

Oversight / NHS

FHWA REGION VIII OVERSIGHT?  NO  YES

NATIONAL HIGHWAY SYSTEM?  NO  YES



# DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

R.O.W. Projects:  
R.O.W. Project Description: NH 160A-003  
Code: 16056

### TABULATION OF LENGTH & DESIGN DATA

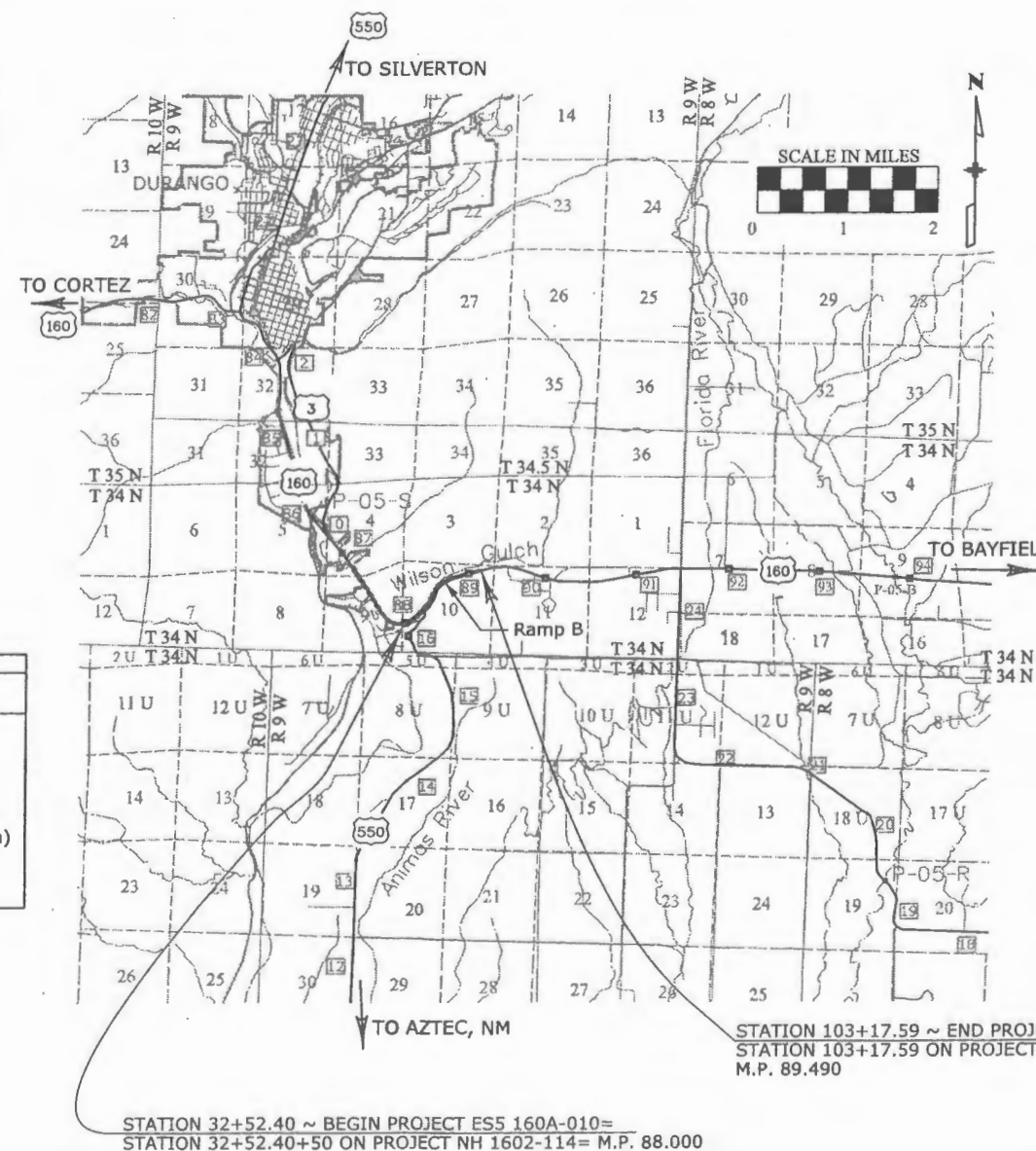
STATION	LINEAR FEET		MAJOR STRUCTURE
	RAMPS		
RAMP B STA. 399+64.08 ~ BEGIN RAMP B STA. 411+50.00 ~ END RAMP B	1,185.92		
RAMP B TIE STA. 10+00.00 ~ BEGIN RAMP B TIE STA. 11+62.59 ~ END RAMP B TIE	162.59		
ACCESS ROAD STA. 7+85.00 ~ BEGIN ACCESS ROAD STA. 10+00.00 ~ END ACCESS ROAD	215.00		
<b>SUBTOTAL</b>	<b>1,563.51</b>		

SUMMARY OF PROJECT LENGTH	FEET	MILES
ROADWAY (NET LENGTH)	1,563.51	0.296
STRUCTURE (NET LENGTH)		
PROJECT GROSS LENGTH	1,563.51	0.296

DESIGN DATA *	RAMP B		
	Ramp	Entrance	Access Road
MINIMUM RADIUS OF CURVE	250 Ft.	2040 Ft.	75 Ft. ( At Intersection)
MAXIMUM GRADE	8.0%	3.23%	4.78%
MINIMUM S.S.D. HORIZONTAL	156 Ft.	724 Ft.	158 Ft. (At Intersection)
MINIMUM S.S.D. VERTICAL	232 Ft.	305 Ft.	N/A
MAXIMUM DESIGN SPEED	25 MPH	40 MPH	30 MPH (15 MPH At Intersection)
CLEAR ZONE DISTANCE (FILL)	16 Ft.	16 Ft.	16 Ft.
CLEAR ZONE DISTANCE (CUT)	14 Ft.	14 Ft.	14 Ft.

TRAFFIC DATA	RAMP B	ACCESS ROAD
2010 TRAFFIC VOLUME		
ADT	N/A	N/A
TRUCKS	N/A	N/A
2030 DESIGN TRAFFIC DATA		
ADT	8,549	
DHV	770	
TRUCKS	7%	7%

## HIGHWAY CONSTRUCTION BID PLANS ~~OF PROPOSED~~ <sup>AS CONSTRUCTED</sup> FEDERAL AID PROJECT NO. ES5 160A-010 STATE HIGHWAY NO. 160 LA PLATA COUNTY CONSTRUCTION PROJECT CODE NO. 17269



SHEET NO.	INDEX OF SHEETS
(R-2) 1	TITLE SHEET
2	STANDARD PLANS LIST
3-4	TYPICAL SECTIONS
5-6	GENERAL NOTES
(R-2) 7-9	SUMMARY OF APPROXIMATE QUANTITIES
10	TABULATION OF ROADWAY
11-12	HORIZONTAL ALIGNMENTS
13-14	EXISTING UTILITIES
15-18	PLAN AND PROFILE SHEETS
19	RAMP B GORE DETAIL
(R-2) 20	NORTH GRADING PLAN
21-22	NORTH GRADING REPORT
(R-2) 23	DRAINAGE DITCH DETAIL
(R-2) 24	NORTH POND DETAIL
25	WEIR DETAIL
(R-2) 26	DRAINAGE STRUCTURE SECTIONS
27-28	RIGHT-OF-WAY FENCE
29-35	GROUND NAIL WALLS
(R-2) 36-48	MSE WALLS
49-51	ENGINEERING GEOLOGY
52-53	EROSION CONTROL PLANS
54-56	STORM WATER MANAGEMENT SHEETS
57	SURVEY TABULATION SHEET
58	TRAFFIC CONTROL DEVICE TABULATION

*WORK ADDED BY CMO*

THE ITEMS CROSSED OUT ON THIS PAGE ARE NOT INCLUDED IN THE CONTRACT, BUT MAY BE ADDED IF FUNDS BECOME AVAILABLE.

THE TABULATED WORK BELOW IS NOT IN THE CONTRACT. THE WORK MAY BE ADDED IF FUNDS BECOME AVAILABLE.

1. CONCRETE PANEL FACING FOR THE SOIL NAIL WALLS
2. MS4 PONDS AND OTHER WATER QUALITY FEATURES
3. ADDITIONAL GRADING
4. ADDITIONAL LANDSCAPING
5. PAVING

Print Date: 7/1/2009	Sheet Revisions			Colorado Department of Transportation		Contract Information		Project No./Code	
Drawing File Name: 17269 TitleSheet 01.dgn	Date:	Comments	Init.	3803 North Main Avenue		Contractor: <b>SEMA CONSTRUCTION</b>		ES5 160A-010	
Horiz. Scale: 1:1	07/01/09	Quantities & Clarifications	EJA	Suite 200		Resident Engineer: <b>ED ARCHULETA</b>			
Unit Information				Durango, CO 81301		Project Engineer: <b>JOE COLLEY</b>		17269	
				Phone: 970-385-1440 FAX: 970-385-8365		PROJECT STARTED: <b>9/16/09</b> ACCEPTED: <b>8/27/10</b>			
				Region 5		Comments: <b>FINAL SET</b>		Sheet Number 1	


Program Files\PWZ\_Working\dms50627\17269 M&S Standard Plans List Index.dgn

PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER	PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER	PLAN NUMBER	NEW OR REVISED	S STANDARD TITLE	PAGE NUMBER
<input checked="" type="checkbox"/> M-100-1	<input type="checkbox"/>	STANDARD SYMBOLS (3 SHEETS)	1-3	<input checked="" type="checkbox"/> M-607-1	<input type="checkbox"/>	WIRE FENCES AND GATES (3 SHEETS)	84-86	<input type="checkbox"/> S-612-1	<input type="checkbox"/>	DELINEATOR INSTALLATIONS (5 SHEETS)	131-135
<input type="checkbox"/> M-203-1	<input type="checkbox"/>	APPROACH ROADS	4	<input type="checkbox"/> M-607-2	<input type="checkbox"/>	CHAIN LINK FENCE (3 SHEETS)	87-89	<input checked="" type="checkbox"/> S-614-1	<input type="checkbox"/>	GROUND SIGN PLACEMENT (2 SHEETS)	136-137
<input checked="" type="checkbox"/> M-203-2	<input type="checkbox"/>	DITCH TYPES	5	<input type="checkbox"/> M-607-3	<input type="checkbox"/>	BARRIER FENCE	90	<input type="checkbox"/> S-614-2	<input type="checkbox"/>	CLASS I SIGNS	138
<input checked="" type="checkbox"/> M-203-11	<input type="checkbox"/>	SUPERELEVATION CROWNED AND DIVIDED HIGHWAYS (3 SHEETS)	6-8	<input type="checkbox"/> M-607-4	<input type="checkbox"/>	DEER FENCE AND GATES (2 SHEETS)	91-92	<input type="checkbox"/> S-614-3	<input type="checkbox"/>	CLASS II SIGNS	139
<input type="checkbox"/> M-203-12	<input type="checkbox"/>	SUPERELEVATION STREETS (2 SHEETS)	9-10	<input type="checkbox"/> M-607-10	<input type="checkbox"/>	PICKET SNOW FENCE	93	<input type="checkbox"/> S-614-4	<input type="checkbox"/>	CLASS III SIGNS (3 SHEETS)	140-142
<input checked="" type="checkbox"/> M-206-1	<input type="checkbox"/>	EXCAVATION AND BACKFILL FOR STRUCTURES (2 SHEETS)	11-12	<input type="checkbox"/> M-607-15	<input type="checkbox"/>	ROAD CLOSURE GATE (9 SHEETS)	94-102	<input type="checkbox"/> S-614-5	<input type="checkbox"/>	BREAK-AWAY SIGN SUPPORT DETAILS FOR GROUND SIGNS (2 SHEETS)	143-144
<input type="checkbox"/> M-206-2	<input type="checkbox"/>	EXCAVATION AND BACKFILL FOR BRIDGES (2 SHEETS)	13-14	<input type="checkbox"/> M-608-1	<input type="checkbox"/>	CURB RAMPS (4 SHEETS)	103-106	<input type="checkbox"/> S-614-6	<input type="checkbox"/>	CONCRETE FOOTINGS AND SIGN ISLANDS FOR CLASS III SIGNS (2 SHEETS)	145-146
<input checked="" type="checkbox"/> M-208-1	<input type="checkbox"/>	TEMPORARY EROSION CONTROL (7 SHEETS)	15-21	<input type="checkbox"/> M-609-1	<input type="checkbox"/>	CURBS, GUTTERS, AND SIDEWALKS (3 SHEETS)	107-109	<input checked="" type="checkbox"/> S-614-8	<input type="checkbox"/>	TUBULAR STEEL SIGN SUPPORT DETAILS (5 SHEETS)	147-151
<input type="checkbox"/> M-210-1	<input type="checkbox"/>	MAILBOX SUPPORTS (2 SHEETS)	22-23	<input type="checkbox"/> M-611-1	<input type="checkbox"/>	CATTLE GUARD (2 SHEETS)	110-111	<input type="checkbox"/> S-614-10	<input type="checkbox"/>	MARKER ASSEMBLY INSTALLATIONS	152
<input checked="" type="checkbox"/> M-214-1	<input type="checkbox"/>	PLANTING DETAILS	24	<input type="checkbox"/> M-613-1	<input type="checkbox"/>	ROADWAY LIGHTING (4 SHEETS)	112-115	<input type="checkbox"/> S-614-12	<input type="checkbox"/>	STRUCTURE NUMBER INSTALLATION	153
<input type="checkbox"/> M-412-1	<input type="checkbox"/>	CONCRETE PAVEMENT JOINTS (5 SHEETS)	25-29	<input type="checkbox"/> M-614-1	<input type="checkbox"/>	RUMBLE STRIPS (3 SHEETS)	116-118	<input type="checkbox"/> S-614-14	<input type="checkbox"/>	FLASHING BEACON AND SIGN INSTALLATIONS (3 SHEETS)	154-156
<input type="checkbox"/> M-510-1	<input type="checkbox"/>	STRUCTURAL PLATE PIPE H-20 LOADING	30	<input type="checkbox"/> M-614-2	<input type="checkbox"/>	SAND BARREL ARRAYS (2 SHEETS)	119-120	<input type="checkbox"/> S-614-20	<input type="checkbox"/>	TYPICAL POLE MOUNT SIGN INSTALLATIONS	157
<input type="checkbox"/> M-601-1	<input type="checkbox"/>	SINGLE CONCRETE BOX CULVERT (2 SHEETS)	31-32	<input type="checkbox"/> M-615-1	<input type="checkbox"/>	EMBANKMENT PROTECTOR TYPE 3	121	<input type="checkbox"/> S-614-21	<input type="checkbox"/>	CONCRETE BARRIER SIGN POST INSTALLATIONS	158
<input type="checkbox"/> M-601-2	<input type="checkbox"/>	DOUBLE CONCRETE BOX CULVERT (2 SHEETS)	33-34	<input type="checkbox"/> M-615-2	<input type="checkbox"/>	EMBANKMENT PROTECTOR TYPE 5	122	<input type="checkbox"/> S-614-22	<input type="checkbox"/>	TYPICAL MULTI-SIGN INSTALLATIONS	159
<input type="checkbox"/> M-601-3	<input type="checkbox"/>	TRIPLE CONCRETE BOX CULVERT (2 SHEETS)	35-36	<input type="checkbox"/> M-616-1	<input type="checkbox"/>	INVERTED SIPHON	123	<input type="checkbox"/> S-614-40	<input type="checkbox"/>	TYPICAL TRAFFIC SIGNAL INSTALLATION DETAILS (7 SHEETS)	160-166
<input type="checkbox"/> M-601-10	<input type="checkbox"/>	HEADWALL FOR PIPES	37	<input checked="" type="checkbox"/> M-620-1	<input type="checkbox"/>	FIELD LABORATORY CLASS 1	124	<input type="checkbox"/> S-614-40A	<input type="checkbox"/>	ALTERNATIVE TRAFFIC SIGNAL INSTALLATION DETAILS (5 SHEETS)	167-171
<input type="checkbox"/> M-601-11	<input type="checkbox"/>	TYPE "S" SADDLE HEADWALLS FOR PIPE	38	<input checked="" type="checkbox"/> M-620-2	<input type="checkbox"/>	FIELD LABORATORY CLASS 2	125	<input type="checkbox"/> S-614-50	<input type="checkbox"/>	MONOTUBE OVERHEAD SIGNS (14 SHEETS)	172-185
<input type="checkbox"/> M-601-12	<input type="checkbox"/>	HEADWALLS AND PIPE OUTLET PAVING	39	<input checked="" type="checkbox"/> M-620-11	<input type="checkbox"/>	FIELD OFFICE CLASS 1	126	<input type="checkbox"/> S-627-1	<input checked="" type="checkbox"/>	PAVEMENT MARKINGS (5 SHEETS) SHEET 1 REVISED ON 09/24/08 SHEET 2 REVISED ON 09/25/08	186-190
<input type="checkbox"/> M-601-20	<input type="checkbox"/>	WINGWALLS FOR PIPE OR BOX CULVERTS	40	<input type="checkbox"/> M-620-12	<input type="checkbox"/>	FIELD OFFICE CLASS 2	127	<input type="checkbox"/> S-630-1	<input checked="" type="checkbox"/>	TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION (12 SHEETS) SHEET 8 REVISED ON 03/05/07	191-202
<input type="checkbox"/> M-603-1	<input type="checkbox"/>	METAL AND PLASTIC PIPE (2 SHEETS)	41-42	<input checked="" type="checkbox"/> M-629-1	<input type="checkbox"/>	SURVEY MONUMENTS (2 SHEETS)	128-129	<input checked="" type="checkbox"/> S-630-2	<input type="checkbox"/>	BARRICADES, DRUMS, CONCRETE BARRIERS (TEMP) AND VERTICAL PANELS	203
<input checked="" type="checkbox"/> M-603-2	<input type="checkbox"/>	REINFORCED CONCRETE PIPE	43					<input type="checkbox"/> S-630-3	<input type="checkbox"/>	FLASHING BEACON (PORTABLE) DETAILS	204
<input type="checkbox"/> M-603-3	<input type="checkbox"/>	PRECAST CONCRETE BOX CULVERT	44								
<input checked="" type="checkbox"/> M-603-10	<input type="checkbox"/>	CONCRETE AND METAL END SECTIONS (2 SHEETS)	45-46								
<input checked="" type="checkbox"/> M-604-10	<input type="checkbox"/>	INLET, TYPE C	47								
<input checked="" type="checkbox"/> M-604-11	<input type="checkbox"/>	INLET, TYPE D	48								
<input type="checkbox"/> M-604-12	<input type="checkbox"/>	CURB INLET TYPE R (2 SHEETS)	49-50								
<input type="checkbox"/> M-604-13	<input type="checkbox"/>	CONCRETE INLET TYPE 13	51								
<input type="checkbox"/> M-604-20	<input type="checkbox"/>	MANHOLES (3 SHEETS)	52-54								
<input type="checkbox"/> M-604-25	<input type="checkbox"/>	VANE GRATE INLET (5 SHEETS)	55-59								
<input type="checkbox"/> M-605-1	<input type="checkbox"/>	SUBSURFACE DRAINS	60								
<input checked="" type="checkbox"/> M-606-1	<input type="checkbox"/>	GUARDRAIL TYPE 3 W-BEAM (16 SHEETS)	61-76								
<input type="checkbox"/> M-606-13	<input type="checkbox"/>	GUARDRAIL TYPE 7 F-SHAPE BARRIER (4 SHEETS)	77-80								
<input type="checkbox"/> M-606-14	<input type="checkbox"/>	PRECAST TYPE 7 CONCRETE BARRIER (3 SHEETS)	81-83								

THE STANDARD PLAN SHEETS INDICATED HEREON BY A MARKED BOX ARE TO BE USED TO CONSTRUCT THIS PROJECT.

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

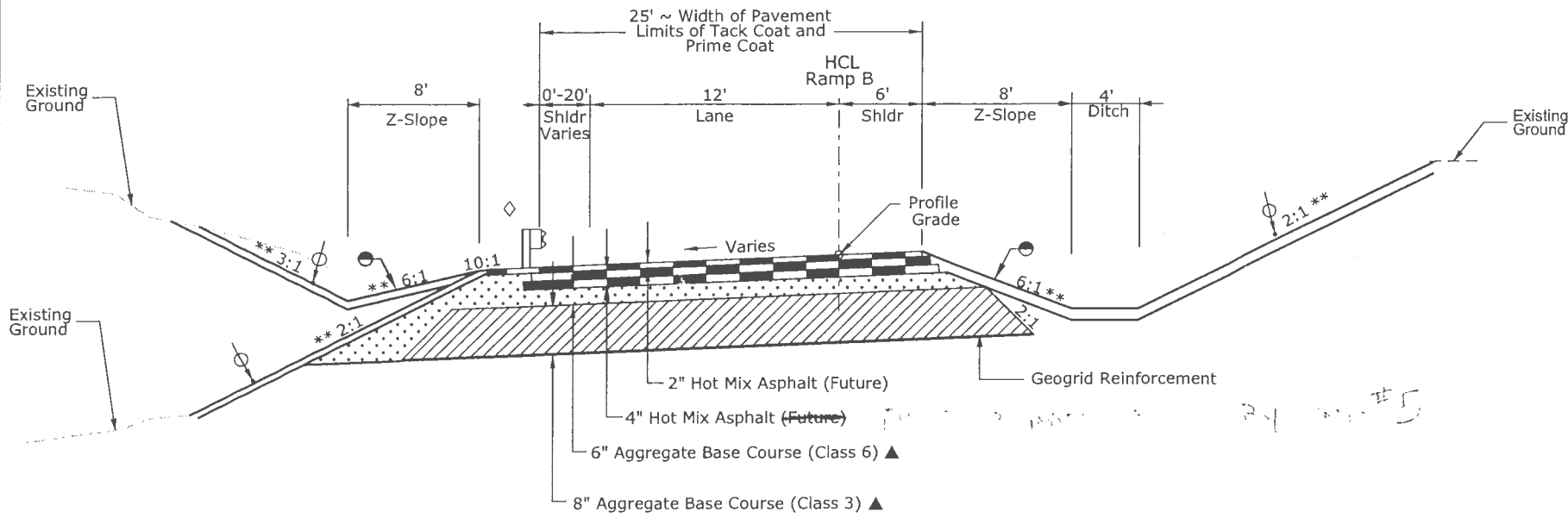
**COLORADO**  
 DEPARTMENT OF TRANSPORTATION  
**STANDARD PLANS LIST**  
**M&S STANDARDS**  
 July 04, 2006

Print Date: 5/26/2009	<b>Sheet Revisions</b>			<b>Colorado Department of Transportation</b>			<b>As Constructed</b>		<b>STANDARD PLANS LIST</b>			<b>Project No./Code</b>			
File Name: 17269 M&S Standard Plans List Index.dgn	Date:	Comments:	Init.	 3803 North Main Avenue Suite 200 Durango, CO 81301 Phone: 970-385-1440 FAX: 970-385-8365 <b>Region 5</b>			No Revisions: <b>8/27/16</b>		Designer: SPC Detailer: JND Sheet Subset: M&S Std Subset Sheets: 1 of 1			ES5 160A-010			
Horiz. Scale: 1:1 Vert. Scale: As Noted							Revised:					Structure Numbers		17269	
Unit Information Unit Leader Initials							Void:					Sheet Number		2	

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**TYPICAL SECTION "RAMP B"**

Station 405+20 to Station 408+52



**LANE TRANSITIONS FOR RAMP B**

Sta. 404+00 to Sta. 405+20  
Lane = 20' to 15' Lt. of HCL

Sta. 407+00 to Sta. 408+50  
Lane = 15' to 12' Lt. of HCL

Sta. 416+63.52 to Sta. 419+94.22  
Lane = 12' to 0' Lt. of HCL

Sta. 400+75 to Sta. 401+75  
Rt. Turn = 4' to 16' Rt. of HCL

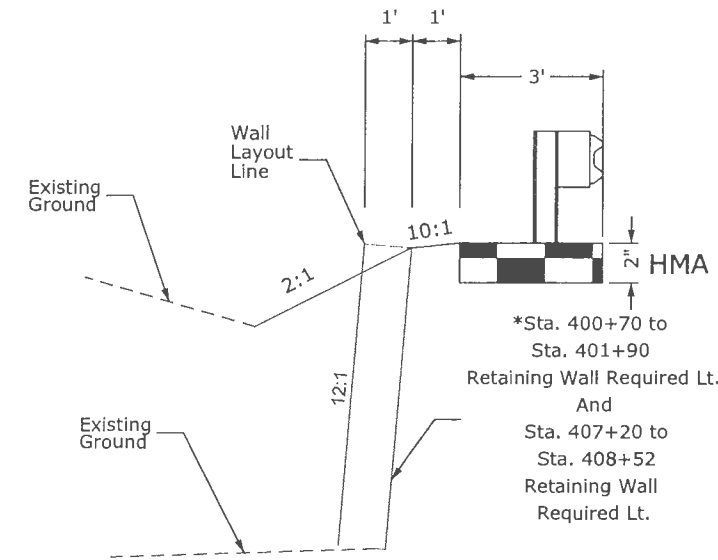
Sta. 401+75 to Sta. 403+75  
Rt. Turn = 16' Rt. of HCL

Sta. 403+75 to Sta. 404+67.79  
Lane = 16' to 0' Rt. of HCL

**SHOULDER TRANSITION**

Sta. 400+75 to Sta. 400+91.84  
Transition from a 6' shoulder to a 4' shoulder

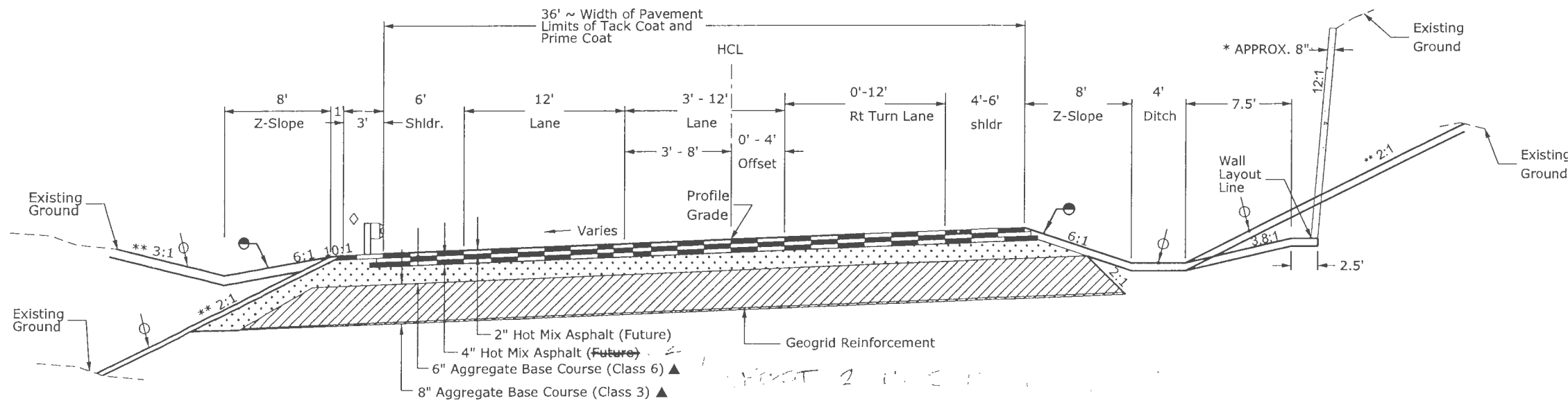
**WALL AND GUARDRAIL DETAIL**



**TYPICAL SECTION "RAMP B"**

**2 LANE TYPICAL**

Station 399+64.08 to Station 405+20



**TYPICAL SECTION NOTES**

- Break points on slopes and in bottoms of ditches shall be rounded during construction for a pleasing appearance.
- The Contractor will be required to place a minimum of 4 Inches of Topsoil or specified alternative to this line.
- ▲ Approximate thickness.
- The Contractor will be required to place shouldering material to a depth of 4 inches as shown or as directed by the Engineer. Shouldering material shall be Aggregate Base Course (Class 6).
- \* See retaining wall details.
- HCL Horizontal Control Line.
- See next sheet for HMA Shoulder Detail.
- \*\* See Cross Sections.

Print Date: 6/8/2009

File Name: 17269 Typical Sections Ramp B 01.dgn

Horiz. Scale: 1:10 Vert. Scale: As Noted

Unit Information Unit Leader Initials

**Sheet Revisions**

Date:	Comments	Init.

Colorado Department of Transportation

3803 North Main Avenue  
Suite 200  
Durango, CO 81301  
Phone: 970-385-1440 FAX: 970-385-8365

Region 5

EJA

As Constructed

No Revisions:

Revised: 8/27/10

Void:

**TYPICAL SECTIONS RAMP B**

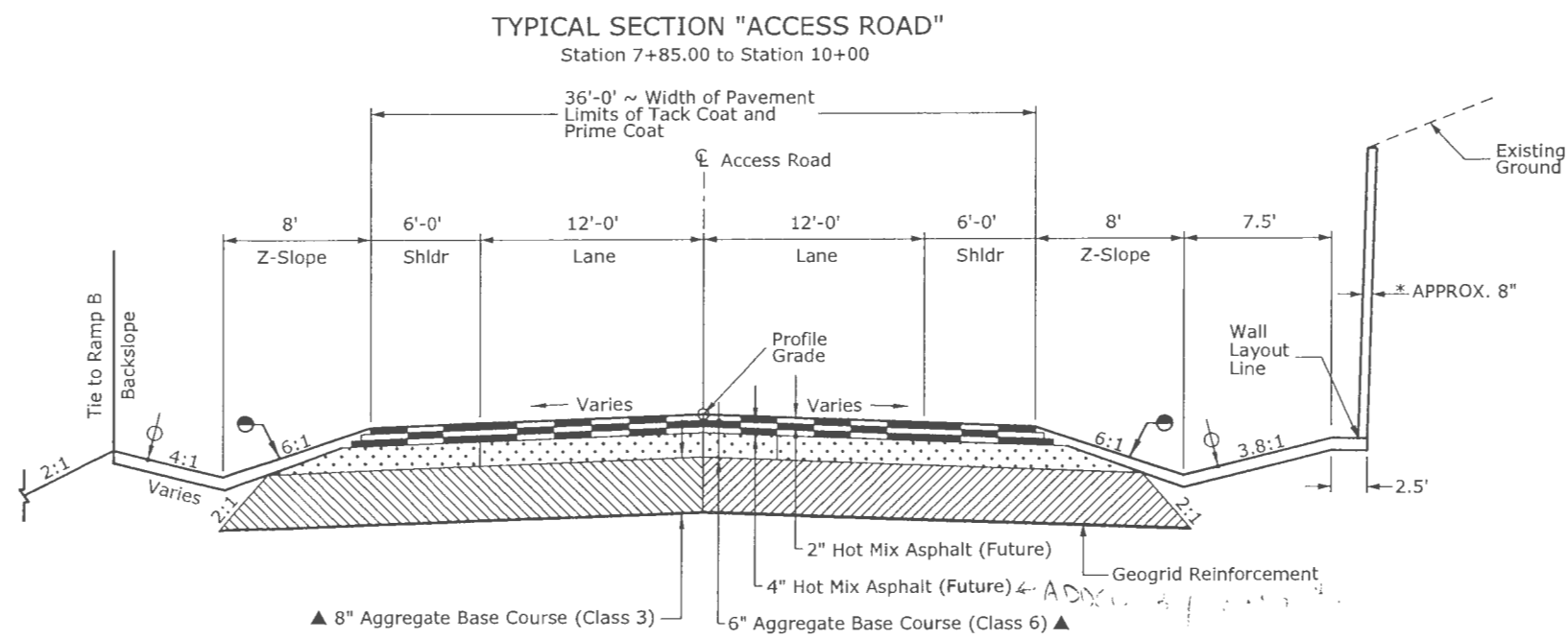
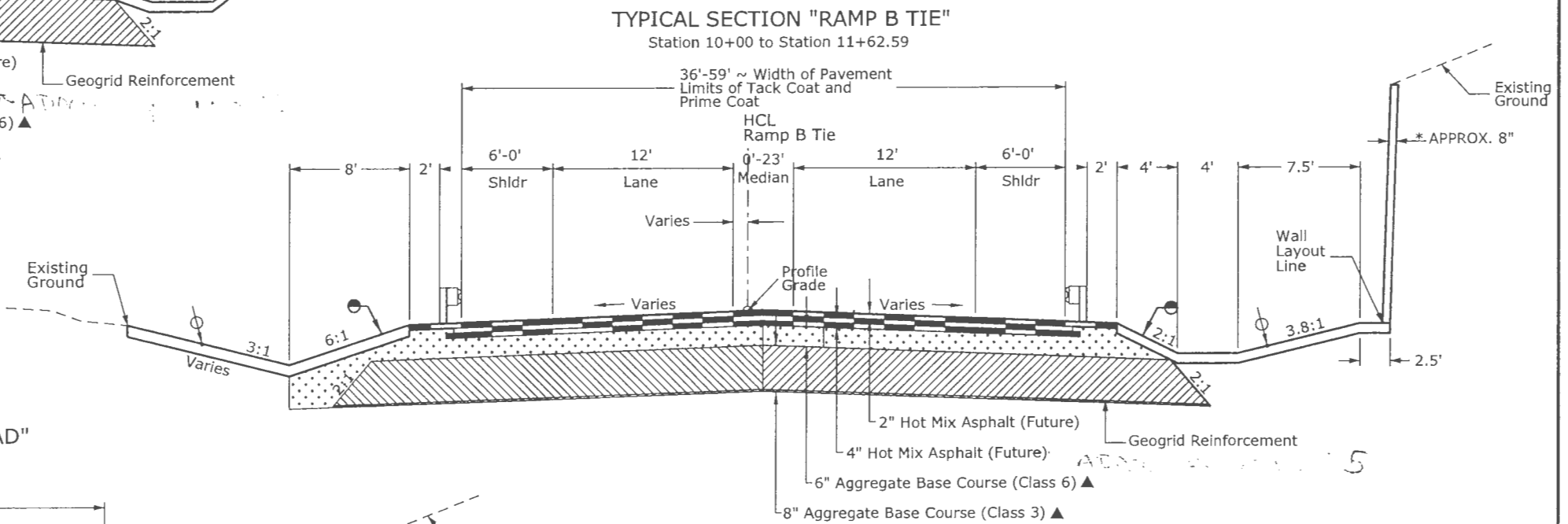
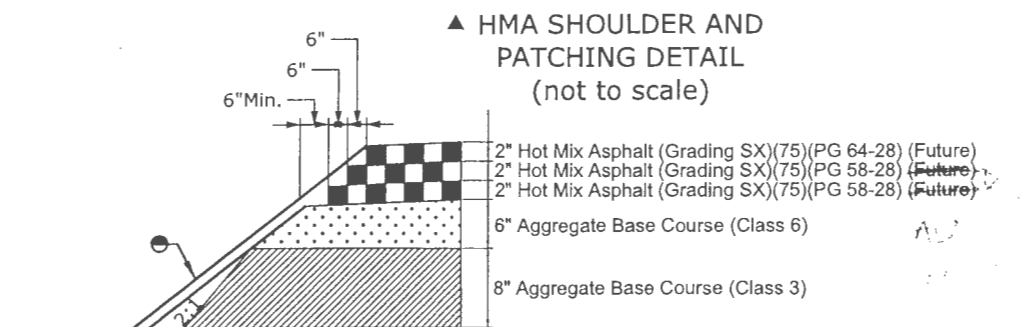
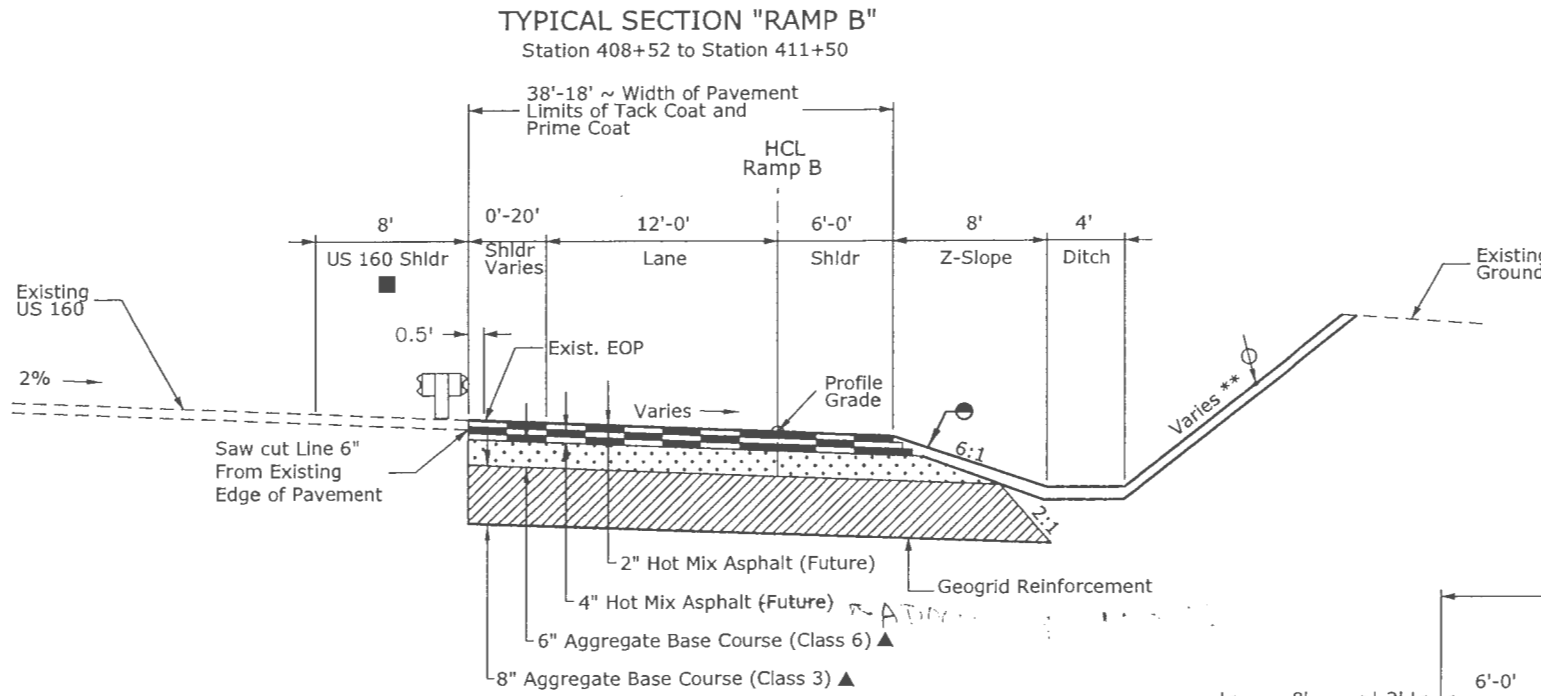
Designer:	SPC	Structure Numbers	NA
Detailer:	JND	Structure Numbers	NA
Sheet Subset:	TYPICALS	Subset Sheets:	1 of 2

Project No./Code

ES5 160A-010

17269

Sheet Number 3



- #### TYPICAL SECTION NOTES
- Break points on slopes and in bottoms of ditches shall be rounded during construction for a pleasing appearance.
  - The Contractor will be required to place a minimum of 4 Inches of Topsoil or specified alternative to this line.
  - ▲ Approximate thickness
  - The Contractor will be required to place shoudering material as shown. Shoudering material shall be aggregate base course (class 6)
  - \*\* See cross sections
  - \* See retaining wall details
  - HCL Horizontal Control Line
  - Construct HMA overlay. See Gore Detail for additional information.

Print Date: 6/8/2009	<b>Sheet Revisions</b>			<b>Colorado Department of Transportation</b>  3803 North Moin Avenue Suite 200 Durango, CO 81301 Phone: 970-385-1440 FAX: 970-385-8365 <b>Region 5 EJA</b>	As Constructed	<b>TYPICAL SECTIONS</b>		Project No./Code
File Name: 17269 TypicalSections Ramp B 01.dgn	Date:	Comments	Init.		No Revisions:	<b>RAMP B, RAMP B TIE &amp; ACCESS ROAD</b>		
Horiz. Scale: 1:10					Revised: 8/27/10	Designer: SPC	Structure Numbers	17269
Unit Information					Void:	Detailer: JND		Sheet Number 4
						Sheet Subset: TYPICALS	Subset Sheets: 2 of 2	

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1. FOR PRELIMINARY PLAN QUANTITIES OF PAVEMENT MATERIAL, THE FOLLOWING RATES OF APPLICATION WERE USED:

AGGREGATE BASE COURSE	@ 133 LBS/CU. FT
<del>HMA(GR.SX) (75) (PG 64-28)</del>	<del>@ 110 LBS./SQ. YD./INCH</del>
<del>HMA(GR.SX) (75) (PG 58-28)</del>	<del>@ 110 LBS./SQ. YD./INCH</del>
<del>EMULSIFIED ASPHALT (SLOW SETTING)</del>	<del>@ 0.10 GAL./SQ. YD. (DIL.)</del>
<del>EMULSIFIED ASPHALT (PRIME COAT)</del>	<del>@ 0.10 GAL./SQ. YD. (UNDIL.)</del>

~~2. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, A TACK COAT OF EMULSIFIED ASPHALT (SLOW SETTING) IS TO BE APPLIED BETWEEN PAVEMENT COURSES TO IMPROVE THE BOND.~~

~~3. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF 1 PART WATER AND 1 PART EMULSIFIED ASPHALT.~~

~~4. RATES OF APPLICATION SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF APPLICATION.~~

~~5. ANY LAYER OF BITUMINOUS PAVEMENT THAT IS TO HAVE A SUCCEEDING LAYER PLACED THEREON SHALL BE COMPLETED FULL WIDTH BEFORE THE SUCCEEDING LAYER IS PLACED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.~~

~~6. THE CONTRACTOR SHALL SUBMIT A PAVING SCHEDULE TO THE ENGINEER AT LEAST 5 WORKING DAYS PRIOR TO THE PRE PAVING CONFERENCE. PAVING SHALL NOT BEGIN UNTIL THE SCHEDULE HAS BEEN ACCEPTED IN WRITING BY THE ENGINEER.~~

~~7. CUTTING OF ASPHALT MATERIAL SHALL BE REQUIRED WHERE EVER NEW ASPHALT PAVEMENT ADJUTS EXISTING ASPHALT PAVEMENT.~~

~~8. THE PAVEMENT SMOOTHNESS INCENTIVE/DISINCENTIVE PAYMENT FOR THIS PROJECT SHALL BE BASED ON CATEGORY II (INCHES/MILES).~~

~~9. PRIOR TO PLACING BITUMINOUS PAVEMENT, THE PAVED SURFACE SHALL BE SWEEPED AND CLEANED. THIS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE HOT MIX ASPHALT PAVEMENT ITEM.~~

~~10. WHERE CUTTING OF ASPHALT PAVEMENT IS REQUIRED, THE CUTTING SHALL BE REQUIRED TO A NEAT WORK LINE WITH A SAW AS APPROVED BY THE ENGINEER.~~

~~11. THE PAVEMENT SHALL BE CUT TO A NEAT LINE OF 6" IN FROM EXISTING US 160 EOP. THIS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE HOT MIX ASPHALT PAVEMENT ITEM.~~

12. DEPTH OF MOISTURE-DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:  
FULL DEPTH OF ALL EMBANKMENTS  
BASES OF CUTS AND FILL: 0.5 FOOT

13. THE TYPE OF COMPACTION FOR EMBANKMENT MATERIAL WILL BE AASHTO T-99.

14. THE CONTRACTOR SHALL PROVIDE A CERTIFIED SCALE AND CERTIFIED WEIGHER AT THE POINT OF LOADING FOR ALL ASPHALT AGGREGATES AND CONCRETE DELIVERED TO THE PROJECT.

15. FOR ALL CONCRETE AND SHOTCRETE ITEMS, INCLUDING REINFORCED CONCRETE PIPES, THE SULFATE EXPOSURE LEVEL IS CLASS 2.

16. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION.

17. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF PROTECTING LIVE UTILITIES DURING THEIR CONSTRUCTION OPERATIONS AND SHALL HOLD CDOT HARMLESS FOR ANY AND ALL DAMAGES TO LIVE UTILITIES ARISING FROM THEIR CONSTRUCTION OPERATIONS.

18. THE CONTRACTOR SHALL NOT PARK EQUIPMENT OVERNIGHT WITHIN THE CLEAR ZONE LIMITS.

19. SEE GEOTECHNICAL REPORT FOR EXCAVATION OF BEDROCK MATERIALS

20. THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION. WHERE POSSIBLE, THE CONTRACTOR SHALL CONSTRUCT THE NORTH POND, DITCH, AND ASSOCIATED DRAINAGE CULVERT EARLY IN THE CONSTRUCTION SEQUENCE TO ALLOW THIS PERMANENT BMP FEATURE TO FUNCTION DURING ACTIVE CONSTRUCTION OF RAMP B.

21. DRAINAGE PIPES LEFT IN PLACE AND ABANDONED SHALL BE PLUGGED PER SPECIFICATIONS.

22. CONTROL OF SURFACE RUNOFF AND THE REPAIR OF DAMAGE RESULTING FROM RUNOFF IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

23. THE CONTRACTOR SHALL NOT DISTURB AREAS BEYOND THE LIMITS OF CLEARING AND GRUBBING AS SHOWN ON THE PLANS, TYPICAL SECTIONS, OR AS DIRECTED BY THE ENGINEER.

24. EXCAVATION LIMITS SHOWN IN THE DETAILS ARE GRAPHICAL REPRESENTATIONS ONLY AND DO NOT REPRESENT THE ACTUAL EXCAVATION LIMITS OR SAFE TRENCH CONDITIONS REQUIRED BY LOCAL, STATE, AND FEDERAL CODES GOVERNING SHORING, SHEETING, AND BRACING OF EXCAVATIONS AND TRENCHES, AND FOR THE PROTECTION AND SAFETY OF WORKERS AND OTHER CONSTRUCTION RELATED PERSONNEL.

25. TO PROTECT KNOWN ENVIRONMENTAL RESOURCES WITHIN CDOT ROW (WETLANDS, HISTORIC RAILROADS, CULTURAL SITES, THREATENED AND ENDANGERED SPECIES), TEMPORARY USE AREAS FOR EQUIPMENT STAGING, SETUP, REPAIR, OR OVERNIGHT PARKING AREAS SHALL BE APPROVED BY THE ENGINEER FOLLOWING COORDINATION WITH THE REGIONAL ENVIRONMENTAL STAFF. THE CONTRACTOR SHALL SUBMIT A PLAN FOR EQUIPMENT SETUP AND STAGING AREAS.

26. THE CONTRACTOR SHALL NOT IMPACT ANY AREAS OUTSIDE THE ROW LIMITS ALONG THE HISTORIC DENVER AND RIO GRAND RAILROAD GRADE WITHOUT PRIOR AUTHORIZATION FROM THE CDOT ENVIRONMENTAL UNIT. THIS INCLUDES IMPACTS FROM STAGING, PROCESSING, OR WASTING MATERIALS ON ADJACENT PRIVATE PROPERTY. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COORDINATION OF ADDITIONAL CLEARANCES REQUIRED FOR COMPLIANCE WITH FHWA AND SHPO.

27. THE CONTRACTOR SHALL CONTAIN ALL CONCRETE MATERIALS AND WASTEWATER. MULTIPLE CONCRETE WASHOUT FACILITIES ARE REQUIRED AT AN UPLAND LOCATION PER PROJECT SPECIAL PROVISION 208-EROSION CONTROL. THE CONTRACTOR SHALL SUBMIT A PLAN TO CONTAIN AND DISPOSE OF CONCRETE WASTES WITH A CONTINGENCY PLAN FOR ADDRESSING ACCIDENTAL RELEASES PER STANDARD SPECIFICATION 107.25(B)5.

28. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS DIRECTED BY THE ENGINEER.

29. IF AN ACTIVE RAPTOR NEST IS OBSERVED WITHIN 1/3 MILE THE PROJECT AREA, THE CONTRACTOR SHALL INFORM THE CDOT PROJECT ENGINEER WHO WILL CONTACT THE CDOT REGIONAL BIOLOGIST FOR CLARIFICATION ON WHETHER CERTAIN ACTIVITIES REQUIRE RESTRICTIONS TO COMPLY WITH CDOW RAPTOR BUFFER GUIDELINES WITHIN CERTAIN AREAS OF THE PROJECT. PROJECT CONSTRUCTION THAT BEGINS AFTER OCTOBER 15TH AND BEFORE FEBRUARY 15TH WILL NOT WARRANT RESTRICTIONS BASED ON RAPTOR NESTING TOLERANCE TO ACTIVE CONSTRUCTION.

30. TO COMPLY WITH THE MIGRATORY BIRD TREATY ACT (MBTA), ALL VEGETATION, TREE AND SHRUB REMOVAL SHALL TAKE PLACE OUTSIDE THE NESTING SEASON FOR MIGRATORY BIRDS WHICH EXTENDS FROM APRIL 1ST TO AUGUST 31ST. WORK THAT CANNOT BE CONDUCTED OUTSIDE THIS SEASON SHALL REQUIRE INSPECTION BY THE CONTRACTOR'S BIOLOGIST THREE DAYS PRIOR TO REMOVAL ACTIVITIES. IDENTIFIED ACTIVE NESTS DURING THE NESTING SEASON SHALL REQUIRE A 50 FOOT BUFFER AROUND THE NEST UNTIL AFTER AUGUST 31ST OR AS DIRECTED BY THE PROJECT ENGINEER. AT NO TIME SHALL COMPLETED OR OCCUPIED NESTS BE REMOVED DURING THE NESTING SEASON. COMPENSATION WILL NOT BE PAID FOR REQUIRED COMPLIANCE WITH THE MBTA.

WORK ADDED BY CMO #5

THE ITEMS CROSSED OUT ON THIS PAGE ARE NOT INCLUDED IN THE CONTRACT, BUT MAY BE ADDED IF FUNDS BECOME AVAILABLE.

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Horiz. Scale: 1:100      Vert. Scale: As Noted					Suite 200		Revised: 8/27/10		Designer: SPC		Structure		17269	
Unit Information      Unit Leader Initials					Durango, CO 81301		Void:		Detailer: IBH		Numbers		Sheet Number 5	
				Phone: 970-385-1440    FAX: 970-385-8365				Sheet Subset: GENERAL		Subset Sheets: 1 of 2				
				Region 5		EJA								

31. FIELD FACILITY ACCESS AREAS SHALL BE PROVIDED WITH AN ALL-WEATHER SURFACE AND PLACED WITHIN THE PROJECT LIMITS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

32. MAINTENANCE OF THE SANITARY FACILITY SHALL INCLUDE CLEANING AT LEAST TWICE A WEEK.

33. THE CONTRACTOR SHALL REPAIR OR REPLACE AT THEIR EXPENSE, ANY EXISTING SIGNS DAMAGED BY THE CONTRACTOR.

~~34. ALL SIGNING AND STRIPING (TEMPORARY AND PERMANENT) SHALL BE DONE BY THE CONTRACTOR. IT IS ESTIMATED THAT 2 GALLONS OF WHITE EPOXY PAVEMENT MARKING WILL BE REQUIRED FOR THE EDGE LINE ALONG US 160.~~

35. IT IS ANTICIPATED THAT ONE LANE OF EAST BOUND US 160 WILL NEED TO BE CLOSED DURING THE CONSTRUCTION OF RAMP B. THE CONTRACTOR SHALL CONFORM TO THE LANE CLOSURE TIMES AS SPECIFIED IN THE CONTRACT.

36. THE CONTRACTOR SHALL WORK WITHIN THE ROW LIMITS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL KEEP EQUIPMENT AND MATERIALS WITHIN THESE LIMITS AND CLEAR THE TRAVEL WAY AS REQUIRED TO MAINTAIN TRAFFIC THROUGH THE SITE DURING CONSTRUCTION.

37. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTS DESIGNATED TO REMAIN IN PLACE FROM DAMAGE DURING CONSTRUCTION OPERATIONS. ANY MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE RESET AT THE CONTRACTORS EXPENSE. THE CONTRACTOR AND THE ENGINEER SHALL NOTE THESE MONUMENTS IN THE FIELD PRIOR TO CONSTRUCTION.

38. THE SURVEY MONUMENT AT THE BELOW LOCATION SHALL BE REPLACED BY THE CONTRACTOR WITH SIMILAR SURVEY MONUMENT (TYPE II) PER SECTION 629 OF THE STANDARD SPECIFICATION.

LOCATION  
 US 160 CM-MP 89.20  
 SET CDOT MON. TYPE II  
 N = 1213274.70  
 E = 2320623.13  
 ELEV = 6690.77

39. ALL REMOVALS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS INDICATED IN THE PLANS AND PROJECT SPECIFICATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A DISPOSAL SITE FOR THE UNUSABLE MATERIALS.

40. IT IS ANTICIPATED THAT DEWATERING MAY BE REQUIRED FOR THE CONSTRUCTION OF RAMP B. UNDERGROUND SPRINGS MAY LIKELY BE ENCOUNTERED WITH THIS EXCAVATION, DEPENDING ON THE TIME OF YEAR.

41. THE CONTRACTOR SHALL PROVIDE UP TO 3 CDOT CONSTRUCTION STAFF CELL PHONES FOR THE PROJECT DURATION PER SPECIFICATIONS.

42. IT IS ESTIMATED THAT 1 FIELD OFFICE (CLASS 1), 1 FIELD LAB (CLASS 2), AND 1 SANITARY FACILITY WILL BE REQUIRED.

43. THE CONTRACTOR SHALL PLANT EVERGREEN TREES (20) AND DECIDUOUS SHRUBS (30) WITHIN DISTURBED AREAS OF THE PROJECT AS DIRECTED BY THE CDOT LANDSCAPE ARCHITECT IN COORDINATION WITH THE PROJECT ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 2 WKS PRIOR TO PLANTING TO PROVIDE NOTICE TO LANDSCAPE ARCHITECT TO STAKE PLANTING LOCATIONS. CONTRACTOR SHALL PROVIDE STAKING MATERIAL TO LOCATE PLANT MATERIAL IN FIELD.

44. LOCATIONS FOR PLANTINGS ARE AS DIRECTED BY THE ENGINEER.

45. PLANTING SHALL BE IN ACCORDANCE WITH SPECIFICAITON 214 AND M-STANDARD 214-1 AND SHALL BE PAID FOR AS BID ITEMS 214 DECIDUOUS SHRUB (1 GALLON) AND EVERGREEN TREE (5 GALLON). PLANTING INCLUDES DRYWATER SYSTEM OR APPROVED EQUAL. INSTALL THREE -THREE IN. DIA GEL PACKS AND TUBES PER PLANT AND PLACE A 4 INCH DEPTH OF WOOD MULCH WITHIN ALL PLANTING BASINS.

46. DECIDUOUS SHRUBS SHALL BE PLANTED IN SMALL GROUPINGS OF UP TO 5 PLANTS PER GROUPING OF THE SAME SPECIES SPACED AT 5 FEET OFF-CENTER AND INCLUDE A MINIMUM OF 10 CERCOCARPUS MONTANUS , 10 AMELANCHIER ALNIFOLIA, AND 10 QUERCUS GAMBELLII. EVERGREEN TREES SHALL INCLUDE A NEARLY EQUAL MIX OF JUNIPERUS SCOPULORUM AND PINUS EDULIS.

47. TREES AND SHRUBS SHALL BE WATERED IN ACCORDANCE WITH SPECIFICATION 214 LANDSCAPE MAINTENANCE (LS). IT IS ESTIMATED THAT 5 MGALS OF WATER (LANDSCAPING) WILL BE REQUIRED IN ACCORDANCE TO SPECIFICATION 214.

48. IT IS ESTIMATED THAT 20 HRS OF PROOF ROLLING, 40 HRS OF BLADING, 40 HRS OF COMBINATION LOADER AND 40 HRS OF LABOR WILL BE REQUIRED ON THIS PROJECT AS DIRECTED BY THE ENGINEER.

49. ALL CONDUIT ELBOWS SHALL BE PVC COATED METAL.

50. THE CONTRACTOR SHALL BE REQUIRED TO USE WELL MAINTAINED EQUIPMENT (ESPECIALLY WITH RESPECT TO MUFFLERS) AND LIMIT WORK TO DAYLIGHT HOURS.

51. THE CONTRACTOR SHALL BE REQUIRED TO TAKE APPROPRIATE STEPS TO MINIMIZE THE SPREAD OF NOXIOUS WEEDS DURING CONSTRUCTION AS DESCRIBED IN THE INTEGREGATED NOXIOUS WEED MANAGEMENT PLAN (INWMP) AND AS APPROVED BY THE PROJECT ENGINEER. WEED TREATMENT WITH APPROVED HERBICIDES SHALL BE PAID UNDER THE 208 FORCE ACCOUNT - EROSION CONTROL.

THE TABULATED WORK BELOW IS NOT IN THE CONTRACT. THE WORK MAY BE ADDED IF FUNDS BECOME AVAILABLE.

- 1. CONCRETE PANEL FACING FOR THE SOIL NAIL WALLS
- 2. MS4 PONDS AND OTHER WATER QUALITY FEATURES
- 3. ADDITIONAL GRADING
- 4. ADDITIONAL LANDSCAPING

THE ITEMS CROSSED OUT ON THIS PAGE ARE NOT INCLUDED IN THE CONTRACT, BUT MAY BE ADDED IF FUNDS BECOME AVAILABLE.

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INDEX BOOK PAGE SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY		P-05-AT		P-05-AV		P-05-AU		P-05-AW		PROJECT TOTALS	
				PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.		
	<b>R-2</b> 201-00001	Clearing and Grubbing	ACRE	6.3										<del>6.3</del>	<b>7.3</b>
	202-04001	Plug Culvert	EACH	1										<del>1</del>	<b>1</b>
	203-00010	Unclassified Excavation (Complete In Place)	CY	53,045										<del>53,045</del>	<b>53,045</b>
	203-01100	Proof Rolling	HOUR	20										<del>20</del>	<b>0</b>
	203-01500	Blading	HOUR	40										<del>40</del>	<b>0</b>
	203-01594	Combination Loader	HOUR	40										<del>40</del>	<b>20</b>
	203-01597	Potholing	HOUR	24										<del>24</del>	<b>32</b>
	203-02330	Laborer	HOUR	40										<del>40</del>	<b>24</b>
	206-00000	Structure Excavation	CY	316	<b>325</b>		705	<b>747</b>		500	<b>500</b>			<del>1,521</del>	<b>1,572</b>
	<b>R-2</b> 206-00100	Structure Backfill (Class 1)	CY	38	<b>38</b>		1,355	<b>1,355</b>		460	<b>460</b>			<del>1,853</del>	<b>1,853</b>
	<b>R-2</b> 206-00360	Mechanical Reinforcement of Soil	CY				835	<b>835</b>		310	<b>310</b>			<del>1,145</del>	<b>1,145</b>
	207-00205	Topsoil	CY	975	<b>700</b>									<del>975</del>	<b>700</b>
	208-00003	Erosion Log (18 Inch)	LF	980	<b>200</b>									<del>980</del>	<b>200</b>
	208-00020	Silt Fence	LF	1,600	<b>0</b>									<del>1,600</del>	<b>0</b>
	208-00045	Concrete Washout Structure	EACH	2	<b>2</b>									<del>2</del>	<b>2</b>
	208-00050	Storm Drain Inlet Protection	EACH	3	<b>3</b>									<del>3</del>	<b>3</b>
	208-00070	Stabilized Construction Entrance	EACH	1	<b>1</b>									<del>1</del>	<b>1</b>
	208-00206	Erosion Control Supervisor	DAY	180	<b>179</b>									<del>180</del>	<b>179</b>
	209-00100	Water (Landscaping)	M GAL	5	<b>0</b>									<del>5</del>	<b>0</b>
	212-00006	Seeding (Native)	ACRE	5	<b>8.26</b>									<del>5</del>	<b>8.26</b>
	212-00032	Soil Conditioning	ACRE	5	<b>0.5</b>									<del>5</del>	<b>0.5</b>
	213-00004	Mulching (Weed Free Straw)	ACRE	5	<b>8</b>									<del>5</del>	<b>8</b>
	213-00061	Mulch Tackifier	LB	500	<b>1,400</b>									<del>500</del>	<b>1,400</b>
	214-00000	Landscape Maintenance	L S	1	<b>0</b>									<del>1</del>	<b>0</b>
	214-00310	Deciduous Shrub (1 Gallon Container)	EACH	30	<b>0</b>									<del>30</del>	<b>0</b>
	214-00450	Evergreen Tree (5 Gallon Container)	EACH	20	<b>0</b>									<del>20</del>	<b>0</b>
	216-00041	Soil Retention Blanket (Straw/Coconut)	SY	3,113	<b>2,451</b>									<del>3,113</del>	<b>2,451</b>
	304-03000	Aggregate Base Course (Class 3)	TON	3,457	<b>3,219</b>									<del>3,457</del>	<b>3,219</b>
	<b>R-2</b> 304-06000	Aggregate Base Course (Class 6)	TON	3,098	<b>2,666</b>									<del>3,098</del>	<b>2,666</b>
	<b>R-2</b> 403-00721	Hot Mix Asphalt (Patching) (Asphalt)	SY	59	<b>133</b>									<del>59</del>	<b>133</b>
	420-00113	Geotextile (Drainage) (Class 2)	SY	940	<b>910</b>									<del>940</del>	<b>910</b>
	<b>R-2</b> 504-04420	Precast Panel Facing	SF			1,756	<b>1,756</b>		975	<b>975</b>				<del>2,751</del>	<b>2,731</b>
	504-06310	Ground Nail (10 Foot)	EACH								111	<b>127</b>	56	<del>187</del>	<b>212</b>

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Horiz. Scale: 1:200	07/01/09	Added or Revised Quantities	EJA	Suite 200		Revised: 8/27/10		Detailer: SPC			17269	
Unit Information				Durango, CO 81301		Void:		Sheet Subset: SOAQ			Sheet Number 7	
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				Region 5								
				EJA								

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BOOK	PAGE	SHEET				PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.
			504-06315	Ground Nail (15 Foot)	EACH							<del>66</del>	62	<del>66</del>	62	<del>66</del>	62
			504-06320	Ground Nail (20 Foot)	EACH							<del>360</del>	320	<del>66</del>	70	<del>420</del>	390
			504-06325	Ground Nail (25 Foot)	EACH							<del>48</del>	48	<del>48</del>		<del>48</del>	48
			504-06330	Ground Nail (30 Foot)	EACH							<del>198</del>	205	<del>480</del>	160	<del>358</del>	365
			504-06340	Ground Nail (40 Foot)	EACH									<del>244</del>	243	<del>244</del>	243
			506-00030	Grouted Riprap	CY	<del>102</del>	134									<del>102</del>	134
			506-00206	Riprap (6 Inch)	CY	<del>60</del>	37									<del>60</del>	37
			506-00212	Riprap (12 Inch)	CY	<del>111</del>	119									<del>111</del>	119
			506-01020	Geogrid Reinforcement	SY	<del>8,942</del>	7146									<del>8,942</del>	7146
			<b>R-2</b> 601-01050	Concrete Class B (Wall)	CY	<del>3</del>	3	<del>11</del>	5.6	<del>12</del>	12					<del>26</del>	21
			<b>R-2</b> 601-40300	Structural Concrete Coating	SY			<del>260</del>	260	<del>175</del>	175	<del>1,900</del>	1961	<del>1,215</del>	1237	<del>3,550</del>	3611
			<b>R-2</b> 602-00000	Reinforcing Steel	LB	<del>168</del>	166									<del>166</del>	166
			<b>R-2</b> 602-00020	Reinforcing Steel (Epoxy Coated)	LB			<del>150</del>	150	<del>75</del>	75					<del>225</del>	225
			603-01245	24 Inch Reinforced Concrete Pipe (Complete In Place)	LF	<del>128</del>	128									<del>128</del>	128
			603-01365	36 Inch Reinforced Concrete Pipe (Complete In Place)	LF	<del>208</del>	208									<del>208</del>	208
			603-05024	24 Inch Reinforced Concrete End Section	EACH	<del>1</del>	1									<del>1</del>	1
			603-05036	36 Inch Reinforced Concrete End Section	EACH	<del>1</del>	1									<del>1</del>	1
			604-00310	Inlet Type C (10 Foot)	EACH	<del>1</del>	1									<del>1</del>	1
			<b>R-2</b> 604-00505	Inlet Type D (5 Foot)	EACH	<del>1</del>	1									<del>1</del>	1
			604-00510	Inlet Type D (10 Foot)	EACH	<del>1</del>	1									<del>1</del>	1
			<b>R-2</b> 606-00710	Guardrail Type 7 (Style-6A) CD <i>per 105-100</i>	LF	<del>150</del>	150									<del>450</del>	150
			613-01200	2 Inch Electrical Conduit (Plastic)	LF	<del>551</del>	94									<del>551</del>	94
			613-07026	Pull Box (16"x24"x12")	EACH	<del>3</del>	0									<del>3</del>	0
			620-00001	Field Office (Class 1)	EACH	<del>1</del>	1									<del>1</del>	1
			620-00012	Field Laboratory (Class 2)	EACH	<del>1</del>	1									<del>1</del>	1
			620-00020	Sanitary Facility	EACH	<del>1</del>	1									<del>1</del>	1
			625-00000	Construction Surveying	L S	<del>1</del>	1									<del>1</del>	1
			626-00000	Mobilization	L S	<del>1</del>	1									<del>1</del>	1
			626-01000	Public Information Services	L S	<del>1</del>	1									<del>1</del>	1
			629-01002	Survey Monument (Type 2)	EACH	<del>1</del>	1									<del>1</del>	1
			630-00000	Flagging	HOUR	<del>3,200</del>	0									<del>3,200</del>	0
			630-00007	Traffic Control Inspection	DAY	<del>64</del>	155									<del>64</del>	155

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BOOK	PAGE	SHEET				PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.
			630-00012	Traffic Control Management	DAY	<del>160</del>	62									<del>160</del>	62
			630-80341	Construction Traffic Sign (Panel Size A)	EACH	<del>2</del>	3									<del>2</del>	3
			630-80342	Construction Traffic Sign (Panel Size B)	EACH	<del>12</del>	11									<del>12</del>	11
			630-80344	Construction Traffic Sign (Special)	SF	<del>94.5</del>	94.5									<del>94.5</del>	94.5
			630-80356	Advance Warning Flashing or Sequencing Arrow Panel (A Type)	EACH	<del>2</del>	1									<del>2</del>	1
			630-80360	Drum Channelizing Device	EACH	<del>50</del>	0									<del>50</del>	0
			630-80380	Traffic Cone	EACH	<del>100</del>	22									<del>100</del>	22
			700-70010	FORCE ACCOUNT =====	F A	1										1	
			700-70011	F/A Minor Contract Revisions	F A	1										1	
			700-70012	F/A Partnering	F A	1										1	
			700-70016	F/A Asphalt Pavement Incentive	F A	1										1	
			700-70019	F/A Fuel Cost Adjustment	F A	1										1	
			700-70022	F/A Asphalt Cement Cost Adjustment	F A	1										1	
			700-70023	F/A OJT Colorado Training Program	F A	1										1	
			700-70023	F/A On-The-Job Trainee	F A	1										1	
			700-70025	F/A Quality Incentive Payment	F A	1										1	
			700-70028	F/A ESB Program	F A	1										1	
			700-70380	F/A Erosion Control	F A	1										1	

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**SURFACING TABULATIONS**

STATION LIMITS	LIFT	THICKNESS INCH	SURFACE AREA SF	HOT MIX ASPHALT (GR SX) (75) (PG 64-28)		HOT MIX ASPHALT (GR SX) (75) (PG 58-28)		EMULSIFIED ASPHALT (Slow Setting)		EMULSIFIED ASPHALT (Prime Coat)	
				TON		TON		GAL		GAL	
				Plan	Final	Plan	Final	Plan	Final	Plan	Final
<del>Ramp B Tie</del>											
<del>10+00.00 - 11+62.59</del>											
<del>Ramp B</del>											
<del>399+64.08 - 411+50.00</del>											
<del>Access Road</del>											
<del>7+85 - 10+00</del>											
<del>Pipe at 407+55</del>											
<del>Guardrail</del>											
SUB TOTAL				175,719	0	1,472	329	214			
10% IRREGULARITIES						147					
PROJECT TOTAL				175,719	0	1619	329	214			

HMA PAVING  
B.1  
C.M.O.#

**Summary of Earthwork Quantities**

Unclassified Excavation (Complete in Place)		Cubic Yards
For Ramp B		26,851
For Ramp B Tie		7,209
For Access Road		13,259
For Pond & North Ditch		2,364
For Ditch		680
For Cut Slope Treatment		2,366
Unclassified Excavation from Structure Quantities		316
<b>Total</b>		<b>53,045</b>
FOR INFORMATION ONLY		
Embankment (Net)		Cubic Yards
For Ramp B		1,676
For Ramp B Tie		63
For Access Road		2
For Pond & North Ditch		63
For Ditch		0
Embankment from Structure Quantities		642
<b>Total</b>		<b>2,446</b>
Compaction (AASHTO T-99)		Cubic Yards
Total Embankment (Net)		2,446
Bases of Cuts and Fills		1,574
<b>Total</b>		<b>4,020</b>
Wetting (For Information Only)		M Gallons
Dust Palliative		19
Aggregate Base Course		99
Compaction		140
<b>Total</b>		<b>258</b>
Earthwork Quantities Balance		
		Cubic Yards
Unclassified Excavation		53,045
Embankment (Net)		2,446
Embankment (Net) Times Compaction Factor (1.2)		2,935
Excess Excavation (to be placed north of US 160 as shown on the plans)		50,110
Embankment Factored plus Excess Excavation		53,045

THE ITEMS CROSSED OUT ON THIS PAGE ARE NOT INCLUDED IN THE CONTRACT, BUT MAY BE ADDED IF FUNDS BECOME AVAILABLE.

PAVING ADDED AS NOTED

**AGGREGATE BASE COURSE**

STATION LIMITS	AGGREGATE BASE COURSE (CLASS 3)		AGGREGATE BASE COURSE (CLASS 6)		GEOGRID REINFORCEMENT		*SHOULDER MATERIAL AGGREGATE BASE COURSE (CLASS 6)		TOPSOIL	
	TON		TON		SQ YRD		TON		CY	
	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
<del>Ramp B Tie</del>										
<del>10+00.00 - 11+62.59</del>										
<del>Ramp B</del>										
<del>399+64.08 - 411+50</del>										
<del>Access Road</del>										
<del>7+85 - 10+00</del>										
<del>Pipe at 407+55</del>										
SUB TOTAL										
10% IRREGULARITIES										
PROJECT TOTALS										

\* Shouldering material. See typical sections

**GUARDRAIL TABULATION**

STATION TO STATION	SIDE	* GUARDRAIL TYPE 3	GUARDRAIL TRANSITION TYPE 3G	GUARDRAIL TYPE 3 (DOUBLE)	IMPACT ATTENUATOR	END ANCHORAGE NON FLARED
		LF	EACH	LF	EACH	EACH
US 550 265+77.52	Lt.		1			
US 550 265+58.77 to Ramp B 408+36.34	Lt.	975				
Ramp B 408+36.34 to Ramp B 408+73.54	Lt.			37.5		
Ramp B 408+73.54	Lt.				1	
US 550 265+54.71	Rt.		1			
US 550 265+35.96 to Ramp B 399+13.35	Rt.	137.5				
Ramp B 399+13.35	Rt.					1
<b>PROJECT TOTAL</b>		<b>1112.5</b>	<b>2</b>	<b>37.5</b>	<b>1</b>	<b>1</b>

\* 7' Guardrail posts required at MSE wall locations

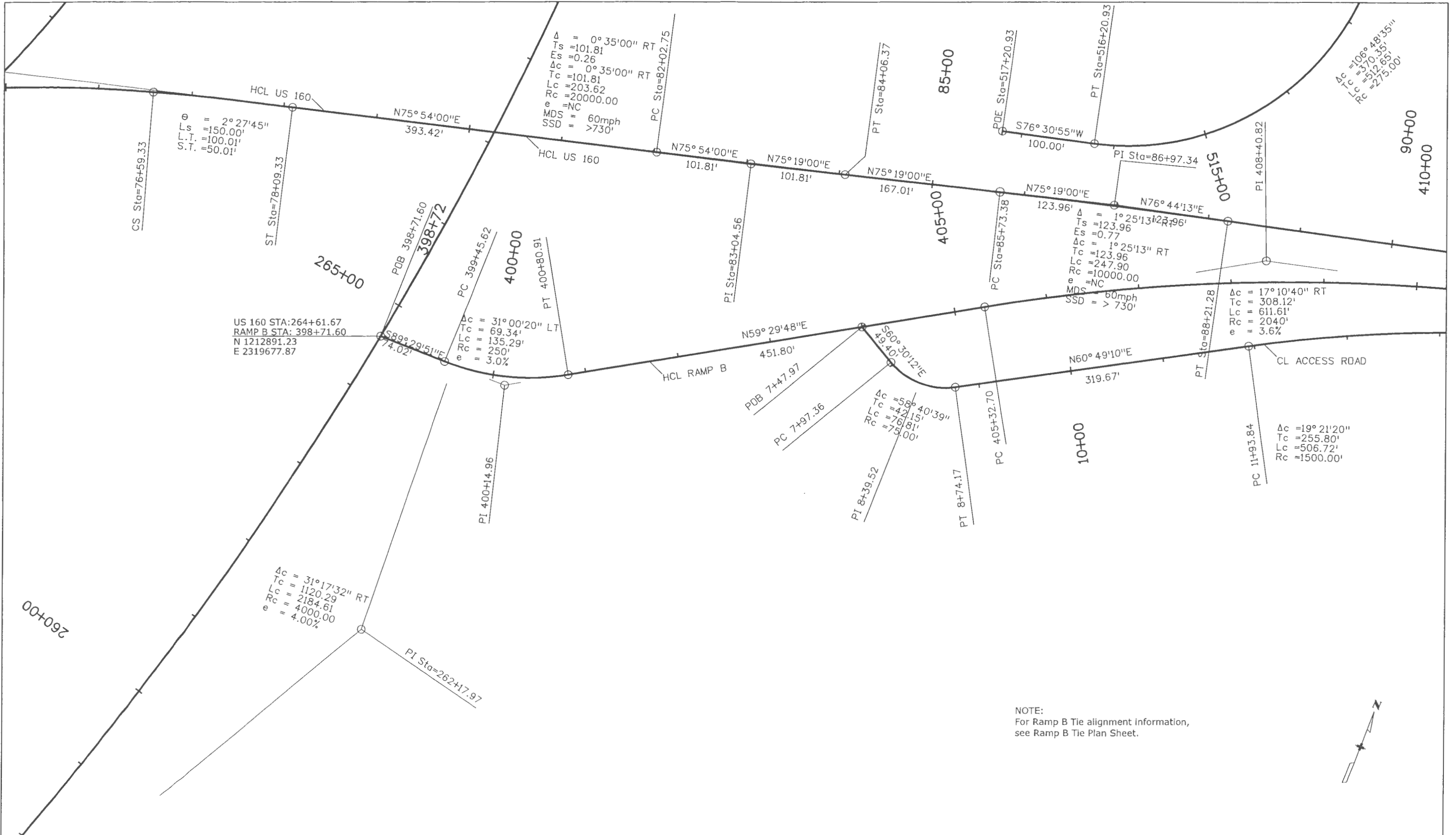
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Horiz. Scale: 1:100      Vert. Scale: As Noted
Unit Information      Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**  
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**Region 5**      **EJA**

As Constructed	ROADWAY TABULATION	
No Revisions:	Designer: SPC	Structure Numbers
Revised: 8/27/10	Detailer: SPC	
Void:	Sheet Subset: TABS	Subset Sheets: 1 of 1

Project No./Code	ES5 160A-010
Sheet Number	17269
Sheet Number	10



NOTE:  
For Ramp B Tie alignment information,  
see Ramp B Tie Plan Sheet.

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Print Date: 5/27/2009	
File Name: 17269 Horz Alignment Sheet Ramp B1.dgn	
Horiz. Scale: 1:100	Vert. Scale: As Noted
Unit Information	Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

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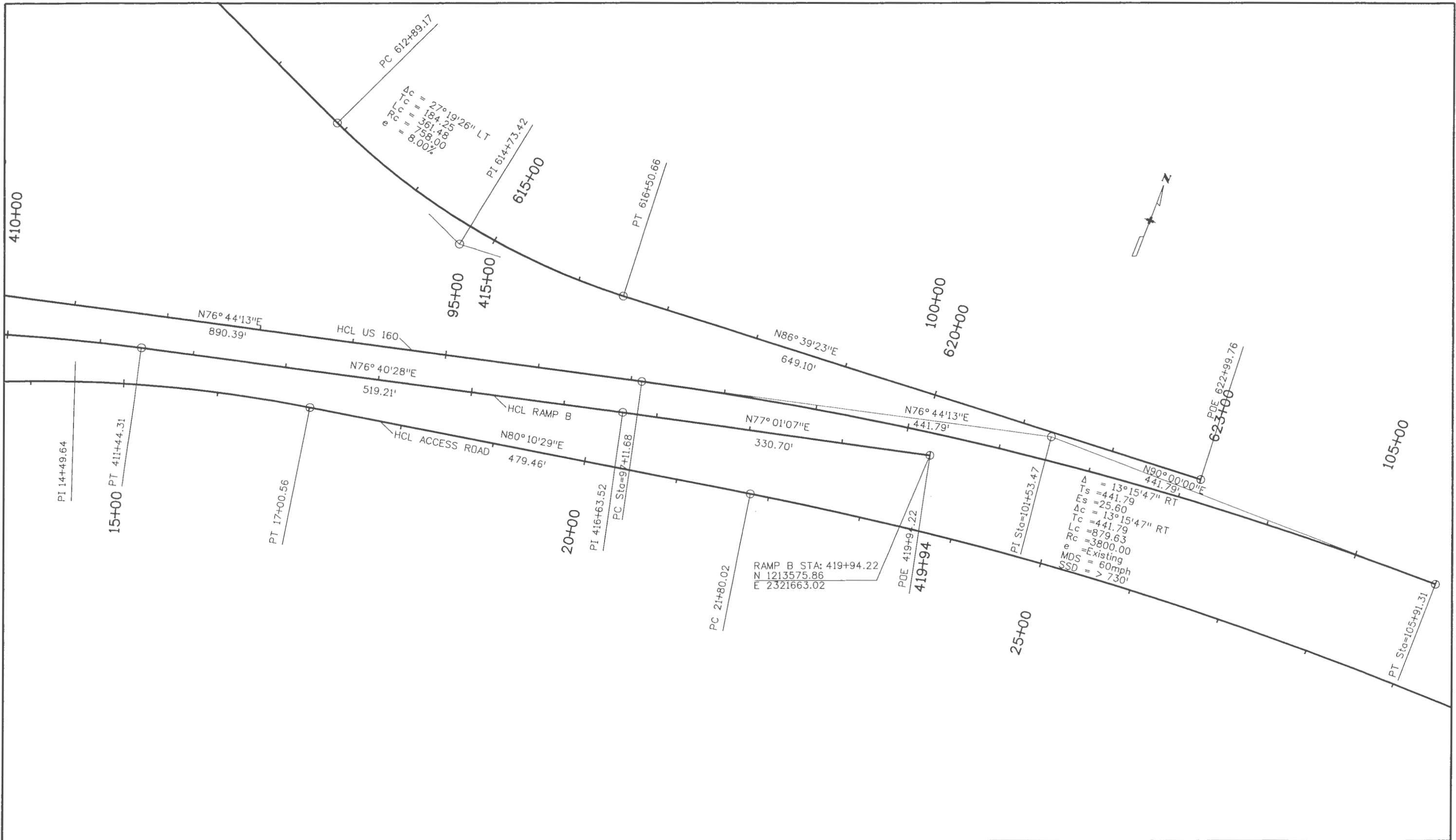
**Region 5** **EJA**

As Constructed
No Revisions: <b>8/27/10</b>
Revised:
Void:

RAMP B HORIZONTAL ALIGNMENT			
Designer:	SPC	Structure	
Detailer:	IBH	Numbers	
Sheet Subset:	Alignments	Subset Sheets:	1 of 2

Project No./Code	ES5 160A-010
	17269
Sheet Number	11

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Print Date: 5/26/2009	
File Name: 17269 Horz Alignment Sheet Ramp B2.dgn	
Horiz. Scale: 1:100	Vert. Scale: As Noted
Unit Information	Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

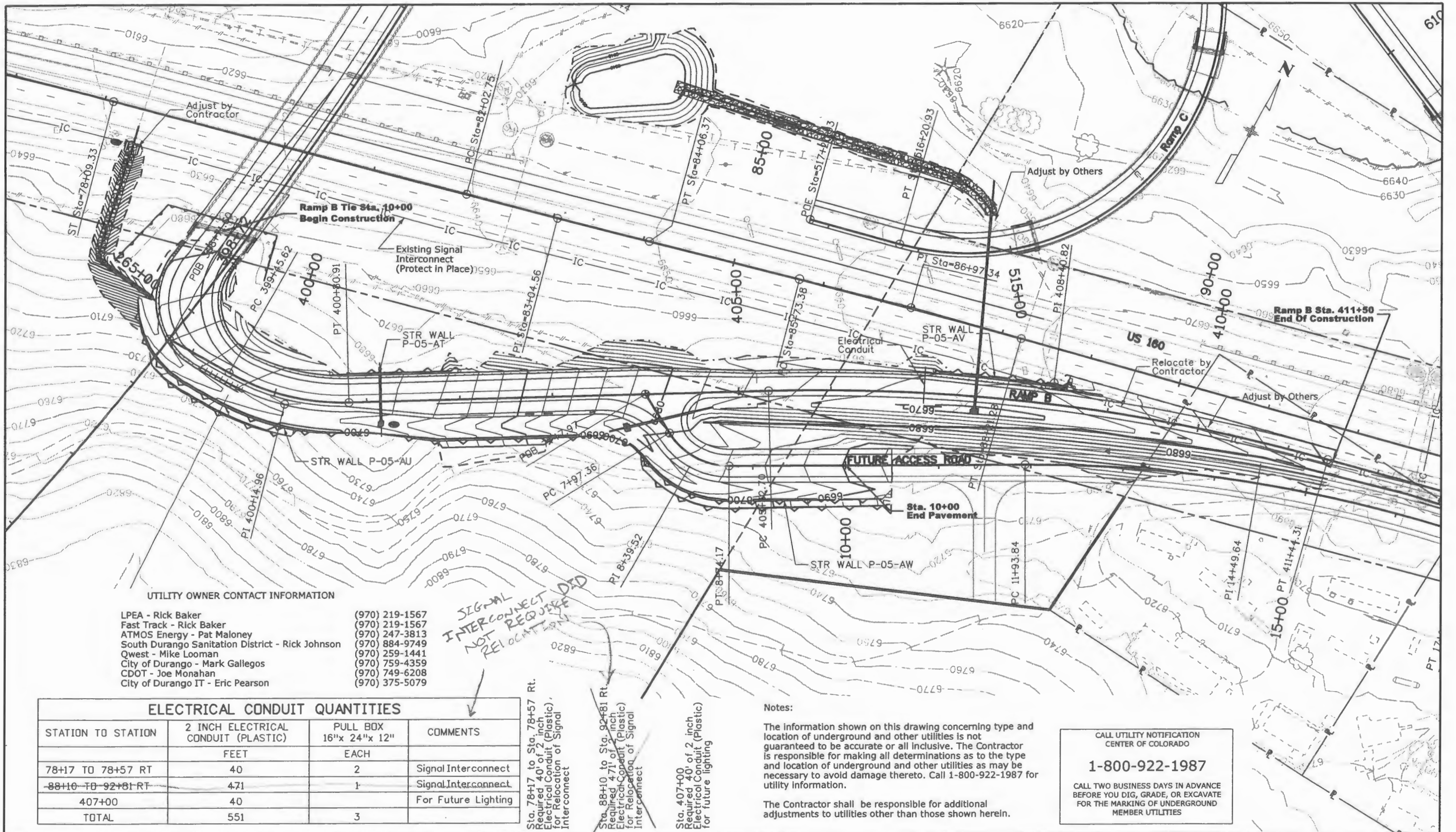
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No Revisions: <i>8/27/10</i>
Revised:
Void:

RAMP B HORIZONTAL ALIGNMENT		
Designer: SPC	Structure Numbers	
Detailer: IBH		
Sheet Subset: Alignments	Subset Sheets: 2 of 2	

<b>Project No./Code</b>
ES5 160A-010
17269
Sheet Number <b>12</b>



**UTILITY OWNER CONTACT INFORMATION**

LPEA - Rick Baker	(970) 219-1567
Fast Track - Rick Baker	(970) 219-1567
ATMOS Energy - Pat Maloney	(970) 247-3813
South Durango Sanitation District - Rick Johnson	(970) 884-9749
Qwest - Mike Looman	(970) 259-1441
City of Durango - Mark Gallegos	(970) 759-4359
CDOT - Joe Monahan	(970) 749-6208
City of Durango IT - Eric Pearson	(970) 375-5079

*SIGNAL INTERCONNECT NOT REQUIRED DAD RELOCATION*

ELECTRICAL CONDUIT QUANTITIES			
STATION TO STATION	2 INCH ELECTRICAL CONDUIT (PLASTIC)	PULL BOX 16"x 24"x 12"	COMMENTS
	FEET	EACH	
78+17 TO 78+57 RT	40	2	Signal Interconnect
88+10 TO 92+81 RT	471	1	Signal Interconnect
407+00	40		For Future Lighting
TOTAL	551	3	

Sta. 78+17 to Sta. 78+57 Rt. Required 40' of 2 inch Electrical Conduit (Plastic) for Relocation of Signal Interconnect

Sta. 88+10 to Sta. 92+81 Rt. Required 471' of 2 inch Electrical Conduit (Plastic) for Relocation of Signal Interconnect

Sta. 407+00 Required 40' of 2 inch Electrical Conduit (Plastic) for future lighting

**Notes:**

The information shown on this drawing concerning type and location of underground and other utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making all determinations as to the type and location of underground and other utilities as may be necessary to avoid damage thereto. Call 1-800-922-1987 for utility information.

The Contractor shall be responsible for additional adjustments to utilities other than those shown herein.

CALL UTILITY NOTIFICATION CENTER OF COLORADO  
**1-800-922-1987**  
CALL TWO BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

Print Date: 6/1/2009  
File Name: 17269 Ramp B Plan utilities 01.dgn  
Horiz. Scale: 1:100  
Unit Information

Sheet Revisions		
Date:	Comments	Init.

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**As Constructed**  
No Revisions:  
Revised: 8/22/10  
Void:

EXISTING UTILITIES			
Designer:	SPC	Structure	--
Detailer:	IBH	Numbers	--
Sheet Subset:	Utilities	Subset Sheets:	1 of 2

**Project No./Code**  
ES5 160A-010  
17269  
Sheet Number **13**

**Notes:**

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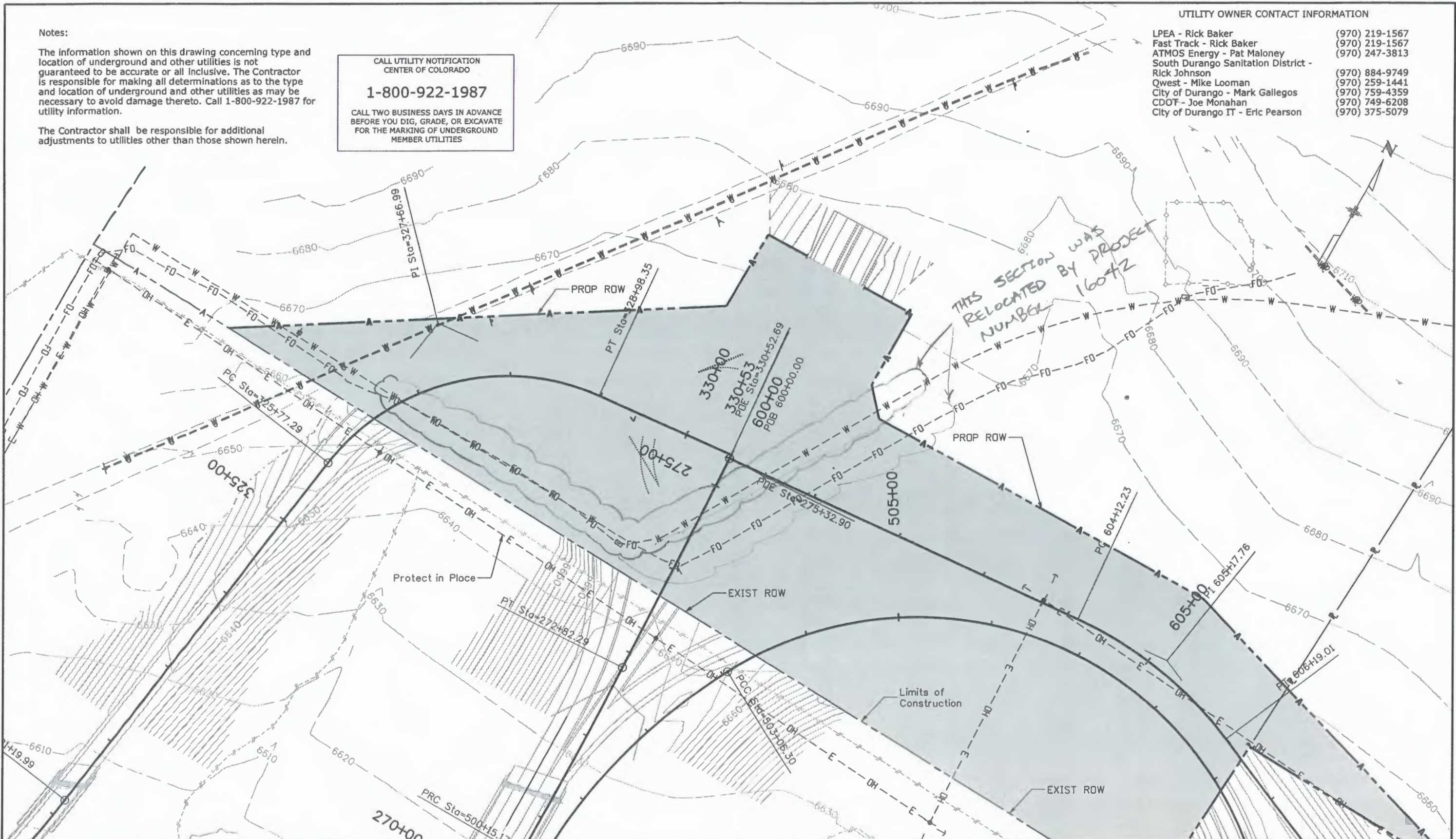
The Contractor shall be responsible for additional adjustments to utilities other than those shown herein.

CALL UTILITY NOTIFICATION  
CENTER OF COLORADO  
**1-800-922-1987**

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BEFORE YOU DIG, GRADE, OR EXCAVATE  
FOR THE MARKING OF UNDERGROUND  
MEMBER UTILITIES

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Print Date: 5/26/2009	
File Name: 17269 Ramp B Plan utilities 04.dgn	
Horiz. Scale: 1:100	Vert. Scale: As Noted
Unit Information	Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

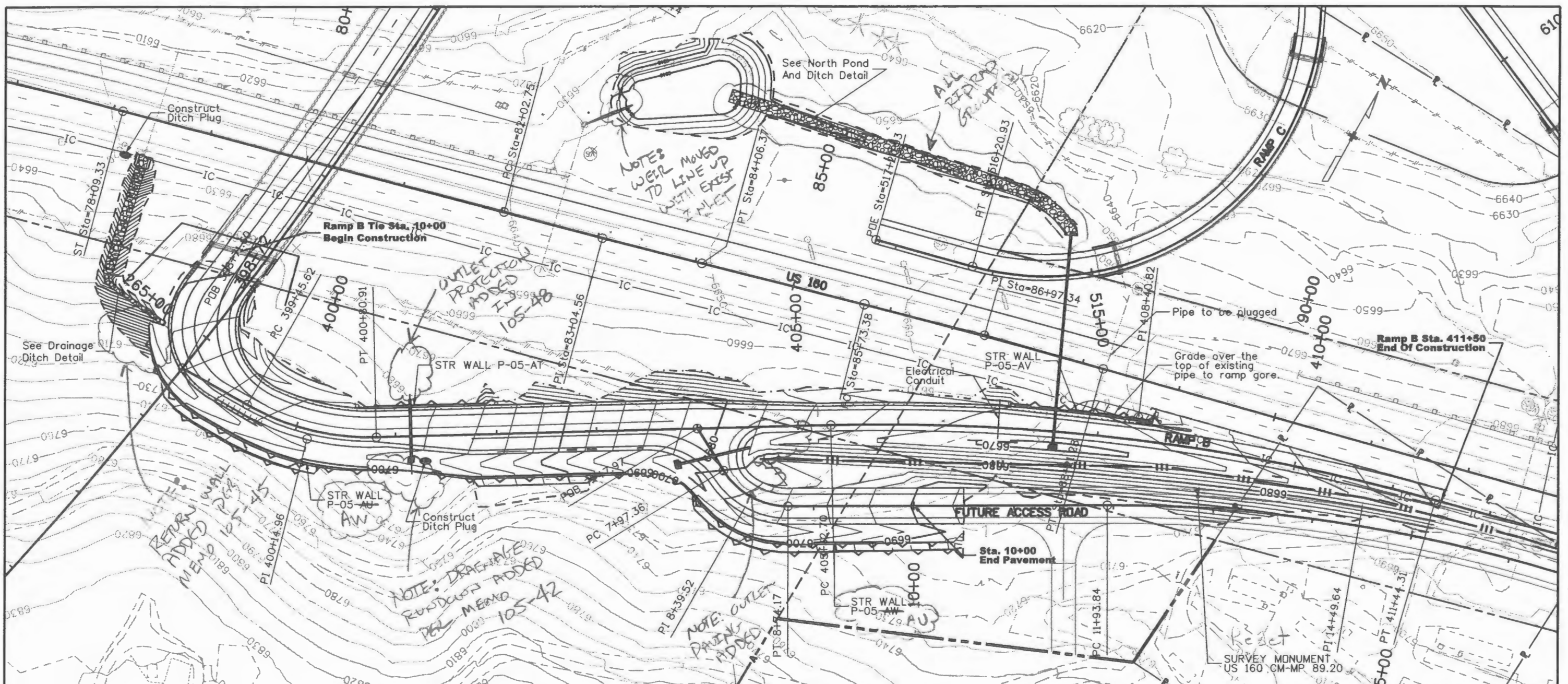
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**Region 5 EJA**

<b>As Constructed</b>
No Revisions:
Revised: 8/27/0
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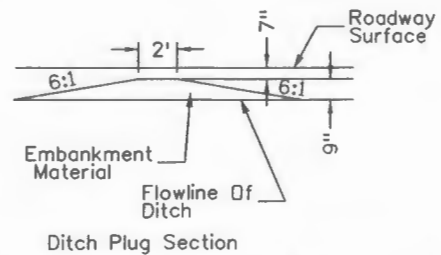
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Detailer:	IBH	Numbers	--
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<b>Project No./Code</b>
ES5 160A-010
17269
Sheet Number <b>14</b>

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THE ITEMS CROSSED OUT ON THIS PAGE ARE NOT INCLUDED IN THE CONTRACT, BUT MAY BE ADDED IF FUNDS BECOME AVAILABLE.



Ditch Plug Construction will not be paid for separately, but shall be included in item 203 Unclassified Excavation (C.I.P.).

- ~~US 560 Sta. 265+77.52 to 265+156.77 Required Over-drill Transition Type 36 Rt.~~
- ~~US 160 Sta. 78+25 Rt. Required Ditch Plug Per Detail~~
- ~~Ramp B Sta. 300+13.36 to 300+13.36 Required End Anchorage (non-tapered) Rt.~~
- ~~Ramp B Sta. 401+15 to 401+56.1 RCP With Inlet Type C (10') Rt. And Ditch Plug Per Detail~~
- ~~US 560 Sta. 265+54.71 to 265+135.96 Required Guard-rail Transition Type 36 Lt.~~
- ~~US 560 Sta. 265+35.96 to 265+135.96 Rt. Required 137.5 Guard-rail Type 3~~
- ~~Ramp B Sta. 404+16 to 404+16 Required 24" x 72" RCP With FES Lt. and Inlet Type D (5') Rt. See Structure Section for Details~~
- ~~US 560 Sta. 265+58.77 to 265+108+36.34 Required 0.75' Guard-rail Type 3 Lt.~~
- ~~Ramp B Sta. 408+36.34 to 408+36.34 Required 37.5' Guard-rail (Double) Transition Type 36~~
- ~~US 160 Sta. 88+50.00 To 160 Sta. 91+82.57 Required Sawcutting Edge of existing US 160 Asphalt 6" in from EOP~~
- ~~Ramp B STA. 407+55.90 Required 36" x 208" RCP With Inlet Type D (5') Inlet Rt. and FES Lt. See Structure Section for Details~~
- ~~Ramp B Sta. 408+73.54 Lt. Required Impact Attenuator~~
- ~~Sta. 88+50 to Sta. 91+76.80 Required HMA overlay along 15' to 100' shoulder to match ramp. See care detail~~
- ~~US 160 STA 88+24 Existing 24" CMP to be plugged~~

PAVING BY ADDS BY CNO #5  
STRUCTURE WALL P-05-BB ADDS BY CNO #4

Print Date: 6/8/2009	
File Name: 17269 Ramp B Plan 01.dgn	
Horiz. Scale: 1:100	Vert. Scale: As Noted
Unit Information	Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

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Region 5 EJA

As Constructed
No Revisions:
Revised: 8/22/10
Void:

RAMP B PLAN SHEET			
Designer:	SPC	Structure Numbers	
Detailer:	JND		
Sheet Subset:	P & P	Subset Sheets:	1 of 4

Project No./Code	ES5 160A-010
	17269
Sheet Number	15