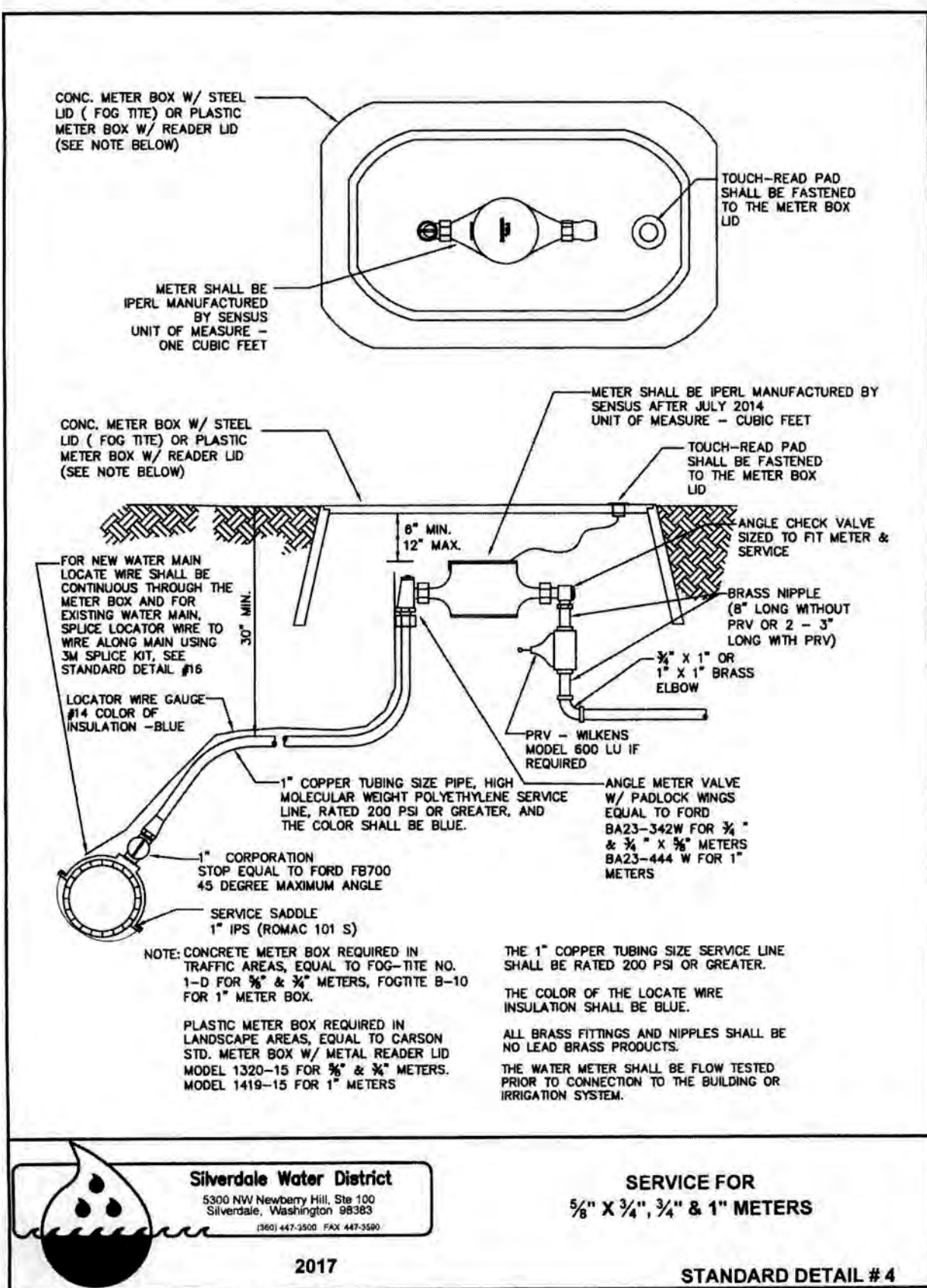
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2017 STANDARD DETAIL # 10



CONCRETE BLOCKING

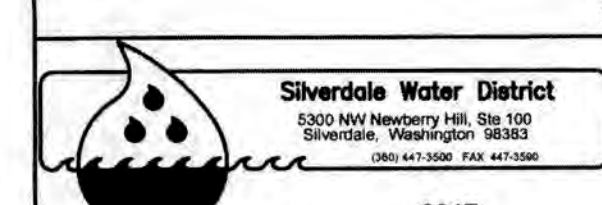
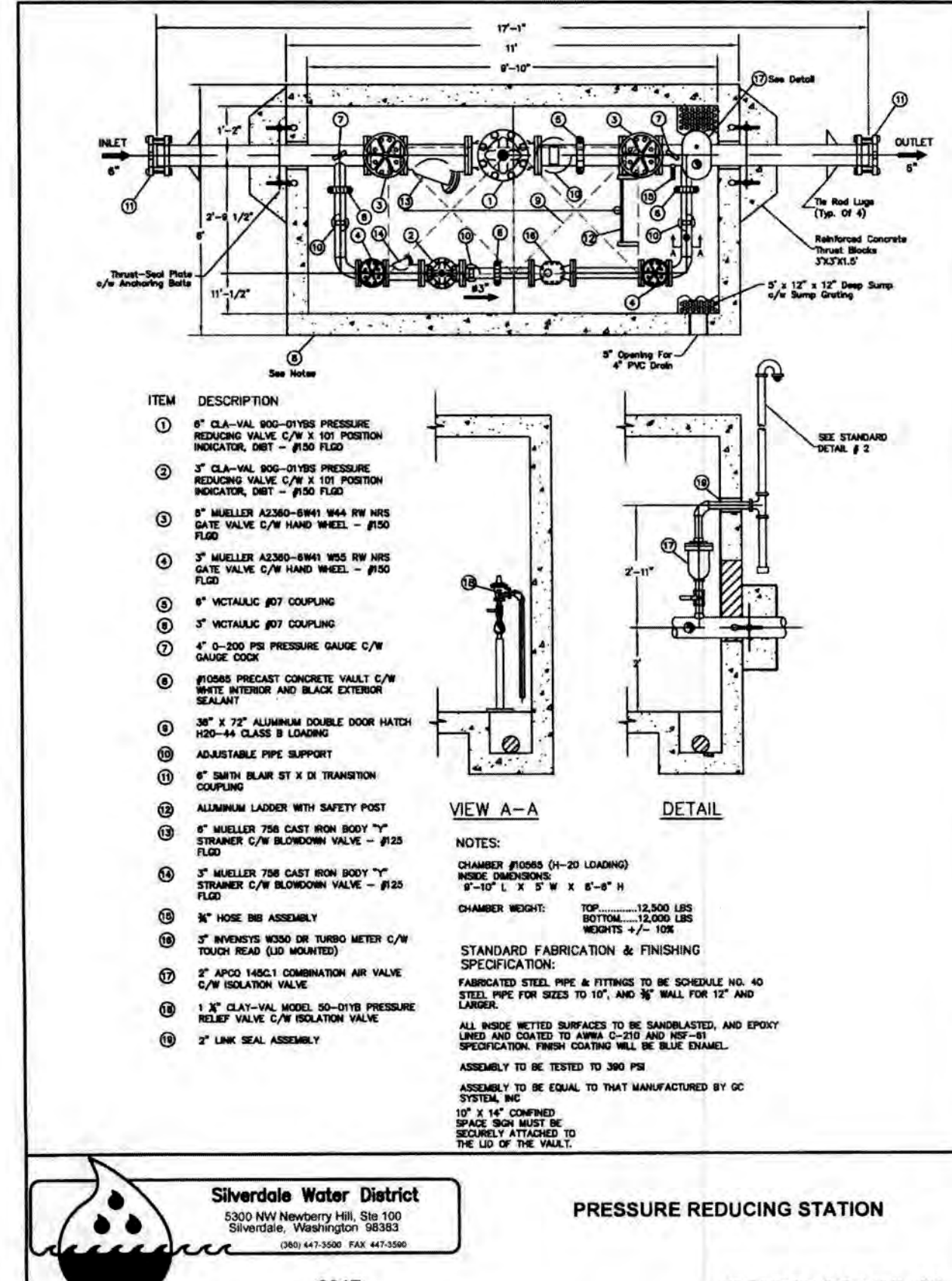
2017 STANDARD DETAIL # 11



SERVICE FOR

3/4\"/>

2017 STANDARD DETAIL # 4



PRESSURE REDUCING STATION

2017 STANDARD DETAIL # 9

WATER NOTES & DETAILS 2

RED BARN LANE PLAT / PBD
SITE DEVELOPMENT ACTIVITY PERMIT

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SCALE: 1"=40'

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SHEET C7.11

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