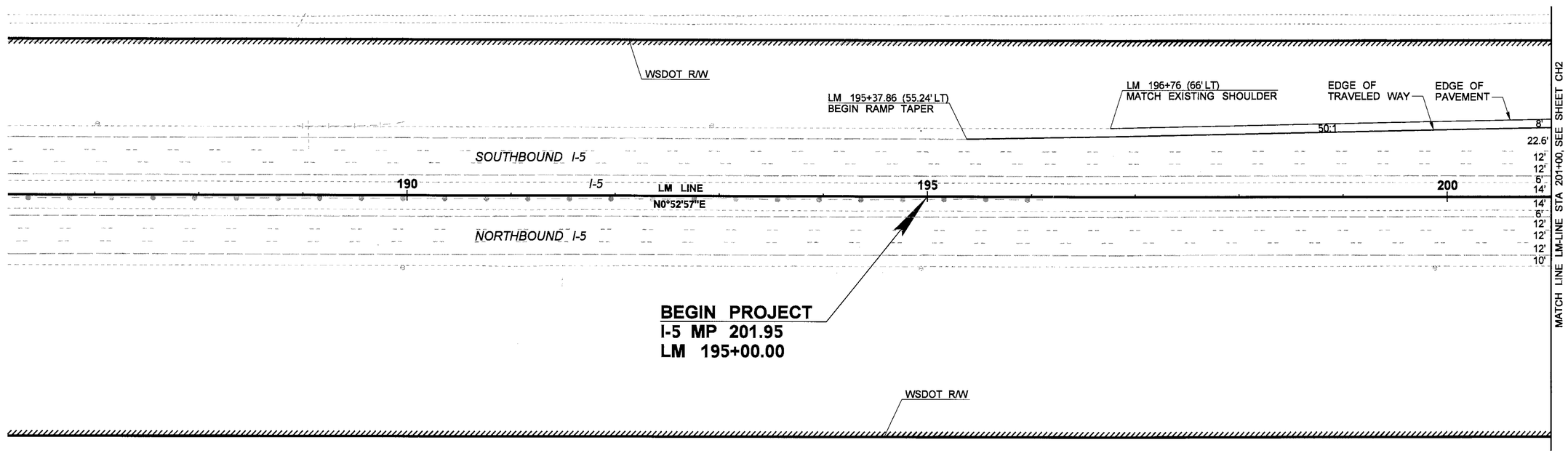
SEC 8 & SEC 17, T. 30N. R. 5E. W.M.

DESIGN DATA

	I-5	116TH STREET NE	34TH AVE NE	SW RAMP	ES RAMP	WN RAMP	NE RAMP	SE RAMP	WS RAMP	EN RAMP	NW RAMP	36TH DR NE
	LM 195+00 TO LM 250+00	M 106+49 TO M 127+27	US 320+23 TO US 322+00 A 320+72 TO A 322+65	SW 111+62 TO SW 122+65	ES 112+76 TO ES 122+74	WN 122+57 TO WN 132+89	NE 122+62 TO NE 131+63	SE 119+18 TO SE 122+47	WS 121+13 TO WS 122+81	EN 122+47 TO EN 124+05	NW 122+52 TO NW 126+53	B 10+100 TO B 13+94 RURAL MINOR COLLECTOR
FUNCTIONAL CLASS:	INTERSTATE	URBAN MINOR ARTERIAL	RURAL MINOR COLLECTOR									
HIGHWAY DESIGN CLASS:	FULL: INTERSTATE											
NHS STATUS:	NHS	NON NHS	NON NHS									NON NHS
DESIGN MATRIX:	MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13		MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13	MATRIX: 2 LINE: 2-13	
ACCESS CONTROL:	LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL WITHIN INTERCHANGE		LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL	LIMITED ACCESS, FULL CONTROL	
DESIGN VEHICLE:	WB-67	WB-67	WB-50	WB-67	WB-67	WB-67	WB-67	WB-67	WB-67	WB-67	WB-67	
POSTED/DESIGN SPEED:	60 / 70	35 / 40	35 / 35	NA / 60	NA / 60	NA / 60	NA / 60	NA / 15	NA / 15	NA / 15	NA / 15	
TERRAIN:	LEVEL											
TRUCK PERCENTAGE:	8%	3% EB, 2% WB	2%	5%	2%	3%	6%	5%	2%	3%	6%	



WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
Signed Barbara Briggs Date 28Nov11
Print Barbara Briggs

ENGINEERING MANAGER
Signed [illegible] Date 12/12/11
Print Catherine George

0 50 100
SCALE IN FEET

FILE NAME	U:\Bell\Projects\Clients\1598-Tulalip Tribes\554-1598-033-116thPh3\99Svcs\CADD\PlansforApproval\ChanPlans\BL1598033_PS_CH.dgn						
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DATE	11/23/2011						
PLOTTED BY	purgabut				JOB NUMBER		
DESIGNED BY	M. TSUN / J. JUN						
ENTERED BY	B. PURGANAN						
CHECKED BY	M. BURRUS				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S. SHAKLAWUN						
REGIONAL ADM.	L. ENG	REVISION	DATE	BY			

P.E. STAMP BOX DATE

MARK ALLEN BURRUS STATE OF WASHINGTON 45196 REGISTERED PROFESSIONAL ENGINEER
11/23/2011 DATE
P.E. STAMP BOX

TULALIP TRIBES Parametrix

I-5 MP 201.95 TO MP 202.99

116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

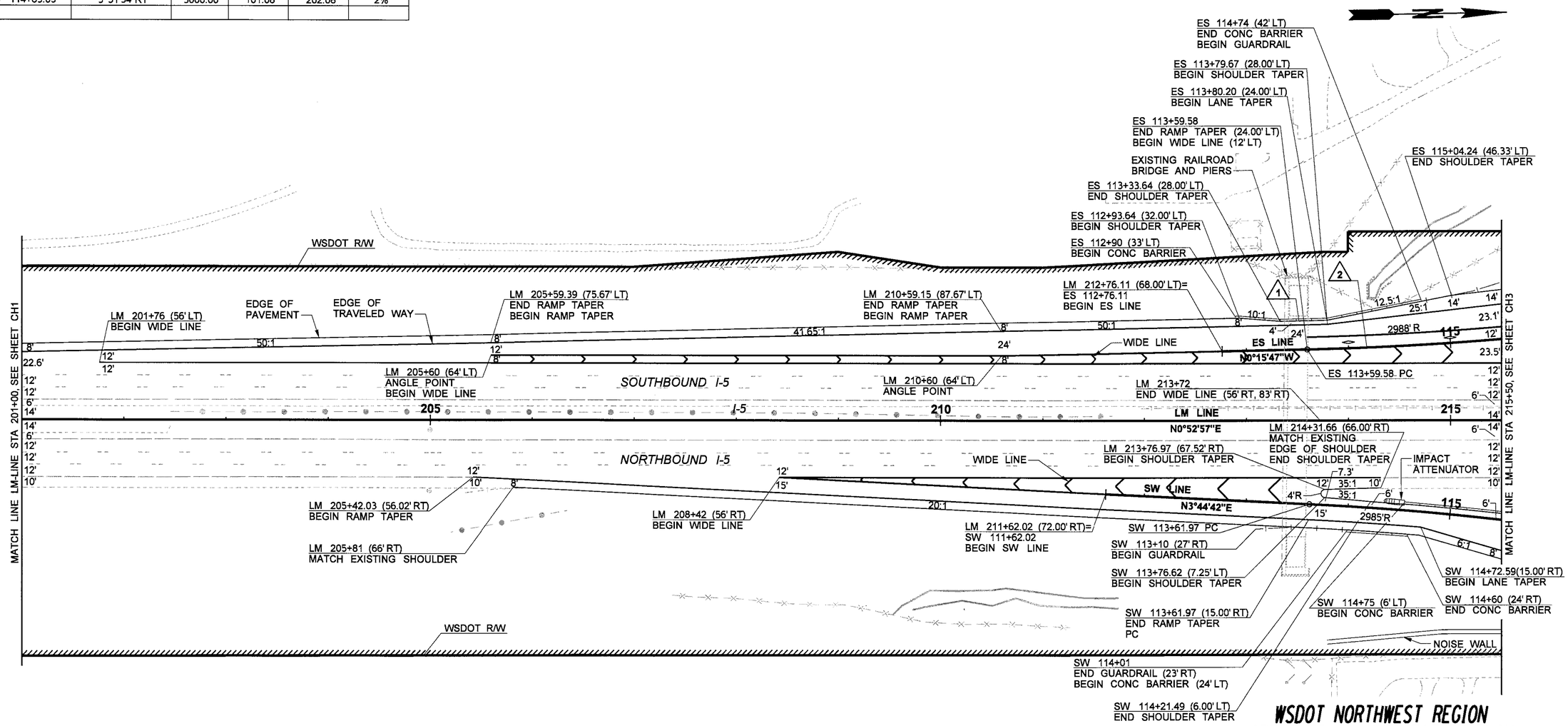
CHANNELIZATION PLAN

Plot 1
PLAN REF NO CH1
SHEET 1 OF 9 SHEETS

Drawer 223 Sequence 11

CURVE DATA					
P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH	S
ES 114+77.54	4°30'13"LT	3000.00'	117.96	235.80	4%
SW 114+63.05	3°51'34"RT	3000.00'	101.08	202.08	2%

SEC 8, T. 30N. R. 5E. W.M.



DESIGN VARIANCES

1. DEVIATION FOR RAMP: SHOULDER WIDTH. DM 1360.05 (4), 12-12 2011
2. EVALUATE UPGRADE FOR RAMP: SAG CURVE LENGTH. DM 1260.04 (4), 11-14 2011

0 50 100
SCALE IN FEET

WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
Signed Barbara Briggs Date 28Nov11
Print Barbara Briggs

ENGINEERING MANAGER
Signed [signature] Date 12/12/11
Print Catherine George

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ENTERED BY	B. PURGANAN							
CHECKED BY	M. BURRUS				CONTRACT NO.		LOCATION NO.	
PROJ. ENGR.	S. SHAKLAWUN							
REGIONAL ADM.	L. ENG	REVISION	DATE	BY				

P.E. STAMP BOX DATE

MARK ALLEN BURRUS STATE OF WASHINGTON 45196 REGISTERED PROFESSIONAL ENGINEER
11/23/2011 DATE
P.E. STAMP BOX

TULALIP TRIBES Parametrix

I-5 MP 201.95 TO MP 202.99

116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

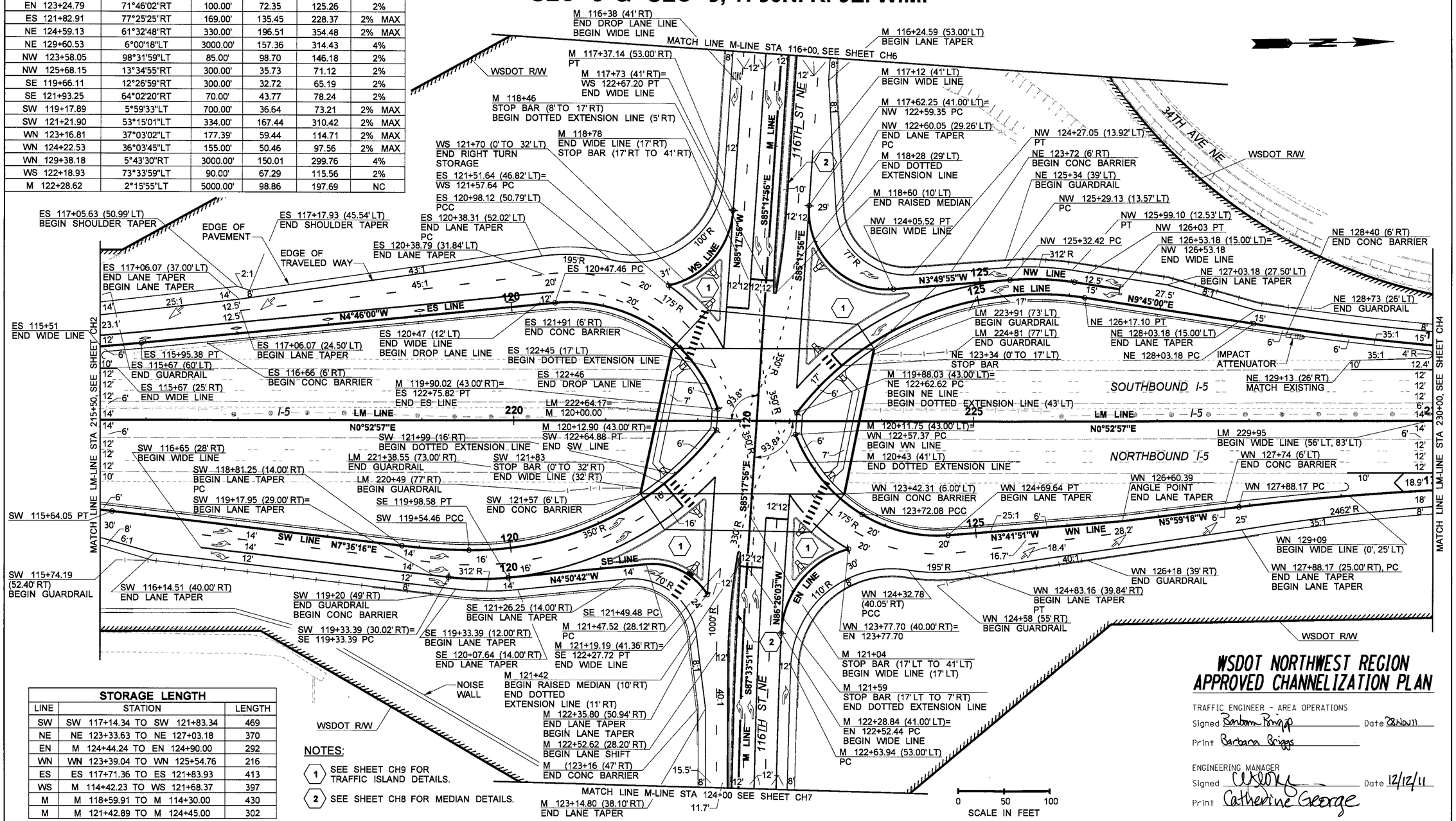
CHANNELIZATION PLAN

Plot 2
PLAN REF NO CH2
SHEET 2 OF 9 SHEETS

Drawer 223 Sequence 11

SEC 8 & SEC 9, T. 30N. R. 5E. W.M.

CURVE DATA					
P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH	S
EN 123+24.79	71°46'02"RT	100.00'	72.35	125.26	2%
ES 121+82.91	77°25'25"RT	169.00'	135.45	228.37	2% MAX
NE 124+59.13	61°32'48"RT	330.00'	196.51	354.48	2% MAX
NE 129+60.53	6°00'18"LT	3000.00'	157.36	314.43	4%
NW 123+58.05	98°31'59"LT	85.00'	98.70	146.18	2%
NW 125+68.15	13°34'55"RT	300.00'	35.73	71.12	2%
SE 119+66.11	12°26'59"RT	300.00'	32.72	65.19	2%
SE 121+93.25	64°02'20"RT	70.00'	43.77	78.24	2%
SW 119+17.89	5°59'33"LT	700.00'	36.64	73.21	2% MAX
SW 121+21.90	53°15'01"LT	334.00'	167.44	310.42	2% MAX
WN 123+16.81	37°03'02"LT	177.39'	59.44	114.71	2% MAX
WN 124+22.53	36°03'45"LT	155.00'	50.46	97.56	2% MAX
WN 129+38.18	5°43'30"RT	3000.00'	150.01	299.76	4%
WS 122+18.93	73°33'59"LT	90.00'	67.29	115.56	2%
M 122+28.62	2°15'55"LT	5000.00'	98.86	197.69	NC



STORAGE LENGTH		
LINE	STATION	LENGTH
SW	SW 117+14.34 TO SW 121+83.34	469
NE	NE 123+33.63 TO NE 127+03.18	370
EN	M 124+44.24 TO EN 124+90.00	292
WN	WN 123+39.04 TO WN 125+54.76	216
ES	ES 117+71.36 TO ES 121+83.93	413
WS	M 114+42.23 TO WS 121+68.37	397
M	M 118+59.91 TO M 114+30.00	430
M	M 121+42.89 TO M 124+45.00	302

NOTES:

(1) SEE SHEET CH9 FOR TRAFFIC ISLAND DETAILS.

(2) SEE SHEET CH8 FOR MEDIAN DETAILS.

WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
Signed Barbara Briggs Date 28 Nov 11
Print Barbara Briggs

ENGINEERING MANAGER
Signed [illegible] Date 12/12/11
Print Catherine George

FILE NAME	U:\Bell\Projects\Clients\1598-Tulalip Tribes\554-1598-033-116thPh3\99Svcs\CADD\PlansforApproval\ChanPlans\BL1598033_PS_CH.dgn				
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PLOTTED BY	purgabut				
DESIGNED BY	M. TSUN / J. JUN				
ENTERED BY	B. PURGANAN				
CHECKED BY	M. BURRUS				
PROJ. ENGR.	S. SHAKLAWUN				
REGIONAL ADM.	L. ENG	REVISION	DATE	BY	

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

P.E. STAMP BOX DATE

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TULALIP TRIBES — Parametrix

I-5 MP 201.95 TO MP 202.99

116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

CHANNELIZATION PLAN

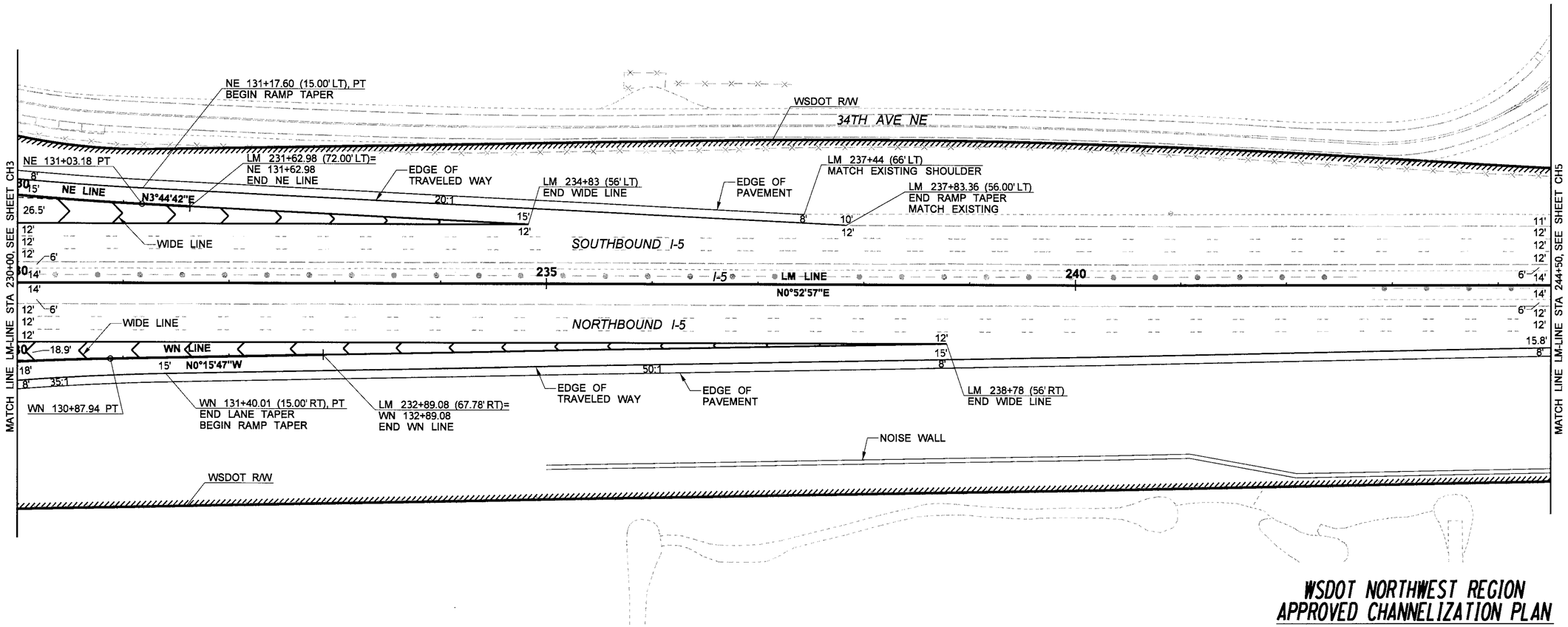
Plot 3

PLAN REF NO CH3

SHEET 3 OF 9 SHEETS

Drawer 223 Sequence 11

SEC 8, T. 30N. R. 5E. W.M.



WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
Signed Barbara Briggs Date 28 Nov 11
Print Barbara Briggs

ENGINEERING MANAGER
Signed [illegible] Date 12/12/11
Print Catherine George

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SCALE IN FEET

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ENTERED BY	B. PURGANAN					
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PROJ. ENGR.	S. SHAKLAWUN					
REGIONAL ADM.	L. ENG	REVISION	DATE	BY		

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

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TULALIP TRIBES — Parametrix

I-5 MP 201.95 TO MP 202.99

116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

CHANNELIZATION PLAN

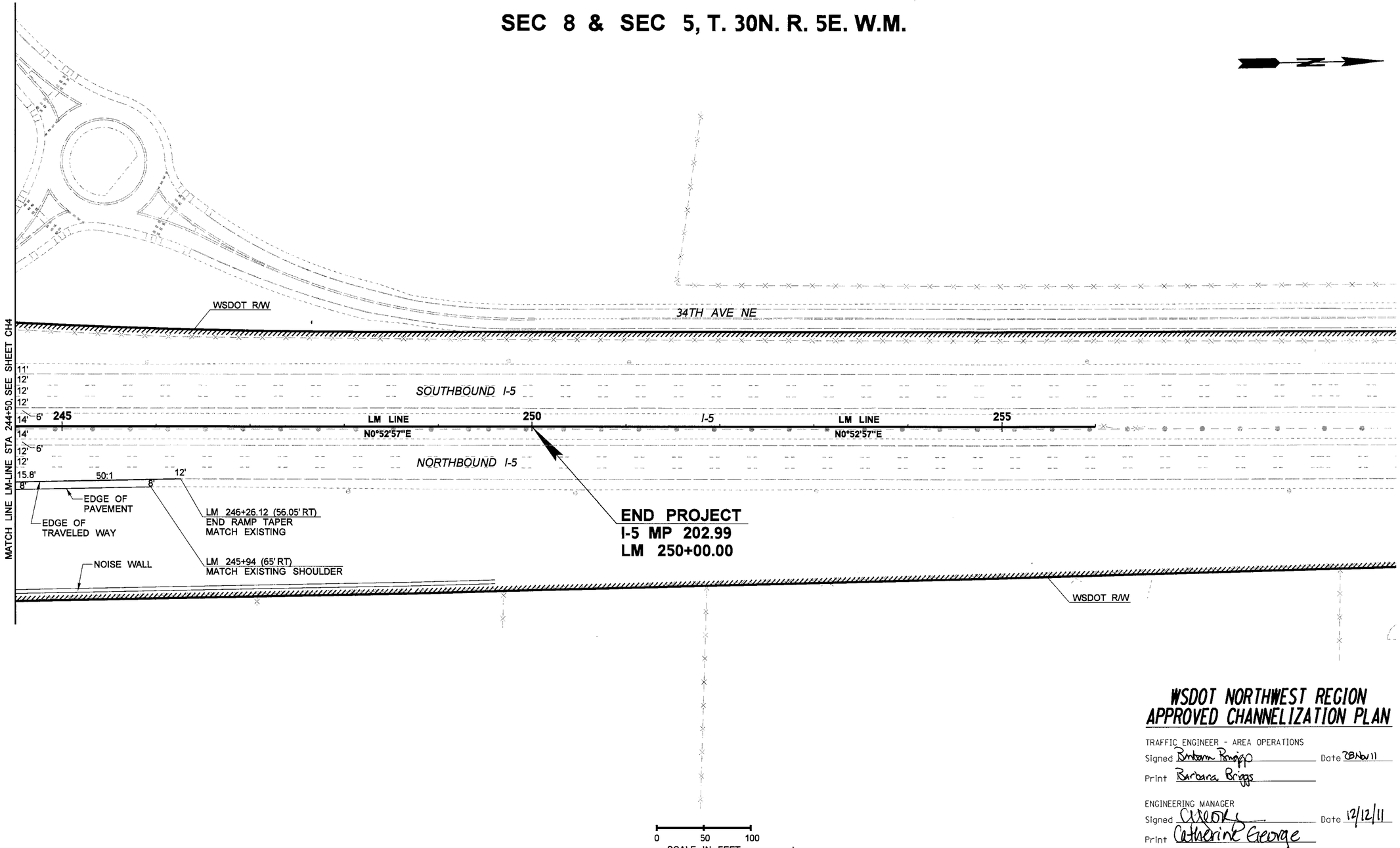
Plot 4

PLAN REF NO CH4

SHEET 4 OF 9 SHEETS

Drawer 223 Sequence 11

SEC 8 & SEC 5, T. 30N. R. 5E. W.M.



WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
Signed Barbara Briggs Date 28 Nov 11
Print Barbara Briggs

ENGINEERING MANAGER
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PROJ. ENGR.	S. SHAKLAWUN						
REGIONAL ADM.	L. ENG	REVISION	DATE	BY			

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TULALIP TRIBES — Parametrix

I-5 MP 201.95 TO MP 202.99

116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

CHANNELIZATION PLAN

Plot 5

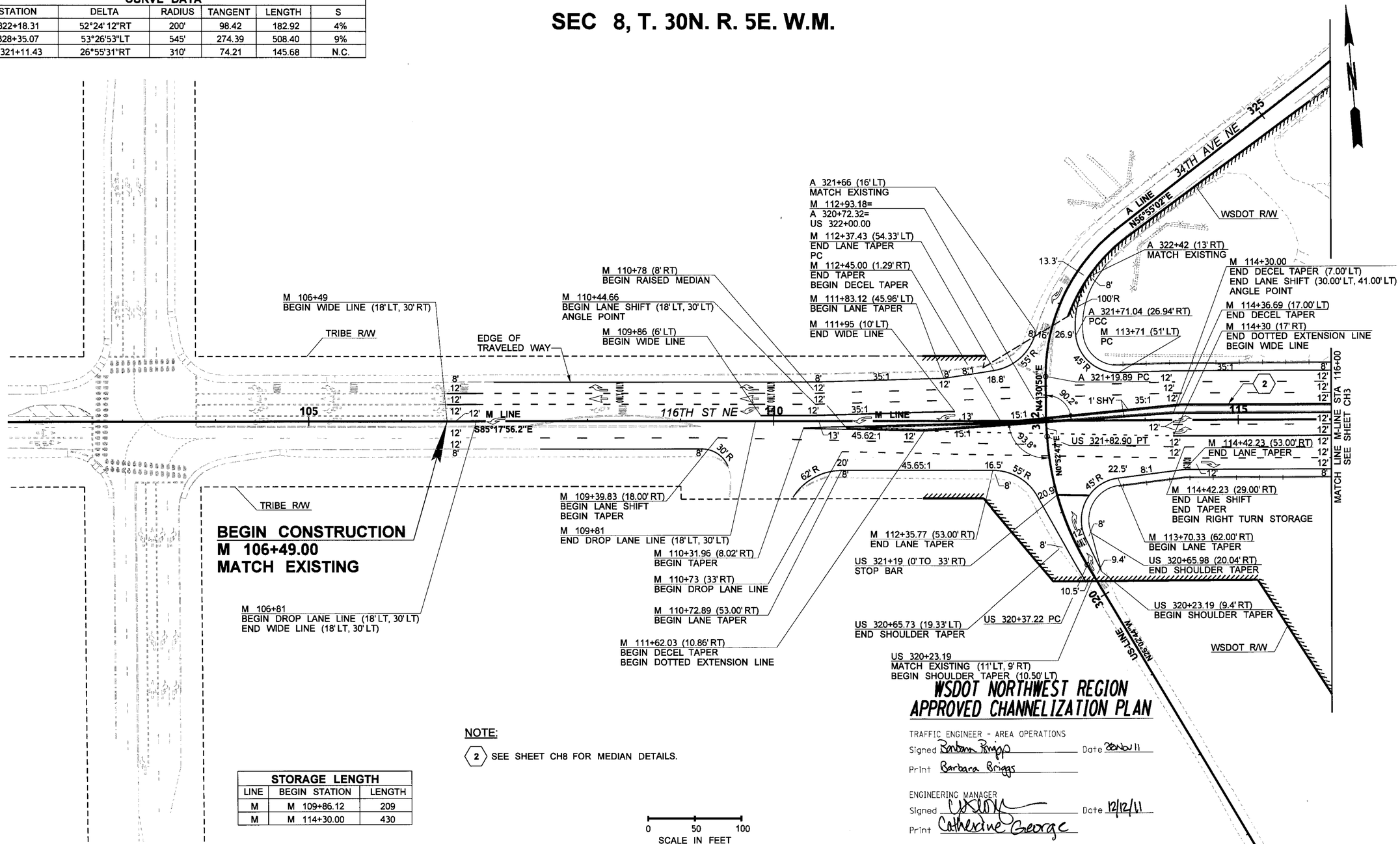
PLAN REF NO CH5

SHEET 5 OF 9 SHEETS

Drawer 223 Sequence 11

CURVE DATA					
P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH	S
A 322+18.31	52°24'12"RT	200'	98.42	182.92	4%
A 328+35.07	53°26'53"LT	545'	274.39	508.40	9%
US 321+11.43	26°55'31"RT	310'	74.21	145.68	N.C.

SEC 8, T. 30N. R. 5E. W.M.



NOTE:

(2) SEE SHEET CH8 FOR MEDIAN DETAILS.

STORAGE LENGTH		
LINE	BEGIN STATION	LENGTH
M	M 109+86.12	209
M	M 114+30.00	430

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PROJ. ENGR.	S. SHAKLAWUN						
REGIONAL ADM.	L. ENG	REVISION	DATE	BY			

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TULALIP TRIBES — Parametrix

I-5 MP 201.95 TO MP 202.99

116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

CHANNELIZATION PLAN

Plot 6

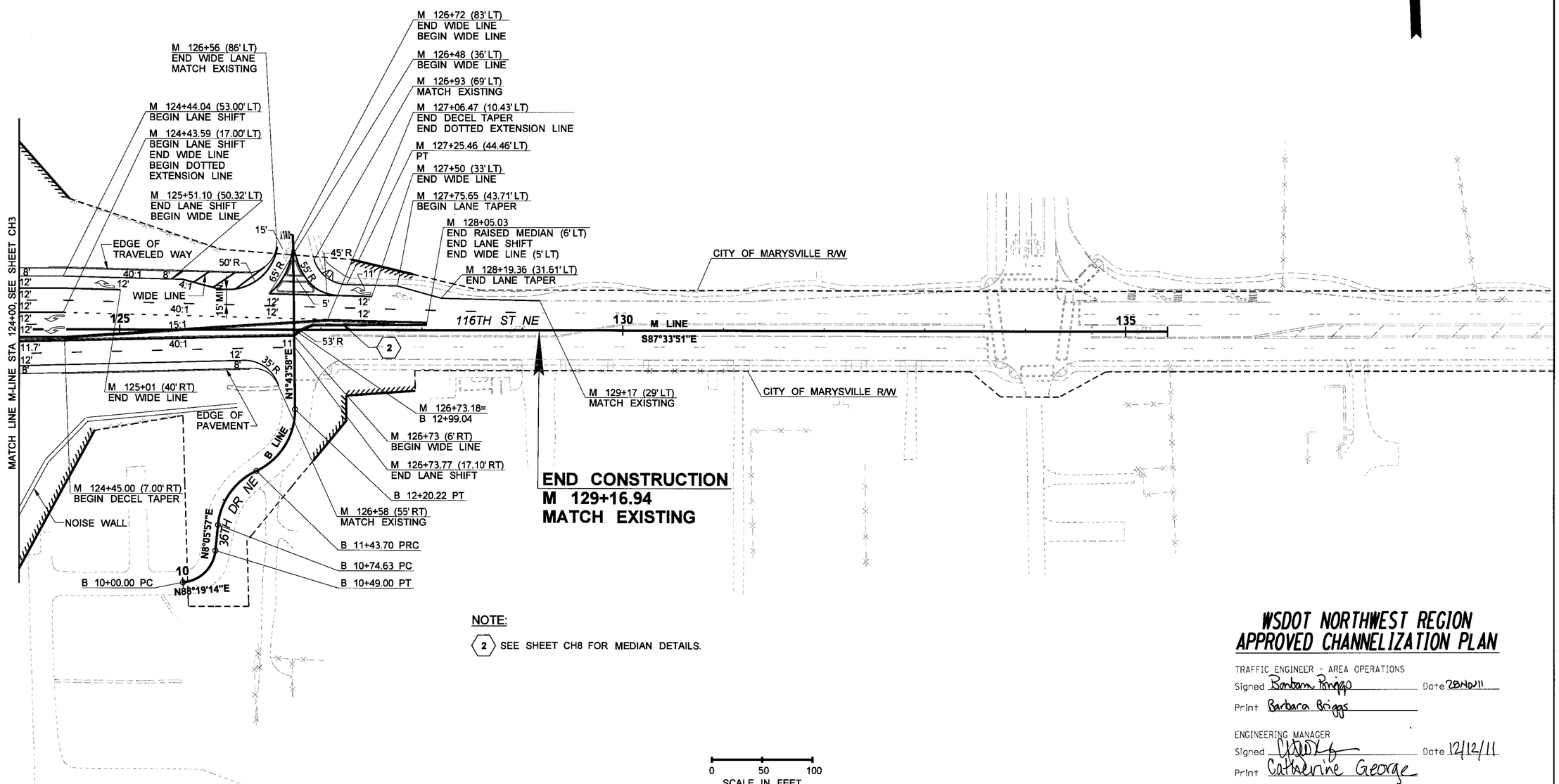
PLAN REF NO CH6

SHEET 6 OF 9 SHEETS

Drawer 223 Sequence 11

CURVE DATA					
P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH	S
B 10+29.48	30°13'17"LT	35'	29.48	49	N.C.
B 11+12.59	59°04'01"RT	67'	37.96	69.07	N.C.
B 11+86.74	65°26'00"LT	67'	43.04	76.52	N.C.

SEC 9, T. 30N. R. 5E. W.M.



NOTE:

(2) SEE SHEET CH8 FOR MEDIAN DETAILS.

0 50 100
SCALE IN FEET

WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
Signed Barbara Briggs Date 28 NOV 11
Print Barbara Briggs

ENGINEERING MANAGER
Signed [illegible] Date 12/12/11
Print Catherine George

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DESIGNED BY	M. TSUN / J. JUN
ENTERED BY	B. PURGANAN
CHECKED BY	M. BURRUS
PROJ. ENGR.	S. SHAKLAWUN
REGIONAL ADM.	L. ENG

REVISION | DATE | BY

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

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TULALIP TRIBES — Parametrix

I-5 MP 201.95 TO MP 202.99

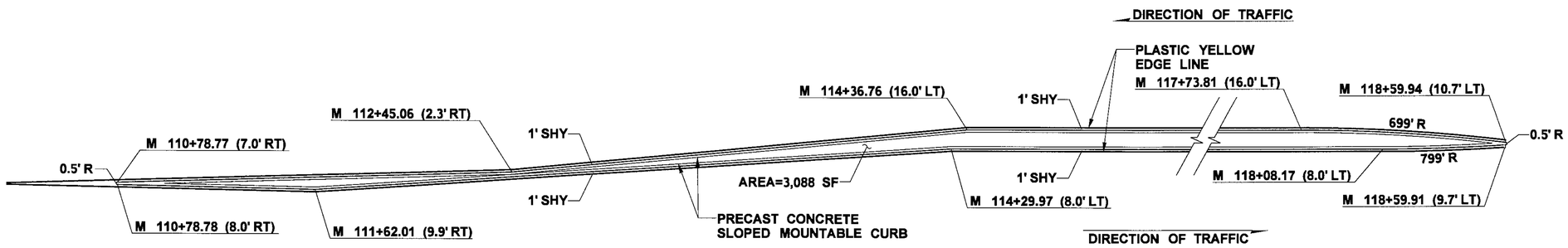
116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

CHANNELIZATION PLAN

Plot 7
PLAN REF NO CH7
SHEET 7 OF 9 SHEETS

Drawer 223 Sequence 11



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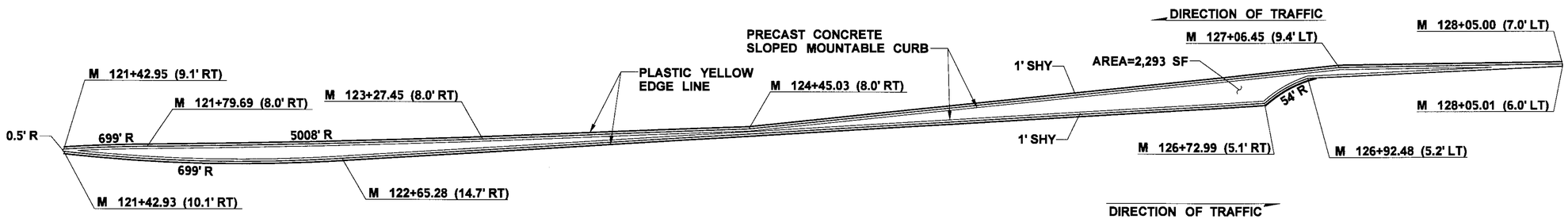

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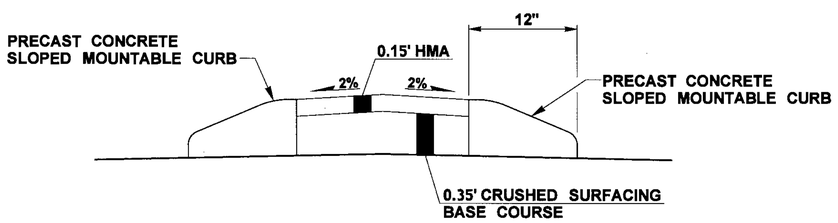

RAISED MEDIAN SECTION

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WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
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Print Barbara Briggs

ENGINEERING MANAGER
Signed [signature] Date 12/12/11
Print Catherine George

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PROJ. ENGR.	S. SHAKLAWUN						
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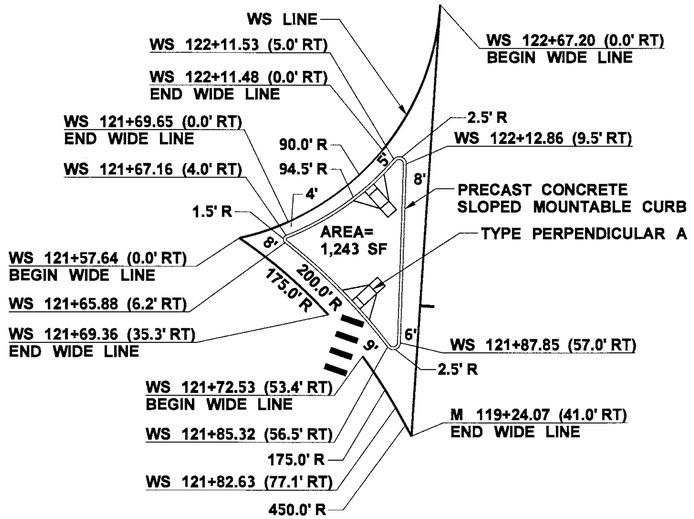
116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

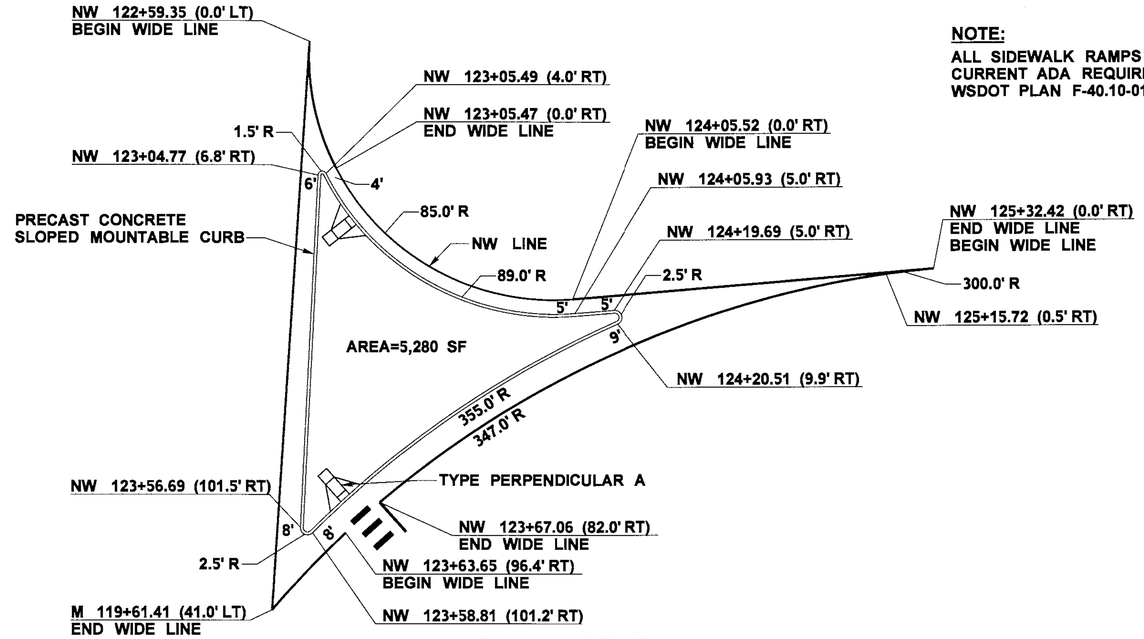
CHANNELIZATION PLAN

Plot 8
PLAN REF NO CH8
SHEET 8 OF 9 SHEETS

Drawer 223 Sequence 11

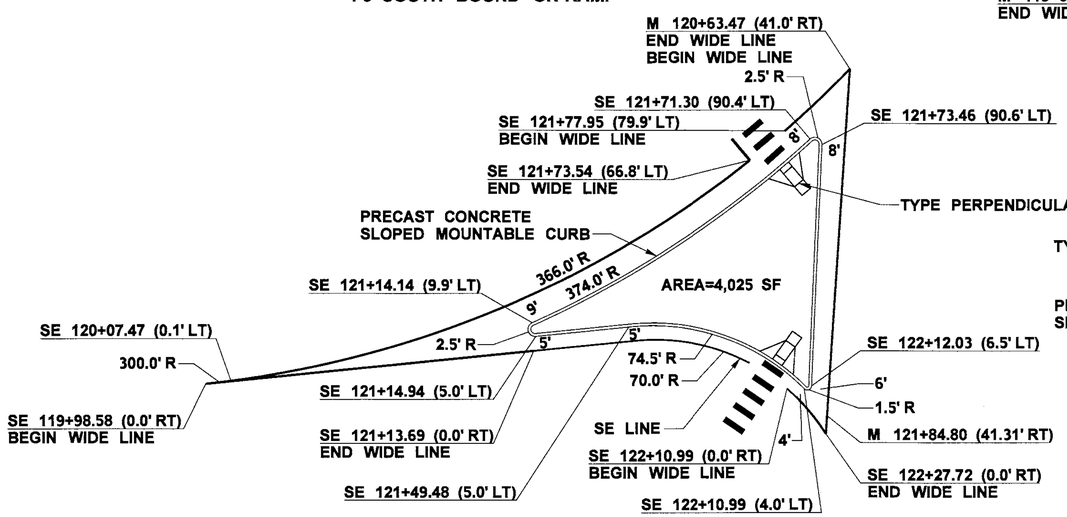


TRAFFIC ISLAND DETAIL
I-5 SOUTH BOUND ON-RAMP

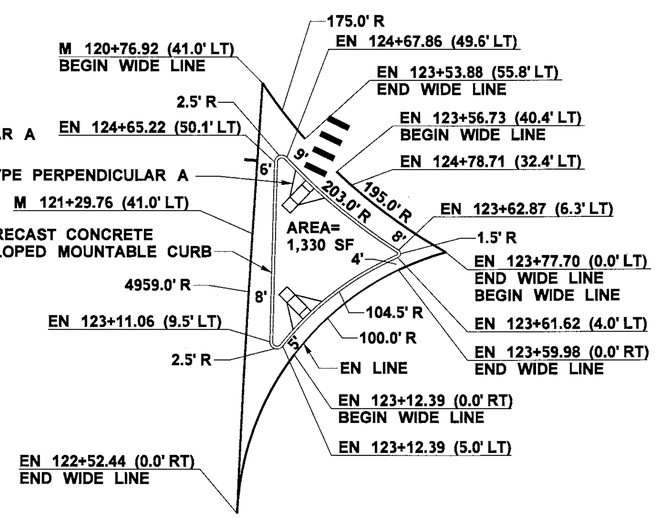


NOTE:
ALL SIDEWALK RAMPS SHALL MEET CURRENT ADA REQUIREMENTS. SEE WSDOT PLAN F-40.10-01.

TRAFFIC ISLAND DETAIL
I-5 SOUTH BOUND OFF-RAMP



TRAFFIC ISLAND DETAIL
I-5 NORTH BOUND OFF-RAMP



TRAFFIC ISLAND DETAIL
I-5 NORTH BOUND ON-RAMP

0 25 50
SCALE IN FEET

WSDOT NORTHWEST REGION APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER - AREA OPERATIONS
Signed Barbara Briggs Date 28 Nov 11
Print Barbara Briggs

ENGINEERING MANAGER
Signed [illegible] Date 12/12/11
Print Catherine George

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DATE	11/23/2011						
PLOTTED BY	purgabut				JOB NUMBER		
DESIGNED BY	M. TSUN / J. JUN						
ENTERED BY	B. PURGANAN						
CHECKED BY	M. BURRUS				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S. SHAKLAWUN						
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I-5 MP 201.95 TO MP 202.99

116TH ST NE IMPROVEMENTS

TULALIP/SNOHOMISH COUNTY NOVEMBER 2011

CHANNELIZATION PLAN

Plot 9
PLAN REF NO CH9
SHEET 9 OF 9 SHEETS

Drawer 223 Sequence 11