CONTRACT PLANS
SEGMENT 2B

I-405 MP 9.75 TO MP 11.78

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

VOLUME 5
DRAINAGE

RFC

KING COUNTY

Washington State
Department of Transportation

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

12/20/2021

VOLUME 5

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
B				DR	A	STRUCTURAL NOTES SHEET 1	DR28 TO DR30
A				DR	A1	STRUCTURE NOTES - DRAINAGE	DR12-DR13
A				DR	A2	STRUCTURE NOTES - DRAINAGE	DR13-DR15
A				DR	A3	STRUCTURE NOTES - DRAINAGE	DR15-DR18
A				DR	A4	STRUCTURE NOTES - DRAINAGE	DR18-DR19
A				DR	A5	STRUCTURE NOTES - DRAINAGE	DR19-DR20
A				DR	A6	STRUCTURE NOTES - DRAINAGE	DR20-DR21
A				DR	A7	STRUCTURE NOTES - DRAINAGE	DR21-DR22
A				DR	A8	STRUCTURE NOTES - DRAINAGE	DR22 AND DR71
				DR	A9	STRUCTURE NOTES - DRAINAGE	
				DR	A10	STRUCTURE NOTES - DRAINAGE	
1		11/12/21	1214	DR	B	STRUCTURE NOTES - DRAINAGE	DR31
1		11/12/21	1214	DR	B1	STRUCTURE NOTES - DRAINAGE	DR31 TO DR33
1		11/12/21	1214	DR	C	STRUCTURE NOTES - DRAINAGE	DR33
1		11/12/21	1214	DR	C1	STRUCTURE NOTES - DRAINAGE	DR33 TO DR34
1		11/12/21	1214	DR	D	STRUCTURE NOTES - DRAINAGE	DR34 TO DR35
2		12/2/20	716	DR	E	STRUCTURE NOTES - DRAINAGE	
4		6/18/21	1889	DR	F	STRUCTURE NOTES - DRAINAGE	
1		11/12/21	1214	DR	G	STRUCTURE NOTES - DRAINAGE	DR35
0		11/12/21	1214	DR	H	STRUCTURE NOTES - DRAINAGE	DSP31 TO DSP33
0		11/12/21	1214	DR	I	STRUCTURE NOTES - DRAINAGE	DSP33 TO DSP34
0		11/12/21	1214	DR	J	STRUCTURE NOTES - DRAINAGE	DSP34 TO DSPPR
1		11/12/21	1214	DR	K	STRUCTURE NOTES - DRAINAGE	DRPR
B				DR	L	STRUCTURE NOTES - DRAINAGE	
B				DR	L1	STRUCTURE NOTES - DRAINAGE	
B				DR	M	STRUCTURE NOTES - DRAINAGE	
B				DR	M1	STRUCTURE NOTES - DRAINAGE	
B				DR	N	STRUCTURE NOTES - DRAINAGE	
B				DR	N1	STRUCTURE NOTES - DRAINAGE	
B				DR	O	STRUCTURE NOTES - DRAINAGE	
B				DR	O1	STRUCTURE NOTES - DRAINAGE	
B				DR	P	STRUCTURE NOTES - DRAINAGE	
B				DR	Q	STRUCTURE NOTES - DRAINAGE	
B				DR	R	STRUCTURE NOTES - DRAINAGE	
B				DR	S	STRUCTURE NOTES - DRAINAGE	
0	X	12/20/21	1950	DR	T	STRUCTURE NOTES - DRAINAGE	DR36 TO DR37
0	X	12/20/21	1950	DR	T1	STRUCTURE NOTES - DRAINAGE	DR37
0	X	12/20/21	1950	DR	U	STRUCTURE NOTES - DRAINAGE	DR37 TO DR39
0	X	12/20/21	1950	DR	U1	STRUCTURE NOTES - DRAINAGE	DR39 TO DR41
0	X	12/20/21	1950	DR	V	STRUCTURE NOTES - DRAINAGE	DR41 TO DR67
0	X	12/20/21	1950	DR	W	STRUCTURE NOTES - DRAINAGE	DR67
0	X	12/20/21	1950	DR	X	STRUCTURE NOTES - DRAINAGE SITE PREP	DSP36 TO DSP37
0	X	12/20/21	1950	DR	Y	STRUCTURE NOTES - DRAINAGE SITE PREP	DSP37 TO DSP40
0	X	12/20/21	1950	DR	Z	STRUCTURE NOTES - DRAINAGE SITE PREP	DSP40 TO DSP42, DSP65
0		11/23/21	1889	DR	Z1	STRUCTURE NOTES - DRAINAGE	DR-43 & DSP-43
0		11/23/21	1889	DR	Z2	STRUCTURE NOTES - DRAINAGE	DSP-43, DR-44, DSP-44 & DR-45
0		11/23/21	1889	DR	Z3	STRUCTURE NOTES - DRAINAGE	DR-45, DSP-45, DR-46, DSP-46 & DR-47
0		11/23/21	1889	DR	Z4	STRUCTURE NOTES - DRAINAGE	DR-47, DSP-47, DR-48 & DSP-48
0		11/23/21	1889	DR	Z5	STRUCTURE NOTES - DRAINAGE	DSP-48, DR-52, DSP-52, DR-68 & DSP-68
B				DSP	23	DRAINAGE SITE PREPARATION PLAN	STA. 5625+00 TO STA. 5640+00
B				DSP	24	DRAINAGE SITE PREPARATION PLAN	STA. 5640+00 TO STA. 5655+00
B				DSP	25	DRAINAGE SITE PREPARATION PLAN	STA. 5655+00 TO STA. 5670+00
B				DSP	26	DRAINAGE SITE PREPARATION PLAN	STA. 5670+00 TO STA. 5685+00
B				DSP	27	DRAINAGE SITE PREPARATION PLAN	STA. 5685+00 TO STA. 5700+00
B				DSP	28	DRAINAGE SITE PREPARATION PLAN	STA. 5700+00 TO STA. 5715+00
B				DSP	29	DRAINAGE SITE PREPARATION PLAN	STA. 5715+00 TO STA. 5730+00
B				DSP	30	DRAINAGE SITE PREPARATION PLAN	STA. 5730+00 TO STA. 5745+00

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
0		11/12/21	1214	DSP	31	DRAINAGE SITE PREPARATION PLAN	STA. 5745+00 TO STA. 5760+00
0		11/12/21	1214	DSP	32	DRAINAGE SITE PREPARATION PLAN	STA. 5760+00 TO STA. 5775+00
0		11/12/21	1214	DSP	33	DRAINAGE SITE PREPARATION PLAN	STA. 5775+00 TO STA. 5790+00
0		11/12/21	1214	DSP	34	DRAINAGE SITE PREPARATION PLAN	STA. 5790+00 TO STA. 5805+00
0		11/12/21	1889	DSP	35	DRAINAGE SITE PREPARATION PLAN	STA. 5805+00 TO STA. 5820+00
0		11/12/21	1889	DSP	PR	DRAINAGE SITE PREPARATION PLAN	NEWPORT HILLS PARK & RIDE
0	X	12/20/21	1950	DSP	36	DRAINAGE SITE PREPARATION PLAN	STA. 5820+00 TO STA. 5835+00
0	X	12/20/21	1950	DSP	37	DRAINAGE SITE PREPARATION PLAN	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DSP	38	DRAINAGE SITE PREPARATION PLAN	STA. 5850+00 TO STA. 5865+00
0	X	12/20/21	1950	DSP	39	DRAINAGE SITE PREPARATION PLAN	STA. 5865+00 TO STA. 5880+00
0	X	12/20/21	1950	DSP	40	DRAINAGE SITE PREPARATION PLAN	STA. 5880+00 TO STA. 5895+00
0	X	12/20/21	1950	DSP	41	DRAINAGE SITE PREPARATION PLAN	STA. 5895+00 TO STA. 5910+00
0	X	12/20/21	1950	DSP	42	DRAINAGE SITE PREPARATION PLAN	STA. 5910+00 TO STA. 5925+00
0		11/23/21	1889	DSP	43	DRAINAGE SITE PREPARATION PLAN	STA. 5925+00 TO STA. 5940+00
0		11/23/21	1889	DSP	44	DRAINAGE SITE PREPARATION PLAN	STA. 5940+00 TO STA. 5955+00
0		11/23/21	1889	DSP	45	DRAINAGE SITE PREPARATION PLAN	STA. 5955+00 TO STA. 5965+00
0		11/23/21	1889	DSP	46	DRAINAGE SITE PREPARATION PLAN	STA. 5965+00 TO STA. 5980+00
0		11/23/21	1889	DSP	47	DRAINAGE SITE PREPARATION PLAN	STA. 5980+00 TO STA. 5995+00
0		11/23/21	1889	DSP	48	DRAINAGE SITE PREPARATION PLAN	STA. 5995+00 TO STA. 6010+00
B				DSP	49	DRAINAGE SITE PREPARATION PLAN	STA. 6010+00 TO STA. 6025+00
B				DSP	50	DRAINAGE SITE PREPARATION PLAN	STA. 6025+00 TO STA. 6040+00
B				DSP	51	DRAINAGE SITE PREPARATION PLAN	STA. 6040+00 TO NBSTA.8050+00
0		11/23/21	1889	DSP	52	DRAINAGE SITE PREPARATION PLAN	STA. 8050+00 TO STA. 8065+00
B				DSP	53	DRAINAGE SITE PREPARATION PLAN	STA. 8065+00 TO STA. 8071+00
B				DSP	59	DRAINAGE SITE PREPARATION PLAN	STA. 7+00 TO STA. 16+00
B				DSP	60	DRAINAGE SITE PREPARATION PLAN	STA. 16+00 TO STA. 31+00
B				DSP	61	DRAINAGE SITE PREPARATION PLAN	LAKE WASHINGTON BLVD
0	X	12/20/21	1950	DSP	64	DRAINAGE SITE PREPARATION PLAN	NB I-405 TO EB I-90
0	X	12/20/21	1950	DSP	65	DRAINAGE SITE PREPARATION PLAN	I-405 TO I-90 RAMP
0	X	12/20/21	1950	DSP	67	DRAINAGE SITE PREPARATION PLAN	DISPERSION AREA
0		11/23/21	1889	DSP	68	DRAINAGE SITE PREPARATION PLAN	MAIN ST
				DSP	69	DRAINAGE SITE PREPARATION PLAN	NE 6TH ST.
A				UD	1	UNDERDRAIN STRUCTURE NOTES	UNDERDRAIN STRUCTURE NOTES
A				UD	2	UNDERDRAIN STRUCTURE NOTES	UNDERDRAIN STRUCTURE NOTES
A				UD	3	UNDERDRAIN STRUCTURE NOTES	UNDERDRAIN STRUCTURE NOTES
A				UD	4	UNDERDRAIN STRUCTURE NOTES	UNDERDRAIN STRUCTURE NOTES
B				UD	5	UNDERDRAIN STRUCTURE NOTES	UNDERDRAIN STRUCTURE NOTES
1		11/12/21	1214	UD	6	UNDERDRAIN STRUCTURE NOTES	UNDERDRAIN STRUCTURE NOTES
1		11/12/21	1214	UD	7	UNDERDRAIN STRUCTURE NOTES	UNDERDRAIN STRUCTURE NOTES
0	X	12/20/21	1950	UD	8	UNDERDRAIN STRUCTURE NOTES	DR36 TO DR37
0	X	12/20/21	1950	UD	9	UNDERDRAIN STRUCTURE NOTES	DR37 TO DR39
0	X	12/20/21	1950	UD	9A	UNDERDRAIN STRUCTURE NOTES	DR39 TO DR42, DR65
0		11/23/21	1889	UD	10	UNDERDRAIN DETAILS	DR43 - DR45
0		11/23/21	1889	UD	11	UNDERDRAIN DETAILS	DR45 TO DR48
0		11/23/21	1889	UD	12	UNDERDRAIN DETAILS	DR48, DR52 & DR68
A				DR	1	DRAINAGE PLAN	STA. 5305+00 TO STA. 5315+00
				DR	2	DRAINAGE PLAN	STA. 5315+00 TO STA. 5325+00
A				DR	12	DRAINAGE PLAN	STA. 5460+00 TO STA. 5475+00
A				DR	13	DRAINAGE PLAN	STA. 5475+00 TO STA. 5490+00
A				DR	14	DRAINAGE PLAN	STA. 5490+00 TO STA. 5505+00
A				DR	15	DRAINAGE PLAN	STA. 5505+00 TO STA. 5520+00
A				DR	16	DRAINAGE PLAN	STA. 5520+00 TO STA. 5535+00
A				DR	17	DRAINAGE PLAN	STA. 5535+00 TO STA. 5550+00
A				DR	18	DRAINAGE PLAN	STA. 5550+00 TO STA. 5565+00
A				DR	19	DRAINAGE PLAN	STA. 5565+00 TO STA. 5580+00
A				DR	20	DRAINAGE PLAN	STA. 5580+00 TO STA. 5595+00
A				DR	21	DRAINAGE PLAN	STA. 5595+00 TO STA. 5610+00

NO.	ISSUE DATE	ISSUE RECORD - DESCRIPTION	DESIGNED BY	ENTERED BY	CHECKED BY	DESIGN MANAGER:

REGION NO. 10 | STATE WASH

XL5467

CONTRACT NO.

C9242

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

DATE P.E. STAMP BOX

DATE P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405
RENTON TO BELLEVUE
EXPRESS TOLL LANES

INDEX OF SHEETS - VOL 5

PLAN REF NO
IN05-1

VOLUME 5

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
A				DR	22	DRAINAGE PLAN	STA. 5610+00 TO STA. 5625+00
B				DR	23	DRAINAGE PLAN	STA. 5625+00 TO STA. 5640+00
B				DR	24	DRAINAGE PLAN	STA. 5640+00 TO STA. 5655+00
0		07/03/20	265	DR	25	DRAINAGE PLAN	STA. 5655+00 TO STA. 5670+00
2		12/2/20	716	DR	26	DRAINAGE PLAN	STA. 5670+00 TO STA. 5685+00
0		07/03/20	265	DR	27	DRAINAGE PLAN	STA. 5685+00 TO STA. 5700+00
B				DR	28	DRAINAGE PLAN	STA. 5700+00 TO STA. 5715+00
B				DR	29	DRAINAGE PLAN	STA. 5715+00 TO STA. 5730+00
B				DR	30	DRAINAGE PLAN	STA. 5730+00 TO STA. 5745+00
1		11/12/21	1214	DR	31	DRAINAGE PLAN	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DR	32	DRAINAGE PLAN	STA. 5760+00 TO STA. 5775+00
2		11/12/21	1214	DR	33	DRAINAGE PLAN	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DR	34	DRAINAGE PLAN	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DR	35	DRAINAGE PLAN	STA. 5805+00 TO STA. 5820+00
0	X	12/20/21	1950	DR	36	DRAINAGE PLAN	STA. 5820+00 TO STA. 5835+00
0	X	12/20/21	1950	DR	37	DRAINAGE PLAN	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DR	38	DRAINAGE PLAN	STA. 5850+00 TO STA. 5865+00
0	X	12/20/21	1950	DR	39	DRAINAGE PLAN	STA. 5865+00 TO STA. 5880+00
0	X	12/20/21	1950	DR	40	DRAINAGE PLAN	STA. 5880+00 TO STA. 5895+00
0	X	12/20/21	1950	DR	41	DRAINAGE PLAN	STA. 5895+00 TO STA. 5910+00
0	X	12/20/21	1950	DR	42	DRAINAGE PLAN	STA. 5910+00 TO STA. 5925+00
0		11/23/21	1889	DR	43	DRAINAGE PLAN	STA. 5925+00 TO STA. 5940+00
0		11/23/21	1889	DR	44	DRAINAGE PLAN	STA. 5940+00 TO STA. 5955+00
0		11/23/21	1889	DR	45	DRAINAGE PLAN	STA. 5955+00 TO STA. 5965+00
0		11/23/21	1889	DR	46	DRAINAGE PLAN	STA. 5965+00 TO STA. 5980+00
0		11/23/21	1889	DR	47	DRAINAGE PLAN	STA. 5980+00 TO STA. 5995+00
0		11/23/21	1889	DR	48	DRAINAGE PLAN	STA. 5995+00 TO STA. 6010+00
0		11/23/21	1889	DR	49	DRAINAGE PLAN	STA. 6010+00 TO STA. 6025+00
0		11/23/21	1889	DR	50	DRAINAGE PLAN	STA. 6025+00 TO STA. 6040+00
0		11/23/21	1889	DR	51	DRAINAGE PLAN	STA. 6040+00 TO NB STA. 8050+00
0		11/23/21	1889	DR	52	DRAINAGE PLAN	NB STA. 8050+00 TO STA. 8065+00
0		11/23/21	1889	DR	53	DRAINAGE PLAN	NB STA. 8065+00 TO STA. 8071+00
B				DR	59	DRAINAGE PLAN	STA. 7+00 TO STA. 16+00
B				DR	60	DRAINAGE PLAN	STA. 16+00 TO STA. 31+00
3		6/18/21	1492	DR	61	DRAINAGE PLAN	LAKE WASHINGTON BLVD
0	X	12/20/21	1950	DR	64	DRAINAGE PLAN	NB I-405 TO EB I-90
0	X	12/20/21	1950	DR	65	DRAINAGE PLAN	I-405 TO I-90 RAMP
0	X	12/20/21	1950	DR	67	DRAINAGE PLAN	DISPERSION AREA
0		11/23/21	1889	DR	68	DRAINAGE PLAN	MAIN ST.
				DR	71	DRAINAGE PLAN	N. SOUTHPORT DRIVE
1		11/12/21	1214	DR	PR	DRAINAGE PLAN	NEWPORT HILLS PARK & RIDE
A				DP	12	DRAINAGE PROFILES	STA. 5460+00 TO STA. 5475+00
A				DP	12A	DRAINAGE PROFILES	STA. 5460+00 TO STA. 5475+00
A				DP	12B	DRAINAGE PROFILES	STA. 5460+00 TO STA. 5475+00
A				DP	13	DRAINAGE PROFILES	STA. 5475+00 TO STA. 5490+00
A				DP	13A	DRAINAGE PROFILES	STA. 5475+00 TO STA. 5490+00
A				DP	14	DRAINAGE PROFILES	STA. 5490+00 TO STA. 5505+00
A				DP	14A	DRAINAGE PROFILES	STA. 5490+00 TO STA. 5505+00
A				DP	14C	DRAINAGE PROFILES	STA. 5490+00 TO STA. 5505+00
A				DP	15	DRAINAGE PROFILES	STA. 5505+00 TO STA. 5520+00
A				DP	15A	DRAINAGE PROFILES	STA. 5505+00 TO STA. 5520+00
A				DP	15B	DRAINAGE PROFILES	STA. 5505+00 TO STA. 5520+00
A				DP	16	DRAINAGE PROFILES	STA. 5520+00 TO STA. 5535+00
A				DP	16C	DRAINAGE PROFILES	STA. 5520+00 TO STA. 5535+00
A				DP	17	DRAINAGE PROFILES	STA. 5535+00 TO STA. 5550+00
A				DP	17A	DRAINAGE PROFILES	STA. 5535+00 TO STA. 5550+00
A				DP	17B	DRAINAGE PROFILES	STA. 5535+00 TO STA. 5550+00

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
A				DP	18	DRAINAGE PROFILES	STA. 5550+00 TO STA. 5565+00
A				DP	18A	DRAINAGE PROFILES	STA. 5550+00 TO STA. 5565+00
A				DP	19	DRAINAGE PROFILES	STA. 5565+00 TO STA. 5580+00
A				DP	19A	DRAINAGE PROFILES	STA. 5565+00 TO STA. 5580+00
A				DP	19B	DRAINAGE PROFILES	STA. 5565+00 TO STA. 5580+00
A				DP	19C	DRAINAGE PROFILES	STA. 5565+00 TO STA. 5580+00
A				DP	20	DRAINAGE PROFILES	STA. 5580+00 TO STA. 5595+00
A				DP	20A	DRAINAGE PROFILES	STA. 5580+00 TO STA. 5595+00
A				DP	20B	DRAINAGE PROFILES	STA. 5580+00 TO STA. 5595+00
A				DP	20C	DRAINAGE PROFILES	STA. 5580+00 TO STA. 5595+00
A				DP	20D	DRAINAGE PROFILES	STA. 5580+00 TO STA. 5595+00
A				DP	21	DRAINAGE PROFILES	STA. 5595+00 TO STA. 5610+00
A				DP	21A	DRAINAGE PROFILES	STA. 5595+00 TO STA. 5610+00
A				DP	21B	DRAINAGE PROFILES	STA. 5595+00 TO STA. 5610+00
A				DP	21C	DRAINAGE PROFILES	STA. 5595+00 TO STA. 5610+00
A				DP	22	DRAINAGE PROFILES	STA. 5610+00 TO STA. 5625+00
A				DP	22A	DRAINAGE PROFILES	STA. 5610+00 TO STA. 5625+00
B				DP	23	DRAINAGE PROFILES	STA. 5625+00 TO STA. 5640+00
B				DP	23A	DRAINAGE PROFILES	STA. 5625+00 TO STA. 5640+00
B				DP	23B	DRAINAGE PROFILES	STA. 5625+00 TO STA. 5640+00
B				DP	24	DRAINAGE PROFILES	STA. 5640+00 TO STA. 5655+00
B				DP	24A	DRAINAGE PROFILES	STA. 5640+00 TO STA. 5655+00
B				DP	24B	DRAINAGE PROFILES	STA. 5640+00 TO STA. 5655+00
B				DP	24C	DRAINAGE PROFILES	STA. 5640+00 TO STA. 5655+00
B				DP	24D	DRAINAGE PROFILES	STA. 5640+00 TO STA. 5655+00
B				DP	25	DRAINAGE PROFILES	STA. 5655+00 TO STA. 5670+00
B				DP	25A	DRAINAGE PROFILES	STA. 5655+00 TO STA. 5670+00
B				DP	25B	DRAINAGE PROFILES	KENNYDALE LINE
2		12/2/20	716	DP	26	DRAINAGE PROFILES	STA. 5670+00 TO STA. 5685+00
B				DP	26A	DRAINAGE PROFILES	STA. 5670+00 TO STA. 5685+00
B				DP	26B	DRAINAGE PROFILES	STA. 5670+00 TO STA. 5685+00
0		07/03/20	265	DP	26C	DRAINAGE PROFILES	STA. 5670+00 TO STA. 5685+00
0		07/03/20	265	DP	26D	DRAINAGE PROFILES	KENNYDALE LINE
0		07/03/20	265	DP	27	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	27A	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	27B	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	27C	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	27D	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	27E	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	27F	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	27G	DRAINAGE PROFILES	STA. 5685+00 TO STA. 5700+00
B				DP	28	DRAINAGE PROFILES	STA. 5700+00 TO STA. 5715+00
B				DP	28A	DRAINAGE PROFILES	STA. 5700+00 TO STA. 5715+00
B				DP	28B	DRAINAGE PROFILES	STA. 5700+00 TO STA. 5715+00
B				DP	28C	DRAINAGE PROFILES	STA. 5700+00 TO STA. 5715+00
B				DP	29	DRAINAGE PROFILES	STA. 5715+00 TO STA. 5730+00
B				DP	29A	DRAINAGE PROFILES	STA. 5715+00 TO STA. 5730+00
B				DP	29B	DRAINAGE PROFILES	STA. 5715+00 TO STA. 5730+00
B				DP	30	DRAINAGE PROFILES	STA. 5730+00 TO STA. 5745+00
B				DP	30A	DRAINAGE PROFILES	STA. 5730+00 TO STA. 5745+00
B				DP	30B	DRAINAGE PROFILES	STA. 5730+00 TO STA. 5745+00
1		11/12/21	1214	DP	31A	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DP	31B	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DP	31C	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DP	31D	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DP	31E	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DP	31F	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00

NO.	ISSUE DATE	ISSUE RECORD - DESCRIPTION	DESIGNED BY	ENTERED BY	CHECKED BY	DESIGN MANAGER:

REGION NO. 10 | STATE WASH

XL5467
CONTRACT NO.
C9242

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION
DATE
P.E. STAMP BOX
DATE
P.E. STAMP BOX

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405
RENTON TO BELLEVUE
EXPRESS TOLL LANES

INDEX OF SHEETS - VOL 5

PLAN REF NO
IN05-2

VOLUME 5

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
1		11/12/21	1214	DP	31G	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DP	31H	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
0		11/12/21	1214	DP	31I	DRAINAGE PROFILES	STA. 5745+00 TO STA. 5760+00
1		11/12/21	1214	DP	32A	DRAINAGE PROFILES	STA. 5760+00 TO STA. 5775+00
1		11/12/21	1214	DP	32B	DRAINAGE PROFILES	STA. 5760+00 TO STA. 5775+00
0		11/12/21	1214	DP	32C	DRAINAGE PROFILES	STA. 5760+00 TO STA. 5775+00
2		11/12/21	370	DP	33A	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
2		11/12/21	370	DP	33B	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	33C	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	33D	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	33E	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	33F	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	33G	DRAINAGE PROFILES	STA. 7770+36 TO STA. 7785+48
1		11/12/21	1214	DP	33H	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	33I	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	33J	DRAINAGE PROFILES	STA. 5775+00 TO STA. 5790+00
1		11/12/21	1214	DP	34A	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34B	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34C	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34D	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34E	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34F	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34G	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34H	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	34I	DRAINAGE PROFILES	STA. 5790+00 TO STA. 5805+00
1		11/12/21	1214	DP	35A	DRAINAGE PROFILES	STA. 5805+00 TO STA. 5820+00
1		11/12/21	1214	DP	35B	DRAINAGE PROFILES	STA. 5805+00 TO STA. 5820+00
1		11/12/21	1214	DP	35C	DRAINAGE PROFILES	STA. 5805+00 TO STA. 5820+00
1		11/12/21	1214	DP	35D	DRAINAGE PROFILES	STA. 5805+00 TO STA. 5820+00
1		11/12/21	1214	DP	35E	DRAINAGE PROFILES	STA. 5805+00 TO STA. 5820+00
0	X	12/20/21	1950	DP	36	DRAINAGE PROFILES	STA. 5820+00 TO STA. 5835+00
0	X	12/20/21	1950	DP	36A	DRAINAGE PROFILES	STA. 5820+00 TO STA. 5835+00
0	X	12/20/21	1950	DP	36B	DRAINAGE PROFILES	STA. 5820+00 TO STA. 5835+00
0	X	12/20/21	1950	DP	36C	DRAINAGE PROFILES	STA. 5820+00 TO STA. 5835+00
0	X	12/20/21	1950	DP	37	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	37A	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	37B	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	37C	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	37D	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	37E	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	37F	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	37G	DRAINAGE PROFILES	STA. 5835+00 TO STA. 5850+00
0	X	12/20/21	1950	DP	38	DRAINAGE PROFILES	STA. 5850+00 TO STA. 5865+00
0	X	12/20/21	1950	DP	38A	DRAINAGE PROFILES	STA. 5850+00 TO STA. 5865+00
0	X	12/20/21	1950	DP	38B	DRAINAGE PROFILES	STA. 5850+00 TO STA. 5865+00
0	X	12/20/21	1950	DP	39	DRAINAGE PROFILES	STA. 5865+00 TO STA. 5880+00
0	X	12/20/21	1950	DP	39A	DRAINAGE PROFILES	STA. 5865+00 TO STA. 5880+00
0	X	12/20/21	1950	DP	39B	DRAINAGE PROFILES	STA. 5865+00 TO STA. 5880+00
0	X	12/20/21	1950	DP	39C	DRAINAGE PROFILES	STA. 5865+00 TO STA. 5880+00
0	X	12/20/21	1950	DP	39D	DRAINAGE PROFILES	STA. 5865+00 TO STA. 5880+00
0	X	12/20/21	1950	DP	40	DRAINAGE PROFILES	STA. 5880+00 TO STA. 5895+00
0	X	12/20/21	1950	DP	41	DRAINAGE PROFILES	STA. 5895+00 TO STA. 5910+00
0	X	12/20/21	1950	DP	41A	DRAINAGE PROFILES	STA. 5895+00 TO STA. 5910+00
0	X	12/20/21	1950	DP	41B	DRAINAGE PROFILES	STA. 5895+00 TO STA. 5910+00
0	X	12/20/21	1950	DP	41C	DRAINAGE PROFILES	STA. 5895+00 TO STA. 5910+00
0	X	12/20/21	1950	DP	41D	DRAINAGE PROFILES	STA. 5895+00 TO STA. 5910+00
0	X	12/20/21	1950	DP	42	DRAINAGE PROFILES	STA. 5910+00 TO STA. 5925+00

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
0	X	12/20/21	1950	DP	42A	DRAINAGE PROFILES	STA. 5910+00 TO STA. 5925+00
0	X	12/20/21	1950	DP	42B	DRAINAGE PROFILES	STA. 5910+00 TO STA. 5925+00
0		11/23/21	1889	DP	43	DRAINAGE PROFILES	STA. 5925+00 TO STA. 5940+00
0		11/23/21	1889	DP	43A	DRAINAGE PROFILES	STA. 5925+00 TO STA. 5940+00
0		11/23/21	1889	DP	43B	DRAINAGE PROFILES	STA. 5925+00 TO STA. 5940+00
0		11/23/21	1889	DP	43C	DRAINAGE PROFILES	STA. 5937+00 TO STA. 5939+00
0		11/23/21	1889	DP	44	DRAINAGE PROFILES	STA. 5940+00 TO STA. 5955+00
0		11/23/21	1889	DP	44A	DRAINAGE PROFILES	STA. 5940+00 TO STA. 5955+00
0		11/23/21	1889	DP	44B	DRAINAGE PROFILES	STA. 5940+00 TO STA. 5955+00
0		11/23/21	1889	DP	45	DRAINAGE PROFILES	STA. 5955+00 TO STA. 5965+00
0		11/23/21	1889	DP	45A	DRAINAGE PROFILES	STA. 5955+00 TO STA. 5965+00
0		11/23/21	1889	DP	46	DRAINAGE PROFILES	STA. 5965+00 TO STA. 5980+00
0		11/23/21	1889	DP	46A	DRAINAGE PROFILES	STA. 5965+00 TO STA. 5980+00
0		11/23/21	1889	DP	47	DRAINAGE PROFILES	STA. 5980+00 TO STA. 5995+00
0		11/23/21	1889	DP	47A	DRAINAGE PROFILES	STA. 5980+00 TO STA. 5995+00
0		11/23/21	1889	DP	48	DRAINAGE PROFILES	STA. 5995+00 TO STA. 6010+00
0		11/23/21	1889	DP	48A	DRAINAGE PROFILES	STA. 5995+00 TO STA. 6010+00
0		11/23/21	1889	DP	48B	DRAINAGE PROFILES	STA. 5995+00 TO STA. 6010+00
0		11/23/21	1889	DP	52	DRAINAGE PROFILES	NB STA. 8050+00 TO STA. 8065+00
B				DP	59	DRAINAGE PROFILES	NE 44TH STREET
B				DP	60	DRAINAGE PROFILES	NE 44TH STREET
B				DP	60A	DRAINAGE PROFILES	NE 44TH STREET
3		6/18/21	1492	DP	61	DRAINAGE PROFILES	LAKE WASHINGTON BLVD
1		6/18/21	1492	DP	61A	DRAINAGE PROFILES	LAKE WASHINGTON BLVD
3		6/18/21	1492	DP	61B	DRAINAGE PROFILES	LAKE WASHINGTON BLVD
B				DP	61C	DRAINAGE PROFILES	LAKE WASHINGTON BLVD
0	X	12/20/21	1950	DP	65	DRAINAGE PROFILES	I-405 TO I-90 RAMP
0		11/23/21	1889	DP	68	DRAINAGE PROFILES	MAIN ST.
A				DP	71	DRAINAGE PROFILES	JC
				DP	71A	DRAINAGE PROFILES	JC
1		11/12/21	370	DP	PR-A	DRAINAGE PROFILES	PARK & RIDE
1		11/12/21	370	DP	PR-B	DRAINAGE PROFILES	PARK & RIDE
1		11/12/21	265	DD	01	DRAINAGE DETAILS	
3		6/18/21	1492	DD	02	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	02A	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	02B	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	02C	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	03	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	03A	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		6/18/21	1492	DD	04	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	04A	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	04B	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
0		6/18/21	1492	DD	04C	DRAINAGE DETAILS	DRAINAGE CONNECTION DETAILS
0			297	DD	05	TEMPORARY DRAINAGE DETAILS - GN1	
B				DD	06	DRAINAGE DETAILS	STREAM 8.12 DIVERSION CHANNEL
B				DD	07	DRAINAGE DETAILS	DRAINAGE DITCH NOTES
B				DD	08	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
B				DD	09	DRAINAGE DETAILS	CABS #3
B				DD	09A	DRAINAGE DETAILS	CABS #3
B				DD	10	DRAINAGE DETAILS	CABS #4.1, #4.2, #4.3, #4.4, #4.5, #4.6, #5
B				DD	10A	DRAINAGE DETAILS	NB 405 - NE 44 RAMP
B				DD	10B	DRAINAGE DETAILS	NB 405 - NE 44 RAMP
B				DD	10C	DRAINAGE DETAILS	NB 405 - NE 44 RAMP
B				DD	10D	DRAINAGE DETAILS	NB 405 - NE 44 RAMP
B				DD	11	DRAINAGE DETAILS	CABS #6
B				DD	11A	DRAINAGE DETAILS	NE44-SB405
0		08/14/20	370	DD	12	DRAINAGE DETAILS	GN1

NO.	ISSUE DATE	ISSUE RECORD - DESCRIPTION	DESIGNED BY	ENTERED BY	CHECKED BY	DESIGN MANAGER:

REGION NO. 10 | STATE WASH

XL5467

CONTRACT NO. C9242

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION
DATE
P.E. STAMP BOX
DATE
P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405
RENTON TO BELLEVUE
EXPRESS TOLL LANES

INDEX OF SHEETS - VOL 5

PLAN REF NO
IN05-3

VOLUME 5

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
B				DD	13	DRAINAGE DETAILS	CABS #7.1 & #7.2
B				DD	13A	DRAINAGE DETAILS	SB405-NE44
B				DD	14	DRAINAGE DETAILS	CABS #7.3 & #7.4
B				DD	14A	DRAINAGE DETAILS	SB405-NE44
B				DD	15	BIORETENTION CELLS DETAILS	
B				DD	15A	BIORETENTION CELL DETAIL	
B				DD	15B	BIORETENTION CELL DETAIL	
B				DD	15C	BIORETENTION CELL DETAIL	
B				DD	15D	BIORETENTION CELL DETAIL	
B				DD	15E	CABS DETAIL	
B				DD	15F	BIORETENTION CELL DETAIL	
B				DD	15G	BIORETENTION CELL DETAIL	
B				DD	15H	BIORETENTION CELL DETAIL	
B				DD	16	BIORETENTION CELL DETAIL	SECTION A-A
B				DD	17	BIORETENTION CELL DETAIL	SECTION B-B
B				DD	18	BIORETENTION CELL DETAIL	SECTION C-C
B				DD	20	BIORETENTION CELL DETAIL	
1		11/12/21	1214	DD	21	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	21A	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	22	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	22A	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	23	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	23A	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	24	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	24A	DRAINAGE DETAILS	LAKE WASHINGTON BLVD
1		11/12/21	1214	DD	27	DRAINAGE DETAILS	DITCH SUMMARY TABLE
1		11/12/21	1214	DD	28	DRAINAGE DETAILS	DITCH SUMMARY TABLE
0	X	12/20/21	1950	DD	31	DRAINAGE DETAILS	CABS 9.95/W3-1
0	X	12/20/21	1950	DD	32	DRAINAGE DETAILS	CABS 10.00/W3-2
0	X	12/20/21	1950	DD	33	DRAINAGE DETAILS	CABS 10.17/W3-2 SW
0	X	12/20/21	1950	DD	34	DRAINAGE DETAILS	CABS 10.26/W3-2 NW
0	X	12/20/21	1950	DD	35	DRAINAGE DETAILS	CABS 11.25/W4
0	X	12/20/21	1950	DD	36	DRAINAGE DETAILS	CABS TYPICAL SECTIONS
B		07/28/21	1037	DD	37	DRAINAGE DETAILS	DISPERSION SITE PLAN
B		03/23/21	1037	DD	37A	DRAINAGE DETAILS	WEIR PANEL SECTIONS AND DETAILS
B		03/23/21	1037	DD	37B	DRAINAGE DETAILS	PANEL CONNECTIONS DETAILS
B		03/23/21	1037	DD	37C	DRAINAGE DETAILS	RETAINING PANEL SECTIONS AND DETAILS
0	X	12/20/21	1950	DD	38	DRAINAGE DETAILS	CABS PROFILES
0	X	12/20/21	1950	DD	39	DRAINAGE DETAILS	DITCH SUMMARY TABLE
0	X	12/20/21	1950	DD	40	DRAINAGE DETAILS	HYDRODYNAMIC SEPARATOR
0		11/23/21	1889	DD	41	DRAINAGE DETAILS	CABS AND DETENTION B
0		11/23/21	1889	DD	41A	DRAINAGE DETAILS	CABS AND DETENTION B
0		11/23/21	1889	DD	42	DRAINAGE DETAILS	CABS AND DETENTION C
0		11/23/21	1889	DD	42A	DRAINAGE DETAILS	CABS AND DETENTION C
0		11/23/21	1889	DD	43	DRAINAGE DETAILS	FLOW SPLITTER
0		11/23/21	1889	DD	43A	DRAINAGE DETAILS	FLOW RESTRICTOR & OUTLET STRUCTURE
0		11/23/21	1889	DD	44	DRAINAGE DETAILS	DETENTION VAULT F
0		11/23/21	1889	DD	45	DRAINAGE DETAILS	DITCHES
0		11/23/21	1889	DD	45A	DRAINAGE DETAILS	DITCHES
0		11/23/21	1889	DD	48	DRAINAGE DETAILS	GUTTER TRANSITION DETAIL
1		11/12/21	1214.1	DD	51	DRAINAGE DETAILS	DRAINAGE STRUCTURE PLACEMENT
1		11/12/21	1214.1	DD	52	DRAINAGE DETAILS	TYPICAL CABS DETAILS
1		11/12/21	1214.1	DD	52A	DRAINAGE DETAILS	TYPICAL CABS DETAILS
1		11/12/21	1214.1	DD	52B	DRAINAGE DETAILS	TYPICAL CABS DETAILS
0		11/12/21	1214	DD	52C	DRAINAGE DETAILS	TYPICAL CABS DETAILS
1		11/12/21	1214.1	DD	53	DRAINAGE DETAILS	DRAINAGE CONNECTION DETAILS
0		11/12/21	1214	DD	53A	DRAINAGE DETAILS	DRAINAGE CONNECTION DETAILS

REV NO.	INCLUDED	REV. DATE	SUB. NO.	PLAN REF NO.		SHEET TITLE	SHEET DESCRIPTION
1		11/12/21	1214.1	DD	54	DRAINAGE DETAILS	DITCH LINING AND OUTFALL DETAILS
0		11/12/21	1214	DD	55	DRAINAGE DETAILS	DROP STRUCTURE DETAILS
0		11/12/21	1037	DD	56	DRAINAGE DETAILS	MEDIA FILTER DRAIN TYPES 1 AND 3
0		11/12/21	1037	DD	57	DRAINAGE DETAILS	FLOW SPLITTER MANHOLE
B				DD	61	DRAINAGE DETAILS	CABS 1.0, 1.1, 1.2
B				DD	62	DRAINAGE DETAILS	CABS 2.0
B				DD	63	DRAINAGE DETAILS	CABS 5.0, 5.1, 5.2
B				DD	64	DRAINAGE DETAILS	CABS 4.0
B				DD	65	DRAINAGE DETAILS	CABS 4.1
				DD	66	DRAINAGE DETAILS	CABS 4.2
				DD	67	DRAINAGE DETAILS	CABS TYPICAL SECTIONS
				DD	68	DRAINAGE DETAILS	JC- OUTFALL
				DD	69	DRAINAGE DETAILS	SPC VAULT DETAILS
				DD	70	DRAINAGE DETAILS	DETENTION VAULT DETAILS
		10/23/20		PS	1	PUMP STATION	PLAN VIEW
		10/23/20		PS	2	PUMP STATION	PROFILE VIEW
		10/23/20		PS	3	PUMP STATION	SECTION VIEW
				PS	4	PUMP STATION	DETAILS
		5/4/21		PS	5	PUMP STATION	DETAILS
				PS	6	PUMP STATION	WATER TREATMENT DETAILS
				PS	7	PUMP STATION	WATER TREATMENT DETAILS
				PS	8	PUMP STATION	WATER TREATMENT DETAILS
				PS	9	PUMP STATION	SITE PLAN
				PS	10	PUMP STATION	FORCE MAIN PLAN
				PS	11	PUMP STATION	FORCE MAIN PLAN
				PS	12	PUMP STATION	FORCE MAIN PLAN
		03/23/21		PS	13	PUMP STATION	FORCE MAIN PROFILE
		03/25/21		PS	14	PUMP STATION	FORCE MAIN PROFILE
				PS	15	PUMP STATION	FORCE MAIN PROFILE
				PS	16	PUMP STATION	FORCE MAIN PROFILE
				PS	17	PUMP STATION	CIVIL DETAIL
				PS	18	PUMP STATION	CIVIL DETAIL
				PS	19	PUMP STATION	CIVIL DETAIL
				PS	20	PUMP STATION	CIVIL DETAIL
				PS	21	PUMP STATION	CIVIL DETAIL

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FLATIRON LANE
wood.

I-405
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EXPRESS TOLL LANES

INDEX OF SHEETS - VOL 5

PLAN REF NO
IN05-4

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

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

ID NO.	LOCATION (SEE NOTE 4)	MANHOLE TYPE 1 WSDOT STD. PLAN B-15.20-01	MANHOLE TYPE 3 (48 IN DIA.) WSDOT STD. PLAN B-15.60-02	GRATE INLET TYPE 2 WSDOT STD. PLAN B-35.40-00	GRATE INLET ON CATCH BASIN TYPE 2 WSDOT STD. PLAN B-30.60-00	CATCH BASIN TYPE 1 WSDOT STD. PLAN B-5.20-02	CATCH BASIN TYPE 1L WSDOT STD. PLAN B-5.40-02	CATCH BASIN TYPE 2 (48 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (60 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (72 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (96 IN DIA.) WSDOT STD. PLAN B-10.20-02	RECTANGULAR VANED GRATE WSDOT STD. PLAN B-30.30-03	FRAME AND DUAL VANED GRATES WSDOT STD. PLAN B-40.40-02	CIRCULAR FRAME (RING) AND COVER MARKED DRAIN WSDOT STD. PLAN B-30.70-04	RECANGULAR SOLID METAL COVER WSDOT STD. PLAN B-30.20-04	COMBINATION INLET WSDOT STD. PLAN B-25.20-02	SCHEDULE A STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 36 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	FLARED END SECTION 12 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 18 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 24 IN. DIA. WSDOT STD. PLAN B-70.60-01	OUTLET PROTECTION. SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 2 IN WSDOT STD. 7-01	PROPOSED DITCH SEE SHEET DD-39	MEDIA FILTER DRAIN SEE SHEET DD-56	DROP STRUCTURE SEE SHEET DD-55	CONSTRUCTION NOTES
		EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	LF	EA	EA	EA	N/A
DR36-1	SB 405 5822+65	1													1															66					1		1					
DR36-2	SB 405 5824+78							1						1													25							1		1					8
DR36-2.1	SB 405 5824+78																						223																		
DR36-2.2	SB 405 5824+78																										12							1							
DR36-3	SB 405 5826+29							1						1													6							1		1					8
DR36-4	CC-SB 405 831+00							1						1			173																								
DR36-5	CC-SB 405 832+73			1									1				54																								
DR36-6	CC-SB 405 833+27					1						1					69																								
DR36-7	CC-SB 405 833+96					1						1					204																								
DR36-8	SB 405 5822+00						1					1					264																								
DR36-9	SB 405 5824+71						1					1								211																					
DR36-10	SB 405 5826+87			1									1					106																							
DR36-11	SB 405 5827+03							1						1																											1
DR36-12	SB 405 5828+02					1						1					104																								
DR36-13	SB 405 5829+06					1						1					91																								8
DR36-14	SB 405 5829+97			1									1				92																								
DR36-15	SB 405 5830+89			1									1				92																								8
DR36-21	NB 405 7822+11										1			1																											1
DR36-22	NB 405 7823+46			1									1					150																							
DR36-25	NB 405 7825+00			1									1					147																							
DR36-26	NB 405 7825+00					1						1					5																						1	8
DR36-31	NB 405 7826+47			1									1					151																							
DR36-32	NB 405 7827+98							1				1						47																							
DR36-33	M-NB 405-CC 6828+38			1									1				50																								
DR36-34	M-NB 405-CC 6828+88			1									1				110																								
DR36-36	NB405 7828+13					1						1										11																			
DR36-37	M-NB 405-CC 6830+25					1						1					104																								8
DR36-38	NB 405 7827+41							1						1									128																		
DR36-39	NB 405 7829+69							1						1														9							1	1					
DR36-40	SB 405 5826+87					1						1					5																							1	8
DR36-C-1	NB 405 7828+47																												21				1			1					
DR36-D1	CC-SB 405 831+52																																					1			
DR36-D2	M-NB 405 CC 6828+70																																					1			
DR37-1	CC-SB 405 836+01						1					1											66																		
DR37-2	CC-SB 405 836+68						1					1											66																		
DR37-3	CC-SB 405 837+36							1				1							87																						
DR37-4	CC-SB 405 838+25							1				1							87																						
DR37-5	CC-SB 405 839+15							1						1					70																						
DR37-6	CC-SB 405 839+87							1				1							65																						
DR37-7	CC-SB 405 840+53							1				1												58																	
DR37-8	CC-SB 405 840+54								1					1																											1, 8
DR37-9	CC-SB 405 841+20										1			1																		26			1	1					
DR37-9.1	CC-SB 405 841+20																															35			1	1					
DR37-10	CC-SB 405 841+11				1					1			1												27																8
DR37-11	CC-SB 405 842+44				1			1					1										133																		
DR37-14	CC 27+80							1						1										33																	
DR37-14A	CC 27+51	1													1									235																	
DR37-14.1	CC 27+80																							15						7					1						
DR37-15	CC 28+04																													11											8
DR37-16	CC 28+48							1						1				53																							

GENERAL NOTES

1. ALL DRAINAGE FEATURES SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.
2. REUSED EXISTING INFRASTRUCTURE SHALL BE CLEANED, SURVEYED, AND VALIDATED PER WSDOT STD. 7-07.
3. EXISTING INFRASTRUCTURE DETERMINED FROM SURVEY AND AS-BUILT DRAWINGS, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.
4. SEE PROFILE SHEETS FOR EXACT STATION/OFFSET LOCATIONS. SEE DETAIL SHEET DD-51 FOR DRAINAGE STRUCTURE PLACEMENT.
5. GALVANIZED PRODUCTS ARE NOT ALLOWED ON STORM DRAINAGE PIPES AND OTHER HYDRAULIC STRUCTURES, SUCH AS GRATES, CONTROL STRUCTURES, LADDER RUNGS, AND BIRDCAGES ON TOP OF OVERFLOW STRUCTURES.
6. DUCTILE IRON PIPE SHALL USE CLASS 50 OR PRESSURE CLASS 350 IN ACCORDANCE WITH STD. SPECIFICATION 9-05.13.
7. IF EVIDENCE OF CORROSIVITY IS OBSERVED WHERE DIP IS TO BE INSTALLED, CONSULT WITH ENGINEER FOR PIPE PROTECTION REQUIREMENT.
8. REFER TO WALL PLANS FOR WALL CLEANOUTS. FOR CABS UNDERDRAINS, CONTACT EOR IF A FITTING OF 90-DEGREES IS REQURED BASED ON UNDERDRAIN PLACEMENT FOR DETERMINATION IF A CLEANOUT IS REQUIRED.
9. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS, PIPES, AND DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH DIVISIONS 2 & 7 OF STANDARD SPECIFICATIONS. SPECIFICALLY NOTING SECTIONS 07-05.3(2) & 07-05.3(4).

CONSTRUCTION NOTES

1. CONNECT TO EXISTING PIPE. SEE DETAIL SHEET DD-53.
2. CONNECT TO EXISTING INLET.
3. ABANDON EXISTING STRUCTURE.
4. ABANDON EXISTING PIPE.
5. REMOVE EXISTING STRUCTURE.
6. REMOVE EXISTING PIPE.
7. ADJUST EXISITING STRUCTURE.
8. UNDERDRAIN CONNECTING TO INLET. SEE UD-08, UD-09.
9. TRENCH BACKFILL OUTSIDE WSDOT LIMITED ACCESS AND WITHIN CITY OF BELLEVUE RIGHT-OF-WAY SHALL CONFORM WITH CITY STD. PLAN RC-190-1.

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7582\7407_388\XL5467_PS_DR_NOTES-T.dgn				
TIME	5:40:07 PM				
DATE	12/20/2021				
PLOTTED BY	AMECPW03ICS01$				
DESIGNED BY	M. EMESON				
ENTERED BY	M. EMESON				
CHECKED BY	J. ST. JOHN				
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS	
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John 2021.12.21 09:21:25 -08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE
DR36 TO DR37

PLAN REF NO DR-T

SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	MANHOLE TYPE 1 WSDOT STD. PLAN B-15.20-01	MANHOLE TYPE 3 (48 IN DIA.) WSDOT STD. PLAN B-15.60-02	GRATE INLET TYPE 2 WSDOT STD. PLAN B-35.40-00	GRATE INLET ON CATCH BASIN TYPE 2 WSDOT STD. PLAN B-30.60-00	CATCH BASIN TYPE 1 WSDOT STD. PLAN B-5.20-02	CATCH BASIN TYPE 1L WSDOT STD. PLAN B-5.40-02	CATCH BASIN TYPE 2 (48 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (60 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (72 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (96 IN DIA.) WSDOT STD. PLAN B-10.20-02	RECTANGULAR VANED GRATE WSDOT STD. PLAN B-30.30-03	FRAME AND DUAL VANED GRATES WSDOT STD. PLAN B-40.40-02	CIRCULAR FRAME (RING) AND COVER MARKED DRAIN WSDOT STD. PLAN B-30.70-04	RECANGULAR SOLID METAL COVER WSDOT STD. PLAN B-30.20-04	COMBINATION INLET WSDOT STD. PLAN B-25.20-02	SCHEDULE A STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 36 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	FLARED END SECTION 12 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 18 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 24 IN. DIA. WSDOT STD. PLAN B-70.60-01	OUTLET PROTECTION. SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 2 IN WSDOT STD. 7-01	PROPOSED DITCH SEE SHEET DD-39	MEDIA FILTER DRAIN SEE SHEET DD-56	DROP STRUCTURE SEE SHEET DD-55	CONSTRUCTION NOTES
		EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	LF	EA	EA	EA	N/A
DR37-17	120 SE 50+55							1						1				116																								
DR37-19	120 SE 50+86							1						1				56																								
DR37-19.1	120 SE 50+86																										20								1							
DR37-20	120 SE 54+26		1												1									81																		
DR37-24	SB 405 6831+35							1				1											48																			8
DR37-27	SB 405 6832+43							1				1						100																								
DR37-33	CC-SB 405 840+76																																									7, 8
DR37-34	CC-SB 405 841+54							1				1																														1, 8
DR37-35	CC 26+78			1									1				17																									2
DR37-36	CC 26+69																																									7, 8
DR37-37	SB 405-CC 843+74							1				1											137																			
DR37-38	SB 405-CC 843+76					1						1										6																				
DR37-39	SB 405 5845+90							1				1											13																		1	8
DR37-40	SB 405-CC 847+53					1						1					94																									
DR37-41	SB 405-CC 847+43							1						1									38																			
DR37-42	SB 405-CC 849+02							1				1												131																		8, 9
DR37-43	M-NB 405-CC 6831+29							1				1											41																		1	8
DR37-44	M-NB 405-CC 6831+29					1						1										159																				
DR37-45	M-NB 405-CC 6831+33					1						1										5																				
DR37-46	M-NB 405-CC 6831+74							1				1						99																								
DR37-47	M-NB 405-CC 6832+30						1					1									53																					
DR37-48	M-NB 405-CC 6833+13					1						1					44																									
DR37-49	SB 405 5837+60							1				1											90																			8
DR37-50	SB 405 5838+42					1						1					81																									
DR37-54	CC-SB 405 839+05					1									1		89																									8
DR37-55	SB 405 5839+44					1						1					88																									8
DR37-61	SB 405 5841+04					1									1		87																									
DR37-62	M-NB 405-CC 6839+13					1						1					87																									
DR37-64	SB 405 5844+76							1				1					47																									8
DR37-65	M-NB 405-CC 6840+90							1				1											82																			
DR37-68	M-NB 405-CC 6836+06					1						1					128																									
DR37-69	NB 405 7838+35					1						1										120																				
DR37-71	NB 405 7838+54					1						1					129																									
DR37-73	NB 405 7838+35					1						1					158																									
DR37-74	NB 405 7839+17			1									1							12																						
DR37-76	NB 405 7839+98					1						1								81																						8
DR37-77	NB 405 7841+15							1				1					74																									
DR37-79	NB 405 7845+74					1						1					81																									
DR37-83	NB 405-CC 842+24							1				1																														5
DR37-84	CC-NB 405 837+49									1		1																														5
DR37-86	CC-NB 405 838+17																																					11				
DR37-88	CC 23+16							1						1																												5
DR37-88A	CC 23+21					1						1								28																						8
DR37-89	CC-NB 405 840+31						1					1					96																									
DR37-91	119 SE 23+73			1									1				128																									1, 8
DR37-92	NB 405 7845+76																																					100				
DR37-93	NB 405 7844+15																																					25				
DR37-94	SB 405 5848+56					1										1																										1
DR37-95	CC-NB405836+45																																									7
DR37-96	119 SE 23+89						1					1											162																			8

GENERAL NOTES

1. ALL DRAINAGE FEATURES SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.
2. REUSED EXISTING INFRASTRUCTURE SHALL BE CLEANED, SURVEYED, AND VALIDATED PER WSDOT STD. 7-07.
3. EXISTING INFRASTRUCTURE DETERMINED FROM SURVEY AND AS-BUILT DRAWINGS, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.
4. SEE PROFILE SHEETS FOR EXACT STATION/OFFSET LOCATIONS. SEE DETAIL SHEET DD-51 FOR DRAINAGE STRUCTURE PLACEMENT.
5. GALVANIZED PRODUCTS ARE NOT ALLOWED ON STORM DRAINAGE PIPES AND OTHER HYDRAULIC STRUCTURES, SUCH AS GRATES, CONTROL STRUCTURES, LADDER RUNGS, AND BIRDCAGES ON TOP OF OVERFLOW STRUCTURES.
6. DUCTILE IRON PIPE SHALL USE CLASS 50 OR PRESSURE CLASS 350 IN ACCORDANCE WITH STD. SPECIFICATION 9-05.13.
7. IF EVIDENCE OF CORROSIVITY IS OBSERVED WHERE DIP IS TO BE INSTALLED, CONSULT WITH ENGINEER FOR PIPE PROTECTION REQUIREMENT.
8. REFER TO WALL PLANS FOR WALL CLEANOUTS. FOR CABS UNDERDRAINS, CONTACT EOR IF A FITTING OF 90-DEGREES IS REQURED BASED ON UNDERDRAIN PLACEMENT FOR DETERMINATION IF A CLEANOUT IS REQUIRED.
9. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS, PIPES, AND DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH DIVISIONS 2 & 7 OF STANDARD SPECIFICATIONS. SPECIFICALLY NOTING SECTIONS 07-05.3(2) & 07-05.3(4).

CONSTRUCTION NOTES

1. CONNECT TO EXISTING PIPE. SEE DETAIL SHEET DD-53.
2. CONNECT TO EXISTING INLET.
3. ABANDON EXISTING STRUCTURE.
4. ABANDON EXISTING PIPE.
5. REMOVE EXISTING STRUCTURE.
6. REMOVE EXISTING PIPE.
7. ADJUST EXISITING STRUCTURE.
8. UNDERDRAIN CONNECTING TO INLET. SEE UD-08, UD-09.
9. TRENCH BACKFILL OUTSIDE WSDOT LIMITED ACCESS AND WITHIN CITY OF BELLEVUE RIGHT-OF-WAY SHALL CONFORM WITH CITY STD. PLAN RC-190-1.

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME \\AMECPW03ICS01\iCS_pdf_work_dir\7582\7407_1732\XL5467_PS_DR_NOTES-T1.dgn
TIME 5:40:34 PM
DATE 12/20/2021
PLOTTED BY AMECPW03ICS01$
DESIGNED BY M. EMESON
ENTERED BY M. EMESON
CHECKED BY J. ST. JOHN
PROJ. ENGR. J. LEFOTU
REGIONAL ADM. L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER XL5467
CONTRACT NO. C9242 | LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN — STATE OF WASHINGTON — 27497 — REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.20 17:22:27-08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON | LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE
DR37

PLAN REF NO DR-T1
SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	MANHOLE TYPE 1 WSDOT STD. PLAN B-15.20-01	MANHOLE TYPE 3 (48 IN DIA.) WSDOT STD. PLAN B-15.60-02	GRATE INLET TYPE 2 WSDOT STD. PLAN B-35.40-00	GRATE INLET ON CATCH BASIN TYPE 2 WSDOT STD. PLAN B-30.60-00	CATCH BASIN TYPE 1 WSDOT STD. PLAN B-5.20-02	CATCH BASIN TYPE 1L WSDOT STD. PLAN B-5.40-02	CATCH BASIN TYPE 2 (48 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (60 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (72 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (96 IN DIA.) WSDOT STD. PLAN B-10.20-02	RECTANGULAR VANED GRATE WSDOT STD. PLAN B-30.30-03	FRAME AND DUAL VANED GRATES WSDOT STD. PLAN B-40.40-02	CIRCULAR FRAME (RING) AND COVER MARKED DRAIN WSDOT STD. PLAN B-30.70-04	RECANGULAR SOLID METAL COVER WSDOT STD. PLAN B-30.20-04	COMBINATION INLET WSDOT STD. PLAN B-25.20-02	SCHEDULE A STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 36 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	FLARED END SECTION 12 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 18 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 24 IN. DIA. WSDOT STD. PLAN B-70.60-01	OUTLET PROTECTION. SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 2 IN WSDOT STD. 7-01	PROPOSED DITCH SEE SHEET DD-39	MEDIA FILTER DRAIN SEE SHEET DD-56	DROP STRUCTURE SEE SHEET DD-55	CONSTRUCTION NOTES
		EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	LF	EA	EA	EA	N/A
DR37-97	SB 405 5844+95						1					1											83																			8
DR37-100	SB 405 5841+01					1						1								14																						
DR37-16A	CC 27+97									1				1					15																							
DR37-16A.1	CC 27+68																																56			1						
DR37-20A	CABS10.26 3+05		1												1				104					1																		
DR37-20B	CABS10.26 1+65		1												1													27								1	1					
DR37-39A	SB 405 5843+99					1						1					94																									
DR37-9A	CC-CB405 841+41																																					39				
DR37-C-1	120 SE 51+83																															41		1			1					
DR37-C-2	120 SE 53+33																															117		1			1					
DR37-D1	CC-SB 405 839+60																																						1			
DR37-D2	M-NB 405-CC 6830+70																																						1			
DR38-2	SB 405-CC 851+63					1						1	1									122																				
DR38-3	SB 405-CC 851+91					1						1			1							28																				
DR38-4	SB 405-CC 854+27							1				1					175																									8
DR38-6	SB 405-CC 856+65					1						1					236																									
DR38-7	SB 405-CC 856+65					1						1										5																			1	
DR38-9	SB 405 5860+37					1						1					257																									
DR38-11	SB 405 5864+53					1						1					4																								1	
DR38-12	SB 405 5864+54					1						1					10																									2
DR38-13	SB 405 5850+68																																									7
DR38-15	SB 405 5852+28			1									1									268																				
DR38-17	SB 405 5852+28							1				1					6																									
DR38-18	NB 405 7848.11						1					1											234																			
DR38-21	NB 405 7849+69					1						1										4																				7
DR38-22	NB 405 7851+84					1						1					45																									
DR38-24	SB 405 5856+66					1						1					280																									
DR38-25	NB 405 7853+18					1						1					5																									
DR38-29	SB 405 5859+66					1						1					272																									
DR38-30	SB 405 5860+78					1						1					4																									
DR38-31	SB 405 5861+10					1						1					112																									
DR38-32	NB 405 7857+48					1						1					32																									
DR38-34	NB 405 7859+50			1									1									4																				
DR38-35	NB 405 7860+32					1						1					127																									
DR38-38	SB 405-CC 852+49					1		1				1										6																			1	8
DR38-4A	SB 405-CC 852+52							1				1					61																									
DR38-T2	SB 405 5864+90	1													1									498																		
DR39-1	SB 405 5866+26					1						1					4																								1	
DR39-2	SB 405 5866+25					1						1					5																									2
DR39-3	SB 405 5866+25																																									7
DR39-4	SB 405 5868+26					1						1					4																								1	
DR39-5	SB 405 5868+25					1						1					4																									2
DR39-6	SB 405 5868+25																																									7
DR39-8	SB 405 5857+83																																									7
DR39-9	SB 405 5859+63																																									7
DR39-11	SB 405 5874+75							1				1																														1
DR39-12	SB 405 5875+49								1			1																														1, 8
DR39-13	SB 405 5876+10							1				1																														1
DR39-18	SB 405 5866+17			1									1									4																				
DR39-19	NB 405 7862+00					1						1					250																									

GENERAL NOTES

1. ALL DRAINAGE FEATURES SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.
2. REUSED EXISTING INFRASTRUCTURE SHALL BE CLEANED, SURVEYED, AND VALIDATED PER WSDOT STD. 7-07.
3. EXISTING INFRASTRUCTURE DETERMINED FROM SURVEY AND AS-BUILT DRAWINGS, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.
4. SEE PROFILE SHEETS FOR EXACT STATION/OFFSET LOCATIONS. SEE DETAIL SHEET DD-51 FOR DRAINAGE STRUCTURE PLACEMENT.
5. GALVANIZED PRODUCTS ARE NOT ALLOWED ON STORM DRAINAGE PIPES AND OTHER HYDRAULIC STRUCTURES, SUCH AS GRATES, CONTROL STRUCTURES, LADDER RUNGS, AND BIRDCAGES ON TOP OF OVERFLOW STRUCTURES.
6. DUCTILE IRON PIPE SHALL USE CLASS 50 OR PRESSURE CLASS 350 IN ACCORDANCE WITH STD. SPECIFICATION 9-05.13.
7. IF EVIDENCE OF CORROSIVITY IS OBSERVED WHERE DIP IS TO BE INSTALLED, CONSULT WITH ENGINEER FOR PIPE PROTECTION REQUIREMENT.
8. REFER TO WALL PLANS FOR WALL CLEANOUTS. FOR CABS UNDERDRAINS, CONTACT EOR IF A FITTING OF 90-DEGREES IS REQURED BASED ON UNDERDRAIN PLACEMENT FOR DETERMINATION IF A CLEANOUT IS REQUIRED.
9. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS, PIPES, AND DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH DIVISIONS 2 & 7 OF STANDARD SPECIFICATIONS. SPECIFICALLY NOTING SECTIONS 07-05.3(2) & 07-05.3(4).

CONSTRUCTION NOTES

1. CONNECT TO EXISTING PIPE. SEE DETAIL SHEET DD-53.
2. CONNECT TO EXISTING INLET.
3. ABANDON EXISTING STRUCTURE.
4. ABANDON EXISTING PIPE.
5. REMOVE EXISTING STRUCTURE.
6. REMOVE EXISTING PIPE.
7. ADJUST EXISITING STRUCTURE.
8. UNDERDRAIN CONNECTING TO INLET. SEE UD-08, UD-09.
9. TRENCH BACKFILL OUTSIDE WSDOT LIMITED ACCESS AND WITHIN CITY OF BELLEVUE RIGHT-OF-WAY SHALL CONFORM WITH CITY STD. PLAN RC-190-1.

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7582\7407_461\XL5467_PS_DR_NOTES-U.dgn
TIME	5:40:02 PM
DATE	12/20/2021
PLOTTED BY	AMECPW03ICS01$
DESIGNED BY	M. EMESON
ENTERED BY	M. EMESON
CHECKED BY	J. ST. JOHN
PROJ. ENGR.	J. LEFOTU
REGIONAL ADM.	L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER XL5467
CONTRACT NO. C9242 | LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN — STATE OF WASHINGTON — 27497 — REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON | LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE
DR37 TO DR39

PLAN REF NO DR-U
SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	MANHOLE TYPE 1 WSDOT STD. PLAN B-15.20-01	MANHOLE TYPE 3 (48 IN DIA.) WSDOT STD. PLAN B-15.60-02	GRATE INLET TYPE 2 WSDOT STD. PLAN B-35.40-00	GRATE INLET ON CATCH BASIN TYPE 2 WSDOT STD. PLAN B-30.60-00	CATCH BASIN TYPE 1 WSDOT STD. PLAN B-5.20-02	CATCH BASIN TYPE 1L WSDOT STD. PLAN B-5.40-02	CATCH BASIN TYPE 2 (48 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (60 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (72 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (96 IN DIA.) WSDOT STD. PLAN B-10.20-02	RECTANGULAR VANED GRATE WSDOT STD. PLAN B-30.30-03	FRAME AND DUAL VANED GRATES WSDOT STD. PLAN B-40.40-02	CIRCULAR FRAME (RING) AND COVER MARKED DRAIN WSDOT STD. PLAN B-30.70-04	RECANGULAR SOLID METAL COVER WSDOT STD. PLAN B-30.20-04	COMBINATION INLET WSDOT STD. PLAN B-25.20-02	SCHEDULE A STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 36 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	FLARED END SECTION 12 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 18 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 24 IN. DIA. WSDOT STD. PLAN B-70.60-01	OUTLET PROTECTION. SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 2 IN WSDOT STD. 7-01	PROPOSED DITCH SEE SHEET DD-39	MEDIA FILTER DRAIN SEE SHEET DD-56	DROP STRUCTURE SEE SHEET DD-55	CONSTRUCTION NOTES
		EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	LF	EA	EA	EA	N/A
DR39-22	SB 405 5868+67			1									1							5																						
DR39-23	NB 405 7864+50			1									1				101																									
DR39-24	SB 405 5870+18			1									1																													1
DR39-25	NB 405 7866+00			1									1																													1
DR39-26	NB 405 7869+03									1		1																														1, 8
DR39-28	M-NB 405_90 6871+38					1						1					8																									
DR39-29	M-NB 405_90 6871+46				1				1				1																													1, 8
DR39-30	M-NB 405_90 6872+00					1						1					17																									
DR39-31	M-NB 405_90 6872+18					1						1								6																					1	
DR39-32	M-NB 405_90 6872+18									1		1						71																								1
DR39-33	M-NB 405_90 6873+00			1									1																													1
DR39-34	M-NB 405_90 6874+54							1				1																														1
DR39-35	M-NB 405_90 6874+55					1						1										8																				
DR39-36	NB 405 7876+01																																									7
DR39-37	M-NB 405_90 6876+05					1						1										9																				
DR39-38	NB405-90 875+44																																									
DR39-39	EB 90-SB 405 871+71					1						1								132																						2
DR39-C-1	SB 405 5871+36																															7		1			1					
DR39-D1	SB 405 5867+70																																						1			
DR39-T1	SB 405 5869+89							1						1										259																		
DR39-T2	SB 405 5872+48							1						1										267																		
DR39-T3	SB 405 5875+28							1						1										280																		
DR39-T4	SB 405 5878+25							1						1										261																		
DR40-21	SB 405-EB 90 905+42							1						1								19																				2
DR40-21.1	SB 405-EB 90 905+42																												81					1								
DR40-25	SB 405-EB 90 904+21																																									7
DR40-32	M-NB 405_90 6877+08			1									1																													
DR40-34	M-NB 405_90 6877+69							1				1																														1
DR40-35	M-NB 405_90 6877+69							1				1																														1
DR40-36	M-NB 405_90 6879+10					1						1										14																				
DR40-37	M-NB 405_90 6879+10							1				1																														1
DR40-38	NB 405 7877+68					1						1					14																									
DR40-41	EB 90 1879+57					1						1					42																									1
DR40-62	SB 405-EB 90 906+04					1						1					8																									2
DR40-25A	SB405 5894+43																																					38				
DR40-D2A	M-NB 405_90 6877+55																																						1			
DR40-D2B	M-NB 405_90 6877+70																																						1			
DR40-M1	EB 90 1874+55																																						1	1		
DR40-M2	EB 90 1875+84																																							1		
DR40-T1	SB 405 5880+92							1						1										354																		
DR40-T2	SB 405 5884+69							1						1										166																		
DR40-T3	EB 90 1873+71							1						1										127																		
DR40-70	SB 405-WB 90 896+02							1						1																25					1		1					
DR41-1	SB 405-WB 90 897+42							1						1									155																			
DR41-2	SB 405-WB 90 898+03				1			1					1					77																								
DR41-3	SB 405-WB 90 900+02					1						1										98																				
DR41-5	SB 405-EB 90 915+21					1						1					214																									
DR41-8	SB 405-EB 90 917+13					1						1					190																									
DR41-24	SB 405 5895+73							1				1																														1
DR41-25	SB 405 5898+61							1				1																														1

GENERAL NOTES

1. ALL DRAINAGE FEATURES SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.
2. REUSED EXISTING INFRASTRUCTURE SHALL BE CLEANED, SURVEYED, AND VALIDATED PER WSDOT STD. 7-07.
3. EXISTING INFRASTRUCTURE DETERMINED FROM SURVEY AND AS-BUILT DRAWINGS, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.
4. SEE PROFILE SHEETS FOR EXACT STATION/OFFSET LOCATIONS. SEE DETAIL SHEET DD-51 FOR DRAINAGE STRUCTURE PLACEMENT.
5. GALVANIZED PRODUCTS ARE NOT ALLOWED ON STORM DRAINAGE PIPES AND OTHER HYDRAULIC STRUCTURES, SUCH AS GRATES, CONTROL STRUCTURES, LADDER RUNGS, AND BIRDCAGES ON TOP OF OVERFLOW STRUCTURES.
6. DUCTILE IRON PIPE SHALL USE CLASS 50 OR PRESSURE CLASS 350 IN ACCORDANCE WITH STD. SPECIFICATION 9-05.13.
7. IF EVIDENCE OF CORROSIVITY IS OBSERVED WHERE DIP IS TO BE INSTALLED, CONSULT WITH ENGINEER FOR PIPE PROTECTION REQUIREMENT.
8. REFER TO WALL PLANS FOR WALL CLEANOUTS. FOR CABS UNDERDRAINS, CONTACT EOR IF A FITTING OF 90-DEGREES IS REQURED BASED ON UNDERDRAIN PLACEMENT FOR DETERMINATION IF A CLEANOUT IS REQUIRED.
9. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS, PIPES, AND DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH DIVISIONS 2 & 7 OF STANDARD SPECIFICATIONS. SPECIFICALLY NOTING SECTIONS 07-05.3(2) & 07-05.3(4).

CONSTRUCTION NOTES

1. CONNECT TO EXISTING PIPE. SEE DETAIL SHEET DD-53.
2. CONNECT TO EXISTING INLET.
3. ABANDON EXISTING STRUCTURE.
4. ABANDON EXISTING PIPE.
5. REMOVE EXISTING STRUCTURE.
6. REMOVE EXISTING PIPE.
7. ADJUST EXISITING STRUCTURE.
8. UNDERDRAIN CONNECTING TO INLET. SEE UD-08, UD-09.
9. TRENCH BACKFILL OUTSIDE WSDOT LIMITED ACCESS AND WITHIN CITY OF BELLEVUE RIGHT-OF-WAY SHALL CONFORM WITH CITY STD. PLAN RC-190-1.

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7582\7407_1733\XL5467_PS_DR_NOTES-U1.dgn
TIME	5:38:58 PM
DATE	12/20/2021
PLOTTED BY	AMECPW03ICS01$
DESIGNED BY	M. EMESON
ENTERED BY	M. EMESON
CHECKED BY	J. ST. JOHN
PROJ. ENGR.	J. LEFOTU
REGIONAL ADM.	L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

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

JOB NUMBER XL5467

CONTRACT NO. C9242 | LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John 2021.12.20 17:22:59-08'00'

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE
DR39 TO DR41

PLAN REF NO DR-U1

SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	MANHOLE TYPE 1 WSDOT STD. PLAN B-15.20-01	MANHOLE TYPE 3 (48 IN DIA.) WSDOT STD. PLAN B-15.60-02	GRATE INLET TYPE 2 WSDOT STD. PLAN B-35.40-00	GRATE INLET ON CATCH BASIN TYPE 2 WSDOT STD. PLAN B-30.60-00	CATCH BASIN TYPE 1 WSDOT STD. PLAN B-5.20-02	CATCH BASIN TYPE 1L WSDOT STD. PLAN B-5.40-02	CATCH BASIN TYPE 2 (48 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (60 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (72 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (96 IN DIA.) WSDOT STD. PLAN B-10.20-02	RECTANGULAR VANED GRATE WSDOT STD. PLAN B-30.30-03	FRAME AND DUAL VANED GRATES WSDOT STD. PLAN B-40.40-02	CIRCULAR FRAME (RING) AND COVER MARKED DRAIN WSDOT STD. PLAN B-30.70-04	RECANGULAR SOLID METAL COVER WSDOT STD. PLAN B-30.20-04	COMBINATION INLET WSDOT STD. PLAN B-25.20-02	SCHEDULE A STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 36 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	FLARED END SECTION 12 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 18 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 24 IN. DIA. WSDOT STD. PLAN B-70.60-01	OUTLET PROTECTION. SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 2 IN WSDOT STD. 7-01	PROPOSED DITCH SEE SHEET DD-39	MEDIA FILTER DRAIN SEE SHEET DD-56	DROP STRUCTURE SEE SHEET DD-55	CONSTRUCTION NOTES
		EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	LF	EA	EA	EA	N/A
DR41-26	SB 405 5898+61					1						1										6																				
DR41-27	SB 405 5898+93									1				1																												1
DR41-35	SB 405 5906+70			1									1				59																									2
DR41-37	SB 405 5907+29																																									7
DR41-38	SB 405 5908+30			1									1				101																									2
DR41-39	SB 405 5909+23																																									
DR41-41	NB 405 7892+28							1						1																												1
DR41-42	NB 405 7892+29					1						1										9																				
DR41-43	M-NB 405_90 6894+70					1						1										6																				
DR41-44	M-NB 405_90 6894+73									1				1																												1
DR41-45	NB 405 7895+47																																									7
DR41-46	NB 405 7896+16					1						1					69																									2
DR41-48	NB 405 7898+23																																									
DR41-50	NB 405 7902+73																																									7
DR41-51	NB 405 7902+88								1			1																														1
DR41-52	NB 405 7904+71					1						1																														1
DR41-53	NB 405 7904+71																																									7
DR41-54	NB 405 7905+69					1						1																														1
DR41-55	NB 405 7905+69																																									7
DR41-57	NB 405 7906+50					1						1																														1
DR41-58	NB 405 7906+50																																									7, 8
DR41-60	SB 405-WB 90 899+02					1						1										98																				
DR41-D1	SB 405 5895+50																																						1			
DR41-D2	M-NB 405_90 6889+40																																						1			
DR41-D3	SB 405 5897+00																																						1			
DR42-5	SB 405 5919+85			1									1				32																									
DR42-7	SB 405 5921+69							1				1						96																								1
DR42-8	SB 405 5922+65							1				1						115																								
DR42-9	SB 405 5923+80							1				1						219																								
DR42-11	NB 405 7919+80			1									1													9								1			1					8
DR42-12	NB 405 7920+64			1									1				84																									
DR42-13	NB 405 7921+54					1						1					89																									
DR42-14	NB 405 7920+52																																									7
DR42-15	NB 405 7908+22																																									7
DR42-16	NB 405 7908+24					1						1										7																				2
DR42-17	NB 405 7909+32																																									7
DR42-18	NB 405 7909+32					1						1																														1
DR42-20	NB 405 7910+50					1						1								116																						
DR42-21	NB 405 7913+24																																									7
DR42-32	NB 405 7913+23					1						1					6																								1	2
DR42-11A	NB405 7919+96																																					10				
DR42-1A	SB 405 5912+19																																					10				
DR42-D1	SB 405 5923+50																																						1			
DR64-8	NB 405-EB 90 82+11																																					53				
DR64-9	NB 405-EB 90 82+11																																					36				
DR64-M1	SB 405-EB 90 895+20																																						1	1		
DR65-5	NB 405-EB 90 87+51			1									1																													1
DR65-D1	NB 405-EB 90 83+70																																						1			
DR65-M1	EB 90 1890+85																																							1		
DR65-M2	EB 90 1890+63																																							1		
DR67-T1	SB 405 5861+90							1						1										280																		

GENERAL NOTES

1. ALL DRAINAGE FEATURES SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.
2. REUSED EXISTING INFRASTRUCTURE SHALL BE CLEANED, SURVEYED, AND VALIDATED PER WSDOT STD. 7-07.
3. EXISTING INFRASTRUCTURE DETERMINED FROM SURVEY AND AS-BUILT DRAWINGS, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.
4. SEE PROFILE SHEETS FOR EXACT STATION/OFFSET LOCATIONS. SEE DETAIL SHEET DD-51 FOR DRAINAGE STRUCTURE PLACEMENT.
5. GALVANIZED PRODUCTS ARE NOT ALLOWED ON STORM DRAINAGE PIPES AND OTHER HYDRAULIC STRUCTURES, SUCH AS GRATES, CONTROL STRUCTURES, LADDER RUNGS, AND BIRDCAGES ON TOP OF OVERFLOW STRUCTURES.
6. DUCTILE IRON PIPE SHALL USE CLASS 50 OR PRESSURE CLASS 350 IN ACCORDANCE WITH STD. SPECIFICATION 9-05.13.
7. IF EVIDENCE OF CORROSIVITY IS OBSERVED WHERE DIP IS TO BE INSTALLED, CONSULT WITH ENGINEER FOR PIPE PROTECTION REQUIREMENT.
8. REFER TO WALL PLANS FOR WALL CLEANOUTS. FOR CABS UNDERDRAINS, CONTACT EOR IF A FITTING OF 90-DEGREES IS REQURED BASED ON UNDERDRAIN PLACEMENT FOR DETERMINATION IF A CLEANOUT IS REQUIRED.
9. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS, PIPES, AND DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH DIVISIONS 2 & 7 OF STANDARD SPECIFICATIONS. SPECIFICALLY NOTING SECTIONS 07-05.3(2) & 07-05.3(4).

CONSTRUCTION NOTES

1. CONNECT TO EXISTING PIPE. SEE DETAIL SHEET DD-53.
2. CONNECT TO EXISTING INLET.
3. ABANDON EXISTING STRUCTURE.
4. ABANDON EXISTING PIPE.
5. REMOVE EXISTING STRUCTURE.
6. REMOVE EXISTING PIPE.
7. ADJUST EXISITING STRUCTURE.
8. UNDERDRAIN CONNECTING TO INLET. SEE UD-08, UD-09.
9. TRENCH BACKFILL OUTSIDE WSDOT LIMITED ACCESS AND WITHIN CITY OF BELLEVUE RIGHT-OF-WAY SHALL CONFORM WITH CITY STD. PLAN RC-190-1.

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7582\7407_460\XL5467_PS_DR_NOTES-V.dgn
TIME	5:40:09 PM
DATE	12/20/2021
PLOTTED BY	AMECPW03ICS01$
DESIGNED BY	M. EMESON
ENTERED BY	M. EMESON
CHECKED BY	J. ST. JOHN
PROJ. ENGR.	J. LEFOTU
REGIONAL ADM.	L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER XL5467
CONTRACT NO. C9242 | LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN — STATE OF WASHINGTON — 27497 — REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON | LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE DR41 TO DR67

PLAN REF NO DR-V
SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	MANHOLE TYPE 1 WSDOT STD. PLAN B-15.20-01	MANHOLE TYPE 3 (48 IN DIA.) WSDOT STD. PLAN B-15.60-02	GRATE INLET TYPE 2 WSDOT STD. PLAN B-35.40-00	GRATE INLET ON CATCH BASIN TYPE 2 WSDOT STD. PLAN B-30.60-00	CATCH BASIN TYPE 1 WSDOT STD. PLAN B-5.20-02	CATCH BASIN TYPE 1L WSDOT STD. PLAN B-5.40-02	CATCH BASIN TYPE 2 (48 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (60 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (72 IN DIA.) WSDOT STD. PLAN B-10.20-02	CATCH BASIN TYPE 2 (96 IN DIA.) WSDOT STD. PLAN B-10.20-02	RECTANGULAR VANED GRATE WSDOT STD. PLAN B-30.30-03	FRAME AND DUAL VANED GRATES WSDOT STD. PLAN B-40.40-02	CIRCULAR FRAME (RING) AND COVER MARKED DRAIN WSDOT STD. PLAN B-30.70-04	RECANGULAR SOLID METAL COVER WSDOT STD. PLAN B-30.20-04	COMBINATION INLET WSDOT STD. PLAN B-25.20-02	SCHEDULE A STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	DUCTILE IRON (DI) STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 12 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 18 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 24 IN. DIA. WSDOT STD. 7-04 & 7-08	CPEP STORM SEWER PIPE 36 IN. DIA. WSDOT STD. 7-04 & 7-08	SCHEDULE A CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	SCHEDULE A CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 18 IN. DIA. WSDOT STD. 7-02 & 7-08	CPEP CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 12 IN. DIA. WSDOT STD. 7-02 & 7-08	DUCTILE IRON CULVERT 24 IN. DIA. WSDOT STD. 7-02 & 7-08	FLARED END SECTION 12 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 18 IN. DIA. WSDOT STD. PLAN B-70.60-01	FLARED END SECTION 24 IN. DIA. WSDOT STD. PLAN B-70.60-01	OUTLET PROTECTION. SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 2 IN WSDOT STD. 7-01	PROPOSED DITCH SEE SHEET DD-39	MEDIA FILTER DRAIN SEE SHEET DD-56	DROP STRUCTURE SEE SHEET DD-55	CONSTRUCTION NOTES
		EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	LF	EA	EA	EA	N/A
DR67-T2	EB 90 1869+82							1						1										121																			
DR67-T3	EB 90 1868+61							1						1										325																			
DR67-T4	EB 90 1865+35							1						1										22																			
DR67-T5	EB 90 1865+17							1						1										212																			
DR67-T6	EB 90 1866+46							1						1										103																			
DR67-T7	EB 90 1866+67							1						1										48																			
DR67-T8	EB 90 1866+28							1						1										137																			
DR67-T10	EB 90 1866+22							1						1																	92					1	1						
Totals		3	3	27	5	78	8	67	4	8	1	117	31	39	11	1	6323	1764	505	637	100	1282	1322	3932	27	9	112	36	102	25	110	165	117	6	6	7	14	322	17	5	13	

GENERAL NOTES

1. ALL DRAINAGE FEATURES SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.
2. REUSED EXISTING INFRASTRUCTURE SHALL BE CLEANED, SURVEYED, AND VALIDATED PER WSDOT STD. 7-07.
3. EXISTING INFRASTRUCTURE DETERMINED FROM SURVEY AND AS-BUILT DRAWINGS, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.
4. SEE PROFILE SHEETS FOR EXACT STATION/OFFSET LOCATIONS. SEE DETAIL SHEET DD-51 FOR DRAINAGE STRUCTURE PLACEMENT.
5. GALVANIZED PRODUCTS ARE NOT ALLOWED ON STORM DRAINAGE PIPES AND OTHER HYDRAULIC STRUCTURES, SUCH AS GRATES, CONTROL STRUCTURES, LADDER RUNGS, AND BIRDCAGES ON TOP OF OVERFLOW STRUCTURES.
6. DUCTILE IRON PIPE SHALL USE CLASS 50 OR PRESSURE CLASS 350 IN ACCORDANCE WITH STD. SPECIFICATION 9-05.13.
7. IF EVIDENCE OF CORROSIVITY IS OBSERVED WHERE DIP IS TO BE INSTALLED, CONSULT WITH ENGINEER FOR PIPE PROTECTION REQUIREMENT.
8. REFER TO WALL PLANS FOR WALL CLEANOUTS. FOR CABS UNDERDRAINS, CONTACT EOR IF A FITTING OF 90-DEGREES IS REQURED BASED ON UNDERDRAIN PLACEMENT FOR DETERMINATION IF A CLEANOUT IS REQUIRED.
9. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS, PIPES, AND DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH DIVISIONS 2 & 7 OF STANDARD SPECIFICATIONS. SPECIFICALLY NOTING SECTIONS 07-05.3(2) & 07-05.3(4).

CONSTRUCTION NOTES

1. CONNECT TO EXISTING PIPE. SEE DETAIL SHEET DD-53.
2. CONNECT TO EXISTING INLET.
3. ABANDON EXISTING STRUCTURE.
4. ABANDON EXISTING PIPE.
5. REMOVE EXISTING STRUCTURE.
6. REMOVE EXISTING PIPE.
7. ADJUST EXISITING STRUCTURE.
8. UNDERDRAIN CONNECTING TO INLET. SEE UD-08, UD-09.
9. TRENCH BACKFILL OUTSIDE WSDOT LIMITED ACCESS AND WITHIN CITY OF BELLEVUE RIGHT-OF-WAY SHALL CONFORM WITH CITY STD. PLAN RC-190-1.

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7582\7407_804\XL5467_PS_DR_NOTES-W.dgn						
TIME	5:40:01 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	12/20/2021						
PLOTTED BY	AMECPW03ICS01$				JOB NUMBER XL5467		
DESIGNED BY	M. EMESON						
ENTERED BY	M. EMESON						
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — Digitally signed by James M. St. John 2021.12.20 23:14:08-08'00' — DATE

P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE
DR67

PLAN REF NO DR-W

SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	ABANDON EXISTING MANHOLE WSDOT STD 7-05 EA	ABANDON EXISTING CATCH BASIN WSDOT STD 7-05 EA	ABANDON EXISTING STORM SEWER WSDOT STD 2-09.3 LF	ABANDON EXISTING CULVERT WSDOT STD 2-09.3 EA	REMOVE DRAINAGE STRUCTURE WSDOT STD 2-02 EA	REMOVE EXISTING STORM SEWER WSDOT STD 7-02 LF	REMOVE EXISTING CULVERT WSDOT STD 7-02 EA
DR36-11	SB 405 5827+03					1		
DR36-11.1	SB 405 5827+03						92	
DR36-16	SB 405 5831+15			61		1		
DR36-16.1	SB 405 5831+15						94	
DR36-16.2	SB 405 5831+15			104				
DR36-17	SB405 5831+18				42	1		
DR36-18	SB405 5833+24					1		
DR36-19	NB405 7821+82			29		1		
DR36-21	NB 405 7822+11					1		
DR36-21.1	NB 405 7822+11			67				
DR36-21.2	NB 405 7822+11			67				
DR36-23	NB 405 7824+56					1	12	
DR36-24	NB 405 7824+55	1		79				
DR36-28	NB 405 7825+34		1	73				
DR36-29	NB 405 7825+00					1	14	
DR36-29.1	NB 405 7825+00						46	
DR36-29.2	NB 405 7825+00						51	
DR36-30	NB 405 7826+07		1	83				
DR36-35	NB 405 7829+61					1		10
DR37-21	CC-SB 405 835+89					1	6	
DR37-21.1	CC-SB 405 835+89						61	
DR37-22	CC-SB 405 835+95					1	160	
DR37-22.1	CC-SB 405 835+95			91				
DR37-22.2	CC-SB 405 835+95			89				
DR37-23	CC-SB 405 835+95					1	63	
DR37-25	CC-SB 405 836+16					1	59	
DR37-26	CC-SB 405 836+37					1	28	
DR37-27	SB 405 6832+43					1		
DR37-28	CC-SB 405 836+95					1	28	
DR37-29	CC-SB 405 838+04					1	99	
DR37-30	CC-SB 405 839+16					1	115	
DR37-31	CC-SB 405 840+63					1	30	
DR37-32	CC-SB 405 840+78					1	8	
DR37-36	CC-SB 405 843+25					1		
DR37-42A	SB 405 5848+28					1	59	
DR37-47	M-NB 405-CC 6832+30			96			1	
DR37-47.1	M-NB 405-CC 6832+30			60				
DR37-51	SB 405 5838+41					1	161	
DR37-52	SB 405 5838+04					1	13	
DR37-53	SB 405 5838+94					1	108	
DR37-56	SB 405 5839+52					1	61	
DR37-57	SB 405 5839+58					1	15	
DR37-58	SB 405 5839+56					1	19	
DR37-59	SB 405 5839+83					1	22	
DR37-59.1	SB 405 5839+83						16	
DR37-60	SB 405 5840+72					1	133	
DR377-60.1	SB 405 5840+72						59	
DR37-63	SB 405 5844+19					1	153	
DR37-63A	M-NB 405-CC 6839+61					1	41	
DR37-64	SB 405 5844+76					1	88	

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7582\7407_813\XL5467_PS_DR_NOTES-X.dgn				
TIME	5:40:33 PM				
DATE	12/20/2021				
PLOTTED BY	AMECPW03ICS01$				
DESIGNED BY	M. EMESON				
ENTERED BY	M. EMESON				
CHECKED BY	J. ST. JOHN				
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS	
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
James M. St. John 12/20/2021 23:25 08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE SITE PREP
DSP36 TO DSP37

PLAN REF NO DR-X

SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	ABANDON EXISTING MANHOLE WSDOT STD 7-05	ABANDON EXISTING CATCH BASIN WSDOT STD 7-05	ABANDON EXISTING STORM SEWER WSDOT STD 2-09.3	ABANDON EXISTING CULVERT WSDOT STD 2-09.3	REMOVE DRAINAGE STRUCTURE WSDOT STD 2-02	REMOVE EXISTING STORM SEWER WSDOT STD 7-02	REMOVE EXISTING CULVERT WSDOT STD 7-02
		EA	EA	LF	EA	EA	LF	EA
DR37-66	M-NB 405-CC 6842+12					1		
DR37-67	M-NB 405-CC 6834+44					1	34	
DR37-75	NB 405 7839+60					2	81	
DR37-76	NB 405 7839+98					1	25	
DR37-78	NB 405 7842+75			105		1		
DR37-80	CC-NB 405 842+24			153		1		
DR37-81	CC-NB 405 843+75		1	159				
DR37-81.1	CC-NB 405 843+75						20	
DR37-82	NB 405-CC 835+60			300		1		
DR37-83	NB 405-CC 842+24					1		
DR37-83.1	NB 405-CC 838+60			61				
DR37-84	CC-NB 405 837+49					1		
DR37-84.1	CC-NB 405 837+49			69				
DR37-88	CC 23+16					1		
DR37-88.1	CC 23+16						68	
DR37-89	CC-NB 405 840+31					1		
DR37-90	CC-NB 405 835+28		1	111				
DR37-94	SB 405 5848+56					1	32	
DR37-98	SB 405-CC 848+17					1	95	
DR38-1	SB 405-CC 850+42					1		
DR38-5	SB 405-CC 856+63					1	409	
DR38-5A	SB 405-CC 856+63					1	259	
DR38-8	SB 405 5859+63					1	255	
DR38-10	SB 405 5860+37					1	255	
DR38-13	SB 405 5864+54					1	172	
DR38-14	SB 405 5850+98					1		
DR38-16	SB 405 5851+55					1		
DR38-19	NB 405 7848+84		1	189				
DR38-20	SB 405 5853+86		1	121				
DR38-23	NB 405 7852+49		1	300				
DR38-26	NB 4057853+20		1	134				
DR38-27	NB 405 7854+85					1	12	
DR38-28	NB 405 7855+49					1		
DR38-33	SB 405 5863+67					1		
DR38-36	NB 405 5864+50					1	10	
DR38-37	SB 405-CC 852+51		1	130				
DR39-3	SB 405 5866+25		1	200				
DR39-6	SB 405 5868+26		1	202				
DR39-16	NB 405 7861+61					1	7	
DR39-17	NB 405 7861+64		1	165				
DR39-20	NB 405 7863+29					1	11	
DR39-21	NB 405 7863+29		1	271				
DR39-25	NB 405 7866+00					1		
DR39-25.1	NB 405 7866+00						44	
DR39-26	NB 405 7869+03					1		
DR39-28	M-NB 405_90 6871+38					1	11	
DR39-28.1	M-NB 405_90 6871+38						26	
DR39-29	M-NB 405_90 6871+46					1		
DR39-32	M-NB 405_90 6872+18					1	69	
DR40-24A	SB 405-EB 90 906+01					1	34	

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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DESIGNED BY	M. EMESON				
ENTERED BY	M. EMESON				
CHECKED BY	J. ST. JOHN				
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS	
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
James M. St. John 12/20/2021 23:32:08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE SITE PREP
DSP37 TO DSP40

PLAN REF NO DR-Y

SHEET XX OF SHEETS

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

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

ID NO.	LOCATION (SEE NOTE 4)	ABANDON EXISTING MANHOLE WSDOT STD 7-05	ABANDON EXISTING CATCH BASIN WSDOT STD 7-05	ABANDON EXISTING STORM SEWER WSDOT STD 2-09.3	ABANDON EXISTING CULVERT WSDOT STD 2-09.3	REMOVE DRAINAGE STRUCTURE WSDOT STD 2-02	REMOVE EXISTING STORM SEWER WSDOT STD 7-02	REMOVE EXISTING CULVERT WSDOT STD 7-02
		EA	EA	LF	EA	EA	LF	EA
DR40-32	M-NB 405_90 6877+08					1		
DR40-37	M-NB 405_90 6879+10					1		
DR40-40	NB405 7877+24			55		1		
DR40-42	NB405 7877+67						42	
DR41-4	SB 405-EB 90 912+78					1	27	
DR41-6	SB 405-EB 90 915+25					1	245	
DR41-7	SB 405-EB 90 915+25					1	6	
DR41-8	SB 405-EB 90 917+75					1		
DR41-14	SB 405 5900+23						53	
DR41-24	SB 405 5895+73					1		
DR41-25	SB 405 5898+61					1		
DR41-27	SB 405 5898+93					1		
DR41-35	SB 405 5906+69						60	
DR41-41	NB 405 7892+28					1		
DR41-44	M-NB 405_90 6894+73					1		
DR41-51	NB 405 7902+88					1		
DR41-52	NB 405 7904+72					1	13	
DR41-54	NB 405 7905+69					1	12	
DR41-56	NB 405 7906+49					1	14	
DR42-4	SB 405 5919+84						32	
DR42-7	SB 405 5921+69						299	
DR42-10	SB 405 5924+68					1	131	
DR65-4	NB 405 EB90 86+28					1		
Totals		1	13	3624	42	83	4778	10

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
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DESIGNED BY	M. EMESON
ENTERED BY	M. EMESON
CHECKED BY	J. ST. JOHN
PROJ. ENGR.	J. LEFOTU
REGIONAL ADM.	L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
James M. St. John 12/20/21 23:40 -08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

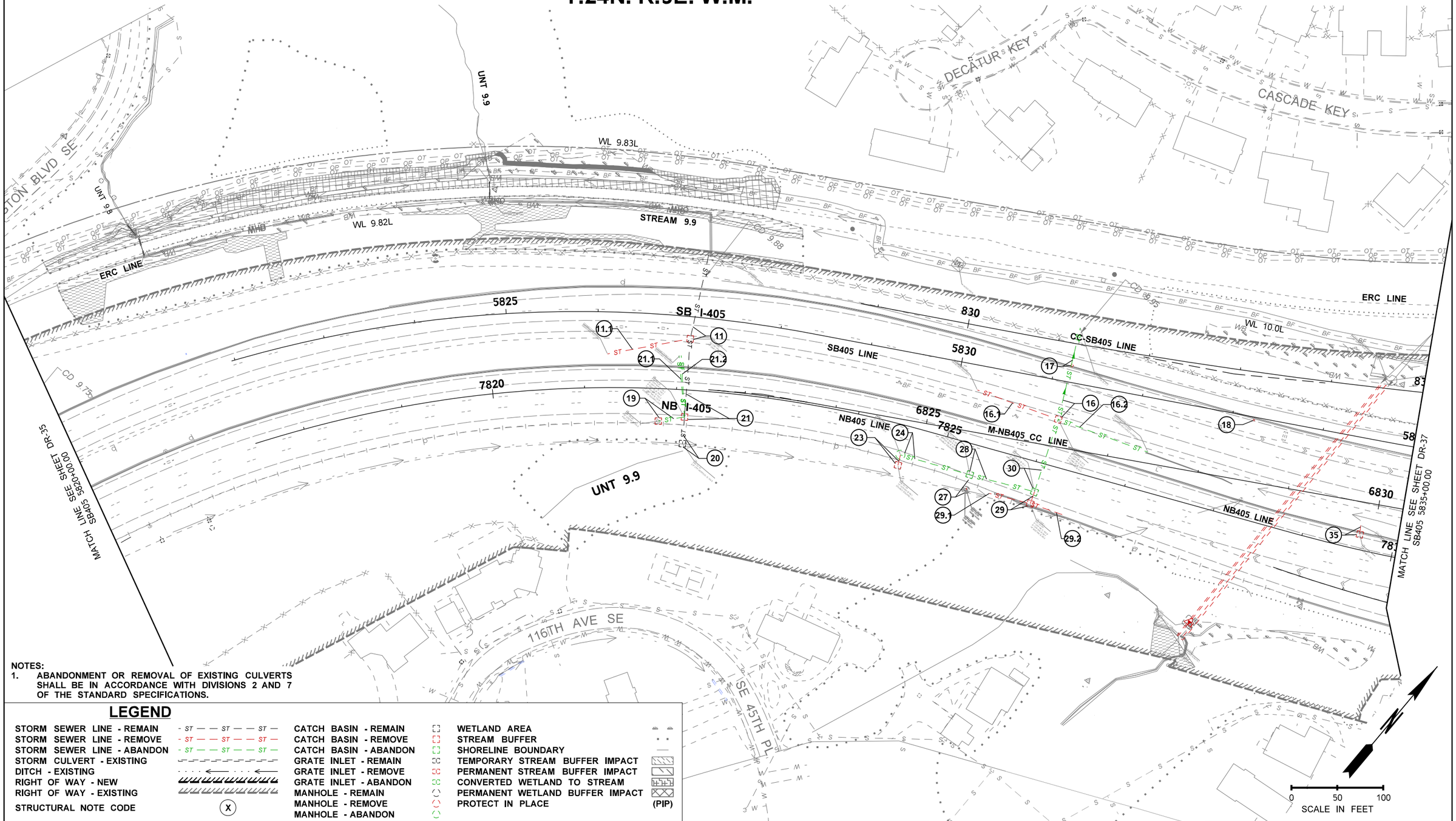
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

STRUCTURE NOTES - DRAINAGE SITE PREP
DSP40 TO DSP42, DSP65

PLAN REF NO DR-Z

SHEET XX OF SHEETS

T.24N. R.5E. W.M.



NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	- ST — — ST — — ST —	CATCH BASIN - REMAIN		WETLAND AREA	
STORM SEWER LINE - REMOVE	- ST — — ST — — ST —	CATCH BASIN - REMOVE		STREAM BUFFER	
STORM SEWER LINE - ABANDON	- ST — — ST — — ST —	CATCH BASIN - ABANDON		SHORELINE BOUNDARY	
STORM CULVERT - EXISTING		GRATE INLET - REMAIN		TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING		GRATE INLET - REMOVE		PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW		GRATE INLET - ABANDON		CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING		MANHOLE - REMAIN		PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE	X	MANHOLE - REMOVE		PROTECT IN PLACE	(PIP)
		MANHOLE - ABANDON			

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
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DESIGNED BY	N. WONG			
ENTERED BY	J. NGO			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
STA. 5820+00 TO STA. 5835+00

PLAN REF NO DSP-36

SHEET OF SHEETS

T.24N. R.5E. W.M.

REMOVE TREATMENT SYSTEM AND MFD

MATCH LINE SEE SHEET DSP-36 SB405 5835+00.00

MATCH LINE SEE SHEET DSP-38 SB405 5850+00.00

ERC TRAIL

ERC_CCS LINE

ERC_CCN LINE

COAL CREEK

COAL CREEK PKWY SE

120TH AVE SE

119TH AVE SE

CC-SB405 LINE

SB405-CC LINE

CC LINE

SB405 LINE

SB I-405

M-NB405 CC LINE

NB I-405

NB405 LINE

NB405-CC LINE

CC-NB405 LINE

1-405 SE LINE

SCALE IN FEET: 0 50 100

NOTES:

1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	CATCH BASIN - REMAIN	WETLAND AREA	
STORM SEWER LINE - REMOVE	CATCH BASIN - REMOVE	STREAM BUFFER	
STORM SEWER LINE - ABANDON	CATCH BASIN - ABANDON	SHORELINE BOUNDARY	
STORM CULVERT - EXISTING	GRATE INLET - REMAIN	TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING	GRATE INLET - REMOVE	PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW	GRATE INLET - ABANDON	CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING	MANHOLE - REMAIN	PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE (X)	MANHOLE - REMOVE	PROTECT IN PLACE (PIP)	
	MANHOLE - ABANDON		

Wood Environment & Infrastructure, Inc.
12/21/2021 — Date
DOAM Initials
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CHECKED BY	J. ST. JOHN
PROJ. ENGR.	J. LEFOTU
REGIONAL ADM.	L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27492, REGISTERED PROFESSIONAL ENGINEER — DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

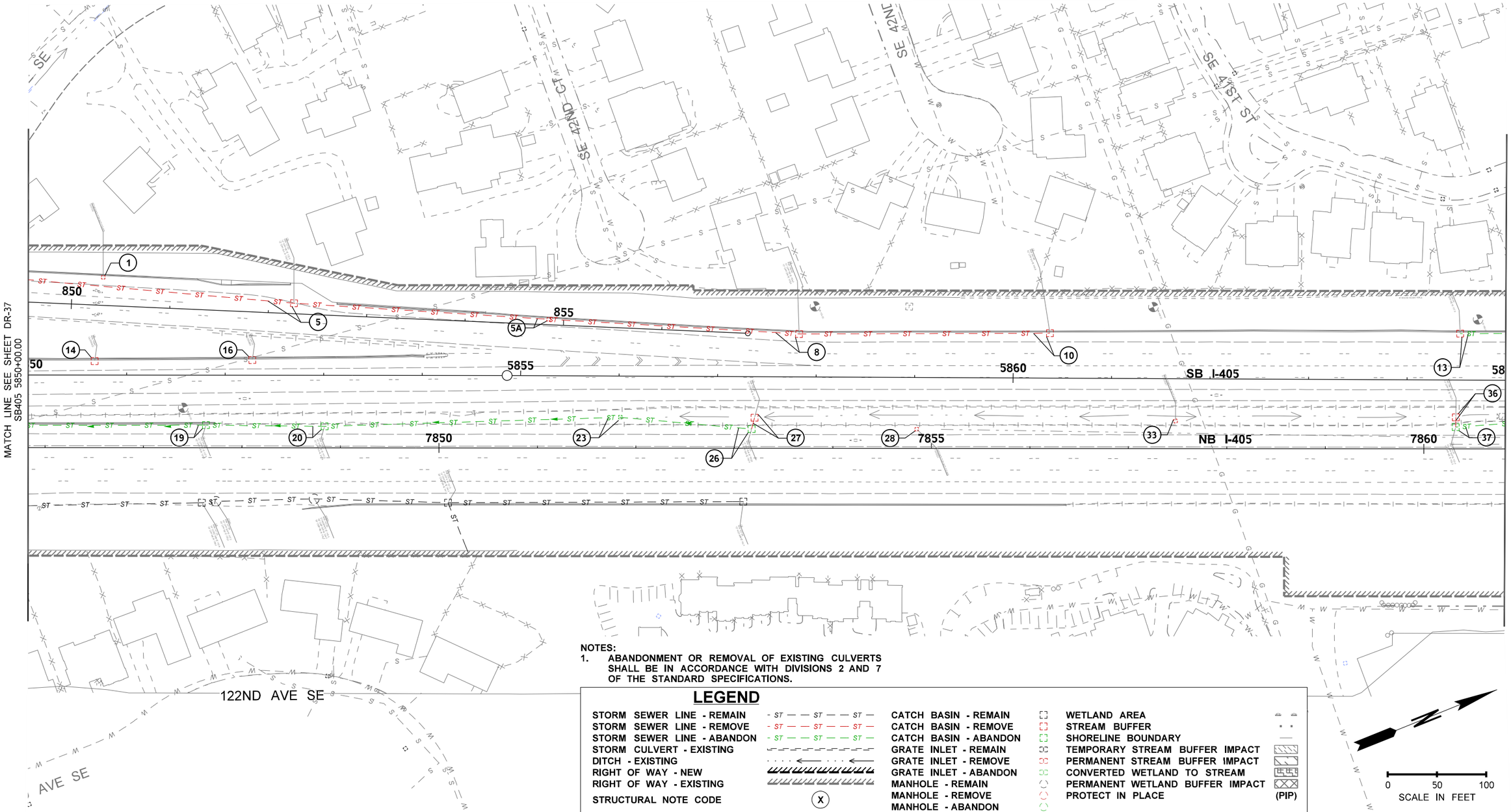
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
STA 5835+00 TO STA 5850+00

PLAN REF NO DSP-37

SHEET OF SHEETS

T.24N. R.5E. W.M.



NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	- ST — — ST — — ST —	CATCH BASIN - REMAIN		WETLAND AREA	
STORM SEWER LINE - REMOVE	- ST — — ST — — ST —	CATCH BASIN - REMOVE		STREAM BUFFER	
STORM SEWER LINE - ABANDON	- ST — — ST — — ST —	CATCH BASIN - ABANDON		SHORELINE BOUNDARY	
STORM CULVERT - EXISTING		GRATE INLET - REMAIN		TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING		GRATE INLET - REMOVE		PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW		GRATE INLET - ABANDON		CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING		MANHOLE - REMAIN		PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE	X	MANHOLE - REMOVE		PROTECT IN PLACE	(PIP)
		MANHOLE - ABANDON			

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
James M. St. John
2021.12.21 14:24:03 -08'00'
P.E. STAMP BOX — DATE

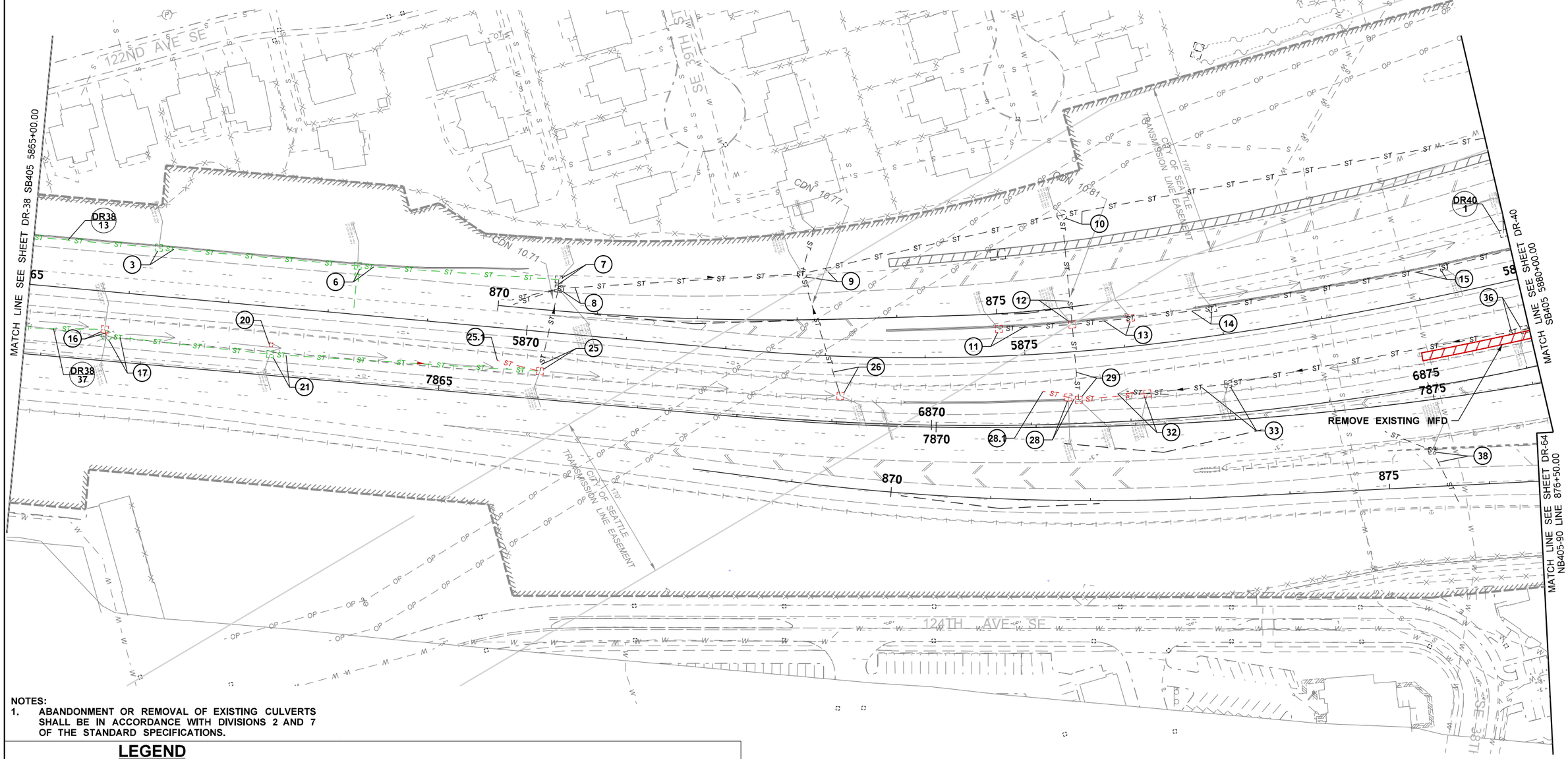
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
STA 5850+00 TO STA 5865+00

PLAN REF NO DSP-38
SHEET OF SHEETS

T.24N. R.5E. W.M.



NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	CATCH BASIN - REMAIN	WETLAND AREA	
STORM SEWER LINE - REMOVE	CATCH BASIN - REMOVE	STREAM BUFFER	
STORM SEWER LINE - ABANDON	CATCH BASIN - ABANDON	SHORELINE BOUNDARY	
STORM CULVERT - EXISTING	GRATE INLET - REMAIN	TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING	GRATE INLET - REMOVE	PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW	GRATE INLET - ABANDON	CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING	MANHOLE - REMAIN	PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE (X)	MANHOLE - REMOVE	PROTECT IN PLACE	(PIP)
	MANHOLE - ABANDON		

0 50 100
SCALE IN FEET

Wood Environment & Infrastructure, Inc.
12/21/2021
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REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

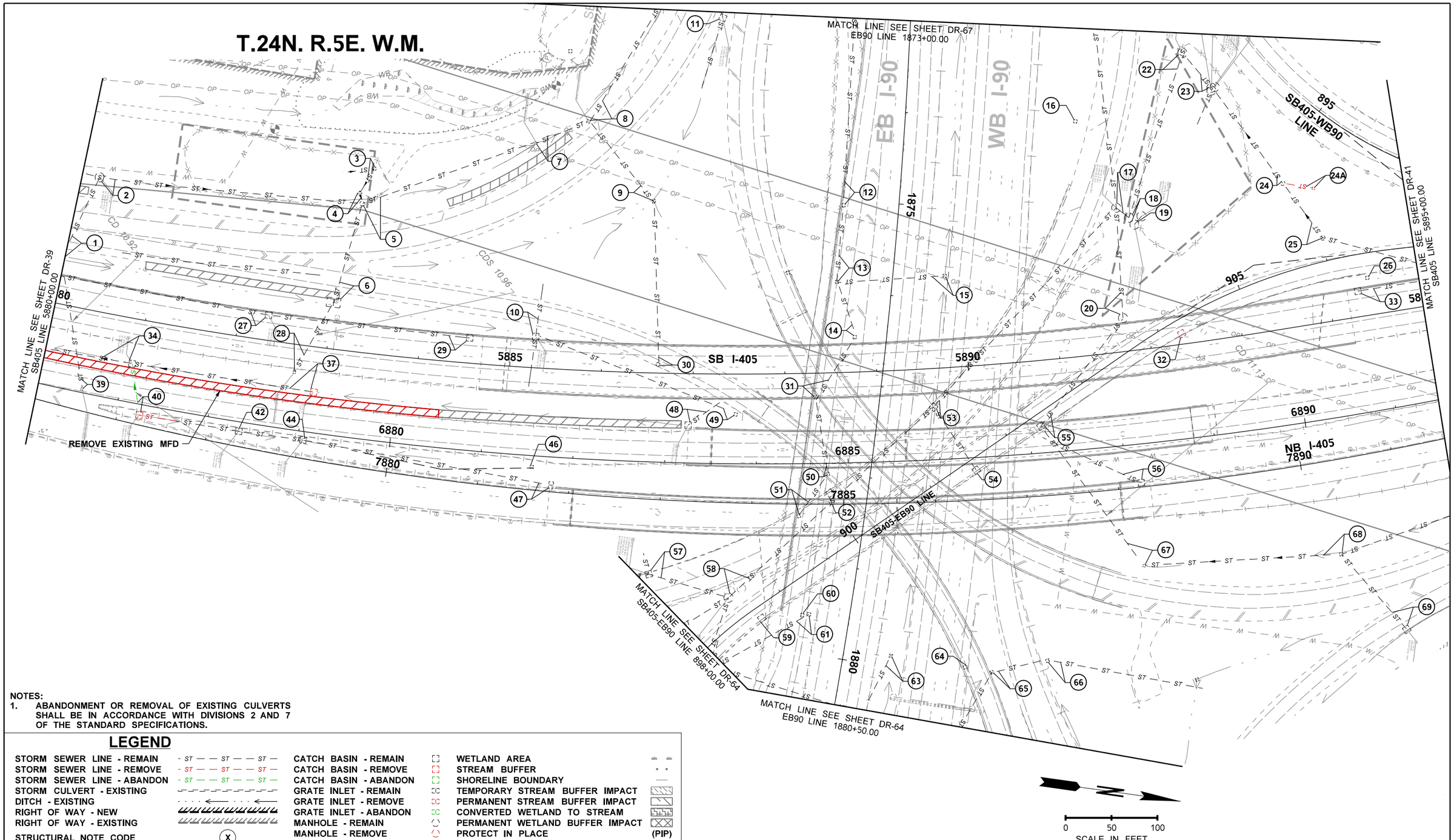
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
STA 5865+00 TO STA 5880+00

PLAN REF NO DSP-39

SHEET OF SHEETS



NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	ST	CATCH BASIN - REMAIN		WETLAND AREA	
STORM SEWER LINE - REMOVE	ST	CATCH BASIN - REMOVE		STREAM BUFFER	
STORM SEWER LINE - ABANDON	ST	CATCH BASIN - ABANDON		SHORELINE BOUNDARY	
STORM CULVERT - EXISTING		GRATE INLET - REMAIN		TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING		GRATE INLET - REMOVE		PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW		GRATE INLET - ABANDON		CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING		MANHOLE - REMAIN		PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE	X	MANHOLE - REMOVE		PROTECT IN PLACE	(PIP)
		MANHOLE - ABANDON			

Wood Environment & Infrastructure, Inc.
12/21/2021
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.21 14:17:24-19'00'
P.E. STAMP BOX DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
STA 5880+00 TO STA 5895+00

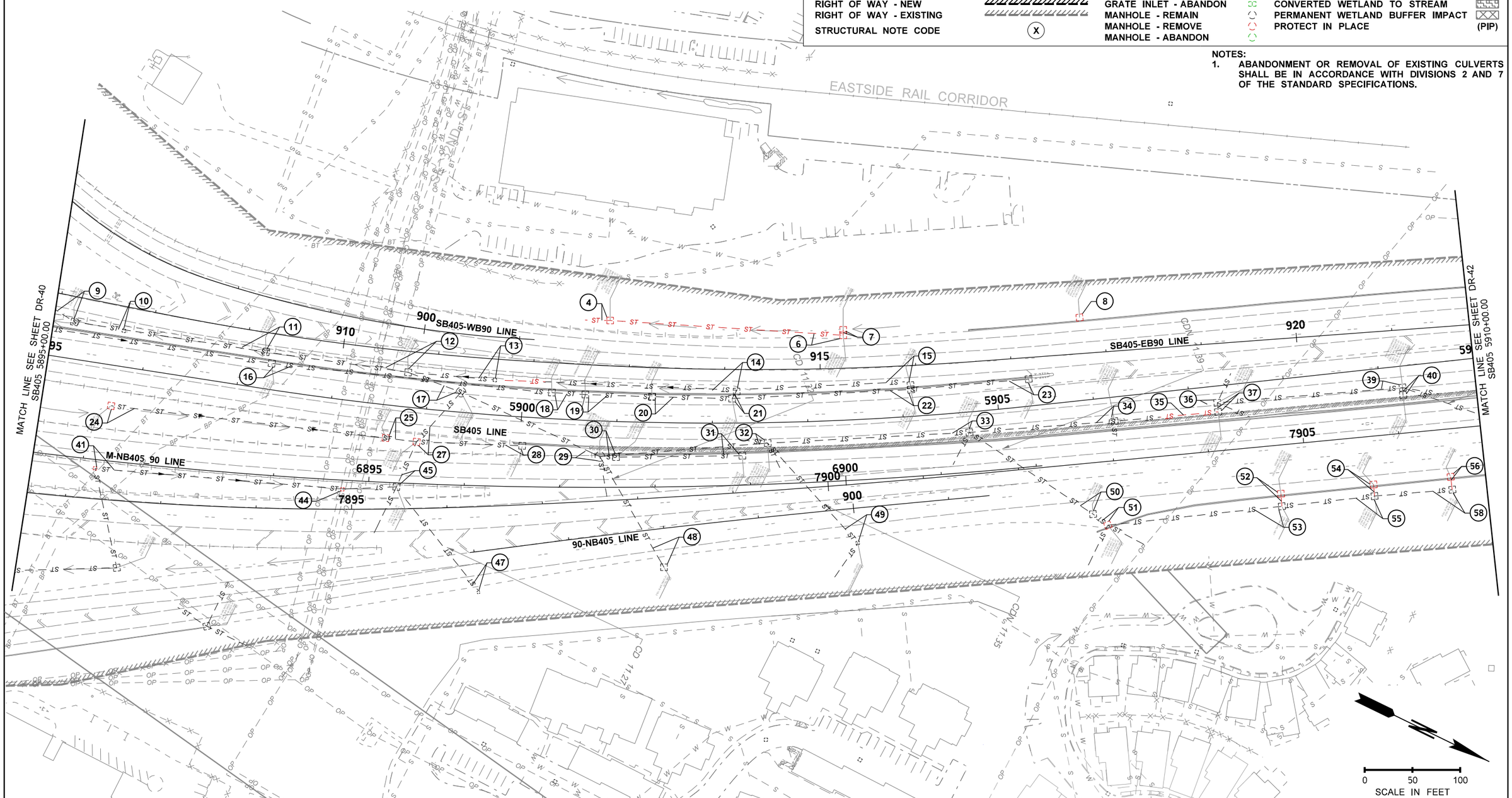
PLAN REF NO DSP-40
SHEET OF SHEETS

T.24N. R.5E. W.M.

LEGEND

STORM SEWER LINE - REMAIN	- ST — — ST — — ST —	CATCH BASIN - REMAIN		WETLAND AREA	
STORM SEWER LINE - REMOVE	- ST — — ST — — ST —	CATCH BASIN - REMOVE		STREAM BUFFER	
STORM SEWER LINE - ABANDON	- ST — — ST — — ST —	CATCH BASIN - ABANDON		SHORELINE BOUNDARY	
STORM CULVERT - EXISTING		GRATE INLET - REMAIN		TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING		GRATE INLET - REMOVE		PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW		GRATE INLET - ABANDON		CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING		MANHOLE - REMAIN		PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE	X	MANHOLE - REMOVE		PROTECT IN PLACE	(PIP)
		MANHOLE - ABANDON			

NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.



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12/21/2021
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — DATE

P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

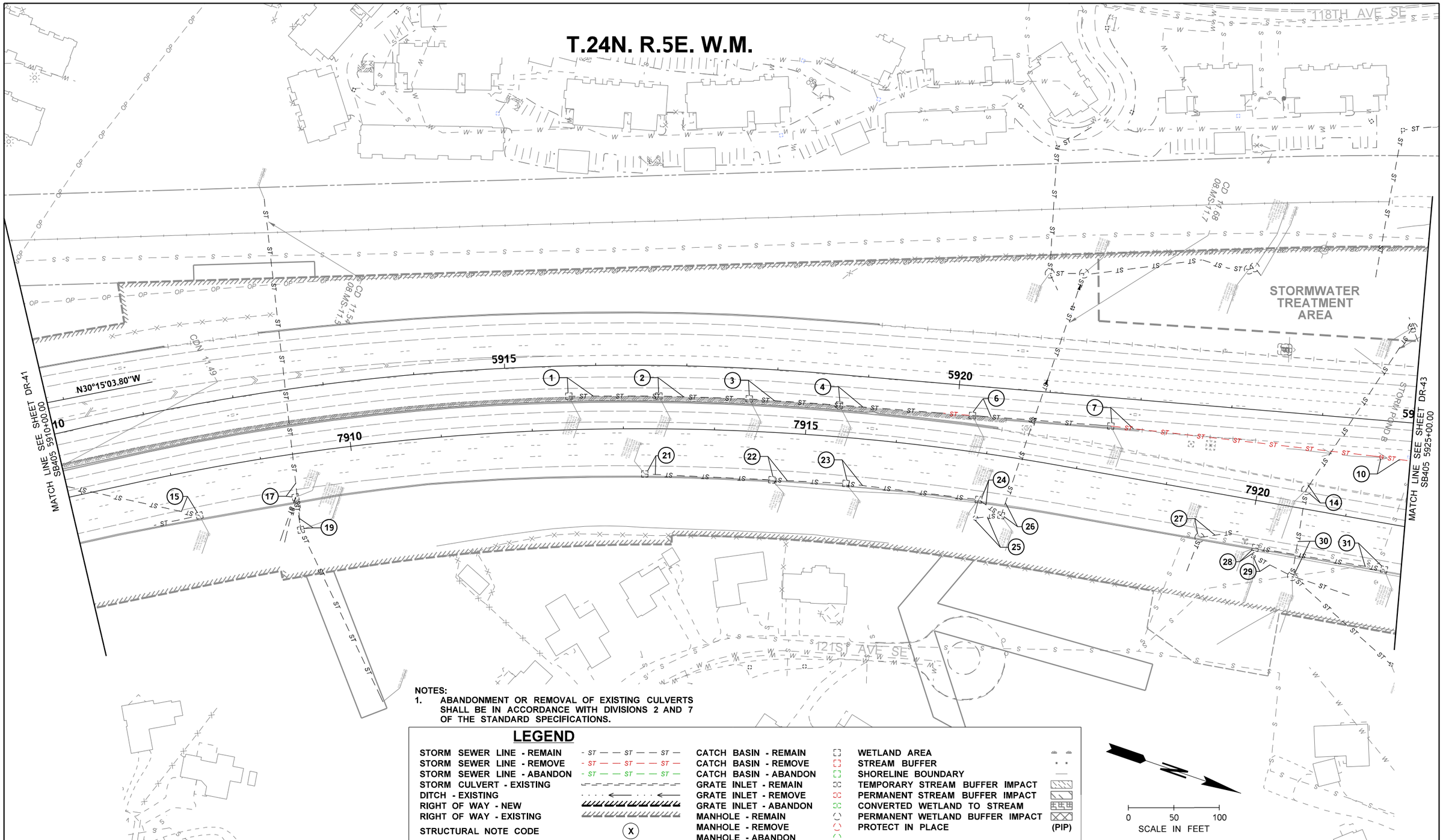
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
STA 5895+00 TO STA 5910+00

PLAN REF NO DSP-41

SHEET OF SHEETS



NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	CATCH BASIN - REMAIN	WETLAND AREA	
STORM SEWER LINE - REMOVE	CATCH BASIN - REMOVE	STREAM BUFFER	
STORM SEWER LINE - ABANDON	CATCH BASIN - ABANDON	SHORELINE BOUNDARY	
STORM CULVERT - EXISTING	GRATE INLET - REMAIN	TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING	GRATE INLET - REMOVE	PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW	GRATE INLET - ABANDON	CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING	MANHOLE - REMAIN	PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE (X)	MANHOLE - REMOVE	PROTECT IN PLACE	(PIP)
	MANHOLE - ABANDON		

Wood Environment & Infrastructure, Inc.
12/21/2021
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CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John Date: 2021.12.21 17:24:33 -08'00'
P.E. STAMP BOX DATE

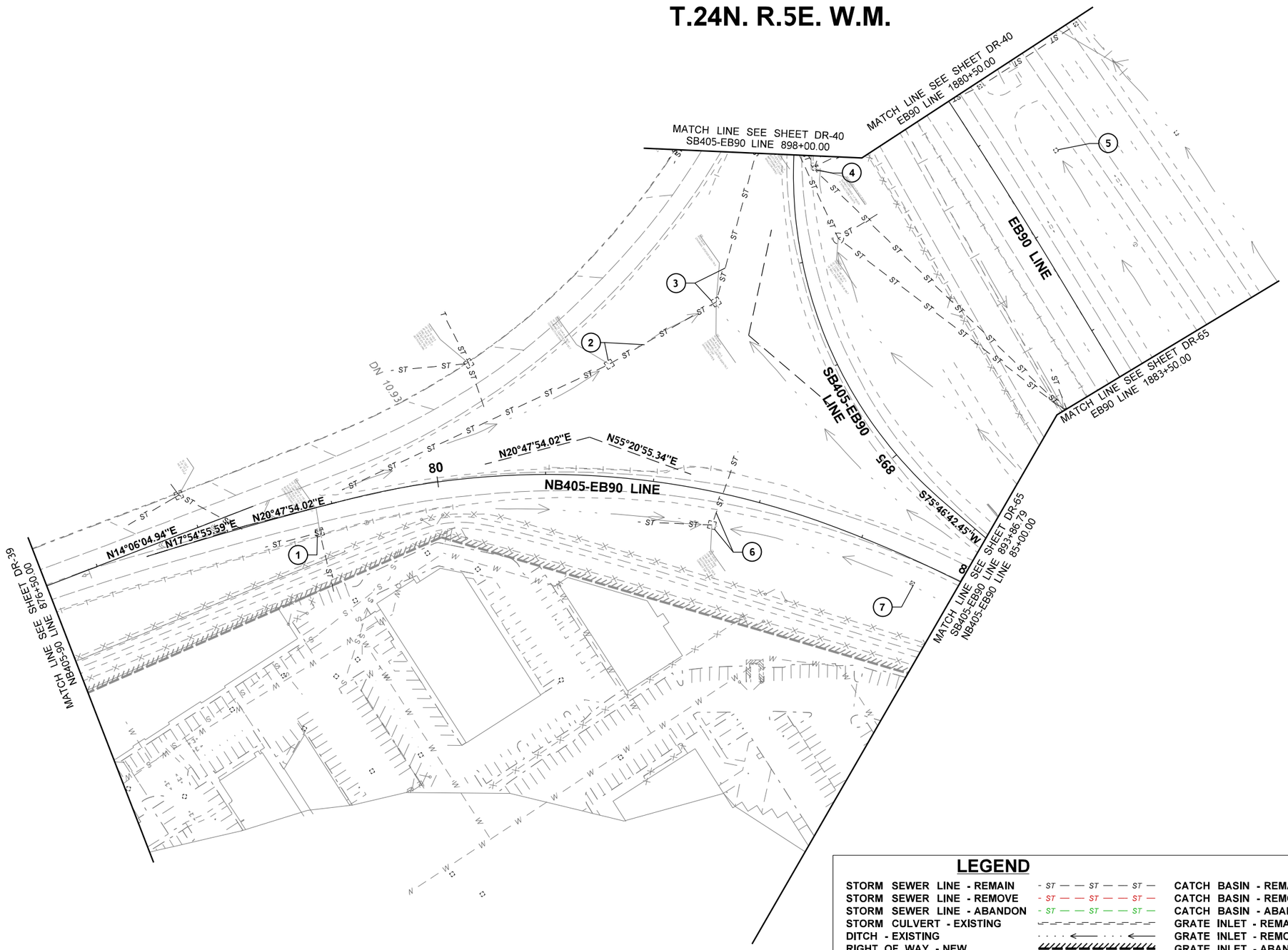
Washington State Department of Transportation
FLATIRON LANE
wood.

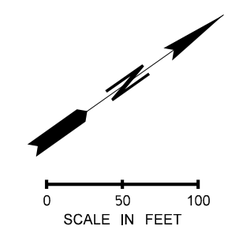
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
STA 5910+00 TO STA 5925+00

PLAN REF NO DSP-42
SHEET OF SHEETS

T.24N. R.5E. W.M.





NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	- ST — — ST — — ST —	CATCH BASIN - REMAIN		WETLAND AREA	
STORM SEWER LINE - REMOVE	- ST — — ST — — ST —	CATCH BASIN - REMOVE		STREAM BUFFER	
STORM SEWER LINE - ABANDON	- ST — — ST — — ST —	CATCH BASIN - ABANDON		SHORELINE BOUNDARY	
STORM CULVERT - EXISTING		GRATE INLET - REMAIN		TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING		GRATE INLET - REMOVE		PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW		GRATE INLET - ABANDON		CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING		MANHOLE - REMAIN		PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE	X	MANHOLE - REMOVE		PROTECT IN PLACE	(PIP)
		MANHOLE - ABANDON			

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
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DATE	12/20/2021				JOB NUMBER		
PLOTTED BY	AMECPW03ICS01$				XL5467		
DESIGNED BY	N. WONG				CONTRACT NO.		LOCATION NO.
ENTERED BY	J. NGO				C9242		
CHECKED BY	J. ST. JOHN						
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST JOHN, STATE OF WASHINGTON, 27492, REGISTERED PROFESSIONAL ENGINEER
James M. St John
2021.12.24 12:42:08 -08'00'
P.E. STAMP BOX — DATE

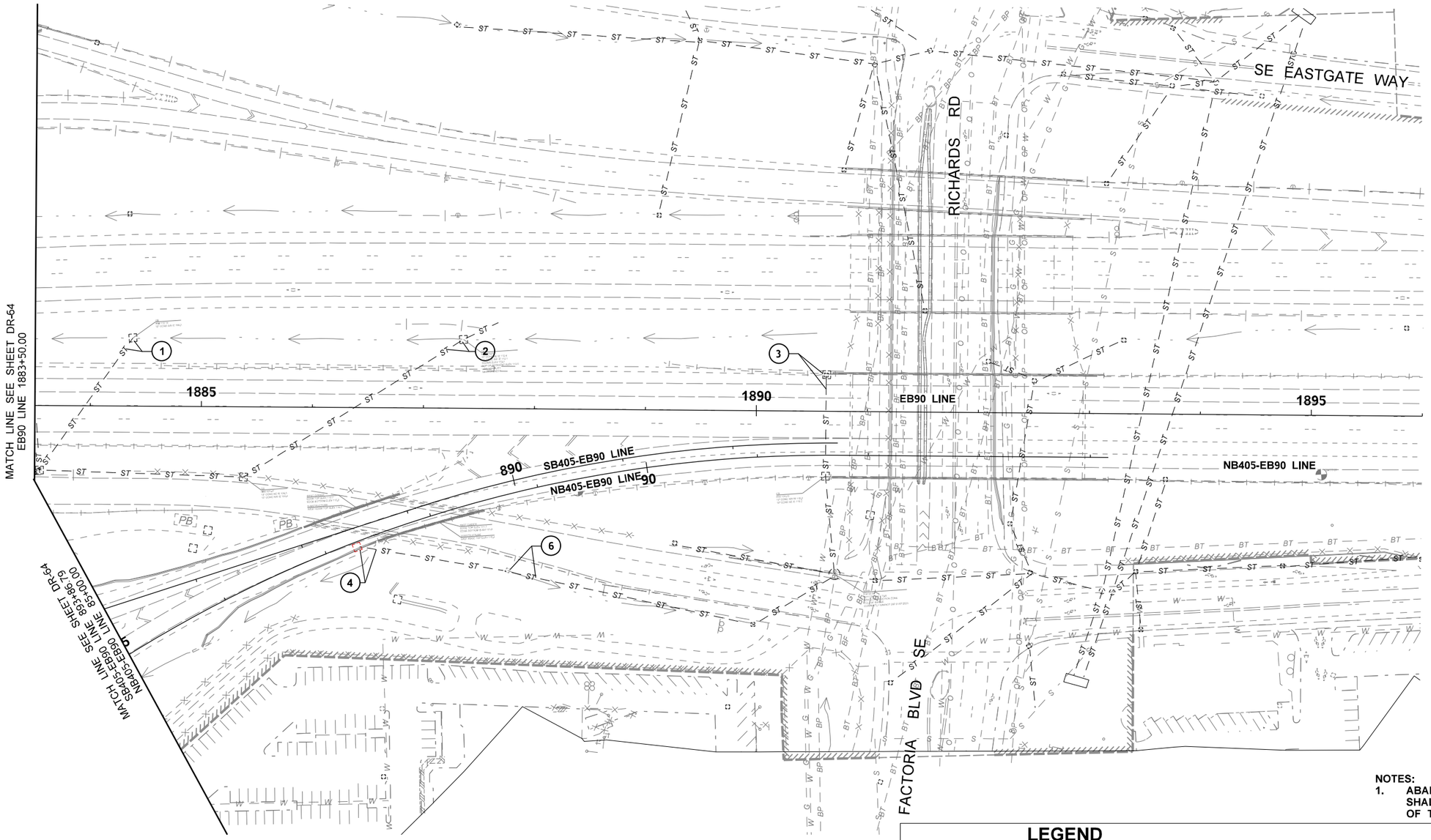
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
NB I-405 TO EB I-90

PLAN REF NO DSP-64
SHEET OF SHEETS

T.24N. R.5E. W.M.



NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	CATCH BASIN - REMAIN	WETLAND AREA	
STORM SEWER LINE - REMOVE	CATCH BASIN - REMOVE	STREAM BUFFER	
STORM SEWER LINE - ABANDON	CATCH BASIN - ABANDON	SHORELINE BOUNDARY	
STORM CULVERT - EXISTING	GRATE INLET - REMAIN	TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING	GRATE INLET - REMOVE	PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW	GRATE INLET - ABANDON	CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING	MANHOLE - REMAIN	PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE (X)	MANHOLE - REMOVE	PROTECT IN PLACE (PIP)	
	MANHOLE - ABANDON		

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DOAM Initials
RELEASED FOR CONSTRUCTION

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TIME	5:20:32 PM				10	WASH	
DATE	12/20/2021				JOB NUMBER		
PLOTTED BY	AMECPW03ICS01$				XL5467		
DESIGNED BY	N. WONG				CONTRACT NO.		LOCATION NO.
ENTERED BY	J. NGO				C9242		
CHECKED BY	J. ST. JOHN						
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
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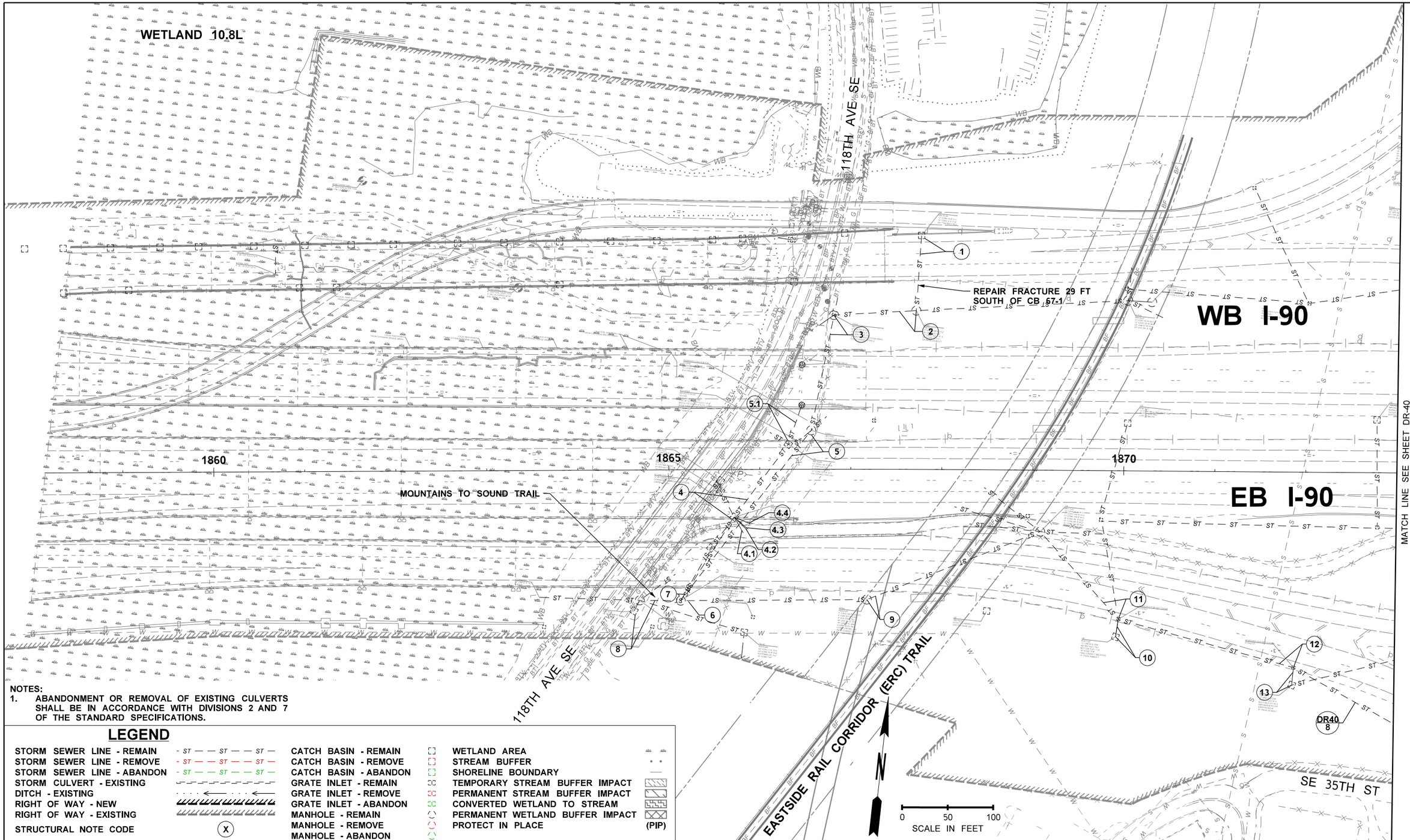
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN
I-405 TO I-90 RAMP

PLAN REF NO DSP-65
SHEET OF SHEETS



NOTES:
1. ABANDONMENT OR REMOVAL OF EXISTING CULVERTS SHALL BE IN ACCORDANCE WITH DIVISIONS 2 AND 7 OF THE STANDARD SPECIFICATIONS.

LEGEND

STORM SEWER LINE - REMAIN	CATCH BASIN - REMAIN	WETLAND AREA	
STORM SEWER LINE - REMOVE	CATCH BASIN - REMOVE	STREAM BUFFER	
STORM SEWER LINE - ABANDON	CATCH BASIN - ABANDON	SHORELINE BOUNDARY	
STORM CULVERT - EXISTING	GRATE INLET - REMAIN	TEMPORARY STREAM BUFFER IMPACT	
DITCH - EXISTING	GRATE INLET - REMOVE	PERMANENT STREAM BUFFER IMPACT	
RIGHT OF WAY - NEW	GRATE INLET - ABANDON	CONVERTED WETLAND TO STREAM	
RIGHT OF WAY - EXISTING	MANHOLE - REMAIN	PERMANENT WETLAND BUFFER IMPACT	
STRUCTURAL NOTE CODE (X)	MANHOLE - REMOVE	PROTECT IN PLACE	(PIP)
	MANHOLE - ABANDON		

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

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DESIGNED BY	N. WONG			
ENTERED BY	J. NGO			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

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I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE SITE PREPARATION PLAN DISPERSION AREA

PLAN REF NO DSP-67

SHEET OF SHEETS

UNDERDRAIN ID	CONNECTING STRUCTURE ID NO.	START STATION OR STRUCTURE ID	END STATION OR STRUCTURE ID	TYPE (WALL, BARRIER)	PLACEMENT DETAIL	OUTLET PROTECTION SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 6 IN. DIA. WSDOT STD. 7-01 & 7-08 or approved Equal (Depths<15')	DRAINPIPE DOUBLE-WALLED CORRUGATED HDPE 6 IN. DIA. AASHTO M252/M294, OR APPROVED EQUAL (DEPTH 15'-40')	UNDERDRAIN PIPE 6 IN. DIA. WSDOT STD. 7-01 & 7-08 or approved Equal (Depths<15')	UNDERDRAIN PIPE DOUBLE-WALLED CORRUGATED HDPE 6 IN. DIA. AASHTO M252/M294, OR APPROVED EQUAL (DEPTHS 15'-40')	NOTES
						EA	LF	LF	LF	LF	
DR36-1.1	DR36-1	SB405 5819+79	DR36-1	WALL	SEE WALL 09.35L DETAILS			9		249	
DR36-1.2	DR36-1	SB405 5823+25	DR36-1	WALL	SEE WALL 09.35L DETAILS			0		62	
DR36-2.3	DR36-2	SB405 5823+80.00	SB 405 5824+78	WALL	SEE WALL 9.90L-A DETAILS			19		101	
DR36-3.1	DR36-3	SB 405 5824+78	DR36-3	WALL	SEE WALL 9.90L-A DETAILS			3		157	
DR36-3.2	DR36-UD-1	DR36-3	SB 405 5829+18	WALL	SEE WALL 9.90L-A DETAILS	1		21		297	
DR36-3.3	DR36-UD-2	DR36-UD-1	SB 405 5832+05	WALL	SEE WALL 9.90L-A DETAILS	1		18		287	
DR36-8.1	DR36-8	SB405 5818+25	DR36-8	BARRIER	SEE SEGMENT 2B RS SHEETS		0		362		
DR36-15.1	DR36-15	DR36-40	DR36-15	BARRIER	SEE SEGMENT 2B RS SHEETS		2		396		
DR36-20.1	DR36-20	NB405 7813+83	DR36-20	BARRIER	SEE SEGMENT 2B RS SHEETS		0		808		
DR36-26.1	DR36-26	DR36-20	DR36-26	BARRIER	SEE SEGMENT 2B RS SHEETS		2		306		
DR36-33.1	DR36-33	NB405 7826+73	DR36-33	ROADWAY	SEE SEGMENT 2B RS SHEETS		38		100		
DR36-37.1	DR36-37	DR36-15	DR36-37	WALL	SEE WALL 09.50M DETAILS		101		309		
DR36-15.2	DR36-15	DR36-13	DR36-15	WALL	SEE WALL 09.50M DETAILS		13		183		
DR36-13.1	DR36-13	DR36-40	DR36-13	WALL	SEE WALL 09.50M DETAILS		11		210		
DR36-40.1	DR36-40	NB405 7820+01	DR36-40	WALL	SEE WALL 09.50M DETAILS		8		200		
DR36-40.2	DR36-40	DR36-8	DR36-40	BARRIER	SEE SEGMENT 2B RS SHEETS		0		480		
DR37-1.1	DR37-UD-1	CC-SB405 834+80	CC-SB405 837+46	WALL	SEE WALL 9.90L-B DETAILS	1		20		263	
DR37-8.1	DR37-8	CC-SB405 837+46	DR37-8	WALL	SEE WALL 9.90L-B DETAILS			42		269	
DR37-2.1	DR37-2	CC-SB405 831+99	DR37-2	ROADWAY	SEE SEGMENT 2B RS SHEETS		0		470		
DR37-10.1	DR37-10	DR37-2	DR37-10	ROADWAY	SEE SEGMENT 2B RS SHEETS		0		438		
DR37-10.2	DR37-10	CC-SB405 841+67	DR37-10	ROADWAY	SEE SEGMENT 2B RS SHEETS		0		58		
DR37-15.1	DR37-15	CC-SB405 841+97	DR37-15	WALL	SEE WALL 10.18L DETAILS		50		80		Add cleanout at bend in drain pipe.
DR37-24.1	DR37-24	SB405 5835+20	DR37-24	ROADWAY	SEE SEGMENT 2B RS SHEETS		4		85		
DR37-24.2	DR37-24	SB405 5841+33	DR37-24	ROADWAY	SEE SEGMENT 2B RS SHEETS		0		512		DR37-24.2 uses the same drain pipe as DR37-24.1.
DR37-54.1	DR37-54	SB405 5841+04	DR37-54	WALL	SEE WALL 10.10GL DETAILS			20		268	
DR37-34.3	DR37-34	SB405 5841+04	DR37-34	WALL	SEE WALL 10.10GL DETAILS			0		72	DR37-34.3 uses the same drain pipe as DR37-34.1.
DR37-34.2	DR37-34	SB405 5840+38	SB405 5841+78	WALL	SEE WALL 10.05M DETAILS			0		177	DR37-34.2 uses the same drain pipe as DR37-34.1.
DR37-34.1	DR37-34	CC 24+82	CC 25+65	WALL	SEE WALL 10.16L DETAILS			44		79	
DR37-34.4	DR37-34	CC 24+82	CC 25+65	WALL	SEE WALL 10.16GL DETAILS		0		89		DR37-34.4 uses the same drain pipe as DR37-34.1.
DR37-36.1	DR37-36	SB405 5845+65	SB405 5843+44	WALL	SEE WALL 10.20GL DETAILS			12		218	
DR37-36.2	DR37-36	SB405 5842+88	SB405 5843+44	WALL	SEE WALL 10.17GR DETAILS			0		92	DR37-36.2 uses the same drain pipe as DR37-36.1.
DR37-39.1	DR37-39	DR37-43	DR37-39	ROADWAY	SEE SEGMENT 2B RS SHEETS		2		424		
DR37-39.2	DR37-39	DR37-43	DR37-39	WALL	SEE WALL 10.20GL DETAILS			9		423	

Wood Environment & Infrastructure, Inc.
12/21/2021
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PLOTTED BY	AMECPW03ICS01$
DESIGNED BY	R. BARKIE
ENTERED BY	N. LOUTSIS
CHECKED BY	J. ST. JOHN
PROJ. ENGR.	J. LEFOTU
REGIONAL ADM.	L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — James M. St. John 12/20/2021 12:25:04 -08'00' — DATE — P.E. STAMP BOX

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

UNDERDRAIN STRUCTURE NOTES
DR36 TO DR37

PLAN REF NO UD-08
SHEET XX OF SHEETS

UNDERDRAIN ID	CONNECTING STRUCTURE ID NO.	START STATION OR STRUCTURE ID	END STATION OR STRUCTURE ID	TYPE (WALL, BARRIER)	PLACEMENT DETAIL	OUTLET PROTECTION SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 6 IN. DIA. WSDOT STD. 7-01 & 7-08 or approved Equal (Depths<15')	DRAINPIPE DOUBLE-WALLED CORRUGATED HDPE 6 IN. DIA. AASHTO M252/M294, OR APPROVED EQUAL (DEPTH 15'-40')	UNDERDRAIN PIPE 6 IN. DIA. WSDOT STD. 7-01 & 7-08 or approved Equal (Depths<15')	UNDERDRAIN PIPE DOUBLE-WALLED CORRUGATED HDPE 6 IN. DIA. AASHTO M252/M294, OR APPROVED EQUAL (DEPTHS 15'-40')	NOTES
						EA	LF	LF	LF	LF	
DR37-42.1	DR37-42	DR38-3	DR37-42	BARRIER	SEE SEGMENT 2B RS SHEETS		4		451		
DR37-43.2	DR37-43	SB405 5852+20	DR37-43	WALL	SEE WALL 10.20GL DETAILS			2		390	
DR37-43.1	DR37-43	SB405 5853+35	DR37-43	ROADWAY	SEE SEGMENT 2B RS SHEETS			0		505	DR37-43.1 uses the same drain pipe as DR37-39.1
DR37-49.1	DR37-49	M-NB405 CC 6830+27	DR37-49	BARRIER	SEE SEGMENT 2B RS SHEETS		3		201		
DR37-49.2	DR37-49	M-NB405 CC 6836+65	DR37-49	BARRIER	SEE SEGMENT 2B RS SHEETS		0		425		DR37-49.2 uses the same drain pipe as DR37-49.1.
DR37-64.1	DR37-36.2	NB405 6838+95	DR37-36.2	WALL	SEE WALL 10.18R-A DETAILS		0		19		
DR37-64.2	DR37-64	DR37-68	DR37-64	BARRIER	SEE SEGMENT 2B RS SHEETS		0		175		DR37-64.2 uses the same drain pipe as DR37-64.1.
DR37-64.3	DR37-64	DR37-69	DR37-64	WALL	SEE WALL10.18R DETAILS		3		295		
DR37-64.4	DR37-64	NB405 6838+95	DR37-64	BARRIER	SEE SEGMENT 2B RS SHEETS		0		66		
DR37-68.1	DR37-68	DR37-96	DR37-68	BARRIER	SEE SEGMENT 2B RS SHEETS		0		475		
DR37-69.1	DR37-69	DR37-97	DR37-69	WALL	SEE WALL10.18R DETAILS		3		193		
DR37-97.1	DR37-97	DR37-96	DR37-97	WALL	SEE WALL10.18R DETAILS		2		162		
DR37-76.1	DR37-76	NB405 7838+22	DR37-76	BARRIER	SEE SEGMENT 2B RS SHEETS		2		13		
DR37-76.2	DR37-76	NB405 7842+07	DR37-76	BARRIER	SEE SEGMENT 2B RS SHEETS		0		370		DR37-76.2 uses the same drain pipe as DR37-76.1.
DR37-88.1	DR37-88A	CC 25+53	DR37-88A	WALL	SEE WALL 10.17R DETAILS		6		288		
DR37-91.1	DR37-91	CC-NB405 842+24	DR37-91	BARRIER	SEE SEGMENT 2B RS SHEETS		3		346		
DR37-96.1	DR37-96	NB405 7847+83	DR37-96	WALL	SEE WALL10.18R DETAILS		0		207		
DR37-96.2	DR37-96	DR38-22	DR36-96	BARRIER	SEE SEGMENT 2B RS SHEETS		0		392		
DR37-19.2	DR37-UD-3	CABS10.26 2+67	CABS10.26 1+67	WALL	SEE CABS10.26 WALL DETAILS		27		102		
DR38-3.1	DR38-3	DR38-7	DR38-3	BARRIER	SEE SEGMENT 2B RS SHEETS		0		472		
DR38-4.1	DR38-4	SB405 5857+04	DR38-4	WALL	SEE WALL 10.35L DETAILS		8		233		
DR38-7.1	DR38-7	SB405 5861+71	DR38-7	BARRIER	SEE SEGMENT 2B RS SHEETS		0		464		
DR38-22.1	DR38-22	DR38-24	DR38-22	BARRIER	SEE SEGMENT 2B RS SHEETS		0		280		
DR38-24.1	DR38-24	NB4-5 7857+39	DR38-24	BARRIER	SEE SEGMENT 2B RS SHEETS		0		490		
DR38-38.1	DR38-38	DR38-4	DR38-38	WALL	SEE WALL 10.35L DETAILS		4		175		
DR38-UD-1	N/A	SB405 5852+20	SB405 5850+41	WALL	SEE WALL 10.20GL DETAILS		14		179		
DR39-2.1	DR39-2	SB405 5861+71	DR39-2	BARRIER	SEE SEGMENT 2B RS SHEETS		0		455		
DR39-7.1	DR39-7	DR39-2	DR39-7	BARRIER	SEE SEGMENT 2B RS SHEETS		0		402		
DR39-7.2	DR39-7	90-SB405 874+02	DR39-7	ROADWAY	SEE SEGMENT 2B RS SHEETS		0		339		
DR39-12.1	DR39-12	SB405 5873+93	DR39-12	BARRIER	SEE SEGMENT 2B RS SHEETS		0		153		
DR39-12.2	DR39-12	SB405 5876+65	DR39-12	BARRIER	SEE SEGMENT 2B RS SHEETS		0		115		DR39-12.2 uses the same drain pipe as DR39-12.1.
DR39-19.1	DR39-19	NB405 7857+39	DR39-19	BARRIER	SEE SEGMENT 2B RS SHEETS		0		461		
DR39-25.1	DR39-25	DR39-19	DR39-25	BARRIER	SEE SEGMENT 2B RS SHEETS		0		400		

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DOAM Initials
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DATE	12/20/2021					
PLOTTED BY	AMECPW03ICS01$				JOB NUMBER XL5467	
DESIGNED BY	M. EMESON					
ENTERED BY	M. EMESON					
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242	LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — P.E. STAMP BOX — DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

UNDERDRAIN STRUCTURE NOTES
DR37 TO DR39

PLAN REF NO UD-09

SHEET XX OF SHEETS

UNDERDRAIN ID	CONNECTING STRUCTURE ID NO.	START STATION OR STRUCTURE ID	END STATION OR STRUCTURE ID	TYPE (WALL, BARRIER)	PLACEMENT DETAIL	OUTLET PROTECTION SEE SHEET DD-54 AND WSDOT STD. 9-13	DRAIN PIPE 6 IN. DIA. WSDOT STD. 7-01 & 7-08 or approved Equal (Depths<15')	DRAINPIPE DOUBLE-WALLED CORRUGATED HDPE 6 IN. DIA. AASHTO M252/M294, OR APPROVED EQUAL (DEPTH 15'-40')	UNDERDRAIN PIPE 6 IN. DIA. WSDOT STD. 7-01 & 7-08 or approved Equal (Depths<15')	UNDERDRAIN PIPE DOUBLE-WALLED CORRUGATED HDPE 6 IN. DIA. AASHTO M252/M294, OR APPROVED EQUAL (DEPTHS 15'-40')	NOTES
						EA	LF	LF	LF	LF	
DR39-26.1	DR39-26	SB405 5870+04	DR39-26	WALL	SEE WALL 10.36IR DETAILS		13		314		
DR39-26.2	DR39-26	DR39-25	DR39-26	BARRIER	SEE SEGMENT 2B RS SHEETS		0		301		
DR39-29.1	DR39-29	DR39-26	DR39-29	WALL	SEE WALL 10.36IR DETAILS		15		246		
DR39-29.2	DR39-29	DR39-26	DR39-29	BARRIER	SEE SEGMENT 2B RS SHEETS		4		236		
DR39-29.3	DR39-29	DR39-37	DR39-29	BARRIER	SEE SEGMENT 2B RS SHEETS		0		454		DR39-29.3 uses the same drain pipe as DR39-29.2.
DR39-37.1	DR39-37	NB405 7880+15	DR39-37	BARRIER	SEE SEGMENT 2B RS SHEETS		0		410		
DR39-38.1	DR39-38	NB405-EB90 873+34	DR39-38	BARRIER	SEE SEGMENT 2B RS SHEETS		37		177		
DR41-48.1	DR41-48	90-NB405 896+87	DR41-48	ROADWAY	SEE SEGMENT 2B RS SHEETS		9		104		
DR41-48.2	DR41-48	NB405 7902+74	DR41-48	ROADWAY	SEE SEGMENT 2B RS SHEETS		0		459		DR41-48.2 uses the same drain pipe as DR41-48.1.
DR41-51.1	DR41-51	NB405 7905+15	DR41-51	BARRIER	SEE SEGMENT 2B RS SHEETS		0		228		
DR41-58.1	DR41-58	NB405 7906+78	DR41-58	WALL	SEE ITS CABINET ENCLOSURE DETAILS		0		66		
DR41-4.1	DR41-4	DR41-7	DR41-UD-1	BARRIER	SEE SEGMENT 2B RS SHEETS		10		318		
DR41-7.1	DR41-7	SB405 5908+29	DR41-7	BARRIER	SEE SEGMENT 2B RS SHEETS		0		486		
DR42-16.1	DR42-16	NB405 7905+15	DR42-16	BARRIER	SEE SEGMENT 2B RS SHEETS		0		306		
DR42-32.1	DR42-32	DR42-16	DR42-32	BARRIER	SEE SEGMENT 2B RS SHEETS		2		490		
DR42-32.2	DR42-32	NB405 7913+58	DR42-32	BARRIER	SEE SEGMENT 2B RS SHEETS		0		34		
DR42-UD-1	N/A	SB405 5911+28	SB405 5911+22	WALL	SEE ITS WALL 11.51L DETAILS		16		21		
DR65-7	DR65-UD-1	NB405-EB90 91+67	NB405-EB90 89+07	BARRIER	SEE SEGMENT 2B RS SHEETS		12		295		

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DATE	12/20/2021					FED.AID PROJ.NO.
PLOTTED BY	AMECPW03ICS01$				JOB NUMBER XL5467	
DESIGNED BY	M. EMESON					
ENTERED BY	M. EMESON					
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242	LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

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JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — Digitally signed by James M. St. John 2021.12.21 14:25:22 -08'00' — P.E. STAMP BOX — DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

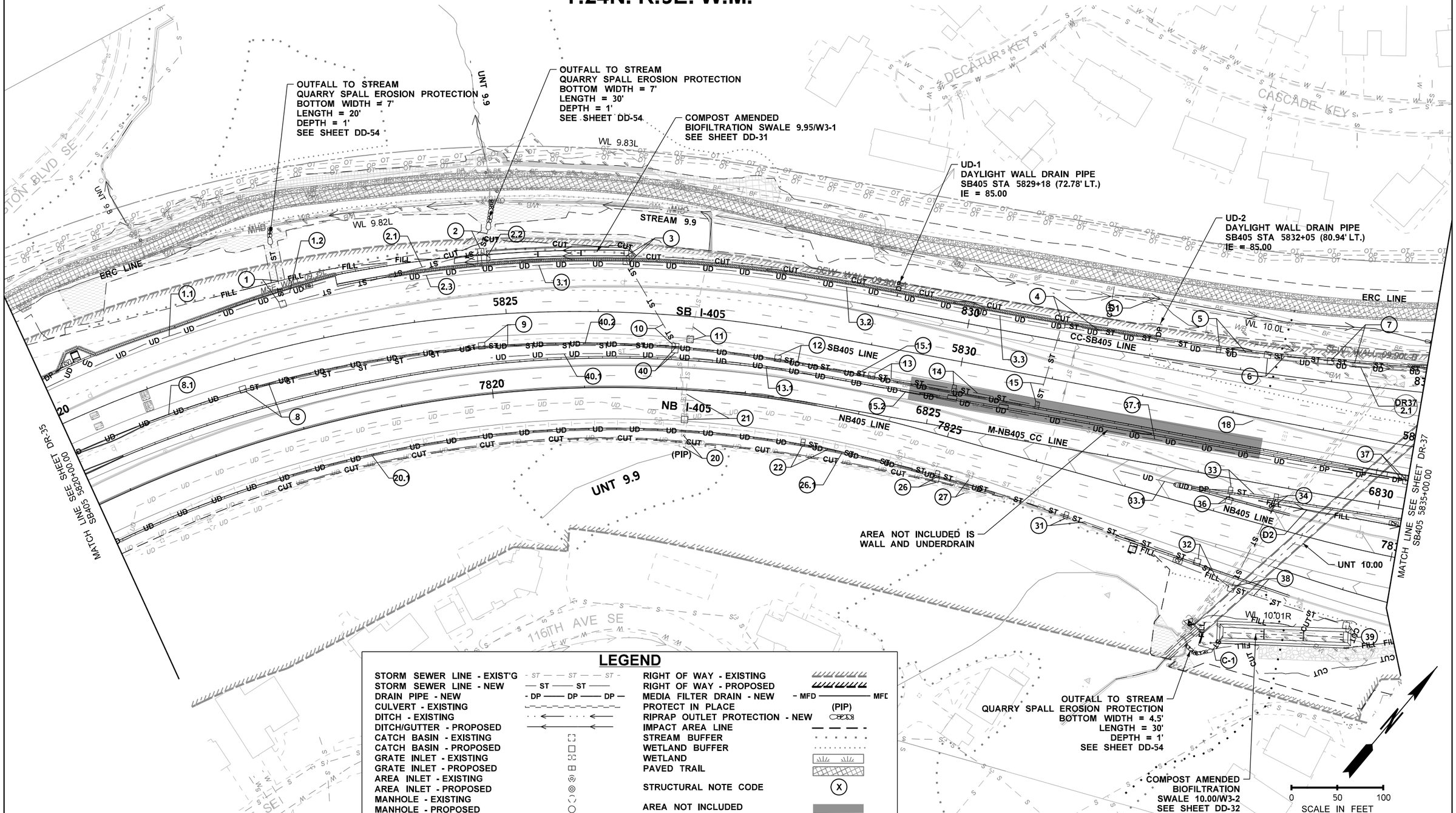
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

UNDERDRAIN STRUCTURE NOTES
DR39 TO DR42, DR65

PLAN REF NO UD-9A

SHEET XX OF SHEETS

T.24N. R.5E. W.M.



LEGEND

STORM SEWER LINE - EXIST'G	- ST — — ST — — ST -	RIGHT OF WAY - EXISTING	
STORM SEWER LINE - NEW	— ST —— ST ——	RIGHT OF WAY - PROPOSED	
DRAIN PIPE - NEW	- DP —— DP —— DP —	MEDIA FILTER DRAIN - NEW	- MFD —— MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	— — — -
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING		STRUCTURAL NOTE CODE	X
AREA INLET - PROPOSED			
MANHOLE - EXISTING		AREA NOT INCLUDED	
MANHOLE - PROPOSED			

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DESIGNED BY	M. EMESON			
ENTERED BY	R. BARKIE			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

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JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
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Washington State Department of Transportation
FLATIRON | LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
STA. 5820+00 TO STA. 5835+00

PLAN REF NO DR-36

SHEET XX OF SHEETS

PROPOSED CULVERTS

C1
BEGIN 120SE 51+72.79 (20.12' LT.)
END 120SE 51+27.98 (23.03' LT.)
LENGTH: 40.7 FT
SLOPE: 10.6%
DIA: 12 IN
MATERIAL: D.I.
UP IE = 78.01
DN IE = 73.70

C2
BEGIN 120SE 53+32.80 (19.84' RT.)
END 120SE 52+25.01 (25.49' RT.)
LENGTH: 116.7 FT
SLOPE: 10.3%
DIA: 12 IN
MATERIAL: D.I.
UP IE = 100.25
DN IE = 88.18

ITS DRAINAGE

86 NB405 STA 7836+05.43 (62.03' RT.)
DAYLIGHT 2" DRAIN PIPE AT MIN. 2% GRADE
IE OUT = 90.00

92 CC-NB405 STA 840+32.72 (25.95' RT.)
DAYLIGHT 2" DRAIN PIPE AT 2% GRADE
IE OUT = 110.09

93 NB405-CC STA 835+28.46 (65.71' RT.)
DAYLIGHT 2" DRAIN PIPE AT 1% GRADE
IE OUT = 79.75

9A CC-CB405 STA 841+41.45 (62.82' LT.)
DAYLIGHT 2" DRAIN PIPE AT MIN. 2% GRADE
IE OUT = 67.0

FORCE MAIN INFLECTION POINTS

F1 CC STA 27+51.23 (65.15' LT.)
SWEEP ANGLE = 33.75 DEG

F2 SB405-CC STA 844+06.89 (23.90' LT.)
SWEEP ANGLE = 22.50 DEG

F3 SB405-CC STA 844+46.26 (15.31' LT.)
SWEEP ANGLE = 11.25 DEG

F4 SB405-CC STA 845+02.85 (8.99' LT.)
SWEEP ANGLE = 15.53 DEG

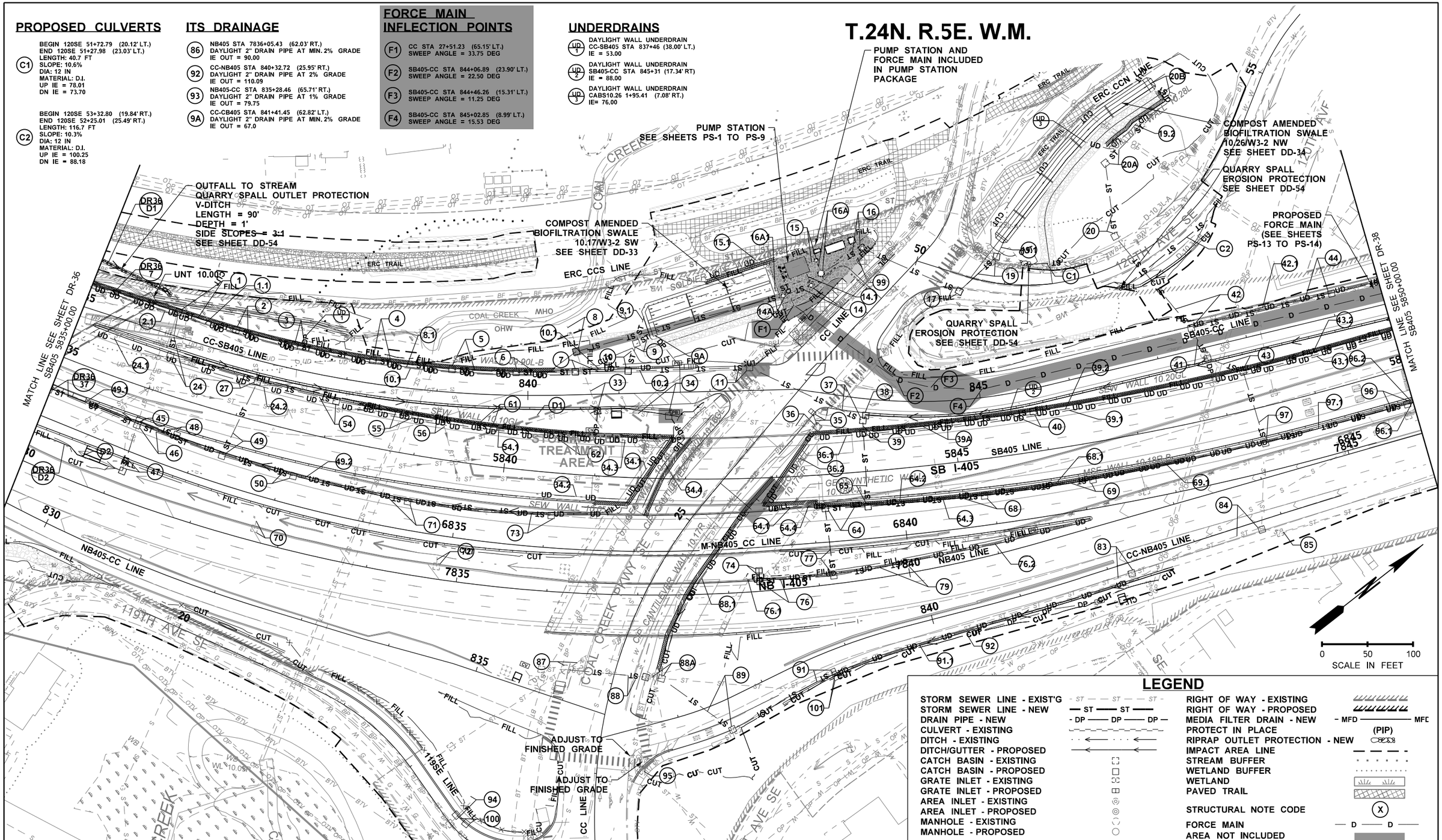
UNDERDRAINS

UD 1 DAYLIGHT WALL UNDERDRAIN
CC-SB405 STA 837+46 (38.00' LT.)
IE = 53.00

UD 2 DAYLIGHT WALL UNDERDRAIN
SB405-CC STA 845+31 (17.34' RT)
IE = 88.00

UD 3 DAYLIGHT WALL UNDERDRAIN
CABS10.26 1+95.41 (7.08' RT.)
IE= 76.00

T.24N. R.5E. W.M.



LEGEND

STORM SEWER LINE - EXIST'G	ST — ST — ST	RIGHT OF WAY - EXISTING	
STORM SEWER LINE - NEW	ST — ST	RIGHT OF WAY - PROPOSED	
DRAIN PIPE - NEW	DP — DP — DP	MEDIA FILTER DRAIN - NEW	MFD — MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING		STRUCTURAL NOTE CODE	X
AREA INLET - PROPOSED		FORCE MAIN	D — D
MANHOLE - EXISTING		AREA NOT INCLUDED	
MANHOLE - PROPOSED			

Wood Environment & Infrastructure, Inc.
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Date
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PLOTTED BY	AMECPW03ICS01$
DESIGNED BY	M. EMESON
ENTERED BY	R. BARKIE
CHECKED BY	J. ST. JOHN
PROJ. ENGR.	J. LEFOTU
REGIONAL ADM.	L. HODGSON

REVISION	DATE	BY
RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
James M. St. John 12/21/2021 5:39:08 PM PST
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
STA 5835+00 TO STA 5850+00

PLAN REF NO DR-37
SHEET OF SHEETS

FORCE MAIN INFLECTION POINTS

F1 SB405 5859+63.35 (46.39' LT.)
SWEEP ANGLE = 3.36 DEG

F2 SB405 5861+90.53 (50.80' LT.)
SWEEP ANGLE = 3.16 DEG

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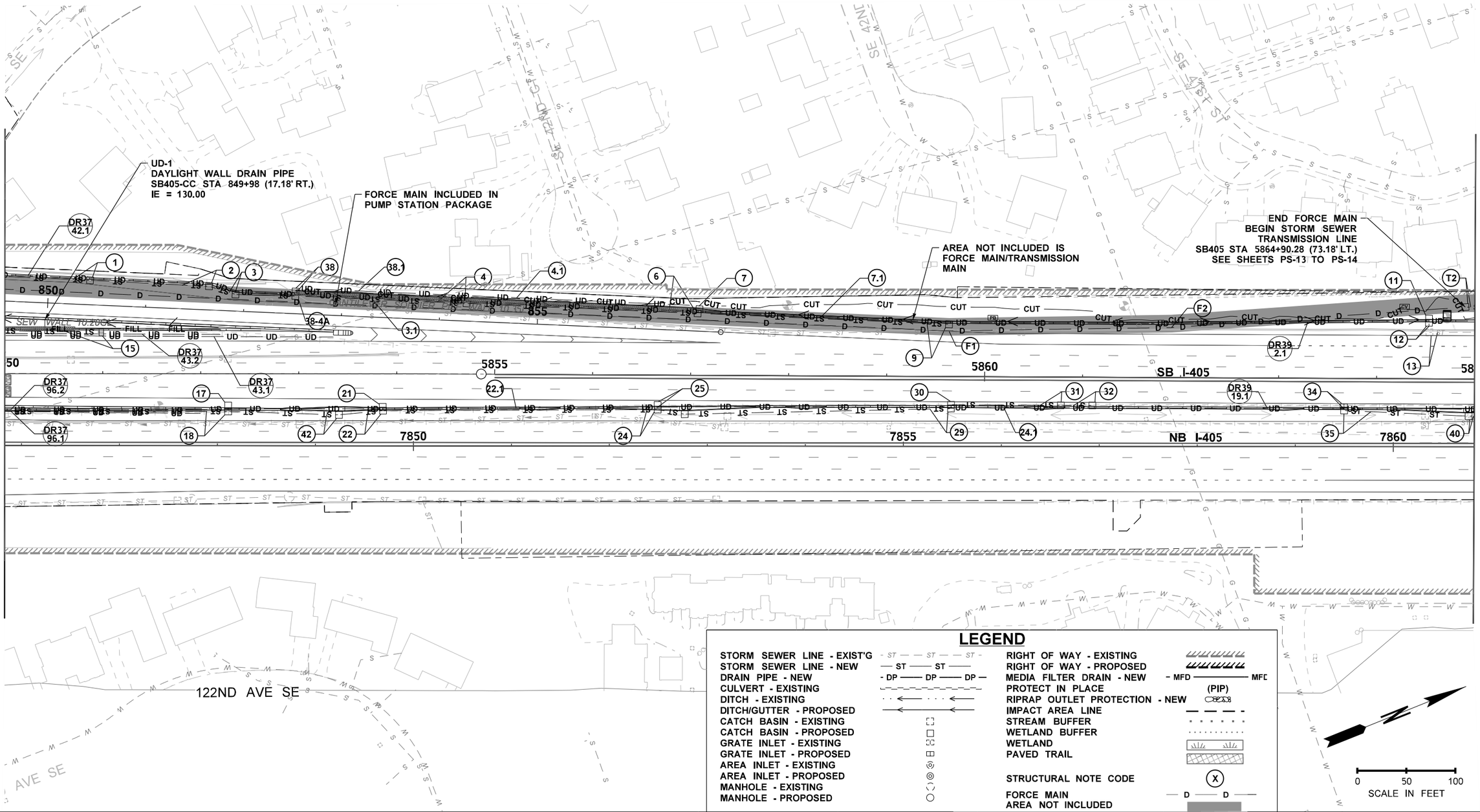

LEGEND

STORM SEWER LINE - EXIST'G	ST	RIGHT OF WAY - EXISTING	
STORM SEWER LINE - NEW	ST	RIGHT OF WAY - PROPOSED	
DRAIN PIPE - NEW	DP	MEDIA FILTER DRAIN - NEW	MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING			
AREA INLET - PROPOSED		STRUCTURAL NOTE CODE	X
MANHOLE - EXISTING		FORCE MAIN	D
MANHOLE - PROPOSED		AREA NOT INCLUDED	

0 50 100
SCALE IN FEET

Wood Environment & Infrastructure, Inc.
12/21/2021
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CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
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REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

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Date: 2021.12.21 17:25:46 -08'00'
P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
STA 5850+00 TO STA 5865+00

PLAN REF NO DR-38

SHEET XX OF SHEETS

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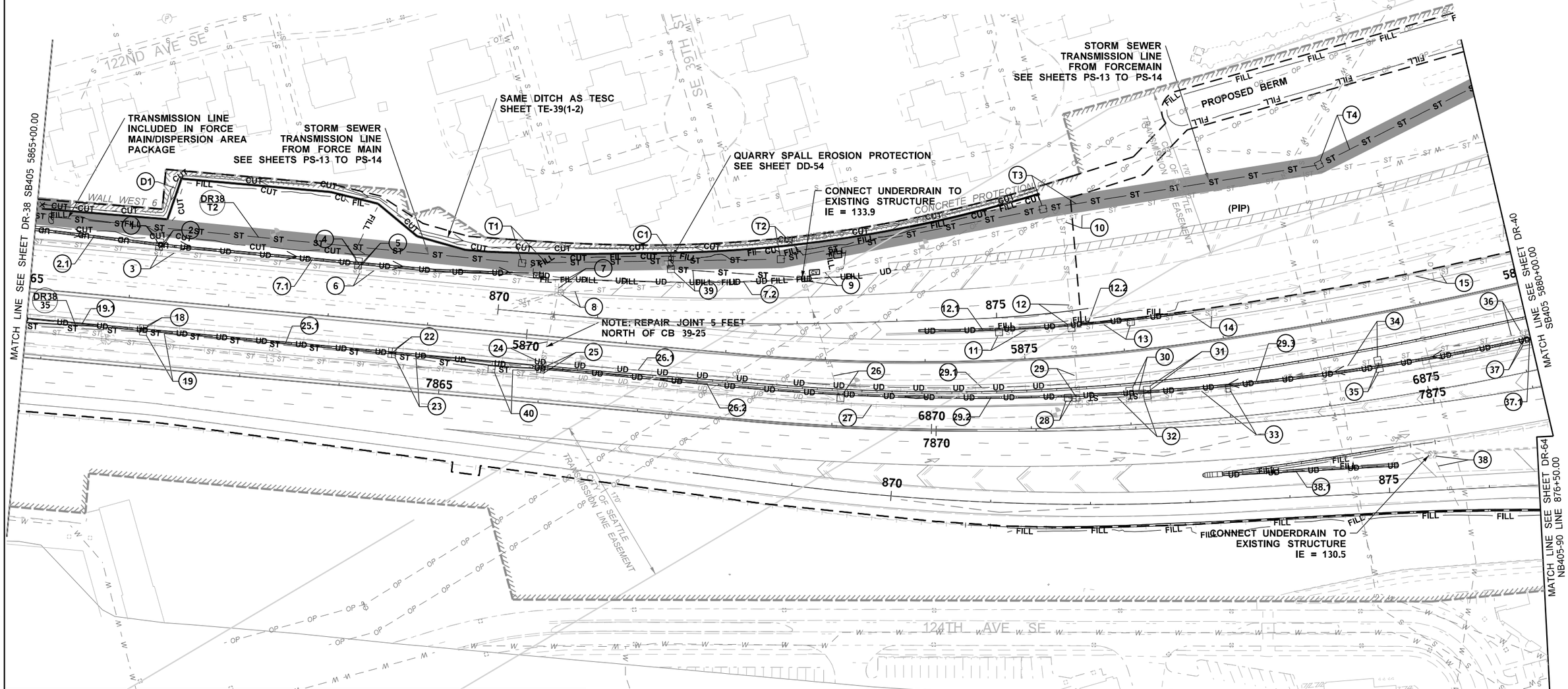

LEGEND

STORM SEWER LINE - EXIST'G	- ST — — ST — — ST -	RIGHT OF WAY - EXISTING	
STORM SEWER LINE - NEW	— ST — ST —	RIGHT OF WAY - PROPOSED	
DRAIN PIPE - NEW	- DP — DP — DP —	MEDIA FILTER DRAIN - NEW	- MFD — MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	— — — -
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING			
AREA INLET - PROPOSED		STRUCTURAL NOTE CODE	X
MANHOLE - EXISTING			
MANHOLE - PROPOSED		FORCE MAIN	— D — D —
		AREA NOT INCLUDED	

PROPOSED CULVERTS

C1
SB 405 STA 5871+36.02 (97.47' LT.)
NOISE WALL WEST 6 STA 8+25.43 (0.00' LT.)
LENGTH: 6.6 FT
SLOPE: 0.5%
DIA: 12 IN
MATERIAL: D.I.
UP IE = 149.05
DN IE = 149.02

0 50 100
SCALE IN FEET

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DATE	12/20/2021				JOB NUMBER		
PLOTTED BY	AMECPW03ICS01$				XL5467		
DESIGNED BY	M. EMESON				CONTRACT NO.		LOCATION NO.
ENTERED BY	M. EMESON				C9242		
CHECKED BY	J. ST. JOHN						
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

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JAMES M. ST JOHN, STATE OF WASHINGTON, 27492, REGISTERED PROFESSIONAL ENGINEER — DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
STA 5865+00 TO STA 5880+00

PLAN REF NO DR-39

SHEET XX OF SHEETS

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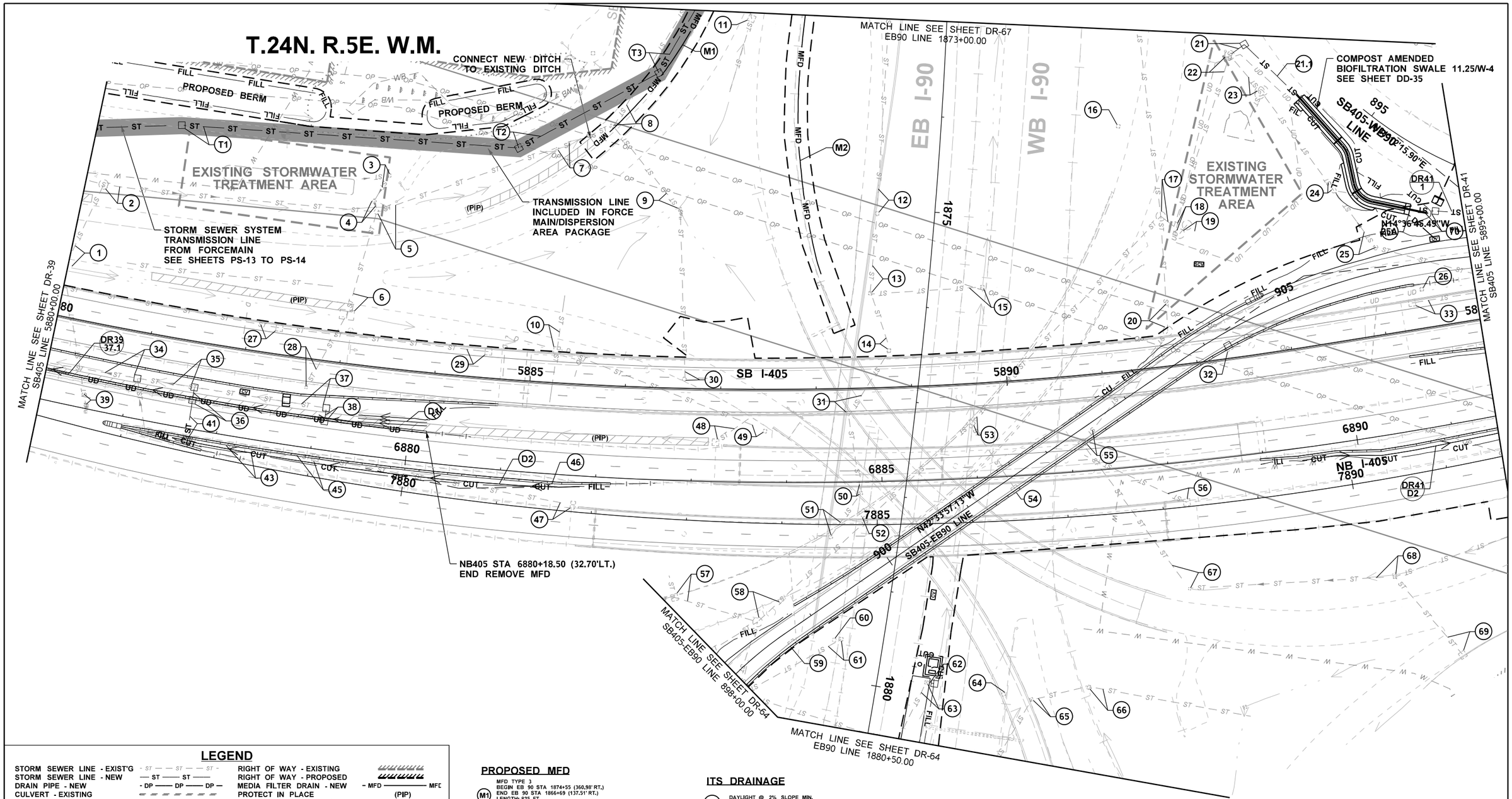

LEGEND

STORM SEWER LINE - EXIST'G	ST	RIGHT OF WAY - EXISTING	
STORM SEWER LINE - NEW	ST	RIGHT OF WAY - PROPOSED	
DRAIN PIPE - NEW	DP	MEDIA FILTER DRAIN - NEW	MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING		STRUCTURAL NOTE CODE	X
AREA INLET - PROPOSED		FORCE MAIN	D
MANHOLE - EXISTING		AREA NOT INCLUDED	
MANHOLE - PROPOSED			

PROPOSED MFD

M1
MFD TYPE 3
BEGIN EB 90 STA 1874+55 (360.98' RT.)
END EB 90 STA 1866+69 (137.51' RT.)
LENGTH: 825 FT
LONGITUDINAL SLOPE: 2.9%
MEDIA WIDTH (B): 4 FT
SIDE SLOPE (S): 4:1
SEE SHEET DD-56 FOR MFD TYPICAL SECTIONS AND DIMENSIONS

M2
MFD TYPE 3
BEGIN EB 90 STA 1875+84 (109.35' RT.)
END EB 90 STA 1872+50 (140.50' RT.)
LENGTH: 303 FT
LONGITUDINAL SLOPE: 6.4%
MEDIA WIDTH (B): 4 FT
SIDE SLOPE (S): 4:1
SEE SHEET DD-56 FOR MFD TYPICAL SECTIONS AND DIMENSIONS

ITS DRAINAGE

25A
DAYLIGHT @ 2% SLOPE MIN.
IE = 88.50
SB405 STA 5894+43.43 (119.50' LT.)

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DESIGNED BY	M. EMESON						
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CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
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JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

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Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
STA 5880+00 TO STA 5895+00

PLAN REF NO DR-40

SHEET XX OF SHEETS

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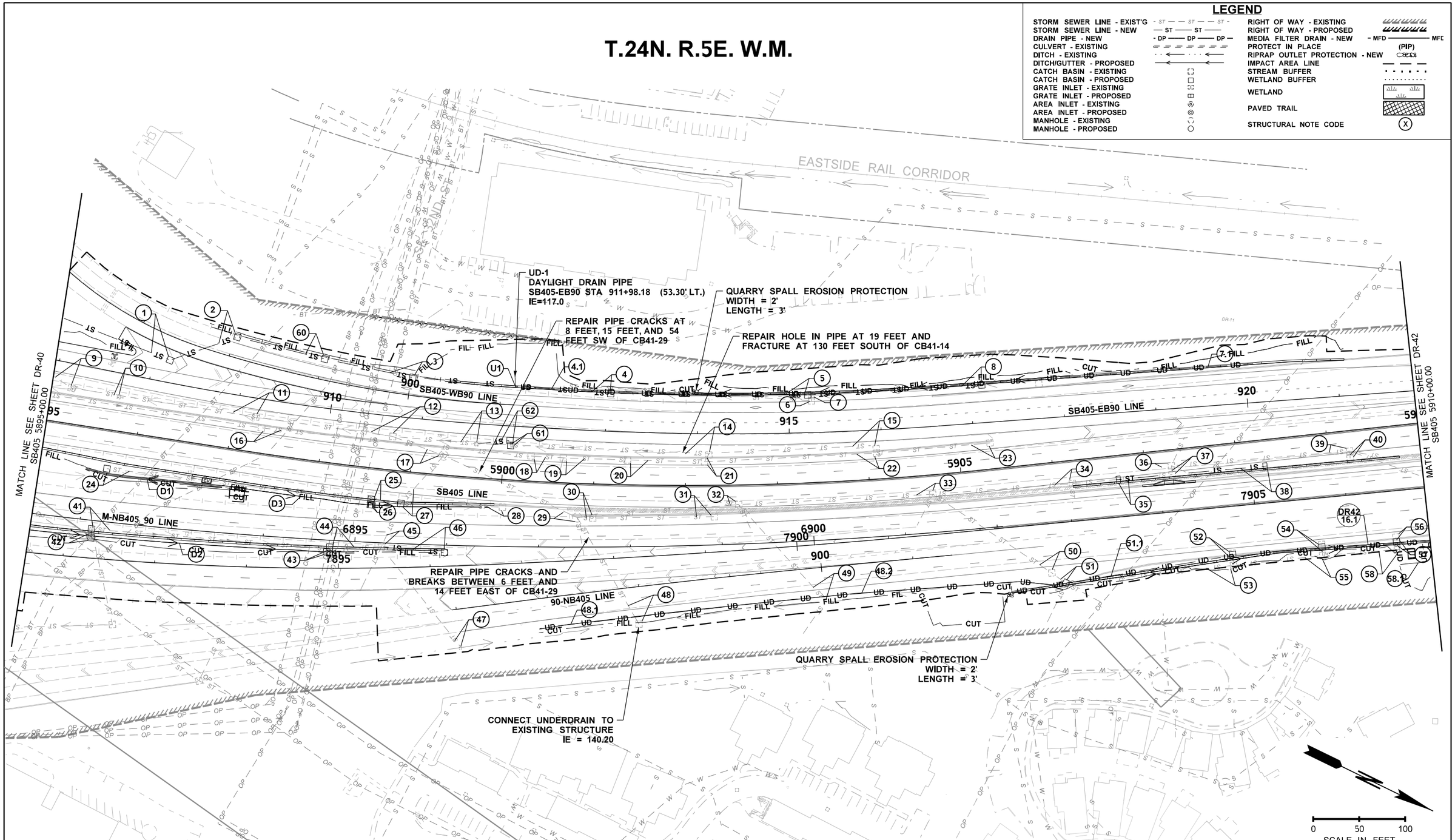

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Washington State Department of Transportation

FLATIRON LANE

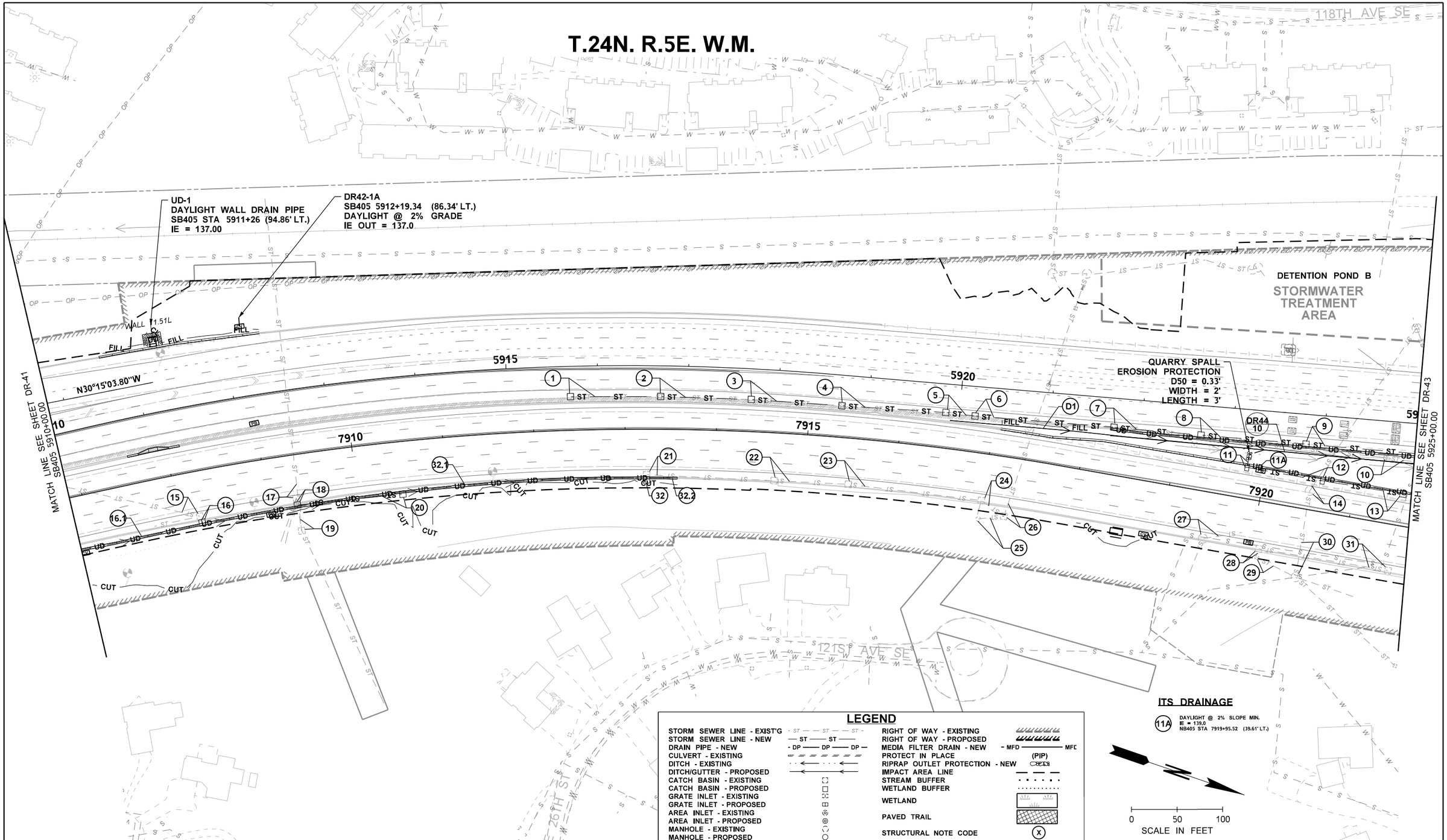
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
STA 5895+00 TO STA 5910+00

PLAN REF NO DR-41

SHEET XX OF SHEETS



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CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
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10	WASH	
JOB NUMBER XL5467		
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Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
STA 5910+00 TO STA 5925+00

PLAN REF NO DR-42

SHEET XX OF SHEETS

T.24N. R.5E. W.M.

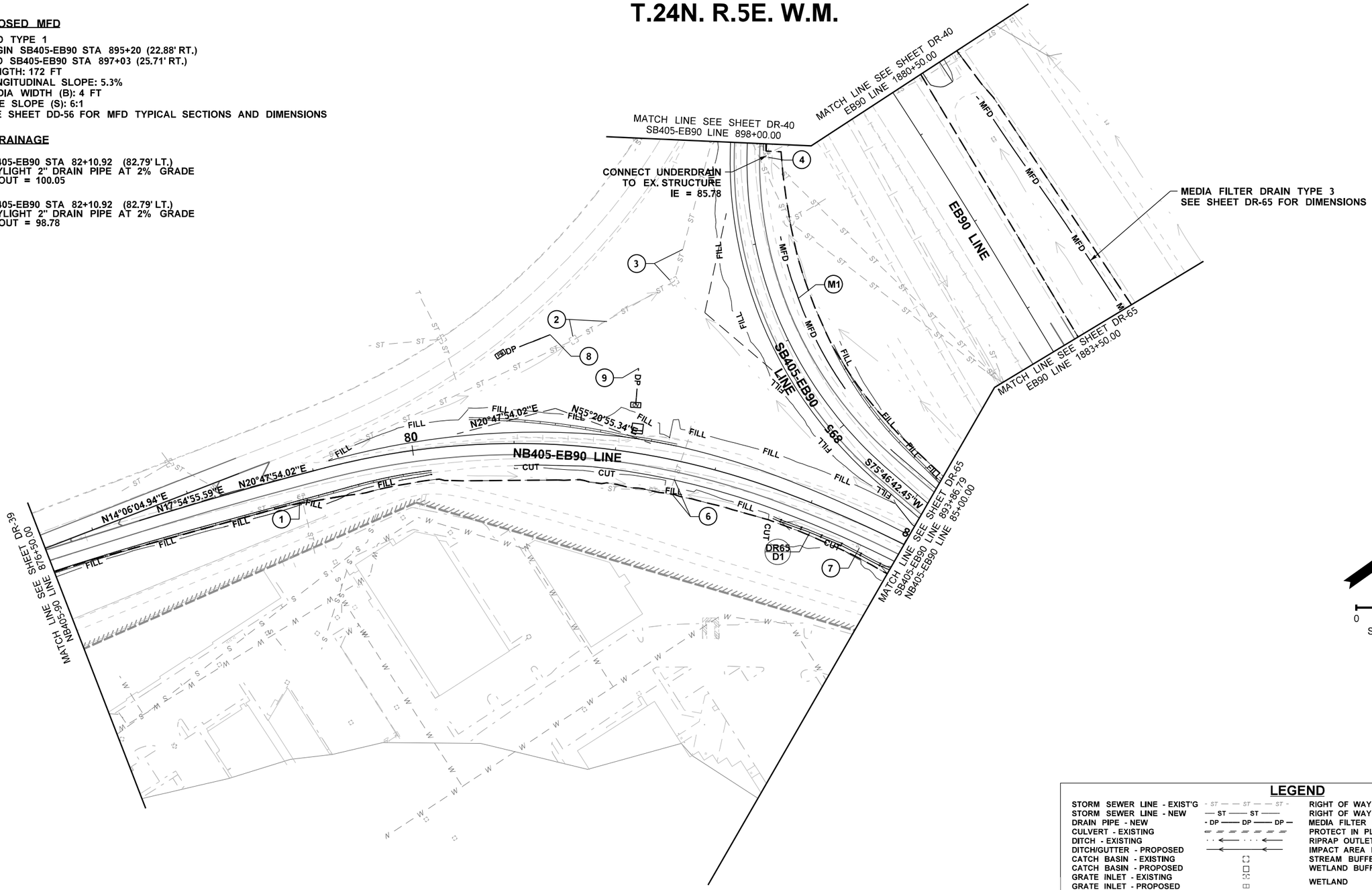
PROPOSED MFD

MFD TYPE 1
BEGIN SB405-EB90 STA 895+20 (22.88' RT.)
END SB405-EB90 STA 897+03 (25.71' RT.)
(M1) LENGTH: 172 FT
LONGITUDINAL SLOPE: 5.3%
MEDIA WIDTH (B): 4 FT
SIDE SLOPE (S): 6:1
SEE SHEET DD-56 FOR MFD TYPICAL SECTIONS AND DIMENSIONS

ITS DRAINAGE

(8) NB405-EB90 STA 82+10.92 (82.79' LT.)
DAYLIGHT 2" DRAIN PIPE AT 2% GRADE
IE OUT = 100.05

(9) NB405-EB90 STA 82+10.92 (82.79' LT.)
DAYLIGHT 2" DRAIN PIPE AT 2% GRADE
IE OUT = 98.78



LEGEND

STORM SEWER LINE - EXIST'G	ST	RIGHT OF WAY - EXISTING	
STORM SEWER LINE - NEW	ST	RIGHT OF WAY - PROPOSED	
DRAIN PIPE - NEW	DP	MEDIA FILTER DRAIN - NEW	MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING		STRUCTURAL NOTE CODE	X
AREA INLET - PROPOSED			
MANHOLE - EXISTING			
MANHOLE - PROPOSED			

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CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.21 16:26:26-08'00'
P.E. STAMP BOX DATE

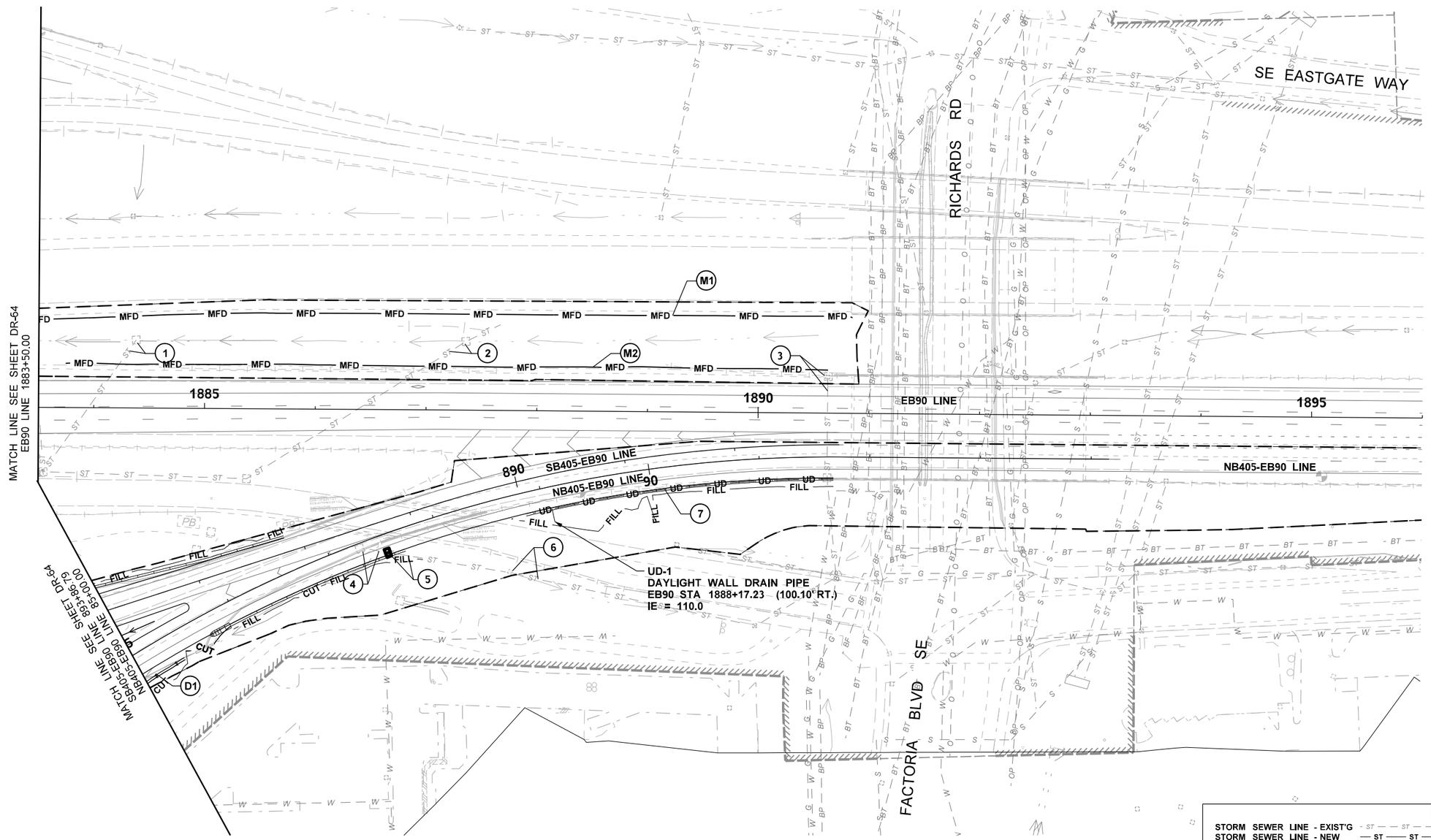
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
NB I-405 TO EB I-90

PLAN REF NO DR-64
SHEET XX OF SHEETS

T.24N. R.5E. W.M.



PROPOSED MFD

M1
MFD TYPE 3
BEGIN EB90 STA 1890+85 (86.39' LT.)
END EB90 STA 1880+97 (66.77' LT.)
LENGTH: 990 FT
LONGITUDINAL SLOPE: 1.2%
MEDIA WIDTH (B): 4 FT
SIDE SLOPE (S): 4:1
SEE SHEET DD-56 FOR MFD TYPICAL SECTIONS AND DIMENSIONS

M2
MFD TYPE 3
BEGIN EB90 STA 1890+63 (38.77' LT.)
END EB90 STA 1883+74 (40.03' LT.)
LENGTH: 689 FT
LONGITUDINAL SLOPE: 1.2%
MEDIA WIDTH (B): 4 FT
SIDE SLOPE (S): 7:1
SEE SHEET DD-56 FOR MFD TYPICAL SECTIONS AND DIMENSIONS

N

0 50 100
SCALE IN FEET

LEGEND

STORM SEWER LINE - EXIST'G	ST	RIGHT OF WAY - EXISTING	
STORM SEWER LINE - NEW	ST	RIGHT OF WAY - PROPOSED	
DRAIN PIPE - NEW	DP	MEDIA FILTER DRAIN - NEW	MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING			
AREA INLET - PROPOSED		STRUCTURAL NOTE CODE	X
MANHOLE - EXISTING			
MANHOLE - PROPOSED		FORCE MAIN	D

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12/21/2021
Date
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REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.21 16:26:33 -08'00'
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Washington State Department of Transportation

FLATIRON LANE

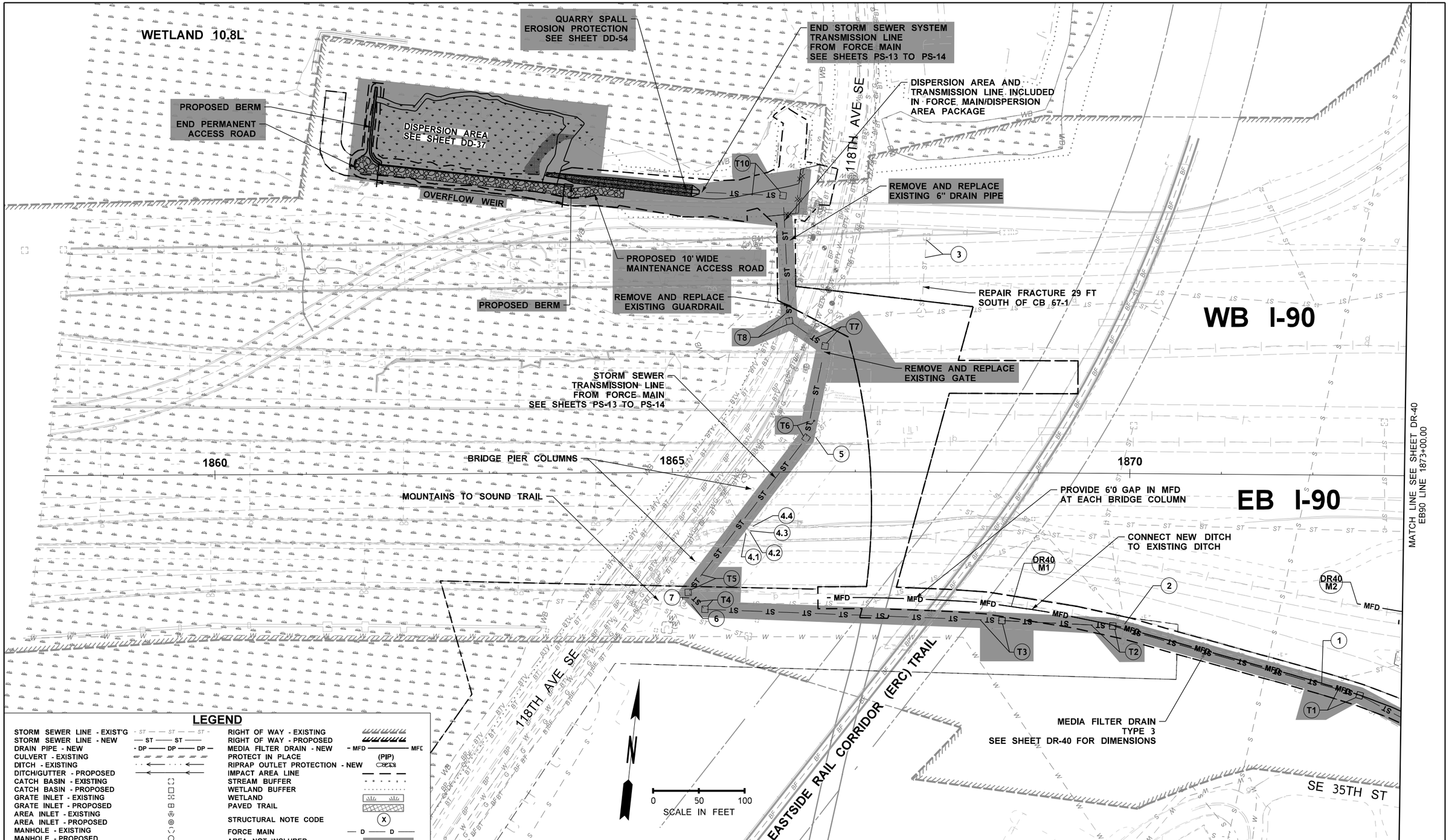
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
I-405 TO I-90 RAMP

PLAN REF NO DR-65

SHEET OF SHEETS



LEGEND

STORM SEWER LINE - EXIST'G	ST	RIGHT OF WAY - EXISTING	
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DRAIN PIPE - NEW	DP	MEDIA FILTER DRAIN - NEW	MFD
CULVERT - EXISTING		PROTECT IN PLACE	(PIP)
DITCH - EXISTING		RIPRAP OUTLET PROTECTION - NEW	
DITCH/GUTTER - PROPOSED		IMPACT AREA LINE	
CATCH BASIN - EXISTING		STREAM BUFFER	
CATCH BASIN - PROPOSED		WETLAND BUFFER	
GRATE INLET - EXISTING		WETLAND	
GRATE INLET - PROPOSED		PAVED TRAIL	
AREA INLET - EXISTING		STRUCTURAL NOTE CODE	X
AREA INLET - PROPOSED		FORCE MAIN	D
MANHOLE - EXISTING		AREA NOT INCLUDED	
MANHOLE - PROPOSED			

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12/21/2021
Date
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

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JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

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Washington State Department of Transportation

FLATIRON LANE

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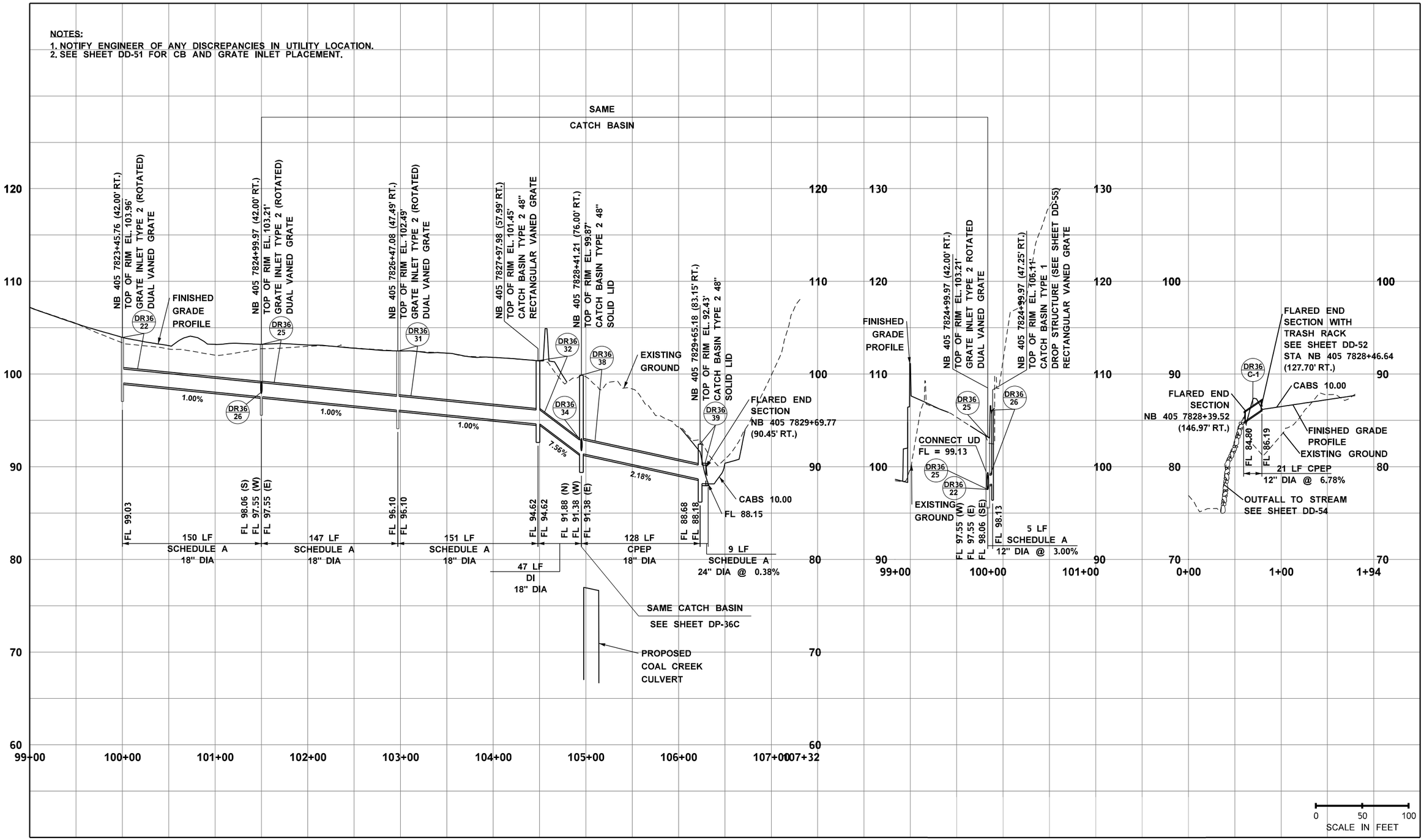
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PLAN
DISPERSION AREA

PLAN REF NO DR-67

SHEET XX OF SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



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DESIGNED BY	M. EMESON			
ENTERED BY	M. EMESON			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

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Washington State Department of Transportation

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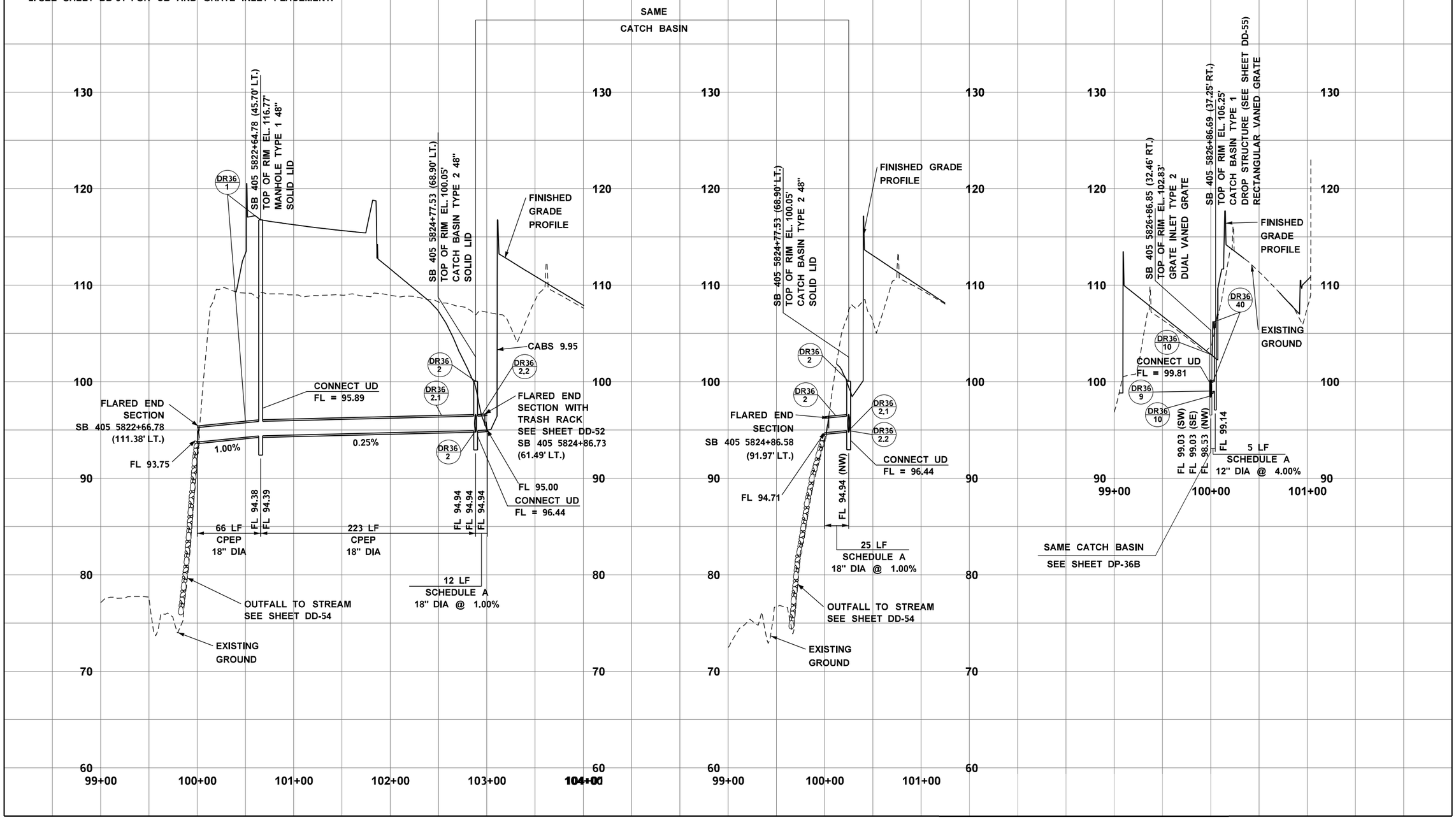
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5820+00 TO STA. 5835+00

PLAN REF NO DP-36

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



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DESIGNED BY	HARRY STRASSER			
ENTERED BY	FRED DEAN			
CHECKED BY	HARRY STRASSER			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	K. HENRY	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
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Date: 2021.12.21 16:56:08'00'
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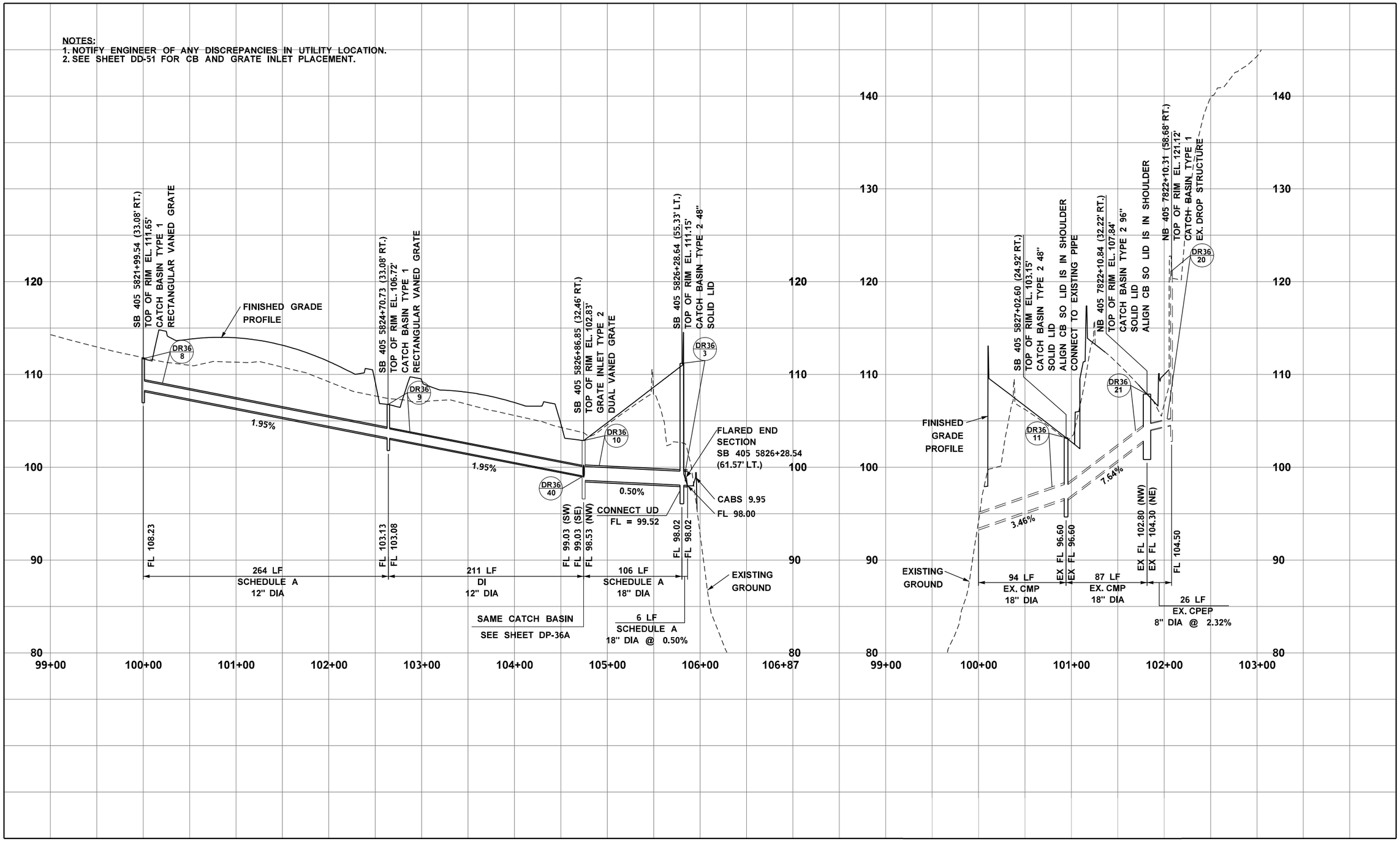
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5820+00 TO STA. 5835+00

PLAN REF NO DP-36A
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



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DESIGNED BY	M. EMESON				CONTRACT NO.		LOCATION NO.
ENTERED BY	M. EMESON				C9242		
CHECKED BY	J. ST. JOHN						
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	K. HENSON	REVISION	DATE	BY			

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Date: 2021.12.20 14:27:04 08'00'
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Washington State Department of Transportation
FLATIRON LANE
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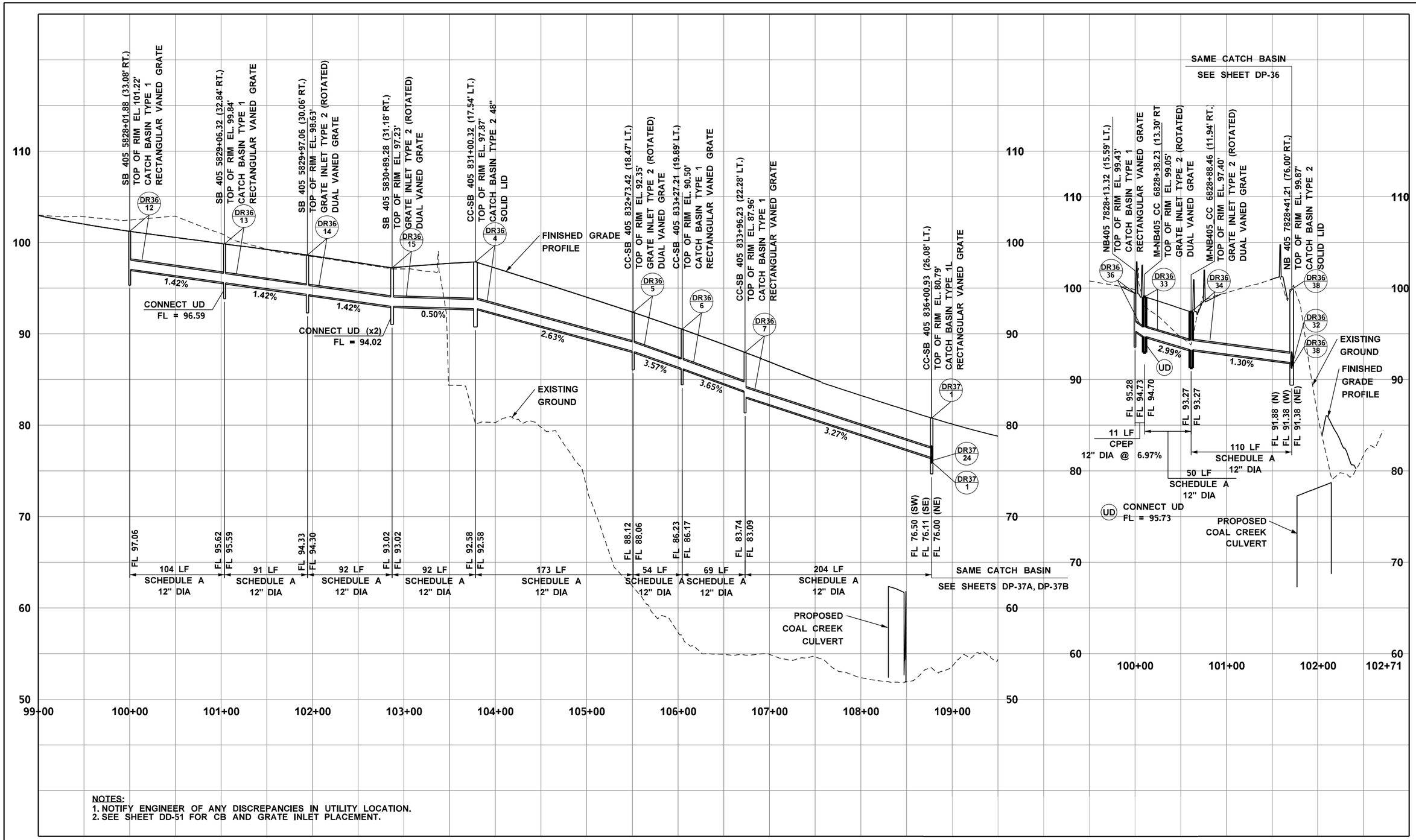
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5820+00 TO STA. 5835+00

PLAN REF NO
DP-36B

SHEET XX OF XX SHEETS



NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.

Wood Environment & Infrastructure, Inc.
12/21/2021
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ENTERED BY	M. EMESON						
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST JOHN, STATE OF WASHINGTON, 27492, REGISTERED PROFESSIONAL ENGINEER — DATE — P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

wood.

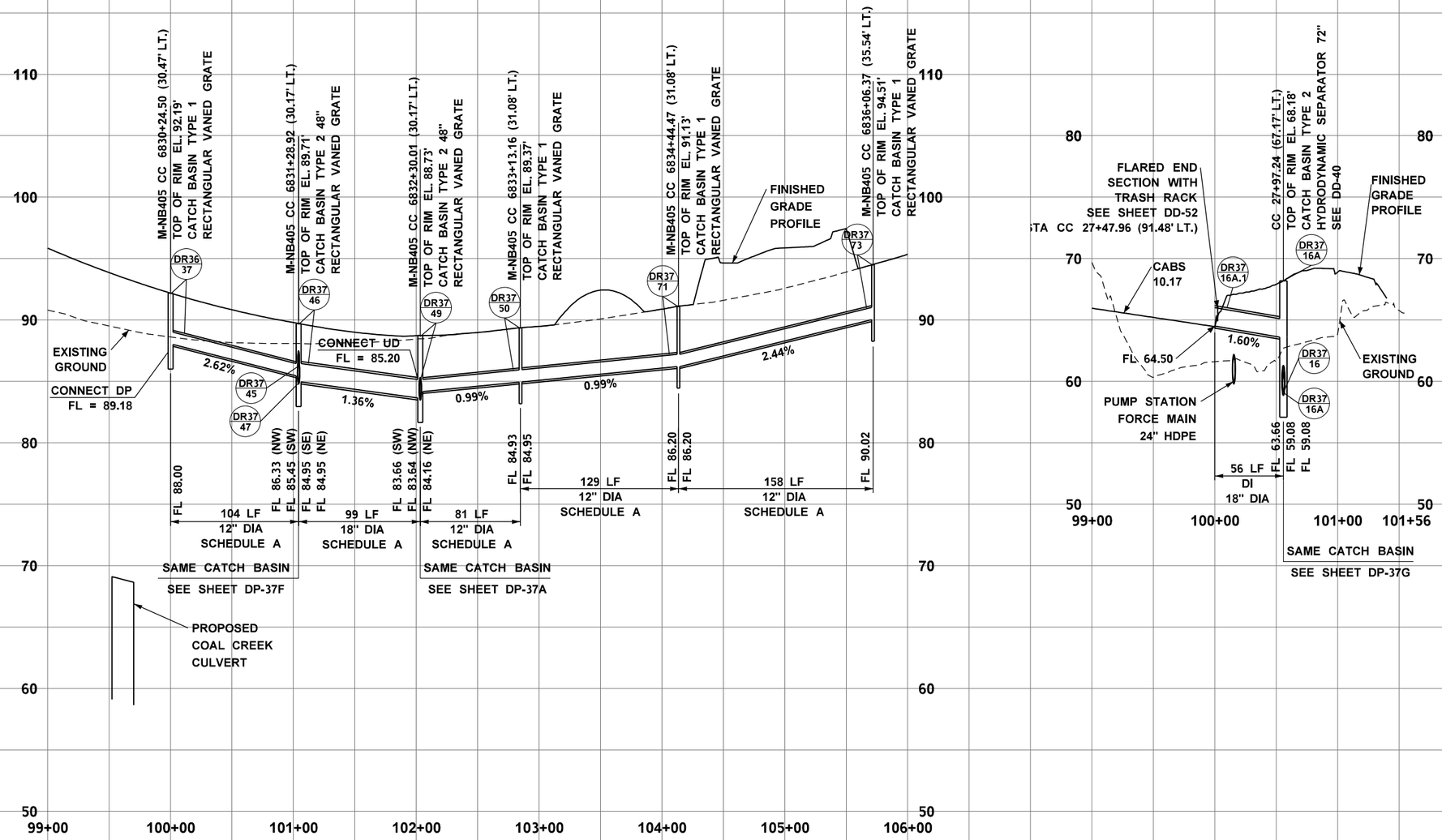
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5820+00 TO STA. 5835+00

PLAN REF NO DP-36C

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



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REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

DATE
P.E. STAMP BOX

JAMES M. ST. JOHN
STATE OF WASHINGTON
27497
REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.21 17:27:18 -08'00'
DATE
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Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

PLAN REF NO DP-37
SHEET XX OF XX SHEETS

NOTES:
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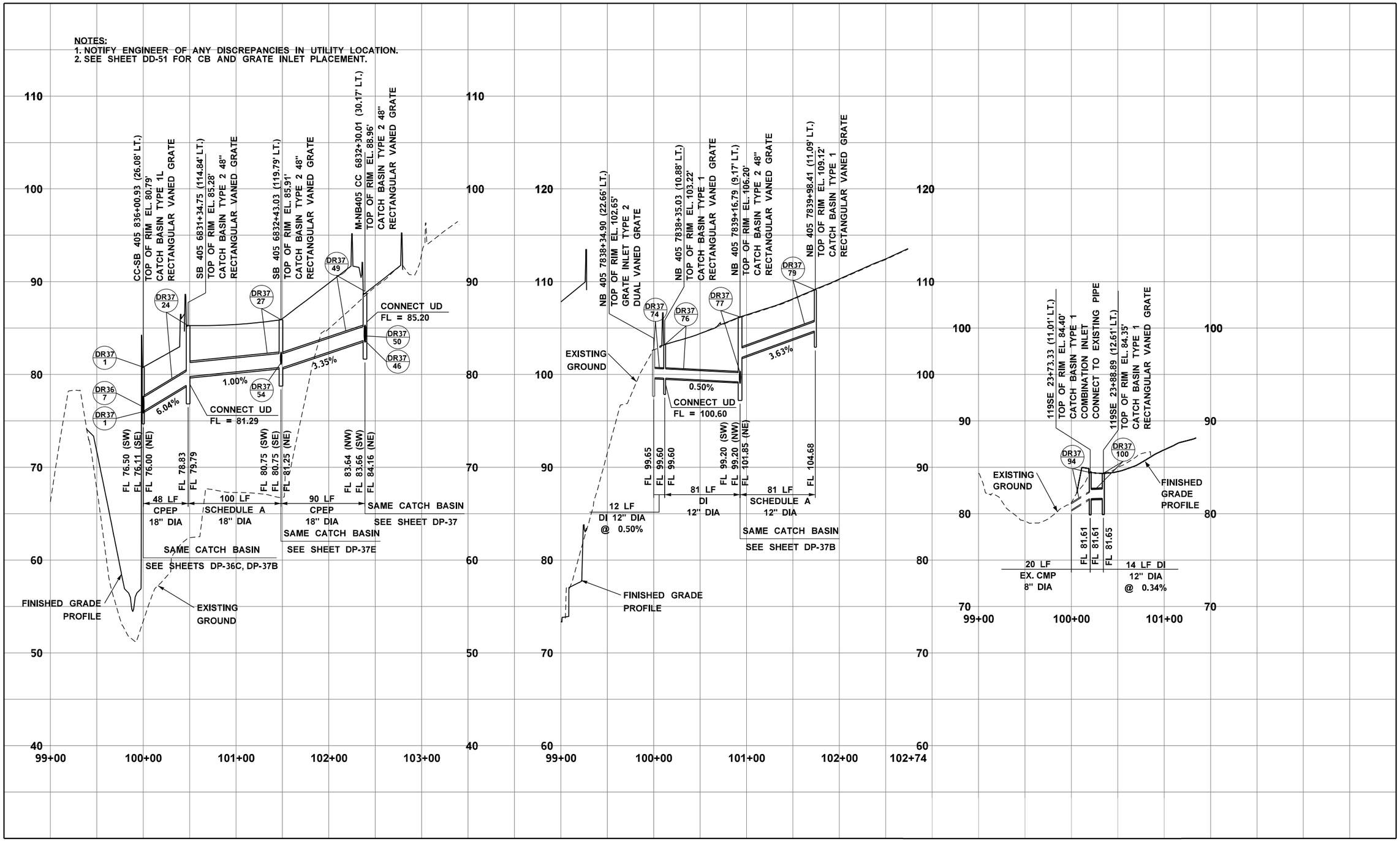
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX DATE

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Washington State Department of Transportation
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I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

PLAN REF NO DP-37A

SHEET XX OF XX SHEETS

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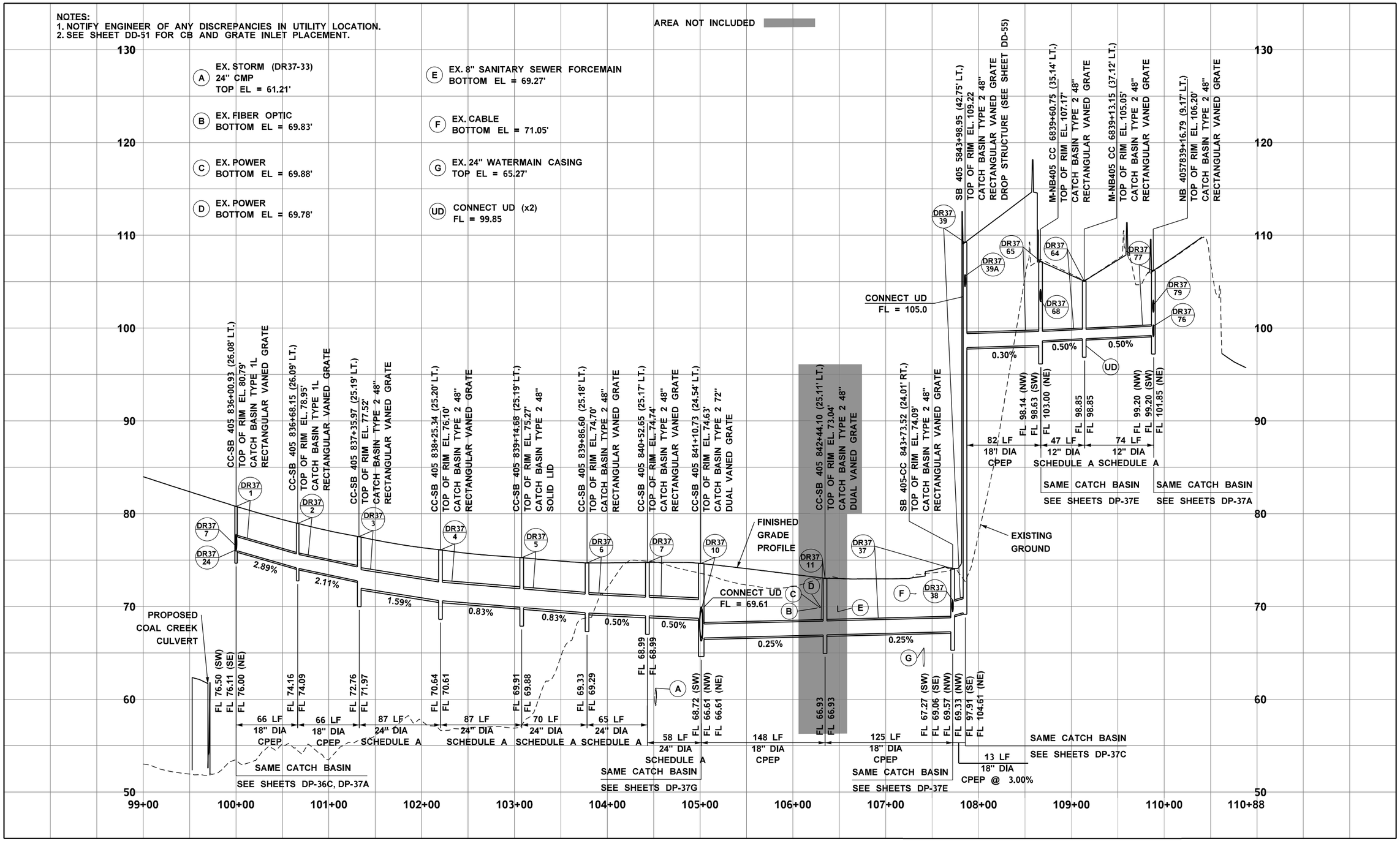
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.

AREA NOT INCLUDED



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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

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JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
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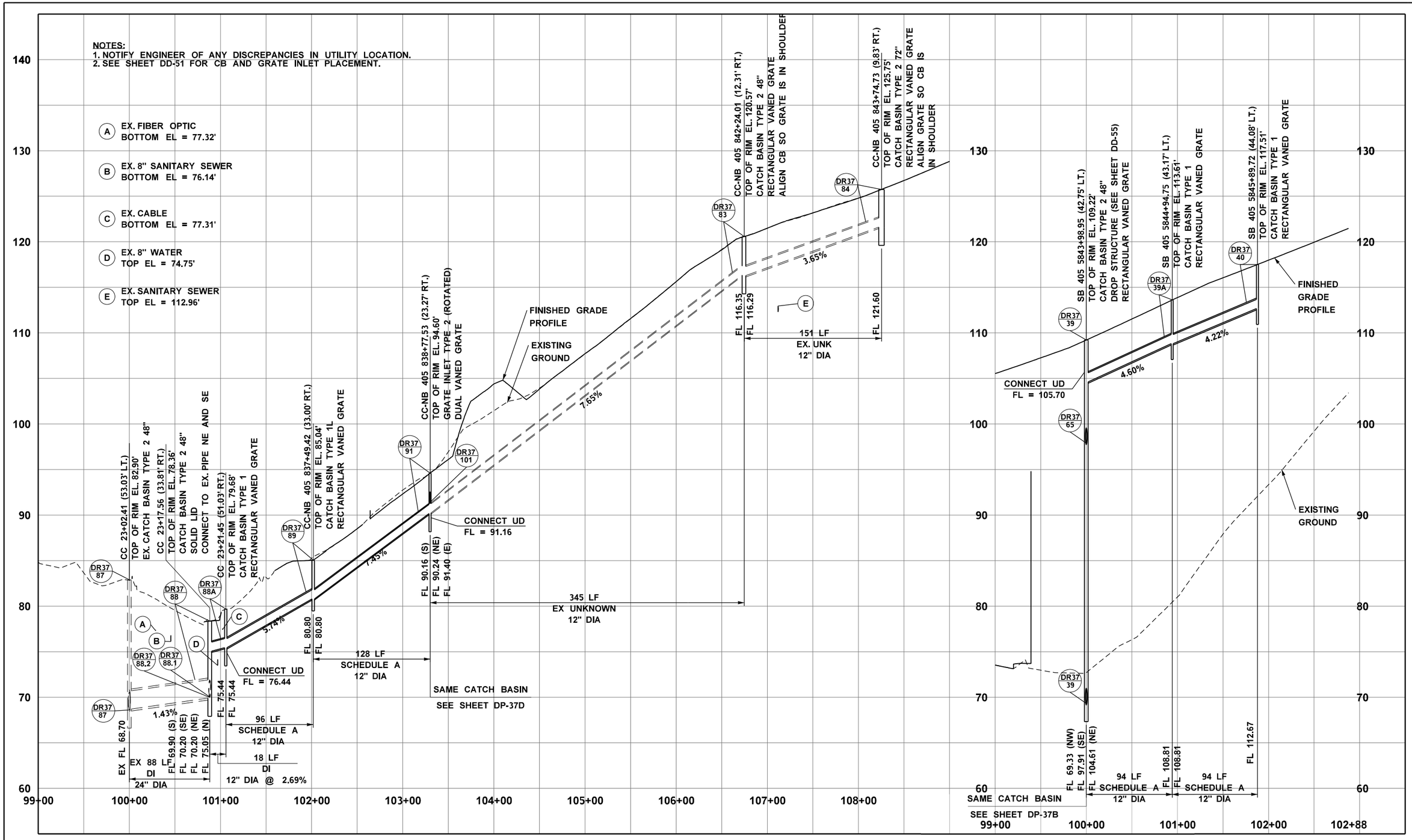
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

PLAN REF NO DP-37B

SHEET XX OF XX SHEETS



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REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

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P.E. STAMP BOX DATE

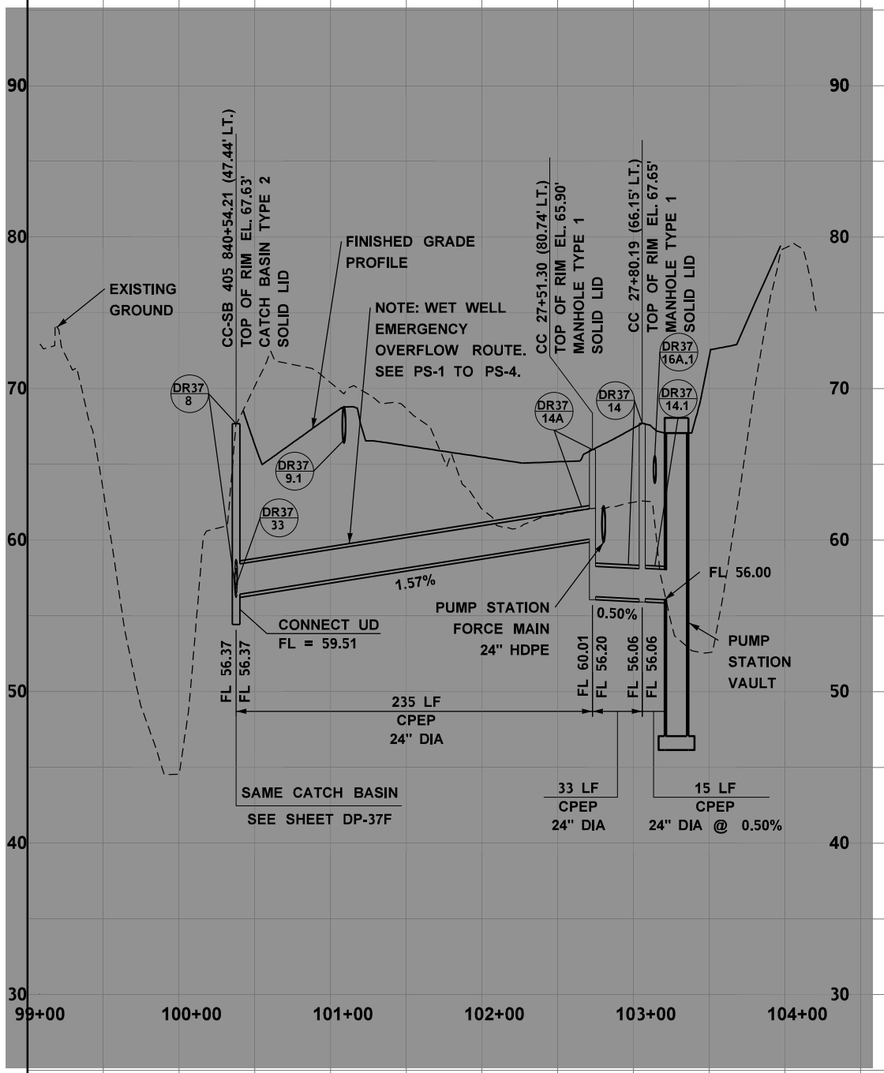
Washington State Department of Transportation
FLATIRON LANE
wood.

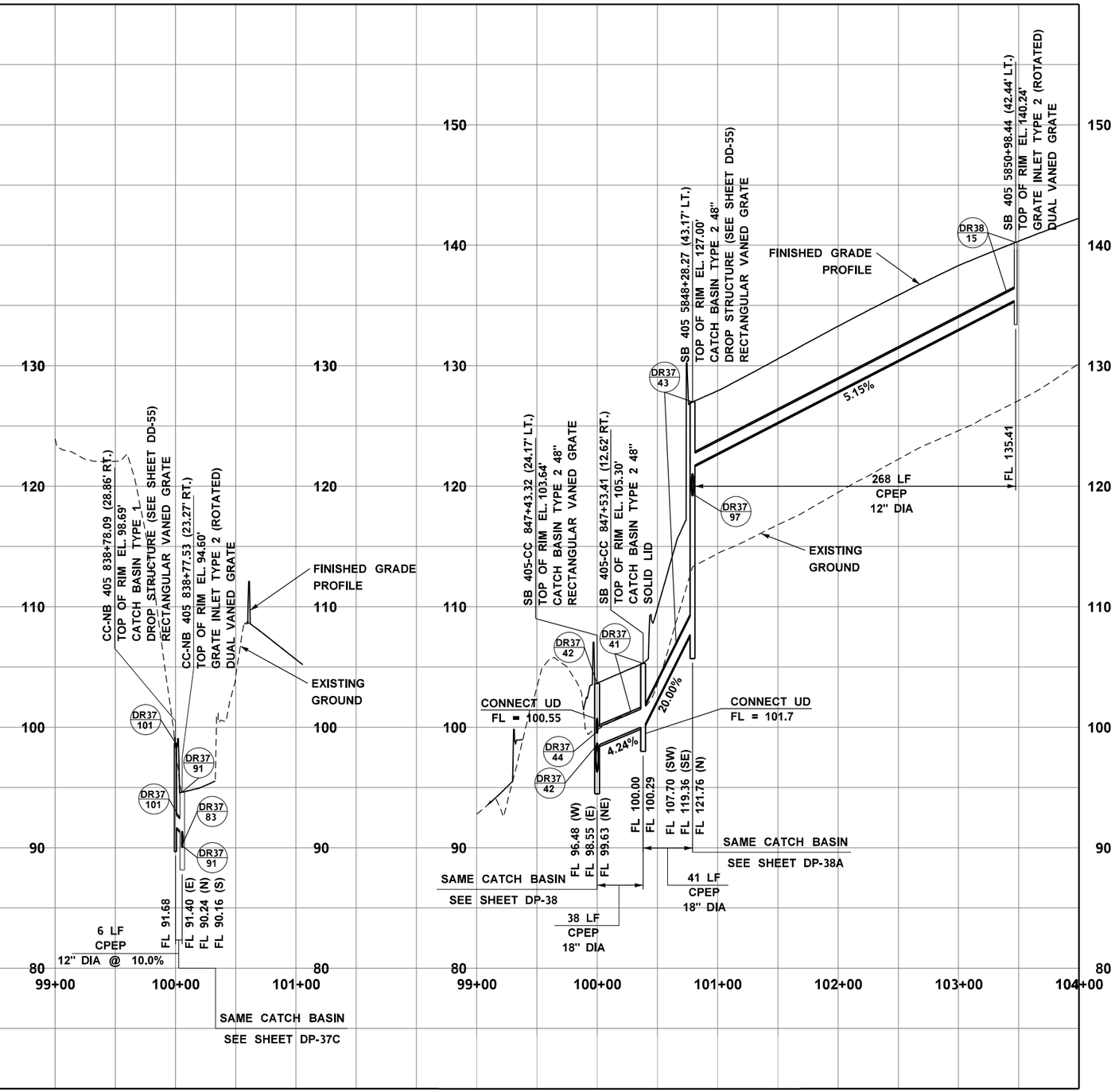
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

PLAN REF NO DP-37C
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.





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REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

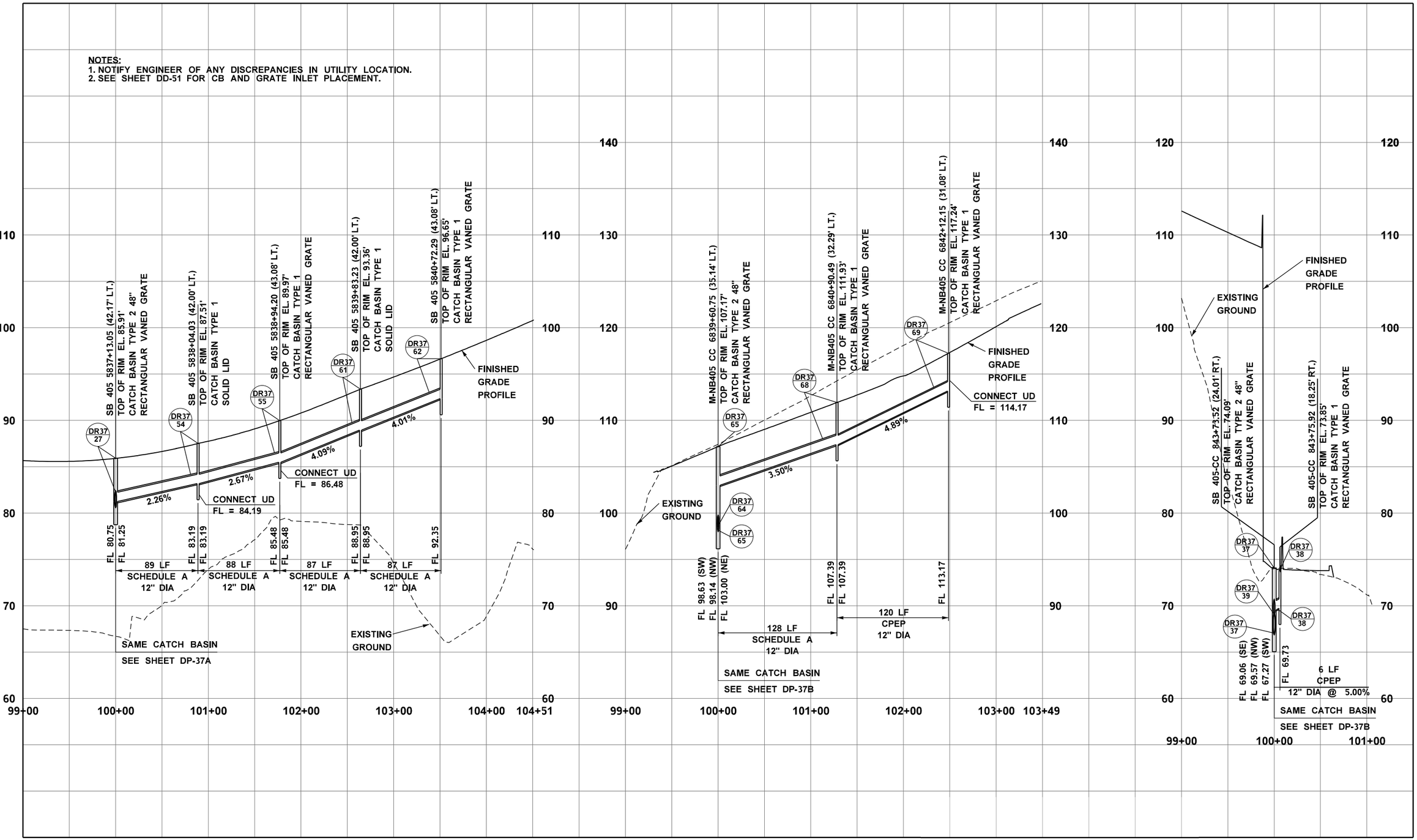
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

PLAN REF NO DP-37D

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27492, REGISTERED PROFESSIONAL ENGINEER — DATE — P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

wood.

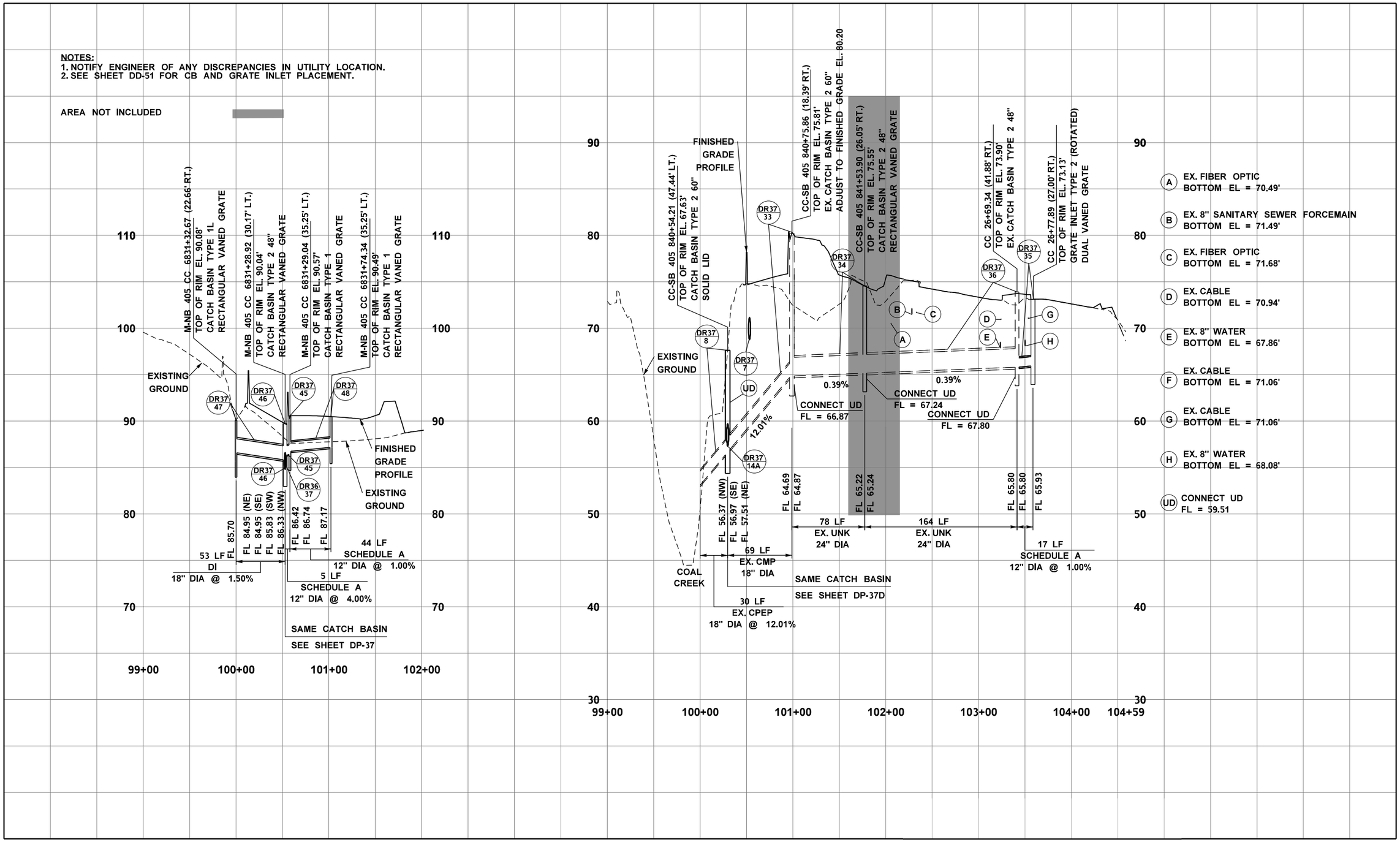
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

PLAN REF NO DP-37E

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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RELEASED FOR CONSTRUCTION

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DATE	12/20/2021				JOB NUMBER		
PLOTTED BY	AMECPW03ICS01$				XL5467		
DESIGNED BY	M. EMESON				CONTRACT NO.		LOCATION NO.
ENTERED BY	M. EMESON						
CHECKED BY	J. ST. JOHN						
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS	C9242		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — DATE — P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

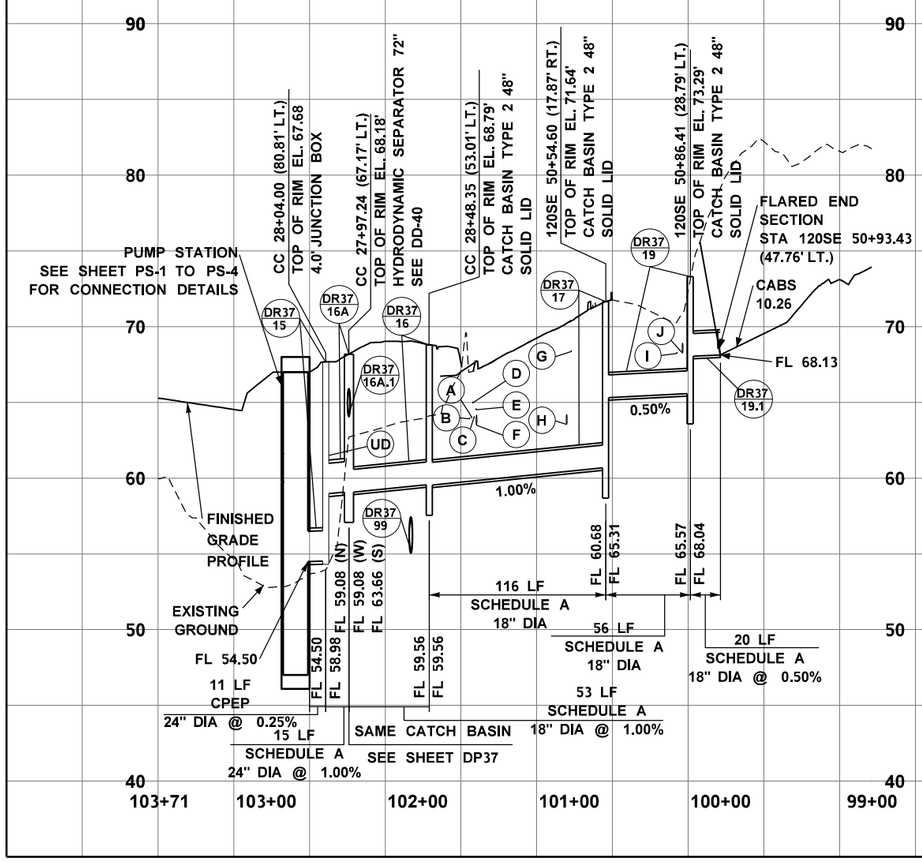
DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

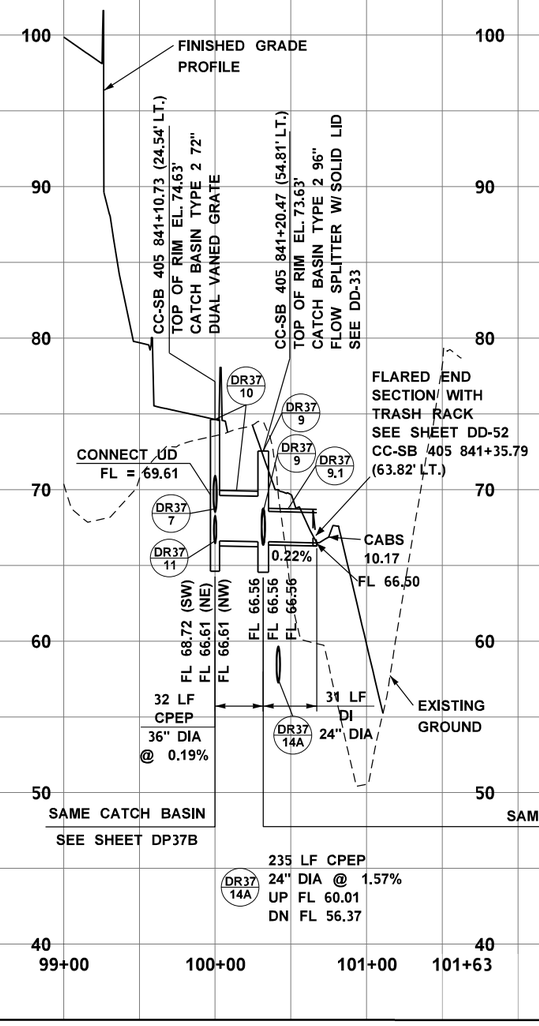
PLAN REF NO
DP-37F

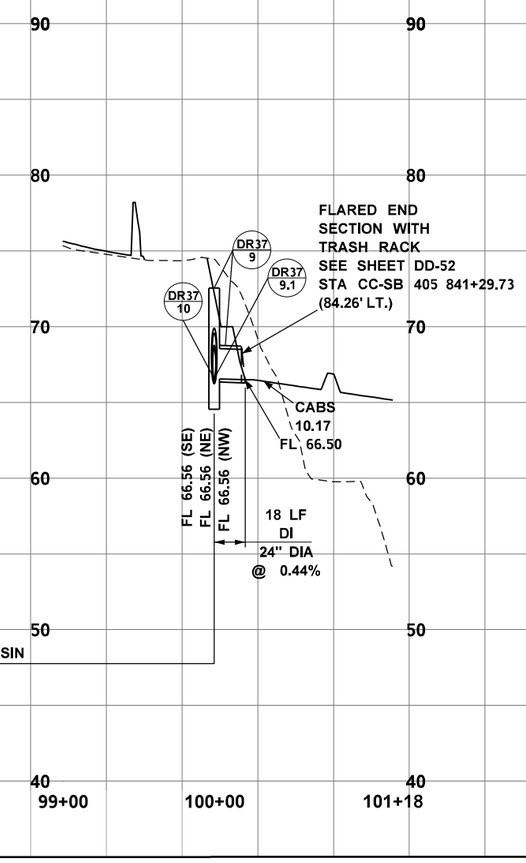
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.

(A) EX. POWER BOTTOM EL = 63.95'
(B) EX. FIBER OPTIC BOTTOM EL = 63.92'
(C) EX. POWER BOTTOM EL = 63.99'
(D) EX. FIBER OPTIC BOTTOM EL = 64.97'
(E) EX. FIBER OPTIC BOTTOM EL = 64.52'
(F) EX. 8" SANITARY SEWER FORCEMAIN BOTTOM EL = 63.50'
(G) EX. CABLE BOTTOM EL = 68.36'
(H) EX. 8" WATER BOTTOM EL = 63.55'
(I) EX. CABLE BOTTOM EL = 68.23'
(J) EX. 8" WATER BOTTOM EL = 68.25'
(UD) CONNECT UD FL EL = 61.19'







Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

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DESIGNED BY	M. EMESON					
ENTERED BY	M. EMESON					
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242	LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.20 18:28:17 -08'00'
P.E. STAMP BOX — DATE

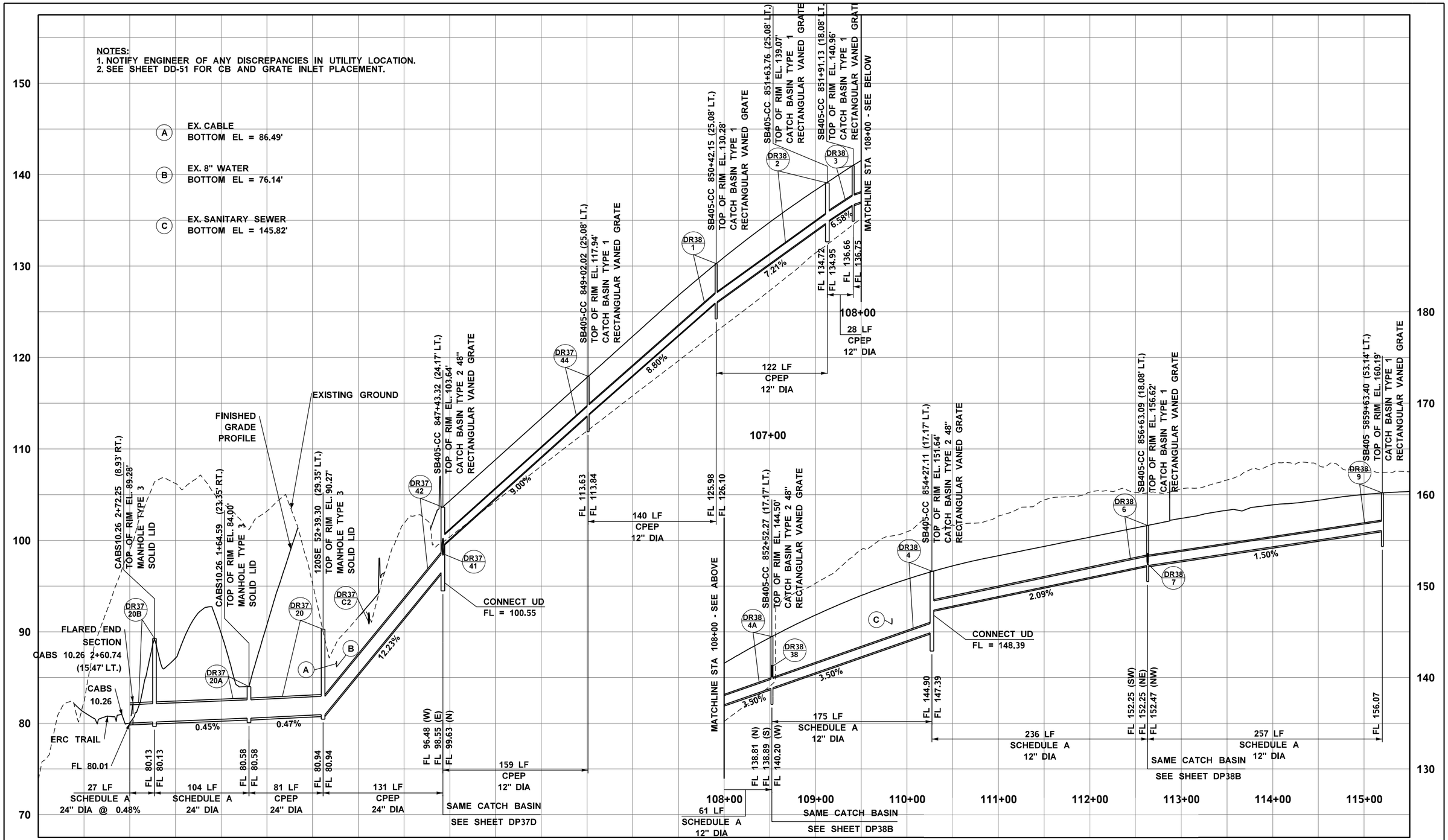
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5835+00 TO STA. 5850+00

PLAN REF NO DP-37G

SHEET XX OF XX SHEETS



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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DESIGNED BY	M. EMESON			
ENTERED BY	R. BARKIE			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
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P.E. STAMP BOX DATE

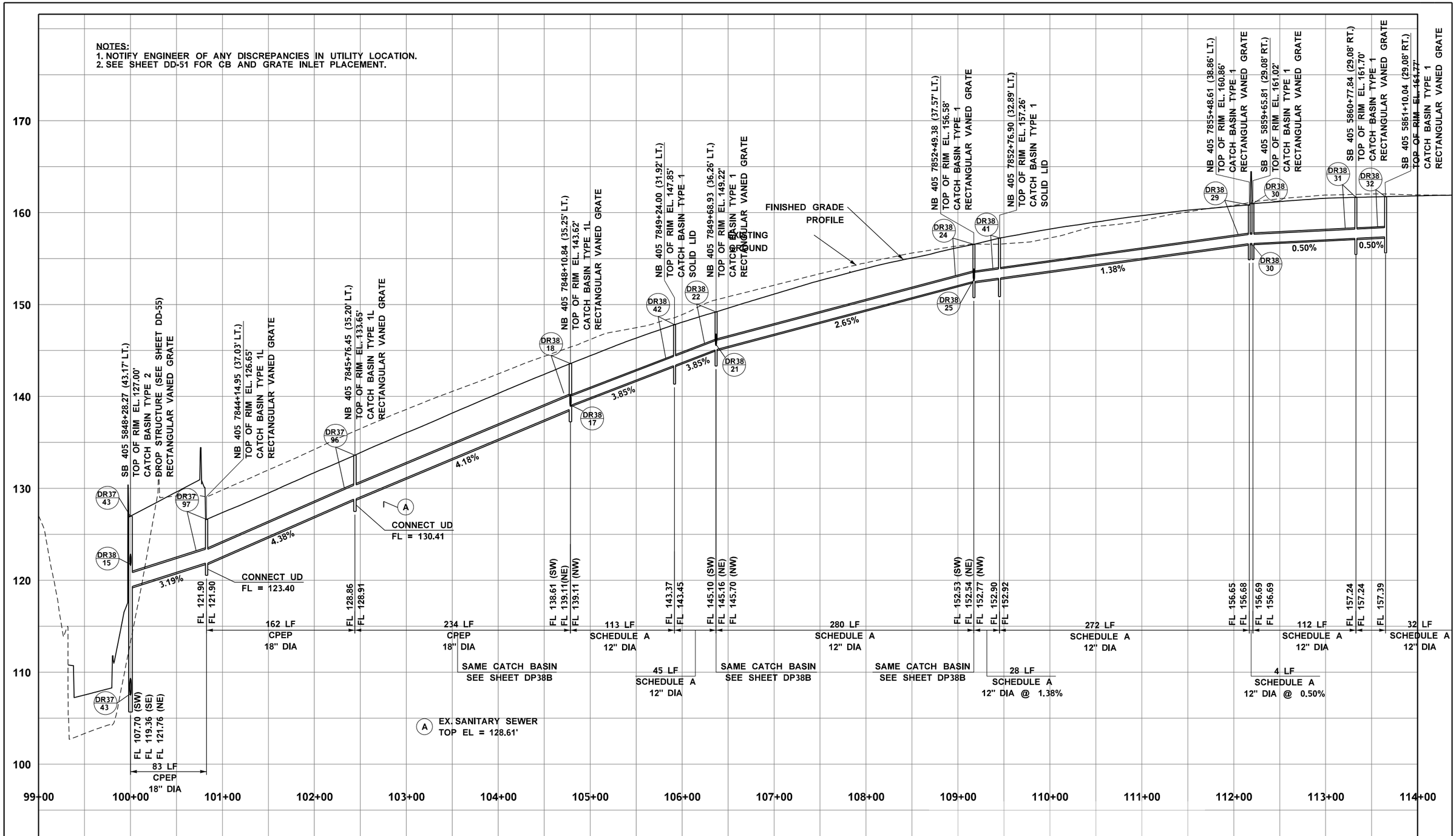
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5850+00 TO STA. 5865+00

PLAN REF NO DP-38
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
James M. St. John
12/21/2021 8:28:31-08'00'
P.E. STAMP BOX DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

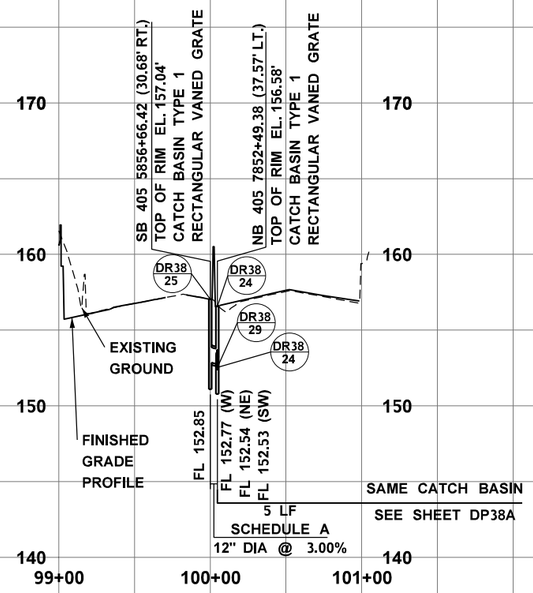
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

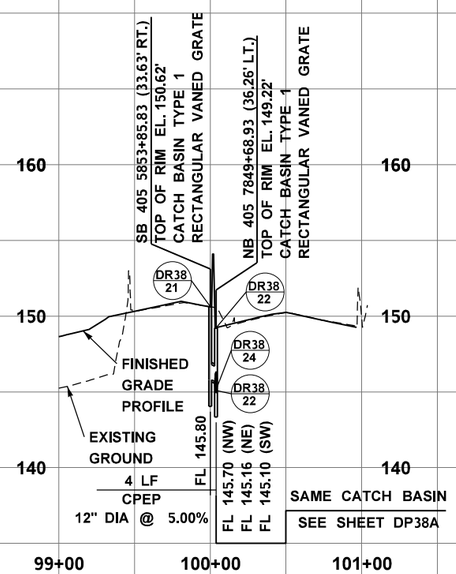
DRAINAGE PROFILES
STA. 5850+00 TO STA. 5865+00

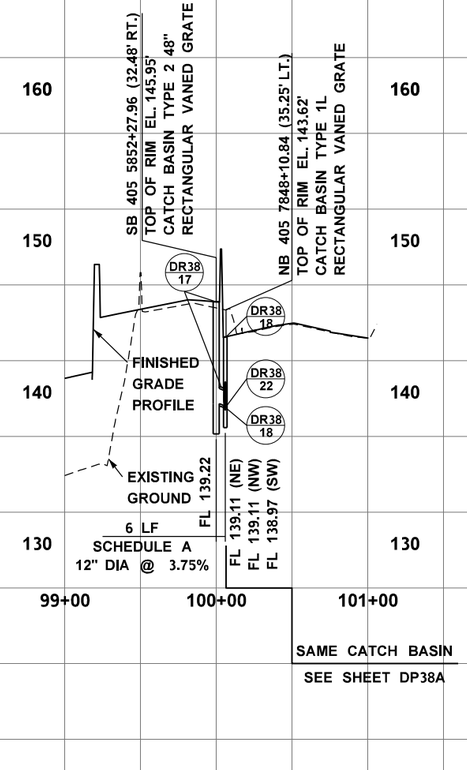
PLAN REF NO DP-38A

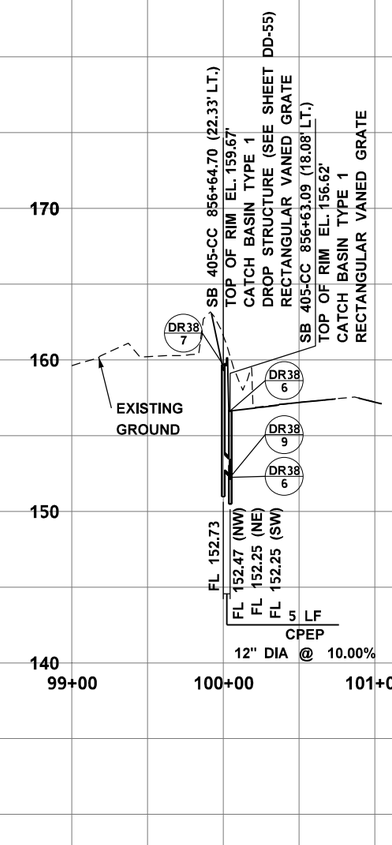
SHEET XX OF XX SHEETS

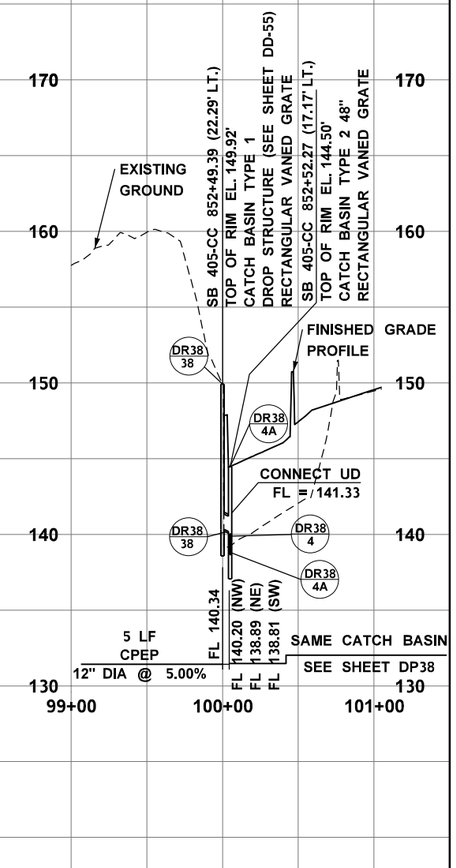
NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.











Wood Environment & Infrastructure, Inc.
12/21/2021
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DESIGNED BY	M. EMESON				CONTRACT NO.		LOCATION NO.
ENTERED BY	M. EMESON						
CHECKED BY	J. ST. JOHN						
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS	C9242		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
James M. St. John
12/20/2021 16:28:39-08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

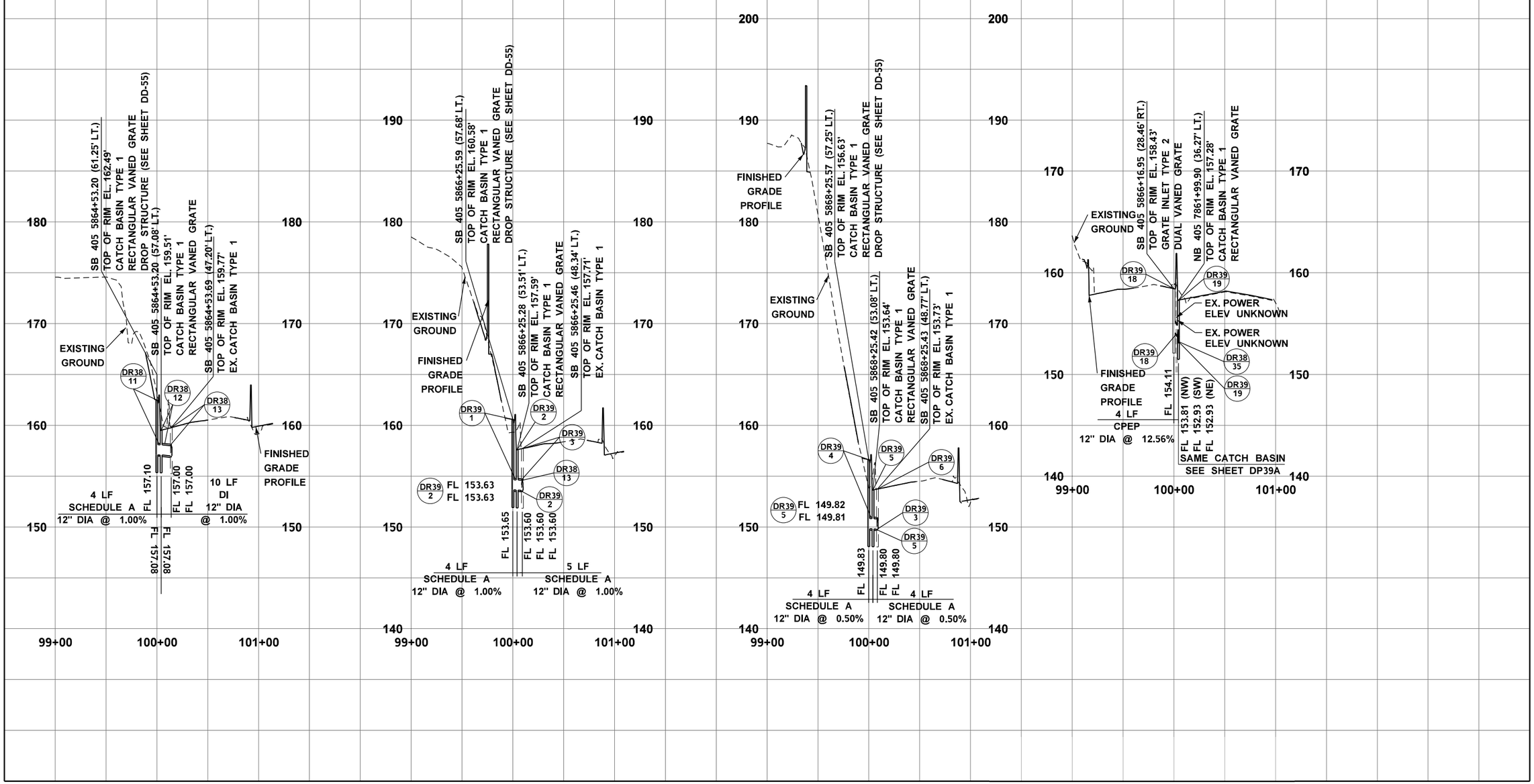
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5850+00 TO STA. 5865+00

PLAN REF NO
DP-38B

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



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CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILE
STA. 5865+00 TO STA. 5880+00

PLAN REF NO DP-39

SHEET XX OF XX SHEETS

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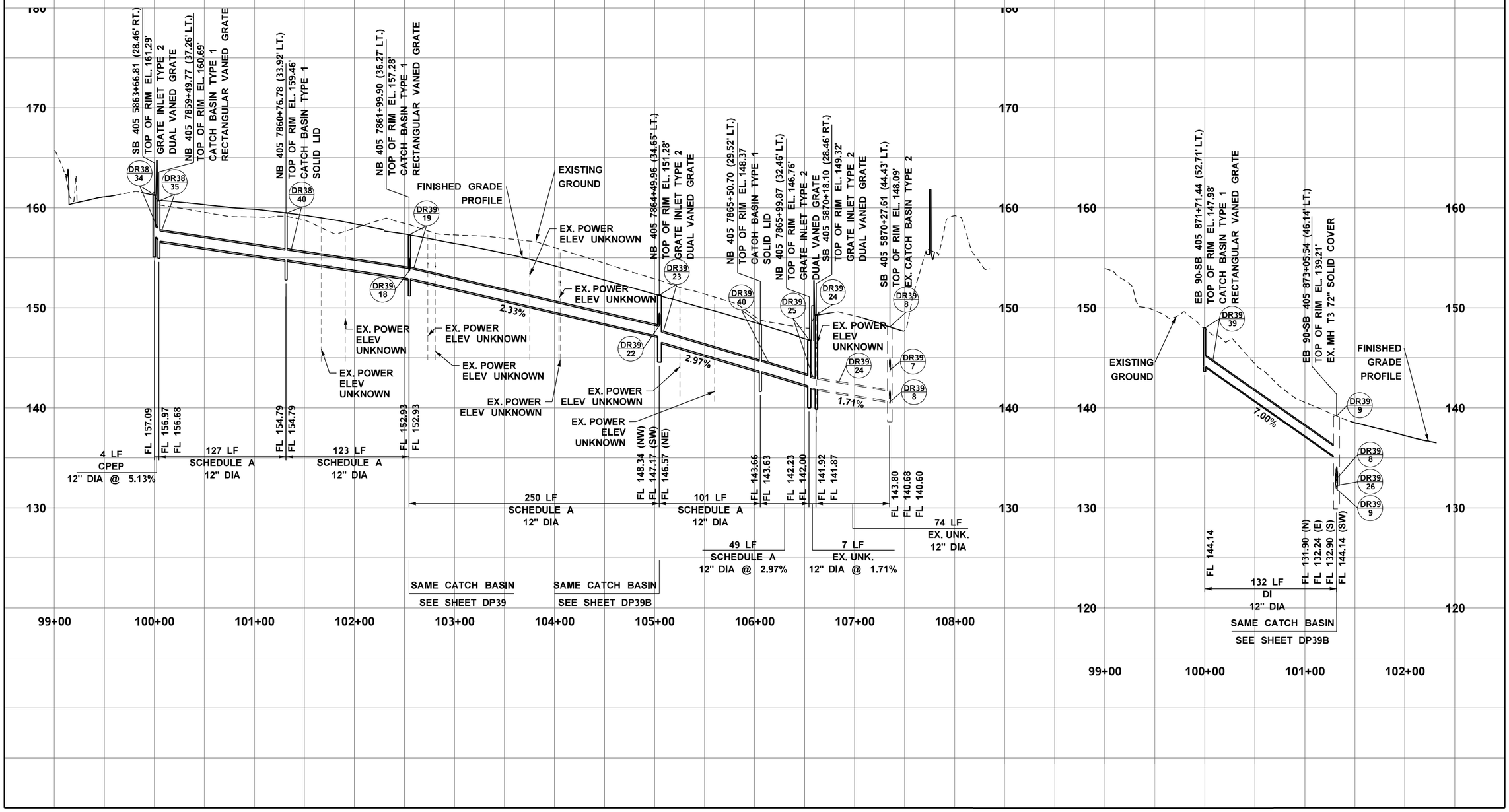
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

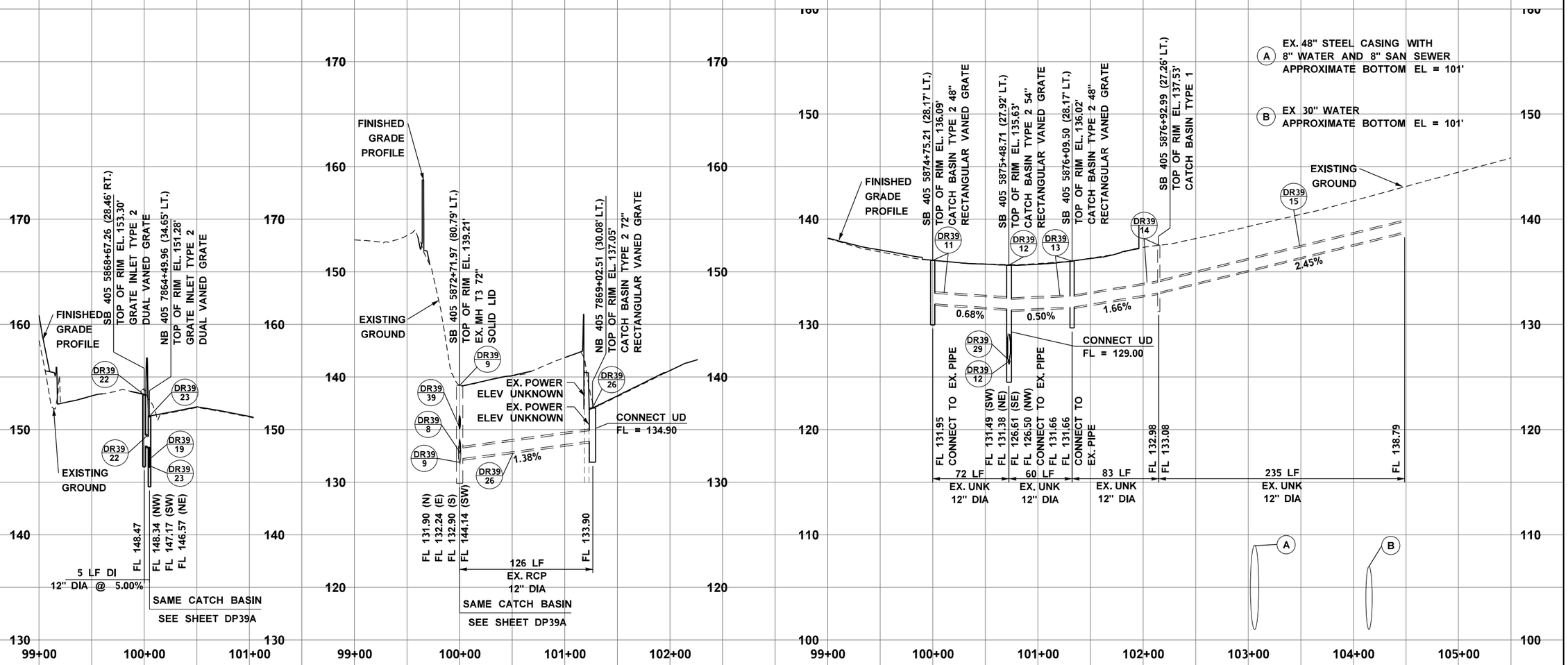
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5865+00 TO STA. 5880+00

PLAN REF NO DP-39A

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

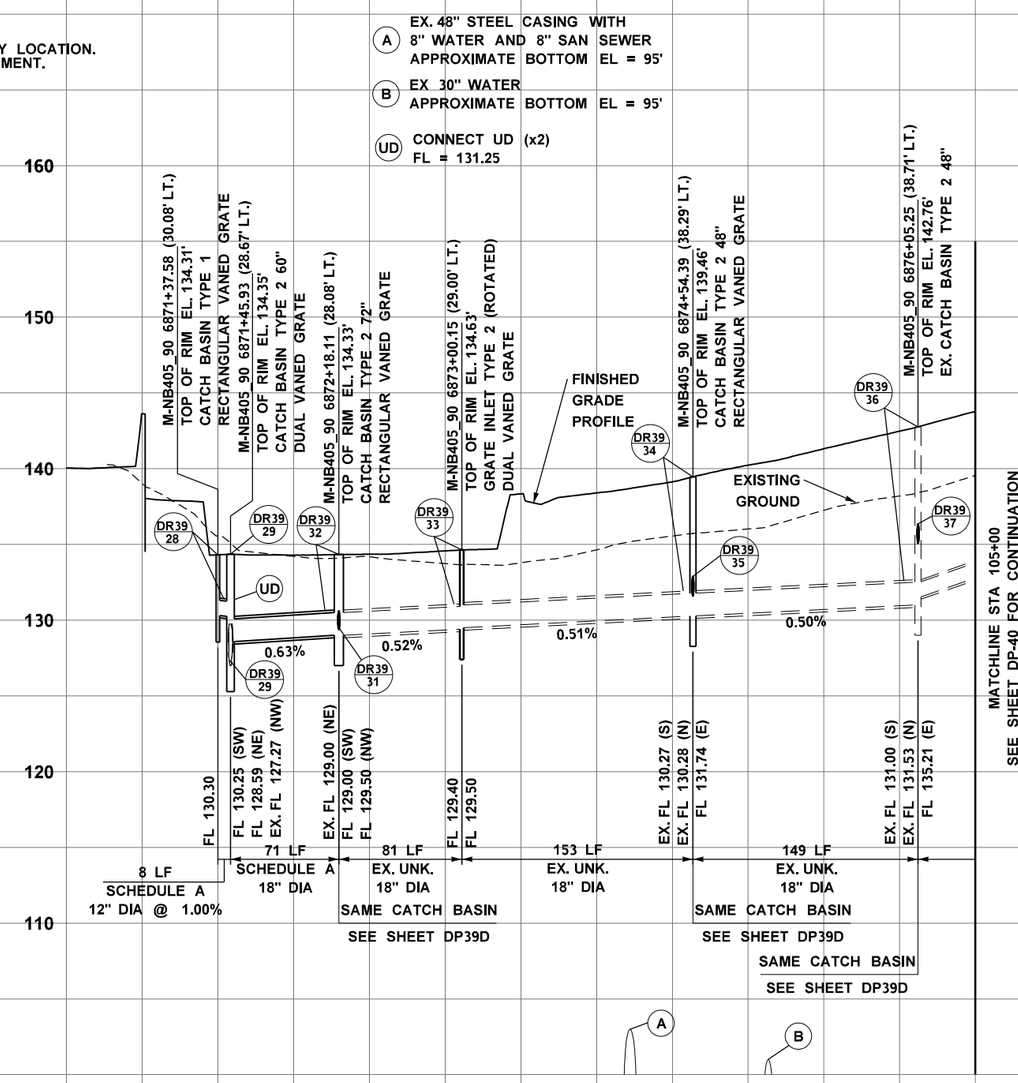
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5865+00 TO STA. 5880+00

PLAN REF NO DP-39B

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John 2021.12.21 16:08:17 -08'00'
P.E. STAMP BOX DATE

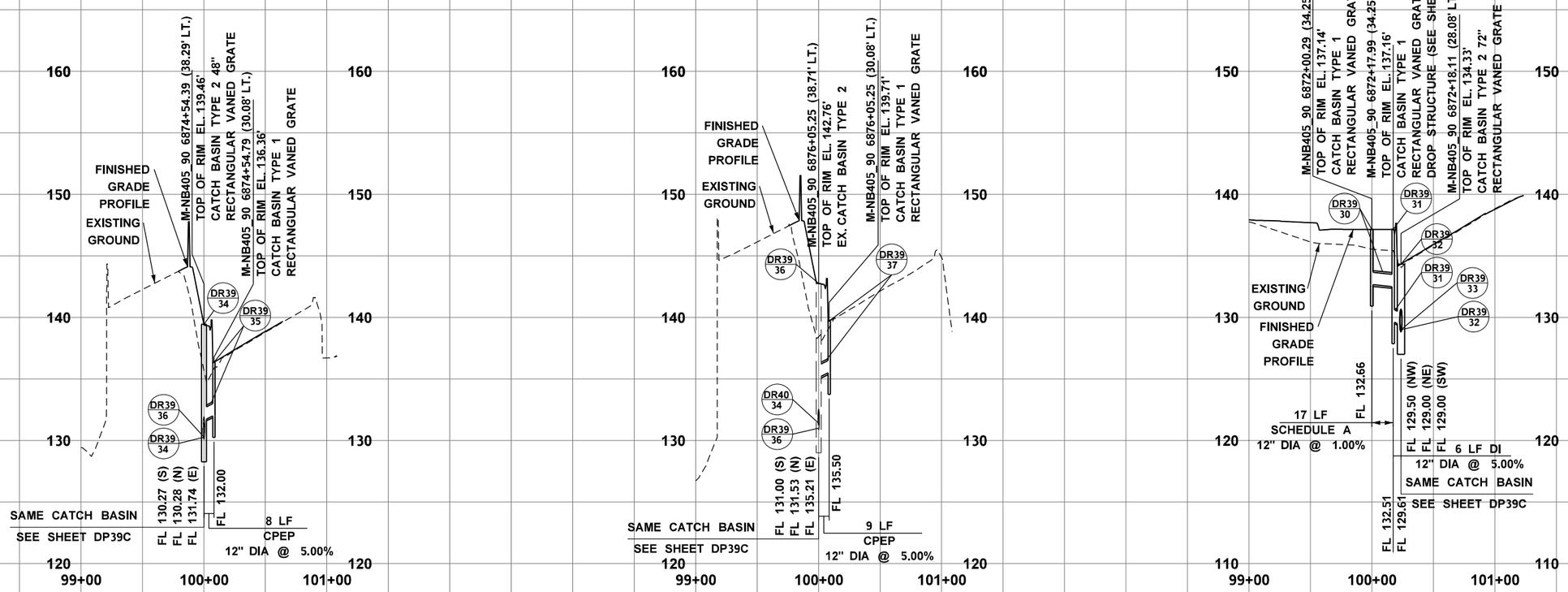
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5865+00 TO STA. 5880+00

PLAN REF NO DP-39C
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

DATE
P.E. STAMP BOX

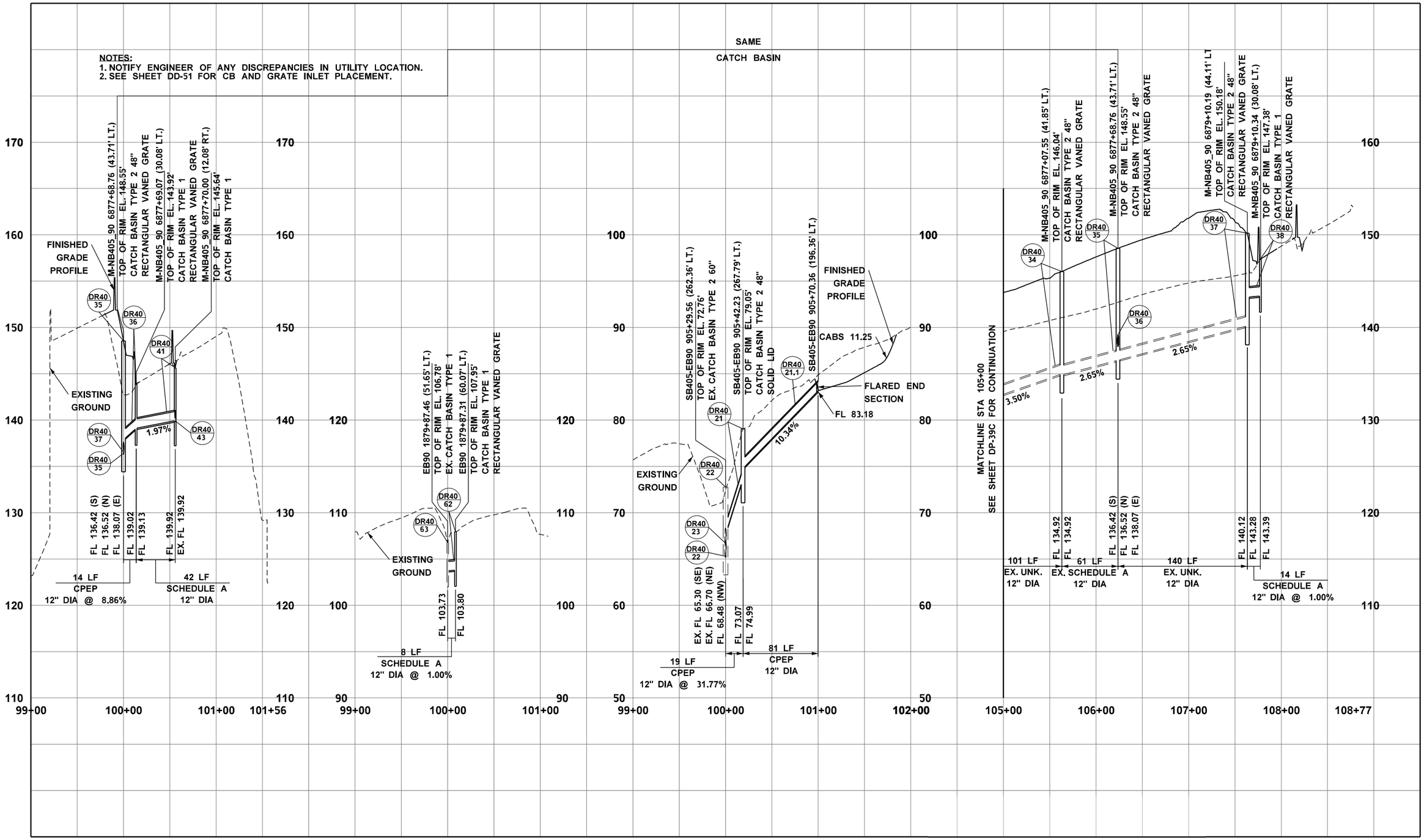
JAMES M. ST. JOHN
STATE OF WASHINGTON
27497
REGISTERED PROFESSIONAL ENGINEER
James M. St. John
2021.12.21 17:29:15 -08'00'
DATE
P.E. STAMP BOX

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5865+00 TO STA. 5880+00

PLAN REF NO
DP-39D
SHEET XX OF XX SHEETS



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12/21/2021
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REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

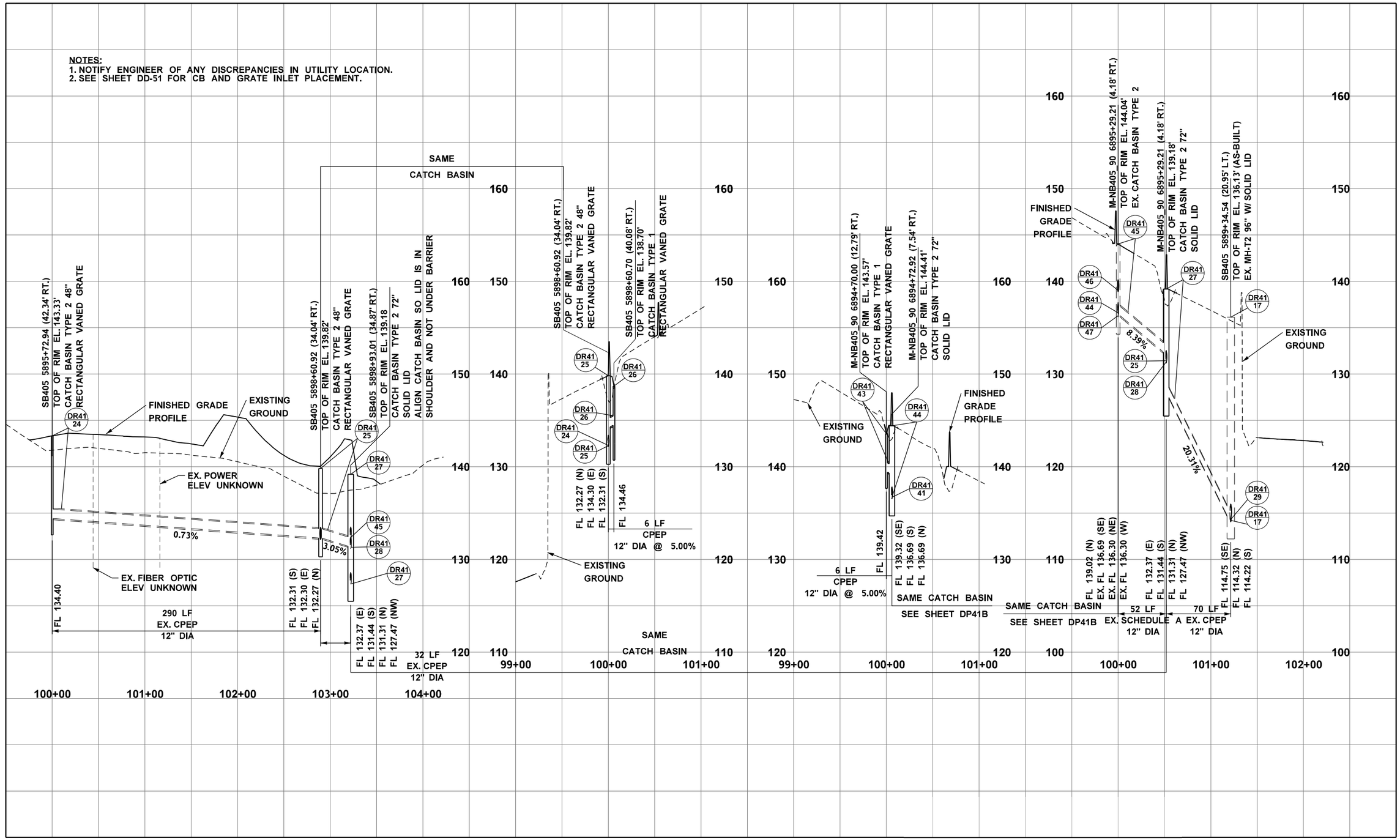
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5880+00 TO STA. 5895+00

PLAN REF NO DP-40

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
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REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
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P.E. STAMP BOX DATE

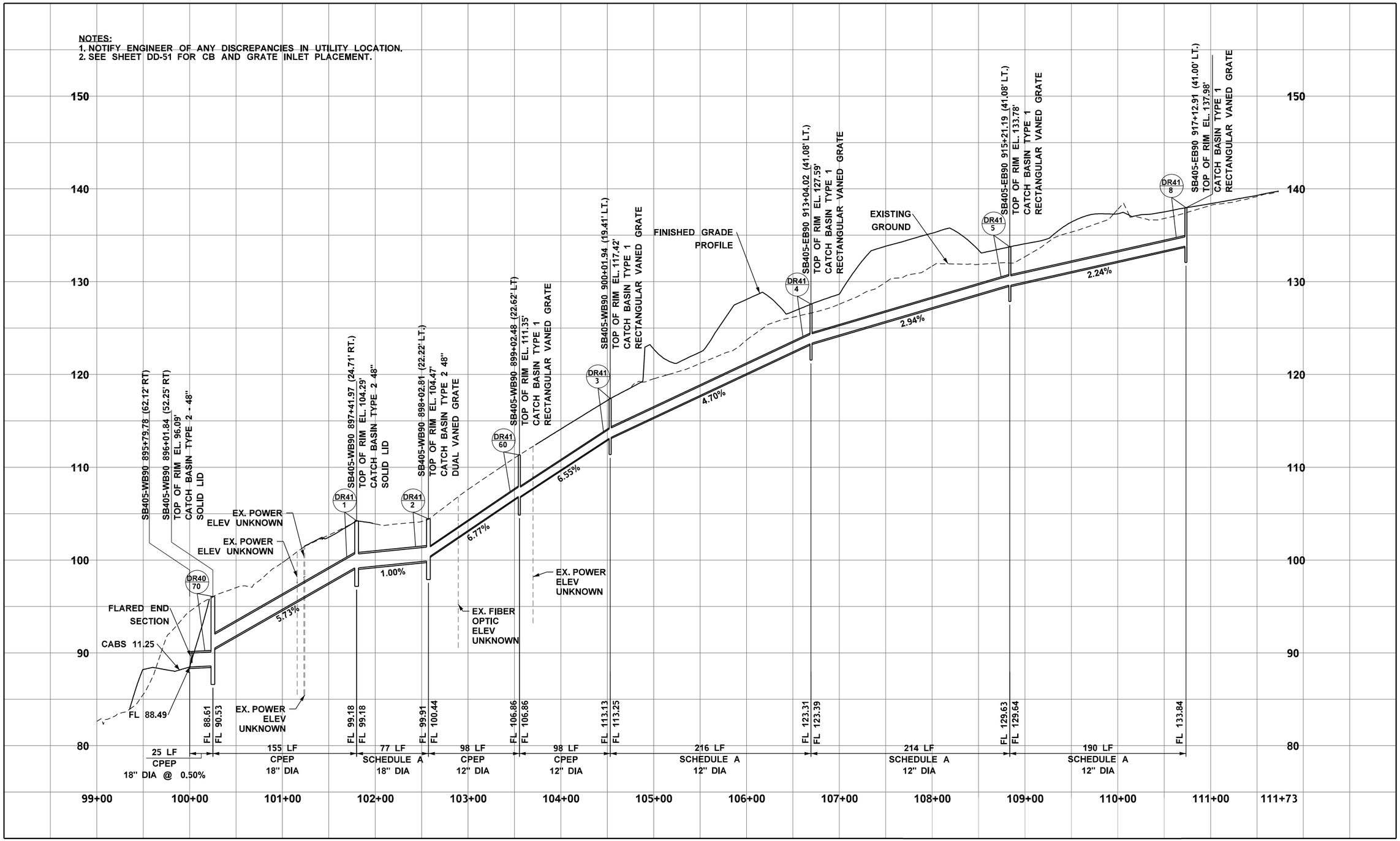
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5895+00 TO STA. 5910+00

PLAN REF NO DP-41
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
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DESIGNED BY	M. EMESON			
ENTERED BY	M. EMESON			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

wood.

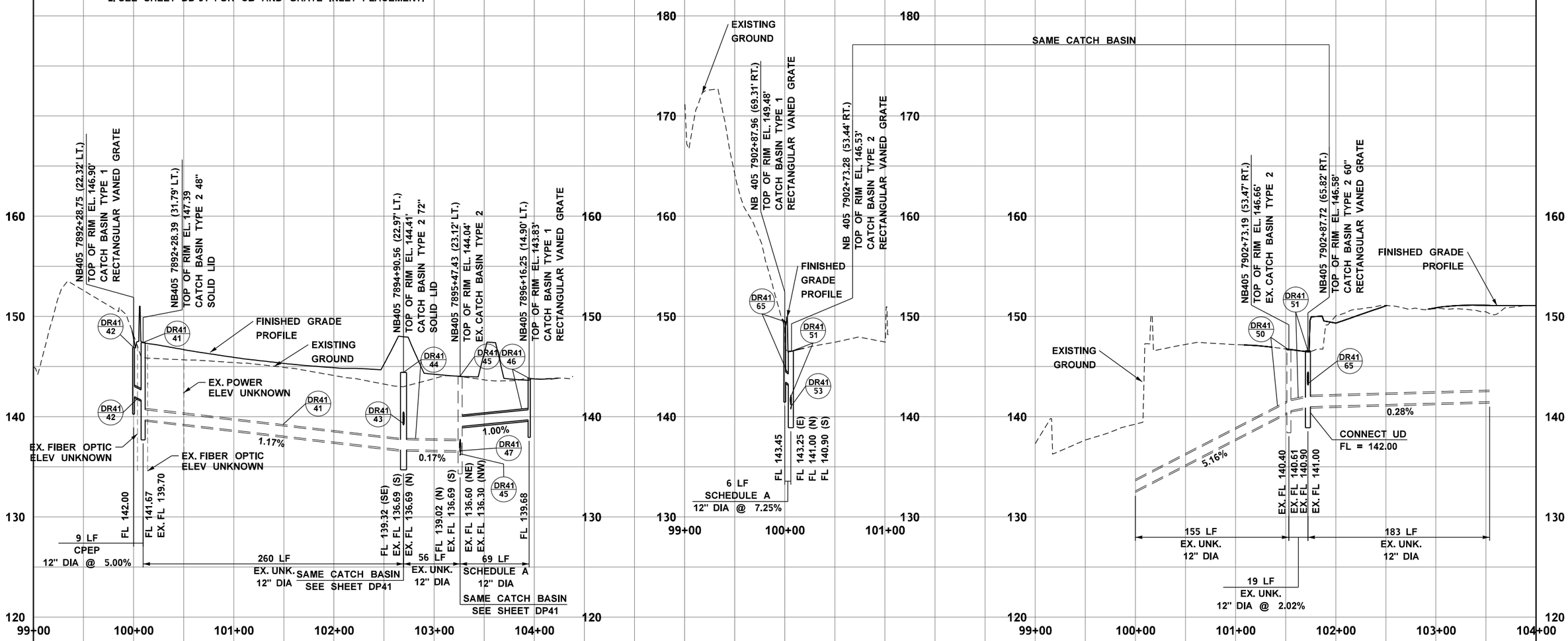
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5895+00 TO STA. 5910+00

PLAN REF NO DP-41A

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
RELEASED FOR CONSTRUCTION

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DESIGNED BY	M. EMESON			
ENTERED BY	M. EMESON			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
James M. St. John 12/21/21 09:29:43 -08'00'
P.E. STAMP BOX DATE

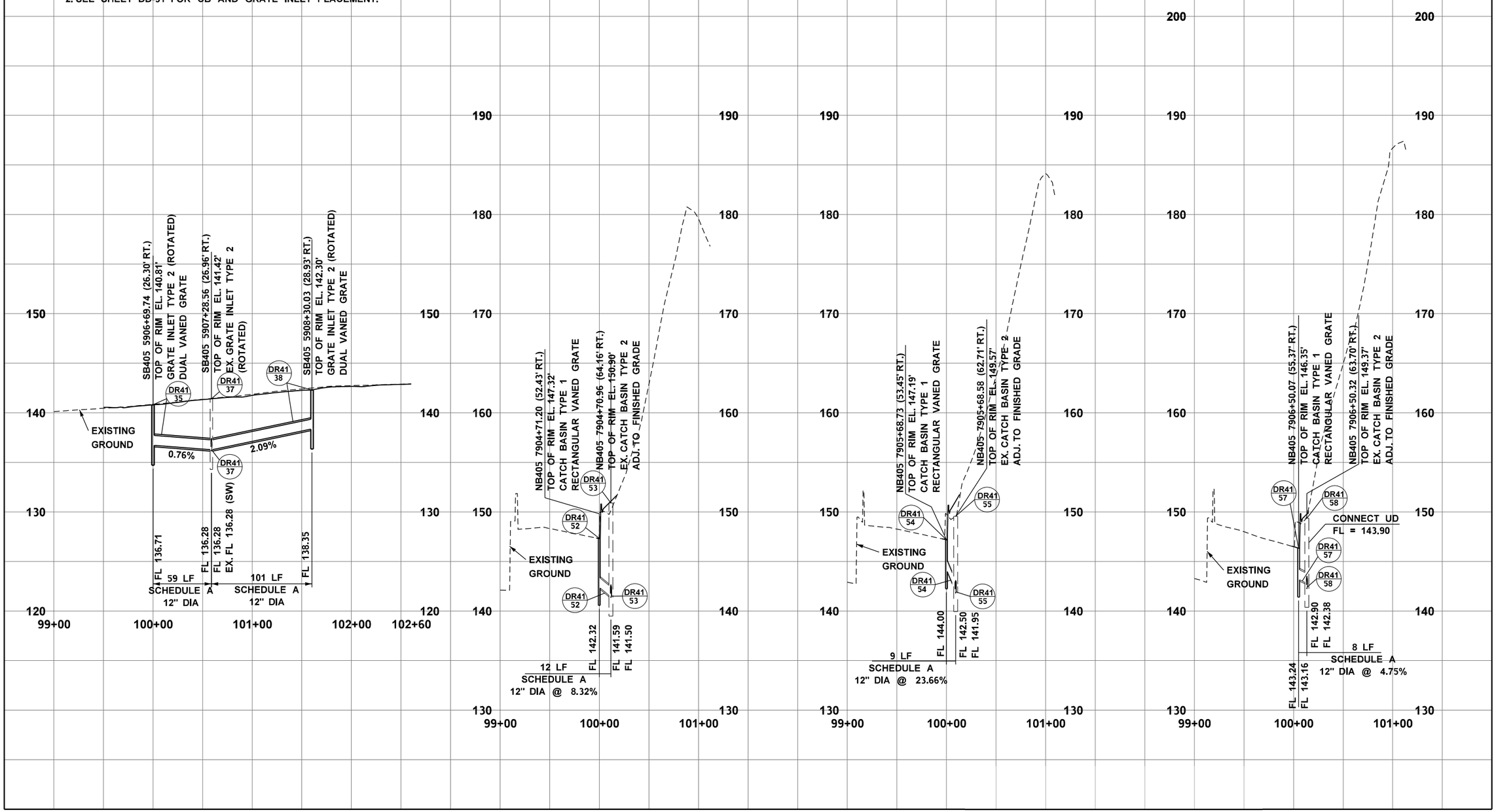
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5895+00 TO STA. 5910+00

PLAN REF NO DP-41B
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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ENTERED BY	M. EMESON			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.21 17:29:51 -08'00'
P.E. STAMP BOX DATE

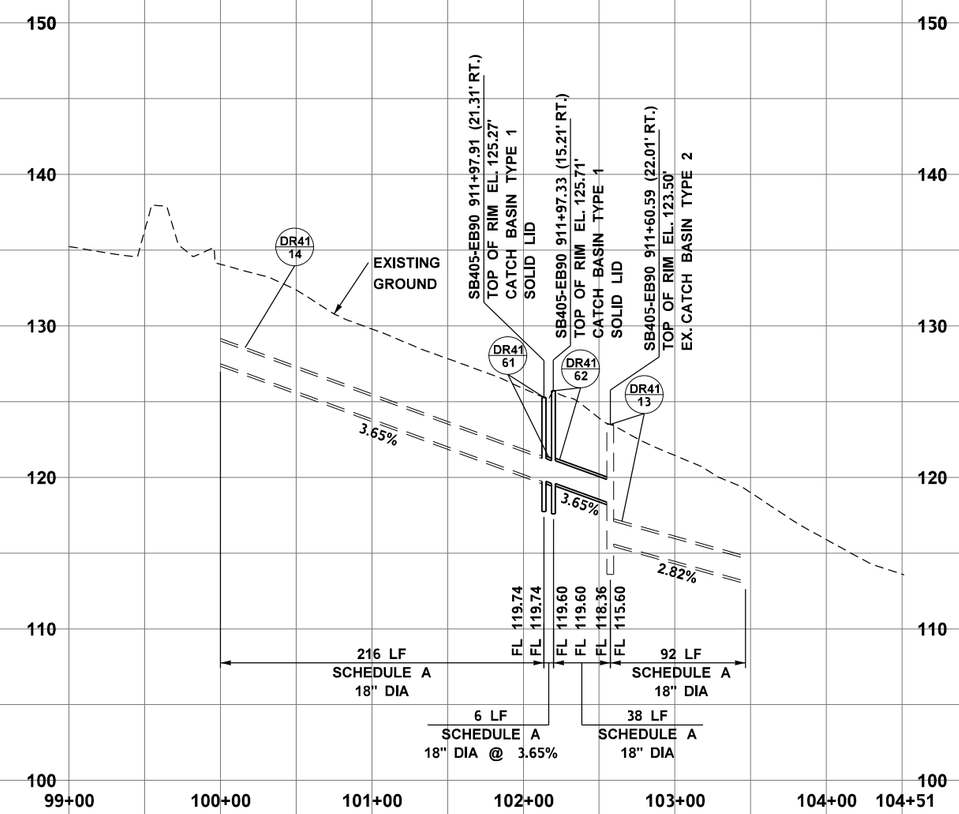
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5895+00 TO STA. 5910+00

PLAN REF NO DP-41C
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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DESIGNED BY	M. EMESON						
ENTERED BY	M. EMESON						
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN — STATE OF WASHINGTON — 27497 — REGISTERED PROFESSIONAL ENGINEER
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P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

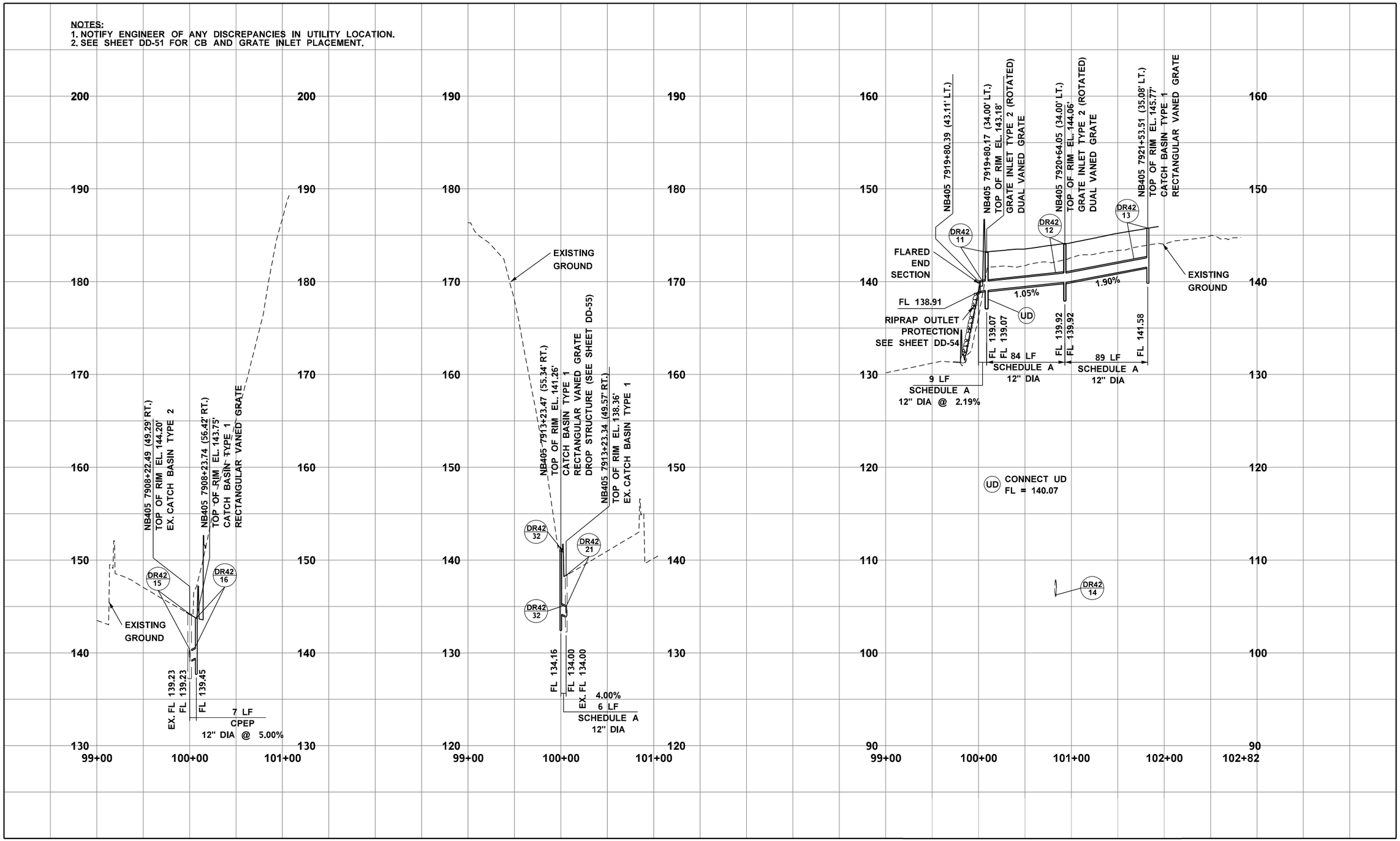
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5895+00 TO STA. 5910+00

PLAN REF NO DP-41D

SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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DESIGNED BY	M. EMESON						
ENTERED BY	R. BARKIE						
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27407 REGISTERED PROFESSIONAL ENGINEER
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P.E. STAMP BOX DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

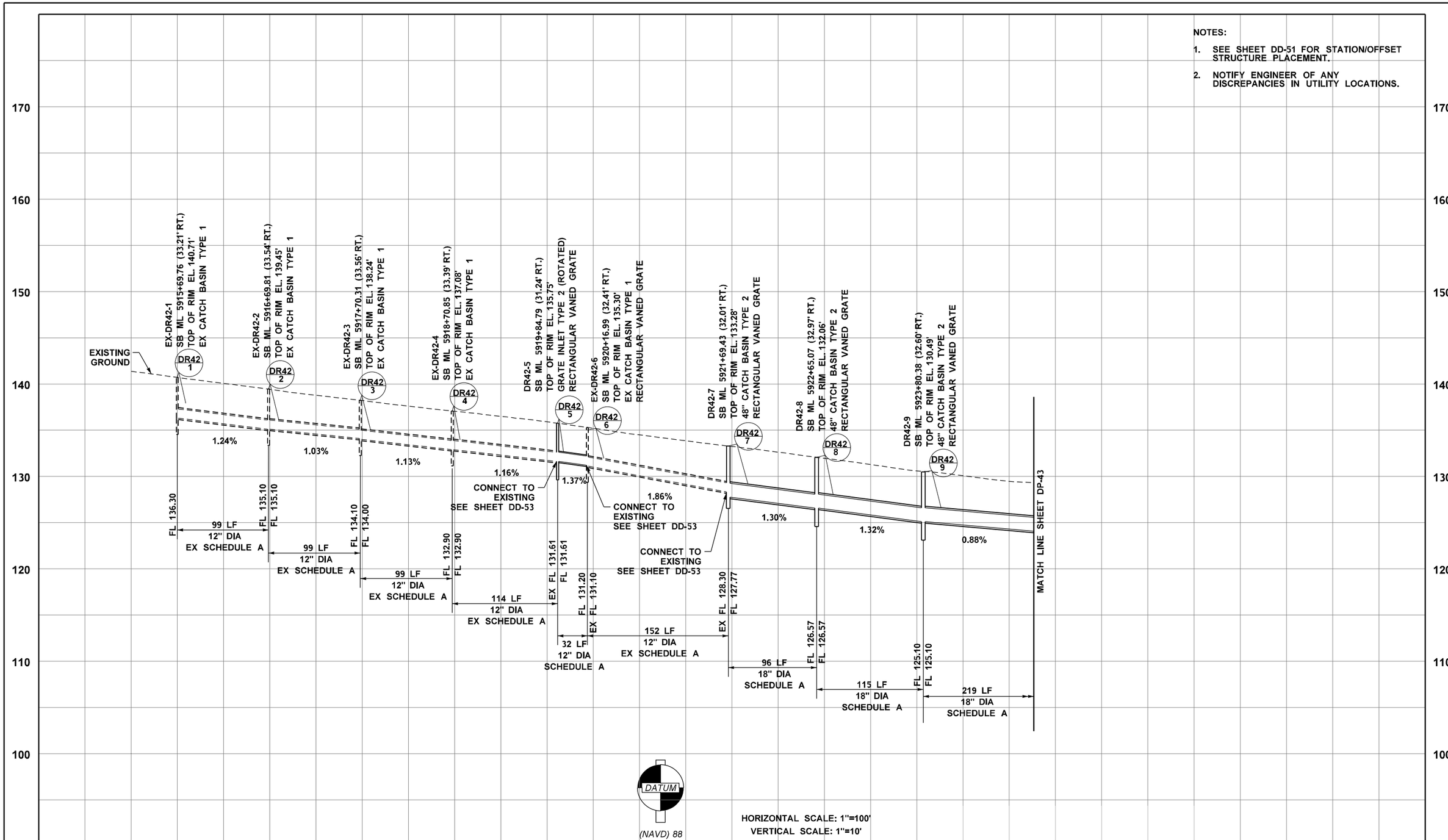
DRAINAGE PROFILES
STA. 5910+00 TO STA. 5925+00

PLAN REF NO DP-42

SHEET XX OF XX SHEETS

NOTES:

1. SEE SHEET DD-51 FOR STATION/OFFSET STRUCTURE PLACEMENT.
2. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATIONS.



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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RELEASED FOR CONSTRUCTION

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PLOTTED BY	Rsba			
DESIGNED BY	L. EAST			
ENTERED BY	D. HOUT			
CHECKED BY	T. MULI			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

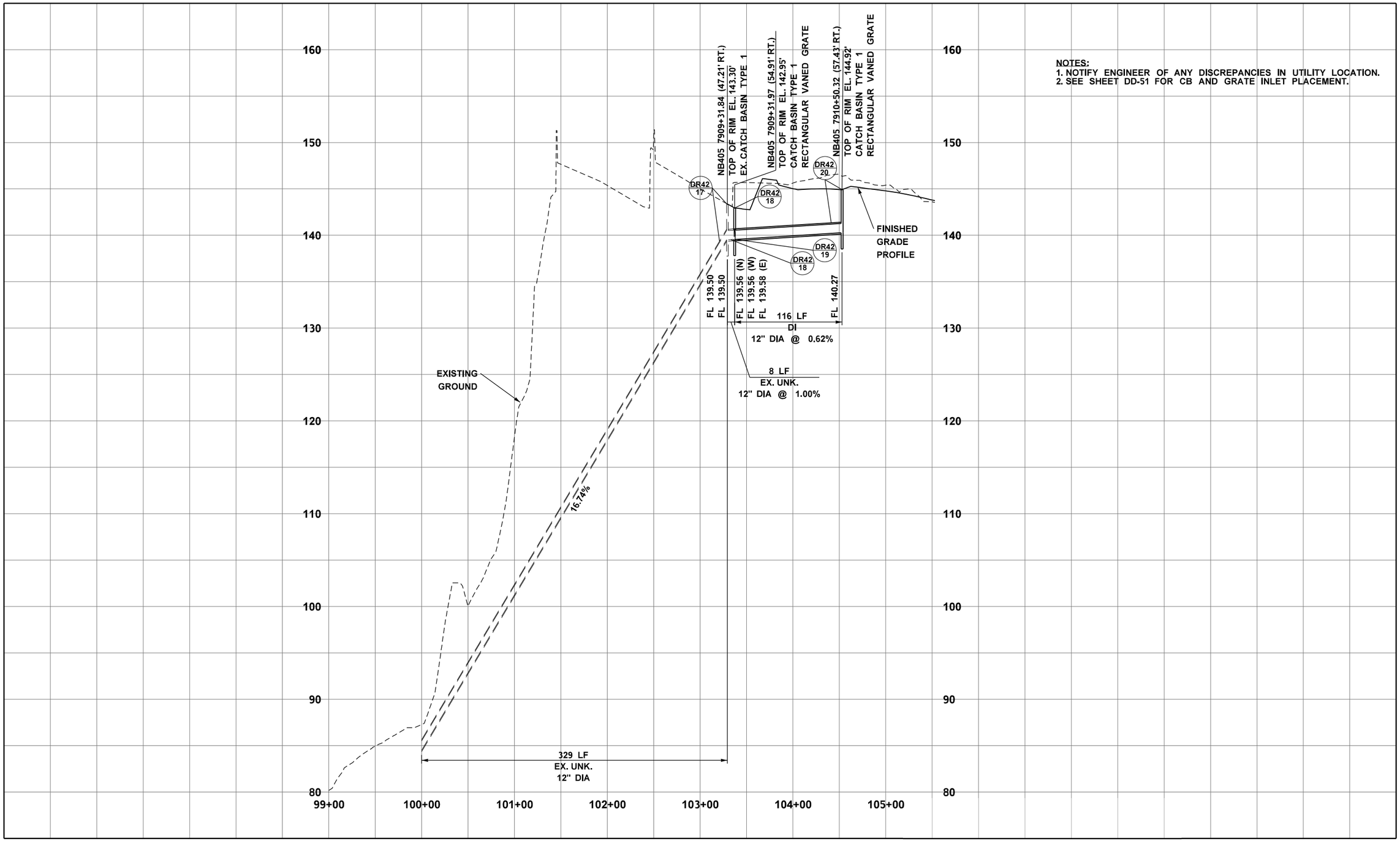
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5910+00 TO STA. 5925+00

PLAN REF NO DP-42A

SHEET XX OF XX SHEETS



NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQAM Initials
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ENTERED BY	M. EMESON			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.21 17:30:20 -08'00'
P.E. STAMP BOX DATE

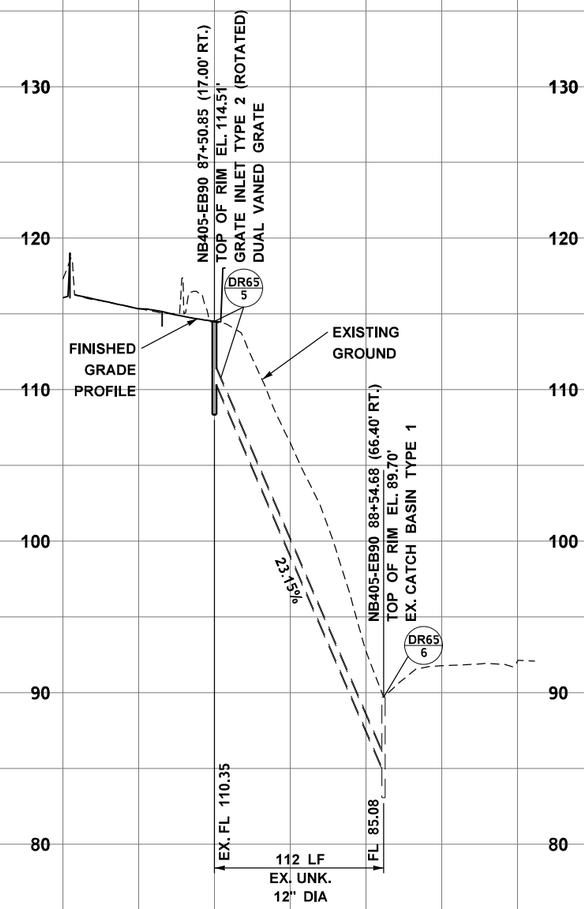
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE PROFILES
STA. 5910+00 TO STA. 5925+00

PLAN REF NO DP-42B
SHEET XX OF XX SHEETS

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES IN UTILITY LOCATION.
2. SEE SHEET DD-51 FOR CB AND GRATE INLET PLACEMENT.



Wood Environment & Infrastructure, Inc.
12/21/2021
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DESIGNED BY	M. EMESON				XL5467		
ENTERED BY	M. EMESON						
CHECKED BY	J. ST. JOHN				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS	C9242		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — DATE

P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

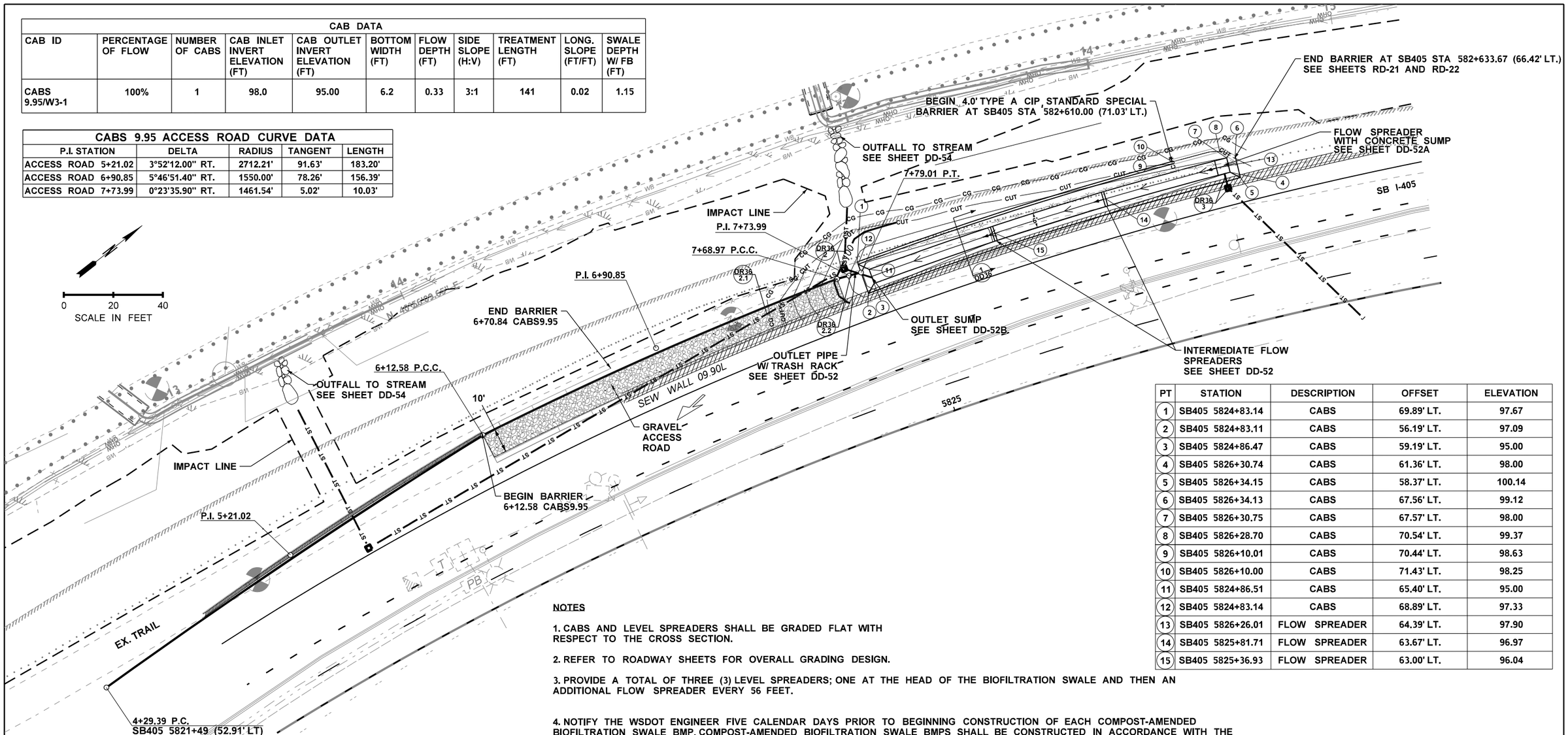
DRAINAGE PROFILES
I-405 TO I-90 RAMP

PLAN REF NO
DP-65

SHEET XX OF XX SHEETS

CAB DATA										
CAB ID	PERCENTAGE OF FLOW	NUMBER OF CABS	CAB INLET INVERT ELEVATION (FT)	CAB OUTLET INVERT ELEVATION (FT)	BOTTOM WIDTH (FT)	FLOW DEPTH (FT)	SIDE SLOPE (H:V)	TREATMENT LENGTH (FT)	LONG. SLOPE (FT/FT)	SWALE DEPTH W/ FB (FT)
CABS 9.95/W3-1	100%	1	98.0	95.00	6.2	0.33	3:1	141	0.02	1.15

CABS 9.95 ACCESS ROAD CURVE DATA				
P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH
ACCESS ROAD 5+21.02	3°52'12.00" RT.	2712.21'	91.63'	183.20'
ACCESS ROAD 6+90.85	5°46'51.40" RT.	1550.00'	78.26'	156.39'
ACCESS ROAD 7+73.99	0°23'35.90" RT.	1461.54'	5.02'	10.03'



PT	STATION	DESCRIPTION	OFFSET	ELEVATION
1	SB405 5824+83.14	CABS	69.89' LT.	97.67
2	SB405 5824+83.11	CABS	56.19' LT.	97.09
3	SB405 5824+86.47	CABS	59.19' LT.	95.00
4	SB405 5826+30.74	CABS	61.36' LT.	98.00
5	SB405 5826+34.15	CABS	58.37' LT.	100.14
6	SB405 5826+34.13	CABS	67.56' LT.	99.12
7	SB405 5826+30.75	CABS	67.57' LT.	98.00
8	SB405 5826+28.70	CABS	70.54' LT.	99.37
9	SB405 5826+10.01	CABS	70.44' LT.	98.63
10	SB405 5826+10.00	CABS	71.43' LT.	98.25
11	SB405 5824+86.51	CABS	65.40' LT.	95.00
12	SB405 5824+83.14	CABS	68.89' LT.	97.33
13	SB405 5826+26.01	FLOW SPREADER	64.39' LT.	97.90
14	SB405 5825+81.71	FLOW SPREADER	63.67' LT.	96.97
15	SB405 5825+36.93	FLOW SPREADER	63.00' LT.	96.04

NOTES

1. CABS AND LEVEL SPREADERS SHALL BE GRADED FLAT WITH RESPECT TO THE CROSS SECTION.

2. REFER TO ROADWAY SHEETS FOR OVERALL GRADING DESIGN.

3. PROVIDE A TOTAL OF THREE (3) LEVEL SPREADERS; ONE AT THE HEAD OF THE BIOFILTRATION SWALE AND THEN AN ADDITIONAL FLOW SPREADER EVERY 56 FEET.

4. NOTIFY THE WSDOT ENGINEER FIVE CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION OF EACH COMPOST-AMENDED BIOFILTRATION SWALE BMP. COMPOST-AMENDED BIOFILTRATION SWALE BMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RFC PLAN WITH PARTICULAR ATTENTION TO THE DECOMPACTION OF UNDERLYING SOILS, AS-BUILT FLAT BOTTOM WIDTH OF THE FINISHED SURFACE (TOP OF COMPOST), AND THICKNESS OF COMPOST. THE CONSTRUCTION INSPECTION SHALL INCLUDE THE DOCUMENTATION METHOD AND TIMING OF DECOMPACTION, AND MEASUREMENT OF THE BOTTOM WIDTH TAKEN AT 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION. THE DEPTH OF COMPOST AS-BUILT SHALL BE MEASURED AT THE MIDDLE POINT AND AT EACH EDGE OF THE FLAT BOTTOM AREA ON 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION TO VERIFY THAT A MINIMUM OF A 3-INCH THICKNESS HAS BEEN ACHIEVED. THE DESIGN-BUILDER SHALL ENSURE THAT THE BMP PERFORMANCE RETAINS THE DESIGN SHEET FLOW WIDTHS FOR THE DURATION OF THE WARRANTY PERIOD. REPAIR ALL TRACKING AND RUTTING ONCE COMPOST HAS BEEN PLACED. IF RUNOFF IS ALLOWED TO FLOW IN THE BMP PRIOR TO GRASS ESTABLISHMENT, THE DESIGN BUILDER SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES TO PREVENT EROSION OF THE COMPOST LAYER.

5. IN ADDITION TO THE CALCULATED LENGTH REQUIRED FOR TREATMENT, ADDITIONAL LENGTH IS PROVIDED FOR THE FOLLOWING REASONS: FIVE (5) EXTRA FEET OF LENGTH AT UPSTREAM END OF CABS FOR THE FLOW SPREADER WITH CONCRETE SUMP, TWO (2) EXTRA FEET AT DOWNSTREAM END OF CABS FOR OUTLET SUMP, AND AN ADDITIONAL FOOT FOR EACH INTERMEDIATE FLOW SPREADER.

6. SPOT ELEVATION FOR FLOW SPREADER IS PROVIDED AT THE BOTTOM OF THE FLOW SPREADER.

LEGEND

STORM SEWER LINE - NEW — ST — ST —
STORM SEWER LINE - EX. - ST — — ST — — ST -
DITCH - EXISTING
PROPOSED DITCH
RIGHT OF WAY
CATCH BASIN - NEW
CATCH BASIN - EXISTING
PROPOSED MANHOLE
EXISTING MANHOLE
LEVEL SPREADER
QUARRY SPALLS
OUTLET PROTECTION

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DQM Initials
RELEASED FOR CONSTRUCTION

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DATE	12/20/2021					FED.AID PROJ.NO.
PLOTTED BY	AMECPW03ICS01$				JOB NUMBER XL5467	
DESIGNED BY	N. WONG					
ENTERED BY	R. BARKIE					
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242	LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — DATE

P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

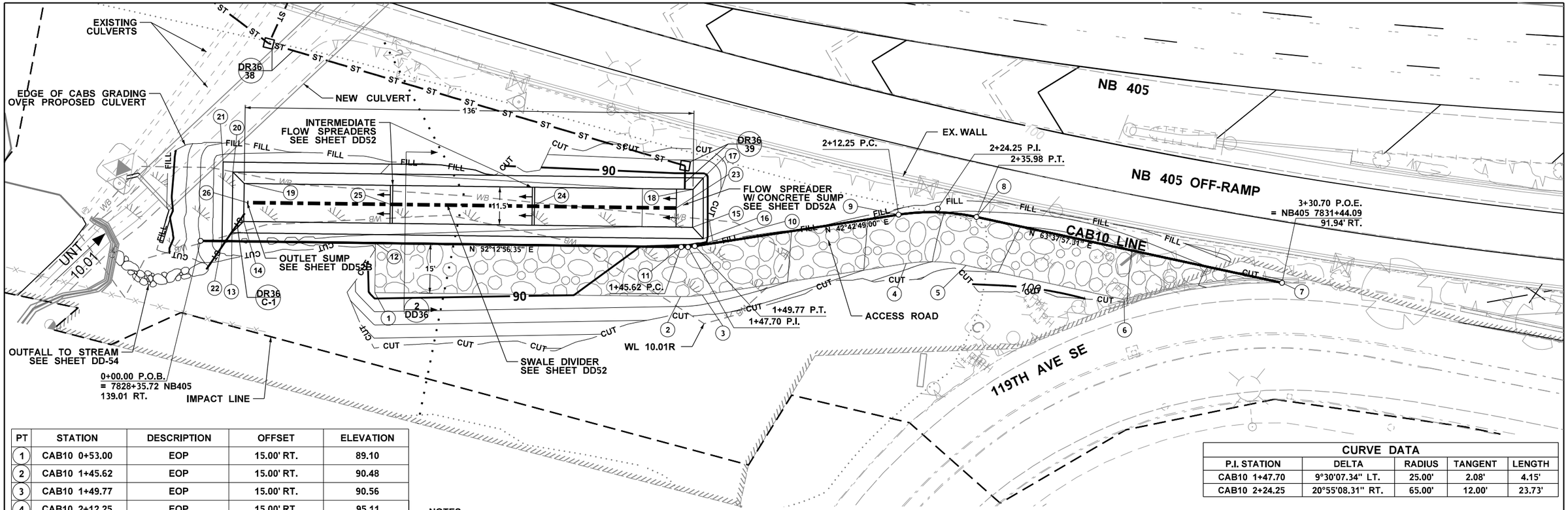
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE DETAILS
CABS 9.95/W3-1

PLAN REF NO DD-31

SHEET XX OF SHEETS



PT	STATION	DESCRIPTION	OFFSET	ELEVATION
1	CAB10 0+53.00	EOP	15.00' RT.	89.10
2	CAB10 1+45.62	EOP	15.00' RT.	90.48
3	CAB10 1+49.77	EOP	15.00' RT.	90.56
4	CAB10 2+12.25	EOP	15.00' RT.	95.11
5	CAB10 2+35.98	EOP	15.00' RT.	97.14
6	CAB10 2+85.00	EOP	15.00' RT.	98.18
7	CAB10 3+30.70	EOP	0.00'	94.02
8	CAB10 2+35.98	EOP	0.00'	96.84
9	CAB10 2+12.25	EOP	0.00'	94.81
10	CAB10 1+49.77	EOP	0.00'	90.26
11	CAB10 1+45.62	EOP	0.00'	90.18
12	CAB10 0+53.00	EOP	0.00'	88.80
13	CAB10 0+09.50	CAB	2.57' LT.	87.34
14	CAB10 0+13.00	CAB	6.02' LT.	86.19
15	CAB10 1+49.97	CAB	5.73' LT.	88.09
16	CAB10 1+52.62	CAB	1.81' LT.	89.39
17	CAB10 1+55.46	CAB	20.00' LT.	89.39
18	CAB10 1+51.87	CAB	17.07' LT.	88.09
19	CAB10 0+13.00	CAB	17.52' LT.	86.19
20	CAB10 0+09.50	CAB	20.97' LT.	87.34
21	CAB10 0+06.50	CAB	23.97' LT.	87.17
22	CAB10 0+06.50	CAB	0.00'	87.34
23	CAB10 1+44.00	FLOW SPREADER	11.77' LT.	88.15
24	CAB10 1+00.33	FLOW SPREADER	11.77' LT.	87.50
25	CAB10 0+57.33	FLOW SPREADER	11.77' LT.	86.85
26	CAB10 0+13.95	FLOW SPREADER	11.77' LT.	86.20

CURVE DATA				
P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH
CAB10 1+47.70	9°30'07.34" LT.	25.00'	2.08'	4.15'
CAB10 2+24.25	20°55'08.31" RT.	65.00'	12.00'	23.73'

NOTES

1. CABS AND LEVEL SPREADERS SHALL BE GRADED FLAT WITH RESPECT TO THE CROSS SECTION.
2. REFER TO ROADWAY SHEETS FOR OVERALL GRADING DESIGN.
3. IN ADDITION TO THE CALCULATED LENGTH REQUIRED FOR TREATMENT, ADDITIONAL LENGTH IS PROVIDED FOR THE FOLLOWING REASONS: FIVE (5) EXTRA FEET OF LENGTH AT UPSTREAM END OF CABS FOR THE FLOW SPREADER WITH CONCRETE SUMP, TWO (2) EXTRA FEET AT DOWNSTREAM END OF CABS FOR OUTLET SUMP, AND AN ADDITIONAL FOOT FOR EACH INTERMEDIATE FLOW SPREADER.
4. PROVIDE A 1' GAP IN DIVIDER AT D/S END TO ALLOW FLOW THROUGH TO OUTLET.
5. PROVIDE A TOTAL OF THREE (3) LEVEL SPREADERS; ONE AT THE HEAD OF THE BIOFILTRATION SWALE AND THEN AN ADDITIONAL FLOW SPREADER EVERY 43 FEET.
6. CABS HAS BEEN DIVIDED TO MEET DESIGN STANDARDS FOR MAXIMUM BOTTOM WIDTH. PLACE SWALE DIVIDER IN THE CENTERLINE OF SWALE.
7. NOTIFY THE WSDOT ENGINEER FIVE CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION OF EACH COMPOST-AMENDED BIOFILTRATION SWALE BMP. COMPOST-AMENDED BIOFILTRATION SWALE BMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RFC PLAN WITH PARTICULAR ATTENTION TO THE DECOMPACTION OF UNDERLYING SOILS, AS-BUILT FLAT BOTTOM WIDTH OF THE FINISHED SURFACE (TOP OF COMPOST), AND THICKNESS OF COMPOST. THE CONSTRUCTION INSPECTION SHALL INCLUDE THE DOCUMENTATION METHOD AND TIMING OF DECOMPACTION, AND MEASUREMENT OF THE BOTTOM WIDTH TAKEN AT 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION. THE DEPTH OF COMPOST AS-BUILT SHALL BE MEASURED AT THE MIDDLE POINT AND AT EACH EDGE OF THE FLAT BOTTOM AREA ON 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION TO VERIFY THAT A MINIMUM OF A 3-INCH THICKNESS HAS BEEN ACHIEVED. THE DESIGN-BUILDER SHALL ENSURE THAT THE BMP PERFORMANCE RETAINS THE DESIGN SHEET FLOW WIDTHS FOR THE DURATION OF THE WARRANTY PERIOD. REPAIR ALL TRACKING AND RUTTING ONCE COMPOST HAS BEEN PLACED. IF RUNOFF IS ALLOWED TO FLOW IN THE BMP PRIOR TO GRASS ESTABLISHMENT, THE DESIGN BUILDER SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES TO PREVENT EROSION OF THE COMPOST LAYER.
8. SPOT ELEVATION FOR FLOW SPREADER IS PROVIDED AT THE BOTTOM OF FLOW SPREADER.

CAB DATA										
CAB ID	PERCENTAGE OF FLOW	NUMBER OF CABS	CAB INLET INVERT ELEVATION (FT)	CAB OUTLET INVERT ELEVATION (FT)	BOTTOM WIDTH (FT)	FLOW DEPTH (FT)	SIDE SLOPE (H:V)	TREATMENT LENGTH (FT)	LONG. SLOPE (FT/FT)	SWALE DEPTH W/ FB (FT)
CABS 10.00/W3-2	100%	1	88.15	86.19	11.5	0.33	3:1	127	0.015	1.15

0 15 30
SCALE IN FEET

LEGEND

STORM SEWER LINE - NEW — ST — ST —
STORM SEWER LINE - EX. - ST — — ST — — ST -
DITCH - EXISTING
PROPOSED DITCH
RIGHT OF WAY
CATCH BASIN - NEW
CATCH BASIN - EXISTING
PROPOSED MANHOLE
EXISTING MANHOLE
CMU BLOCK WALL
SWALE DIVIDER
LEVEL SPREADER
QUARRY SPALLS
OUTLET PROTECTION

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DOAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7583\7407_353\XL5467_PS_DD_32.dgn					
TIME	6:17:46 PM				REGION NO. 10	STATE WASH
DATE	12/20/2021					FED.AID PROJ.NO.
PLOTTED BY	AMECPW03ICS01$				JOB NUMBER XL5467	
DESIGNED BY	N. WONG					
ENTERED BY	M. EMESON				CONTRACT NO. C9242	LOCATION NO.
CHECKED BY	J. ST. JOHN					
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

P.E. STAMP BOX — DATE

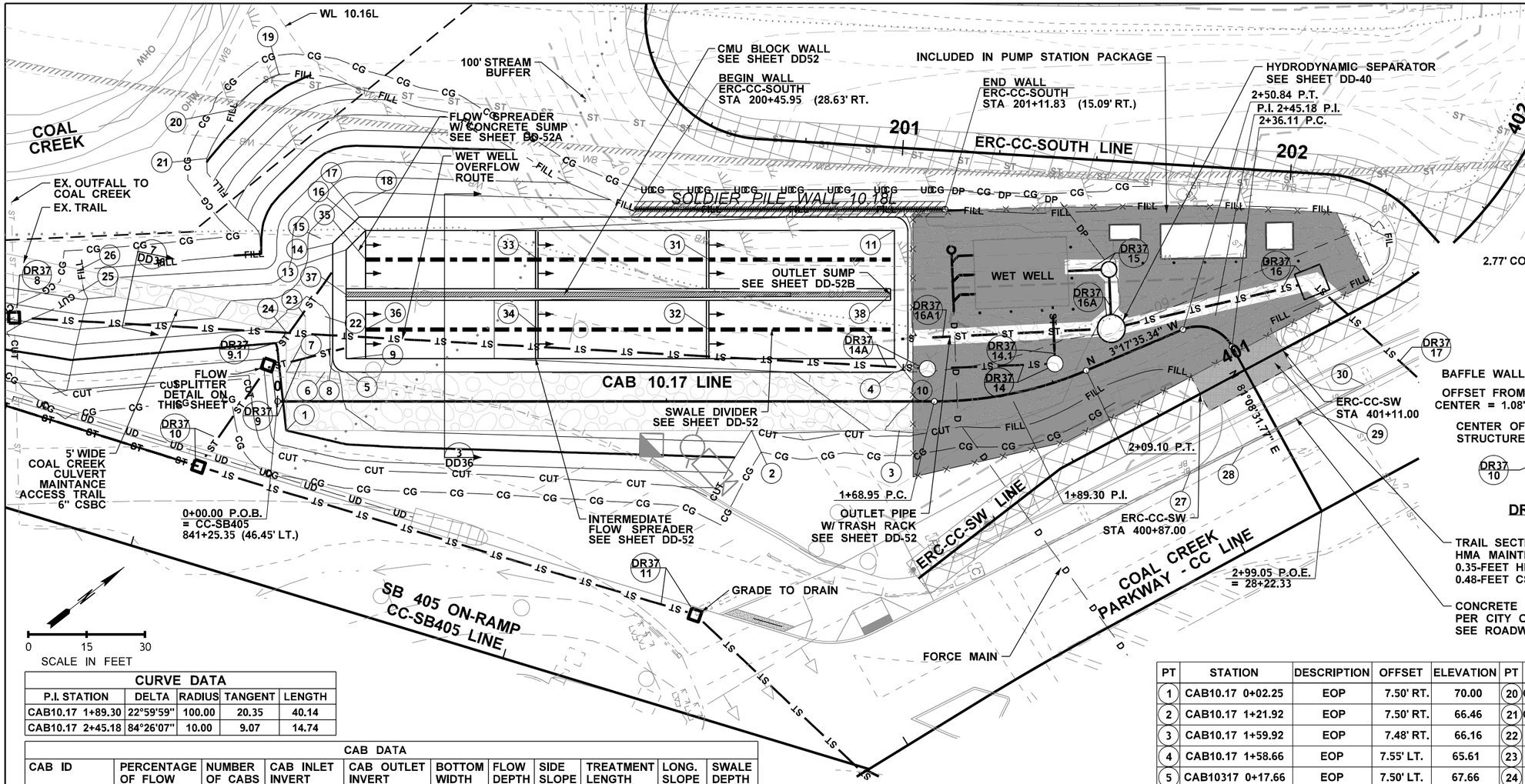
JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John 2021.12.20 08:42:08 PDT
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

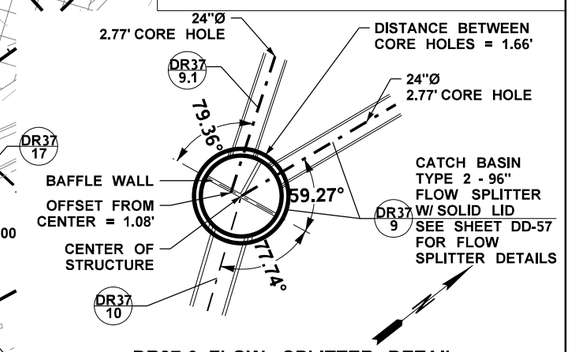
DRAINAGE DETAILS
CABS 10.00/W3-2

PLAN REF NO DD-32
SHEET XX OF SHEETS



LEGEND

- STORM SEWER LINE - NEW
- STORM SEWER LINE - EX.
- DITCH - EXISTING
- PROPOSED DITCH
- RIGHT OF WAY
- CATCH BASIN - NEW
- CATCH BASIN - EXISTING
- PROPOSED MANHOLE
- EXISTING MANHOLE
- CMU BLOCK WALL
- SWALE DIVIDER
- LEVEL SPREADER
- QUARRY SPALLS
- OUTLET PROTECTION
- AREA NOT INCLUDED



DR37-9 FLOW SPLITTER DETAIL
NTS

TRAIL SECTION MODIFIED TO PROVIDE HMA MAINTENANCE ACCESS ROAD 0.35-FEET HMA CLASS-INCH PG 58H-22 0.48-FEET CSBC

CONCRETE DRIVEWAY ENTRANCE PER CITY OF BELLEVUE STD. PLAN SW-180-1 SEE ROADWAY PLANS

CURVE DATA

P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH
CAB10.17 1+89.30	22°59'59"	100.00	20.35	40.14
CAB10.17 2+45.18	84°26'07"	10.00	9.07	14.74

CAB DATA

CAB ID	PERCENTAGE OF FLOW	NUMBER OF CABS	CAB INLET INVERT ELEVATION (FT)	CAB OUTLET INVERT ELEVATION (FT)	BOTTOM WIDTH (FT)	FLOW DEPTH (FT)	SIDE SLOPE (H:V)	TREATMENT LENGTH (FT)	LONG. SLOPE (FT/FT)	SWALE DEPTH W/ FB (FT)
CABS 10.17/ W3-2 SW	100%	2	66.50	64.50	15 (2 EA)	0.33	3:1	132	0.015	1.15

NOTES
1. SEE PS-9 FOR PUMP STATION SITE PLAN INCLUDED IN PUMP STATION PACKAGE
2. CABS AND LEVEL SPREADERS SHALL BE GRADED FLAT WITH RESPECT TO THE CROSS SECTION.
3. REFER TO ROADWAY SHEETS FOR OVERALL GRADING DESIGN.
4. PROVIDE A TOTAL OF THREE (3) LEVEL SPREADERS; ONE AT THE HEAD OF THE BIOFILTRATION SWALE AND THEN AN ADDITIONAL FLOW SPREADER EVERY 43 FEET.
5. 30' CABS BOTTOM WIDTH HAS BEEN DIVIDED TO MEET DESIGN STANDARDS FOR MAX BOTTOM WIDTH: TWO (2) FIFTEEN (15) FOOT CABS SEPARATED BY BLOCK WALL, EACH WITH A SWALE DIVIDER SPACED IN THE CENTERLINE OF THE SWALE AT 7.5'.
6. PROVIDE A 1' GAP IN WALL AND DIVIDERS AT D/S END TO ALLOW FLOW THROUGH TO OUTLET.
7. NOTIFY THE WSDOT ENGINEER FIVE CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION OF EACH COMPOST-AMENDED BIOFILTRATION SWALE BMP. COMPOST-AMENDED BIOFILTRATION SWALE BMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RFC PLAN WITH PARTICULAR ATTENTION TO THE DECOMPACTION OF UNDERLYING SOILS, AS-BUILT FLAT BOTTOM WIDTH OF THE FINISHED SURFACE (TOP OF COMPOST), AND THICKNESS OF COMPOST. THE CONSTRUCTION INSPECTION SHALL INCLUDE THE DOCUMENTATION METHOD AND TIMING OF DECOMPACTION, AND MEASUREMENT OF THE BOTTOM WIDTH TAKEN AT 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION. THE DEPTH OF COMPOST AS-BUILT SHALL BE MEASURED AT THE MIDDLE POINT AND AT EACH EDGE OF THE FLAT BOTTOM AREA ON 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION TO VERIFY THAT A MINIMUM OF A 3-INCH THICKNESS HAS BEEN ACHIEVED. THE DESIGN-BUILDER SHALL ENSURE THAT THE BMP PERFORMANCE RETAINS THE DESIGN SHEET FLOW WIDTHS FOR THE DURATION OF THE WARRANTY PERIOD. REPAIR ALL TRACKING AND RUTTING ONCE COMPOST HAS BEEN PLACED. IF RUNOFF IS ALLOWED TO FLOW IN THE BMP PRIOR TO GRASS ESTABLISHMENT, THE DESIGN BUILDER SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES TO PREVENT EROSION OF THE COMPOST LAYER.
8. SPOT ELEVATION FOR FLOW SREADER AND CMU BLOCK WALL IS PROVIDED AT THE BOTTOM OF FLOW SPREADER AND CMU BLOCK WALL.

PT	STATION	DESCRIPTION	OFFSET	ELEVATION	PT	STATION	DESCRIPTION	OFFSET	ELEVATION
1	CAB10.17 0+02.25	EOP	7.50' RT.	70.00	20	CC-SB405 840+92.47	GRADING	114.92' LT.	47.88
2	CAB10.17 1+21.92	EOP	7.50' RT.	66.46	21	CC-SB405 840+89.76	GRADING	100.97' LT.	49.71
3	CAB10.17 1+59.92	EOP	7.48' RT.	66.16	22	CAB10.17 0+12.21	CABS	21.86' LT.	68.65
4	CAB10.17 1+58.66	EOP	7.55' LT.	65.61	23	CAB10.17 0+07.15	ACCESS	21.86' LT.	68.65
5	CAB10317 0+17.66	EOP	7.50' LT.	67.66	24	CAB10.17 0+02.21	ACCESS	17.78' LT.	68.65
6	CAB10.17 0+12.21	EOP	7.57' LT.	68.65	25	CC-SB405 840+69.30	ACCESS	59.39' LT.	60.78
7	CAB10.17 0+02.22	EOP	7.50' LT.	69.20	26	CC-SB405 840+66.91	ACCESS	64.19' LT.	60.64
8	CAB10.17 0+14.16	CABS	11.00' LT.	67.66	27	CAB10.17 2+73.93	EOP	24.91' RT.	70.35
9	CAB10.17 0.17+66	CABS	11.00' LT.	66.50	28	CAB10.17 2+74.91	EOP	9.94' RT.	69.33
10	CAB10.17 1+58.66	CABS	11.00' LT.	64.46	29	CAB10.17 2+75.55	EOP	10.02' LT.	68.58
11	CAB10.17 1+58.66	CABS	44.00' LT.	64.46	30	CAB10.17 2+75.53	EOP	25.06' LT.	68.35
12	CAB10.17 1+58.66	CABS	47.45' LT.	65.61	31	CAB10.17 1+10.99	FLOW SPREADER	36.50' LT.	65.17
13	CAB10.17 0+17.66	CABS	39.00' LT	66.50	32	CAB10.17 1+10.99	FLOW SPREADER	18.50' LT.	65.17
14	CAB10.17 0+14.21	CABS	40.72' LT.	67.65	33	CAB10.17 0+67.00	FLOW SPREADER	35.50' LT.	65.83
15	CAB10.17 0+11.16	CABS	41.92' LT.	67.66	34	CAB10.17 0+67.00	FLOW SPREADER	18.50' LT.	65.83
16	CAB10.17 0+22.66	CABS	44.00' RT.	66.50	35	CAB10.17 0+22.66	FLOW SPREADER	36.50' LT.	66.50
17	CAB10.17 0+20.96	CABS	47.45' LT.	67.65	36	CAB10.17 0+22.66	FLOW SPREADER	18.50' LT.	66.50
18	CAB10.17 0+19.72	CABS	50.45' LT.	67.66	37	CAB10.17 0+17.66	CMU BLOCK WALL	27.47' LT.	66.50
19	CAB10.17 0+00.40	GRADING	84.09' LT.	48.26	38	CAB10.17 1+57.66	CMU BLOCK WALL	27.49' LT.	64.47

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DOAM Initials
RELEASED FOR CONSTRUCTION

FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7583\7407_330\XL5467_PS_DD_33.dgn				
TIME	6:18:08 PM				
DATE	12/20/2021				
PLOTTED BY	AMECPW03ICS01$				
DESIGNED BY	N. WONG				
ENTERED BY	M. EMESON				
CHECKED BY	J. ST. JOHN				
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS	
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY	

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO.
JOB NUMBER XL5467
CONTRACT NO. C9242 | LOCATION NO.

P.E. STAMP BOX — DATE

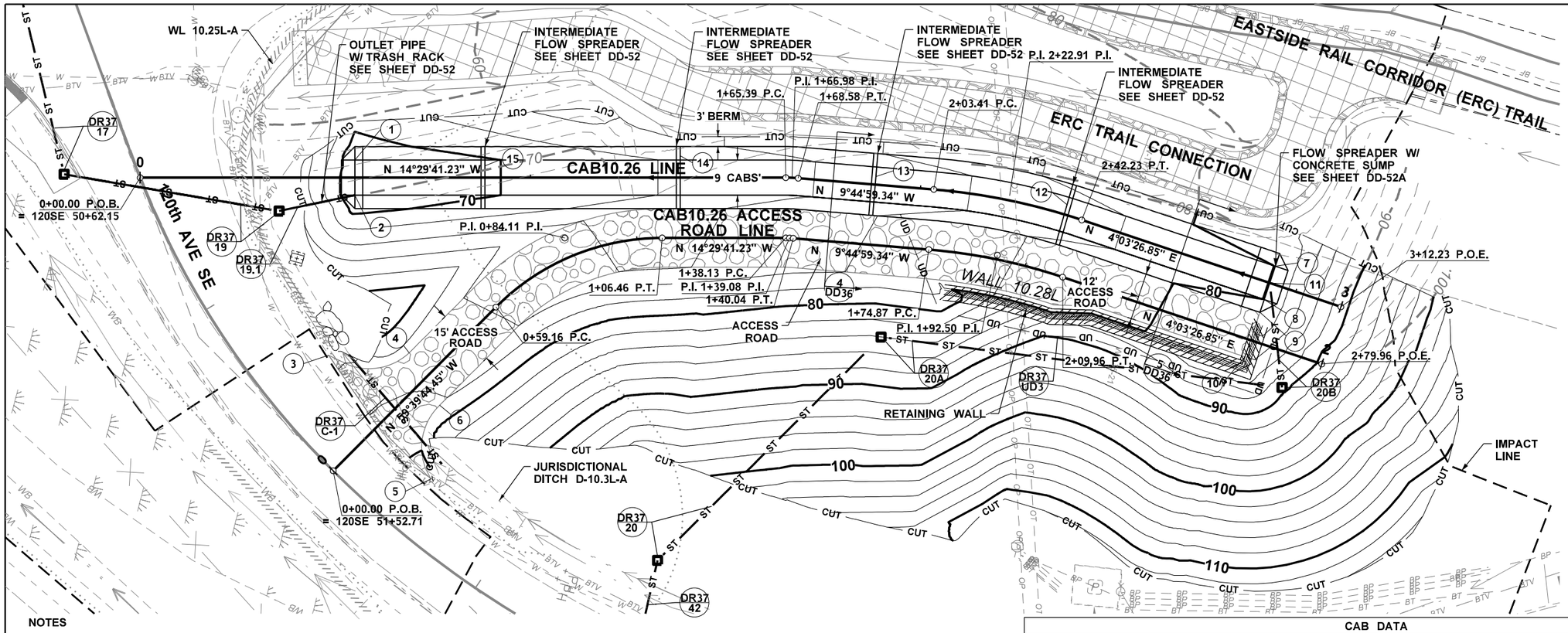
JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
James M. St. John, 2021.12.20 10:30:52 -08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON | LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE DETAILS
CABS 10.17/W3-2 SW

PLAN REF NO DD-33
SHEET XX OF SHEETS



NOTES

1. CABS AND LEVEL SPREADERS SHALL BE GRADED FLAT WITH RESPECT TO THE CROSS SECTION.

2. REFER TO ROADWAY SHEETS FOR OVERALL GRADING DESIGN.

3. PROVIDE A TOTAL OF SIX (6) LEVEL SPREADERS; ONE AT THE HEAD OF THE BIOFILTRATION SWALE AND THEN AN ADDITIONAL FLOW SPREADER EVERY 50 FEET.

4. NOTIFY THE WSDOT ENGINEER FIVE CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION OF EACH COMPOST-AMENDED BIOFILTRATION SWALE BMP. COMPOST-AMENDED BIOFILTRATION SWALE BMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RFC PLAN WITH PARTICULAR ATTENTION TO THE DECOMPACTION OF UNDERLYING SOILS, AS-BUILT FLAT BOTTOM WIDTH OF THE FINISHED SURFACE (TOP OF COMPOST), AND THICKNESS OF COMPOST. THE CONSTRUCTION INSPECTION SHALL INCLUDE THE DOCUMENTATION METHOD AND TIMING OF DECOMPACTION, AND MEASUREMENT OF THE BOTTOM WIDTH TAKEN AT 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION. THE DEPTH OF COMPOST AS-BUILT SHALL BE MEASURED AT THE MIDDLE POINT AND AT EACH EDGE OF THE FLAT BOTTOM AREA ON 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION TO VERIFY THAT A MINIMUM OF A 3-INCH THICKNESS HAS BEEN ACHIEVED. THE DESIGN-BUILDER SHALL ENSURE THAT THE BMP PERFORMANCE RETAINS THE DESIGN SHEET FLOW WIDTHS FOR THE DURATION OF THE WARRANTY PERIOD. REPAIR ALL TRACKING AND RUTTING ONCE COMPOST HAS BEEN PLACED. IF RUNOFF IS ALLOWED TO FLOW IN THE BMP PRIOR TO GRASS ESTABLISHMENT, THE DESIGN BUILDER SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES TO PREVENT EROSION OF THE COMPOST LAYER.

5. IN ADDITION TO THE CALCULATED LENGTH REQUIRED FOR TREATMENT, ADDITIONAL LENGTH IS PROVIDED FOR THE FOLLOWING REASONS: FIVE (5) EXTRA FEET OF LENGTH AT UPSTREAM END OF CABS FOR THE FLOW SPREADER WITH CONCRETE SUMP, TWO (2) EXTRA FEET AT DOWNSTREAM END OF CABS FOR OUTLET SUMP, AND AN ADDITIONAL FOOT FOR EACH INTERMEDIATE FLOW SPREADER.

6. SPOT ELEVATION FOR FLOW SPREADER IS PROVIDED A THE BOTTOM OF FLOW SPREADER.

CABS10.26 CURVE DATA

P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH
CAB10.26 1+66.98	4°44'41.89" RT.	38.49'	13.03'	3.19'
CAB10.26 2+22.91	13°48'26.19" RT.	161.09'	45.08'	38.82'

CABS 10.26 ACCESS ROAD CURVE DATA

P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH
ACCESS ROAD 0+84.11	45°10'03.22" RT.	60.00'	24.96'	47.30'
ACCESS ROAD 1+39.08	4°44'41.89" RT.	23.04'	0.96'	1.91'
ACCESS ROAD 1+92.50	13°48'26.19" RT.	145.64'	17.63'	35.10'

CAB DATA

CAB ID	PERCENTAGE OF FLOW	NUMBER OF CABS	CAB INLET INVERT ELEVATION (FT)	CAB OUTLET INVERT ELEVATION (FT)	BOTTOM WIDTH (FT)	FLOW DEPTH (FT)	SIDE SLOPE (H:V)	LENGTH (FT)	LONG. SLOPE (FT/FT)	SWALE DEPTH W/ FB (FT)
CABS 10.26/ W3-2 NW	100%	1	80.02	68.13	9.0	0.33	3:1	229	0.05	1.15

PT	STATION	DESCRIPTION	OFFSET	ELEVATION
1	CAB10.26 0+55.00	CABS	4.50' LT.	68.13
2	CAB10.26 0+55.00	CABS	4.50' RT.	68.13
3	ACCESS ROAD 0+20.14	ENTRANCE	21.70' LT.	75.39
4	ACCESS ROAD 0+35.14	EOP	7.50' LT.	77.13
5	ACCESS ROAD 0+16.14	ENTRANCE	19.19' RT.	81.01
6	ACCESS ROAD 0+31.14	EOP	7.50' RT.	78.33
7	CAB10.26 2+93.00	CABS	4.50' LT.	80.02
8	CAB10.26 2+93.00	CABS	4.50' RT.	80.02
9	ACCESS ROAD 2+60.74	EOP	7.50' LT.	81.16
10	ACCESS ROAD 2+60.74	EOP	4.50' RT.	81.28
11	CAB10.26 2+93.00	FLOW SPREADER	0.00' RT.	80.01
12	CAB10.26 2+37.98	FLOW SPREADER	0.00' RT.	77.26
13	CAB10.26 1+87.87	FLOW SPREADER	0.00' RT.	74.76
14	CAB10.26 1+37.83	FLOW SPREADER	0.00' RT.	72.26
15	CAB10.26 0+87.83	FLOW SPREADER	0.00' RT.	69.77

LEGEND

STORM SEWER LINE - NEW — ST — ST —
STORM SEWER LINE - EX. - ST — — ST — — ST -
DITCH - EXISTING
PROPOSED DITCH
RIGHT OF WAY
CATCH BASIN - NEW
CATCH BASIN - EXISTING
PROPOSED MANHOLE
EXISTING MANHOLE
CMU BLOCK WALL
SWALE DIVIDER
LEVEL SPREADER
QUARRY SPALLS
OUTLET PROTECTION

Wood Environment & Infrastructure, Inc.
12/21/2021
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FILE NAME	\\AMECPW03ICS01\iCS_pdf_work_dir\7583\7407_362\XL5467_PS_DD_34.dgn						
TIME	6:18:04 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.
DATE	12/20/2021						
PLOTTED BY	AMECPW03ICS01$				JOB NUMBER XL5467		
DESIGNED BY	N. WONG						
ENTERED BY	M. EMESON						
CHECKED BY	J. ST. JOHN				CONTRACT NO. C9242		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

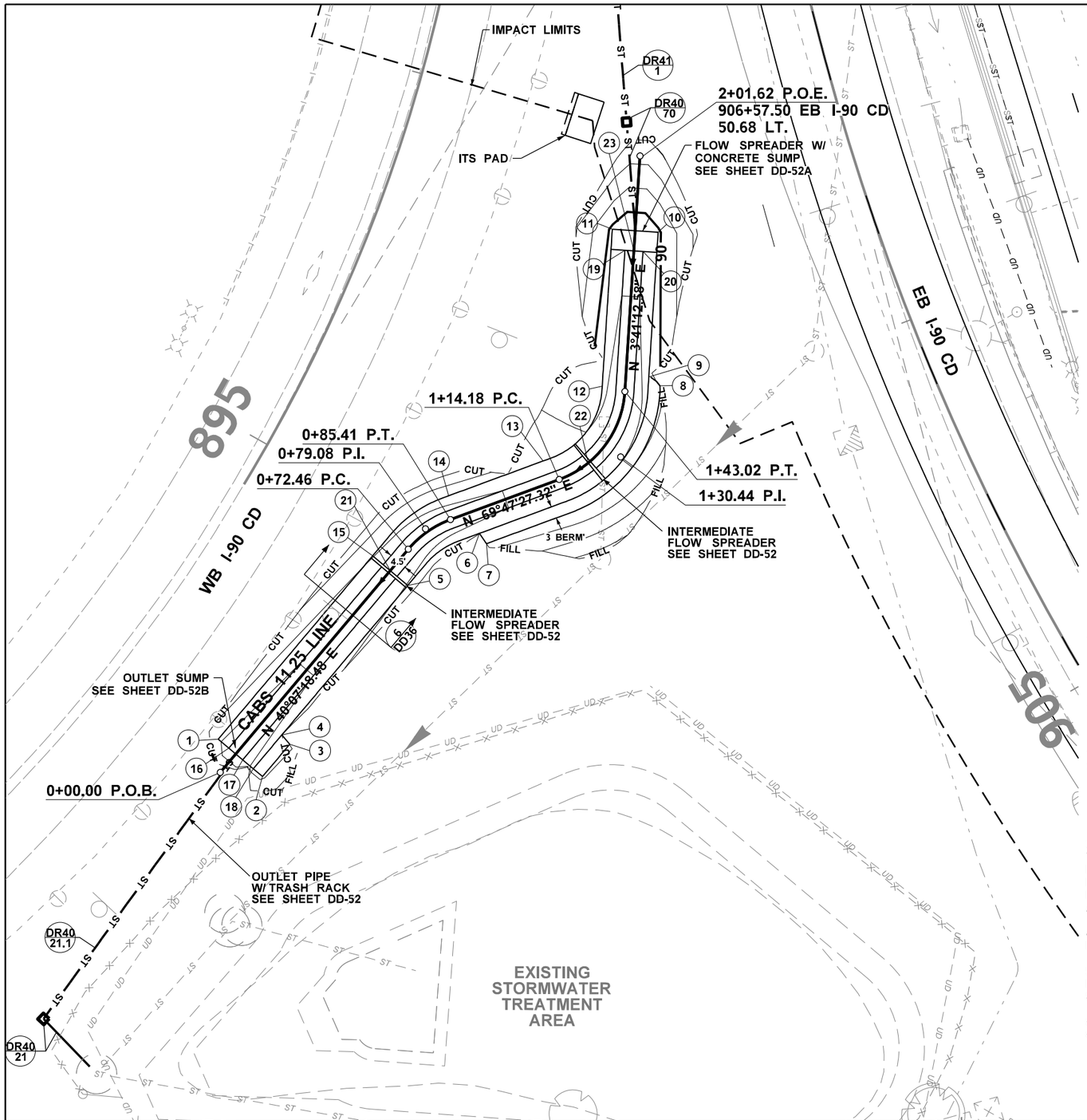
JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
2021.12.21 11:31:02-08'00'
P.E. STAMP BOX — DATE

Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE DETAILS
CABS 10.26/W3-2 NW

PLAN REF NO DD-34
SHEET XX OF SHEETS



PT	STATION	DESCRIPTION	OFFSET	ELEVATION
1	CAB11.25 0+06.00	CABS	5.70' LT.	84.33
2	CAB11.25 0+06.00	CABS	8.70' RT.	84.33
3	CAB11.25 0+16.49	CABS	8.70' RT.	83.92
4	CAB11.25 0+17.00	CABS	5.70' RT.	84.66
5	CAB11.25 0+65.50	CABS	5.70' RT.	86.12
6	CAB11.25 0+91.00	CABS	5.77' RT.	86.88
7	CAB11.25 0+91.72	CABS	8.70' RT.	86.50
8	CAB11.25 1+45.00	CABS	8.61' RT.	88.50
9	CAB11.25 1+47.00	CABS	5.70' RT.	88.56
10	CAB11.25 1+83.00	CABS	5.70' RT.	89.64
11	CAB11.25 1+83.00	CABS	5.70' LT.	89.64
12	CAB11.25 1+44.00	CABS	5.70' LT.	88.47

PT	STATION	DESCRIPTION	OFFSET	ELEVATION
13	CAB11.25 1+12.00	CABS	5.70' LT.	87.51
14	CAB11.25 0+87.00	CABS	5.70' LT.	86.76
15	CAB11.25 0+65.50	CABS	5.70' LT.	86.13
16	CAB11.25 0+06.00	CABS	2.25' LT.	83.18
17	CAB11.25 0+06.00	CABS	2.25' RT.	83.18
18	CAB11.25 0+06.00	CABS	5.70' RT.	84.33
19	CAB11.25 1+78.00	CABS	2.25' LT.	88.34
20	CAB11.25 1+78.00	CABS	2.25' RT.	88.34
21	CAB11.25 0+65.50	FLOW SPREADER	0.00' RT.	84.97
22	CAB11.25 1+22.49	FLOW SPREADER	0.00' RT.	86.67
23	CAB11.25 1+78.00	FLOW SPREADER	0.00' RT.	88.34

CAB DATA

CAB ID	PERCENTAGE OF FLOW	NUMBER OF CABS	CAB INLET INVERT ELEVATION (FT)	CAB OUTLET INVERT ELEVATION (FT)	BOTTOM WIDTH (FT)	FLOW DEPTH (FT)	SIDE SLOPE (H:V)	TREATMENT LENGTH (FT)	LONG. SLOPE (FT/FT)	SWALE DEPTH W/ FB (FT)
CABS 11.25/W4	100%	1	88.49	83.24	4.5	0.33	3:1	167.5	0.03	1.15

NOTES

1. REFER TO ROADWAY SHEETS FOR OVERALL GRADING DESIGN.

2. NOTIFY THE WSDOT ENGINEER FIVE CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION OF EACH COMPOST-AMENDED BIOFILTRATION SWALE BMP. COMPOST-AMENDED IOFILTRATION SWALE BMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RFC PLAN WITH PARTICULAR ATTENTION TO THE DECOMPACTION OF UNDERLYING SOILS, AS-BUILT FLAT BOTTOM WIDTH OF THE FINISHED SURFACE (TOP OF COMPOST), AND THICKNESS OF COMPOST. THE CONSTRUCTION INSPECTION SHALL INCLUDE THE OCUMENTATION METHOD AND TIMING OF DECOMPACTION, AND MEASUREMENT OF THE BOTTOM WIDTH TAKEN AT 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION. THE DEPTH OF COMPOST AS-BUILT SHALL BE MEASURED AT THE MIDDLE POINT AND AT EACH EDGE OF THE FLAT BOTTOM AREA ON 50-FOOT INTERVALS ALONG THE LENGTH OF THE INSTALLATION TO VERIFY THAT A MINIMUM OF A 3-INCH THICKNESS HAS BEEN ACHIEVED. THE DESIGN-BUILDER SHALL ENSURE THAT THE BMP PERFORMANCE RETAINS THE DESIGN SHEET FLOW WIDTHS FOR THE DURATION OF THE WARRANTY PERIOD. REPAIR ALL TRACKING AND RUTTING ONCE COMPOST HAS BEEN PLACED. IF RUNOFF IS ALLOWED TO FLOW IN THE BMP PRIOR TO GRASS ESTABLISHMENT, THE DESIGN BUILDER SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES TO PREVENT EROSION OF THE COMPOST LAYER.

3. IN ADDITION TO THE CALCULATED LENGTH REQUIRED FOR TREATMENT, ADDITIONAL LENGTH IS PROVIDED FOR THE FOLLOWING REASONS: FIVE (5)EXTRA FEET OF LENGTH AT UPSTREAM END OF CABS FOR THE FLOW SPREADER WITH CONCRETE SUMP, TWO (2) EXTRA FEET AT DOWNSTREAM END OF CABS FOR OUTLET SUMP, AND AN ADDITIONAL FOOT FOR EACH INTERMEDIATE FLOW SPREADER.

4. CABS AND LEVEL SPREADERS SHALL BE GRADED FLAT WITH RESPECT TO THE CROSS SECTION.

5. PROVIDE A TOTAL OF THREE (3) LEVEL SPREADERS; ONE AT THE HEAD OF THE BIOFILTRATION SWALE AND THEN AN ADDITIONAL FLOW SPREADER EVERY 56.5 FEET.

6. SPOT ELEVATION FOR FLOW SREADER IS PROVIDED AT THE BOTTOM OF FLOW SPREADER.

CURVE DATA

P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH
CAB11.25 0+79.08	29°40'08.84" RT.	25.00'	6.62'	12.95'
CAB11.25 1+30.44	66°06'14.74" LT.	25.00'	16.27'	28.84'

LEGEND

STORM SEWER LINE - NEW
STORM SEWER LINE - EX.
DITCH - EXISTING
PROPOSED DITCH
RIGHT OF WAY
CATCH BASIN - NEW
CATCH BASIN - EXISTING
PROPOSED MANHOLE
EXISTING MANHOLE
CMU BLOCK WALL
SWALE DIVIDER
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FED.AID PROJ.NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
James M. St. John 12/21/2021 9:31:10-08'00'
P.E. STAMP BOX DATE

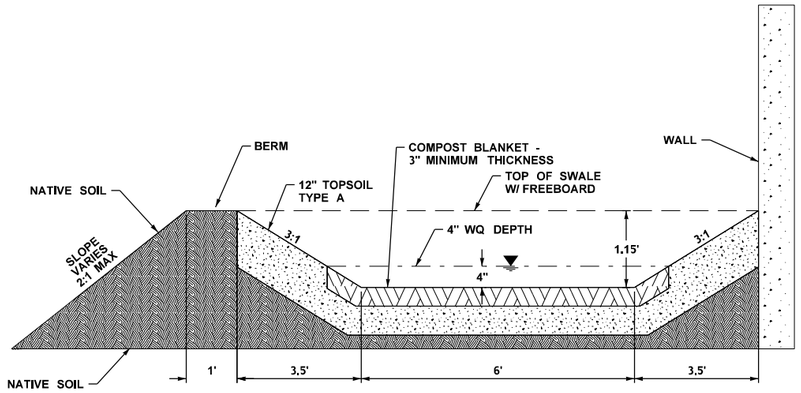
Washington State Department of Transportation
FLATIRON LANE
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE DETAILS
CABS 11.25/W4

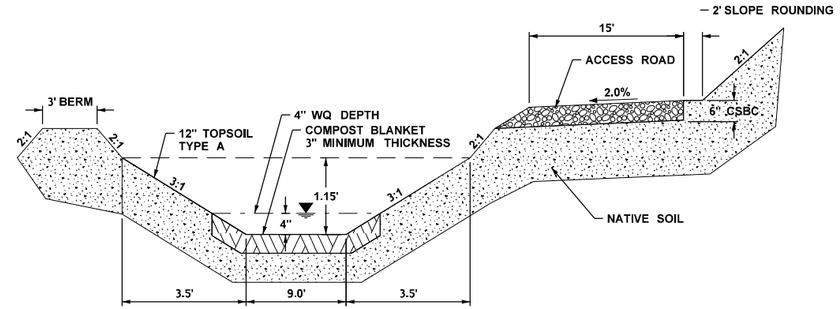
PLAN REF NO DD-35

SHEET XX OF SHEETS



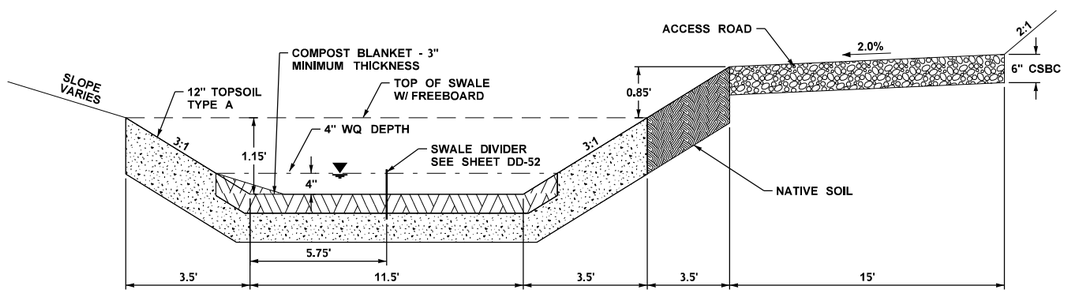
1 **CABS 9.95/W3-1 TYPICAL SECTION**

NOT TO SCALE



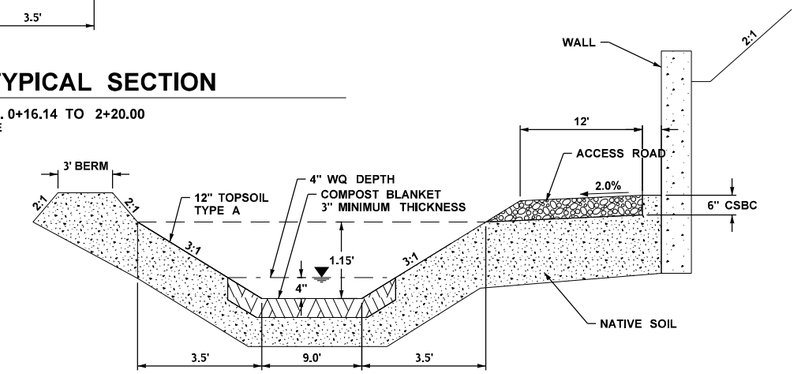
4 **CABS 10.26/W3-2 NW TYPICAL SECTION**

CABS 10.26 ACCESS ROAD STA. 0+16.14 TO 2+20.00
NOT TO SCALE



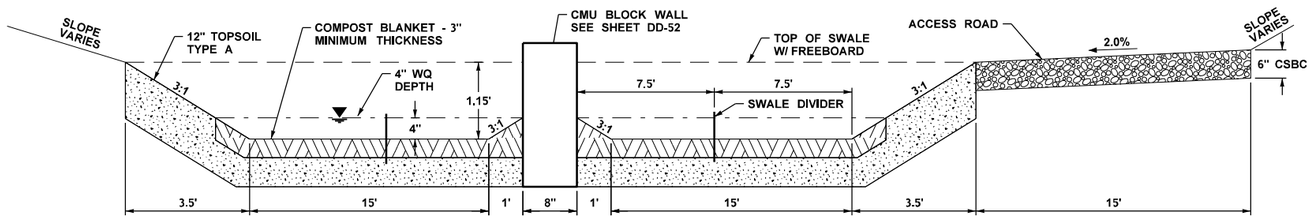
2 **CABS 10.00/W3-2 TYPICAL SECTION**

NOT TO SCALE



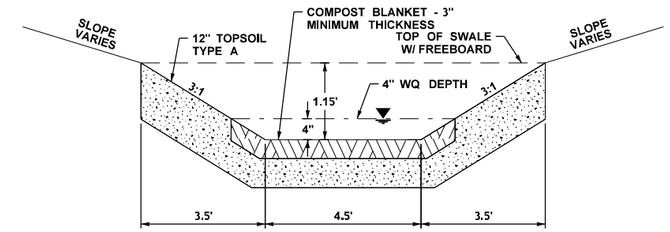
5 **CABS 10.26/W3-2 NW TYPICAL SECTION**

CABS 10.26 ACCESS ROAD STA. 2+20.00 TO 2+60.74
NOT TO SCALE



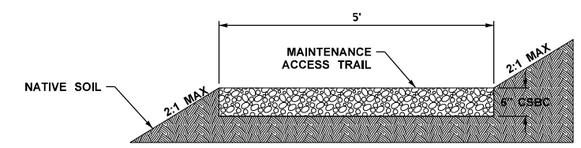
3 **CABS 10.17/W3-2 SW TYPICAL SECTION**

NOT TO SCALE



6 **CABS 11.25/W4 TYPICAL SECTION**

NOT TO SCALE



7 **COAL CREEK CULVERT MAINTENACE ACCESS TRAIL TYPICAL SECTION**

NOT TO SCALE

Wood Environment & Infrastructure, Inc.
12/21/2021
Date
DO/MI Initials
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DATE	12/20/2021				JOB NUMBER		
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DESIGNED BY	N. WONG				CONTRACT NO.		LOCATION NO.
ENTERED BY	M. EMESON				C9242		
CHECKED BY	J. ST. JOHN						
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS			
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

JAMES M. ST. JOHN, STATE OF WASHINGTON, 27497, REGISTERED PROFESSIONAL ENGINEER — DATE — P.E. STAMP BOX

Washington State Department of Transportation

FLATIRON LANE

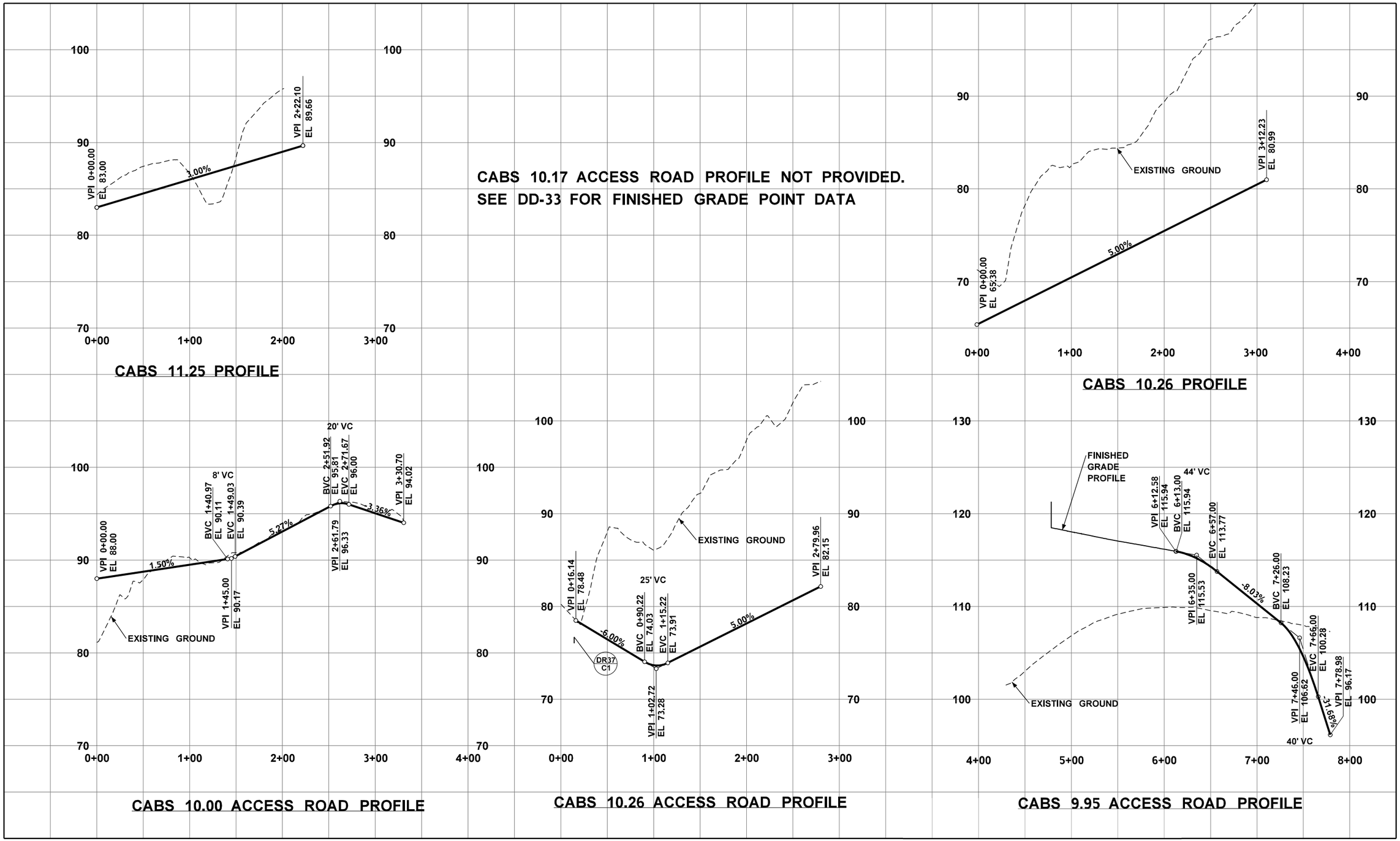
wood.

I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE DETAILS
CABS TYPICAL SECTIONS

PLAN REF NO DD-36

SHEET XX OF SHEETS



Wood Environment & Infrastructure, Inc.
12/21/2021
Date
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DATE	12/20/2021			
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DESIGNED BY	M. EMESON			
ENTERED BY	D. BENTZ			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	K. HENSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER

P.E. STAMP BOX DATE

Washington State Department of Transportation

FLATIRON LANE

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DRAINAGE PROFILES
CABS PROFILES

PLAN REF NO DD-38

SHEET XX OF XX SHEETS

PROPOSED DITCHES

Plan ID	Begin Station	End Station	Begin Offset (ft)	End Offset (ft)	Max Channel Slope (ft/ft)	Min Channel Slope (ft/ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Channel Length (ft)	Minimum Required Lining Type
DR36-D1	CC-SB405 831+52	CC-SB405 835+88	59 LT	41 LT	0.2476	0.0067	2:1	2:1	0	435	Vegetation/Quarry Spalls
DR36-D2	M-NB405 CC 6828+70	M-NB405 CC 6830+70	18 RT	22 RT	0.0587	0.0614	2:1	2:1	0	200	Impermeable liner
DR37-D1	CC-SB405 839+60	CC-SB405 841+54	16 RT	26 RT	0.0161	0.0134	25:1	4:1	0	199	Impermeable liner
DR37-D2	M-NB405 CC 6828+70	M-NB405 CC 6831+33	20 RT	23 RT	0.0113	0.0096	6.6:1	2:1	0	64	Vegetation
DR39-D1	SB405 5867+70	SB405 5865+05	128 LT	85 LT	0.2032	0.0112	2:1	2:1	0	296	6-inch Riprap
DR40-D2A	M-NB405 90 6877+55	M-NB405 90 6877+70	12 RT	12RT	0.0298	0.0050	2:1	2:1	0	15	Impermeable liner
DR40-D2B	M-NB405 90 6877+70	M-NB405 90 6881+83	12 RT	12 RT	0.0298	0.0050	2:1	2:1	0	416	Impermeable liner
DR40-M1	EB 90 1874+55	EB 90 1866+69	138 RT	361 RT	0.0551	0.0551	2:1	2:1	0	786	6-inch Riprap
DR41-D1	SB405 5895+50	SB405 5897+00	45 RT	41 RT	0.0630	0.0010	2:1	2:1	2	150	Impermeable liner
DR41-D2	M-NB405 90 6889+40	M-NB405 90 6895+00	13 RT	11 RT	0.0163	0.0108	2:1	2:1	0	563	Vegetation
DR41-D3	SB405 5897+00	SB405 5899+93	41 RT	32 RT	0.0113	0.0107	2:1	2:1	0	297	Impermeable liner
DR42-D1	SB405 5923+50	SB405 5921+66	40 RT	44 RT	0.0335	0.0095	2:1	2:1	2	150	Vegetation
DR65-D1	NB405-EB90 83+70	NB405-EB90 85+40	25 RT	25 RT	0.0312	0.0027	4:1	2:1	2	170	Impermeable liner

NOTE:

1) SEE SHEET DD-54 FOR DITCH LINING AND OUTLET PROTECTION DETAILS.

2) DR36-D1 ONLY REQUIRES QUARRY SPALLS FOR FINAL 90 FEET OF DITCH, BEGINNING WHERE THE SLOPE STEEPENS FROM 0.5% TO 25%, UNTIL THE DITCH MERGES W/ UNT 10.00. VEGETATIVE LINING WILL BE SUFFICIENT FOR THE REMAINDER OF THE DITCH.

3) GRADE BACKSLOPE OF DR40-M1 TO MATCH EXISTING GRADE.

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PLOTTED BY	AMECPW03ICS01$			
DESIGNED BY	R. BARKIE			
ENTERED BY	R. BARKIE			
CHECKED BY	J. ST. JOHN			
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER XL5467		
CONTRACT NO. C9242		LOCATION NO.

DATE
P.E. STAMP BOX

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John
Date: 2021.12.17 17:31:33 -08'00'
DATE
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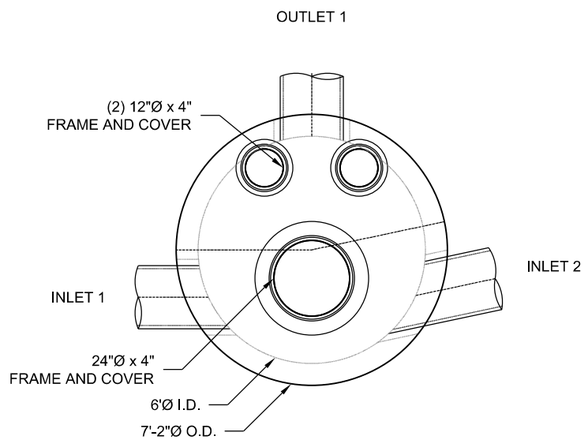
FLATIRON LANE
wood.

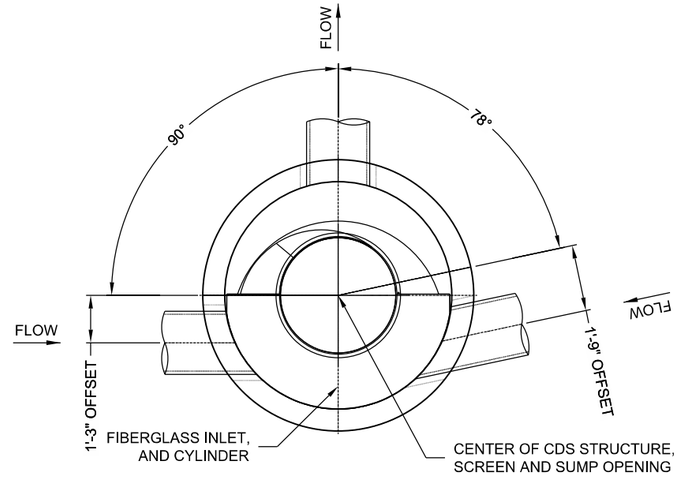
I-405; RENTON TO BELLEVUE WIDENING AND EXPRESS TOLL LANES PROJECT

DRAINAGE DETAILS
DITCH SUMMARY TABLE

PLAN REF NO DD-39
SHEET XX OF SHEETS



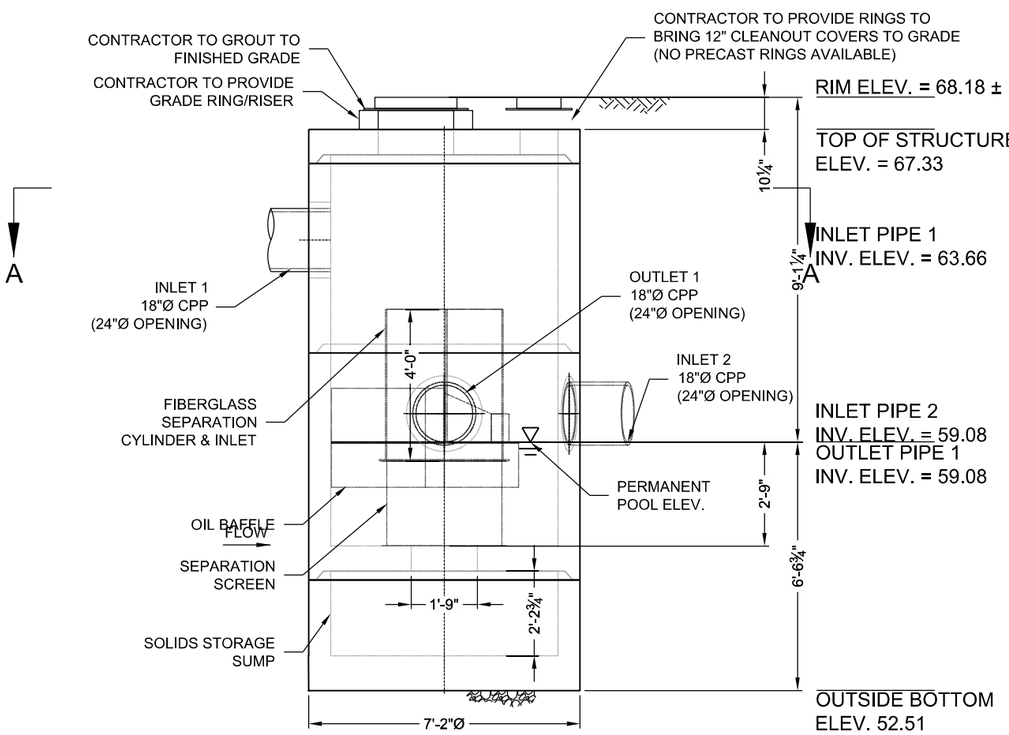
PLAN VIEW



SECTION A-A

COUNT	DESCRIPTION	INSTALLED BY
1	FIBERGLASS INLET AND CYLINDER	CONTECH
1	2400 micron, 3' O.D. x 2.25' SEP. SCREEN	CONTECH
1	SEALANT FOR JOINTS	CONTRACTOR
1	24"Ø x 4" FRAME & COVER, EJ#41600389, OR EQUIV.	CONTRACTOR
2	12"Ø x 4" FRAME & COVER, EJ#41610201, OR EQUIV.	CONTRACTOR

WATER QUALITY FLOW RATE	1.33 CFS
PEAK FLOW RATE	17 CFS
RETURN PERIOD OF PEAK FLOW	100 YRS



ELEVATION VIEW

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. GROUNDWATER ELEVATION = 45'. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = LBS.
STRUCTURE IS DELIVERED IN PIECES

MAX FOOTPRINT = Ø

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS3020-6-C-672197-10
WSDOT I405 DESIGN BUILD
RENTON, WA
for SYSTEM: DR37-16A

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12/21/2021
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DATE	12/20/2021					
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CHECKED BY	J. ST. JOHN			CONTRACT NO. C9242		LOCATION NO.
PROJ. ENGR.	J. LEFOTU	RELEASED FOR CONSTRUCTION REV 0	12/20/21	JS		
REGIONAL ADM.	L. HODGSON	REVISION	DATE	BY		

P.E. STAMP BOX DATE

JAMES M. ST. JOHN STATE OF WASHINGTON 27497 REGISTERED PROFESSIONAL ENGINEER
Digitally signed by James M. St. John Date: 2021.12.21 08:31:42 -08'00'
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DRAINAGE DETAILS
HYDRODYNAMIC SEPARATOR

PLAN REF NO DD-40
SHEET XX OF SHEETS