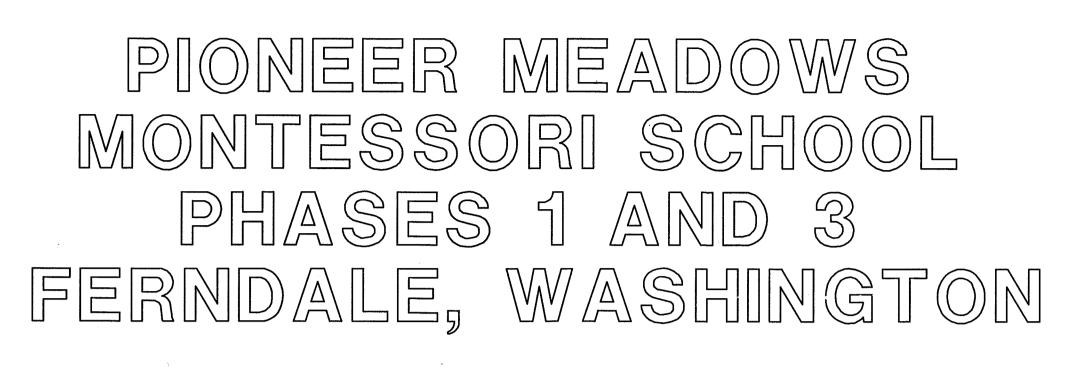
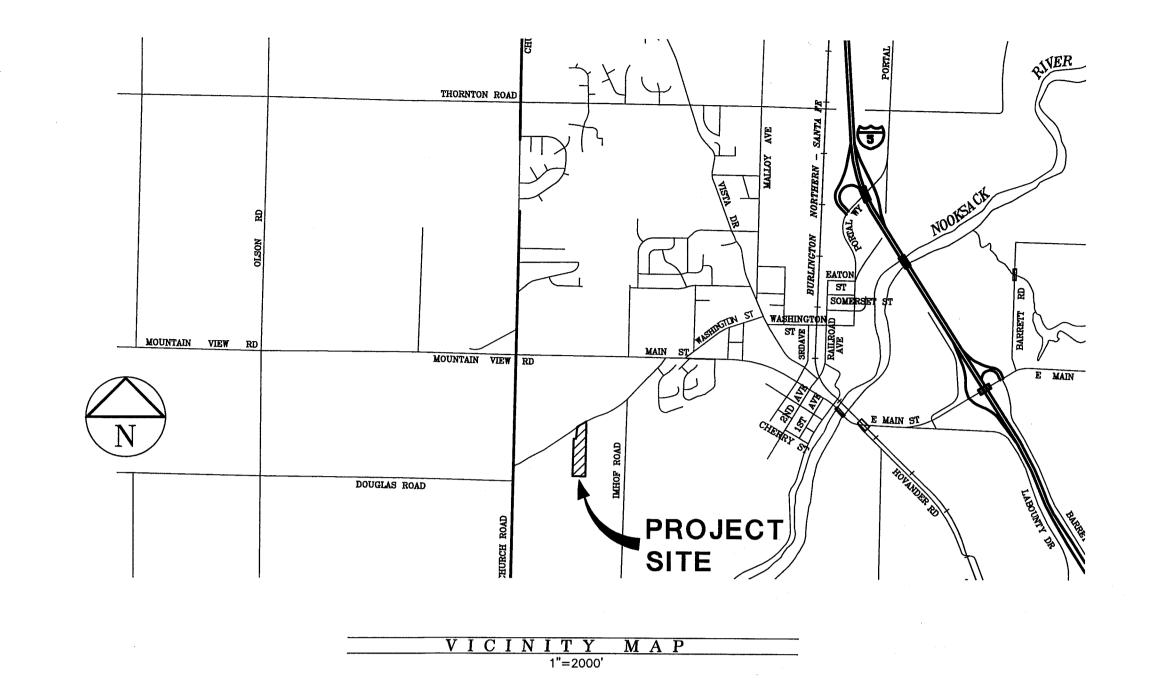
SECTION 30, T39N R2E, W.M.



CONSULTING ENGINEER:

DAVID EVANS AND ASSOCIATES, INC.



	DRAWING INDEX	LEGEND		
SHEET NO.	DRAWING TITLE	EXISTING	PROPOSED	DESCRIPTION
1	COVED SUEET	P	P	BURIED POWER
ı	COVER SHEET		P_	OVERHEAD POWER
	TOROGRAPHICAL SURVEY	COM-	COM	TELEPHONE
	TOPOGRAPHICAL SURVEY — EXISTING CONDITIONS —		SD	GAS
	EXISTING CONDITIONS	X		STORM DRAINAGE
3	STORMWATER POLLUTION PREVENTION PLAN	W	WA	SEWER WATER
	AND EROSION & SEDIMENTATION PLAN		SE SE	SILT FENCE
4	SWPPP NOTES AND DETAILS			— DITCH / BIOSWALE
7	SWITT NOTES AND DETAILS			RIGHT-OF-WAY
E	SITE PLAN DIMENSIONS AND CONTROL			EASEMENT
5	SITE PLAN DIMENSIONS AND CONTROL	100	100	CONTOUR
6	GRADING AND STORM DRAINAGE PLAN	X	<u> </u>	— FENCE
O	GRADING AND STORM DRAINAGE FLAN			ROAD CENTERLINE
7	SANITARY SEWER AND WATER PLAN	>	\	CULVERT
•		A	₩	FIRE HYDRANT
8	ROADWAY AND WATER MAIN PROFILE		•	CATCH BASIN
_		0	•	MANHOLE
9	ROADWAY AND STORM DETAILS		H	VALVE
				WATER METER
10	STANDARD DETAILS	Р	•-/ [D]	WATER BLOWOFF
	WATER OTANDARD RETAIL O		[P]	POWER VAULT
11	WATER STANDARD DETAILS		<u> </u>	TELEPHONE VAULT TELEPHONE RISER
		· · · · · · · · · · · · · · · · · · ·		SURFACE MONUMENT
			◎ ☆	TREES
			T	SIGN
				RIP RAP
		-0-	-	UTILITY POLE
			\rightarrow	GUY WIRE
			•	LIGHT POLE
				LUMINAIRE
				ASPHALT PAVEMENT
				PORTLAND CEMENT CONCRETI
				GRAVEL ROAD

GENERAL NOTES

- 1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION WASHINGTON STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS (STANDARD SPECIFICATIONS) AND STANDARD PLANS (STANDARD PLANS) FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AND THE CITY OF FERNDALE DEVELOPMENT STANDARDS (CITY STANDARDS), LATEST EDITION. ALL WORK AND MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE
- 2. UNDERGROUND UTILITIES ARE KNOWN TO EXIST IN THE AREA OF CONSTRUCTION. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PROJECT DRAWINGS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY OWNERS FOR LOCATIONS AND TO FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE ONE—CALL NUMBER FOR UNDERGROUND UTILITY LOCATES IS 1—800—424—5555. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND FOR NOTIFYING THE ENGINEER PROMPTLY OF ANY CONFLICTS WITH EXISTING UTILITIES.
- 3. PUBLIC RIGHTS—OF—WAY SHALL BE KEPT IN A CLEAN AND SERVICEABLE CONDITION AT ALL TIMES. IN THE EVENT THAT MATERIALS ARE INADVERTENTLY DEPOSITED IN PUBLIC RIGHTS—OF—WAY, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEPT AND REMOVED PRIOR TO ANY STREET WASHING. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION AND SEDIMENTATION. FAILURE TO MEET THESE REQUIREMENTS MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING AS—BUILT INFORMATION. AS—BUILT DRAWINGS SHALL INCLUDE THE EXACT LOCATION OF ALL UNDERGROUND AND ABOVE—GROUND UTILITIES. UPON COMPLETION OF THE PROJECT, THESE AS—BUILT DRAWINGS SHALL BE GIVEN TO THE PROJECT ENGINEER FOR INCORPORATION INTO THE PROJECT'S RECORD DRAWINGS.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES (SILT FENCE, STRAW BALE DAMS, SILT PONDS, ETC.), THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING.
- 6. ALL HARD SURFACE PAVEMENTS MUST BE REPAIRED AT THE CLOSE OF EACH WORK DAY. THE REPAIRS CAN BE TEMPORARY WITH ASPHALT COLD MIX OR PERMANENT WITH HOT MIX ASPHALT OR CONCRETE.

WATER MAIN SPECIFICATIONS

- 7. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTIONS 7-08 TO 7-15 AND THE CITY STANDARDS, SECTION 705, AND SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE.
- 8. ALL WORK MUST BE INSPECTED AND APPROVED BY A REPRESENTATIVE OF THE CITY OF FERNDALE DEPARTMENT OF PUBLIC WORKS. 24—HOURS NOTICE MUST BE GIVEN PRIOR TO STARTING WORK OR TO SCHEDULE INSPECTIONS.
- 9. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON, THICKNESS CLASS 50, WITH CEMENT LINING IN ACCORDANCE WITH A.W.W.A. STANDARD C151-71 AND CEMENT LINING C104-71. WATER FITTINGS SHALL BE DUCTILE IRON. JOINTS SHALL BE M.J., FLANGED OR PUSH-ON JOINTS AND SHALL CONFORM TO A.W.W.A. SPECIFICATIONS C110-71 AND C104-71
- 9A. ALL WATER SERVICE PIPE, 2" AND SMALLER, SHALL MEET THE STANDARD SPECIFICATIONS SECTION 7-09 AND CITY OF FERNDALE STANDARDS. PIPE TYPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE (PE), FOR POTABLE WATER SERVICE AND DISTRIBUTION SYSTEMS. PE PIPE SHALL BE NSF LISTED AND MEET ASTM F 714-01 FOR COPPER TUBE SIZE TUBING.

NOTES

- 10. PIPE LAYING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 7-09. ALL PIPE SHALL HAVE A MINIMUM COVER OF 3.5 FEET.
- 11. ALL VALVES SHALL BE RESILIENT SEAT GATE VALVES IN ACCORDANCE WITH CITY STANDARDS, SECTION 705.B.3.
- 12. ALL FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. W-1.
- 13. ALL BLOW OFFS SHALL BE IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. W-9 FOR EXTENDABLE MAIN.
- 14. HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTIONS 7-09.3(23) AND 7-09.3(24).
- 14A. DOUBLE CHECK VALVE ASSEMBLY SHALL BE ON STATE APPROVED LIST.

SEWER SPECIFICATIONS

- 15. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTIONS 7-08, 7-17 TO 7-19 AND THE CITY STANDARDS, SECTION 706, AND SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE.
- 16. ALL WORK MUST BE INSPECTED AND APPROVED BY A REPRESENT—ATIVE OF THE CITY OF FERNDALE DEPARTMENT OF PUBLIC WORKS. 24—HOURS NOTICE MUST BE GIVEN PRIOR TO STARTING WORK OR TO SCHEDULE INSPECTIONS.
- 17. TRENCH EXCAVATION AND BEDDING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 7-08.3(1)A & B AND WITH

CITY STANDARDS, DRAWING NO. SS-1 AND SS-15.

- 18. SANITARY PIPE MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 7-17.
- 19. PIPE LAYING SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 7-08.3(2).
- 20. ALL SIDE SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. SS-6, SS-8, AND SS-13.
- 21. ALL MANHOLES SHALL BE IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. SS-2 AND SHALL HAVE FIELD CONSTRUCTED
- 22. ALL CLEANOUTS SHALL BE IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. SS-5.
- 23. ALL SEWER PIPE SHALL BE CLEANED AND AIR PRESSURE TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 7—17.3(2).

STREET SPECIFICATIONS

CHANNEL AND SHELF.

24. THE OWNER SHALL PROVIDE TO THE ENGINEER A REPORT FROM A QUALIFIED GEOTECHNICAL FIRM CERTIFYING THE COMPACTION OF THE GRAVEL BASE UNDER ALL PAVED AREAS.

- 25. ASPHALT CONCRETE PAVEMENT SHALL BE CLASS "B". MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 5-04, EXCEPT AS MODIFIED HEREIN. CONNECTIONS TO EXISTING PAVEMENT SHALL BE TO A STRAIGHT, NEATLY-TRIMMED LINE.
- 26. CRUSHED ROCK SURFACING FOR PAVEMENT BASE SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION, SECTION 9-03.9(3); BALLAST PER SECTION 9-03.9(1).
- 27. CEMENT CONCRETE SHALL BE CLASS 3000 (WITH AIR ENTRAINMENT) IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 6-
- 28. CEMENT CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER, IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. R-12.
- 29. CEMENT CONCRETE DRIVEWAYS SHALL BE 6 INCHES THICK AND CONSTRUCTED WHERE SHOWN ON THE PLANS OR DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. R-15. A 2-INCH LAYER OF 3/4 INCH DRAIN ROCK SHALL BE USED FOR DRIVEWAY BEDDING.
- 30. CEMENT CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER, IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 8-04 AND CITY STANDARDS, DRAWING NO. R-8 AND R-9. HANDICAP RAMPS SHALL BE CONSTRUCTED PER F-40.10-01, WSDOT STANDARD PLANS. WHERE NEW CEMENT CONCRETE CURB AND GUTTER IS TO BE CONSTRUCTED TO CONNECT TO EXISTING CURBED ROADWAY, CARE SHALL BE TAKEN TO ASSURE THAT NO ABRUPT OFFSETS IN LINE OR GRADE SHALL BE CONSTRUCTED WHICH WILL BE UNSIGHTLY OR IMPEDE FLOW IN THE
- 31. THRU-CURB BASINS AND THRU-CURB INLETS CONFORMING TO THE STANDARD SPECIFICATIONS, SECTION 7-05 SHALL BE CONSTRUCTED AT THE LOW POINTS OF THE CURBS AND TO THE LOCATIONS, DIMENSIONS, AND DETAILS AS SHOWN ON THE PLANS OR DESIGNATED BY THE ENGINEER AND CITY STANDARDS, DRAWING NO. R-8.
- 32. TRENCH EXCAVATIONS, BEDDING, AND PIPE FOR STORMWATER PIPE LAYING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 7-08.
- 33. STORM SEWER PIPE CONSTRUCTION REQUIREMENTS
 SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION,
 SECTION 7-04. MATERIAL SHALL BE HANCOR SURE-LOK F477 PIPE
 OR CITY APPROVED EQUAL. LOTS STORM DRAIN SERVICE LINE SHALL
 BE 6" PVC PER THE STANDARD SPECIFICATIONS, SECTION 9-05.1(5).
- 34. PERFORATED UNDERDRAIN PIPE SHALL MEET THE STANDARD SPECIFICATIONS SECTION 9-05.2(6).

MISCELLANEOUS NOTES

FOR SURVEYOR'S AND ENGINEER'S

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CERTIFICATION SEE SHEETS 5, 6 AND 7

35. RIP-RAP SHALL BE "HAND PLACED RIP-RAP" IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 9-13.2.

APPROVE

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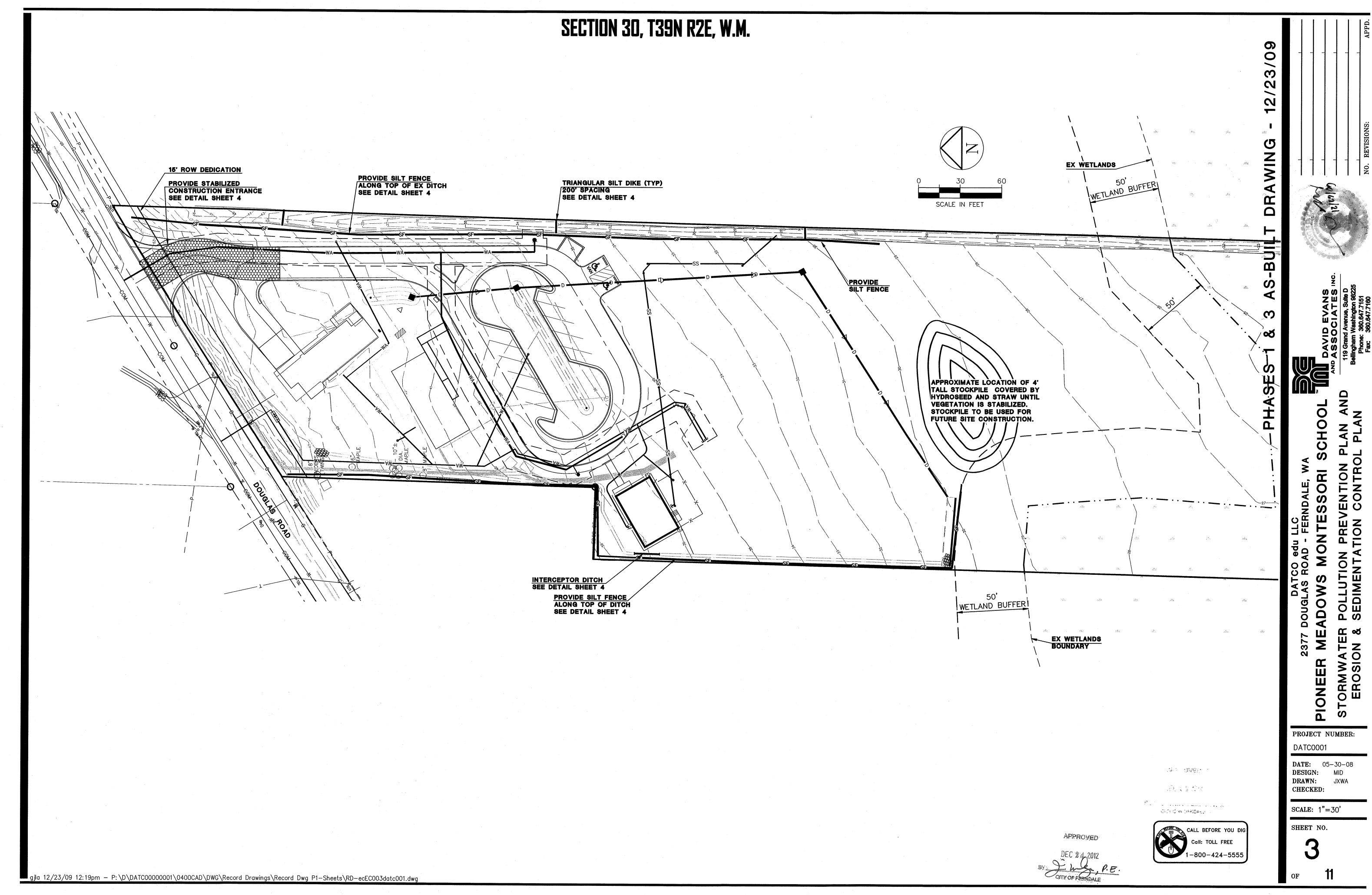
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SECTION 30, T39N R2E, W.M.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

THIS STORMWATER POLLUTION PREVENTION PLAN IS PROVIDED IN ACCORDANCE WITH THE TERMS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR CONSTRUCTION ACTIVITIES FOR THIS PROJECT. THE CONTRACTOR IS ADVISED THAT THE PROJECT AREA DRAINS TO WETLANDS AND/OR STATE WATERS AND THAT THE CONTRACTOR IS RESPONSIBLE TO PROTECT THE RECEIVING WATERS FROM DELETERIOUS EFFECTS OF

THE CONTRACTOR IS REQUIRED TO HAVE A COPY OF THE NPDES PERMIT AS WELL AS THE SWPPP ON SITE AT ALL TIMES.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE EROSION CONTROL MEASURES SHOWN OR DESCRIBED IN THE CONTRACT DOCUMENTS AND ANY ADDITIONAL MEASURES THAT MAY BE REQUIRED BY THE CONTRACTORS MEANS AND METHODS OF CONSTRUCTION AS NEEDED TO CONTROL EROSION AND SEDIMENT AT THE CONSTRUCTION SITE AND TO PREVENT VIOLATION OF SURFACE WATER QUALITY, GROUND WATER QUALITY, OR SEDIMENT MANAGEMENT STANDARDS. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED EARTH IS STABILIZED

THE FOLLOWING DESCRIBES HOW THE CONSTRUCTION SWPPP ADDRESSES EACH OF THE 12 REQUIRED ELEMENTS. REFER TO THESE PLANS FOR DRAWINGS OF THE PROJECT, VICINITY MAP, SITE MAP, CONVEYANCE SYSTEMS, EROSION AND SEDIMENT CONTROL MEASURES, AND EROSION AND SEDIMENT CONTROL DETAILS.

ELEMENT #1: PRESERVE VEGETATION/MARK CLEARING LIMITS . PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES (INCLUDING CLEARING AND GRADING) CLEARLY MARK ALL CLEARING LIMITS AND TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA AS SHOWN ON THE DRAWINGS.

SILT FENCE, GEOTEXTILE ENCASED BARRIERS, CONSTRUCTION FENCE, ORANGE PLASTIC FENCE, OR OTHER APPROVED MEASURES MAY BE USED TO MARK THE CLEARING LIMITS AT THE CONTRACTOR'S OPTION.

THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION SHALL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM DEGREE PRACTICABLE. SUGGESTED BMPs/BMPs TO BE USED:

BMP C101: PRESÉRVING NATIVE VEGETATION

ELEMENT #2: ESTABLISH CONSTRUCTION ACCESS

1. CONSTRUCTION VEHICLE ACCESS AS PER DOE MANUAL BMP C105. REFER TO SHEET 1 OF THESE PLANS FOR THE CONSTRUCTION ENTRANCE LOCATIONS. ALL ACCESS/EXIT POINTS SHALL BE STABILIZED WITH QUARRY SPALLS, CRUSHED ROCK OR OTHER EQUIVALENT BMP, TO MINIMIZE THE TRACKING OF SEDIMENT

2. IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT EFFECTIVE IN PREVENTING SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADS, WHEEL WASH OR TIRE BATHS SHALL BE LOCATED ON SITE.

3. IF SEDIMENT IS TRACKED OFF SITE, PUBLIC ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY, OR MORE FREQUENTLY DURING WET WEATHER. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR PICKUP SWEEPING AND SHALL BE TRANSPORTED TO A CONTROLLED SEDIMENT

4. STREET WASHING IS ALLOWED ONLY AFTER SEDIMENT IS REMOVED AS DESCRIBED ABOVE. STREET WASH WASTEWATER SHALL BE CONTROLLED BY PUMPING BACK ON SITE OR OTHERWISE BE PREVENTED FROM FROM DISCHARGING INTO SYSTEMS TRIBUTARY TO WATERS OF THE STATE.

SUGGESTED BMPs/BMPs TO BE USED: BMP C105: STABILIZED CONSTRUCTION ENTRANCE

ELEMENT #3: CONTROL FLOW RATES

1. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VELOCITY AND PEAK VOLUMETRIC FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE.

SEDIMENT CONTROL BMPs SHALL BE CONSTRUCTED AS ONE OF THE FIRST STEPS IN GRADING. THESE BMPs SHALL BE FUNCTIONAL BEFORE OTHER LAND DISTURBING ACTIVITIES TAKE PLACE.

3. PRIOR TO LEAVING THE CONSTRUCTION SITE, STORMWATER RUNOFF FROM DISTURBED AREAS SHALL PASS THROUGH AN APPROPRIATE SEDIMENT REMOVAL BMP. RUNOFF FROM FULLY STABILIZED AREAS MAY BE DISCHARGED WITHOUT A SEDIMENT REMOVAL BMP, BUT MUST MEET THE FLOW CONTROL PERFORMANCE STANDARD OF ELEMENT #3.

SUGGESTED BMPs/BMPs TO BE USED: BMP C233: SILT FENCE

BMP C241: TEMPORARY SEDIMENT POND

ELEMENT #5: STABILIZE SOILS EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY APPLICATION OF EFFECTIVE BMPs THAT PROTECT THE SOIL FORM EROSIVE FORCES OF RAINDROPS. FLOWING WATER, AND WIND.

TO PREVENT EROSION, NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN THE TIME PERIODS SET FORTH BELOW:

DURING THE WET SEASON (OCTOBER 1 - APRIL 30): 2 DAYS

DURING THE DRY SEASON (MAY 1 - SEPT. 30): 7 DAYS

THIS STABILIZATION REQUIREMENT APPLIES TO ALL SOILS ON SITE, WHETHER AT FINAL GRADE OR NOT. THESE TIMES MAY BE ADJUSTED BY THE LOCAL PERMITTING AUTHORITY IF IT CAN BE SHOWN THAT SITE CONDITIONS OR THE AVERAGE TIME BETWEEN STORM EVENTS JUSTIFIES A DIFFERENT STANDARD.

3. SOILS SHALL BE STABILIZED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST.

4. SOIL STOCKPILES SHALL BE STABILIZED FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND WHERE POSSIBLE, BE LOCATED AWAY FROM STORM DRAIN INLETS, WATERWAYS, AND DRAINAGE CHANNELS.

5. APPLICABLE BMPs INCLUDE, BUT ARE NOT LIMITED TO: TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING, SOIL APPLICATION OF POLYACRYLAMIDE (PAM), THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED AND DUST CONTROL. SELECT SOIL STABILIZATION MEASURES SHALL BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, ESTIMATED DURATION OF USE, AND THE POTENTIAL WATER QUALITY IMPACTS.

6. REMOVE ALL TESC MEASURES AS SOON AS PRACTICAL AFTER ESTABLISHMENT OF UNIFORM GRASS GROWTH OR INSTALLATION OF OTHER PERMANENT STABILIZATION MEASURES. REPAIR ANY DAMAGE TO STABILIZED SURFACES AFTER REMOVAL OF TESC MEASURES.

SUGGESTED BMPs/BMPs TO BE USED: BMP C120: TEMPÓRARY AND PERMANENT SEEDING

BMP C121: MULCHING BMP C122: NETS AND BLANKETS

BMP C123: PLASTIC COVERING

BMP C130: SURFACE ROUGHENING BMP C140: DUST CONTROL

ELEMENT #6: PROTECT SLOPES

1. DESIGN, CONSTRUCT, AND PHASE CUT AND FILL SLOPES IN A MANNER THAT WILL MINIMIZE EROSION. APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, REDUCING CONTINUOUS LENGTH OF SLOPE WITH TERRACING AND DIVERSIONS, REDUCING SLOPE STEEPNESS, AND ROUGHENING SLOPE SURFACES (e.g., TRACK

2. OFF-SITE STORMWATER RUN-ON OR GROUNDWATER SHALL BE DIVERTED AWAY FROM SLOPES AND DISTURBED AREAS WITH INTERCEPTOR DIKES, PIPES, AND/OR SWALES. OFF-SITE STORMWATER SHOULD BE MANAGED SEPARATELY FROM STORMWATER GENERATED ON THE SITE.

3. DO NOT CLEAR AND GRUB SLOPES GREATER THAN 4 (HORIZONTAL):1 (VERTICAL) UNLESS FURTHER WORK RESULTING IN STABILIZATION OF THE SLOPES TO BE CLEARED AND GRUBBED IS SCHEDULED.

4. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES, CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS.

CHECK DAMS SHALL BE PLACED AT REGULAR INTERVALS WITHIN CONSTRUCTED CHANNELS THAT ARE CUT DOWN A SLOPE.

SUGGESTED BMPs/BMPs TO BE USED:

BMP C120: TEMPORARY AND PERMANENT SEEDING BMP C130: SURFACE ROUGHENING BMP C200: INTERCEPTOR DIKE AND SWALE

BMP C207: CHECK DAMS BMP C208: TRIANGULAR SILT DIKE

ELEMENT #7: PROTECT DRAIN INLETS

1. ALL STORM DRAIN INLETS OPERABLE DURING CONSTRUCTION AND ALL INLETS WITHIN 200' DOWNSTREAM OF THE PROJECT SITE SHALL BE PROTECTED WITH CATCH BASIN FILTERS SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT. CATCH BASIN FILTERS IN THE ROADWAY WILL BE OIL/SEDIMENT FILTERS AND CATCH BASIN FILTERS OUTSIDE OF THE ROADWAY WILL BE SEDIMENT

2. APPROACH ROADS SHALL BE KEPT CLEAN. SEDIMENT AND STREET WASH WATER SHALL NOT BE ALLOWED TO ENTER STORM DRAINS WITHOUT PRIOR AND ADEQUATE TREATMENT.

3. INLET PROTECTION DEVICES SHOULD BE CLEANED OR REMOVED AND REPLACED WHEN SEDIMENT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE (OR WHEN FILLED WITH SIX-INCHES OF SEDIMENT).

BMPs TO BE USED: BMP C220: STORM DRAIN INLET PROTECTION

ELEMENT #8: STABILIZE CHANNELS AND OUTLETS

1. ALL TEMPORARY ON-SITE CONVEYANCE CHANNELS SHALL BE DESIGNED, CONSTRUCTED AND STABILIZED TO PREVENT EROSION FROM THE EXPECTED PEAK 10 MINUTE VELOCITY OF FLOW FROM A TYPE 1A, 10-YR, 24-HR FREQUENCY STORM FOR THE DEVELOPED CONDITION. ALTERNATIVELY, THE 10-YR, 1-HR FLOW RATE INDICATED BY AN APPROVED CONTINUOUS RUNOFF MODEL, INCREASED BY A

2. STABILIZATION, INCLUDING ARMORING MATERIAL, ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES, AND DOWNSTREAM REACHES SHALL BE PROVIDED AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.

SUGGESTED BMPs/BMPs TO BE USED:

FACTOR OF 1.6, MAY BE USED.

BMP C202: CHANNEL LINING BMP C209: OUTLET PROTECTION

ELEMENT #9: CONTROL POLLUTANTS

1. ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS THAT OCCUR ONSITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.

COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND ELEMENT #4: INSTALL SEDIMENT CONTROLS

1. THE DUFF LAYER, NATIVE SOIL, AND NATURAL VEGETATION SHALL BE RETAINED

OTHER MATERIALS THAT HAVE THE POTENTIAL TO POSE A THREAT TO HUMAN THE ENVIRONMENT. ON—SITE FUELING TANKS SHALL INCLUDE

SECONDARY CONTAINMENT. OTHER MATERIALS THAT HAVE THE POTENTIAL TO POSE A THREAT TO HUMAN SECONDARY CONTAINMENT.

> . MAINTENANCE, FUELING, AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES SHALL BE CONDUCTED USING SPILL PREVENTION AND CONTROL MEASURES. CONTAMINATED SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY SPILL

4. WHEEL WASH OR TIRE BATH WASTEWATER SHALL BE DISCHARGED TO A SEPARATE ON-SITE TREATMENT SYSTEM OR TO THE SANITARY SEWER WITH LOCAL SEWER DISTRICT APPROVAL.

5. APPLICATION OF FERTILIZERS AND PESTICIDES, SHALL BE CONDUCTED IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. MANUFACTURERS' LABEL REQUIREMENTS FOR APPLICATION RATES AND PROCEDURES SHALL BE FOLLOWED.

. BMPs SHALL BE USED TO PREVENT OR TREAT CONTAMINATION OF STORMWATER RUNOFF BY pH MODIFYING SOURCES. THESE SOURCES INCLUDE. BUT ARE NOT LIMITED TO: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHING AND CURING WATERS, WASTE STREAMS GENERATED FROM CONCRETE GRINDING AND SAWING, EXPOSED AGGREGATE PROCESSES, AND CONCRETE PUMPING AND MIXER WASHOUT WATERS. PERMITTEES SHALL ADJUST THE pH OF STORMWATER IF NECESSARY TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS.

7. PERMITTEES SHALL OBTAIN WRITTEN APPROVAL FROM ECOLOGY PRIOR TO USING CHEMICAL TREATMENT, OTHER THAN CARBON DIOXIDE OR DRY ICE TO

SUGGESTED BMPs/BMPs TO BE USED:

ELEMENT #10: CONTROL DEWATERING 1. FOUNDATION, VAULT, AND TRENCH DE-WATERING WATER, WHICH HAVE SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE, SHALL BE DISCHARGED INTO A CONTROLLED CONVEYANCE SYSTEM PRIOR TO DISCHARGE TO A SEDIMENT TRAP OR SEDIMENT POND.

. CLEAN, NON-TURBID DE-WATERING WATER, SUCH AS WELL-POINT GROUND WATER, CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO, OR DIRECTLY INTO SURFACE WATERS OF THE STATE, AS SPECIFIED IN ELEMENT #8. PROVIDED THE DE-WATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF RECEIVING WATERS. CLEAN DE-WATERING WATER SHOULD NOT BE ROUTED THROUGH STORMWATER SEDIMENT PONDS.

3. OTHER DE-WATERING DISPOSAL OPTIONS MAY INCLUDE:

b) TRANSPORT OFF SITE IN A VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE

c) ECOLOGY APPROVED ON-SITE CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES. d) SANITARY SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, IF

THERE IS NO OTHER OPTION. e) USE OF A SEDIMENTATION BAG (DIRTBAG OR APPROVED EQUAL) WITH OUTFALL TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DE-WATERING.

4. HIGHLY TURBID CONTAMINATED DEWATERING WATER FROM CONSTRUCTION EQUIPMENT OPERATION, CLAMSHELL DIGGING, CONCRETE TREMIE POUR, OR WORK INSIDE A COFFERDAM SHALL BE HANDLED SEPARATELY FROM STORMWATER.

ELEMENT #11: MAINTAIN BMPs

1. INSPECT EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. MAKE NECESSARY REPAIRS AND MAINTENANCE TO ENSURE CONTINUED PERFORMANCE OF EROSION AND SEDIMENT CONTROLS.

WHEN SEDIMENT ACCUMULATION IN SEDIMENTATION STRUCTURES, OTHER THAN INLET PROTECTION DEVICES, HAS REACHED A POINT ONE-THIRD DEPTH OF SEDIMENT STRUCTURE OR DEVICE, OR IF FLOW THROUGH THE DEVICE IS REDUCED BY MORE THAN ONE-THIRD CAPACITY, THE CONTRACTOR SHALL REMOVE AND REPLACE DISPOSABLE DEVICES OR CLEAN AND DISPOSE OF SEDIMENT.

REMOVED OR STABILIZED ON SITE. DISTURBED SOILS SHALL BE PERMANENTLY 4. TEMPORARY SEDIMENT POND AND CONTROL STRUCTURE WILL BE USED FOR A PERMANENT DETENTION POND IN FUTURE AND SEDIMENTS SHALL BE EXCAVATED

3. TEMPORARY EROSION AND SEDIMENT CONTROL BMPs SHALL BE REMOVED

WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE

TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE

1. PHASING OF CONSTRUCTION:

OUT PRIOR TO FINAL CONSTRUCTION.

a) DEVELOPMENT PROJECTS SHALL BE PHASED WHERE FEASIBLE IN ORDER TO PREVENT, TO THE MAXIMUM EXTENT PRACTICABLE, THE TRANSPORT OF SEDIMENT FROM THE DEVELOPMENT SITE DURING CONSTRUCTION. REVEGETATION OF EXPOSED AREAS AND MAINTENANCE OF THAT VEGETATION SHALL BE AN INTEGRAL PART OF THE CLEARING ACTIVITIES FOR ANY PHASE.

b) CLEARING AND GRADING ACTIVITIES FOR DEVELOPMENTS SHALL BE PERMITTED ONLY IF CONDUCTED PURSUANT TO AN APPROVED SITE DEVELOPMENT PLAN (e.g., SUBDIVISION APPROVAL) THAT ESTABLISHES APPROVED AREAS OF CLEARING, GRADING, CUTTING AND FILLING. WHEN ESTABLISHING THESE PERMITTED CLEARING AND GRADING AREAS, CONSIDERATION SHOULD BE GIVEN TO MINIMIZING REMOVAL OF EXISTING TREES AND MINIMIZING DISTURBANCE AND COMPACTION OF NATIVE SOILS EXCEPT AS NEEDED FOR BUILDING PURPOSES. THESE PERMITTED CLEARING AND GRADING AREAS AND ANY OTHER AREAS REQUIRED TO PRESERVE CRITICAL OR SENSITIVE AREAS. BUFFERS. NATIVE GROWTH PROTECTION EASEMENTS, OR TREE RETENTION AREAS AS MAY BE REQUIRED BY LOCAL JURISDICTIONS, SHALL BE DELINEATED ON THE SITE PLANS AND THE DEVELOPMENT SITE.

2. SEASONAL WORK LIMITATIONS: FROM OCTOBER 1 THROUGH APRIL 30, CLEARING, GRADING, AND OTHER SOIL DISTURBING ACTIVITIES SHALL ONLY BE PERMITTED IF SHOWN TO THE

SATISFACTION OF THE LOCAL PERMITTING AUTHORITY THAT THE TRANSPORT OF SEDIMENT FROM THE CONSTRUCTION SITE TO RECEIVING WATERS WILL BE PREVENTED THROUGH A COMBINATION OF THE FOLLOWING: a) SITE CONDITIONS INCLUDING EXISTING VEGETATIVE COVERAGE, SLOPE, SOIL TYPE. AND PROXIMITY TO RECEIVING WATERS; AND b) LIMITATIONS ON ACTIVITIES AND THE EXTENT OF DISTURBED AREAS; AND) PROPOSED EROSION AND SEDIMENT CONTROL MEASURES.

BASED ON THE INFORMATION PROVIDED AND LOCAL WEATHER CONDITIONS, THE LOCAL PERMITTING AUTHORITY MAY EXPAND OR RESTRICT THE SEASONAL LIMITATION ON SITE DISTURBANCE. THE LOCAL PERMITTING AUTHORITY SHALL TAKE ENFORCEMENT ACTION - SUCH AS NOTICE OF VIOLATION, ADMINISTRATIVE ORDER, PENALTY, OR STOP—WORK ORDER UNDER THE FOLLOWING CIRCUMSTANCES:

- IF, DURING THE COURSE OF ANY CONSTRUCTION ACTIVITY OR SOIL DISTURBANCE DURING THE SEASONAL LIMITATION PERIOD, SEDIMENT LEAVES THE CONSTRUCTION SITE CAUSING A VIOLATION OF THE SURFACE WATER QUALITY STANDARD; OR - IF CLEARING AND GRADING LIMITS OR EROSION AND SEDIMENT CONTROLS MEASURES SHOWN IN THE APPROVED PLAN ARE NOT MAINTAINED.

THE FOLLOWING ACTIVITIES ARE EXEMPT FROM THE SEASONAL CLEARING AND GRADING LIMITATIONS: a) ROUTINE MAINTENANCE AND NECESSARY REPAIR OF EROSION AND SEDIMENT

b) ROUTINE MAINTENANCE OF PUBLIC FACILITIES OR EXISTING UTILITY STRUCTURES THAT DO NOT EXPOSE THE SOIL OR RESULT IN THE REMOVAL OF THE VEGETATIVE COVER TO SOIL: AND c) ACTIVITIES WHERE THERE IS ONE HUNDRED PERCENT INFILTRATION OF SURFACE WATER RUNOFF WITHIN THE SITE IN APPROVED AND INSTALLED

3. COORDINATE WITH UTILITIES AND OTHER CONTRACTORS THE PRIMARY PROJECT PROPONENT SHALL EVALUATE, WITH INPUT FROM UTILITIES AND OTHER CONTRACTORS. THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE ENTIRE PROJECT, INCLUDING THE UTILITIES, WHEN PREPARING THE

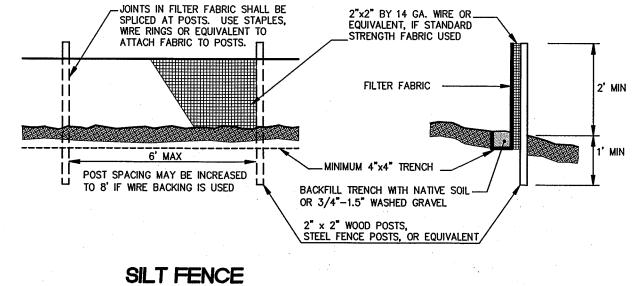
4. INSPECTION AND MONITORING:

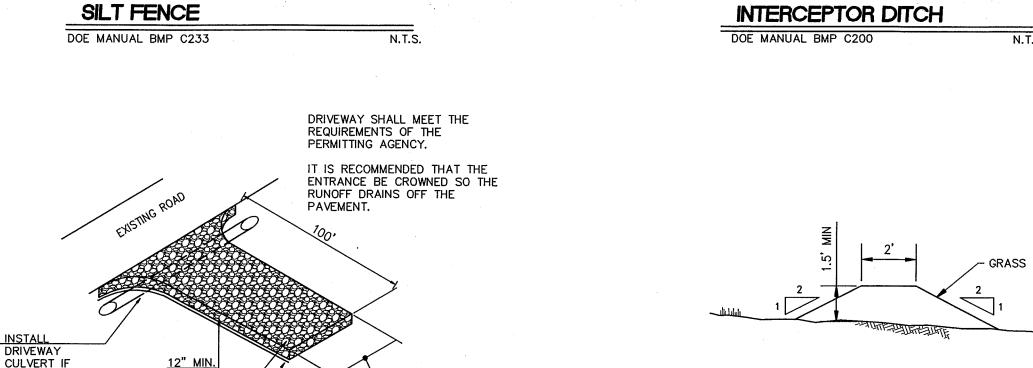
EROSION AND SEDIMENT CONTROL FACILITIES.

a) A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL SHALL BE IDENTIFIED AT THE PRE-CONSTRUCTION MEETING AND SHALL BE ON-SITE OR ON-CALL AT ALL TIMES. EMERGENCY CONTACT INFORMATION SHALL BE KEPT ON-SITE. CERTIFICATION MAY BE THROUGH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM OFFERED BY WSDOT, ASSOCIATED GENERAL CONTRACTORS OF WASHINGTON - EDUCATION FOUNDATION, OR ANY EQUIVALENT LOCAL OR NATIONAL CERTIFICATION AND/OR TRAINING PROGRAM.

b) IF INSPECTION AND/OR WATER MONITORING OF SITE RUNOFF REVEALS THAT THE BMPs IDENTIFIED IN THE CONSTRUCTION SWPPP ARE INADEQUATE, THE CONTRACTOR SHALL IMMEDIATELY ADD BMPs TO THE SWPPP AS NECESSARY.

5. THE CONSTRUCTION SWPPP SHALL BE RETAINED ON-SITE. THE CONTRACTOR'S TESC RECORD OF RAINFALL, TESC MEASURES, AND INSPECTION SHALL BECOME PART OF THE SWPPP. THE CONSTRUCTION SWPPP SHALL BE MODIFIED BY THE CONTRACTOR'S TESC RECORD WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR





STABILIZED CONSTRUCTION ENTRANCE

PROVIDE FULL WIDTH

OF INGRESS/EGRESS

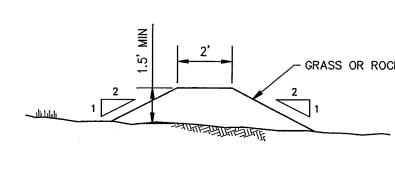
15' MIN.

THERE IS

PRESENT

ROADSIDE DITCH

4" TO 8"
QUARRY SPALLS



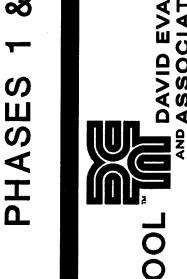
CHECK DAMS TO BE PLACED AT 100' O.C. ALONG

LENGTH OF INTERCEPTOR DITCH.

LEVEL BOTTOM

- GRASS OR ROCK

INTERCEPTOR DIKE



3

O 0 S S 0 0 -0 G 0

PROJECT NUMBER:

O

DATC0001 **DATE:** 05-30-08 DESIGN: MID DRAWN: KLST CHECKED:

SCALE: AS NOTED

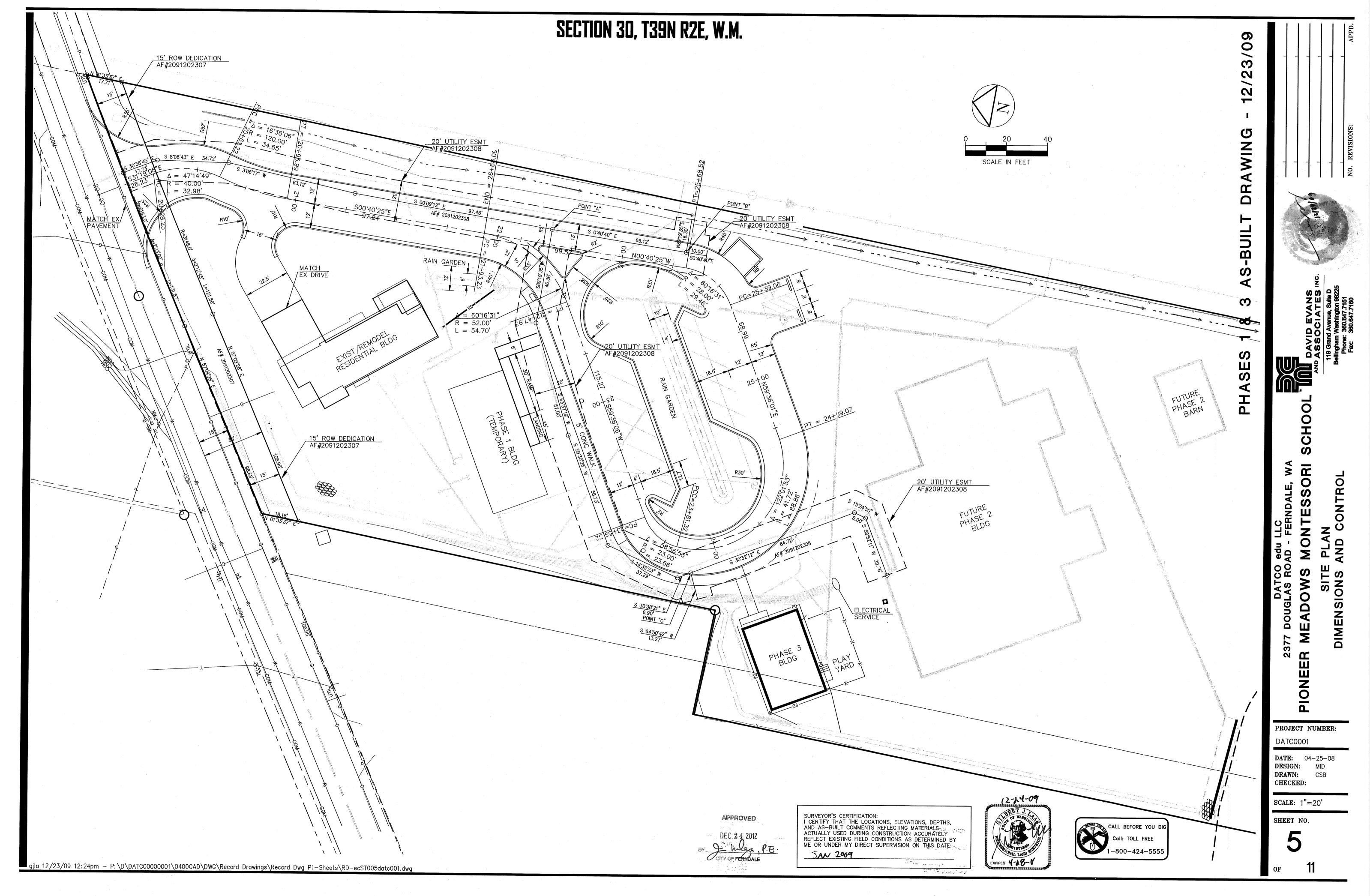
SHEET NO.

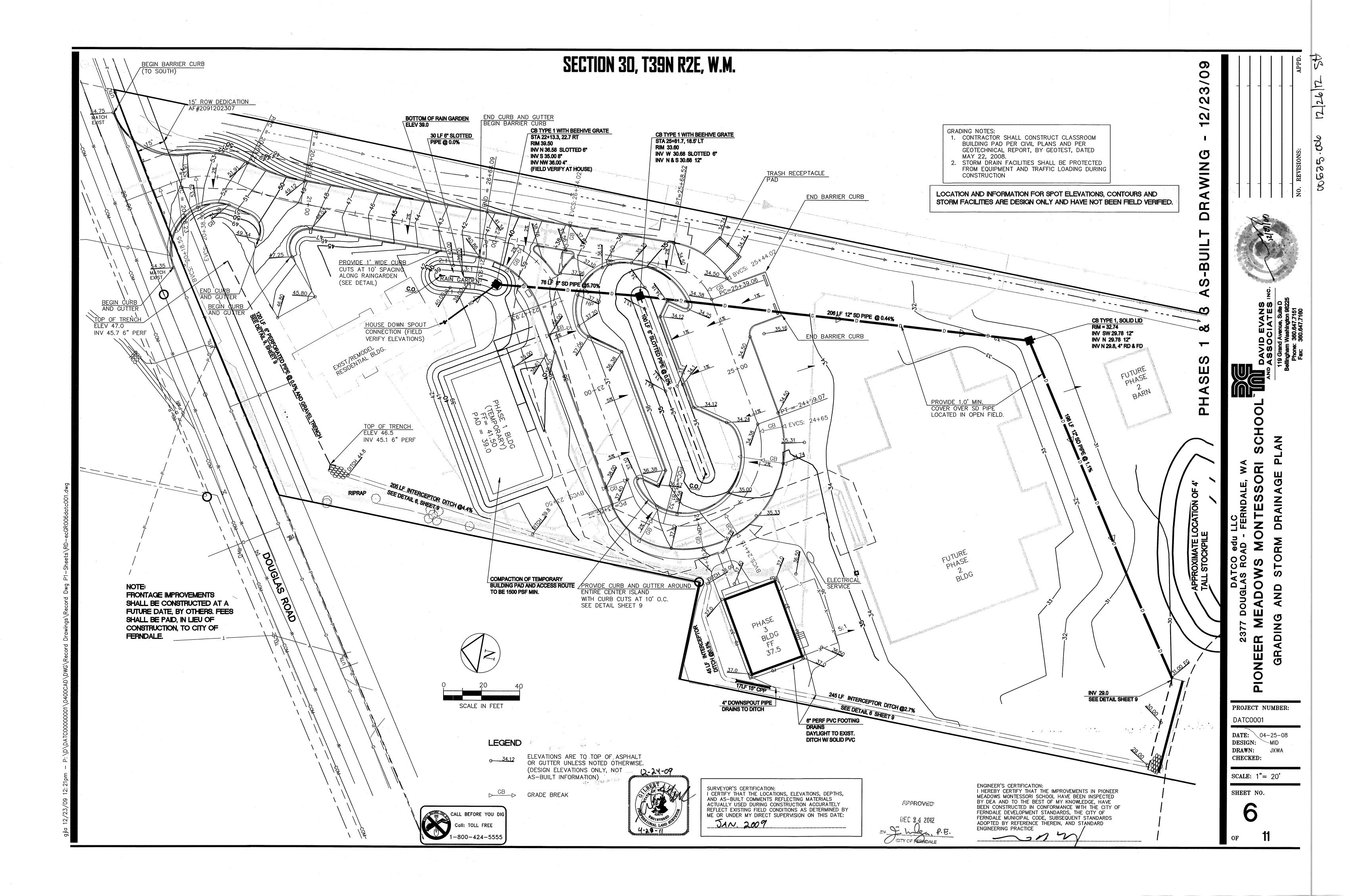
ila 12/23/09 12:20pm - P:\D\DATC00000001\0400CAD\DWG\Record Drawings\Record Dwg P1-Sheets\RD-ecEC004datc0002.dwg

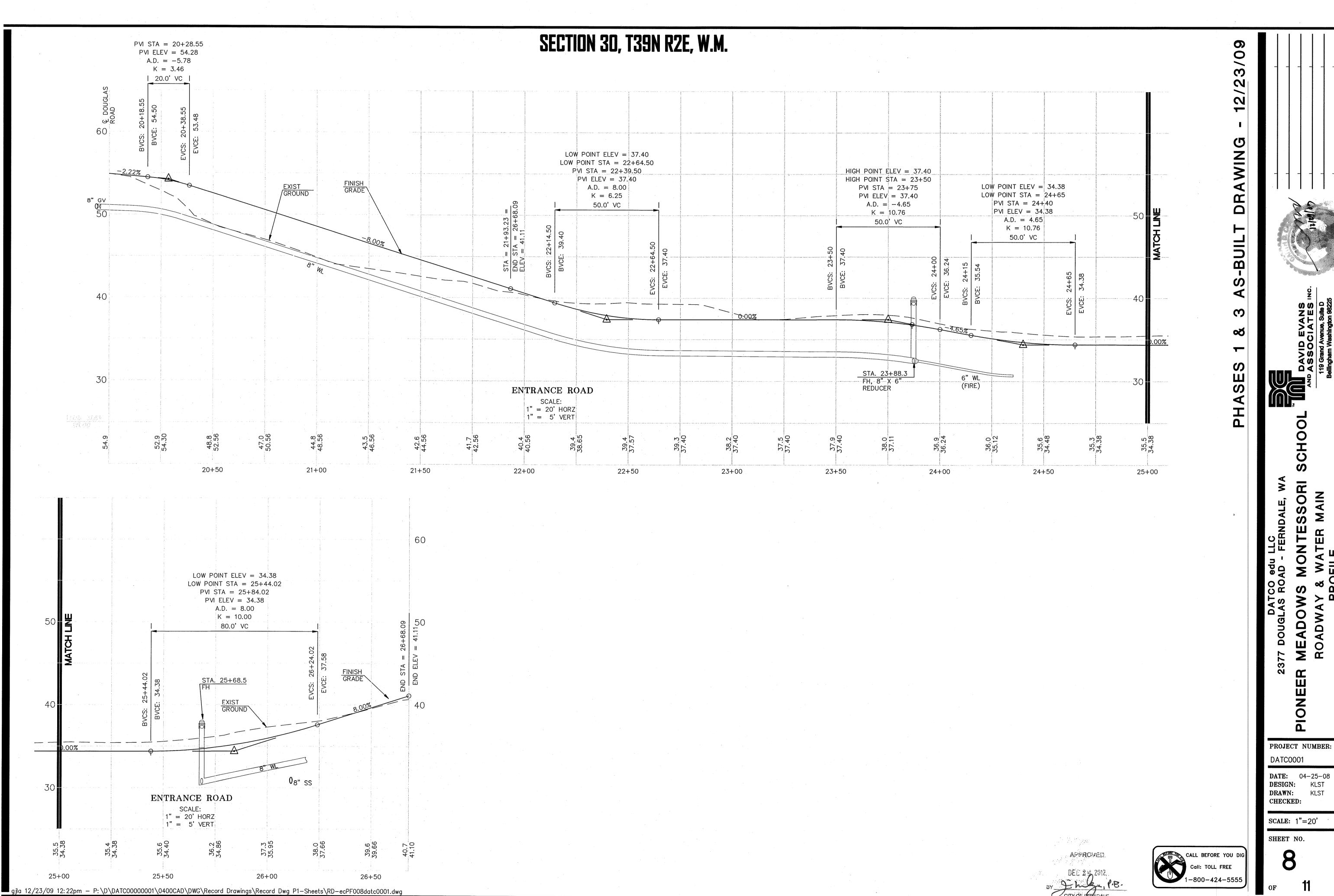
TRIANGULAR SILT DIKE 10"-14" NSTALL EDGES 12" HIGHER HIGH W/ 20"-28" BASE HAN HIGH WATER SPILLWAY OR APPROVED EQUAL SOIL OR GRAVEL OVER LEADING EDGE OF FABRIC SPILLWAY ' MIN. ON TRAILING GAUGE WIRE STAPLES 200 MM AND LEADING EDGE TO 300 MM LENGTH SPACING PER MANUFACTURER'S RECOMMENDATIONS

TRIANGULAR SILT DIKE ADAPTED FROM DOE STORMWATER MANAGEMENT MANUAL, BMP C208

APPROVED







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RIM ELEV. SEE

" PERFORATED PVC PIPE

GEOTEXTILE FABRIC

CONCRETE CURB

& GUTTER

N.T.S.

TIGHT LINE

TO SD SYSTEM

 α

PROJECT NUMBER:

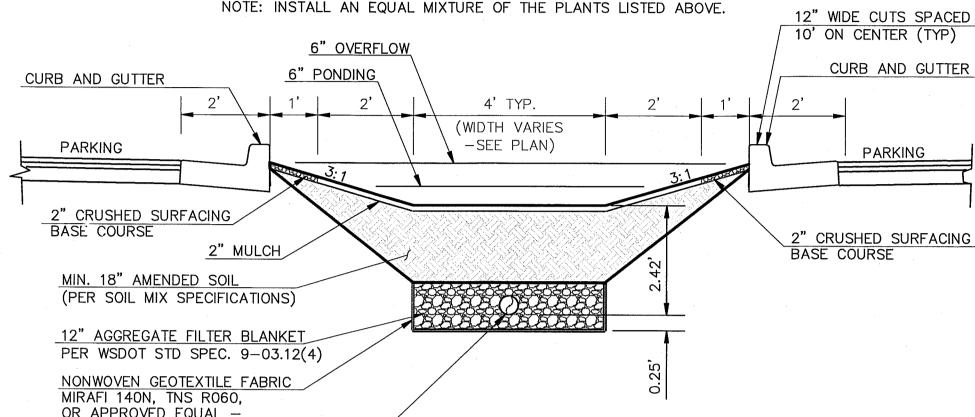
DATC0001 DATE: 04-25-08 DESIGN: MID DRAWN: HJC

SCALE: AS NOTED

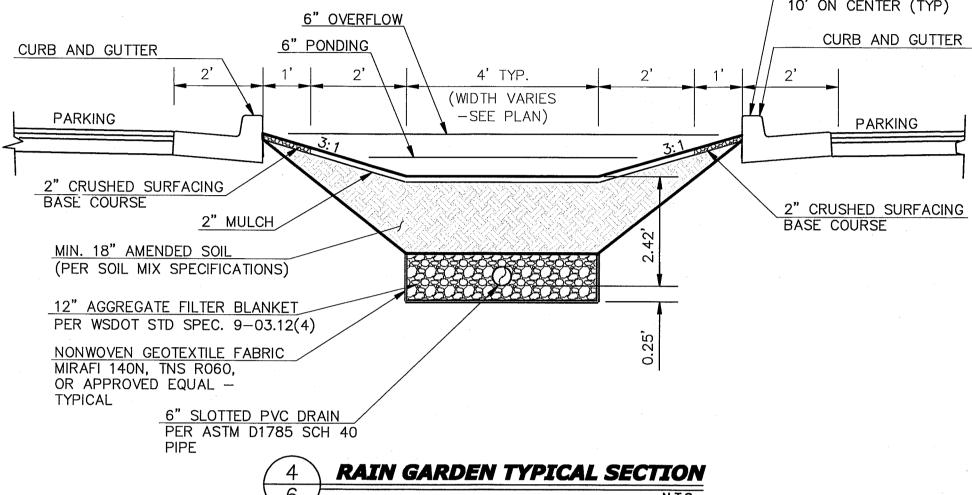
SECTION 30, T39N R2E, W.M.

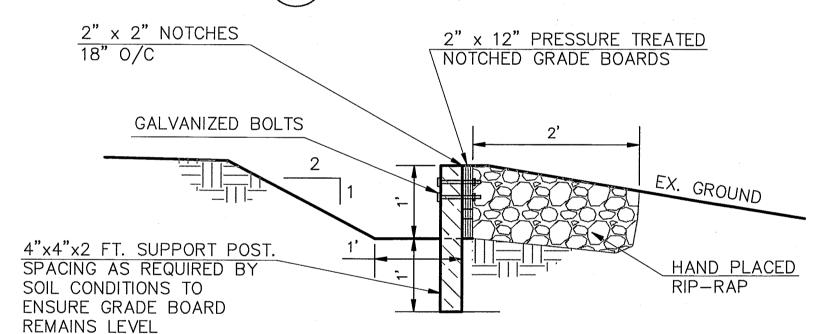
PLANT SCHEDULE FOR RAIN GARDENS

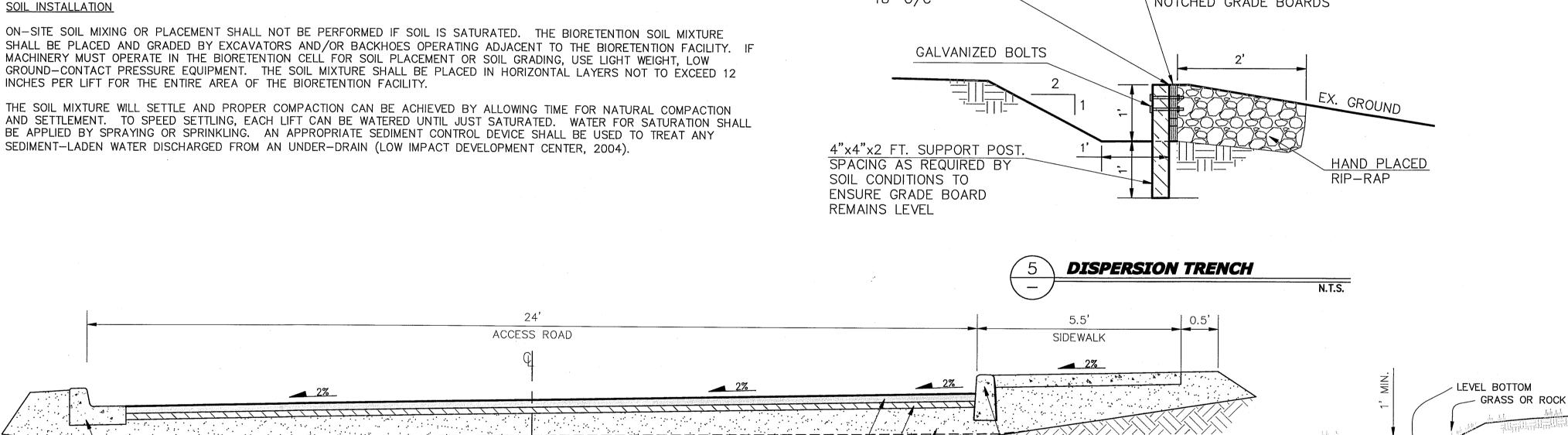
COMMON NAME	SCIENTIFIC NAME	SPACING
Slender Rush	Juncus tenuis	18"
Black Twinberry	Lonica involucrata	18"
Snowberry	Symphoricarpos albus	18"
Slough Sedge	Carex obnupta	18"
Western Columbine	Aquilegia formosa	18"



2" x 2" NOTCHES 2" x 12" PRESSURE TREATED 18" O/C NOTCHED GRADE BOARDS GALVANIZED BOLTS HAND PLACED RIP-RAP



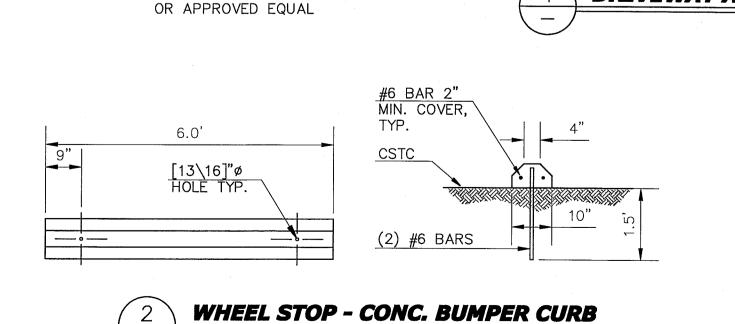


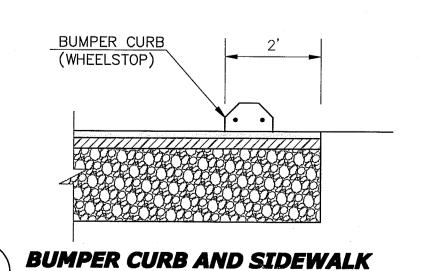


" ASPHALT, CLASS "B"

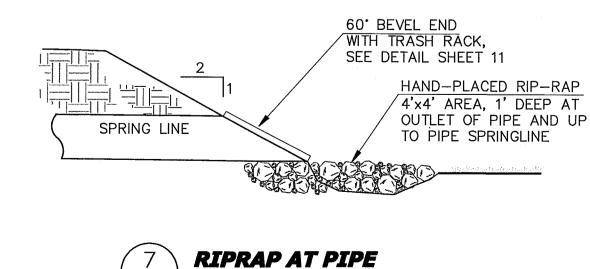
3" CRUSHED SURFACE TOP COURSE

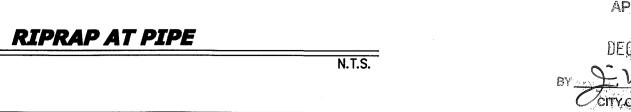
DRIVEWAY AND PAVEMENT SECTION

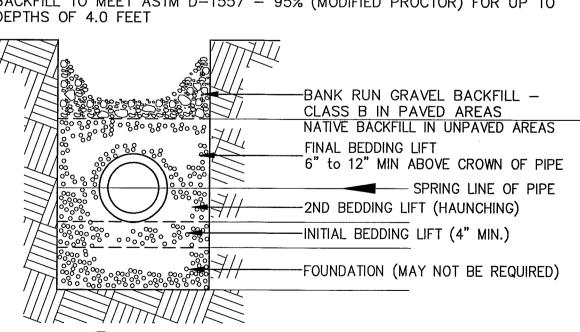


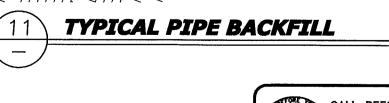


8" GRAVEL BASE









NOTE: CHECK DAMS TO BE PLACED AT 100' O.C. ALONG LENGTH OF INTERCEPTOR DITCH.

CONCRETE CURB

& GUTTER **CURB CUT DETAIL**

> PEA GRAVEL - PEA GRAVEL BEDDING SHALL BE A CLEAN MIXTURE FREE FROM ORGANIC MATTER AND CONFORMING TO THE FOLLOWING GRADATION

TYPE I CATCH BASIN WITH SQ. BEEHIVE GRATE

NEENAH R4346 OR

AMENDED SOIL

<u>LAKURIORIA KANAA</u>

RAIN GARDEN TYPICAL PROFILE

4" NATIVE MATERIAL

PER ASTM D178

GRAVEL TRENCH

SCH 40 PIPE

APPROVED EQUAL

2" MULCH

6" CLEAN-OUT ASSEMBLY w/

REMOVABLE CAP

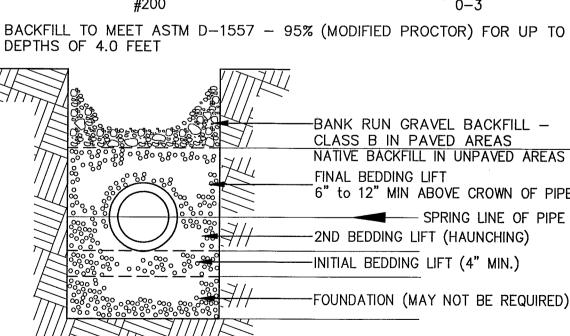
GEOTEXTILE

FILTER BLANKET

1 1/2" - 3/4" WASHEDROCK

WHEN TESTED IN ACCORDANCE WITH ASTM D422: U.S. STANDARD SIEVE SIZE PERCENT PASSING, BY WT. 100 3/8 " 95-100 0-10

DEPTHS OF 4.0 FEET



CEMENT CONCRETE BARRIER CURB

INTERCEPTOR DITCH

APPROVED.

Call: TOLL FREE -800 - 424 - 5555 SHEET NO.

CHECKED:

BIORETENTION (RAINGARDEN) SOIL MIX

- GRAVELLY SAND GRADATION PER ASTM D 422.

88-100

79–97

ORGANIC SOIL AMENDMENT SPECIFICATION.

AREA (LOW IMPACT DEVELOPMENT CENTER, 2004).

- COVER AND STORE SOIL ACCORDINGLY TO PREVENT WETTING OR SATURATION.

- MAXIMUM CLAY CONTENT SHALL BE LESS THAN 5%.

TREATMENT CAPABILITY OF THE SOIL MIX.

CURB AND GUTTER, AS NOTED ON PLAN

WOVEN ROAD STABILIZATION GEOTEXTILE FABRIC

MIRAFI 500X, PERMATEX 2000,

PERCENT PASSING

SOIL MIX: (AMENDED SOIL)

US NO. 4 US NO. 6

US NO. 8

US NO. 50

US NO. 200

(REFERENCE: LOW IMPACT DEVELOPMENT TECHNICAL GUIDANCE MANUAL FOR PUGET SOUND, JANUARY 2005)

- COMPOST MATERIAL SHALL BE STABLE MATURE COMPOST DERIVED FROM ORGANIC WASTE MATERIALS INCLUDING YARD

- ORGANIC CONTENT OF THE COMPOST SHALL BE BETWEEN 35 AND 65 PERCENT AS DETERMINED BY LOSS OF IGNITION

- THE FINAL SOIL MIX (INCLUDING COMPOST AND SOIL) SHALL HAVE A MINIMUM LONG-TERM HYDRAULIC CONDUCTIVITY OF

CHARACTERISTICS OF SOIL USING MODIFIED EFFORT) (TACKETT, 2004). INFILTRATION RATE AND HYDRAULIC

- THE FINAL SOIL MIXTURE SHALL BE TESTED BY AN INDEPENDENT LABORATORY PRIOR TO INSTALLATION FOR FERTILITY.

DEBRIS, MANURES, BIO-SOLIDS, WOOD WASTES OR OTHER ORGANIC MATERIALS THAT MEET THE INTENT OF THE

(<http://www.ecy.wa.gov/programs/swfa/facilities/350.html>) and meet type 1, 2, 3, or 4 feedstock.

1.0 INCH/HOUR PER ASTM DESIGNATION D 2434 (STANDARD TEST METHOD FOR PERMEABILITY OF GRANULAR SOILS) AT

MICRONUTRIENT ANALYSIS, AND ORGANIC MATERIAL CONTENT. SOIL AMENDMENTS PER LABORATORY RECOMMENDATIONS

(STANDARD TEST METHOD FOR MOISTURE, ASH AND ORGANIC MATTER OF PEAT AND OTHER ORGANIC SOILS) (TACKETT,

ACCEPTABLE RANGE, IT MAY BE MODIFIED WITH LIME TO INCREASE THE PH OR IRON SULFATE PLUS SULFUR TO LOWER

THE PH. THE LIME OR IRON SULFATE MUST BE MIXED UNIFORMLY INTO THE SOIL PRIOR TO USE IN BIORETENTION

ECOLOGY'S SSC-6 "SOIL PHYSICAL AND CHEMICAL SUITABILITY FOR TREATMENT" RECOMMENDATIONS FOR DESIGNING INFILTRATION SYSTEMS. A SOILS REPORT EVALUATING THESE PARAMETERS SHALL BE PROVIDED TO VERITY THE

(IF ANY) SHALL BE UNIFORMLY INCORPORATED FOR OPTIMUM PLAN ESTABLISHMENT AND EARLY GROWTH (TACKETT,

- FINAL SÓIL MIXTURE SHALL BE UNIFORM, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2

- ORGANIC CONTENT OF THE FINAL SOIL MIXTURE SHALL BE 10% TO 12% BY DRY WEIGHT PER ASTM DESIGNATION D 2974

- ON-SITE SOIL MIXING OR PLACEMENT NOT ALLOWED IF SOIL IS SATURATED OR SUBJECTED TO WATER WITHIN 48 HOURS.

- THE ABOVE GUIDELINES SHALL PROVIDE A SOIL TEXTURE, ORGANIC CONTENT, AND INFILTRATION RATE SUITABLE TO MEET

- THE PH FOR THE SOIL MIX SHALL BE BETWEEN 5.5 AND 7.0 (STENN, 2003). IF THE PH FALLS OUTSIDE OF THE

80 PERCENT COMPACTION PER ASTM DESIGNATION D 1557 (STANDARD TEST METHODS FOR LABORATORY COMPACTION

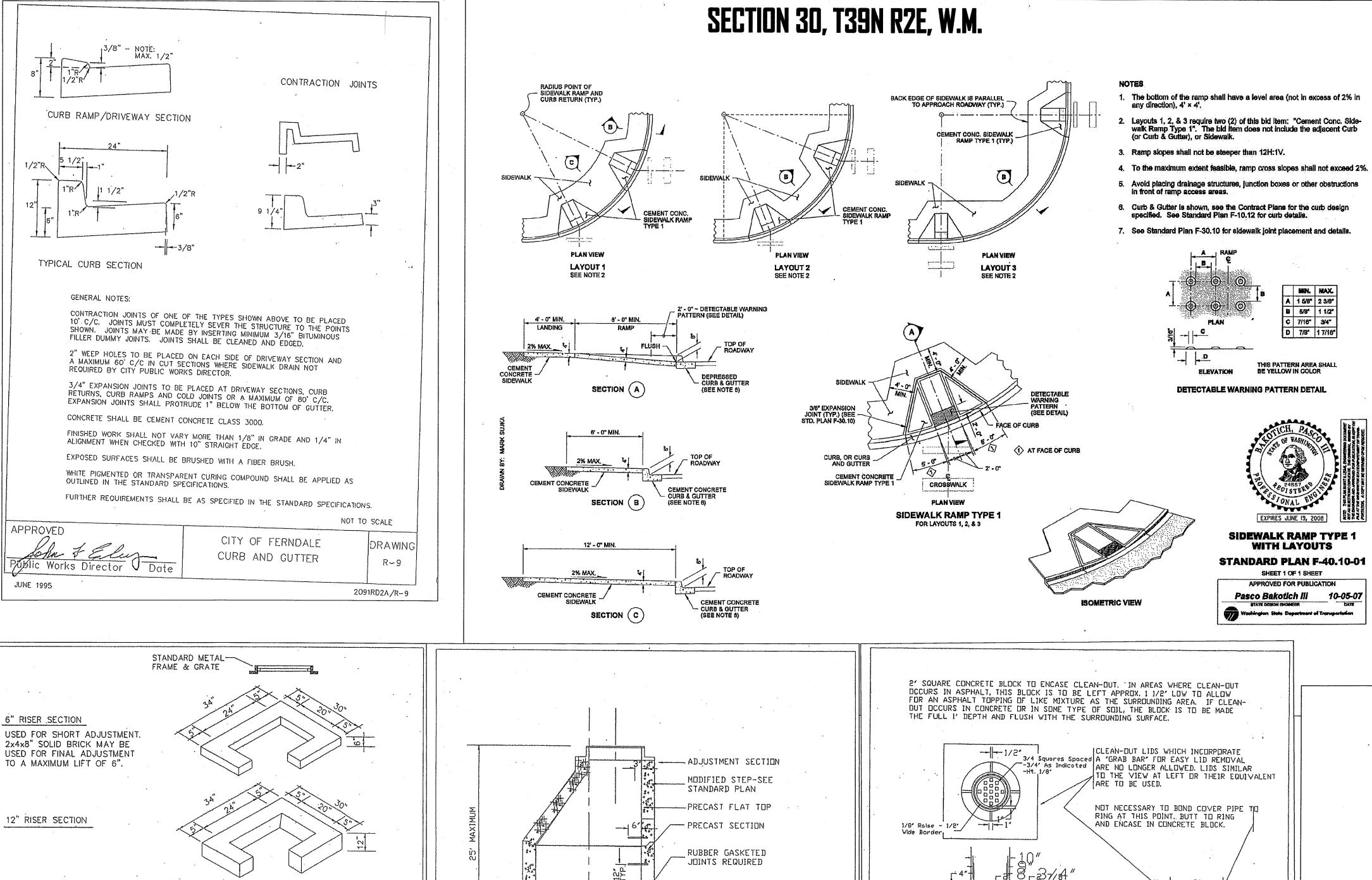
BIORETENTION SOIL MIX SHALL BE MIXED OFF-SITE AND DELIVERED READY FOR INSTALLATION.

- 65% TO 70% GRAVELLY SAND AND 30% TO 35% COMPOST (SEE SPECIFICATION BELOW).

COMPOST MATERIAL SHALL BE IN COMPLIANCE WITH WAC CHAPTER 173-350 SECTION 220.

CONDUCTIVITY ARE ASSUMED TO BE APPROXIMATELY THE SAME IN A UNIFORM MIX SOIL.

TEST METHOD (ASTM D 2974) AND CONTAIN NO VIABLE WEED SEEDS.



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PROJECT NUMBER: DATC0001

DATE: 04–25–08 DESIGN: HJC DRAWN: CHECKED:

SCALE: AS NOTED

SHEET NO.

gila 12/23/09 12:18pm — P:\D\DATC00000001\0400CAD\DWG\Record Drawings\Record Dwg P1-Sheets\RD-ecDT010datc0001.dwg

1) CAST IN PLACE OR MASONRY CONSTRUCTION UNITS MAY BE SUBSTITUTED

2) FOR DETAILS OF REINFORCEMENTS AND INSTALLATION, SEE A.P.W.A. STANDARDS

CITY OF FERNDALE

NOT TO SCALE

DRAWING

AS PER A.P.W.A. STANDARDS OR STATE STANDARDS. (B-1)

PRECAST BASE SECTION

孔blic Works Director

4-WAY 18" THRU 20"(NOMINAL) KNOCKOUTS. PIPE SIZE AND PIPE ENTRANCE ANGLE

OR STATE STANDARDS.

TO BE LIMITED BY KNOCKOUTS, MAXIMUM

PIPE SIZE - 15" DIAMETER ON WIDE SIDE

AND 12" DIAMETER ON NARROW SIDE.

LIMITED BY PIPE CONFIGURATION

STEPS-SEE STANDARD PLAN

LADDER-SEE STANDARD PLAN

MAXIMUM PIPE SIZE MAY BE

-FIELD CONSTRUCT CHANNEL &

NOT TO SCALE

DRAWING

SHELF (PRÉCAST CHANNEL

-- PRECAST BASE SECTION

UNACCEPTABLE)

CITY OF FERNDALE

TYPE 1 48" MANHOLE

- CAST IN PLACE BASE

MORTAR FILL

MINIMUM 6"——

APPROYED

Public Works Director Date

JANUARY 1993

Plug To Be Sealed In Same Manner As Main Sever Joints.

CAST IRON RING AND COVER

MONUMENT RING AND COVER NOT ACCEPTABLE.

SSCD 04/30/92 16:17

Public Works Director Date

CITY OF FERNDALE 8" CLEAN DUT

Fiber Joint Packing

ROPE OFF SUFFICIENT/

DIAMETER TO SEAL

JOINT IS D.K.

PLACE PIPE ON

UNDISTURBED SOIL IN AREA BETWEEN

(1"# CLEARANCE)

NOT TO SCALE

DRAWING SS-5

BY THE CITY ENGINEER.

OF DRIVEWAYS.

TYPE "E" BARRIER CURB

BE 10' C/C OR AS DIRECTED BY THE CITY ENGINEER. PARTIAL DIVISION PLATES MAY BE

- 2" WEEP HOLES EVERY 60' AND EACH SIDE

- CONCRETE SHALL BE CLASS "C". (3000 PSI)

APPROVED

USED IN LIEU OF DUMMY JOINTS IF APPROVED

- DUMMY JOINTS SHALL EXTEND 2" BELOW GUTTER LINE, BE MINIMUM OF 36" THICK AND

1-800-424-5555

经保险的自己。

A PERSON OF CHECKETONS CONTINUES. ・レオ、アニを指揮を

MIN. MAX. 1 5/8" 2 3/8" C 7/16" 3/4" D 7/8" 17/16" SIDEWALK RAMP TYPE 1

WITH LAYOUTS STANDARD PLAN F-40.10-01 SHEET 1 OF 1 SHEET Pasco Bakotich III 10-05-07

Washington State Department of Transportation

