INDEX

SHEET NO.	PLAN REFERENCE NO.	TITLE
		VOLUME 1
1	IN1	INDEX
2	VM1	VICINITY MAP
3 - 5	SQ1 - SQ3	SUMMARY OF QUANTITIES
		VOLUME 2
6	IN2	INDEX
7	CT1	CERTIFICATION SHEET
8 - 9	RS1 - RS2	ROADWAY SECTIONS
10 - 15	AL1 - AL6	ALIGNMENT AND RIGHT OF WAY
16 - 21	QTTE1 - QTTE6	QUANTITY TABULATION - TESC/SITE PREPARATION
22 - 26	SP1 - SP5	TESC/SITE PREPARATION
27 - 31	RP1 - RP5	ROADWAY PROFILES
32 - 34	SND1 - SND3	STRUCTURE NOTES DRAINAGE
35 - 38	DR1 - DR4	DRAINAGE PLANS
39 - 43	DP1 - DP5	DRAINAGE PROFILES
44 - 48	DD1 - DD5	DRAINAGE DETAILS
49	UT1	UTILITY PLAN
50	QTMK1	QUANTITY TABULATION - PAVING AND PAVEMENT MARKING
51 - 53	MK1 - MK3	PAVING AND PAVEMENT MARKING
54 - 61	ITS1 - ITS8	ITS PLAN
62	SS1	SIGN SPECIFICATIONS
63	SI1	SIGNING PLAN
64	SD1	SIGNING DETAILS

INDEX (CONTINUED)

SHEET NO.	PLAN REFERENCE NO.	TITLE
		VOLUME 3
65	IN3	INDEX
66	CT2	CERTIFICATION SHEET
67 - 177	BP1 - BP111	BRIDGE PLAN
178 - 182	BC1 - BC5	ARCHITECTURAL DETAILS
183 - 190	SB1 - SB8	SIGN BRIDGE
191 - 192	CS1 - CS2	CONSTRUCTION SIGNING PLAN
193 - 196	TC1 - TC4	TRAFFIC CONTROL PLAN

NOTE TO THE DESIGNER:

1. THE INDEX IS TO BE THE FIRST SHEET IN PLANS SET VOLUME 1 (SEE 400.06)
2. THE FEDERAL AID NUMBER IS REQUIRED ON THE FIRST SHEET OF THE PLANS, WHETHER IT IS THE INDEX OR COMBINATION INDEX/VICINITY MAP.
3. PLAN REFERENCE NUMBERS SHALL NOT BE REPEATED.
4. THE LIMIT OF PLAN SHEETS PER VOLUME IS 225 PAGES. BREAK VOLUMES AT THE END OF A PLAN SET.

PLAN REF. NO.
IN1
SHEET
OF
SHEETS

NOTE: ALL SHEET REFERENCES, FIRST NOS. OF STRUCTURE CODE DESIGNATIONS AND MATCH LINE SHEET REFERENCES, ETC., THROUGHOUT THE PLANS, REFER TO THE ENTRY IN THE PLAN REFERENCE NUMBER BOX.

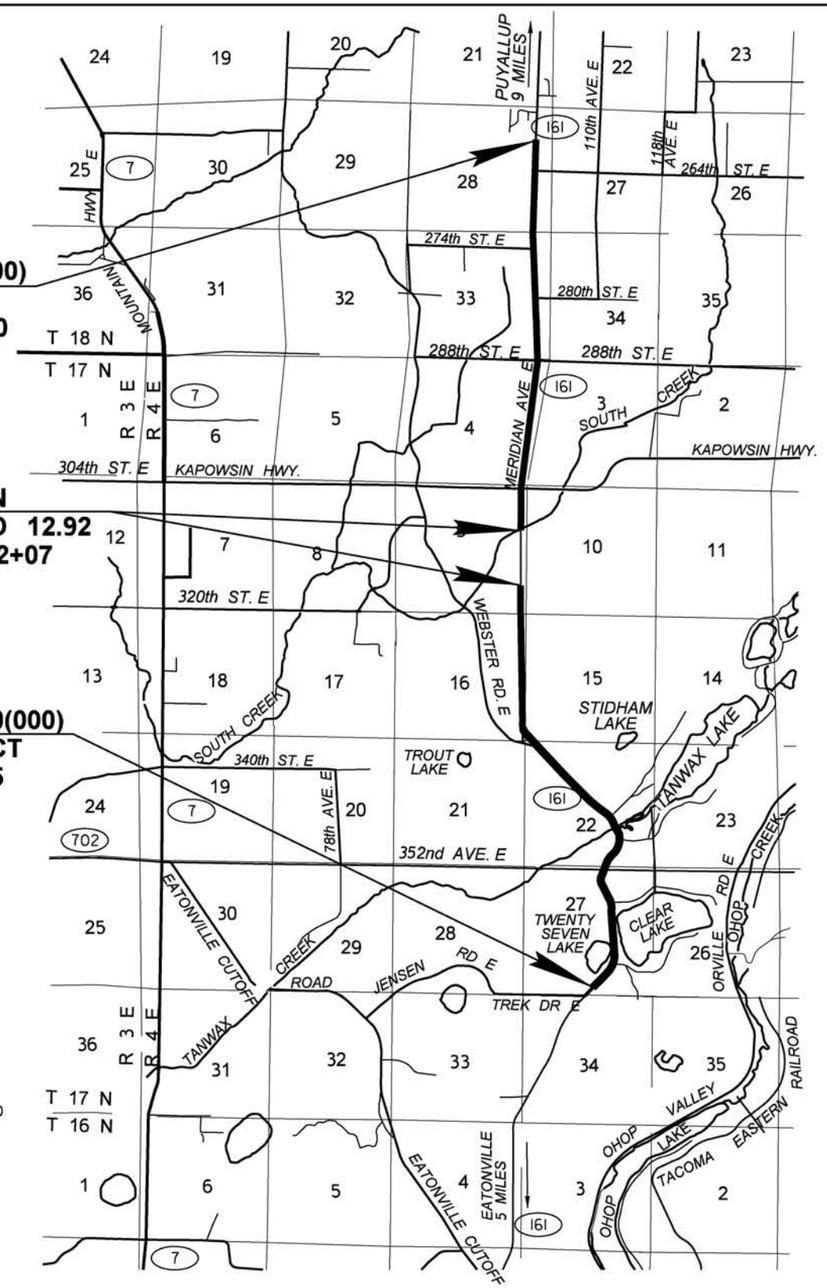
INDEX

SHEET NO.	PLAN REFERENCE NO.	TITLE
		VOLUME 1
1	IN1	INDEX / VICINTY MAP
2 - 3	SQ1 - SQ2	SUMMARY OF QUANTITIES
		VOLUME 2
4	CT1	CERTIFICATION SHEET
5	RS1	ROADWAY SECTIONS
6 - 7	PV1 - PV2	PAVING AND PAVEMENT MARKING
8	PD1	PAVING DETAILS
9	PM1	PAVEMENT MARKING DETAILS
10 - 11	RA1 - RA2	ROAD APPROACH DETAILS
12	PL1	PLANING DETAILS
13 - 18	QT1 - QT6	QUANTITY TABULATION-TRAFFIC
22	MD1	MONUMENT DETAILS
23	DL1	DETECTOR LOOP REPLACEMENT PLAN
24 - 25	SS1 - SS4	SIGN SPECIFICATIONS
26 - 27	S1-S2	SIGN PLANS
28	AV1	ADVANCED WARNING SIGN PLAN
29-41	TC1 - TC13	TRAFFIC CONTROL PLAN

END NH-0000(000)
END PROJECT
SR161 M.P. 16.10
STA 850+08

PAVING EXCEPTION
SR161 M.P. 12.39 TO 12.92
STA 654+34 TO 682+07

BEGIN NH-0000(000)
BEGIN PROJECT
SR161 M.P. 8.95
STA 472+60



0 4000 8000
SCALE IN FEET

NOTE TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF COMBINING THE INDEX AND VICINITY MAP ON A SMALL PROJECT.
2. THE INDEX OR INDEX/VICINITY MAP COMBINATION IS TO BE THE FIRST SHEET IN PLANS SET VOLUME 1 (SEE 400.06)
3. THE FEDERAL AID NUMBER FOR CONSTRUCTION (IF APPLICABLE) IS REQUIRED ON THE FIRST SHEET OF THE PLANS, WHETHER THAT IS THE INDEX OR COMBINATION INDEX/VICINITY MAP LIKE THIS EXAMPLE.
4. PLAN REFERENCE NOS. SHALL NOT BE REPEATED.

PLAN REF NO
IN1
SHEET
OF
SHEETS

NOTE:
ALL SHEET REFERENCES, FIRST NOS. OF STRUCTURE CODE DESIGNATIONS AND MATCH LINE SHEET REFERENCES, ETC., THROUGHOUT THE PLANS, REFER TO THE ENTRY IN THE PLAN REFERENCE NUMBER BOX.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-2.dgn					
TIME	1:29:12 PM					
DATE	5/2/2025					
PLOTTED BY	WilliSD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	NH-0000(000)
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP. BOX DATE

P.E. STAMP. BOX DATE

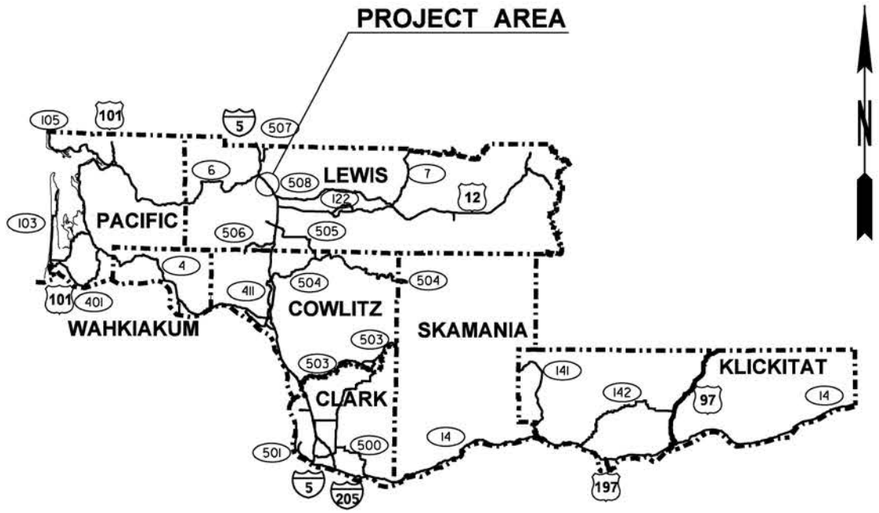
EXAMPLE 4-2

INDEX / VICINITY MAP

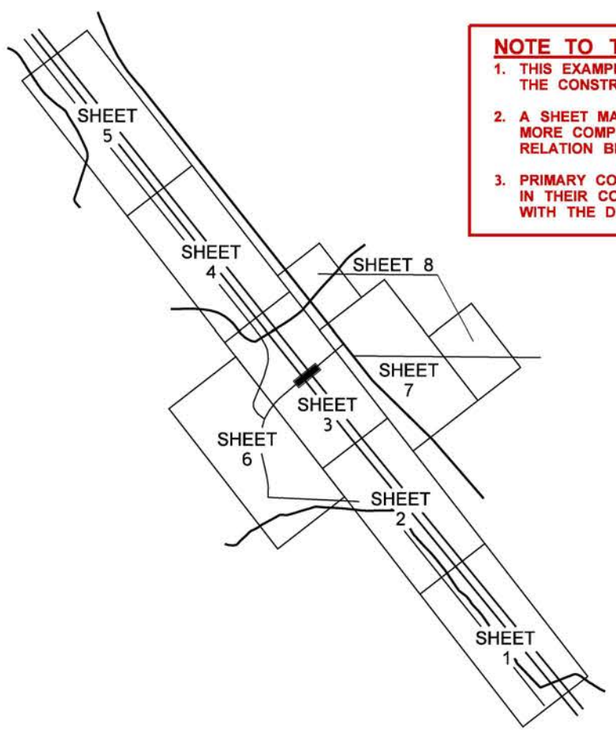
Plot 2

IN1

SHEET OF SHEETS

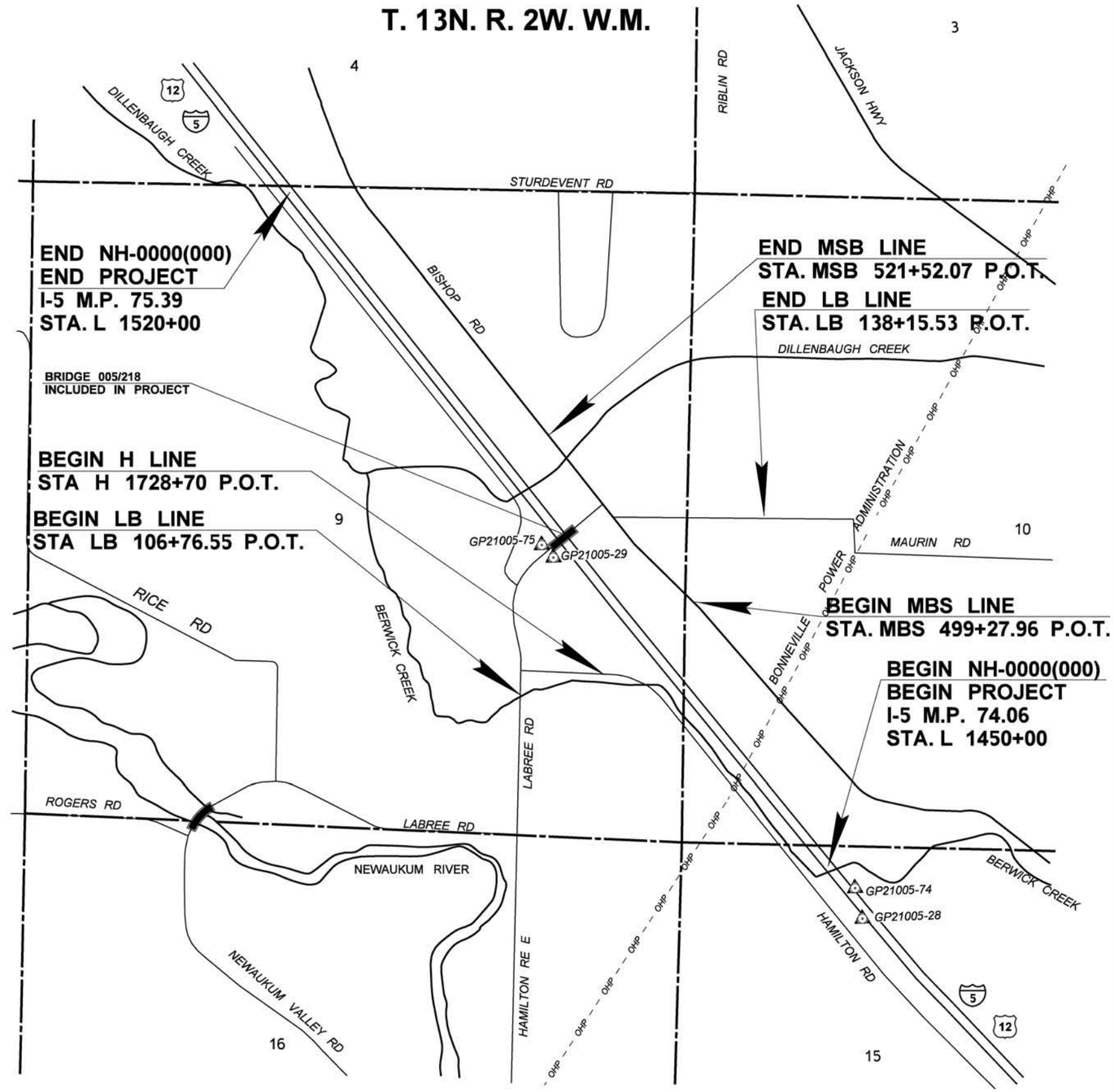


SOUTHWEST REGION



NOTE TO THE DESIGNER:

1. THIS EXAMPLE USES A BLOW-UP TO SHOW THE CONSTRUCTION LIMITS.
2. A SHEET MAP CAN BE VERY USEFUL ON MORE COMPLEX CONTRACT TO IDENTIFY THE RELATION BETWEEN PLAN SHEET LOCATIONS.
3. PRIMARY CONTROL POINTS ARE DISPLAYED IN THEIR COORDINATE LOCATION AND LABELED WITH THE DESIGNATION ID ONLY.



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-3.dgn						
TIME	1:41:35 PM						
DATE	4/18/2025						
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.

JOB NUMBER 00Z000

CONTRACT NO. | LOCATION NO. SP1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-3

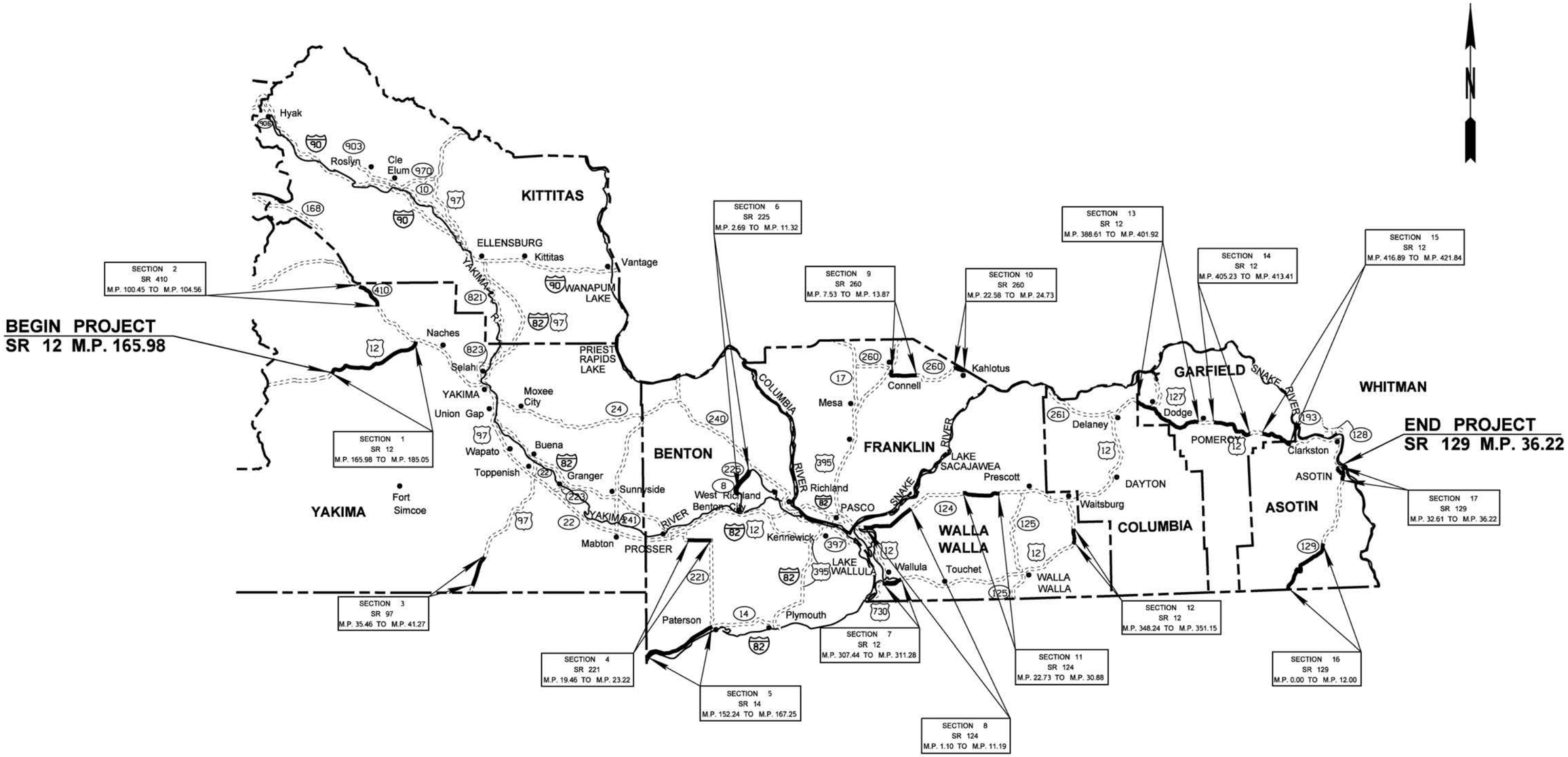
VICINITY MAP

Plot 1

PLAN REF NO VM1

SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\GeoMetrix\Manuals\PPM\Div4_MasterFiles\PPM_Div_4_Example_4-3.dgn



NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A REGION WIDE BST PROJECT, THEREFORE ONLY MILE POSTS ARE SHOWN (NO STATIONING) DUE TO THE LACK OF PROJECT COMPLEXITY.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-4.dgn				REGION NO.	STATE	FED.AID PROJ.NO.
TIME	1:43:03 PM				10	WASH	
DATE	4/18/2025						
PLOTTED BY	WilliSD				JOB NUMBER		
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO.
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-4

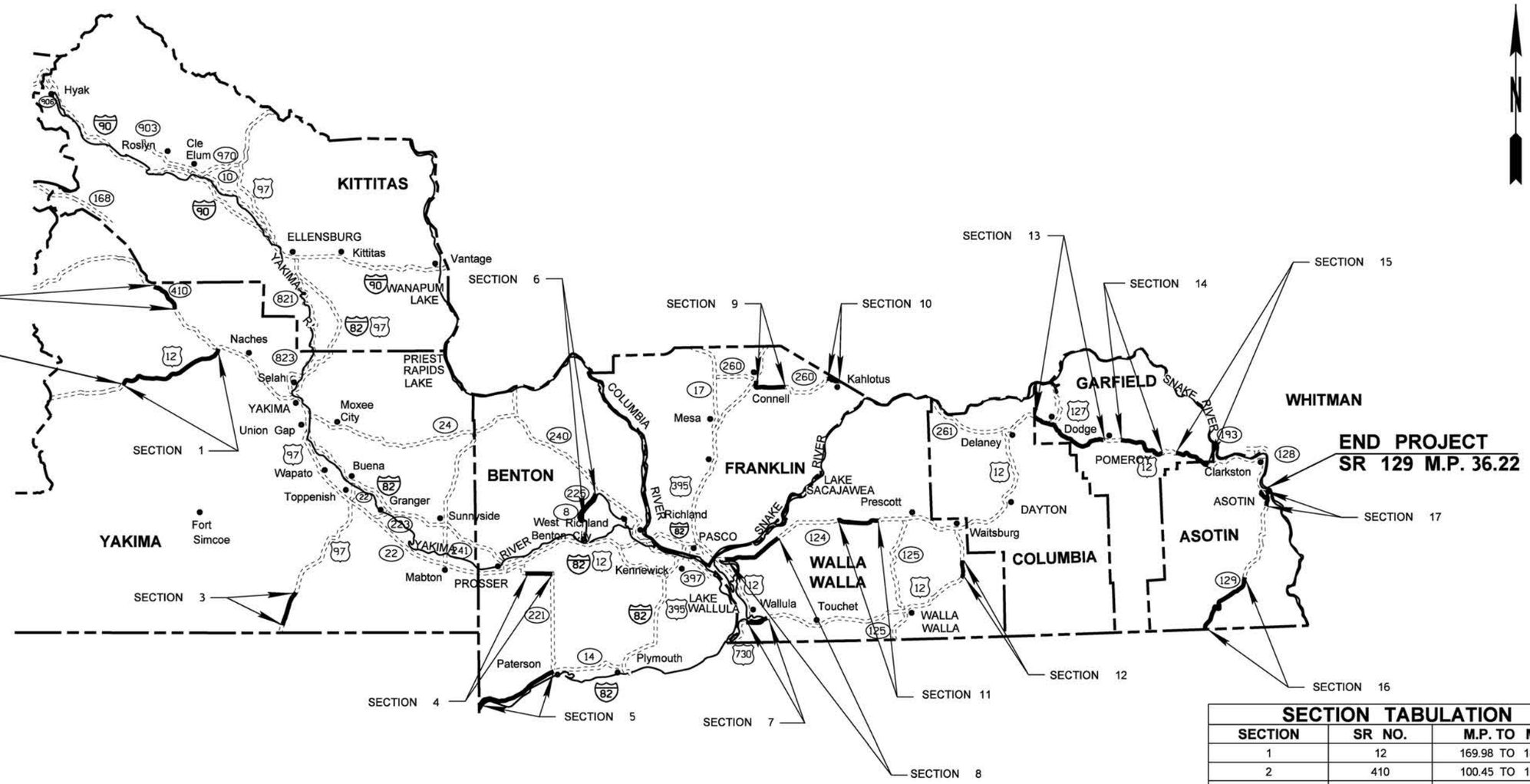
VICINITY MAP

Plot 4

PLAN REF NO VM1

SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\GeoMetrix\Manuals\PPM\Div4_MasterFiles\PPM_Div_4_Example_4-4.dgn



SECTION TABULATION

SECTION	SR NO.	M.P. TO M.P.
1	12	169.98 TO 185.05
2	410	100.45 TO 104.56
3	97	35.46 TO 41.27
4	221	19.46 TO 23.22
5	14	152.24 TO 167.25
6	225	2.69 TO 11.32
7	12	307.44 TO 311.28
8	124	1.10 TO 11.19
9	260	7.53 TO 13.87
10	260	22.73 TO 30.88
11	124	22.73 TO 30.88
12	12	348.24 TO 351.15
13	12	388.61 TO 401.92
14	12	405.23 TO 413.41
15	12	416.89 TO 421.84
16	129	0.00 TO 12.00
17	129	32.61 TO 36.22

NOTES TO THE DESIGNER:

1. THIS IS AN ALTERNATIVE METHOD OF EXAMPLE 4-3, THE SAME REGION WIDE BST PROJECT. SECTION IDENTIFICATION IS IN TABULAR FORMAT (SEE TABLE).

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-5.dgn				
TIME	1:45:34 PM				
DATE	4/18/2025				
PLOTTED BY	WillisD				
DESIGNED BY					
ENTERED BY					
CHECKED BY					
PROJ. ENGR.					
REGIONAL ADM.		REVISION	DATE	BY	

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER
CONTRACT NO. | LOCATION NO.

P.E. STAMP BOX DATE
P.E. STAMP BOX DATE

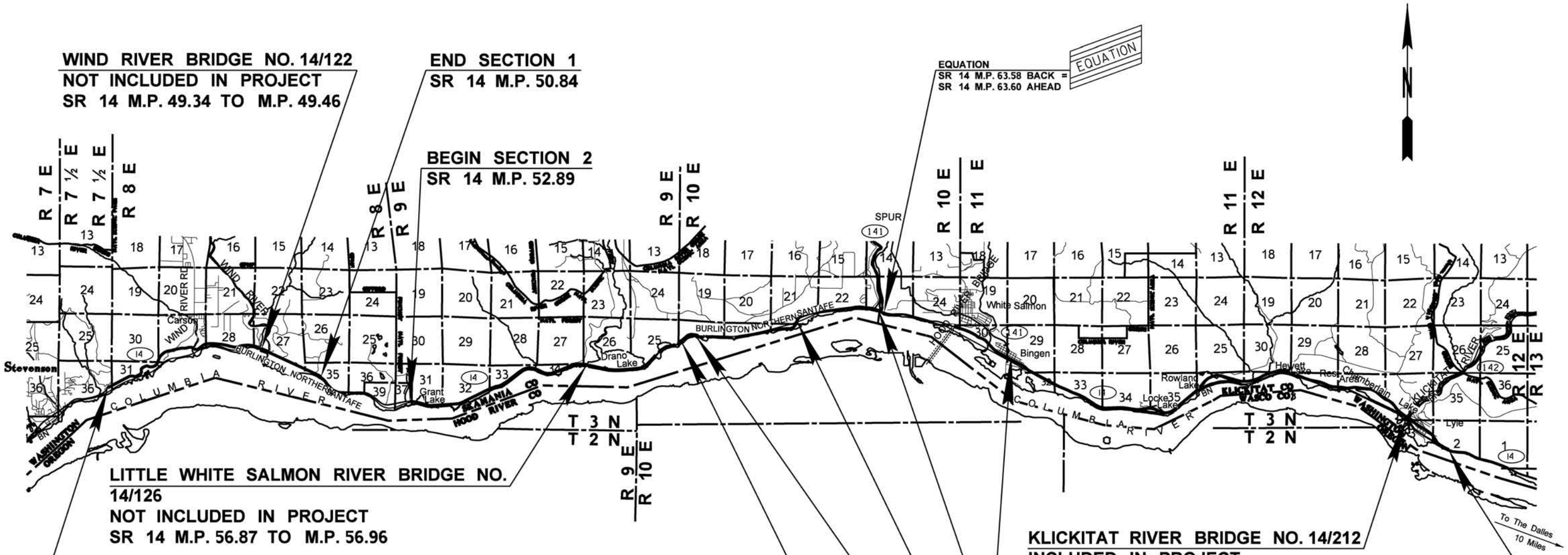
Washington State Department of Transportation

EXAMPLE 4-5

VICINITY MAP

Plot 5
PLAN REF NO VM1
SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\GeoMetrix\Manuals\PPM\Div4_MasterFiles\PPM_Div_4_Example_4-5.dgn



NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A SIMPLE PAVER UTILIZING MILE POSTS ONLY. IF STATIONING IS USED IN THE PLANS, THEN STATIONING MUST BE SHOWN ON THE VICINITY MAP.
2. THIS EXAMPLE SHOWS HOW PAVING EXCEPTIONS ARE SHOWN ON A VICINITY MAP.
3. THIS EXAMPLE ALSO SHOWS HOW BRIDGES ARE TO BE SHOWN ON A VICINITY MAP WHEN THEIR LOCATION IS WITHIN PROJECT THE LIMITS.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-6.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. NH-0000(000)
TIME	1:51:37 PM				JOB NUMBER 00Z000		
DATE	5/2/2025						
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO. XL-1234
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-6

VICINITY MAP

Plot 6

PLAN REF NO VM1

SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\GeoMetrix\Manuals\PPM\Div4_MasterFiles\PPM_Div_4_Example_4-6.dgn

SUMMARY OF QUANTITIES

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION I-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION I-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1 SR77 49+00.00 TO 70+85.00	GROUP 1 DB6 LINE 9+00.00 TO 29+85.00	GROUP 1 MC-N LINE 10+00.00 TO 17+18.64	GROUP 1 MC-S LINE 10+00.00 TO 13+59.65	GROUP 1 W-NS LINE 10+00.00 TO 17+74.53	GROUP 1 NS-W LINE 9+00.00 TO 18+19.15	GROUP 1 BRIDGE NO. 77/10	GROUP 2 E-NS LINE 10+00.00 TO 18+83.05	GROUP 2 NS-E LINE 9+00.00 TO 22+36.98	GROUP 2 SR77 70+85.00 TO 95+00.00	GROUP 3 DB6 LINE 7+65.00 TO 9+00.00	GROUP 4 DB6 LINE 29+85.00 TO 31+20.00	GROUP 5 THIRD PARTY DAMAGES			
						PREPARATION																
1	LUMP SUM		LUMP SUM	0001	L.S.	MOBILIZATION	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.							
2	14.50		14.50	0025	ACRE	CLEARING AND GRUBBING	0.90	4.20	1.00	0.40	1.20	1.00		1.70	2.10	2.00						
3	6.00		6.00	0049	EACH	REMOVING DRAINAGE STRUCTURE	1.00	5.00														
4	25517.00	700.00	24817.00	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	5,679.00	3,057.00	5,219.00	2,238.00	221.00				221.00	8,182.00	700.00					
5	930.00		930.00	0170	L.F.	REMOVING GUARDRAIL			580.00			170.00		180.00								
6	4.00		4.00	0182	EACH	REMOVING GUARDRAIL ANCHOR			2.00			1.00		1.00								
7	LUMP SUM		LUMP SUM	0215	L.S.	REMOVING MISCELLANEOUS TRAFFIC ITEM	L.S.	L.S.	L.S.	L.S.												
8	350.00		350.00	0230	L.F.	REMOVING WIRE FENCE		150.00			200.00											
						GRADING																
9	61810.00	60.00	61750.00	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	1,590.00	1,320.00	5,640.00	1,130.00	11,040.00	7,160.00		11,500.00	15,810.00	6,560.00	60.00					
10	1250.00		1250.00	0330	C.Y.	ROADWAY EXCAVATION INCL. HAUL - AREA POND A			1,250.00													
11	1850.00		1850.00	0330	C.Y.	ROADWAY EXCAVATION INCL. HAUL - AREA POND B						1,850.00										
12	7000.00		7000.00	0330	C.Y.	ROADWAY EXCAVATION INCL. HAUL - AREA POND C		7,000.00														
13	109850.00	130.00	109720.00	0408	TON	SELECT BORROW INCL. HAUL	3,150.00	78,980.00	20,470.00	1,970.00	1,000.00	790.00		1,010.00	1,340.00	1,010.00	90.00	40.00				
14	62080.00	70.00	62010.00	0470	C.Y.	EMBANKMENT COMPACTION	1,710.00	42,690.00	11,070.00	1,070.00	950.00	630.00		1,110.00	2,240.00	540.00	50.00	20.00				
						DRAINAGE																
15	1513.00		1513.00	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	784.00	511.00			6.00	212.00										
16	3.00		3.00	1054	EACH	GRATE INLET TYPE 2	1.00	2.00														
17	4100.00		4100.00	1086	TON	QUARRY SPALLS	2.00	30.00	11.00	2.00	617.00	315.00		846.00	2,277.00							
18	228.00		228.00	1161	L.F.	UNDERDRAIN PIPE 8 IN. DIAM.		228.00														
19	660.00		660.00	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	24.00	161.00	126.00	98.00		89.00		83.00	79.00							
20	61.00		61.00	1272	L.F.	CL. IV REINF. CONC. CULV. PIPE 18 IN. DIAM.					61.00											
						STORM SEWER																
21	4.00		4.00	3090	EACH	CATCH BASIN TYPE 2 - 54 IN. DIAM. WITH FLOW RESTRITOR	1.00	1.00	1.00			1.00										
22	1.00		1.00	3091	EACH	CATCH BASIN TYPE 1		1.00														
23	505.00		505.00	3151	L.F.	TESTING STORM SEWER PIPE	178.00	188.00	78.00			61.00										
24	230.00		230.00	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	51.00	40.00	78.00			61.00										
25	127.00		127.00	3582	L.F.	SOLID WALL PVC STORM SEWER PIPE 24 IN. DIAM.	127.00															
26	148.00		148.00	3602	L.F.	CORRUGATED POLYETHYLENE STORM SEWER PIPE 12 IN. DIAM.		148.00														
						STRUCTURE																
27	600.00		600.00	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL							600.00									
28	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A							L.S.									
29	141.00		141.00	4025	C.Y.	GRAVEL BACKFILL FOR WALL							141.00									
30	4.00		4.00	4060	EACH	FURNISHING AND DRIVING CONCRETE TEST PILE							4.00									
31	1900.00		1900.00	4070	L.F.	FURNISHING CONC. PILING 24 INCH DIAM.							1,900.00									
32	50.00		50.00	4080	EACH	DRIVING CONC. PILE 24 INCH DIAM.							50.00									
33	54.00		54.00	8376	EACH	FURNISHING STEEL PILE TIP OR SHOE							54.00									
34	119600.00		119600.00	4149	LB.	ST. REINF. BAR FOR BRIDGE							119,600.00									
35	700.00		700.00	4322	C.Y.	CONC. CLASS 4000 FOR BRIDGE							700.00									
36	1.00		1.00	4219	DOL	DEFICIENT STRENGTH CONC. PRICE ADJUSTMENT							1.00									
37	LUMP SUM		LUMP SUM	4300	L.S.	SUPERSTRUCTURE BRIDGE 8/15							L.S.									
38	1688.00		1688.00	4352	L.F.	CONDUIT PIPE 2 IN. DIAM.							1,688.00									
39	854.00		854.00	4415	L.F.	TRAFFIC BARRIER							854.00									

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	77	140801	**	STATE,FEDERAL AID
2	77	140800	**	STATE,FEDERAL AID
3	77	1400CT	*	STATE,FEDERAL AID
4	77	1400CY	*	STATE,FEDERAL AID
5	77	140800	**	STATE

DATE	REVISION	BY

REGION	STATE	FEDERAL AID PROJECT. NO.
10	WA	NH-0077(000)

JOB NUMBER 04H321/1

CONTRACT NO 000000

Washington State
Department of Transportation

EXAMPLE 4-7

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION I-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION I-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1 SR77 49+00.00 TO 70+85.00	GROUP 1 DB6 LINE 9+00.00 TO 29+85.00	GROUP 1 MC-N LINE 10+00.00 TO 17+18.64	GROUP 1 MC-S LINE 10+00.00 TO 13+59.65	GROUP 1 W-NS LINE 10+00.00 TO 17+74.53	GROUP 1 NS-W LINE 9+00.00 TO 18+19.15	GROUP 1 BRIDGE NO. 77/10	GROUP 2 E-NS LINE 10+00.00 TO 18+83.05	GROUP 2 NS-E LINE 9+00.00 TO 22+36.98	GROUP 2 SR77 70+85.00 TO 95+00.00	GROUP 3 DB6 LINE 7+65.00 TO 9+00.00	GROUP 4 DB6 LINE 29+85.00 TO 31+20.00	GROUP 5 THIRD PARTY DAMAGES
						SURFACING													
40	20634.00	375.00	20259.00	5100	TON	CRUSHED SURFACING BASE COURSE	2,676.00	4,515.00	1,910.00	900.00	1,680.00	1,570.00		1,780.00	2,600.00	2,628.00	375.00		
						LIQUID ASPHALT													
41	10028.00	206.00	9822.00	5334	DOL	ANTI-STRIPPING ADDITIVE	1,333.00	2,313.00	923.00	425.00	760.00	690.00		765.00	1,020.00	1,593.00	178.00	28.00	
						ASPHALT CONCRETE PAVEMENT													
42	180.00	180.00		5711	S.Y.	PLANING BITUMINOUS PAVEMENT												180.00	
43	20045.00	410.00	19635.00	5767	TON	HMA CL. 1/2 IN. PG 58-22	2,665.00	4,625.00	1,845.00	850.00	1,520.00	1,380.00		1,530.00	2,035.00	3,185.00	355.00	55.00	
44	21046.00	431.00	20615.00	5830	DOL	JOB MIX COMPLIANCE PRICE ADJUSTMENT	2,798.00	4,856.00	1,937.00	893.00	1,596.00	1,450.00		1,606.00	2,135.00	3,344.00	373.00	58.00	
45	9962.00	204.00	9758.00	5835	DOL	COMPACTION PRICE ADJUSTMENT	1,325.00	2,299.00	917.00	422.00	755.00	686.00		760.00	1,011.00	1,583.00	176.00	28.00	
						EROSION CONTROL AND PLANTING													
46	36.00		36.00	6403	DAY	ESC LEAD	36.00												
47	2.80		2.80	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	1.60	0.33		0.28	0.21	0.13			0.25				
48	4279.00	31.00	4248.00	6438	C.Y.	COMPOST	662.00	870.00	551.00	127.00	742.00	640.00		175.00	481.00		31.00		
49	252.00		252.00	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE					252.00								
50	3790.00		3790.00	6373	L.F.	SILT FENCE	1,295.00	1,480.00	625.00			390.00							
51	20000.00		20000.00	6490	DOL	EROSION/WATER POLLUTION CONTROL	20,000.00												
52	3740.00		3740.00	6410	C.Y.	TOPSOIL TYPE B		1,400.00			2,340.00								
						TRAFFIC													
53	1530.00		1530.00	6727	L.F.	EXTRUDED CURB		1,130.00	215.00			185.00							
54	522.00		522.00	6748	L.F.	BEAM GUARDRAIL TYPE 1 - 8 FT. LONG POST	522.00												
55	1894.00		1894.00	6751	L.F.	BEAM GUARDRAIL TYPE 1	930.00	964.00											
56	4.00		4.00	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE D		4.00											
57	4.00		4.00	6716	EACH	BEAM GUARDRAIL FLARED TERMINAL	2.00	2.00											
58	4.00		4.00	6774	EACH	BEAM GUARDRAIL ANCHOR TYPE 4	2.00	2.00											
59	1600.00		1600.00	6781	L.F.	TEMPORARY CONC. BARRIER	1,600.00												
60	4.00		4.00	7440	EACH	TEMPORARY IMPACT ATTENUATOR	4.00												
61	7400.00		7400.00	7444	DOL	REPAIR IMPACT ATTENUATOR	7,400.00												
62	1.00		1.00	7447	EACH	TRUCK MOUNTED IMPACT ATTENUATOR		1.00											
63	60.00		60.00	7449	HOUR	OPERATION OF TRUCK MOUNTED IMPACT ATTENUATOR	60.00												
64	166.00		166.00	6832	EACH	FLEXIBLE GUIDE POST	44.00	14.00	23.00	14.00	17.00	18.00		14.00	22.00				
65	24320.00	910.00	23410.00	6806	L.F.	PAINT LINE	3,590.00	5,890.00	1,500.00	780.00	1,280.00	1,180.00		1,420.00	2,270.00	5,500.00	510.00	400.00	
66	210.00		210.00	6807	L.F.	PLASTIC LINE	210.00												
67	3070.00		3070.00	6818	L.F.	PLASTIC WIDE LINE	830.00				250.00	360.00		200.00	270.00	1,160.00			
68	2580.00		2580.00	6854	L.F.	PAINTED BARRIER LINE			1,340.00	620.00	160.00	150.00		150.00	160.00				
69	100.00		100.00	6859	L.F.	PLASTIC STOP LINE		40.00	30.00	30.00									
70	6.00		6.00	6833	EACH	PLASTIC TRAFFIC ARROW			2.00	2.00	1.00			1.00					
71	27.00		27.00	6881	EACH	PLASTIC DRAINAGE MARKING	6.00	9.00	2.00	2.00	2.00	2.00		2.00	2.00				
72	54.00		54.00		EACH	PLASTIC JUNCTION BOX MARKING	10.00	2.00	5.00	4.00	5.00	5.00		5.00	7.00	11.00			
73	4.00		4.00	6882	HUND	RAISED PAVEMENT MARKER TYPE 1	2.00									2.00			
74	3.25		3.25	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	1.43	0.28	0.18	0.08	0.28	0.31		0.28	0.41				
75	11000.00		11000.00	6888	L.F.	TEMPORARY PAVEMENT MARKING	2,400.00		4,550.00	2,400.00						1,650.00			
76	LUMP SUM		LUMP SUM	6890	L.S.	PERMANENT SIGNING	L.S.												
77	LUMP SUM		LUMP SUM	6904	L.S.	ILLUMINATION SYSTEM SCD 2641	L.S.	L.S.				L.S.				L.S.			

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	77	140801	**	STATE,FEDERAL AID
2	77	140800	**	STATE,FEDERAL AID
3	77	1400CT	*	STATE,FEDERAL AID
4	77	1400CY	*	STATE,FEDERAL AID
5	77	140800	**	STATE

DATE	REVISION	BY

REGION	STATE	FEDERAL AID PROJECT. NO.
10	WA	NH-0077(000)

JOB NUMBER 04H321/1

CONTRACT NO 000000

Washington State
Department of Transportation

EXAMPLE 4-8

SUMMARY OF QUANTITIES

SQ2

SUMMARY OF QUANTITIES

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION I-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION I-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1 SR77 49+00.00 TO 70+85.00	GROUP 1 DB6 LINE 9+00.00 TO 29+85.00	GROUP 1 MC-N LINE 10+00.00 TO 17+18.64	GROUP 1 MC-S LINE 10+00.00 TO 13+59.65	GROUP 1 W-NS LINE 10+00.00 TO 17+74.53	GROUP 1 NS-W LINE 9+00.00 TO 18+19.15	GROUP 1 BRIDGE NO. 77/10	GROUP 2 E-NS LINE 10+00.00 TO 18+83.05	GROUP 2 NS-E LINE 9+00.00 TO 22+36.98	GROUP 2 SR77 70+85.00 TO 95+00.00	GROUP 3 DB6 LINE 7+65.00 TO 9+00.00	GROUP 4 DB6 LINE 29+85.00 TO 31+20.00	GROUP 5 THIRD PARTY DAMAGES			
78	LUMP SUM		LUMP SUM	6904	L.S.	ILLUMINATION SYSTEM SCD 2642	L.S.	L.S.			L.S.					L.S.						
79	LUMP SUM		LUMP SUM	6904	L.S.	ILLUMINATION SYSTEM SCX 2643	L.S.															
80	LUMP SUM		LUMP SUM	9380	L.S.	TEMPORARY TRAFFIC CONTROL DEVICES	L.S.															
81	2.00		2.00		EACH	TEMPORARY PAINTED TRAFFIC ARROW	2.00															
82	900.00		900.00	6979	HOUR	TRAFFIC CONTROL LABOR	900.00															
83	1000.00		1000.00	6972	HOUR	TRAFFIC CONTROL SUPERVISOR	1,000.00															
84	1085.00		1085.00	6982	S.F.	CONSTRUCTION SIGNS CLASS A	1,085.00															
						OTHER ITEMS																
85	1740.00		1740.00	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	580.00	390.00	320.00	110.00	40.00	150.00		80.00	70.00							
86	6550.00		6550.00	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	750.00	1,140.00	1,670.00	670.00	270.00	1,040.00		530.00	480.00							
87	12.00		12.00	7014	C.Y.	GRAVEL BACKFILL FOR DRAIN		12.00														
88	700.00		700.00	7018	mGAL	WATER	120.00	290.00	90.00	20.00	40.00	40.00		40.00	60.00							
89	1.00		1.00	7029	EACH	PLUGGING EXISTING PIPE			1.00													
90	LUMP SUM		LUMP SUM	7037	L.S.	STRUCTURE SURVEYING							L.S.									
91	5.00		5.00	7045	EACH	MONUMENT CASE AND COVER		2.00		1.00				1.00	1.00							
92	593.00		593.00	7065	S.Y.	CONC. SLOPE PROTECTION	593.00															
93	320.00		320.00	7110	L.F.	WIRE FENCE TYPE 1		320.00														
94	LUMP SUM		LUMP SUM	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	L.S.															
95	1200.00		1200.00	7400	HOUR	TRAINING	1,200.00															
96	2000.00		2000.00	7480	DOL	ROADSIDE CLEANUP	2,000.00															
97	LUMP SUM		LUMP SUM	7490	L.S.	TRIMMING AND CLEANUP	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.		L.S.	L.S.							
98	5.00		5.00	7725	DOL	REIMBURSEMENT FOR THIRD PARTY DAMAGE													5.00			
99	-1.00		-1.00	7728	DOL	MINOR CHANGE	-1.00															
100	LUMP SUM		LUMP SUM	7736	L.S.	SPCC PLAN	L.S.															
101	LUMP SUM		LUMP SUM	7500	L.S.	FIELD OFFICE BUILDING		L.S.														
102	120.00		120.00	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE		80.00	20.00			20.00										
103	4220.00		4220.00	7552	S.Y.	CONSTRUCTION GEOTEXTILE FOR SOIL STABILIZATION					650.00	330.00		880.00	2,360.00							
104	1.00		1.00	7562	EACH	MAILBOX SUPPORT TYPE 1		1.00														

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	77	140801	**	STATE,FEDERAL AID
2	77	140800	**	STATE,FEDERAL AID
3	77	1400CT	*	STATE,FEDERAL AID
4	77	1400CY	*	STATE,FEDERAL AID
5	77	140800	**	STATE

DATE	REVISION	BY

REGION	STATE	FEDERAL AID PROJECT. NO.
10	WA	NH-0077(000)

JOB NUMBER 04H321/1

CONTRACT NO 000000

Washington State
Department of Transportation

EXAMPLE 4-9

SUMMARY OF QUANTITIES

PROJECT LICENSED PROFESSIONAL CERTIFICATES

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.
AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.
AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.

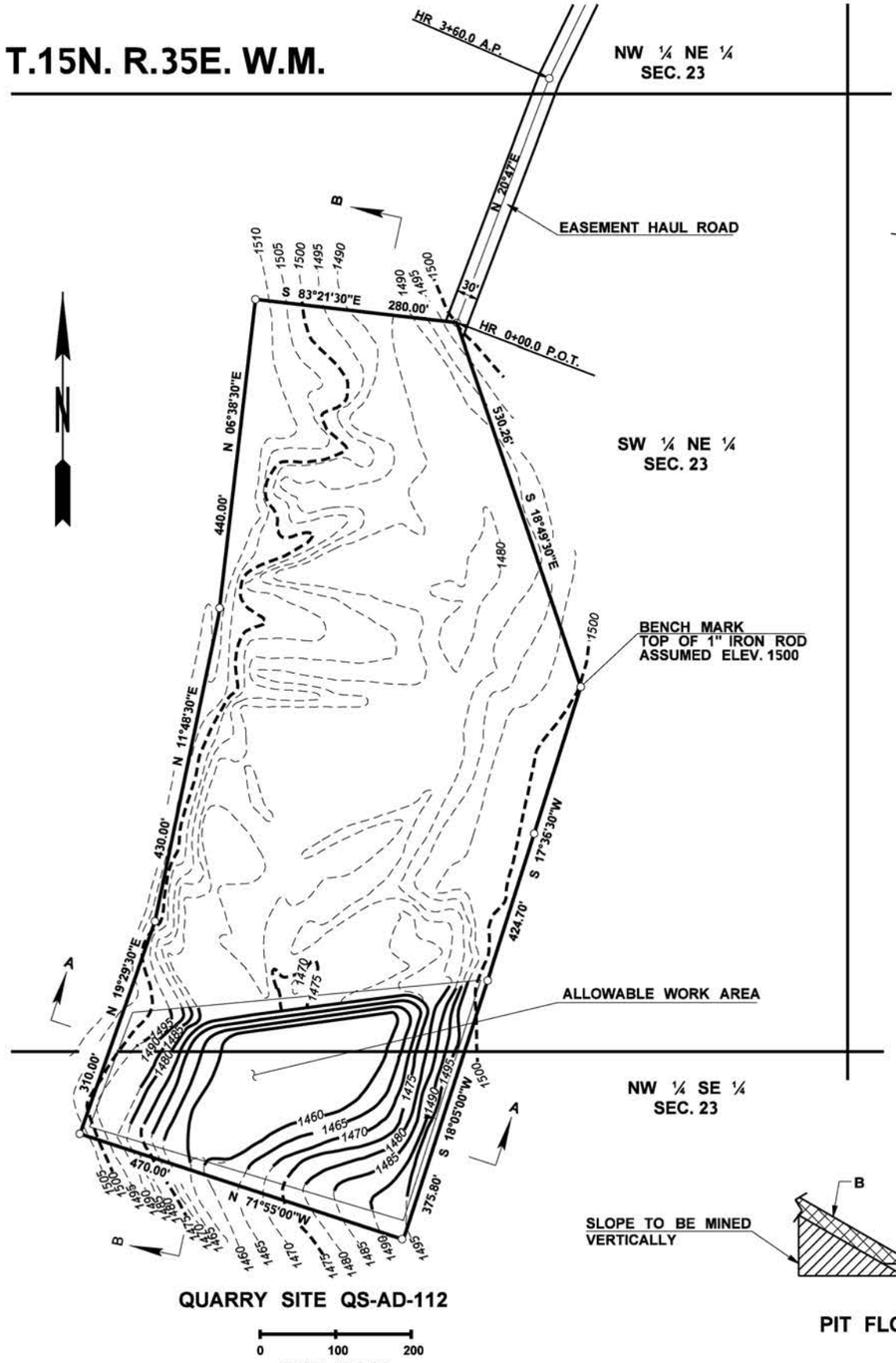
NOTES TO THE DESIGNER:

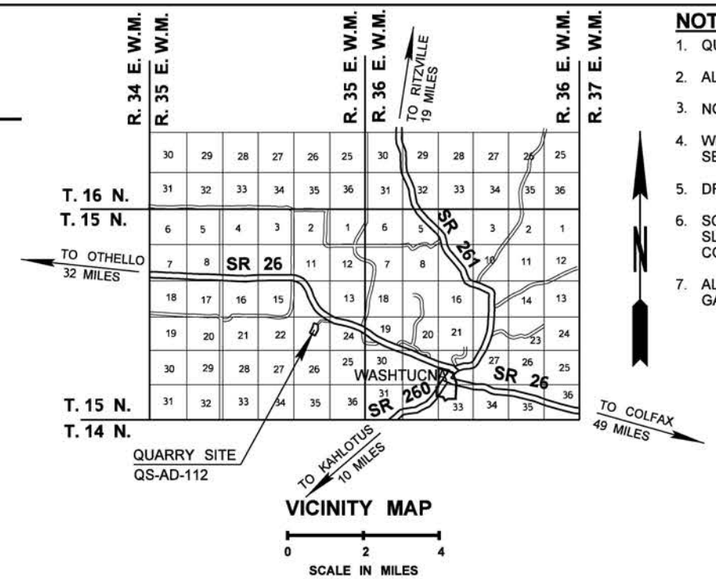
1. ADD DIGITAL SIGNATURE TO EACH BOX THAT NEEDS IT.

NOTES:

1. THIS PLAN SET WAS DEVELOPED ELECTRONICALLY UNDER THE DIRECT SUPERVISION OF THE LICENSED PROFESSIONALS THAT HAVE AFFIXED THEIR SIGNATURE TO THIS PAGE.
2. THIS SHEET SERVES AS THE CERTIFICATION BY THE ABOVE LICENSED PROFESSIONALS OF ALL SHEETS IN THIS PLAN SET WHERE THEIR STAMPS AND SIGNATURES APPEAR.

T.15N. R.35E. W.M.





VICINITY MAP

NOTES:

1. QUARRY QS-AD-112 IS OWNED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION.
2. ALL SLOPE INTERSECTIONS SHALL BE ROUNDED FOR NATURAL APPEARANCE.
3. NO CONTAMINATES ARE ANTICIPATED.
4. WHEN ALL MINING IS COMPLETED IN THIS QUARRY SITE, ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED, AND MULCHED WITH SPECIAL EROSION CONTROL MIX.
5. DRAINAGE SHALL BE TOWARDS THE SOUTH END OF THE SITE.
6. SCALPINGS SHALL BE USED ON THE QUARRY FLOOR AND ON THE SIDES TO OBTAIN THE SIDE SLOPE. IT MAY BE NECESSARY TO HAUL ADDITIONAL BORROW MATERIAL INTO SITE TO CONSTRUCT THE SIDE SLOPES FOR ULTIMATE RECLAMATION.
7. ALL PIT BOUNDARIES SHALL BE FENCED WITH TYPE 2 WIRE FENCING INCLUDING A 20 FOOT WIDE GATE AT THE HAUL ROAD AS FIRST ORDER OF WORK.

NOTES TO THE DESIGNER:

1. MAKE SURE THAT ALL NOTES ARE PROJECT SPECIFIC.
2. THE CONTRACT RECLAMATION PLAN IS DEVELOPED FROM THE ULTIMATE RECLAMATION PLAN ON FILE WITH THE REGIONAL MATERIALS LABORATORY.

QUARRY SITE QS-AD-112

THERE IS SUFFICIENT MATERIAL IN THIS QUARRY FOR THIS PROJECT

SOURCE OF MATERIAL FOR PRODUCTION OF:

BALLAST
CRUSHED SURFACING TOP COURSE
CRUSHED SCREENING ½ INCH TO ¼ INCH
CRUSHED SCREENING ¼ INCH TO 0
PRIME COAT AGGREGATE
MINERAL AGGREGATE FOR ASPHALT CONCRETE
PAVEMENT CLASS B

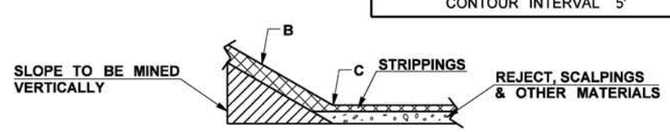
STRIPPING INCLUDING HAUL SITE QS-AD-112

LEGEND

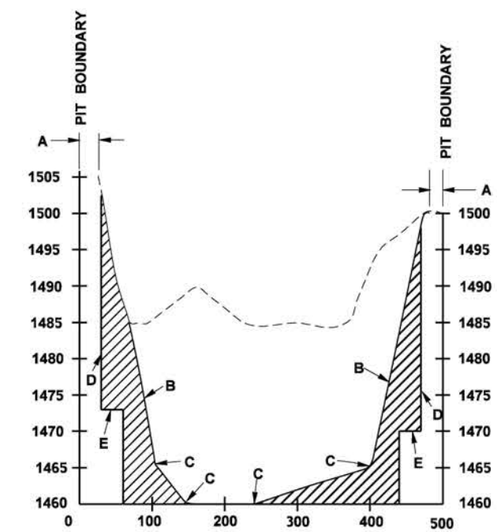
A	NATURAL AREA 10' MINIMUM
B	2:1 SLOPE MAXIMUM
C	ROUNDING FOR NATURAL APPEARANCE
D	VERTICAL SLOPE 30' MAXIMUM
E	BENCH 30' MINIMUM

EXISTING CONTOURS
ULTIMATE CONTOURS
AREA FOR ADDITIONAL BORROW MATERIAL
CONTRACT WORK AREA

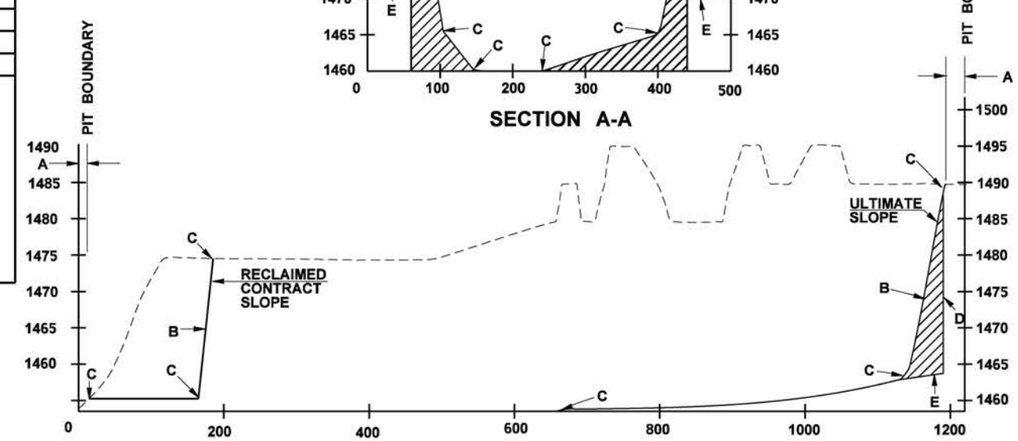
CONTOUR INTERVAL 5'



PIT FLOOR DETAIL



SECTION A-A



SECTION B-B

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-11.dgn
TIME	1:54:36 PM
DATE	5/2/2025
PLOTTED BY	WillisD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP BOX DATE

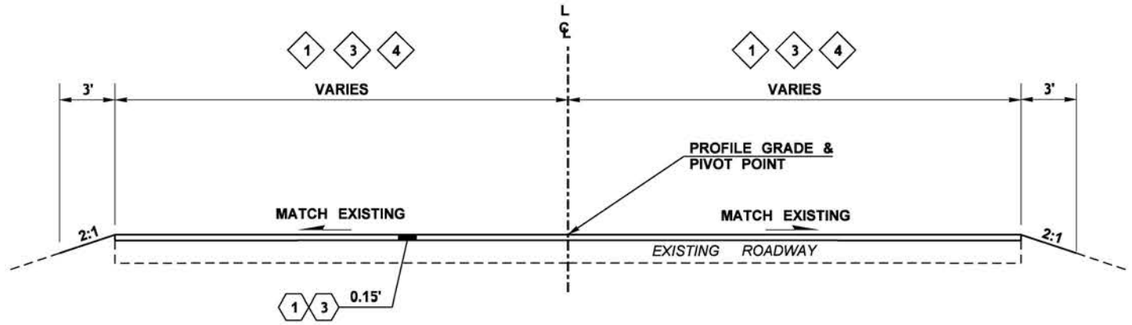
P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-11

RECLAMATION PLAN

Plot 10
PLAN REF NO RC1
SHEET OF SHEETS

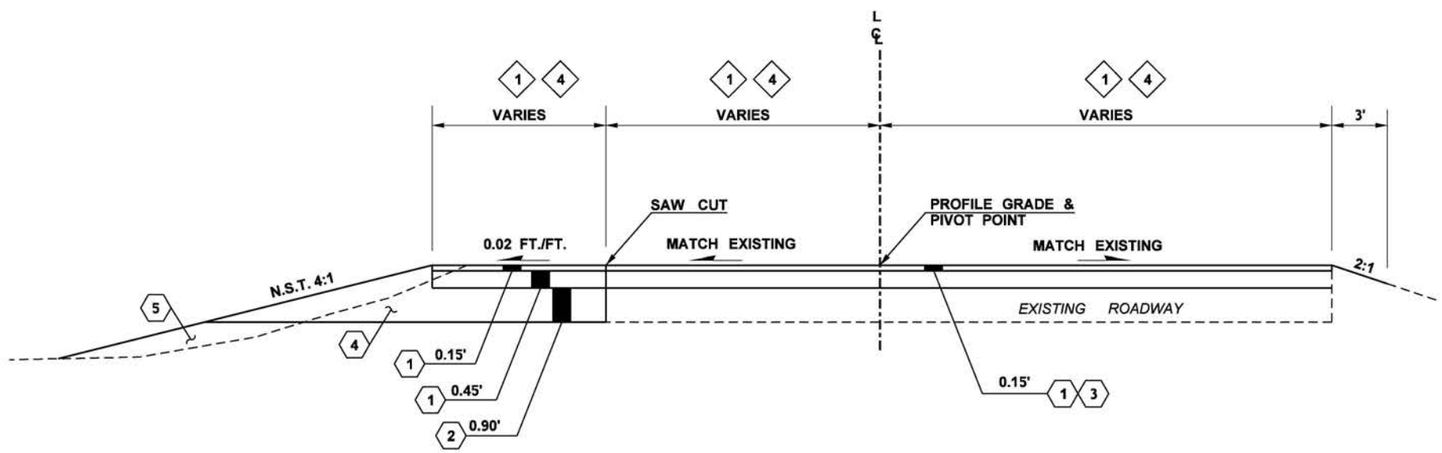


ROADWAY SECTION A

L 461+50 TO L 465+36
L 468+18 TO L 471+61

CONSTRUCTION NOTES:

1. SEE PAVING PLANS
3. BRIDGE NO. 241/010 AND APPROACH SLABS NOT INCLUDED IN PROJECT STA. L465+36 TO STA. L468+18
4. ALL PAVEMENT AND SURFACING DEPTHS SHOWN ARE COMPACTED DEPTHS (SEE STD. SPEC. 5-04.3(7) FOR MAXIMUM DEPTHS PER LAYER)



ROADWAY SECTION B

L 471+61 TO L 473+00

NOTE TO THE DESIGNER:

1. SOME OVERLAY PROJECTS DO NOT NEED A PROFILE ALIGNMENT. WHERE A PROFILE ALIGNMENT IS NOT NEEDED, OMIT "PROFILE GRADE".
   THE PROFILE GRADE AND PIVOT POINT ARE USUALLY COINCIDENTAL AND AT THE CENTERLINE, BUT MAY SOMETIMES BE BASED ON AN OFFSET ROADWAY FEATURE, LIKE AN OFFSET CROWN.

LEGEND

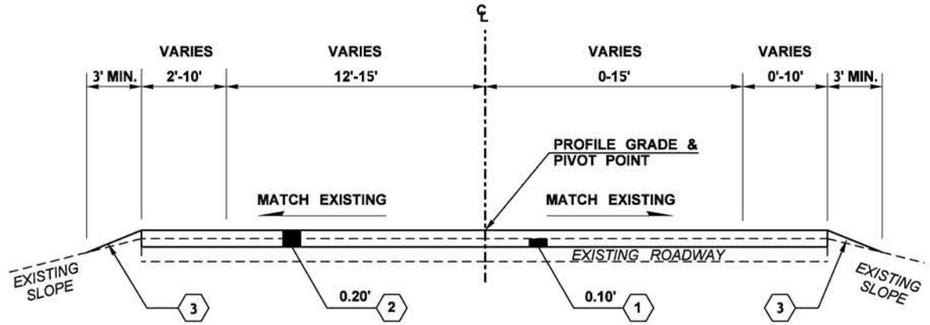
1. ASPHALT CONCRETE PAVEMENT CLASS A PG. 64-28
2. CRUSHED SURFACING BASE COURSE
3. PLANING BITUMINOUS PAVEMENT
4. ROADWAY EXCAVATION INCL. HAUL
5. EMBANKMENT COMPACTION

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-12.dgn								Plot 11
TIME	1:49:08 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	Washington State Department of Transportation	PLAN REF NO RS2
DATE	4/18/2025								
PLOTTED BY	WilliSD				JOB NUMBER 00Z000			EXAMPLE 4-12	SHEET OF SHEETS
DESIGNED BY									
ENTERED BY									
CHECKED BY					CONTRACT NO.		LOCATION NO. XL-1234	ROADWAY SECTION	
PROJ. ENGR.									
REGIONAL ADM.		REVISION	DATE	BY					

P.E. STAMP BOX DATE

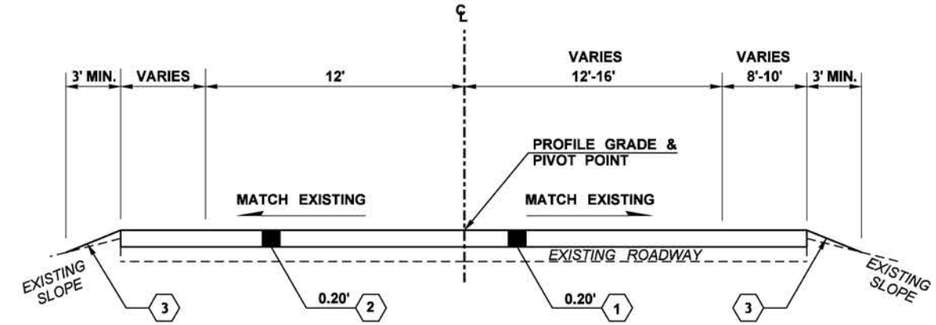
P.E. STAMP BOX DATE



ROADWAY SECTION A

STATION TO STATION

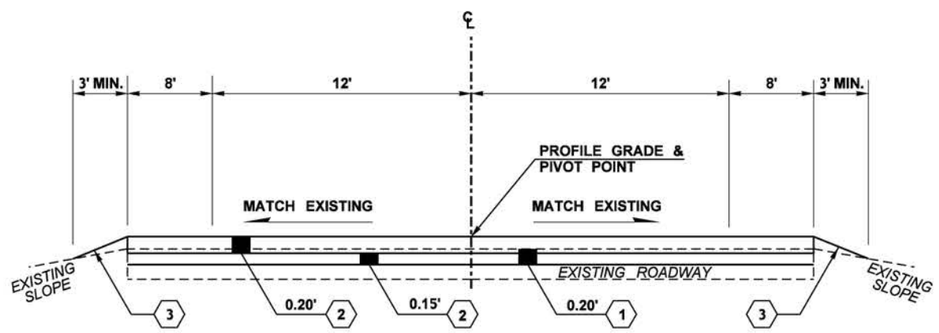
L 10+00	L 31+11
L 34+75	L 46+96
C 318+93	C 327+23



ROADWAY SECTION B

STATION TO STATION

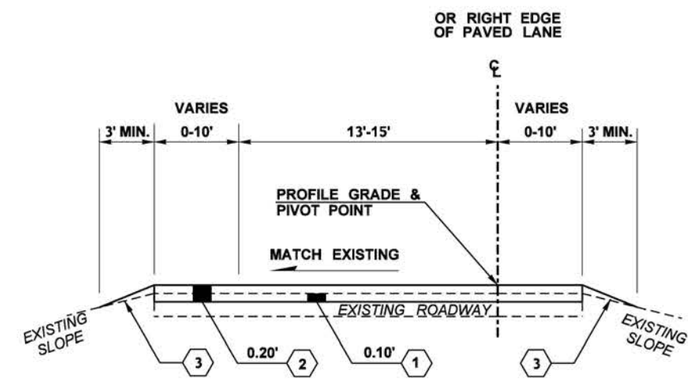
L 46+96	L 64+38
L 77+58	L 239+15
L 241+79	L 242+85
CEW 13+00	CEW 30+07



ROADWAY SECTION C

STATION TO STATION

L 64+38	L 77+58
L 239+15	L 241+79



ROADWAY SECTION D

STATION TO STATION

C 327+23	C 333+02
C 327+23	C 339+28

NOTE TO THE DESIGNER:

1. SOME OVERLAY PROJECTS DO NOT NEED A PROFILE ALIGNMENT. WHERE A PROFILE ALIGNMENT IS NOT NEEDED, OMIT "PROFILE GRADE".
   THE PROFILE GRADE AND PIVOT POINT ARE USUALLY COINCIDENTAL AND AT THE CENTERLINE, BUT MAY SOMETIMES BE BASED ON AN OFFSET ROADWAY FEATURE, LIKE AN OFFSET CROWN.

LEGEND

1. PLANING BITUMINOUS PAVEMENT
2. HMA CL. ½ IN. PG
3. SHOULDER FINISHING

NOTES:

1. ALL DEPTHS SHOWN ARE COMPACTED DEPTHS
2. SEE PAVING PLAN FOR VARIABLE WIDTHS
3. BRIDGE 12/612 IS INCLUDED IN THIS PROJECT (STATION L 31+11 TO L34+75)

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-13.dgn						
TIME	1:56:31 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	5/2/2025						
PLOTTED BY	WilliSD						
DESIGNED BY					JOB NUMBER 00Z000		
ENTERED BY							
CHECKED BY					CONTRACT NO.	LOCATION NO. XL-1234	
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-13

ROADWAY SECTION

Plot 12

PLAN REF NO RS3

SHEET OF SHEETS

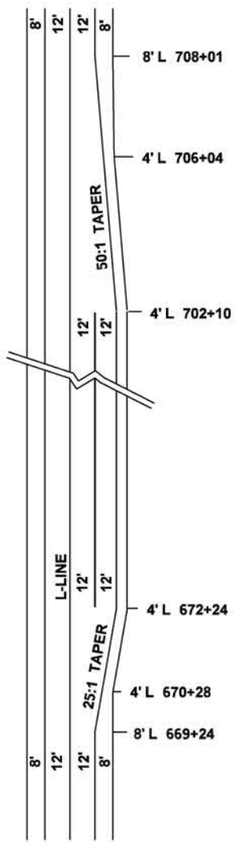
CONSTRUCTION NOTES:

1. AUXILIARY PASSING LANE
   LANE VARIES FROM 0' AT L 669+29 TO 12' AT L 672+24, AND FROM 12' AT L702+10 TO 0' AT L 708+01

2. RIGHT SHOULDER
   SHOULDER VARIES FROM 8' AT L 699+29 TO 4' AT L 670+28, AND FROM 4' AT L 706+04 TO 8' AT L 708+01

LEGEND

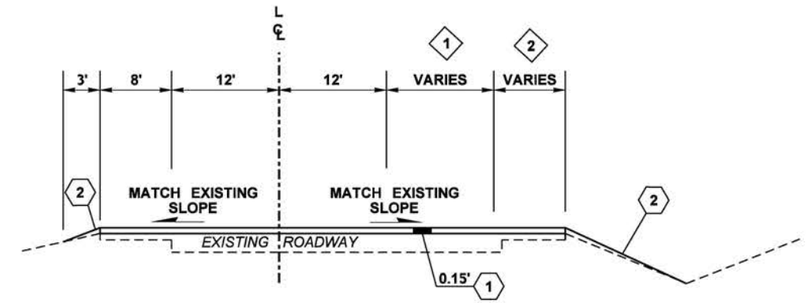
1. ASPHALT CONC. PAVEMENT CL. B - 0.15' COMP. DEPTH
2. CRUSHED SURFACING TOP COURSE - VARIES COMP. DEPTH



AUXILIARY PASSING LANE

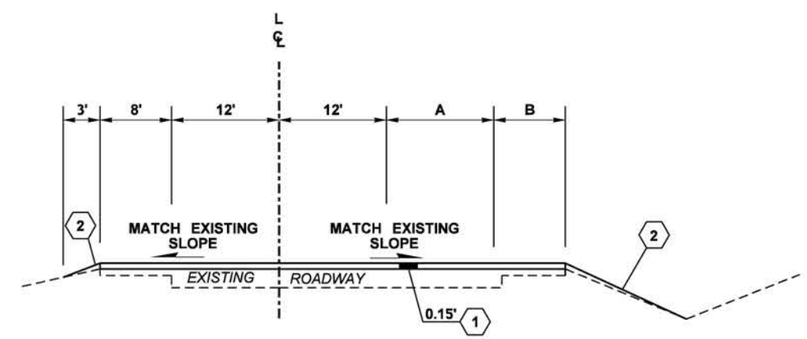
NOTES TO THE DESIGNER:

1. THE AUXILIARY PASSING LANE DETAIL IS SHOWN HERE FOR YOUR USE IN SEEING WHAT ROADWAY SECTION C IS ACCOMPLISHING WITHOUT THE USE OF A PAVING OR CHANNELIZATION PLAN ON A SIMPLE PAVING PROJECT.
2. THE TWO ROADWAY SECTIONS REPRESENT DIFFERENT WAYS OF SHOWING THE SAME VARYING ROADWAY CONFIGURATION.
3. EVEN THOUGH THE SHOULDER DOESN'T SPECIFY TAPERING EXACTLY AS SHOWN IN THE PLAN DETAIL IT IS SUFFICIENT FOR AN OVERLAY PROJECT WHERE THE PAVING IN THE FIELD WILL BE DONE TO THE EXISTING CONDITION AND THE CONTRACTOR CAN STILL OBTAIN A REASONABLE QUANTITY TAKE-OFF FROM IT.



ROADWAY SECTION C

L 505+25 TO L 997+38



ROADWAY SECTION C

STATION	A	B
L 505+25 TO L 669+29	0	8'
L 669+29 TO L 672+24	0-12'	8'-4'
L 672+24 TO L 702+10	12'	4'
L 702+10 TO L 708+01	12'-0	4'-8'
L 708+01 TO L 997+38	0	8'

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-14.dgn					
TIME	1:51:33 PM			REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	4/18/2025					
PLOTTED BY	WilliSD			JOB NUMBER 00Z000		
DESIGNED BY						
ENTERED BY						
CHECKED BY				CONTRACT NO.		LOCATION NO. XL-1234
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

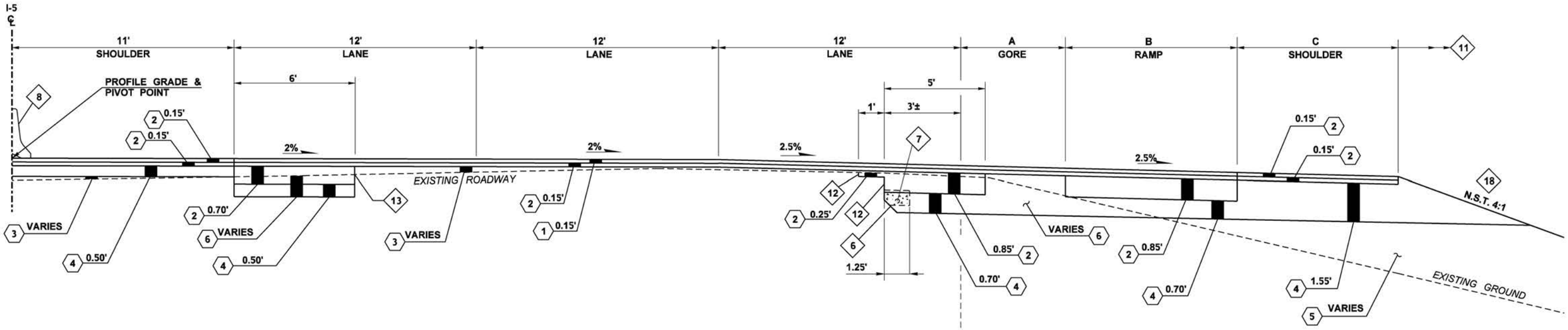
EXAMPLE 4-14

ROADWAY SECTION

Plot 13

PLAN REF NO RS4

SHEET OF SHEETS

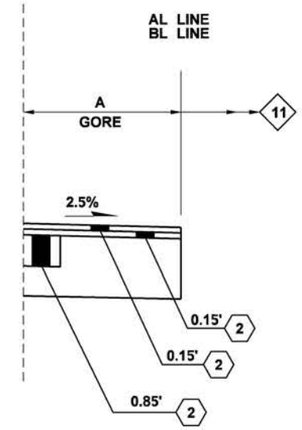


NOTES:

1. COMPACTED DEPTH OF ANY LIFT SHALL BE IN ACCORDANCE WITH SECTION 5.04 OF THE WSDOT STANDARD SPECIFICATIONS.
2. ALL DEPTHS ARE COMPACTED DEPTHS.
3. N.S.T. = NOT STEEPER THAN.

ROADWAY SECTION B-1

STATION	A	B	C
L 1450+25 (RT.) TO L 1464+01 (RT.)	0'	0'	10'
L 1461+01 (RT.) TO L 1464+41 (RT.)	0'	0' - 2'	10' - 8'
L 1464+41 (RT.) TO L 1467+01 (RT.)	0'	2' - 15'	8'
L 1467+01 (RT.) TO L 1470+20 (RT.)	0' - 16'	15'	8'
L 1504+76 (RT.) TO L 1510+75 (RT.)	12' - 0'	15'	8'
L 1510+75 (RT.) TO L 1517+26 (RT.)	0'	15' - 2'	8'
L 1517+26 (RT.) TO L 1518+26 (RT.)	0'	2' - 0'	8' - 10'
L 1518+26 (RT.) TO L 1520+00 (RT.)	0'	0'	10'



STATION	A
L 1517+26 (RT.) TO L 1518+26 (RT.)	16'-11'
L 1518+26 (RT.) TO L 1520+00 (RT.)	11'-12'

LEGEND

1. HMA CL. ½ IN. PG 70-22
2. HMA CL. ½ IN. PG 64-22
3. HMA FOR PRELEVELING CL.½ IN. PG 64-22
4. CRUSHED SURFACING BASE COURSE
5. SPECIAL BORROW INCL. HAUL
6. ROADWAY EXCAVATION INCL. HAUL
7. PLANING BITUMINOUS PAVEMENT
8. TOPSOIL TYPE B

CONSTRUCTION NOTES:

6. DO NOT MAKE VERT.ICAL CUT BELOW PCCP PANEL USE 1:1
7. 4" CORRUGATED PLASTIC UNDERDRAIN PIPE TO BE REMOVED AS PART. OF ROADWAY EXCAVATION INCL. HAUL.
8. SEE STAGING AND TESC PLANS FOR BARRIER TYPE AND PLACEMENT
11. SEE SHOULDER DETAILS, REFERENCE SHEET R16
12. SAW CUT OR GRIND EDGE TO BE WITHIN 1" OF EDGE OF EXISTING CONC. PANEL EDGE
13. SAW CUT OR GRIND EDGE
18. SEE SHOULDER SCHEDULE, REFERENCE SHEET RS15, RS16 FOR SHOULDER SLOPE

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-15.dgn					
TIME	2:36:16 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	2/21/2025					
PLOTTED BY	WilliSD				JOB NUMBER 00Z000	
DESIGNED BY	DESIGNER					
ENTERED BY	CAD OPERATOR				CONTRACT NO.	LOCATION NO. SP1234
CHECKED BY	TEAM LEAD					
PROJ. ENGR.	PROJECT ENGINEER					
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY		

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

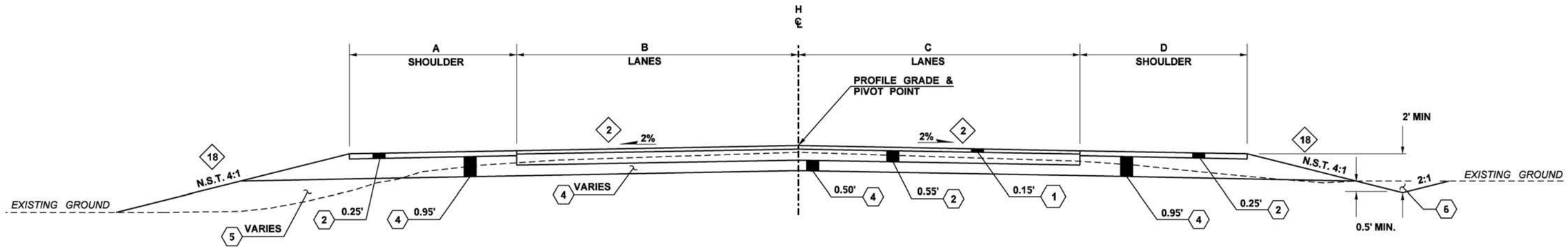
EXAMPLE 4-15

ROADWAY SECTION

Plot 3

PLAN REF NO RS3

SHEET OF SHEETS

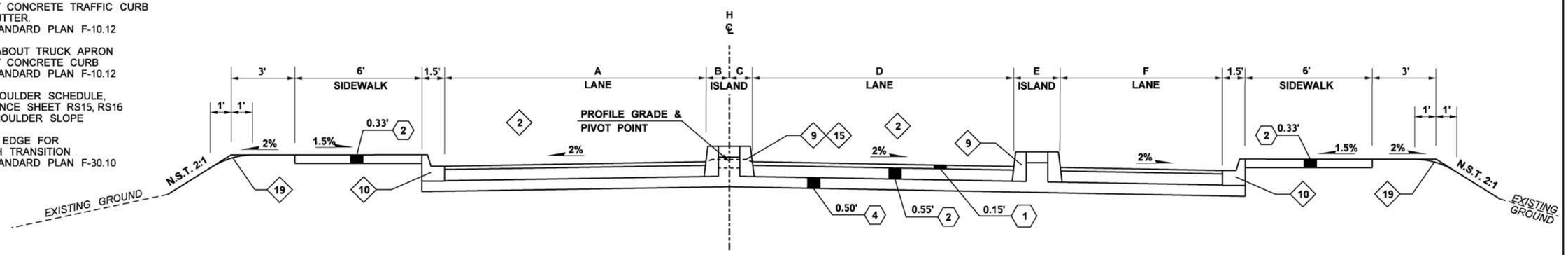


ROADWAY SECTION I-1

STATION	A	B	C	D
H 1728+70 TO H 1728+92	8.4'	11.3'	10.7'	9.4'
H 1728+92 TO H 1729+09	8.4'	11.3'	10.7' - 12.9'	9.4' - 10.3'
H 1729+09 TO H 1729+40	8.3' - 10.3'	11.3'	12.9' - 17'	10.3'
H 1729+40 (RT.) TO H 1730+53 (RT.)	N/A	N/A	17' - 32.2'	10.3'
H 1729+40 (LT.) TO H 1730+76 (LT.)	10.3' - 10.6'	11.3' - 17.8'	N/A	N/A

CONSTRUCTION NOTES:

- (2) CROSS SLOPES VARY, SEE SUPERELEVATION DIAGRAMS
- (9) CEMENT CONCRETE TRAFFIC CURB SEE STANDARD PLAN F-10.12
- (10) CEMENT CONCRETE TRAFFIC CURB AND GUTTER. SEE STANDARD PLAN F-10.12
- (15) ROUNDABOUT TRUCK APRON CEMENT CONCRETE CURB SEE STANDARD PLAN F-10.12
- (18) SEE SHOULDER SCHEDULE, REFERENCE SHEET RS15, RS16 FOR SHOULDER SLOPE
- (19) ROUND EDGE FOR SMOOTH TRANSITION SEE STANDARD PLAN F-30.10



LEGEND

- (1) HMA CL. ½ IN. PG 70-22
- (2) HMA CL. ½ IN. PG 64-22
- (3) HMA FOR PRELEVELING CL.½ IN. PG 64-22
- (4) CRUSHED SURFACING BASE COURSE
- (5) SPECIAL BORROW INCL. HAUL
- (6) ROADWAY EXCAVATION INCL. HAUL
- (7) PLANING BITUMINOUS PAVEMENT
- (8) TOPSOIL TYPE B

ROADWAY SECTION I-2

STATION	A	B	C	D	E	F
H 1730+53 (RT.) TO H 1730+81 (RT.)	N/A	N/A	1.3'	20.5'	0'	19.7'
H 1730+81 (RT.) TO H 1730+92 (RT.)	N/A	N/A	1.3' - 1.5'	20.5' - 22.2'	0'	19.7' - 21.2'
H 1730+92 (RT.) TO H 1731+62 (RT.)	N/A	N/A	1.5' - 11.9'	20.1' - 22'	5' - 23.6'	19'
H 1730+76 (LT.) TO H 1730+81 (LT.)	21' - 21.2'	0'	N/A	N/A	N/A	N/A
H 1730+81 (LT.) TO H 1731+60 (LT.)	19.2' - 20.3'	2' - 11.5'	N/A	N/A	N/A	N/A

NOTES:

1. COMPACTED DEPTH OF ANY LIFT SHALL BE IN ACCORDANCE WITH SECTION 5.04 OF THE WSDOT STANDARD SPECIFICATIONS.
2. ALL DEPTHS ARE COMPACTED DEPTHS.
3. N.S.T. = NOT STEEPER THAN.

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-16.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
TIME	2:36:51 PM						
DATE	2/21/2025						
PLOTTED BY	WilliSD				JOB NUMBER 00Z000		
DESIGNED BY	DESIGNER						
ENTERED BY	CAD OPERATOR						
CHECKED BY	TEAM LEAD				CONTRACT NO.		LOCATION NO. SP1234
PROJ. ENGR.	PROJECT ENGINEER						
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

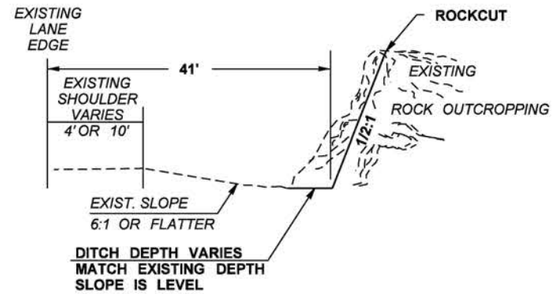
EXAMPLE 4-16

ROADWAY SECTION

Plot 13

PLAN REF NO RS13

SHEET OF SHEETS



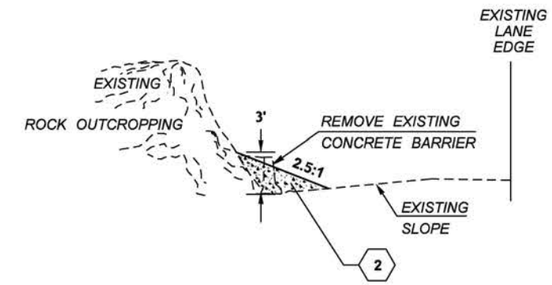
ROCKCUT DETAIL
(TYPICAL)

LL 1118+92 TO 1126+00 MED.
LL 1177+50 TO 1192+50 MED.

LL 1119+75 TO 1140+50 LT.
LL 1176+50 TO 1193+00 LT.
LL 1203+50 TO 1205+00 LT.

LR 1112+50 TO 1115+00 MED.
LR 1128+10 TO 1146+70 MED.
LR 1152+70 TO 1155+50 MED.

LR 1134+50 TO 1138+50 RT.
LR 1178+00 TO 1179+25 RT.
LR 1182+00 TO 1194+40 RT.

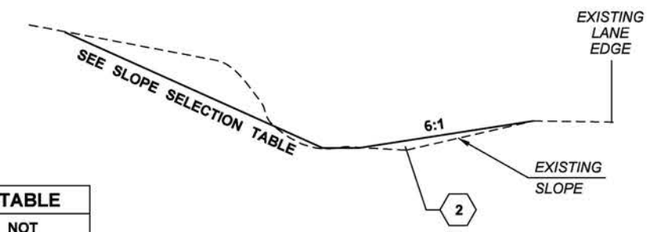


MEDIAN BERM DETAIL
(TYPICAL)

LL 1225+45 TO 1228+50 MED.
LL 1240+00 TO 1250+20 MED.

LL 1220+00 TO 1222+50 LT.
LL 1376+00 TO 1382+50 LT.

LR 1092+50 TO 1105+50 MED.
LR 1220+00 TO 1254+00 MED.
LR 1275+50 TO 1281+00 MED.



SLOPE SELECTION TABLE	
HEIGHT OF CUT	SLOPE NOT STEEPER THAN
0-5	6:1
5-20	3:1
OVER 20	2:1

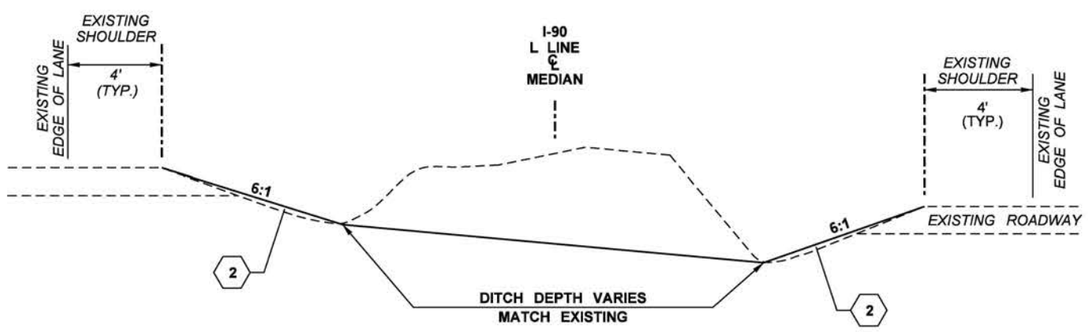
SLOPE FLATTENING DETAIL
(TYPICAL)

LR 1199+50 TO 1203+75 MED.
LR 1588+10 TO 1598+00 MED.
LR 1691+50 TO 1710+00 MED.

LR 1134+00 TO 1138+00 RT.
LR 1333+50 TO 1338+00 RT.
LR 1372+50 TO 1376+00 RT.

LL 1094+50 TO 1097+00 MED.
LL 1177+50 TO 1192+50 MED.
LL 1344+25 TO 1353+50 MED.

LL 1135+50 TO 1140+50 LT.
LL 1214+50 TO 1220+00 LT.
LL 1241+00 TO 1254+50 LT.



MEDIAN CUT DETAIL
(TYPICAL)

LR 1274+50 TO 1276+00
LR 1332+50 TO 1341+00

LEGEND

1. ROADWAY EXCAVATION INCL. HAUL
2. EMBANKMENT COMPACTION
3. CRUSHED SURFACING BASE COURSE

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-17.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
TIME	2:37:24 PM						
DATE	2/21/2025						
PLOTTED BY	WilliSD						
DESIGNED BY	DESIGNER				JOB NUMBER 00Z000		
ENTERED BY	CAD OPERATOR						
CHECKED BY	TEAM LEADER				CONTRACT NO.	LOCATION NO. XL-1234	
PROJ. ENGR.	PROJECT ENGINEER						
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

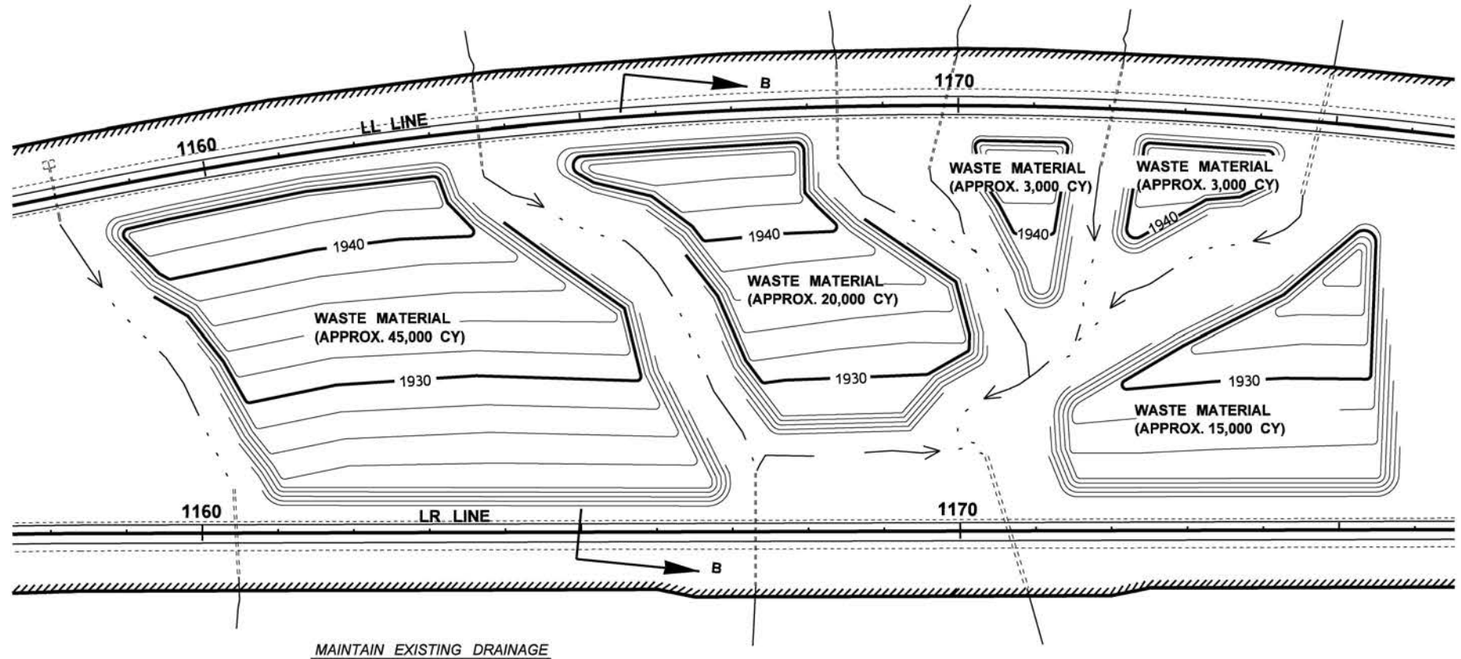
P.E. STAMP BOX DATE

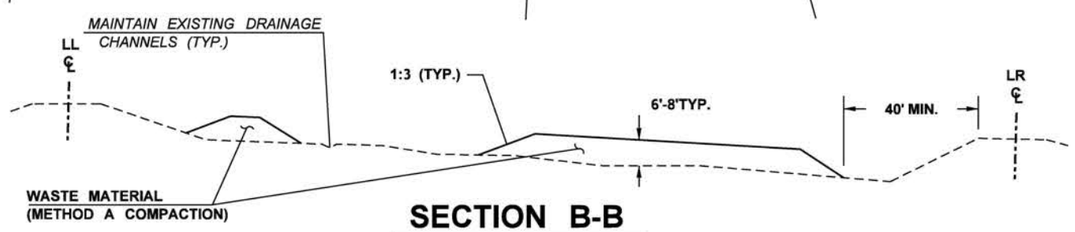
Washington State
Department of Transportation

EXAMPLE 4-17

ROADWAY SECTION

Plot 16
PLAN REF NO
RS6
SHEET
OF
SHEETS





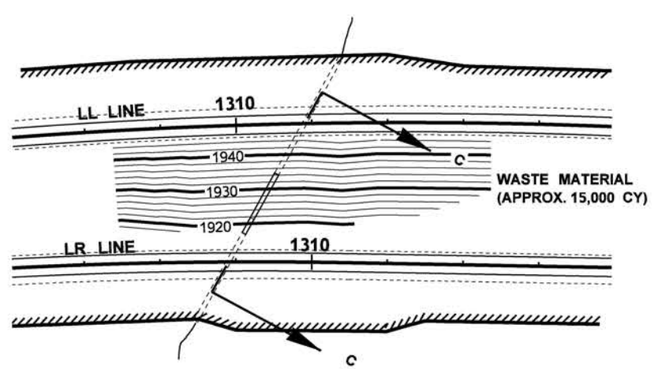
SECTION B-B

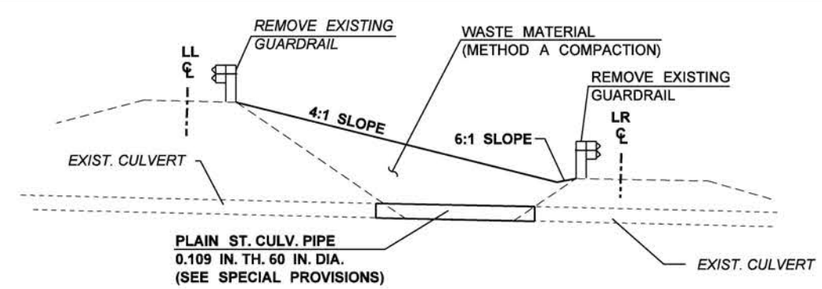
SEE SPECIAL PROVISIONS

NOT TO SCALE

NOTE:

1. BITUMINOUS MATERIAL SHALL NOT BE DEPOSITED AT THIS SITE.





SECTION C-C

SEE SPECIAL PROVISIONS

NOT TO SCALE

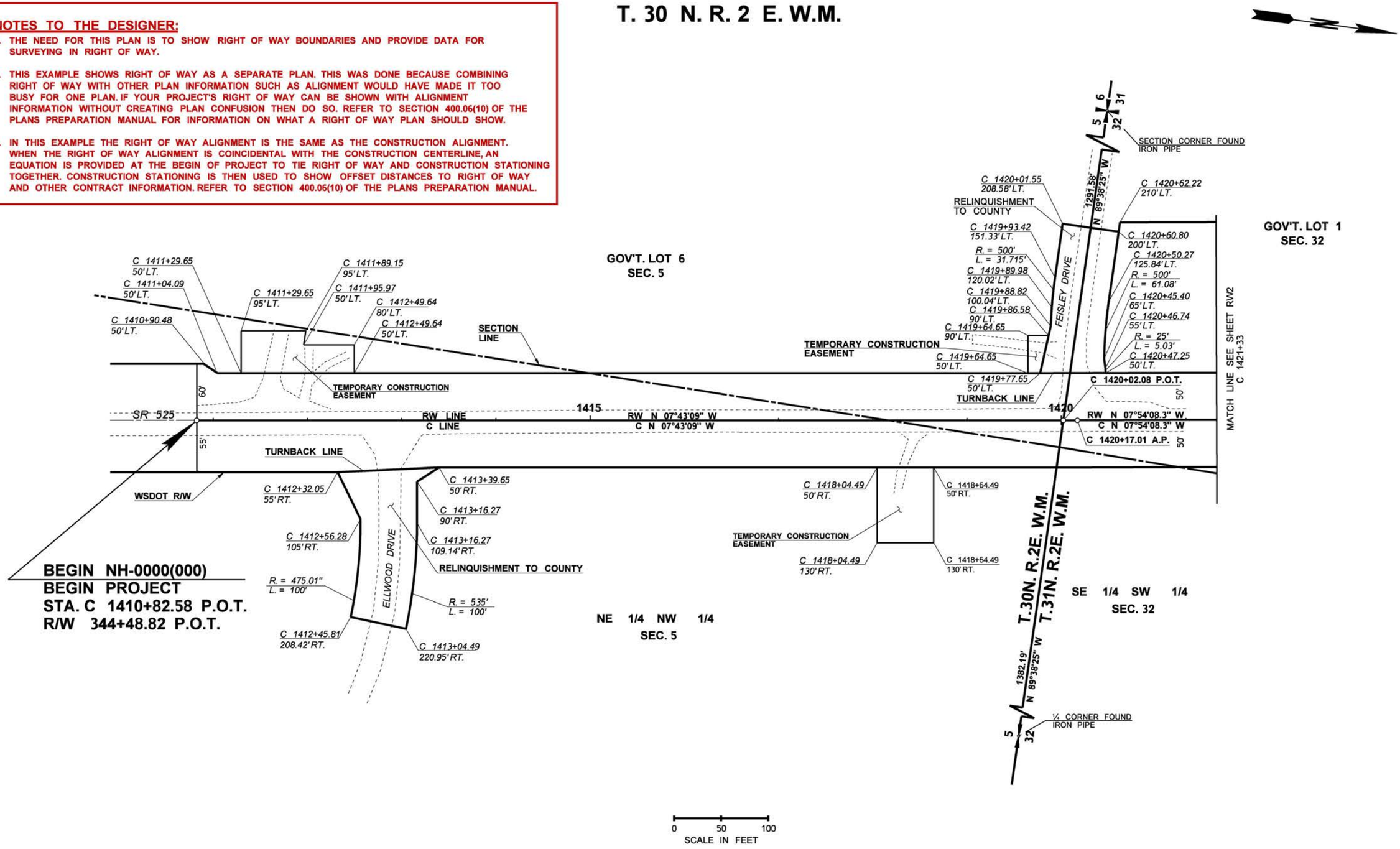
NOTE:

1. BITUMINOUS MATERIAL SHALL NOT BE DEPOSITED AT THIS SITE.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-18.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	P.E. STAMP BOX DATE	P.E. STAMP BOX DATE	Plot 17
TIME	2:37:56 PM								Washington State Department of Transportation	PLAN REF NO CG1
DATE	2/21/2025				JOB NUMBER 00Z000					EXAMPLE 4-18
PLOTTED BY	WilliSD									SHEET OF SHEETS
DESIGNED BY	DESIGNER									
ENTERED BY	CAD OPERATOR									
CHECKED BY	TEAM LEADER				CONTRACT NO.		LOCATION NO. XL-1234			CONTOUR GRADING
PROJ. ENGR.	PROJECT ENGINEER									
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY						

NOTES TO THE DESIGNER:

1. THE NEED FOR THIS PLAN IS TO SHOW RIGHT OF WAY BOUNDARIES AND PROVIDE DATA FOR SURVEYING IN RIGHT OF WAY.
2. THIS EXAMPLE SHOWS RIGHT OF WAY AS A SEPARATE PLAN. THIS WAS DONE BECAUSE COMBINING RIGHT OF WAY WITH OTHER PLAN INFORMATION SUCH AS ALIGNMENT WOULD HAVE MADE IT TOO BUSY FOR ONE PLAN. IF YOUR PROJECT'S RIGHT OF WAY CAN BE SHOWN WITH ALIGNMENT INFORMATION WITHOUT CREATING PLAN CONFUSION THEN DO SO. REFER TO SECTION 400.06(10) OF THE PLANS PREPARATION MANUAL FOR INFORMATION ON WHAT A RIGHT OF WAY PLAN SHOULD SHOW.
3. IN THIS EXAMPLE THE RIGHT OF WAY ALIGNMENT IS THE SAME AS THE CONSTRUCTION ALIGNMENT. WHEN THE RIGHT OF WAY ALIGNMENT IS COINCIDENTAL WITH THE CONSTRUCTION CENTERLINE, AN EQUATION IS PROVIDED AT THE BEGIN OF PROJECT TO TIE RIGHT OF WAY AND CONSTRUCTION STATIONING TOGETHER. CONSTRUCTION STATIONING IS THEN USED TO SHOW OFFSET DISTANCES TO RIGHT OF WAY AND OTHER CONTRACT INFORMATION. REFER TO SECTION 400.06(10) OF THE PLANS PREPARATION MANUAL.



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-19.dgn								Plot 18
TIME	1:53:35 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	Washington State Department of Transportation	PLAN REF NO RW1
DATE	4/18/2025								
PLOTTED BY	WilliSD				JOB NUMBER 00Z000			EXAMPLE 4-19	SHEET
DESIGNED BY									OF
ENTERED BY									SHEETS
CHECKED BY					CONTRACT NO.	LOCATION NO. XL-1234	SEE SHEET CT1 DATE P.E. STAMP BOX	DATE P.E. STAMP BOX	
PROJ. ENGR.									
REGIONAL ADM.		REVISION	DATE	BY				RIGHT OF WAY	

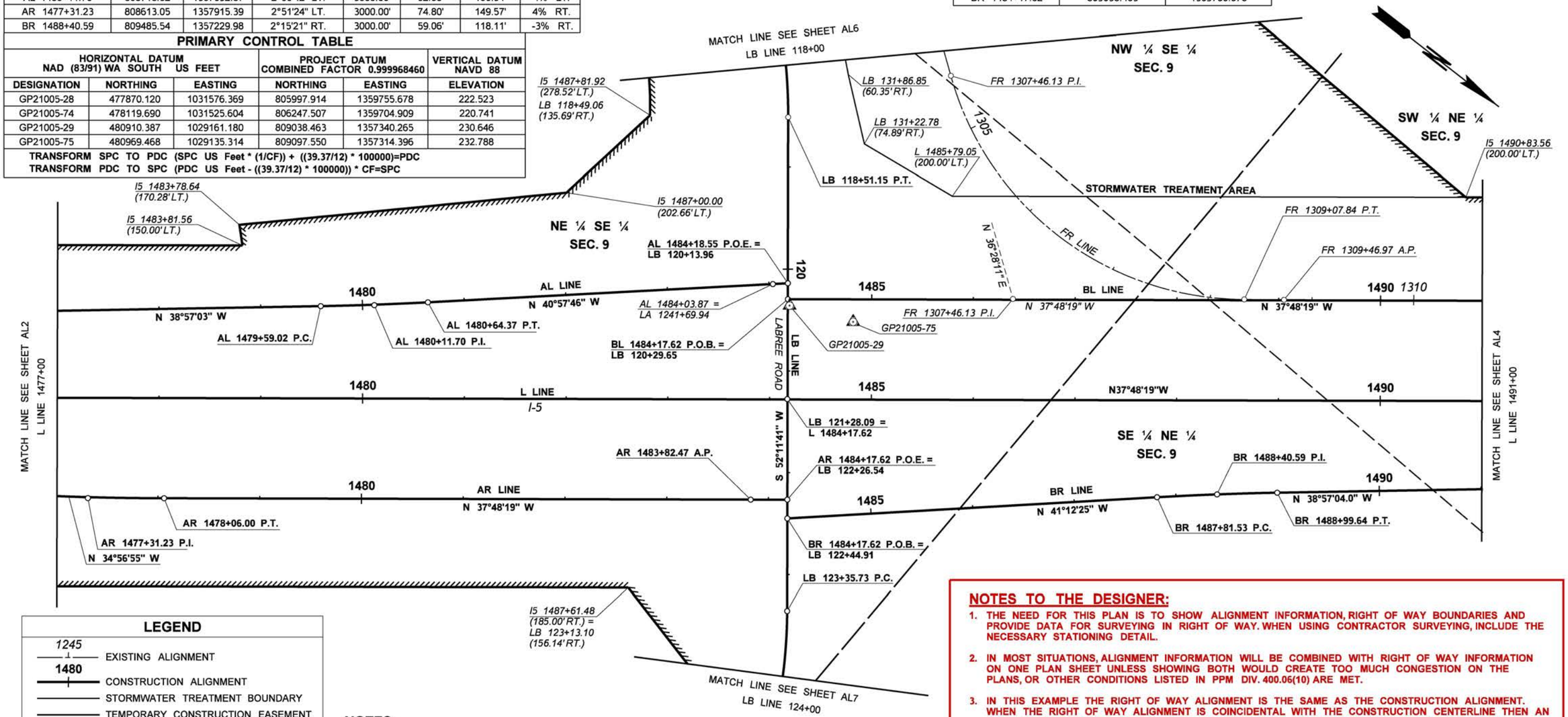
T. 13N. R. 2W. W.M.

CURVE DATA							
P.I. STATION	NORTHING	EASTING	DELTA	RADIUS	TANGENT	LENGTH	SUPER
FR 1307+46.13	809209.67	1357202.23	74°16'30" LT.	300.00'	227.20'	388.90'	N/A
AL 1480+11.70	808718.52	1357592.87	2°00'42" LT.	3000.00'	52.68'	105.34'	4% LT.
AR 1477+31.23	808613.05	1357915.39	2°51'24" LT.	3000.00'	74.80'	149.57'	4% RT.
BR 1488+40.59	809485.54	1357229.98	2°15'21" RT.	3000.00'	59.06'	118.11'	-3% RT.

ALIGNMENT COORDINATES (FEET)		
STATION	NORTHING	EASTING
BL 1484+17.62	805997.914	1359755.678
BR 1484+17.62	809038.463	1359755.678

PRIMARY CONTROL TABLE					
HORIZONTAL DATUM NAD (83/91) WA SOUTH US FEET			PROJECT DATUM COMBINED FACTOR 0.999968460		VERTICAL DATUM NAVD 88
DESIGNATION	NORTHING	EASTING	NORTHING	EASTING	ELEVATION
GP21005-28	477870.120	1031576.369	805997.914	1359755.678	222.523
GP21005-74	478119.690	1031525.604	806247.507	1359704.909	220.741
GP21005-29	480910.387	1029161.180	809038.463	1357340.265	230.646
GP21005-75	480969.468	1029135.314	809097.550	1357314.396	232.788

TRANSFORM SPC TO PDC (SPC US Feet * (1/CF)) + ((39.37/12) * 100000)=PDC
TRANSFORM PDC TO SPC (PDC US Feet - ((39.37/12) * 100000)) * CF=SPC



LEGEND

- 1245 — EXISTING ALIGNMENT
- 1480 — CONSTRUCTION ALIGNMENT
- STORMWATER TREATMENT BOUNDARY
- TEMPORARY CONSTRUCTION EASEMENT
- UTILITY EASEMENT
- HIGHWAY RIGHT OF WAY
- LIMITED ACCESS RIGHT OF WAY
- COUNTY RIGHT OF WAY
- TURN BACK LINE
- SIXTEENTH SECTION LINE
- QUARTER SECTION LINE
- SECTION LINE

NOTES:

1. THE BASIS OF BEARING IS DETERMINED FROM THE WASHINGTON STATE COORDINATE SYSTEM SOUTH ZONE (NAD 83/2011).
2. THE DISTANCES SHOWN ARE GROUND DISTANCES IN U.S. SURVEY FEET.
3. PER RCW 58.09.130, ANY MONUMENT OR CORNER DISTURBED BY THE CONTRACTOR'S OPERATION.

0 50 100
SCALE IN FEET

NOTES TO THE DESIGNER:

1. THE NEED FOR THIS PLAN IS TO SHOW ALIGNMENT INFORMATION, RIGHT OF WAY BOUNDARIES AND PROVIDE DATA FOR SURVEYING IN RIGHT OF WAY. WHEN USING CONTRACTOR SURVEYING, INCLUDE THE NECESSARY STATIONING DETAIL.
2. IN MOST SITUATIONS, ALIGNMENT INFORMATION WILL BE COMBINED WITH RIGHT OF WAY INFORMATION ON ONE PLAN SHEET UNLESS SHOWING BOTH WOULD CREATE TOO MUCH CONGESTION ON THE PLANS, OR OTHER CONDITIONS LISTED IN PPM DIV. 400.06(10) ARE MET.
3. IN THIS EXAMPLE THE RIGHT OF WAY ALIGNMENT IS THE SAME AS THE CONSTRUCTION ALIGNMENT. WHEN THE RIGHT OF WAY ALIGNMENT IS COINCIDENTAL WITH THE CONSTRUCTION CENTERLINE THEN AN EQUATION IS PROVIDED AT THE BEGIN OF PROJECT TO TIE RIGHT OF WAY AND CONSTRUCTION STATIONING TOGETHER. CONSTRUCTION STATIONING IS THEN USED TO SHOW OFFSET DISTANCES TO RIGHT OF WAY AND OTHER CONTRACT INFORMATION.
4. PRIMARY CONTROL POINTS ARE DISPLAYED IN THEIR COORDINATE LOCATION AND LABELED WITH THE DESIGNATION ID ONLY. THE PRIMARY CONTROL POINT TABLE AND BASIS OF BEARING CONTENT WILL BE ON THE FIRST SHEET OR THE FIRST SHEET THAT CAN ACCOMMODATE BOTH WITHOUT OBSCURING PERTINENT SHEET INFORMATION.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-20.dgn					
TIME	1:54:48 PM					
DATE	4/18/2025					
PLOTTED BY	WilliSD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. SP1234

SEE SHEET CT1
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

Washington State Department of Transportation

EXAMPLE 4-20

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 3
PLAN REF NO AL3
SHEET
OF
SHEETS

QUANTITY TABULATION - SITE PREPARATION

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →			REMOVING CONC. BARRIER		REMOVE ASPHALT CONC. PAVEMENT		REMOVING GAURDRAIL		REMOVING GAURDRAIL ANCHOR		REMOVING CHAINLINK FENCE		REMOVING WIRE FENCE			SEE GENERAL NOTES
				L.F.		S.Y.		L.F.		EACH		L.F.		L.F.			
SP1-1	L 1450+00 (RT.) TO L 1457+45 (RT.)							745		1							
SP1-2	L 1458+11 (LT.) TO L 1482+50 (RT.)							2439		1							
SP2-1	L 1468+59 (117' RT.) TO L 1483+81 (115' RT.)													1522			
SP2-2	L 1471+21 (169' RT.) TO L 1472+58 (185' RT.)													146			
SP2-3	L 1475+02 (173' RT.) TO L 1475+28 (147' RT.)													105			
SP2-4	L 1475+38 (185' RT.) TO L 1475+74 (114' RT.)													110			
SP3-1	L 1478+79 (150' LT.) TO L 1483+81 (117' LT.)													510			
SP3-2	L 1479+99 (147' LT.) TO L 1480+52 (217' LT.)													87			
SP3-3	LB 116+23 (116' RT.) TO LB 119+78.68 (115 LT')													310			
SP3-4	LB 116+76 (40' RT.) TO LB 120+12 (36' RT.)							325		1							
SP3-5	LB 117+33 (11' LT.) TO LB 120+11 (8' LT.)							275		1							
SP3-6	L 1484+26 (115' LT.) TO L 1520+00 (71' LT.)													3575			
SP3-7	FR 1300+08 (90' RT.) TO FR 1346+23 (15' RT.)					14753											
SP3-8	LB 108+85 (84' RT.) TO LB 119+28 (662' LT.)													1476			
SP3-9	L 1490+79 (200' LT.) TO L 1492+21 (199' LT.)													142			
SP3-10	L 1482+50 (2' RT.) TO L 1490+51 (2' RT.)			301													
SP3-11	L 1490+51 (2' LT.) TO L 1520+00 (2' RT.)							3449									
SP3-12	L 1487+88 (71' RT.) TO L 1489+32 (60' RT.)							150		2							
SP3-13	LB 122+44 (36' RT.) TO LB 123+77 (39' RT.)							125		1							
SP3-14	LB 122+44 (5' LT.) TO LB 123+70 (12' LT.)							125		1							
SP3-15	L 1484+24 (116' RT.) TO L 1489+10 (110' RT.)													3607			
SP3-16	LB 123+06 (254' LT.) TO LB 124+50 (278' LT.)											204					
SP3-17	L 1486+71 (178' RT.) TO L 1487+57 (180' RT.)											86					
SP4-1	L 1492+99 (188' LT.) TO L 1520+00 (188' LT.)													2739			
SP6-1	HAM 1729+56 (75' RT.) TO HAM 1731+80 (41' RT.)													220			
SP6-2	HAM 1730+73 (47' RT.) TO HAM 1730+83 (93' RT.)																
SP6-3	HAM 1730+90 (76' RT.) TO HAM 1731+06 (64' RT.)																
SP6-4	H 1730+67 TO H 1732+14					486											
SP6-5	LB 106+75 TO LB 110+80					1127											
	SHEET TOTAL			301		16366		7633		8		290		14549			
	PROJECT TOTAL			301		16366		7633		8		290		14549			

GENERAL NOTES:

1. SEE SPECIAL PROVISIONS, "FILLING OF CULVERTS AND SEWER PIPES."

2. SEE SPECIAL PROVISIONS, "REMOVING DRAINAGE STRUCTURES."

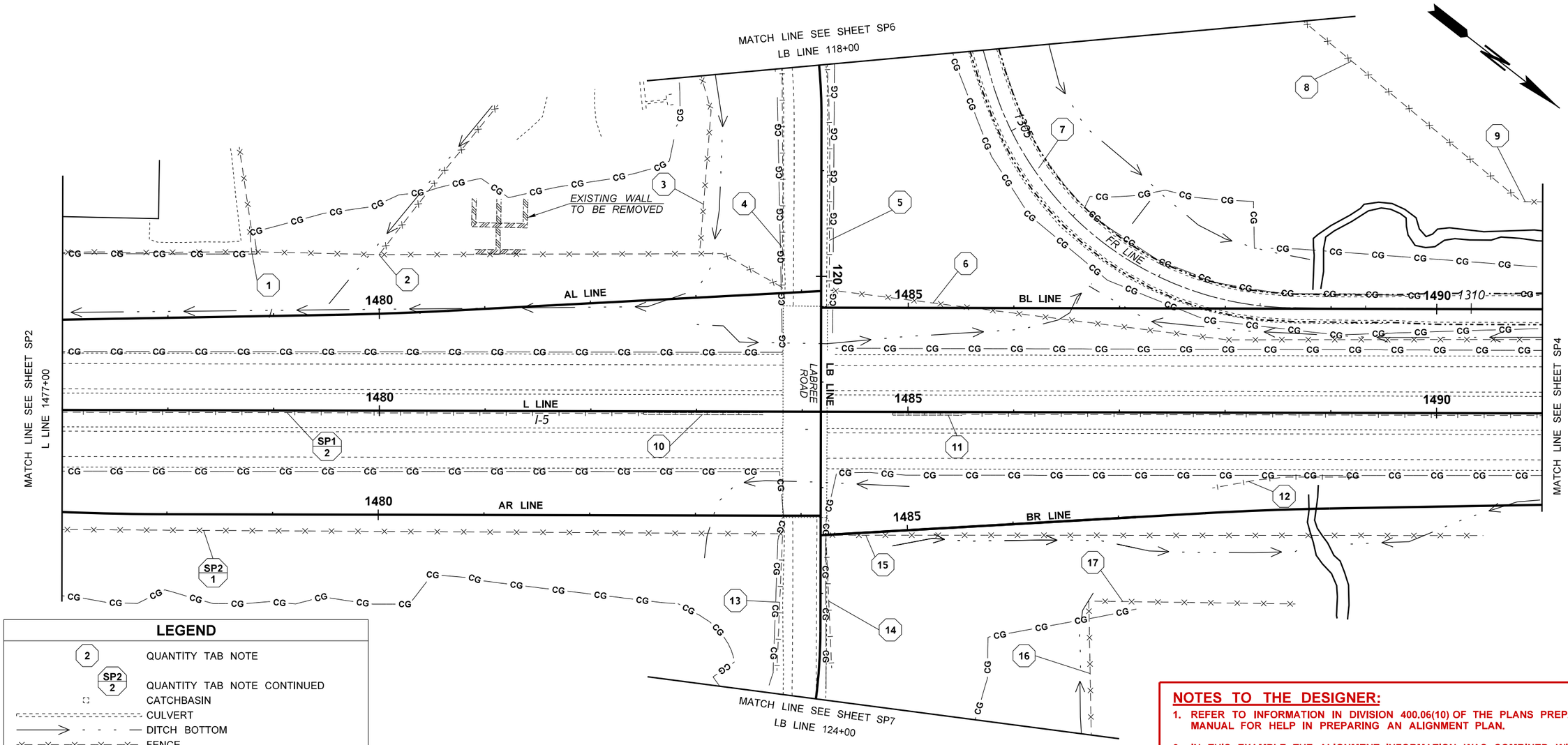
3. SEE SPECIAL PROVISIONS, "REMOVAL OF STRUCTURES AND OBSTRUCTIONS."

4. SEE SPECIAL PROVISION, "TEMPORARY TRAFFIC CONTROL."

5. CULVERTS IN THE MEDIAN THAT MUST BE FILLED ARE TO REMAIN FUNCTIONAL UNTIL NO LONGER NEEDED FOR STAGE 1 DRAINAGE.

6. CULVERT MUST REMAIN FUNCTIONAL UNTIL STRUCTURE CODE DR8-34 & DR8-35 ARE OPERATIONAL

7. REMOVE ENOUGH OF THIS CULVERT TO CONSTRUCT SHORING FOR WALL #1 OVEREXCAVATION.



LEGEND

- 2 — QUANTITY TAB NOTE
- SP2 2 — QUANTITY TAB NOTE CONTINUED
- CATCHBASIN
- CULVERT
- DITCH BOTTOM
- FENCE
- GUARDRAIL
- GRAVEL EDGE
- PAVED EDGE
- BRIDGE
- RETAINING WALL
- BUILDINGS
- STREAM EDGE
- PAVEMENT REMOVAL BOUNDARY
- CG — CLEARING AND GRUBBING BOUNDARY

NOTES TO THE DESIGNER:

1. REFER TO INFORMATION IN DIVISION 400.06(10) OF THE PLANS PREPARATION MANUAL FOR HELP IN PREPARING AN ALIGNMENT PLAN.
2. IN THIS EXAMPLE THE ALIGNMENT INFORMATION WAS COMBINED WITH THE SITE PREPARATION INFORMATION TO FORM ONE PLAN SHEET. COMBINING THIS INFORMATION IS ACCEPTABLE, (REFER TO SECTION 400.06(10) OF THE PLANS PREPARATION MANUAL) AND WAS DONE BECAUSE THERE WERE EXTENSIVE CONSTRUCTION EASEMENTS AND RIGHT OF WAY REVISIONS THAT WERE BEST VIEWED ON A SEPARATE RIGHT OF WAY PLAN. IN MOST SITUATIONS, ALIGNMENT INFORMATION WILL BE COMBINED WITH RIGHT OF WAY INFORMATION ON ONE PLAN SHEET UNLESS SHOWING BOTH WOULD CREATE TOO MUCH CONGESTION ON THE PLANS, OR OTHER CONDITIONS LISTED IN SECTION 400.04 (1) ARE MET.
3. WHEN USING CONTRACTOR SURVEYING, INCLUDE THE NECESSARY STATIONING DETAIL.

FILE NAME	c:\users\wlllsd\pw_wsdot\d0181855\PPM_Div_4_Example_4-22.dgn						
TIME	2:31:31 PM						
DATE	8/22/2025						
PLOTTED BY	WillISD						
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

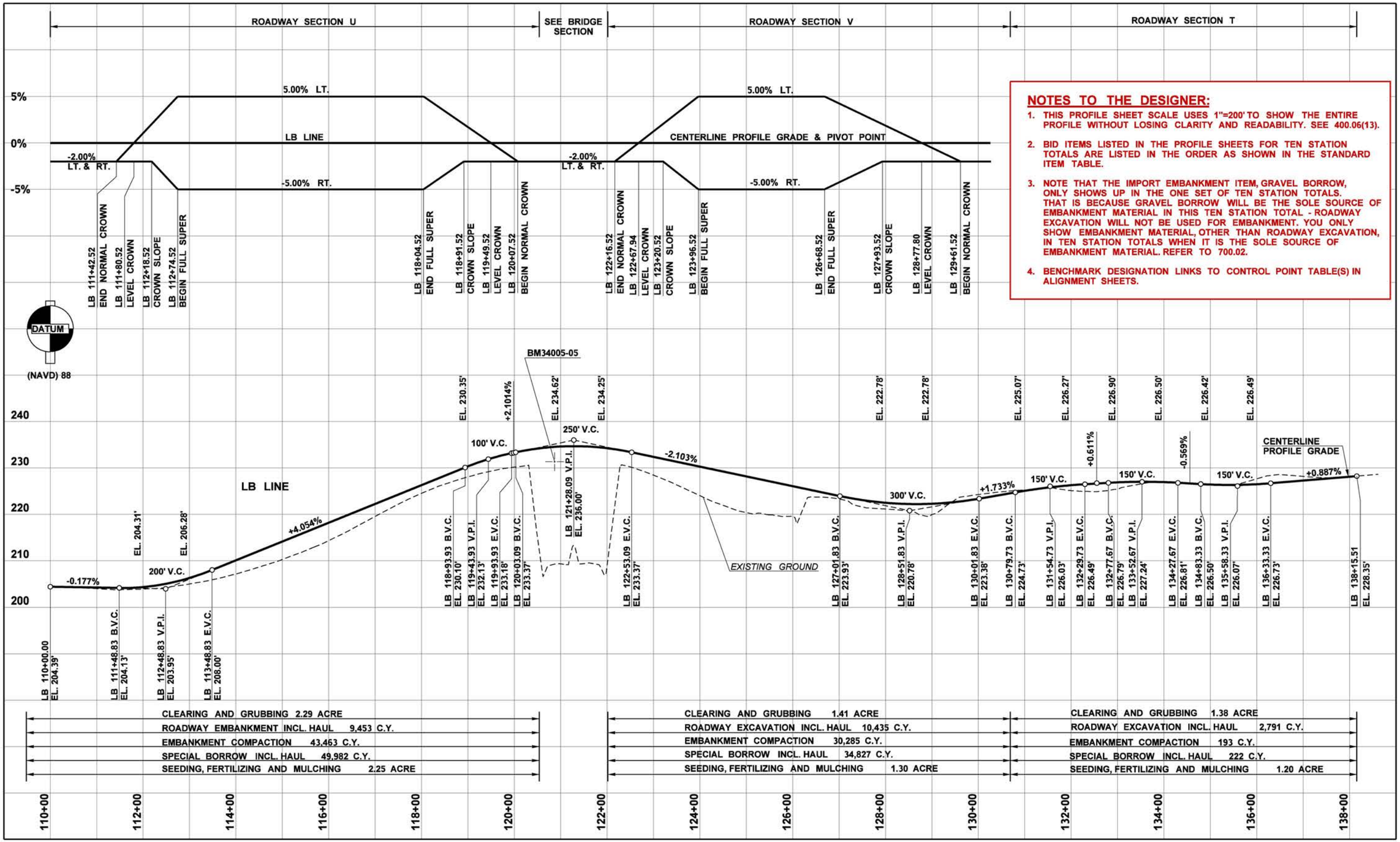
EXAMPLE 4-22

SITE PREPARATION PLAN

Plot 3

PLAN REF NO SP3

SHEET OF SHEETS



NOTES TO THE DESIGNER:

1. THIS PROFILE SHEET SCALE USES 1"=200' TO SHOW THE ENTIRE PROFILE WITHOUT LOSING CLARITY AND READABILITY. SEE 400.06(13).
2. BID ITEMS LISTED IN THE PROFILE SHEETS FOR TEN STATION TOTALS ARE LISTED IN THE ORDER AS SHOWN IN THE STANDARD ITEM TABLE.
3. NOTE THAT THE IMPORT EMBANKMENT ITEM, GRAVEL BORROW, ONLY SHOWS UP IN THE ONE SET OF TEN STATION TOTALS. THAT IS BECAUSE GRAVEL BORROW WILL BE THE SOLE SOURCE OF EMBANKMENT MATERIAL IN THIS TEN STATION TOTAL - ROADWAY EXCAVATION WILL NOT BE USED FOR EMBANKMENT. YOU ONLY SHOW EMBANKMENT MATERIAL, OTHER THAN ROADWAY EXCAVATION, IN TEN STATION TOTALS WHEN IT IS THE SOLE SOURCE OF EMBANKMENT MATERIAL. REFER TO 700.02.
4. BENCHMARK DESIGNATION LINKS TO CONTROL POINT TABLE(S) IN ALIGNMENT SHEETS.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-23.dgn
TIME	2:09:42 PM
DATE	4/18/2025
PLOTTED BY	WillisD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. SP1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-23

ROADWAY PROFILE

PLAN REF. NO. RP8

SHEET OF SHEETS

STRUCTURE NOTES - DRAINAGE

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	ADJUST DRAINAGE STRUCTURE	DITCH EXCAVATION INCL. HAUL	GRATE INLET TYPE 2	QUARRY SPALLS	DRAIN PIPE 6 IN. DIA.	HDPE 18 IN DIA.	SCHEDULE A CULV. PIPE 12 IN. DIA.	SCHEDULE A CULV. PIPE 18 IN. DIA.	SCHEDULE A CULV. PIPE 24 IN. DIA.	CL. V REINF. CONC. CULV. PIPE 36 IN. DIA.	MANHOLE TYPE 1-60" DIA.	CATCH BASIN TYPE 2 60 IN. DIA.	CATCH BASIN TYPE 1L	CATCH BASIN TYPE 2 54 IN. DIA.	TESTING STORM SEWER PIPE	SEE GENERAL NOTES
		EACH	C.Y.	EACH	TON	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	L.F.	
DR3-1	LB 131+60 (127' LT.) TO LB 135+86 (74' RT.)		XX														
DR3-2	LB 131+60 (126' LT.) TO LB 131+61 (84' LT.)										56						1, 9, 11
DR3-3	LB 131+62 (69' RT). TO LB 131+62 (148' RT.)										102						1, 9, 11
DR3-4	LB 129+94 (35' LT.)	1															7
DR3-5	LB 129+92 (3' RT.)	1															7
DR3-6	LB 129+73 (59' LT.) TO LB 129+72 (67' RT.)			1				98						1		98	1, 2, 6, 14
DR3-7	BL 1484+84 (2' LT.) TO BL 1484+73 (47' LT.)			1				56							1	56	1, 2, 8, 14
DR3-8	BL 1484+73 (47' LT.) TO BL 1486+48 (23' LT.)			1				176							1	176	1, 2, 8, 14
DR3-9	BL 1486+48 (23' LT.) TO BL 1486+47 (42' RT.)			1				65				1				65	1, 2, 13
DR3-10	BL 1484+87 (25' RT.) TO BL 1486+64 (94' LT.)								30				1			30	1, 5, 6, 14
DR3-11	BL 1486+74 (26' LT.) TO BL 1487+12 (80' LT.)								20				1			20	1, 5, 6, 14
DR3-12	L 1478+97 (1' LT.) TO L 1478+94 (88' LT.)	1															7
DR3-13	L 1478+97 (55' LT.) TO L 1479+97 (5' LT.)			1				100						1		100	1, 2, 6, 14
DR3-14	L 1479+97 (55' LT.) TO L 1480+97 (55' LT.)			1				100						1		100	1, 2, 6, 14
DR3-15	L 1480+97 (55' LT.) TO L 1481+97 (55' LT.)			1				100						1		100	1, 2, 6, 14
DR3-16	L 1481+97 (55' LT.) TO L 1482+97 (55' LT.)								100					1		100	1, 2, 6, 14
DR3-17	L 1482+97 (55' LT.) TO L 1485+97 (55' LT.)								300					1		300	1, 2, 6, 14
DR3-18	L 1485+97 (55' LT.) TO L 1486+47 (56' LT.)								50					1		50	1, 2, 6, 14
DR3-19	L 1486+47 (56' LT.) TO L 1488+72 (55' LT.)								224					1		224	1, 2, 6, 14
DR3-20	L 1488+72 (56' LT.) TO L 1489+10 (56' LT.)						38							1		38	1, 2, 6, 14
DR3-21	L 1489+10 (56' LT.) TO L 1490+00 (56' LT.)								90					1		90	1, 2, 6, 14
DR3-22	L 1490+00 (56' LT.) TO L 1491+00 (56' LT)									100					1	100	1, 5, 6, 14
DR3-23	L 1491+00 (56' LT.) TO L 1492+00 (56' LT.)									100					1	100	1, 5, 6, 14
	SHEET TOTAL	3		7			38	695	814	200	158	1	2	10	4	1747	
	PROJECT TOTAL	3		7			38	695	814	200	158	1	2	10	4	1747	

GENERAL NOTES:

NOTES TO THE DESIGNER:

1. THIS STRUCTURE NOTE EXAMPLE COINCIDES WITH OTHER EXAMPLES: EXAMPLE PLAN 4-26 IS ONE OF THE DRAINAGE PLAN SHEETS AND EXAMPLE PLAN 4-29 AND 4-30 FOR PROFILE SHEETS THAT GOES WITH THIS EXAMPLE.

1. SEE PIPE ZONE BEDDING AND BACKFILL - STANDARD PLAN B-55.20.

2. SEE CATCH BASIN TYPE 1L - STANDARD PLAN B-5.40.

3. SEE GRATE INLET TYPE 2 - STANDARD PLAN B-35.40.

4. SEE FRAME AND DUAL VANED GRATED FOR GRATE INLET TYPE 2 - STANDARD PLAN B-40.40 ROTATED INSTALLATION.

5. SEE CATCH BASIN TYPE 2 - STANDARD PLAN B-10.20.

6. SEE RECTANGULAR FRAME (REVERSIBLE) - STANDARD PLAN B-30.10.

7. EXISTING STRUCTURE TO BE ADJUSTED.

8. SEE RECTANGULAR VANED GRATE - STANDARD PLAN B-30.30.

9. SEE BEVELED END SECTIONS - STANDARD PLAN B-70.20.

10. SEE SPECAIL PROVION, "FILLING OF CULVERTS AND SEWER PIPE".

11. CONNECTION DETAILS FOR DISSIMILAR CULVERT PIPE - STANDARD PLAN B-60.20.

12. CULVERTS IN THE MEDIAN THAT MUST BE FILLED ARE TO REMAIN FUNCTIONAL UNTIL NO LONGER NEEDED FOR STAGE 1 DRAINAGE.

13. SEE MANHOLE TYPE 1 - STANDARD PLAN B-15.20.

14. SEE STORM DRAIN INLET PROTECTION - STANDARD PLAN I-7.
PIPE ZONE BEDDING.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-24.dgn
TIME	2:11:20 PM
DATE	4/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.

JOB NUMBER 00Z000

CONTRACT NO.

LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-24

STRUCTURE NOTES - DRAINAGE

PLAN REF NO SN1

SHEET OF SHEETS

LEGEND

	EXISTING	NEW
STORM DRAIN		
STORM SEWER	ST	ST
DRAIN PIPE	DP	DP
UNDERDRAIN	UD	UD
DITCH		
CATCH BASIN		
CONCRETE INLET		
GRATE INLET		
MANHOLE		
PIPE OUTFALL PROTECTION		
OUTFALL PROTECTION		
WATER QUALITY & DETENTION		
ORDINARY HIGH WATER MARK	OHW	OHW
COMPOST AMENDED VEGETATED FILTER STRIP (CAVFS)		CAVFS
COMPOST AMENDED BIOFILTRATION SWALE (CABS)		CABS
CONTINUOUS INFLOW COMPOST AMENDED BIOFILTRATION SWALE (CICABS)		CICABS
MEDIA FILTER DRAIN (MFD)		MFD
BIOFILTRATION SWALE		
CULVERT		
BOX CULVERT		
STREAM EDGE		
DETENTION POND		
MISCELLANEOUS		
RIGHT OF WAY		
EASEMENT		
WETLAND		
WETLAND BUFFER		
WETLAND MITIGATION BUFFER		
STRUCTURE NOTE FLAG		??
STRUCTURE NOTE FLAG CONTINUE		?? ??

CONSTRUCTION NOTES:

1. ADJUST EXISTING STORM DRAIN STRUCTURE RIM TO FINISHED GRADE. (WSDOT SPEC. 7-05.3(1))
2. PROTECT IN PLACE EX DRAINAGE STRUCTURE / PIPE.
3. CONNECT TO EX DRAINAGE STRUCTURE / PIPE. (WSDOT SPEC. 7-05.3(3))
4. PLUG EXISTING PIPE / STRUCTURE.
5. DAYLIGHT EXISTING DRAIN TO NEW SLOPE
6. END OF GUTTER PROTECTION, SEE DETAIL ON DD.
7. NOT USED.
8. ALIGN SHORT SIDE OF GRATE INLET TO BARRIER.
9. DAYLIGHT EX SLOPE DRAIN TO NEW DITCH.
10. GRADE DITCH TO EX INLET.
11. PROVIDE ROCK OUTFALL PROTECTION WHERE PIPE DAYLIGHTS TO SLOPE, SEE DETAIL SHEET DDXX.
12. INSTALL FLARED END SECTION.
13. BRIDGE DRAIN
14. CONNECT TO WALL DRAINS. SEE WALL PLANS FOR ADDITIONAL DETAILS.
15. CONNECT UNDERDRAIN / DRAIN TO INLET.
16. INSTALL DYKE PER STD B-45.20 WITH 10:1 BACKSLOPE.
17. BARRIER GUTTER DRAINS. SEE DRAINAGE PROFILES AND BARRIER PLANS FOR ADDITIONAL DETAILS.

NOTES:

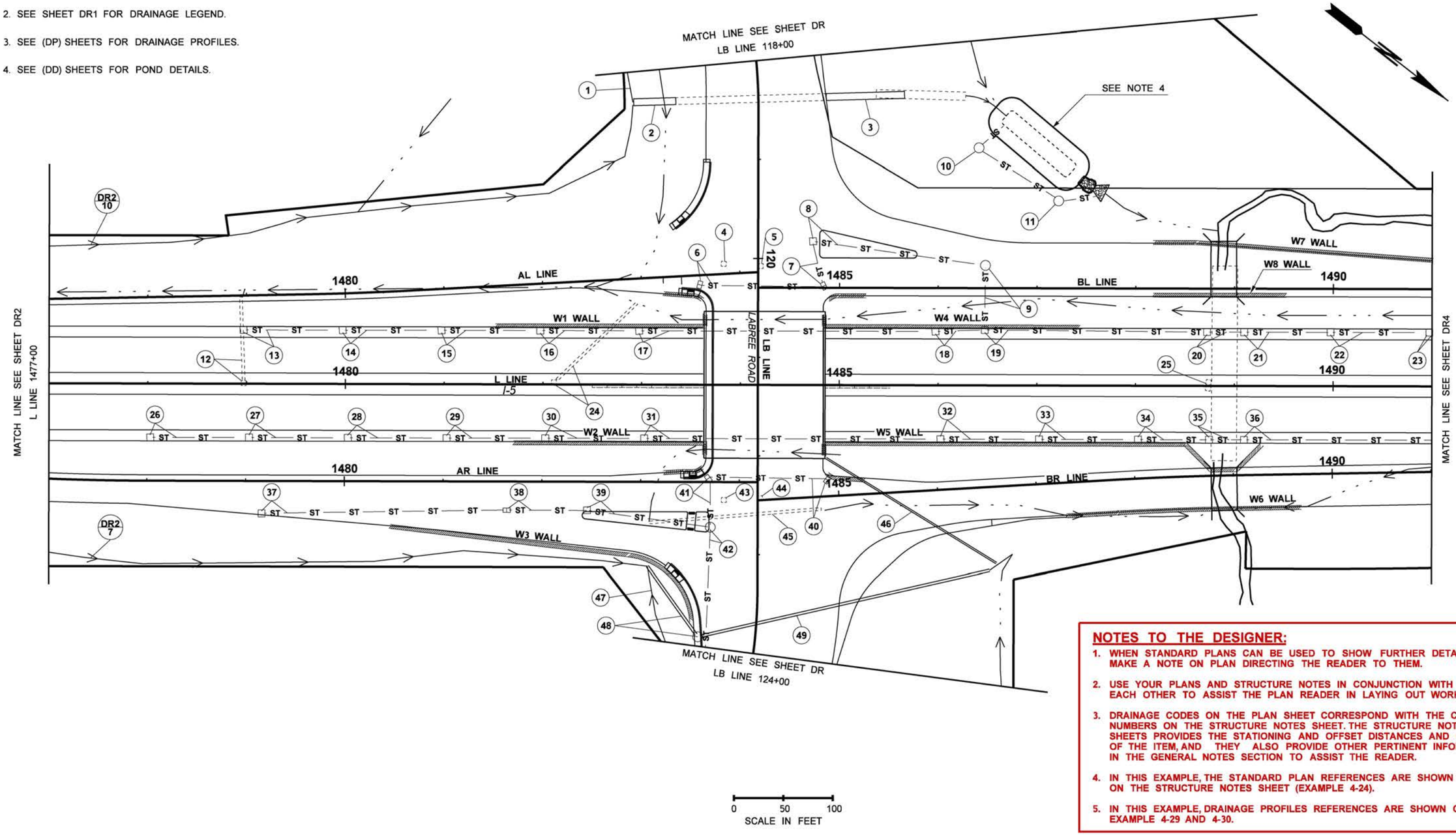
1. WSDOT TYPE 2 AND TYPE 3 MANHOLE MAY BE CONSTRUCTED WITHOUT CHANNELIZATION. SEE DETAIL DD.
2. FOR STRUCTURE REMOVAL AND ABANDON SEE SITE PREP PLAN (SP) SHEETS.

NOTES TO THE DESIGNER:

1. LEGEND SHEET IS ACCEPTABLE ON THE FIRST DR OF A SET IN A SERIES OR THE FIRST SHEET OF DR IN THE PS&E.
2. THE LEGEND SHEET SHALL INCLUDE ALL DRAINAGE ITEMS AND NOTES FOR THE PROJECT THAT ENCOMPASS EEDS DRAINAGE AND STORMWATER LINE STYLES AND SYMBOLS THE PROJECT WILL USE.
3. DRAINAGE SHEETS SHALL BE IN BLACK AND WHITE BUT COLOR CODING SHALL BE APPROVED BY REGIONAL HYDRAULIC ENGINEER.
4. CONSULT REGIONAL HYDRAULIC ENGINEER FOR SMALL SCALE DRAINAGE PROJECTS ON DRAINAGE LEGEND AS AN OPTION.
5. PIPE REHABILITATION WHERE REQUIRED SHALL USE A TRENCHLESS TECHNIQUE AS SPECIFIED IN THE WSDOT HYDRAULICS MANUAL, SECTION 8-9.1.

NOTES:

1. STRUCTURE REMOVAL AND ABANDON SEE SITE PREP PLAN (SP) SHEETS.
2. SEE SHEET DR1 FOR DRAINAGE LEGEND.
3. SEE (DP) SHEETS FOR DRAINAGE PROFILES.
4. SEE (DD) SHEETS FOR POND DETAILS.



NOTES TO THE DESIGNER:

1. WHEN STANDARD PLANS CAN BE USED TO SHOW FURTHER DETAIL, MAKE A NOTE ON PLAN DIRECTING THE READER TO THEM.
2. USE YOUR PLANS AND STRUCTURE NOTES IN CONJUNCTION WITH EACH OTHER TO ASSIST THE PLAN READER IN LAYING OUT WORK.
3. DRAINAGE CODES ON THE PLAN SHEET CORRESPOND WITH THE CODE NUMBERS ON THE STRUCTURE NOTES SHEET. THE STRUCTURE NOTES SHEETS PROVIDES THE STATIONING AND OFFSET DISTANCES AND QUANTITY OF THE ITEM, AND THEY ALSO PROVIDE OTHER PERTINENT INFORMATION IN THE GENERAL NOTES SECTION TO ASSIST THE READER.
4. IN THIS EXAMPLE, THE STANDARD PLAN REFERENCES ARE SHOWN ON THE STRUCTURE NOTES SHEET (EXAMPLE 4-24).
5. IN THIS EXAMPLE, DRAINAGE PROFILES REFERENCES ARE SHOWN ON EXAMPLE 4-29 AND 4-30.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-26.dgn						
TIME	2:50:17 PM			REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	
DATE	4/18/2025						
PLOTTED BY	WilliSD			JOB NUMBER 00Z000			
DESIGNED BY							
ENTERED BY							
CHECKED BY				CONTRACT NO.		LOCATION NO. XL-1234	
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-26

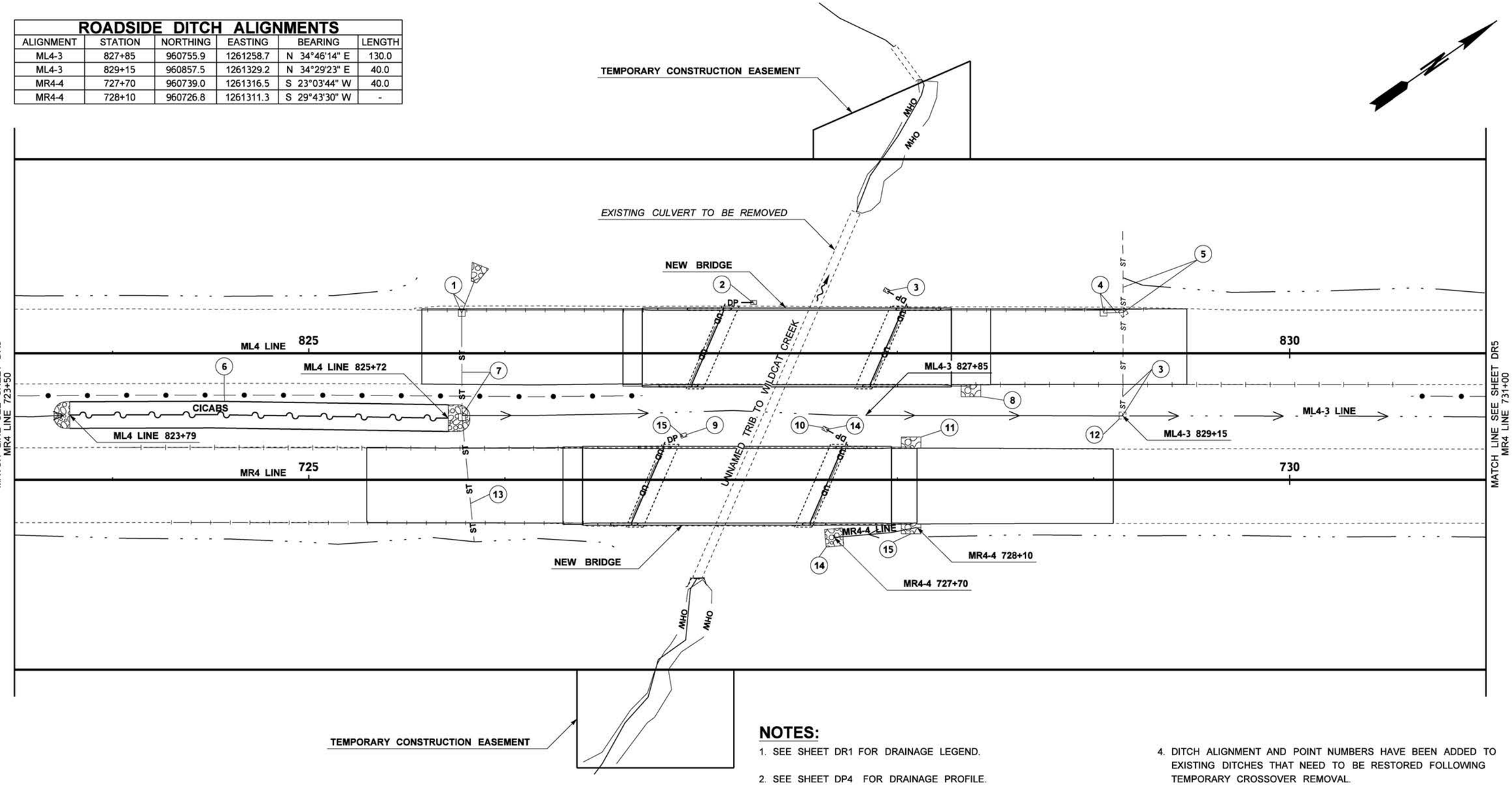
DRAINAGE PLAN

PLAN REF NO DR3

SHEET OF SHEETS

ROADSIDE DITCH ALIGNMENTS

ALIGNMENT	STATION	NORTHING	EASTING	BEARING	LENGTH
ML4-3	827+85	960755.9	1261258.7	N 34°46'14" E	130.0
ML4-3	829+15	960857.5	1261329.2	N 34°29'23" E	40.0
MR4-4	727+70	960739.0	1261316.5	S 23°03'44" W	40.0
MR4-4	728+10	960726.8	1261311.3	S 29°43'30" W	-



NOTES:

1. SEE SHEET DR1 FOR DRAINAGE LEGEND.
2. SEE SHEET DP4 FOR DRAINAGE PROFILE.
3. FOR DRAINAGE DETAILS INCLUDING DRAINAGE DITCHES, OUTLET PROTECTION, MEDIA FILTER DRAINS (MFD), COMPOST AMENDED VEGETATIVE FILTER STRIPS (CAVFS), AND CONTINUOUS INFLOW COMPOST AMENDED BIOFILTRATION SWALES (CICABS), SEE DRAINAGE DETAIL (DD) SHEETS.
4. DITCH ALIGNMENT AND POINT NUMBERS HAVE BEEN ADDED TO EXISTING DITCHES THAT NEED TO BE RESTORED FOLLOWING TEMPORARY CROSSOVER REMOVAL.
5. FOR DITCH CONSTRUCTION, SEE DITCH PROFILES ON (DP) SHEETS AND DITCH DETAILS ON (DD) SHEETS.
6. STRUCTURE REMOVAL AND ABANDON SEE SITE PREP PLAN (SP) SHEETS.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-27.dgn				
TIME	2:51:47 PM				
DATE	4/18/2025				
PLOTTED BY	WilliSD				
DESIGNED BY					
ENTERED BY					
CHECKED BY					
PROJ. ENGR.					
REGIONAL ADM.		REVISION	DATE	BY	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

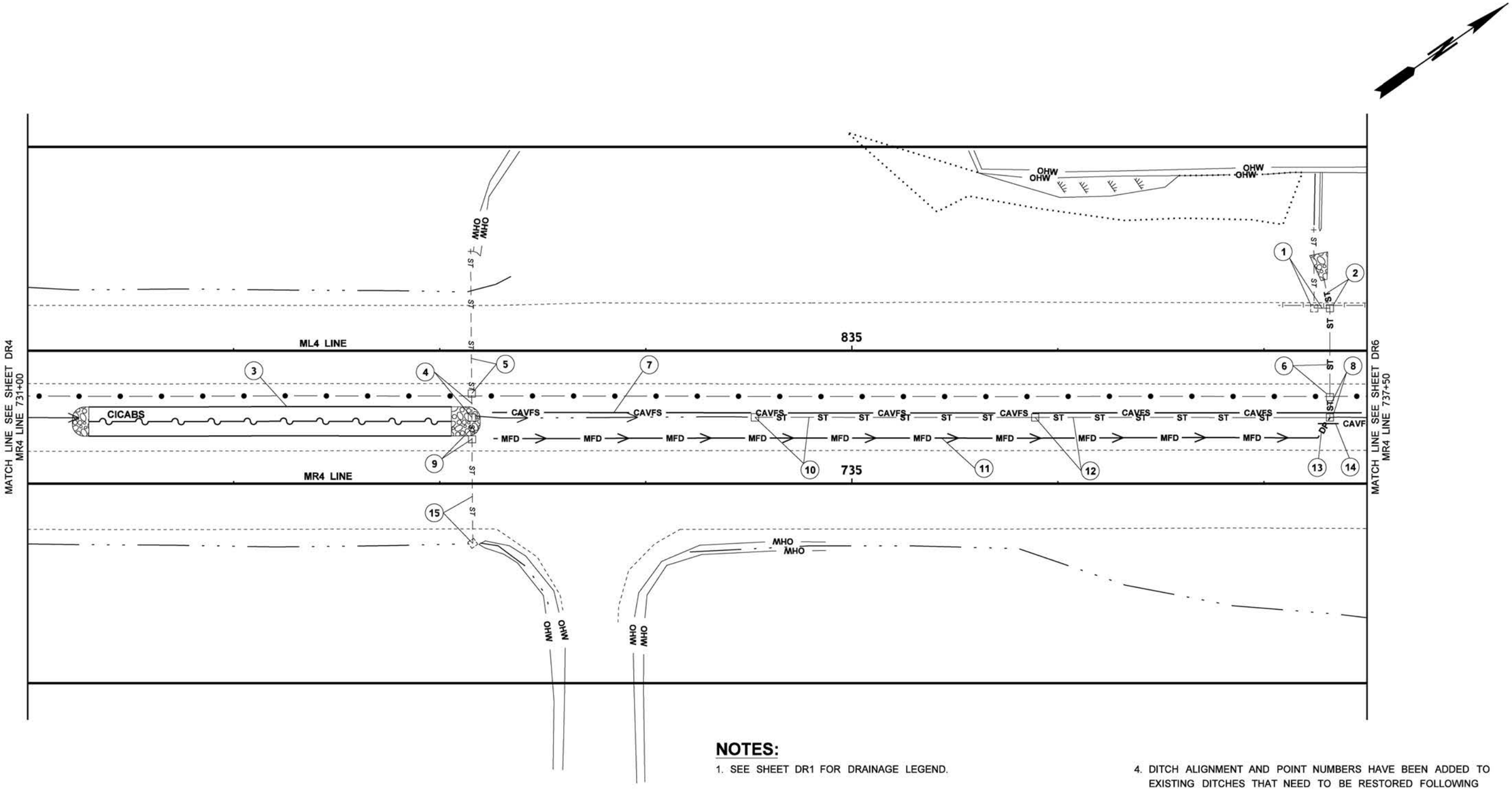
Washington State Department of Transportation

EXAMPLE 4-27

DRAINAGE PLAN

PLAN REF NO DR4

SHEET OF SHEETS



NOTES:

1. SEE SHEET DR1 FOR DRAINAGE LEGEND.
2. SEE (DP) SHEETS FOR DRAINAGE PROFILE.
3. FOR DRAINAGE DETAILS INCLUDING DRAINAGE DITCHES, OUTLET PROTECTION, MEDIA FILTER DRAINS (MFD), COMPOST AMENDED VEGETATIVE FILTER STRIPS (CAVFS), AND CONTINUOUS INFLOW COMPOST AMENDED BIOFILTRATION SWALES (CICABS), SEE DRAINAGE DETAIL (DD) SHEETS.
4. DITCH ALIGNMENT AND POINT NUMBERS HAVE BEEN ADDED TO EXISTING DITCHES THAT NEED TO BE RESTORED FOLLOWING TEMPORARY CROSSOVER REMOVAL.
5. FOR DITCH CONSTRUCTION, SEE DITCH PROFILES ON (DP) SHEETS AND DITCH DETAILS ON (DD) SHEETS.
6. STRUCTURE REMOVAL AND ABANDON SEE SITE PREP PLAN (SP) SHEETS.

0 25 50
SCALE IN FEET

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-28.dgn						
TIME	2:52:36 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	4/18/2025						
PLOTTED BY	WilliSD				JOB NUMBER 00Z000		
DESIGNED BY							
ENTERED BY					CONTRACT NO.		LOCATION NO.
CHECKED BY							XL-1234
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-28

DRAINAGE PLAN

PLAN REF NO DR5

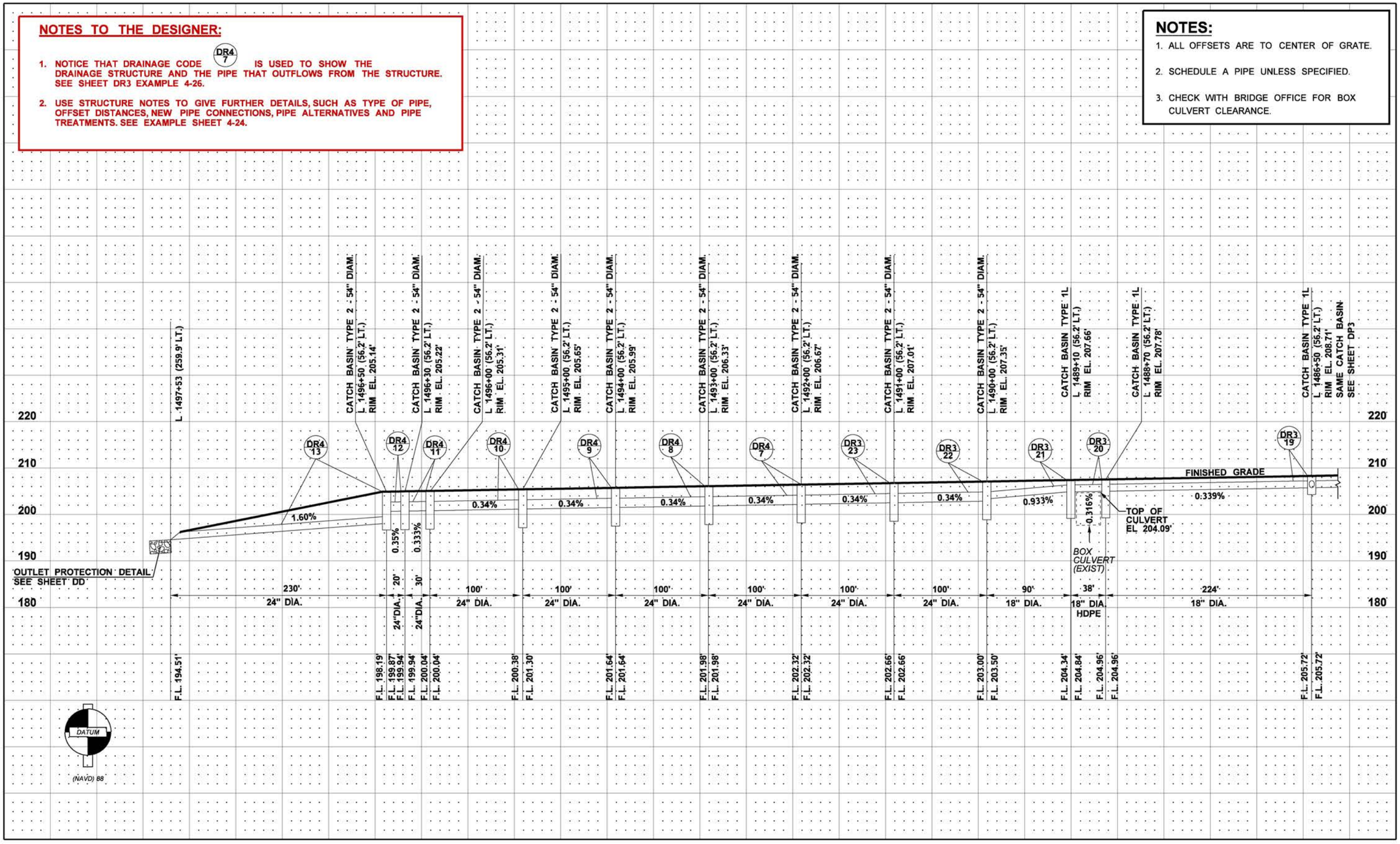
SHEET OF SHEETS

NOTES TO THE DESIGNER:

1. NOTICE THAT DRAINAGE CODE (DR4 7) IS USED TO SHOW THE DRAINAGE STRUCTURE AND THE PIPE THAT OUTFLOWS FROM THE STRUCTURE. SEE SHEET DR3 EXAMPLE 4-26.
2. USE STRUCTURE NOTES TO GIVE FURTHER DETAILS, SUCH AS TYPE OF PIPE, OFFSET DISTANCES, NEW PIPE CONNECTIONS, PIPE ALTERNATIVES AND PIPE TREATMENTS. SEE EXAMPLE SHEET 4-24.

NOTES:

1. ALL OFFSETS ARE TO CENTER OF GRATE.
2. SCHEDULE A PIPE UNLESS SPECIFIED.
3. CHECK WITH BRIDGE OFFICE FOR BOX CULVERT CLEARANCE.



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-29.dgn					
TIME	2:53:15 PM					
DATE	4/18/2025					
PLOTTED BY	WillisD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

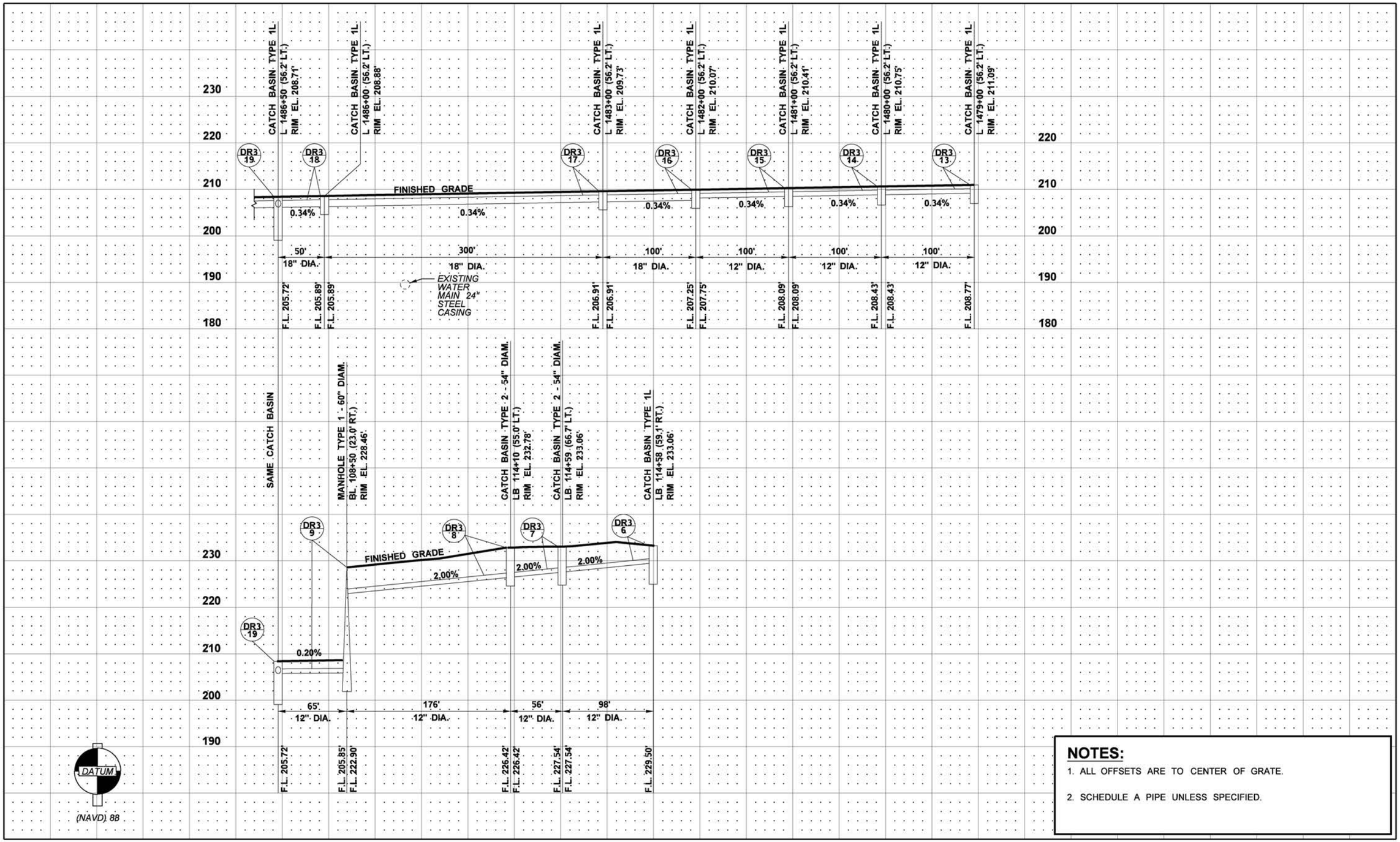
Washington State Department of Transportation

EXAMPLE 4-29

DRAINAGE PROFILE

PLAN REF. NO. DP1

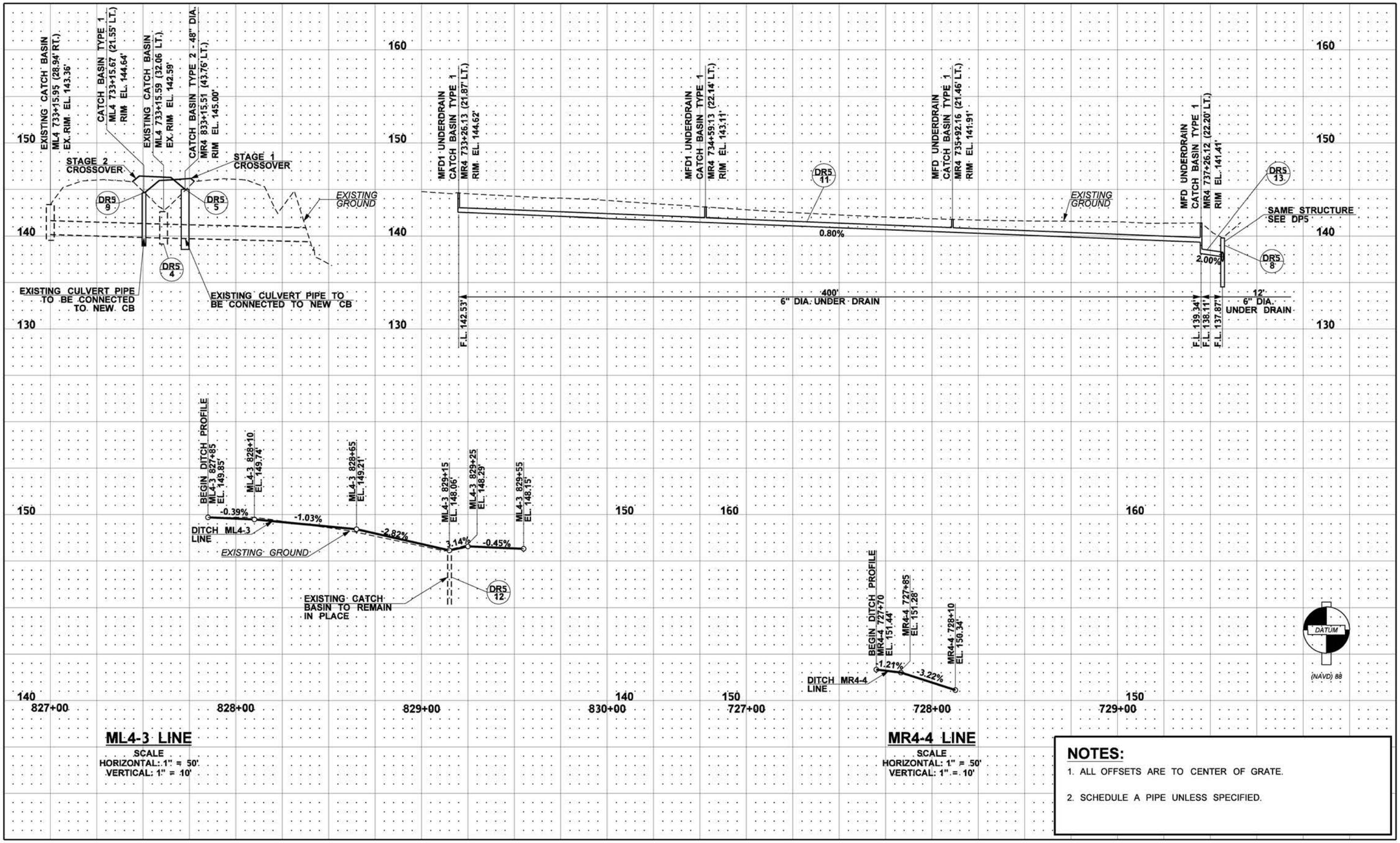
SHEET OF SHEETS



NOTES:

1. ALL OFFSETS ARE TO CENTER OF GRATE.
2. SCHEDULE A PIPE UNLESS SPECIFIED.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-30.dgn								
TIME	2:54:13 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	Washington State Department of Transportation	PLAN REF. NO. DP2
DATE	4/18/2025							EXAMPLE 4-30	
PLOTTED BY	WilliSD				JOB NUMBER 00Z000				SHEET
DESIGNED BY									OF
ENTERED BY					CONTRACT NO.	LOCATION NO. XL-1234		DRAINAGE PROFILE	SHEETS
CHECKED BY									
PROJ. ENGR.									
REGIONAL ADM.		REVISION	DATE	BY			P.E. STAMP BOX DATE	P.E. STAMP BOX DATE	



NOTES:

1. ALL OFFSETS ARE TO CENTER OF GRATE.
2. SCHEDULE A PIPE UNLESS SPECIFIED.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-31.dgn						
TIME	2:55:22 PM						
DATE	4/18/2025						
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

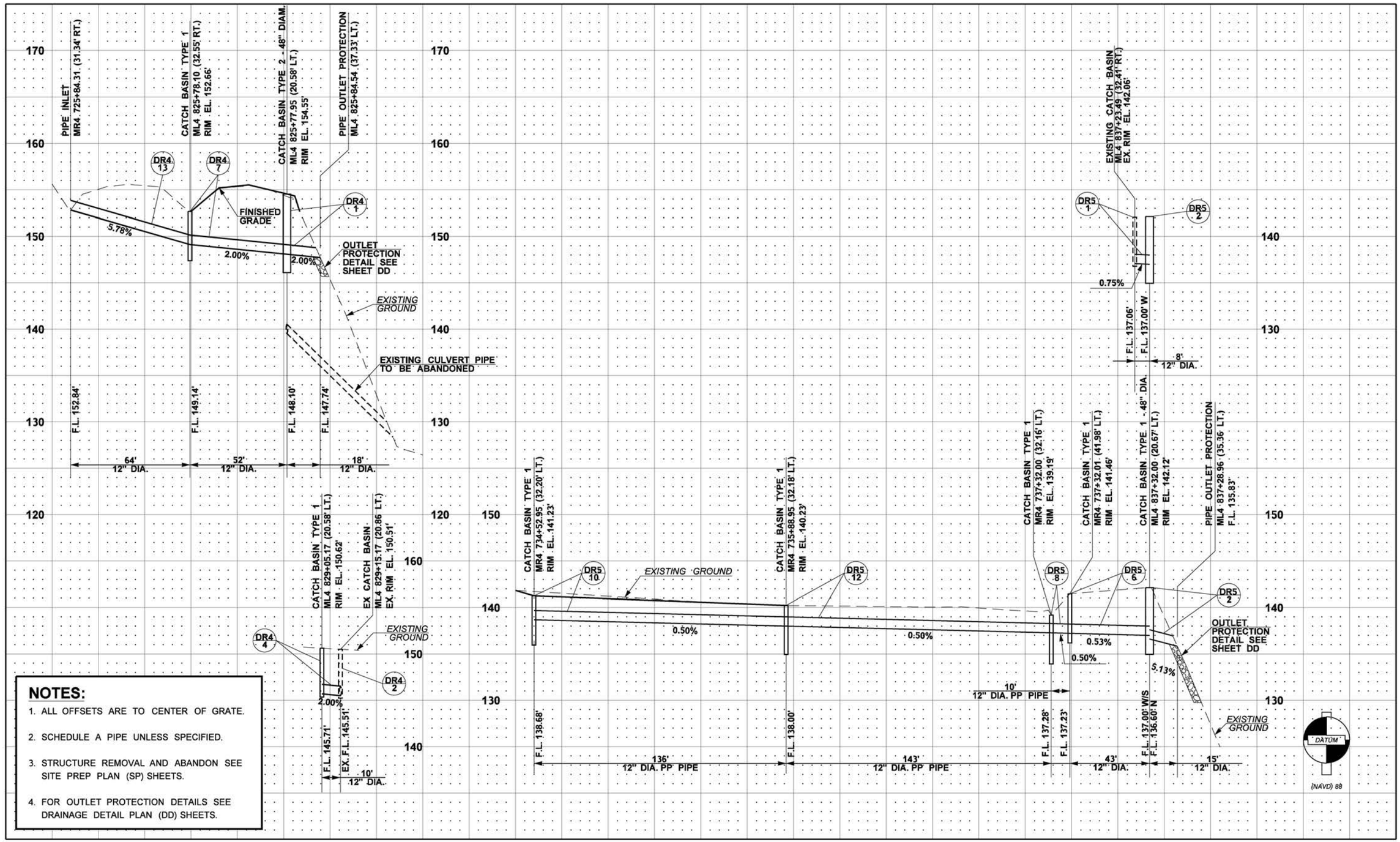
Washington State Department of Transportation

EXAMPLE 4-31

DRAINAGE PROFILE

PLAN REF. NO. DP3

SHEET OF SHEETS



NOTES:

1. ALL OFFSETS ARE TO CENTER OF GRATE.
2. SCHEDULE A PIPE UNLESS SPECIFIED.
3. STRUCTURE REMOVAL AND ABANDON SEE SITE PREP PLAN (SP) SHEETS.
4. FOR OUTLET PROTECTION DETAILS SEE DRAINAGE DETAIL PLAN (DD) SHEETS.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-32.dgn			REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
TIME	2:56:06 PM			JOB NUMBER 00Z000		
DATE	4/18/2025			CONTRACT NO.	LOCATION NO. XL-1234	
PLOTTED BY	WillisD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-32

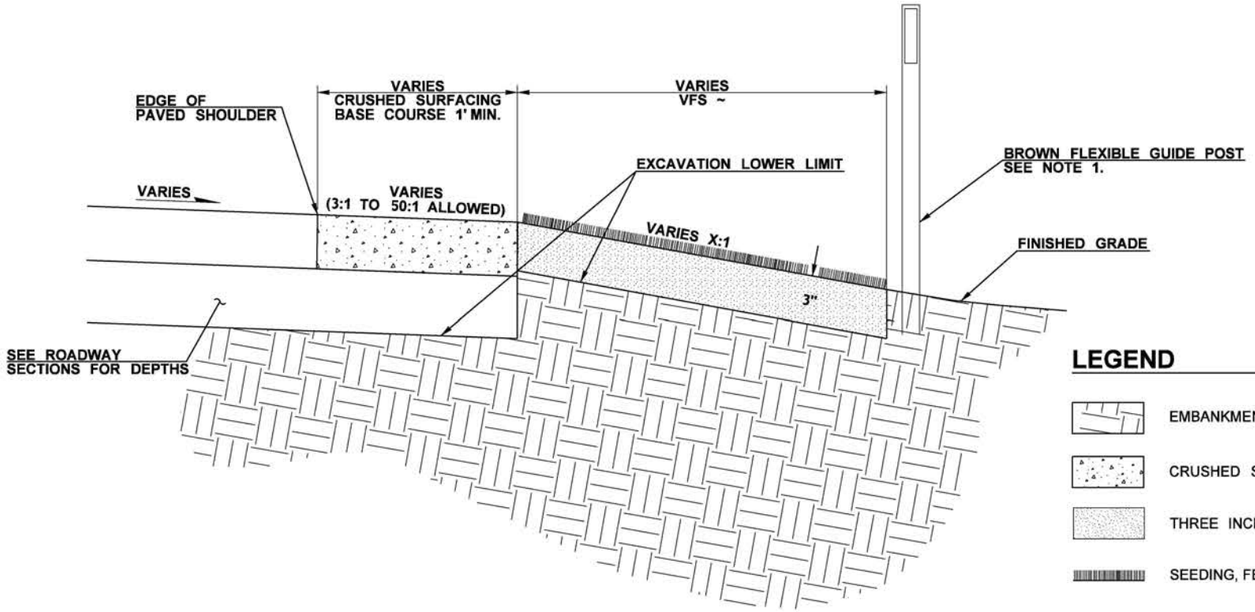
DRAINAGE PROFILE

PLAN REF. NO. DP4

SHEET OF SHEETS

NOTES:

1. INSTALL PLASTIC DRAINAGE MARKERS AND FLEXIBLE GUIDE POSTS IN ACCORDANCE WITH STANDARD PLAN M-24.65, SEE DELINEATION SCHEDULE.



LEGEND

- EMBANKMENT MATERIAL
- CRUSHED SURFACING BASE COURSE (CSBC)
- THREE INCH DEEP MEDIUM COMPOST
- SEEDING, FERTILIZING AND MULCHING

VEGETATED FILTER STRIP (VFS)

NOT TO SCALE

VFS SCHEDULE

LOCATION ▼ / UNIT ➤	LENGTH (INFORMATIONAL ONLY) FT.	CRUSHED SURFACING BASE COURSE WIDTH (INFORMATIONAL ONLY) FT.	VFS WIDTH (INFORMATIONAL ONLY) FT.	VEGETATED FILTER STRIP S.Y.	SEEDING, FERTILIZING AND MULCHING AC.
NB I-5					
STA. 111+40 TO STA. 123+90 (RT)	1,250	*	*	710	0.12
STA. 136+20 TO STA. 143+10 (LT)	690	*	*	230	0.03
STA. 147+00 TO STA. 173+00 (LT)	2,600	*	*	870	0.12
			TOTAL	1,810	0.27

DELINEATION SCHEDULE

LOCATION	FLEXIBLE GUIDE POST (SEE STANDARD PLANS M-24.65) TYPE	QTY (EA)	PLASTIC DRAINAGE MARKING (SEE VFS MARKING DETAIL) TYPE	QTY (EA)
STA. 111+40 (RT)	B	1	BEGIN	1
STA. 112+00 (RT)	B	1		
STA. 113+10 (RT)	B	1		

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-33.dgn
TIME	2:56:55 PM
DATE	4/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.

JOB NUMBER 00Z000

CONTRACT NO.

LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

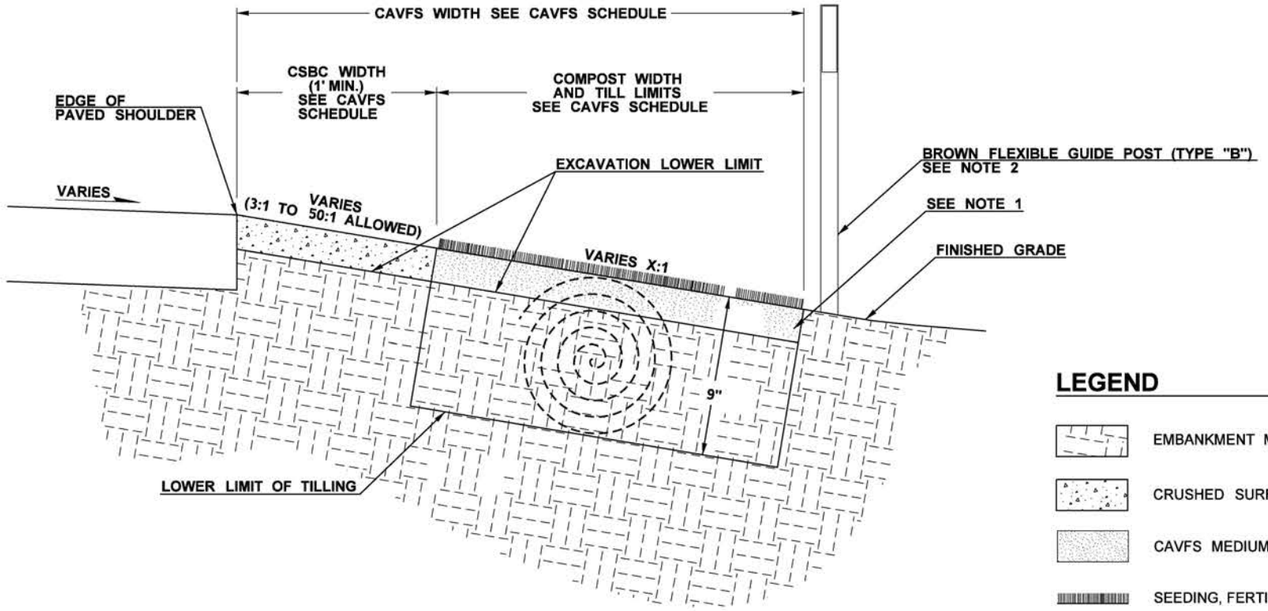
Washington State Department of Transportation

EXAMPLE 4-33

DRAINAGE DETAILS

PLAN REF NO DD1

SHEET OF SHEETS



LEGEND

- EMBANKMENT MATERIAL
- CRUSHED SURFACING BASE COURSE (CSBC)
- CAVFS MEDIUM COMPOST MIX
- SEEDING, FERTILIZING AND MULCHING

NOTES:

1. TILL TWO INCH DEEP MEDIUM COMPOST APPLICATION INTO SEVEN INCHES OF EMBANKMENT MATERIAL.
2. INSTALL PLASTIC DRAINAGE MARKERS AND FLEXIBLE GUIDE POSTS IN ACCORDANCE WITH STANDARD PLAN M-24.65, SEE DELINEATION SCHEDULE.

COMPOST AMENDED VEGETATED FILTER STRIP (CAVFS)

CAVFS SCHEDULE

LOCATION ▼ / UNIT ➤	LENGTH (INFORMATIONAL ONLY) FT.	CRUSHED SURFACING BASE COURSE WIDTH (INFORMATIONAL ONLY) FT.	COMPOST WIDTH (INFORMATIONAL ONLY) FT.	CAVFS WIDTH (INFORMATIONAL ONLY) FT.	COMPOST AMENDED VEGETATED FILTER STRIP S.Y.	SEEDING, FERTILIZING AND MULCHING AC.
STA. 111+40 TO STA. 123+90 (RT)	1,250	*	*	*	710	0.12
STA. 136+20 TO STA. 143+10 (LT)	690	*	*	*	230	0.03
STA. 147+00 TO STA. 173+00 (LT)	2,600	*	*	*	870	0.12
				TOTAL	1,810	0.27

DELINEATION SCHEDULE

LOCATION	FLEXIBLE GUIDE POST SEE STANDARD PLANS M-24.65, M-40.10 AND M-40.40 TYPE	QTY (EA)	PLASTIC DRAINAGE MARKING SEE CAVFS MARKING DETAIL TYPE	QTY (EA)
STA. 111+40 (RT)	B	1	BEGIN	1
STA. 112+00 (RT)	B	1		
STA. 113+10 (RT)	B	1		
STA. 116+30 (RT)	B	1		
STA. 115+60 (RT)	B	1		
STA. 117+40 (RT)	B	1		
STA. 119+00 (RT)	B	1		
STA. 120+60 (RT)	B	1		
STA. 119+80 (RT)	B	1		
STA. 122+20 (RT)	B	1		
	TOTAL	10	TOTAL	1

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-34.dgn
TIME	3:01:58 PM
DATE	4/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.

JOB NUMBER 00Z000

CONTRACT NO.

LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

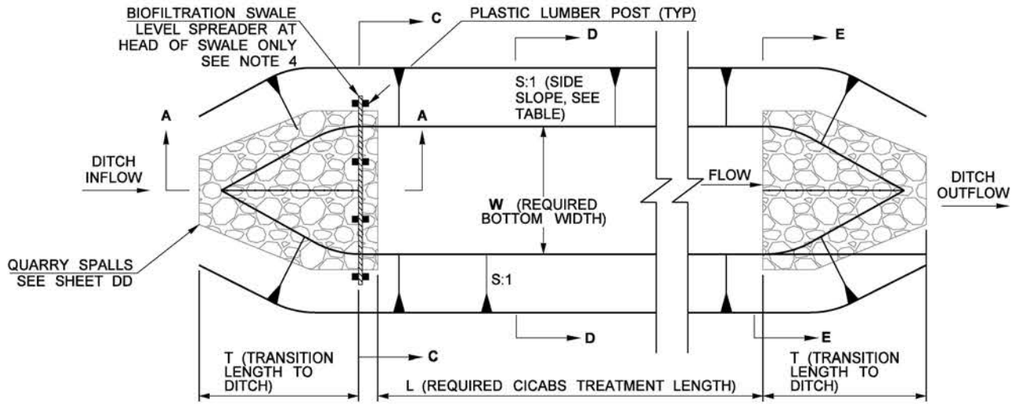
Washington State Department of Transportation

EXAMPLE 4-34

DRAINAGE DETAILS - CAVFS

PLAN REF NO DD2

SHEET OF SHEETS



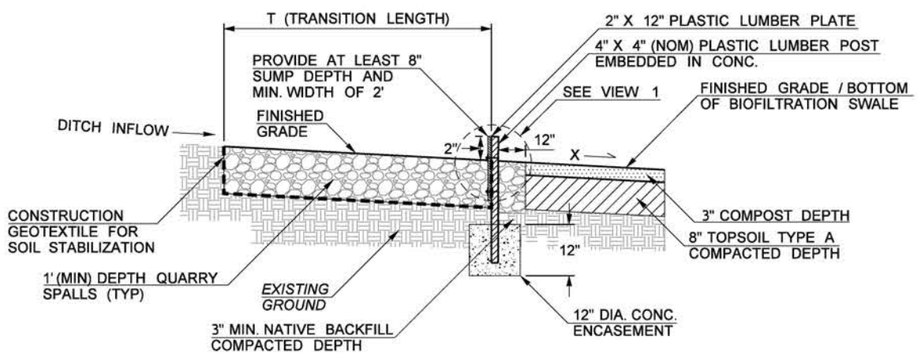
CICABS

NOT TO SCALE

CONTINUOUS INFLOW COMPOST AMENDED BIOFILTRATION SWALE (CICABS)

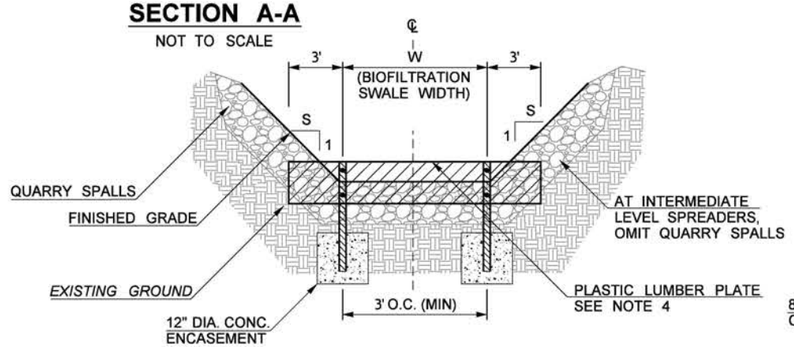
DR4 6 DR5 3

NOT TO SCALE



SECTION A-A

NOT TO SCALE



BIOFILTRATION SWALE LEVEL SPREADER SECTION C-C

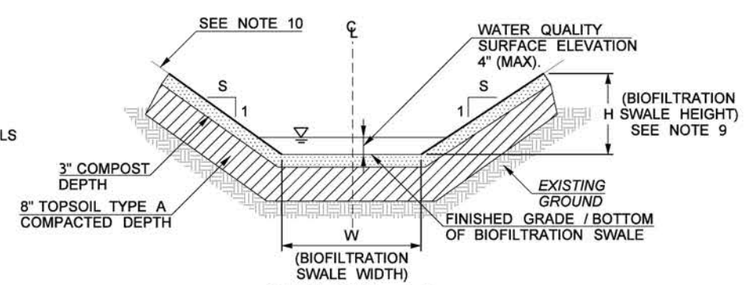
NOT TO SCALE

CICABS TABLE

ID	BMP TYPE	W	L	H	S	T	X
		FEET	FEET	FEET	FEET	FEET	
DR4-6	CICABS	4.5	193	1.11	3	10	1.5%
DR5-3	CICABS	4	176	1.09	3	10	1.8%

NOTES:

1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
2. FOR LOCATION OF CICABS, SEE DRAINAGE PLAN SHEETS DR2 AND DR3. SEE DITCH ALIGNMENTS FOR BIOFILTRATION SWALE CENTERLINES.
3. FOR BIOFILTRATION SWALE LEVEL SPREADER, SEE SPECIAL PROVISIONS.
4. INSTALL BIOFILTRATION LEVEL SPREADERS LEVEL AND PERPENDICULAR TO THE CENTERLINE OF THE SWALE.
5. INSTALL PLASTIC DRAINAGE MARKERS AND FLEXIBLE GUIDE POSTS IN ACCORDANCE WITH STANDARD PLAN M-24.65, SEE DELINEATION SCHEDULE.
6. SEED CICABS PER SPECIFICATION SECTION 8-01.3(2)B.
7. EXCAVATION BELOW FINISHED GRADE IS INCLUDED IN DITCH EXCAVATION INCL. HAUL. EXCAVATION TO FINISHED GRADE WITHIN ROADWAY IMPROVEMENT AREAS IS INCLUDED IN ROADWAY EXCAVATION INCL. HAUL.
8. CONSTRUCTION GEOTEXTILE FOR SOIL STABILIZATION PER STANDARD SPECIFICATION 9-33.2(1), TABLE 3, NON-WOVEN.
9. EXTEND COMPOST AND TOPSOIL FROM THE BOTTOM OF THE BIOFILTRATION SWALE ONTO THE SIDE SLOPES UP TO THE BIOFILTRATION SWALE HEIGHT NOTED IN THE TABLE.
10. CICABS SHALL BE SEEDED FROM THE BOTTOM OF THE FACILITY UP TO THE BIOFILTRATION SWALE HEIGHT NOTED IN THE TABLE. ABOVE THIS HEIGHT, THE FINISHED GRADE ALONG THE CICABS SHALL BE SEEDED WITH ROADSIDE RESTORATION MIX PER LANDSCAPING PLANS.
11. QUARRY SPALLS AT BIOFILTRATION SWALE OUTLET AREA SHALL EXTEND UP TO 0.5' ABOVE BIOFILTRATION UP TO ROADWAY SUBGRADE ELEVATION FOR CICABS.

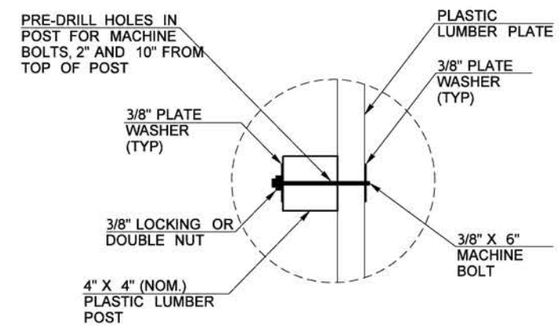


SECTION D-D

NOT TO SCALE

DELINEATION SCHEDULE

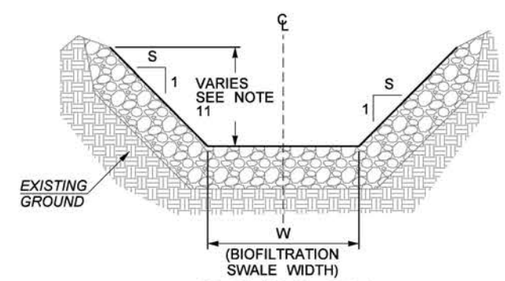
LOCATION	FLEXIBLE GUIDE POST SEE STANDARD PLANS M-24.65, M-40.10 AND M-40.40		PLASTIC DRAINAGE MARKING SEE CICABS MARKING DETAIL	
	TYPE	QTY (EA)	TYPE	QTY (EA)
STA. 111+40 (RT)	B	1	BEGIN	1
STA. 112+00 (RT)	B	1		
	TOTAL	2	TOTAL	1



VIEW 1

PLATE INSTALLATION PLAN

NOT TO SCALE



SECTION E-E

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-35.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
TIME	3:04:24 PM						
DATE	4/18/2025						
PLOTTED BY	WilliSD				JOB NUMBER 00Z000		
DESIGNED BY							
ENTERED BY					CONTRACT NO.		LOCATION NO. XL-1234
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-35

DRAINAGE DETAILS

PLAN REF NO DD3

SHEET OF SHEETS

CABS TABLE

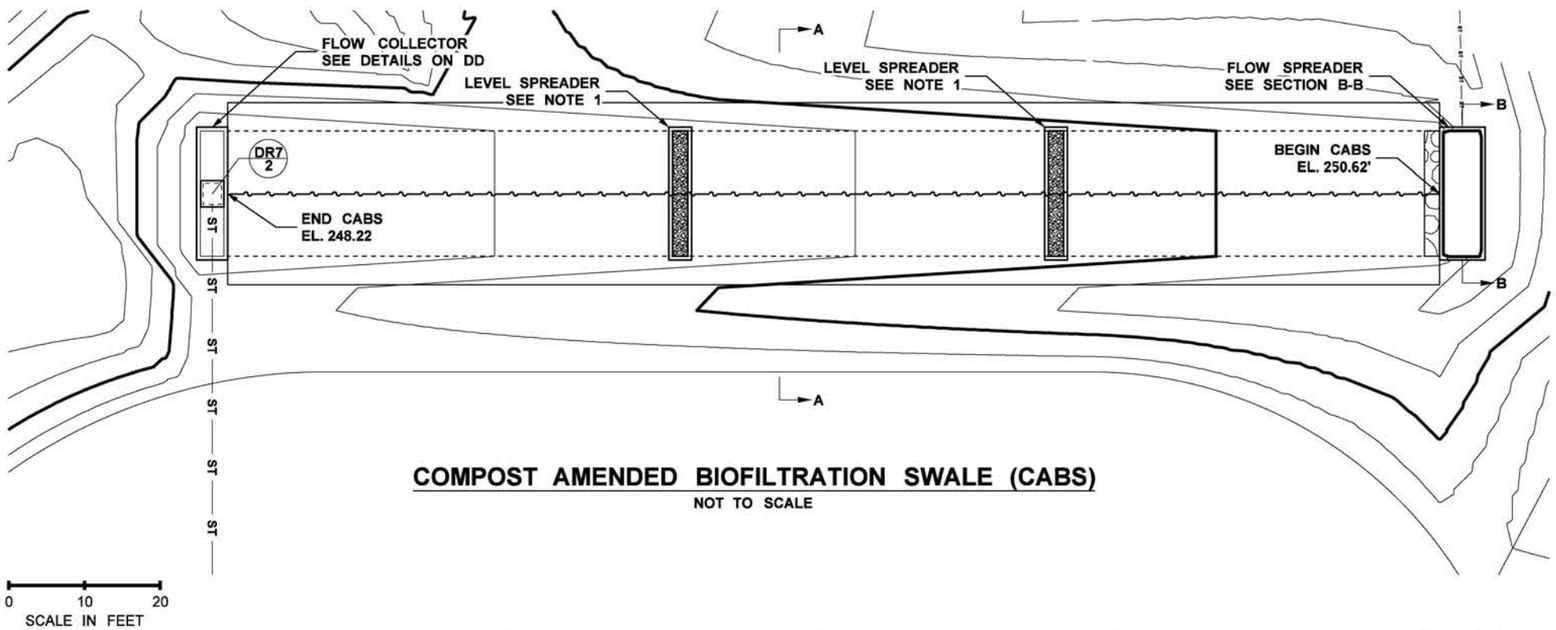
ID	BMP TYPE	W	L	H	S	T	X
		FEET	FEET	FEET	FEET	FEET	
DR7-3	CABS	21	193	1.11	3	10	1.5%

NOTES:

1. INSTALL LEVEL SPREADER AT THE HEAD OF THE SWALE AND EVERY 50' OF THE SWALE LENGTH.
2. INSTALL PLASTIC DRAINAGE MARKERS AND FLEXIBLE GUIDE POSTS IN ACCORDANCE WITH STANDARD PLAN M-24.65, SEE DELINEATION SHEETS.

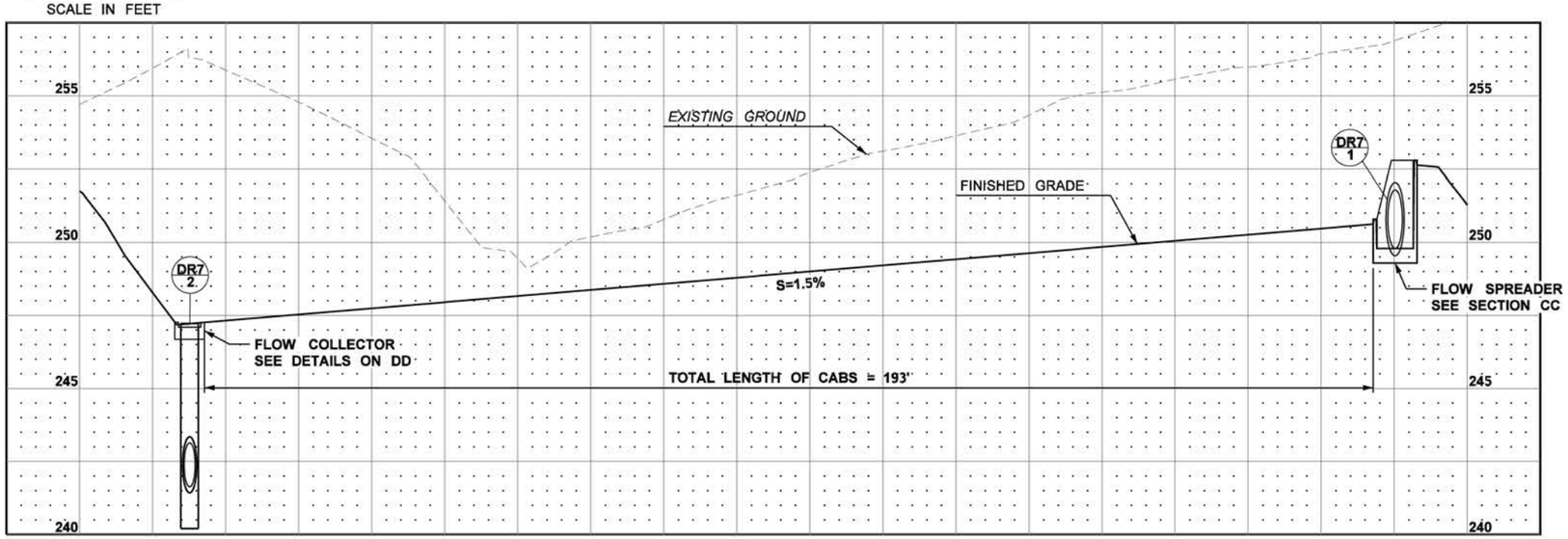
DELINEATION SCHEDULE

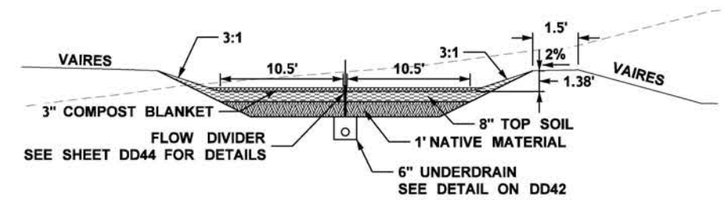
	FLEXIBLE GUIDE POST SEE STANDARD PLANS M-24.65, M-40.10 AND M-40.40		PLASTIC DRAINAGE MARKING SEE CABS MARKING DETAIL	
LOCATION	TYPE	QTY (EA)	TYPE	QTY (EA)
STA. 111+40 (RT)	B	1	BEGIN	1
STA. 112+00 (RT)	B	1		
	TOTAL	2	TOTAL	1



COMPOST AMENDED BIOFILTRATION SWALE (CABS)

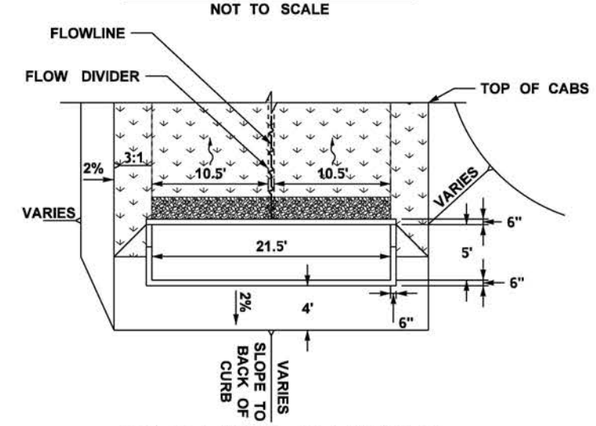
NOT TO SCALE





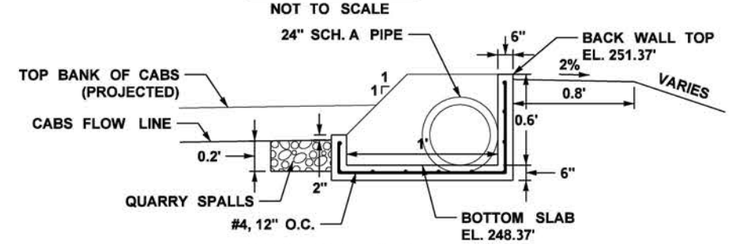
TYPICAL SECTION A-A

NOT TO SCALE



CABS FLOW SPREADER SECTION B-B

NOT TO SCALE



SECTION C-C

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-36.dgn						
TIME	3:05:46 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	4/18/2025						
PLOTTED BY	WilliSD				JOB NUMBER 00Z000		
DESIGNED BY							
ENTERED BY					CONTRACT NO.	LOCATION NO. XL-1234	
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-36

DRAINAGE DETAILS

PLAN REF NO DD4

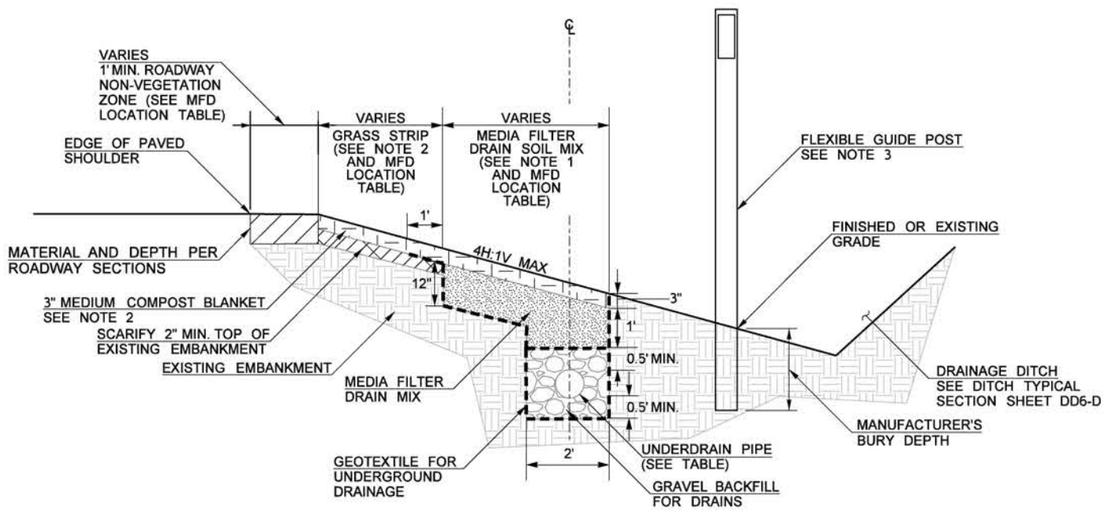
SHEET OF SHEETS

MFD SCHEDULE LOCATION TABLE

STRUCTURE CODE	MFD TYPE	LOCATION	LENGTH	MEDIA FILTER DRAIN SOIL MIX WIDTH	UNDER-DRAIN DIAM.	GRASS STRIP	NON-VEGETATION ZONE
			FEET	FEET	INCHES	FEET	FEET
DR5-11	1	MR4 733+26.13 (21.9 LT) TO MR4 737+26.12 (22.2 LT)	400	3	6	3	3

DELINEATION SCHEDULE

	FLEXIBLE GUIDE POST SEE STANDARD PLANS M-24.65, M-40.10 AND M-40.40		PLASTIC DRAINAGE MARKING SEE MFD MARKING DETAIL	
LOCATION	TYPE	QTY (EA)	TYPE	QTY (EA)
STA. 111+40 (RT)	B	1	BEGIN	1
STA. 112+00 (RT)	B	1		
	TOTAL	2	TOTAL	1



MEDIA FILTER DRAIN (MFD) TYPE 1

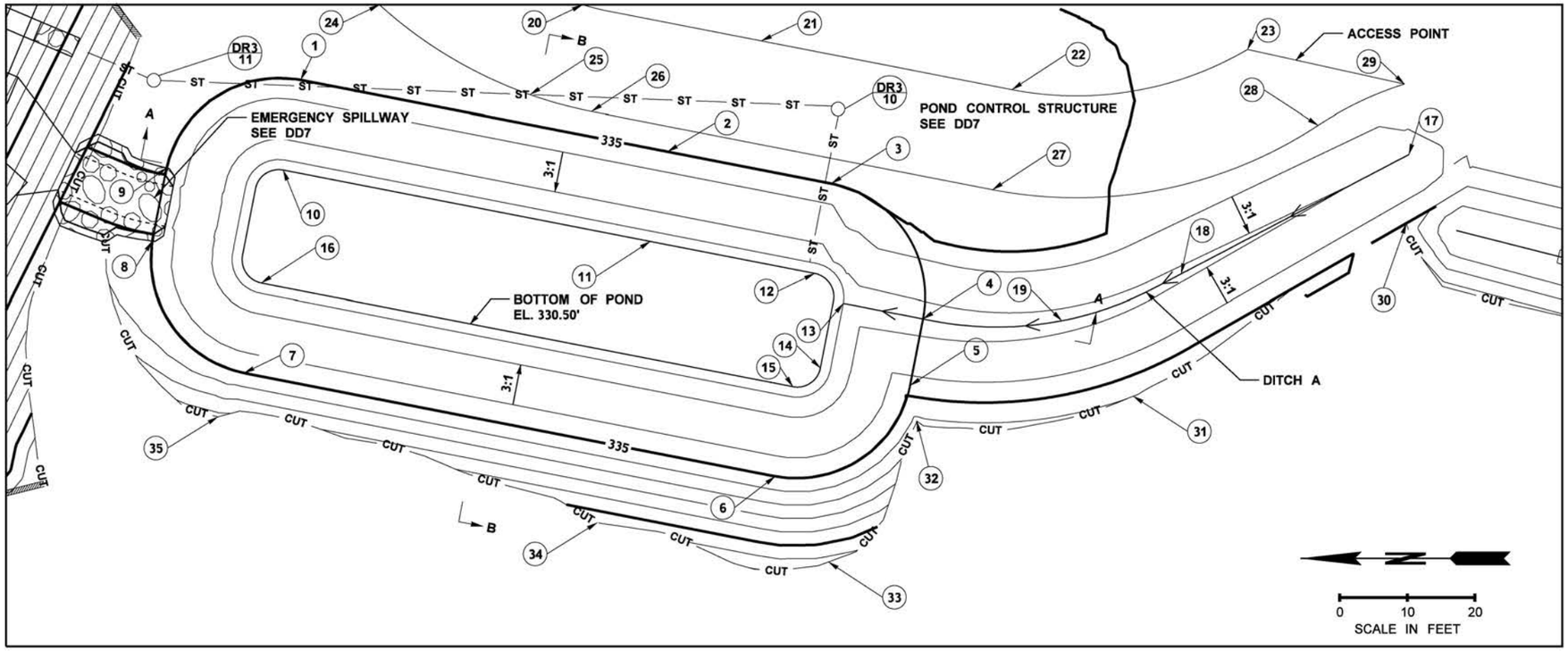
SIDE SLOPE APPLICATION WITH UNDERDRAIN
NOT TO SCALE

NOTES:

1. MEDIA FILTER DRAIN SOIL MIX SHALL BE PLACED IN ACCORDANCE WITH SECTION "MEDIA FILTER DRAIN SOIL MIX" OF THE SPECIAL PROVISIONS.
2. 3' MIN. GRASS STRIP FOR TYPE 1-5. SEE ROADSIDE RESTORATION PLANS FOR SEEDING.
3. INSTALL PLASTIC DRAINAGE MARKERS AND FLEXIBLE GUIDE POSTS IN ACCORDANCE WITH STANDARD PLAN M-24.65, SEE DELINEATION SHEETS.
4. FOR BEGIN AND END STATIONS FOR PLACEMENT OF GUIDE POST, SEE MFD LOCATION TABLE. INTERMEDIATE STATIONS NOT TO EXCEED 500'.
5. FOR FINISHED EMBANKMENT SLOPE, SEE ROADWAY SECTION (RS) AND PAVING DETAIL (PVD) SHEETS. FOR EXISTING EMBANKMENT, INSTALL MFD ON EXISTING EMBANKMENT SLOPES - NOT TO EXCEED 4:1.
6. FOR INSTALLATION SEQUENCE OF MFDS, SEE SITE PREPARATION AND TESC PLAN (SP) SHEETS.
7. SEE DRAINAGE PLANS FOR REGRADED DRAINAGE PATTERN FOR CENTER MEDIAN
8. SEE DRAINAGE PROFILES FOR MFD UNDERDRAIN SLOPES AND CB TYPE 1 STRUCTURES FOR UNDERDRAIN CLEANOUT.
9. SPREADER MATERIAL IS INCLUDED IN THE ROADWAY SUBBASE QUANTITIES WHERE NEW FULL DEPTH PAVEMENT SECTION OR CABLE BARRIER INSTALLATION IS PROPOSED.

NOTES TO THE DESIGNER:

1. CHANGE MFD TYPE 1-7 PER HRM DEPENDING ON PROJECT DESIGN.

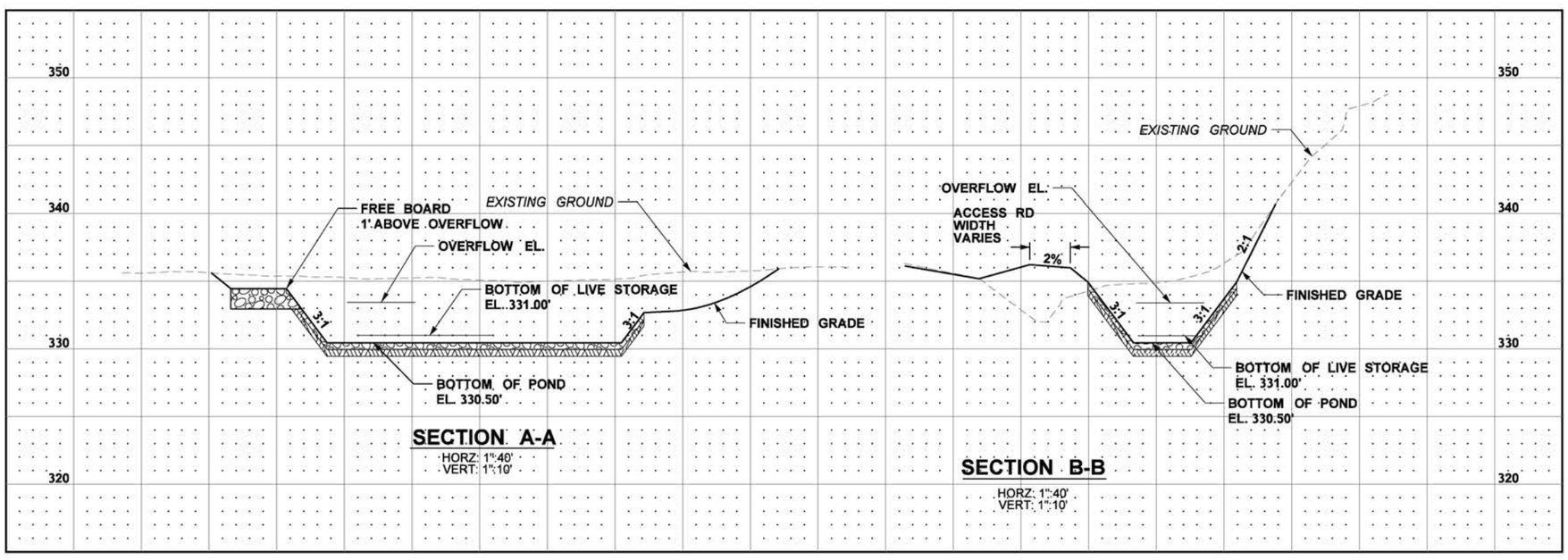


DELINEATION SCHEDULE

	FLEXIBLE GUIDE POST SEE STANDARD PLANS M-24.65, M-40.10 AND M-40.40		PLASTIC DRAINAGE MARKING SEE POND MARKING DETAIL	
LOCATION	TYPE	QTY (EA)	TYPE	QTY (EA)
STA. 111+40 (RT)	B	1	BEGIN	1
STA. 112+00 (RT)	B	1		
	TOTAL	2	TOTAL	1

NOTES:

1. INSTALL PLASTIC DRAINAGE MARKERS AND FLEXIBLE GUIDE POSTS IN ACCORDANCE WITH STANDARD PLAN M-24.65, SEE DELINEATION SHEETS.
2. POND EMBANKMENT MATERIAL SHALL CONSIST OF COMMON BORROW IN ACCORDANCE WITH STANDARD SPEC. 9-03.14(3).
3. LOOSE OR SOFT SOIL ENCOUNTERED AT THE BOTTOM OF THE EXCAVATION FOR THE POND OR POND EMBANKMENTS SHALL BE REMOVED AND BACKFILLED IN ACCORDANCE WITH STANDARD SPEC. 2-09.3(1)C.
4. CONSTRUCT POND EMBANKMENT IN ACCORDANCE WITH STANDARD SPEC. 2-03.3(14)C, METHOD C, WITH EACH LAYER.
5. SEE DD7 FOR NORTHING, EASTING AND ELEVATIONS FOR INDIVIDUAL POINTS AROUND THE POND, ACCESS ROAD AND PROPOSED DITCH.
6. SEE SHEET DR1 FOR DRAINAGE LEGEND.



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-38.dgn					
TIME	3:07:52 PM					
DATE	4/18/2025					
PLOTTED BY	WillisD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

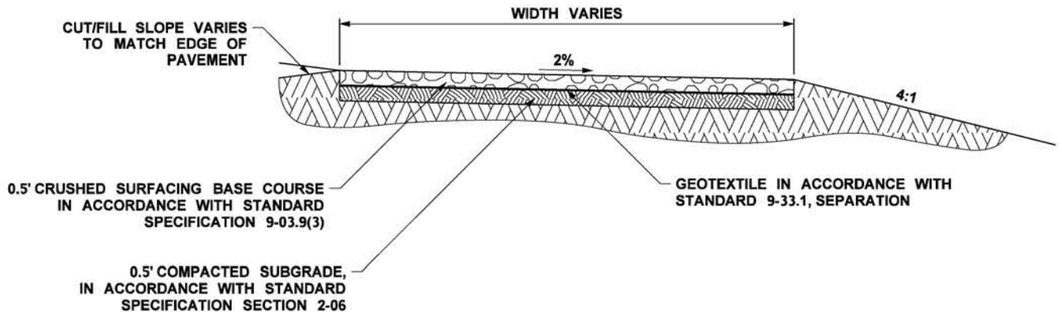
Washington State Department of Transportation

EXAMPLE 4-38

DRAINAGE DETAILS

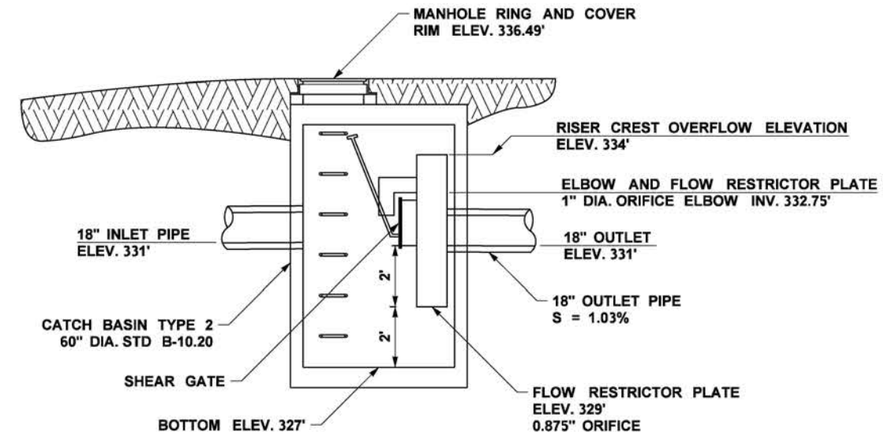
PLAN REF NO DD6

SHEET OF SHEETS



POND ACCESS ROAD TYPICAL SECTION

NOT TO SCALE

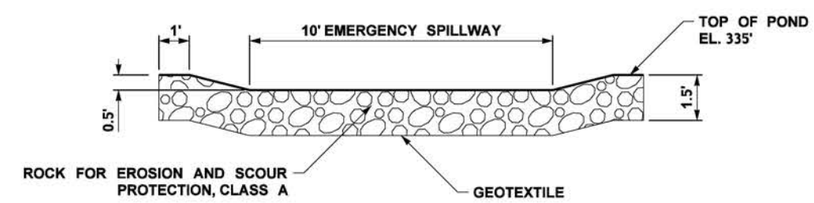


DR3-10 POND CONTROL STRUCTURE

NOT TO SCALE

POND AND POND ACCESS POINTS

POINT	NORTHING	EASTING	ELEVATION	POINT	NORTHING	EASTING	ELEVATION
1	575944.36	1635274.99	335.00	19	576056.84	1635310.46	331.41
2	575998.57	1635285.53	335.00	20	575960.24	1635246.44	335.42
3	576022.88	1635290.26	335.00	21	575990.21	1635264.89	335.82
4	576036.33	1635310.20	331.15	22	576049.46	1635276.42	335.87
5	576034.42	1635320.01	334.48	23	576084.27	1635270.49	334.75
6	576014.48	1635333.45	335.01	24	575937.31	1635241.94	335.70
7	575935.95	1635318.18	335.01	25	575945.68	1635251.86	335.22
8	575922.51	1635298.24	335.00	26	575987.35	1635279.61	335.46
9	575924.42	1635288.43	335.00	27	576046.60	1635291.14	335.71
10	575941.78	1635288.24	330.50	28	576094.70	1635281.66	334.47
11	575995.99	1635298.78	330.50	29	576107.47	1635275.6	334.69
12	576020.31	1635303.51	330.50	30	576107.76	1635296.11	335.00
13	576024.55	1635307.90	330.50	31	576067.40	1635321.60	335.99
14	576021.16	1635317.43	330.50	32	576035.36	1635325.50	336.29
15	576017.06	1635320.20	330.50	33	576022.33	1635346.12	341.41
16	575938.53	1635304.92	330.50	34	575988.16	1635340.30	340.88
17	576108.12	1635285.95	332.12	35	575932.11	1635324.65	338.26
18	576073.13	1635304.28	331.63				



POND EMERGENCY SPILLWAY

NOT TO SCALE

NOTES TO THE DESIGNER:

1. WIDTH OF ACCESS ROAD VARIES, MUST TALK WITH MAINTENANCE ON ACCEPTABLE WIDTH PER LOCATION. REFERENCE HRM SECTION 5-3.7.1.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-39.dgn
TIME	3:08:42 PM
DATE	4/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-39

DRAINAGE DETAILS

PLAN REF NO DD7

SHEET OF SHEETS

STRUCTURE NOTES - UTILITY

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	BORING AND JACKING 42 IN. PLAIN STEEL CULVERT PIPE	JACKING PIT FOR 42 IN. PLIAN STEEL CULVERT PIPE	SLIPLINING 42 IN. STEEL CASING WITH 30 IN. HDPE PIPE	HIGH DENSITY POLYETHYLENE PIPE 12 IN. DIAM.		HIGH DENSITY POLYETHYLENE PIPE 30 IN. DIAM.	HSS 16.00 STEEL PIPE	CAPPING SANITARY SEWER MANHOLE	MONITORING SANITARY SEWER LINE		SEWER CLEANOUT	TESTING SEWER PIPE	PVC SANITARY SEWER PIPE 6 IN. DIAM.	PVC SANITARY SEWER PIPE 12 IN. DIAM.		SEE GENERAL NOTES
		L.F.	EACH	L.F.	L.F.		L.F.	EACH	EACH	EACH		EACH	L.F.	L.F.	L.F.		
UT3-1	L 1477+30 (154' RT.) TO L 1478+06 (147' RT.)																
UT3-2	L 1478+06 (147' RT.) TO L 1481+60 (157' RT.)																
UT3-3	L 1481+60 (157' RT.) TO L 1482+82 (156' RT.)								1	20							
UT3-4	L 1482+82 (156' RT.) TO L 1485+55 (154' RT.)								1								
UT3-5	L 1485+55 (154' RT.) TO L 1487+62 (155' RT.)								1								
UT3-6	L 1478+06 (147' RT.) TO L 1478+16 (157' RT.)						14						14				
UT3-7	L 1478+16 (157' RT.) TO L 1481+92 (168' RT.)						337						337				
UT3-8	L 1481+92 (168' RT.) TO L 1487+47 (167' RT.)	487	1	487			497						497				
UT3-9	L 1487+47 (167' RT.) TO L 1487+63 (156' RT.)						14						14				
UT3-10	L 1487+63 (156' RT.)																
UT3-11	LB 118+71 (119' LT.)																
UT3-12	LB 118+57 (115' LT.) TO LB 118+72 (75' LT.)																
UT3-13	LB 118+54 (75' LT.)																
UT3-14	LB 118+72 (75' LT.) TO LB 120+15 (51' LT.)				709												
UT3-15	LB 120+44 (62' LT.) TO LB 120+48 (70' RT.)																
UT3-16	LB 120+51 (79' LT.)																
UT3-17	LB 120+15 (51' LT.) TO LB 122+18 (51' LT.)							142									
UT3-18	LB 122+110 (63' LT.) TO LB 122+06 (63' RT.)																
UT3-19	LB 122+07 (72' LT.)																
UT3-20	LB 122+18 (51' LT.) TO LB 125+37 (74' LT.)																
UT6-1	HAM 1729+34 (31' LT.)																
UT6-2	HAM 1729+34 (31' L.T) TO HAM 1731+61 (45' LT.)																
UT6-3	LB 108+09 (70' RT.) TO LB 106+76 (23' RT.)																
UT6-4	LB 106+76 (23' RT.)																
UT6-5	LB 106+28 (52' LT.) TO LB 108+09 (70' RT.)																
UT6-6	LB 109+28 (52' LT.)																
UT6-7	LB 110+10 (36' LT.)																
UT6-8	LB 110+99 (52' LT.) TO LB 110+86 (71' RT.)																
UT6-9	LB 113+89 (44' LT') TO LB 144+06 (117' RT.)																
UT6-10	LB 116+24.(6'5 LT.) TO LB 115+79 (127' RT.)																
UT7-1	OB 600+63 (60' LT.) TO OB 602+92 (24' RT.)														250		
UT7-2	OB 602+92 (24' RT.) TO OB 602+91 (43' RT.)											1		20			
UT7-3	LB 129+48 (62' RT.)																
UT7-4	LB 129+48 (62' RT.) TO LB 129+52 (10' RT.)																
UT7-5	LB 127+02 (95' RT.) TO LB 126+94 (89' RT.)																
	SHEET TOTAL	487	1	487	709		862	142	3	20		1	862	20	250		
	PROJECT TOTAL	487	1	487	709		862	142	3	20		1	862	20	250		

GENERAL NOTES:

1. SEE SPECIAL PROVISION "FILLING OF CULVERTS AND SEWER PIPE."

2. SEE SPEIAL PROVISION "HIGH DENSITY POLYETHYLINE PIPE."

3. SEE SPECIAL PROVISION " BORING AND JACKING CULVERT PIPE."

4. SEE SPECIAL PROVISION " JACKING PIT."

5. SEE SPECIAL PROVISION "CAPPING SANITARY SEWER MANHOLE."

6. SEE SPECAIL PROVISION "SLIPPING."

7. SEE SPECIAL PROVISION "MONITORING SANITARY SEWER LINES."

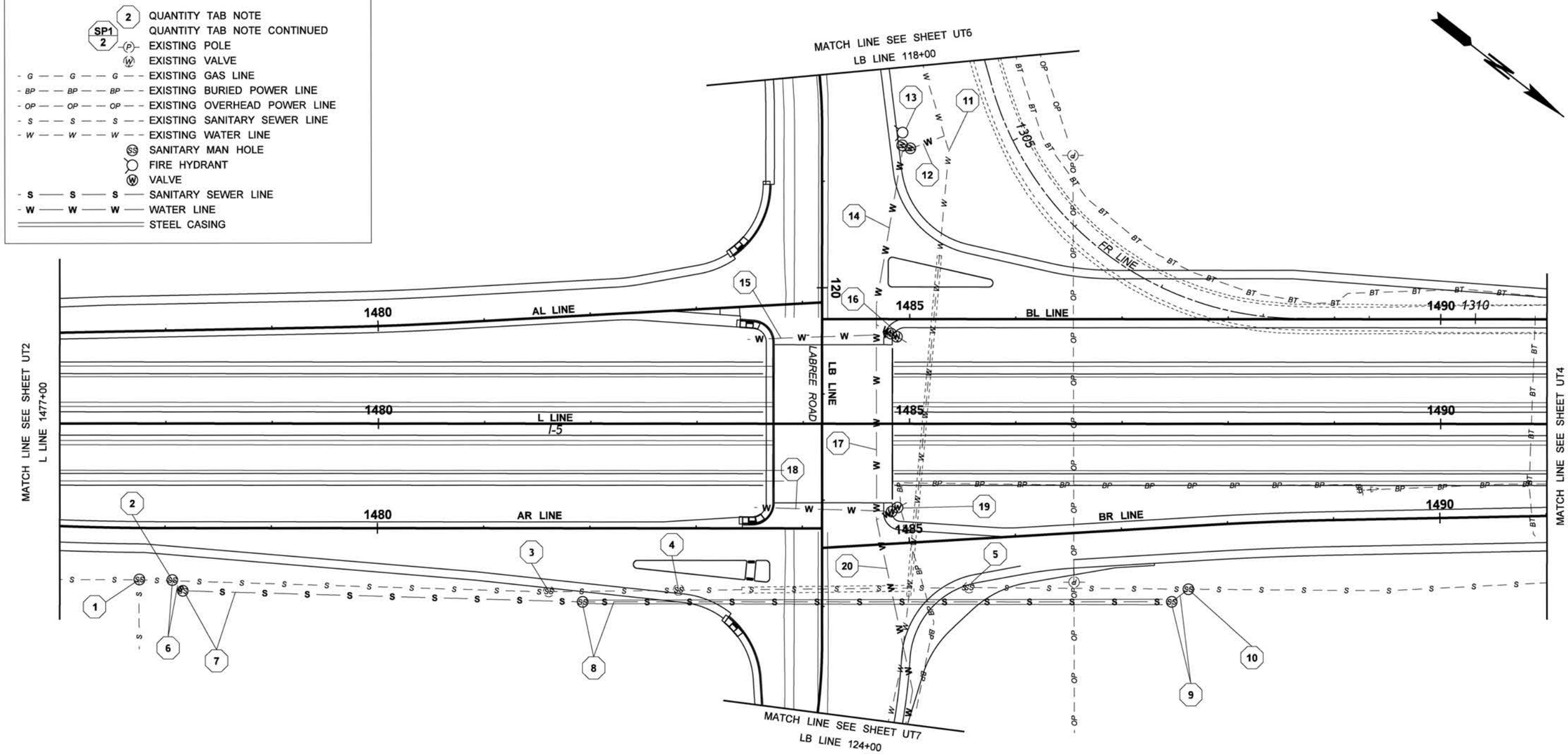
8. SEE SPECAIL PROVISION "VALVES FOR WATER MAINS."

9. SEE SPECIAL PROVISION "HSS 16,00 STEEL PIPE."

10. SEE "CEMENT CONCRETE SIDEWALK @ FIRE HYDRANT" DETAIL FOR CONCRETE SIDEWALK THICKNESS.

LEGEND

2	QUANTITY TAB NOTE
SP1 2	QUANTITY TAB NOTE CONTINUED
(P)	EXISTING POLE
(W)	EXISTING VALVE
- G — G — G —	EXISTING GAS LINE
- BP — BP — BP —	EXISTING BURIED POWER LINE
- OP — OP — OP —	EXISTING OVERHEAD POWER LINE
- S — S — S —	EXISTING SANITARY SEWER LINE
- W — W — W —	EXISTING WATER LINE
(SS)	SANITARY MAN HOLE
	FIRE HYDRANT
(W)	VALVE
- S — S — S —	SANITARY SEWER LINE
- W — W — W —	WATER LINE
═══	STEEL CASING



0 50 100
SCALE IN FEET

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-41.dgn						
TIME	2:01:25 PM						
DATE	5/2/2025						
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 00Z000		
CONTRACT NO.		LOCATION NO. XL-1234

SEE SHEET CT1
DATE
P.E. STAMP BOX

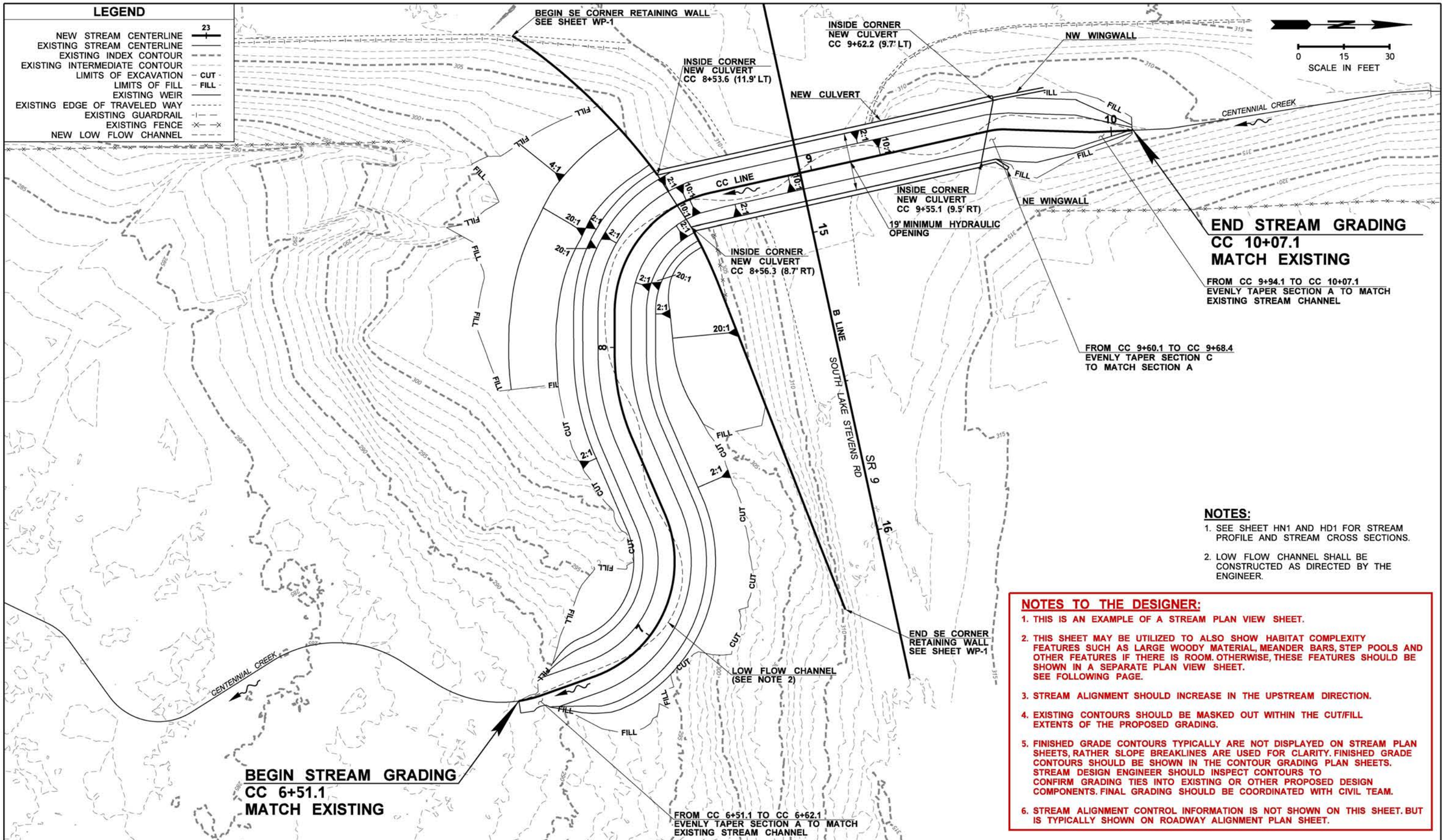
DATE
P.E. STAMP BOX

Washington State
Department of Transportation

EXAMPLE 4-41

UTILITY PLAN

Plot 3
PLAN REF NO
UT3
SHEET
OF
SHEETS



NOTES:

1. SEE SHEET HN1 AND HD1 FOR STREAM PROFILE AND STREAM CROSS SECTIONS.
2. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.

NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A STREAM PLAN VIEW SHEET.
2. THIS SHEET MAY BE UTILIZED TO ALSO SHOW HABITAT COMPLEXITY FEATURES SUCH AS LARGE WOODY MATERIAL, MEANDER BARS, STEP POOLS AND OTHER FEATURES IF THERE IS ROOM. OTHERWISE, THESE FEATURES SHOULD BE SHOWN IN A SEPARATE PLAN VIEW SHEET. SEE FOLLOWING PAGE.
3. STREAM ALIGNMENT SHOULD INCREASE IN THE UPSTREAM DIRECTION.
4. EXISTING CONTOURS SHOULD BE MASKED OUT WITHIN THE CUT/FILL EXTENTS OF THE PROPOSED GRADING.
5. FINISHED GRADE CONTOURS TYPICALLY ARE NOT DISPLAYED ON STREAM PLAN SHEETS, RATHER SLOPE BREAKLINES ARE USED FOR CLARITY. FINISHED GRADE CONTOURS SHOULD BE SHOWN IN THE CONTOUR GRADING PLAN SHEETS. STREAM DESIGN ENGINEER SHOULD INSPECT CONTOURS TO CONFIRM GRADING TIES INTO EXISTING OR OTHER PROPOSED DESIGN COMPONENTS. FINAL GRADING SHOULD BE COORDINATED WITH CIVIL TEAM.
6. STREAM ALIGNMENT CONTROL INFORMATION IS NOT SHOWN ON THIS SHEET. BUT IS TYPICALLY SHOWN ON ROADWAY ALIGNMENT PLAN SHEET.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-42.dgn

TIME				REGION NO.	STATE	FED.AID PROJ.NO.
DATE					WASH	
PLOTTED BY				JOB NUMBER		
DESIGNED BY						
ENTERED BY				CONTRACT NO.		LOCATION NO.
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

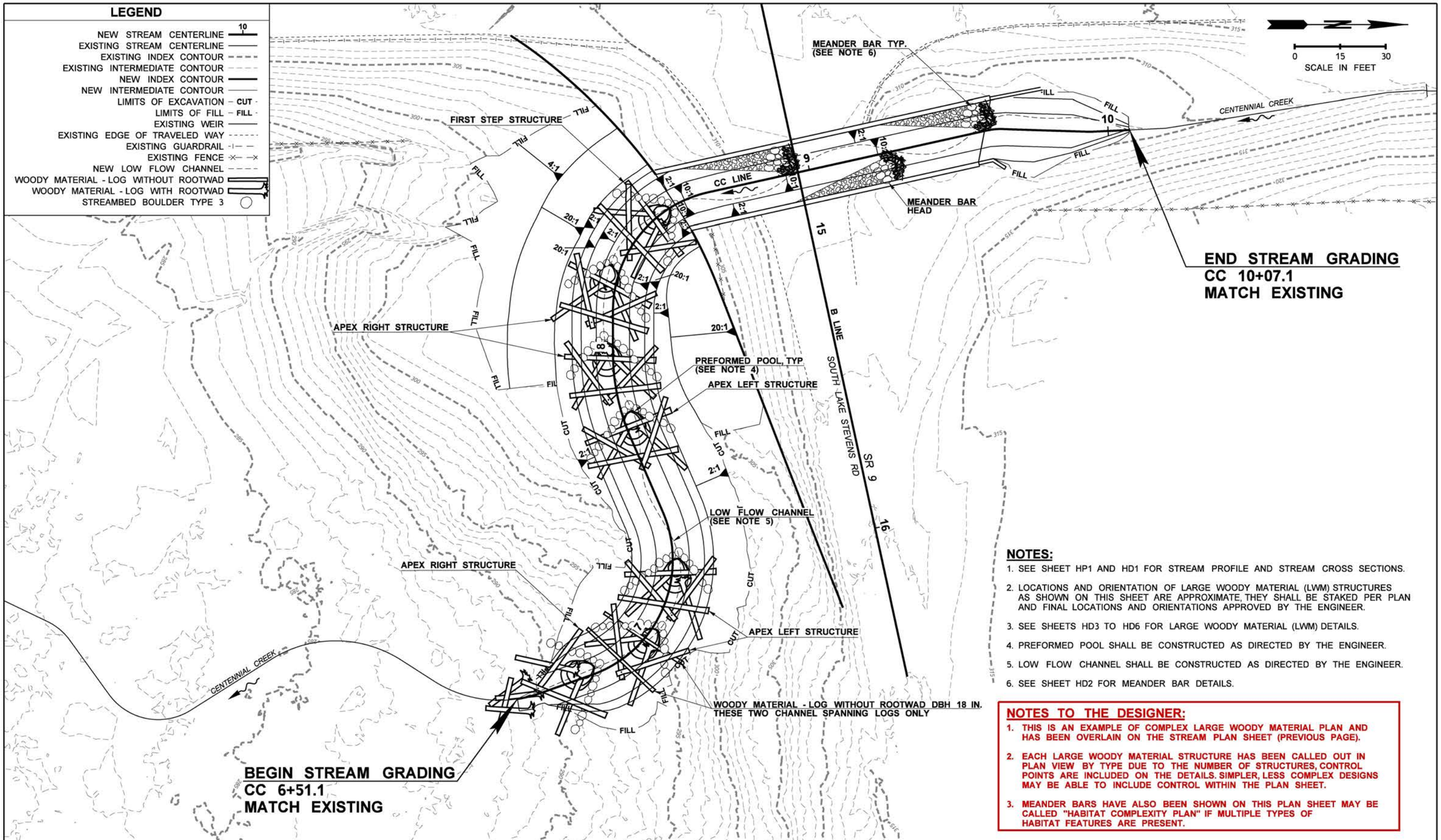
Washington State
Department of Transportation

EXAMPLE 4-42

STREAM PLAN

PLAN REF NO
HN1

SHEET
OF
SHEETS



NOTES:

1. SEE SHEET HP1 AND HD1 FOR STREAM PROFILE AND STREAM CROSS SECTIONS.
2. LOCATIONS AND ORIENTATION OF LARGE WOODY MATERIAL (LWM) STRUCTURES AS SHOWN ON THIS SHEET ARE APPROXIMATE, THEY SHALL BE STAKED PER PLAN AND FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER.
3. SEE SHEETS HD3 TO HD6 FOR LARGE WOODY MATERIAL (LWM) DETAILS.
4. PREFORMED POOL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
5. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
6. SEE SHEET HD2 FOR MEANDER BAR DETAILS.

NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF COMPLEX LARGE WOODY MATERIAL PLAN AND HAS BEEN OVERLAIN ON THE STREAM PLAN SHEET (PREVIOUS PAGE).
2. EACH LARGE WOODY MATERIAL STRUCTURE HAS BEEN CALLED OUT IN PLAN VIEW BY TYPE DUE TO THE NUMBER OF STRUCTURES, CONTROL POINTS ARE INCLUDED ON THE DETAILS. SIMPLER, LESS COMPLEX DESIGNS MAY BE ABLE TO INCLUDE CONTROL WITHIN THE PLAN SHEET.
3. MEANDER BARS HAVE ALSO BEEN SHOWN ON THIS PLAN SHEET MAY BE CALLED "HABITAT COMPLEXITY PLAN" IF MULTIPLE TYPES OF HABITAT FEATURES ARE PRESENT.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-43.dgn					
TIME				REGION NO.	STATE	FED.AID PROJ.NO.
DATE					WASH	
PLOTTED BY				JOB NUMBER		
DESIGNED BY						
ENTERED BY						
CHECKED BY				CONTRACT NO.	LOCATION NO.	
PROJ. ENGR.						
REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

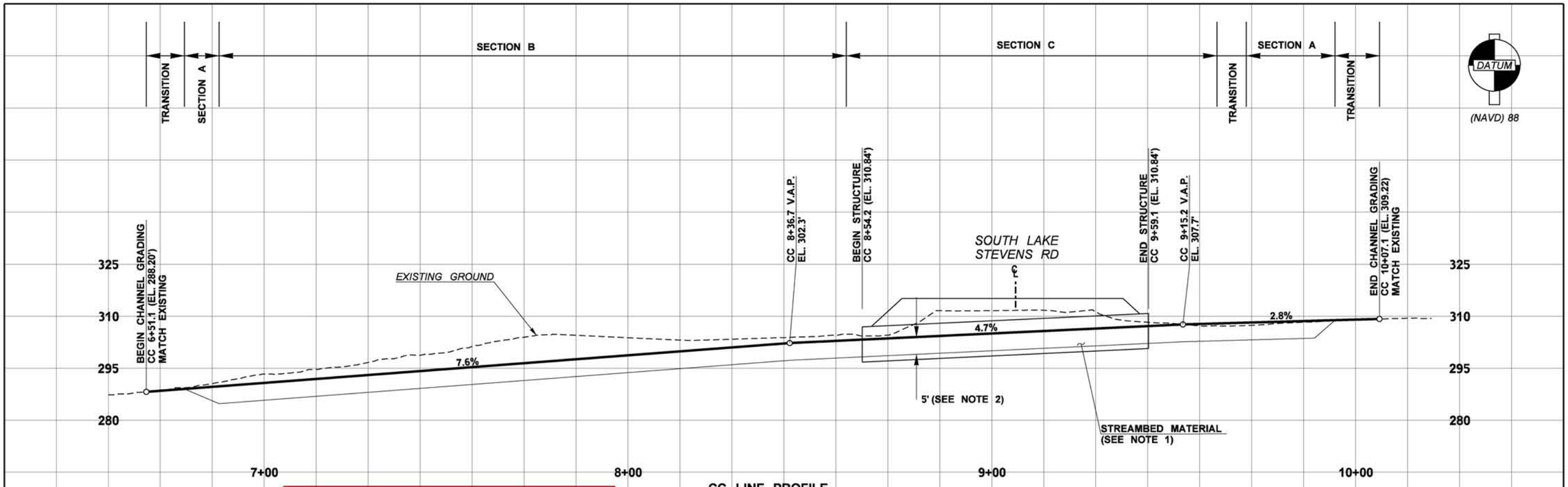
Washington State Department of Transportation

EXAMPLE 4-43

LARGE WOODY MATERIAL PLAN

PLAN REF NO HN2

SHEET OF SHEETS



CC LINE PROFILE

NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF STREAM PROFILE SHEET.
2. IF MEANDER BARS CROSS THE STREAM CENTERLINE THEY SHOULD BE DISPLAYED IN THE PROFILE.
3. IF PROPOSED STRUCTURE IS A 4-SIDED STRUCTURE, SHOW STRUCTURE BOTTOM IN PROFILE.

BEGIN CHANNEL GRADING CC 6+51.0 — END CHANNEL GRADING CC 10+07.0

- STREAMBED COBBLES 8" = 12 TON
- STREAMBED SAND = 108 TON
- STREAMBED COBBLES 12" = 18 TON
- STREAMBED SEDIMENT = 6 TON
- CHANNEL EXCAVATION INCL. HAUL = 240 C.Y.
- STREAMBED BOULDER TYPE TWO = 53 TON
- STREAMBED BOULDER TYPE THREE = 16 EACH
- STREAMBED BOULDER TYPE FOUR = 12 EACH

NOTE:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL AND STREAMBED MATERIAL PLACEMENT. INSTALLATION WILL PROVIDE A WELL GRADED MIX OF STREAMBED SEDIMENT, SAND, AND COBBLES.
2. SEE STREAM DETAILS FOR STREAMBED MATERIAL LIFTS AND STREAM SECTIONS.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-44.dgn						
TIME				REGION NO.	STATE	FED.AID PROJ.NO.
DATE					WASH	
PLOTTED BY						
DESIGNED BY				JOB NUMBER		
ENTERED BY						
CHECKED BY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.						
REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

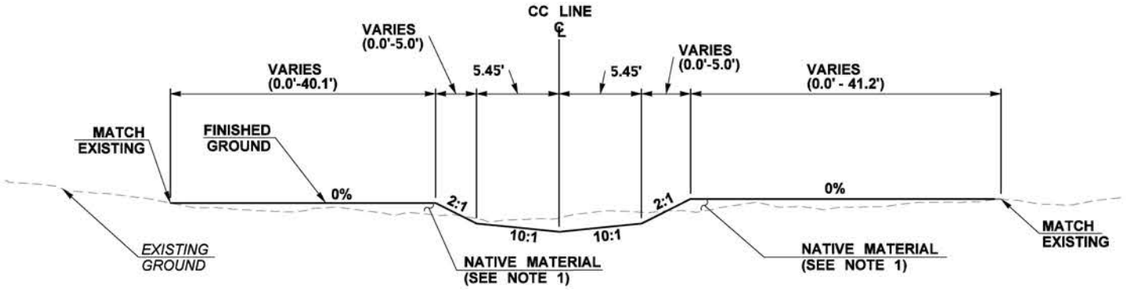
Washington State Department of Transportation

EXAMPLE 4-44

STREAM PROFILE

PLAN REF. NO. HP1

SHEET OF SHEETS

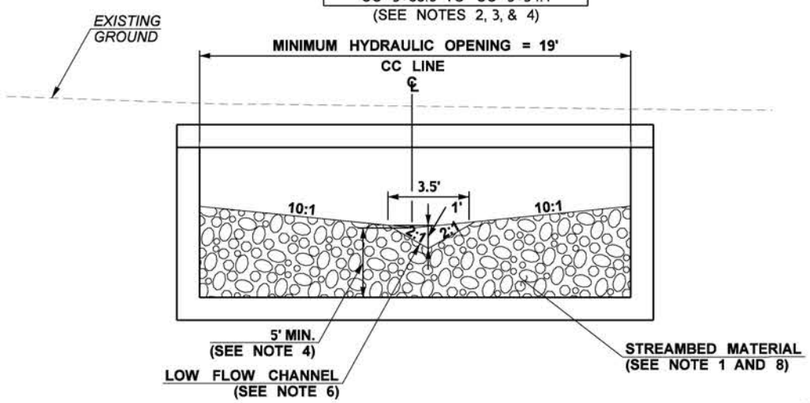


SECTION A

NOT TO SCALE

STATION
CC 6+62.1 TO CC 6+72.1
CC 9+68.5 TO CC 9+94.1

(SEE NOTES 2, 3, & 4)

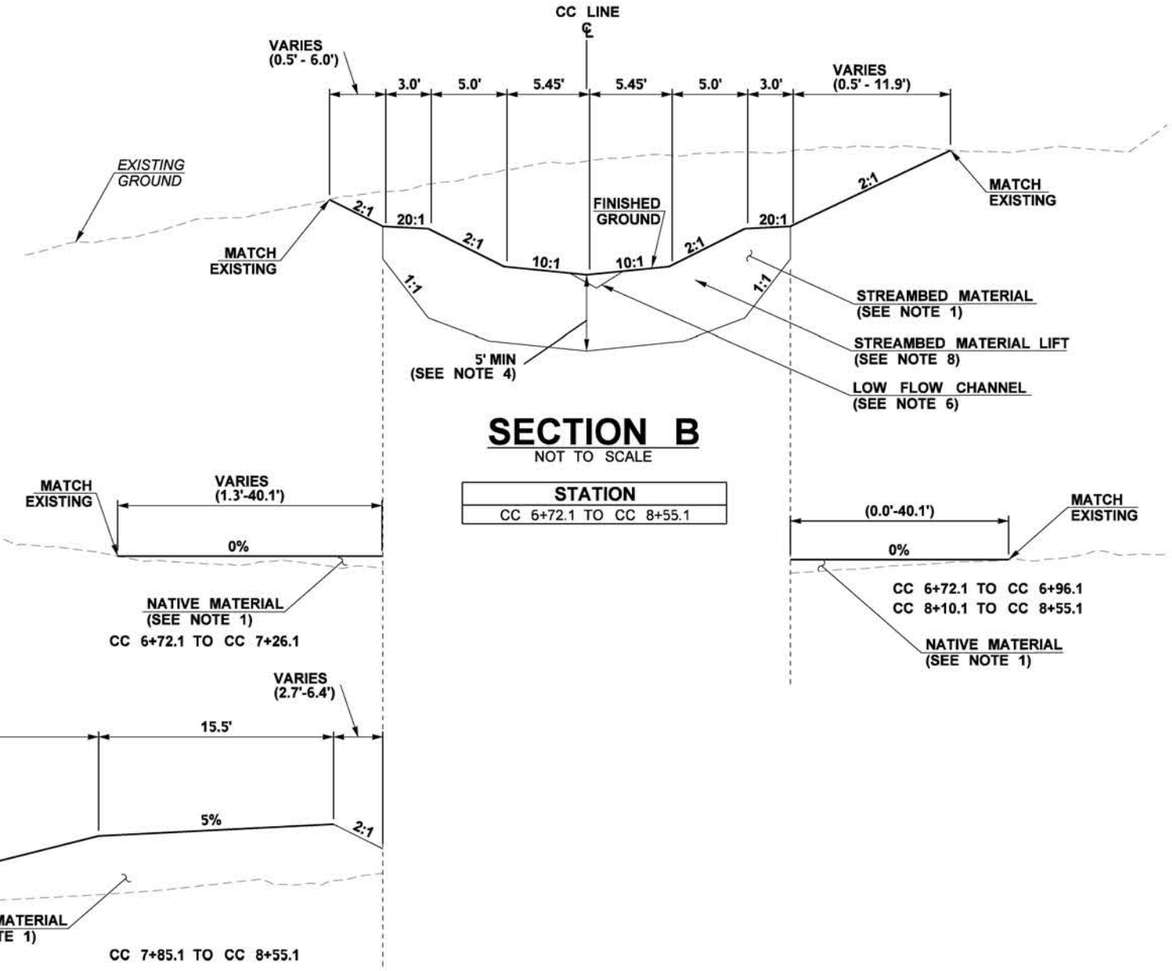


SECTION C

NOT TO SCALE

STATION
CC 8+55.1 TO CC 9+60.1

(SEE NOTE 4)



SECTION B

NOT TO SCALE

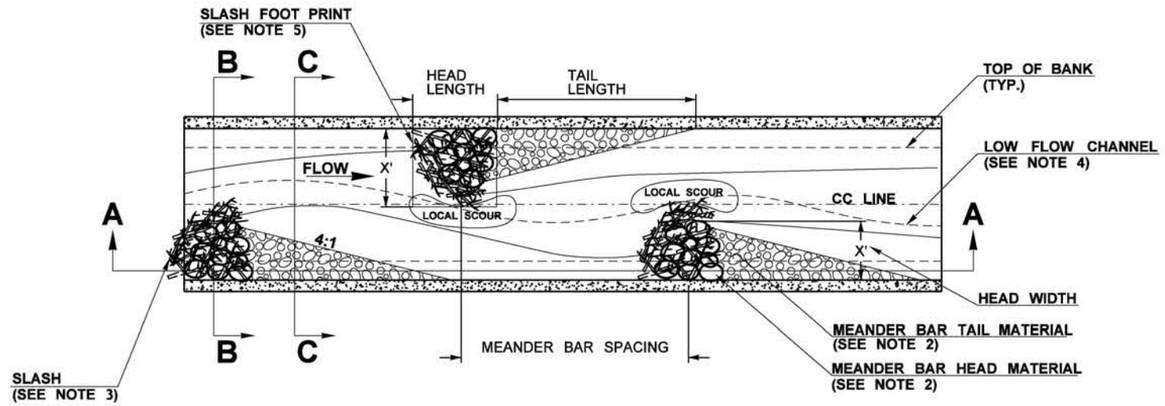
STATION
CC 6+72.1 TO CC 8+55.1

NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL AND STREAMBED MATERIAL PLACEMENT. INSTALLATION WILL PROVIDE A WELL GRADED MIX OF STREAMBED SEDIMENT, SAND, AND COBBLES.
2. FROM CC 6+51.1 TO CC 6+62.1 EVENLY TAPER SECTION A TO MATCH EXISTING STREAM CHANNEL.
3. FROM CC 9+94.1 TO CC 10+07.1 EVENLY TAPER SECTION A TO MATCH EXISTING STREAM CHANNEL
4. FROM CC 9+60.1 TO CC 9+68.5 EVENLY TAPER SECTION C TO MATCH SECTION A.
5. LOCATION AND ORIENTATION OF STREAMBED FEATURES SHOWN ON THIS SHEET ARE APPROXIMATE, FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER IN THE FIELD.
6. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
7. SEE BRIDGE SHEETS FOR ADDITIONAL STRUCTURE DETAILS.
8. SEE STREAMBED MATERIAL PLACEMENT SEQUENCING DETAILS ON SHEET HD8.

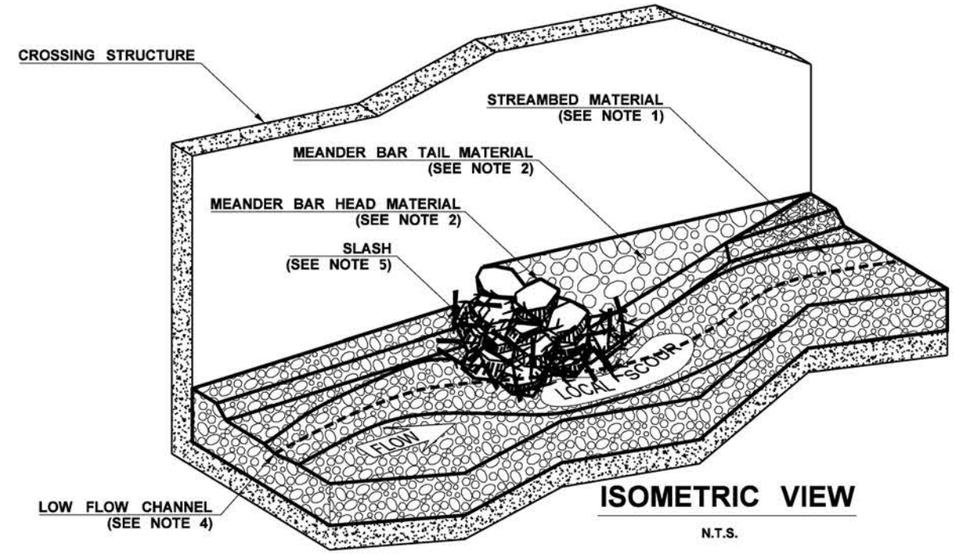
NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE STREAM DETAIL PAGE, ILLUSTRATING THE TYPICAL CROSS SECTIONS USED IN THE DESIGN.
2. STREAMBED MATERIAL LIFTS ARE SHOWN IN THE AREAS WHERE THE STREAMBED MATERIAL IS BEING PLACED TO ILLUSTRATE THE PHASED CONSTRUCTION OF THE CHANNEL.
3. EACH PROJECT WITH STREAMBED MATERIAL SHOULD ALSO INCLUDE THE SEQUENCE OF WORK DETAIL ON SHEET SD1.



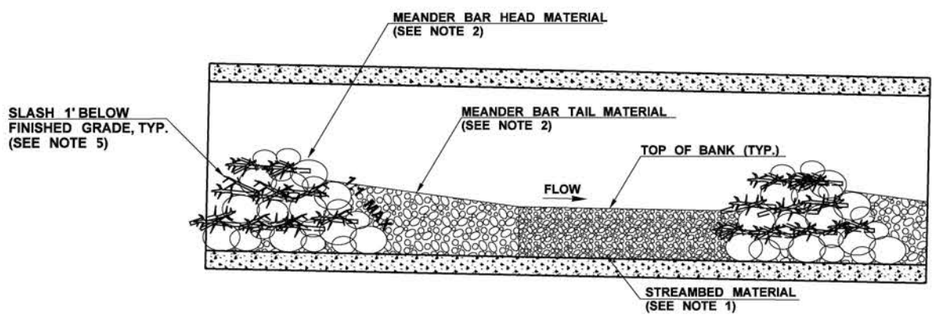
MEANDER BAR PLAN VIEW

N.T.S.



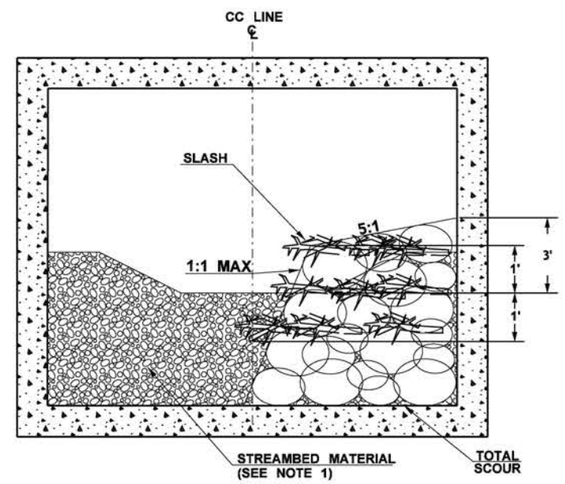
ISOMETRIC VIEW

N.T.S.



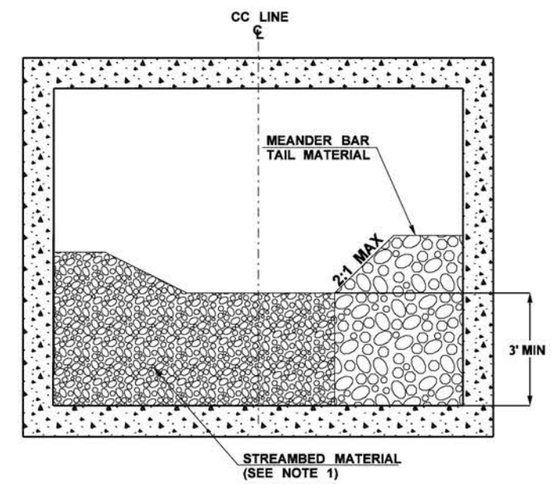
SECTION A-A

N.T.S.



SECTION B-B

N.T.S.



SECTION C-C

N.T.S.

NOTES TO THE DESIGNER:

1. DETAILS SHOULD BE DRAWN TO SCALE BASED ON THE STREAM CHANNEL AND STRUCTURE DESIGN FOR EACH PROJECT.
2. THIS SHEET PROVIDES THE DETAILED PLAN, PROFILE, AND CROSS SECTIONS FOR MEANDER BARS THAT CAN BE MODIFIED FOR EACH PROJECT AND PROVIDED THE BASIS FOR THIS SHEET.
3. ISOMETRIC VIEWS, PHOTOS OR 3D RENDERINGS CAN BE BENEFICIAL IN ILLUSTRATING THE INTENT OF HABITAT COMPLEXITY FEATURES AND CONVEYING THE LAYOUT TO CONTRACTORS.

NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL AND STREAMBED MATERIAL PLACEMENT.
2. SEE SPECIAL PROVISIONS FOR MEANDER BAR MATERIALS.
3. LOCATION AND ORIENTATION OF STREAMBED FEATURES SHOWN ON THIS SHEET ARE APPROXIMATE, FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER IN THE FIELD.
4. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
5. SLASH SHALL EXTEND TO THE STRUCTURE WALL, WRAP AROUND THE MEANDER BAR HEAD AND EXTEND TO THE CENTER OF THE CHANNEL. SLASH SHALL BE BALLASTED IN THE MEANDER BAR HEAD APPROXIMENTLY TWO-THIRDS OF THE LENGTH OF THE MATERIAL AND EXTEND INTO THE CHANNEL. SLASH SHALL BE BURIED ONE FOOT BELOW THE THAWLEG.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-46.dgn						
TIME				REGION NO.	STATE	FED.AID PROJ.NO.
DATE					WASH	
PLOTTED BY						
DESIGNED BY				JOB NUMBER		
ENTERED BY						
CHECKED BY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.						
REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

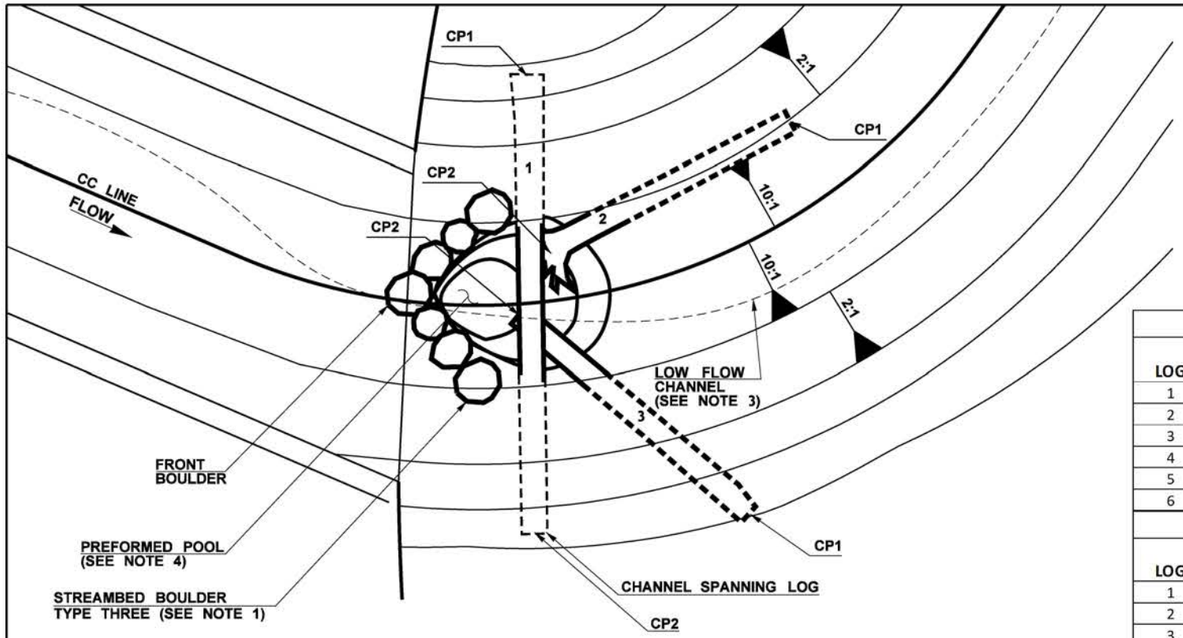
Washington State Department of Transportation

EXAMPLE 4-46

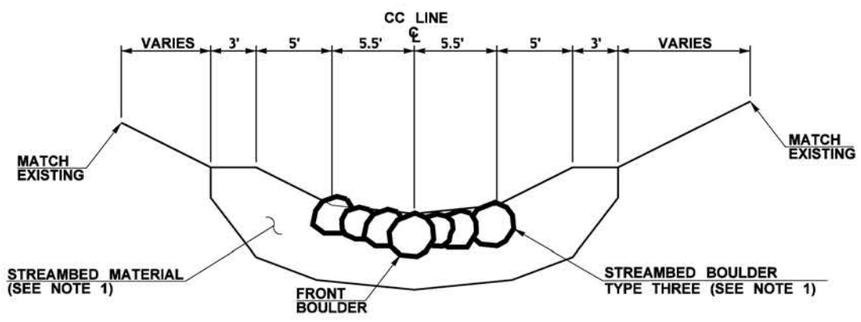
STREAM DETAILS

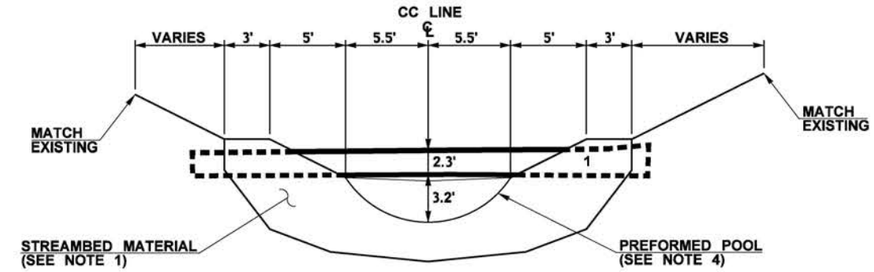
PLAN REF NO HD2

SHEET OF SHEETS



FIRST STEP LAYER 1





LEFT APEX #1

LOG	LOG DESCRIPTION (SEE NOTE 2)	LAYER	NOTES	CP1 STATION	CP1 OFFSET	CP2 STATION	CP2 OFFSET
1	30' LONG, 18"-20" DBH LOG	1	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'
2	20' LONG, 18"-20" DBH LOG WITH ROOT WAD	1	3/4 BURIED, ROOT END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
3	20' LONG, 18"-20" DBH LOG	1	3/4 BURIED, ONE END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
4	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 5, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
5	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 4, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
6	30' LONG, 18"-20" DBH LOG	3	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'

LEFT APEX #2

LOG	LOG DESCRIPTION (SEE NOTE 2)	LAYER	NOTES	CP1 STATION	CP1 OFFSET	CP2 STATION	CP2 OFFSET
1	30' LONG, 18"-20" DBH LOG	1	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'
2	20' LONG, 18"-20" DBH LOG WITH ROOT WAD	1	3/4 BURIED, ROOT END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
3	20' LONG, 18"-20" DBH LOG	1	3/4 BURIED, ONE END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
4	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 5, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
5	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 4, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
6	30' LONG, 18"-20" DBH LOG	3	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'

RIGHT APEX #1

LOG	LOG DESCRIPTION (SEE NOTE 2)	LAYER	NOTES	CP1 STATION	CP1 OFFSET	CP2 STATION	CP2 OFFSET
1	30' LONG, 18"-20" DBH LOG	1	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'
2	20' LONG, 18"-20" DBH LOG WITH ROOT WAD	1	3/4 BURIED, ROOT END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
3	20' LONG, 18"-20" DBH LOG	1	3/4 BURIED, ONE END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
4	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 5, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
5	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 4, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
6	30' LONG, 18"-20" DBH LOG	3	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'

RIGHT APEX #2

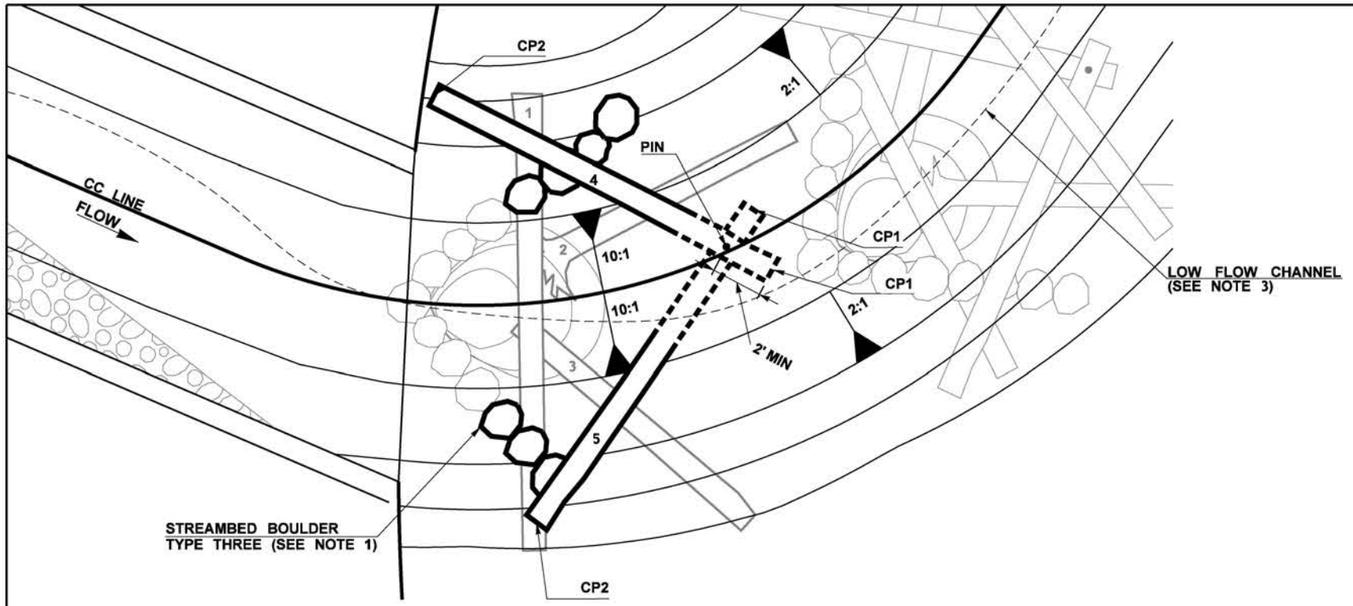
LOG	LOG DESCRIPTION (SEE NOTE 2)	LAYER	NOTES	CP1 STATION	CP1 OFFSET	CP2 STATION	CP2 OFFSET
1	30' LONG, 18"-20" DBH LOG	1	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'
2	20' LONG, 18"-20" DBH LOG WITH ROOT WAD	1	3/4 BURIED, ROOT END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
3	20' LONG, 18"-20" DBH LOG	1	3/4 BURIED, ONE END EXPOSED IN PREFORMED POOL	xxx+xx	xx'	xxx+xx	xx'
4	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 5, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
5	25' LONG, 18"-20" DBH LOG	2	PINNED TO LOG 4, PINNED END BURIED	xxx+xx	xx'	xxx+xx	xx'
6	30' LONG, 18"-20" DBH LOG	3	CHANNEL SPANNING LOG, BOTH ENDS BURIED	xxx+xx	xx'	xxx+xx	xx'

NOTES TO THE DESIGNER:

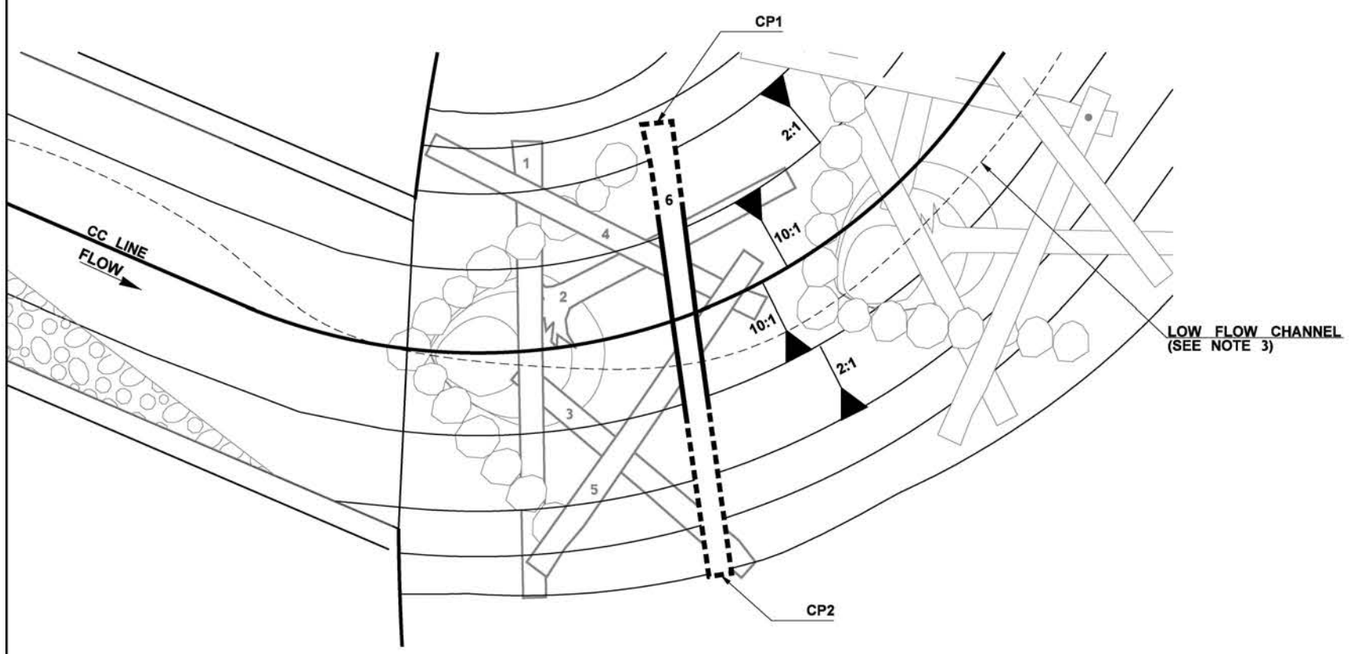
1. THIS IS AN EXAMPLE DETAILS ASSOCIATED WITH THE CONSTRUCTION OF A COMPLEX HABITAT STRUCTURE WITH BOTH ROCK AND LARGE WOODY MATERIAL. IN THIS SHEET "FIRST STEP" IS THE NAME OF THE COMPLEXITY STRUCTURE.
2. FOR COMPLEX STRUCTURES, DETAILS HAVE BEEN PROVIDED FOR EACH LAYER OF THE STRUCTURE. LAYER 1 ON THIS SHEET SHOWS THE ELEMENTS THAT ARE INSTALLED FIRST. THE FOLLOWING SHEET SHOWS LAYERS 2 AND 3.
3. CONTROL POINTS HAVE BEEN CALLED OUT IN EACH DETAIL AND COORDINATES PROVIDED IN THE CONTROL TABLE ON THIS SHEET. NOTE, THAT EACH LOG HAS TWO CONTROL POINTS, WHICH IS EASIER FOR THE CONTRACTOR TO PLACE THE LOG RATHER THAN SPECIFY AN ANGLE IN THE CONTROL TABLE. WHILE CONTROL POINTS ARE HELPFUL, COMPLEXITY STRUCTURES ARE STILL PLACED IN THE FIELD BY THE ENGINEER, AS INDICATED BY NOTE 2 ON THIS SHEET. TABLE TO BE POPULATED WITH ACTUAL COORDINATES.

NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL, STREAMBED BOULDERS AND STREAMBED MATERIAL PLACEMENT.
2. LOCATIONS AND ORIENTATION OF LARGE WOODY MATERIAL (LWM) STRUCTURES AS SHOWN ON THIS SHEET ARE APPROXIMATE. LWM STRUCTURES SHALL BE STAKED PER PLAN AND FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER.
3. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
4. SEE SHEET HD5 FOR PREFORMED POOL DETAILS. PREFORMED POOLS SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
5. SEE SHEET HD1 FOR CHANNEL SECTION DETAILS.



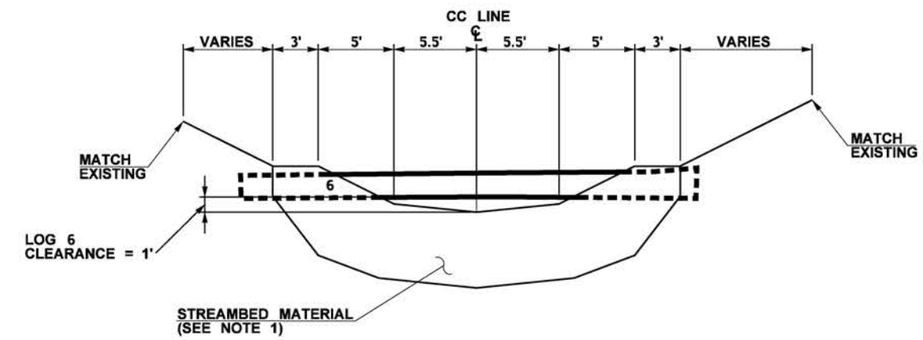
FIRST STEP LAYER 2



FIRST STEP LAYER 3

NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL AND STREAMBED MATERIAL PLACEMENT.
2. LOCATIONS AND ORIENTATION OF LARGE WOODY MATERIAL (LWM) STRUCTURES AS SHOWN ON THIS SHEET ARE APPROXIMATE. LWM STRUCTURES SHALL BE STAKED PER PLAN AND FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER.
3. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
4. SEE SHEET HD5 FOR PREFORMED POOL DETAILS. PREFORMED POOLS SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
5. SEE SHEET HD1 FOR CHANNEL SECTION DETAILS.
6. SEE SHEET HD3 FOR CONTROL TABLE.



NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE DETAIL ASSOCIATED WITH THE CONSTRUCTION OF A COMPLEX HABITAT STRUCTURE WITH BOTH ROCK AND LARGE WOODY MATERIAL. THIS SHEET IS A CONTINUATION OF THE PREVIOUS SHEET AND SHOWS THE CONSTRUCTION OF LAYERS 2 AND 3.
2. CONTROL POINTS TABLE IS INCLUDED ON THE PREVIOUS PAGE.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-48.dgn								
TIME				REGION NO.	STATE	FED.AID PROJ.NO.		
DATE					WASH			
PLOTTED BY								
DESIGNED BY				JOB NUMBER				
ENTERED BY								
CHECKED BY				CONTRACT NO.		LOCATION NO.		
PROJ. ENGR.								
REGIONAL ADM.	REVISION	DATE	BY					

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

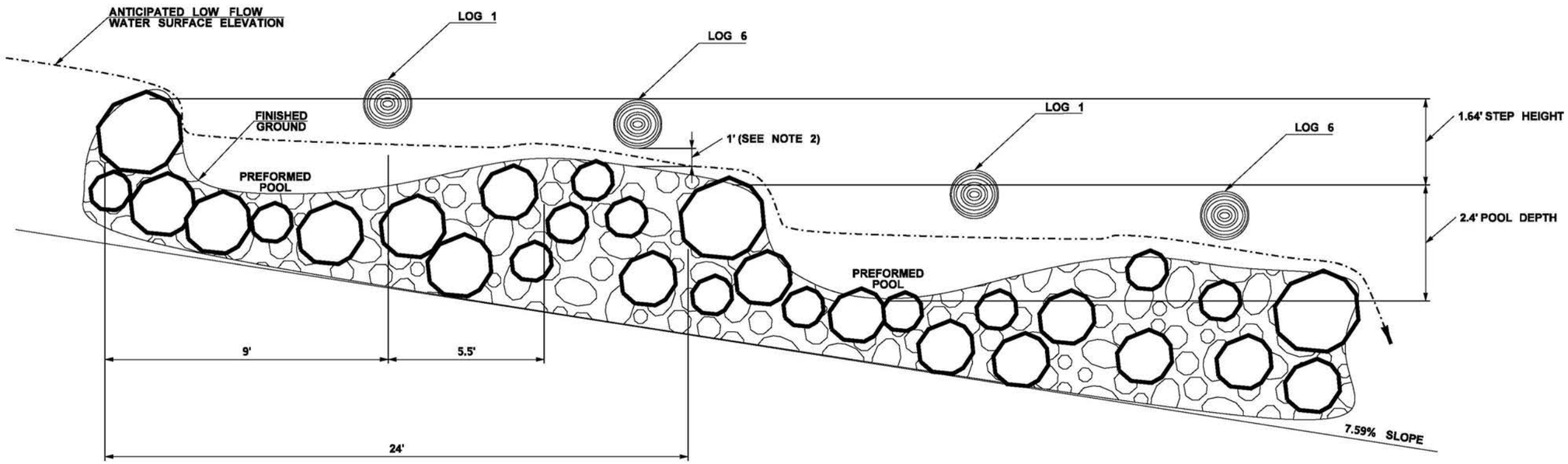
Washington State
Department of Transportation

EXAMPLE 4-48

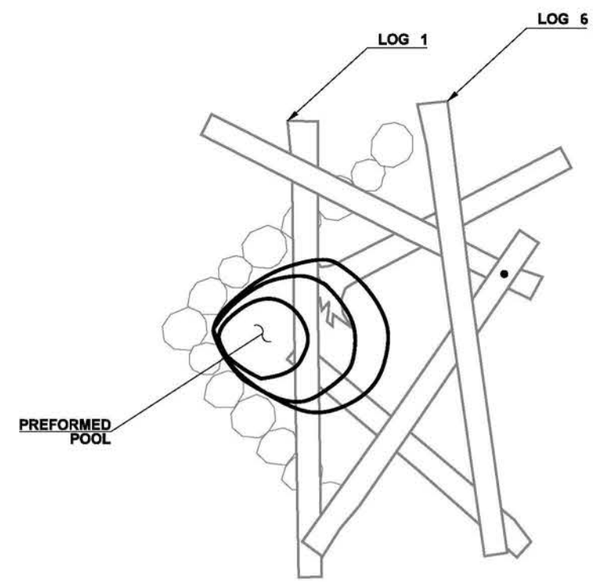
STREAM DETAILS

PLAN REF NO
HD4

SHEET
OF
SHEETS



PREFORMED POOL ELEVATION



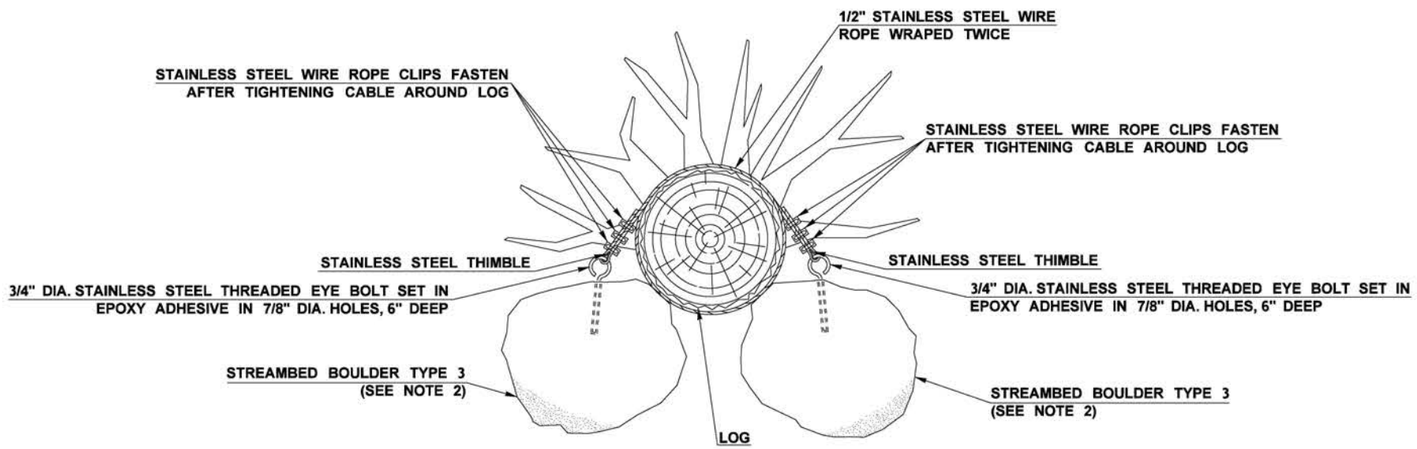
PREFORMED POOL DETAIL

NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL AND STREAMBED MATERIAL PLACEMENT.
2. LOCATIONS AND ORIENTATION OF LARGE WOODY MATERIAL (LWM) STRUCTURES AS SHOWN ON THIS SHEET ARE APPROXIMATE. LWM STRUCTURES SHALL BE STAKED PER PLAN AND FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER.
3. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
4. PREFORMED POOLS SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.

NOTE TO THE DESIGNER:

1. THIS SHEET IS A CONTINUATION OF THE PREVIOUS SHEET AND SHOWS THE PROFILE VIEW OF THE COMPLEXITY STRUCTURE. A PHOTOGRAPH HAS BEEN INCLUDED ON THIS PAGE TO ILLUSTRATE THE INTENT AND LAYOUT OF THE COMPLEXITY STRUCTURE TO THE CONTRACTOR. PHOTOGRAPHS, ISOMETRIC VIEWS OR RENDERINGS CAN BE INCLUDED TO PROVIDE CONTEXT TO THE CONTRACTOR.



BOULDER ANCHOR

NOTES:

1. SEE SPECIAL PROVISIONS "WOODY MATERIAL" FOR DESCRIPTION OF MATERIALS AND CONSTRUCTION REQUIREMENTS.
2. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL AND STREAMBED MATERIAL PLACEMENT.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-50.dgn								
TIME				REGION NO.	STATE	FED.AID PROJ.NO.		
DATE					WASH			
PLOTTED BY								
DESIGNED BY				JOB NUMBER				
ENTERED BY								
CHECKED BY				CONTRACT NO.		LOCATION NO.		
PROJ. ENGR.								
REGIONAL ADM.	REVISION	DATE	BY					

DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

Washington State Department of Transportation

EXAMPLE 4-50

ANCHOR EXAMPLES

PLAN REF NO
HD6

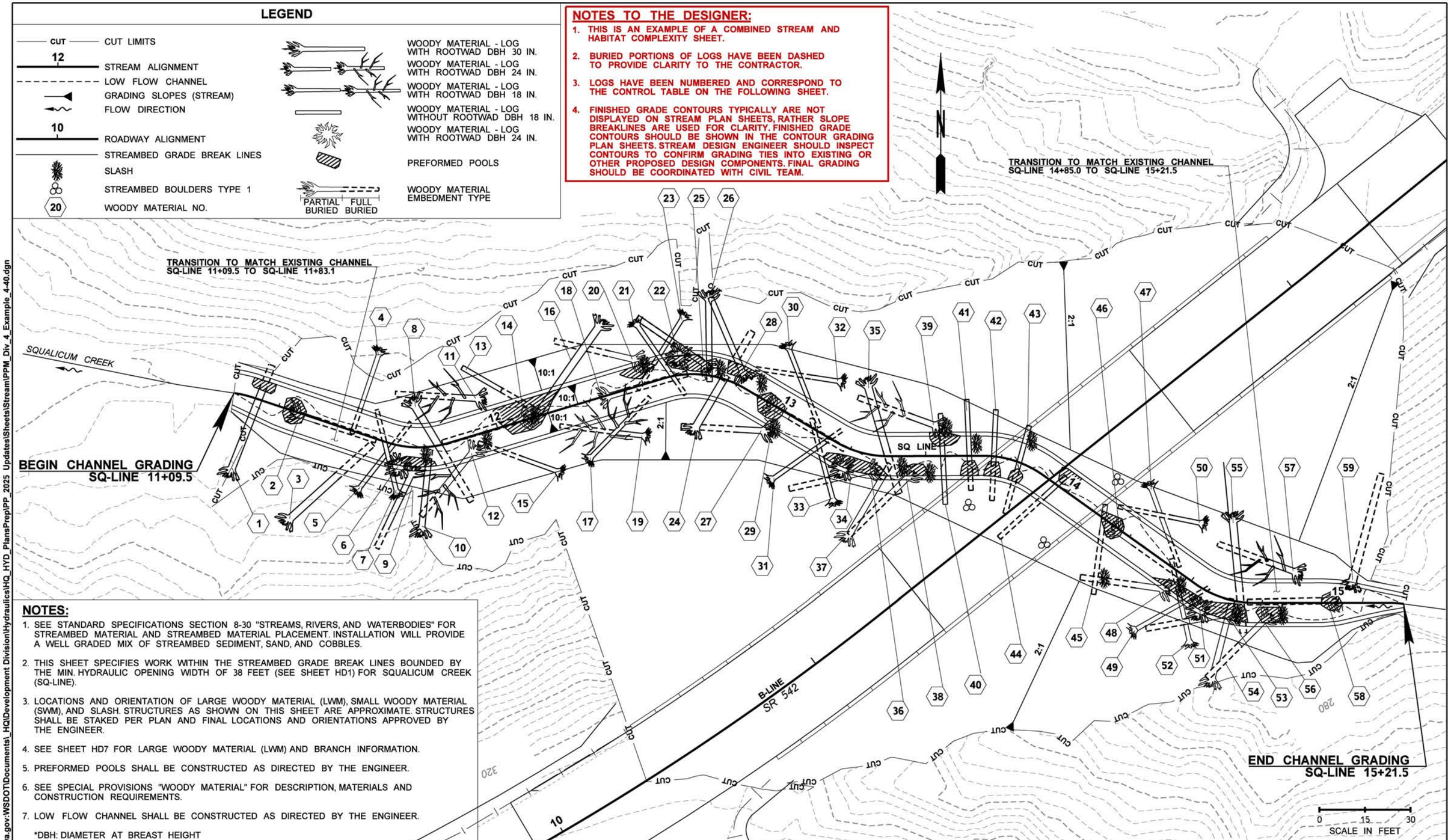
SHEET
OF
SHEETS

LEGEND

- CUT — CUT LIMITS
- 12 — STREAM ALIGNMENT
- LOW FLOW CHANNEL
- GRADING SLOPES (STREAM)
- FLOW DIRECTION
- 10 — ROADWAY ALIGNMENT
- STREAMBED GRADE BREAK LINES
- SLASH
- STREAMBED BOULDERS TYPE 1
- 20 — WOODY MATERIAL NO.
- WOODY MATERIAL - LOG WITH ROOTWAD DBH 30 IN.
- WOODY MATERIAL - LOG WITH ROOTWAD DBH 24 IN.
- WOODY MATERIAL - LOG WITH ROOTWAD DBH 18 IN.
- WOODY MATERIAL - LOG WITHOUT ROOTWAD DBH 18 IN.
- WOODY MATERIAL - LOG WITH ROOTWAD DBH 24 IN.
- PREFORMED POOLS
- PARTIAL BURIED / FULL BURIED — WOODY MATERIAL EMBEDMENT TYPE

NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A COMBINED STREAM AND HABITAT COMPLEXITY SHEET.
2. BURIED PORTIONS OF LOGS HAVE BEEN DASHED TO PROVIDE CLARITY TO THE CONTRACTOR.
3. LOGS HAVE BEEN NUMBERED AND CORRESPOND TO THE CONTROL TABLE ON THE FOLLOWING SHEET.
4. FINISHED GRADE CONTOURS TYPICALLY ARE NOT DISPLAYED ON STREAM PLAN SHEETS, RATHER SLOPE BREAKLINES ARE USED FOR CLARITY. FINISHED GRADE CONTOURS SHOULD BE SHOWN IN THE CONTOUR GRADING PLAN SHEETS. STREAM DESIGN ENGINEER SHOULD INSPECT CONTOURS TO CONFIRM GRADING TIES INTO EXISTING OR OTHER PROPOSED DESIGN COMPONENTS. FINAL GRADING SHOULD BE COORDINATED WITH CIVIL TEAM.



NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR STREAMBED MATERIAL AND STREAMBED MATERIAL PLACEMENT. INSTALLATION WILL PROVIDE A WELL GRADED MIX OF STREAMBED SEDIMENT, SAND, AND COBBLES.
2. THIS SHEET SPECIFIES WORK WITHIN THE STREAMBED GRADE BREAK LINES BOUNDED BY THE MIN. HYDRAULIC OPENING WIDTH OF 38 FEET (SEE SHEET HD1) FOR SQUALICUM CREEK (SQ-LINE).
3. LOCATIONS AND ORIENTATION OF LARGE WOODY MATERIAL (LWM), SMALL WOODY MATERIAL (SWM), AND SLASH. STRUCTURES AS SHOWN ON THIS SHEET ARE APPROXIMATE. STRUCTURES SHALL BE STAKED PER PLAN AND FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER.
4. SEE SHEET HD7 FOR LARGE WOODY MATERIAL (LWM) AND BRANCH INFORMATION.
5. PREFORMED POOLS SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
6. SEE SPECIAL PROVISIONS "WOODY MATERIAL" FOR DESCRIPTION, MATERIALS AND CONSTRUCTION REQUIREMENTS.
7. LOW FLOW CHANNEL SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.

*DBH: DIAMETER AT BREAST HEIGHT

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-51.dgn				
TIME	2:09:01 PM				
DATE	5/2/2025				
PLOTTED BY	WilliSD				
DESIGNED BY					
ENTERED BY					
CHECKED BY					
PROJ. ENGR.					
REGIONAL ADM.		REVISION	DATE	BY	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-51

STREAM PLAN

PLAN REF NO HN3

SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\Hydraulics\HQ_HYD_PlansPrep\PP_2025 Updates\Sheets\Stream\PPM_Div_4_Example_4-40.dgn

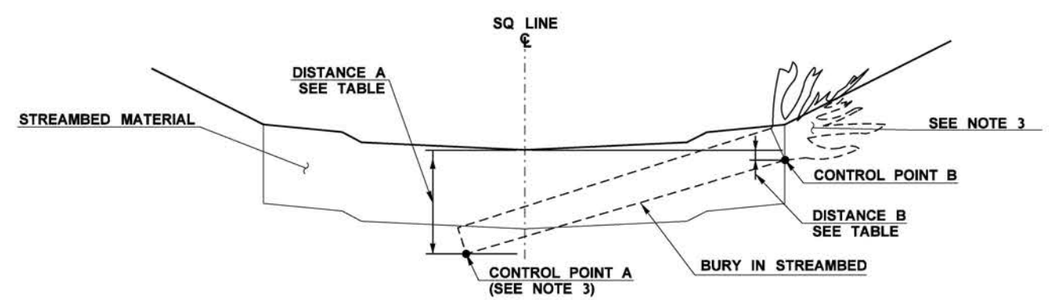
LWM NO.	BRANCHES (YES/NO)	DBH (MIN.)	LENGTH (MIN.)	ROOT WAD DIAMETER	STATION/OFFSET A - LWM END NEAREST CHANNEL CENTERLINE (SEE STATION/OFFSET LOCATION DETAIL) (IF LWM IS ALONG CHANNEL CENTERLINE, ROOTWAD IS POINT A)	DISTANCE A - VERTICAL DISTANCE BETWEEN BOTTOM OF LWM AND FINISHED GRADE	STATION/OFFSET B - LWM END FURTHEST FROM CHANNEL CENTERLINE (SEE STATION/OFFSET LOCATION DETAIL)	DISTANCE B - VERTICAL DISTANCE BETWEEN BOTTOM OF LWM AND FINISHED GRADE
1	NO	30 IN	40 FT	90 IN	11+19 (12.0' LT)	7.0 FT	11+17 (24.0' RT)	0.0 FT
2	NO	24 IN	30 FT	72 IN	11+32 (0.5' RT)	0.7 FT	11+59 (0.5' RT)	6.3 FT
3	NO	30 IN	40 FT	90 IN	11+58 (2.0' RT)	4.4 FT	11+40 (33.5' RT)	0.0 FT
4	NO	18 IN	30 FT	54 IN	11+51 (1.0' RT)	2.8 FT	11+51 (26.0' LT)	0.5 FT
5	NO	18 IN	30 FT	54 IN	11+68 (7.0' LT)	4.7 FT	11+70 (8.0' LT)	0 FT
6	NO	24 IN	15 FT	72 IN	11+68 (7.0' RT)	13.5 FT	N/A (VERTICAL)	N/A
7	NO	18 IN	30 FT	54 IN	11+56 (9.0' LT)	5.0 FT	11+68 (14.5' RT)	0 FT
8	NO	30 IN	40 FT	90 IN	11+71 (13.5' LT)	1.0 FT	11+85 (20.5' RT)	8.3 FT
9	NO	24 IN	30 FT	72 IN	11+71 (9.0' RT)	0.5 FT	11+66 (35.0' RT)	3.2 FT
10	NO	24 IN	30 FT	72 IN	11+77 (0.0' RT)	3.5 FT	11+74 (26.0' RT)	0.0 FT
11	YES	18 IN	30 FT	54 IN	12+15 (0.5' LT)	3.2 FT	11+95 (22.5' LT)	0.0 FT
12	YES	24 IN	30 FT	72 IN	11+89 (5.5' RT)	1.0 FT	11+74 (22.5' RT)	6.0 FT
13	NO	24 IN	30 FT	72 IN	11+96 (11.5' LT)	0.5 FT	11+60 (16.0' LT)	4.5 FT
14	NO	24 IN	30 FT	72 IN	12+07 (0.5' LT)	1.5 FT	11+81 (0.5' LT)	5.8 FT
15	NO	18 IN	30 FT	54 IN	11+93 (2.5' RT)	3.6 FT	12+14 (19.0' RT)	0.0 FT
16	NO	30 IN	40 FT	90 IN	12+13 (0.5' RT)	2.5 FT	12+41 (22.0' LT)	0.0 FT
17	YES	18 IN	30 FT	54 IN	12+51 (4.5' RT)	2.4 FT	12+27 (18.0' RT)	0.0 FT
18	NO	24 IN	30 FT	72 IN	12+39 (0.5' RT)	0.7 FT	12+65 (0.5' RT)	6.3 FT
19	YES	18 IN	30 FT	54 IN	12+20 (5.0' RT)	3.6 FT	12+45 (16.0' RT)	0.0 FT
20	NO	24 IN	30 FT	72 IN	12+49 (9.0' LT)	0.5 FT	12+26 (22.0' LT)	5.5 FT
21	NO	18 IN	30 FT	54 IN	12+65 (6.5' RT)	4.3 FT	12+54 (19.0' LT)	0.0 FT
22	NO	24 IN	15 FT	72 IN	12+63 (6.5' LT)	13.5 FT	N/A (VERTICAL)	N/A
23	NO	18 IN	30 FT	54 IN	12+48 (1.0' RT)	6.0 FT	12+64 (18.0' LT)	0.0 FT
24	NO	30 IN	40 FT	90 IN	12+70 (17.0' RT)	1.0 FT	12+80 (18.0' LT)	8.3 FT
25	NO	24 IN	30 FT	72 IN	12+70 (4.0' LT)	0.8 FT	12+55 (12.5' LT)	6.0 FT
26	NO	24 IN	30 FT	72 IN	12+73 (2.0' RT)	3.5 FT	12+70 (24.0' LT)	0.0 FT
27	NO	24 IN	30 FT	72 IN	12+97 (9.5' RT)	0.5 FT	12+59 (16.5' RT)	4.7 FT
28	NO	24 IN	30 FT	72 IN	12+82 (4.5' LT)	1.0 FT	12+70 (25.5' LT)	6.0 FT
29	NO	24 IN	30 FT	72 IN	12+97 (0.5' RT)	0.7 FT	13+23 (0.5' RT)	6.3 FT
30	NO	18 IN	30 FT	54 IN	13+12 (1.5' LT)	2.4 FT	12+91 (18.5' LT)	0.0 FT

NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A CONTROL TABLE FOR LARGE WOOD MATERIAL (LWM). NUMBERS ARE IDENTIFIED ON THE PLAN SHEET (PREVIOUS PAGE). NOTE, TABLE SHOULD INCLUDE ALL LWM STRUCTURES FROM PLAN SHEETS, POPULATE FULL TABLE AND DELETE EMPTY ROWS.
2. CONTROL POINTS A AND B ARE SHOWN IN THE DETAIL BELOW. TABLE INCLUDES STATION AND OFFSET POINTS FOR EACH CONTROL POINT AND A DEPTH RELATIVE TO THE STREAM THAWLEG TO SPATIALLY LOCATE EACH PIECE OF WOODY MATERIAL. ANGLES ARE NOT USED IN THE CONTROL TABLE.

WOODY MATERIAL SUMMARY TABLE

TYPE	DESCRIPTION	DIA. (IN)	LENGTH (FT)	QUANTITY	UNITS
LWM A	LARGE WOODY MATERIAL - LOG WITH ROOTWAD DIA 18 IN.	18	25	13	EACH
LWM B	LARGE WOODY MATERIAL - LOG WITHOUT ROOTWAD DIA 18 IN.	18	15	8	EACH
SWM	SMALL WOODY MATERIAL	2-4	6 MAX	12	CY
SLASH	SLASH	<2	6 MAX	8	CY

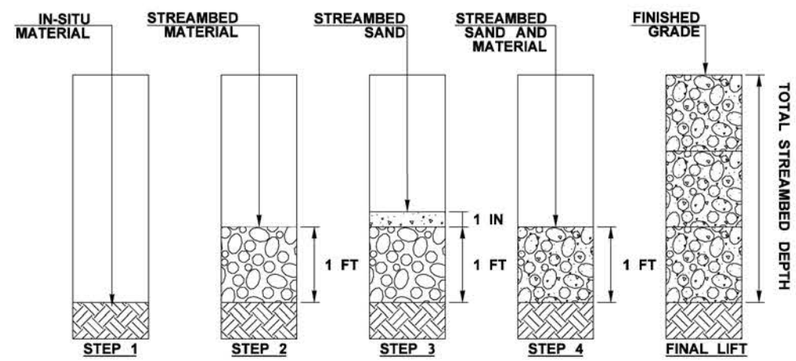


STATION /OFFSET / VERTICAL DISTANCE LOCATION DETAIL

NOT TO SCALE

NOTES:

1. LOCATIONS AND ORIENTATION OF LARGE WOODY MATERIAL (LWM) STRUCTURES AS SHOWN ON THIS SHEET ARE APPROXIMATE. LWM STRUCTURES SHALL BE STAKED PER PLAN AND FINAL LOCATIONS AND ORIENTATIONS APPROVED BY THE ENGINEER.
2. SEE SPECIAL PROVISIONS "WOODY MATERIAL" FOR DESCRIPTION, MATERIALS AND CONSTRUCTION REQUIREMENTS.
3. EXCAVATION BELOW CHANNEL LIMITS SHALL BE BACK FILLED WITH STREAMBED MATERIAL UNLESS OTHERWISE APPROVED BY THE ENGINEER.



STREAMBED CHANNEL PREPARATION

STEP 1

EXCAVATE CHANNEL TO ACCOMMODATE STREAMBED MATERIAL.

STEP 2

PLACE 1 FOOT LIFT OF STREAMBED MATERIAL.

STEP 3

PLACE 1 INCH OF STREAMBED SAND UNIFORMLY OVER STREAMBED MATERIAL.

STEP 4

APPLY WATER TO STREAMBED SAND. SEE DETAIL NOTE 1.

STEP 5

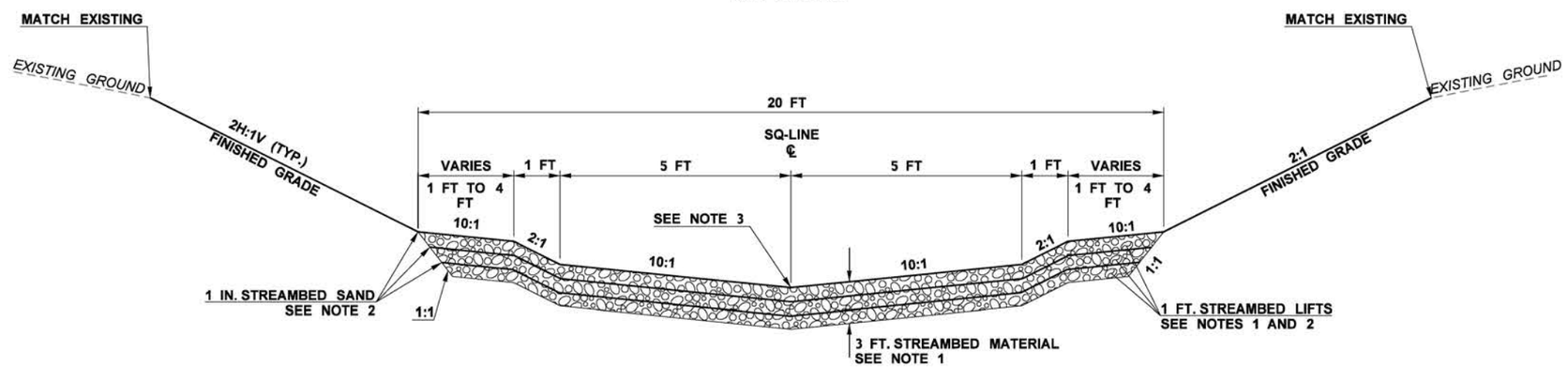
(REPEAT STEP 2-4 TO FINAL LIFT), SEE NOTE 2

DETAIL NOTES:

1. APPLY WATER TO SAND LAYERS TO FACILITATE FILLING INTERSTITIAL VOIDS. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES".
2. STEPS 2, 3, AND 4 SHALL BE REPEATED AS NECESSARY FOR PLACEMENT OF STREAMBED MATERIAL AND ALL IN-STREAM FEATURES TO TOTAL STREAMBED DEPTH AS SHOWN BELOW.

PLACING BLENDED STREAMBED AGGREGATES - SEQUENCE OF WORK

NOT TO SCALE



NAME CREEK STREAM SECTION X

STA SQ 12+00 TO STA SQ 15+00
NOT TO SCALE

NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES".
2. SEE DETAIL "PLACING BLENDED STREAMBED AGGREGATES - SEQUENCE OF WORK."
3. CONTRACTOR TO CONSTRUCT LOW FLOW CHANNEL AS DIRECTED BY ENGINEER.
4. STREAMBED EXCAVATION LIMITS AND DEPTHS MAY BE ADJUSTED BY THE ENGINEER IF IN-SITU MATERIAL IS DEEMED SUITABLE.

NOTES TO THE DESIGNERS:

1. THIS IS AN EXAMPLE DETAIL OF STREAMBED MATERIAL PLACEMENT - SEQUENCE OF WORK AND SHOULD BE INCLUDED ON EACH PROJECT THAT USES STREAMBED MATERIAL.
2. SEQUENCE OF WORK DETAIL SHOULD BE UPDATED FOR EACH PROJECT AS THE NUMBER OF LIFTS REQUIRED AND THICKNESS OF STREAMBED SAND LIFTS WILL VARY.

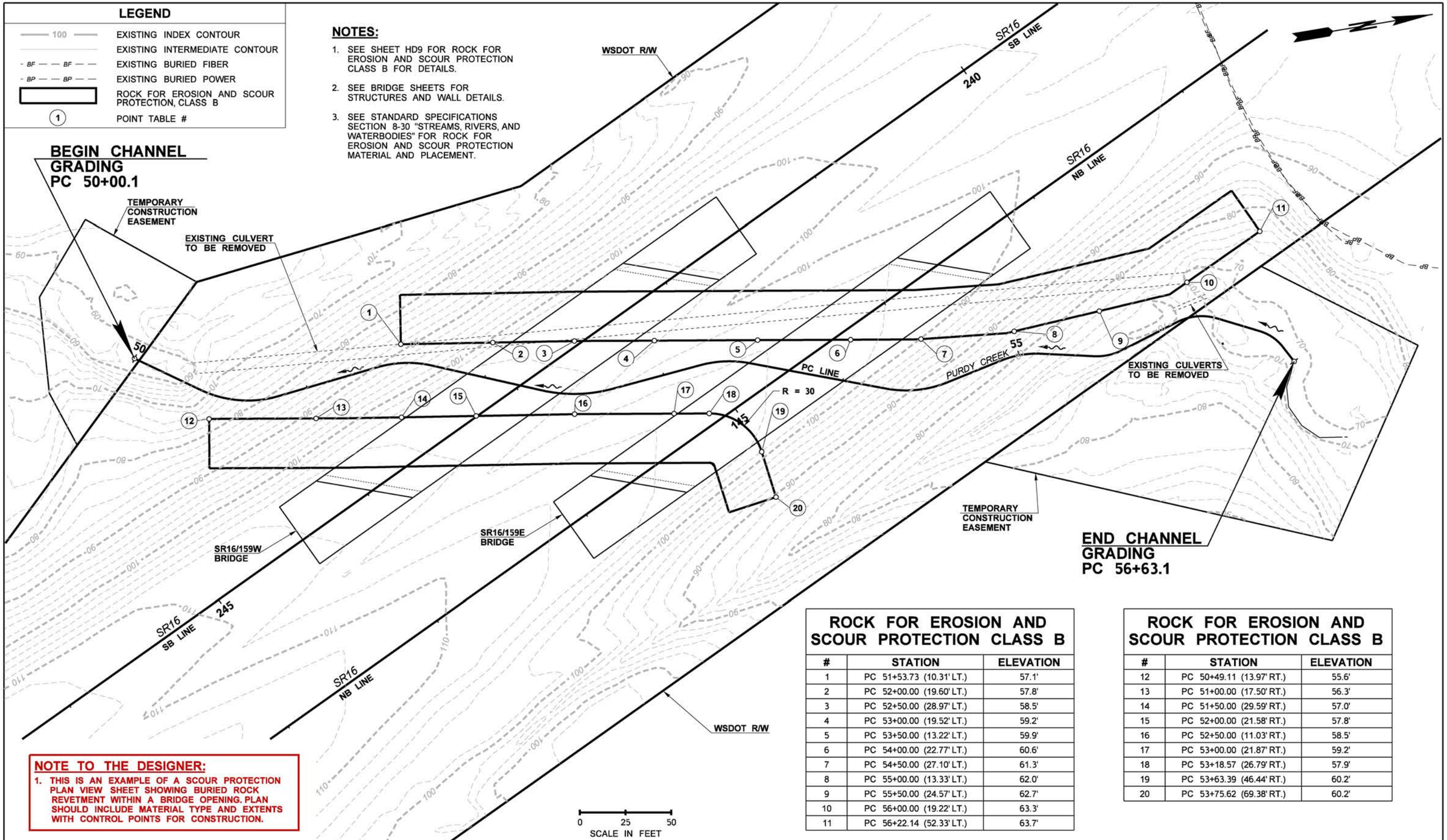
FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-53.dgn									
TIME				REGION NO.	STATE	FED.AID PROJ.NO.			PLAN REF NO HD8
DATE					WASH			Washington State Department of Transportation	EXAMPLE 4-53
PLOTTED BY									
DESIGNED BY				JOB NUMBER					SHEET OF SHEETS
ENTERED BY									
CHECKED BY				CONTRACT NO.		LOCATION NO.	DATE P.E. STAMP BOX	DATE P.E. STAMP BOX	
PROJ. ENGR.									STREAM DETAILS
REGIONAL ADM.	REVISION	DATE	BY						

LEGEND

100	EXISTING INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
BF	EXISTING BURIED FIBER
BP	EXISTING BURIED POWER
	ROCK FOR EROSION AND SCOUR PROTECTION, CLASS B
1	POINT TABLE #

NOTES:

1. SEE SHEET HD9 FOR ROCK FOR EROSION AND SCOUR PROTECTION CLASS B FOR DETAILS.
2. SEE BRIDGE SHEETS FOR STRUCTURES AND WALL DETAILS.
3. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR ROCK FOR EROSION AND SCOUR PROTECTION MATERIAL AND PLACEMENT.



ROCK FOR EROSION AND SCOUR PROTECTION CLASS B

#	STATION	ELEVATION
1	PC 51+53.73 (10.31' LT.)	57.1'
2	PC 52+00.00 (19.60' LT.)	57.8'
3	PC 52+50.00 (28.97' LT.)	58.5'
4	PC 53+00.00 (19.52' LT.)	59.2'
5	PC 53+50.00 (13.22' LT.)	59.9'
6	PC 54+00.00 (22.77' LT.)	60.6'
7	PC 54+50.00 (27.10' LT.)	61.3'
8	PC 55+00.00 (13.33' LT.)	62.0'
9	PC 55+50.00 (24.57' LT.)	62.7'
10	PC 56+00.00 (19.22' LT.)	63.3'
11	PC 56+22.14 (52.33' LT.)	63.7'

ROCK FOR EROSION AND SCOUR PROTECTION CLASS B

#	STATION	ELEVATION
12	PC 50+49.11 (13.97' RT.)	55.6'
13	PC 51+00.00 (17.50' RT.)	56.3'
14	PC 51+50.00 (29.59' RT.)	57.0'
15	PC 52+00.00 (21.58' RT.)	57.8'
16	PC 52+50.00 (11.03' RT.)	58.5'
17	PC 53+00.00 (21.87' RT.)	59.2'
18	PC 53+18.57 (26.79' RT.)	57.9'
19	PC 53+63.39 (46.44' RT.)	60.2'
20	PC 53+75.62 (69.38' RT.)	60.2'

NOTE TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A SCOUR PROTECTION PLAN VIEW SHEET SHOWING BURIED ROCK REVETMENT WITHIN A BRIDGE OPENING. PLAN SHOULD INCLUDE MATERIAL TYPE AND EXTENTS WITH CONTROL POINTS FOR CONSTRUCTION.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-54.dgn				
TIME				REGION NO.	STATE
DATE					WASH
PLOTTED BY				JOB NUMBER	
DESIGNED BY					
ENTERED BY					
CHECKED BY				CONTRACT NO.	
PROJ. ENGR.					
REGIONAL ADM.	REVISION	DATE	BY		

FED.AID PROJ.NO.

LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

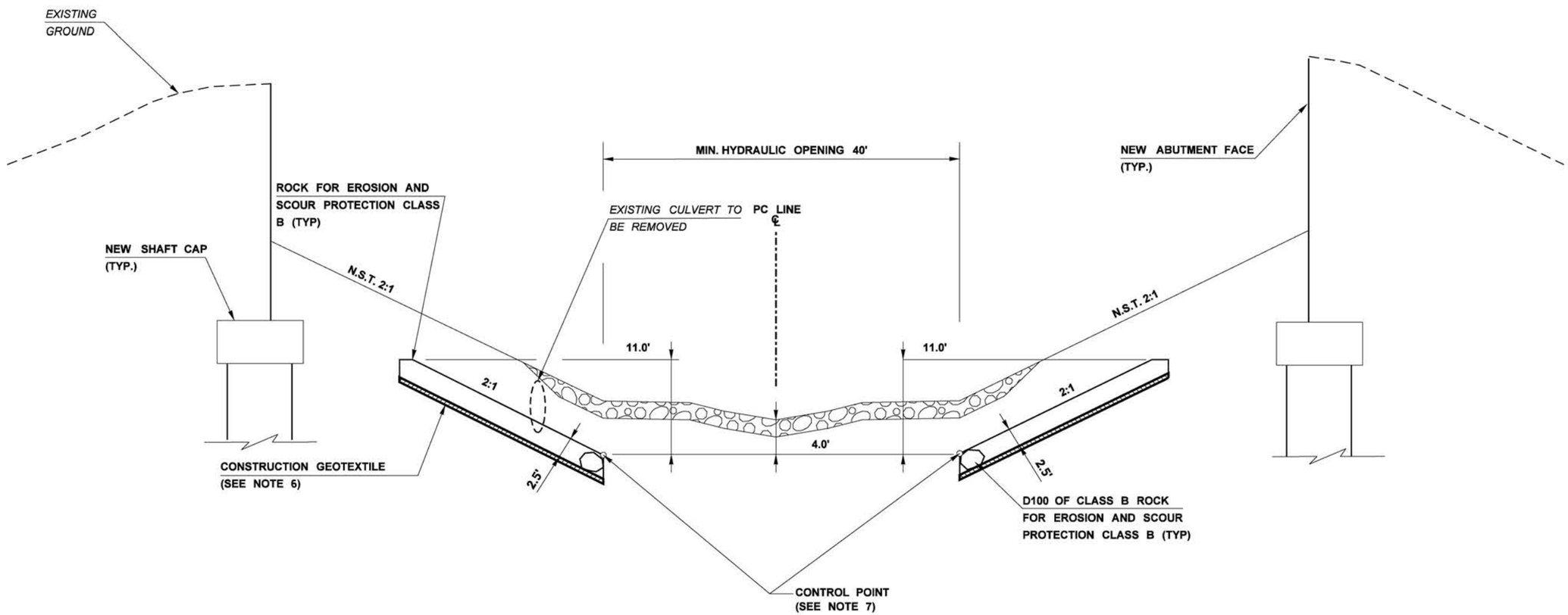
Washington State Department of Transportation

EXAMPLE 4-54

SCOUR PROTECTION PLAN

PLAN REF NO HN4

SHEET OF SHEETS



NOTES:

1. SEE STANDARD SPECIFICATIONS SECTION 8-30 "STREAMS, RIVERS, AND WATERBODIES" FOR ROCK FOR EROSION AND SCOUR PROTECTION MATERIAL AND PLACEMENT.
2. SEE SHEET HD8 FOR STREAM DETAILS.
3. SEE SHEET HN4 FOR SCOUR PROTECTION PLAN DETAILS.
4. SEE BRIDGE SHEETS FOR STRUCTURES AND WALL DETAILS.
5. "N.S.T." DENOTES NOT STEEPER THAN.
6. A NON-WOVEN, HIGH-SURVIVABILITY GEOTEXTILE FOR PERMANENT EROSION CONTROL BE UTILIZED (IN ACCORDANCE WITH STANDARD SPECIFICATION 9-33.2(1), TABLE 4.
7. SEE SHEET HN4 FOR CONTROL TABLE.

ROCK FOR EROSION AND SCOUR PROTECTION TYPICAL SECTION

NOT TO SCALE

NOTES TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A SCOUR PROTECTION DETAIL SHEET SHOWING BURIED ROCK REVETMENT WITHIN A BRIDGE OPENING. DETAIL SHOULD INCLUDE MATERIAL TYPE, THICKNESS AND FILTER MATERIAL.
2. NOT ALL SHEETS REFERENCED IN NOTES AND DETAILS HAVE BEEN INCLUDED.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-55.dgn						
TIME				REGION NO.	STATE	FED.AID PROJ.NO.
DATE					WASH	
PLOTTED BY				JOB NUMBER		
DESIGNED BY						
ENTERED BY						
CHECKED BY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.						
REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-55

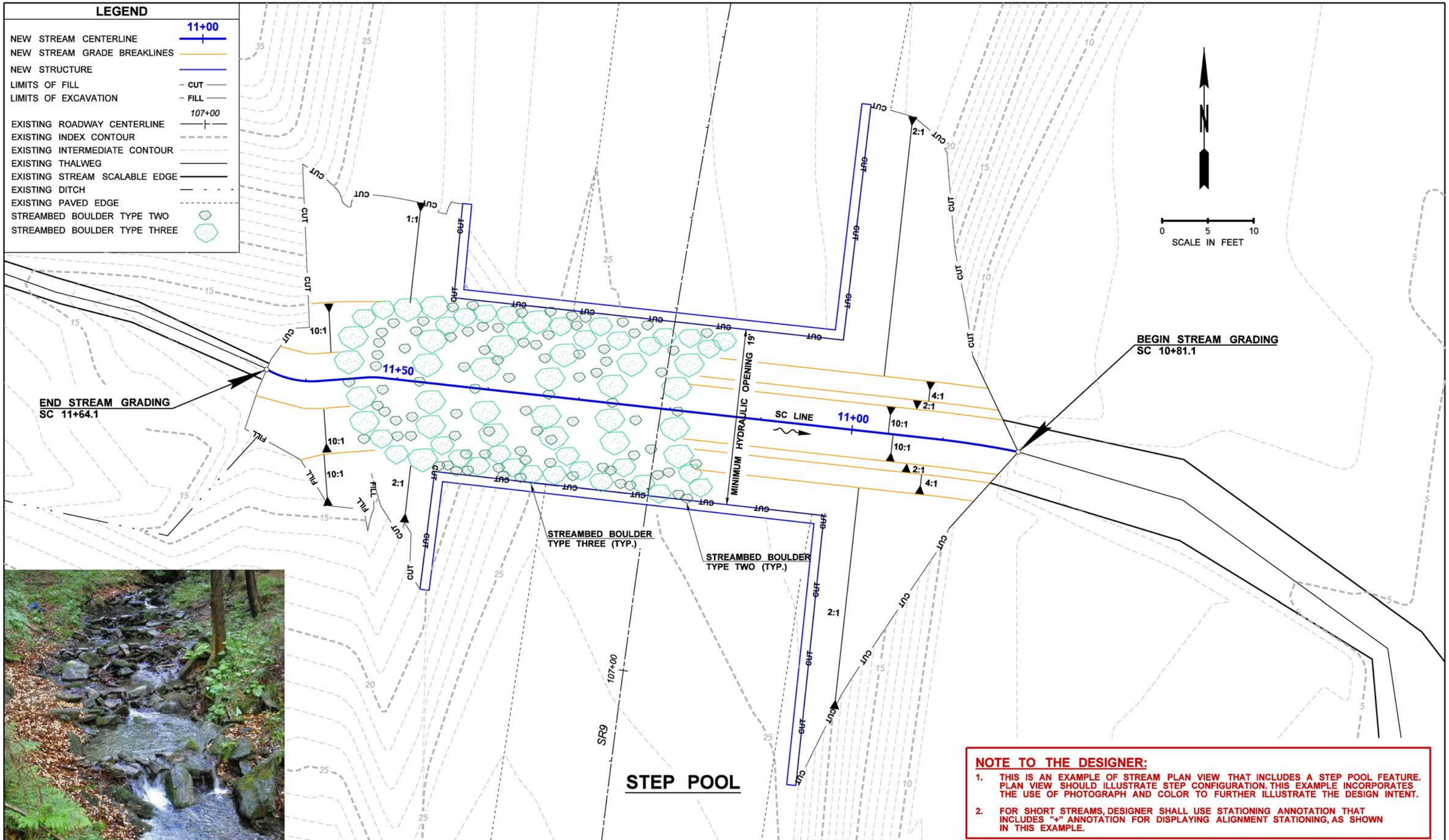
SCOUR PROTECTION DETAILS

PLAN REF NO HD9

SHEET OF SHEETS

LEGEND

- NEW STREAM CENTERLINE (11+00)
- NEW STREAM GRADE BREAKLINES
- NEW STRUCTURE
- LIMITS OF FILL (CUT)
- LIMITS OF EXCAVATION (FILL)
- EXISTING ROADWAY CENTERLINE (107+00)
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING THALWEG
- EXISTING STREAM SCALABLE EDGE
- EXISTING DITCH
- EXISTING PAVED EDGE
- STREAMBED BOULDER TYPE TWO
- STREAMBED BOULDER TYPE THREE



NOTE TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF STREAM PLAN VIEW THAT INCLUDES A STEP POOL FEATURE. PLAN VIEW SHOULD ILLUSTRATE STEP CONFIGURATION. THIS EXAMPLE INCORPORATES THE USE OF PHOTOGRAPH AND COLOR TO FURTHER ILLUSTRATE THE DESIGN INTENT.
2. FOR SHORT STREAMS, DESIGNER SHALL USE STATIONING ANNOTATION THAT INCLUDES "+" ANNOTATION FOR DISPLAYING ALIGNMENT STATIONING, AS SHOWN IN THIS EXAMPLE.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-56.dgn		
TIME			
DATE			
PLOTTED BY			
DESIGNED BY			
ENTERED BY			
CHECKED BY			
PROJ. ENGR.			
REGIONAL ADM.	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-56

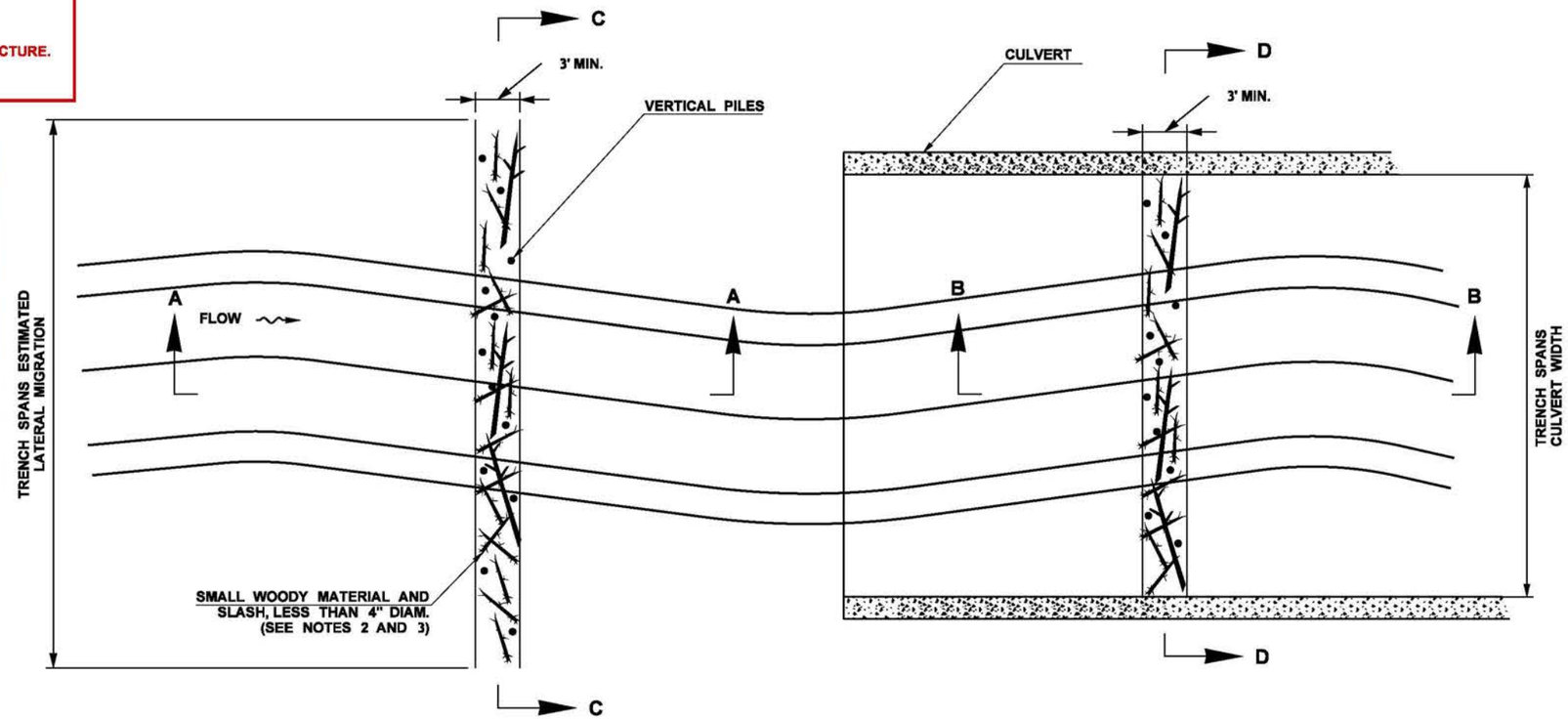
STREAM PLAN

PLAN REF NO HN5

SHEET OF SHEETS

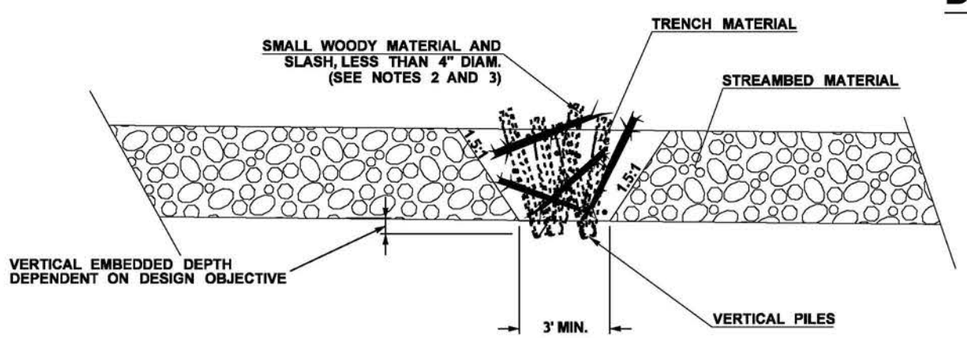
NOTE TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A DEFORMABLE GRADE CONTROL STRUCTURE PLAN VIEW SHEET ILLUSTRATING INSTALLATION BOTH OUTSIDE AND WITHIN A PROPOSED STRUCTURE. DEPTH OF TRENCH IS DEPENDENT ON LONG TERM DEGRADATION AND WIDTH IS DEPENDENT ON LATERAL MIGRATION.



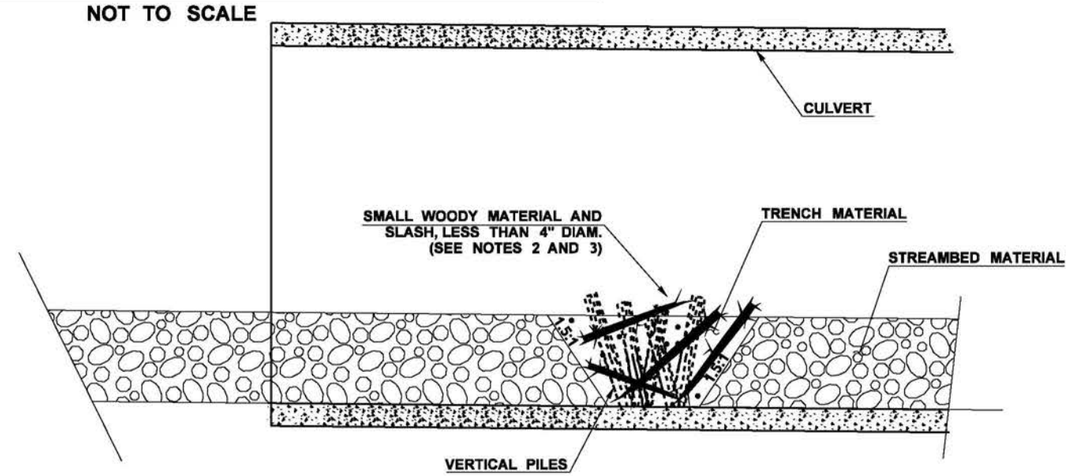
DEFORMABLE GRADE CONTROL STRUCTURE

NOT TO SCALE



SECTION A-A

NOT TO SCALE



SECTION B-B

NOT TO SCALE

NOTES:

1. SEDIMENT/WOOD RATIO BASED ON DESIGN OBJECTIVES AND SITE CONDITIONS.
2. SEE SPECIAL PROVISIONS "WOODY MATERIAL" FOR DESCRIPTIONS, MATERIALS AND CONSTRUCTION REQUIREMENTS.
3. SMALL WOODY MATERIAL AND SLASH SHALL EXTEND 4 - 6 INCHES ABOVE FINISHED STREAMBED GRADE.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-57.dgn							
TIME				REGION NO.	STATE	FED.AID PROJ.NO.	
DATE					WASH		
PLOTTED BY							
DESIGNED BY				JOB NUMBER			
ENTERED BY							
CHECKED BY				CONTRACT NO.		LOCATION NO.	
PROJ. ENGR.							
REGIONAL ADM.	REVISION	DATE	BY				

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

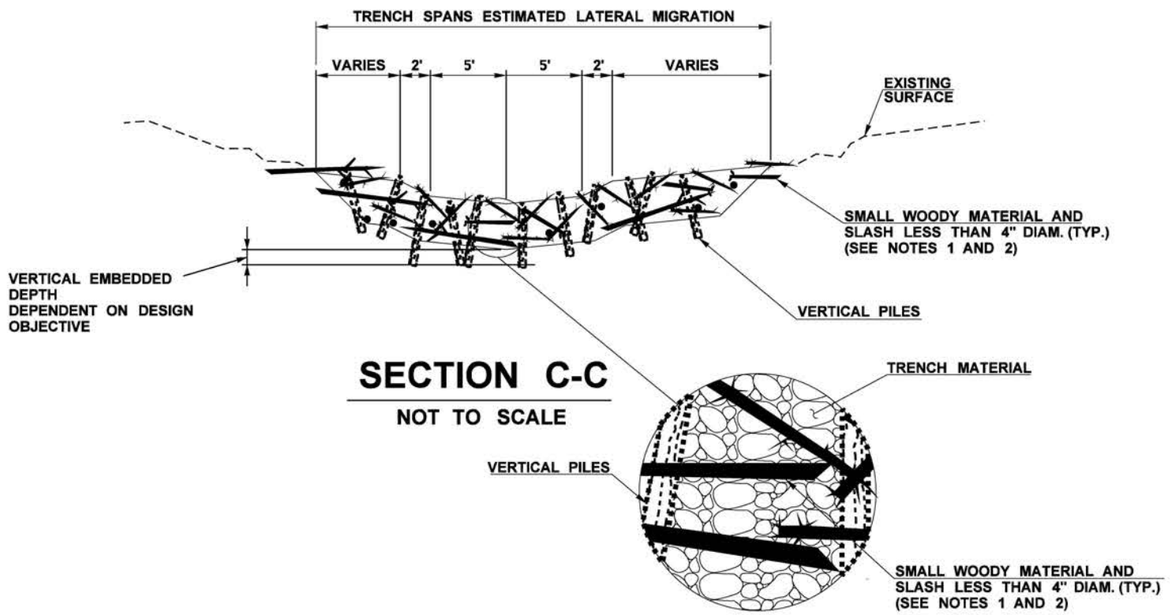
Washington State Department of Transportation

EXAMPLE 4-57

STREAM DETAIL

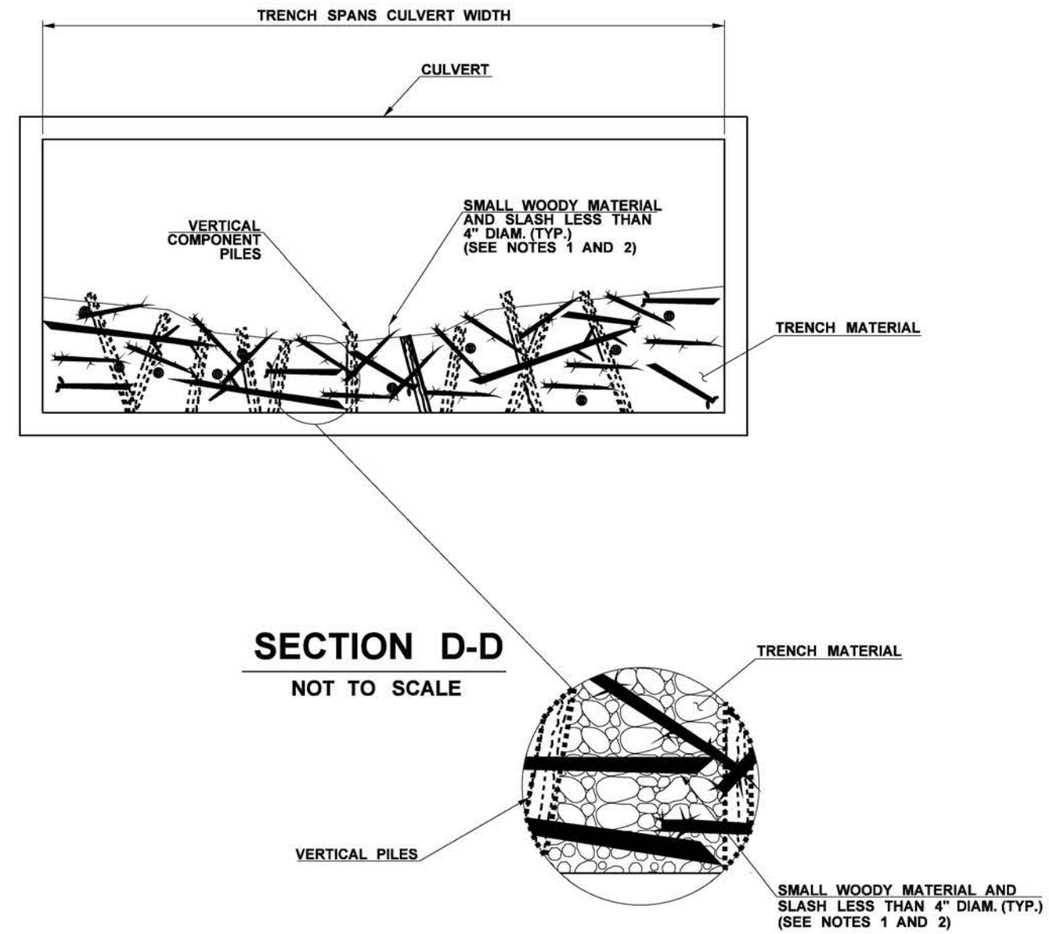
PLAN REF NO HD10

SHEET OF SHEETS



SECTION C-C

NOT TO SCALE



SECTION D-D

NOT TO SCALE

DEFORMABLE GRADE CONTROL STRUCTURE

NOT TO SCALE

NOTES:

1. SEE SPECIAL PROVISIONS "WOODY MATERIAL" FOR DESCRIPTION, MATERIALS AND CONSTRUCTION REQUIREMENTS
2. SMALL WOODY MATERIAL AND SLASH SHALL EXTEND 4 - 6 INCHES ABOVE FINISHED STREAMBED GRADE.

NOTE TO THE DESIGNER:

1. THIS IS AN EXAMPLE OF A DEFORMABLE GRADE CONTROL STRUCTURE SECTIONS SHEET. DEPTH OF TRENCH IS DEPENDENT ON LONG TERM DEGRADATION AND WIDTH IS DEPENDENT ON EXPECTED LATERAL MIGRATION.

FILE NAME c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-58.dgn						
TIME				REGION NO.	STATE	FED.AID PROJ.NO.
DATE					WASH	
PLOTTED BY						
DESIGNED BY				JOB NUMBER		
ENTERED BY						
CHECKED BY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.						
REGIONAL ADM.	REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-58

STREAM DETAILS

PLAN REF NO HD11

SHEET OF SHEETS

QUANTITY TABULATION

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	REMOVING GUARDRAIL	REMOVING GUARDRAIL ANCHOR	SHOULDER FINISHING	PLANING BITUMINOUS PAVEMENT		BEAM GUARDRAIL TYPE 31 - 8 FT. LONG POST	BEAM GUARDAIL TYPE 31	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	BEAM GUARDRAIL ANCHOR TYPE 10	PAINT LINE	PLASTIC WIDE LANE LINE	PLASTIC CROSSWALK LINE	PLASTIC STOP LINE	CENTERLINE RUMBLE STRIP	RECESSED PAVEMENT MARKER	SEE GENERAL NOTES
		L.F.	EACH	MI.	S.Y.		L.F.	L.F.	EACH	EACH	L.F.	L.F.	S.F.	L.F.	MI.	HUND	
PM1-1	100+00 TO 100+75				230												7
PM1-2	217+70 (28' LT TO 217+90 (28' LT													20			4
PM1-3	217+90 (11' LT.) TO 218+15 (78' LT.)											130					1, 2
PM1-4	218+15 (28' LT.) TO 218+27 (28' LT.)													10			4
PM1-5	218+80 (28' LT.) TO 221+50 (28' LT.)											270					1, 2
PM1-6	258+55 TO 259+30				230												8
PM1-7	259+30 TO 272+25				4440												
PM1-8	264+55 (6' RT.) TO 265+50 (6' RT.)											95					1, 2
PM1-9	265+50 (6' LT.) TO 265+50 (22' RT.)													30			4
PM1-10	265+55 (LT.) TO 265+63 (RT.)												160				3
PM1-11	265+65 (LT.) TO 265+90 (LT.)												150				3
PM1-12	265+68 (55' LT.) TO 265+90 (55' LT.)													30			4
PM1-13	265+90 (LT.) TO 266+17 (LT.)												180				3
PM1-14	266+17 (LT.) TO 266+25 (RT.)												150				3
PM1-15	266+30 (25' LT.) TO 266+30 (6' RT.)													30			4
PM1-16	266+25 (34' LT.) TO 266+33 (42' LT.)													10			4
PM1-17	266+25 (RT.) TO 266+40 (RT.)												50				3
PM1-18	265+35 (RT.) TO 266+45 (RT.)											110					1, 2
PM1-19	266+30 (6' RT.) TO 267+35 (6' RT.)											105					1, 2
PM1-20	269+07 (LT.) TO 269+15 (RT.)												120				3
	100+00 TO 218+00			2.23							35400				2.17	2.01	1, 5, 6, 9
	110+15 TO 110+90				230												8
	110+90 TO 114+45				870												
	111+65 TO 111+82 (19' RT.)													20			4
	113+14 TO 113+30 (14' LT.)													20			4
	114+45 TO 114+96 (BR. 300/1)				120												
	114+96 TO 115+21				60												
	115+21 TO 115+96				230												8
	117+73 TO 117+85 (18' RT.)													10			4
	145+64 TO 145+80 (18' LT.)													20			4
	145+80 TO 145+96 (18' RT.)													20			4
	218+00 TO 260+00			0.79							12600				0.75	0.94	1, 5, 6, 9
	222+47 (34.5' RT.) TO 223+91 (21.5' RT.)	115	2				38	50	1	1							10
	246+85 TO 247+60				230												8
	247+60 TO 247+85				80												
	247+85 TO 248+50 (BR. 300/3)				160												
	248+50 TO 248+75				60												
	248+75 TO 249+50				230												8
	260+00 TO 272+25										4360					0.47	1, 6
	SHEET TOTAL	115	2	3.02	7170		38	50	1	1	52360	710	810	220	2.92	3.42	
	PROJECT TOTAL	115	2	3.02	7170		38	50	1	1	52360	710	810	220	2.92	3.42	

GENERAL NOTES:

1. SEE STD PLAN M-20.10.
2. SEE STD PLAN M-20.40.
3. SEE STD PLAN M-15.10.
4. SEE STD PLAN M-24.60.
5. SEE STD PLAN M-65.10.
6. SEE STD PLANS M-20.30 AND M-20.40. TYPE 2YY = 3.16 HUND, TYPE 2W = 0.26 HUND.
7. SEE "BUTT JOINT PLANING DETAIL", SHEET PD2.
8. SEE "TRANSITION PLANING DETAIL", SHEET PD2.
9. SEE SPECIAL PROVISION "BALLAST AND CRUSHED SURFACING".
10. SEE STD PLANS C-20.10, C-22.40, AND C-23.60, AND "GUARDRAIL PLAN", SHEET MD1.
11. SHOULDER FINISHING SHALL BE PLACED AT 10:1 SLOPE OR FLATTER FROM STA. 222+47 (RT) TO STA. 224+30 (RT).

NOTES:

- SEE SHEET QS1 FOR ADDITIONAL PAVEMENT MARKING QUANTITIES.
- SEE SHEET PD1 FOR ADDITIONAL PLANING QUANTITIES.
- ALL PLASTIC PAVEMENT MARKINGS SHALL BE TYPE D PLASTIC.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-59.dgn
TIME	3:13:28 PM
DATE	4/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.

JOB NUMBER

CONTRACT NO. | LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

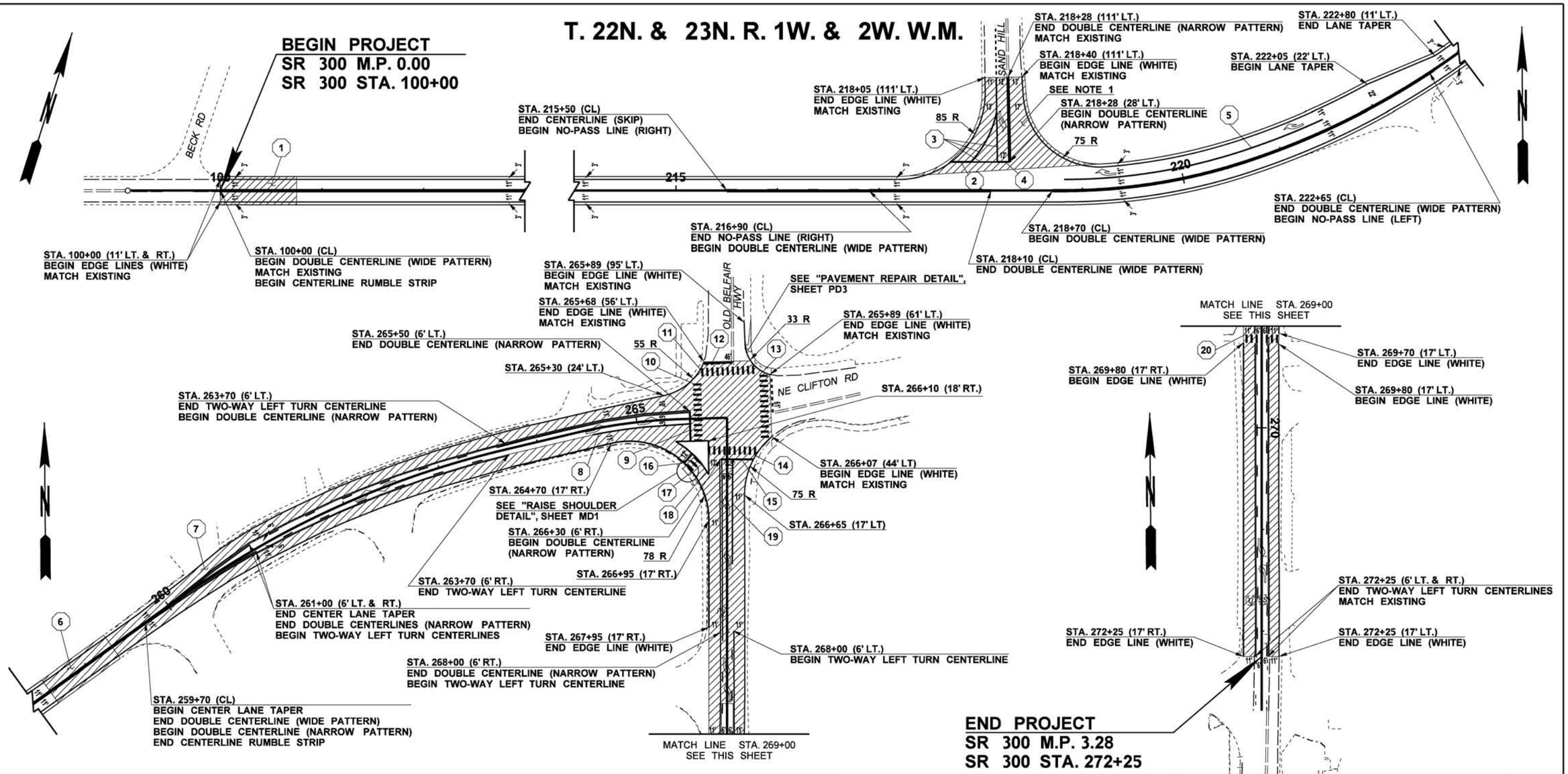
EXAMPLE 4-59

QUANTITY TABULATIONS - PAVING MISC.

PLAN REF NO **PVQ-1**

SHEET OF SHEETS

T. 22N. & 23N. R. 1W. & 2W. W.M.



LEGEND

EXISTING EDGE OF PAVED SHOULDER	EDGE OF PAVED SHOULDER	NO-PASS LINE OR TWO-WAY LEFT-TURN CENTERLINE
EXISTING CURB	TRAFFIC ARROW	
EXISTING EDGE LINE	EDGE LINE	QUANTITY TABULATION NOTE SEE SHEET QT1
EXISTING DOUBLE CENTERLINE	DOUBLE CENTERLINE	
EXISTING WIDE LINE	WIDE LINE	PLANING BITUMINOUS PAVEMENT
EXISTING STOP LINE	STOP LINE	
EXISTING CROSSWALK BAR	CROSSWALK BAR	EXISTING VALVE BOX TO BE ADJUSTED

NOTE TO THE DESIGNER:

1. THIS PLAN SHEET INCLUDES QUANTITY TAB NOTES IN CONJUNCTION WITH THE PREVIOUS EXAMPLE.

NOTES:

1. SEE SHEET PD1 FOR PAVING AT INTERSECTIONS AND ROAD APPROACHES.
2. SEE SHEET QS1 FOR ADDITIONAL PAVEMENT MARKING QUANTITIES.
3. ALL PLASTIC PAVEMENT MARKINGS SHALL BE TYPE D PLASTIC.

0 50 100
SCALE IN FEET

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-60.dgn
TIME	3:14:51 PM
DATE	4/18/2025
PLOTTED BY	WillisD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WA	

JOB NUMBER

CONTRACT NO. | LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

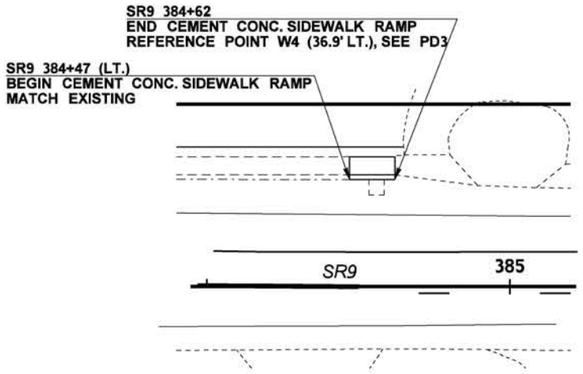
Washington State Department of Transportation

EXAMPLE 4-60

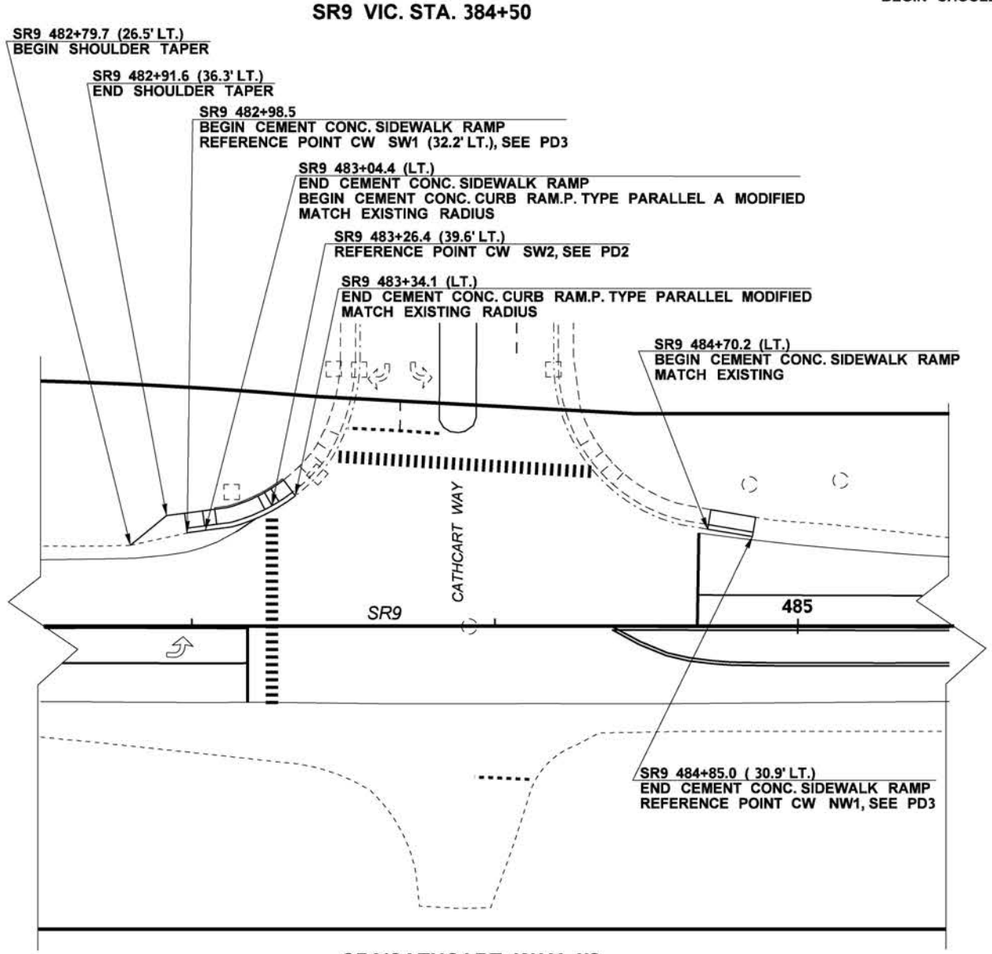
PAVING AND PAVEMENT MARKING PLAN

PLAN REF NO PM1

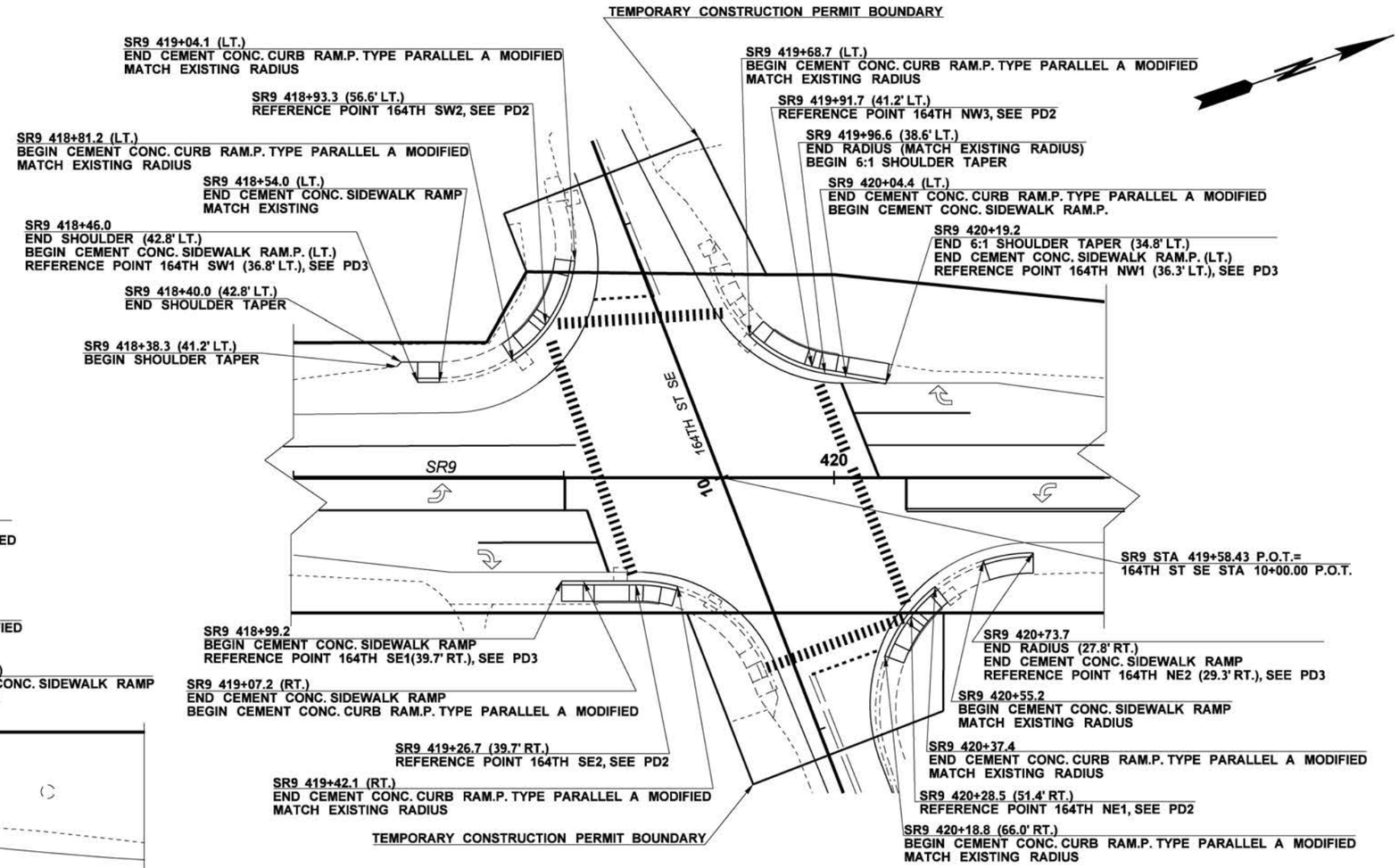
SHEET OF SHEETS



SR9 VIC. STA. 384+50



SR9/CATHCART WAY I/S



SR9/164TH ST SE I/S

LEGEND	
EXISTING	
———	RIGHT OF WAY
———	TEMP. CONST. PERMIT
○	MANHOLE
⊡	CATCH BASIN
- - - - - - - -	EDGE OF PAVEMENT
—·—·—·—	CURB
— — — — —	SIDEWALK
NEW	
———	EDGE OF PAVEMENT

NOTES TO THE DESIGNER:

1. THESE DETAILS ARE EMPHASIZING ADA DESIGN FOR CONSTRUCTION.
2. THIS DESIGN REPRESENTS A MOBILE PAVING OPERATION.

0 50 100
SCALE IN FEET

NOTES:

1. SEE PAVING PLANS AND ROADWAY SECTIONS FOR PAVEMENT WIDTHS AND LIMITS OF PLANING BITUMINOUS PAVEMENT.
2. SEE ALIGNMENT AND RIGHT OF WAY PLANS FOR TEMPORARY CONSTRUCTION PERMIT AND RIGHT OF WAY BOUNDARIES.
3. SEE PAVEMENT MARKING PLANS FOR RELATED LEGEND ITEMS AND DETAILS.
4. SEE TESC PLANS FOR RELATED LEGEND ITEMS AND DETAILS.
5. SEE SHEETS PD2 & PD3 FOR ADDITIONAL SIDEWALK AND CURB RAM.P. DETAILS.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-61.dgn					
TIME	4:18:32 PM					
DATE	2/14/2025					
PLOTTED BY	WilliSD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

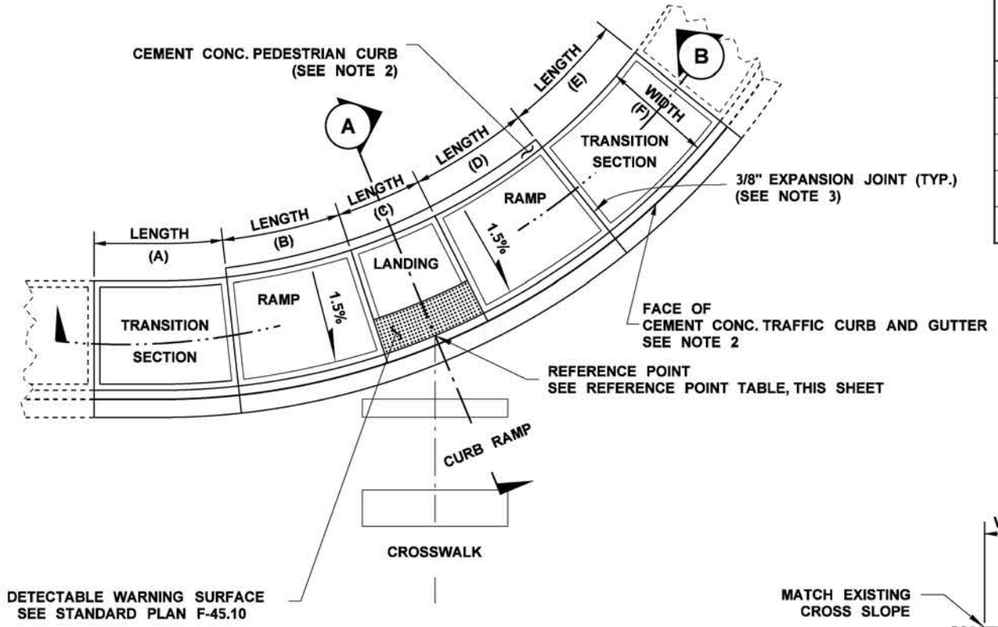
Washington State Department of Transportation

EXAMPLE 4-61

PAVING DETAIL

PLAN REF NO PD1

SHEET OF SHEETS

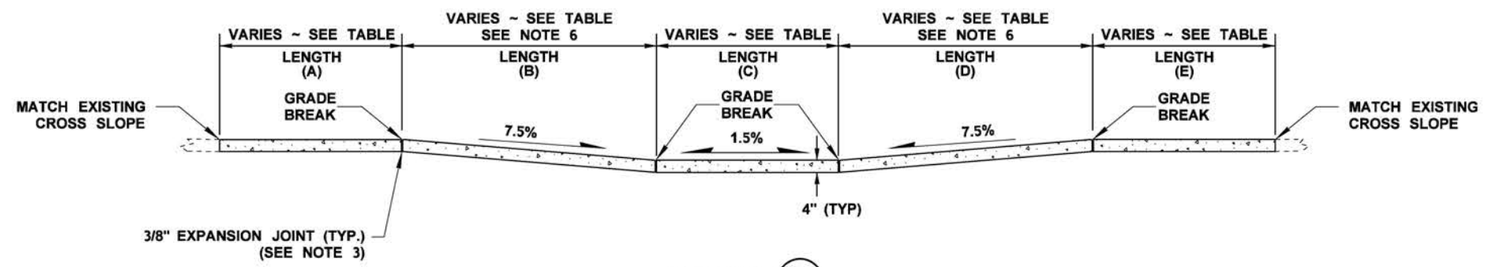


PLAN VIEW
NOT TO SCALE

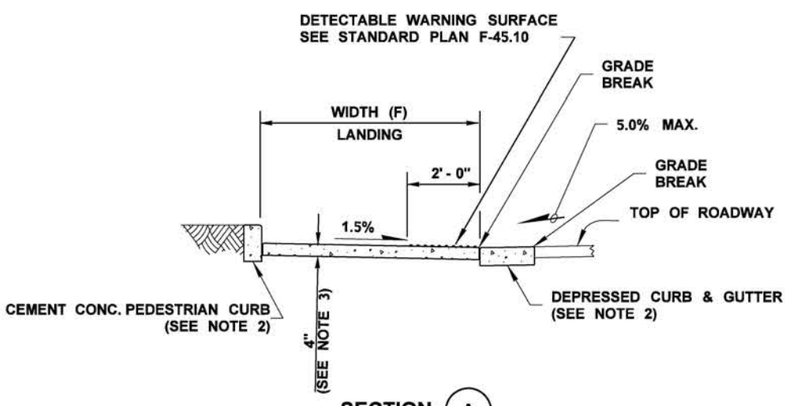
CURB RAMP REF. POINT ID SEE SHEET PD1	APPROXIMATE LENGTH (SEE NOTES 6 AND 7)					WIDTH
	(A)	(B)	(C)	(D)	(E)	(F)
164TH SW2	5'	8'	5'	15'	5'	6'
164TH NW3	5'	15'	5'	6'	4'	6'
164TH SE2	5'	6'	5'	13'	4'	6'
164TH NE1	3'	7'	5'	8'	5'	6'
CW SW2	4'	15'	5'	5'	N/A	5'

NOTES:

1. 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.
2. SEE STANDARD PLAN F-10.12 FOR CURB, AND CURB AND GUTTER DETAILS.
3. SEE STANDARD PLAN F-30.10 FOR CEMENT CONCRETE SIDEWALK DETAILS.
4. THE BID ITEM "CEMENT CONC. CURB RAMP TYPE PARALLEL A MODIFIED" INCLUDES THE ADJACENT CEMENT CONC. CURB AND GUTTER, CEMENT CONC. PEDESTRIAN CURB, AND CEMENT CONC. SIDEWALKS. SEE SPECIAL PROVISION "CEMENT CONCRETE SIDEWALKS" FOR ADDITIONAL INCLUSIONS.
5. APPROXIMATE LENGTHS ARE FOR INFORMATIONAL PURPOSES ONLY. GRADE REQUIREMENTS SHALL BE MET.
6. THE CURB RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET AND SHALL BE AS FLAT AS FEASIBLE.
7. CEMENT CONC. CURB RAMP TYPE PARALLEL A MODIFIED SHALL RECEIVE A BROOM FINISH. SEE SECTION 8-14.3(3).
8. THE USE OF SLOPES TAKE PRECEDENCE OVER THE USE OF DIMENSION IN ADA DESIGN.



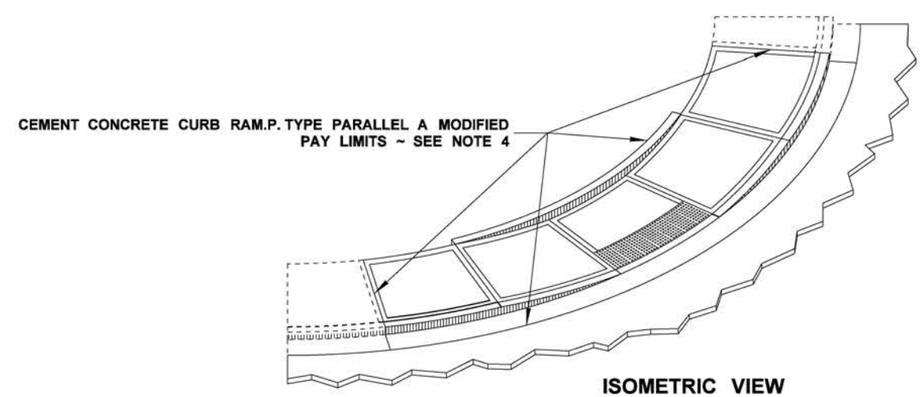
SECTION (B)



SECTION (A)

NOTES TO THE DESIGNER:

1. THESE DETAILS ARE EMPHASIZING ADA DESIGN FOR CONSTRUCTION.
2. CONSULT WITH YOUR REGION ADA COORDINATOR. THIS DESIGN IS PROJECT SPECIFIC AND YOUR REGION MAY HAVE OTHER REQUIREMENTS FOR CONSTRUCTABILITY.
3. THE "APPROXIMATE LENGTH" SCHEDULE IS FOR INFORMATION ONLY.
4. NOTE 8 WAS ADDED TO EMPHASIZE THE USE OF SLOPE VERSUS DIMENSIONS FOR ADA DESIGN.



ISOMETRIC VIEW

CEMENT CONC. CURB RAM.P. TYPE PARALLEL A MODIFIED

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-62.dgn					
TIME	4:32:01 PM			REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	2/14/2025					
PLOTTED BY	WilliSD			JOB NUMBER		
DESIGNED BY						
ENTERED BY						
CHECKED BY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-62

PAVING DETAIL

PLAN REF NO **PD2**

SHEET OF SHEETS

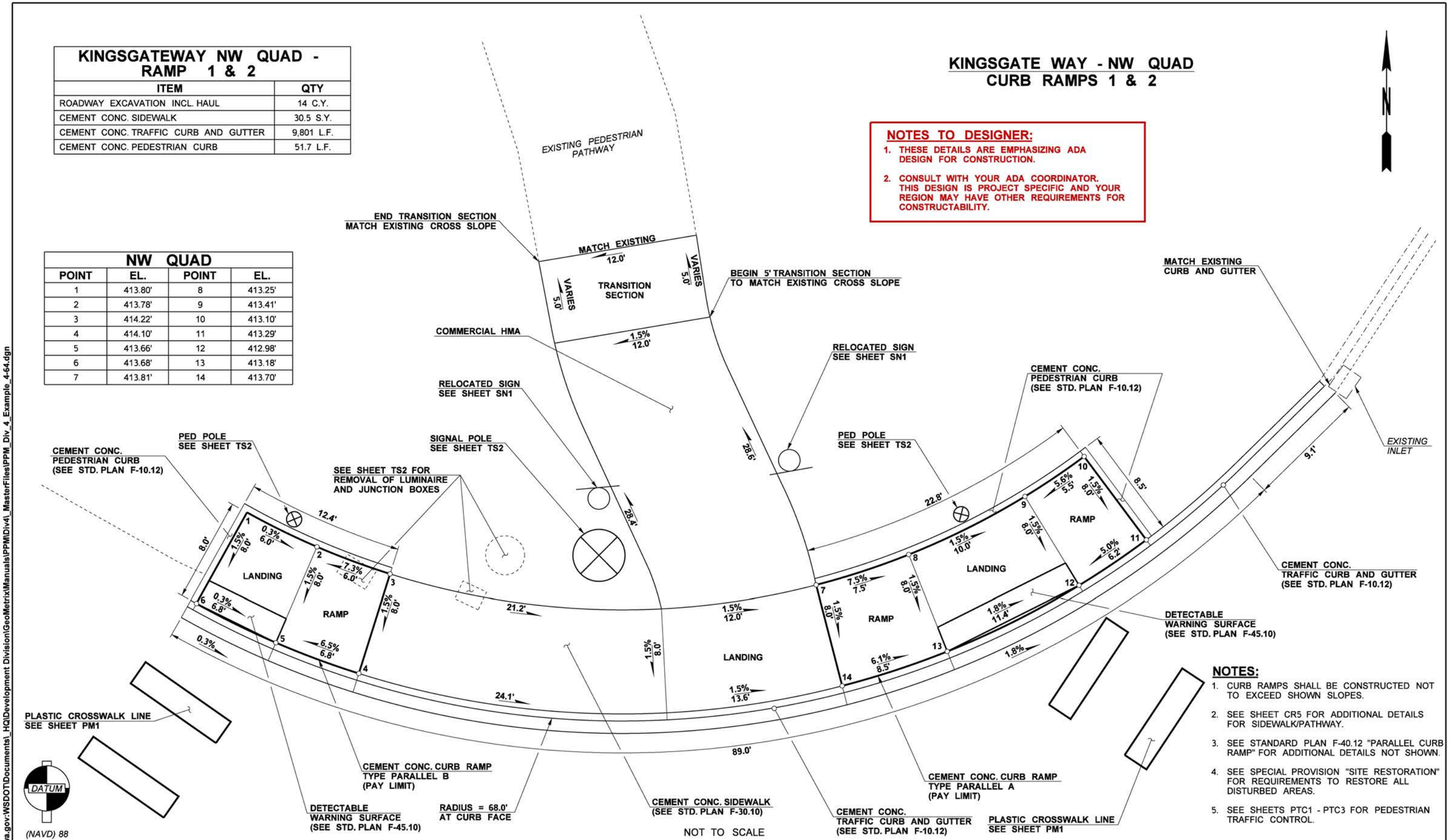
KINGSGATEWAY NW QUAD - RAMP 1 & 2	
ITEM	QTY
ROADWAY EXCAVATION INCL. HAUL	14 C.Y.
CEMENT CONC. SIDEWALK	30.5 S.Y.
CEMENT CONC. TRAFFIC CURB AND GUTTER	9,801 L.F.
CEMENT CONC. PEDESTRIAN CURB	51.7 L.F.

NW QUAD			
POINT	EL.	POINT	EL.
1	413.80'	8	413.25'
2	413.78'	9	413.41'
3	414.22'	10	413.10'
4	414.10'	11	413.29'
5	413.66'	12	412.98'
6	413.68'	13	413.18'
7	413.81'	14	413.70'

KINGSGATE WAY - NW QUAD
CURB RAMPS 1 & 2

NOTES TO DESIGNER:

1. THESE DETAILS ARE EMPHASIZING ADA DESIGN FOR CONSTRUCTION.
2. CONSULT WITH YOUR ADA COORDINATOR. THIS DESIGN IS PROJECT SPECIFIC AND YOUR REGION MAY HAVE OTHER REQUIREMENTS FOR CONSTRUCTABILITY.



NOTES:

1. CURB RAMPS SHALL BE CONSTRUCTED NOT TO EXCEED SHOWN SLOPES.
2. SEE SHEET CR5 FOR ADDITIONAL DETAILS FOR SIDEWALK/PATHWAY.
3. SEE STANDARD PLAN F-40.12 "PARALLEL CURB RAMP" FOR ADDITIONAL DETAILS NOT SHOWN.
4. SEE SPECIAL PROVISION "SITE RESTORATION" FOR REQUIREMENTS TO RESTORE ALL DISTURBED AREAS.
5. SEE SHEETS PTC1 - PTC3 FOR PEDESTRIAN TRAFFIC CONTROL.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-63.dgn					
TIME	4:34:11 PM					
DATE	2/14/2025					
PLOTTED BY	WilliSD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-63

CURB RAMP PLAN

PLAN REF NO PD3

SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\GeoMetrix\Manuals\PPM\Div4_MasterFiles\PPM_Div_4_Example_4-64.dgn

QUANTITY TABULATION - PAVEMENT MARKINGS

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	FLEXABLE GUIDE POST	PAINT LINE	PLASTIC LINE		PAINTED WIDE LINE	PLASTIC WIDE LINE	PLASTIC CROSSWALK LINE		PLASTIC STOP LINE	PLASTIC TRAFFIC ARROW		PAINTED DRAINAGE MARKINGS	SHOULDER RUMBLE STRIP TYPE	RAISED PAVEMENT MARKER TYPE		SEE GENERAL NOTES
PM1-1	L 1450+00 (47' LT.) TO L 1463+75 (74' LT.)		1375														
PM1-2	L 1450+00 (35' LT.) TO L 1520+00 (35' LT.)		7000														
PM1-3	L 1450+00 (23' LT.) TO L 1520+00 (23' L.T)		7000														
PM1-4	L 1450+00 (11' LT.) TO L 1520+00 (11' LT.)		7000														
PM1-5	L 1450+00 (11' LT.) TO L 1520+00 (11' LT.)		7000														
PM1-6	L 1450+00 (23' LT.) TO L 1520+00 (23' LT.)		7000														
PM1-7	L 1450+00 (35' LT.) TO L 1520+00 (35' LT.)		7000														
PM1-8	L 1450+00 (47' LT.) TO L 1470+20 (78' RT.)		2020														
PM1-9	L 1455+04 (61' LT.)												1				6
PM1-10	L 1457+75 (47' LT.) TO L 1460+75 (53' LT.)		300														
PM1-11	L 1459+97 (70' LT.) AND (7' LT.)												2				6
PM1-12	L 1460+75.32 (53' LT.) TO L 1463+75 (74' LT.)					300											
PM1-13	L 1460+75 (47' LT.) TO L 1495+17 (47' LT.)		3442														
PM2-1	AL 1463+75 (15' LT.) TO AL 1483+46 (51' LT.)			1970													
PM2-2	AL 1463+75 (0' RT.) TO AL 1474+75 (0' RT.)						1100										
PM2-3	AL 1463+98 (19' LT.)												1				6
PM2-4	AL 1467+94 (19' LT.)												1				6
PM2-5	AL 1473+97 (22' LT.)												1				6
PM2-6	AL 1474+75 (0' RT.) TO AL 1483+50 (11' RT.)			875													
PM2-7	L 1463+98 (7' LT.)												1				6
PM2-8	L 1467+01 (47' RT.) TO L 1475+22 (47' RT.)					820											
PM2-9	L 1467+01 (47' RT.) TO L 1470+20 (63' RT.)		318														
PM2-10	L 1467+87 (70' RT.)												1				6
PM2-11	L 1473+99 (7' LT.)												1				6
PM2-12	L 1474+22 (47' RT.) TO L 1507+75 (47' RT.)		3254														
PM2-13	AR 1470+21 (0' LT.) TO AR 1474+21 (0' LT.)						400										
PM2-14	AR 1470+21 (0' RT.) TO AR 1483+39 (2' RT.)			1317													
PM2-15	AR 1474+21 (0' LT.) TO AR 1483+53 (2' LT.)			931													
PM3-1	AL 1477+45 (13' LT.) TO AL 1483+38 (13' LT.)			593													
PM3-2	AL 1483+46 (51' LT.) TO AL 1483+50 (11' RT.)							144									7
PM3-3	L 1478+03 (51' RT.)												1				6
PM3-4	L 1478+97 (50' LT.) AND L 1479+02 (50' RT.)												2				6
PM3-5	L 1479+99 (50' LT.) AND L 1480+03 (50' RT.)												2				6
	SHEET TOTAL		52709	5686		1120	1500	144					14				
	PROJECT TOTAL		52709	5686		1120	1500	144					14				

GENERAL NOTES:

1. SEE STANDARD PLAN "M-24.40" TYPE 1S
2. SEE STANDARD PLAN "M-24.40" TYPE 2SL
3. SEE STANDARD PLAN "M-24.40" TYPE 2SR
4. SEE STANDARD PLAN "M-24.40" TYPE 3SL
5. SEE STANDARD PLAN "M-24.40" TYPE 3SR
6. SEE STANDARD PLAN "M-24.60"
7. SEE STANDARD PLAN "M-15.10"

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-64.dgn
TIME	8:22:28 AM
DATE	2/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.

JOB NUMBER

CONTRACT NO. | LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

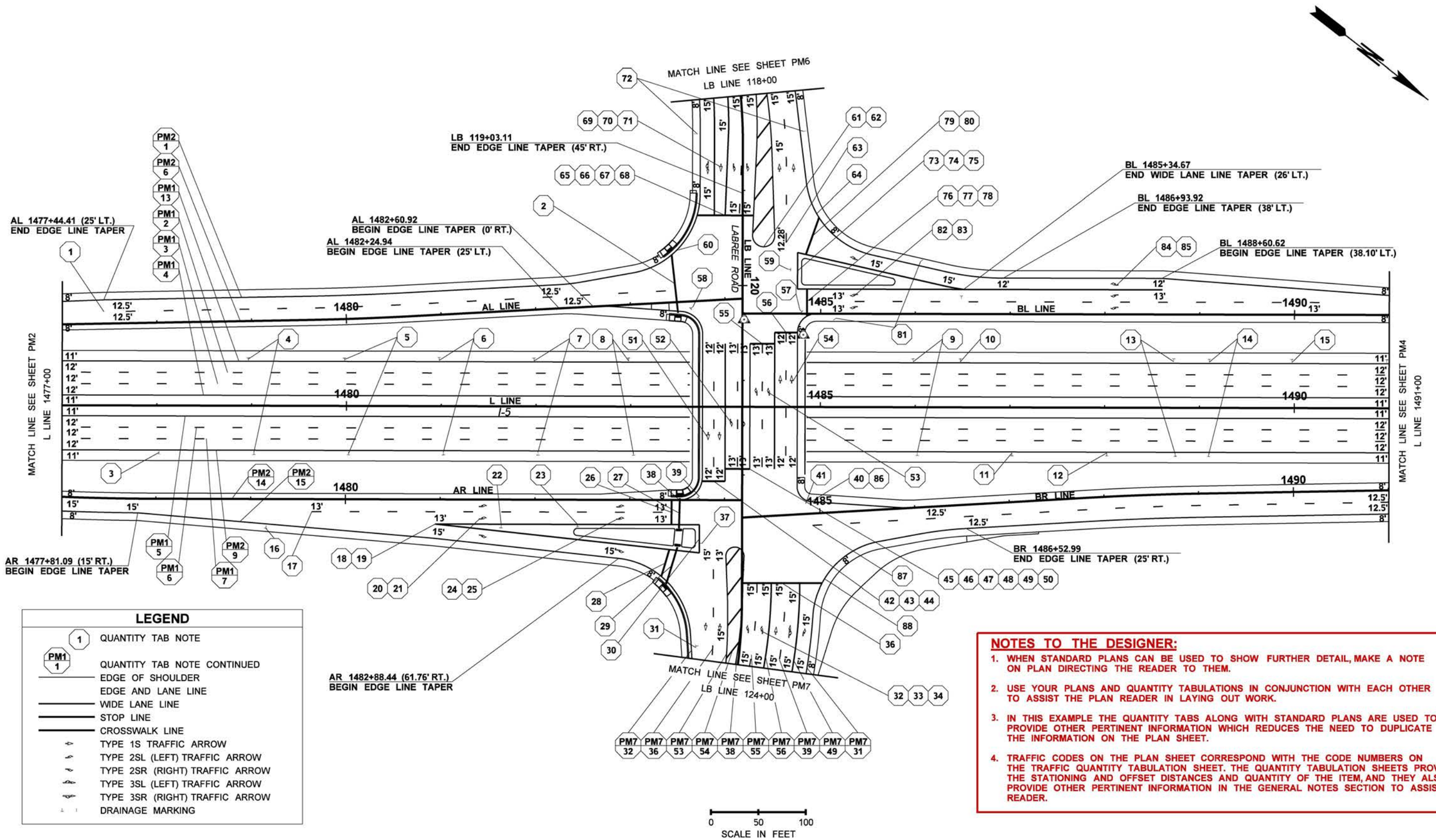
Washington State Department of Transportation

EXAMPLE 4-64

QUANTITY TABULATION - PAVEMENT MARKING

PLAN REF NO QTPM1

SHEET OF SHEETS



LEGEND

1	QUANTITY TAB NOTE
PM1 1	QUANTITY TAB NOTE CONTINUED
	EDGE OF SHOULDER
	EDGE AND LANE LINE
	WIDE LANE LINE
	STOP LINE
	CROSSWALK LINE
	TYPE 1S TRAFFIC ARROW
	TYPE 2SL (LEFT) TRAFFIC ARROW
	TYPE 2SR (RIGHT) TRAFFIC ARROW
	TYPE 3SL (LEFT) TRAFFIC ARROW
	TYPE 3SR (RIGHT) TRAFFIC ARROW
	DRAINAGE MARKING

NOTES TO THE DESIGNER:

1. WHEN STANDARD PLANS CAN BE USED TO SHOW FURTHER DETAIL, MAKE A NOTE ON PLAN DIRECTING THE READER TO THEM.
2. USE YOUR PLANS AND QUANTITY TABULATIONS IN CONJUNCTION WITH EACH OTHER TO ASSIST THE PLAN READER IN LAYING OUT WORK.
3. IN THIS EXAMPLE THE QUANTITY TABS ALONG WITH STANDARD PLANS ARE USED TO PROVIDE OTHER PERTINENT INFORMATION WHICH REDUCES THE NEED TO DUPLICATE THE INFORMATION ON THE PLAN SHEET.
4. TRAFFIC CODES ON THE PLAN SHEET CORRESPOND WITH THE CODE NUMBERS ON THE TRAFFIC QUANTITY TABULATION SHEET. THE QUANTITY TABULATION SHEETS PROVIDES THE STATIONING AND OFFSET DISTANCES AND QUANTITY OF THE ITEM, AND THEY ALSO PROVIDE OTHER PERTINENT INFORMATION IN THE GENERAL NOTES SECTION TO ASSIST THE READER.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-65.dgn						
TIME	8:17:11 AM						
DATE	2/20/2025						
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

SEE SHEET CT1
DATE
P.E. STAMP BOX

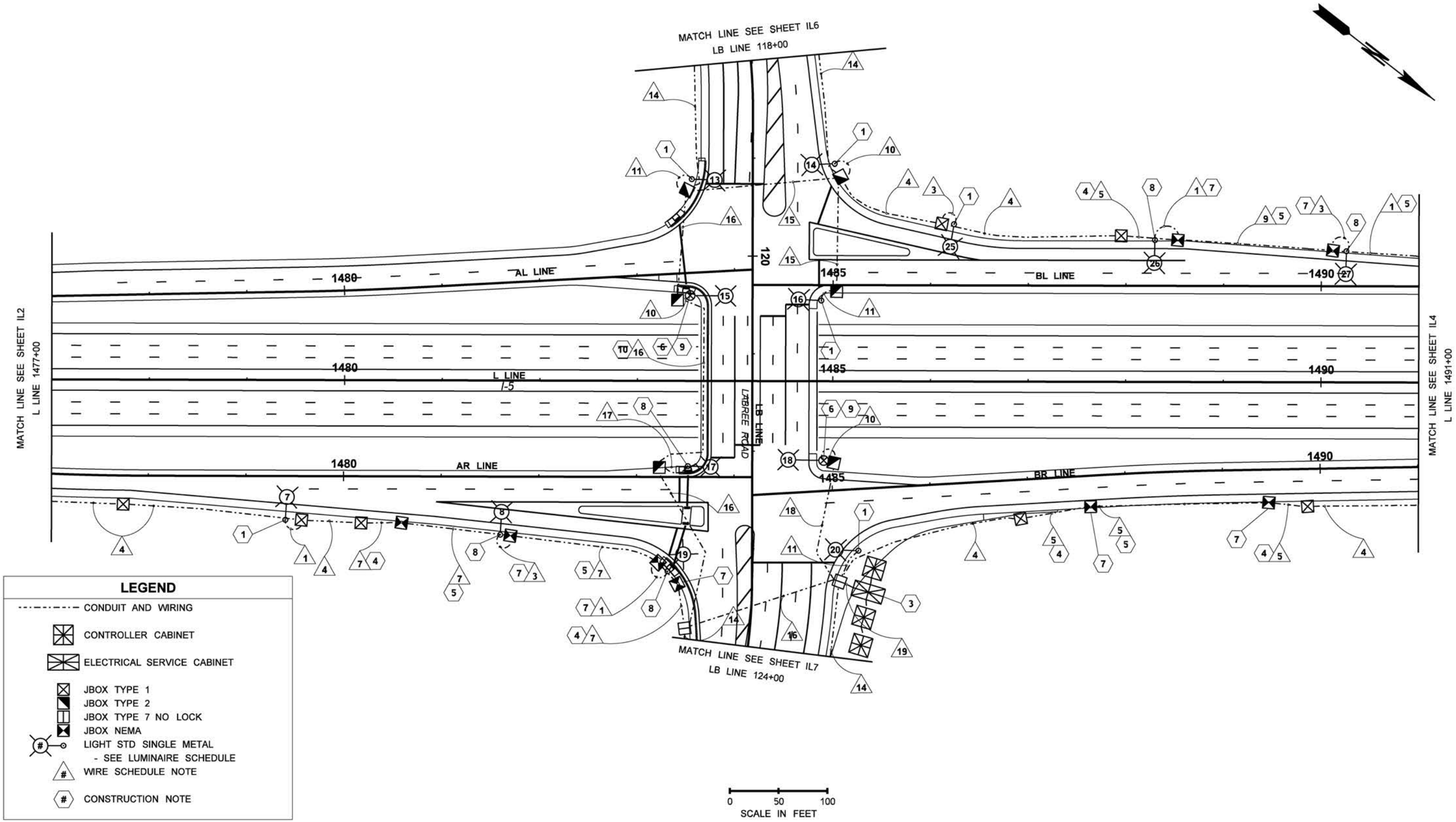
SEE SHEET CT1
DATE
P.E. STAMP BOX

Washington State
Department of Transportation

EXAMPLE 4-65

PAVEMENT MARKING PLAN

PLAN REF NO
PM3
SHEET
OF
SHEETS



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-66.dgn						
TIME	3:50:33 PM						
DATE	4/18/2025						
PLOTTED BY	WillisD						
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State
Department of Transportation

EXAMPLE 4-66

ILLUMINATION PLAN

PLAN REF NO
IL3

SHEET
OF
SHEETS

LUMINAIRE SCHEDULE — SERVICE NO. S*** ****

LUMINAIRE NUMBER	CIRCUIT	LOCATION STATION	LOCATION OFFSET	TYPE - DISTRIBUTION - WATTAGE	MAST ARM	H1	BASE TYPE	COMMENTS
1	*	L 1453+06.4	68.6' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
2	*	L 1455+44.3	73.4' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
3	*	L 1466+85.4	77.1' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
4	*	L 1469+17.5	89.0' RT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
5	*	AL 1473+78.4	33.6' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
6	*	AL 1476+10.4	38.4' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
7	*	AR 1479+40.4	44.8' RT.	III - MED CUTOFF - 310 HPS	16'	40'		
8	*	AR 1481+60.6	59.6' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
9	*	LB 115+59.2	51.9' RT.	III - MED CUTOFF - 310 HPS	16'	40'		
10	*	LB 115+51.7	51.7' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
11	*	LB 117+39.2	57.3' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
12	*	LB 117+31.7	69.9' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
13	*	LB 119+12.8	55.5' RT.	III - MED CUTOFF - 310 HPS	16'	40'		
14	*	LB 119+05.5	83.8' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
15	*	LB 120+40.6	63.9' RT.	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
16	*	LB 120+45.5	70.4' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
17	*	LB 122+15.4	65.9' RT.	III - MED CUTOFF - 310 HPS	16'	40'		
18	*	LB 121+87.2	74.5' LT.	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
19	*	LB 123.22.9	86.5' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
20	*	LB 123+01.7	109.0' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
21	*	LB 125+59.8	57.3' RT.	III - MED CUTOFF - 310 HPS	16'	40'		
22	*	LB 124+54.9	85.7' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
23	*	LB 126+04.3	53.5' RT.	III - MED CUTOFF - 400 HPS	16'	40'	FIXED	
24	*	LB 126+06.8	75.2' LT.	III - MED CUTOFF - 400 HPS	16'	40'	FIXED	
25	*	BL 1486+23.8	62.7' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
26	*	BL 1488+29.6	46.9' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
27	*	BL 1490+25.7	35.9' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
28	*	BR 1492+42.2	38.2' RT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
29	*	BR 1494+74.2	33.7' RT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
30	*	L 1501+13.8	88.9' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
31	*	L 1503+45.8	77.3' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
32	*	L 1513+09.8	73.3' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
33	*	L 1515+41.9	68.7' LT.	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
34	*	MSB 503+79.5	47.9' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
35	*	MSB 505+16.8	46.4' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
36	*	MSB 506+39.9	67.4' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
37	*	LB 127+56.5	56.4' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
38	*	LB 127+56.4	56.5' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
39	*	LB 129+03.3	56.4' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
40	*	LB 128+99.6	57.8' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
41	*	LB 130+02.7	62.4' RT.	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
42	*	LB 130+21.4	50.4' LT.	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
43	*	MSB 508+15.9	59.6' RT.	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
44	*	MSB 508+36.4	88.3' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
45	*	MSB 510+11.1	66.4' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
46	*	MSB 509+93.9	39.6' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
47	*	MSB 512+02.1	61.7' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
48	*	MSB 512+00.4	41.6' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
49	*	LB 132+39.4	47.1' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
50	*	LB 132+33.0	63.8' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
51	*	LB 134+35.5	39.6' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
52	*	LB 134+23.5	63.6' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
53	*	LB 111+77.0	28.0' LT.	III - MED CUTOFF - 310 HPS	16'	40'		
54	*	LB 111+72.6	42.1' RT.	III - MED CUTOFF - 310 HPS	16'	40'		
55	*	LB 110+00.9	44.4' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
56	*	LB 109+48.5	34.3' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
57	*	LB 107+55.1	34.6' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
58	*	LB 107+55.2	33.4' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	

LUMINAIRE SCHEDULE — SERVICE NO. S*** ****

LUMINAIRE NUMBER	CIRCUIT	LOCATION STATION	LOCATION OFFSET	TYPE - DISTRIBUTION - WATTAGE	MAST ARM	H1	BASE TYPE	COMMENTS
59	*	H 1731+32.5	34.6' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
60	*	H 1731+22.5	30.3' RT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
61	*	H 1729+86.8	27.2' LT.	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	

WIRING SCHEDULE — SERVICE NO.

△ NO.	CONDUIT SIZE	CONDUCTORS EXISTING	CONDUCTORS NEW	CIRCUIT	COMMENTS
1	1"		2-#8	A	ILLUMINATION
2	1½"		2-#8	A	ILLUMINATION
3	1"		2-#8	B	ILLUMINATION
4	1½"		4-#8	A,B	ILLUMINATION
5	2"		4-#8	A,B	ILLUMINATION
	2"		SPARE	---	FUTURE
6	1½"		2-#8	B	ILLUMINATION
7	2"		4-#8	A,B	ILLUMINATION
8	2"		SPARE	---	FUTURE
9	2"		2-#8	B	ILLUMINATION
	2"		---	---	SEE SIGNAL PLANS
10	1"		2-#8	C	ILLUMINATION
11	1"		2-#8	D	ILLUMINATION
12	1½"		2-#8	C	ILLUMINATION
13	1½"		2-#8	D	ILLUMINATION
14	1½"		4-#8	C,D	ILLUMINATION
15	2"		2-#8	D	ILLUMINATION
	2"		SPARE	---	FUTURE
16	2"		8-#8	A,B,C,D	ILLUMINATION
	2"		SPARE	---	FUTURE
17	2"		2-#8	D	ILLUMINATION
18	2"		2-#8	C	ILLUMINATION
	2"		SPARE	---	FUTURE
19	2"		8-#8	A,B,C,D	ILLUMINATION
	2-2"		SPARE	---	FUTURE
20	1"		2-#8	A	ILLUMINATION
21	2"		2-#8	A	ILLUMINATION
22	1"		2-#8	B	ILLUMINATION
23	2"		4-#8	A,B	ILLUMINATION
24	2"		2-#8	B	ILLUMINATION
25	1"		2-#8	C	ILLUMINATION
26	2"		2-#8	C	ILLUMINATION
27	1"		2-#8	D	ILLUMINATION
28	2"		4-#8	C,D	ILLUMINATION
29	2"		2-#8	D	ILLUMINATION
30	2"		8-#8	A,B,C,D	ILLUMINATION
	2"		SPARE	---	FUTURE
31	2"		8-#8	A,B,C,D	ILLUMINATION
	2"		SPARE	---	FUTURE
32	2"		2-#6	F	SIGNAL POWER

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-67.dgn				
TIME	8:27:36 AM				
DATE	2/18/2025				
PLOTTED BY	WillisD				
DESIGNED BY					
ENTERED BY					
CHECKED BY					
PROJ. ENGR.					
REGIONAL ADM.		REVISION	DATE	BY	

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.

JOB NUMBER

CONTRACT NO. | LOCATION NO.

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

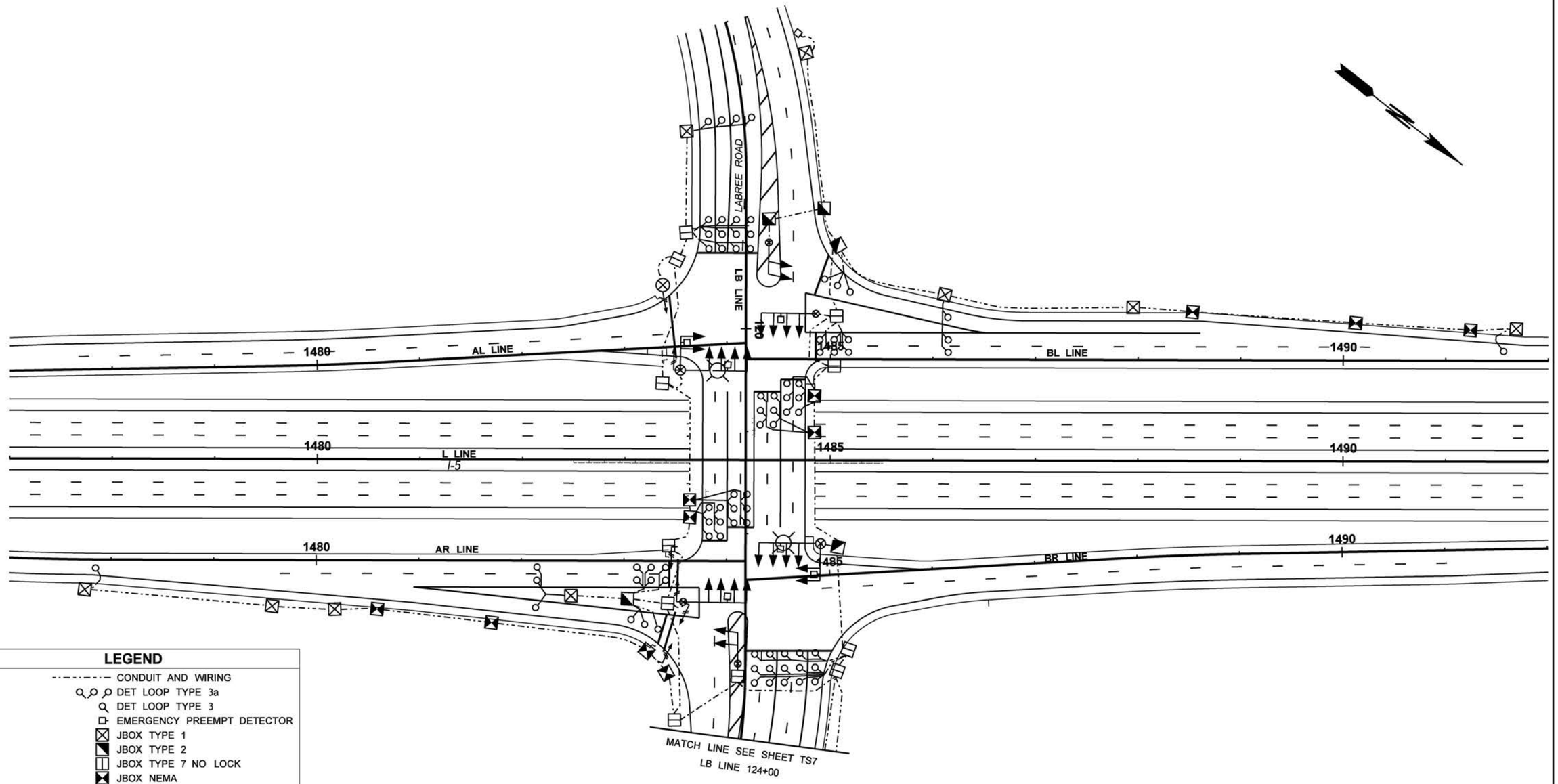
Washington State Department of Transportation

EXAMPLE 4-67

ILLUMINATION SCHEDULE

PLAN REF NO IL9

SHEET OF SHEETS



LEGEND

- CONDUIT AND WIRING
- DET LOOP TYPE 3a
- DET LOOP TYPE 3
- EMERGENCY PREEMPT DETECTOR
- JBOX TYPE 1
- JBOX TYPE 2
- JBOX TYPE 7 NO LOCK
- JBOX NEMA
- PED PUSH BUTTON POST
- PED SIGNAL HEAD LEFT
- PED SIGNAL HEAD RIGHT
- PED SIGNAL HEAD STRAIGHT
- SIGNAL HEAD
- SIGNAL STD TYPE 1 OR 4
- SIGNAL STD TYPE 3

0 50 100
SCALE IN FEET

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-68.dgn									
TIME	9:03:57 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.		Washington State Department of Transportation	EXAMPLE 4-68	PLAN REF NO TS3
DATE	2/20/2025										SHEET
PLOTTED BY	WilliSD				JOB NUMBER						OF
DESIGNED BY											SHEETS
ENTERED BY											
CHECKED BY					CONTRACT NO.		LOCATION NO.			ITS PLAN	
PROJ. ENGR.											
REGIONAL ADM.		REVISION	DATE	BY				P.E. STAMP BOX DATE	P.E. STAMP BOX DATE		

SIGN SPECIFICATIONS

SIGN NO.	SIGN CODE	SIGN DESCRIPTION	STA. LOC. (OR MP)	SIGN SIZE		SHEETING TYPE	LETTER SIZE OR CODE	POST MATERIAL	POST SIZE	POST LENGTH				CLEARANCE		REMARKS
				X	Y					H1	H2	H3	H4	V	W	
1A	W2-6P	ROUNDABOUT AHEAD	Y 30+75 RT.	36"	18"	III OR IV	STANDARD	STEEL	2.5" SO. (SB)	13.5'				11.25'	15'	
1B	W2-6	CIRCULAR INTERSECTION SYMBOL	"	36"	36"	III OR IV	STANDARD							7'		INSTALL BELOW SIGN NO. 1A.
1C	W13-1 (15)	15 MPH	"	24"	24"	III OR IV	STANDARD							5'		INSTALL BELOW SIGN NO. 1 B.
R-2		<MILLER RD GIBRALTER RD>/ CROSS	Y 31+50 RT.													REMOVE SIGNS (2), STEEL POST &
3	R4-7	KEEP RIGHT SYMBOL	Y 33+00 LT.	24'	30"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	10.5'				7'	CN 1	
4	03-2 MOD.	< MILLER RD GIBRAL TER RD >	Y 33+25 RT.	6'	3'	III OR IV	SEE DETAIL	STEEL	2.5" SQ. (4)	11'	11'			7'	12'	
5A	W11-2	PEDESTRIAN SYMBOL	Y 35+35 RT.	36"	36"	III OR IV	STANDARD	STEEL	2.5" SQ. (SB)	13.5'				7'	12'	
5B	W16-7PL	LEFT DOWNWARD ARROW	"	24"	12"	III OR IV									6'	INSTALL BELOW SIGN NO. 5A.
6	R1-2	YIELD	Y 35+60 RT.	36"	36"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	12'				7'	12'	
7	R6-4	DOUBLE CHEVRON	"	30"	24"	III OR IV	*	STEEL	2.5" SQ. (4)	8'				5'	CN 1	
8	03-302 MOD.	GIBRALTER RD >	G 17+43 RT.	60"	12"	III OR IV	SEE DETAIL	STEEL	2.5" SQ. (4)	9'				7'	CN 1	
9A	W11-2	PEDESTRIAN SYMBOL	G 17+60 RT.	36"	36"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	13.5'				7'	12'	
9B	W16-7PL	LEFT DOWNWARD ARROW	"	24"	12"	III OR IV	STANDARD							6'		INSTALL BELOW SIGN NO. 9A.
10	NOT USED															
R-11		STOP AHEAD	G 20+24 LT.													REMOVE SIGN & WOOD POST.
11A	03-201 MOD.	SR20 >	"	36"	12"	III OR IV	SEE DETAIL	SEE CN8	2" SQ. (CN 7)	12'				13.5'	CN 3	
11B	W2-6	CIRCULAR INTERSECTION SYMBOL	"	30"	30"	III OR IV	STANDARD							7'		INSTALL BELOW SIGN NO. 11A.
11C	W13-1 (15)	15 MPH	"	18"	18"	III OR IV	STANDARD							5.5'		INSTALL BELOW SIGN NO. 11B.
12	R4-7	KEEP RIGHT SYMBOL	G 17+74 RT.	24"	30"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	10.5'				7'	CN 1	
13A	W11-2	PEDESTRIAN SYMBOL	G 17+70 LT.	36"	36"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	13.5'				7'		
13B	W16-7PL	LEFT DOWNWARD ARROW	"	24"	12"	III OR IV								6'		INSTALL BELOW SIGN NO. 13A.
14	R1-2	YIELD	G17+45 LT.	36"	36"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	12'				7'	12'	
R-15		<MILLER RD GILBRALTER RD/ STOP	G 16+97 LT.													REMOVE SIGNS (2) & WOOD POST.
16	R6-4	DOUBLE CHEVRON	G 16+85 LT.	30"	24"	III OR IV	*	STEEL	2.5" SQ. (4)	8'				5'	CN 1	
17	D3-302 MOD.	SR 20 EAST>	Y 37+45 RT.	48"	16"	III OR IV	SEE DETAIL	STEEL	2.5" SQ. (4)	9'				7'	CN 1	

CONSTRUCTION NOTES (CN):

1. EDGE(S) OF SIGN SHALL BE 2' FROM FACE OF CURB. ADJUST STATION LOCATION AS NECESSARY.
2. EDGE OF SIGN SHALL BE 3' FROM FACE OF GUARDRAIL.
3. SAME AS EXISTING.
4. EDGE OF SIGN SHALL BE 12' FROM EDGE OF PAVEMENT.
5. REMOVE SIGN, SIGN LIGHTS AND ALL Z-BAR, WINDBEAM, VERTICAL RACESMOUNTING HARDWARE, ETC. SEE ELECTRICAL REMOVAL PLANS SHEETS FOR POWER REMOVAL.
6. INSTALL NEW SIGN WITH ALL NEW Z-BAR, WINDBEAM, VERTICAL BRACES AND MOUNTING HARDWARE. NO EXISTING ITEMS SHALL BE REUSED.
7. SIGN TO BE DELIVERED TO WSDOT [CITY] OFFICE AT [ADDRESS]. CONTACT [CONTACT PERSON] AT [PHONE NUMBER] THREE (3) DAYS PRIOR TO DELIVERY.
8. POST SHALL BE 4x4 TREATED WOOD WITH A 2' - 3' EMBEDMENT DEPTH.

* SEE FHWA STANDARD HIGHWAY SIGNS MANUAL, 2012 SUPPLEMENT FOR DETAIL.

** SEE FHWA MUTCD INTERIM APPROVAL (I1-15) FOR FABRICATION DETAIL.

SIGN SPECIFICATIONS

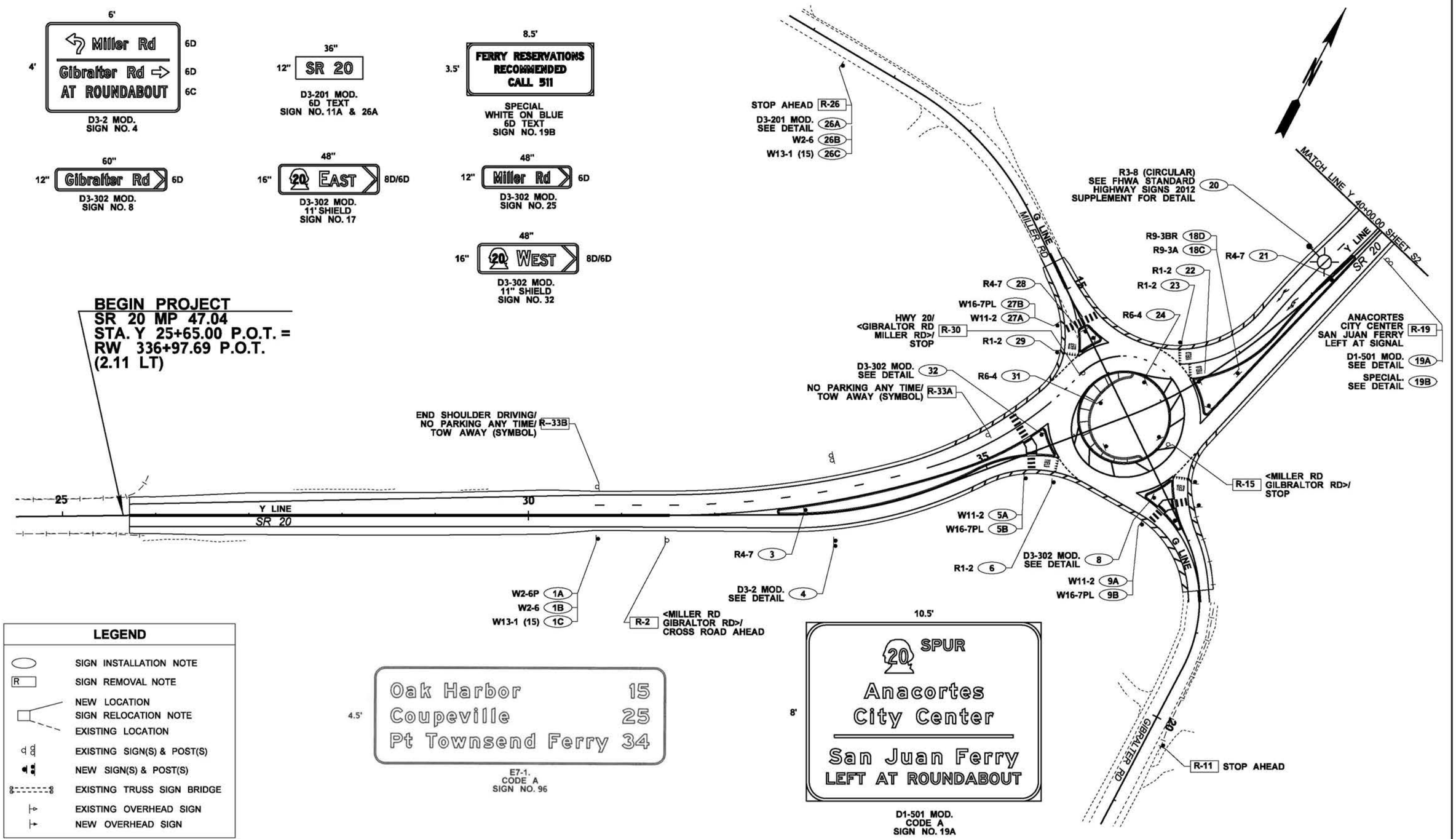
SIGN NO.	SIGN CODE	SIGN DESCRIPTION	STA. LOC. (or MP)	SIGN SIZE X	SIGN SIZE Y	SHEETING TYPE	LETTER SIZE OR CODE	POST MATERIAL	POST SIZE	POST LENGTH H1	POST LENGTH H2	POST LENGTH H3	POST LENGTH H4	CLEARANCE V	CLEARANCE W	REMARKS
18A	R9-3A	NO PEDESTRIANS	Y 37+47 CL	18"	18"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	8'				5.5'		CENTER IN TRAFFIC ISLAND.
18B	R9-3BL	<--USE CROSSWALK	"	12"	6"	III OR IV	STANDARD							5'		INSTALL BELOW SIGN NO. 18A.
18C	R9-3A	NO PEDESTRIANS	"	18"	18"	III OR IV	STANDARD							5.5'		INSTALL OPPOSITE SIGN NO. 18A.
18D	R9-3BR	USE CROSSWALK-->	"	12"	6"	III OR IV	STANDARD							5'		INSTALL BELOW SIGN NO. 18C.
R-19		ANACORTES CITY CENTER SAN JUAN FERRY LEFT AT SIGNAL	Y 39+84 RT.													REMOVE SIGN, POSTS (2) AND CONCRETE FOUNDATIONS.
19A	D1-501 MOD.	SR 20 SPUR...LEFT AT ROUNDABOUT	Y 40+00 RT.	10.5'	8'	III OR IV	SEE DETAIL	STEEL	W6x12	19'	18'			8.5'	11.5'	
19B	SPECIAL	FERRY RESERVATIONS...	"	8.5'	3.5'	III OR IV	SEE DETAIL							5'		INSTALL BELOW SIGN NO. 19A PER MOUNTING. DETAIL FOR SUPPLEMENTAL GUIDE SIGNS ON S2.
20	R3-8	CIRCULAR LANE ASSIGNMENTS	Y 39+38 LT.			III OR IV	*	LT STD	N/A					7'		
21	R4-7	KEEP RIGHT SYMBOL	Y 39+25 RT.	24"	30"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	10.5'				7'	CN 1'	
22	R1-2	YIELD	Y 37+45 LT.	48"	48"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	13'				7'	CN 1'	
23	R1-2	YIELD	Y 37+42 LT.	48"	48"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	13'				7'	12'	
24	R6-4	DOUBLE CHEVRON	Y 36+90 LT.	30"	24"	III OR IV	*	STEEL	2.5" SQ. (4)	8'				5'	CN 1'	
25	D3-302 MOD.	MILLER RD>	G 15+58 LT.	48"	12"	III OR IV	SEE DETAIL	STEEL	2.5" SQ. (4)	9'				7'	CN 1'	
R-26		STOP AHEAD	G 11+45 RT.													REMOVE SIGN & WOOD POST.
26A	D3-201 MOD.	SR 20	"	36"	12"	III OR IV	SEE DETAIL	SEE CN 8						13.5	CN 3	
26B	W2-6	CIRCULAR INTERSECTION SYMBOL	"	30"	30"	III OR IV	STANDARD							7'		INSTALL BELOW SIGN NO. 26A.
26C	W13-1 (15)	15 MPH	"	18"	18"	III OR IV	STANDARD							5.5'		INSTALL BELOW SIGN NO. 26B.
27A	W11-2	PEDESTRIAN SYMBOL	G 15+30 RT.	36"	36"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	13.5'				7'	12'	
27B	W16-7PL	LEFT DOWNWARD ARROW	"	24"	12"	III OR IV	STANDARD							6'		INSTALL BELOW SIGN NO. 27A.
28	R4-7	KEEP RIGHT SYMBOL	G 15+50 RT.	24"	30"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	10.5'				7'	CN 1'	
29	R1-2	YIELD	G 15+57 RT.	36"	36"	III OR IV	STANDARD	STEEL	2.5" SQ. (4)	12'				7'	12'	
R-30		HWY 20/ <GIBRALTOR RD MILLER RD>/ STOP AHEAD	G 15+88 RT.													REMOVE SIGNS (4), STEEL POST & CONCRETE FOUNDATION.
31	R6-4	DOUBLE CHEVRON	G 16+26 RT.	30"	24"	III OR IV	*	STEEL	2.5" SQ. (4)	8'				5'	CN 1'	
32	D3-302 MOD.	SR 20 WEST >	Y 35+67 LT.	48"	16"	III OR IV	SEE DETAIL	STEEL	2.5" SQ. (4)	10.5'				7'	CN 1'	

CONSTRUCTION NOTES (CN):

1. EDGE(S) OF SIGN SHALL BE 2' FROM FACE OF CURB. ADJUST STATION LOCATION AS NECESSARY.
2. EDGE OF SIGN SHALL BE 3' FROM FACE OF GUARDRAIL.
3. SAME AS EXISTING.
4. EDGE OF SIGN SHALL BE 12' FROM EDGE OF PAVEMENT.
5. REMOVE SIGN, SIGN LIGHTS AND ALL Z-BAR, WINDBEAM, VERTICAL RACESMOUNTING HARDWARE, ETC. SEE ELECTRICAL REMOVAL PLANS SHEETS FOR POWER REMOVAL.
6. INSTALL NEW SIGN WITH ALL NEW Z-BAR, WINDBEAM, VERTICAL BRACES AND MOUNTING HARDWARE. NO EXISTING ITEMS SHALL BE REUSED.
7. SIGN TO BE DELIVERED TO WSDOT [CITY] OFFICE AT [ADDRESS]. CONTACT [CONTACT PERSON] AT [PHONE NUMBER] THREE (3) DAYS PRIOR TO DELIVERY.
8. POST SHALL BE 4x4 TREATED WOOD WITH A 2' - 3' EMBEDMENT DEPTH.

* SEE FHWA STANDARD HIGHWAY SIGNS MANUAL, 2012 SUPPLEMENT FOR DETAIL.

** SEE FHWA MUTCD INTERIM APPROVAL (I1-15) FOR FABRICATION DETAIL.



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-71.dgn					
TIME	3:19:24 PM					
DATE	4/18/2025					
PLOTTED BY	WillisD					
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER 17A020		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State
Department of Transportation

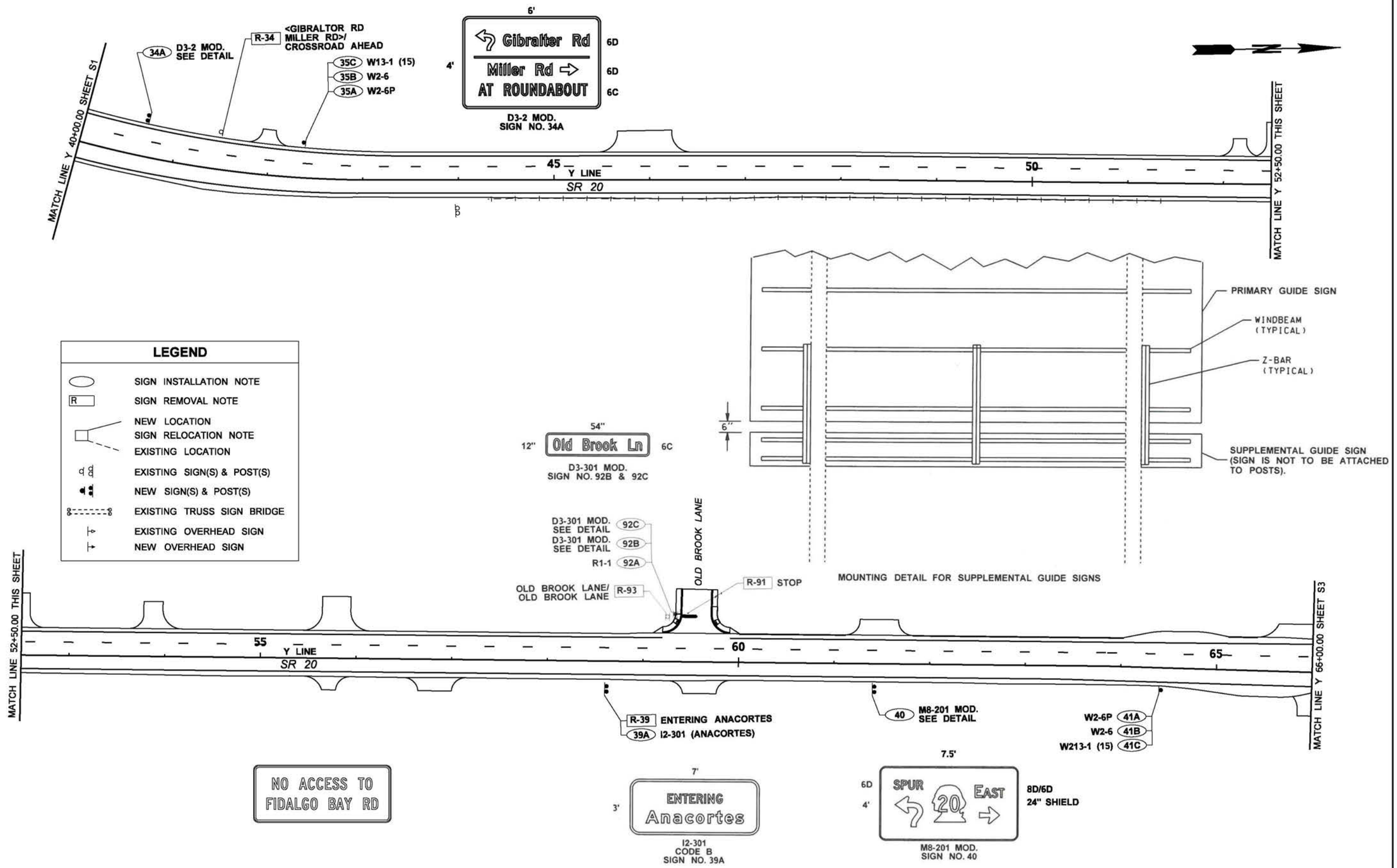
EXAMPLE 4-71

SIGNING PLAN

Plot 1

PLAN REF NO S1

SHEET 170 OF 201 SHEETS



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-72.dgn					
TIME	3:20:10 PM			REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	4/18/2025			JOB NUMBER 17A020		
PLOTTED BY	WilliSD			CONTRACT NO.		LOCATION NO.
DESIGNED BY						
ENTERED BY						
CHECKED BY						
PROJ. ENGR.						
REGIONAL ADM.		REVISION	DATE	BY		

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

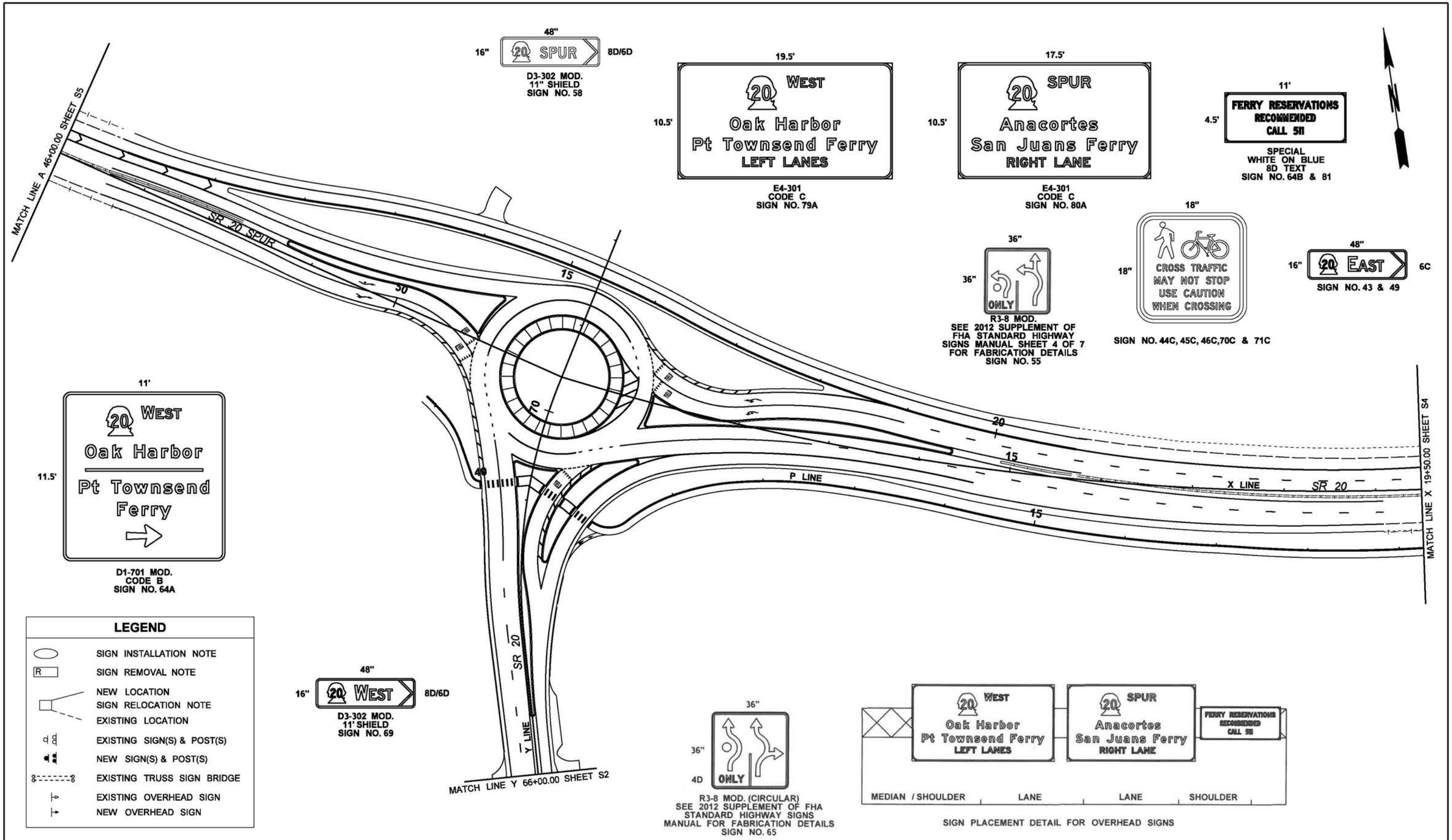
EXAMPLE 4-72

SIGNING PLAN

Plot 2

PLAN REF NO S2

SHEET 171 OF 201 SHEETS



FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-73.dgn						
TIME	3:21:38 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	4/18/2025						
PLOTTED BY	WillisD				JOB NUMBER 17A020		
DESIGNED BY							
ENTERED BY					CONTRACT NO.		LOCATION NO.
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State
Department of Transportation

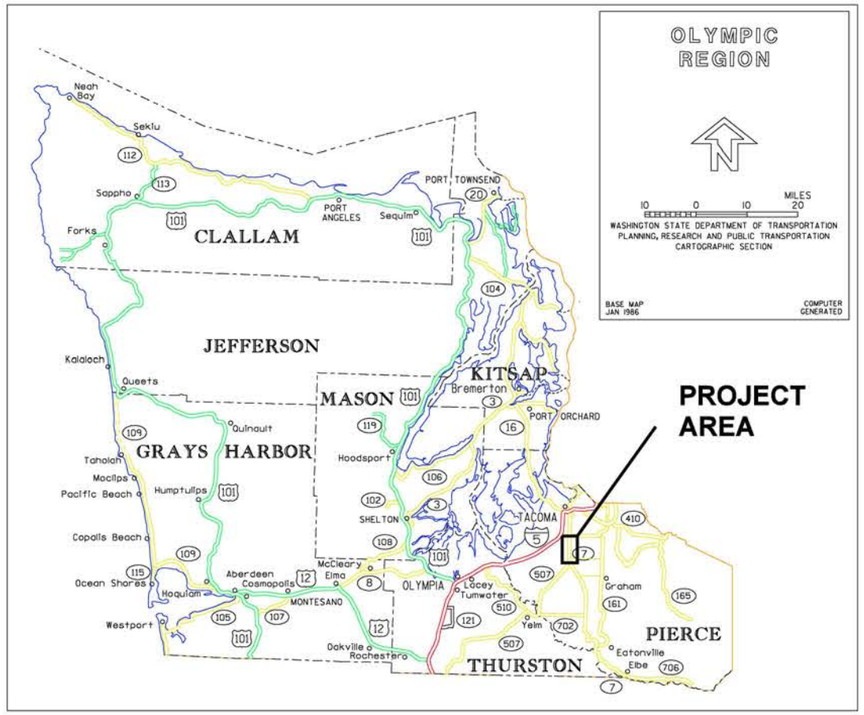
EXAMPLE 4-73

SIGNING PLAN

Plot 3

PLAN REF NO S3

SHEET 172 OF 201 SHEETS



G20-2

1

NB SR 7: MP 47.07 +/-
SB SR 7: MP 52.50 +/-
NB SR 507: MP 43.25 +/-
(SEE NOTES 2 & 3)

I20-301 (B/W)

2

NB SR 7: MP 47.17 +/-
SB SR 7: MP 52.42 +/-
NB SR 507: MP 43.35 +/-
(SEE NOTES 2 & 3)

W20-1

3

500' +/- UNLESS NOTED BELOW
188th St: 200' +/- from SR 7
159th St: 150' +/- from SR 7
(SEE NOTES 2 & 3)

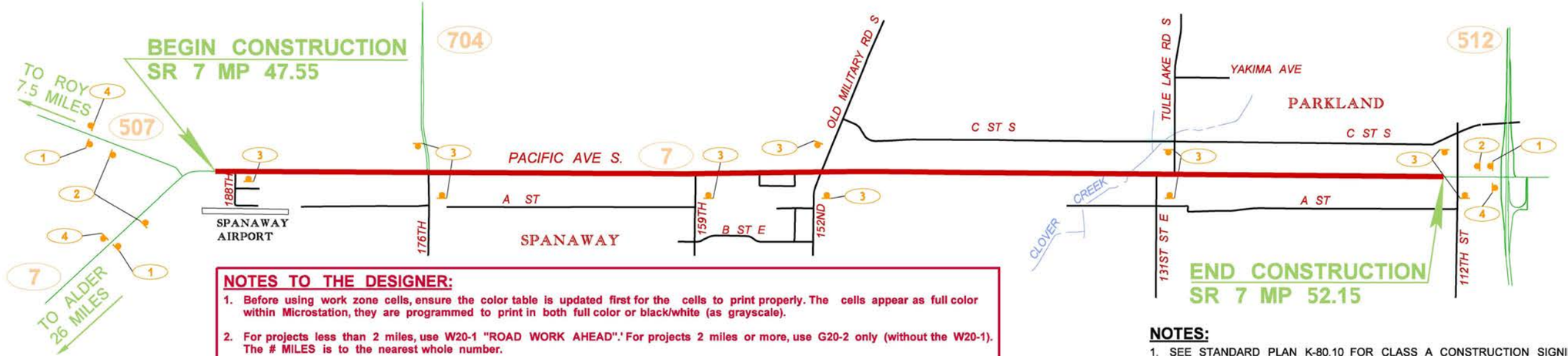
SEE NOTE 4

G20-2A

G24-501

4

SB SR 7: MP 47.07 +/-
NB SR 7: MP 52.50 +/-
SB SR 507: MP 43.25 +/-
(SEE NOTES 2 & 3)



NOTES TO THE DESIGNER:

1. Before using work zone cells, ensure the color table is updated first for the cells to print properly. The cells appear as full color within Microstation, they are programmed to print in both full color or black/white (as grayscale).
2. For projects less than 2 miles, use W20-1 "ROAD WORK AHEAD".' For projects 2 miles or more, use G20-2 only (without the W20-1). The # MILES is to the nearest whole number.
3. I20-301 signs is optional; double fines can be issued to drivers without I20-301 installed. For Class A signs, 36"x48" I20-301 signs are sufficient for conventional roadways and 2-lane freeways, but use 48"x60" on freeways with 3 lanes or more.
4. 36"x36" W20-1 signs may be used on roadways 40 mph or less. Use 48"x48" W20-1 signs on roadways 45 mph or higher.
5. Combine the G20-2A & G24-501 signs at the end of the project limits--contact information is needed by the road user at the end of the project, not at the beginning or within project

NOTES:

1. SEE STANDARD PLAN K-80.10 FOR CLASS A CONSTRUCTION SIGNING INSTALLATION.
2. ALL SIGN SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT GRADE INTERSECTIONS, AND DRIVEWAYS. ALL SIGN SPACING MAY BE ADJUSTED IN URBAN AREAS. ALL SIGN SPACING MAY BE ADJUSTED IN COORDINATION WITH OTHER PROJECTS.
3. SIGNS PLACED ON RIGHT SIDE OF TRAFFIC UNLESS OTHERWISE NOTED.
4. G24-501 SIGN'S PHONE NUMBER TO BE PROVIDED BY WSDOT PROJECT ENGINEERING OFFICE.
5. SIGNS ARE BLACK ON ORANGE BACKGROUND UNLESS NOTED OTHERWISE.

LEGEND

(?) SIGN NOTE FLAG

CLASS A SIGN LOCATION

CLASS A CONSTRUCTION SIGN LAYOUT
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-74.dgn						
TIME	3:25:48 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	4/18/2025						
PLOTTED BY	WilliSD						
DESIGNED BY					JOB NUMBER		
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO.
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-74

CONSTRUCTION SIGNING PLAN

Plot 1

PLAN REF NO TCS1

SHEET OF SHEETS

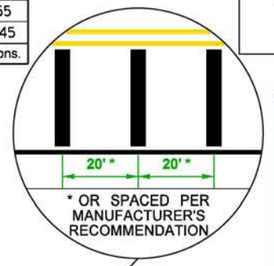
RECOMMENDED SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-65 MPH	800' ±
RURAL ROADS	45-55 MPH	500' ±

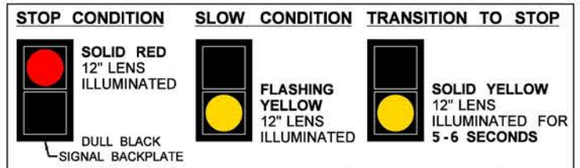
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	45	50	55	60	65
B (feet)	360	425	495	570	645

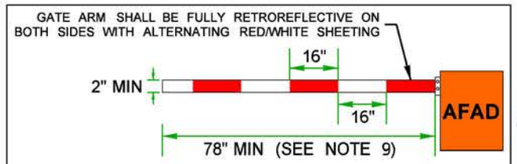
Buffer space may be adjusted (±) based on field conditions.

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50 - 75	40	80
45	30	60





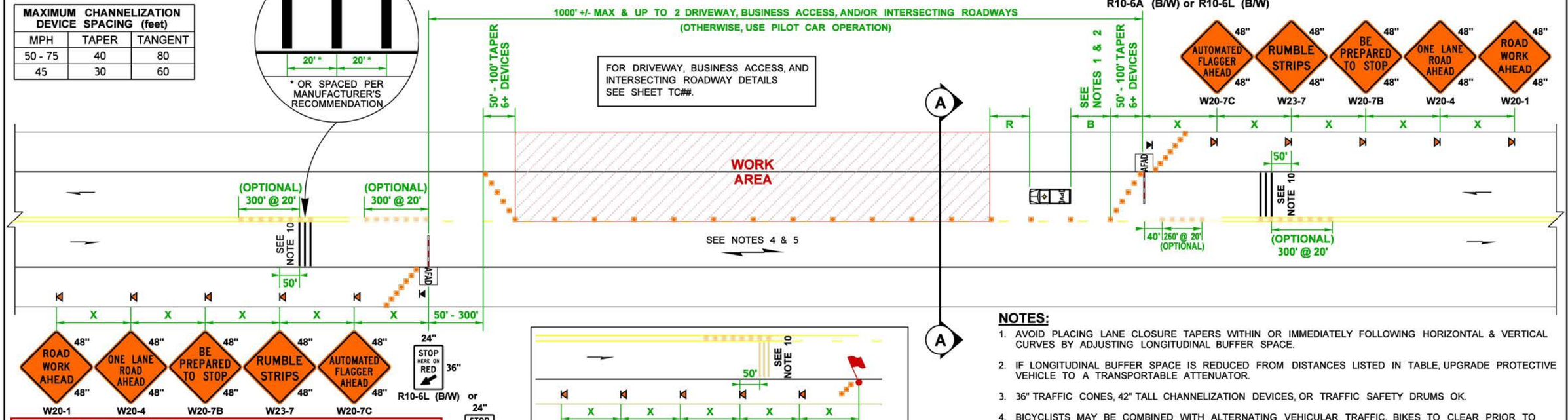
AFAD RED/YELLOW LENS DETAIL

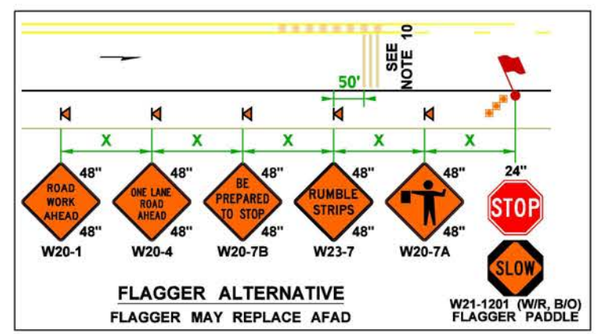


AFAD GATE ARM DETAIL

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW. 40' - 80' RECOMMENDED.

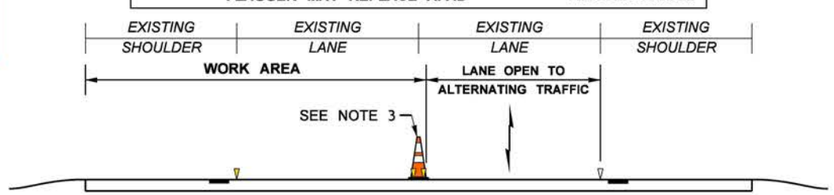
STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT LESS THAN 22,000 lbs.		HOST VEHICLE WEIGHT 22,000+ lbs.	
45-55 MPH	60+ MPH	45-55 MPH	60+ MPH
123'	172'	100'	150'





FLAGGER ALTERNATIVE

FLAGGER MAY REPLACE AFAD



SECTION A-A

NOTES:

1. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES BY ADJUSTING LONGITUDINAL BUFFER SPACE.
2. IF LONGITUDINAL BUFFER SPACE IS REDUCED FROM DISTANCES LISTED IN TABLE, UPGRADE PROTECTIVE VEHICLE TO A TRANSPORTABLE ATTENUATOR.
3. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS OK.
4. BICYCLISTS MAY BE COMBINED WITH ALTERNATING VEHICULAR TRAFFIC. BIKES TO CLEAR PRIOR TO FLAGGER'S RELEASING ONCOMING TRAFFIC.
5. ACCOMMODATE PEDESTRIANS VIA SHUTTLE THROUGH LANE CLOSURE, USING THE PAVED SHOULDER OPPOSITE THE WORK AREA, OR ANOTHER METHOD THE ENGINEER ACCEPTS.
6. SEE STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS:
   1-07.8(1) HIGH-VISIBILITY APPAREL
   1-10.3(1)A FLAGGER'S AND NIGHTTIME ILLUMINATION
   1-10.3(2)TRAFFIC CONTROL PROCEDURES
   9-35.124-INCH STOP/SLOW PADDLE SIZE
7. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE SPECIAL PROVISIONS.
8. EACH AFAD OPERATED BY AFAD-TRAINED FLAGGER WHO VISUALLY SEES BOTH AFAD AND APPROACHING TRAFFIC (DIGITAL ALTERNATIVES OK). LEAVING AFAD UNATTENDED WHEN IN OPERATION IS PROHIBITED.
9. AFAD GATE ARM DESCENDS AFTER RED LENS DISPLAYED & SHALL REACH HALFWAY ACROSS THE CONTROLLED LANE AND ASCENDS TO UPRIGHT POSITION ON FLASHING YELLOW LENS DISPLAY
10. AVOID PLACING TEMPORARY TRANSVERSE RUMBLE STRIPS WITHIN HORIZONTAL CURVES, ADJUST SIGN SPACING IF NEEDED. USE ONE OF THE FOLLOWING RUMBLE STRIPS:
    * PSS ROADQUAKE 2 OR 2F TEMPORARY PORTABLE RUMBLE STRIP (BLACK)
    * TRAFFIC ALERT HIGH SPEED RUMBLE STRIP (BLACK)
11. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
12. ACTUAL CENTERLINE PAVEMENT MARKINGS MAY VARY.

NOTES TO THE DESIGNER:

1. Typical traffic control plans (TCPs) are generic and meant to be used in a variety of locations with different speed limits. Thus, numerous tables are used with "X", "L", "2L", "B", etc.
2. WSDOT Typical Traffic Control Plan Library provides an ever expanding set of plans (TC332 used here) that can be used as is or modified based on WSDOT Region Traffic practices and preferences. Typical TCPs include a Designer Guidance sheet providing detailed information regarding modifications.
3. Updated Typical TCPs contain more realistic work zone symbology and signage along with updated tables. Even though the Microstation file appears in full color, these cells are programmed to automatically print in full-color or black/white (as grayscale) provided the Microstation color table is up-to-date.

LEGEND

- TEMPORARY SIGN LOCATION
- 28" REFLECTIVE TRAFFIC CONE (SEE NOTE 3)
- OPTIONAL CHANNELIZATION DEVICE
- PROTECTIVE VEHICLE (SEE NOTE 2)
- FLAGGER
- AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (SEE NOTES 8 & 9)
- TEMPORARY PORTABLE RUMBLE STRIPS (SEE NOTE 10)

ALTERNATING 1-LANE, 2-WAY TRAFFIC: AFAD-CONTROLLED + TEMP. RUMBLE STRIPS
(45+ MPH HIGHWAYS)
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-75.dgn						
TIME	8:58:26 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	2/18/2025						
PLOTTED BY	WilliSD						
DESIGNED BY					JOB NUMBER		
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO.
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-75

TRAFFIC CONTROL PLAN

Plot 2

PLAN REF NO TC1

SHEET OF SHEETS

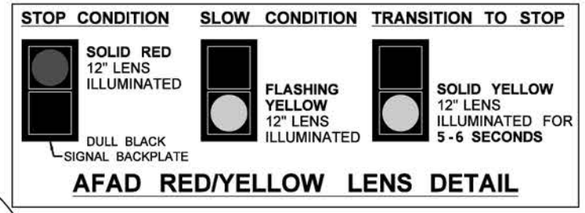
RECOMMENDED SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-65 MPH	800' ±
RURAL ROADS	45-55 MPH	500' ±

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

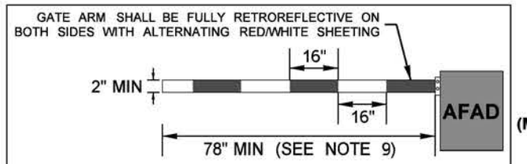
LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	45	50	55	60	65
B (feet)	360	425	495	570	645

Buffer space may be adjusted (±) based on field conditions.

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50 - 75	40	80
45	30	60



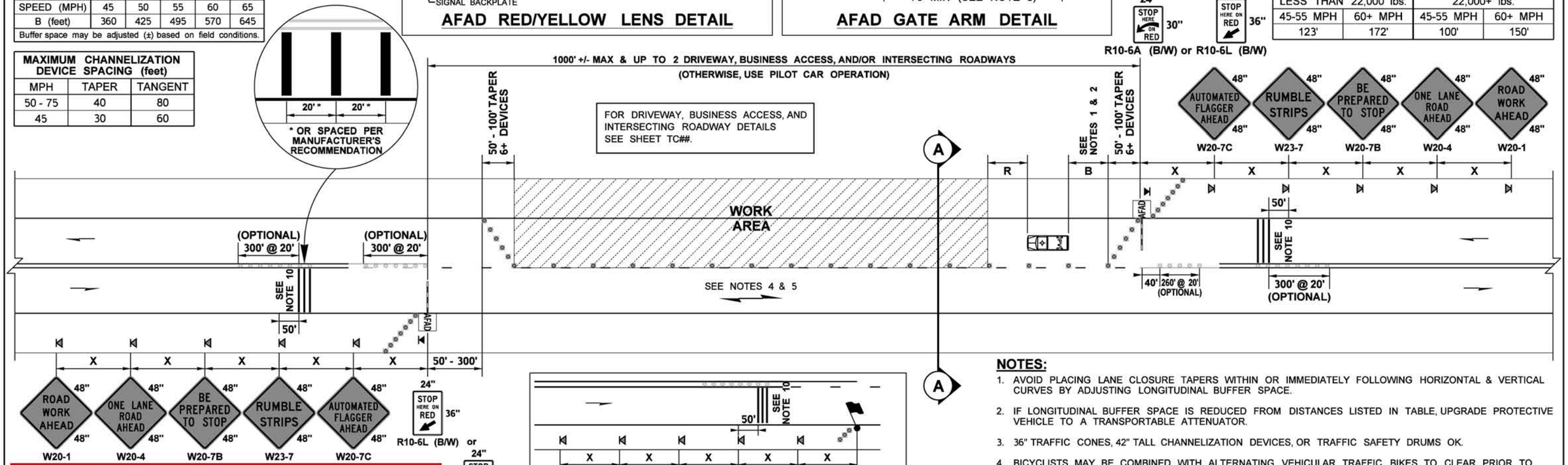
AFAD RED/YELLOW LENS DETAIL



AFAD GATE ARM DETAIL

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW. 40' - 80' RECOMMENDED.

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT LESS THAN 22,000 lbs.		HOST VEHICLE WEIGHT 22,000+ lbs.	
45-55 MPH	60+ MPH	45-55 MPH	60+ MPH
123'	172'	100'	150'



NOTES TO THE DESIGNER:

1. This plan is the black/white (as grayscale) version of Example 4-64. Updated work zone cells are programmed to automatically print in full-color or black/white (as grayscale) provided the Microstation color table is up-to-date.
2. Typical traffic control plans (TCPs) are generic and meant to be used in a variety of locations with different speed limts. Thus, numerous tables are used with "X", "L", "2L", "B", etc.
3. WSDOT Typical Traffic Control Plan Library provides an ever expanding set of plans (TC332 used here) that can be used as is or modified based on WSDOT Region Traffic practices and preferences. Typical TCPs include a Designer Guidance sheet providing detailed information regarding modifications.

LEGEND

- TEMPORARY SIGN LOCATION
- 28" REFLECTIVE TRAFFIC CONE (SEE NOTE 3)
- OPTIONAL CHANNELIZATION DEVICE
- PROTECTIVE VEHICLE (SEE NOTE 2)
- FLAGGER
- AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (SEE NOTES 8 & 9)
- TEMPORARY PORTABLE RUMBLE STRIPS (SEE NOTE 10)

NOTES:

1. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES BY ADJUSTING LONGITUDINAL BUFFER SPACE.
2. IF LONGITUDINAL BUFFER SPACE IS REDUCED FROM DISTANCES LISTED IN TABLE, UPGRADE PROTECTIVE VEHICLE TO A TRANSPORTABLE ATTENUATOR.
3. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS OK.
4. BICYCLISTS MAY BE COMBINED WITH ALTERNATING VEHICULAR TRAFFIC. BIKES TO CLEAR PRIOR TO FLAGGER'S RELEASING ONCOMING TRAFFIC.
5. ACCOMMODATE PEDESTRIANS VIA SHUTTLE THROUGH LANE CLOSURE, USING THE PAVED SHOULDER OPPOSITE THE WORK AREA, OR ANOTHER METHOD THE ENGINEER ACCEPTS.
6. SEE STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS:
   - 1-07.8(1) HIGH-VISIBILITY APPAREL
   - 1-10.3(1)A FLAGGER'S AND NIGHTTIME ILLUMINATION
   - 1-10.3(2)TRAFFIC CONTROL PROCEDURES
   - 9-35.124-INCH STOP/SLOW PADDLE SIZE
7. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE SPECIAL PROVISIONS.
8. EACH AFAD OPERATED BY AFAD-TRAINED FLAGGER WHO VISUALLY SEES BOTH AFAD AND APPROACHING TRAFFIC (DIGITAL ALTERNATIVES OK). LEAVING AFAD UNATTENDED WHEN IN OPERATION IS PROHIBITED.
9. AFAD GATE ARM DESCENDS AFTER RED LENS DISPLAYED & SHALL REACH HALFWAY ACROSS THE CONTROLLED LANE AND ASCENDS TO UPRIGHT POSITION ON FLASHING YELLOW LENS DISPLAY
10. AVOID PLACING TEMPORARY TRANSVERSE RUMBLE STRIPS WITHIN HORIZONTAL CURVES, ADJUST SIGN SPACING IF NEEDED. USE ONE OF THE FOLLOWING RUMBLE STRIPS:
    - * PSS ROADQUAKE 2 OR 2F TEMPORARY PORTABLE RUMBLE STRIP (BLACK)
    - * TRAFFIC ALERT HIGH SPEED RUMBLE STRIP (BLACK)
11. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
12. ACTUAL CENTERLINE PAVEMENT MARKINGS MAY VARY.

ALTERNATING 1-LANE, 2-WAY TRAFFIC: AFAD-CONTROLLED + TEMP. RUMBLE STRIPS
(45+ MPH HIGHWAYS)
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-76.dgn						
TIME	9:38:09 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	2/18/2025						
PLOTTED BY	WilliSD				JOB NUMBER		
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.	LOCATION NO.	
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-76

TRAFFIC CONTROL PLAN

Plot 2

PLAN REF NO TC1

SHEET OF SHEETS

RECOMMENDED SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-70 MPH	800' +/-
RURAL ROADS	45-55 MPH	500' +/-
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.		

SHOULDER CLOSURE TAPER LENGTH = L/3								
SHOULDER WIDTH	SPEED (MPH)	45	50	55	60	65	70	75
< 6'	L/3 (feet)	60	80	80	80	80	80	80
6'		90	120	120	120	160	160	160
10'		150	200	200	200	240	240	280

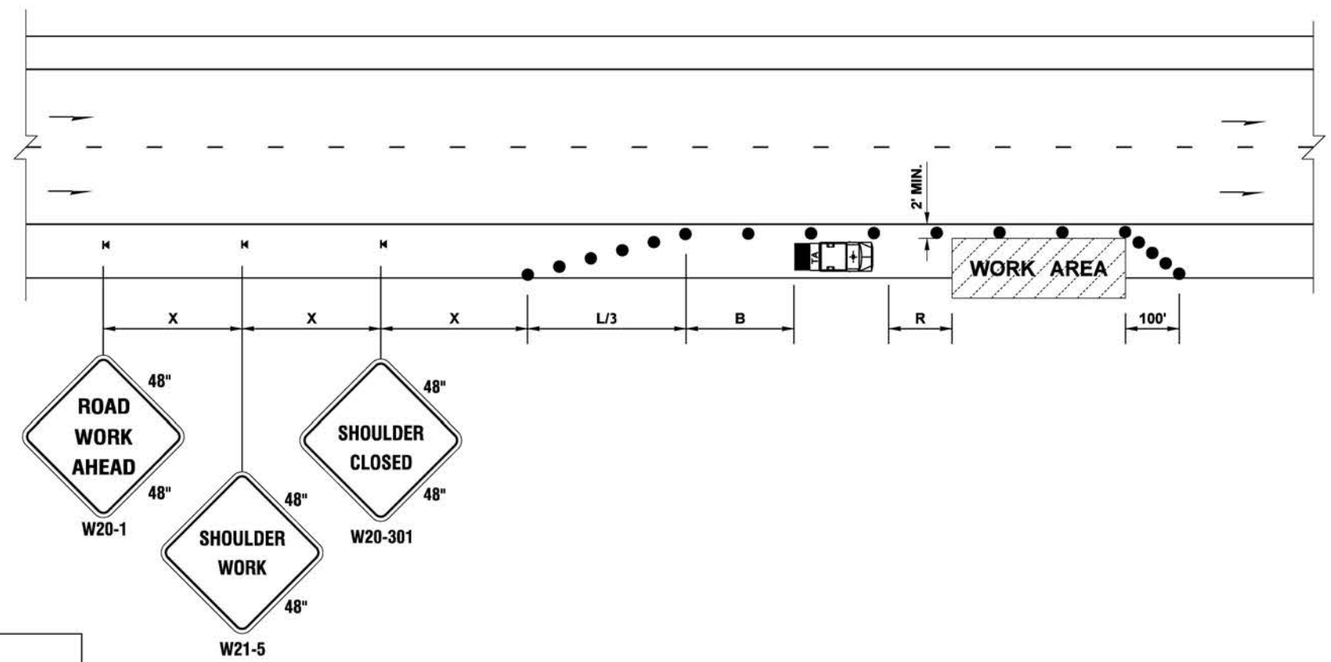
LONGITUDINAL BUFFER SPACE = B							
SPEED (MPH)	45	50	55	60	65	70	75
B (feet)	360	425	495	570	645	730	820
Buffer space may be adjusted (±) based on field conditions.							

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50 - 75	40	80
45	30	60

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT LESS THAN 22,000 lbs.		HOST VEHICLE WEIGHT 22,000+ lbs.	
45-55 MPH	60+ MPH	45-55 MPH	60+ MPH
123'	172'	100'	150'

NOTES TO THE DESIGNER:

1. Old traffic control plans can still be used, like this one from the WSDOT Typical TCP Library. PS&Es can include a combination of traffic control plans that are full color, grayscale, or wireframe. We understand "old" traffic control plans from previous projects are still be utilized in new PS&Es and it will take years to complete this transition.
2. Designers should update all the work zone tables at a minimum. The "old" wireframe signs can still be used in PS&Es; however, if time allows the designer can replace them with updated ones in the Microstation work zone cell library. Please do not delete the background on the signs if used.
3. Only if time allows, the work zone symbols can be updated (as shown in this example) but it is not necessary.
4. Before using work zone cells, ensure the color table is updated first for the cells to print properly. The cells appear as full color within Microstation, they are programmed to print in both full color or black/white (as grayscale).



LEGEND

- TEMPORARY SIGN LOCATION
- TRAFFIC SAFETY DRUM
- TRANSPORTABLE ATTENUATOR (TL-3)

SHOULDER CLOSURE - HIGH SPEED
NOT TO SCALE

NOTES:

1. NO ENCROACHMENT IN TRAVELED LANE. IF ENCROACHMENT IS NECESSARY, LANE SHALL BE CLOSED.
2. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT) O.C.
3. ALL SIGNS ARE BLACK ON ORANGE.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-77.dgn
TIME	9:44:37 AM
DATE	2/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-77

TRAFFIC CONTROL PLAN

Plot 4

PLAN REF NO TC2

SHEET OF SHEETS

PCMS - PRIMARY MSG		
1	2	3
RIGHT LANE CLOSURE	WATCH FOR SLOW TRAFFIC	NEXT # MILES
1.5 SEC	1.5 SEC	1.5 SEC

USE IF TRAFFIC BACKUPS EXPECTED, BUT NOT VERIFIED HOURLY BY TCS.

FIELD LOCATE 1.5± MILES PRIOR TO CLOSURE TAPER OR UPSTREAM OF EXPECTED MAXIMUM TRAFFIC QUEUE PER STD. SPEC. 1-10.3(3)C.

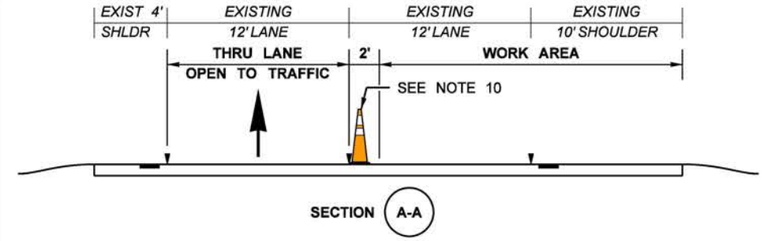
PCMS - ALTERNATIVE MSG		
1	2	3
RIGHT LANE CLOSURE	SLOW TRAFFIC AHEAD	NEXT # MILES
1.5 SEC	1.5 SEC	1.5 SEC

ONLY USED IF TCS VERIFIES HOURLY THAT TRAFFIC BACKUPS ARE PRESENT.

FIELD LOCATE 1.5± MILES PRIOR TO CLOSURE TAPER OR UPSTREAM OF EXPECTED MAXIMUM TRAFFIC QUEUE PER STD. SPEC. 1-10.3(3)C.

NOTES TO THE DESIGNER:

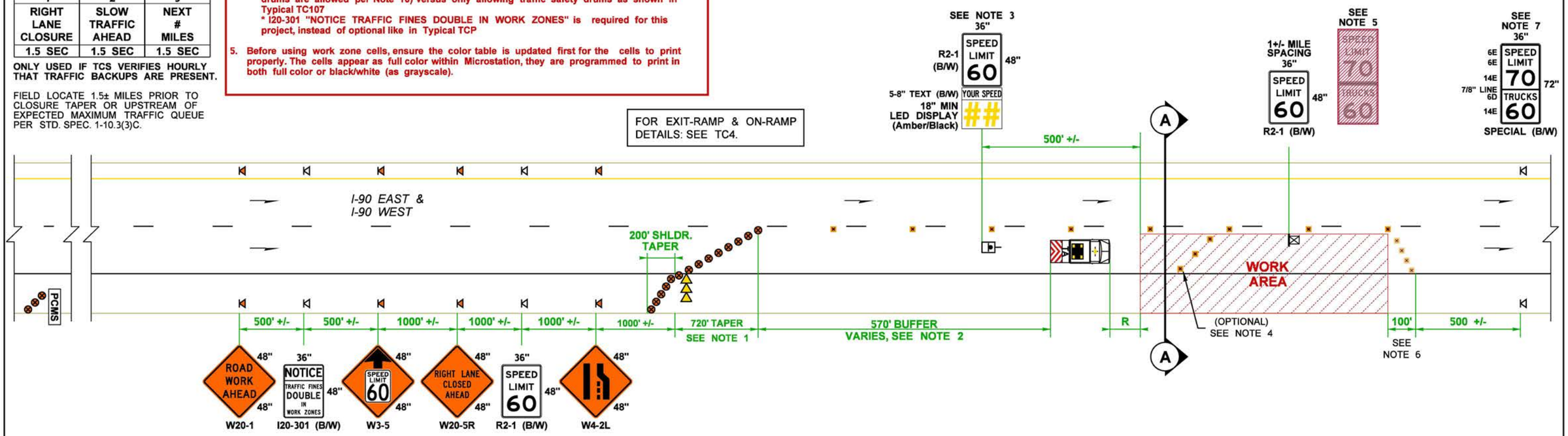
1. WSDOT Typical TCPs can be modified, or be referenced, to create project-specific TCPs based on WSDOT Region Traffic practices and preferences.
2. Project-specific TCPs should have minimal tables as the speed limit is known (e.g this plan reduces the existing 70 mph zone to 60 mph). Thus, the sign spacing and buffer distances are entered directly into the TCP and the "X" and B" tables deleted. The channelization device table and roll ahead distance tables have been simplified as well.
3. Region Traffic Operations must approve all regulatory speed limit reductions and advisory speeds in work zones. See WSDOT Traffic Manual Section 5-18, Executive Order E1060 for details. Freeway speed limit policy is per Project Delivery Memo 19-01.
4. This project-specific TCP modifies Typical TC107 in the Library. Summary of modifications:
   * Cross-section updated to reflect actual I-90 roadway configuration at project
   * Along tangents, 36" cones are shown (42-inch tall channelization devices and traffic drums are allowed per Note 10) versus only allowing traffic safety drums as shown in Typical TC107
   * I20-301 "NOTICE TRAFFIC FINES DOUBLE IN WORK ZONES" is required for this project, instead of optional like in Typical TCP
5. Before using work zone cells, ensure the color table is updated first for the cells to print properly. The cells appear as full color within Microstation, they are programmed to print in both full color or black/white (as grayscale).



STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
LESS THAN 22,000 lbs.	172'
22,000+ lbs.	150'

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)	
TAPER	TANGENT
##	##

FOR EXIT-RAMP & ON-RAMP DETAILS: SEE TC4.



LEGEND

- TEMPORARY SIGN LOCATION
- TEMPORARY SIGN LOCATION (5' MIN HEIGHT)
- 36" TRAFFIC CONE (SEE NOTE 10)
- TRAFFIC SAFETY DRUM
- RADAR SPEED DISPLAY SIGN (RSDS)
- SEQUENTIAL ARROW SIGN
- TRANSPORTABLE ATTENUATOR (TL-3)
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:

1. IF FEASIBLE, AVOID PLACING LANE CLOSURE OR LANE SHIFT TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL CURVES.
2. DISTANCE INCREASES AS WORK AREA MOVES DOWNSTREAM.
3. RELOCATE RSDS AS WORK AREA MOVES DOWNSTREAM. ENGINEER MAY ORDER ADDITIONAL RSDS (WITH R2-1) PRIOR TO EACH WORK CREW WITHIN WORK AREA.
4. IF USED, PLACE DEVICES TRANSVERSELY ACROSS CLOSED LANES AT 45° +/- AND 5' SPACING AT STRATEGIC LOCATIONS.
5. COVER ALL CONFLICTING SIGNAGE PER STANDARD SPEC 8-21.3(3).
6. DOWNSTREAM TAPER OPTIONAL ACROSS RIGHT LANE. DOWNSTREAM TAPER DEVICE SPACING IS 20'.
7. SIGNS OPTIONAL IF EXISTING SPEED LIMIT SIGNS PRESENT WITHIN 1500' +/- FOLLOWING THE DOWNSTREAM TAPER.
8. ADD "TRUCKS LEAVING HIGHWAY" AND "TRUCKS ENTERING HIGHWAY" (W21-30, 48"x48", 5' HEIGHT) SIGNS 500' +/- PRIOR TO WHERE CONSTRUCTION VEHICLES FREQUENTLY EXIT AND ENTER INTO THE OPEN LANE(S).
9. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
10. 42-INCH TALL CHANNELIZATION DEVICE OR TRAFFIC SAFETY DRUM ALSO ACCEPTABLE.
11. PLAN IS APPLICABLE TO LANE CLOSURES OF 3 DAYS OR LESS.
12. BICYCLES PROHIBITED THROUGH WORK ZONE; CONSIDER PROVIDING DETOUR, ALTERNATIVE ROUTE, OR SHUTTLE IN HIGH-USE LOCATIONS PERMITTING PERMANENT BICYCLE ACCESS.

I-90 (2 LANES): SINGLE RIGHT LANE CLOSURE
(60 MPH WORK ZONE SPEED LIMIT)
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-78.dgn
TIME	9:45:31 AM
DATE	2/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

EXAMPLE 4-78

TRAFFIC CONTROL PLAN

Plot 5

PLAN REF NO TC3

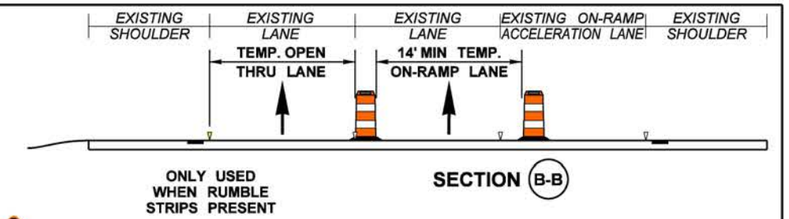
SHEET OF SHEETS

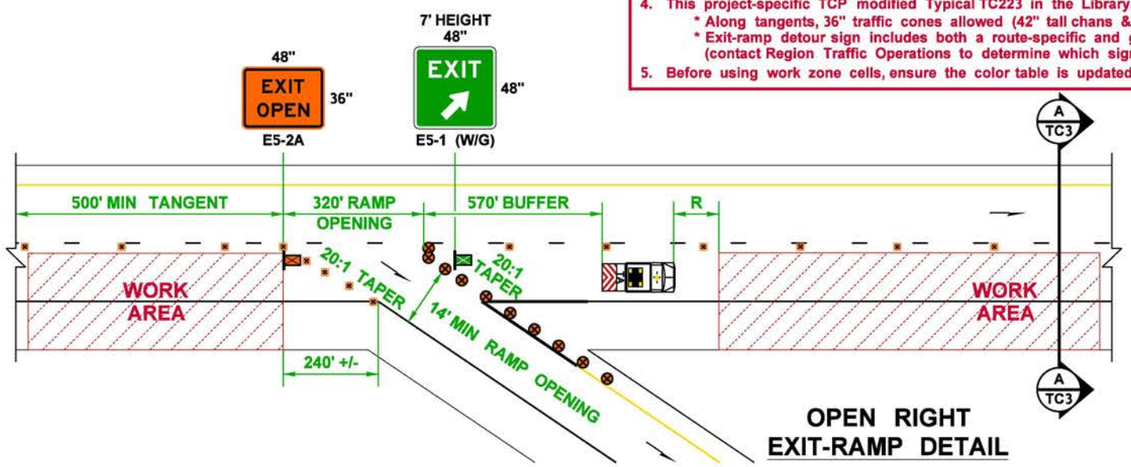
NOTES:

1. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC3.
2. SEE DETOUR PLAN FOR ADDITIONAL RAMP CLOSURE DETOUR SIGNAGE. US395 SOUTH EXIT-RAMP CLOSURE NEEDS A ROUTE-SPECIFIC DETOUR SIGN (48"x48" ON I-5, 36"x36" ON OTHER ROADWAYS). ALL OTHER EXIT-RAMP DETOURS CAN USE THE GENERIC M4-9 (48"x36" ON I-5, 30"x24" ON OTHER ROADWAYS).

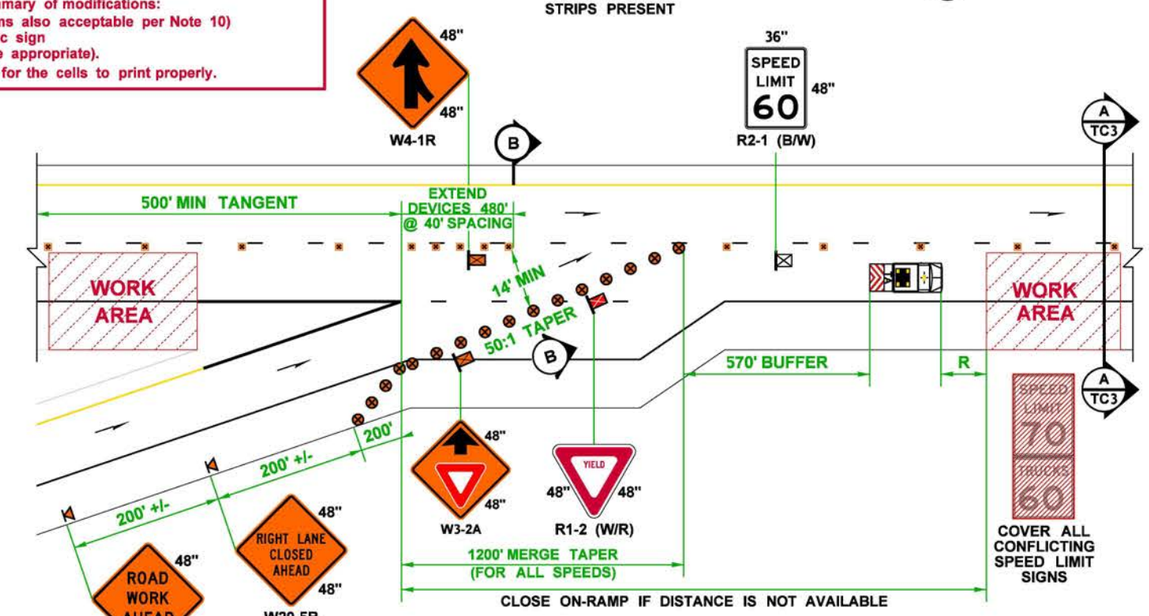
NOTES TO THE DESIGNER

1. The updated Typical TCPs now include Detail sheets to supplement the overall traffic control plan (Typical TC223, Sheet 2B modified here). For example, for exit-ramps and on-ramps within the single right lane closure (as shown on TC3), then this detail sheet applies. Note there's a parallel on-ramp alternative available in the Typical TCP as well.
2. These Detail sheets may also be modified based on Region Traffic Operation practices & preferences. See Designer Guidance sheet in Typical TCP.
3. Region Traffic Operations must approved all regulatory speed limit reductions and advisory speeds in work zones. See WSDOT Traffic Manual Section 5-18.
4. This project-specific TCP modified Typical TC223 in the Library. Summary of modifications:
   * Along tangents, 36" traffic cones allowed (42" tall chans & drums also acceptable per Note 10)
   * Exit-ramp detour sign includes both a route-specific and generic sign (contact Region Traffic Operations to determine which signs are appropriate).
5. Before using work zone cells, ensure the color table is updated first for the cells to print properly.

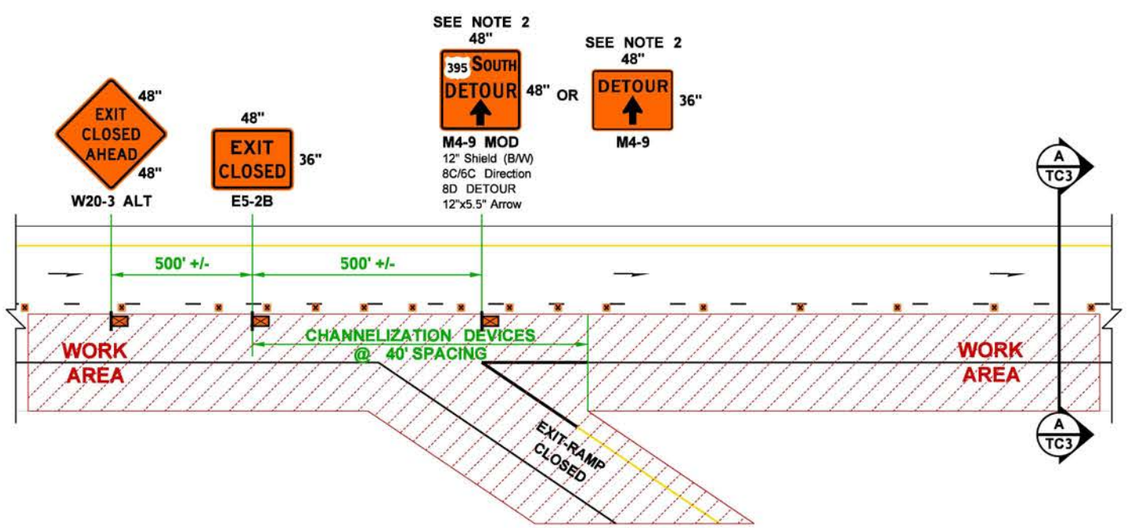




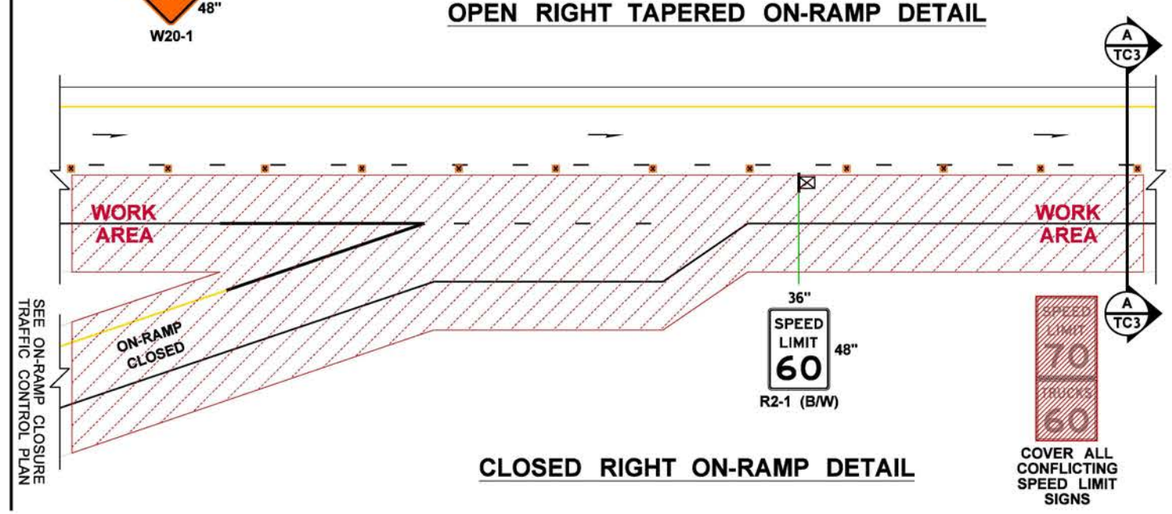
OPEN RIGHT EXIT-RAMP DETAIL



OPEN RIGHT TAPERED ON-RAMP DETAIL



CLOSED RIGHT EXIT-RAMP DETAIL



CLOSED RIGHT ON-RAMP DETAIL

I-90 (2 LANES): SINGLE RIGHT LANE CLOSURE (60 MPH WORK ZONE SPEED LIMIT)

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-79.dgn						
TIME	9:48:02 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	2/18/2025				JOB NUMBER		
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO.
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-79

TRAFFIC CONTROL PLAN

Plot 6

PLAN REF NO TC4

SHEET OF SHEETS

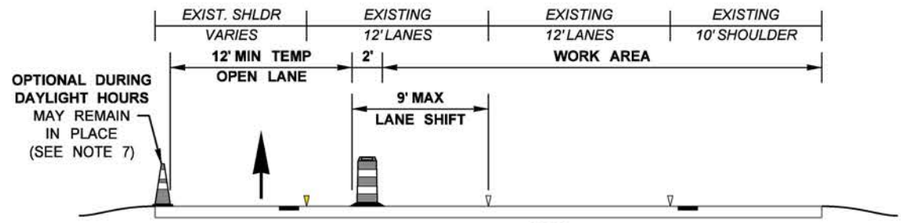
3-MILE QUEUE WARNING SYSTEM MESSAGES					
TRAFFIC SENSORS		PCMS 2		PCMS 1	
B	A	1	2	1	2
TRIGGER	SPEED	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC
35+ MPH	35+ MPH	RIGHT LANE CLOSURE	3 MILES AHEAD	ROADWAY NARROWS 12' WIDE	SHOULDER DRIVING AHEAD
35+ MPH	< 35 MPH	LANE CLOSURE 3 MILES	ROADWAY NARROWS 12' WIDE	SLOW OR STOPPED TRAFFIC	NEXT 1.5 MILES
< 35 MPH	< 35 MPH	SLOW OR STOPPED TRAFFIC	NEXT 3 MILES	USE BOTH LANES	TAKE TURNS AT MERGE

SEE QUEUE WARNING SYSTEM SPECIAL PROVISION OR RFP FOR DETAILS.

LOCATE PCMSs PER STD. SPEC 1-10.3(3)C. PCMS MAY BE PLACED ON OPPOSITE SHOULDER WHEN NEEDED, BUT AVOID RAMP GORES. WHEN PCMSs OR TRAFFIC SENSORS PLACED BEHIND BARRIER/GUARDRAIL OR WITHIN CLOSED LANE, 3 TRANSVERSE TRAFFIC DRUMS ARE NOT REQUIRED.

ADJUST QWS COMPONENTS AS NEEDED TO AVOID CONFLICTS WITH TRAFFIC CONTROL DEVICES, NARROW SHOULDERS, RAMPS, OR TO MAINTAIN VISIBILITY OF SEQUENTIAL ARROW SIGN.

IN THE EVENT OF A SYSTEM FAILURE, SEE SPECIAL PROVISIONS OR RFP "QUEUE WARNING SYSTEM FAILURE PROTOCOL".



SECTION A-A

SHOULDER CLOSURE TAPER LENGTH = L/3	
SHOULDER WIDTH	L/3
< 6'	80'
6'	120'
10'	200'

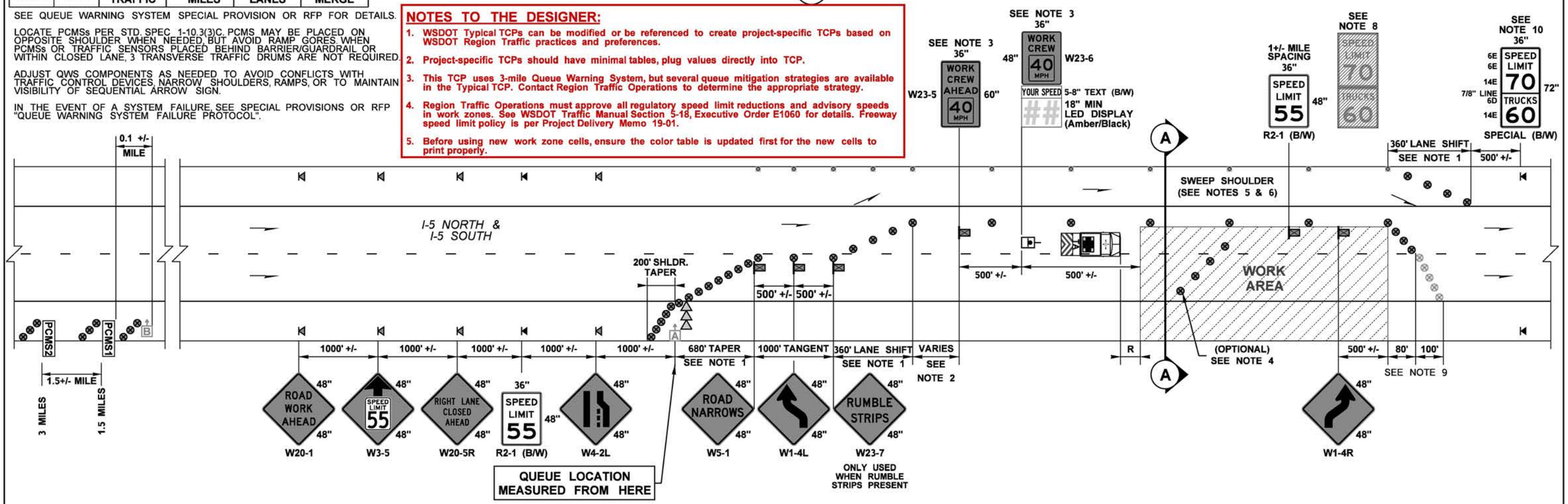
STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
LESS THAN 22,000 lbs.	123'
22,000+ lbs.	100'

FOR EXIT-RAMP & ON-RAMP DETAILS: SEE TC6.

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50 - 55	40	80

NOTES TO THE DESIGNER:

1. WSDOT Typical TCPs can be modified or be referenced to create project-specific TCPs based on WSDOT Region Traffic practices and preferences.
2. Project-specific TCPs should have minimal tables, plug values directly into TCP.
3. This TCP uses 3-mile Queue Warning System, but several queue mitigation strategies are available in the Typical TCP. Contact Region Traffic Operations to determine the appropriate strategy.
4. Region Traffic Operations must approve all regulatory speed limit reductions and advisory speeds in work zones. See WSDOT Traffic Manual Section 5-18, Executive Order E1060 for details. Freeway speed limit policy is per Project Delivery Memo 19-01.
5. Before using new work zone cells, ensure the color table is updated first for the new cells to print properly.



LEGEND

- TEMPORARY SIGN LOCATION
- TEMPORARY SIGN LOCATION (5' MIN HEIGHT)
- 36" TRAFFIC CONE (SEE NOTE 10)
- TRAFFIC SAFETY DRUM
- QWS TRAFFIC SENSOR
- RADAR SPEED DISPLAY SIGN (RSDS)
- SEQUENTIAL ARROW SIGN
- TRANSPORTABLE ATTENUATOR (TL-3)
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:

1. IF FEASIBLE, AVOID PLACING LANE CLOSURE OR LANE SHIFT TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL CURVES.
2. DISTANCE INCREASES AS WORK AREA MOVES DOWNSTREAM.
3. RELOCATE RSDS AS WORK AREA MOVES DOWNSTREAM. ENGINEER MAY ORDER ADDITIONAL RSDS (WITH W23-6) AND W23-5 PRIOR TO EACH WORK CREW WITHIN WORK AREA.
4. IF USED, PLACE DEVICES TRANSVERSELY ACROSS CLOSED LANES AT 45° +/- AND 5' SPACING AT STRATEGIC LOCATIONS.
5. WHEN SHOULDER NARROWS, USE LANE SHIFTS (40:1 MIN SHIFT TAPER @ 6' MIN WIDTH) WITH W1-4 SIGNS 500' +/- PRIOR.
6. CONTACT WSDOT COMMERICAL VEHICLE SERVICES AT LEAST 7 DAYS IN ADVANCE OF ROADWAY WIDTH RESTRICTIONS.
7. 28" TRAFFIC CONES MAY REMAIN IN PLACE THROUGHOUT THE PROJECT (THEY DO NOT HAVE TO BE REMOVED DAILY/NIGHTLY).
8. COVER ALL CONFLICTING SIGNAGE PER STANDARD SPEC 8-21.3(3).
9. DOWNSTREAM TAPER OPTIONAL ACROSS RIGHT LANE, BUT FIRST 80' REQUIRED STREAM TAPER DEVICE SPACING IS 20'.
10. SIGNS OPTIONAL IF EXISTING SPEED LIMIT SIGNS PRESENT WITHIN 1500' +/- FOLLOWING THE DOWNSTREAM TAPER.
11. ADD "TRUCKS LEAVING HIGHWAY" AND "TRUCKS ENTERING HIGHWAY" (W21-30, 48"x48", 5' HEIGHT) SIGNS 500' +/- PRIOR TO WHERE CONSTRUCTION VEHICLES FREQUENTLY EXIT AND ENTER INTO THE OPEN LANE(S). ADJUST TO AVOID W1-4R SIGN.
12. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
13. PLAN IS APPLICABLE TO LANE CLOSURES OF 3 DAYS OR LESS.
14. BICYCLES PROHIBITED THROUGH WORK ZONE; CONSIDER PROVIDING DETOUR, ALTERNATIVE ROUTE, OR SHUTTLE IN HIGH-USE LOCATIONS PERMITTING PERMANENT BICYCLE ACCESS.

I-5 (2 LANES): SINGLE RIGHT LANE CLOSURE, 9' MAX LEFT SHOULDER SHIFT
(55 MPH WORK ZONE SPEED LIMIT, 40 MPH ADVISORY SPEED)
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-80.dgn
TIME	10:12:13 AM
DATE	2/19/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-80

TRAFFIC CONTROL PLAN

Plot 7

PLAN REF NO TC5

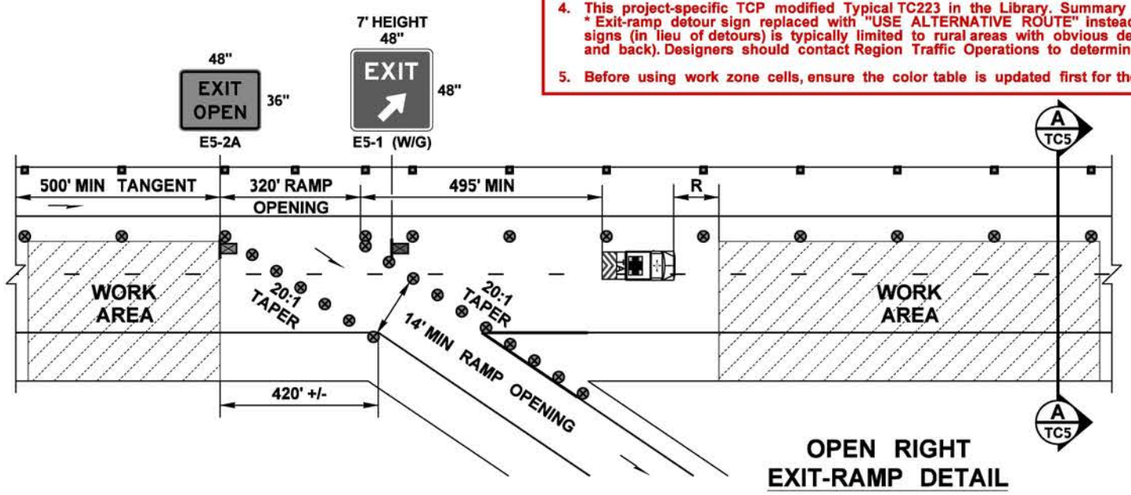
SHEET OF SHEETS

NOTES:

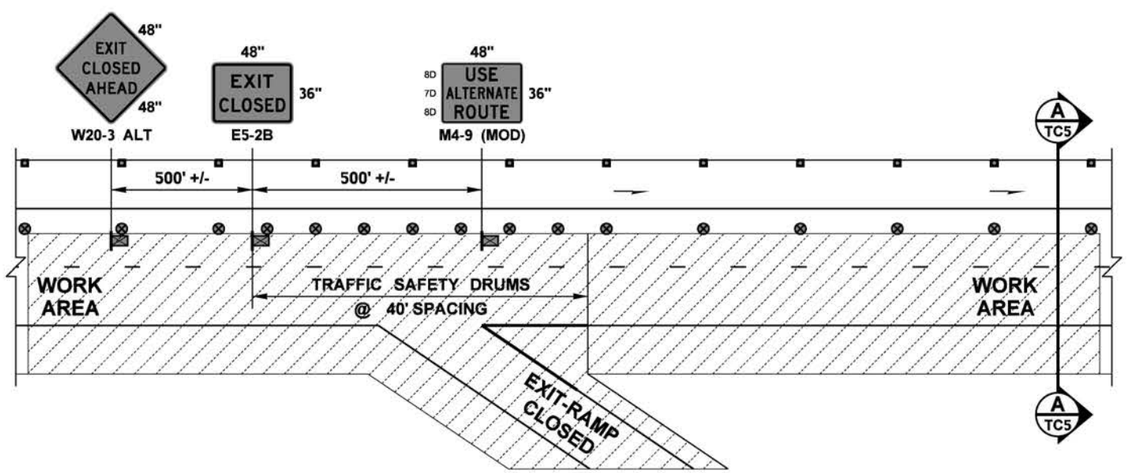
1. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC5.
2. FOR RIGHT RAMP DETAILS FOR A SINGLE RIGHT LANE CLOSURE (WITHOUT SHOULDER SHIFT) SEE TYPICAL TRAFFIC CONTROL PLAN TC107, SHEET 2B. ADD R2-1 (55) SIGN AFTER ON-RAMP MERGES NEAR COVERED EXISTING SPEED LIMIT SIGN.

NOTES TO THE DESIGNER:

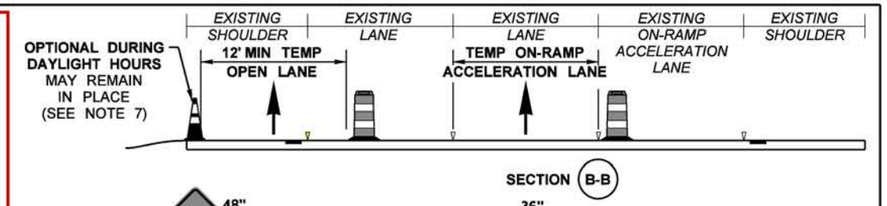
1. The updated Typical TCPs now include Detail sheets to supplement the overall traffic control plan (Typical TC238, Sheet 2A modified here). For example, for exit-ramps and on-ramps within the single right lane closure (as shown on TC3), then this detail sheet applies. Note there's a tapered on-ramp alternative available in the Typical TCP as well.
2. These Detail sheets may also be modified based on Region Traffic Operation practices & preferences. See Designer Guidance sheet in Typical TCP.
3. Region Traffic Operations must approved all regulatory speed limit reductions and advisory speeds in work zones. See WSDOT Traffic Manual Section 5-18.
4. This project-specific TCP modified Typical TC223 in the Library. Summary of modifications:
   * Exit-ramp detour sign replaced with "USE ALTERNATIVE ROUTE" instead of Detour signs. Using alternative route signs (in lieu of detours) is typically limited to rural areas with obvious detour routes (e.g down to the next interchange and back). Designers should contact Region Traffic Operations to determine which strategy is appropriate.
5. Before using work zone cells, ensure the color table is updated first for the cells to print properly.

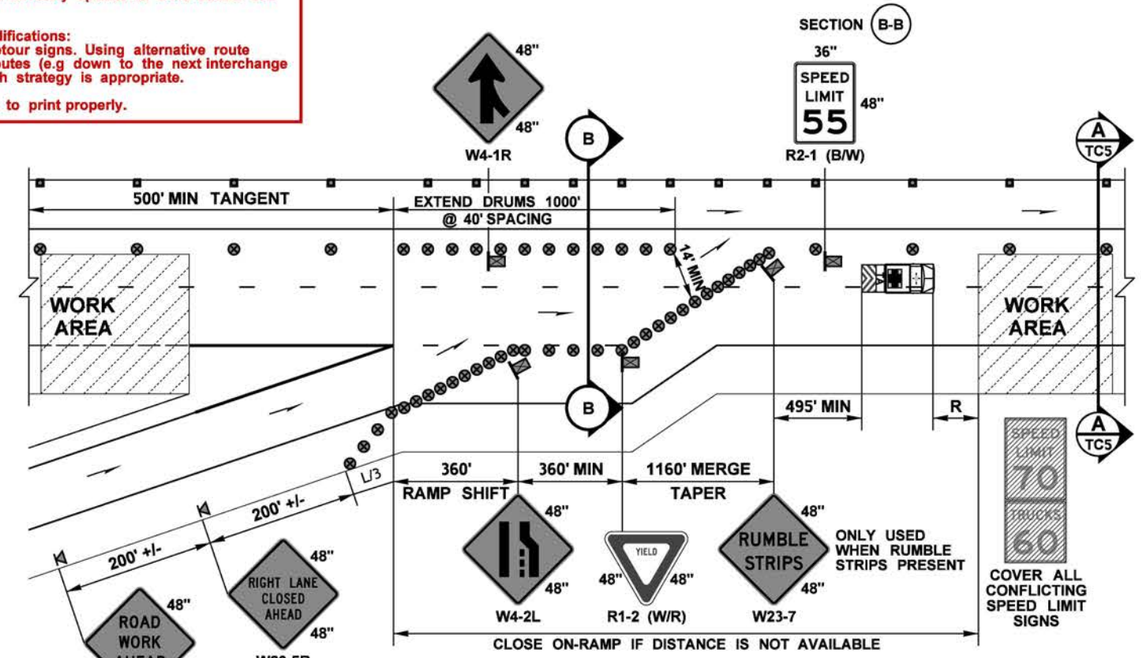


OPEN RIGHT EXIT-RAMP DETAIL

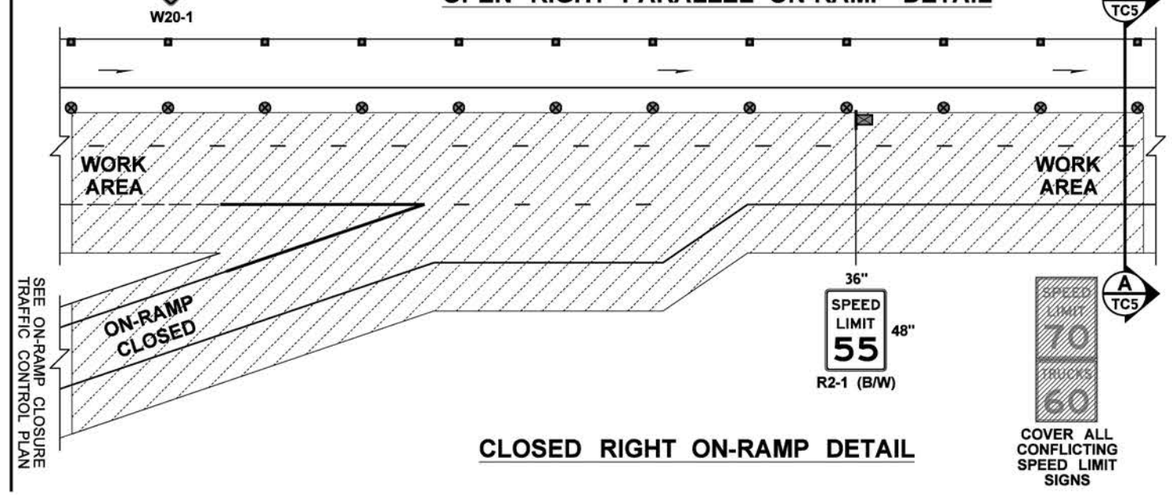


CLOSED RIGHT EXIT-RAMP DETAIL





OPEN RIGHT PARALLEL ON-RAMP DETAIL



CLOSED RIGHT ON-RAMP DETAIL

I-5 (2 LANES): SINGLE RIGHT LANE CLOSURE, 9' MAX LEFT SHOULDER SHIFT (55 MPH WORK ZONE SPEED LIMIT, 40 MPH ADVISORY SPEED)

NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-81.dgn						
TIME	9:49:56 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	2/18/2025						
PLOTTED BY	WilliSD				JOB NUMBER		
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO.
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-81

TRAFFIC CONTROL PLAN

Plot 8

PLAN REF NO TC6

SHEET OF SHEETS

PCMS1		
1	2	3
2 LEFT LANE CLOSURE	45 MPH ZONE AHEAD	WATCH FOR SLOW TRAFFIC
1.5 SEC	1.5 SEC	1.5 SEC

LOCATE AT MP 30.00.

REMOVE PHASE 3 WHEN TRAFFIC QUEUES NO LONGER EXPECTED. INCREASE DISPLAY TO 2.0 SEC.

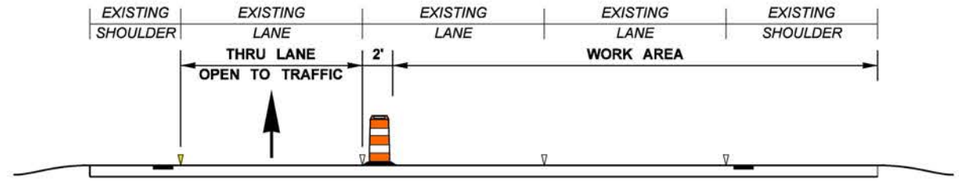
LOCATE PCMS PER WSDOT STANDARD SPEC. 1-10.3(3)C.

PCMS2	
1	2
CHICANE SHIFT TO LEFT	500 FEET AFTER EXIT 27
2.0 SEC	2.0 SEC

LOCATE AT MP 27.67.

ONLY DISPLAY MESSAGE WHEN CHICANE SHIFT IS IN PLACE, OTHERWISE PLACE ON FLASHING 4-DOT CAUTION MODE.

LOCATE PCMS PER WSDOT STANDARD SPEC. 1-10.3(3)C.



SECTION A-A

SHOULDER CLOSURE TAPER LENGTH = L/3	
SHOULDER WIDTH	L/3
< 6'	60'
6'	90'
10'	150'

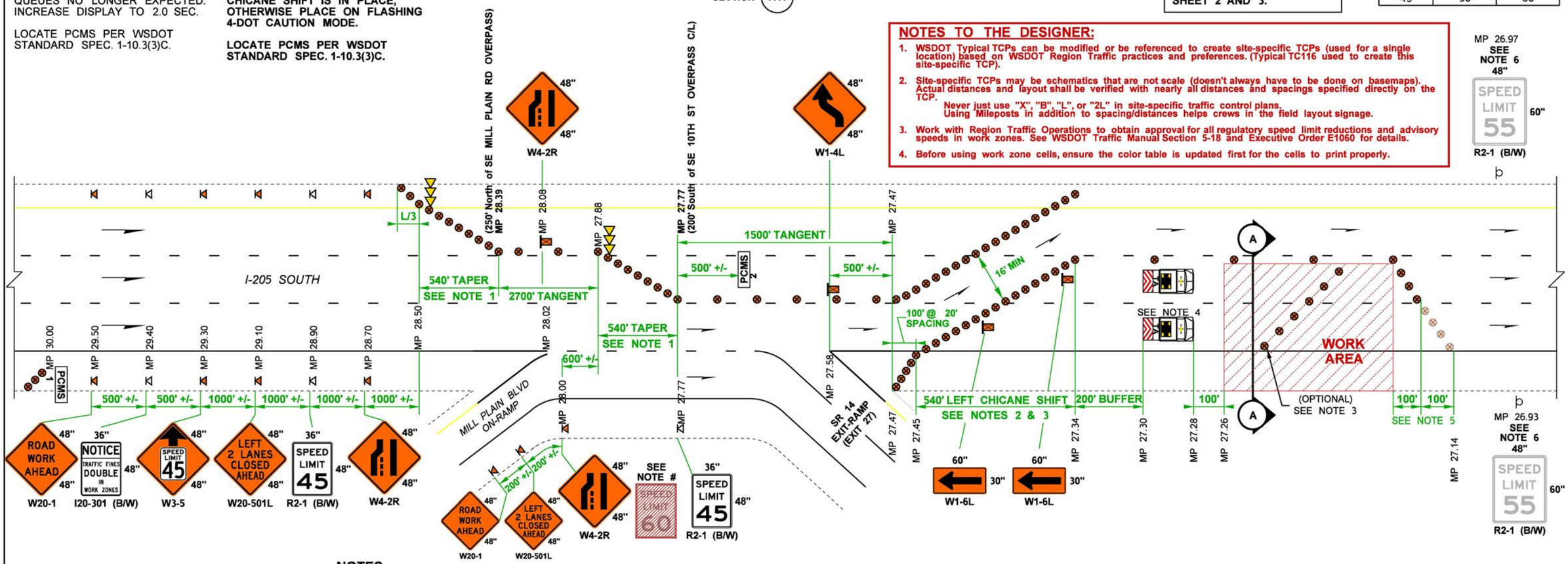
STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
LESS THAN 22,000 lbs.	123'
22,000+ lbs.	100'

FOR RAMP DETAILS: SEE TC104 OR TC108, SHEET 2 AND 3.

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
45	30	60

NOTES TO THE DESIGNER:

1. WSDOT Typical TCPs can be modified or be referenced to create site-specific TCPs (used for a single location) based on WSDOT Region Traffic practices and preferences. (Typical TC116 used to create this site-specific TCP).
2. Site-specific TCPs may be schematics that are not scale (doesn't always have to be done on basemaps). Actual distances and layout shall be verified with nearly all distances and spacings specified directly on the TCP.
   Never just use "X", "B", "L", or "2L" in site-specific traffic control plans.
   Using Mileposts in addition to spacing/distances helps crews in the field layout signage.
3. Work with Region Traffic Operations to obtain approval for all regulatory speed limit reductions and advisory speeds in work zones. See WSDOT Traffic Manual Section 5-18 and Executive Order E1060 for details.
4. Before using work zone cells, ensure the color table is updated first for the cells to print properly.



LEGEND

- TEMPORARY SIGN LOCATION
- TEMPORARY SIGN LOCATION (5' MIN HEIGHT)
- TRAFFIC SAFETY DRUM
- SEQUENTIAL ARROW SIGN
- TRANSPORTABLE ATTENUATOR (TL-3)
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:

1. IF FEASIBLE, AVOID PLACING LANE CLOSURE OR LANE SHIFT TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL CURVES.
2. CHANNELIZATION DEVICES NEEDED FOR CHICANE MAY BE ADDED WITHIN DOUBLE LEFT LANE CLOSURE PRIOR TO PERFORMING THE ROLLING SLOWDOWN. DO NOT PRESTAGE W1-6 SIGNS.
3. ROLLING SLOWDOWN SHALL BE USED TO INSTALL CHICANE CHANNELIZATION DEVICES ACROSS RIGHT LANE AND SHOULDER, PLACE W1-6 SIGNS, AND RELOCATE THE WORK AREA.
4. MINIMUM TRANSPORTABLE ATTENUATOR WEIGHT IS 22,001 LBS.
5. IF USED, PLACE DEVICES TRANSVERSELY ACROSS CLOSED LANES AT 45° +/- AND 5' SPACING AT STRATEGIC LOCATIONS.
6. COVER ALL CONFLICTING SIGNAGE PER STANDARD SPEC 8-21.3(3).
7. DOWNSTREAM TAPER OPTIONAL ACROSS RIGHT LANE, BUT FIRST 100' REQUIRED ACROSS THE CENTER LANE. DOWNSTREAM TAPER DEVICE SPACING IS 20'.
8. EXISTING SPEED LIMIT 55 SIGNS, FOLLOWING SR14 ON-RAMP, RESTORES EXISTING SPEED LIMIT AT COLUMBIA RIVER BRIDGE.
9. ADD "TRUCKS LEAVING HIGHWAY" AND "TRUCKS ENTERING HIGHWAY" (W21-30, 48"x48", 5' HEIGHT) SIGNS 500' +/- PRIOR TO WHERE CONSTRUCTION VEHICLES FREQUENTLY EXIT AND ENTER INTO THE OPEN LANE(S).
10. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
11. PLAN IS APPLICABLE TO LANE CLOSURES OF 3 DAYS OR LESS.
12. BICYCLES PROHIBITED THROUGH WORK ZONE; CONSIDER PROVIDING DETOUR, ALTERNATIVE ROUTE, OR SHUTTLE IN HIGH USE LOCATIONS PERMITTING PERMANENT BICYCLE ACCESS.

I-205 SOUTH: DOUBLE LEFT LANE CLOSURE WITH LEFT CHICANE SHIFT AT BR205/3
(45 MPH WORK ZONE SPEED LIMIT)
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-82.dgn
TIME	3:07:10 PM
DATE	2/21/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER
CONTRACT NO. | LOCATION NO.

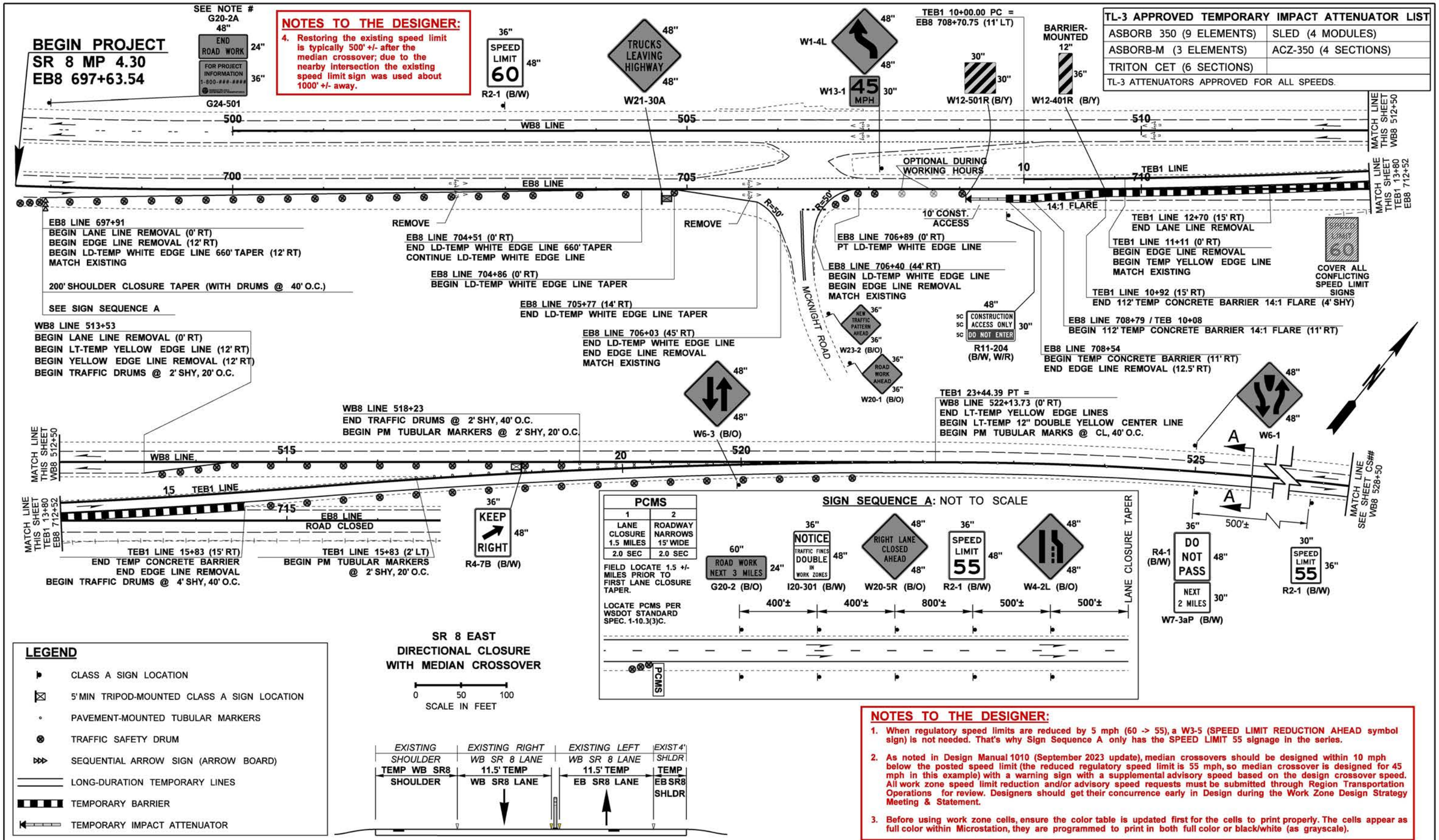
P.E. STAMP BOX DATE
P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-82

TRAFFIC CONTROL PLAN

Plot 9
PLAN REF NO TC7
SHEET OF SHEETS



NOTES TO THE DESIGNER:

1. When regulatory speed limits are reduced by 5 mph (60 -> 55), a W3-5 (SPEED LIMIT REDUCTION AHEAD symbol sign) is not needed. That's why Sign Sequence A only has the SPEED LIMIT 55 signage in the series.
2. As noted in Design Manual 1010 (September 2023 update), median crossovers should be designed within 10 mph below the posted speed limit (the reduced regulatory speed limit is 55 mph, so median crossover is designed for 45 mph in this example) with a warning sign with a supplemental advisory speed based on the design crossover speed. All work zone speed limit reduction and/or advisory speed requests must be submitted through Region Transportation Operations for review. Designers should get their concurrence early in Design during the Work Zone Design Strategy Meeting & Statement.
3. Before using work zone cells, ensure the color table is updated first for the cells to print properly. The cells appear as full color within Microstation, they are programmed to print in both full color or black/white (as grayscale).

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-83.dgn				
TIME	3:07:54 PM				
DATE	2/21/2025				
PLOTTED BY	WilliSD				
DESIGNED BY					
ENTERED BY					
CHECKED BY					
PROJ. ENGR.					
REGIONAL ADM.		REVISION	DATE	BY	

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER
CONTRACT NO. | LOCATION NO.

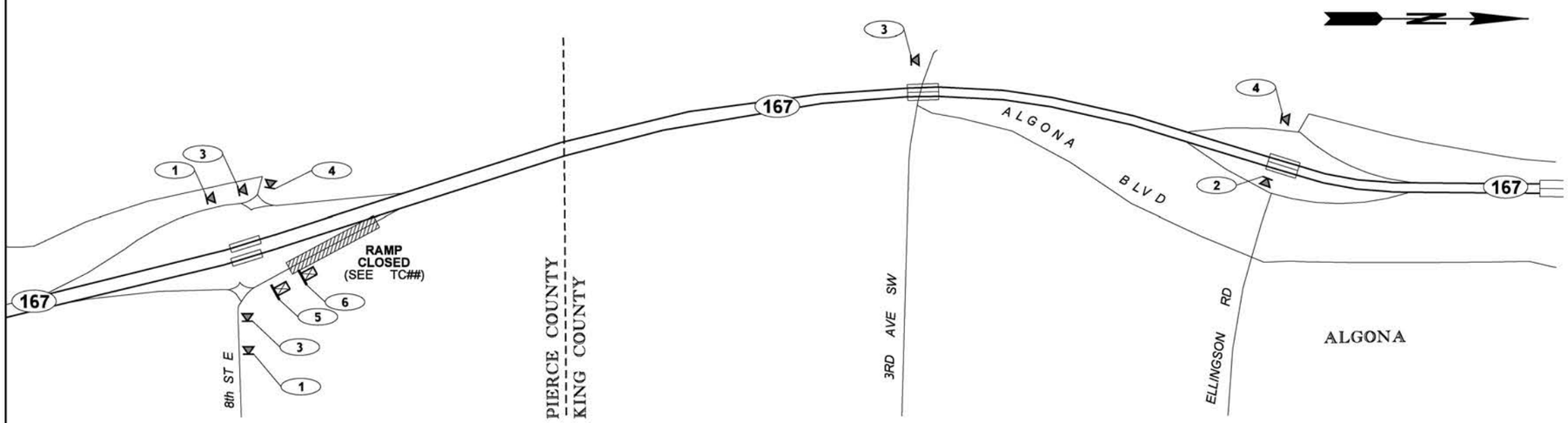
P.E. STAMP BOX DATE
P.E. STAMP BOX DATE

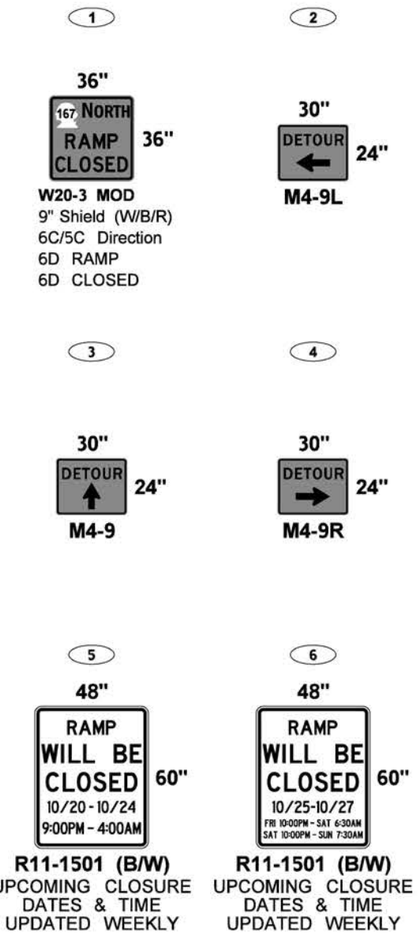
Washington State Department of Transportation

EXAMPLE 4-83

STAGED TRAFFIC CONTROL PLAN

Plot 12
PLAN REF NO STC2
SHEET OF SHEETS





RECOMMENDED SIGN SPACING = X (1)		
FREEWAYS & EXPRESSWAYS	50-75 MPH	1500' +/-
RURAL HIGHWAYS	60-70 MPH	800' +/-
RURAL ROADS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

NOTES:

1. SEE SPECIAL PROVISIONS "PUBLIC CONVENIENCE AND SAFETY - CONSTRUCTION UNDER TRAFFIC" FOR PERMITTED CLOSURE HOURS.
2. PLACE NEAREST SIGN 100' +/- AND THEN "X" SPACING FOR EACH ADDITIONAL SIGN APPROACHING THE INTERSECTION.
3. SIGNS ARE BLACK ON ORANGE UNLESS NOTED OTHERWISE.

LEGEND

- CLASS B SIGN LOCATION (SEE NOTES 1 & 2)
- CLASS B SIGN LOCATION (5' MIN HEIGHT)
- (?) CONSTRUCTION SIGN CALLOUT

NOTES TO THE DESIGNER:

1. In lieu of using PCMS or mPCMS (mini PCMS), consider using a W20-3 MOD to inform drivers of the current ramp closure. Route-specific ramp closure signs are available in cell library "RampClosedAheadRS_600s" for 48"x48" and "RampClosedAheadRS_700s" for 36"x36" signs. Contact Region Traffic Operations for their preferences.
2. Generic detour signs are typically 48"x36" on freeways and 30"x24" on conventional roadways. On conventional roadways, 48"x36" signs may be strategically used. For simple, straightforward daily/nightly detours, generic detour signs are normally sufficient; however, route-specific detour signs may be used. Contact Region Traffic Operations for their preferences and standard practices.
3. Work zone cells "Detour..." are available for various detour sign configurations.
4. Class B signs now have a duration of 7 days or less, so R11-1501 is now a Class B sign. Plan shows a second R11-1501 to explain weekend closures (which tend to have different hours) in addition to a weekday/weeknight R11-1501 sign.
5. Before using work zone cells, ensure the color table is updated first for the cells to print properly. The cells appear as full color within Microstation, they are programmed to print in both full color or black/white (as grayscale).

8TH ST E TO NORTH SR 167
ON-RAMP DETOUR
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-84.dgn						
TIME	3:08:42 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	2/21/2025				JOB NUMBER		
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO.
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State
Department of Transportation

EXAMPLE 4-84

DETOUR PLAN

Plot 13

PLAN REF NO DU1

SHEET OF SHEETS

(1) 48" 161 SOUTH CLOSED 4 MILES AHEAD 48"
W19-3 MOD
11" Shield (B/W)
8C/6C Direction
7E CLOSED
6E # MILES
6E AHEAD

(2) 48" 161 SOUTH DETOUR 48"
M4-9 MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
16.25"x3.7" Arrow

(3) 48" 161 SOUTH DETOUR 48"
M4-9L MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
21.5"x3.7" Arrow

(4) 36" 161 SOUTH CLOSED 3 MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

(5) 36" 161 SOUTH CLOSED ½ MILE AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

(6) 36" 161 SOUTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

(7) 36" 161 SOUTH DETOUR 36"
M4-9L MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

(8) 36" 161 SOUTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
9"x5.5" Arrow

(9) 36" 161 SOUTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

(10) 36" 161 SOUTH DETOUR 36"
M4-9R MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

(11) 48" 161 NORTH CLOSED 2 MILES AHEAD 48"
W19-3 MOD
11" Shield (B/W)
8C/6C Direction
7E CLOSED
6E # MILES
6E AHEAD

(12) 48" 161 NORTH DETOUR 48"
M4-9 MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
16.25"x3.7" Arrow

(13) 48" 161 NORTH DETOUR 48"
M4-9R MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
21.5"x3.7" Arrow

(14) 36" 161 NORTH CLOSED 1½ MILE AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

(15) 36" 161 NORTH CLOSED ½ MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

(16) 36" 161 NORTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

(17) 36" 161 NORTH DETOUR 36"
M4-9L MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

(18) 36" 161 NORTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
9"x5.5" Arrow

(19) 36" 161 NORTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

(20) 36" 161 NORTH DETOUR 36"
M4-9R MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

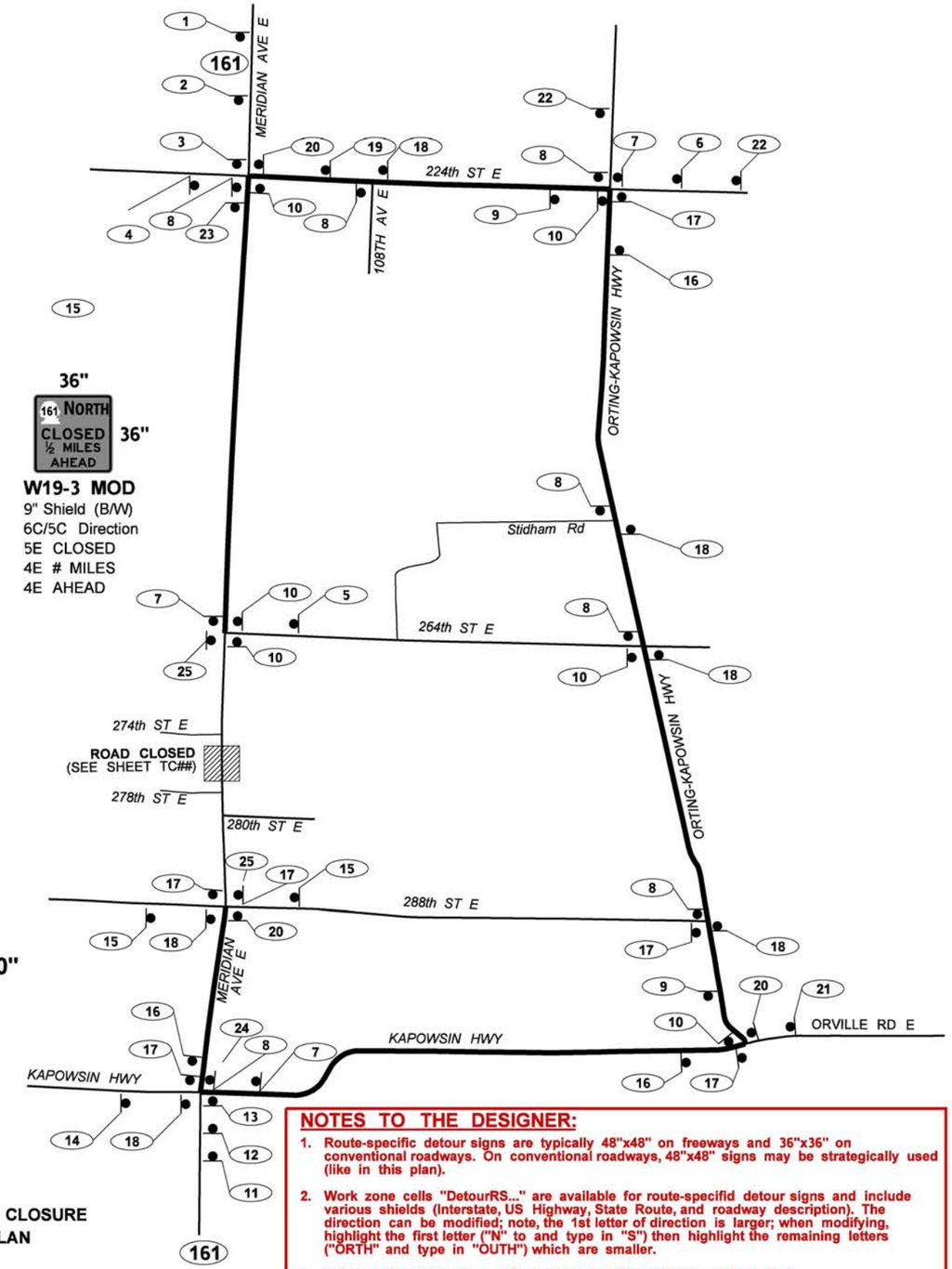
(21) 36" 161 NORTH CLOSED 5 MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

(22) 36" 161 SOUTH CLOSED 5 MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

(23) 60" ROAD CLOSED ## MILES AHEAD LOCAL TRAFFIC ONLY 30"
R11-3 (B/W)

(24) 60" ROAD CLOSED ## MILES AHEAD LOCAL TRAFFIC ONLY 30"
R11-3 (B/W)

(25) 60" ROAD CLOSED TO THRU TRAFFIC 30"
R11-4 (B/W)



NOTES:

1. STANDARD PLAN K80.10 & STANDARD SPECIFICATIONS 1-10.3(3)A, 9-35.2, AND 9-35.3 FOR CLASS A SIGNING INSTALLATION DETAILS AND REQUIREMENTS.
2. PLACE NEAREST SIGN 100'+/- AND THEN "X" SPACING FOR EACH ADDITIONAL SIGN APPROACHING THE INTERSECTION.
3. PLACE TYPE III BARRICADES (R11-3 AND R11-4) ADJACENT TO TRAVELED WAY (ON SHOULDER, BUT NOT WITHIN TRAVEL LANES).
4. SIGNS ARE BLACK ON ORANGE UNLESS NOTED OTHERWISE.

LEGEND

- ● CLASS A SIGN LOCATION (SEE NOTES 1 & 2)
- (?) CONSTRUCTION SIGN CALLOUT

RECOMMENDED SIGN SPACING = X (1)		
FREEWAYS & EXPRESSWAYS	50-75 MPH	1500' +/-
RURAL HIGHWAYS	60-70 MPH	800' +/-
RURAL ROADS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

SR161 ROADWAY CLOSURE DETOUR PLAN

NOTES TO THE DESIGNER:

1. Route-specific detour signs are typically 48"x48" on freeways and 36"x36" on conventional roadways. On conventional roadways, 48"x48" signs may be strategically used (like in this plan).
2. Work zone cells "DetourRS..." are available for route-specifid detour signs and include various shields (Interstate, US Highway, State Route, and roadway description). The direction can be modified; note, the 1st letter of direction is larger; when modifying, highlight the first letter ("N" to and type in "S") then highlight the remaining letters ("ORTH" and type in "OUTH") which are smaller.
3. Before using work zone cells, ensure the color table is updated first.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-85.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
TIME	9:55:53 AM						
DATE	2/18/2025						
PLOTTED BY	WilliSD				JOB NUMBER		
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.		LOCATION NO.
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-85

DETOUR PLAN

PLAN REF NO DU3

SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\GeoMetrix\Manuals\PPM\Div4_MasterFiles\PPM_Div_4_Example_4-74.dgn

1 — 48" — 161 SOUTH CLOSED 4 MILES AHEAD 48"
W19-3 MOD
11" Shield (B/W)
8C/6C Direction
7E CLOSED
6E # MILES
6E AHEAD

2 — 48" — 161 SOUTH DETOUR 48"
M4-9 MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
16.25"x3.7" Arrow

3 — 48" — 161 SOUTH DETOUR 48"
M4-9L MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
21.5"x3.7" Arrow

4 — 36" — 161 SOUTH CLOSED 3 MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

5 — 36" — 161 SOUTH CLOSED ½ MILE AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

6 — 36" — 161 SOUTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

7 — 36" — 161 SOUTH DETOUR 36"
M4-9L MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

8 — 36" — 161 SOUTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
9"x5.5" Arrow

9 — 36" — 161 SOUTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

10 — 36" — 161 SOUTH DETOUR 36"
M4-9R MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

11 — 48" — 161 NORTH CLOSED 2 MILES AHEAD 48"
W19-3 MOD
11" Shield (B/W)
8C/6C Direction
7E CLOSED
6E # MILES
6E AHEAD

12 — 48" — 161 NORTH DETOUR 48"
M4-9 MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
16.25"x3.7" Arrow

13 — 48" — 161 NORTH DETOUR 48"
M4-9R MOD
11" Shield (B/W)
8C/6C Direction
8D DETOUR
21.5"x3.7" Arrow

14 — 36" — 161 NORTH CLOSED 1½ MILE AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

15 — 36" — 161 NORTH CLOSED ½ MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

16 — 36" — 161 NORTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

17 — 36" — 161 NORTH DETOUR 36"
M4-9L MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

18 — 36" — 161 NORTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
9"x5.5" Arrow

19 — 36" — 161 NORTH DETOUR 36"
M4-9 MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
12.5"x2.75" Arrow

20 — 36" — 161 NORTH DETOUR 36"
M4-9R MOD
9" Shield (B/W)
6C/5C Direction
6D DETOUR
15.9"x2.75" Arrow

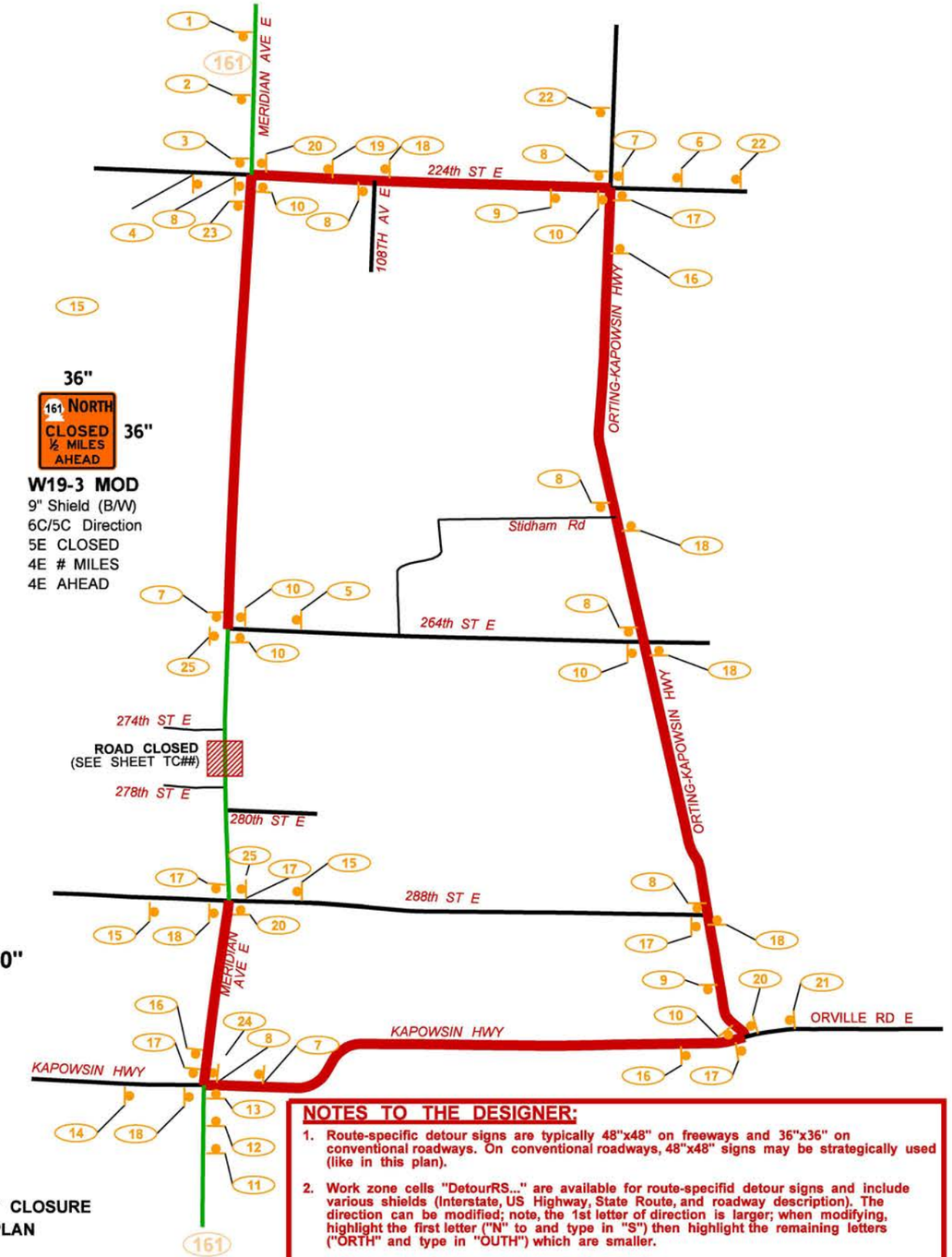
21 — 36" — 161 NORTH CLOSED 5 MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

22 — 36" — 161 SOUTH CLOSED 5 MILES AHEAD 36"
W19-3 MOD
9" Shield (B/W)
6C/5C Direction
5E CLOSED
4E # MILES
4E AHEAD

23 — 60" — ROAD CLOSED ## MILES AHEAD LOCAL TRAFFIC ONLY 30"
R11-3 (B/W)

24 — 60" — ROAD CLOSED ## MILES AHEAD LOCAL TRAFFIC ONLY 30"
R11-3 (B/W)

25 — 60" — ROAD CLOSED TO THRU TRAFFIC 30"
R11-4 (B/W)



NOTES:

1. STANDARD PLAN K80.10 & STANDARD SPECIFICATIONS 1-10.3(3)A, 9-35.2, AND 9-35.3 FOR CLASS A SIGNING INSTALLATION DETAILS AND REQUIREMENTS.
2. PLACE NEAREST SIGN 100' +/- AND THEN "X" SPACING FOR EACH ADDITIONAL SIGN APPROACHING THE INTERSECTION.
3. PLACE TYPE III BARRICADES (R11-3 AND R11-4) ADJACENT TO TRAVELED WAY (ON SHOULDER, BUT NOT WITHIN TRAVEL LANES).
4. SIGNS ARE BLACK ON ORANGE UNLESS NOTED OTHERWISE.

LEGEND

CLASS A SIGN LOCATION (SEE NOTES 1 & 2)

? CONSTRUCTION SIGN CALLOUT

RECOMMENDED SIGN SPACING = X (1)		
FREEWAYS & EXPRESSWAYS	50-75 MPH	1500' +/-
RURAL HIGHWAYS	60-70 MPH	800' +/-
RURAL ROADS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

SR161 ROADWAY CLOSURE DETOUR PLAN

NOTES TO THE DESIGNER:

1. Route-specific detour signs are typically 48"x48" on freeways and 36"x36" on conventional roadways. On conventional roadways, 48"x48" signs may be strategically used (like in this plan).
2. Work zone cells "DetourRS..." are available for route-specifid detour signs and include various shields (Interstate, US Highway, State Route, and roadway description). The direction can be modified; note, the 1st letter of direction is larger; when modifying, highlight the first letter ("N" to and type in "S") then highlight the remaining letters ("ORTH" and type in "OUTH") which are smaller.
3. Before using work zone cells, ensure the color table is updated first.

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-86.dgn
TIME	3:18:19 PM
DATE	5/7/2025
PLOTTED BY	WillisD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER
CONTRACT NO. | LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

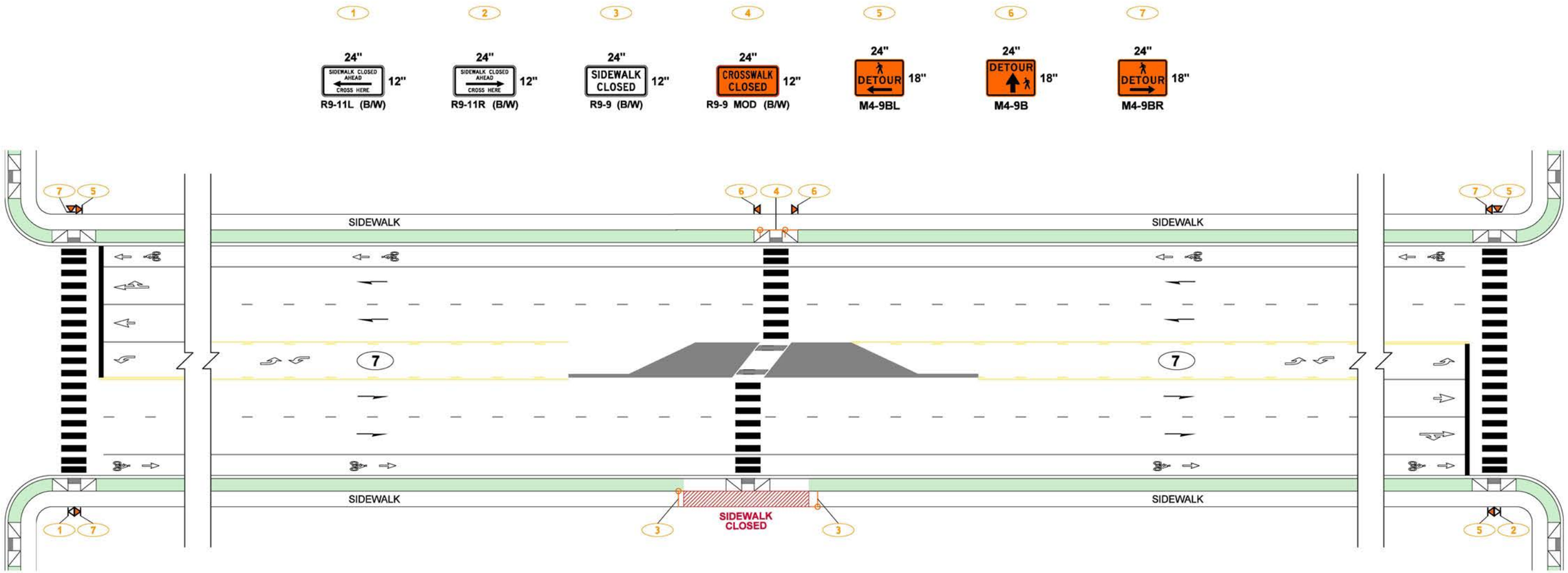
EXAMPLE 4-86

DETOUR PLAN

PLAN REF NO DU3

SHEET OF SHEETS

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Development Division\GeoMetrix\Manuals\PPM\Div4_MasterFiles\PPM_Div_4_Example_4-74.dgn



NOTES:

1. SEE SPECIAL PROVISIONS "PUBLIC CONVENIENCE AND SAFETY - CONSTRUCTION UNDER TRAFFIC" FOR PERMITTED CLOSURE HOURS.
2. CONTACT AND COORDINATE WITH IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING SIDEWALK/CROSSWALK CLOSURE.
3. SIGNS ARE BLACK ON ORANGE UNLESS NOTED OTHERWISE.

LEGEND:

- CLASS B SIGN LOCATION (SEE NOTES 1 & 2)
- CONSTRUCTION SIGN CALLOUT
- PEDESTRIAN CHANNELIZATION DEVICE

NOTES TO THE DESIGNER:

1. Do not close sidewalks/crosswalks with Type 2 or Type 3 barricades. Instead, use a pedestrian channelization device across the sidewalk/crosswalk.
2. See Design Manual Chapter 1010 for policies relating to pedestrian and bicycle accommodations in work zones. See Washington Traffic Control Supervisor course book Chapter 8 and 9 for more detailed information.
3. Before using new work zone cells, ensure the color table is updated first for the new cells to print properly. The cells appear as full color within Microstation, they are programmed to print in both full color or black/white (as grayscale).

PEDESTRIAN DETOUR PLAN
NOT TO SCALE

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-87.dgn
TIME	9:58:09 AM
DATE	2/18/2025
PLOTTED BY	WilliSD
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-87

PEDESTRIAN TRAFFIC CONTROL PLAN

Plot 16

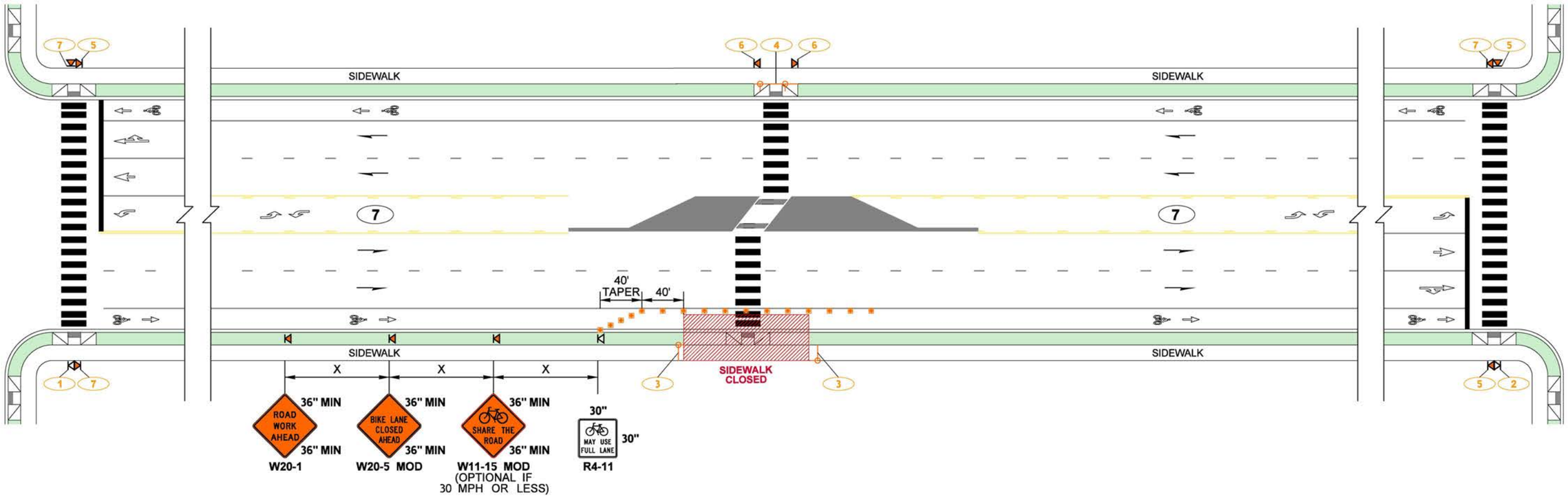
PLAN REF NO PTC1

SHEET OF SHEETS

RECOMMENDED SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



NOTES:

1. SEE SPECIAL PROVISIONS "PUBLIC CONVENIENCE AND SAFETY - CONSTRUCTION UNDER TRAFFIC" FOR PERMITTED CLOSURE HOURS.
2. CONTACT AND COORDINATE WITH IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING SIDEWALK/CROSSWALK CLOSURE.
3. 28" TRAFFIC CONES MINIMUM. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES MAY ALSO BE USED.
4. SIGNS ARE BLACK ON ORANGE UNLESS NOTED OTHERWISE.

LEGEND

- CLASS B SIGN LOCATION (SEE NOTES 1 & 2)
- ? CONSTRUCTION SIGN CALLOUT
- 28" REFLECTIVE TRAFFIC CONE (SEE NOTE 3)
- PEDESTRIAN CHANNELIZATION DEVICE

PEDESTRIAN DETOUR PLAN
WITH BICYCLE TEMPORARY TRAFFIC CONTROL
(40 MPH OR LESS)
NOT TO SCALE

NOTES TO THE DESIGNER:

1. Do not close sidewalks/crosswalks with Type 2 or Type 3 barricades. Instead, use a pedestrian channelization device across the sidewalk/crosswalk.
2. See Design Manual Chapter 1010 for policies relating to pedestrian and bicycle accommodations in work zones. See Washington Traffic Control Supervisor course book Chapter 8 and 9 for more detailed information.
3. Before using new work zone cells, ensure the color table is updated first for the new cells to print properly. The cells appear as full color within Microstation, they are programmed to print in both full color or black/white (as grayscale).

FILE NAME	c:\users\willisd\pw_wsdot\d0181855\PPM_Div_4_Example_4-88.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
TIME	9:59:17 AM				JOB NUMBER		
DATE	2/18/2025						
PLOTTED BY	WilliSD						
DESIGNED BY							
ENTERED BY							
CHECKED BY					CONTRACT NO.	LOCATION NO.	
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

EXAMPLE 4-88

PEDESTRIAN & BICYCLE TCP

Plot 17

PLAN REF NO PBTC1

SHEET OF SHEETS