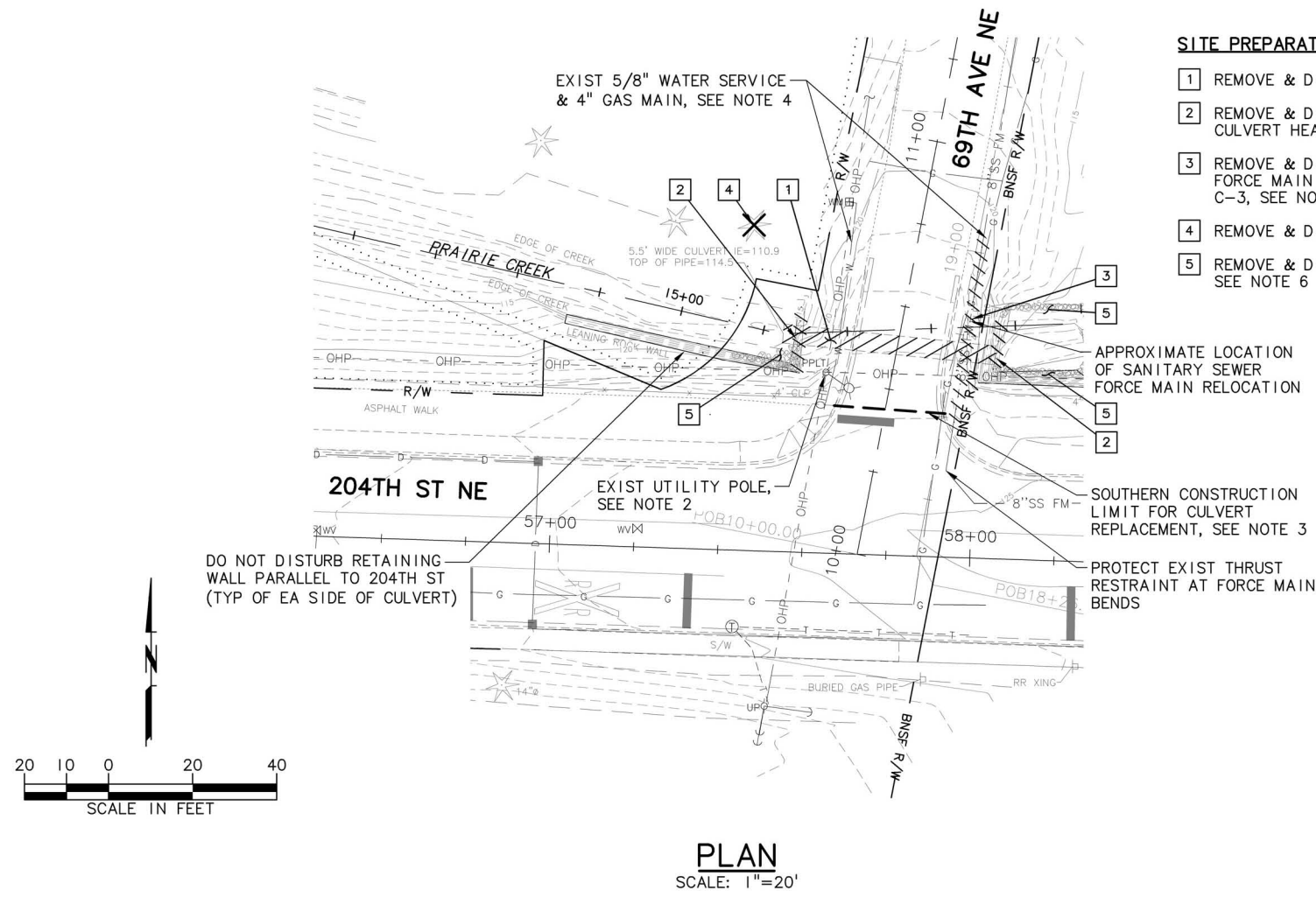


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SITE PREPARATION KEY NOTES:

- 1 REMOVE & DISPOSE OF CULVERT
- 2 REMOVE & DISPOSE OF RETAINING WALL & CULVERT HEADWALL
- 3 REMOVE & DISPOSE OF SANITARY SEWER FORCE MAIN & RELOCATE PER DET 2, SHT C-3, SEE NOTE 5
- 4 REMOVE & DISPOSE OF TREE
- 5 REMOVE & DISPOSE OF RIP-RAP BOULDERS, SEE NOTE 6

SITE PREPARATION NOTES:

- 1. CONTRACTOR SHALL PROVIDE ALL OTHER SITE PREPARATION, DEMOLITION ACTIVITIES AND TEMPORARY EROSION SEDIMENT CONTROL NOT SHOWN PER 67TH AVE PHASE III RECONSTRUCTION PROJECT PLANS AS PREPARED BY HDR AND SHALL EXPAND CLEARING AND GRUBBING LIMITS AND SILT FENCE ALIGNMENT TO FACILITATE THE CONSTRUCTION OF THE CULVERT REPLACEMENT.
- 2. CITY COORDINATING RELOCATION OF SNOHOMISH PUD UTILITY POLE PRIOR TO EXCAVATION FOR CULVERT REPLACEMENT.
- 3. DURING CONSTRUCTION OF THE CULVERT REPLACEMENT, CONTRACTOR SHALL NOT EXCAVATE SOUTH OF THE LIMIT SHOWN ON THE PLAN. CONTRACTOR SHALL DESIGN SHORING AS REQUIRED TO FACILITATE CONSTRUCTION OF THE CULVERT.
- 4. CONTRACTOR TO DESIGN, FURNISH AND INSTALL TEMPORARY SUPPORT FOR EXISTING 5/8-INCH WATER SERVICE AND 4-INCH GAS MAIN. SUPPORT SHALL BE SUBMITTED TO AND APPROVED BY THE RESPECTIVE UTILITY. ALTERNATELY, THE CONTRACTOR MAY ELECT TO COORDINATE WITH CNG TO CUT AND CAP GAS MAIN TO FACILITATE THE INSTALLATION OF THE CULVERT FOLLOWED BY INSTALLATION OF A NEW GAS MAIN. ALSO, THE CONTRACTOR MAY ELECT TO COORDINATE WITH THE CITY TO CUT AND CAP WATER SERVICE TO FACILITATE THE INSTALLATION OF THE CULVERT FOLLOWED BY THE INSTALLATION OF A NEW 5/8-INCH WATER SERVICE LINE PER CITY STANDARDS. MAXIMUM DURATION OF WATER SERVICE INTERRUPTION SHALL BE DETERMINED BY CNG. MAXIMUM DURATION OF WATER SERVICE INTERRUPTION SHALL BE 2 HOURS. SCHEDULE IN ADVANCE WITH THE CITY.
- 5. CONTRACTOR SHALL PROVIDE TEMPORARY BYPASS PIPING FOR THE EXISTING 8-INCH SEWER FORCE MAIN TO FACILITATE THE CONSTRUCTION OF THE CULVERT REPLACEMENT. SEE SECTION 7-17 OF THE SPECIAL PROVISIONS FOR SPECIFIC BYPASS PIPING AND BYPASS PLAN SUBMITTAL REQUIREMENTS.
- 6. RIP RAP MAY BE REUSED AND HAND PLACED. REMOVE LOOSE MORTAR AS MUCH AS POSSIBLE PRIOR TO REUSE. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ANY EXCESS RIP RAP.
- 7. DRIVEWAY ACCESS TO THE BUSINESSES ON 69TH AVE NE SHALL NOT BE BLOCKED FOR GREATER THAN 4 CONSECUTIVE DAYS.
- 8. CONTRACTOR SHALL DEVELOP AND SUBMIT ALL REQUIRED TRAFFIC AND PEDESTRIAN CONTROL PLANS.
- 9. STREAMBED GRAVELS WITHIN THE EXISTING CULVERT MAY BE REUSED FOLLOWING APPROVAL OF THE CITY. EXCESS STREAMBED GRAVELS REMOVED FROM PRAIRIE CREEK CAN BE HAULED AND DELIVERED AT THE CITY OF ARLINGTON AIRPORT WITH THE CITY'S PERMISSION. CONTRACTOR RESPONSIBLE FOR DISPOSAL OF ALL OTHER EXCESS MATERIALS.

GENERAL NOTES:

- 1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF ARLINGTON STANDARDS, THE LATEST REVISIONS OF AWWA STANDARD SPECIFICATIONS, 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 REQUIREMENTS OF STATE AND LOCAL HEALTH AUTHORITIES.
- 3. DEPTHS AND LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE DATA AT THE TIME OF DESIGN. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY DEPTHS AT CROSSINGS AND CONNECTIONS, TYPICAL ALL SHEETS.
- 4. THE OWNER OR OWNER'S AGENT MAY, AT ITS DISCRETION, REQUIRE TESTS AND/OR REPORTS FROM THE CONTRACTOR TO VALIDATE CLAIMS OF MATERIAL OR CONSTRUCTION ADEQUACY/COMPLIANCE. SUCH TEST/REPORTS SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.
- 5. ALL EXISTING SURFACE FEATURES SUCH AS PLANTERS, LANDSCAPING, STRUCTURES, LOTS, SWALES, DITCHES, CURBS, SIDEWALKS, FENCES, WALLS, MAILBOXES, SIGNS, GUY WIRES, PIPING, AND UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITION, UNLESS OTHERWISE PROPOSED.
- 6. MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN CONDITION, FREE FROM OBSTRUCTIONS AND HAZARDS.

- 7. ANY CHANGE IN CONSTRUCTION AFTER PLAN APPROVAL MUST BE SUBMITTED IN WRITING AND APPROVED BY THE CITY PRIOR TO CHANGE.
- 8. THE CONTRACTOR SHALL PROVIDE "RECORD DRAWINGS" INDICATING ALL CHANGES IN GRADE, ALIGNMENT, FITTINGS, AND MATERIALS INSTALLED AND ANY OTHER UTILITIES OR OBSTACLES NOT SO INDICATED ON THESE PLANS.
- 9. UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL SEAL AND CAP THE REMAINING EXPOSED ENDS OF ABANDONED UTILITIES WITH NON-SHRINK GROUT TO 1 FOOT LENGTH INTO PIPE OR ONE PIPE DIAMETER, WHICHEVER IS GREATER.
- 10. OPERATION OF ALL VALVES SHALL BE PERFORMED BY AUTHORIZED CITY PERSONNEL ONLY.
- 11. ALL PIPING SHALL HAVE A MINIMUM OF 3 FEET OF COVER FROM TOP OF PIPE TO STREET GRADE OR OTHER FINISHED GRADE, UNLESS OTHERWISE SHOWN OR APPROVED BY ENGINEER.
- 12. OWNER AND OWNER'S AGENT SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF ANY REQUIRED INSPECTIONS.
- 13. NO UNDERGROUND WORK SHALL BE "BURIED" UNTIL INSPECTED AND APPROVED BY THE OWNER'S AGENT.

PERMIT NOTES:

- 1. CITY WILL OBTAIN HYDRAULIC PROJECT APPROVAL (HPA) FOR THE WORK SHOWN WITHIN THESE PLANS.
- 2. CONTRACTOR IS REQUIRED TO OBTAIN ALL PERMITS OR MODIFICATIONS TO ALL REQUIRED FEDERAL, STATE, AND LOCAL PERMITS INCLUDING, BUT NOT LIMITED TO, NPDES CONSTRUCTION STORMWATER PERMIT AND CITY OF ARLINGTON RIGHT OF WAY AND GRADING PERMITS.

SURVEY CONTROL NOTES:

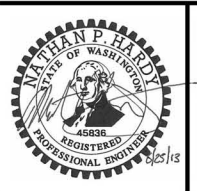
- 1. SURVEY BASEMAP, BENCHMARKS, ALIGNMENTS BASED ON SURVEY BY HDR FOR 67TH AVENUE NE PHASE III RECONSTRUCTION PROJECT.

NO.	DATE	BY	REVISION

NOTICE

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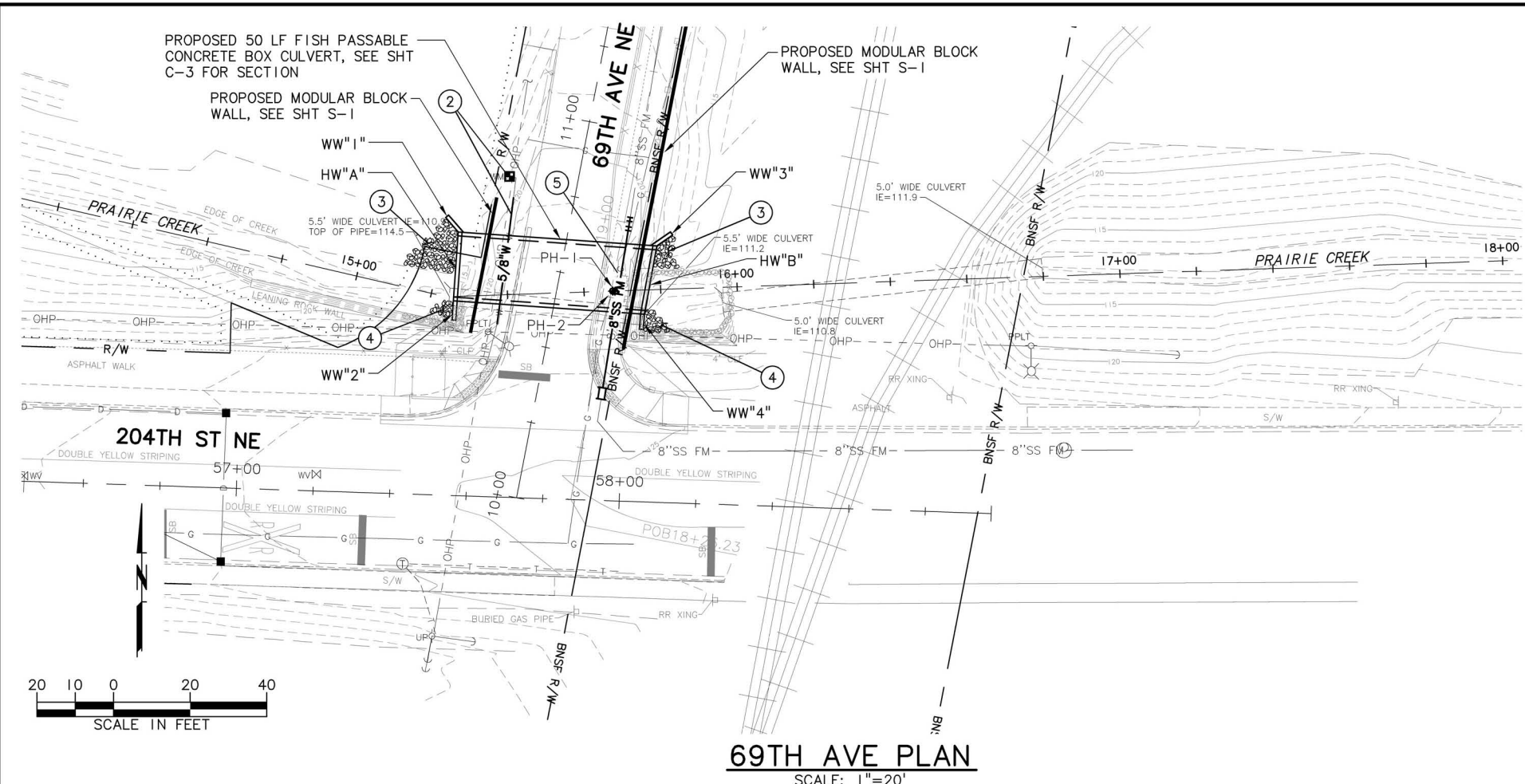
CITY OF ARLINGTON
69TH AVE NE CULVERT REPLACEMENT

EXISTING CONDITIONS AND SITE PREPARATION 69TH AVE CULVERT

PROJECT NO.: 12-1347.205 SCALE: AS SHOWN DATE: JUNE 2013

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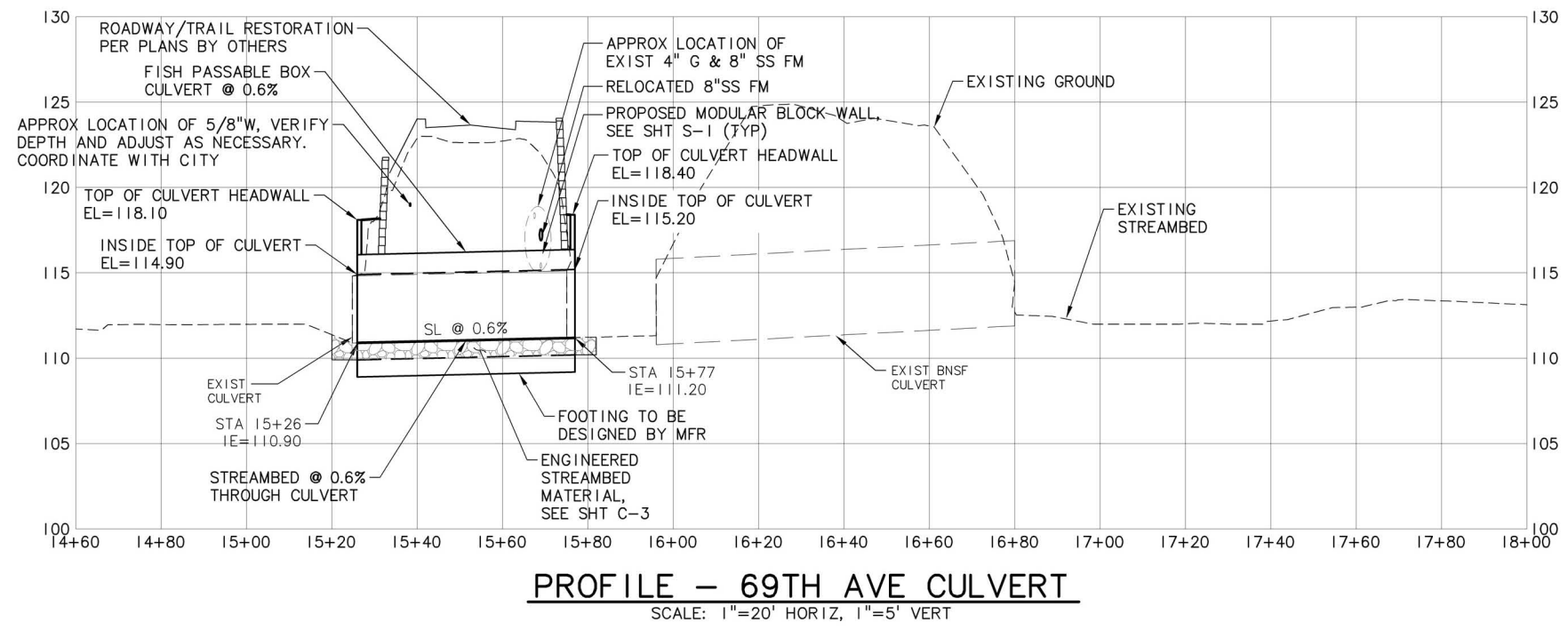
- CONSTRUCTION KEY NOTES:**
- ① UTILITY POTHOLE:
PH-1 - 8" SS FM, TOP OF PIPE ELEV 115.87% PH-2 - 4" G,
TOP OF PIPE ELEV 118.77%
 - ② FURNISH AND INSTALL NEW METER BOX FOR EXISTING 5/8"
WATER SERVICE PER CITY STD W-040. ADJUST TO FINAL
GRADE. FURNISH AND INSTALL 5/8-INCH WATER SERVICE
LINE AND RECONNECT TO EXISTING, IF REMOVED DURING
CONSTRUCTION.
 - ③ FURNISH AND HAND PLACE LIGHT LOOSE RIP RAP SLOPE
PROTECTION PER WSDOT SPEC 9-13.1. GRADE TO MATCH
EXISTING SLOPES. SEE DET 3, SHT C-3.
 - ④ FURNISH AND HAND PLACE LIGHT LOOSE RIP RAP
PROTECTION PER WSDOT SPEC 9-13.1 TO TIE INTO
EXISTING RETAINING WALL. CONTRACTOR MAY REUSE
EXISTING RIP RAP IF LOOSE MORTAR IS REMOVED. SEE DET
3, SHT C-3.
 - ⑤ RELOCATED 8" PVC FORCE MAIN, PER DET 2, SHT C-3

NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY CONSTRUCTION DEWATERING AND STREAM AND FISH BYPASS DURING THE CULVERT INSTALLATION. CONTRACTOR SHALL PREPARE AND SUBMIT FISH PASSAGE INSTALLATION PLAN AND STREAM AND FISH BYPASS PLAN PER THE 67TH AVE NE PHASE III RECONSTRUCTION PROJECT SPECIAL PROVISION 7-03.3 (PG VI-118).

NAME	LENGTH	ANGLE*	TOP EL
WW"1"	5'	45°	118.1
HW"A"	18'	-	118.1
WW"2"	5'	0°	118.1
WW"3"	5'	45°	117.9
HW"B"	18'	SKewed END	118.4
WW"4"	4'	2°	118.4

* ANGLE MEASURED PARALLEL TO CULVERT HEADWALL



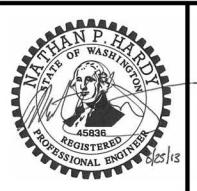
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NOTICE

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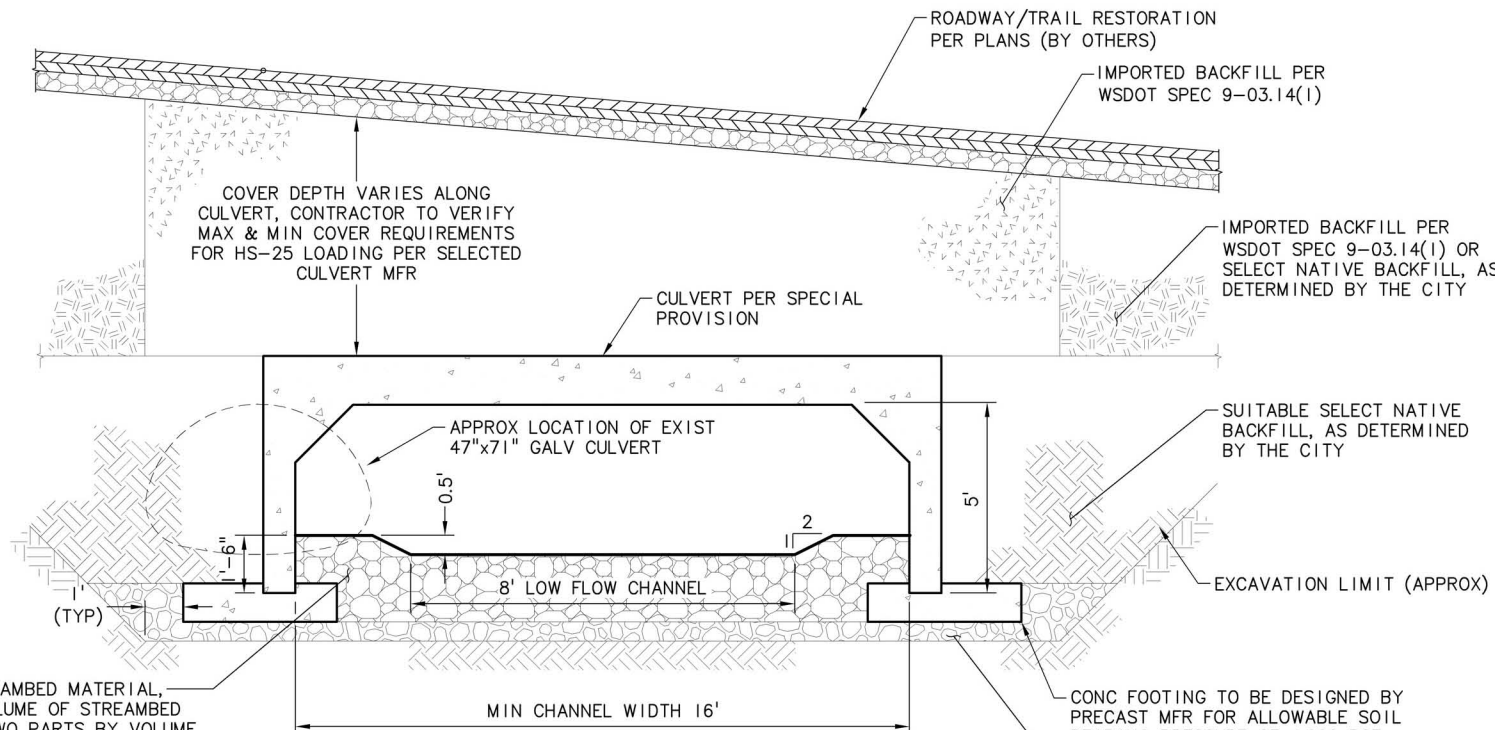
CITY OF ARLINGTON
69TH AVE NE CULVERT
REPLACEMENT

**69TH AVE CULVERT
PLAN & PROFILE**

PROJECT NO.: 12-1347.205 SCALE: AS SHOWN DATE: JUNE 2013

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ENGINEERED STREAMBED MATERIAL, ONE PART BY VOLUME OF STREAMBED SEDIMENT AND TWO PARTS BY VOLUME OF 8" STREAMBED COBBLES PER WSDOT SPEC 9-03.11

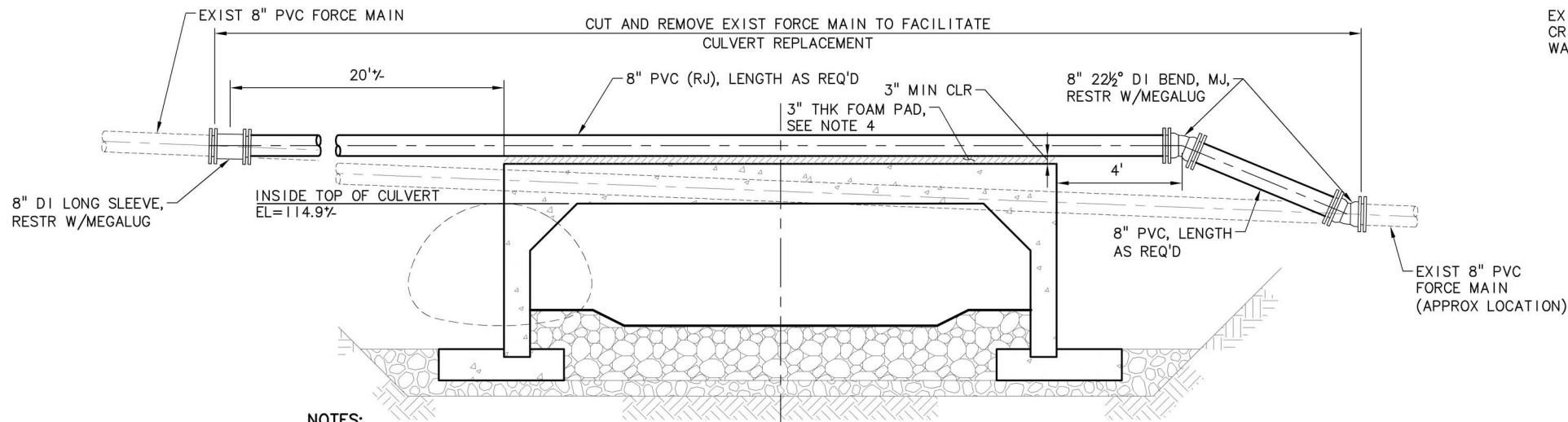
NOTES:

1. ALL BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY BY D-1557 TEST METHOD.

CONC FOOTING TO BE DESIGNED BY PRECAST MFR FOR ALLOWABLE SOIL BEARING PRESSURE OF 4,000 PSF
PROVIDE 6" MIN CSBC PER WSDOT SPEC 9-03.9(3), COMPACTED TO AT LEAST 95% MAX DRY DENSITY AS DETERMINED BY ASTM D-1557 TEST METHOD

CONCRETE BOX CULVERT SECTION

SCALE: NTS

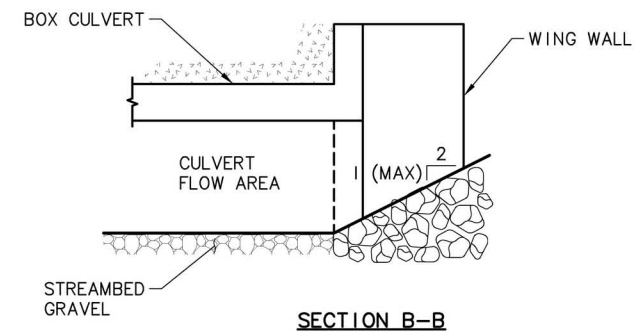
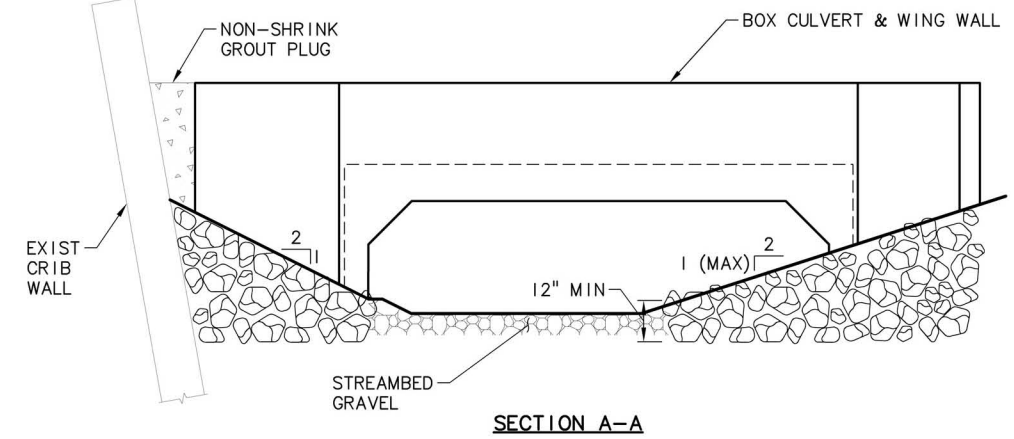
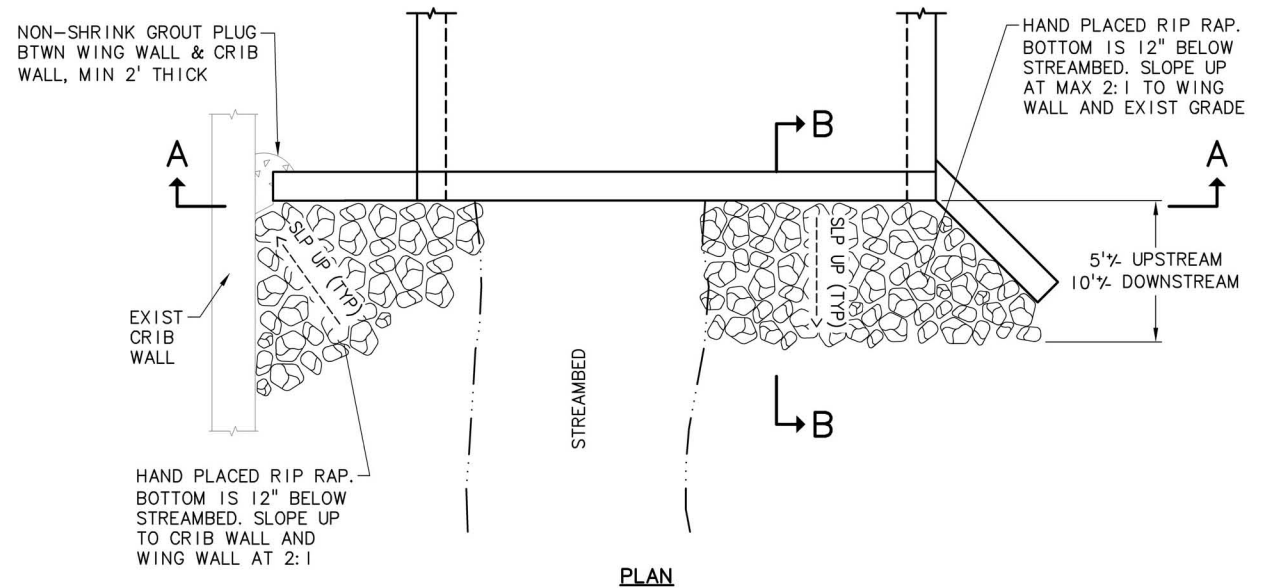


NOTES:

- ALL PVC FORCE MAIN PIPE SHALL BE FULLY RESTRAINED JOINT, SEE SPECIAL PROVISION 9-30.1(7). ALL RESTRAINED MECHANICAL JOINTS PER SPECIAL PROVISION 9-30.2(6).
- NEW PVC FORCE MAIN SHALL BE INSTALLED AT NO SLOPE, OR SLIGHTLY DOWNWARD SLOPE TOWARDS THE NORTH.
- FORCE MAIN SHALL BE RATED AT MINIMUM 150 PSI. PRESSURE TEST NEW FORCE MAIN PER CITY STANDARDS PRIOR MAKING FINAL CONNECTION.
- FOAM PAD SHALL BE FOAMULAR 400 BY OWENS CORNING, OR APPROVED EQUAL.

SEWER FORCE MAIN RELOCATION DETAIL

SCALE: NTS



TYPICAL CULVERT HEADWALL DETAIL

SCALE: NTS

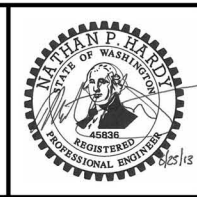


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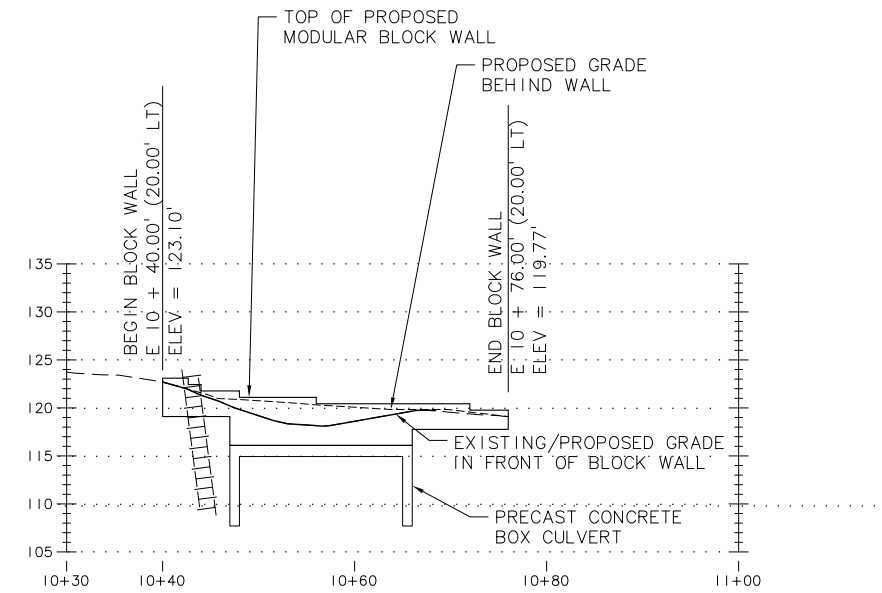
CITY OF ARLINGTON
69TH AVE NE CULVERT
REPLACEMENT

CIVIL DETAILS - 1

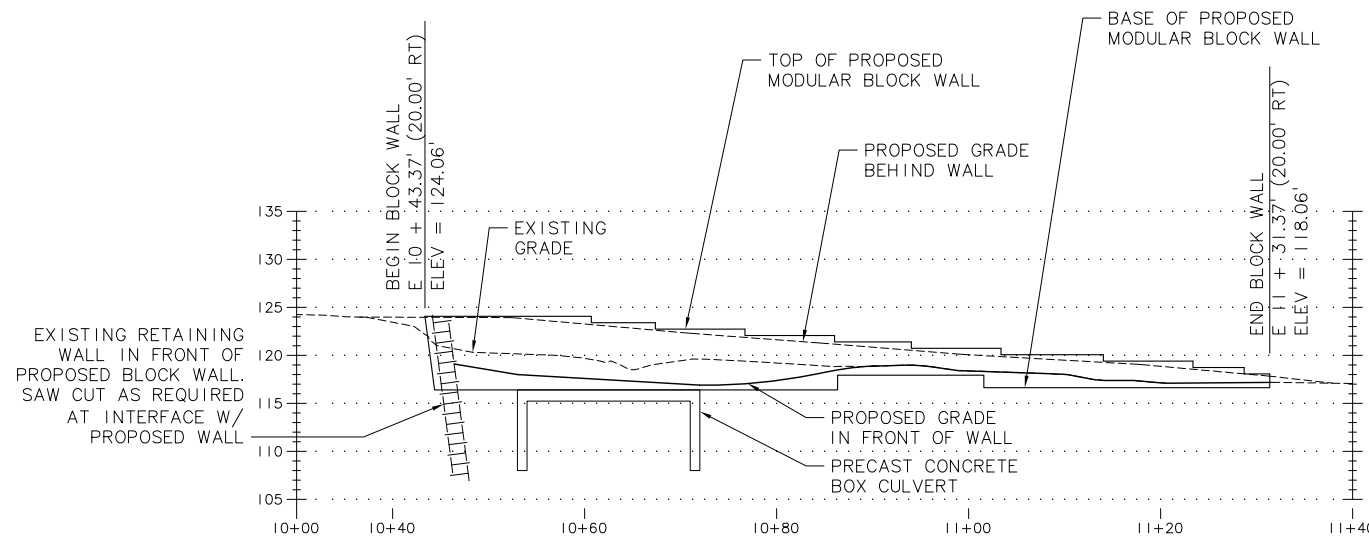
PROJECT NO.: 12-1347.205 SCALE: AS SHOWN DATE: JUNE 2013

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BLOCK WALL ELEVATION LT (REFLECTED)
SCALE: 1" = 10'



BLOCK WALL ELEVATION RT
SCALE: 1" = 10'

MSE WALL NOTES

1. THE MSE WALLS SHALL BE ALLEN BLOCK EUROPA COLLECTION OR APPROVED EQUAL, DESIGNED BY THE MFR, OR AGENT THEREOF. BLOCKS FOR ALL MSE WALLS SHALL BE FROM THE SAME MFR AS SUBMITTED AND APPROVED FOR THE 67TH AVE PHASE III RECONSTRUCTION PROJECT, FEBRUARY 2013.
2. THE MSE WALLS SHALL CONFORM WITH CHAPTER 730 OF THE WSDOT DESIGN MANUAL AND SECTION 6.13 OF THE WSDOT STANDARD SPECIFICATIONS AND GENERAL SPECIAL PROVISIONS.
3. REFER TO THE PROJECT SPECIFICATIONS AND ASSOCIATED GEOTECHNICAL REPORT FOR SOIL DESIGN PROPERTIES AND REQUIREMENTS. UNLESS NOTED OTHERWISE, THE FOLLOWING SERVICE LEVEL SURCHARGE PARAMETERS SHALL BE USED IN THE DESIGN:
 - 250 PSF (AT ROADWAY)
 - HS-25 TRUCK LOADING (NON-CONCURRENT WITH 250 PSF AT ROADWAY)
 - 100 PSF (AT PEDESTRIAN PATH)

4. THE MSE WALL MFR SHALL PROVIDE SHOP DRAWINGS, STAMPED & SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN WASHINGTON, TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SHOP DRAWINGS SHALL BE REVISED AS REQUIRED FOR FIELD CONDITIONS, AND DATE STAMPED BY THE CONTRACTOR PRIOR TO REVIEW BY THE ENGINEER.

ENGINEER'S SHOP DRAWING REVIEW IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND CONTRACT DOCUMENTS. MARKINGS OR COMMENTS SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR FROM COMPLIANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR REMAINS RESPONSIBLE FOR DETAILS AND ACCURACY, FOR CONFORMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FOR TECHNIQUES OF ASSEMBLY, AND FOR PERFORMING THE WORK IN A SAFE MANNER.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR AND MAINTAIN SAFE EXCAVATION & SLOPE CONFIGURATIONS. TEMPORARY CUTS SHALL BE NO STEEPER THAN THOSE RECOMMENDED IN THE CONTRACT SPECIFICATIONS AND/OR GEOTECHNICAL REPORT. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SHORING IF REQUIRED.

IF GROUNDWATER OR LOOSE SOILS ARE ENCOUNTERED, CONSULT GEOTECHNICAL ENGINEER FOR REVISED SLOPE CUT REQUIREMENTS. CUT SLOPES SHALL BE PROTECTED FROM EROSION PER GEOTECHNICAL RECOMMENDATIONS. ALL CUT SLOPE HEIGHTS & INCLINATIONS SHALL CONFORM TO APPROPRIATE OSHA/WISHA REGULATIONS.

SPECIAL INSPECTION

OPERATION	CONT	PERIODIC	REMARKS
SOILS			
EXCAVATION & FILL		X	GEOTECH ENGINEER
BLOCK WALLS			
ERECTION OF BLOCK WALL		X	
GEOGRID INSTALLATION		X	GEOTECH ENGINEER

NOTE:
ITEMS MARKED WITH AN "X" SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17. SPECIAL INSPECTION SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER. ANY INSPECTION FAILING TO MEET THE PROJECT SPECIFICATIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGN TEAM.

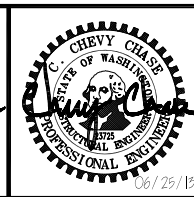


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MTM DESIGNED
ZOS DRAWN
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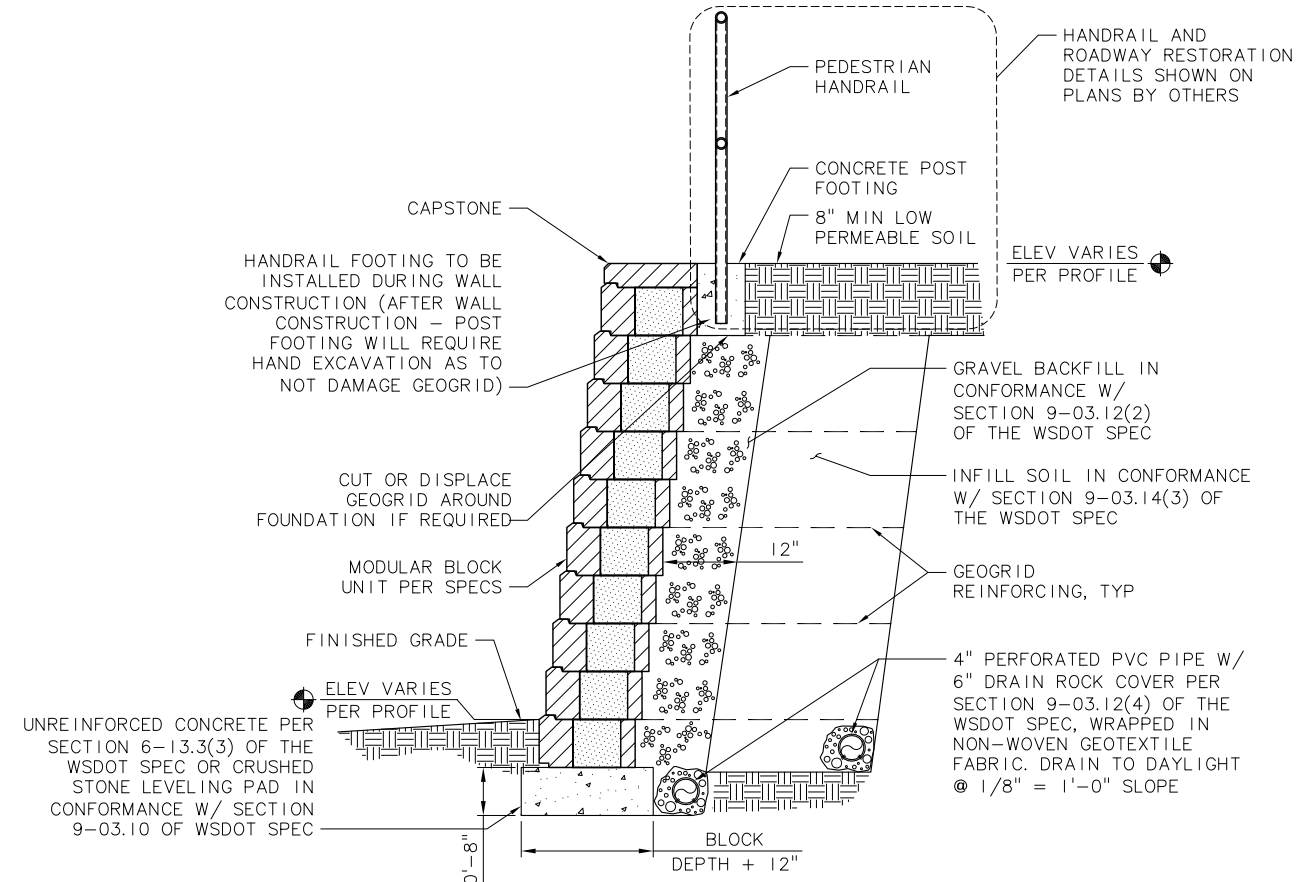
CITY OF ARLINGTON
69TH AVE NE CULVERT
REPLACEMENT

**MODULAR BLOCK WALL
NOTES AND PROFILES**

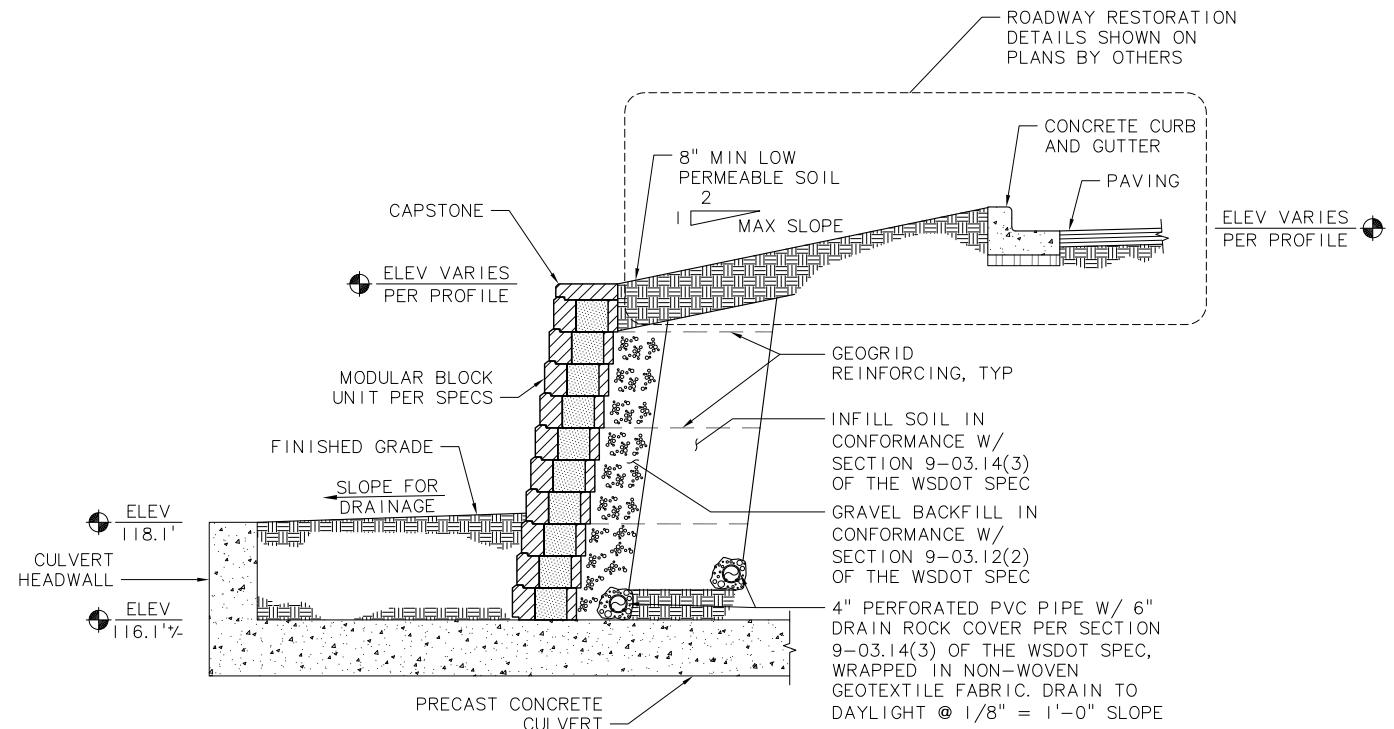
PROJECT NO.: 12-1347.205 SCALE: AS SHOWN DATE: JUNE 2013

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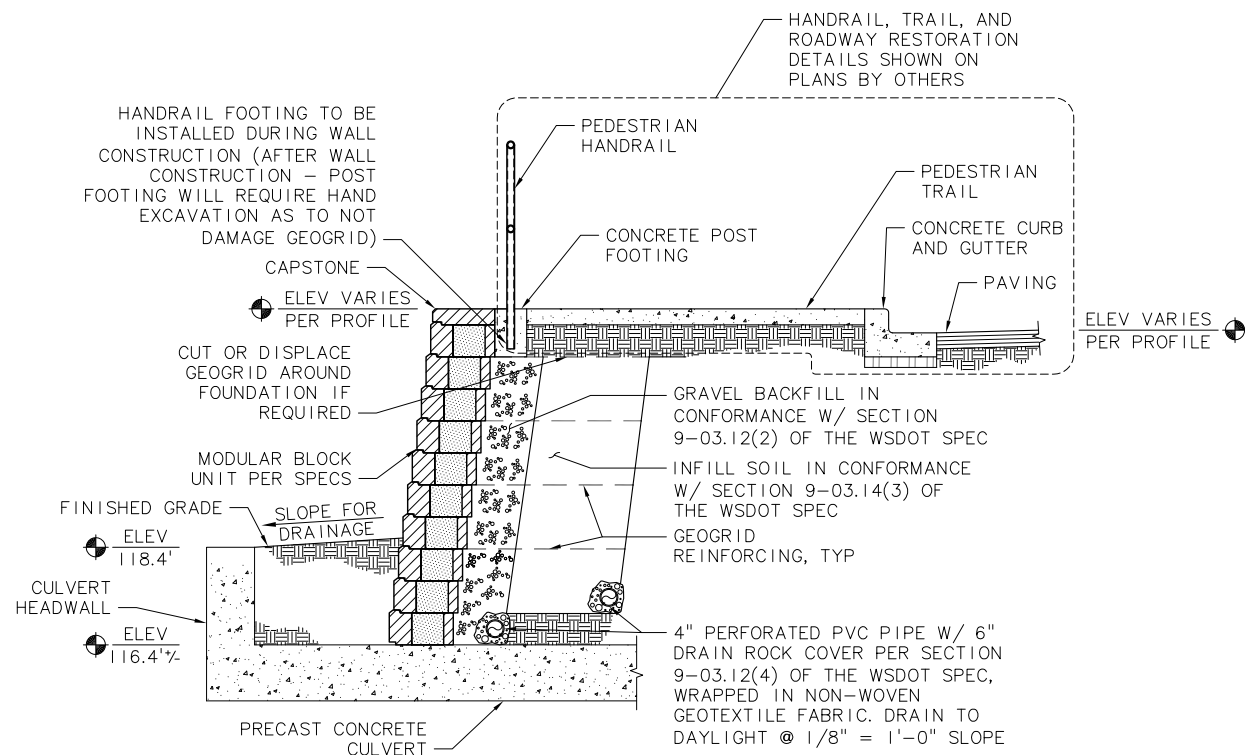
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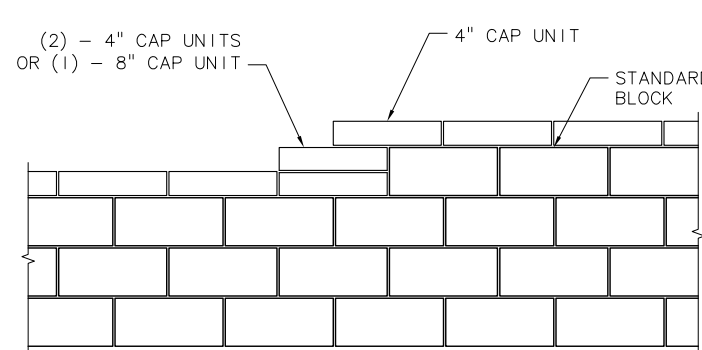
MODULAR BLOCK WALL SECTION
SCALE: 3/4" = 1'-0"



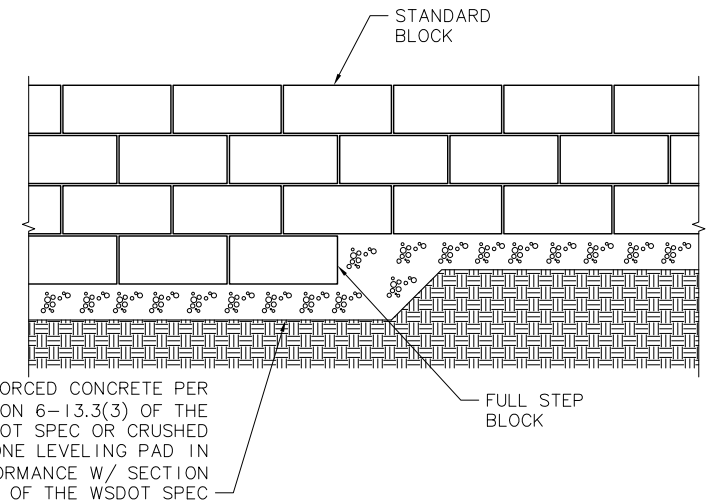
MODULAR BLOCK WALL SECTION AT CULVERT (DOWNSTREAM)
SCALE: 1/2" = 1'-0"



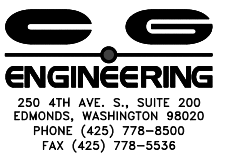
MODULAR BLOCK WALL SECTION AT CULVERT (UPSTREAM)
SCALE: 1/2" = 1'-0"



STEP AT TOP OF WALL
SCALE: 3/4" = 1'-0"



STEP AT BASE OF WALL
SCALE: 3/4" = 1'-0"



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CITY OF ARLINGTON
69TH AVE NE CULVERT REPLACEMENT

MODULAR BLOCK WALL SECTIONS AND DETAILS

PROJECT NO.: 12-1347.205 SCALE: AS SHOWN DATE: JUNE 2013

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