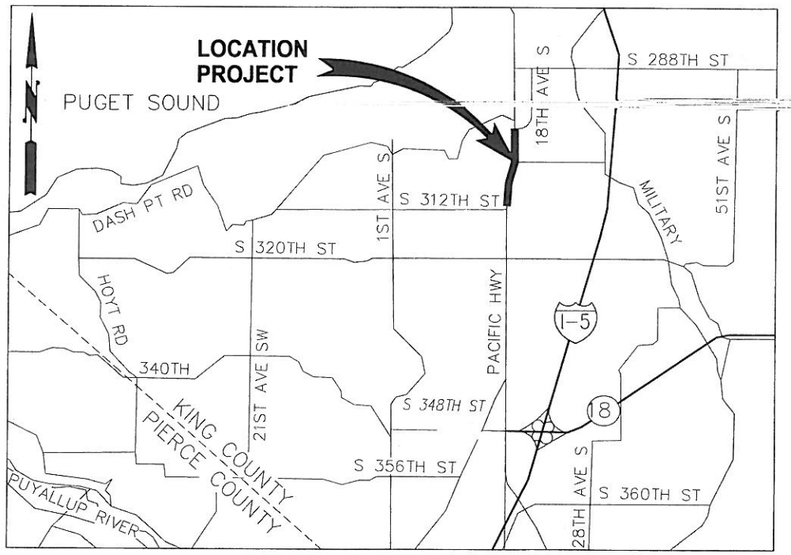
City of Federal Way, Washington

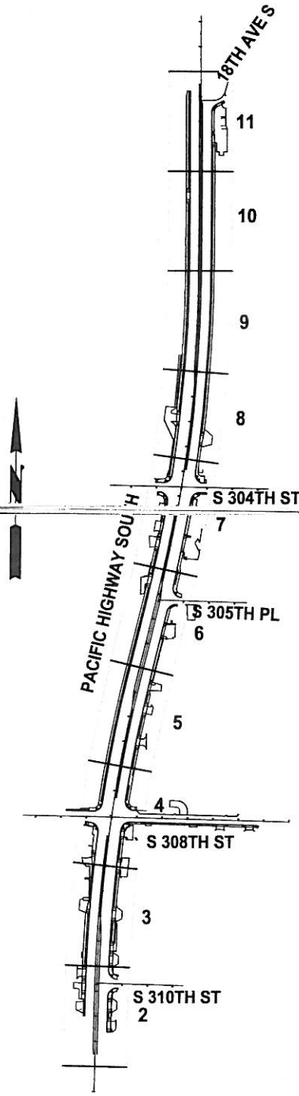
PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV

(S 312TH STREET TO DASH POINT ROAD)



VICINITY MAP

NTS



SCHEDULE OF DRAWINGS

SHEET NO.	TITLE
1	COVER SHEET
2 – 11	CHANNELIZATION PLANS
12 –13	TYPICAL SECTIONS

SHEET KEY

0 300 600 900

SCALE IN FEET

NELSON J. DAVIS — STATE OF WASHINGTON — 13070 — REGISTERED PROFESSIONAL ENGINEER — 4-9-10

NO	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

PROJECT ENGINEER DATE

0656WSDOT01.dwg FILENAME

KCP 4/09 DESIGNED BY DATE

KCP/ODB 4/09 DRAWN BY DATE

NJD 4/09 CHECKED BY DATE

CITY OF Federal Way

KPG

753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

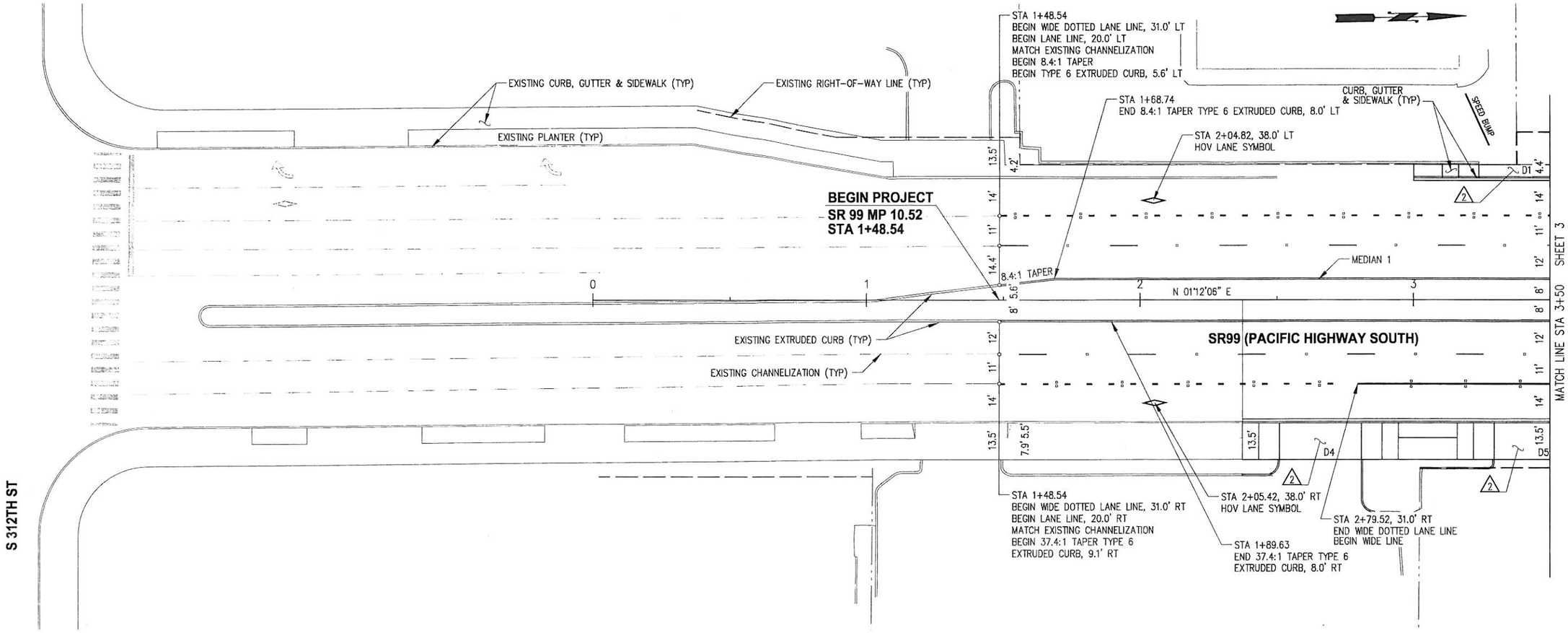
SR99 MP 10.52 TO MP 11.27

PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN

KING COUNTY APRIL, 2010

SHEET 1 OF 13

NW ¼ SECTION 09, T. 21N. R. 4E. W.M.



GENERAL NOTES

1. SEE SHEET 12 – 13 FOR TYPICAL SECTIONS.
2. ALL SIDEWALK RAMPS MEET CURRENT ADA STANDARDS.
3. CHANNELIZATION TO BE INSTALLED SHALL BE PER WSDOT STANDARD SECTION M.
4. FOR DRIVEWAY SCHEDULE SEE SHEET 12.

LEGEND

- PLANTER AREA
- FILL WALL UNDER SIDEWALK
- CUT WALL

CURVE DATA						
PI STATION	DELTA	RADIUS	TANGENT	LENGTH	S	DESIGN SPEED
10+32.29	12°23'26"	5739.21'	623.00'	1241.14'	3%	45 MPH

DESIGN VARIANCES

⚠2 DEVIATION # 1: ACCESS CONNECTION SEPARATION

DESIGN DATA	
CROSS STREETS	DESIGN VEHICLE
S 310TH ST	SU
S 308TH ST	BUS, SU
S 305TH PL	SU
S 304TH ST	BUS, SU
18TH AVE S	SU

DESIGN DATA	
	SR 99
FUNCTIONAL CLASS:	U1
HIGHWAY DESIGN CLASS:	FULL: U M/A-2 MODIFIED: MDL-2
NHS STATUS:	NON-NHS
DESIGN MATRIX:	MATRIX: 5 LINE: 11
MANAGED ACCESS CLASS:	CLASS 4
DESIGN VEHICLE:	WB-50/BUS
POSTED/DESIGN SPEED:	40 & 45 / 45
TERRAIN:	ROLLING
TRUCK PERCENTAGE:	2%

MEDIAN AREAS	
MEDIAN	PLANTER AREA
1	9289 SF
2	9568 SF
3	13592 SF

0 5 10 20 40 60

SCALE IN FEET

WSDOT NORTHWEST REGION
APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER – AREA OPERATIONS
SIGNED Barbara Briggs DATE 20 Apr 10
PRINT Barbara Briggs

ENGINEERING MANAGER
SIGNED Martin A. Dahlum DATE 20 Apr 2010
PRINT Martin A. Dahlum

NELSON J. DAVIS — STATE OF WASHINGTON — 33070 — REGISTERED PROFESSIONAL ENGINEER — 4-9-10

NO	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
PROJECT ENGINEER DATE

0656WSDOT02.dwg FILENAME
KCP 4/09 DESIGNED BY DATE
KCP/OOB 4/09 DRAWN BY DATE
NJD 4/09 CHECKED BY DATE

CITY OF Federal Way

KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

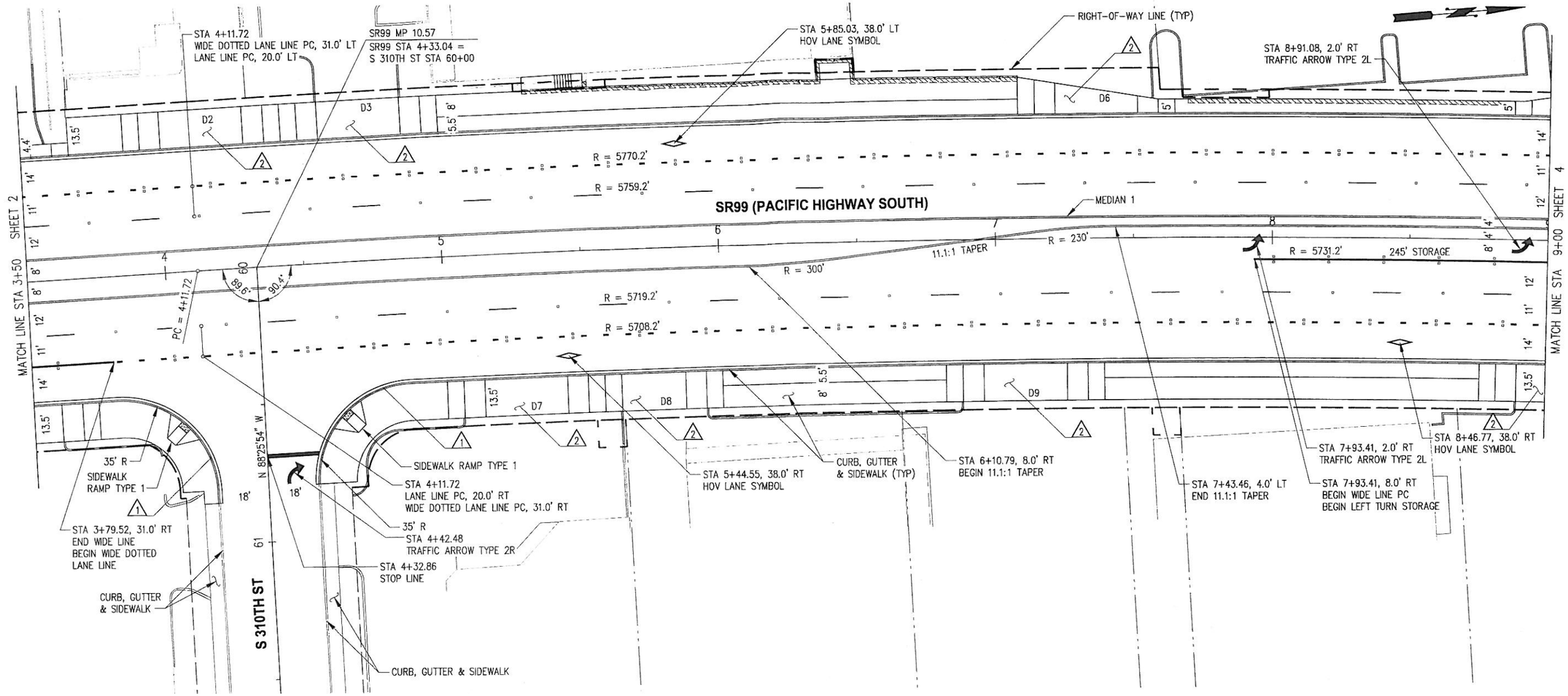
SR99
MP 10.52 TO MP 11.27

PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN

KING COUNTY
APRIL, 2010

SHEET 2 OF 13

NW ¼ OF SECTION 09, T. 21N. R. 4E. W.M.



GENERAL NOTES

1. SEE SHEET 12 – 13 FOR TYPICAL SECTIONS.
2. ALL SIDEWALK RAMPS MEET CURRENT ADA STANDARDS.
3. CHANNELIZATION TO BE INSTALLED SHALL BE PER WSDOT STANDARD SECTION M.
4. FOR DRIVEWAY SCHEDULE SEE SHEET 12.

LEGEND

- PLANTER AREA
- FILL WALL UNDER SIDEWALK
- CUT WALL

DESIGN VARIANCES

⚠1 EVALUATE UPGRADE # 1: TURN RADII. DM 910.07(1), NOVEMBER 2007.

⚠2 DEVIATION # 1: ACCESS CONNECTION SEPARATION

CURVE DATA						
PI STATION	DELTA	RADIUS	TANGENT	LENGTH	S	DESIGN SPEED
10+32.29	12°23'26"	5739.21'	623.00'	1241.14'	3%	45 MPH

0 5 10 20 40 60

SCALE IN FEET

WSDOT NORTHWEST REGION
APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER – AREA OPERATIONS
SIGNED Barbara Briggs DATE 20 April 10
PRINT Barbara Briggs

ENGINEERING MANAGER
SIGNED [signature] DATE 20 Apr 2010
PRINT Martin A. Palmer

NELSON J. DAVIS — 23070 — REGISTERED PROFESSIONAL ENGINEER — 4.9.10

NO.	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
PROJECT ENGINEER DATE

0656WSDOT03.dwg
FILENAME
KCP 4/09
DESIGNED BY DATE
KCP/COB 4/09
DRAWN BY DATE
NJD 4/09
CHECKED BY DATE

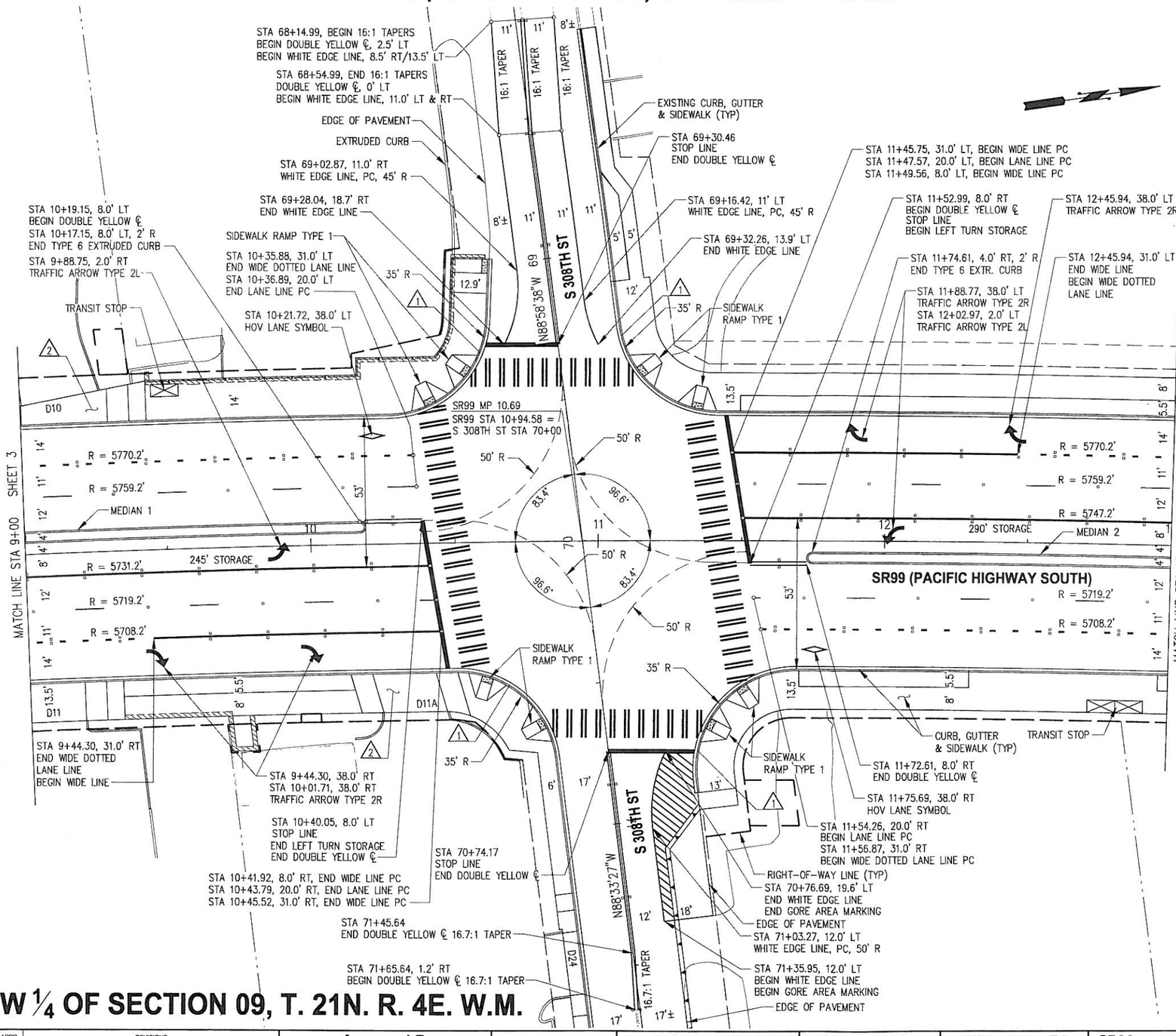
CITY OF Federal Way

KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

SR99
MP 10.52 TO MP 11.27
PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN
KING COUNTY
APRIL, 2010

SHEET 3 OF 13

NE ¼ OF SECTION 08, T. 21N. R. 4E. W.M.



NW ¼ OF SECTION 09, T. 21N. R. 4E. W.M.

GENERAL NOTES

1. SEE SHEET 12 – 13 FOR TYPICAL SECTIONS.
2. ALL SIDEWALK RAMPS MEET CURRENT ADA STANDARDS.
3. CHANNELIZATION TO BE INSTALLED SHALL BE PER WSDOT STANDARD SECTION M.
4. FOR DRIVEWAY SCHEDULE SEE SHEET 12.

LEGEND

- PLANTER AREA
- FILL WALL UNDER SIDEWALK
- CUT WALL

DESIGN VARIANCES

1. EVALUATE UPGRADE # 1: TURN RADII. DM 910.07(1), NOVEMBER 2007.
2. DEVIATION # 1: ACCESS CONNECTION SEPARATION

CURVE DATA						
PI STATION	DELTA	RADIUS	TANGENT	LENGTH	S	DESIGN SPEED
10+32.29	12°23'26"	5739.21'	623.00'	1241.14'	3%	45 MPH

0 5 10 20 40 60

SCALE IN FEET

WSDOT NORTHWEST REGION
APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER – AREA OPERATIONS
SIGNED Barbara Briggs DATE 20 April 10
PRINT Barbara Briggs

ENGINEERING MANAGER
SIGNED [signature] DATE 20 Apr 2010
PRINT Murphy A. Palmer

NELSON J. DAVIS STATE OF WASHINGTON 33070 REGISTERED PROFESSIONAL ENGINEER

NO	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER	DATE
PROJECT MANAGER	DATE
PROJECT ENGINEER	DATE

0656WSDOT04.dwg
FILENAME

KCP DESIGNED BY	4/09 DATE
KCP/DDR DRAWN BY	4/09 DATE
NJD CHECKED BY	4/09 DATE

CITY OF Federal Way

KPG
753 9th Avenue N, Seattle, WA 98109, (206) 286-1640, www.kpg.com
1117 Broadway, Suite 501, Tacoma, WA 98402, (253) 627-0720

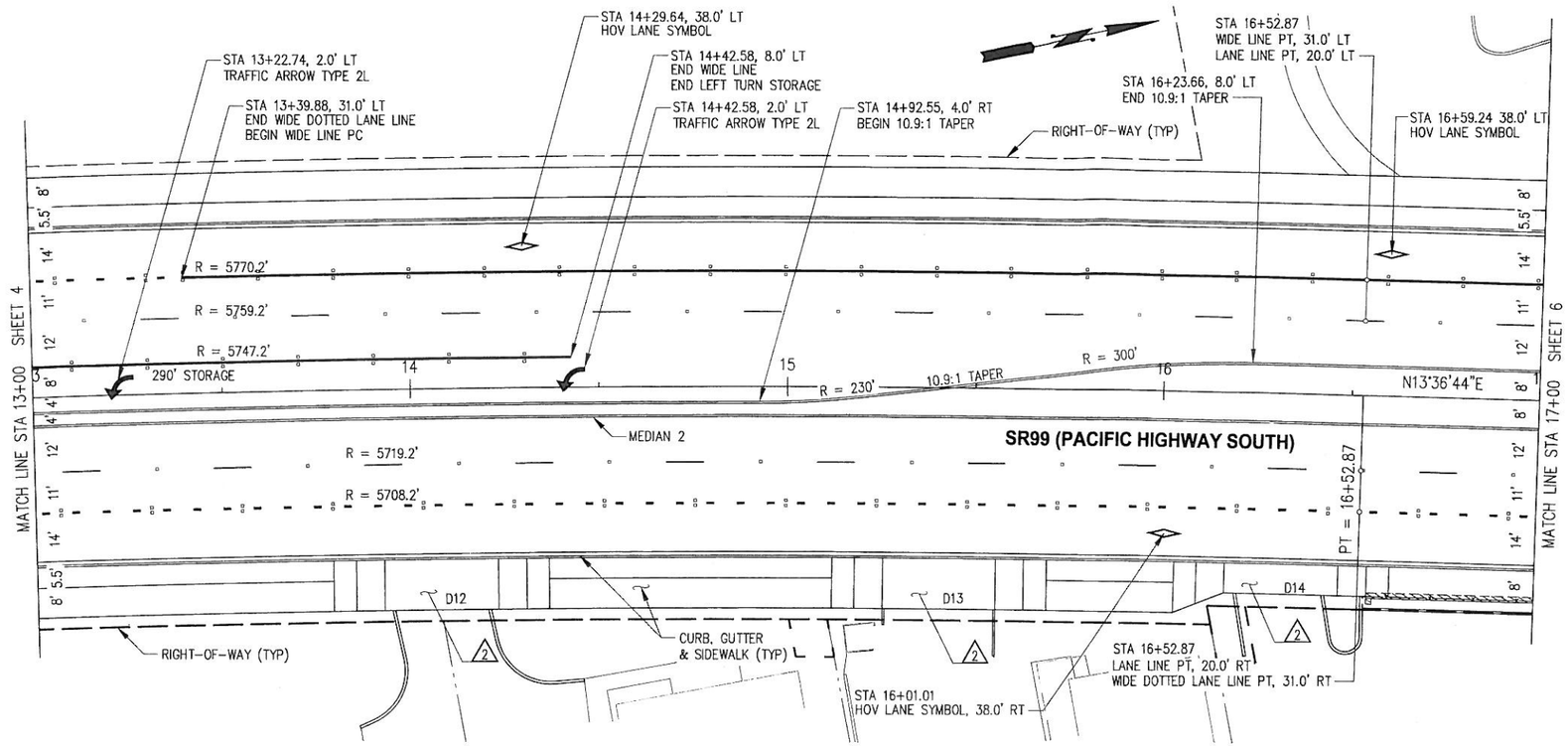
SR99 MP 10.52 TO MP 11.27

PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN

KING COUNTY APRIL, 2010

SHEET 4 OF 13

NE ¼ OF SECTION 08, T. 21N. R. 4E. W.M.



NW ¼ OF SECTION 09, T. 21N. R. 4E. W.M.

CURVE DATA						
PI STATION	DELTA	RADIUS	TANGENT	LENGTH	S	DESIGN SPEED
10+32.29	12°23'26"	5739.21'	623.00'	1241.14'	3%	45 MPH

GENERAL NOTES

1. SEE SHEET 12 – 13 FOR TYPICAL SECTIONS.
2. ALL SIDEWALK RAMPS MEET CURRENT ADA STANDARDS.
3. CHANNELIZATION TO BE INSTALLED SHALL BE PER WSDOT STANDARD SECTION M.
4. FOR DRIVEWAY SCHEDULE SEE SHEET 12.

LEGEND

- PLANTER AREA
- FILL WALL UNDER SIDEWALK
- CUT WALL

DESIGN VARIANCES

2 DEVIATION # 1: ACCESS CONNECTION SEPARATION

0 5 10 20 40 60

SCALE IN FEET

WSDOT NORTHWEST REGION
APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER – AREA OPERATIONS
SIGNED Barbara Briggs DATE 20 Apr 10
PRINT Barbara Briggs

ENGINEERING MANAGER
SIGNED Martin A. Palmer DATE 28 Apr 2010
PRINT Martin A. Palmer

NELSON J. DAVIS, STATE OF WASHINGTON, 35070, REGISTERED PROFESSIONAL ENGINEER
4-9-10

NO.	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
PROJECT ENGINEER DATE

0656WSDOT05.dwg
FILENAME
KCP 4/09
DESIGNED BY DATE
KCP/QDB 4/09
DRAWN BY DATE
NJD 4/09
CHECKED BY DATE

CITY OF Federal Way

KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

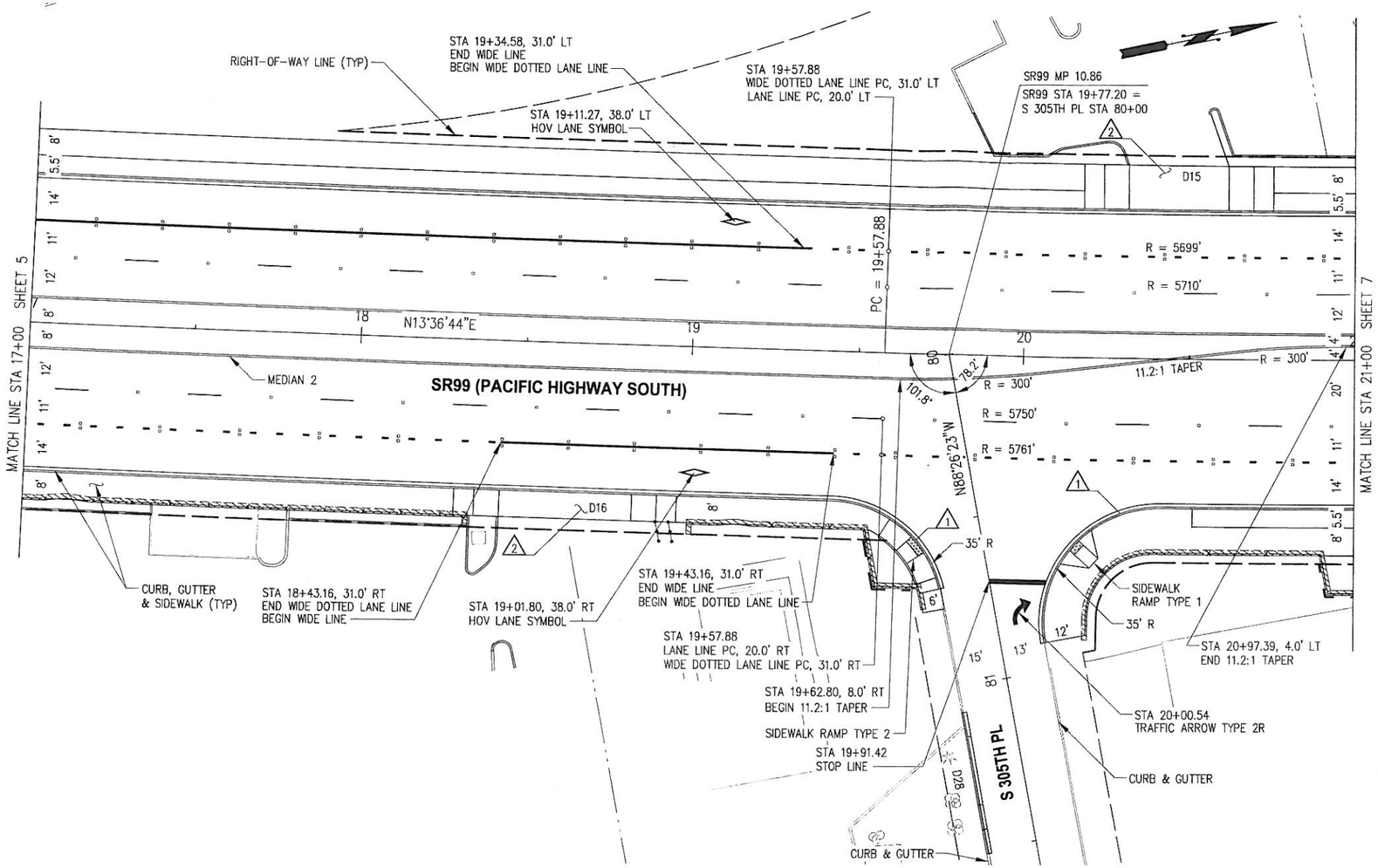
SR99 MP 10.52 TO MP 11.27

PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN

KING COUNTY APRIL, 2010

SHEET 5 OF 13

NW ¼ OF SECTION 09, T. 21N. R. 4E. W.M.



CURVE DATA						
PI STATION	DELTA	RADIUS	TANGENT	LENGTH	S	DESIGN SPEED
26+37.87	13°35'56"	5730.00'	683.20'	1359.99'	2.5%	45 MPH

GENERAL NOTES

1. SEE SHEET 12 – 13 FOR TYPICAL SECTIONS.
2. ALL SIDEWALK RAMPS MEET CURRENT ADA STANDARDS.
3. CHANNELIZATION TO BE INSTALLED SHALL BE PER WSDOT STANDARD SECTION M.
4. FOR DRIVEWAY SCHEDULE SEE SHEET 12.

LEGEND

- PLANTER AREA
- FILL WALL UNDER SIDEWALK
- CUT WALL

DESIGN VARIANCES

1. EVALUATE UPGRADE # 1: TURN RADII. DM 910.07(1), NOVEMBER 2007.
2. DEVIATION # 1: ACCESS CONNECTION SEPARATION

0 5 10 20 40 60

SCALE IN FEET

WSDOT NORTHWEST REGION
APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER – AREA OPERATIONS
SIGNED Barbara Briggs DATE 20 Apr 10
PRINT Barbara Briggs

ENGINEERING MANAGER
SIGNED Martin A. Palmer DATE 20 Apr 2010
PRINT Martin A. Palmer

NELSON J. DAVIS — STATE OF WASHINGTON — 23070 — REGISTERED PROFESSIONAL ENGINEER — 4.9.10

NO	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
PROJECT ENGINEER DATE

0656WSDOT06.dwg FILENAME
KCP 4/09 DESIGNED BY DATE
KCP/ODB 4/09 DRAWN BY DATE
NJD 4/09 CHECKED BY DATE

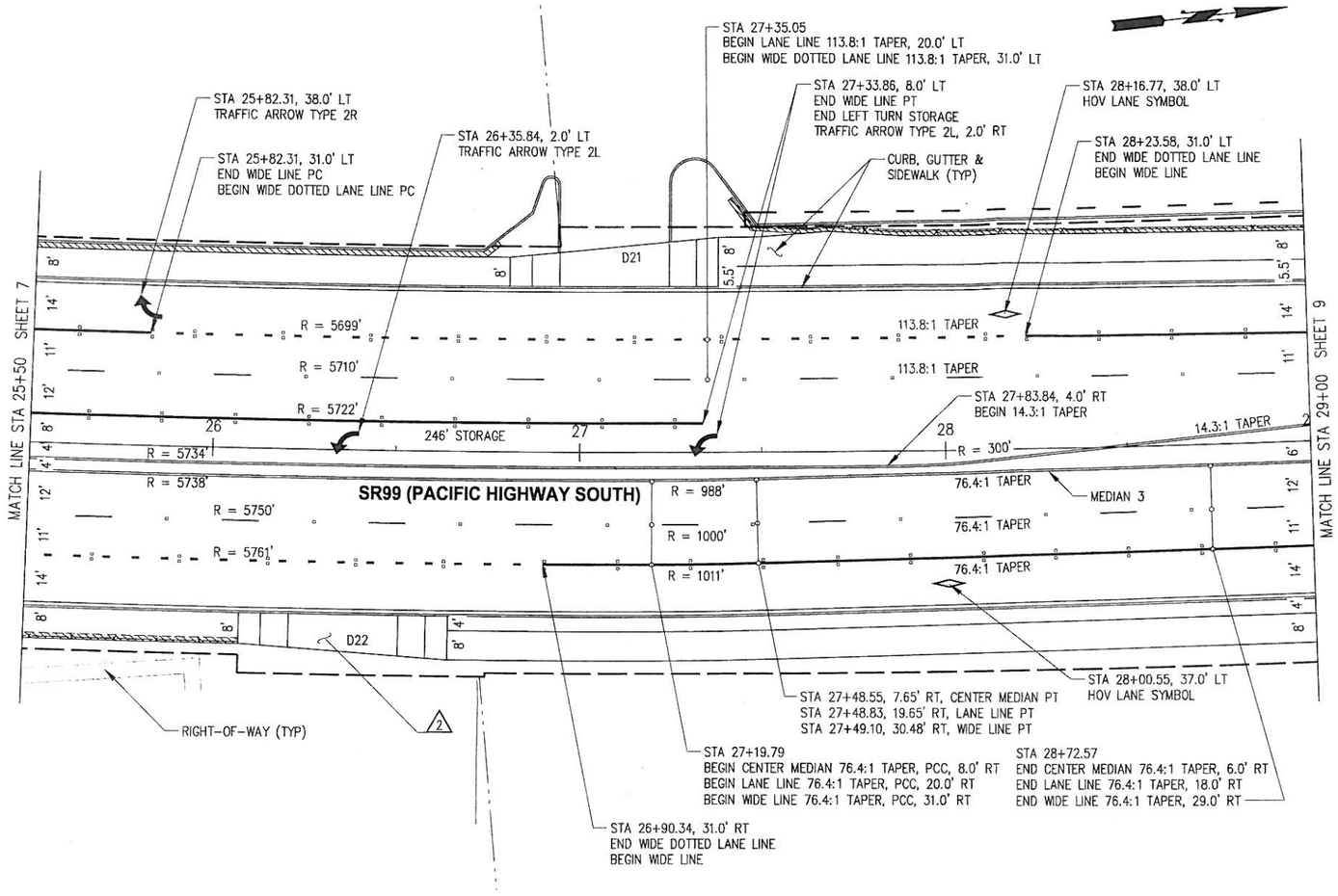
CITY OF Federal Way

KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

SR99
MP 10.52 TO MP 11.27
PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN
KING COUNTY
APRIL, 2010

SHEET 6 OF 13

SW ¼ OF SECTION 04 T. 21N. R. 4E. W.M.



CURVE DATA						
PI STATION	DELTA	RADIUS	TANGENT	LENGTH	S	DESIGN SPEED
26+37.87	13°35'56"	5730.00'	683.20'	1359.99'	2.5%	45 MPH

GENERAL NOTES

1. SEE SHEET 12 – 13 FOR TYPICAL SECTIONS.
2. ALL SIDEWALK RAMPS MEET CURRENT ADA STANDARDS.
3. CHANNELIZATION TO BE INSTALLED SHALL BE PER WSDOT STANDARD SECTION M.
4. FOR DRIVEWAY SCHEDULE SEE SHEET 12.

LEGEND

- PLANTER AREA
- FILL WALL UNDER SIDEWALK
- CUT WALL

DESIGN VARIANCES

2 DEVIATION # 1: ACCESS CONNECTION SEPARATION

0 5 10 20 40 60

SCALE IN FEET

WSDOT NORTHWEST REGION
APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER – AREA OPERATIONS
SIGNED Barbara Briggs DATE 20 April 10
PRINT Barbara Briggs

ENGINEERING MANAGER
SIGNED Martin A. Palmer DATE 28 April 2010
PRINT Martin A. Palmer

NELSON J. DALY — STATE OF WASHINGTON — 33070 — REGISTERED PROFESSIONAL ENGINEER
4.9.10

NO.	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
PROJECT ENGINEER DATE

0656WSDOT08.dwg
FILENAME
KCP 4/09 DESIGNED BY DATE
KCP/CDB 4/09 DRAWN BY DATE
NJD 4/09 CHECKED BY DATE

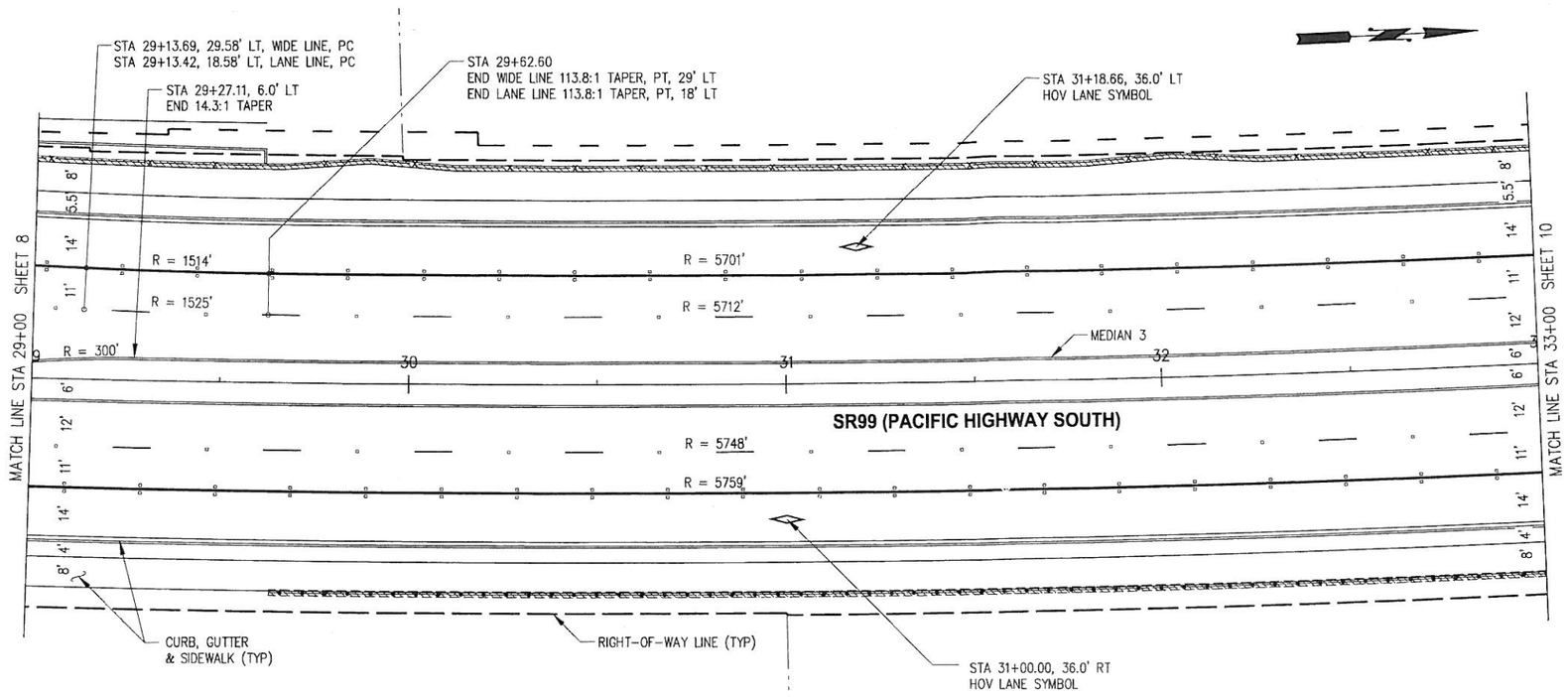
CITY OF Federal Way

KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

SR99
MP 10.52 TO MP 11.27
PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN
KING COUNTY
APRIL, 2010

SHEET 8 OF 13

SW ¼ OF SECTION 04, T. 21N. R. 4E. W.M.



CURVE DATA						
PI STATION	DELTA	RADIUS	TANGENT	LENGTH	S	DESIGN SPEED
26+37.87	13°35'56"	5730.00'	683.20'	1359.99'	2.5%	45 MPH

GENERAL NOTES

1. SEE SHEET 12 – 13 FOR TYPICAL SECTIONS.
2. ALL SIDEWALK RAMPS MEET CURRENT ADA STANDARDS.
3. CHANNELIZATION TO BE INSTALLED SHALL BE PER WSDOT STANDARD SECTION M.
4. FOR DRIVEWAY SCHEDULE SEE SHEET 12.

LEGEND

- PLANTER AREA
- FILL WALL UNDER SIDEWALK
- CUT WALL

0 5 10 20 40 60

SCALE IN FEET

WSDOT NORTHWEST REGION
APPROVED CHANNELIZATION PLAN

TRAFFIC ENGINEER – AREA OPERATIONS
SIGNED Barbara Briggs DATE 20 April 10
PRINT Barbara Briggs

ENGINEERING MANAGER
SIGNED [signature] DATE 20 Apr. 2010
PRINT Martin A. Palmer

NELSON J. DAVIS STATE OF WASHINGTON 33070 REGISTERED PROFESSIONAL ENGINEER
4.9.10

NO.	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
PROJECT ENGINEER DATE

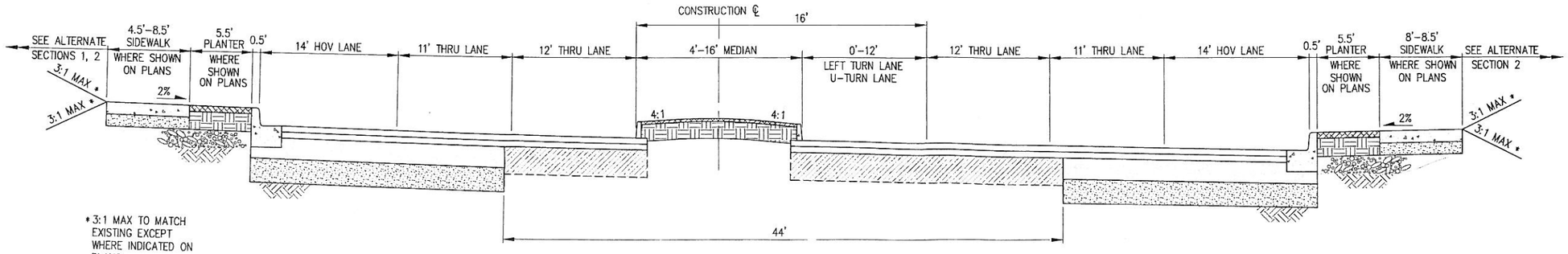
0656WSDOT09.dwg
FILENAME
KCP 4/09
DESIGNED BY DATE
KCP/DDB 4/09
DRAWN BY DATE
NJD 4/09
CHECKED BY DATE

CITY OF Federal Way

KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

SR99
MP 10.52 TO MP 11.27
PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN
KING COUNTY
APRIL, 2010

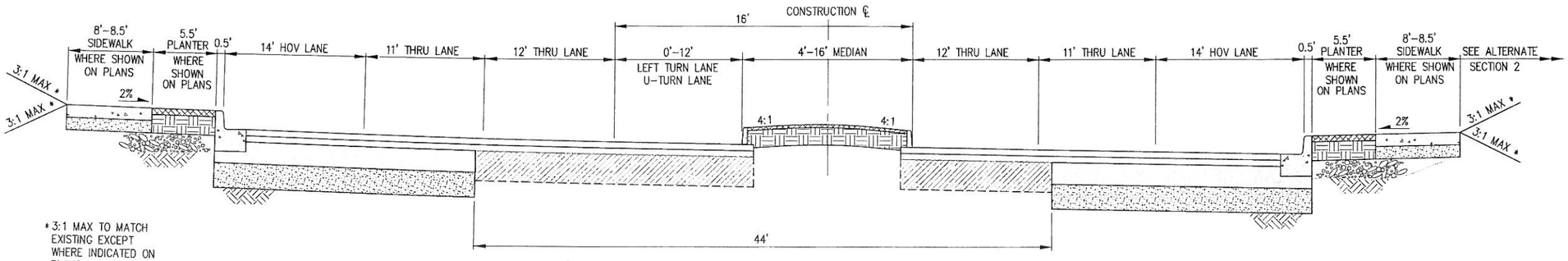
SHEET 9 OF 13



* 3:1 MAX TO MATCH EXISTING EXCEPT WHERE INDICATED ON PLANS.

TYPICAL SECTION A

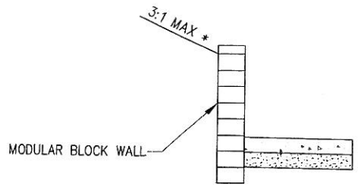
APPROX STA 1+50 TO STA 11+00
APPROX STA 20+00 TO 24+00
NTS



* 3:1 MAX TO MATCH EXISTING EXCEPT WHERE INDICATED ON PLANS.

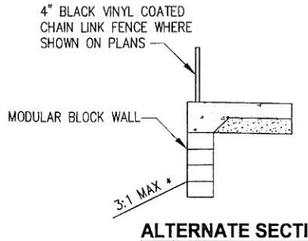
TYPICAL SECTION B

APPROX STA 11+00 TO STA 20+00
NTS



ALTERNATE SECTION 1

WALL 10 – STA 21+23 TO 21+69, LT
WALL 16 – STA 36+59 TO STA 37+23, LT
NTS



ALTERNATE SECTION 2

WALL 2 – STA 5+36 TO 6+48, LT
WALL 3 – STA 7+70 TO 8+87, LT
WALL 4 – STA 9+45 TO 10+49, LT
WALL 5 – STA 9+33 TO 9+75, LT
WALL 7 – STA 19+01 TO 19+26, RT
WALL 8 – STA 19+34 TO 19+71, RT
WALL 9 – STA 20+20 TO 21+76, RT
WALL 11 – STA 22+28 TO 23+37, RT
WALL 12 – STA 24+79 TO 26+08, RT
NTS

DRIVEWAY SCHEDULE

DRIVEWAY NO.	CENTERLINE STATION	ENTRANCE WIDTH (LF)
D1	03+39.08, LT	30.0
D2	04+15.90, LT	30.0
D3	04+72.45, LT	30.0
D4	02+65.93, RT	30.0
D5	03+44.65, RT	30.0
D6	07+36.84, LT	30.0
D7	05+28.63, RT	30.0
D8	05+75.04, RT	30.0
D9	07+10.51, RT	30.0
D10	09+15.58, LT	30.0
D11	09+04.47, RT	30.0
D11A	10+31.67, RT	22.0
D12	14+07.87, RT	30.0
D13	15+40.76, RT	30.0
D14	16+32.49, RT	30.0
D15	20+46.15, LT	30.0
D16	18+66.51, RT	40.0
D17	21+98.14, LT	30.0
D18	22+70.72, LT	30.0
D19	22+19.84, RT	40.0
D20	23+65.24, RT	30.0
D21	27+09.34, LT	30.0
D22	26+36.45, RT	30.0
D23	38+30.97, RT	30.0
D24	71+49.40, RT	30.0
D28	81+31.91, RT	22.0
D29	37+43.22, LT	30.0
D31	39+07.52, RT	23.0

NO.	DATE	BY	APPR	REVISIONS

Approved By

ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
PROJECT ENGINEER DATE

0656WSDOT12.dwg
FILENAME

KCP 4/09
DESIGNED BY DATE
KCP/ODB 4/09
DRAWN BY DATE
NJD 4/09
CHECKED BY DATE

CITY OF Federal Way

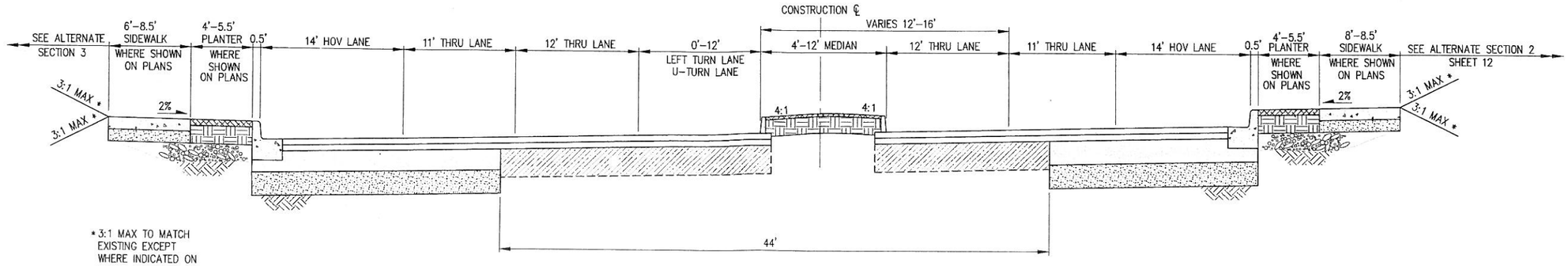
KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

SR99
MP 10.52 TO MP 11.27

PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN

KING COUNTY
APRIL, 2010

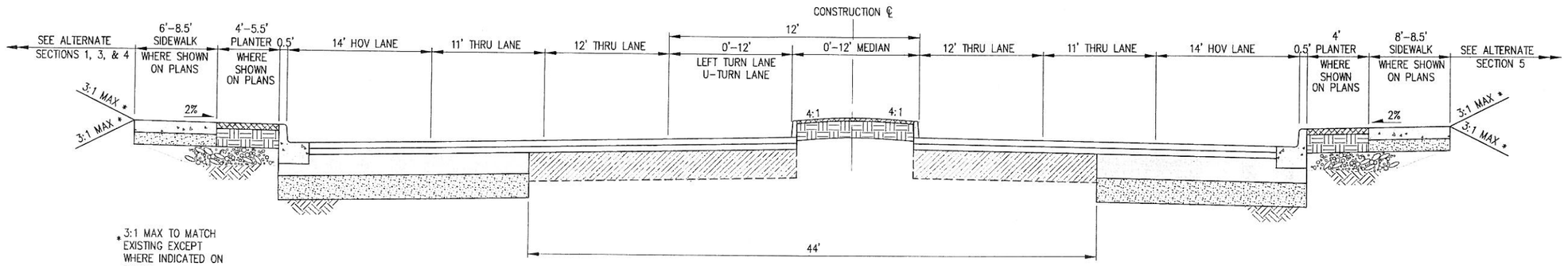
SHEET 12 OF 13



* 3:1 MAX TO MATCH EXISTING EXCEPT WHERE INDICATED ON PLANS.

TYPICAL SECTION C

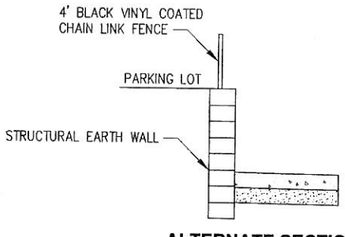
APPROX STA 24+00 TO STA 29+63
NTS



* 3:1 MAX TO MATCH EXISTING EXCEPT WHERE INDICATED ON PLANS.

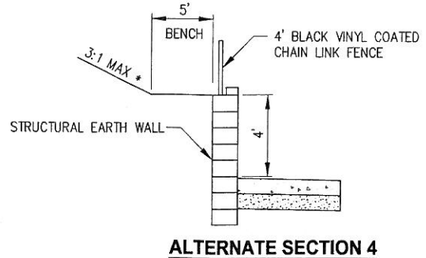
TYPICAL SECTION D

APPROX STA 29+63 TO STA 41+00
NTS



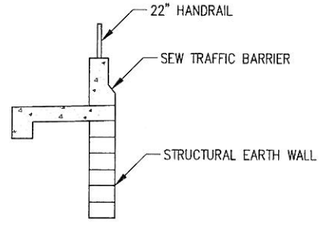
ALTERNATE SECTION 3

WALL 13 STA 24+71 TO STA 26+78, LT
WALL 14 STA 27+40 TO STA 29+98, LT
NTS



ALTERNATE SECTION 4

WALL 14 – STA 29+98 TO 35+88, LT
NTS



ALTERNATE SECTION 5

WALL 15 – STA 29+64 TO 38+02, RT
NTS

NO.	DATE	BY	APPR.	REVISIONS

Approved By

ENGINEERING MANAGER — DATE

PROJECT MANAGER — DATE

PROJECT ENGINEER — DATE

0656WSDOT13.dwg — FILENAME

KCP — DESIGNED BY — 4/09 DATE

KCP/CDW — DRAWN BY — 4/09 DATE

NJD — CHECKED BY — 4/09 DATE

CITY OF Federal Way

KPG
753 9th Avenue N | 1117 Broadway
Seattle, WA 98109 | Suite 501
(206) 286-1640 | Tacoma, WA 98402
www.kpg.com | (253) 627-0720

SR99 — MP 10.52 TO MP 11.27

PACIFIC HIGHWAY SOUTH HOV LANES PHASE IV
CHANNELIZATION PLAN

KING COUNTY — APRIL, 2010

SHEET 13 OF 13