

FHWA FULL OVERSIGHT?	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
NATIONAL HIGHWAY SYSTEM?	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES

CONSTRUCTION BID PLANS OF PROPOSED
FEDERAL AID PROJECT NO. STE M840-001

TOWN OF MANCOS, MONTEZUMA COUNTY, COLORADO
CONSTRUCTION PROJECT CODE NO. 18306

STATION	FEET	
	ROADWAY	
BEGIN PATHWAY		
STA 1+10		
BEGIN PEDESTRIAN BRIDGE		
STA 1+60	50	
END PEDESTRIAN BRIDGE		
STA 2+10	50	
END PATHWAY		
STA 3+34.14	124.14	
BEGIN SIDEWALK		
STA 4+00		
END SIDEWALK		
STA 4+48	48	
TOTAL	272.14	
SUMMARY OF PROJECT LENGTH	FEET	MILES
PATHWAY (NET LENGTH)	172.14	0.03
PROJECT GROSS LENGTH	272.14	0.05
MAXIMUM GRADE	8.0%	
MAXIMUM PAVED CROSS-SLOPE	2.0%	

P.E. UNDER PROJECT:
PROJECT NUMBER:
PROJECT CODE:

F.O.R CONCURRENCE
2012-05-11



SHEET NO	DRAWING NO	DESCRIPTION
1	TT-01	TITLE SHEET
2	SP-01	STANDARD PLANS LIST
3	GN-01	GENERAL NOTES
4	TY-01	TYPICAL SECTIONS
5	SQ-01	SUMMARY OF APPROXIMATE QUANTITIES
6	SQ-02	PROJECT TABULATIONS
7	SV-01	SURVEY TABULATIONS
8	SV-02	SURVEY CONTROL
9	SW-01	STORMWATER MANAGEMENT PLAN
10	EC-01	GRADING, DRAINAGE & EROSION CONTROL PLAN
11	RR-01	REMOVE AND RESET PLANS
12	GL-01	GENERAL LAYOUT
13	PL-01	NORTH APPROACH LAYOUT
14	PL-02	SOUTH APPROACH LAYOUT
15	PL-03	APPROACH DETAILS
16	LS-01	LANDSCAPE PLAN
17	LS-02	LANDSCAPE GENERAL NOTES
18	BR-01	GENERAL INFORMATION AND SUMMARY OF QUANTITIES
19	BR-02	BRIDGE GENERAL LAYOUT
20	BR-03	ENGINEERING GEOLOGY
21	BR-04	HYDRAULIC DATA
22	BR-05	ABUTMENT DETAILS
23-24	X-01 to X-02	CROSS SECTIONS

<u>PLAN NO.</u>	<u>TITLE</u>	<u>DATE</u>
M-208-1	TEMPORARY EROSION CONTROL (12 SHEETS)	(REVISED ON JULY 29, 2011)
M-609-1	CURBS, GUTTERS, AND SIDEWALKS (4 SHEETS)	(REVISED ON JULY 09, 2008)

LOCATION: ON MESA STREET AT MANCOS RIVER BETWEEN EAST GRAND AVE AND EAST 1ST STREET,
TOWN OF MANCOS, MONTEZUMA COUNTY, COLORADO

PROJECT INCLUDES REMOVAL OF EXISTING PEDESTRIAN BRIDGE, CONSTRUCTING NEW PEDESTRIAN
BRIDGE, BRIDGE APPROACHES AND LANDSCAPING.

Creation Date: 2011-10-12	Initials:	BAO
Last Modification Date:	Initials:	
Full Path:		
Drawing File Name:		
Acad Ver. 2007	Scale: AS NOTED	Units: ENGLISH

[illegible]

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VICINITY MAP

0 250 500 1000

ORIGINAL SCALE: 1" = 1000'

SECTION 28

TOWNSHIP 36 NORTH

RANGE 13 WEST



**Colorado Department
of Transportation**

 3003 N. Main Ave., #300
Durango, CO 81301
Phone: (970) 385-1400
Fax: (970) 385-6381

Region 5 **DAE**

Void:

Contractor:		Const. Manager:	
Proj. Start: ----/--/--		Proj. Complete: ----/--/--	
Project Engineer:		----/--/--	
Director of Public Works:		----/--/--	
Sheet Subset:	TT-01	Subset Sheets:	

Number: 1



PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER
<input checked="" type="checkbox"/> M-100-1		STANDARD SYMBOLS (3 SHEETS)	1-3
<input type="checkbox"/> M-203-1		APPROACH ROADS	4
<input type="checkbox"/> M-203-2		DITCH TYPES	5
<input type="checkbox"/> M-203-11		SUPERELEVATION CROWNED AND DIVIDED HIGHWAYS (3 SHEETS)	6-8
<input type="checkbox"/> M-203-12		SUPERELEVATION STREETS (2 SHEETS)	9-10
<input checked="" type="checkbox"/> M-206-1		EXCAVATION AND BACKFILL FOR STRUCTURES (2 SHEETS)	11-12
<input checked="" type="checkbox"/> M-206-2		EXCAVATION AND BACKFILL FOR BRIDGES (2 SHEETS)	13-14
<input type="checkbox"/> M-208-1	<input checked="" type="checkbox"/>	TEMPORARY EROSION CONTROL (12 SHEETS) (REVISED ON JULY 29, 2011)	15-21
<input type="checkbox"/> M-210-1		MAILBOX SUPPORTS (2 SHEETS)	22-23
<input type="checkbox"/> M-214-1		PLANTING DETAILS	24
<input type="checkbox"/> M-412-1	<input type="checkbox"/>	CONCRETE PAVEMENT JOINTS (5 SHEETS) (REVISED ON JULY 29, 2011)	25-29
<input type="checkbox"/> M-510-1		STRUCTURAL PLATE PIPE H-20 LOADING	30
<input type="checkbox"/> M-601-1		SINGLE CONCRETE BOX CULVERT (2 SHEETS)	31-32
<input type="checkbox"/> M-601-2		DOUBLE CONCRETE BOX CULVERT (2 SHEETS)	33-34
<input type="checkbox"/> M-601-3		TRIPLE CONCRETE BOX CULVERT (2 SHEETS)	35-36
<input type="checkbox"/> M-601-10		HEADWALL FOR PIPES	37
<input type="checkbox"/> M-601-11		TYPE "S" SADDLE HEADWALLS FOR PIPE	38
<input type="checkbox"/> M-601-12		HEADWALLS AND PIPE OUTLET PAVING	39
<input type="checkbox"/> M-601-20		WINGWALLS FOR PIPE OR BOX CULVERTS	40
<input type="checkbox"/> M-603-1	<input type="checkbox"/>	METAL PIPE (4 SHEETS) (REVISED ON FEBRUARY 25, 2010)	41-42
<input type="checkbox"/> M-603-2		REINFORCED CONCRETE PIPE	43
<input type="checkbox"/> M-603-3	<input type="checkbox"/>	PRECAST CONCRETE BOX CULVERT (REVISED ON JULY 29, 2011)	44
<input type="checkbox"/> M-603-4	<input type="checkbox"/>	CORRUGATED POLYETHYLENE PIPE (AASHTO M294) (REV. ON FEB. 25, 2010)	45
<input type="checkbox"/> M-603-5	<input type="checkbox"/>	POLYVINYL CHLORIDE (PVC) PIPE (AASHTO M304) (NEW ON FEB. 25, 2010)	46
<input type="checkbox"/> M-603-10		CONCRETE AND METAL END SECTIONS (2 SHEETS)	45-46
<input type="checkbox"/> M-604-10		INLET, TYPE C	47
<input type="checkbox"/> M-604-11		INLET, TYPE D	48
<input type="checkbox"/> M-604-12		CURB INLET TYPE R (2 SHEETS)	49-50
<input type="checkbox"/> M-604-13		CONCRETE INLET TYPE 13	51
<input type="checkbox"/> M-604-20		MANHOLES (3 SHEETS)	52-54
<input type="checkbox"/> M-604-25		VANE GRATE INLET (5 SHEETS)	55-59
<input type="checkbox"/> M-605-1	<input type="checkbox"/>	SUBSURFACE DRAINS (REVISED ON JULY 09, 2009)	60
<input type="checkbox"/> M-606-1	<input type="checkbox"/>	GUARDRAIL TYPE 3 W-BEAM (18 SHEETS) (REVISED ON MAY 05, 2011)	61-76
<input type="checkbox"/> M-606-13		GUARDRAIL TYPE 7 F-SHAPE BARRIER (4 SHEETS)	77-80
<input type="checkbox"/> M-606-14		PRECAST TYPE 7 CONCRETE BARRIER (3 SHEETS)	81-83

PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER
<input type="checkbox"/> M-607-1		WIRE FENCES AND GATES (3 SHEETS)	84-86
<input type="checkbox"/> M-607-2		CHAIN LINK FENCE (3 SHEETS)	87-89
<input type="checkbox"/> M-607-3		BARRIER FENCE	90
<input type="checkbox"/> M-607-4		DEER FENCE AND GATES (2 SHEETS)	91-92
<input type="checkbox"/> M-607-10		PICKET SNOW FENCE	93
<input type="checkbox"/> M-607-15		ROAD CLOSURE GATE (9 SHEETS)	94-102
<input type="checkbox"/> M-608-1	<input type="checkbox"/>	CURB RAMPS (6 SHEETS) (REVISED ON MAY 05, 2011)	103-106
<input type="checkbox"/> M-609-1	<input checked="" type="checkbox"/>	CURBS, GUTTERS, AND SIDEWALKS (4 SHEETS) (REVISED ON JULY 09, 2009)	107-109
<input type="checkbox"/> M-611-1		CATTLE GUARD (2 SHEETS)	110-111
<input type="checkbox"/> M-613-1		ROADWAY LIGHTING (4 SHEETS)	112-115
<input type="checkbox"/> M-614-1		RUMBLE STRIPS (3 SHEETS)	116-118
<input type="checkbox"/> M-614-2		SAND BARREL ARRAYS (2 SHEETS)	119-120
<input type="checkbox"/> M-615-1		EMBANKMENT PROTECTOR TYPE 3	121
<input type="checkbox"/> M-615-2		EMBANKMENT PROTECTOR TYPE 5	122
<input type="checkbox"/> M-616-1		INVERTED SIPHON	123
<input type="checkbox"/> M-620-1		FIELD LABORATORY CLASS 1	124
<input type="checkbox"/> M-620-2		FIELD LABORATORY CLASS 2	125
<input type="checkbox"/> M-620-11		FIELD OFFICE CLASS 1	126
<input type="checkbox"/> M-620-12		FIELD OFFICE CLASS 2	127
<input type="checkbox"/> M-629-1		SURVEY MONUMENTS (2 SHEETS)	128-129

PLAN NUMBER	NEW OR REVISED	S STANDARD TITLE	PAGE NUMBER
<input type="checkbox"/> S-612-1	<input type="checkbox"/>	DELINEATOR INSTALLATIONS (6 SHEETS) (REVISED, JULY 01, 2010)	131-135
<input type="checkbox"/> S-614-1		GROUND SIGN PLACEMENT (2 SHEETS)	136-137
<input type="checkbox"/> S-614-2		CLASS I SIGNS	138
<input type="checkbox"/> S-614-3		CLASS II SIGNS	139
<input type="checkbox"/> S-614-4	<input type="checkbox"/>	CLASS III SIGNS (3 SHEETS) (REVISED, DECEMBER 29, 2009)	140-142
<input type="checkbox"/> S-614-5		BREAK-AWAY SIGN SUPPORT DETAILS FOR GROUND SIGNS (2 SHEETS)	143-144
<input type="checkbox"/> S-614-6		CONCRETE FOOTINGS AND SIGN ISLANDS FOR CLASS III SIGNS (2 SHEETS)	145-146
<input type="checkbox"/> S-614-8	<input type="checkbox"/>	TUBULAR STEEL SIGN SUPPORT DETAILS (5 SHEETS) (REVISED ON SEPT. 01, 2010)	147-154
<input type="checkbox"/> S-614-10		MARKER ASSEMBLY INSTALLATIONS	152
<input type="checkbox"/> S-614-11	<input type="checkbox"/>	MILEPOST SIGN DETAIL FOR HIGH SNOW AREAS (NEW, JUNE 22, 2009)	153
<input type="checkbox"/> S-614-12		STRUCTURE NUMBER INSTALLATION	154-156
<input type="checkbox"/> S-614-14		FLASHING BEACON AND SIGN INSTALLATIONS (3 SHEETS)	157
<input type="checkbox"/> S-614-20	<input type="checkbox"/>	TYPICAL POLE MOUNT SIGN INSTALLATIONS (REVISED ON JUNE 24, 2011)	158
<input type="checkbox"/> S-614-21		CONCRETE BARRIER SIGN POST INSTALLATIONS	159
<input type="checkbox"/> S-614-22		TYPICAL MULTI-SIGN INSTALLATIONS	160-166
<input type="checkbox"/> S-614-40		TYPICAL TRAFFIC SIGNAL INSTALLATION DETAILS (7 SHEETS)	167-171
<input type="checkbox"/> S-614-40A		ALTERNATIVE TRAFFIC SIGNAL INSTALLATION DETAILS (5 SHEETS)	172-185
<input type="checkbox"/> S-614-50		MONOTUBE OVERHEAD SIGNS (14 SHEETS)	186-190
<input type="checkbox"/> S-627-1	<input type="checkbox"/>	PAVEMENT MARKINGS (5 SHEETS) (REVISED ON OCTOBER 01, 2010)	191-202
<input type="checkbox"/> S-630-1	<input type="checkbox"/>	TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION (12 19 SHEETS) (REVISED ON FEB. 16, 2012)	203
<input type="checkbox"/> S-630-2		BARRICADES, DRUMS, CONCRETE BARRIERS (TEMP) AND VERTICAL PANELS	204
<input type="checkbox"/> S-630-3	<input type="checkbox"/>	FLASHING BEACON (PORTABLE) DETAILS (REVISED ON JUNE 27, 2011)	205
<input type="checkbox"/> S-630-4	<input type="checkbox"/>	STEEL SIGN SUPPORT (TEMPORARY) INSTALLATION DETAILS (NEW, MARCH 22, 2010)	206
<input type="checkbox"/> S-630-5	<input type="checkbox"/>	PORTABLE RUMBLE STRIPS (TEMPORARY) (NEW, MAY 05, 2011)	207
<input type="checkbox"/> S-630-6	<input type="checkbox"/>	EMERGENCY PULL-OFF AREA (TEMPORARY) (NEW, MAY 05, 2011)	208
<input type="checkbox"/> S-630-7	<input type="checkbox"/>	ROLLING ROADBLOCKS FOR TRAFFIC CONTROL (NEW, MAY 05, 2011)	209

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
Revised on February 16, 2012

Print Date:	Sheet Revisions					As Constructed			MESA STREET PEDESTRIAN BRIDGE REPLACEMENT STANDARD PLANS LIST		Project No./Code	
File Name:	Date:	Comments	Init.			No Revisions:					STE M840-001	
Horiz. Scale:	Vert. Scale: As Noted					Revised:			Designer: SJB	Structure Numbers	18306	
Unit Information	Unit Leader Initials					Void:			Detailer: LX	Sheet Subset: SP-01	Subset Sheets: 1	Sheet Number 2

UTILITIES:

1. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR'S ATTENTION IS DIRECTED TO PARAGRAPH 105.10 OF THE STANDARD SPECIFICATION CONCERNING UTILITIES. FOR UTILITY LOCATES, THE CONTRACTOR SHALL CALL THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811 OR 1-800-922-1987 AT LEAST TWO (2) WORKING DAYS (NOT INCLUDING THE INITIAL DAY OF CONTACT) PRIOR TO DIGGING, GRADING OR EXCAVATING.
2. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS HOWEVER THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY DISCREPANCY. ALL CONFLICTING UTILITIES SHALL BE EXPOSED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND INSPECTED BY THE ENGINEER TO VERIFY CONFORMANCE WITH THE PLANS. THIS PARTICULARLY APPLIES TO UNDERGROUND WORK TO BE COMPLETED ON THIS PROJECT BY THE CONTRACTOR. RELOCATION OF EXISTING UTILITIES IS NOT A PART OF THIS CONTRACT EXCEPT AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF UTILITY RELOCATIONS BY UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITIES DURING CONSTRUCTION AND SHALL HOLD THE TOWN OF VAIL HARMLESS FOR DAMAGES ARISING FROM CONTRACTOR'S FAILURE TO ADEQUATELY PROTECT EXISTING UTILITIES.
3. THE CONTRACTOR SHALL REFERENCE THE PROJECT TECHNICAL SPECIFICATIONS FOR ADDITIONAL ITEMS THE CONTRACTOR SHALL ADHERE TO IN COOPERATION WITH UTILITIES.

UTILITY CONTACT LIST:

THE FOLLOWING IS A LIST OF KNOWN UTILITIES WITH SERVICE WITHIN THE PROJECT AREA AND THEIR RESPECTIVE CONTACT INDIVIDUALS. ADDITIONAL UTILITIES MAY BE ENCOUNTERED WITHIN THE PROJECT LIMITS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL THE WORK BEING DONE WITH ALL THE UTILITY COMPANIES WITHIN THE PROJECT AREA.

ENTITY	CONTACT	PHONE
ATMOS ENERGY (NATURAL GAS)	PAT MALONEY	970-385-3283
EMPIRE ELECTRIC	ORLY LUCERO	970-564-4457
CENTURY LINK	KIRBY BRYANT	970-259-0511
BRESNAN CABLE	ERIC COPELAND	970-247-1979

CONSTRUCTION

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COLORADO DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2011; AND AS SUBSEQUENTLY REVISED; THE STANDARD PLANS DATED JULY, 2006 AND AS SUBSEQUENTLY REVISED, AND IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS INCLUDED HEREIN.
2. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING PERMIT FROM THE CDPHE FOR ANY DEWATERING OF GROUNDWATER DURING CONSTRUCTION IN ACCORDANCE WITH WATER QUALITY CONTROL DIVISION (WQCD) REQUIREMENTS. THE CONTRACTOR SHALL APPLY FOR THIS PERMIT AT LEAST 30 DAYS PRIOR TO THE START OF DISCHARGE. THIS SHALL INCLUDE, BUT NOT LIMITED TO ALL TEMPORARY DIVERSIONS AND DEWATERING TO REMOVE EXISTING ABUTMENTS AND CONSTRUCT NEW ABUTMENTS AND SUBSTRUCTURES. ALL COSTS FOR OBTAINING THE PERMIT, CONSTRUCTIONS, MAINTAINING AND REMOVING TEMPORARY DIVERSIONS AND DEWATERING DEVICES SHALL BE INCLUDED IN THE COST OF THE WORK.
3. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO COST TO THE OWNER. THIS SHALL INCLUDE REMOVAL OF ANY DEBRIS CAUSED BY FLOODING.
4. LIMITS OF CONSTRUCTION SHALL BE CONFINED TO PUBLIC PROPERTY.
5. REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS, IRRIGATION, OR LANDSCAPING IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL ASSOCIATED COSTS FOR IMPROVEMENTS REPAIR SHALL BE PAID FOR BY THE CONTRACTOR, AT NO EXPENSE TO THE TOWN OF VAIL.
6. THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS PRIOR TO THE START OF CONSTRUCTION. A PRECONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION.
7. THE CONTRACTOR SHALL HAVE: ONE (1) COPY OF THE PLANS, ONE (1) COPY OF THE CONSTRUCTION SPECIFICATIONS AND ONE (1) COPY OF THE STORMWATER MANAGEMENT PLAN FOR THE PROJECT AT THE JOB SITE AT ALL TIMES.
8. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPES AS SHOWN ON THE PLANS AND CROSS-SECTIONS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER, AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS. THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR STAGING OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS OR THAT NOTED ABOVE.
9. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH IMPACTED UTILITIES TO ASSURE THE TIMELY RELOCATION OF THEIR FACILITIES. THIS COORDINATION SHALL INCLUDE ANTICIPATED IMPACTED UTILITIES AND UNFORESEEN UTILITIES.
10. HOT WEATHER AND COLD WEATHER CONCRETING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH CDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" SECTION 601. THIS COST SHALL BE INCLUDED IN WORK.

EARTHWORK:

1. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED AND WILL NOT BE PAID FOR SEPARATELY.
2. PRIOR TO MOISTURE DENSITY CONTROL, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND SOFT OR DISTURBED SOILS. DEPTH OF MOISTURE - DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS: FULL DEPTH OF ALL EMBANKMENTS BASES OF CUTS AND FILLS - 8 INCHES
3. EXCAVATION REQUIRED FOR COMPACTION OF BASES OF CUTS AND FILLS WILL BE CONSIDERED AS SUBSIDIARY TO THAT OPERATION AND WILL NOT BE PAID FOR SEPARATELY.
4. THE TYPE OF COMPACTION FOR EARTHWORK ON THIS PROJECT SHALL BE AASHTO T99. (STANDARD PROCTOR). PROOF ROLLING OF ALL SUBGRADE WILL BE REQUIRED PRIOR SIDEWALK PLACEMENT AND SHALL BE INCLUDED IN COST OF THE WORK. THE EQUIPMENT USED FOR PROOF ROLLING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
5. DEPTH OF TOPSOIL REMOVAL SHALL BE AS DIRECTED BY THE ENGINEER. FINAL GRADES SHOWN REFLECT A MINIMUM OF FOUR (4) INCHES OF TOPSOIL BEING PLACED ON ALL DISTURBED AREAS NOT SURFACED. TOPSOIL TO BE USED IS SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER.
6. ALL BORROW MATERIAL IMPORTED FOR USE ON THIS PROJECT SHALL HAVE A MINIMUM R VALUE OF 40 FOR EMBANKMENT WHEN TESTED BY THE HVEEM STABILOMETER, AND IS SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO ITS INCORPORATION INTO THE PROJECT. ALL BORROW MATERIAL IMPORTED TO THE SITE SHALL MEET THE RESILIENT MODULUS CRITERIA IN ITS NATURAL STATE - NO MIXING SHALL BE ALLOWED.

SIGNING, STRIPING, TRAFFIC CONTROL NOTES:

1. CONSTRUCTION TRAFFIC CONTROL SHALL CONFORM TO THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CDOT STANDARD S-630-1. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A METHOD OF HANDLING TRAFFIC (MHT) TO THE ENGINEER FOR APPROVAL FOR EACH APPLICABLE PHASE OF WORK. ALL COST FOR CONTROLLING TRAFFIC DURING CONSTRUCTION SHALL BE INCLUDED IN ITEM 630 - CONSTRUCTION TRAFFIC CONTROL (LS).
2. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SITE DURING CONSTRUCTION.
3. THE CONTRACTOR IS RESPONSIBLE TO REPLACE ANY SIGNS THAT ARE DAMAGED OR LOST DURING CONSTRUCTION.

DRAINAGE/STORM SEWER NOTES:

1. THE CONTRACTOR IS REQUIRED TO KEEP EXISTING DRAINAGE STRUCTURES FUNCTIONAL AND MAINTAIN DRAINAGE TO THOSE STRUCTURES AT ALL TIMES DURING CONSTRUCTION.

ENVIRONMENTAL NOTES:

EN1. PLACEMENT OF RIP RAP FOR PROTECTION OF THE BRIDGE ABUTMENTS SHALL NOT BE WITHIN LIVE WATER BUT SHALL UTILIZE COFFERDAMS OR OTHER SUITABLE MEASURES APPROVED BY THE PROJECT ENGINEER TO LIMIT SEDIMENTATION.

EN2. CONSTRUCTION OF COFFERDAMS OR DIVERSIONS FOR THE ABUTMENTS (IF REQUIRED) SHALL BE DONE WITH CLEAN MATERIAL (JERSEY BARRIERS, CLEAN ROCK, OR SAND BAGS) TO PROTECT WATER QUALITY AND SHALL BE CAPABLE OF WITHSTANDING EXPECTED HIGH FLOWS. ALL TEMPORARY STRUCTURES SHALL BE REMOVED UPON PROJECT COMPLETION. THE TEMPORARY STRUCTURES SHALL BE INCLUDES IN THE COST OF THE WORK.

EN3. PUMPING AND DISCHARGE OF WATER FROM DEWATERING OPERATIONS MAY REQUIRE A DISCHARGE PERMIT FROM THE WATER QUALITY CONTROL DIVISION. DISCHARGE PERMITS OR ALTERNATE MEASURES FOR DISCHARGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR (SEE PROJECT SPECIFICATION: SPECIAL CONSTRUCTION REQUIREMENTS - GENERAL (CDOW SB 40 AND WQCD DISCHARGE PERMITS) AND STANDARD SPECIFICATION 107.25(B)6. APPLICABLE CONDITIONS FOR DISCHARGE INCLUDING MONITORING AND REPORTING SHALL BE INCLUDED IN THE COST OF THE WORK AND SHALL NOT BE COMPENSATED SEPARATELY.

EN4. TEMPORARY IMPACTS TO WETLANDS AND RIPARIAN AREAS HAVE BEEN PERMITTED UNDER THE 404 PERMIT AND ARE LIMITED TO THAT SHOWN IN THE EROSION CONTROL AND WETLAND IMPACT PLANS. THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING TO PROTECT ADJACENT VEGETATION AND LIMIT EQUIPMENT IMPACTS BEYOND THE FENCED ZONE. UPON COMPLETION, TEMPORARY IMPACT AREAS SHALL BE RESTORED TO PRECONSTRUCTION CONDITIONS BY GRADING, SEEDING AND MULCHING IN ACCORDANCE WITH THE PROJECT SWMP. IT IS ESTIMATED THAT 80 WILLOW BRUSH LAYER CUTTINGS SHALL BE PLACED ON SITE WITHIN TEMPORARY DISTURBANCE AREAS AS DIRECTED BY THE PROJECT ENGINEER.

EN5. MIGRATORY BIRD TREATY ACT (MBTA) COMPLIANCE: ALL VEGETATION REMOVAL NECESSARY TO COMPLETE THE PROJECT SHALL BE CONDUCTED OUTSIDE OF THE NESTING SEASON FOR MIGRATORY BIRDS (APRIL 1 TO AUGUST 31). A SURVEY OF THE PROJECT AREA FOR NESTING BIRDS SHALL BE COMPLETED BY THE CONTRACTORS BIOLOGIST PRIOR TO CONSTRUCTION DURING THE NEST SEASON. IF ACTIVE NESTS ARE IDENTIFIED WITHIN VEGETATION REQUIRING REMOVAL OR ON THE BRIDGE STRUCTURE, A 50 BUFFER AREA SHALL BE REQUIRED UNTIL AFTER THE NESTING SEASON (AUGUST 31ST). PROJECT WORK OUTSIDE THE NESTING SEASON WILL NOT BE AFFECTED.

EN6. THE CONTRACTOR SHALL CONTAIN ALL CONCRETE MATERIALS AND WASTEWATER. A CONCRETE WASHOUT FACILITY IS REQUIRED AT AN UPLAND LOCATION. 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).

EN7. THE CONTRACTOR SHALL LIMIT THEIR ACTIVITIES TO THE DISTURBANCE LIMITS SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROTECT ADJACENT WETLANDS AND RIPARIAN AREAS WITH ORANGE PLASTIC FENCING AND EROSION LOGS TO LIMIT IMPACTS AND PROTECT THE EXISTING WETLANDS OUTSIDE OF THE PLANNED AREA OF DISTURBANCE AS SHOWN IN THE PLANS.

EN8. IMPORTED RIP RAP OR EXCAVATED RIVER SUBSTRATE SHALL NOT BE STOCKPILED IN ADJACENT WETLAND AREAS OR LIVE WATER BUT SHALL BE STORED AT AN UPLAND AREA AND PROTECTED WITH SEDIMENT CONTROLS (I.E. SILT FENCE OR LOGS/BALES).

EN9. A PRECONSTRUCTION MEETING SHALL BE HELD ON-SITE WITH THE TOWN AND THE SELECTED CONTRACTOR TO IDENTIFY THE PROJECT LIMITS, EQUIPMENT AND MATERIAL STORAGE AREAS, SEDIMENT AND EROSION CONTROLS, AND EQUIPMENT MAINTENANCE AREAS PRIOR TO THE COMMENCEMENT OF WORK. REQUIRED CONTRACTOR SUBMITTALS SPECIFIED IN 107.25 (B)(5) WATER QUALITY CONTROL AND 208(B) EROSION CONTROL SHALL BE AVAILABLE FOR THIS PRECONSTRUCTION MEETING. THIS MEETING SHALL BE INCLUDED IN THE COST OF THE WORK.

EN10. HEAVY EQUIPMENT THAT WILL BE USED WITHIN THE MANCOS RIVER THAT WAS PREVIOUSLY WORKING IN ANOTHER STREAM, RIVER, LAKE, POND, OR WETLAND WITHIN 10 DAYS OF INITIATING WORK, WILL REQUIRE ONE THE FOLLOWING PROCEDURES NECESSARY TO PREVENT THE SPREAD OF NEW ZEALAND MUD SNAILS AND OTHER AQUATIC HITCHHIKERS:

(1) REMOVE ALL MUD AND DEBRIS FROM EQUIPMENT (TRACKS, TURRETS, BUCKETS, DRAGS, TEETH, ETC.) AND KEEP THE EQUIPMENT DRY FOR 10 DAYS. OR

(2) REMOVE ALL MUD AND DEBRIS FROM EQUIPMENT (TRACKS, TURRETS, BUCKETS, DRAGS, TEETH, ETC.) AND SPRAY/SOAK EQUIPMENT WITH EITHER A 1:1 SOLUTION OF FORMULA 409 HOUSEHOLD CLEANER AND WATER, OR A SOLUTION OF SPARQUAT 256 (5 OUNCES SPARQUAT PER GALLON OF WATER). TREATED EQUIPMENT MUST BE KEPT MOIST FOR AT LEAST 10 MINUTES. OR

(3) REMOVE ALL MUD AND DEBRIS FROM EQUIPMENT (TRACKS, TURRETS, BUCKETS, DRAGS, TEETH, ETC.) AND SPRAY/SOAK EQUIPMENT WITH WATER GREATER THAN 120 DEGREES F FOR AT LEAST 10 MINUTES.

EN11. CLEANING OPERATIONS SHALL BE CONDUCTED PRIOR TO ARRIVING ON LOCATION. HEAVY EQUIPMENT THAT ARRIVES ON SITE WITH MUD AND DEBRIS MAY BE REJECTED FOR USE ON THE PROJECT UNTIL CLEANED. THE CONTRACTOR SHALL CERTIFY IN WRITING THAT THIS CONDITION HAS BEEN ADDRESSED.

EROSION CONTROL NOTES:

SEE STORMWATER MANAGEMENT PLAN.

SEEDING AND MULCHING:

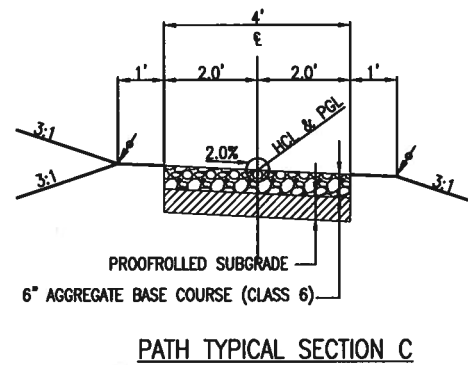
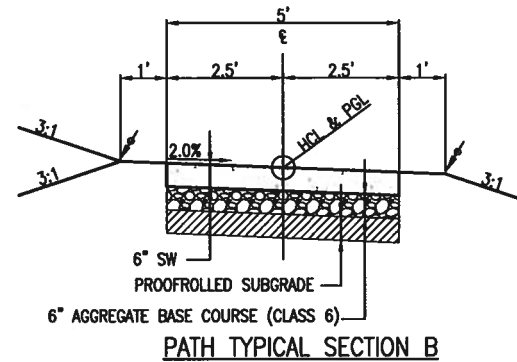
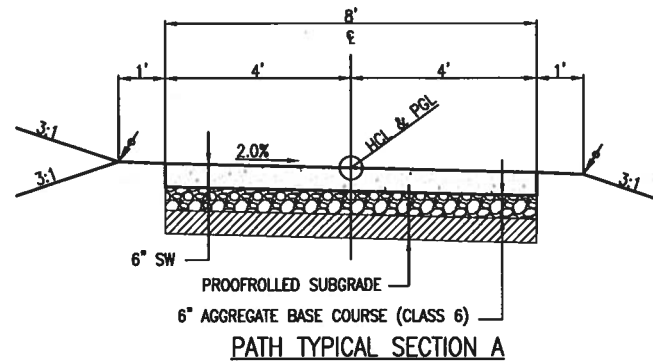
SEE STORMWATER MANAGEMENT PLAN.

F.O.B CONCURRENCE
2012-05-11



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Print Date:	Sheet Revisions					As Constructed			MESA STREET PEDESTRIAN BRIDGE REPLACEMENT		Project No./Code	
File Name:	Date:	Comments	Init.			GENERAL NOTES			STE M840-001			
Horiz. Scale:	Vert. Scale: As Noted					No Revisions:			18306			
Unit Information	Unit Leader Initials					Revised:			Designer: SJB	Structure Numbers		
				Void:			Detailer: BAO					
							Sheet Subset: GN-01	Subset Sheets: 1	Sheet Number	3		



TYPICAL SECTION LEGEND

SW = CONCRETE SIDEWALK (6-INCH) LT = LEFT SHLDR = SHOULDER
CCF = COMPACTED CRUSHER FINE PATH (6-INCH) RT = RIGHT STA = STATION
(SEE CRUSHER FINE DETAIL) TYP = TYPICAL

⚡ = THE CONTRACTOR IS REQUIRED TO STRIP (IF APPLICABLE), STOCKPILE AND RESPREAD 4-INCHES OF TOPSOIL UPON COMPLETION OF FINAL GRADING OR AS DIRECTED, PAID FOR UNDER ITEM 207 - TOPSOIL (COMPLETE IN PLACE)

TYPICAL SECTION NOTES:

1. THE DEPTH AND WIDTH OF ALL DITCHES SHALL BE VARIED WHERE NECESSARY IN ORDER TO PROVIDE PROPER DRAINAGE.
2. BREAK POINTS ON SLOPES AND IN BOTTOMS OF DITCHES SHALL BE ROUNDED FOR A PLEASING APPEARANCE.
3. PROOFROLLED SUBGRADE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF CONCRETE SIDEWALK (6-INCH), OR ABC (CLASS 6).
4. SEE PLAN FOR SECTION & TRANSITION LOCATIONS AND DETAILS.
5. SEE TYPICAL PATH DETAILS FOR FINISHES, JOINTS, ETC.

ABBREVIATIONS TABLE							
AASHTO	ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	CL / LT	CENTER LINE	FES	FLARED END SECTION	LP	LIGHT POLE
ABAN	ABANDON	CLR	CLEAR	FF	FINISH FLOOR / FRONT FACE	LT	LEFT / LIGHT
ABC	AGGREGATE BASE COURSE	CO	CLEAN OUT	FG	FINISH GRADE	MAINT	MAINTENANCE
ABUT	ABUTMENT	COM	COMMUNICATION	FH	FIRE HYDRANT	MAS	MASONRY
ALT	ALTERNATE	CONC	CONCRETE	FL	FLOW LINE	MAT	MATERIAL
AMT	AMOUNT	CONST	CONSTRUCTION	FN	FENCE	MAX	MAXIMUM
APPROX	APPROXIMATE	CONT	CONTINUOUS(SATION)	FPS	FEET PER SECOND	MB	MAIL BOX
ASPH	ASPHALT	COR	CORNER	FT	FEET	MECH	MECHANICAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	CP	CONTROL POINT	FTG	FOOTING / FITTING	MFR	MANUFACTURER
AVG	AVERAGE	CY	CUBIC YARDS	G	GAS	MH	MANHOLE
AWWA	AMERICAN WATER WORKS ASSOCIATION	DEMO	DEMOLITION	GAL	GALLON	MNI	MINIMUM
BE	BACK FACE	DET	DETAIL	GALV	GALVANIZED	MISC	MISCELLANEOUS
BFV	BUTTERFLY VALVE	DA	DIAMETER	CND	GROUND	NA	NOT APPLICABLE
BLDG	BUILDING	DWG	DRAWING	GRD	GALLONS PER DAY	NPT	NATIONAL PIPE THREAD
BM	BENCH MARK	EA	EACH	GPM	GALLONS PER MINUTE	NTS	NOT TO SCALE
BMP	BEST MANAGEMENT PRACTICE	EA	EACH	GRG	GRATING	NHL	NORMAL WATER LINE
BPC	BACK OF CURB	EJ	EXPANSION JOINT	GV	GATE VALVE	OC	ON CENTER
BOF	BOTTOM OF FOOTING	EL/ELEV	ELEVATION	HCL	HORIZONTAL CONTROL LINE	OD	OUTSIDE DIAMETER
BOW	BACK OF WALK / BOTTOM OF WALL	ELEC	ELECTRICAL	HMA	HOT MIX ASPHALT	OH	OVERHEAD
BRG	BEARING	ENGR	ENGINEER	HORIZ	HORIZONTAL	OHE	OVERHEAD ELECTRIC
BS	BACKSIGHT	EOP	EDGE OF PAVEMENT	HP	HIGH POINT	PC	POINT OF CURVATURE
CAG	CURB AND GUTTER	EQW	EDGE OF TRAVELED WAY	HVAC	HEATING, VENTILATION, AIR CONDITIONING	PEF	PREFORMED EXPANSION JOINT FILLER
C/C	CENTER TO CENTER	EQ	EQUAL	HWL	HIGH WATER LINE	PGL	PROFILE GRADE LINE
CB	CATCH BASIN	EQUIP	EQUIPMENT	HWY	HIGHWAY	PI	POINT OF INTERSECTION
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	EQV	EQUIVALENT	D	DIAMETER	PL	PROPERTY LINE
CF	CUBIC FEET PER SECOND	EST	ESTIMATE	INV	INVERT	PP	POWER POLE
CFJ	CONSTRUCTION JOINT / CONTROL JOINT	EX	EXISTING	INV EL	INVERT ELEVATION	PREFAB	PREFABRICATED
		FD	FOUNDATION DRAIN	IRR	IRRIGATION	PRELIM	PRELIMINARY
				LF	LINEAR FOOT	PREP	PREPARATION

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MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
TYPICAL SECTIONS
AND MISC. DETAILS

Designer: BAO
Detailer: BAO
Structure Numbers: _____
Sheet Subset: TY-01
Subset Sheets: 1

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STE M840-001

18306

Sheet Number

4

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INDEX			INDEX ITEM NO.	CONTRACT ITEM	UNIT	BID SCHEDULE A		BID SCHEDULE B										PROJECT TOTALS	
BOOK	PAGE	SHEET				PLAN	AS CONST.	PLAN	AS CONST.									PLAN	AS CONST.
			201	CLEARING AND GRUBBING	LS	1		1										1	
			202	REMOVAL OF TREE	EA	14		14										14	
			202	REMOVAL OF CONCRETE	SY	21		21										21	
			202	REMOVAL OF EXISTING BRIDGE FOUNDATION	LS	1		1										1	
			203	UNCLASSIFIED EXCAVATION (COMPLETE IN PLACE)	CY	180		180										180	
			206	STRUCTURE EXCAVATION	CY	62		62										62	
			206	STRUCTURE BACKFILL (CLASS 1)	CY	38		38										38	
			207	TOPSOIL (COMPLETE IN PLACE)	CY	44		44										44	
			208	EROSION LOG (12-INCH)	LF	250		250										250	
			208	VEHICLE TRACKING PAD	EA	2		2										2	
			208	CONCRETE WASHOUT STRUCTURE	EA	2		2										2	
			208	EROSION SUPERVISOR	HR	8		8										8	
			208	REMOVAL AND DISPOSAL OF SEDIMENT (LABOR)	HR	4		4										4	
			208	REMOVAL AND DISPOSAL OF SEDIMENT (EQUIPMENT)	HR	4		4										4	
			212	SOIL CONDITIONING	AC	0.05		0.08										0.05	
			212	SEEDING (NATIVE)	AC	0.05		0.08										0.05	
			213	MULCH (WEED FREE)	AC	0.05		0.08										0.05	
			213	MULCH TACKIFIER	LB	5		8										5	
			213	CEDAR MULCH	CF	486		29										486	
			213	STRIPSTONE LANDSCAPE BORDER	LF	120		0										120	
			214	BRUSH LAYER CUTTINGS	EA	80		80										80	
			214	DECIDUOUS TREE (3-INCH CALIPER)	EA	1		0										1	
			214	EVERGREEN (10-FOOT)(BALL & BURLAP)	EA	1		0										1	
			214	PLANT (1 GALLON CONTAINER)	EA	112		42										112	
			214	PLANT (5 GALLON CONTAINER)	EA	50		0										50	
			214	PLANT (3-INCH POT)	EA	42		30										42	
			216	SOIL RETENTION BLANKET (EXCELSIOR)	SY	60		60										60	
			304	AGGREGATE BASE COURSE (CLASS 6)	CY	36		36										36	
			307	RECONDITIONING	SY	137		137										137	
			503	DRILLED CAISSON (24 INCH)	LF	64		64										64	
			504	LANDSCAPE BOULDER (MEDIUM)	EA	14		0										14	
			504	LANDSCAPE BOULDER (LARGE)	EA	12		0										12	
			504	BOULDER RETAINING WALL	SF	273		273										273	
			506	RIPRAP (12 INCH)	CY	115		115										115	
			601	CONCRETE CLASS D (BRIDGE)	CY	31		31										31	
			601	MASONRY VENEER	SF	217		217										217	
			602	REINFORCING STEEL (EPOXY COATED)	LF	3243		3243										3243	
			603	12-INCH PLASTIC PIPE	LF	17		17										17	
			607	FENCE (PLASTIC)	LF	200		200										200	
			608	CONCRETE SIDEWALK (6-INCH)	SY	151		151										151	
			613	2-INCH ELECTRICAL CONDUIT	LF	80		80										80	
			613	PULL BOX (16"x16"x6")	EA	2		2										2	
			620	SANITARY FACILITY	EA	1		1										1	
			622	REMOVABLE BOLLARD	EA	2		2										2	
			625	CONSTRUCTION SURVEYING	LS	1		1										1	
			626	MOBILIZATION	LS	1		1										1	
			628	BRIDGE GIRDER AND DECK UNIT - (50' LONG x 10' WIDE U-TRUSS)	EA	1		1										1	
			630	CONSTRUCTION TRAFFIC CONTROL	LS	1		1										1	
			700	F/A MINOR CONTRACT REVISIONS	F/A	1		1										1	
			700	F/A OJT COLORADO TRAINING PROGRAM	F/A	1		1										1	
			700	F/A ON THE JOB TRAINEE	HR	0		0										0	
			700	F/A EROSION CONTROL	F/A	1		1										1	

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MESA STREET PEDESTRIAN BRIDGE REPLACEMENT SUMMARY OF APPROXIMATE QUANTITIES

Designer:

SJB

Detailer:

LX

Sheet Subset:

SQ-01

Subset Sheets:

Project No./Code

STE M840-001

18306

Sheet Number

5



TABULATION OF MISC ITEMS

ITEM NO.	OFFSET &/OR SIDE	201 CLEARING AND GRUBBING	613 2" ELECTRICAL CONDUIT	613 PULL BOX 16"x16"x6"	620 SANITARY FACILITY	622 REMOVABLE BOLLARD	625 CONSTRUCTION SURVEY	626 MOBILIZATION	630 CONSTRUCTION TRAFFIC CONTROL	F/A MINOR CONTRACT REVISIONS	F/A EROSION CONTROL	F/A OJT COLORADO TRAINING PROGRAM	F/A ON THE JOB TRAINEE	REMARKS
LOCATION		LS	LF	EA	EA	EA	EA	LS	LS	FA	FA	FA	HR	
ENTIRE PROJECT		1	80		1		1	1	1	1	1	1	0	-
STA 1+58						1								
STA 2+62						1								
NORTH SIDE				1										
SOUTH SIDE				1										
TOTALS		-	-	-	-	-	-	-	-	-	-	-	0	
PROJECT TOTALS		1	80	2	1	2	1	1	1	1	1	1	0	

TABULATION OF TOPSOIL, SEEDING, PLANTING & EROSION CONTROL ITEMS

ITEM NO.	OFFSET &/OR SIDE	207 TOPSOIL	208 EROSION LOG (12-INCH)	208 VEHICLE TRACKING PAD	208 CONCRETE WASHOUT STRUCTURE	208 EROSION CONTROL SUPERVISOR	208 REMOVAL AND DISPOSAL OF SEDIMENT (LABOR)	208 REMOVAL AND DISPOSAL OF SEDIMENT (EQUIPMENT)	212 SOIL CONDITIONING	212 SEEDING (NATIVE)	213 MULCH (WEED FREE)	213 MULCH TACKIFIER	214 CEDAR MULCH	214 STRIPSTONE LANDSCAPE BORDER	214 BRUSH LAYER CUTTINGS	214 DECIDUOUS TREE (3-INCH CALIPER)	214 EVERGREEN (10-FOOT)(BALL & BURLAP)	214 PLANT (1-GALLON)	214 PLANT (5-GALLON)	214 PLANT (3-INCH POT)	216 SOIL RETENTION BLANKET (EXCELSIOR)	REMARKS
LOCATION		CY	LF	EA	EA	HR	HR	HR	AC	AC	AC	LB	CF	LF	EA	EA	EA	EA	EA	EA	SY	
ENTIRE PROJECT						8	4	4	0.05	0.05	0.05	5						112	50	42		
NORTH SIDE		11	100	1	1								166	40	40	1					33	
SOUTH SIDE		18	150	1	1								320	80	40		1				27	
TOTALS																						
PROJECT TOTALS		29	250	2	2	8	4	4	0.05	0.05	0.05	5	486	120	80	1	1	112	50	42	60	

TABULATION OF SURFACE ITEMS

ITEM NO.	OFFSET &/OR SIDE	304 ABC (CLASS 6)	304 RECONDITION	608 CONCRETE SIDEWALK (6-INCH)	REMARKS
LOCATION		CY	SY	SY	
ENTIRE PROJECT					
NORTH SIDE		10	139	33	
SOUTH SIDE		26		118	
PROJECT TOTALS		36	139	151	

TABULATION OF DRAINAGE ITEMS

ITEM NO.	OFFSET &/OR SIDE	603 12-INCH PLASTIC PIPE	REMARKS
LOCATION		LF	
STA 3+01		17	
PROJECT TOTALS		17	

TABULATION OF REMOVALS, RESETS & ADJUSTS

ITEM NO.	OFFSET &/OR SIDE	202 REMOVAL OF TREE	202 REMOVAL OF CONCRETE PAVEMENT	202 REMOVAL OF EXISTING BRIDGE FOUNDATION	REMARKS
LOCATION		EA	SY	LS	
ENTIRE PROJECT				1	
NORTH SIDE		2	21		
SOUTH SIDE		12			
PROJECT TOTALS		14	21	1	

TABULATION OF WALLS & RIPRAP

ITEM NO.	OFFSET &/OR SIDE	504 BOULDER RETAINING WALL	504 LANDSCAPE BOULDER (MEDIUM)	504 LANDSCAPE BOULDER (LARGE)	506 RIPRAP (12-INCH)	REMARKS
LOCATION		SF	EA	EA	CY	
ENTIRE PROJECT		273			115	
NORTH SIDE			7	5		
SOUTH SIDE			7	7		
TOTALS		273	14	12	115	

SUMMARY OF EARTHWORK QUANTITIES

UNCLASSIFIED EXCAVATION	CUBIC YARDS
EXCAVATION:	180
TOTAL	180
EMBANKMENT MATERIAL (FOR INFORMATION ONLY)	CUBIC YARDS
EMBANKMENT:	60.4
TOTAL	60
COMPACTION*	CUBIC YARDS
TOTAL EMBANKMENT	60
EARTHWORK QUANTITIES BALANCE	
UNCLASSIFIED EXCAVATION	
TOTAL UNCLASSIFIED EXCAVATION	180
EMBANKMENT (NET)	
TOTAL EMBANKMENT	60
EMBANKMENT (NET) TIMES COMPACTION FACTOR (1.15)	
TOTAL	69
EXCESS EXCAVATION	
TOTAL	111

* ALL COMPACTION SHALL BE PER THE 2011 CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS DIRECTED BY THE ENGINEER

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MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
PROJECT TABULATIONS

Designer:

SJB

Detailer:

LX

Sheet Subset:

SQ-02

Structure

Numbers

Subset Sheets:

Project No./Code

STE M840-001

18306

Sheet Number

6

TO ESTABLISH GEOMETRIC CONTROL FOR THE CONSTRUCTION OF THIS PROJECT, THE DEPARTMENT HAS PROVIDED THE FOLLOWING INFORMATION:

<input checked="" type="checkbox"/> Horizontal Control	Format*
<input checked="" type="checkbox"/> Vertical Control	PLAN SHEET
<input type="checkbox"/> Roadway Alignment	PLAN SHEET
<input type="checkbox"/> Original Terrain Data	
<input checked="" type="checkbox"/> Other: PEDESTRIAN BRIDGE	

*Specify the information format, i.e., plan sheet, computer disk, computer printout, or other.
The information marked is either contained on the plans or is available from the Engineer.

TYPE OF PROJECT

- ☐ Landscaping
☐ Signalization
☐ Safety Improvement
☐ Asphalt Overlay
☐ Concrete Overlay
☐ Minor Widening
☐ Major Reconstruction
☐ New Roadway Construction
☐ Bridge Replacement
☐ Bridge Widening
☐ Pedestrian Bridges
☐ Other:

SURVEY WORK TO BE PERFORMED BY OTHERS: _____

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER ITEM 625:

- ☒ Establish and Maintain Project Centerline or Engineer Approved Offset Line(s)
☒ Verification and Maintenance of Horizontal and Vertical Control
☐ Verify or Determine existing grades and alignments
☐ Verify or Determine existing topography
☐ Clearing and Grubbing Limits
☐ Removal Limits
☐ Reset Items

- ☒ Excavation and Embankment
☒ Excavation
☐ Unclassified
☐ Stripping
☐ Muck
☐ Rock
☐ Borrow
☐ Other:

- ☒ Embankment
☒ Site Grading
☒ Erosion Control (Perm)
☐ Other:

- ☐ As Staked Earthwork Quantities
(See General Notes)

- ☐ Landscaping
☐ Top Soil
☐ Seeding
☐ Mulching
☐ Planting
☐ Herbicide
☐ Other:

- ☒ Erosion Control
☐ Seeding (Temp)
☐ Silt Fences
☐ Straw Bales
☐ Temporary Berm
☐ Riprap (Temp)
☒ Other (Temp Diversion, Temp Slope Drain, Brush Barrier, Check Dam, Other: Erosion Log)

	SLOPE STAKING	GRID (Y/N)	GRADE STAKES	SPECIAL INTERVAL
Excavation	-	-	-	-
Embankment	-	-	-	-

- ☐ Roadway Bases
☐ Untreated Subgrade
☐ Treated Subgrade
☐ Aggregate Base Course
☐ Reconditioning
☐ PMBB - Plant Mix Bituminous Base
☐ Other:

	GRID (Y/N)	SPECIAL INTERVAL	SPECIAL OFFSET
Roadway Bases	-	-	-

- ☒ Pavements
☐ HBP - Hot Bituminous Pavement
☐ Concrete
☐ Overlay
☐ Heating & Scarifying Treatment
☐ Prime Coat, Tack Coat & Rejuvenating Agent
☐ Seal Coat or Chip Seal
☐ Other:

Pavements	-	-	-

- ☐ Roadway Elements
☐ Curb and Gutter
☐ Drop inlets - alignment and grades
☐ Retaining Walls
☐ Guard Rail
☐ Sidewalk
☐ Other:

	Tangent Interval	Curve Interval	Special Offset
Curb & Gutter	-	-	-

- ☒ Riprap (Perm)
☐ Slope and Ditch Paving

- ☐ Minor Structures
☐ Structure Excavation limits
☐ Culverts
☐ Culverts w/ Headwalls and Wingwalls
☐ Concrete Box Culverts w/ Headwalls and Wingwalls
☐ Pipes

- ☐ Sanitary Sewer
☐ Storm Sewer
☐ Water
☐ Irrigation
☐ Miscellaneous

- ☐ Manholes
☐ Inlets
☐ Other:

- ☒ Major Structures - Overhead Signs, Concrete Box Culverts, Bridges -
and all other structures assigned a structure number

- ☒ Structure Excavation limits
☐ Concrete Box Culverts w/ Headwalls and Wingwalls
☐ Piling locations and cut off elevations
☐ Caisson locations and elevations
☒ Footing locations, alignment, and elevations
☒ Abutment/Pier locations, alignment, and elevations
☐ Wingwall skew angles/offsets
☐ Structural concrete form locations
☐ Substructure As-constructed survey (Required by Subsection 601.12 for Bridges and S-614-50 for Overhead signs)

- ☐ Bridge expansion joint(s) alignment and grade
(longitudinal and transverse)
☐ Deck grades at Girder 10th or "n" th point locations and elevations
☐ Slope and Ditch Paving
☐ Other:

- ☐ Fencing
☐ Temporary
☐ Permanent
☐ Sound Barriers
☐ Other:

- ☐ Delineators
☐ Temporary
☐ Permanent

- ☐ Lighting and Traffic Control Devices (Perm)
☐ Signal pole locations and elevations
☐ Light pole locations and elevations
☐ Signs
☐ Field verify sign post locations, elevations, and lengths
before fabrication.
☐ Other:

- ☐ Pavement Marking
☐ Striping (Temp)
☐ Striping (Perm)
☐ Symbols
☐ Other:

- ☐ Temporary Lighting and Construction Traffic Control Devices
☐ Signal pole locations and elevations (Temp)
☐ Light pole locations and elevations (Temp)
☐ Signs (Temp)
☐ Other:

- ☐ Easement (Temp)(Staking)(P.L.S. Only)
☐ Right of Way (Temp) (Staking)(P.L.S. Only)

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER ITEM 629:

- ☐ Monumentation
☐ Control
☐ Right of Way
☐ Land corners, Aliquot corners
☐ Easement (Perm)
☐ Reference the specified existing monuments: **
☐ Relocate the specified existing monuments: **
☐ Locate monuments. It is estimated _____ hours are required.

** A Tabulation of Survey Monuments may be provided on the plans.

GENERAL NOTES:

Unless indicated otherwise on this Survey Tabulation Sheet, all survey work and staking intervals shall be done in accordance with the latest edition of the entire CDOT Survey Manual.

Adequate information for establishing lines, grades, and locations for all work items have been specified on the plans. Any additional information required to stake the item or element shall be generated by the Contractor's surveyor.

The Contractor's surveyor shall provide an estimate of the man-hours necessary to complete the work items indicated on this sheet. A copy of this sheet, with the estimated man-hours written on the blank line to the left of the specified items, shall be submitted with the Survey Schedule to the Engineer _____ days prior to Presurvey Conference - Construction Survey.

Stakes and Monuments which are damaged or destroyed by the progress of construction shall be replaced by the Contractor at no additional cost to the Department.

The Contractor shall furnish an As Staked earthwork quantity to the Engineer prior to completion of twenty percent (20%) of the planned earthwork in any phase as per the CDOT Survey Manual. A printed copy of the As Staked earthwork data and a computer disk in the specified format shall be submitted to the Engineer. The Contractor shall field verify original ground cross sections at a maximum 500 feet intervals.

Prior to beginning work on any subsequent operation, such as placing base course or paving, the Contractor shall certify in writing to the Engineer that the final grade is within specified tolerance.

The Contractor's surveyor shall perform all field surveying and calculations necessary to tie plan grades into field grades.

The Contractor shall coordinate construction staking on the project with any utility work.

The Contractor's surveyor shall submit the following fieldbooks to the Engineer:

- ☐ Horizontal Control (Primary & Secondary)
☐ Vertical Control (i.e. Benchmarks)
☐ Property Pin Ties
☐ Horizontal Alignment
☐ Grading
☐ Slope Staking
☐ Minor Structures
☒ Major Structures
☐ One fieldbook for each work category shown on this sheet
☐ Other Fieldbook(s): _____

F.O.R CONCURRENCE
2012-05-11



Print Date:

File Name:

Horiz. Scale:

Vert. Scale: As Noted

Unit Information

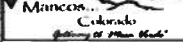
Unit Leader Initials

Sheet Revisions

Date: Comments Init.

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Region 5 DAE

As Constructed

No Revisions:

Revised:

Void:

MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
SURVEY TABULATIONS

Designer: SJB

Detailer: LX

Sheet Subset: SV-01

Subset Sheets:

Project No./Code

STE M840-001

18306

Sheet Number

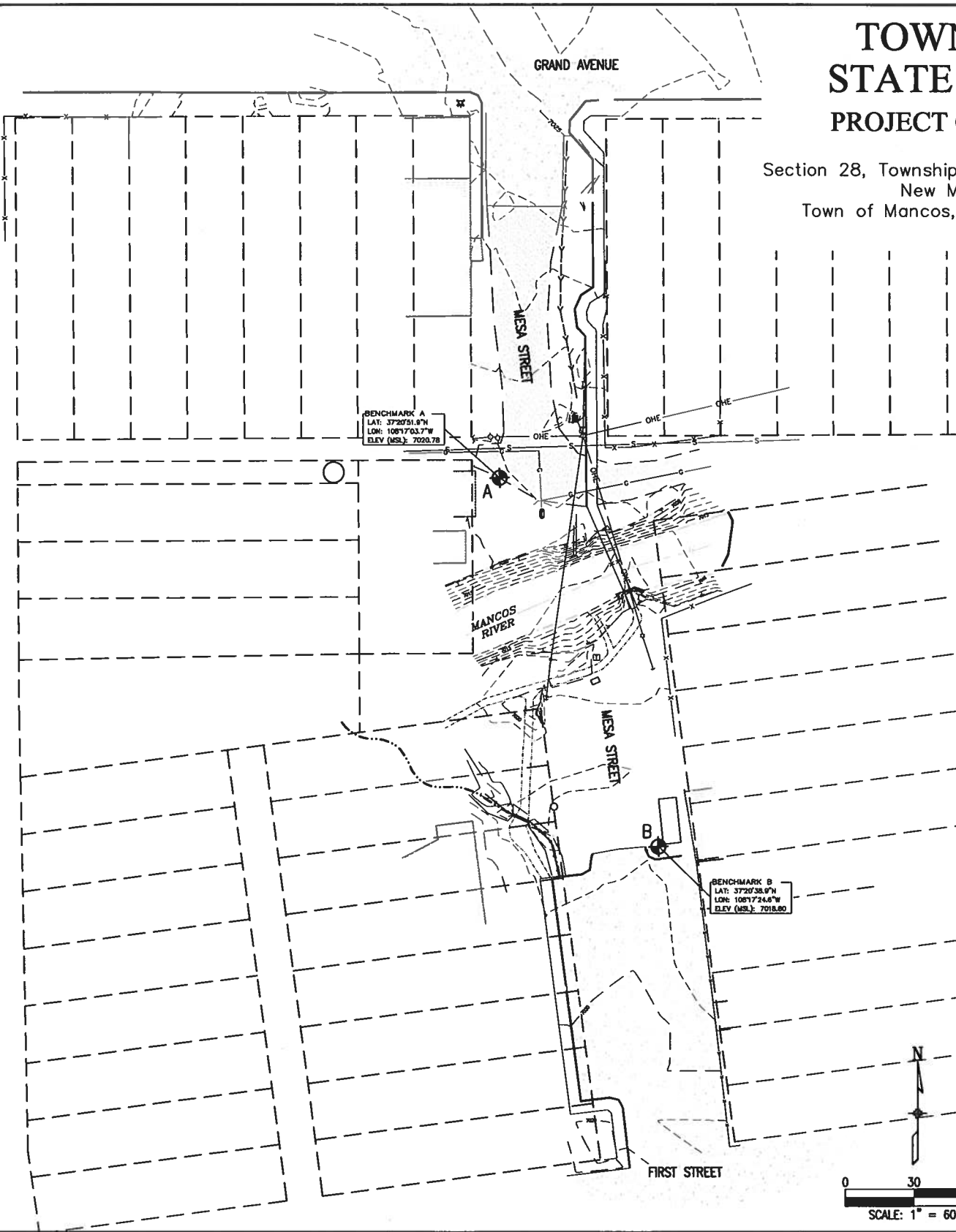
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G:\7.2 Clients\334 - Mancos\11119 - Mesc St Pedestrian Bridge Replacement\50 DWG\11119-03-Survey Control.dwg May 10, 2012 - 3:40pm

TOWN OF MANCOS
STATE OF COLORADO
PROJECT CONTROL DIAGRAM

MESA STREET
Section 28, Township 36 North, Range 13 West, N.M.P.M.,
New Mexico Principal Meridian
Town of Mancos, County of Montezuma, Colorado

F.O.B CONCURRENCE
2012-05-11



PROJECT COORDINATE SUMMARY (LOCAL ASSUMED COORDINATES)(U.S. SURVEY FEET)				
POINT NAME	NORTHING	EASTING	ELEV (NAVD 88)	DESCRIPTION
A	9836.26	9968.52	7020.78	1.5" ALUMINUM CAPS MARKED? LS 19612 ON #4 REBAR
B	9674.31	10038.52	7018.80	1.5" ALUMINUM CAPS MARKED? LS 19612 ON #4 REBAR

GEODETIC COORDINATE SUMMARY TABLE (U.S. SURVEY FEET)								
POINT NAME	LATITUDE(N)	LONGITUDE(W)	ELEV (MSL)	MAPPING ANGLE	GRID SCALE	COLO SOUTH 0503		DESCRIPTION
						NORTHING	EAST	
A	37°20'51.9" N	108°17'03.7 W	7020.78 (2,139.95M)	-1°42'28"	0.99964601	(383731.578M) 1,258,959.351	(667187.567M) 2,188,931.211	1.5" ALUMINUM CAPS MARKED? LS 19612 ON #4 REBAR
B	37°20'38.9" N	108°17'24.6 W	7018.80 (2,139.34M)	-1°42'28"	0.99964601	(383681.986M) 1,258,796.648	(667208.376M) 2,188,999.479	1.5" ALUMINUM CAPS MARKED? LS 19612 ON #4 REBAR

BASIS OF BEARING: ARE BASED ON THE ?STATE PLANE? GRID BEARING AND REFERENCED BY A LINE FROM CDOT MONUMENT #8040 (COLORADO SOUTH 0503 COORDINATE SYSTEM METERS 384026.287, 666692.853, 2132.783, A 3" ALUMINUM MONUMENT LS#25381) AND NOAA MONUMENT K398 (COLORADO SOUTH 0503)

COORDINATE DATUM: METERS 384022.949, 668761.561, 2180.951, A STANDARD NATIONAL GEODETIC SURVEY STAINLESS STEEL ROD WITHOUT SLEEVES IN A MONUMENT VAULT NEAR THE INTERSECTION OF BUSINESS HWY 160, AND HWY 160 ON THE EAST END OF THE TOWN OF MANCOS). THIS LINE BEARS S89°54'27"E 2068.71M.

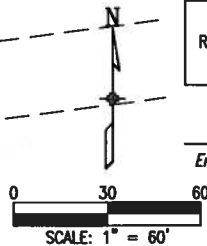
SURVEYOR'S STATEMENT

I, ERNESS MANESS, A DULY REGISTERED LAND SURVEYOR, LICENSED IN THE STATE OF COLORADO, HEREBY STATE FOR AND ON BEHALF OF MANESS & ASSOCIATES, INC., THAT A TOPOGRAPHIC SURVEY OF THE SUBJECT PROPERTY AS SHOWN HEREON, WAS CONDUCTED BY ME AND UNDER MY DIRECT SUPERVISION, RESPONSIBILITY AND CHECKING IN OCTOBER 2011; THAT SAID SURVEY AND THE ATTACHED PRINT HEREON ARE ACCURATE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

PREPARED BY ERNEST MANESS
REGISTERED PROFESSIONAL LAND SURVEYOR
COLORADO LICENSE NUMBER 19612

Ernest Maness, PLS No. 19612

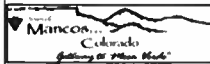
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Unit Information Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

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Region 5 DAE

As Constructed

No Revisions:

Revised:

Void:

MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
SURVEY CONTROL

Designer: SJB
Detailer: LX
Sheet Subset: SV-02
Structure Numbers
Subset Sheets: 2

Project No./Code

STE M840-001

18306

Sheet Number

8

C:\7.2 Clients\334 - Mancos\11119 - Mesa St Pedestrian Bridge Replacement\50 DWG\11119-(09)-SWMP.dwg May 15, 2012 - 5:23pm

1. STORMWATER MANAGEMENT CONTROLS FIRST CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL PERFORM THE FOLLOWING:

A. POTENTIAL POLLUTANT SOURCES

1. Evaluate, identify and describe all potential sources of pollutants at the site in accordance with subsection 107.25 and place any BMPs required to contain potential pollutants.

B. BEST MANAGEMENT PRACTICES (BMPs) FOR STORMWATER POLLUTION PREVENTION

NARRATIVES

EROSION LOGS

WHAT: Erosion logs. Erosion Logs on this project will be straw wattles.
WHERE: Typically used along the toe of fills, in transition areas between cuts and fills, in ditches as check dams, and adjacent to streams. Also used around drop inlets as applicable.
WHEN: Before commencement of clearing, grubbing, or grading when used as perimeter controls or at toes of slopes. After completion of grading when used as check dams in ditches.
HOW: Prior to clearing, grubbing, or grading, place and stake erosion logs in accordance with M-208-1 and the manufacturer's instructions. Logs shall be placed on the contour with the ends of logs j-hooked to prevent water from running around the ends, causing erosion.
WHY: Erosion logs are used to filter sediment laden runoff from disturbed areas during construction to prevent sediment from leaving the construction site.

VEHICLE TRACKING PAD

WHAT: Stabilized construction entrance
WHERE: At locations where equipment will exit from work areas onto existing pavement.
WHEN: Stabilized construction entrances are to be placed prior to entry of equipment into work areas.
HOW: In accordance with M-208-1, the area of the entrance must be excavated a minimum of 6 inches. The geotextile will then be placed and covered with a minimum 6-inch layer of aggregate. The aggregate shall be equal to or greater than 3 inches. The entrance must extend the full width of the ingress/egress area and have a minimum width of 12 feet and a minimum length in the direction of travel of 70 feet or 4 times the circumference of the largest construction vehicle tire, whichever is greater.
WHY: Used to reduce the amount of mud and sediment tracked onto paved public roads by vehicles or runoff leaving the construction site.

CONCRETE WASHOUT STRUCTURE

WHAT: Concrete washout. Facilities where concrete trucks or concrete-coated equipment are washed on site. A sturdy, watertight structure.
WHERE: Areas where concrete waste is generated from demolition activities; where concrete is used as a construction material. Specific locations will be determined at the time of construction and indicated on the SWMP site map. Do not place concrete washouts in low areas, ditches or adjacent to state waters.
WHEN: During operations when concrete waste is generated from demolition activities; when concrete is used as a construction material.
HOW: A sturdy watertight structure as shown in the Town of MANCOS design standards or the Urban Drainage Criteria Manual will be used. Proper signage, such as Concrete Washout or Concrete Saw Water Disposal shall be placed near the washout facilities to inform construction personnel of the location of designated concrete washout facilities.
WHY: Used in order to minimize and prevent concrete waste associated with construction activities from entering storm drains and watercourses.

PERMANENT SEEDING (NATIVE)

WHAT: Grass and forb species planted for permanent cover on disturbed soils and surfaces.
WHERE: Disturbed areas of bare soil.
WHEN: Seeding should occur throughout the duration of the project as construction is completed. Seeding should not be applied when the ground is frozen or during the summer when moisture is not available
WHEO: able to seed. Refer to Local Agency standards for planting dates, if available.
HOW: See Section 3 of this SWMP.
WHY: Used to control erosion and runoff from disturbed areas by establishing vegetative cover. It reduces sediment loss and provides permanent stabilization.

MULCH/MULCH TACKIFIER

WHAT: Application of plant residues to the soil surface.
WHERE: For temporary erosion control (i.e., incomplete slopes, stockpiles). For temporary erosion control on slopes when seeding is not allowed due to seasonal constraints. To cover permanent or temporary seed areas.
WHEN: Throughout construction, when a disturbed area will be left in place for more than 3 months and seeding cannot occur due to seasonal constraints. Also within 4 hours after seeding. Mulch should not be applied in windy conditions.
HOW: See Section 3 of this SWMP.
WHY: To prevent erosion of soil and promote growth of seed.

C. OFFSITE DRAINAGE (RUN ON WATER)

1. Place BMPs to address run-on water in accordance with subsection 208.03.

D. CONSTRUCTION DEWATERING:

1. Obtain a dewatering permit from CDPHE if conditions of their low risk guidance for Discharges of Uncontaminated Groundwater to Land are not met; see subsection 107.25(b) 8.

E. VEHICLE TRACKING PAD

1. BMPs shall be implemented in accordance with subsection 208.04.

F. PERIMETER CONTROL

1. Perimeter control shall be established as the first item on the SWMP to prevent the potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters.
2. Perimeter control may consist of vegetation buffers, berms, silt fence, erosion logs, existing landforms, or other BMPs as approved.
3. Perimeter control shall be in accordance with subsection 208.04.

2. DURING CONSTRUCTION

RESPONSIBILITIES OF THE SWMP ADMINISTRATOR/EROSION CONTROL SUPERVISOR DURING CONSTRUCTION

The SWMP should be considered a "living document" that is continuously reviewed and modified. During construction, the following items shall be added, updated, or amended as needed by the Contractor in accordance with Section 208

A. MATERIALS HANDLING AND SPILL PREVENTION - prior to construction commencing the Contractor shall submit a Spill Prevention, Control and Countermeasure Plan, see subsection 208.06. Materials handling shall be in accordance with subsection 208.08.

B. STOCKPILE MANAGEMENT - shall be done in accordance with subsection 101.95 and 208.07

C. CONCRETE WASHOUT - Concrete wash out water or waste from field laboratories and paving equipment shall be contained in accordance with subsection 208.05.

D. SAW CUTTING - shall be done in accordance with subsection 101.95, 208.04, 208.05

E. STREET CLEANING - shall be done in accordance with subsection 208.04

3. INTERIM AND FINAL STABILIZATION

A. SEEDING PLAN

Soil preparation, soil conditioning or topsoil, seeding (native), mulching (weed free) and mulch tackifier will be required for an estimated 0.12 acres of disturbed area within the right-of-way limits which are not surfaced. The following types and rates shall be used (TOWN OF MANCOS SEED MIX TO BE DETERMINED):

COMMON NAME	BOTANICAL NAME	POUNDS PLS/ACRE
Western Wheatgrass	Pascopyrum smithii	8
Crested Wheatgrass	Agropyron cristatum	5
Streambank Wheatgrass	Elymus lanceolatus	5
Sideoats Grama	Bouteloua curtipedula	5.60
Blue Grama	Bouteloua gracilis	2.10
Buffalo Grass	Buchloe dactyloides	3
Sand Dropseed	Sporobolus cryptandrus	0.30
Wildflower		0.30
TOTAL		29.30

B. SEEDING APPLICATION: Drill seed 0.25 inch to 0.5 inch into the soil. In small areas not accessible to a drill, hand broadcast at double the rate and rake 0.25 inch to 0.5 inch into the soil.

C. SPECIAL REQUIREMENTS: Due to high failure rates, hydromulching and/or hydroseeding will not be allowed.

D. SOIL CONDITIONING AND FERTILIZER REQUIREMENTS:

1. Fertilizer will not be required on the project.
2. Soil conditioner, organic amendment shall be applied to all seeded areas at 3 CY/1000 SF.
3. Temporary seed areas do not required soil conditioner.

E. BLANKET APPLICATION: On slopes and ditches requiring a blanket, the blanket shall be placed in lieu of mulch and mulch tackifier.

F.O.R CONCURRENCE
2012-05-11



4. TABULATION OF STORMWATER QUANTITIES

PAY ITEM	DESCRIPTION		
207	TOPSOIL	44	CY
208	EROSION LOG (12 INCH) #	250	LF
208	VEHICLE TRACKING PAD	2	EA
208	CONCRETE WASHOUT STRUCTURE #	2	EA
208	SEDIMENT REMOVAL AND DISPOSAL EQUIPMENT	4	HR
208	SEDIMENT REMOVAL AND DISPOSAL LABOR	4	HR
208	EROSION CONTROL SUPERVISOR	8	HR
212	SEEDING (NATIVE)	0.05	AC
213	MULCHING (WEED FREE)	0.05	AC
213	MULCH TACKIFIER	5	LB
216	SOIL RETENTION BLANKET (EXCELSIOR)	60	SY
607	FENCE (PLASTIC)	200	LF
620	SANITARY FACILITY	1	EA
700	F/A EROSION CONTROL **	1	F/A

SHALL INCLUDE INSTALLATION, MAINTENANCE AND REMOVAL

*It is anticipated that additional BMPs and BMP quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsection 208.03 and 208.04 (e). Quantities for all BMPs shown above are estimated, and have been increased for unforeseen Project conditions.

A. BMP sediment removal and disposal shall be paid for as: 208 Removal and Disposal of Sediment (Equipment) and 208 Removal and Disposal of Sediment (Labor). All other BMP maintenance is included in the BMP Device.

B. It is estimated that 0 hours of labor, blading, dozing , combination loader (0 horsepower) and/or backhoe may be required for miscellaneous erosion control work as directed by the Engineer. Work shall be paid for as: Included n the cost of the work.

C. Maintenance of seeded areas shall be paid for as: Included in the price of the work

Print Date:	Sheet Revisions					As Constructed		MESA STREET PEDESTRIAN BRIDGE REPLACEMENT STORMWATER MANAGEMENT PLAN		Project No./Code	
File Name:	Date:	Comments	Init.			No Revisions:				STE M840-001	
Horiz. Scale:	Vert. Scale: As Noted					Revised:		Designer: KFD	Structure	18306	
Unit Information	Unit Leader Initials					Void:		Detailer: BAO	Numbers		
						Sheet Subset: SW-01	Subset Sheets: 1	Sheet Number		9	



F.O.R CONCURRENCE
2012-05-11

NOTES:

1. MANCOS RIVER AND ADJACENT WETLANDS ARE WATERS OF THE US UNDER THE JURISDICTION OF THE US ARMY CORPS OF ENGINEERS. A US ARMY CORPS OF ENGINEERS SECTION 404 PERMIT DA/SPK-2012-01234-DC HAS BEEN OBTAINED FOR IMPACTS TO MANCOS RIVER AND ADJACENT WETLANDS AS SHOWN ON THE PLAN SHEETS.
2. ALL BMP DEVICES SHALL BE MAINTAINED PER CDOT STANDARDS & SPECIFICATIONS.
3. EXISTING TREES SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE. IF TREES ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE THE TREES AT NO ADDITIONAL COST TO THE PROJECT.
4. CONSTRUCTION SHALL BE LIMITED TO THE EXISTING RIGHT-OF-WAY AND/OR EASEMENTS WHERE DELINEATED ON THE PLANS.
5. DEWATERING OF MANCOS RIVER IS NOT ANTICIPATED ON THIS PROJECT. IF DEWATERING SHOULD BECOME NECESSARY, IT SHALL BE ACCOMPLISHED BY PUMPING WATER FROM THE EXCAVATION INTO A PERVIOUS DETENTION BASIN LOCATED IMMEDIATELY ADJACENT TO THE RIVER, SO THE PUMPED WATER MAY FILTER THRU THE EMBANKMENT PRIOR TO RE-ENTERING THE CHANNEL. OTHER DEWATERING METHODS MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL. ANY DEWATERING SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.

LEGEND

(CWS)	CONCRETE WASHOUT STRUCTURE	
(EV)	EXISTING VEGETATION	
(NS)	SEEDING (NATIVE)	
(PT)	SANITARY FACILITY	
(CF)	(TREE PROTECTION)	
(EL)	EROSION LOG (12-INCH)	
(SP)	STOCKPILE LOCATION	
(SR)	SOIL RETENTION BLANKET	
(VTP)	VEHICLE TRACKING PAD	
	DIRECTION OF OVERLAND FLOW	
(BC)	BRUSH LAYER CUTTING (1 PER SQUARE YARD)	
(LS)	LANDSCAPE AREA (SEE LANDSCAPE PLAN)	

APPROXIMATE LOCATION OF THE 100-YEAR FLOOD PLAIN PER F.E.M.A. FLOOD INSURANCE RATE MAP, COMMUNITY PANEL No. 08083C0856C & 08083C0858C, DATED SEPTEMBER 26, 2008

IMPACT TO JURISDICTIONAL WATERS OF THE US	
* TEMPORARY	227 SF + 104 SF 331 SF
** PERMANENT	92 SF

JURISDICTIONAL WATERS OF THE US



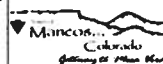
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MESA STREET PEDESTRIAN BRIDGE REPLACEMENT GRADING, DRAINAGE & EROSION CONTROL PLAN

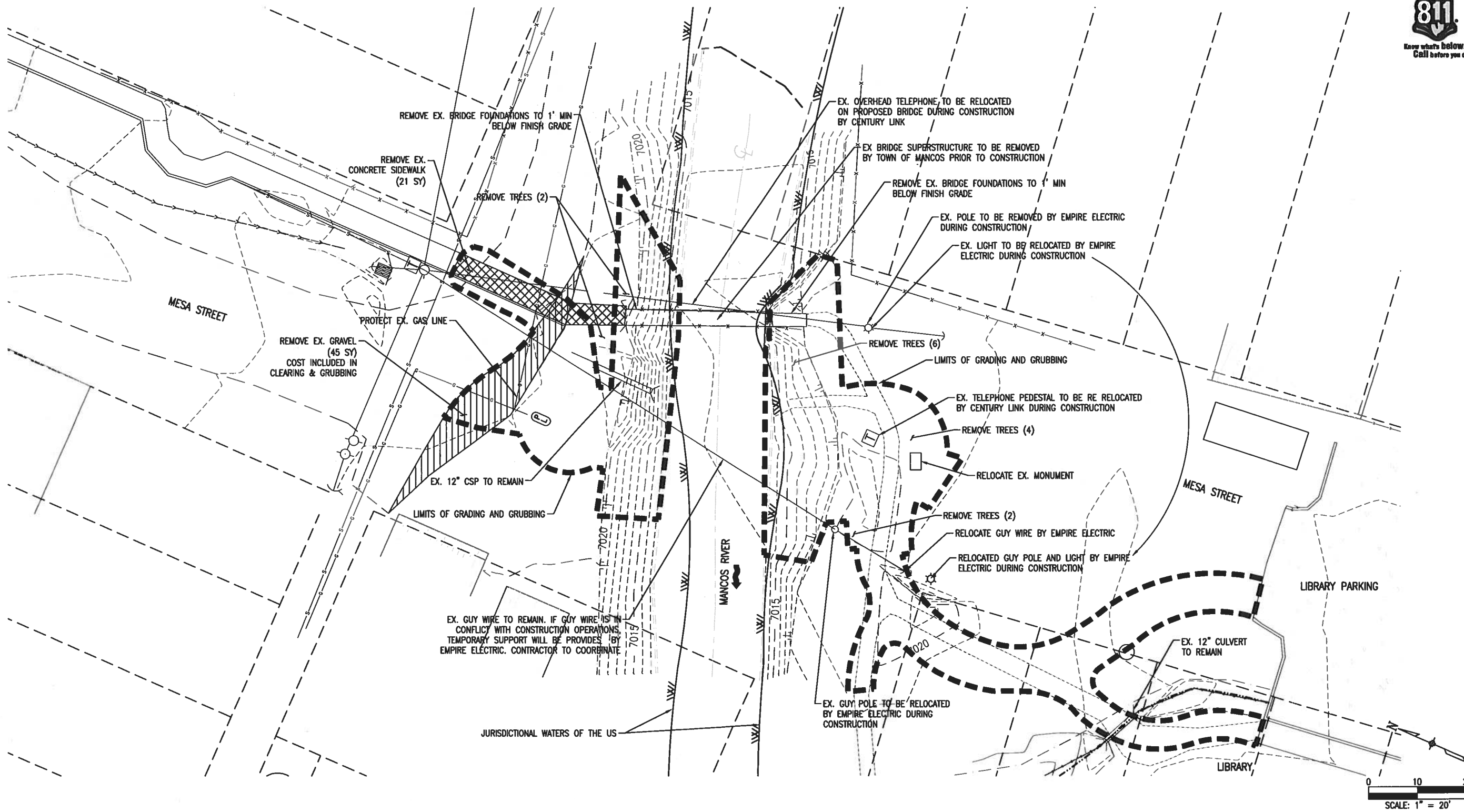
Structure Numbers
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Project No./Code

STE M840-001

18306

Sheet Number 10



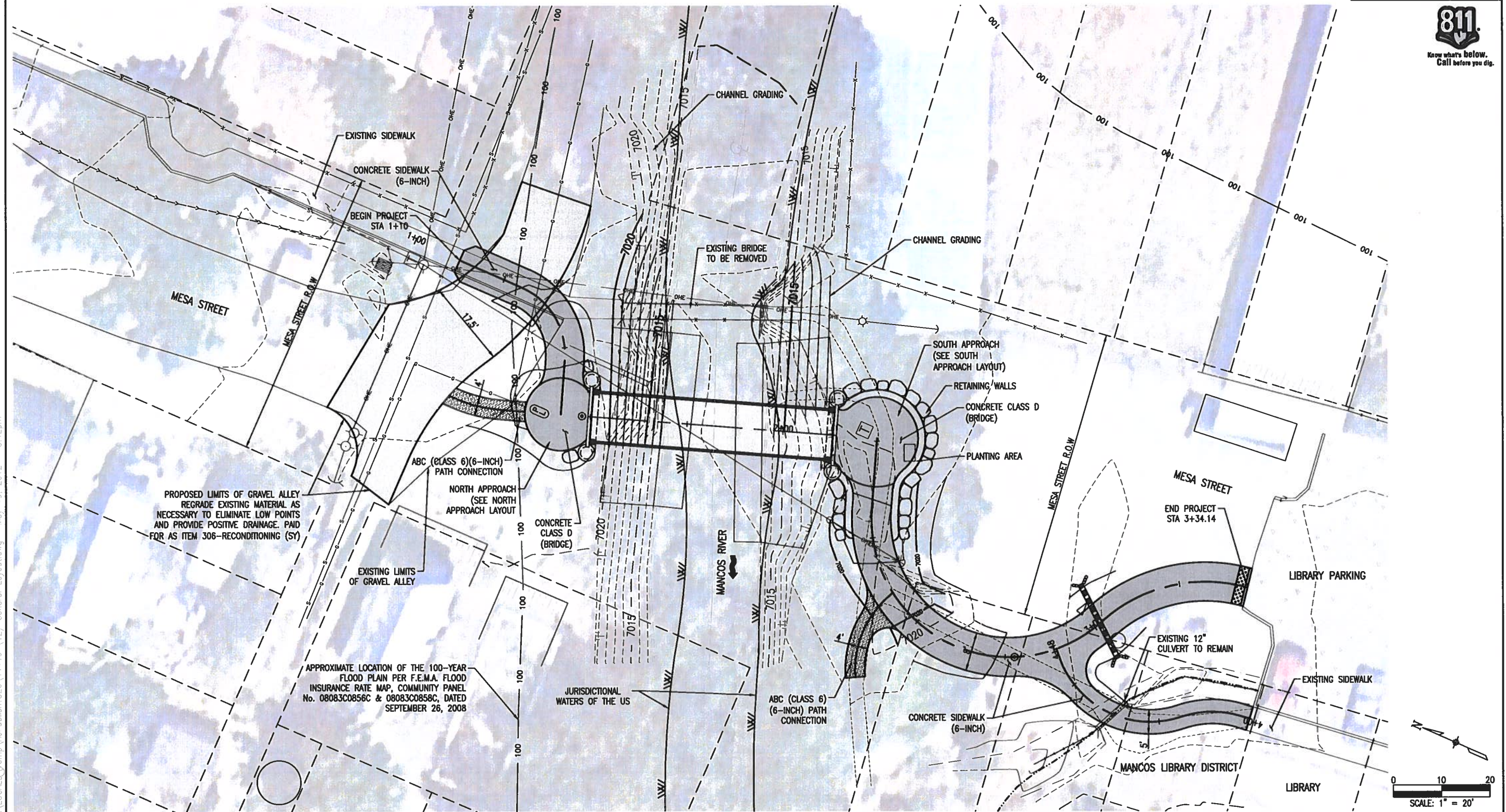
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Unit Information	Unit Leader Initials

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Date:	Comments	Init.

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No Revisions:		Designer: SJB		STE M840-001
Revised:		Detailer: BAO		18306
Void:		Sheet Subset: RR-01		Sheet Number 11
		Structure Numbers		
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2012-05-11



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Unit Information	Unit Leader Initials

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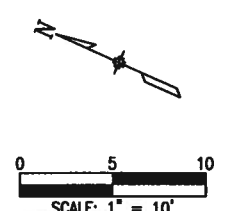
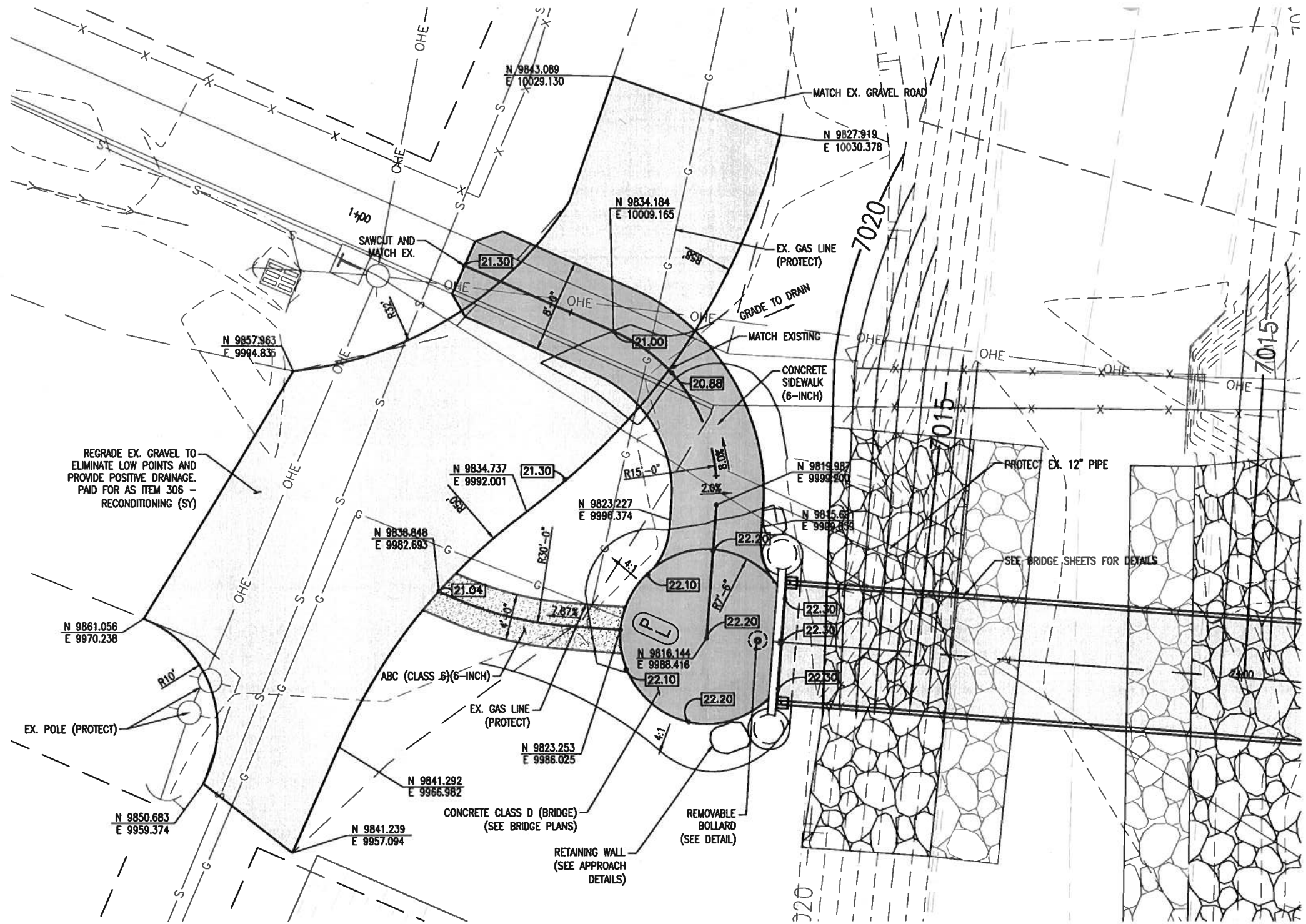
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Fax: (303) 383-6381
Region 5
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No Revisions:	Designer:	SJB	Structure
Revised:	Detailer:	BAO	Numbers
Void:	Sheet Subset:	GL-01	Subset Sheets: 1

Project No./Code	STE M840-001
18306	
Sheet Number	12

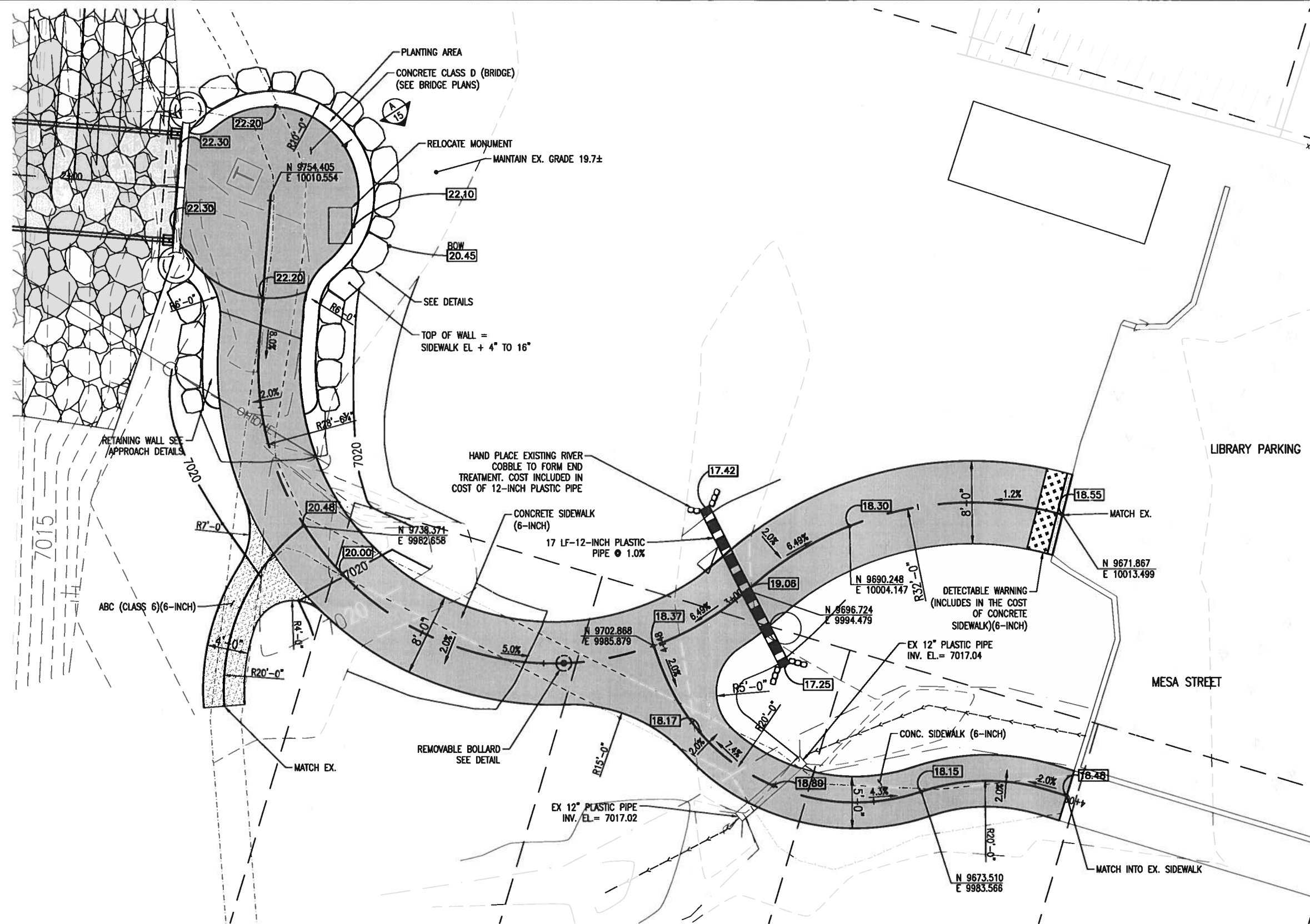


Print Date:		Sheet Revisions				 Loria and Associates, Inc. 5886 Trail Ridge Drive East Lafayette, Colorado 80088 808.444.2078 www.LoriaandAssociates.com	 Mancos Colorado "Gateway to the Four Corners"	 Colorado Department of Transportation 3833 N. High Ave., #200 Durango, CO 81301 Phone: (970) 385-1402 Fax: (970) 385-8381 District 5 DAE	As Constructed		MESA STREET PEDESTRIAN BRIDGE REPLACEMENT NORTH APPROACH LAYOUT			Project No./Code	
File Name:		Date:	Comments	Init.	No Revisions:							STE M840-001			
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Unit Information		Unit Leader Initials	<input type="text"/>						Void:		Detailer:	BAO	Numbers		
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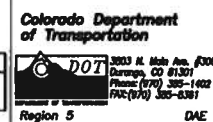
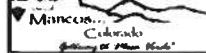


**Know what's below.
Call before you dig.**



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Unit Information	Unit Leader Initials

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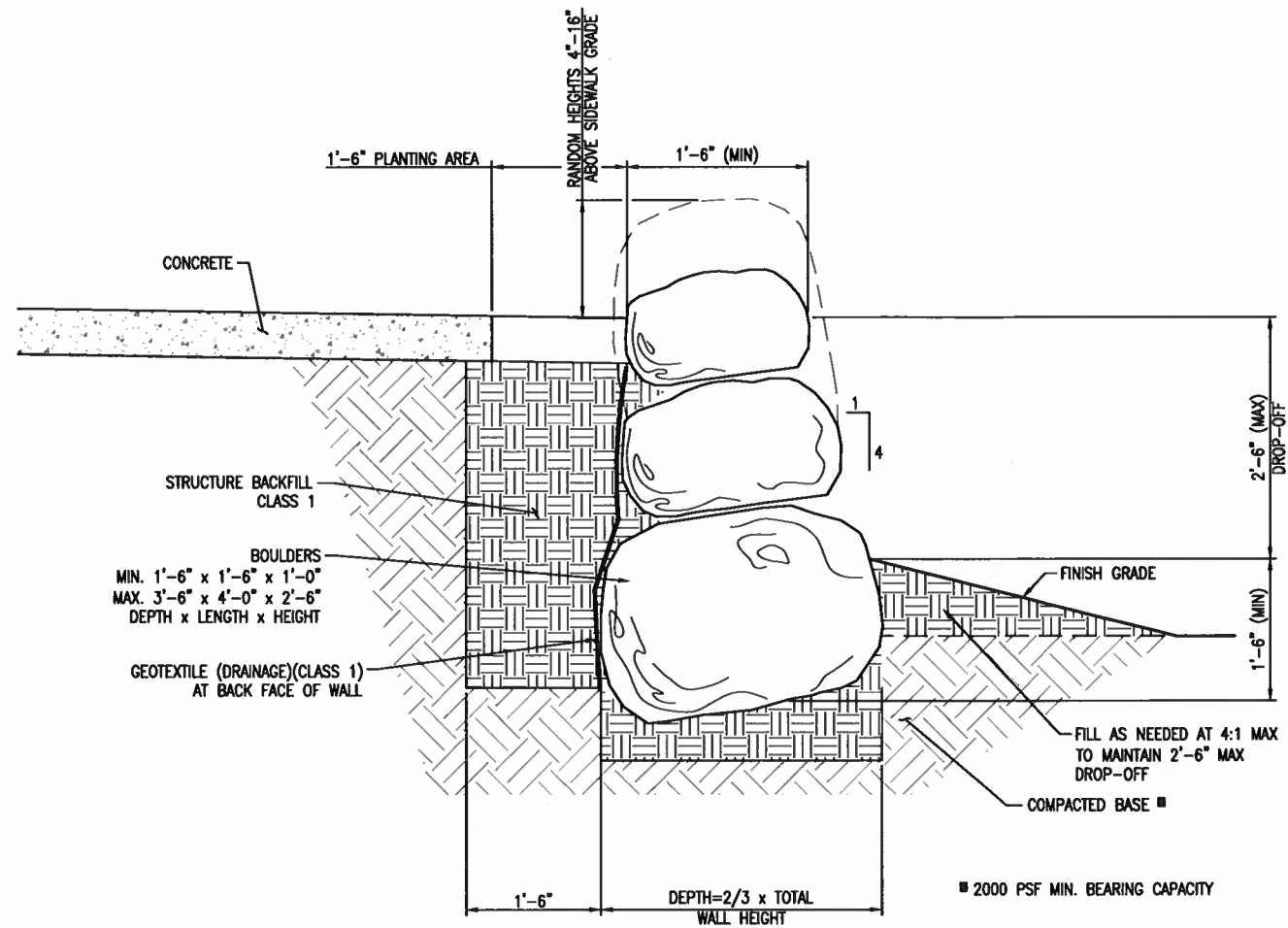
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STE M840-001

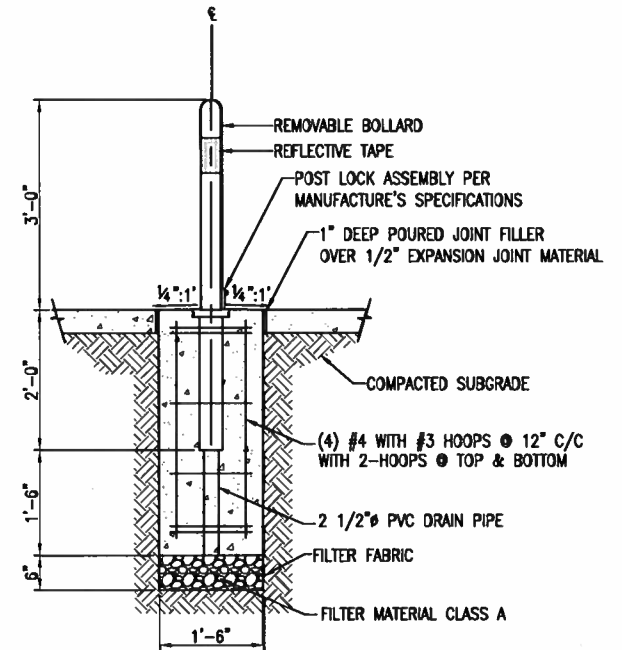
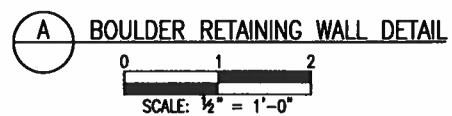
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Sheet Number 14



BOULDER RETAINING WALL NOTES:

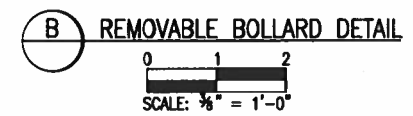
1. SEE REVISION OF SECTION 504 - BOULDER RETAINING WALL FOR SPECIFICATIONS
2. SPECIFIC GRAVITY OF ROCK SHALL BE A MINIMUM OF 2.5.
3. BOTTOM ROCK FOR WALLS SHALL BE A MINIMUM OF 2'-0" IN DEPTH.



NOTE:
COST FOR ALL WORK AND MATERIALS FOR REMOVABLE BOLLARD, INCLUDING BOLLARD ASSEMBLY, CONCRETE FOUNDATION, FILTER MATERIAL, REINFORCING AND JOINT TO BE INCLUDED IN THE COST OF ITEM 622-REMOVABLE BOLLARD

SHALL BE:

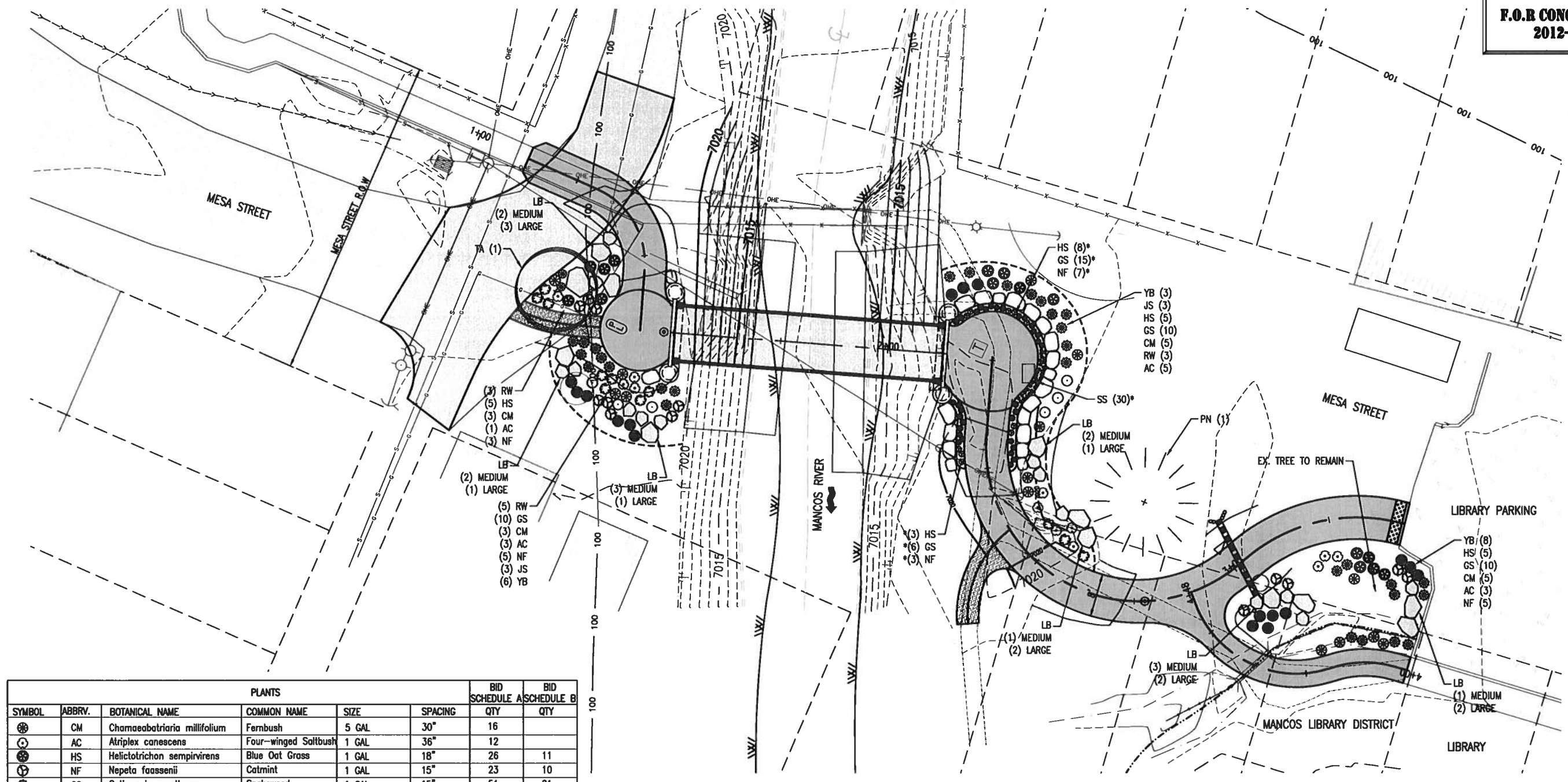
- ♦ TRAFFICGUARD® ROUND POST LOCK (36")
- ♦ LOCKING DETE-A-POST™ (4536 PL)
- ♦ MAXIFORCE MRSW-SS3-V (YELLOW)



Print Date:	Sheet Revisions			 2885 Trail Ridge Drive East Lafayette, Colorado 80026 808.444.8078 www.LorisandAssociates.com	 Manitou Colorado "Following the Yellow Road"	 Colorado Department of Transportation 3003 N. Meade Ave., #206 Denver, CO 80202 Phone: (303) 385-1400 Fax: (303) 385-0381 Region 5 DAE	As Constructed	MESA STREET PEDESTRIAN BRIDGE REPLACEMENT			Project No./Code	
File Name:	Date:	Comments	Init.				No Revisions:	APPROACH DETAILS			STE M840-001	
Horiz. Scale: Vert. Scale: As Noted							Revised:	Designer: BAO	Structure		18306	
Unit Information Unit Leader Initials							Void:	Detailer: BAO	Numbers		Sheet Number	
								Sheet Subset: PL-03	Subset Sheets:	3	15	

Manco... 111119 - Mesa St. Pedestrian Bridge Replacement\50 DWG\111119-(16-17)-Landscape Plan.dwg May 10, 2012 - 3:42pm

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2012-05-11

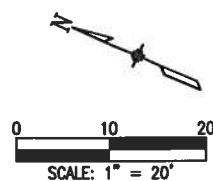


PLANTS						BID SCHEDULE A	BID SCHEDULE B
SYMBOL	ABBREV.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY	QTY
⊗	CM	Chamaebatraria millifolium	Fernbush	5 GAL	30"	16	
⊗	AC	Atriplex canescens	Four-winged Saltbush	1 GAL	36"	12	
⊗	HS	Helictotrichon sempervirens	Blue Oat Grass	1 GAL	18"	26	11
⊗	NF	Nepeta faassenii	Catmint	1 GAL	15"	23	10
⊗	GS	Gutierrezia sarothrae	Snakeweed	1 GAL	15"	51	21
⊗	JS	Juniperus scopulorum	Rocky Mtn Juniper	5 GAL	N.A.	6	
⊗	RW	Rosa	Woods Rose	5 GAL	24"	11	
⊗	YB	Yucca bacatta	Banana Yucca	5 GAL	18"	17	
⊗	SS	Sedum sprium	Stonecrop	3" POT	N.A.	30	30
⊗	TA	Tilia Americana	American Linden	3" CAL. B&B	N.A.	1	
⊗	PN	Pinus Nigra	Austrian Pine	9-10' B&B	N.A.	1	

----- STRIPSTONE LANDSCAPE BORDER: RED SANDSTONE, 4"x4" RANDOM LENGTH. LAY END TO END, SET HEIGHT 1" ABOVE FINISH GRADE

⊗ LANDSCAPE BOULDERS (LB)

* INCLUDED IN BID SCHEDULE B



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Unit Information	Unit Leader Initials				Void:		Detailer: LX		Sheet Number 16		
						Sheet Subset: LS-01		Subset Sheets: 2			

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2012-05-11



I. GRADING & DRAINAGE

1. REFER TO APPROACH LAYOUT SHEETS FOR DRAINAGE & PRECISE GRADING.

2. ALL REQUIRED FILL SHALL BE COMPACTED PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS TO PREVENT FUTURE SETTLING & MAINTAIN STRUCTURAL STABILITY. ALL IMPORT FILL SHOULD BE FREE FROM NOXIOUS WEEDS & CHEMICAL CONTAMINATES & SHALL BE TESTED FOR AGRICULTURAL STABILITY PRIOR TO DELIVERY TO SITE.

3. THE CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY EXISTING CONDITIONS & GRADES IN THE FIELD.

4. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS & ELEVATIONS PRIOR TO COMMENCEMENT OF WORK.

5. ANY CONFLICTS BETWEEN SITE CONDITIONS & THE PLANS SHALL BE RESOLVED, PRIOR TO CONSTRUCTION.

6. ALL AREAS TO RECEIVE PLANTING SHALL BE ROUGH SHAPED TO ELEVATIONS SHOWN ON PLANS & DETAILS PRIOR TO COMMENCEMENT OF ANY PLANTING WORK UNDER THIS CONTRACT. CONTRACTOR WILL BE REQUIRED TO PERFORM FINISH GRADING FOR PROPER ROCK PLACEMENT, MOUNDING OR REPAIR WORK RESULTING FROM WORK PERFORMED UNDER THIS CONTRACT.

7. CONTRACTOR TO BRING ANY GRADING DISCREPANCIES TO THE ATTENTION OF THE PROJECT MANAGER FOR A DECISION PRIOR TO PROCEEDING.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING & PROPER SURFACE DRAINAGE IN ALL AREAS. FINE GRADING SHALL BE COMPLETED AS INDICATED BY CONTOURS & SPOT ELEVATIONS. PROPOSED ELEVATIONS SHOWN ARE FINISHED (COMPACTED) GRADE.

9. ALL EXISTING DRAINAGE STRUCTURES SHALL BE PROTECTED & MAINTAINED DURING CONSTRUCTION.

10. DRAINAGE IN PLANTED AREAS WILL BE DIRECTED TO SWALES OR AREA DRAINS AT 2% MINIMUM.

11. ALL DISTURBED AREAS WILL BE RE-VEGETATED.

II. PLANTING

1. SCOPE OF WORK: FURNISH ALL MATERIALS, LABOR, EQUIPMENT, & THE PERFORMANCE OF ALL OPERATIONS NECESSARY TO COMPLETE THE PLANTING OF PERENNIALS, GROUND COVERS, & EROSION CONTROL. SUBSTITUTIONS OF MATERIALS WILL BE ACCEPTED ONLY IF THE CONTRACTOR CAN SHOW EVIDENCE THAT SPECIFIED MATERIAL IS UNAVAILABLE.

2 ALL PLANTING SHALL BE DONE BY PERSONS FAMILIAR W/ THIS WORK & UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN OR LANDSCAPE CONTRACTOR.

3. ALL PLANT MATERIAL SHALL BE INSPECTED & APPROVED BY THE PROJECT MANAGER UPON DELIVERY TO THE SITE. (ANY & ALL SUBSTITUTIONS TO BE APPROVED BY THE PROJECT MANAGER). UPON DELIVERY TO THE SITE, PLANTS SHALL BE KEPT IN A SECURE AREA, THEN PLANTED AS SOON AS POSSIBLE, & PROTECTED FROM EXCESSIVE SUN OR DRYING WINDS. CERTIFICATES OF INSPECTIONS: INSPECTION CERTIFICATES MUST ACCOMPANY THE INVOICE FOR EACH SHIPMENT OR ORDER OF STOCK, AS REQUIRED BY LAW FOR THE NECESSARY TRANSPORTATION, & SUCH CERTIFICATES MUST BE FILED W/ THE CONTRACTOR PRIOR TO ACCEPTANCE OF THE MATERIALS. ALL MATERIAL WILL COMPLY W/ THE AMERICAN STANDARD FOR NURSERY STOCK AND COMPLY WITH CDOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

4. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY IRRIGATION OF ALL EXISTING & PROPOSED PLANTINGS IN AREAS SHOWN ON THE PLANS DURING THE ENTIRE DURATION OF CONSTRUCTION. THE TOWN OF ERIE WILL BEGIN IRRIGATION AFTER PROJECT ACCEPTANCE UNTIL PLANTINGS ARE ESTABLISHED.

5. PLANTING MATERIAL SHALL BE INSPECTED ON SITE BY THE PROJECT MANAGER & ANY UNACCEPTABLE STOCK SHALL BE IMMEDIATELY REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

6. PRUNING: AFTER PLANTING, PRUNE PLANTS OF SUPERFLUOUS GROWTH.

7. CONTRACTOR SHALL ARRANGE WITH THE TOWN OF MANCOS TO MAINTAIN PLANTS AND SEEDED PLANTING AREAS.

III. RESEEDING OPERATIONS/CORRECTIVE STABILIZATION

1. PRIOR TO FINAL ACCEPTANCE

A. FINAL ACCEPTANCE SHALL BE IN ACCORDANCE WITH SUBSECTION 208.061 OF THE CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

1. BMP MAINTENANCE SHALL BE INCLUDED IN THE COST OF THE EROSION CONTROL DEVICE.

B. SOIL CONDITIONING AND FERTILIZER REQUIREMENTS:

1. AMEND TOP SOIL WITH SOIL CONDITIONING AS PER SECTION 212 OF THE CDOT

C. SEEDING APPLICATION: DRILL SEED 0.25 INCH TO 0.5 INCH INTO THE SOIL. IN SMALL AREAS NOT ACCESSIBLE TO A DRILL, HAND BROADCAST AT DOUBLE THE RATE AND RAKE 0.25 INCH TO 0.5 INCH INTO THE SOIL.

D. MULCHING APPLICATION: MULCHING SHALL BE AS REQUIRED BY THE STANDARDS AND PROJECT SPECIAL PROVISIONS.

IV. CEDAR MULCH

1.QUALITY ASSURANCE:

A. INSTALLER TO PROVIDE SMALL BAG SAMPLE OF CEDAR MULCH TO PROJECT MANAGER FOR APPROVAL

2. MATERIALS

A. CEDAR MULCH (ALSO KNOWN AS "GORILLA HAIR") SHALL BE RED TO REDDISH BROWN IN COLOR AND SHREDDED TO A PARTICLE SIZE OF 1/2-INCH TO 6 INCHES.

3. INSTALLATION:

A. CEDAR MULCH SHALL BE PLACED TO PROVIDE A DEPTH OF 4-INCHES UNIFORMLY APPLIED TO ALL PLANTING AREAS AS SHOWN IN THE PLANS OR DIRECTED. CEDAR MULCH SHALL ALSO BE PLACED IN ALL TREE AND SHRUB SAUCERS IN SEEDED AREAS. CEDAR MULCH SHALL BE MATTED TOGETHER TO RESIST SCATTERING BY WIND.

V. LANDSCAPE BOULDERS

1.QUALITY ASSURANCE:

A. INSTALLER TO CONTACT PROJECT MANAGER FOR APPROVAL OF LANDSCAPE BOULDERS PURCHASE AND PLACEMENT PRIOR TO INSTALL. SCHEDULE TO BE ARRANGED AT LEAST TWO WEEKS PRIOR TO DELIVERY. IF NECESSARY, PROJECT MANAGER WILL ASSIST IN BOULDER SELECTION FROM SUPPLIER, PRIOR ARRANGEMENTS MUST BE MADE IN ADVANCE.

2.MATERIALS:

A. LANDSCAPE BOULDERS TO MATCH BOULDER RETAINING WALL MATERIAL. CONFIRM MATERIAL SELECTION WITH PROJECT MANAGER PRIOR TO PURCHASE. BOULDERS SHALL BE CLEAN, SIZE AS PER LANDSCAPE PLAN LEGEND. STONE MUST BE FREE OF SOIL OR MAN-MADE DEBRIS AND SHALL BE OF GOOD QUALITY. PLACEMENT IS PER LANDSCAPE PLAN.

NATIVE MIXED GRASS SEED MIX

m	BOTANICAL NAME	VARIETY	POUNDS PER/ACRE	SUGGESTIONS
Sideoats Grama	Bouteloua curtipedula	Butte	4.8000	1 Acre = 43560 sq. ft. Divide this per acre seed quantity by 20 to 40 for each 1000 sq. ft. to be seeded.
Buffalo Grass	Buchloe dactyloides	Texoca	5.000000	
Blue Grama	Bouteloua gracilis	Hachita	4.5000	
Switchgrass	Panicum virgatum	Blackwell	2.00	
Western Wheatgrass	Pascopyrum smithii	Ariba	3.000000	
Little bluestem	Schyzachrium scoparium	Postura	2.000000	
Sand Dropseed	Sporobolus cryptandrus	native	0.5000	
Green needlegrass	Stipa viridula	native	1.5000	
TOTAL LBS/PER ACRE			23.3000	

Print Date:

File Name:

Horiz. Scale:

Vert. Scale: As Noted

Unit Information

Unit Leader Initials

Sheet Revisions

Date:

Comments

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of Transportation



As Constructed

MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
LANDSCAPE NOTES

Project No./Code

STE M840-001

No Revisions:

Revised:

Void:

Designer:

SJB

Detailer:

LX

Sheet Subset:

LS-02

Structure

Numbers

Subset Sheets:

2

Sheet Number

17

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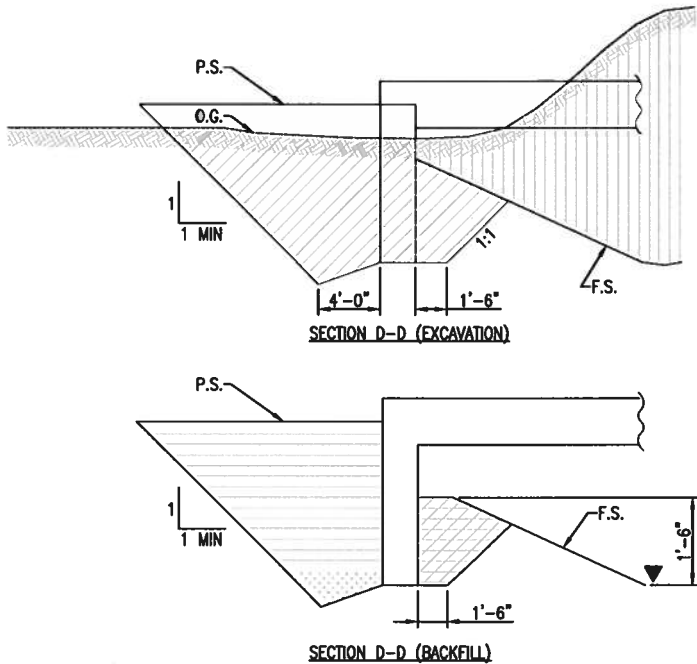
SUMMARY OF QUANTITIES			
CONTRACT ITEM NO.	CONTRACT ITEM DESCRIPTION	UNIT	BRIDGE
206	STRUCTURE EXCAVATION	CY	62
206	STRUCTURE BACKFILL (CLASS 1)	CY	38
503	DRILLED CAISSON (24-INCH)	LF	64
506	RIPRAP (12-INCH)	CY	115
601	CONCRETE CLASS D (BRIDGE)	CY	31
601	MASONRY VENEER	SF	217
602	REINFORCING STEEL (EPOXY COATED)	LB	3243
628	BRIDGE GIRDER & DECK UNIT (50' FOOT)	EA	1

BRIDGE DESIGN INFORMATION	
OVERALL LENGTH ■	50'-0"
CLEAR WIDTH	10'-0"
CORROSION PROTECTION	WEATHERING STEEL
CAMBER	2%
LIVE LOAD	AASHTO*
VEHICLE LOAD	AASHTO*
WIND LOAD	AASHTO*
SEISMIC ZONE	1
RUB RAILS	TIMBER
TOE PLATE	STEEL
RAIL HEIGHT	3'-6" MIN
DECKING	TIMBER
TRUSS TYPE*	U-TYPE
STEP ▼	10½" MAX
BREAKAWAY DEVICE	NO
CLOSURE PLATE	YES

* AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

■ MEASURED AT CENTERLINE OF STRUCTURE

▼ MEASURED FROM TOP OF DECK TO BEARING SURFACE. COORDINATE FINAL DIMENSION WITH BRIDGE SHOP DRAWINGS



LEGEND

- ROADWAY EXCAVATION
- STRUCTURE EXCAVATION
- STRUCTURE BACKFILL (CLASS 1)
- FILTER MATERIAL

ABBREVIATIONS

O.G. ORIGINAL GROUND
P.S. PLANNED SUBGRADE
F.S. PLANNED FINISHED SURFACE

* = MINIMUM BERM DIMENSION.
▼ = MINIMUM EMBEDMENT, OF ABUT., IN STRUCTURE BACKFILL.

FILTER MATERIAL SHALL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF STRUCTURE BACKFILL

ABUTMENT EXCAVATION / BACKFILL
N.T.S.

STRUCTURAL NOTES:

A. DESIGN DATA:

- AASHTO GUIDE SPECIFICATION FOR DESIGN OF PEDESTRIAN BRIDGES AND DIVISION 1 (DESIGN) OF THE AASHTO LRFD SPECIFICATIONS FOR BRIDGES 2009.
- DESIGN METHOD: LRFD
- LIVE LOAD: PEDESTRIAN LOAD - 85 PSF
TRUCK LOAD - H5=10,000 LB.
- CLASS D CONCRETE - $F'_c=4500$ PSI AT 28 DAYS (SUBSTRUCTURES)
- CLASS BZ CONCRETE - $F'_c=4000$ PSI AT 28 DAYS (CAISSONS)
- REINFORCING STEEL - $f_y=60,000$ PSI

B. PRE-ENGINEERED BRIDGE:

- THE PRE-ENGINEERED BRIDGES SHALL BE PURCHASED BY AND DELIVERED TO THE SITE BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTION AND PLACEMENT OF THE BRIDGES.
- REFER TO BRIDGE DESCRIPTION TABLE (THIS PAGE) FOR EACH OF THE BRIDGE'S DESIGN INFORMATION.
- ANCHOR BOLTS FOR BRIDGES SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
- THE ABUTMENT DIMENSION DEPICTED AS "STEP" IS DEFINED AS THE DISTANCE FROM FINISHED DECK SURFACE TO CONCRETE BEARING SEAT ELEVATION. ANY CHANGE TO THE STEP DIMENSION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL, PRIOR TO CONSTRUCTION.

C. CONCRETE NOTES:

- HOT WEATHER AND COLD WEATHER CONCRETING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH CDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" SECTION 601.
- ALL REINFORCING STEEL SHALL BE EPOXY COATED.

THE FOLLOWING TABLE GIVES THE MINIMUM EPOXY COATED REINFORCING BAR LAP SPLICE LENGTH FOR CLASS D SPLICES:

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
CONCRETE CLASS D:	1'-3"	1'-6"	1'-10"	2'-2"	3'-8"	4'-8"	5'-11"	7'-3"

- STAGGER SPLICES ONE SPLICE LENGTH WHERE POSSIBLE.
- ALL EXPOSED CONCRETE EDGES SHALL HAVE A ¾" CHAMFER, UNLESS DESIGNATED OTHERWISE ON THE PLANS.
- ALL REINFORCING STEEL SHALL HAVE 2" OF COVER, UNLESS DESIGNATED OTHERWISE ON PLANS.
- ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED BEFORE FRESH CONCRETE IS POURED.
- ALL EXPOSED CONCRETE SURFACES SHALL RECEIVE A CLASS 2 FINISH TO A DEPTH OF 1'-0" BELOW FINISHED GRADE. A CLASS 1 FINISH IS REQUIRED AT ALL OTHER LOCATIONS.
- CONCRETE FOR SLOPE AND DITCH PAVING SHALL BE CLASS D CONFORMING TO ACI 350 CODE REQUIREMENTS FOR ENVIRONMENTAL STRUCTURES, AND SHALL BE REINFORCED WITH DEFORMED REINFORCEMENT THAT CONFORMS TO MINIMUM REQUIREMENTS OF TABLE 7.12.2.1.
- THE SULFATE EXPOSURE FOR THIS PROJECT IS CLASS 0.

D. STEEL NOTES:

STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:
COLD FORMED WELDED SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS: ASTM A847 PLATES AND OTHER STRUCTURAL STEEL SHAPES: ASTM A588
ANCHOR BOLTS: ASTM A449.

E. FOUNDATION NOTES:

- EXCAVATION AND FILL: ALL FILL, FROM ON-SITE OR IMPORTED FROM OFF-SITE, SHALL BE TESTED AND APPROVED BY THE OWNER PRIOR TO USE IN EMBANKMENT ON THE PROJECT. THE MATERIAL SHALL CONSIST OF NON-EXPANSIVE, GRANULAR FILL.
- GEOTECHNICAL REPORT: STRUCTURAL FOUNDATION DESIGN FOR THIS PROJECT IS BASED ON THE RECOMMENDATIONS OF A GEOTECHNICAL INVESTIGATION BY TRAUTNER GEOTECH LLC, DATED DECEMBER 15, 2011, PROJECT NO 52614GE. THE CONTRACTOR SHALL BE FAMILIARIZED WITH THE REQUIREMENTS OF THIS REPORT.
- DEWATERING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
- THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION DEWATERING PERMIT FROM THE CDPIE FOR ANY DEWATERING OF GROUNDWATER DURING CONSTRUCTION IN ACCORDANCE WITH WATER QUALITY CONTROL DIVISION (WQCD) REQUIREMENTS. THE CONTRACTOR SHALL APPLY FOR THIS PERMIT AT LEAST 30 DAYS PRIOR TO THE START OF DISCHARGE. THIS SHALL INCLUDE, BUT NOT LIMITED TO ALL TEMPORARY DIVERSIONS AND DEWATERING TO REMOVE EXISTING ABUTMENTS AND CONSTRUCT NEW ABUTMENTS AND SUBSTRUCTURES. ALL COSTS FOR OBTAINING THE PERMIT AND DEWATERING DEVICES SHALL BE INCLUDED IN THE WORK.
- IT IS EXPECTED THAT STEEL CASING OF DRILLED HOLES WILL BE REQUIRED. STEEL CASING, IN ACCORDANCE WITH SECTION 503 WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.

F. UTILITY NOTES:

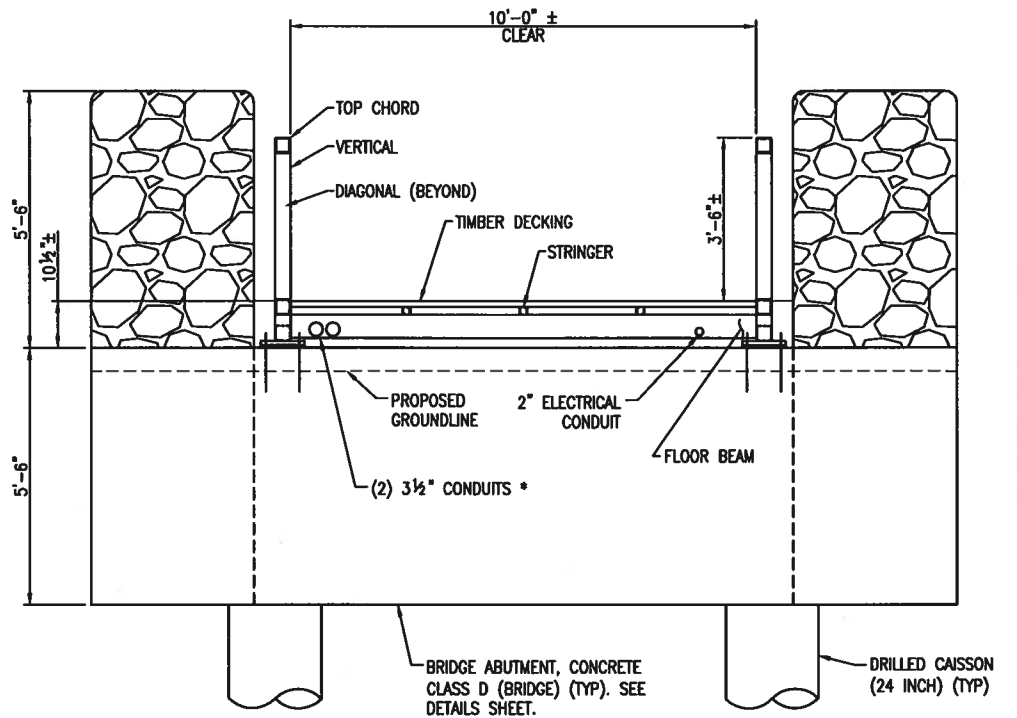
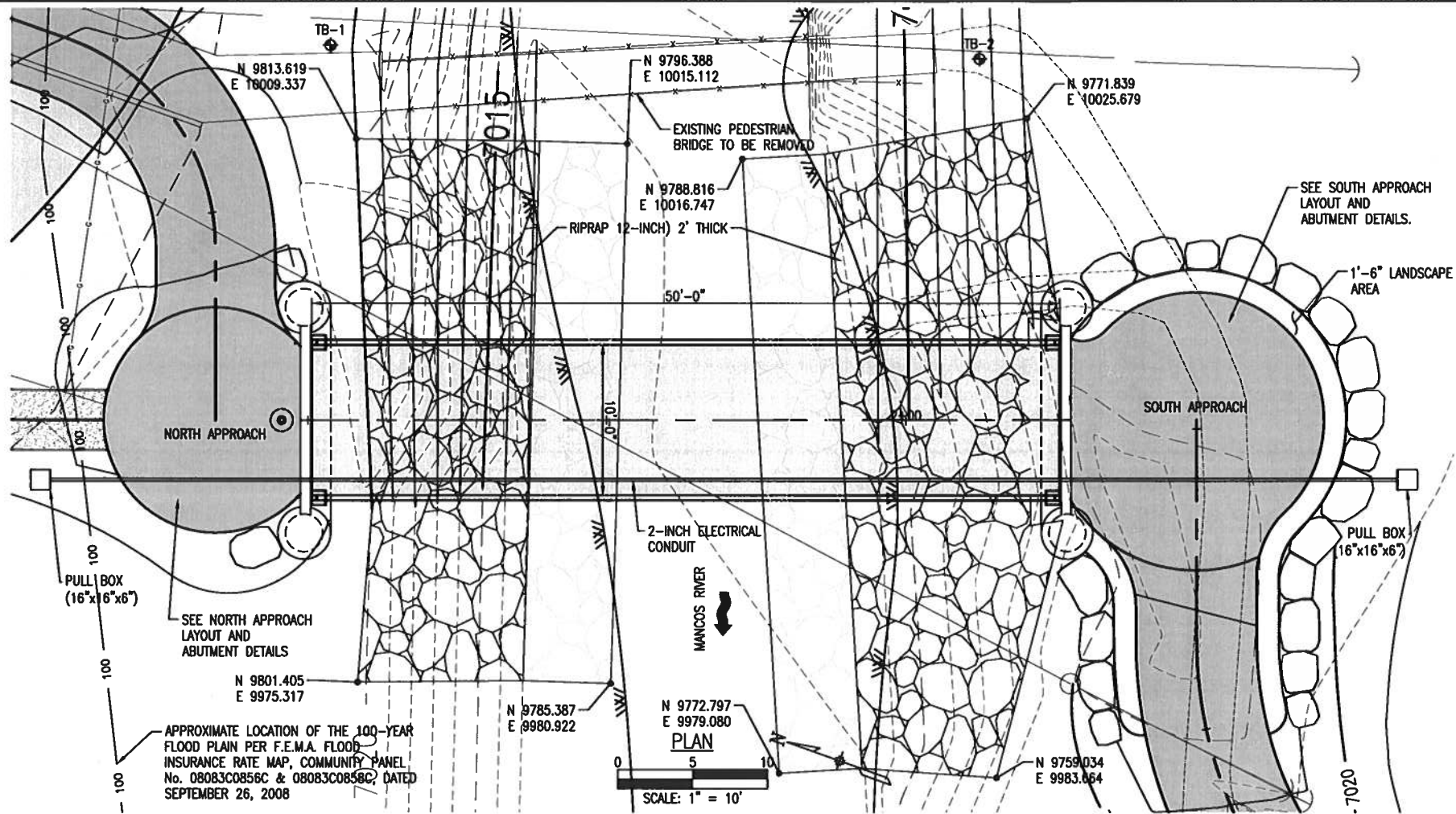
- THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDER GROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL CONTACT UTILITY NOTIFICATION CENTER OF COLORADO AT 811 AT LEAST 2 DAYS (NOT INCLUDING THE DAY OF NOTIFICATION) PRIOR TO ANY EXCAVATION OR OTHER EARTHWORK.

INDEX OF PEDESTRIAN BRIDGE SUBSET SHEETS

SHEET NO	TITLE
BR-01	BRIDGES GENERAL NOTES & SUMMARY OF QUANTITIES
BR-02	BRIDGE GENERAL LAYOUTS
BR-03	ENGINEERING GEOLOGY
BR-04	HYDRAULIC DATA
BR-05	ABUTMENT DETAILS

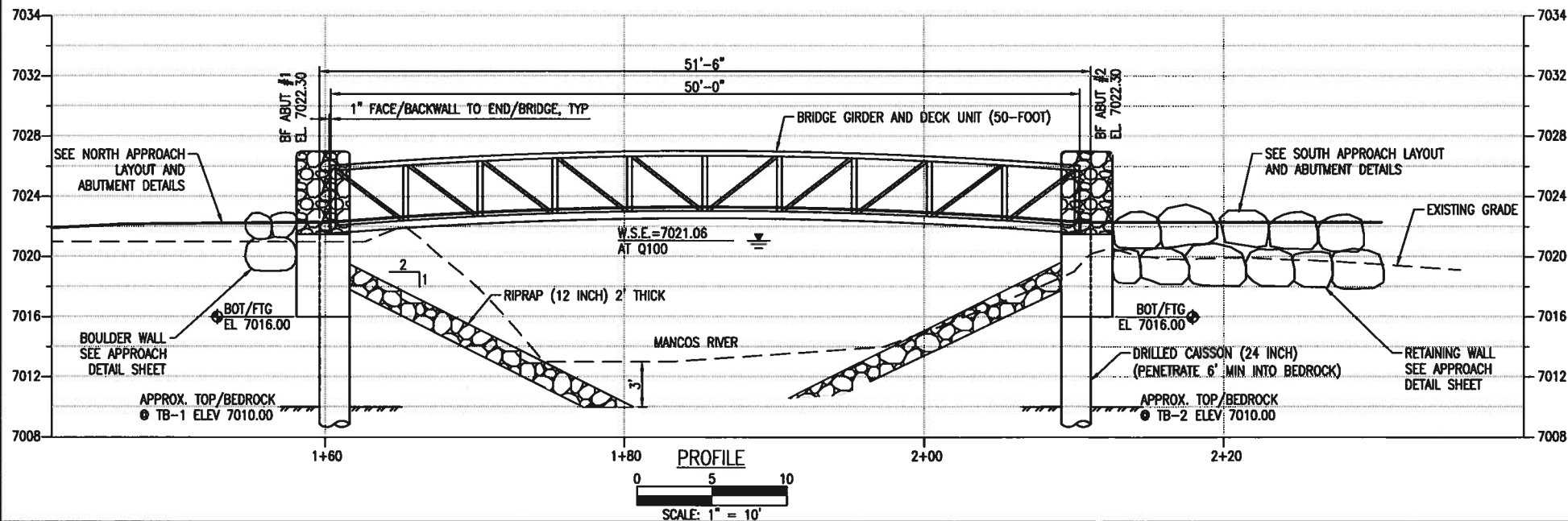
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File Name:	Date:	Comments	Init.			No Revisions:			STE M840-001
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Unit Information	Unit Leader Initials					Void:	Detailer: LX		
							Sheet Subset: BR-01	Subset Sheets: 5	Sheet Number 18



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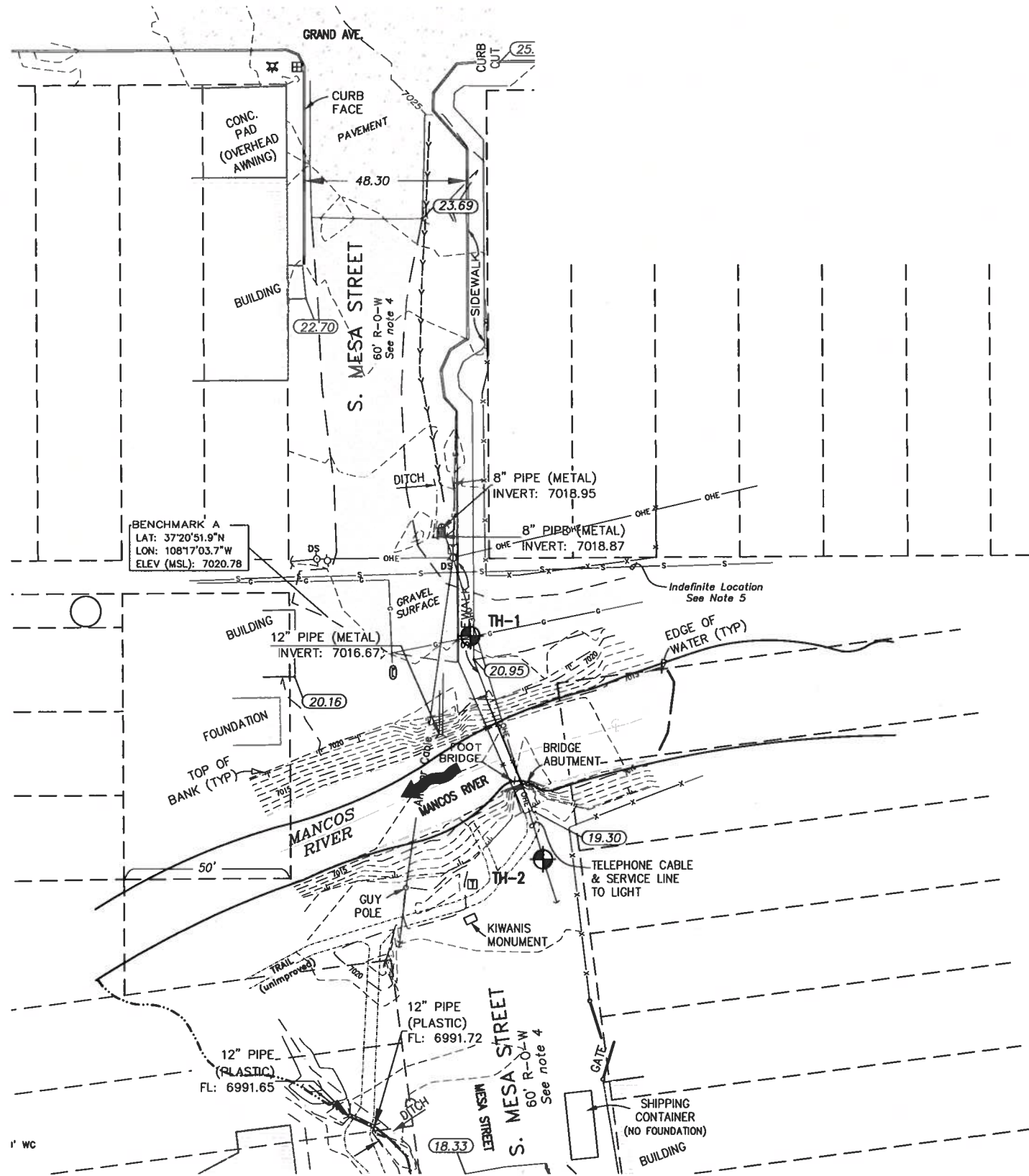
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SCALE: 1/2"=1'

* CONDUIT PROVIDED BY CENTURY LINK AND INSTALLED BY CONTRACTOR. CONTRACTOR TO COORDINATE LOCATION AND INSTALLATION WITH BRIDGE SUPPLIER AND CENTURY LINK



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LOG OF BORING TB-1		Remarks	
Sample Type	Water Level	LOGS	Remarks
Mod. California Sampler	Water Level During Drilling	GP	Water at surface (7) feet
Bag Sample	Water Level After Drilling	GP	Water at surface (7) feet
Standard Split Spoon		GP	Water at surface (7) feet
DESCRIPTION		LOGS	Remarks
GRAVEL SILT, sandy, dense, moist, dark brown		GP	Water at surface (7) feet
GRAVEL COBBLES, slightly clayey, slightly sandy, very dense, slightly moist, brown		GP	Water at surface (7) feet
FORMATIONAL MATERIAL, in eleven (11) feet, Mancos shale, very hard, moist, gray		GP	Water at surface (7) feet
Weathered formation material from surface (18) to depth (18) feet		GP	Water at surface (7) feet
Auger refusal at twenty-one (21) feet		GP	Water at surface (7) feet

LOG OF BORING TB-2		Remarks	
Sample Type	Water Level	LOGS	Remarks
Mod. California Sampler	Water Level During Drilling	GP	Water at surface (7) feet
Bag Sample	Water Level After Drilling	GP	Water at surface (7) feet
Standard Split Spoon		GP	Water at surface (7) feet
DESCRIPTION		LOGS	Remarks
GRAVEL SILT, sandy, medium dense, moist, dark brown		GP	Water at surface (7) feet
GRAVEL COBBLES, slightly clayey, slightly sandy, few boulders, very dense, slightly moist, brown		GP	Water at surface (7) feet
FORMATIONAL MATERIAL, at ten and one-half (10 1/2) feet, Mancos shale, very hard, moist, gray		GP	Water at surface (7) feet
Weathered formation material from surface (19) to depth (19 1/2) feet		GP	Water at surface (7) feet
Bottom of test boring at nineteen and one-half (19 1/2) feet		GP	Water at surface (7) feet

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2012-05-11



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Sheet Revisions

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Region 5 DAE

As Constructed

No Revisions:

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MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
ENGINEERING GEOLOGY

Designer: SJB
Detailer: BAO
Sheet Subset: BR-03
Structure Numbers
Subset Sheets: 5

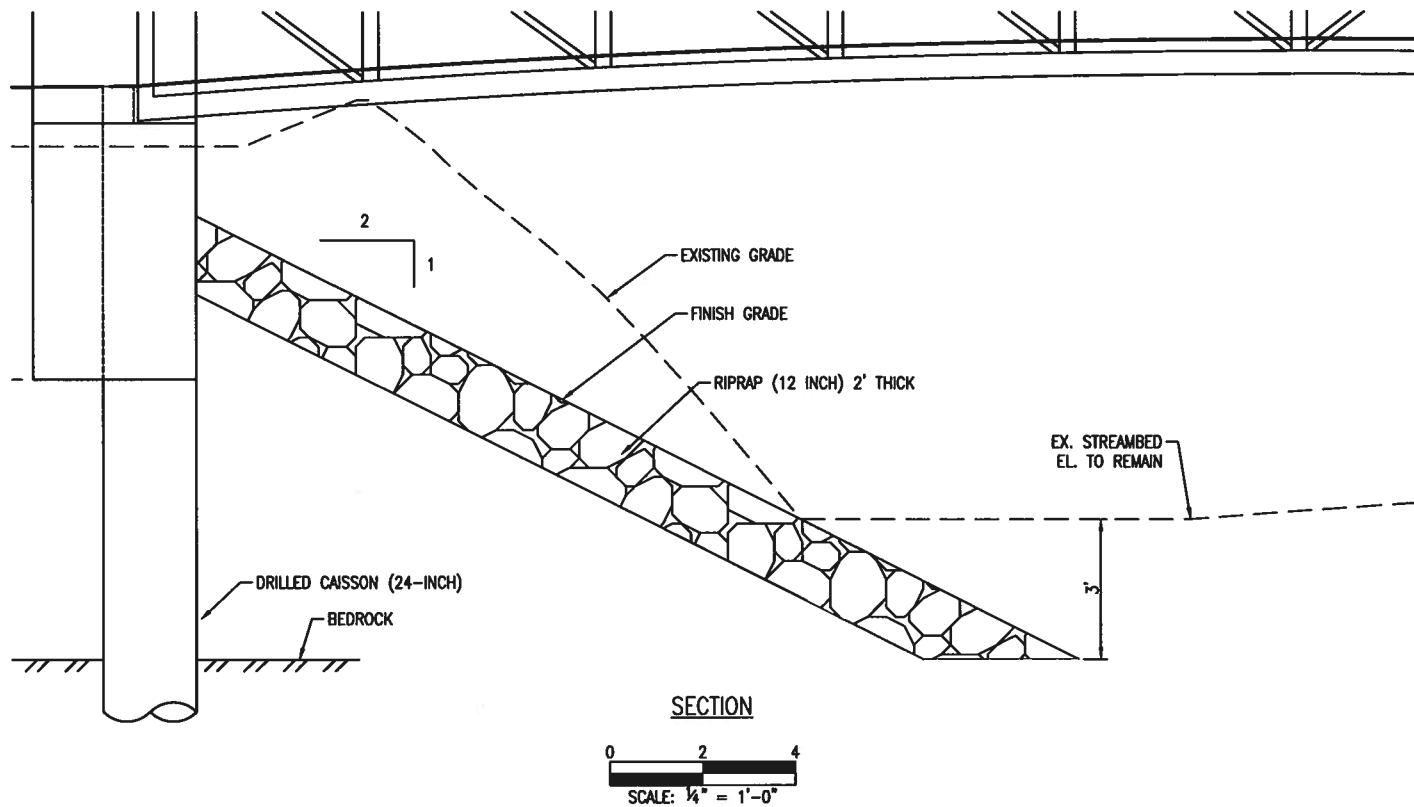
Project No./Code

STE M840-001

18306

Sheet Number 20

G:\7.2 Clients\334 - Mancos\11119 - Mesa St Pedestrian Bridge Replacement\50 DWG\11119-(EP-04) Hydraulic Data.dwg May 10, 2012 - 3:41pm



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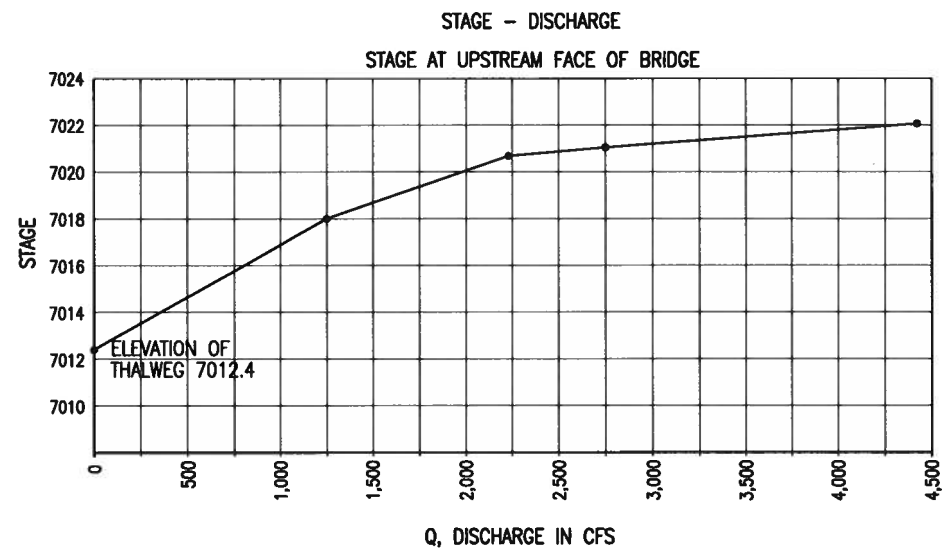
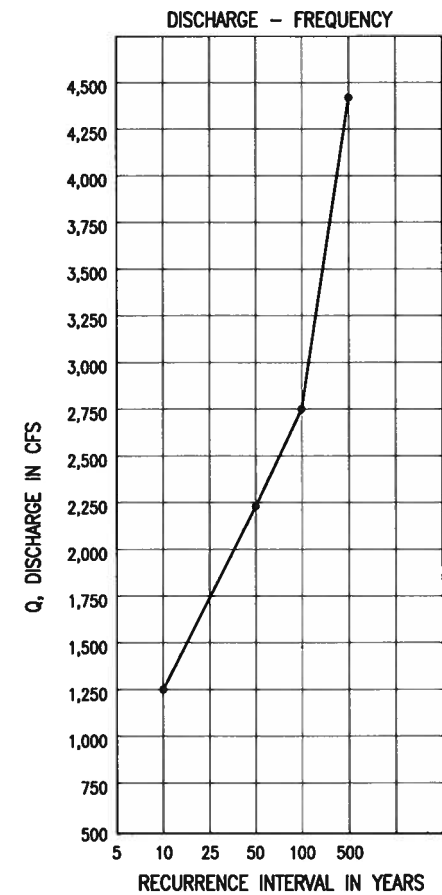
DRAINAGE AREA = 83 SQ MILES
AVERAGE CHANNEL SLOPE = 0.011 FT/FT
MANNING'S 'N' CHANNEL = 0.035 - 0.04
OVERBANK = 0.030 - 0.050
DEBRIS: ☐ BRUSH ☐ LOGS ☐ ICE
DESIGN FLOW = 2750 CFS, 100-YEAR
SOURCE OF HYDROLOGY: FEMA FIS 2008 - MONTEZUMA COUNTY, COLORADO AND UNINCORPORATED AREAS

GEOTECHNICAL DATA:

BOTTOM MATERIAL: ☐ COHESIVE ☐ NON-COHESIVE
BOTTOM MATERIAL PARTICLE SIZE: ☐ CLAY ☐ SILT ☐ SAND
☐ GRAVEL ☐ COBBLES
STREAM PLANFORM: ☐ STRAIGHT ☐ MEANDERING ☐ STRAIGHT
CHANNEL STABILITY: ☐ STABLE ☐ AGGRADING ☐ DEGRADING
ICE: ☐ YES ☐ NO ☐ UNKNOWN

COMPARISON OF HYDRAULICS AT PROPOSED STRUCTURE DURING 100-YEAR EVENT

	VELOCITY	FREEBORD	WSEL
EXISTING	7.4 FPS	N/A	7020.88
PROPOSED	5.9 FPS	1.67'	7021.06



F.O.B CONCURRENCE
2012-05-11



Keep what's below.
Call before you dig.

Print Date:
File Name:
Horiz. Scale: Vert. Scale: As Noted
Unit Information Unit Leader Initials

Sheet Revisions

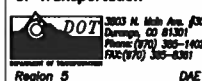
Date: Comments Init.

Loris and Associates, Inc.

2000 Trail Ridge Drive East
Lafayette, Colorado 80026
808.444.8078
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Colorado Department
of Transportation



Region 5 DAE

As Constructed

No Revisions:

Revised:

Void:

MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
HYDRAULIC DATA

Designer: SJB
Detailer: BAO
Sheet Subset: BR-04

Structure
Numbers
Subset Sheets:

Project No./Code

STE M840-001

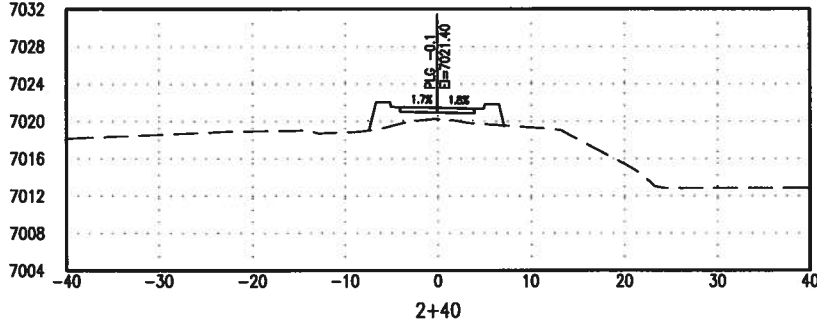
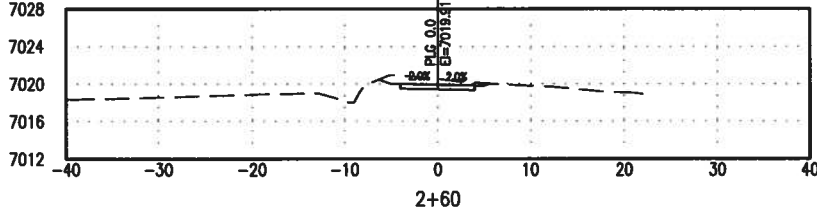
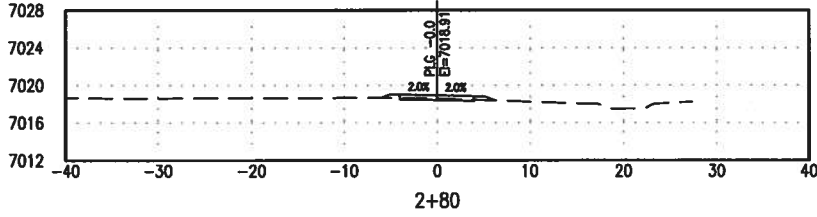
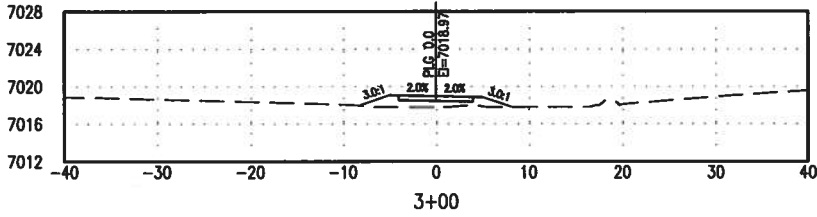
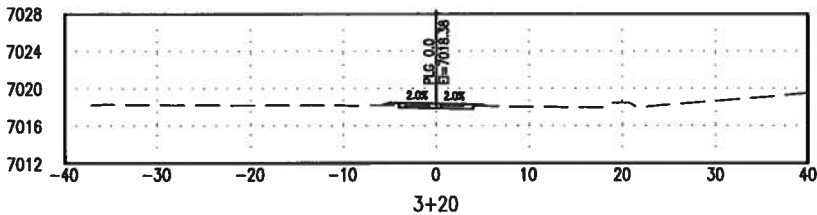
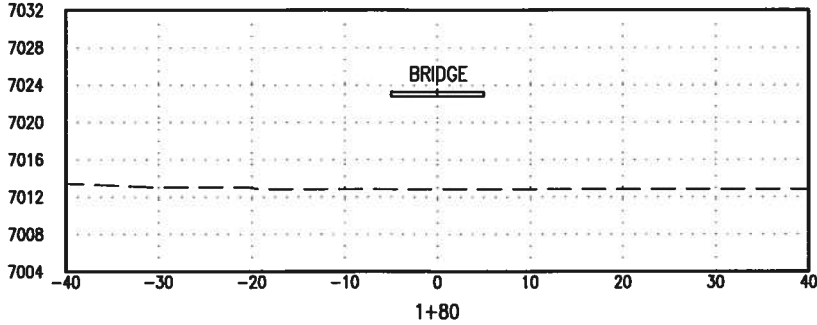
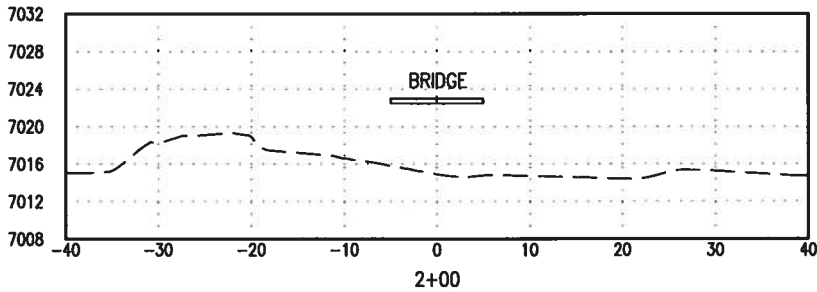
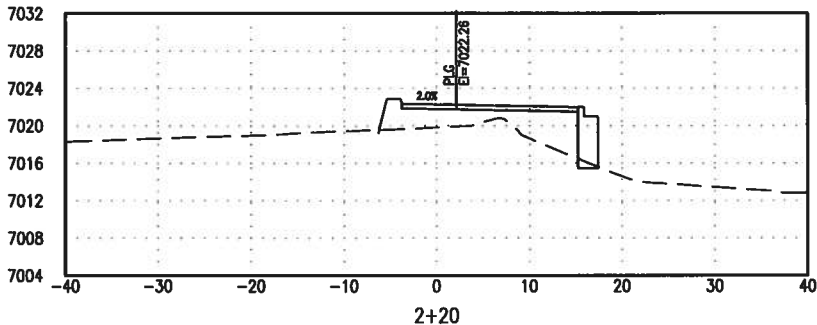
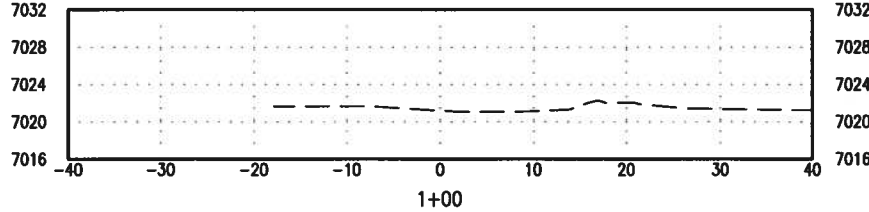
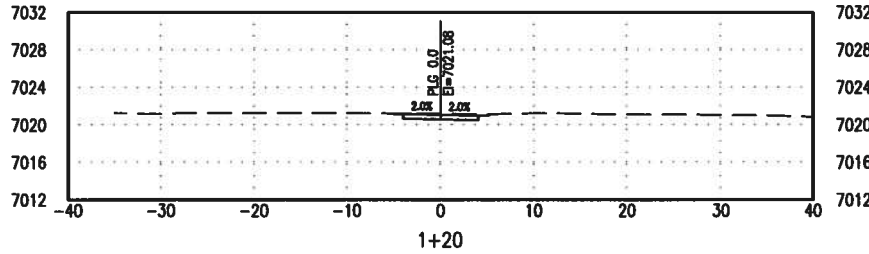
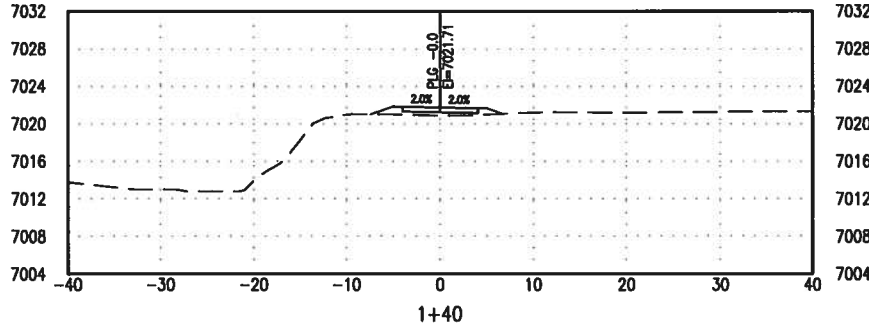
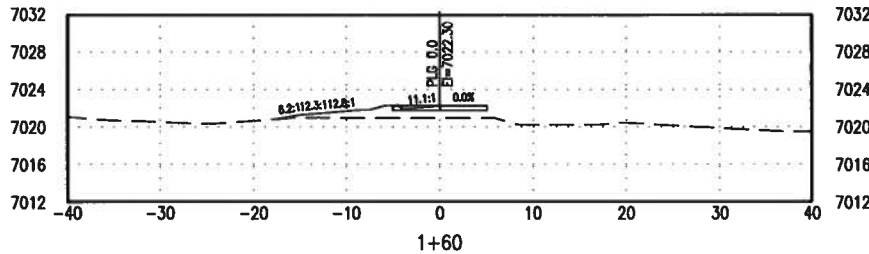
18306

Sheet Number

21

G:\7.2 Clients\334 - Mancos\11119 - Mesa St Pedestrian Bridge Replacement\50 DWG\11119-(23-24)-Cross Sections.dwg May 10, 2012 - 3:41pm

F.O.R CONCURRENCE
2012-05-11



Print Date:	
File Name:	
Horiz. Scale:	Vert. Scale: As Noted
Unit Information	Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

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Region 5
DAE

As Constructed

No Revisions:

Revised:

Void:

MESA STREET PEDESTRIAN BRIDGE REPLACEMENT
CROSS SECTION

Designer:	SJB	Structure	
Detailer:	LX	Numbers	
Sheet Subset:	X-01	Subset Sheets:	2

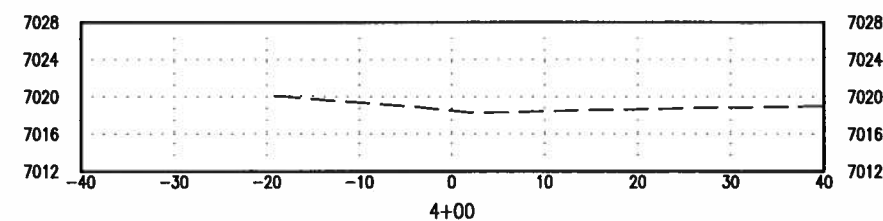
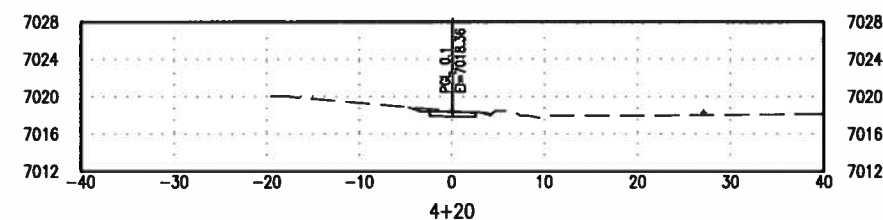
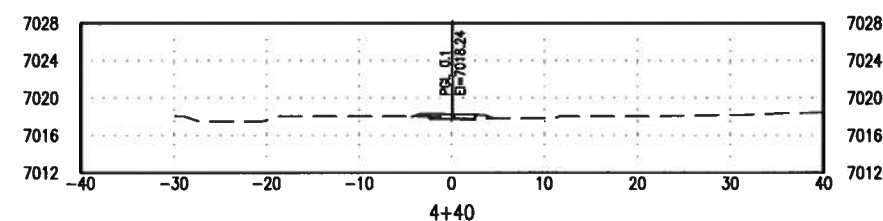
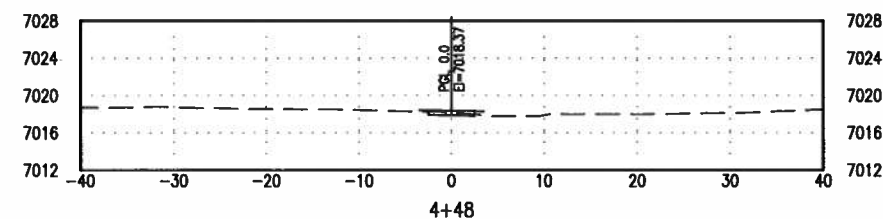
Project No./Code

STE M840-001

18306

Sheet Number 23

F.O.B CONCURRENCE
2012-05-11



G:\72 Cities\334 - Mancos\11119 - Mesa St Pedestrian Bridge.e1ee - (2-24)-Cross Sections.dwg May 10, 2012 - 3:41pm

Print Date:		Sheet Revisions			Loris and Associates, Inc. 3080 Trail Ridge Drive East Lafayette, Colorado 80026 800.444.8078 www.LorisandAssociates.com		Colorado Department of Transportation 3503 N. High Ave., #200 Durango, CO 81301 Phone: (970) 385-1400 Fax: (970) 385-6361 Region 5 DAE	As Constructed		MESA STREET PEDESTRIAN BRIDGE REPLACEMENT CROSS SECTION (LIBRARY CONNECTION)		Project No./Code			
File Name:								No Revisions:		STE M840-001					
Horiz. Scale:		Vert. Scale: As Noted						Revised:		Designer: SJB		Structure		18306	
Unit Information		Unit Leader Initials						Void:		Detailer: LX		Numbers			
										Sheet Subset: X-02		Subset Sheets: 2		Sheet Number 24	