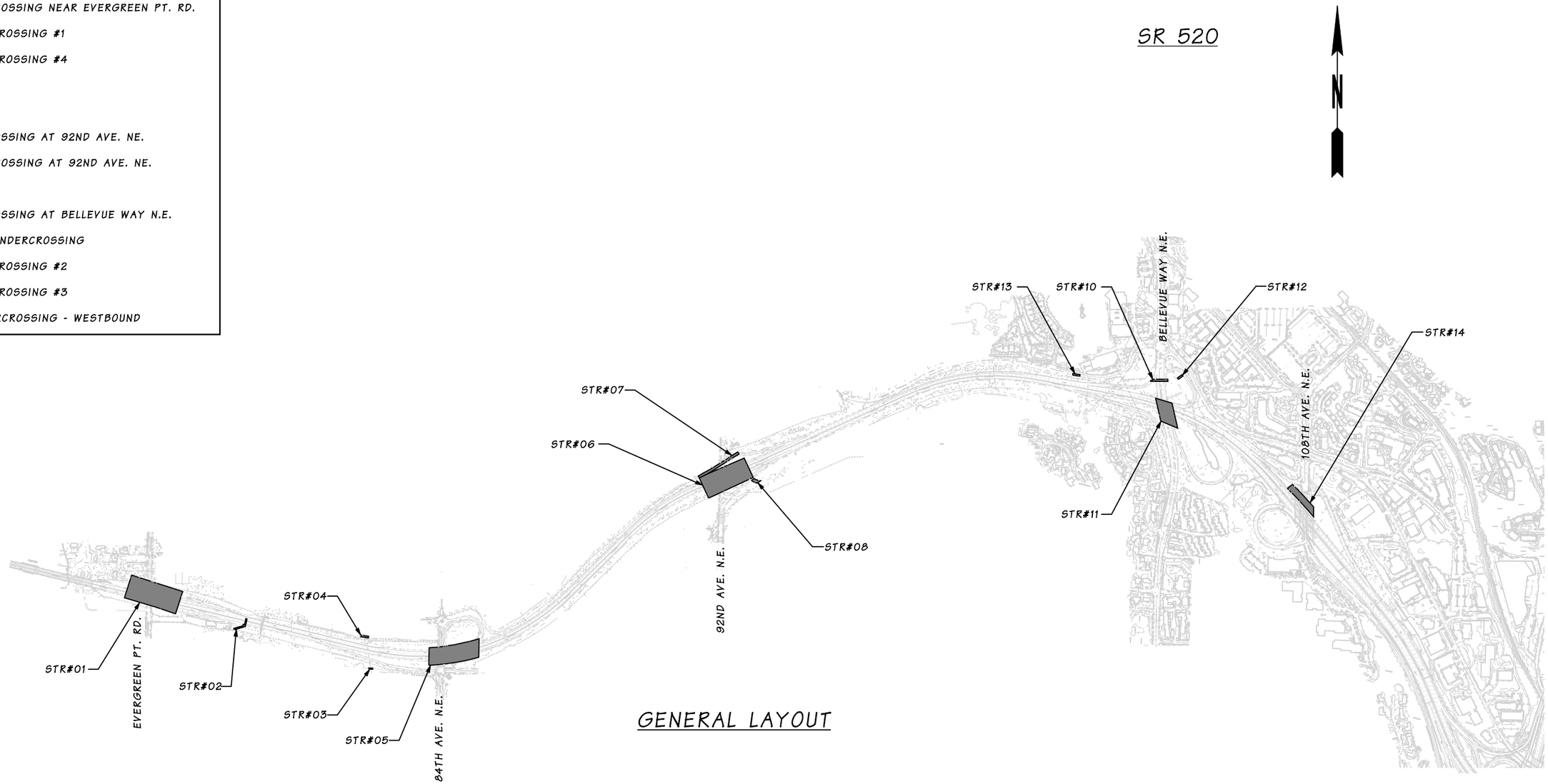
STRUCTURE DESCRIPTION

STR#	TITLE
1	EVERGREEN PT. RD. LID
2	PEDESTRIAN UNDERCROSSING NEAR EVERGREEN PT. RD.
3	PEDESTRIAN CREEK CROSSING #1
4	PEDESTRIAN CREEK CROSSING #4
5	84TH AVE. N.E. LID
6	92ND AVE. N.E. LID
7	PEDESTRIAN OVERCROSSING AT 92ND AVE. NE.
8	PEDESTRIAN UNDERCROSSING AT 92ND AVE. NE.
9	NOT USED
10	PEDESTRIAN OVERCROSSING AT BELLEVUE WAY N.E.
11	BELLEVUE WAY N.E. UNDERCROSSING
12	PEDESTRIAN CREEK CROSSING #2
13	PEDESTRIAN CREEK CROSSING #3
14	108TH AVE. N.E. OVERCROSSING - WESTBOUND



GENERAL LAYOUT

0 500 1000
SCALE IN FEET

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/19/2010 12:25:27 PM				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT					10	WASH			
Designed By	H. JIANG									
Checked By	B. AKESSON					JOB NUMBER				
Detailed By	H. JIANG					PE2344				
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV

GENERAL LAYOUT

BRIDGE SHEET NO. BG00

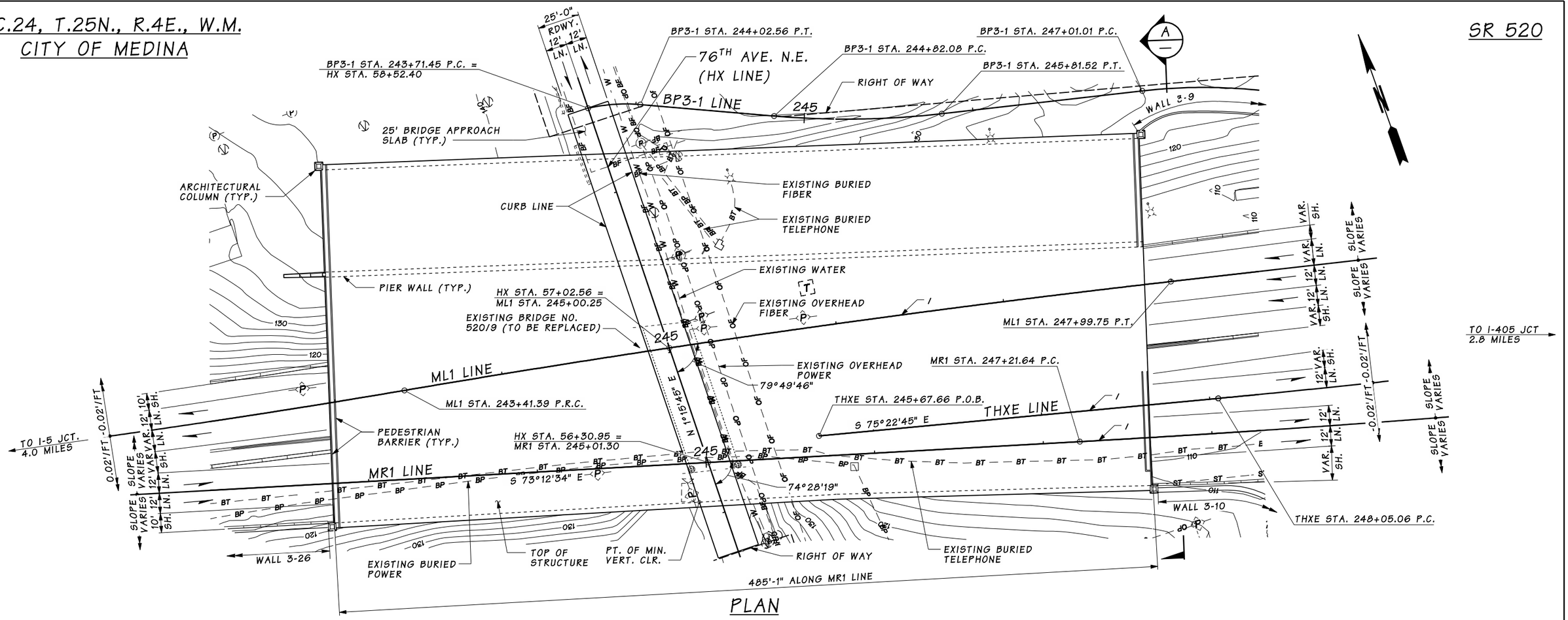
SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_PS_BG_01_EastsideGenLay.dgn

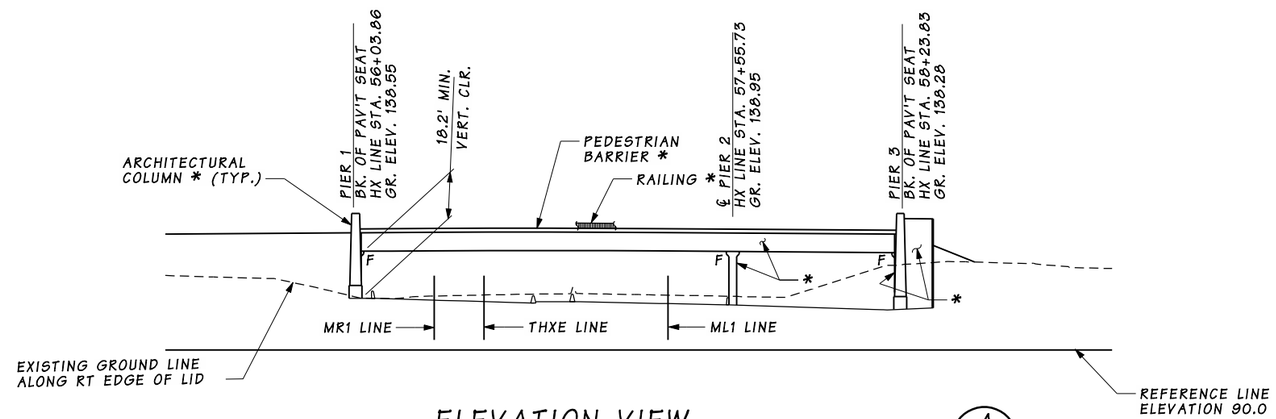
SR ____ JOB NO. PE2344 SHEET BG00
ProjectWise Vault: BG_Bridges

SEC.24, T.25N., R.4E., W.M.
CITY OF MEDINA

SR 520



PLAN



ELEVATION VIEW (A)

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB ON HX LINE AND ARE EQUAL TO PROFILE GRADE

≠ PROFILE GRADE AND PIVOT POINT

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1 (TYPICAL FOR ALL WALL AND BARRIER FACES)

DATUM

NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

P.C. GIRDERS (MODIFIED WF74G) REPLACEMENT
LOADING: SOIL SURCHARGE PLUS 100 PSF LIVE LOAD OR HL-93

Bridge Design Engr.		3/30/2010 3:30:54 PM			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT				10	WASH			
Designed By	H. JIANG				JOB NUMBER				
Checked By	B. AKESSON				PE2344				
Detailed By	L. STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
EVERGREEN PT. RD. LID

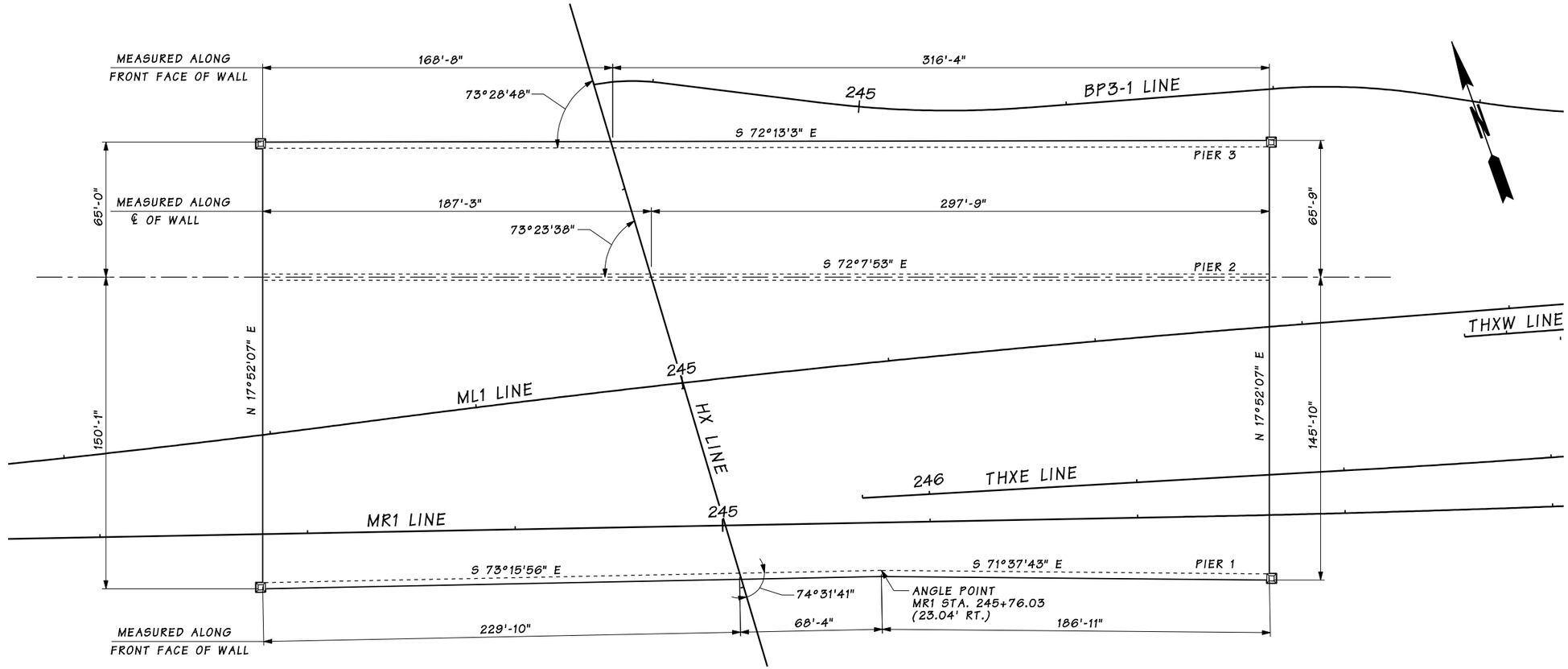
LAYOUT

BRIDGE SHEET NO. BG01

SHEET OF SHEETS

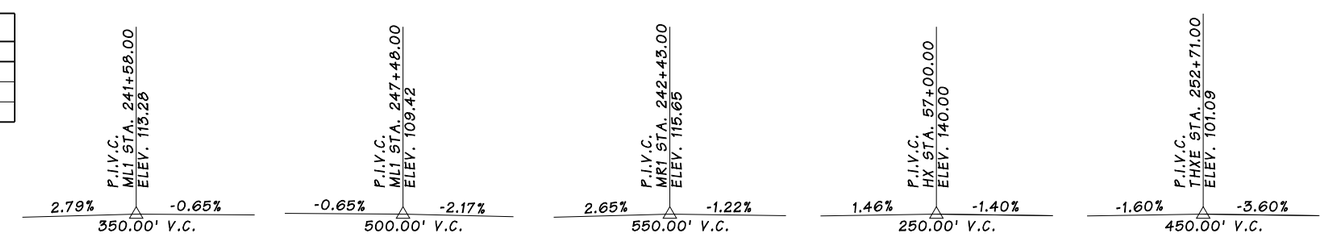
FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_3_PS_BG_01_01.dgn

SR 520 JOB NO. PE2344 SHEET BG01
ProjectWise Vault: BG_Bridges



PLAN

ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
ML1 241+66.86	3°19'43" LT.	6010.00'	174.63'	349.16'	S 76°19'49" E
ML1 245+70.63	3°09'07" RT.	8332.00'	229.24'	458.36'	S 79°39'33" E
MR1 250+64.21	3°55'43" LT.	9988.00'	342.57'	684.87'	S 73°12'34" E



ML1 LINE PROFILE

MR1 LINE PROFILE

HX LINE PROFILE

THXE LINE PROFILE

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:31:09 PM							
Supervisor	P. BOTT								
Designed By	H.JIANG								
Checked By	B.AKESSON								
Detailed By	L. STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER FE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
EVERGREEN PT. RD. LID

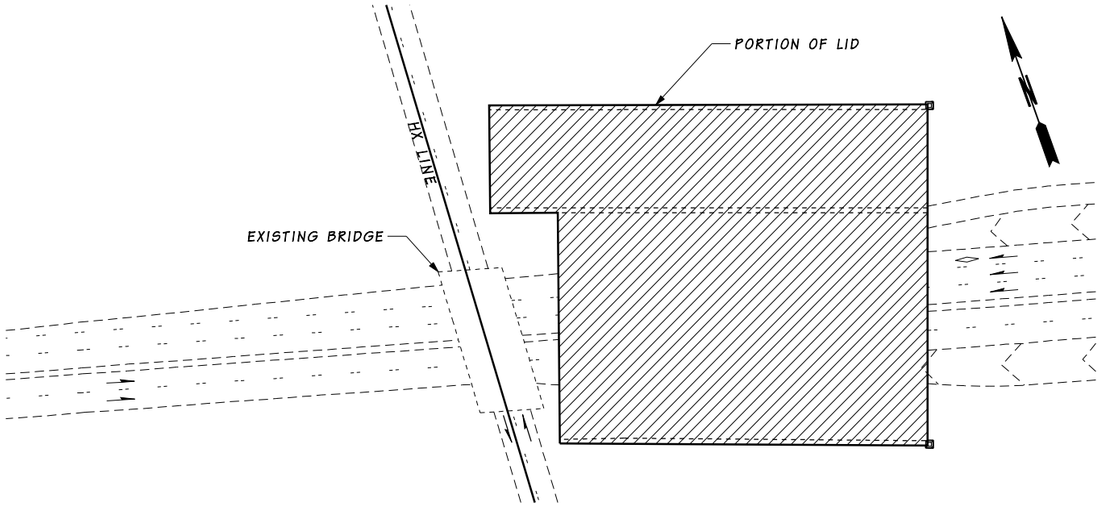
LID GEOMETRY

BRIDGE SHEET NO. BG02

SHEET OF SHEETS

FILENAME: FW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_3_P9_BG_01_02.dgn

SR 520 JOB NO. PE2344 SHEET BG02
ProjectWise Vault: BG_Bridges

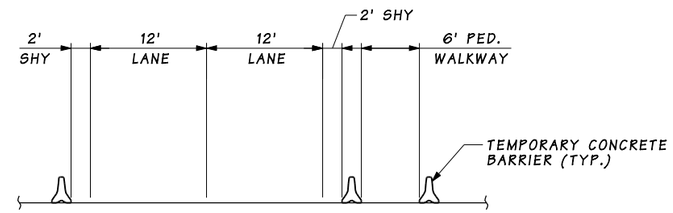


STAGE 1

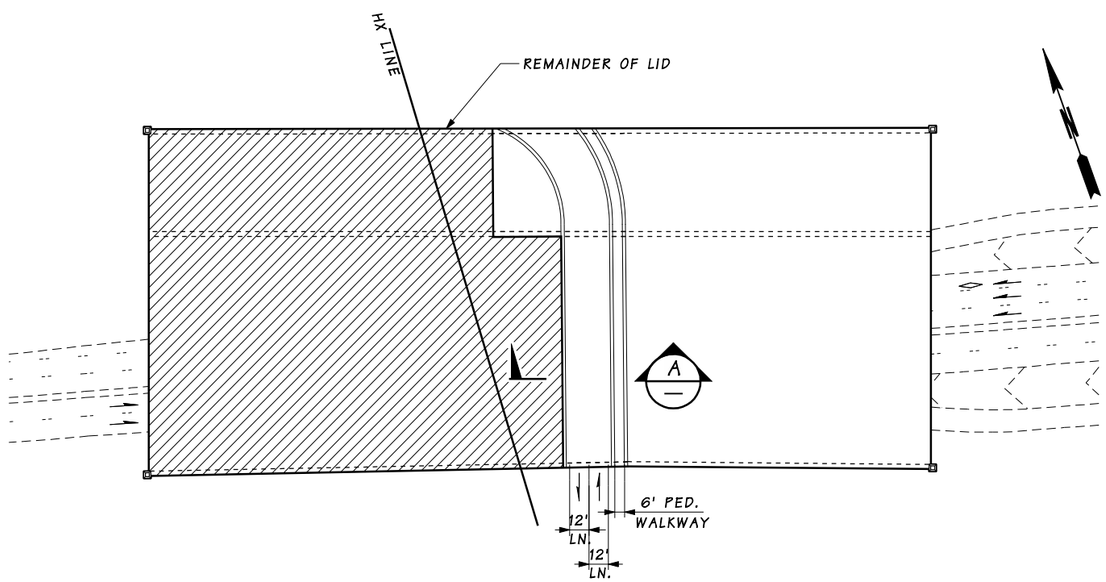
STAGE 1

A. CONSTRUCT PORTION OF LID EAST OF EXISTING BRIDGE.

B. SHIFT EVERGREEN POINT ROAD TRAFFIC TO PORTION OF LID AND DEMOLISH EXISTING BRIDGE.



SECTION A

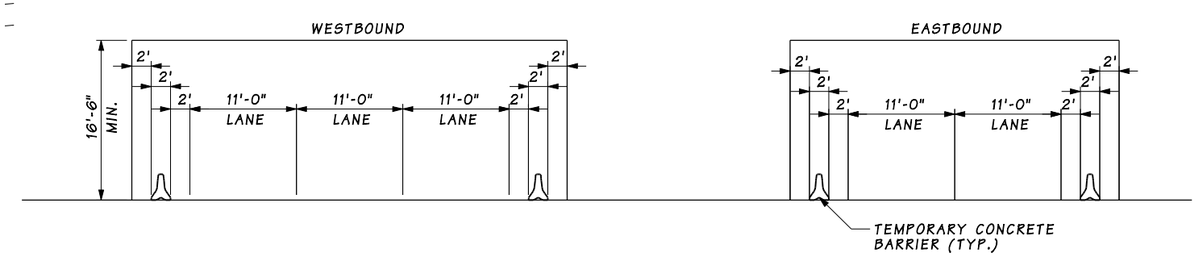


STAGE 2

STAGE 2

A. CONSTRUCT REMAINDER OF LID.

B. SHIFT EVERGREEN POINT ROAD TRAFFIC TO FINAL CONFIGURATION



FALSEWORK OPENING

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:31:23 PM			
Supervisor	P.BOTT				
Designed By	H. JIANG				
Checked By	B.AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
EVERGREEN PT. RD. LID

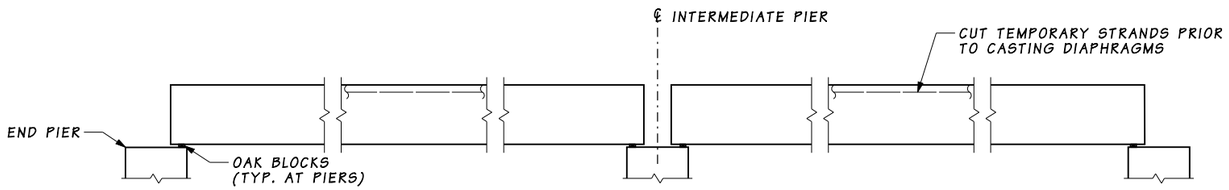
CONSTRUCTION SEQUENCE 1

BRIDGE SHEET NO. BG03

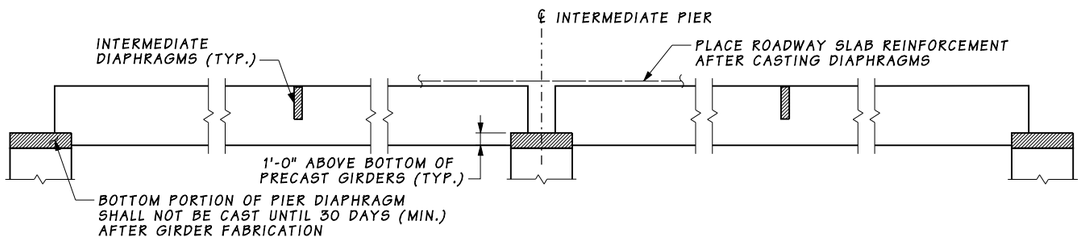
SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_3_P9_BG_01_03.dgn

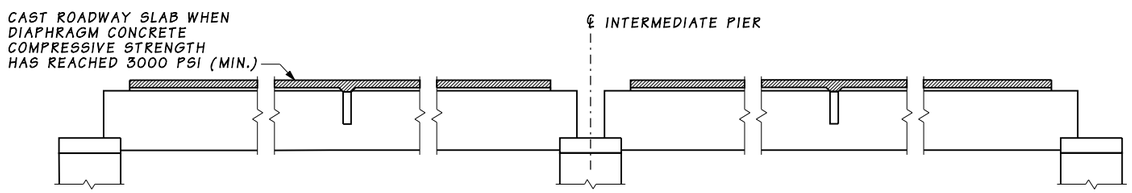
SR 520 JOB NO. PE2344 SHEET BG03
ProjectWise Vault: BG_Bridges



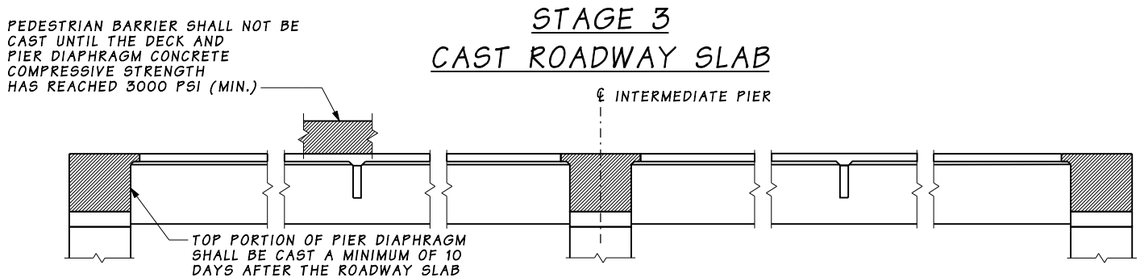
STAGE 1
SET GIRDERS IN PLACE



STAGE 2
CAST DIAPHRAGMS AND PLACE ROADWAY SLAB REINFORCEMENT

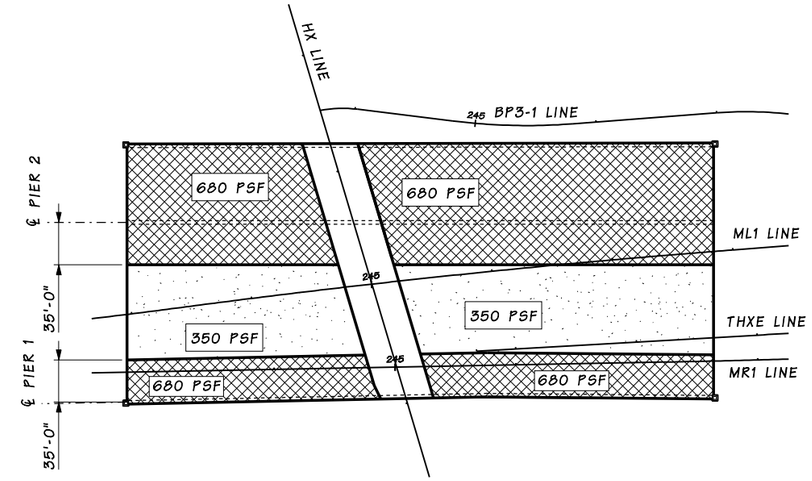


STAGE 3
CAST ROADWAY SLAB



STAGE 4
COMPLETE DIAPHRAGMS

CONSTRUCTION SEQUENCE ~ SUPERSTRUCTURE



LOADING DIAGRAM

NOTE:

1. LOAD LIMITS SHOWN ARE FOR ALL SUPERIMPOSED LOADS INCLUDING LANDSCAPING AND ARCHITECTURAL ELEMENTS. LOADS ASSUME A SOIL DENSITY OF 110PCF PLUS 20 PSF FOR PLANT MATERIALS. ALL OTHER AREAS ARE DESIGNED FOR AASHTO HL-93 LOADING.
2. THE DESIGN OF THE STRUCTURE INCLUDES AN ADDITIONAL 100 PSF FOR PEDESTRIAN LIVE LOAD ON LANDSCAPED AREAS.

NOTE:

NO LIVE LOAD SHALL BE ALLOWED ON THE SPANS UNTIL THE TOP PORTION OF THE PIER DIAPHRAGM CONCRETE COMPRESSIVE STRENGTH HAS REACHED 3000 P.S.I. (MIN.)

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:31:37 PM								
Supervisor	P.BOTT									
Designed By	H. JIANG									
Checked By	B.AKESSON									
Detailed By	L. STEVLINGSON									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
EVERGREEN PT. RD. LID

CONSTRUCTION SEQUENCE 2 & LOADING DIAGRAM

BRIDGE SHEET NO. BG04

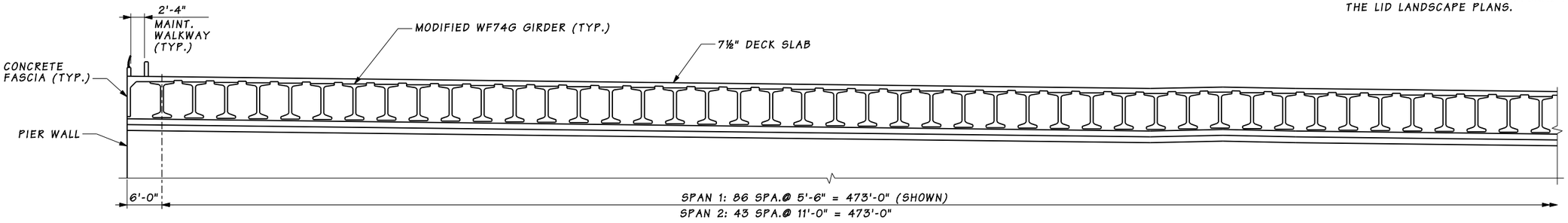
SHEET OF SHEETS

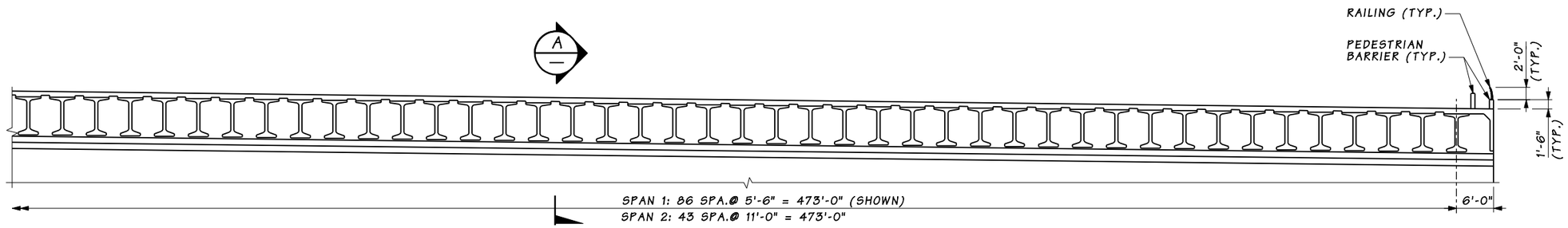
FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_3_PS_BG_01_04.dgn

SR 520 JOB NO. PE2344 SHEET BG04
ProjectWise Vault: BG_Bridges

NOTE:

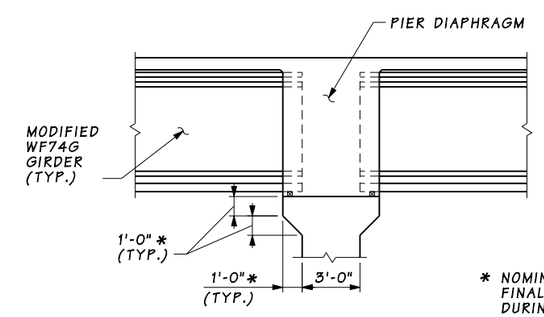
1. FOR LANDSCAPING DETAILS ON TOP OF THE LID, REFER TO THE LID ARCHITECTURAL PLANS AND THE LID LANDSCAPE PLANS.





TYPICAL SECTION

SECTION SHOWN PERPENDICULAR TO LID EDGES



* NOMINAL STRUCTURAL DIMENSIONS. FINAL DIMENSIONS TO BE DETERMINED DURING FINAL DESIGN.

SECTION A

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:31:51 PM				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT					10	WASH			
Designed By	H. JIANG									
Checked By	B. AKESSON					JOB NUMBER				
Detailed By	L.STEVLINGSON					PE2344				
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
EVERGREEN PT. RD. LID

TYPICAL SECTION

BRIDGE SHEET NO. BG05

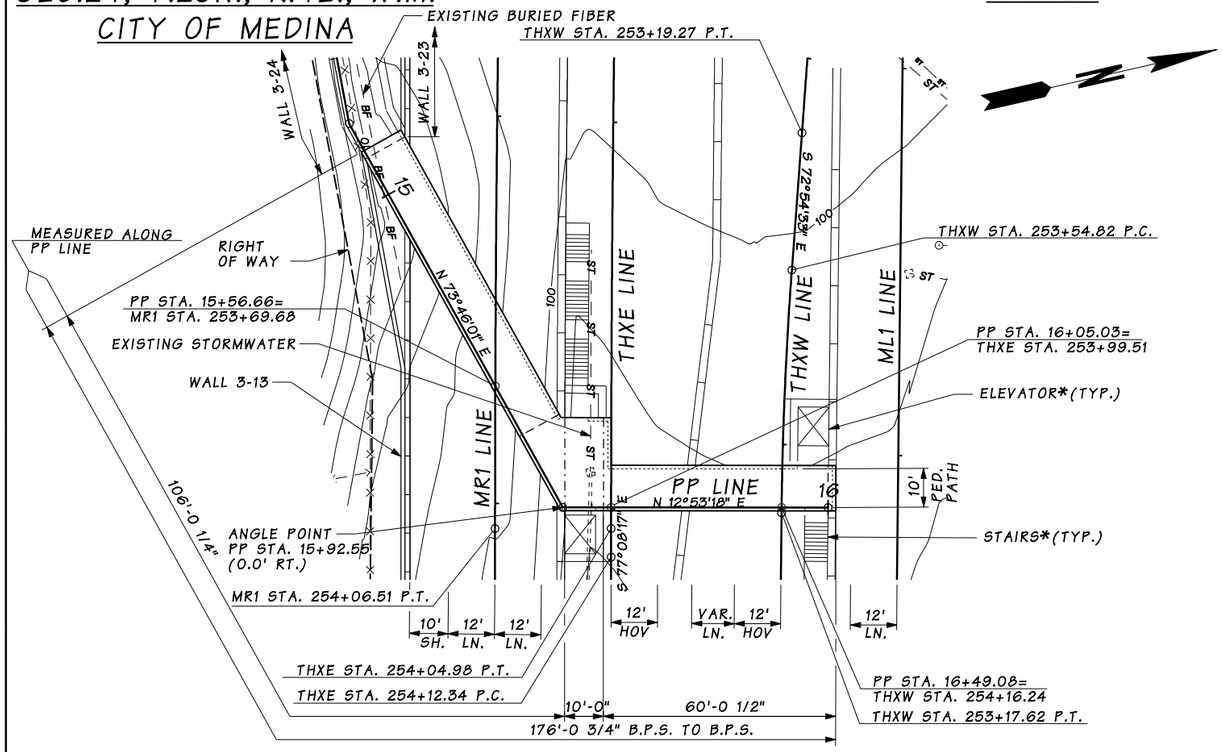
SHEET OF SHEETS

FILENAME: PW:\CADD\Proj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_3_PS_BG_01_05.dgn

SR SR520 JOB NO. PE2344 SHEET BG05
ProjectWise Vault: BG_Bridges

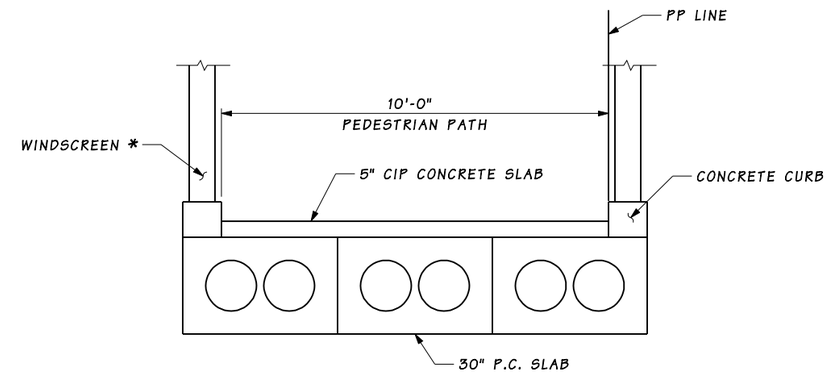
SEC.24, T.25N., R.4E., W.M.
CITY OF MEDINA

SR 520



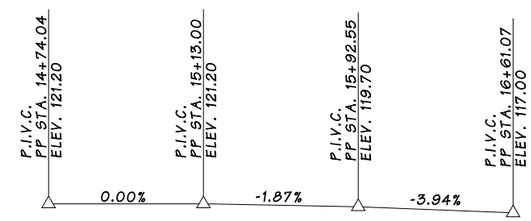
PLAN

BEARING OF ALL PIERS IS NORMAL TO PP LINE



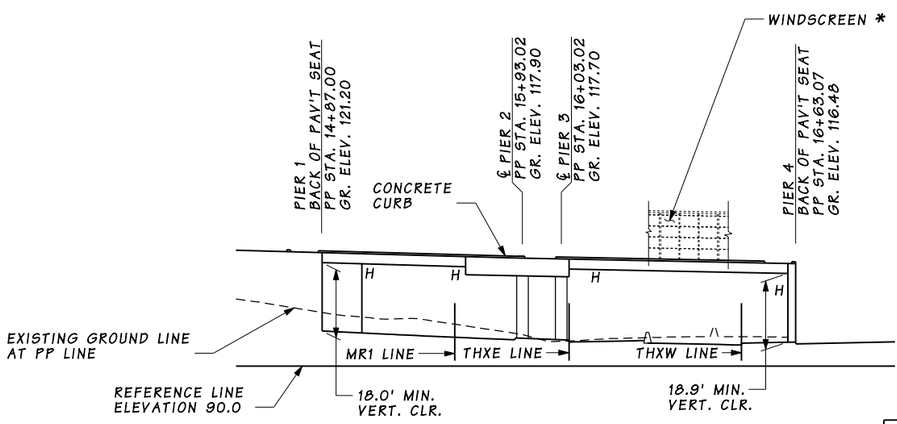
TYPICAL SECTION

(FOR SPANS 1 & 3)



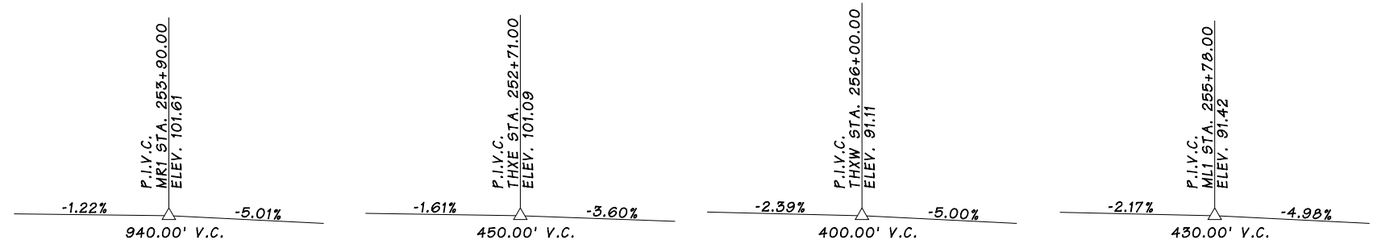
PP LINE PROFILE

* ARCHITECTURAL DESIGN PER TRANSIT FACILITY DESIGN CRITERIA, SEE APPENDIX TF1



ELEVATION

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB AND ARE EQUAL TO PROFILE GRADE



MR1 LINE PROFILE | THXE LINE PROFILE | THXW LINE PROFILE | ML1 LINE PROFILE

ROADWAY HORIZONTAL CURVE DATA

PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
THXW 253+86.23	03°35'53" LT.	1000.00'	31.41'	62.80'	S 72°54'33" E
THXE 252+89.86	01°19'29" LT.	9958.00'	115.13'	230.25'	S 75°48'48" E
MR1 250+64.21	03°55'43" LT.	9988.00'	342.57'	684.87'	S 73°12'34" E

30" P.C. SLABS & CIP CONC. SLAB
LOADING: H-10 OR AASHTO LRFD PEDESTRIAN LOAD

DATUM

NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010	3:32:10 PM		
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN UNDERCROSSING NEAR EVERGREEN PT. RD.

LAYOUT

BRIDGE SHEET NO. BG06

SHEET OF SHEETS

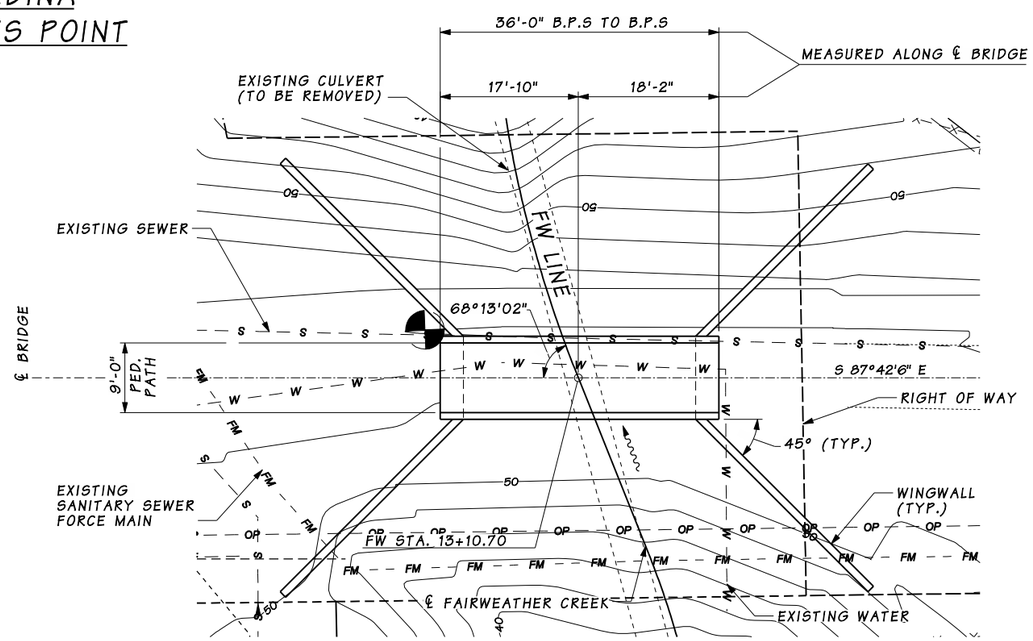
FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_3_PS_BG_02_01.dgn

SR ____ JOB NO. PE2344 SHEET BG06

ProjectWise Vault: BG_Bridges

SEC.24, T.25N., R.4E., W.M.
CITY OF MEDINA
TOWN OF HUNTS POINT

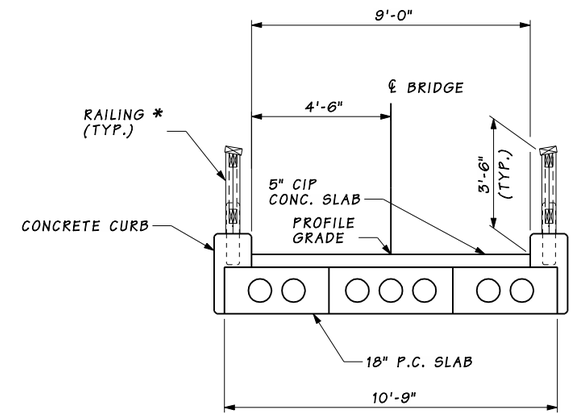
SR 520



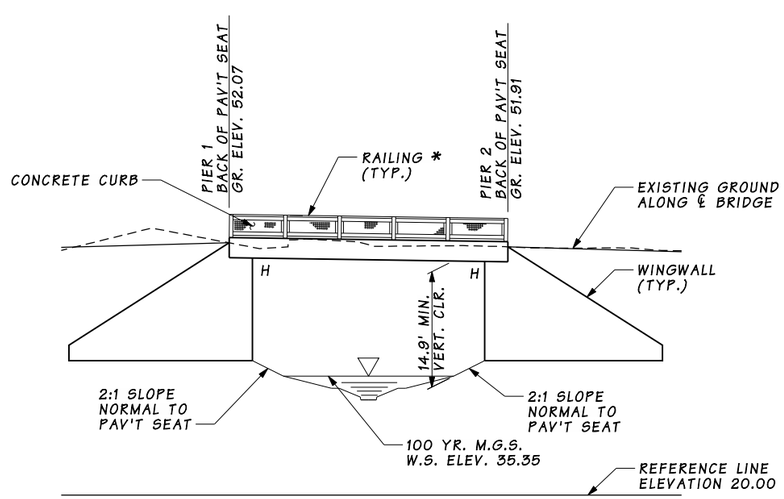
PLAN

BEARING OF ALL PIERS IS N 2°17'54" E

NOTE:
1. FOR DETAILS OF THE CREEK PROFILE, SEE THE STREAM RESTORATION PLANS.



TYPICAL SECTION



ELEVATION

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB AND ARE EQUAL TO PROFILE GRADE

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1

CREEK HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
FW STA. 12+93.17	12°29'26" LT.	155.00'	16.96'	33.79'	S 6°59'38" E

18" P.C. SLABS
LOADING: H-10 OR AASHTO LRFD
PEDESTRIAN LOADING

DATUM
NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:32:30 PM								
Supervisor	P. BOTT									
Designed By	A. JELLIN									
Checked By	B.AKESSON									
Detailed By	H. JIANG									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN CREEK CROSSING #1

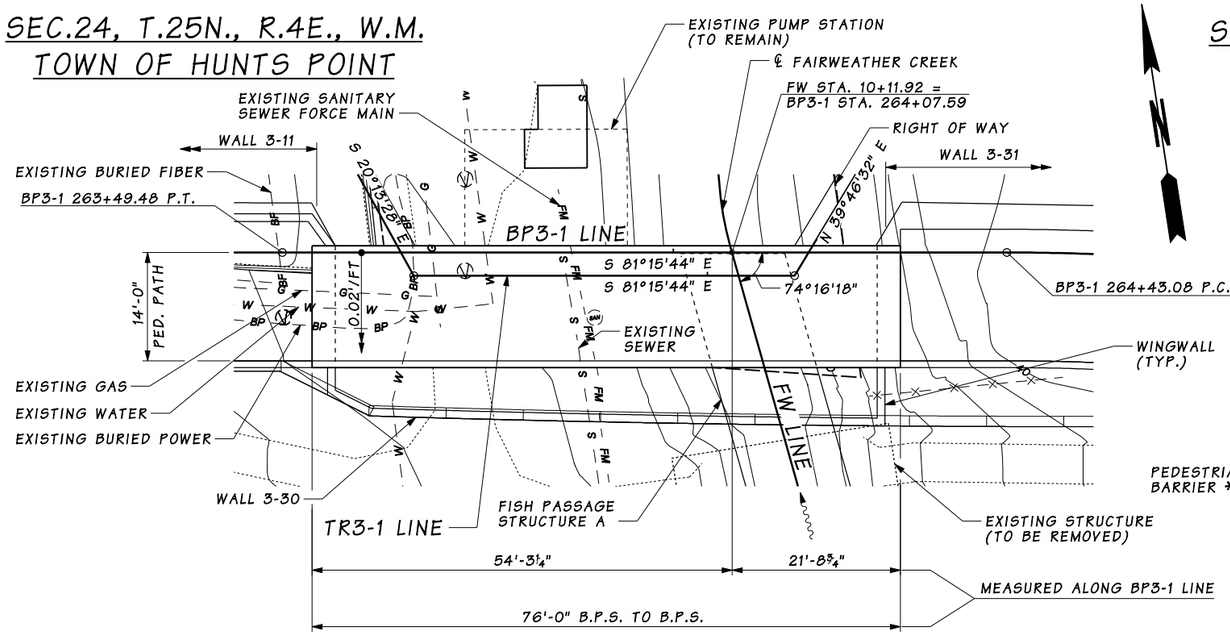
LAYOUT

BRIDGE SHEET NO. BG07
SHEET OF SHEETS

FILENAME: FW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_3_P9_BG_03_01.dgn

SR ____ JOB NO. ____ SHEET BG07
ProjectWise Vault: BG_Bridges

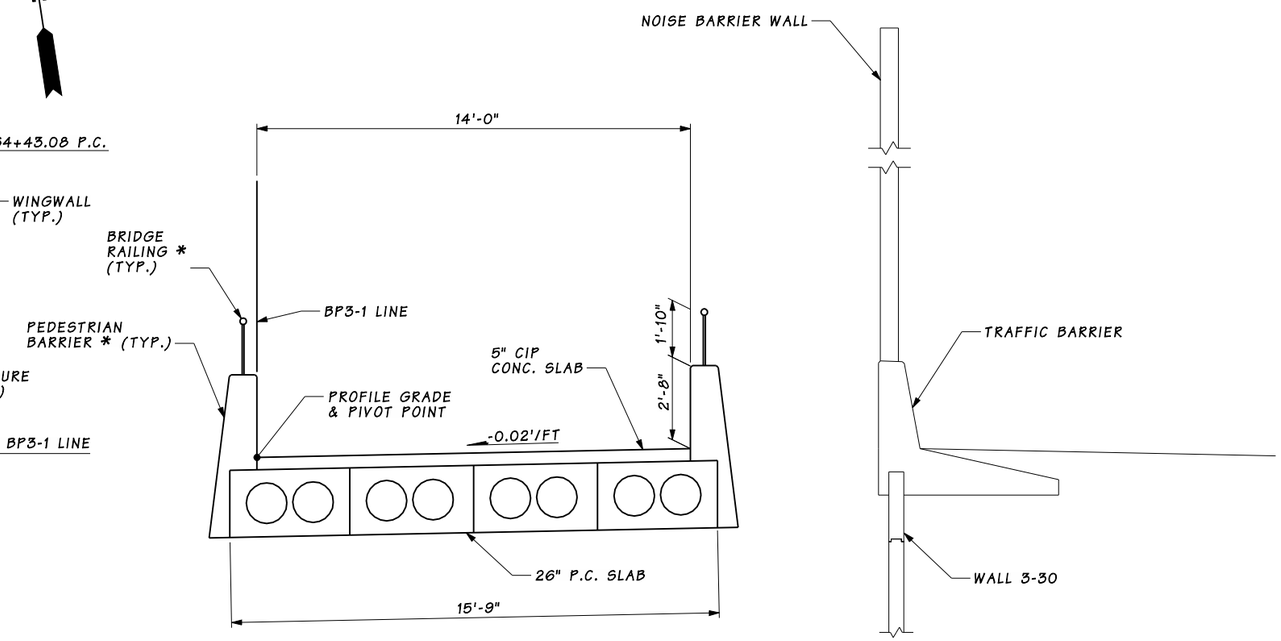
SEC.24, T.25N., R.4E., W.M.
TOWN OF HUNTS POINT



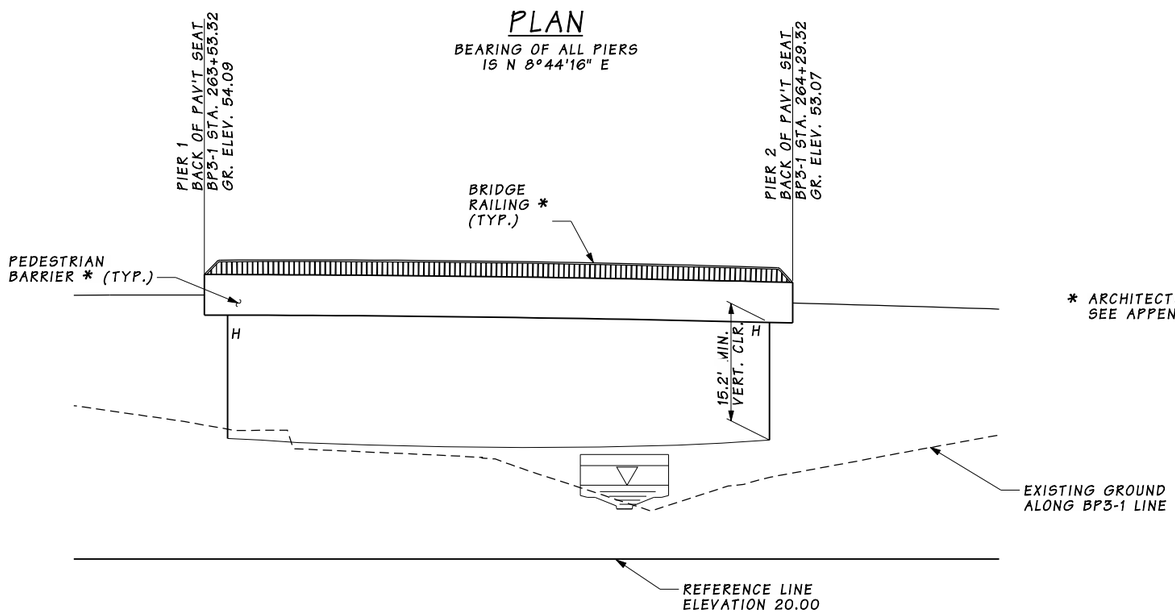
SR 520

PLAN

BEARING OF ALL PIERS IS N 8°44'16" E



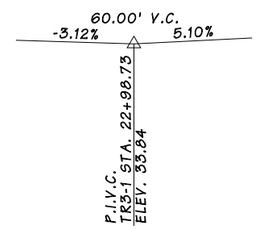
TYPICAL SECTION



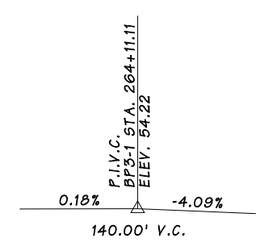
ELEVATION

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB AND ARE EQUAL TO PROFILE GRADE

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1



TR3-1 LINE PROFILE



BP3-1 LINE PROFILE

NOTE:
1. FOR DETAILS OF THE CREEK ALIGNMENT AND PROFILE, SEE THE STREAM RESTORATION PLANS.

26" P.C. SLABS
LOADING: H-10 OR AASHTO LRFD
PEDESTRIAN LOADING

DATUM
NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:33:01 PM							
Supervisor	P. BOTT								
Designed By	A. JELLIN								
Checked By	B. AKESSON								
Detailed By	H. JIANG								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN CREEK CROSSING #4

LAYOUT

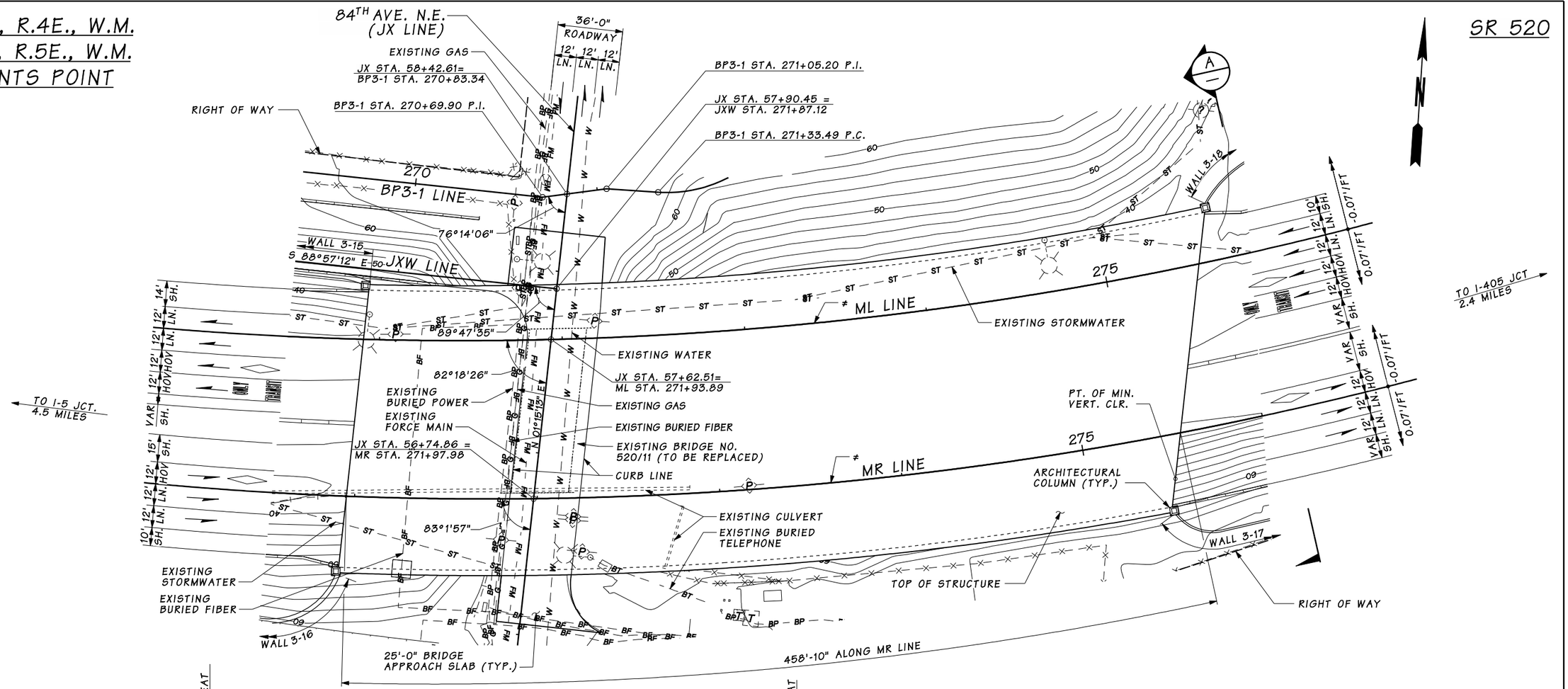
BRIDGE SHEET NO. BG08
SHEET OF SHEETS

FILENAME: FW:\CADD\Proj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_3_P9_BG_04_01.dgn

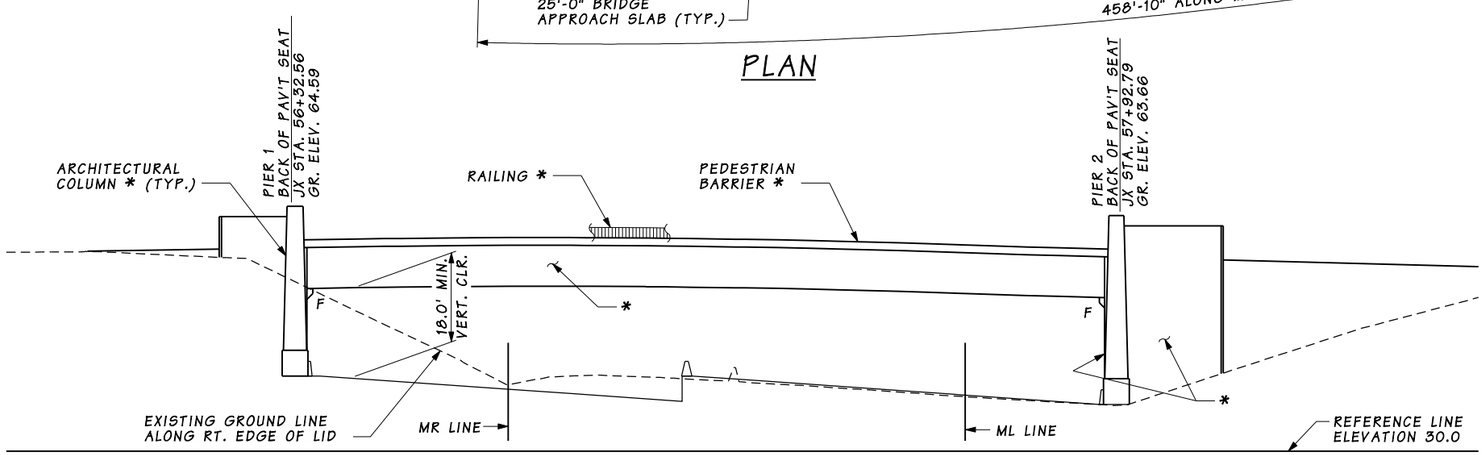
SR ____ JOB NO. ____ SHEET BG08
ProjectWise Vault: BG_Bridges

SEC.24, T.25N., R.4E., W.M.
SEC.19, T.25N., R.5E., W.M.
TOWN OF HUNTS POINT

SR 520



PLAN



≠ PROFILE GRADE AND PIVOT POINT

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1 (TYPICAL FOR ALL WALL AND BARRIER FACES)

ELEVATION VIEW

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB ON JX LINE AND ARE EQUAL TO PROFILE GRADE

P.C. GIRDERS (MODIFIED WF83G) REPLACEMENT
LOADING: SOIL SURCHARGE PLUS 100 PSF LIVE LOAD OR HL-93

DATUM
NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:33:18 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L.STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
84TH AVE. N.E. LID

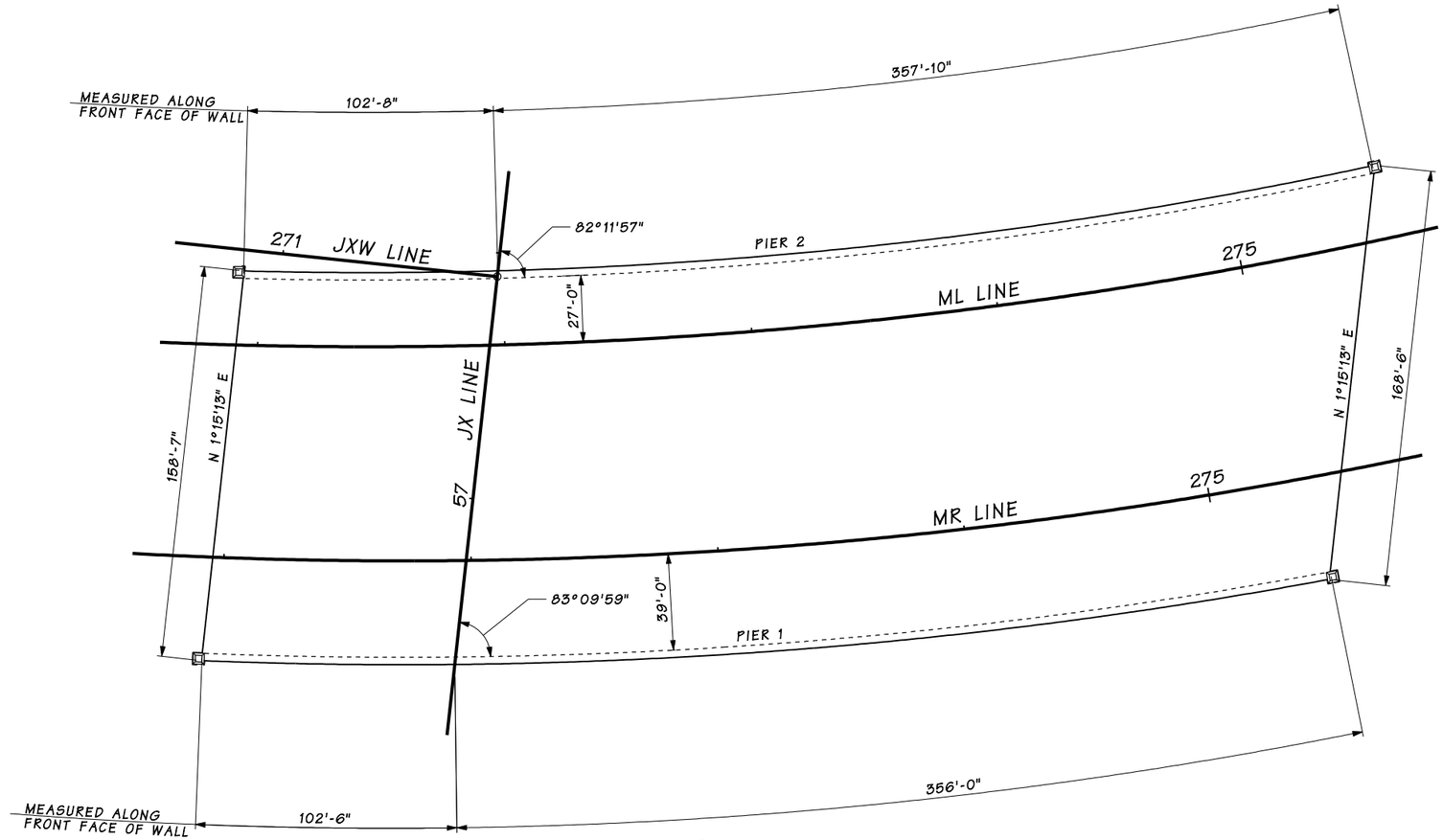
LAYOUT

BRIDGE SHEET NO. BG09

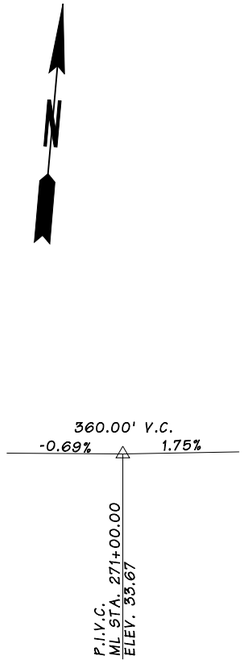
SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_3_PS_BG_06_01.dgn

SR ____ JOB NO. PE2344 SHEET BG09
ProjectWise Vault: BG_Bridges

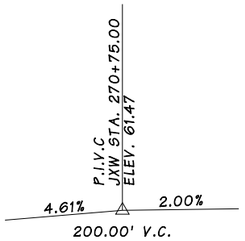


PLAN

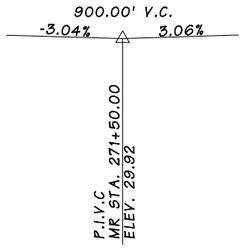


ML LINE PROFILE

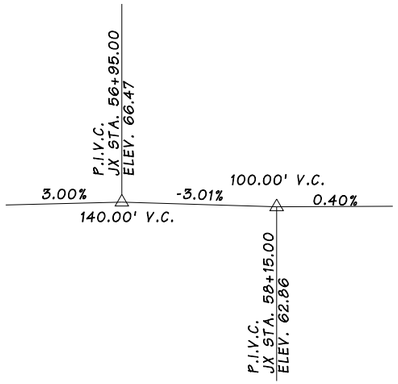
ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
MR 274+65.37	49°12'24" LT.	2000.00'	915.81'	1717.63'	S 77°08'17" E
ML 276+26.85	59°15'01" LT.	1961.00'	1115.14'	2027.90'	S 76°30'26" E



JXW LINE PROFILE



MR LINE PROFILE



JX LINE PROFILE

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:33:32 PM							
Supervisor	P. BOTT								
Designed By	H. JIANG								
Checked By	B. AKESSON								
Detailed By	L.STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
84TH AVE. N.E. LID

LID GEOMETRY

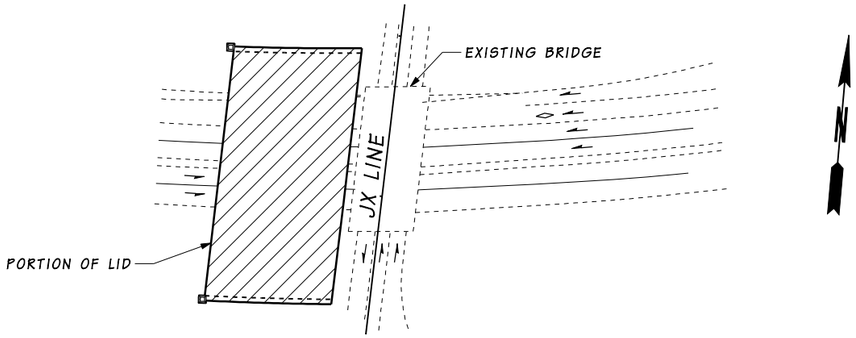
BRIDGE SHEET NO. BG10

SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_3_P9_BG_06_02.dgn

SR ____ JOB NO. ____ SHEET BG10

ProjectWise Vault:

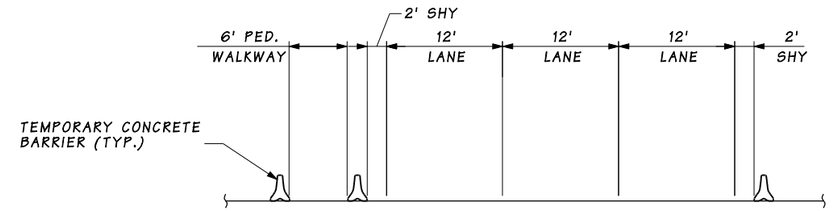


STAGE 1

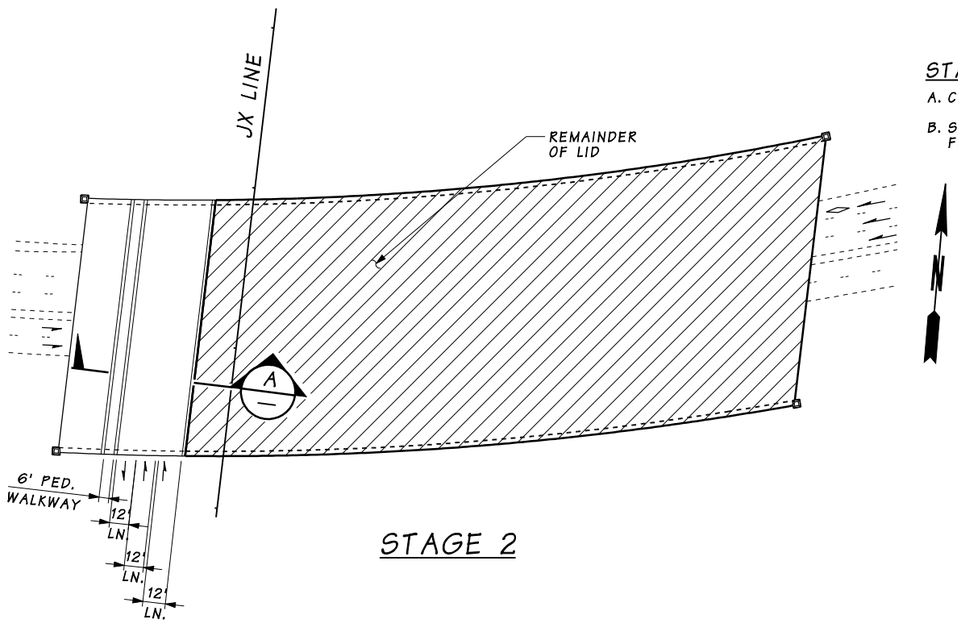
STAGE 1

A. CONSTRUCT PORTION OF LID WEST OF EXISTING BRIDGE.

B. SHIFT 84TH AVE. N.E. TRAFFIC TO PORTION OF LID AND DEMOLISH EXISTING BRIDGE.



SECTION A

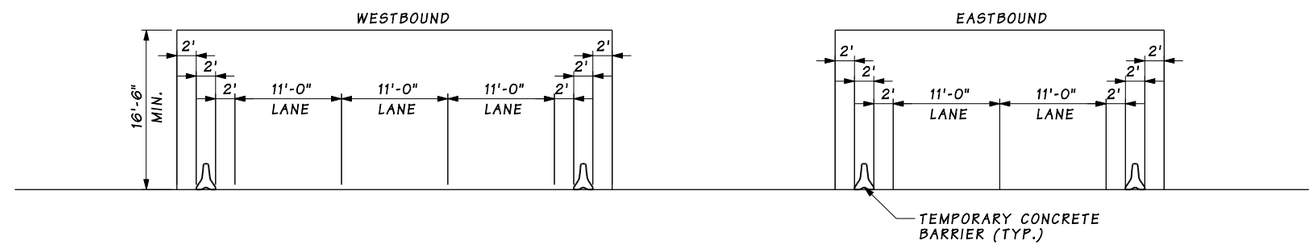


STAGE 2

STAGE 2

A. CONSTRUCT REMAINDER OF LID.

B. SHIFT 84TH AVE. N.E. TRAFFIC TO FINAL CONFIGURATION.



FALSEWORK OPENING

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:33:46 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
84TH AVE, N.E. LID

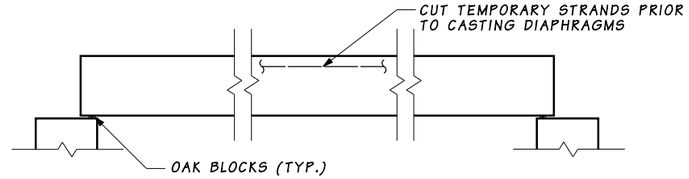
CONSTRUCTION SEQUENCE 1

BRIDGE SHEET NO. BG11

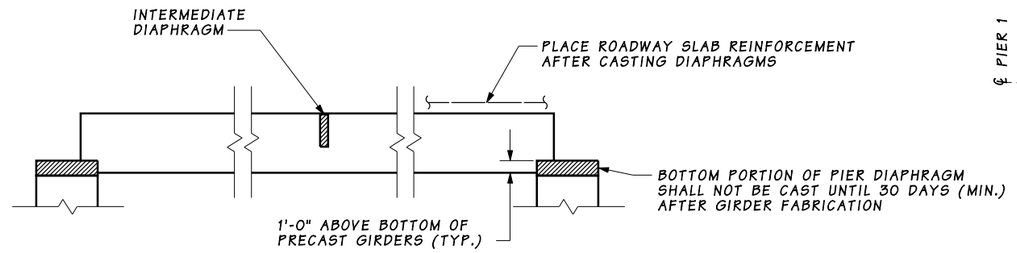
SHEET OF SHEETS

SR ___ JOB NO. PE2344 SHEET BG11
ProjectWise Vault: BG_Bridges

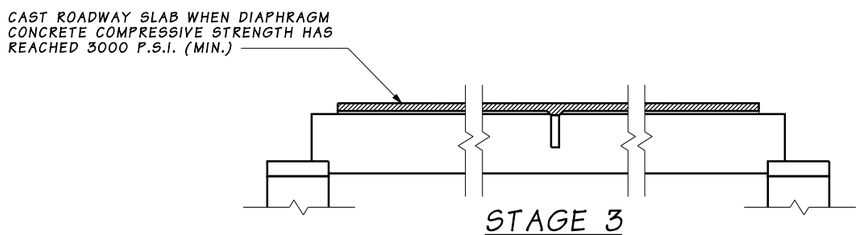
FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_3_P9_BG_06_03.dgn



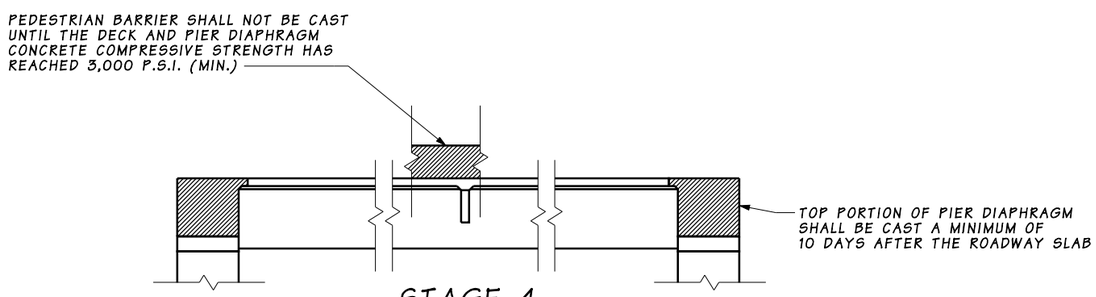
STAGE 1
SET GIRDERS IN PLACE



STAGE 2
CAST DIAPHRAGMS AND PLACE ROADWAY SLAB REINFORCEMENT

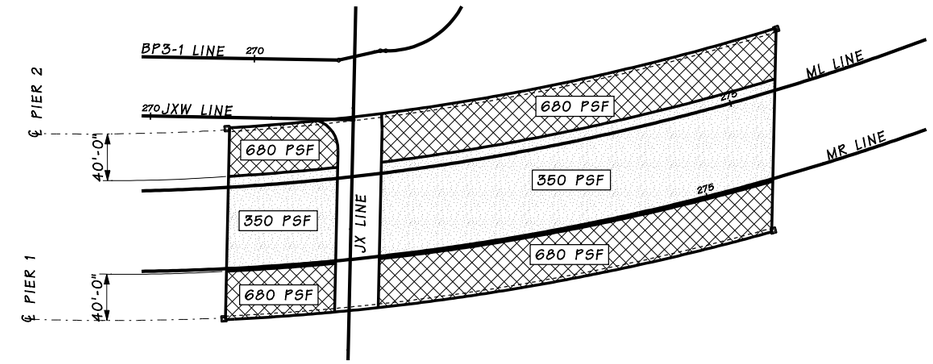


STAGE 3
CAST ROADWAY SLAB



STAGE 4
COMPLETE DIAPHRAGMS

CONSTRUCTION SEQUENCE ~ SUPERSTRUCTURE



LOADING DIAGRAM

1. LOAD LIMITS SHOWN ARE FOR ALL SUPERIMPOSED LOADS INCLUDING LANDSCAPING AND ARCHITECTURAL ELEMENTS. LOADS ASSUME A SOIL DENSITY OF 110PCF PLUS 20 PSF FOR PLANT MATERIALS. ALL OTHER AREAS ARE DESIGNED FOR AASHTO HL-93 LOADING.
2. THE DESIGN OF THE STRUCTURE INCLUDES AN ADDITIONAL 100 PSF FOR PEDESTRIAN LIVE LOAD ON LANDSCAPED AREAS.

NOTE:
NO LIVE LOAD SHALL BE ALLOWED ON THE SPANS UNTIL THE TOP PORTION OF THE PIER DIAPHRAGM CONCRETE COMPRESSIVE STRENGTH HAS REACHED 3000 P.S.I. (MIN.)

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:33:59 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
84TH AVE. N.E. LID

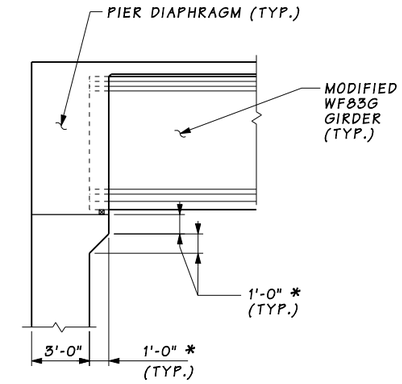
CONSTRUCTION SEQUENCE 2 & LOADING DIAGRAM

BRIDGE SHEET NO. BG12

SHEET OF SHEETS

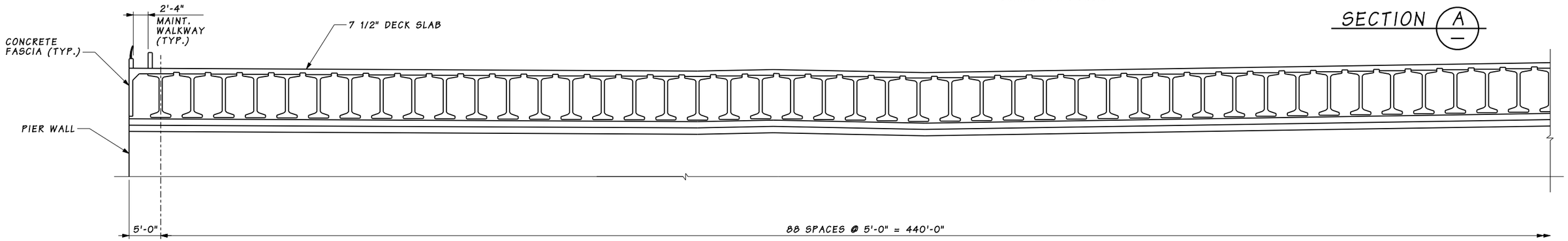
FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_3_P9_BG_06_04.dgn

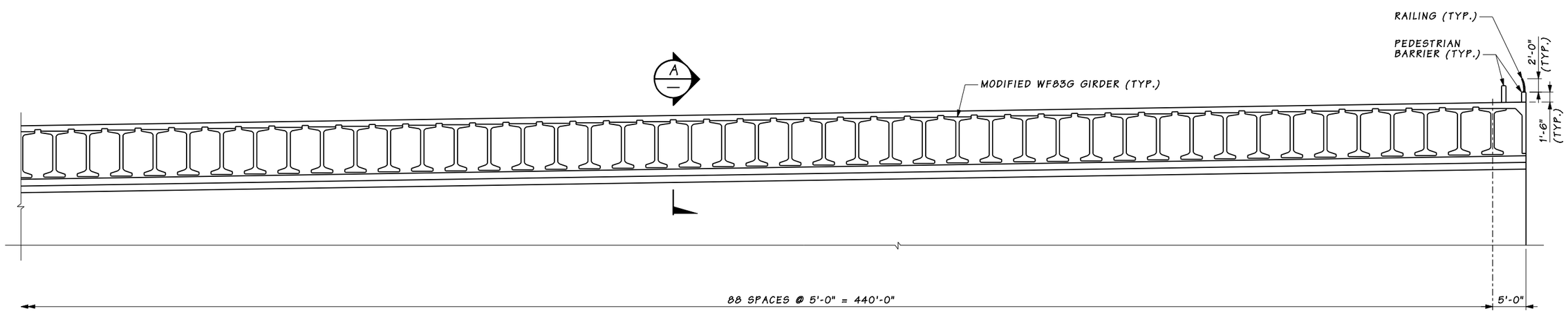
SR ____ JOB NO. PE2344 SHEET BG12
ProjectWise Vault: BG_Bridges



* NOMINAL STRUCTURAL DIMENSIONS. FINAL DIMENSIONS TO BE DETERMINED DURING FINAL DESIGN.

SECTION A





TYPICAL SECTION

SECTION SHOWN PERPENDICULAR TO LID EDGES

NOTE:

1. FOR LANDSCAPING DETAILS ON TOP OF THE LID, REFER TO THE LID ARCHITECTURAL PLANS AND THE LID LANDSCAPE PLANS.

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:34:13 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L.STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
84TH AVE. N.E. LID

TYPICAL SECTION

BRIDGE SHEET NO. BG13

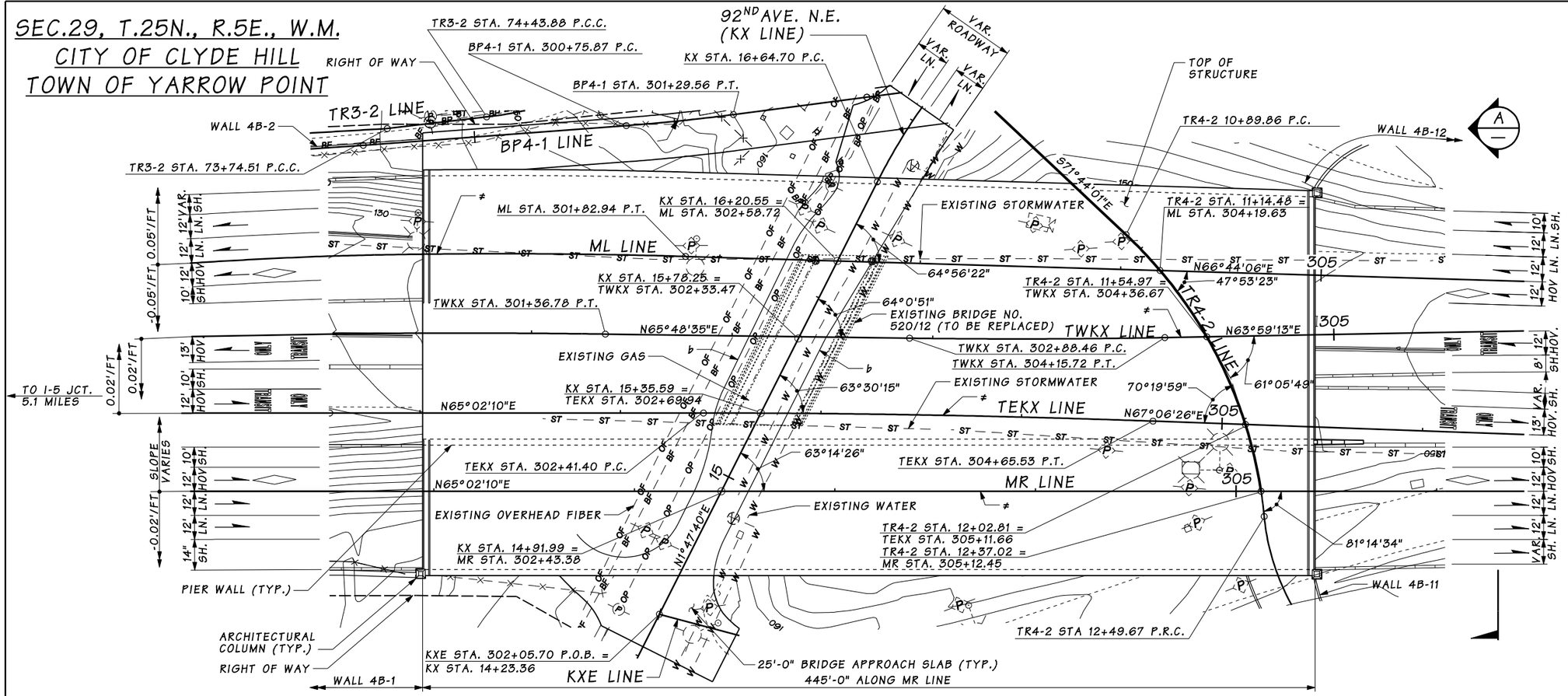
SHEET OF SHEETS

FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_3_PS_BG_05_06.dgn

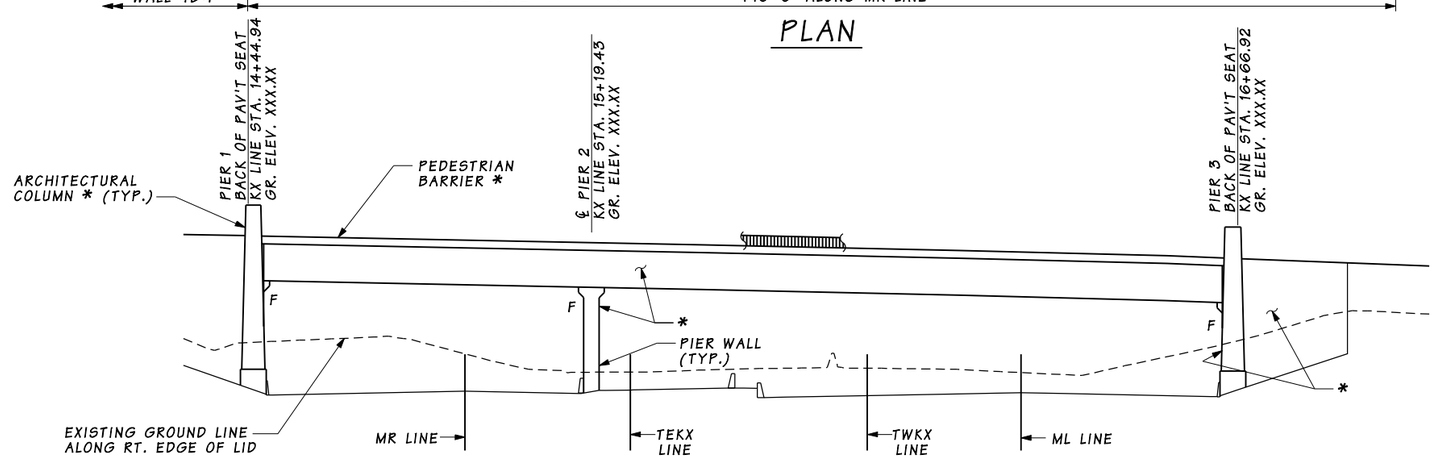
SR SR520 JOB NO. PE2344 SHEET ____
ProjectWise Vault: BG_Bridges

SEC.29, T.25N., R.5E., W.M.
CITY OF CLYDE HILL
TOWN OF YARROW POINT

SR 520



PLAN



ELEVATION VIEW

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB ON KX LINE AND ARE EQUAL TO PROFILE GRADE

≠ PROFILE GRADE AND PIVOT POINT

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1 (TYPICAL FOR ALL WALL AND BARRIER FACES)

ƀ CURB LINE

DATUM

NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

P.C. GIRDERS (MODIFIED WF74G) REPLACEMENT
LOADING: SOIL SURCHARGE PLUS 100 PSF LIVE LOAD OR HL-93

Bridge Design Engr.		3/30/2010 3:34:30 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
92ND AVE. N.E. LID

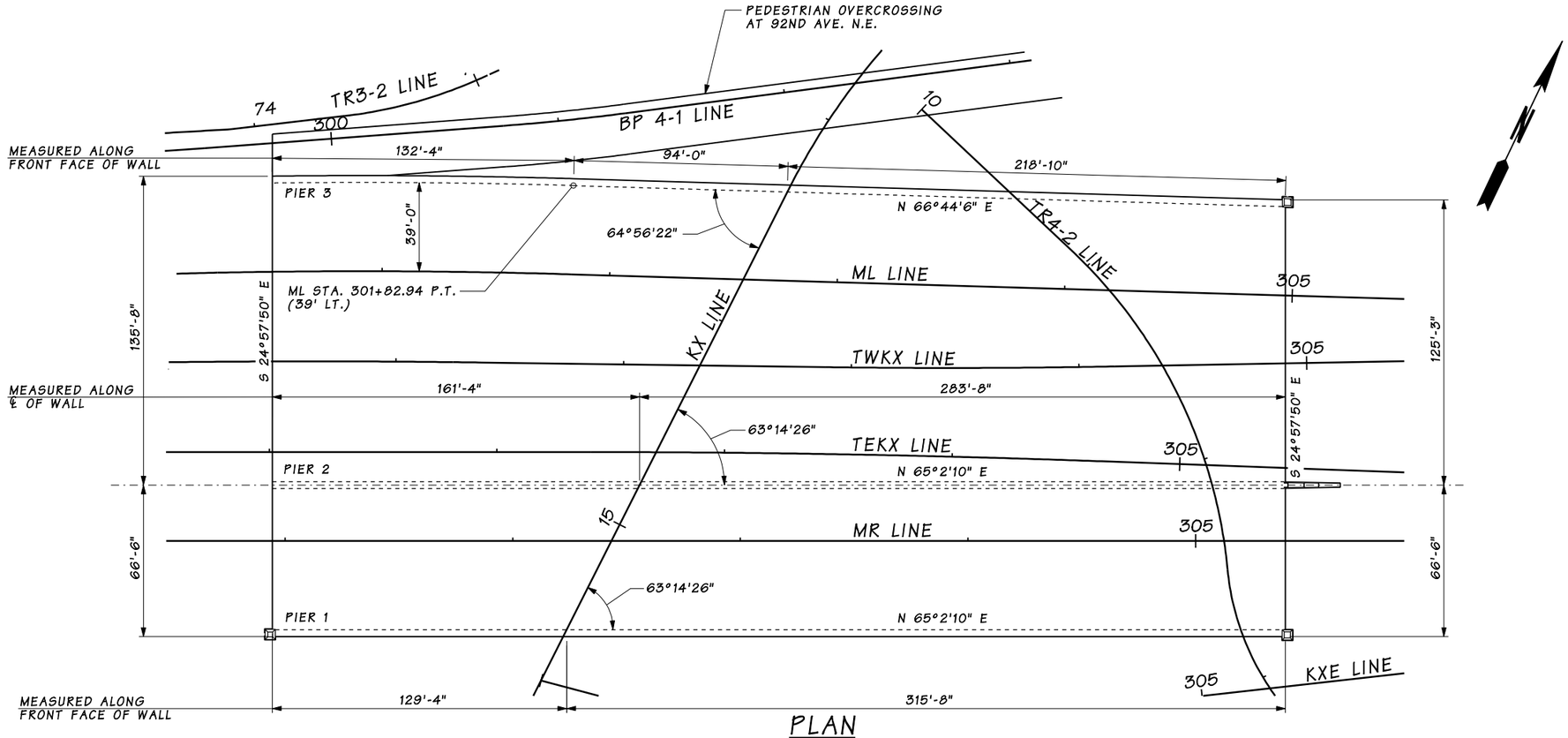
LAYOUT

BRIDGE SHEET NO. BG14

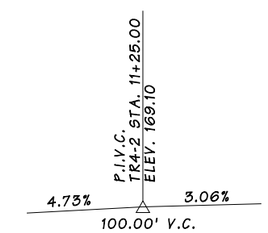
SHEET OF SHEETS

FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_06_01.dgn

SR ____ JOB NO. PE2344 SHEET BG14
ProjectWise Vault: BG_Bridges

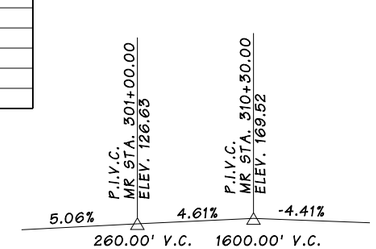


PLAN

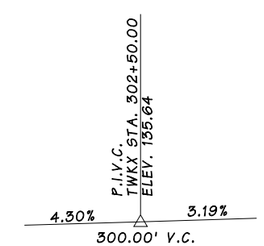


TR4-2 LINE PROFILE

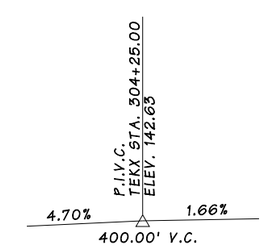
ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
ML 299+90.17	7°08'06" RT.	3100.00'	193.27'	386.04'	N 59°36'00" E
TWKX 300+14.52	2°35'42" RT.	5400.00'	122.30'	244.57'	N 63°12'54" E
TWKX 303+52.10	1°49'22" LT.	4000.00'	63.64'	127.26'	N 65°48'35" E
TEKX 303+53.48	2°04'17" RT.	6200.00'	112.08'	224.13'	N 65°02'10" E
KX 17+13.53	18°29'16" RT.	300.00'	48.83'	96.80'	N 1°47'44" E
TR4-2 11+73.41	41°16'45" RT.	221.81'	83.55'	159.80'	S 71°44'01" E
TR4-2 13+59.61	88°12'35" RT.	113.43'	109.94'	174.64'	S 30°27'16" E



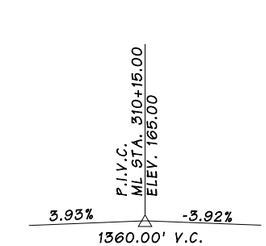
MR LINE PROFILE



TWKX LINE PROFILE



TEKX LINE PROFILE



ML LINE PROFILE

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:34:48 PM							
Supervisor	P. BOTT								
Designed By	H. JIANG								
Checked By	B. AKESSON								
Detailed By	L. STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
92ND AVE. N.E. LID

LID GEOMETRY

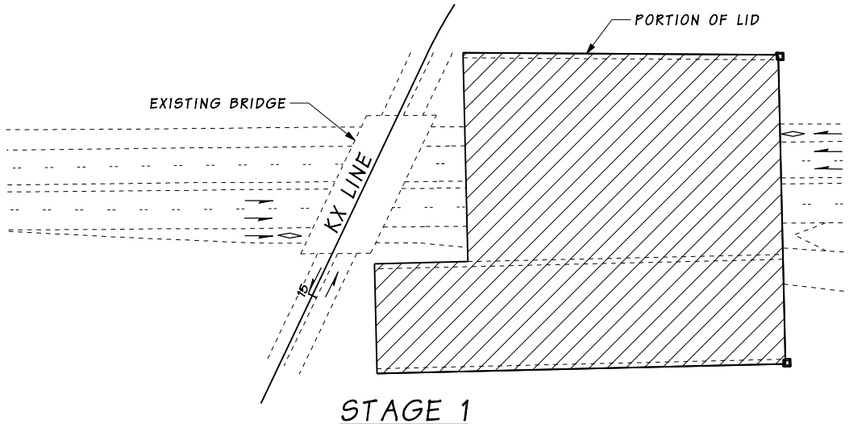
BRIDGE SHEET NO. BG15

SHEET OF SHEETS

FILENAME: FW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_06_02.dgn

SR _____ JOB NO. PE2344 SHEET BG15

ProjectWise Vault: BG_Bridges

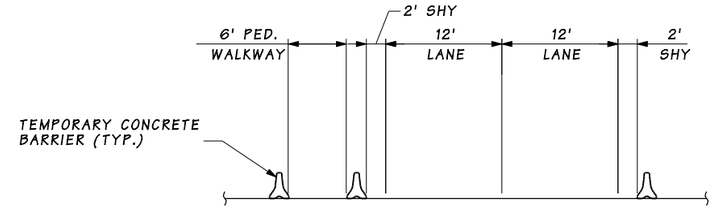


STAGE 1

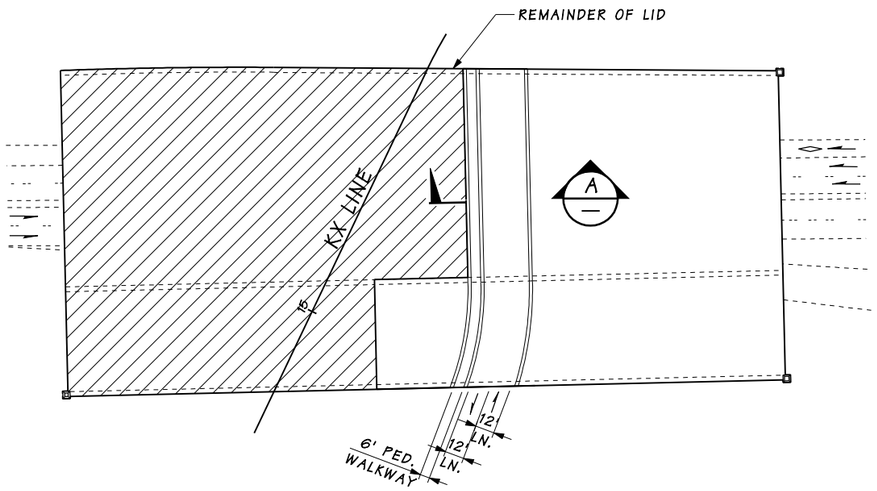
STAGE 1

A. CONSTRUCTION PORTION OF LID EAST OF EXISTING BRIDGE.

B. SHIFT 92ND AVE. N.E. TRAFFIC TO PORTION OF LID AND DEMOLISH EXISTING BRIDGE.



SECTION A

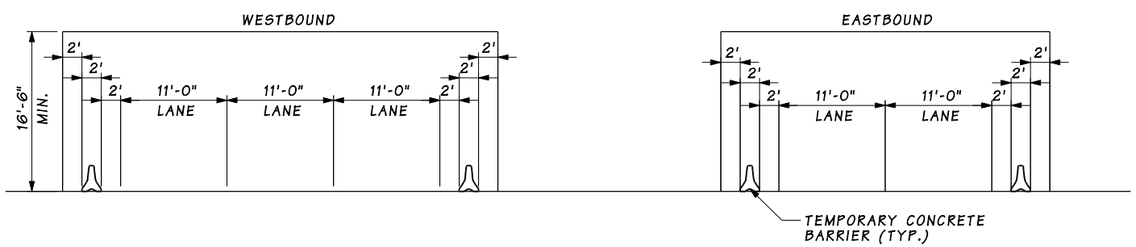


STAGE 2

STAGE 2

A. CONSTRUCT REMAINDER OF LID.

B. SHIFT 92ND AVE. N.E. TRAFFIC TO FINAL CONFIGURATION



FALSEWORK OPENING

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:35:02 PM								
Supervisor	P. BOTT					REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Designed By	H. JIANG					10	WASH			
Checked By	B. AKESSON					JOB NUMBER				
Detailed By	L. STEVLINGSON									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
92ND AVE NE LID

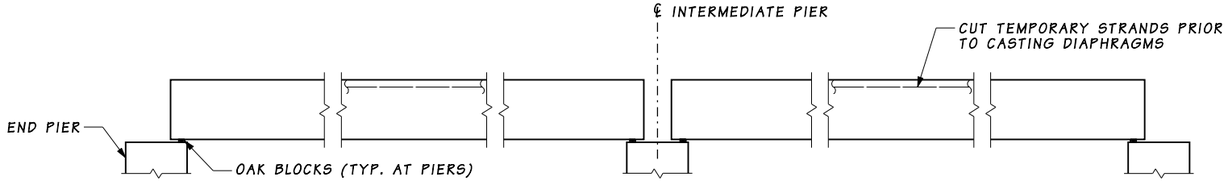
CONSTRUCTION SEQUENCE 1

BRIDGE SHEET NO. BG16

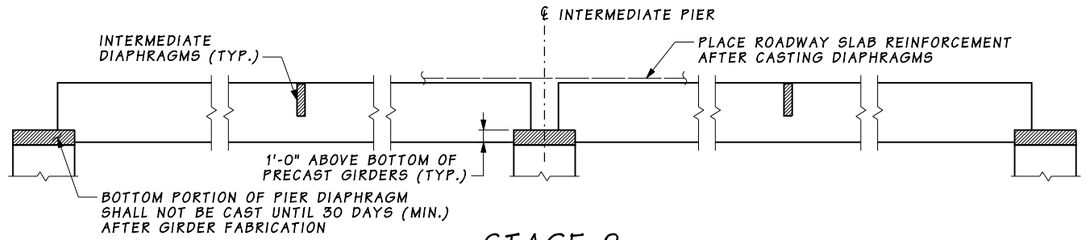
SHEET OF SHEETS

FILENAME: FW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_06_03.dgn

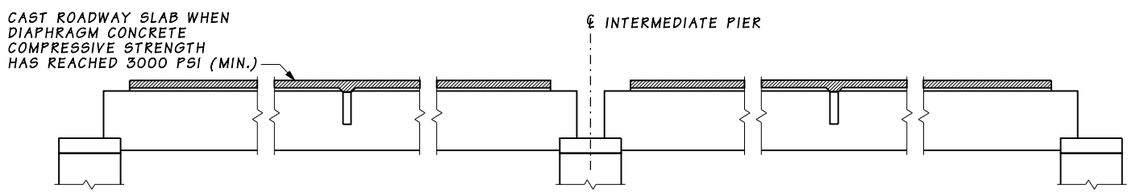
SR ____ JOB NO. ____ SHEET BG16
ProjectWise Vault: BG_Bridges



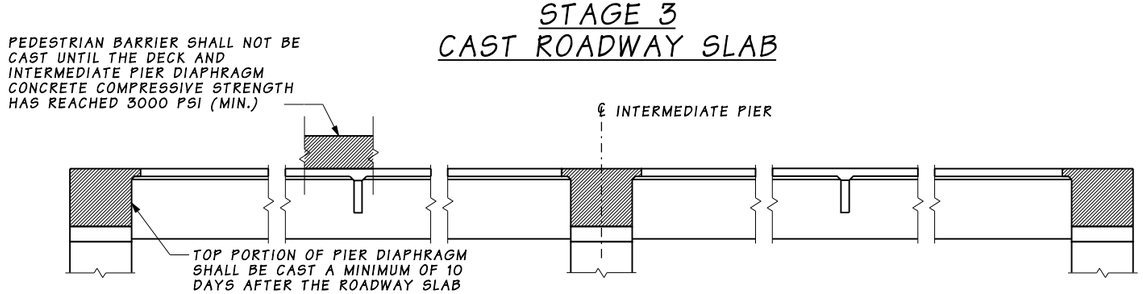
STAGE 1
SET GIRDERS IN PLACE



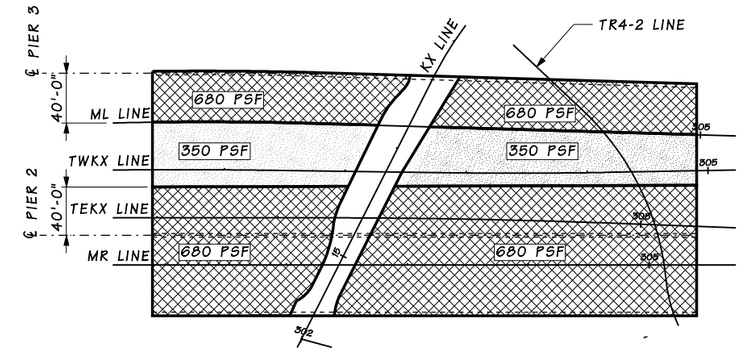
STAGE 2
CAST DIAPHRAGMS AND PLACE ROADWAY SLAB REINFORCEMENT



STAGE 3
CAST ROADWAY SLAB



STAGE 4
COMPLETE DIAPHRAGMS



LOADING DIAGRAM

NOTE:

1. LOAD LIMITS SHOWN ARE FOR ALL SUPERIMPOSED LOADS INCLUDING LANDSCAPING AND ARCHITECTURAL ELEMENTS. LOADS ASSUME A SOIL DENSITY OF 110PCF PLUS 20 PSF FOR PLANT MATERIALS. ALL OTHER AREAS ARE DESIGNED FOR AASHTO HL-93 LOADING.
2. THE DESIGN OF THE STRUCTURE INCLUDES AN ADDITIONAL 100 PSF FOR PEDESTRIAN LIVE LOAD ON LANDSCAPED AREAS.

CONSTRUCTION SEQUENCE ~ SUPERSTRUCTURE

NOTE:

NO LIVE LOAD SHALL BE ALLOWED ON THE SPANS UNTIL THE TOP PORTION OF THE PIER DIAPHRAGM CONCRETE COMPRESSIVE STRENGTH HAS REACHED 3000 P.S.I. (MIN.)

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:35:16 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
92ND AVE. N.E. LID

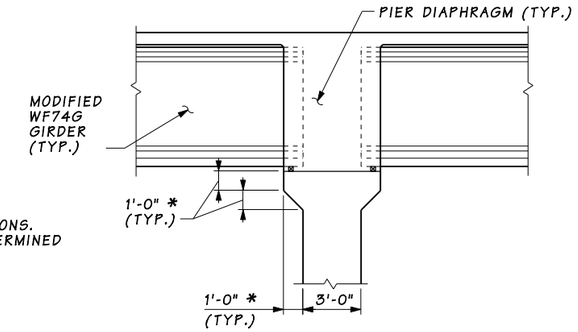
CONSTRUCTION SEQUENCE 2 & LOADING DIAGRAM

BRIDGE SHEET NO. BG17

SHEET OF SHEETS

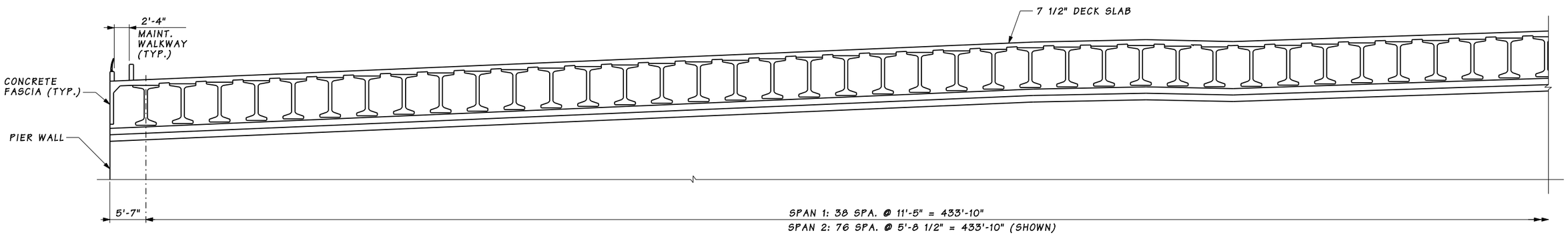
FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_06_04.dgn

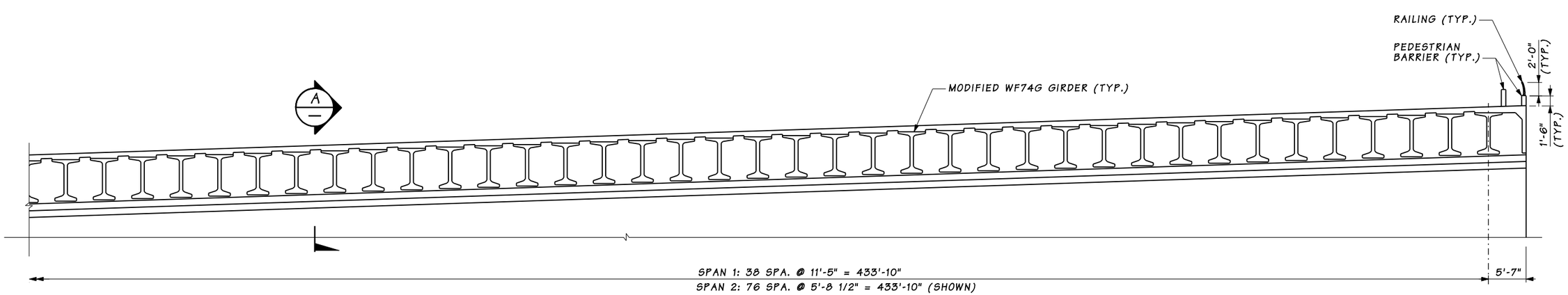
SR ____ JOB NO. ____ SHEET BG17
ProjectWise Vault: BG_Bridges



* NOMINAL STRUCTURAL DIMENSIONS. FINAL DIMENSIONS TO BE DETERMINED DURING FINAL DESIGN.

SECTION A





TYPICAL SECTION

SECTION SHOWN PERPENDICULAR TO LID EDGES

NOTE:

1. FOR LANDSCAPING DETAILS ON TOP OF THE LID, REFER TO THE LID ARCHITECTURAL PLANS AND THE LID LANDSCAPE PLANS.

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:35:31 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
92TH AVE. N.E. LID

TYPICAL SECTION

BRIDGE SHEET NO. BG18

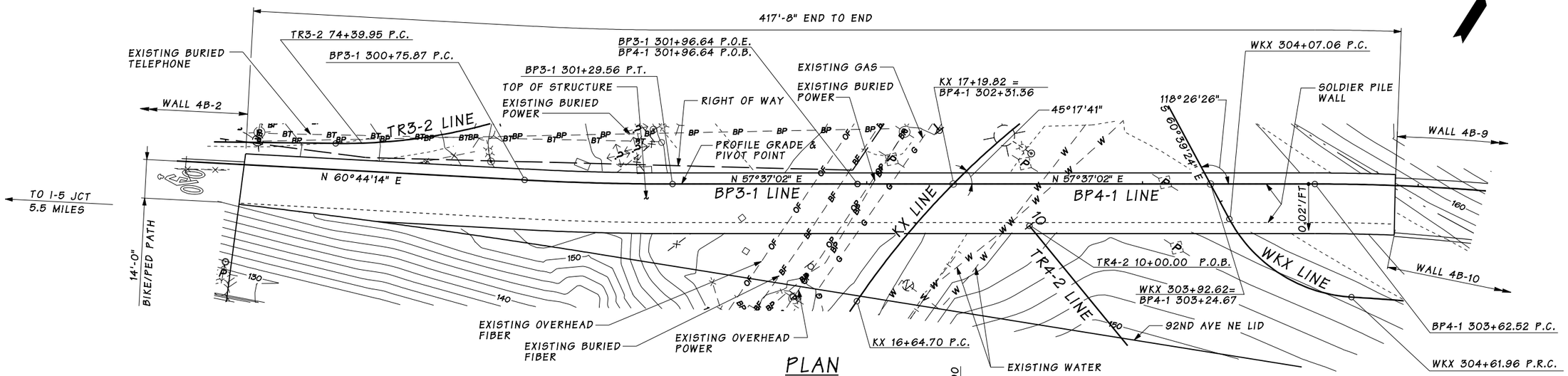
SHEET OF SHEETS

FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_06_05.dgn

SR SR520 JOB NO. PE2344 SHEET ____
ProjectWise Vault: BG_Bridges

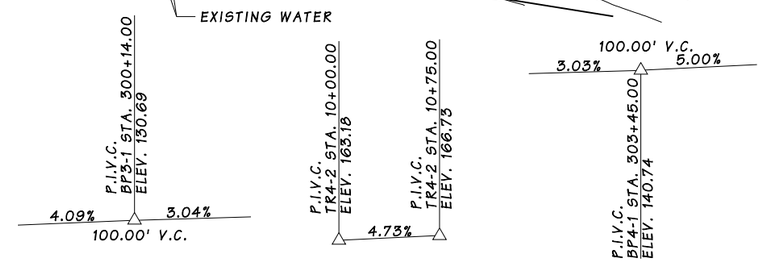
SEC.19, T.25N., R.5E., W.M.
TOWN OF YARROW POINT
CITY OF CLYDE HILL

SR 520



PLAN

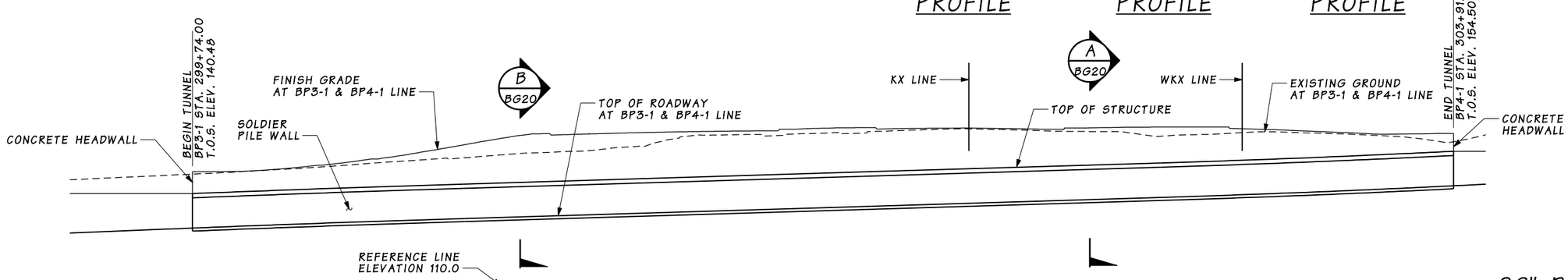
ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
BP3-1 301+02.72 (0.37' RT)	3°07'12" LT.	986.00'	26.85'	53.69'	N 60°44'14" E
BP4-1 304+50.37 (5.03' LT)	13°07'07" RT.	764.00'	87.85'	174.93'	N 57°37'02" E
KX 17+13.53 (3.95' LT)	18°29'16" RT.	300.00'	48.83'	96.80'	N 01°47'44" E
WKX 304+37.14 (7.81' RT)	58°14'36" LT.	54.00'	30.08'	54.89'	S 60°39'24" E
TR3-2 74+09.98 (0.91' RT)	5°59'44" LT.	665.00'	34.83'	69.59'	N 61°39'39" E
TR3-2 74+71.38 (1.75' RT)	15°01'31" LT.	202.00'	26.64'	52.97'	N 55°39'55" E



BP3-1 LINE PROFILE

TR4-2 LINE PROFILE

BP4-1 LINE PROFILE



DEVELOPED ELEVATION

26" P.C. SLABS
LOADING: SOIL SURCHARGE PLUS 100 PSF LIVE LOAD OR HL-93

DATUM
NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:35:51 PM							
Supervisor	P. BOTT					REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Designed By	H. JIANG					10	WASH			
Checked By	B. AKESSON					JOB NUMBER				
Detailed By	L. STEVLINGSON									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN OVERCROSSING AT 92ND AVE. NE

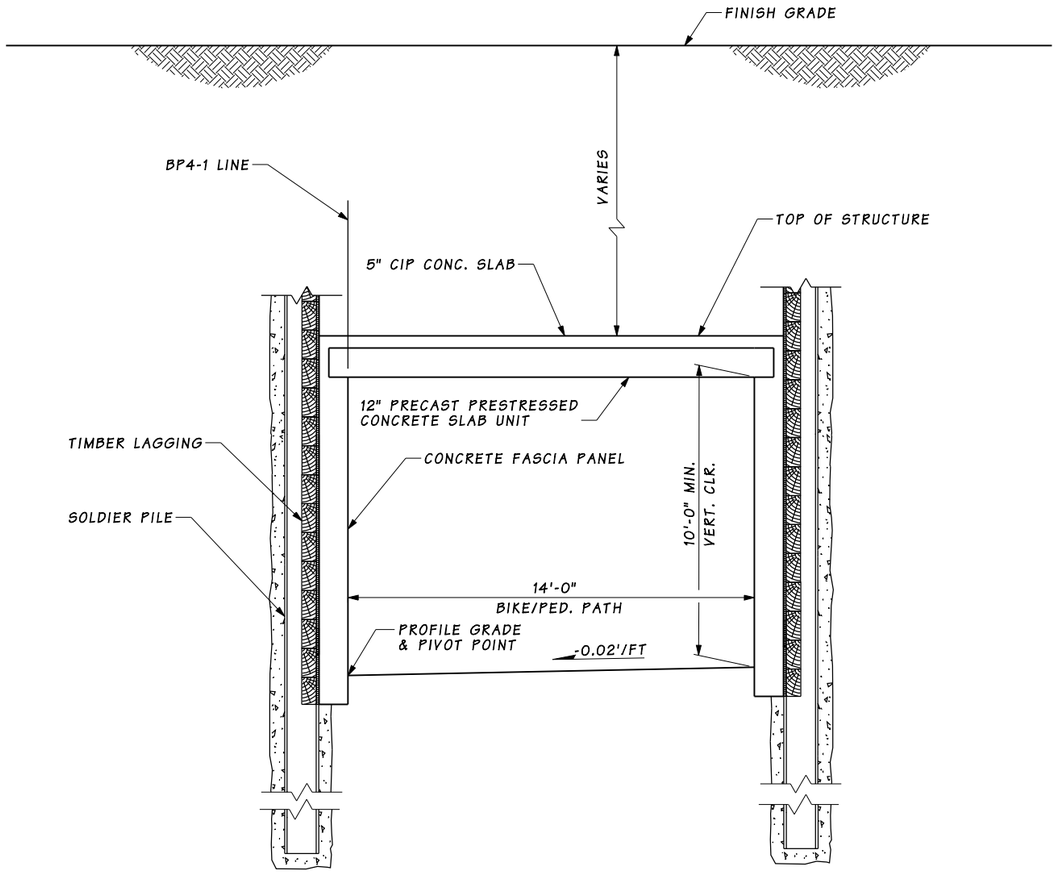
LAYOUT

BRIDGE SHEET NO. BG19

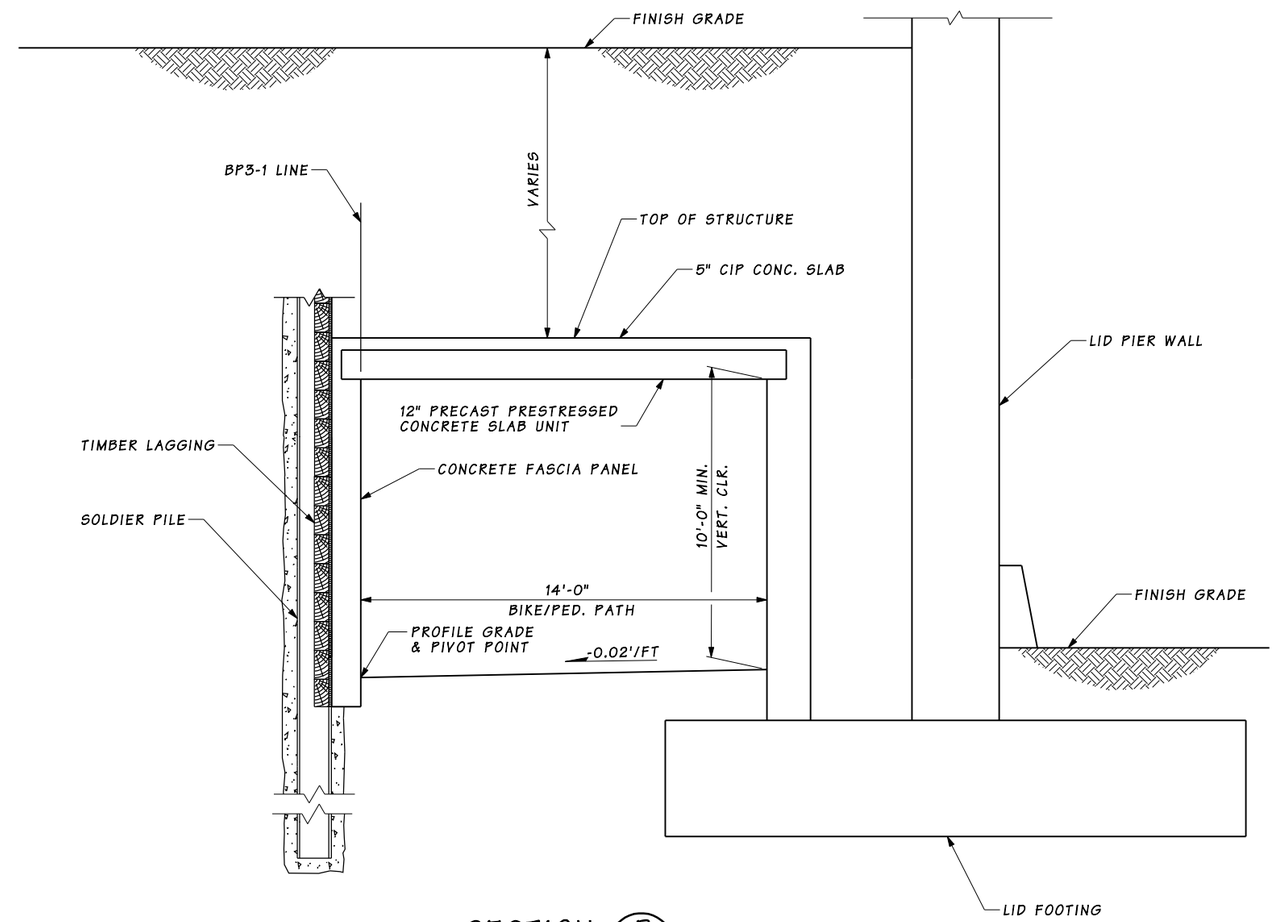
SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_07_01.dgn

SR ____ JOB NO. ____ SHEET BG19
ProjectWise Vault: BG_Bridges



SECTION A
BG19



SECTION B
BG19

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:38:05 PM							
Supervisor	P. BOTT								
Designed By	H. JIANG								
Checked By	B. AKESSON								
Detailed By	L. STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				

BRIDGE
AND
STRUCTURES
OFFICE

Washington State
Department of Transportation

HDR
ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN OVERCROSSING AT 92ND AVE. NE.

TYPICAL SECTION

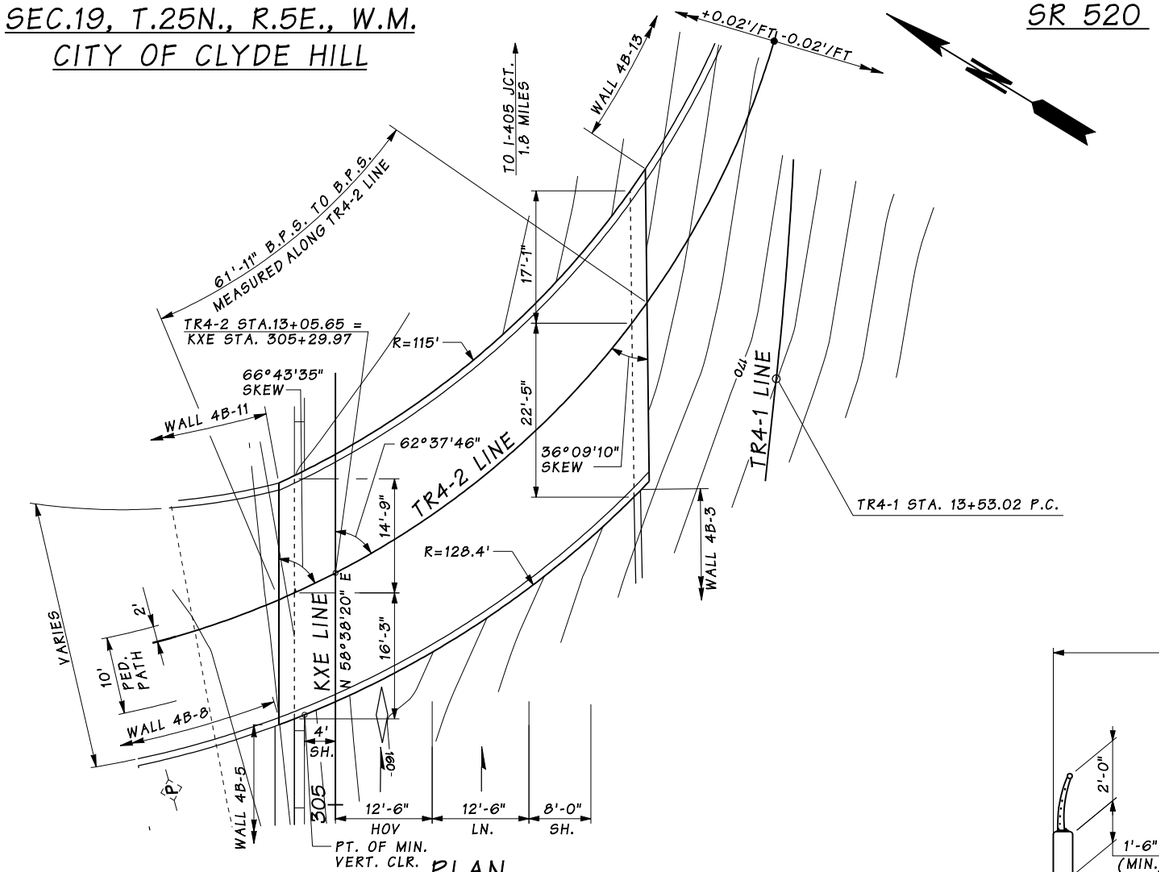
BRIDGE SHEET NO.
BG20
SHEET
OF
SHEETS

FILENAME: FW:\CADD\Proj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_07_02.dgn

SR ____ JOB NO. ____ SHEET BG20
ProjectWise Vault: BG_Bridges

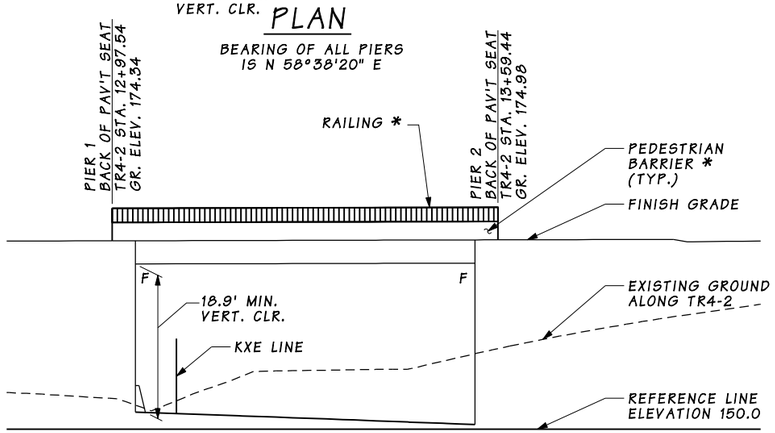
SEC.19, T.25N., R.5E., W.M.
CITY OF CLYDE HILL

SR 520



PLAN

BEARING OF ALL PIERS IS N 58°38'20" E

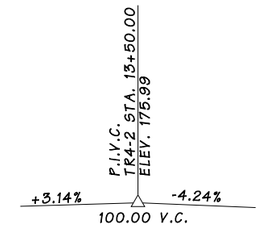


ELEVATION

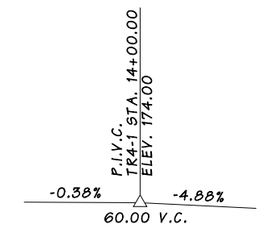
GRADE ELEVATIONS SHOWN ARE TOP OF STRUCTURE ALONG THE TR4-2 LINE AND ARE EQUAL TO PROFILE GRADE

ROADWAY HORIZONTAL CURVE DATA

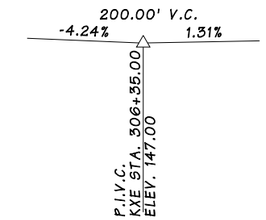
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
TR4-2 13+59.61	88°12'35" LT.	113.43'	109.94'	174.64'	S 30°27'16" E
TR4-1 13+67.93	3°27'51" LT.	493.00'	14.91'	29.81'	N 64°48'00" E



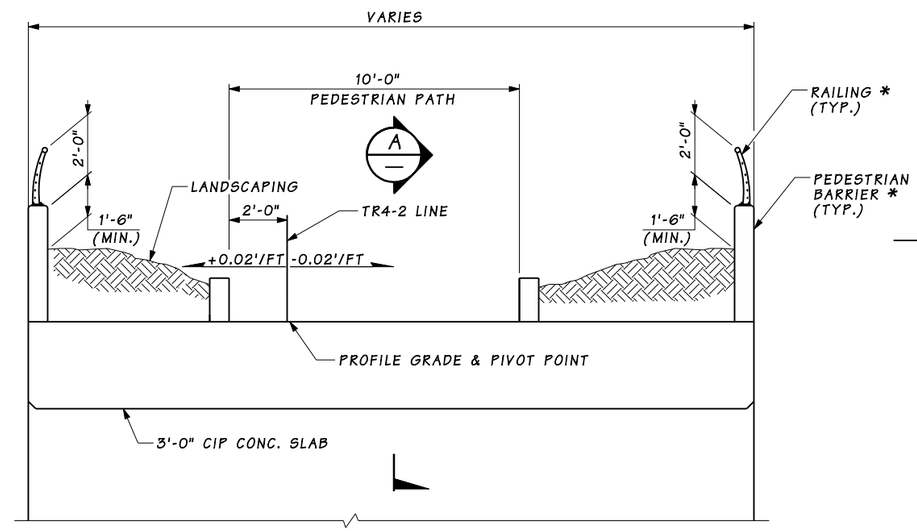
TR4-2 LINE PROFILE



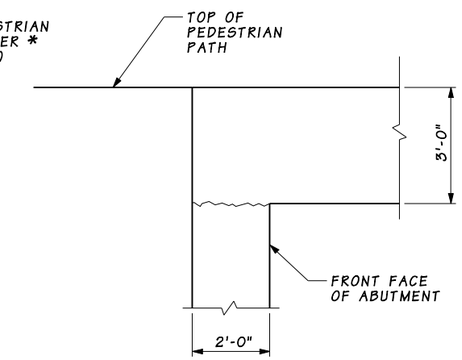
TR4-1 LINE PROFILE



KXE LINE PROFILE



TYPICAL SECTION



SECTION A

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1

CIP CONC. SLAB
LOADING: SOIL SURCHARGE PLUS 100 PSF LIVE LOAD OR H-10

DATUM
NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:36:45 PM				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT					10	WASH			
Designed By	H. JIANG					JOB NUMBER				
Checked By	B. AKESSON									
Detailed By	L. STEVLINGSON									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN UNDERCROSSING AT 92ND AVE. N.E.

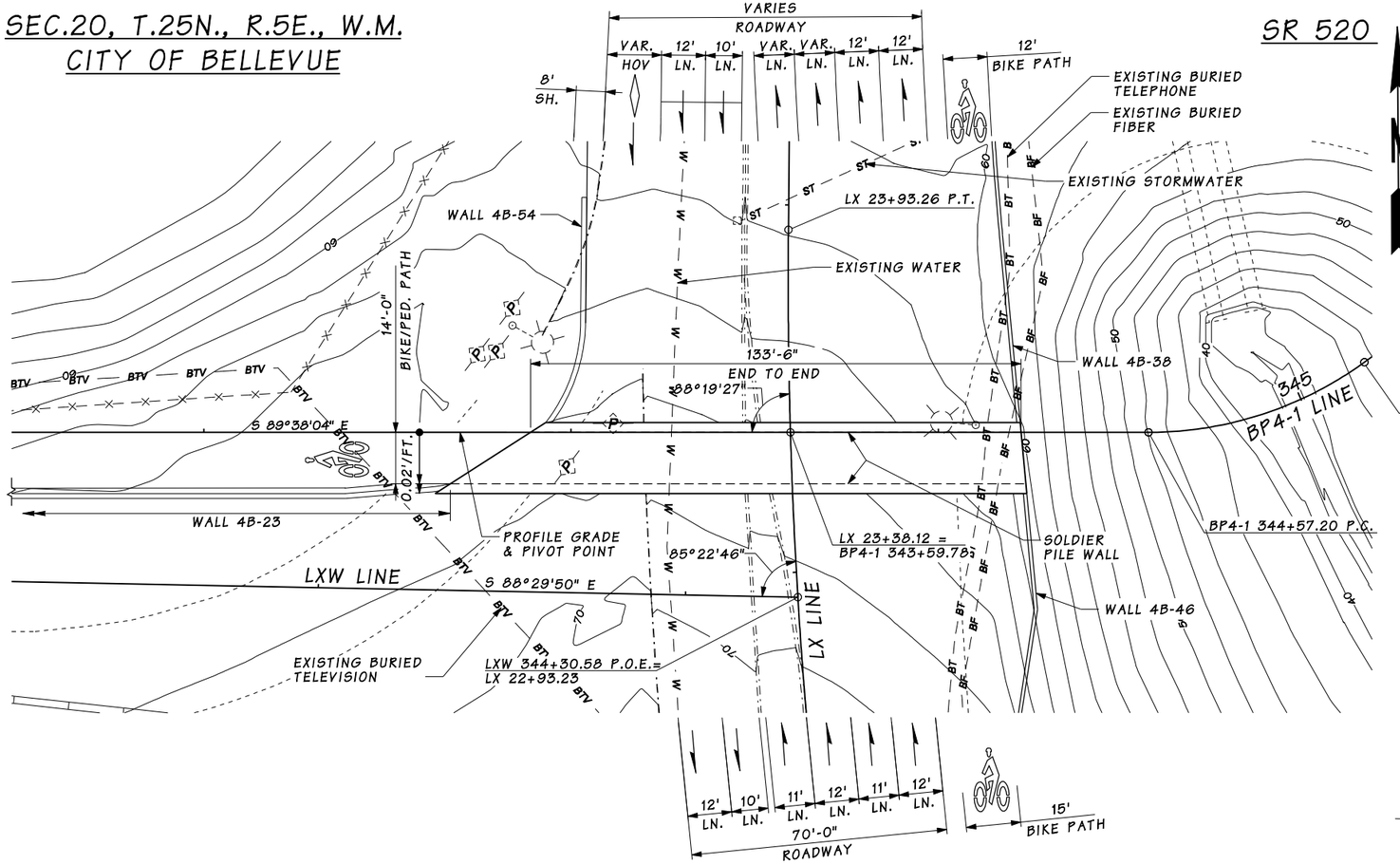
LAYOUT

BRIDGE SHEET NO. BG21
SHEET
OF
SHEETS

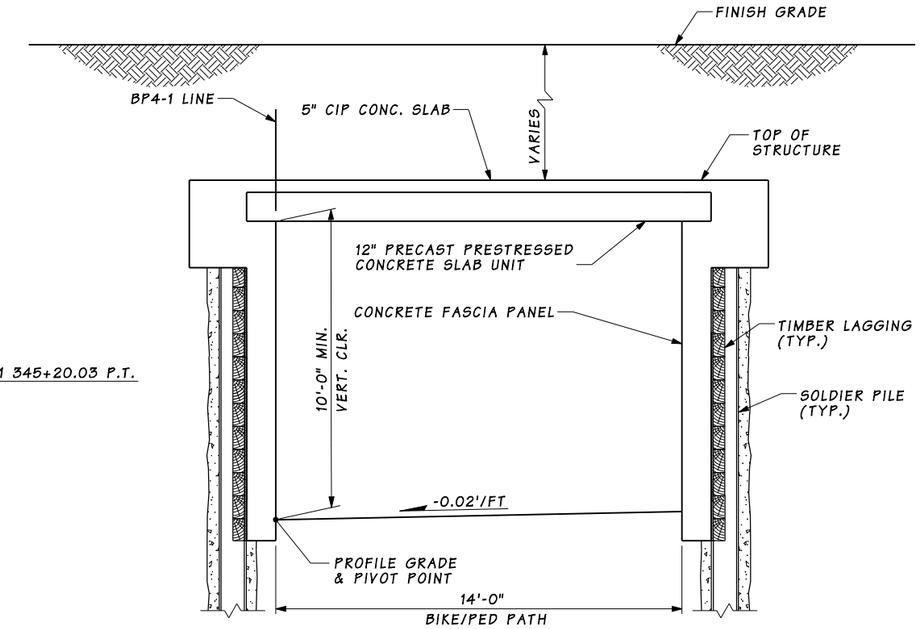
FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_08_01.dgn

SR ____ JOB NO. ____ SHEET BG21
ProjectWise Vault: BG_Bridges

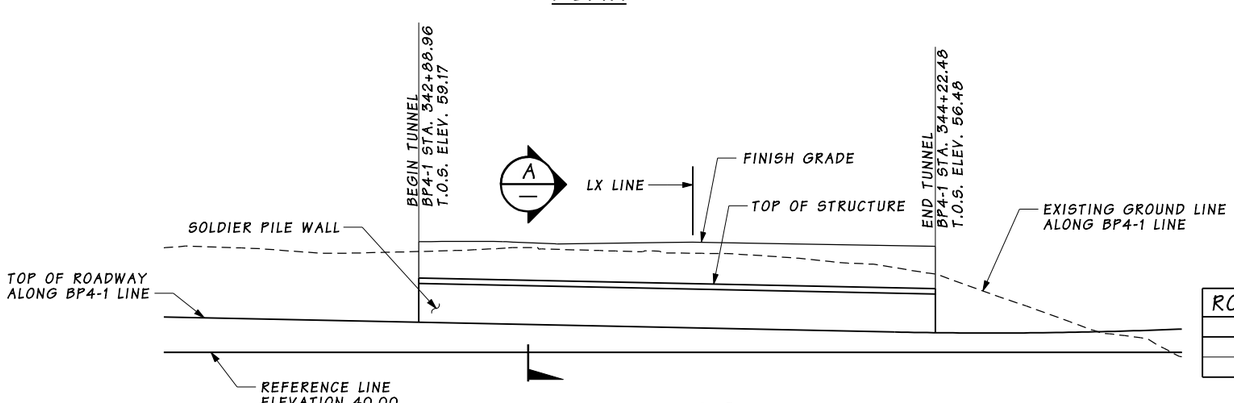
SEC.20, T.25N., R.5E., W.M.
CITY OF BELLEVUE



PLAN

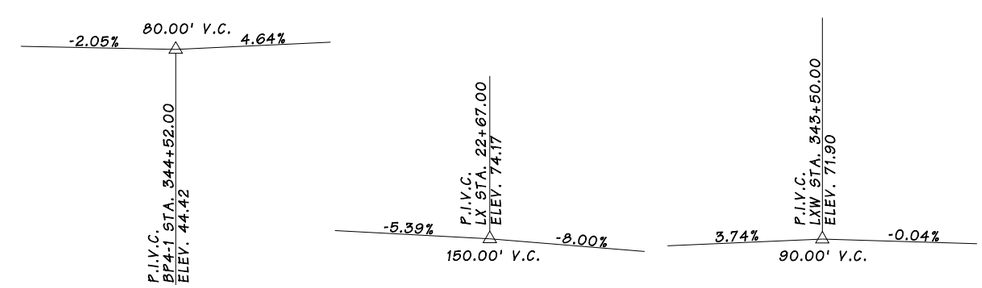


SECTION A



ELEVATION

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF STRUCTURE ALONG BP4-1 LINE



BP4-1 LINE PROFILE

LX LINE PROFILE

LXW LINE PROFILE

ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
BP4-1 344+89.69	35°59'40" LT.	100.00'	32.49'	62.82'	S 89°38'04" E
LX 22+03.18	15°24'00" RT.	1423.00'	192.40'	382.47'	N 14°29'24" W

12" P.C. SLAB
LOADING: SOIL SURCHARGE PLUS HL-93

DATUM
NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:37:02 PM							
Supervisor	P. BOTT				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Designed By	H. JIANG				10	WASH			
Checked By	B. AKESSON				JOB NUMBER				
Detailed By	L. STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN OVERCROSSING AT BELLEVUE WAY N.E.

LAYOUT & TYPICAL SECTION

BRIDGE SHEET NO. BG22

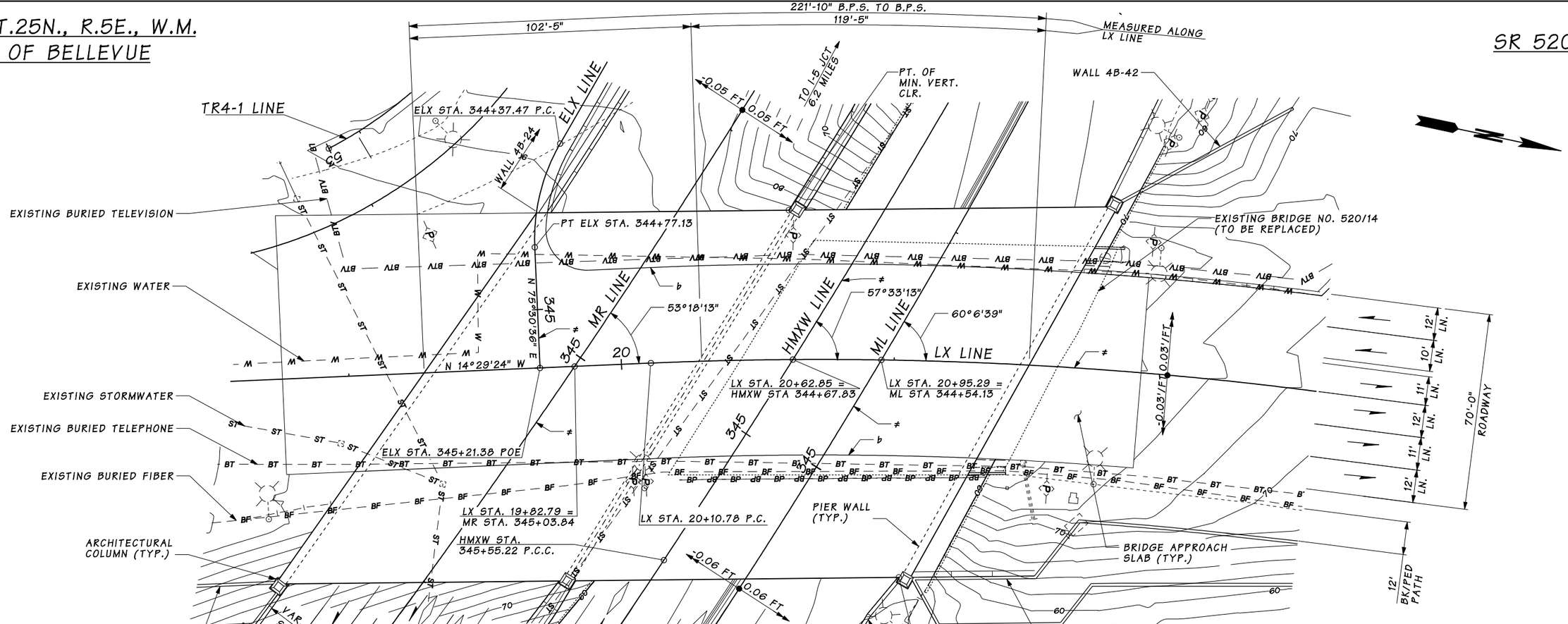
SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_10_01.dgn

SR ____ JOB NO. ____ SHEET BG22
ProjectWise Vault: BG_Bridges

SEC.20, T.25N., R.5E., W.M.
CITY OF BELLEVUE

SR 520



≠ PROFILE GRADE AND PIVOT POINT

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1 (TYPICAL FOR ALL WALL AND BARRIER FACES)

b CURB LINE

DATUM
NAVD 1988

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB AND ARE EQUAL TO PROFILE GRADE

P.C. GIRDERS (WF74G) REPLACEMENT
LOADING: SOIL SURCHARGE PLUS 100 PSF LIVE LOAD OR HL-93

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:37:21 PM			
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	L. STEVLINGSON				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER FE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
BELLEVUE WAY N.E. UNDERCROSSING

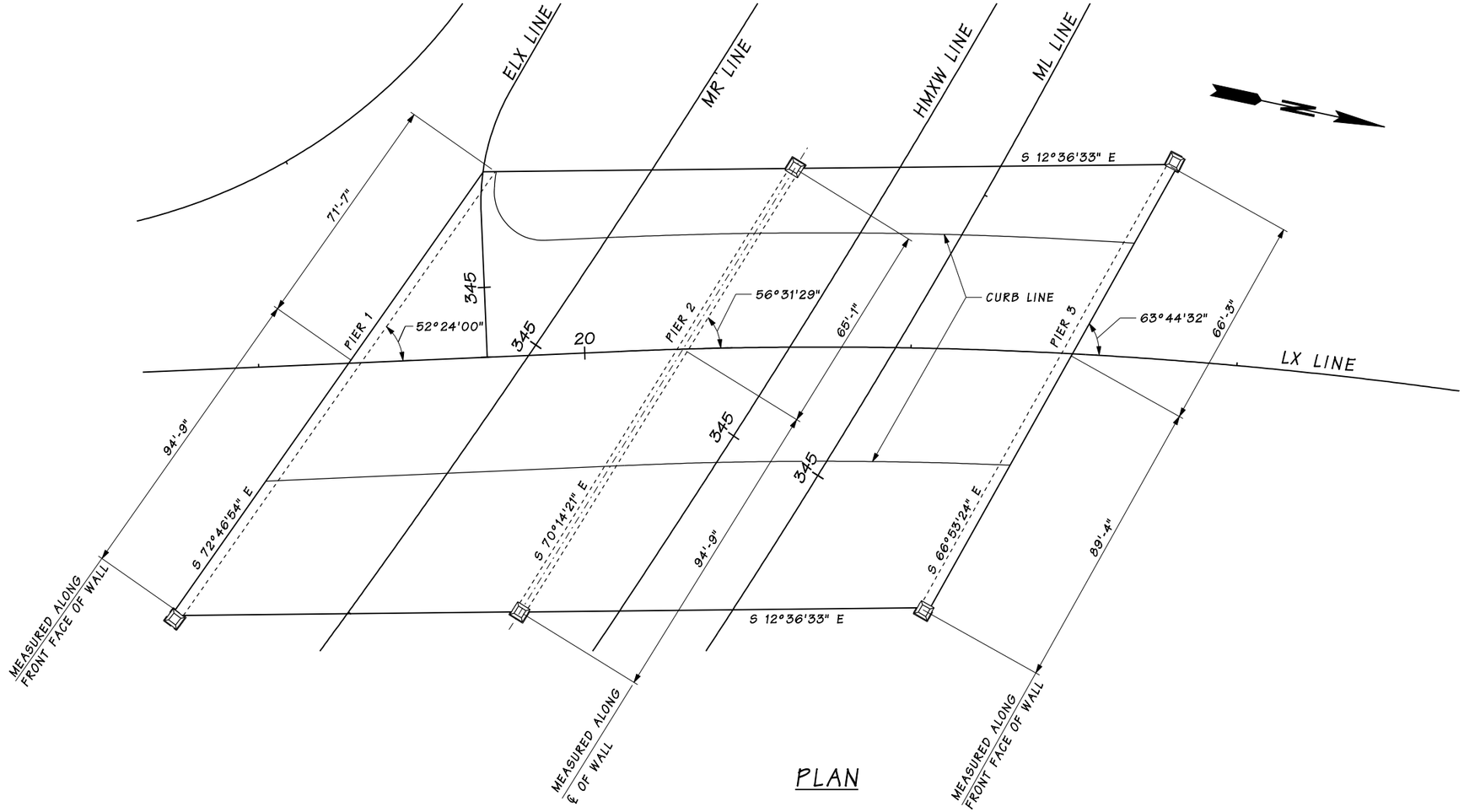
LAYOUT

BRIDGE SHEET NO. BG23

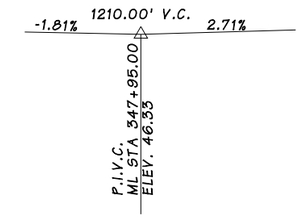
SHEET OF SHEETS

FILENAME: PW:\CADD\Proj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_11_01.dgn

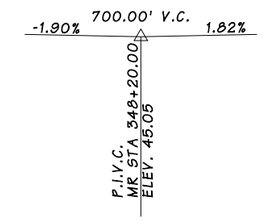
SR ____ JOB NO. PE2344 SHEET BG25
ProjectWise Vault: BG_Bridges



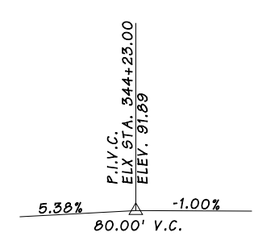
PLAN



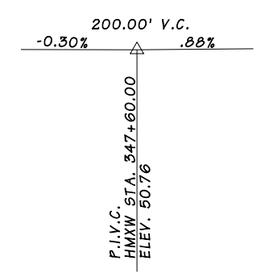
ML LINE PROFILE



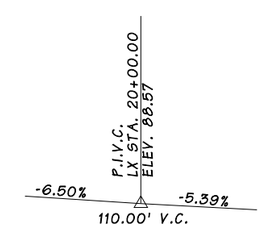
MR LINE PROFILE



ELX LINE PROFILE



HMXW LINE PROFILE



LX LINE PROFILE

ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
ML 346+03.99	20°38'50"RT.	2600.00'	473.61'	936.94'	S 78°19'57.2" E
MR 347+35.74	29°16'43"RT.	3150.00'	822.82'	1609.67'	S 78°32'31.6" E
ELX 344+57.85	32°27'42"LT.	70.00'	20.38'	39.66'	S 72°01'41.9" E
LX 22+03.18	15°24'0"RT.	1423.00'	192.40'	382.47'	N 14°29'24.2" W

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:37:36 PM				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT					10	WASH			
Designed By	H. JIANG					JOB NUMBER PE2344				
Checked By	B. AKESSON									
Detailed By	L. STEVLINGSON									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
BELLEVUE WAY N.E. UNDERCROSSING

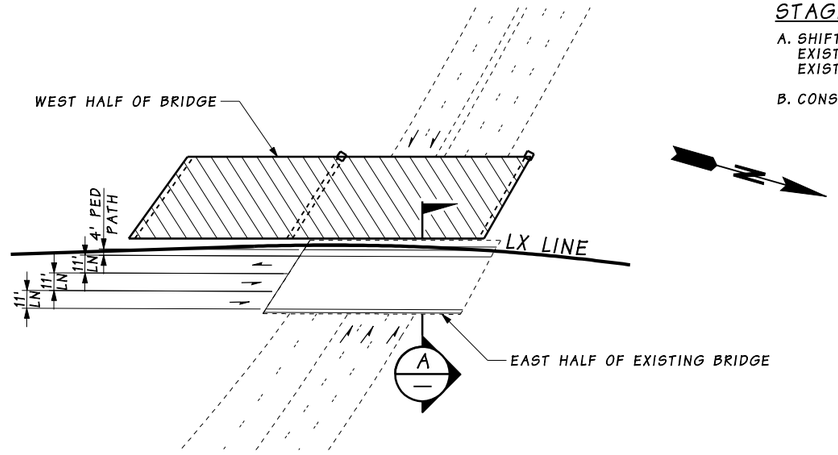
BRIDGE GEOMETRY

BRIDGE SHEET NO. BG24

SHEET OF SHEETS

FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_11_02.dgn

SR 520 JOB NO. PE2344 SHEET BG24
ProjectWise Vault: BG_Bridges

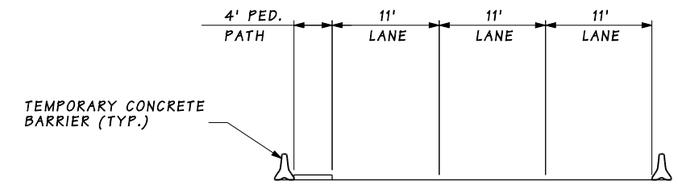


STAGE 1

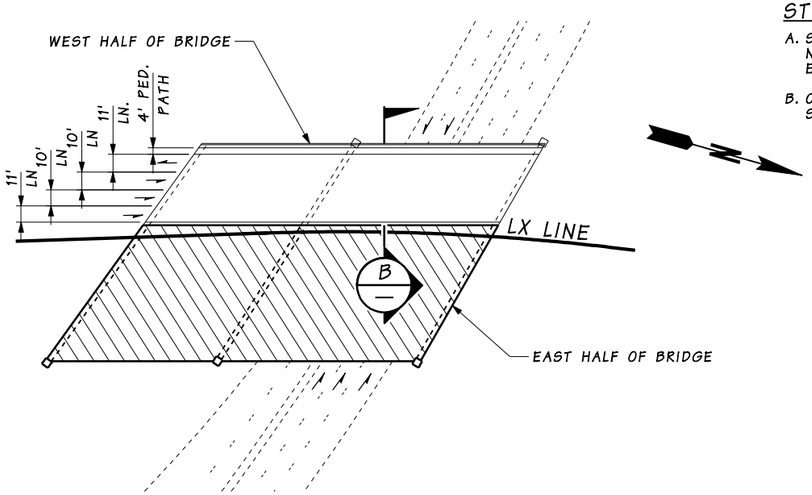
STAGE 1

A. SHIFT BELLEVUE WAY TRAFFIC TO EAST HALF OF EXISTING BRIDGE AND DEMOLISH WEST HALF OF EXISTING BRIDGE.

B. CONSTRUCT WEST HALF OF NEW BRIDGE.



SECTION A

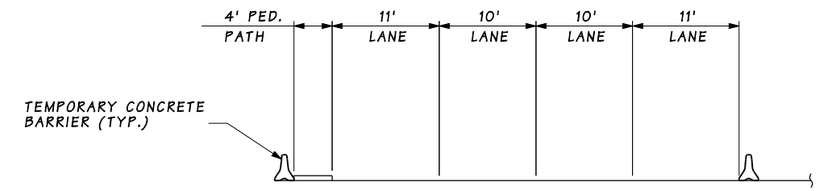


STAGE 2

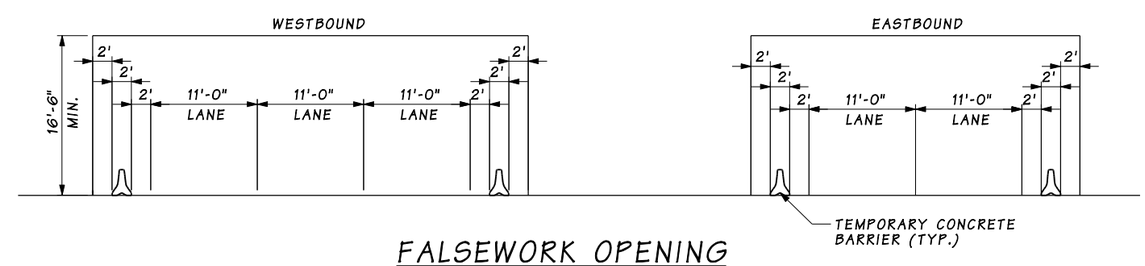
STAGE 2

A. SHIFT BELLEVUE WAY TRAFFIC TO WEST HALF OF NEW BRIDGE AND DEMOLISH EAST HALF OF EXISTING BRIDGE.

B. CONSTRUCT EAST HALF OF NEW BRIDGE AND SHIFT BELLEVUE WAY TRAFFIC TO FINAL ALIGNMENT.



SECTION B



FALSEWORK OPENING

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:37:49 PM							
Supervisor	P. BOTT								
Designed By	H. JIANG								
Checked By	B.AKESSON								
Detailed By	L. STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
BELLEVUE WAY N.E. UNDERCROSSING

CONSTRUCTION SEQUENCE 1

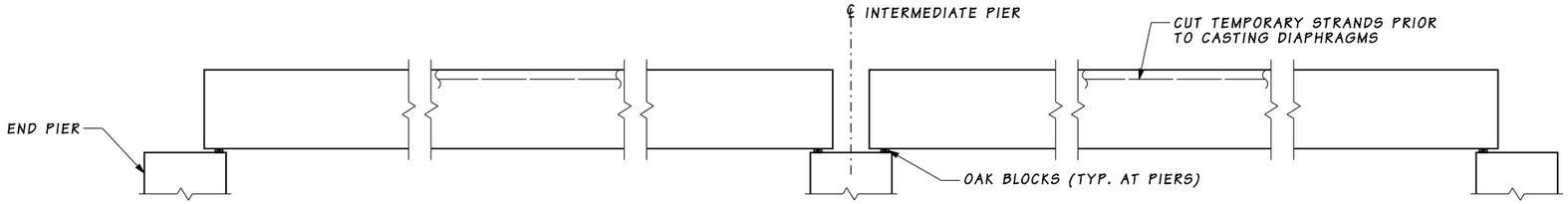
BRIDGE SHEET NO. BG25

SHEET OF SHEETS

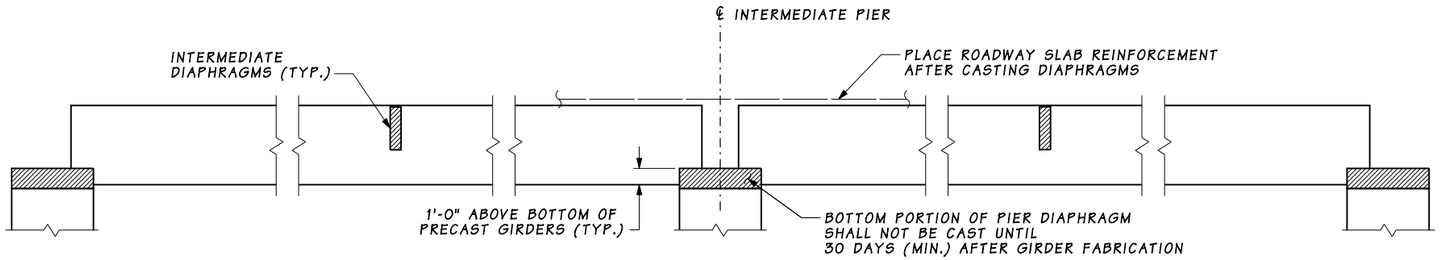
FILENAME: P:\W:\CADD\Proj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_11_03.dgn

SR ____ JOB NO. ____ SHEET BG25

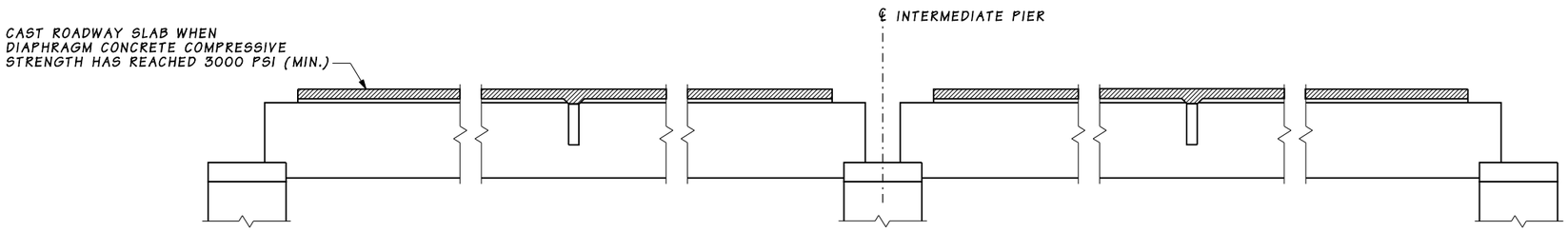
ProjectWise Vault: BG_Bridges



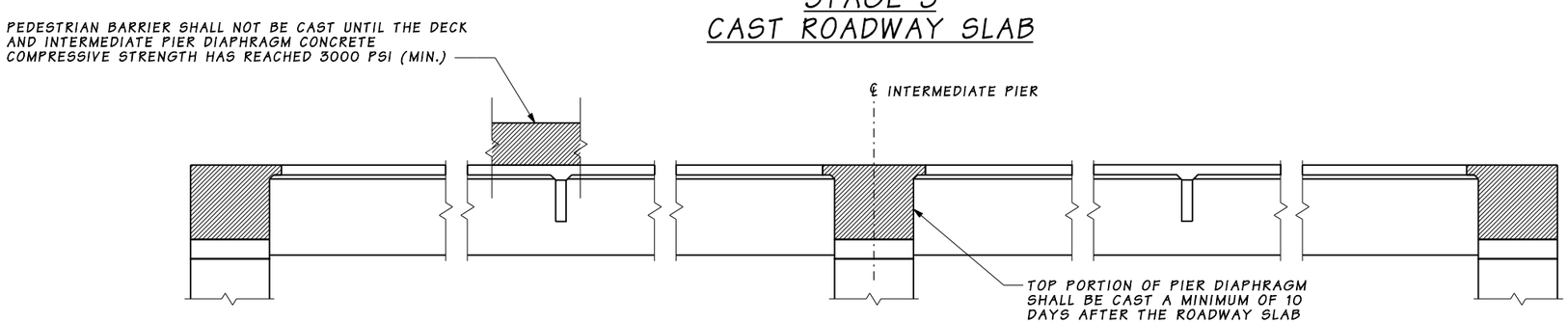
STAGE 1
SET GIRDERS IN PLACE



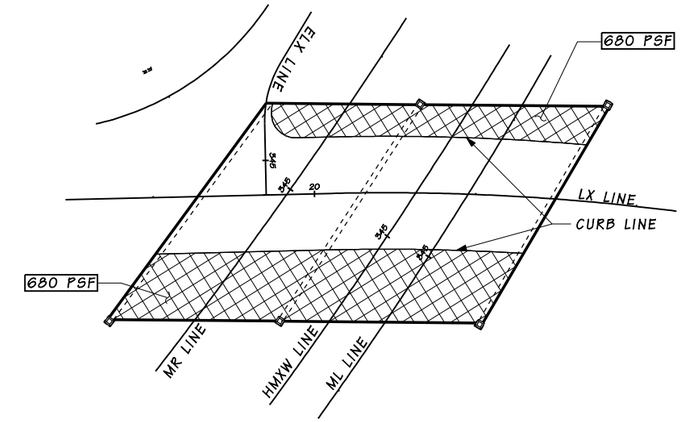
STAGE 2
CAST DIAPHRAGMS AND PLACE ROADWAY SLAB REINFORCEMENT



STAGE 3
CAST ROADWAY SLAB



STAGE 4
COMPLETE DIAPHRAGMS



LOADING DIAGRAM

NOTE:

1. LOAD LIMITS SHOWN ARE FOR ALL SUPERIMPOSED LOADS INCLUDING LANDSCAPING AND ARCHITECTURAL ELEMENTS. LOADS ASSUME A SOIL DENSITY OF 110PCF PLUS 20 PSF FOR PLANT MATERIALS. ALL OTHER AREAS ARE DESIGNED FOR AASHTO HL-93 LOADING.
2. THE DESIGN OF THE STRUCTURE INCLUDES AN ADDITIONAL 100 PSF FOR PEDESTRIAN LIVE LOAD ON LANDSCAPED AREAS.

NOTE:
NO LIVE LOAD SHALL BE ALLOWED ON THE SPANS UNTIL THE TOP PORTION OF THE PIER DIAPHRAGM CONCRETE COMPRESSIVE STRENGTH HAS REACHED 3000 PSI (MIN.).

CONSTRUCTION SEQUENCE ~ SUPERSTRUCTURE

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:38:03 PM				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT					10	WASH			
Designed By	H. JIANG					JOB NUMBER				
Checked By	B. AKESSON					PE2344				
Detailed By	L. STEVLINGSON									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

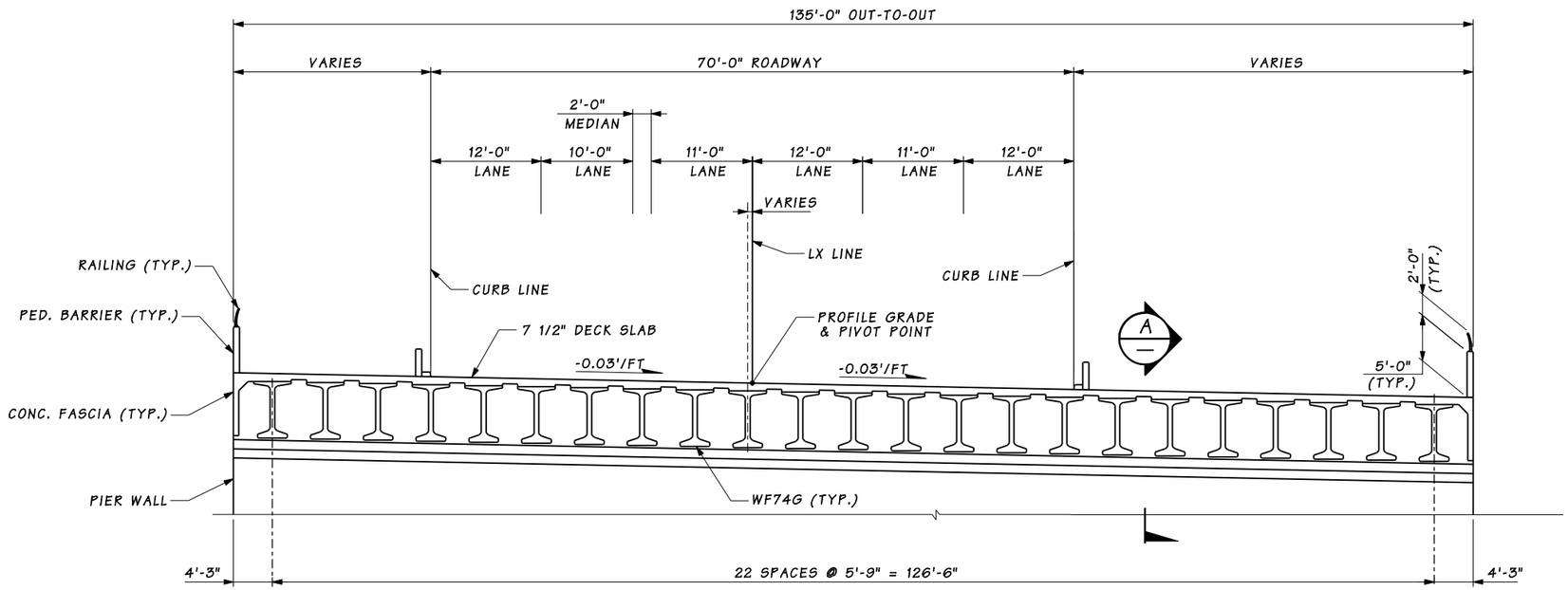
SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
BELLEVUE WAY N.E. UNDERCROSSING

CONSTRUCTION SEQUENCE 2 & LOADING DIAGRAM

BRIDGE SHEET NO. BG26

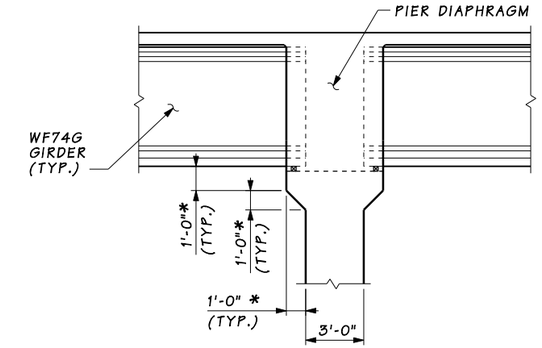
SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_11_04.dgn
SR 520 JOB NO. PE2344 SHEET BG26
ProjectWise Vault: BG_Bridges



TYPICAL SECTION

SECTION SHOWN PERPENDICULAR
TO BRIDGE EDGES



SECTION A

* NOMINAL STRUCTURAL DIMENSIONS.
FINAL DIMENSIONS TO BE DETERMINED
DURING FINAL DESIGN.

NOTE:

1. FOR LANDSCAPING DETAILS ON TOP OF THE BRIDGE, REFER TO THE LID ARCHITECTURAL PLANS AND THE LID LANDSCAPE PLANS.

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:38:17 PM								
Supervisor	P. BOTT					REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Designed By	H.JIANG					10	WASH			
Checked By	B. AKESSON									
Detailed By	L. STEVLINGSON					JOB NUMBER				
Bridge Projects Engr.						PE2344				
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE
AND
STRUCTURES
OFFICE

Washington State
Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
BELLEVUE WAY N.E. UNDERCROSSING

TYPICAL SECTION

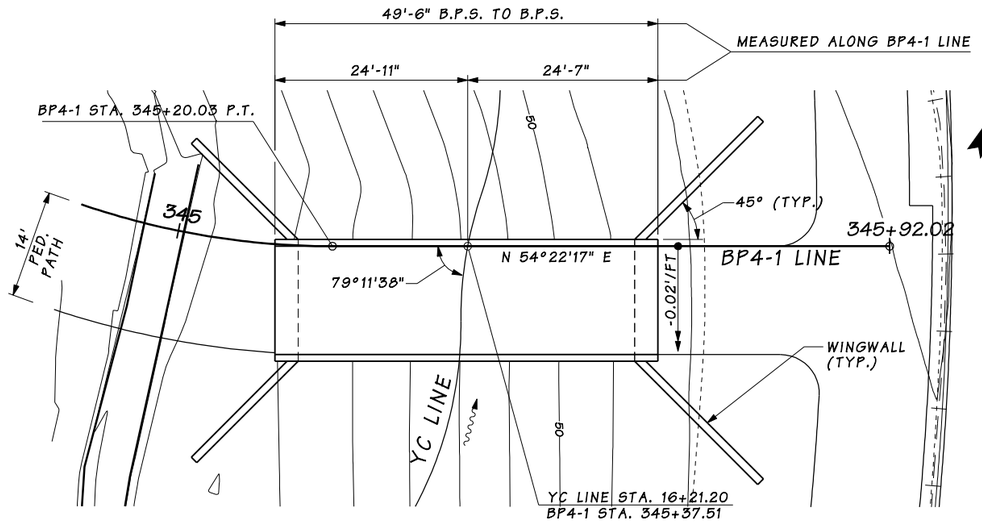
BRIDGE SHEET NO. BG27
SHEET
OF
SHEETS

FILENAME: PW:\CADD\Proj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_11_05.dgn

SR 520 JOB NO. PE2344 SHEET BG27
ProjectWise Vault: BG_Bridges

SEC.20, T.25N., R.5E., W.M.
CITY OF BELLEVUE

SR 520



PLAN

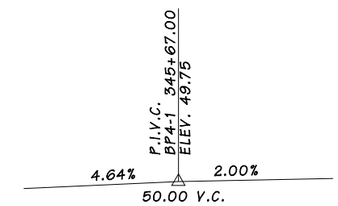
BEARING OF ALL PIERS IS N35°37'43"W

ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
BP4-1 344+89.69	35°59'39" LT	100.00'	32.49'	62.82'	S 89°38'04" E

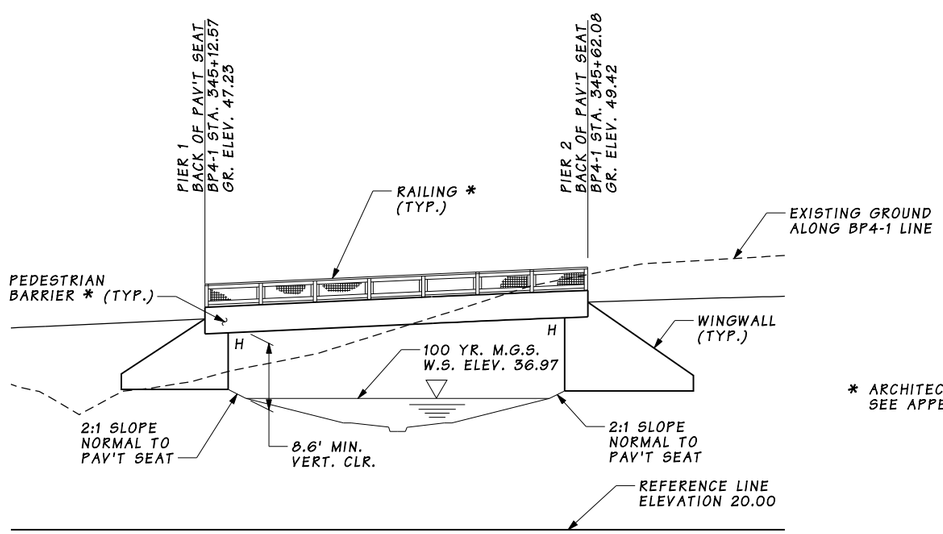
YARROW CREEK HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
YC LINE STA. 16+22.83	18°49'54" LT.	50.00'	8.29'	16.43'	S 17°12'24" E
YC LINE STA. 16+54.52	50°26'23" RT.	50.00'	23.55'	44.02'	S 36°02'18" E

NOTE:

1. FOR DETAILS OF THE CREEK PROFILE, SEE STREAM RESTORATION PLANS.



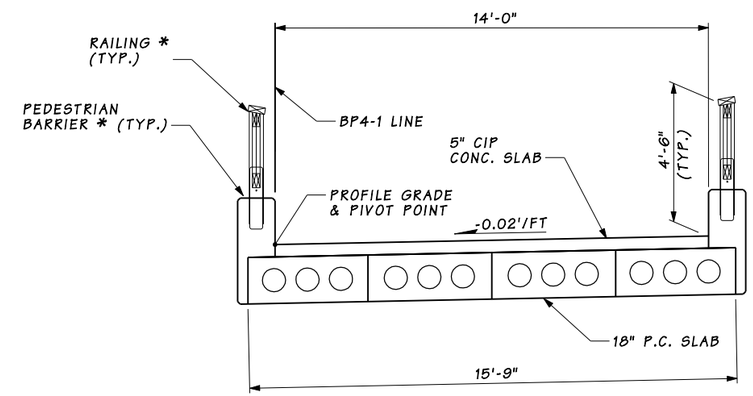
BP4-1 LINE PROFILE



ELEVATION

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB AND ARE EQUAL TO PROFILE GRADE

* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1



TYPICAL SECTION

DATUM

NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

26" P.C. SLABS
LOADING: H-10 OR AASHTO LRFD
PEDESTRIAN LOADING

Bridge Design Engr.		3/30/2010	3:38:32 PM			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT					10	WASH			
Designed By	A.JELLIN					JOB NUMBER				
Checked By	B.AKESSON									
Detailed By	L.STEVLINGSON									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN CREEK CROSSING #2

LAYOUT

BRIDGE SHEET NO. BG28

SHEET OF SHEETS

FILENAME: PW:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_12_01.dgn

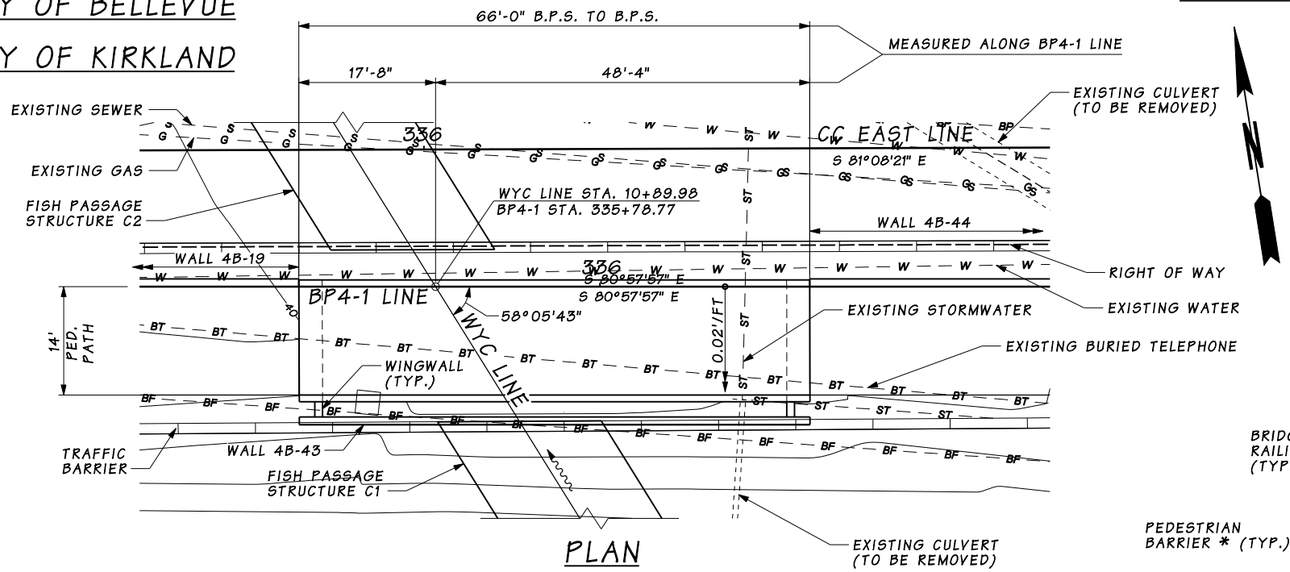
SR ____ JOB NO. ____ SHEET BG28
ProjectWise Vault: BG_Bridges

SEC. 20, T.25N., R.5E., W.M.

CITY OF BELLEVUE

CITY OF KIRKLAND

SR 520

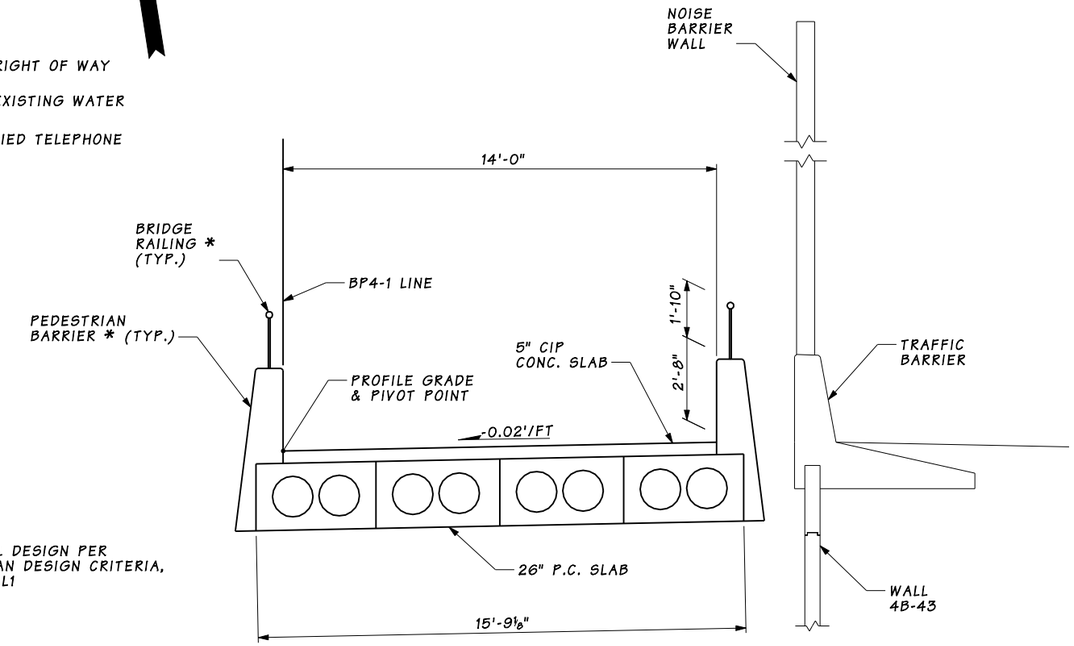


PLAN

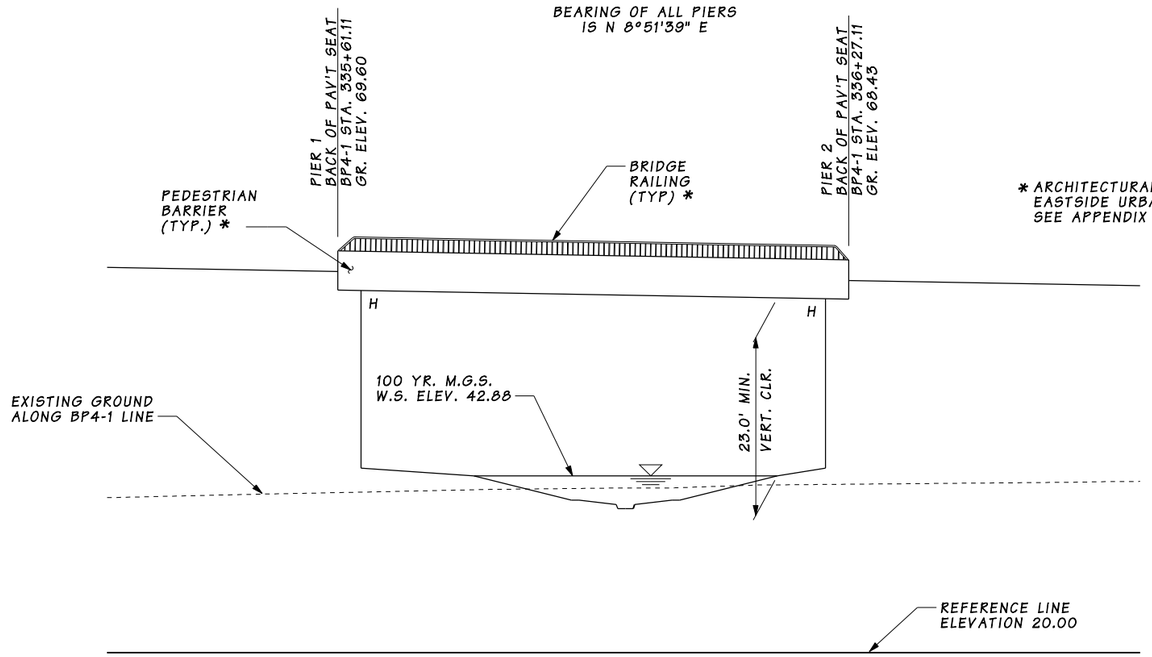
BEARING OF ALL PIERS IS N 8°51'39" E

NOTE:

1. FOR DETAILS OF THE CREEK ALIGNMENT AND PROFILE, SEE THE STREAM RESTORATION PLANS.



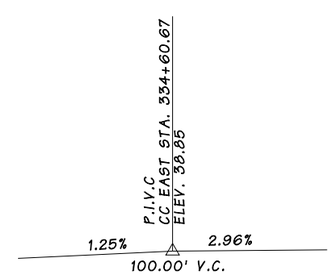
TYPICAL SECTION



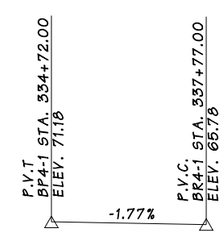
* ARCHITECTURAL DESIGN PER EASTSIDE URBAN DESIGN CRITERIA, SEE APPENDIX L1

ELEVATION

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB AND ARE EQUAL TO PROFILE GRADE



CC EAST LINE PROFILE



BP4-1 LINE PROFILE

26" P.C. SLABS

LOADING: H-10 OR AASHTO LRFD

PEDESTRIAN LOADING

DATUM

NAVD 1988

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:38:48 PM							
Supervisor	P. BOTT								
Designed By	A. JELLIN								
Checked By	B. AKESSON								
Detailed By	L. STEVLINGSON								
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
PEDESTRIAN CREEK CROSSING #3

LAYOUT

BRIDGE SHEET NO. BG29

SHEET OF SHEETS

FILENAME: PW:\CADD\Proj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_13_01.dgn

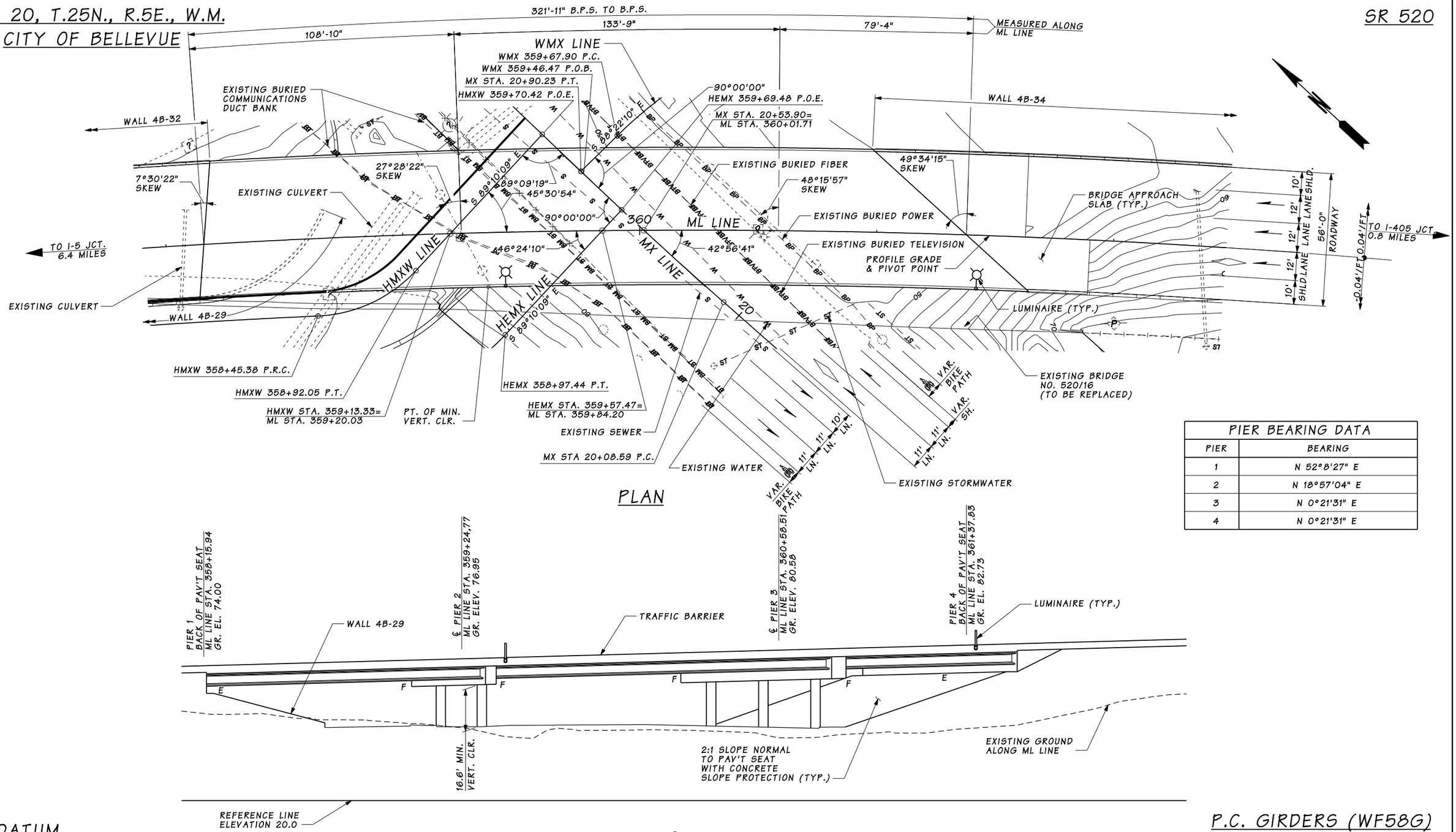
SR ____ JOB NO. ____ SHEET BG29

ProjectWise Vault: BG_Bridges

SEC. 20, T.25N., R.5E., W.M.

CITY OF BELLEVUE

SR 520



PLAN

PIER BEARING DATA	
PIER	BEARING
1	N 52°8'27" E
2	N 18°57'04" E
3	N 0°21'31" E
4	N 0°21'31" E

ELEVATION

ROADWAY SLAB AND ARE EQUAL TO PROFILE GRADE

DATUM

NAVD 1988

P.C. GIRDERS (WF58G) REPLACEMENT

LOADING: HL-93

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010	3:39:04 PM		
Supervisor	P. BOTT				
Designed By	H. JIANG				
Checked By	B. AKESSON				
Detailed By	H. JIANG				
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	APP'D

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER PE2344				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
108TH AVE. N.E. OVERCROSSING - WEST BOUND

LAYOUT

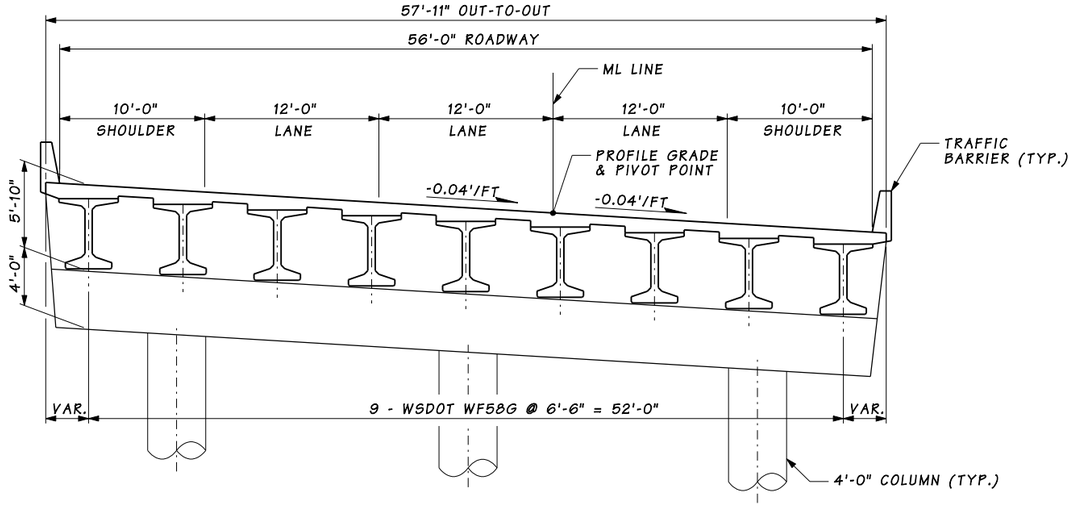
BRIDGE SHEET NO. BG30

SHEET OF SHEETS

FILENAME: PW:\CADDProj\Eastside\CADD\PS&E\Sheets\BG_Bridges\PE2344_4B_PS_BG_14_01.dgn

SR _____ JOB NO. PE2344 SHEET BG30

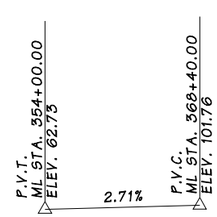
ProjectWise Vault: BG_Bridges



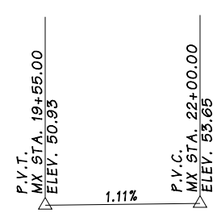
TYPICAL SECTION

SPAN 2 AT PIER 3 SHOWN

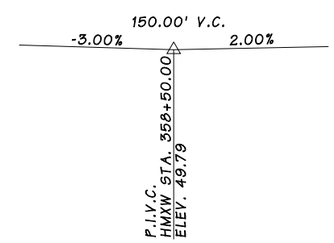
ROADWAY HORIZONTAL CURVE DATA					
PI STATION	△	RADIUS	TANGENT	LENGTH	BACK TANGENT BEARING
ML 357+47.98	22°07'17" RT.	3482.00'	680.66'	1344.36'	S 57°41'07" E
WMX 360+65.04	54°46'23" RT.	187.50'	97.13'	179.24'	S 86°31'23" E
HMXW 358+69.97	44°34'21" LT.	60.00'	24.59'	46.68'	S 44°35'48" E
HEMX 358+63.17	44°37'28" LT.	93.00'	38.17'	72.43'	S 44°22'36" E
MX 20+49.42	2°20'19" RT.	2000.00'	40.82'	81.64'	N 0°39'48" W



ML LINE PROFILE



MX LINE PROFILE



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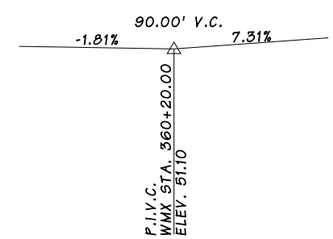
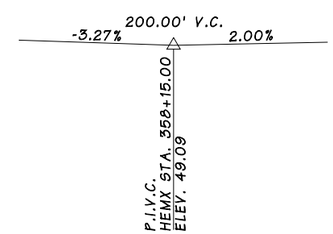


WMX LINE PROFILE



HEMX LINE PROFILE

FILENAME: P:\W:\CADDProj\EastsideCADD\PS&E\Sheets\BG_Bridges\PE2344_48_PS_BG_14_02.dgn

SR ____ JOB NO. ____ SHEET BG31

ProjectWise Vault: BG_Bridges

PRELIMINARY
NOT FOR CONSTRUCTION

Bridge Design Engr.		3/30/2010 3:39:18 PM				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	P. BOTT					10	WASH			
Designed By	H. JIANG					JOB NUMBER				
Checked By	B. AKESSON									
Detailed By	H. JIANG									
Bridge Projects Engr.										
Prelim. Plan By										
Architect/Specialist		DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

HDR ENGINEERING INC.

SR 520
MEDINA TO SR 202 VICINITY
EASTSIDE TRANSIT AND HOV
108TH AVE. N.E. OVERCROSSING WEST BOUND

TYPICAL SECTION

BRIDGE SHEET NO. BG31

SHEET OF SHEETS