

4/09/24 3D Prc



EAST COLUMBIA BASIN IRRIGATION DISTRICT **EL 84.7 IRRIGATION MAIN**

PROJECT VICINITY MAP



PROJECT LOCATION MAP



SURVEY NOTES

1) THE EXISTING TOPOGRAPHIC AND PHYSICAL FEATURES SHOWN ON THESE PLANS ARE BASED ON A FIELD SURVEY BY ERLANDSEN AND ASSOCIATES, LIDAR BY NV5 GEOSPATIAL, AND FIELD RECONNAISSANCE BY RH2 ENGINEERING. ALL DESIGN CRITICAL TOPOGRAPHIC AND PHYSICAL FEATURES SHOWN ON THESE PLANS ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN THE EVENT THAT FIELD VERIFIED FEATURES OR EXPOSED UTILITIES ARE FOUND TO BE IN CONFLICT WITH THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. NO DEVIATION FROM THESE PLANS SHALL BE ACCEPTED ABSENT ENGINEER APPROVAL AND DISTRICT CONCURRENCE PRIOR TO ANY IMPLEMENTATION IN THE FIELD.

2) HORIZONTAL CONTROL: NORTH AMERICAN DATUM (NAD) 1983 (2011) FOR WASHINGTON STATE -SOUTH ZONE COORDINATE SYSTEM. US SURVEY FOOT. (EPSG: 6599).

3) VERTICAL CONTROL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88) BASED ON MONUMENT "OTHL"; LATITUDE: 46° 49' 21.17625"; LONGITUDE:-119° 10' 04.29882"; ELLIPSOID (METERS): 314.187.

4) CONTOUR INTERVAL: 1 FOOT

5) EQUIPMENT AND PROCEDURES USED: THIS LIDAR SURVEY WAS PERFORMED WITH A RIEGL VQ-1560II SYSTEM MOUNTED IN A CESSNA CONQUEST II. ADDITIONAL GROUND SURVEY WAS PERFORMED WITH A TRIMBLE R8.

Select sheets provided show work on DNR-owned parcel TITLE						
					DWG NO	
SHEET NO.		DVVG. NO.	SHEET NO.			
01		C0V	38		IR20	
02	CENERAL NOTES	601	30		IR30	
02		001	40			
03	STATION BASELINE AND OVERVIEW I	V01	41		IR32	
04	STATION BASELINE AND OVERVIEW I	V02	42		IR33	
05	STATION BASELINE AND OVERVIEW II	V0.3	4.3		IR.34	
06	STATION BASELINE AND OVERVIEW IV	V04	44	PLAN & PROFILE XXXV	IR35	
07	STATION BASELINE AND OVERVIEW V	V05	45		IR.36	
08	STATION BASELINE AND OVERVIEW VI	V06	46	PLAN & PROFILE XXXVI	IR.37	
09	STATION BASELINE AND OVERVIEW VI	V07	47	PLAN & PROFILE XXXVIII	IR38	
	GENERAL CIVIL		48	PLAN & PROFILE XXXIX	IR39	
10	PLAN & PROFILE I	IR01	49	PLAN & PROFILE XL	IR40	
11	PLAN & PROFILE II	IR02	50	PLAN & PROFILE XLI	IR41	
12	PLAN & PROFILE III	IR03	51	PLAN & PROFILE XLII	IR42	
13	PLAN & PROFILE IV	IR04	52	TESC DETAILS	D01	
14	PLAN & PROFILE V	IR05	53	IRRIGATION DETAILS I	D02	
15	PLAN & PROFILE VI	IR06	54	IRRIGATION DETAILS II	D03	
16	PLAN & PROFILE VII	IR07	55	IRRIGATION DETAILS III	D04	
17	PLAN & PROFILE VIII	IR08	56	IRRIGATION DETAILS IV	D05	
18	PLAN & PROFILE IX	IR09	57	IRRIGATION DETAILS V	D06	
19	PLAN & PROFILE X	IR10	58	IRRIGATION DETAILS VI	D07	
20	PLAN & PROFILE XI	IR11	59	ROADWAY DETAILS	D08	
21 PLAN & PROFILE XII		IR12		ELECTRICAL		
22	PLAN & PROFILE XIII	IR13	60	ELECTRICAL LEGEND	E001	
23	PLAN & PROFILE XIV	IR14	61	ELECTRICAL TURNOUT ONE-LINE	E002	
24	PLAN & PROFILE XV	IR15	62	FIBER & ELECTRICAL SITE PLAN I	E003	
25	PLAN & PROFILE XVI	IR16	63	FIBER & ELECTRICAL SITE PLAN II	E004	
26	PLAN & PROFILE XVII	IR17	64	FIBER & ELECTRICAL SITE PLAN III	E005	
27	PLAN & PROFILE XVIII	IR18	65	FIBER & ELECTRICAL SITE PLAN IV	E006	
28	PLAN & PROFILE IXX	IR19	66	FIBER & ELECTRICAL SITE PLAN VI	E007	
29	PLAN & PROFILE XX	IR20	67	FIBER & ELECTRICAL SITE PLAN VI	E008	
30	PLAN & PROFILE XXI	IR21	68	FIBER & ELECTRICAL SITE PLAN VIII	E009	
31	PLAN & PROFILE XXII	IR22	69	ELECTRICAL DETAILS	E010	
32	PLAN & PROFILE XXIII	IR23	70	ELECTRICAL SCHEDULES	E011	
33	PLAN & PROFILE XXIV	IR24	71	TURNOUT CONTROL PANEL LAYOUT	E012	
34	PLAN & PROFILE XXV	IR25	72	TURNOUT POWER AND COMMUNICATIONS LAYOUT	E013	
35	PLAN & PROFILE XXVI	IR26	73	TURNOUT PLC INPUT AND OUTPUT WIRING I	E014	
36	PLAN & PROFILE XXVII	IR27	74	TURNOUT PLC INPUT AND OUTPUT WIRING II	E015	



SECTION AN	D DETAIL REFERENCES		ABBREVIA	TIONS	
FOLLOWING CONVENTIONS HAVE E WEEN THE SECTION/DETAIL AND THE ERENCE BUBBLES PLAN REFERENCE THE DETAIL OR SE DETAIL/SECTION F WHICH THE DETAIL TION/DETAIL REFERENCE NUMBER TIONS OR ELEVATIONS SHOULD HAT HROUGH ZZ). SUBSURFA	BEEN USED WITHIN THESE DRAWINGS TO REFER THE READER E PLAN FROM WHICH IT IS REFERENCED. E BUBBLE - REFERS READER BACK TO THE PLAN FROM WHICH ECTION ORIGINATED. REFERENCE BUBBLE - REFERS READER TO THE DRAWING ON IL OR SECTION IS LOCATED. FERENCE NUMBER ON WHICH DETAIL ORIGINATED OR RESIDES. CONVENTIONS: VE A LETTER REFERENCE NUMBER ACE UTILITY LEGEND CE UTILITIES ARE OUTLINED AND EXPLAINED IN THE FOLLOWING	ACP BST CB CONC COUNTY CL CLSM CPEP CSBC CSTC DIAM DI DISTRICT DMJ DND DWG E ELC ELEV EOG EOP EX FL HMA L	ASPHALT CONCRETE PAVEMENT BITUMINOUS SURFACE TREATMENT CATCH BASIN CONCRETE ADAMS COUNTY CENTERLINE CONTROLLED LOW STRENGTH MAT. CORRUGATED POLYETHYLENE CRUSHED SURFACING BASE COURSE CRUSHED SURFACING TOP COURSE DIAMETER DUCTILE IRON EAST COLUMBIA BASIN IRRIGATION DISTRICT DISMANTLING JOINT DO NOT DISTURB DRAWING EAST LOW CANAL ELEVATION EDGE OF GRAVEL EDGE OF PAVEMENT EXISTING FLANGE HOT MIXED ASPHALT LEFT	MJ MECHAI N NORTHI NTD NOTE TO PE POLYET PP PUMPIN PROP PROPOS PVC POLYVII R RIGHT RT RIGHT RT RIGHT RT RIGHT ROW RIGHT-C SPEC SPECIFI SS SANITAI SSMH SANITAI MANHOU ST STORM STA STATIOI STD STANDA STA STATIOI STD STANDA SY SQUARE TBR TO BE F TESC TEMPOF SEDIME TYP TYPICAI U.N.O UNLESS W WATER WSDOT WASHIN	NICAL JOINT NG D DISTRICT D ENGINEER HYLENE G PLANT SED NYL CHLORIDE OF-WAY CATIONS RY SEWER RY SEWER LE N LINE RD E YARDS EMOVED RARY EROSION AND NT CONTROL NOTED OTHERWISE IGTON STATE MENT OF
UTILITY QUALITY LEVEL A I POTHOLE LOCATION W W W SI US Q O A UTILITY QUALITY LEVEL B I A	PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES BTAINED BY THE ACTUAL EXPOSURE OF (OR VERIFICATION OF REVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND UBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, SUALLY AT A SPECIFIC POINT. UNLESS OTHERWISE NOTED, UALITY LEVEL A IS ONLY APPLICABLE AT POTHOLED LOCATIONS N THE PLANS. AT ALL OTHER AREAS, THE UTILITY SHOULD BE SSUMED TO BE QUALITY LEVEL B.	LF CONTACT KYLE SMI PAUL CRO	LINEAR FEET CONTACT PEI - TH, P.E. (PROJECT MANAGER) DSS. P.E. (PRINCIPAL-IN-CHARGE)	TRANSF RSONNE AGENCY RH2 ENGINEERING RH2 ENGINEERING	PORTATION PHONE (509) 392-6490 392-6502
UTILITY QUALITY LEVEL C. - I UTILITY QUALITY LEVEL D. - I UTILITY QUALITY LEVEL D. - I ITILITY QUALITY LEVEL D. - I	HE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF UBSURFACE UTILITIES. INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE BOVE-GROUND UTILITY FEATURES INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL ECOLLECTIONS	JOE LAWF NATE ANE JULIO GO JOSE MEN	RENCE, P.E. (PROJECT ENGINEER) DREINI, P.E. (ASST. MANAGER) NZALEZ, P.E. (DISTRICT ENGINEER) NDOZA (PROJECT MANAGER)	RH2 ENGINEERING ECBID ECBID ECBID	392-5023 488-9671x112 488-9671x114 488-9671x120
THE USE OF THE LINE TYPES PROVIDED ABOVE WAS A PRIMARY METHOD FOR INDICATING THE ACCURACY OF THE UTILITIES SHOWN WITHIN THESE PLANS. WHEN THE SOURCE OF THE INFORMATION WAS UNKNOWN OR THE METHOD FOR LOCATING THE UTILITIES WAS UNAVAILABLE, QUALITY LEVEL D WAS USED AS THE DEFAULT. THESE CLASSIFICATIONS ARE BASED ON CI/ASCE 38-02, STANDARD GUIDELINES FOR THE			CALL 48 HOURS BE ONE CALL REPORT ALL	FORE YOU - 811 SPILLS	DIG



60% DESIGN

20-0078

Nov. 2, 2023 EL84_7-P-COV.DWG

SURVEY CONTROL	LEGEND				
۲	MONUMENT				
0	REBAR CAP				
SURVEY UTILITY	LEGEND				
۴	WATER BLOW OFF VALVE				
04	IRRIGATION RISER				
м	IRRIGATION VALVE				
<u>SURVEY DRY UTILIT</u>	Y LEGEND				
F	FIBER OPTICS VAULT				
¢	POWER POLE				
\rightarrow	POWER GUY ANCHOR				
Ð	POWER METER				
SURVEY SIGNAL	LEGEND				
<u> </u>	DOUBLE POST SIGN				
<u>SURVEY UTILITY LI</u>	<u>NETYPES</u>				
Р	UNDERGROUND POWER				
OHP	OVERHEAD POWER				
т	UNDERGROUND TELEPHONE				
FO	UNDERGROUND FIBER OPTICS				
——— w ———	WATER LINE				
IRRG	IRRIGATION LINE				
<u>SURVEY CONTROL L</u>	INETYPES				
	UTILITY EASEMENT				
	PARCEL LINE				
	SECTION LINE				
	RIGHT OF WAY LINE				
	ROADWAY CENTERLINE				
<u>SURVEY SITE LIN</u>	<u>ETYPES</u>				
1200	MAJOR CONTOUR				
- — — - 1202 - — — -	MINOR CONTOUR				
	BUILDING EDGE				
	DIRT ROAD EDGELINE				
	GRAVEL ROAD EDGELINE				
x x	FENCE				
<u> </u>	CANAL				
<u>SURVEY AREA HA</u>	<u>ATCHING</u>				
	ROADWAY ASPHALT AREA				
	ROADWAY CONCRETE AREA				
	DIRT ROADWAY				
	GRAVEL ROADWAY				

LEGEND

DEMOLITION LEGEND ---- SAWCUT LINE ASPHALT REMOVAL CONCRETE REMOVAL STABILIZED CONSTR. ENTRANCE INLET PROTECTION ---- STRAW WATTLES • • • SILT FENCE UTILITY REMOVAL LIMITS 111

VEGETATION REMOVAL AREA

IRRIGATION LEGEND

	IRRIGATION
	RESTRAINED
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	IRRIGATION
M	VALVE
C	CAP
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FORCE MAIN D JOINT PIPE EMENT EVE DCK TTING L JOINT FITTING JOINT FITTING JOINT REDUCER NWAY RAIN SERVICE ATION VALVE CONNECTION TO EXISTING

PROPOSED LEGEND

— 1170 — 1171 — CUT — FILL — C — P — FO — FO — I
— 1171 — CUT — FILL — C — P — FO — FO — I
CUT FILL C P FO FO FO C C C C C C C C C C C C C C C
FILL
C P F0 F0 I
P
F0
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GENERAL NOTES

TE LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- CUT LIMITS
- FILL LIMITS
- COMMUNICATION CONDUIT
- ELECTRICAL CONDUIT
- FIBER CONDUIT
- JUNCTION BOX
- PROPOSED EASEMENT
- UNDISTURBED NATIVE SOIL
- UNPAVED ROADWAY SHOULDER
- COMPACTED NATIVE MATERIAL
- COMPACTED IMPORT MATERIAL
- SAND
- GRAVEL SURFACE (CSTC)
- GRAVEL SURFACE (CSBC)
- CONTROLLED DENSITY FILL
- CONCRETE
- CONCRETE X-SECTION
- ASPHALT

- ALL WORKMANSHIP. CONSTRUCTION AND MATERIALS SHALL BE PERFORMED OR SUPPLIED IN ACCORDANCE WITH THESE SPECIAL PROVISIONS, PLANS, PROJECT SPECIFICATIONS, EAST COLUMBIA BASIN IRRIGATION DISTRICT (DISTRICT) STANDARD DETAILS, AND THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, 2020 EDITION, AS ISSUED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND THE AMERICAN PUBLIC WORKS ASSOCIATION. WHICH IS HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS.
- 2. A PRECONSTRUCTION CONFERENCE IS REQUIRED PRIOR TO CONSTRUCTION, AND 48 HOURS ADVANCE NOTIFICATION PRIOR TO ACTUAL START OF WORK IS REQUIRED.
- THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE RECORDS BUT HAVE NOT BEEN EXPOSED AND MEASURED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK TO AVOID DAMAGE OR DISTURBANCE, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES. IT IS UNDERSTOOD THAT OTHER ABOVE GROUND AND UNDERGROUND FACILITIES NOT SHOWN ON THE PLANS MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK.
- THE CONTRACTOR SHALL PROTECT BUILDINGS, FENCES, APPURTENANCES, ABOVE GROUND UTILITIES, AND OTHER PROPERTY ADJACENT TO ALL CONSTRUCTION AREAS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR REPAIRING ALL DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES.
- IN ACCORDANCE WITH THE DEPARTMENT OF ECOLOGY AIR QUALITY STANDARDS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING ALL FUGITIVE DUST THAT MAY BE GENERATED BY THE CONSTRUCTION PROJECT.
- 6. THE CONTRACTOR SHALL CONTAIN WORK TO WITHIN RIGHT-OF-WAY OR THE CONSTRUCTION LIMITS AS ILLUSTRATED IN THE PLANS.
- THE CONTRACTOR SHALL SECURE NECESSARY PERMITS PRIOR TO STARTING CONSTRUCTION. THE DISTRICT WILL OBTAIN SOME OF THE REQUIRED PERMITS. SEE THE PROJECT SPECIFICATIONS FOR FURTHER INFORMATION REGARDING PERMITS.
- ONSITE EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND BE IN PLACE PRIOR TO CONSTRUCTION. ANY PROBLEMS OCCURRING BEFORE FINAL ACCEPTANCE BY THE DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR. UPON FINAL ACCEPTANCE BY THE DISTRICT, OR AS OTHERWISE DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY, NON-DEGRADABLE EROSION CONTROL MEASURES.
- 9. ANY REVISIONS TO PLANS MUST BE MADE BY THE ENGINEER AND APPROVED BY THE DISTRICT PRIOR TO ANY IMPLEMENTATION IN THE FIELD.
- 10. ALL PAVEMENT MARKINGS AND SIGNING SHALL CONFORM TO THE REQUIREMENTS OF THE MUTCD.
- 11. A COPY OF THE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 12. WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE CONTRACTOR SHALL SAW CUT OR OVERLAY AND FEATHER NEW PAVEMENT TO PROVIDE A SMOOTH TRANSITION FROM EXISTING TO PROPOSED PAVING. APPLICATION OF A THIN TACK COAT OF EMULSIFIED ASPHALT SHALL BE APPLIED TO INSURE PROPER BONDING.
- 13. THE COMPLETED SURFACE OF ALL COURSES SHALL BE OF UNIFORM TEXTURE, SMOOTH, UNIFORM AS TO CROWN AND GRADE, AND FREE FROM DEFECTS OF ALL KINDS. THE COMPLETED SURFACE OF THE WEARING COURSE SHALL NOT VARY MORE THAN 1/8 INCH FROM THE LOWER EDGE OF A 10-FOOT STRAIGHTEDGE PLACED ON THE SURFACE PARALLEL TO THE CENTERLINE. THE TRANSVERSE SLOPE OF THE COMPLETED SURFACE OF THE WEARING COURSE SHALL VARY NOT MORE THAN 1/4 INCH IN 10- FEET FROM THE RATE OF TRANSVERSE SLOPE SHOWN ON THE PLANS.
- 14. MATERIALS SAMPLING AND TESTING SHALL BE AT A FREQUENCY AND MAGNITUDE AS SPECIFIED IN THE STANDARD SPECIFICATIONS OR DETERMINED BY THE ENGINEER. A PRIVATE AND INDEPENDENT TESTING LABORATORY SHALL PERFORM TESTING AND SAMPLING. CERTIFIED TEST REPORTS SHALL BE FURNISHED FOR ALL TESTS PERFORMED BY PRIVATE TESTING LABORATORIES. THE DISTRICT WILL BE RESPONSIBLE FOR ACCEPTANCE TESTING.

┝━ PIPE LENGTH ╼┥

----- PIPE LENGTH -----

15. PROVIDE A MINIMUM OF 48-HOUR NOTIFICATION TO THE COUNTY PRIOR TO ENTERING THE COUNTY ROW.

PIPELINE LENGTH MEASUREMENTS

THE FOLLOWING NON-FACILITY PIPELINE (EX: WATER MAIN, SEWER MAIN, & IRRIGATION MAIN) LENGTHS CALLED OUT ON PLANS ARE MEASURED AS FOLLOWS:

FLANGE x FLANGE (FLxFL) PIPE MEASURED FROM FACE OF FLANGE TO FACE OF FLANGE.

FLANGE x PLAIN END (FLxPE) PIPE MEASURED FROM FACE OF FLANGE TO CENTER OF FITTING.

PLAIN END x PLAIN END (PExPE) PIPE MEASURED FROM CENTER OF FITTING TO CENTER OF FITTING.

RESTRAINED JOINT x RESTRAINED JOINT (RJxRJ) PIPE MEASURED FROM CENTER OF FITTING TO CENTER OF FITTING.

FITTINGS ARE ASSUMED TO BE STANDARD LENGTH 125#, 250# FLANGED OR COMPACT CLASS 350 MECHANICAL JOINTS. CONTRACTOR RESPONSIBLE FOR VERIFYING LENGTHS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE INTO ACCOUNT ANY VARIATIONS IN FITTING DIMENSIONS.

		ANTITLE CONTRACTOR	R F WA			
EAST COLUMBIA BASIN			EL 84.7 IRRIGATION MAIN		GENERAL NOTES	
в ио.: 20-0078						BY REVIEW
	FILENAME: EL84_7-P-COV.DWG	REVISIONS		NDISTU	30% nrai	
CLIE	- I					
SAVE DATE: Nov 2, 2023 CLIE	PLOT DATE: Nov 3, 2023					TE DESCRIPTION





















SHEET NO.

21

IR12

2 0 $\triangleleft \triangleleft$ S S

SHEET NO. 22 7

IR13

PLAN VIEW 1" = 50'

NOT TO SCALE

GRAB TENSILE ELONGATION (ASTM D4632) 30% MAXIMUM. ULTRAVIOLET RESISTANCE (ASTM D4355) 70% MINIMUM.

EROSION CONTROL N
THE IMPLEMENTATION OF THESE EROSION CONTROL REQUIREMENTS AND THE CONSTRUCTION, MAINTENANCE, REPL CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED AND PERMANENT VEGETATION IS ESTABLISHED. THE ESC REC CONSTRUCTION.
THE EROSION CONTROL FACILITIES SHOWN ON THESE PLANS ARE NECESSARY TO PREVENT EROSION AND SEDIMENT REQUIREMENTS AND MAY NEED TO BE UPGRADED TO CONTROL EROSION AND SEDIMENTATION. IT IS THE CONTRACT

ANY AREA STRIPPED OF VEGETATION, INCLUDING ROADWAY EMBANKMENTS, WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 14 DAYS, SHALL BE IMMEDIATELY STABILIZED WITH TEMPORARY HYDROSEED AND STRAW MULCH OR THE PERMANENT VEGETATION COVER. AREAS WITH SLOPES 3:1 OR GREATER SHALL IMMEDIATELY BE STABILIZED USING MULCH AND SEEDING. IN AREAS WHERE PERMANENT SEEDING IS REQUIRED. ALL TEMPORARY AND EXISTING VEGETATION SHALL BE REMOVED PRIOR TO PERMANENT SEEDING.

NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.

- THE EROSION CONTROL FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT.
- STABILIZED CONSTRUCTION ENTRANCES AND WASH PADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. A CONSTRUCTION FENCE SHALL BE PLACED AROUND THE PERIMETER OF THE PROPERTY TO IDENTIFY CONSTRUCTION GRADING LIMITS.
- TEMPORARY RUNOFF CONVEYANCE SHALL BE INSTALLED TO PREVENT RUNOFF FROM ENTERING THE PROPOSED BUILDING PAD AND PARKING LOT AREAS DURING AND UPON COMPLETION OF THE SITE GRADING.
- SLOPE ROUGHENING IS REQUIRED ON ALL EMBANKMENTS WITH SLOPES OF 3:1 OR GREATER. USE DOZER TREADS TO CREATE GROOVES PERPENDICULAR TO SLOPE DIRECTION.
- DURING CONSTRUCTION, FILTER FABRIC SHALL BE PLACE IN ALL CATCH BASIN INLET GRATES AND MAINTAINED AS REQUIRED TO PREVENT CLOGGING.
- SPRAY WATER AS NEEDED TO CONTROL DUST.
- 10. PROTECT BORROW AND STOCKPILE AREAS FROM EROSION WITH STRAW MULCH AND/OR TEMPORARY SEEDING.
- 11. ALL TEMPORARY ESC MEASURES SHALL BE REMOVED UPON STABILIZATION OF THE SITE. TRAPPED SEDIMENT SHALL BE REMOVED.

WATTLE NOTES:

OTES

LACEMENT, AND UPGRADING OF THEM IS THE RESPONSIBILITY OF THE QUIREMENTS ARE REQUIRED TO BE INSTALLED PRIOR TO BEGINNING

T LADEN WATER FROM LEAVING THE SITE. THESE FACILITIES ARE MINIMUM TORS RESPONSIBILITY TO INSTALL ANY EROSION CONTROL FACILITIES

WATTLES SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION 9-14.5(5). INSTALL WATTLES ALONG CONTOURS. INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(10). SECURELY KNOT EACH END OF WATTLE. ABUT

ADJACENT WATTLES TIGHTLY, END TO END,

PILOT HOLES MAY BE DRIVEN THROUGH THE WATTLES AND INTO THE SOIL WHEN SOIL

LIVE STAKES MAY BE USED FOR PERMANENT INSTALLATION AND SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 9-14.5(6).

WATTLES SHALL BE INSPECTED REGULARLY, AND IMMEDIATELY AFTER A RAINFALL PRODUCES RUNOFF, TO ENSURE THEY REMAIN THOROUGHLY ENTRENCHED AND IN CONTACT WITH THE SOIL.

PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).

BASIN MAIN TRIC VIION BIA S S Δ AIL NN Ζ **IRRIG** OIL _ ____ Ш δ \mathbf{O} U RR S S Щ ш NS SCALE: SHOWN DRAWING IS FULL SCALE WHEN BAR MEASURES 2" SHEET NO

52

D01

Hb. Bd)	TRENCH BACKELL MATERIALS AND CONDITIONS:
(Hh)	
(115) 1 IN	1. NATIVE MATERIAL IS ASSUMED USABLE AS TRENCH BACKFILL MATERIAL IF IN
4-11N	ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT,
	UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.**
6-IN	2. NATIVE MATERIAL WILL NOT BE SUITABLE FOR USE AS BACKFILL MATERIAL
12-IN	
12	
	WHERE HIGH GROUNDWATER LEVELS ARE ENCOUNTERED, THE
(- 1)	BEDDING, EMBEDMENT, AND TRENCH BACKFILL SHALL BE REPLACED WITH
(Bd)	CRUSHED ROCK OR CONTROL DENSITY FILL (CDF) AT THE ENGINEER'S
- 24-IN	DIRECTION, EXCEPT WHERE THE PIPE IS REQUIRED TO BE FULLY ENCASED
- 36-IN	IN CDE AND AS NOTED BELOW
	FUR PUBLIC RUADWAY CRUSSINGS, ALL PIPE ZUNE DEDDING,
=	EMBEDMENT, AND TRENCH BACKFILL MATERIAL WITHIN ROADWAY
-	RIGHT-OF-WAYS (ROWs) SHALL BE CRUSHED ROCK OR CONTROL DENSITY
	FILL (CDF) AT THE ENGINEER'S DIRECTION.
	3. ALL TRENCHING AND SHORING TO BE DONE IN ACCORDANCE WITH OSHA AND
	WISHA STANDARDS, CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH SAFETY
	AND EXCAVATION AS SOIL CONDITIONS CHANGE IN THE FIELD
ED **	
EN.	
	BACKFILL IN UNIFORM LAYERS NOT TO EXCEED 12 INCHES IN LOUSE THICKNESS.
MENT	EACH LIFT IS TO BE COMPACTED TO AT LEAST 90% OF ITS MDD BASED ON ASTM
TAILS	D1557 MODIFIED TEST PROCEDURE OR 92% OF ITS MDD BASED ON ASTM D-698
	STANDARD TEST PROCEDURE
	5. IN AREAS WHERE THE TRENCH WILL SUPPORT ROADWAYS OR VEHICLE ACCESS
	AREAS, TRENCH BACKEILL SHALL BE PLACED IN UNIFORM LAYERS NOT TO
DRY	EXCEED 8 INCHES IN LOOSE THICKNESS, EACH LIET IS TO BE COMPACTED TO AT
RE OR	
Γ	LEAST 95% OF ITS MIDD BASED ON THE ASTM D-1557 TEST PROCEDURE (MODIFIED
	PROCTOR) FROM 0 TO 4 FEET BELOW FINISHED SURFACE AND 90% BELOW 4 FEET.
	6. BACKFILL MATERIAL SHALL CONTAIN MATERIAL NO LARGER THAN 3 INCHES OF
	ANY DIMENSION WITHIN THE FIRST 2 FEET OF COVER.
NIT	
INT	* VARIES. DEPTH SHOWN DOES NOT NECESSARILY REPRESENT ACTUAL DEPTH
	TO GROUNDWATER. CONTRACTOR SHOULD REFER TO THE GEOTECHNICAL
	REPORT FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL COMPLETELY
ASTM	DEWATER TRENCH PRIOR TO PIPELINE PLACEMENT
D ON	
DON	
	TO THE PROJECT SPECIFICATIONS. PERIODIC SAMPLE COLLECTION AND
	TESTING MAY BE PERFORMED TO CONFIRM THE SUITABILITY OF NATIVE
	MATERIAL. NATIVE SOILS THAT ARE UNABLE TO ACHIEVE THE MINIMUM
	STANDARDS OR FAILURE ON THE PART OF THE CONTRACTOR TO PROPER V
	STUKE AND CARE FOR THE STUCKPILED MATERIAL, THEREBY RENDERING THE
	MATERIAL AS UNSUITABLE, SHALL RESULT IN THE REMOVAL, DISPOSAL OF THE
	UNSUITABLE STOCKPILED MATERIAL, AND REPLACEMENT WITH APPROVED
	IMPORT MATERIAL AT THE CONTRACTOR'S EXPENSE

AIR/VACUUM VALVE TABLE						
STATION	CONCRETE RISER HEIGHT	TEE MATERIAL AND SIZE	AIR/VACUUM VALVE SIZE	AIR RELEASE VALVE SIZE	VALVE MODEL ¹	BUTTE
54+37.5A	11'	FRP 42" X 10"	10"	1/4"	APCO 1800	
80+74.7A	11'	FRP 42" X 10"	10"	1/4"	APCO 1800	
113+47.4A	11'	FRP 42" X 10"	10"	1/4"	APCO 1800	
175+75.4A	11'	FRP 42" X 12"	12"	1/4"	APCO 1800	
210+45.2A	11'	FRP 42" X 10"	10"	1/4"	APCO 1800	
216+28.8A	12'	FRP 42" X 8"	8"	1/4"	APCO 1800	
250+55.2A	11'	FRP 42" X 10"	10"	1/4"	APCO 1800	
298+24.3A	9'	DI 16" X 4"	4"	1/8"	APCO 1700	
24+33.4B	9'	DI 20" X 6"	6"	1/4"	APCO 1800	
46+02.2B	9'	DI 20" X 6"	6"	1/4"	APCO 1800	
30+99.6C	9'	DI 16" X 4"	4"	3/8"	APCO 1700	
58+22.4C	9'	DI 16" X 4"	4"	1/8"	APCO 1800	
89+53.5C	9'	DI 16" X 4"	4"	1/8"	APCO 1800	