EVANS AVENUE BRIDGE REPLACEMENT
EVANS AVENUE OVER CHEYENNE CREEK
COLORADO SPRINGS, COLORADO

JULY 2015

INDEX OF SHEETS

CONTACT INFORMATION

SERVICE	ENTITY	P.O.C.
CIVIL ENGINEER:	MATRIX DESIGN GROUP, INC. 2435 RESEARCH PARKWAY, SUITE 300 COLORADO SPRINGS, COLORADO 80920	SCOTT BARNHART (719) 575–0100
CITY PROJECT ENGINEERING DIVISION:	CITY OF COLORADO SPRINGS 30 SOUTH NEVADA AVENUE, SUITE 702 COLORADO SPRINGS, COLORADO 80903	ARRON EGBERT (719) 385–5408
TRAFFIC ENGINEERING:	CITY OF COLORADO SPRINGS 30 SOUTH NEVADA AVENUE, SUITE 405 COLORADO SPRINGS, COLORADO 80903	KATHLEEN KRAGER (719) 385–7628
WATER RESOURCES:	WASTEWATER/WATER: CITY OF COLORADO SPRINGS 111 S CASCADE AVENUE, SUITE 201 COLORADO SPRINGS, COLORADO 80903	ADAM BAKER (719) 668–4737
GAS DEPARTMENT:	CITY OF COLORADO SPRINGS 7710 DURANT DRIVE COLORADO SPRINGS, COLORADO 80920	TONY COLVIN (719) 668–5768
ELECTRIC DEPARTMENT:	CITY OF COLORADO SPRINGS 7710 DURANT DRIVE COLORADO SPRINGS, COLORADO 80920	TONY COLVIN (719) 668–5768
COMMUNICATION COMPANY:	CENTURY LINK 5555 TECH CENTER DRIVE COLORADO SPRINGS, COLORADO 80919	SHARON O'BRIEN (541) 852–5095 LOCATORS (800) 922–1987
	A.T.&T.	LOCATORS (800) 635–3674
	COMCAST 3440 ASTROZON PLACE COLORADO SPRINGS, COLORADO 80919	JAMES EDIE (303) 543–9563

REVIEWED BY

CITY ENGINEERING
BY: _____ DATE: _____

TRAFFIC ENGINEERING
BY: _____ DATE: _____

WATER
BY: _____ DATE: _____
PROJECT # _____
W.O. # _____

WASTEWATER
BY: _____ DATE: _____
PROJECT # _____
W.O. # _____

ELECTRIC DEPARTMENT
BY: _____ DATE: _____

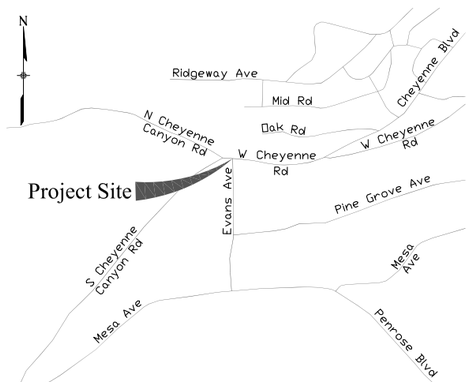
GAS DEPARTMENT
BY: _____ DATE: _____

COMCAST
BY: _____ DATE: _____

CENTURY LINK
BY: _____ DATE: _____

ACCEPTANCE BY THE CITY OF COLORADO SPRINGS OF DESIGN WORK BY DESIGN PROFESSIONALS CONSTITUTES BELIEF THAT THE WORK HAS BEEN DONE IN ACCORDANCE WITH THE CITY STANDARDS AND ORDINANCES. WORK PRODUCTS ARE THE RESPONSIBILITY OF THE DESIGN PROFESSIONAL AND CITY ACCEPTANCE DOES NOT RELIEVE THE PROFESSIONAL OF SAID RESPONSIBILITY.

KEY MAP
1" = 100'



VICINITY MAP
1" = 500'±

COMPUTER FILE INFORMATION			REVISIONS			STATEMENT:			
Creation Date:	3/23/2011	Initials: BGB	No.	Description	Date	THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.			
Last Modification Date:	12/11/2014	Initials: MHH							
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\									
Drawing File Name:	TS01.dwg								
Acad Ver.	2012	Scale: AS SHOWN							

PLOT DATE: 09/26/2014

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: GLG
DRAWN BY: LG
CHECKED BY: GS

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT
EVANS AVENUE OVER CHEYENNE CREEK
TITLE SHEET

Subset: TS | Subset Sheets: TS01 of TS01 | Sheet No: 1

COLORADO
DEPARTMENT OF TRANSPORTATION

STANDARD PLANS LIST

M&S STANDARDS
July 04, 2012
Revised on December 17, 2014

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.

CITY OF COLORADO SPRINGS
ENGINEERING DIVISION

STANDARD DRAWINGS

STANDARD SPECIFICATIONS

* NOT TO BE USED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE CITY ENGINEER ON A SITE BY SITE BASIS.

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	BGB
Last Modification Date:	03/10/2015	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	GN01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT
EVANS AVENUE OVER CHEYENNE CREEK

STANDARD PLAN LIST

Subset: GENERAL | Subset Sheets: GN01 of GN03 | Sheet No: 2

ABBREVIATIONS

AD	ALGEBRAIC DIFFERENCE
ASSY	ASSEMBLY
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
APPROX	APPROXIMATE or APPROXIMATELY
AVE	AVENUE
AVG	AVERAGE
B/C	BACK OF CURB
℄ or B/L	BASELINE
BLVD	BOULEVARD
BOC	BACK OF CURB
BTM	BOTTOM
BW	BOTTOM OF WALL
C & G	CURB AND GUTTER
CAE	CROSS ACCESS EASEMENT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CIP	CAST IRON PIPE
CEN	CENTER
℄ or C/L	CENTERLINE
CFS	CUBIC FEET PER SECOND
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
EA	EACH
EG	EXISTING GRADE
EGL	ENERGY GRADE LINE
ELEV or EL	ELEVATION
ELL	ELBOW
ESMT	EASEMENT
EW	EACH WAY
EX or EXIST	EXISTING
FES	FLARED END SECTION
FIN	FINISHED
℄ or F/L	FLOWLINE
FLG	FLANGE
FOC	FACE OF CURB
FT	FOOT/FEET
FRP	FIBERGLASS REINFORCED PIPE
GAL	GALLON
GALV	GALVANIZED
GAU	GAUGE (MATERIAL)
GV	GATE VALVE
GW	GROUNDWATER
HBP	HOT BITUMINOUS PAVEMENT
HGL	HYDRAULIC GRADE LINE
HP	HIGH POINT
HORIZ	HORIZONTAL
HCL	HORIZONTAL CONTROL LINE
HR	HOUR
INV	INVERT
K	VERTICAL CURVE FACTOR
LBS	POUNDS
LF	LINEAR FEET
LN	LANE
LOC	LIP OF CURB
LP	LOW POINT
LS	LANDSCAPING
LT	LEFT
MAX	MAXIMUM
MFGR	MANUFACTURER
MH	MANHOLE
MID	MIDDLE or MIDPOINT
MIN	MINIMUM
MJ	MECHANICAL JOINT
MSL	MEAN SEA LEVEL
NC	NORMAL CROWN
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
O/S	OFFSET
P	PROPOSED
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PCR	POINT OF CURB RETURN
PE	PLAIN END
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PIE	PUBLIC IMPROVEMENT EASEMENT
℄ or P/L	PROPERTY LINE
PRC	POINT OF REVERSE CURVE
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVE or POLYVINYL CHLORIDE
PVI	POINT OF VETICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENT
R or RAD	RADIUS
RC	REVERSE CROWN
RCP	REINFORCED CONCRETE PIPE
RED	REDUCER
REF	REFERENCE
REINF	REINFORCING
REQ	REQUIRED
REV	REVISION
ROW	RIGHT-OF-WAY
RT	RIGHT
SCH	SCHEDULE
SD	STORM SEWER
SQ	SQUARE
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
SS	SANITARY SEWER
SW or S/W	SIDEWALK
TAN	TANGENT
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
THD	THREADED
THICK	THICKNESS
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
UGFO	UNDERGROUND FIBER OPTICS LINE
UTIL	UTILITY
VAR	VARIES
VC	VERTICAL CURVE
VERT	VERTICAL
W	WIDTH
W/	WITH

LEGEND OF SYMBOLS

EXISTING IRRIGATION VALVE

EXISTING BOLLARD

EXISTING ELEC VAULT

FIRE HYDRANT

EXISTING GUY WIRE

LIGHT POLE

EXISTING MAIL BOX

EXISTING POWER POLE

EXISTING SIGN

PROPOSED SIGN

EXISTING TELEPHONE PEDESTAL

EXISTING WATER SHUT OFF

WATER VALVE

GAS VALVE

EXISTING SANITARY SEWER MANHOLE

TELEPHONE MANHOLE

MONITORING WELL

WATER METER

EXISTING LIGHT STANDARD

EXISTING TRAFFIC SIGNAL POLE

EXISTING CURB AND GUTTER

PROPOSED CURB AND GUTTER

6400 EXISTING CONTOUR

6400 PROPOSED CONTOUR

EXISTING TREE - DECIDUOUS

EXISTING TREE - FIR

ELEC EXISTING ELECTRIC LINE - UNDERGROUND

GAS EXISTING GAS LINE - UNDERGROUND

FO EXISTING FIBER OPTIC - UNDERGROUND

8" SS EXISTING SANITARY SEWER

8" WAT EXISTING WATER LINE

T EXISTING TELEPHONE

OVU EXISTING OVERHEAD UTILITY (MULTIPLE)

OVT EXISTING OVERHEAD TELEPHONE

OE EXISTING OVERHEAD ELECTRIC

EXISTING FENCE

PROPOSED FENCE

RIGHT OF WAY

LIMITS OF CONSTRUCTION

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

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	BGB
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	GN02.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

ABBREVIATIONS / LEGEND

Subset: GENERAL | Subset Sheets: GN02 of GN02 | Sheet No: 3

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF COLORADO SPRINGS, ENGINEERING DIVISION, GENERAL PROVISIONS, SPECIAL PROVISIONS, STANDARD SPECIFICATIONS, REVISIONS TO STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS, AND CDOT STANDARD SPECIFICATIONS, LATEST REVISION.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS AS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
3. NO FIELD CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE PROJECT MANAGER.
4. SUBMITTALS SHALL BE MADE FOR ALL MATERIALS TO BE INCORPORATED INTO THE PROJECT.
5. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION AND PROTECTION OF ALL UTILITIES IN PLACE.
6. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 TWO BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION OR GRADING. FOR A LIST OF SPECIFIC CONTACTS SEE SPECIFICATIONS.
7. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL UTILITY AND STRUCTURES AFFECTS BY THE WORK AND ANY DAMAGE SHALL BE REPAIRED AND RESTORED TO THE SATISFACTION OF THE CITY OF COLORADO SPRINGS. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL UTILITY RELOCATIONS AS NECESSARY. THE CITY ENGINEERING INSPECTIONS AND UTILITY DEPARTMENTS SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WHERE THESE DEPARTMENTS MAY BE AFFECTED.
8. THE CONTRACTOR SHALL NOTIFY THE GAS DIVISION INSPECTOR (636-5736) AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION NEAR ANY GAS FACILITIES. THE GAS DIVISION WILL RELOCATE THE GAS SERVICES REQUIRED ON AN AS NEEDED BASIS.
9. EXCAVATION AT GAS LINES: TEMPORARY COVER DURING CONSTRUCTION SHALL BE AT LEAST 18 INCHES OVER THE GAS CONDUIT. FINISH GRADE MUST BE AT LEAST 2 FEET AND NO MORE THAN 6 FEET OVER THE GAS CONDUIT.
10. IN SOME OF THE PROPOSED AREAS OF CONSTRUCTION EXISTING UNDERGROUND TELEPHONE AND CABLE TELEVISION FACILITIES MAY BE LOCATED IN CLOSE PROXIMITY TO THE WORK. THE CONTRACTOR MAY, IF NECESSARY TEMPORARILY DISPLACE THE CABLES DURING CONSTRUCTION AND REINSTALL THEM IN ACCORDANCE WITH THE APPROPRIATE TELEPHONE OR CABLEVISION COMPANY'S GUIDELINES. COORDINATION WITH BOTH THE TELEPHONE AND CABLE TELEVISION COMPANY IS REQUIRED TO BE DONE BY THE CONTRACTOR.
11. THE CONTRACTOR SHALL OBTAIN AN APPROVED TRAFFIC CONTROL PERMIT PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
12. THE PHYSICAL FEATURES WITHIN THE LIMITS OF THE PROJECT HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FEATURES SHOWN. THE CONTRACTOR SHALL REVIEW AND VERIFY EXISTING PHYSICAL FEATURES AND ELEVATIONS THEMSELVES OF THE CONDITIONS TO BE ENCOUNTERED DURING THE CONSTRUCTION.
13. THE CONTRACTOR SHALL LIMIT ALL WORK AND STORAGE AREAS TO THE PUBLIC RIGHT-OF-WAYS AND EASEMENTS. USE OF ANY PRIVATE AREAS FOR THIS PROJECT BY THE CONTRACTOR MUST BE APPROVED IN WRITING BY THE PROPERTY OWNER WITH A COPY OF THIS APPROVAL PROVIDED TO THE ENGINEER PRIOR TO USAGE.
14. ALL CONSTRUCTION IS TO INCLUDE COMPACTION AND FINISH GRADING IN THE UNIT PRICE RELATED WORK ITEM.
15. ALL WORK SHALL BE DONE TO THE LINES, GRADES, SECTIONS, AND ELEVATIONS SHOWN ON THE PLANS UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER.
16. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF COLORADO SPRINGS AND THE ENGINEER.
17. THE ENGINEER SHALL BE NOTIFIED WITHIN 48 HOUR PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
18. PAYMENT, DIMENSIONS AND RADII ARE SHOWN TO THE LIP OF CURB UNLESS OTHERWISE NOTED.
19. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPE AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
20. THE CONTRACTOR SHALL NOT REMOVE AND SHALL PROTECT FROM DAMAGE ALL TREES, BUSHES, AND EXISTING IMPROVEMENTS INSIDE AND OUTSIDE THE LIMITS OF WORK. SPECIFIC PROVISIONS ARE SHOWN ON THE PLANS.
21. NO TREES SHALL BE REMOVED OR TRIMMED WITHOUT PRIOR ACKNOWLEDGEMENT OF THE PROPERTY OWNER AND/OR PROJECT ENGINEER.
22. THE CONTRACTOR SHALL PROTECT THE EXISTING DRAINAGE STRUCTURES AND REROUTE ANY RUNOFF AS NECESSARY DURING CONSTRUCTION ACTIVITIES TO PREVENT EROSION AND DAMAGE.
23. THE CONTRACTOR SHALL CLOSELY MONITOR ACCESS FOR HEAVY CONSTRUCTION EQUIPMENT THROUGH THE PROJECT AND RESIDENTIAL AREAS.
24. SHOULD THE CONSTRUCTION ACTIVITY CONTINUE PAST 7:00 P.M., THE CONTRACTOR SHALL ENSURE THAT THE NOISE LEVEL DOES NOT EXCEED THE LIMITS SPECIFIED IN THE CITY ORDINANCE.
25. WHERE PAVEMENT IS TO ABUT EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE REMOVED TO A NEAT VERTICAL LINE BY FULL DEPTH SAWING. SAWING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO "REMOVAL OF ASPHALT PAVEMENT". THE CONTRACTOR WILL BE REQUIRED TO PAINT THE EDGE OF CUT PAVEMENT WITH DILUTED EMULSIFIED ASPHALT (SLOW SETTING) PRIOR TO PAVING OPERATIONS. VERTICAL EDGES SHALL NOT REMAIN OVERNIGHT. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF ONE PART EMULSIFIED ASPHALT AND ONE PART WATER.
26. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED. THE COST OF WATER SHALL BE INCIDENTAL TO OTHER BID ITEMS.
27. THE PHYSICAL FEATURES REQUIRING REMOVAL OR OBLITERATION WITHIN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF-SITE. THE EXCEPTION IS TRAFFIC CONTROL DEVICES WHICH SHALL BE SALVED FOR CITY MAINTENANCE AND THE FIRE HYDRANT WHICH SHALL BE SALVED FOR COLORADO SPRINGS UTILITIES MAINTENANCE.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ANY MONUMENT, RANGE POINTS, TIES, BENCHMARKS AND/OR SURVEY CONTROL POINTS WHICH MAY BE DISTRIBUTED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENT BY A REGISTERED PROFESSIONAL LAND SURVEYOR AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF COLORADO.
29. THE CONTRACTOR SHALL HAVE A COPY OF ALL APPLICABLE STANDARDS ON SITE FOR THE DURATION OF THE PROJECT.
30. THE CONTRACTOR SHALL NOT STOCKPILE MATERIAL WITHIN 10 FEET OF THE EDGE OF TRAVELED WAY.
31. THE FOLLOWING SHALL BE FURNISHED WITH EACH BITUMINOUS PAVER. THIS DEVICE SHALL BE USED ON ALL PASSES AND LIFTS OF BITUMINOUS PAVEMENT PLACED
    a. SHORT SKI OR SHOE.
32. 32.ANY LAYER OF BITUMINOUS PAVEMENT THAT IS TO HAVE SUCCEEDING LAYER PLACED THEREON SHALL BE COMPLETED FULL WIDTH BEFORE SUCCEEDING LAYER IS PLACED.
33. BEFORE PLACEMENT OF THE TACK COAT, THE CONTRACTOR SHALL CLEAN THE PRESENT ROADWAY AS DIRECTED. CLEANING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE PROJECT.
34. A TACK COAT OF EMULSIFIED ASPHALT (SLOW SETTING) IS TO BE APPLIED BETWEEN PAVEMENT COURSES TO IMPROVE BOND. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF 1 PART EMULSIFIED ASPHALT AND 1 PART WATER.

GENERAL NOTES CONTINUED

35. STORM MANHOLE STATIONING REFERENCE CENTER OF MANHOLE.
36. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY THROUGHOUT THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL CONTACT TRAFFIC ENGINEERING FORTY-EIGHT (48) HOURS IN ADVANCE FOR ANY REQUIRED MODIFICATION OF TRAFFIC SIGNALS WITHIN CONSTRUCTION AREAS AS NECESSARY TO MAINTAIN SAFE OPERATIONS.
37. EXISTING AND PROPOSED JUNCTION BOX LIDS, WATER VALVES, SANITARY SEWER, OR STORM SEWER MANHOLE LIDS SHALL BE RAISED TO MATCH PROPOSED NEW GRADE. EXCEPT AS CALLED OUT ON THE PLANS, ALL ADJUSTMENTS OR MATERIALS REQUIRED FOR THE ADJUSTMENT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
38. ALL WORK DONE ON OR AROUND WATER RESOURCES DEPARTMENT FACILITIES MUST BE INSPECTED BY A WATER RESOURCES DEPARTMENT INSPECTOR. THE CONTRACTOR IS REQUIRED TO NOTIFY THE WATER RESOURCES DEPARTMENT PIPELINE INSPECTION SECTION (636-5654) TWO WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION. IF THIS PROJECT INVOLVED A TAP, DO NOT CALL TO SCHEDULE TAP UNTIL THE PIPELINE INSPECTION NOTIFICATION. INSPECTION REQUIRED AFTER WORKING HOUR MUST BE COORDINATED WITH THE PIPELINE INSPECTOR IN ADVANCE AND WILL BE SUBJECT TO OVER TIME CHARGES PER W.R.D. SPECIFICATIONS.
39. THE CONTRACTOR SHALL AT THEIR EXPENSE, SUPPORT AND PROTECT ALL WATER MAINS SO THAT THEY WILL FUNCTION CONTINUOUSLY DURING CONSTRUCTION EXCEPT THOSE DESIGNATED TO BE TEMPORARILY SHUT DOWN. TEMPORARY WATER SERVICE DISRUPTION SHALL BE DONE TO MINIMIZE THE EFFECTS ON COLORADO SPRINGS UTILITIES CUSTOMERS. SHOULD A WATER MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATIONS, IT WILL BE REPAIRED IMMEDIATELY BY EITHER THE CONTRACTOR OR THE WATER RESOURCES DEPARTMENT AT THE FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR.
40. ANY DISCREPANCY WITHIN THESE PLANS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND WORK SHALL STOP UNTIL THE DISCREPANCY IS DISCUSSED AND DECISIONS/AGREEMENTS HAVE BEEN MADE.
41. REFER TO PROJECT MANUAL FOR PAY ITEM DESCRIPTIONS AND MEASUREMENT. ALL WORK WITHOUT A SPECIFIC BID ITEM IS INCIDENTAL TO OTHER PAY ITEMS.
42. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL ALL PERMITS HAVE BEEN ISSUED.
43. THE APPROVAL OF THESE PLANS OR ISSUANCE OF A PERMIT BY THE CITY OF COLORADO SPRINGS DOES NOT AUTHORIZE THE OWNER OR CONTRACTOR TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES.
44. ALL CITY PERMITS WILL BE NO FEE

EARTHWORK:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LEGAL DISPOSAL OF ANY EXCESS SOIL, DEBRIS AND WASTE MATERIAL OFF OF THE PROJECT SITE.
2. ANY SOIL LYING BELOW THE SUBGRADE ELEVATION WHICH IS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL IN ACCORDANCE WITH THE SPECIFICATION REQUIREMENTS.
3. ANY MATERIAL NOT SUITABLE FOR BACKFILL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF, BY AND AT THE EXPENSE OF THE CONTRACTOR.

BENCHMARK AND SURVEY CONTROL:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING OF BOTH HORIZONTAL AND VERTICAL LAYOUT ON THIS PROJECT. COORDINATES ARE REFERENCED IN THE COORDINATE LIST SHOWN ON THESE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER FOR INTERPRETATION AND INFORMATION IN STAKING OF THE PROJECT FOR CONSTRUCTION.
2. A TEMPORARY BENCHMARK HAS BEEN ESTABLISHED FOR THIS PROJECT UNLESS OTHERWISE NOTED.
3. PRIOR TO PROJECT COMPLETION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY PROPERTY MONUMENTATION DISTURBED OR REMOVED BY CONSTRUCTION OPERATIONS. THIS WORK SHALL BE PERFORMED BY A LAND SURVEYOR LICENSED IN THE STATE OF COLORADO. PROPERTY CORNERS WHICH FALL WITHIN NEW CONCRETE FLATWORK SHALL BE DURABLE AND SET FLUSH. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

TRAFFIC GENERAL NOTES:

1. BEFORE EXCAVATING, CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES.
2. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
3. THE APPROVAL OF THESE PLANS OR ISSUANCE OF A PERMIT BY THE CITY OF COLORADO SPRINGS DOES NOT AUTHORIZE THE OWNER OR CONTRACTOR TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW, TEMPORARY AND EXISTING TRAFFIC SIGNS FROM THE START OF CONSTRUCTION PROJECT UNTIL ACCEPTANCE BY THE CITY TRAFFIC ENGINEER.
5. ALL TRAFFIC SIGNS, PAVEMENT MARKINGS, AND TRAFFIC SIGNALS SHALL MEET OR EXCEED M.U.T.C.D. STANDARDS.
6. THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING SIGNS, PAVEMENT MARKINGS, OR TRAFFIC SIGNALS DURING THE PROJECT WITHOUT SIGNED AUTHORIZATION OF THE CITY ENGINEERING INSPECTOR ASSIGNED TO THE PROJECT.
7. THE CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN, SUBMIT TO CITY TRAFFIC ENGINEERING FOR APPROVAL, AND OBTAIN APPROPRIATE PERMITS IN ACCORDANCE WITH THE "TRAFFIC CONTROLS FOR STREET CONSTRUCTION, UTILITY WORK AND MAINTENANCE OPERATIONS", M.U.T.C.D. SUPPLEMENT FOR THE CITY OF COLORADO SPRINGS, 2010.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, AND MAINTAINING THE TEMPORARY TRAFFIC CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW, TEMPORARY AND EXISTING SIGNAL MODIFICATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STRIPING AND SIGNAGE GENERAL NOTES:

1. INSTALLATION OF ALL STRIPING, SIGNS AND PAVEMENT MARKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVAL OF EXISTING PAVEMENT MARKINGS (SCARRING OF PAVEMENT IS NOT PERMITTED). AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OVERLAYING OR CHIP SEALING ROADWAY. IF SCARRING OCCURS DURING REMOVAL OF EXISTING OR TEMPORARY PAVEMENT MARKINGS, THE CITY TRAFFIC ENGINEER WILL DETERMINE METHOD OF PAVEMENT REPAIR.
4. ALL STRIPING AND SIGNING SHALL CONFORM TO THE MOST RECENT ADOPTED EDITION OF THE FOLLOWING MANUALS AND THEIR SUPPLEMENTAL AMENDMENTS:
    a. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)
    b. CITY OF COLORADO SPRINGS SIGNS AND MARKING GUIDELINES
    c. CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS
    d. CITY OF COLORADO SPRINGS PUBLIC WORKS DESIGN MANUAL
5. ALL SIGNING AND STRIPING IS SUBJECT TO THE APPROVAL OF THE CITY TRAFFIC ENGINEER PRIOR TO INSTALLATION AND/OR REMOVAL.
6. CONTRACTOR SHALL REMOVE ALL CONFLICTING STRIPING, PAVEMENT MARKINGS AND LEGENDS BY HYDROBLASTING, SANDBLASTING AND/OR GRINDING. ANY DEBRIS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.

STRIPING AND SIGNAGE GENERAL NOTES CONTINUED:

7. SIGN POSTS SHALL BE INSTALLED WITH A MINIMUM OF 1 3/4" X 10' SQUARE PERFORATED STEEL TUBING WITH SLEEVE PER CITY OF COLORADO SPRINGS STANDARD.
8. ALL TRAFFIC SIGNS SHALL HAVE MINIMUM HIGH INTENSITY GRADE SHEETING.
9. ANY DEVIATION FROM THE STRIPING AND SIGNING PLANS SHALL BE APPROVED BY THE ENGINEER OF WORK AND THE CITY TRAFFIC ENGINEER PRIOR TO ANY CHANGES BEING MADE IN THE FIELD.
10. ALL SIGNS SHOWN ON THE STRIPING AND SIGNING PLANS SHALL BE NEW SIGNS PROVIDED AND INSTALLED BY THE CONTRACTOR, EXCEPT FOR EXISTING SIGNS SPECIFICALLY INDICATED TO BE RELOCATED OR TO REMAIN.
11. STRIPED CROSSWALKS SHALL HAVE AN INSIDE DIMENSION OF 10 FEET UNLESS INDICATED OTHERWISE.
12. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS (EXCEPT WITHIN BIKE LANES) SHALL BE A MINIMUM OF 90MIL THICKNESS THERMOPLASTIC OR PREFORM PLASTIC TAPE.
13. ALL LONGITUDINAL LINES SHALL BE A MINIMUM OF 15MIL THICKNESS EPOXY.
14. CONTRACTOR TO DELIVER ALL REMOVED SIGNS TO THE CITY OF COLORADO SPRINGS SIGNS/MARKINGS SHOP AT 404 FONTANERO STREET, (719) 578-5667.
15. CONTRACTOR SHALL NOTIFY CITY TRAFFIC ENGINEER (719) 385-6721 A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO AND UPON COMPLETION OF STRIPING AND SIGNAGE.

NPDES DRAINAGE WATER QUALITY NOTES:

1. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL REMOVE ALL SEDIMENTS, MUD, AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE FLOWLINES AND PUBLIC RIGHTS-OF-WAY AS A RESULT OF THIS CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER.
2. THE CLEANING OF CONCRETE TRUCK DELIVERY CHUTES IS PROHIBITED AT THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER IS PROHIBITED.
3. THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATION, INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE WATER JUST CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERTY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER IS PROHIBITED.
4. THE CONTRACTOR MUST KEEP ALL POLLUTANTS, INCLUDING TRENCH BACKFILL MATERIAL, FROM WASHING INTO THE STORM SEWER SYSTEM.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A STORM WATER MANAGEMENT PLAN PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT IF THE PROJECT MEETS THE MINIMUM REQUIREMENTS FOR A PERMIT.

GENERAL CONSTRUCTION NOTES:

1. PAY ITEMS LISTED IN THE BID SCHEDULE ARE THE ONLY PAY ITEMS FOR THE PROJECT. ANY OTHER ITEMS NECESSARY FOR A COMPLETE PROJECT, BUT NOT SHOWN IN THE BID SCHEDULE SHALL BE CONSIDERED AN INCIDENTAL ITEM AND ITS COST TO BE INCLUDED IN OTHER ITEMS. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO BIDDING PROJECT. ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE EXCEPT AS NOTED.
2. ANY CONTRACTOR-CAUSED DAMAGE TO UTILITY AND/OR SERVICE LINES SHOWN OR NOT SHOWN ON THE PLANS, SHALL BE REPAIRED OR REPLACED AT NO COST TO THE CITY OF COLORADO SPRINGS AND SHALL BE ACCOMPLISHED BY THE CONTRACTOR, SUBCONTRACTOR OR AS APPROVED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK IN THE PROJECT AREA. LIKEWISE, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK AND THAT OF THE INVOLVED UTILITIES IN THE PROJECT AREA.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL LABOR, MATERIAL, EQUIPMENT AND INCIDENTAL ITEMS NEEDED TO PROVIDE ADEQUATE CONSTRUCTION SIGNING, BARRICADES, TRAFFIC CONTROL DEVICES AND OTHER RELATED ITEMS FOR THE PROJECT AREAS, DURING THE CONSTRUCTION PERIOD. THIS WORK SHALL BE INCLUDED IN THE TRAFFIC CONTROL PAY ITEM.
4. THE CONTRACTOR SHALL CAREFULLY REMOVE, STORE AND REINSTALL ALL CITY-OWNED SIGNS WHOSE REMOVAL IS REQUIRED BY THIS CONSTRUCTION WORK IN THE PROJECT AREAS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR THE CITY TO INSPECT ALL SIGNS SCHEDULED FOR REMOVAL PRIOR TO THEIR REMOVAL. ONCE SAID SIGNS HAVE BEEN REMOVED, IT WILL BE ASSUMED THAT THEY WERE IN GOOD CONDITION AT THE TIME OF REMOVAL. ANY SIGNS DAMAGED OR LOST BY THE CONTRACTOR SHALL BE REPLACED AT NO COST TO THE CITY. MATERIALS SHALL BE APPROVED BY THE PROJECT ENGINEER. ALL POST-MOUNTED SIGNS SHALL BE RESET AT THE PROPER HEIGHT AND LOCATION (CITY TO PROVIDE LOCATION OR AS SHOWN ON THE ENCLOSED PLAN).
5. ALL SIDEWALK AND PAVED DRIVEWAY REMOVALS SHALL BE BOUNDED BY JOINTS OR SAWCUTS. SAWCUTS IS TO BE CONSIDERED AN INCIDENTAL ITEM AND THE COST OF THIS ITEM IS TO BE INCLUDED IN OTHER PAY ITEMS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL DRIVEWAY CLOSINGS WITH THE RESPECTIVE PROPERTY OWNERS AND TENANTS IF PROPERTY IS RENTED. EXISTING CONCRETE DRIVES SHALL BE REPLACED PER CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS.
7. PROPERTY OWNERS WILL BE NOTIFIED BY THE CITY PRIOR TO CONSTRUCTION THAT IT WILL BE THE OWNER'S RESPONSIBILITY TO REMOVE TREES, SHRUBS OR OTHER PROPERTY WHICH THEY INTEND TO KEEP. IF THE ITEMS ARE NOT REMOVED AT THE TIME OF CONSTRUCTION AND ARE WITHIN THE PROPOSED SIDEWALK CONSTRUCTION AREAS, THE MISC. ITEMS AND/OR VEGETATION REMOVED SHALL BE PLACED ON THE PROPERTY OWNER'S LAND OR DISPOSED OF OFFSITE AS DIRECTED BY THE PROJECT ENGINEER. TREES MARKED TO BE TRIMMED IN THE PLANS SHALL BE DONE AT THE DIRECTION OF THE PROJECT ENGINEER. THIS WORK SHALL BE INCLUDED IN THE CLEARING AND GRUBBING PAY ITEM.
8. THE CONTRACTOR SHALL TAKE SPECIAL CARE NOT TO DAMAGE TREES AND SHRUBS UNLESS SO DIRECTED BY THE PROJECT ENGINEER.
9. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO THE START OF WORK. THIS WORK IS TO BE CONSIDERED AN INCIDENTAL ITEM AND THE COST OF THIS ITEM IS TO BE INCLUDED IN OTHER PAY ITEMS.
10. ANY SURPLUS EXCAVATION TO INCLUDE BUT NOT LIMITED TO THE REMOVAL OF LANDSCAPING FOR SIDEWALK INSTALLATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND DISPOSAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT NO ADDITIONAL COST.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEYING AND CONSTRUCTION STAKING FOR THE PROJECT. ALL GRADING AND SURFACING SHALL BE IN ACCORDANCE WITH THE PLAN SHEETS AND THE CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS.
12. THE CONTRACTOR SHALL REMOVE AND STOCKPILE ALL SALVAGED TOPSOIL TO BE USED LATER AS BACKFILL BEHIND CURBS AND DRIVES OR IN THE RESTORATION OF DISTURBED AREAS. THIS WORK IS TO BE CONSIDERED AN INCIDENTAL ITEM AND THE COST OF THIS ITEM IS TO BE INCLUDED IN OTHER PAY ITEMS.
13. THE CONTRACTOR SHALL LEVEL ALL DISTURBED AREAS WITH TOPSOIL AND HAND-RAKE TO A UNIFORM APPEARANCE. THE AREA SHALL BE SEEDED WITH PROTECTIVE STRAW MAT COVER DURING WINTER MONTHS OR SODDED ALL OTHER TIMES. THIS WORK IS TO BE CONSIDERED AN INCIDENTAL ITEM.
14. CAUTION: FOR UNDERGROUND UTILITY LOCATIONS, CONTACT 1-800-922-1967 PRIOR TO EXCAVATION. ALL COSTS ASSOCIATED WITH THE LOCATION AND VERIFICATION OF EXISTING UTILITIES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

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

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	BGB
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	GN03.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: JWP
CHECKED BY: MJB

CITY OF COLORADO SPRINGS We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

GENERAL NOTES

Subset: GENERAL | Subset Sheets: GN03 of GN03 | Sheet No: 4

PROJECT SUMMARY OF APPROXIMATE QUANTITIES

BID #	CDOT ITEM NO.	DESCRIPTION	UNIT	ROADWAY		BRIDGE		PROJECT TOTAL	
				PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.
1	626-00000	MOBILIZATION	LS	1				1	
2	201-00000	CLEARING AND GRUBBING	LS	1				1	
3	630-10005	CONSTRUCTION PHASING / MAINTENANCE OF TRAFFIC (MOT)	LS	1				1	
4	203-01597	POTHOLING	HR	8				8	
5	203-00060	EMBANKMENT (COMPLETE-IN-PLACE)	CY	175				175	
6	214-00220	DECIDUOUS TREE (CANADA RED CHERRY)	EA	3				3	
7	214-00220	DECIDUOUS TREE (SPRING SNOW CRABAPPLES)	EA	2				2	
8	202-00000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1				1	
9	210-00810	RESET GROUND SIGN	EA	1				1	
10	210-04040	ADJUST WATER VAULT	EA	1				1	
11	210-04050	ADJUST VALVE BOX	EA	4				4	
12	304-06004	AGGREGATE BASE COURSE (CLASS 6) (8 INCH)	SY	321				321	
13	403-33742	HOT MIX ASPHALT PAVEMENT (GRADING S) (2 INCH)	SY	321				321	
14	403-34742	HOT MIX ASPHALT PAVEMENT (GRADING SX) (2 INCH)	SY	603				603	
15	609-10008	CURB AND GUTTER TYPE 1 (8 INCH CURB HEAD)	LF	131				131	
16	609-30000	CURB AND GUTTER TYPE 3	LF	261				261	
17	610-00020	MEDIAN COVER MATERIAL	SF	466				466	
18	213-00067	LANDSCAPE ROCK (1 1/2")	SY	38				38	
19	300-05000	TYPE II BEDDING	CY	145				145	
20	506-00224	D50 = 24” RIPRAP	CY	150				150	
21	506-00230	D50 = 30” RIPRAP	CY	575				575	
22	603-01185	18-INCH CLASS III REINFORCED CONCRETE PIPE (CIP)	LF	20				20	
23	604-19104	INLET TYPE 10R (L=4')	EA	1				1	
24	613-00027	12-INCH HDPE (JACKED)	LF	169				169	
25	619-75064	GATE VALVE 8-INCH	EA	3				3	
26	619-75096	GATE VALVE 12-INCH	EA	1				1	
27	625-00000	CONSTRUCTION SURVEYING	LS	1				1	
28	627-00004	EPOXY PAVEMENT MARKING	SF	135				135	
29	627-00070	PREFORMED THERMOPLASTIC PAVEMENT MARKING	SF	80				80	
30	620-00002	FIELD OFFICE (CLASS 2)	EA	1				1	
31	208-00020	SILT FENCE	LF	354				354	
32	208-00045	CONCRETE WASHOUT STRUCTURE	LS	1				1	
33	208-00050	STORM DRAIN INLET PROTECTION	EA	2				2	
34	208-00070	VEHICLE TRACKING CONTROL	LS	1				1	
35	208-00200	EROSION CONTROL SUPERVISOR	LS	1				1	
36	212-00001	SEEDING AND MULCHING	SY	360				360	
37	216-00015	EROSION CONTROL BLANKET	SY	360				360	

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	BGB
Last Modification Date:	03/10/2015	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	SOQ01-02.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

SUMMARY OF APPROXIMATE QUANTITIES

Subset: QTY | Subset Sheets: QT01 of QT02 | Sheet No: 5

PROJECT SUMMARY OF APPROXIMATE QUANTITIES

BID #	CDOT ITEM NO.	DESCRIPTION	UNIT	ROADWAY		BRIDGE		PROJECT TOTAL	
				PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.
38	700-70010	F/A MINOR CONTRACT REVISIONS	EST	1				1	
39	700-70009	F/A CSU MINOR CONTRACT REVISIONS	EST	1				1	
40	206-00000	STRUCTURE EXCAVATION	CY			765		765	
41	206-00100	STRUCTURE BACKFILL (CLASS 1)	CY			640		640	
42	206-00200	STRUCTURE BACKFILL (CLASS 2)	CY			90		90	
43	206-00065	STRUCTURE BACKFILL (FLOW-FILL)	CY			550		550	
44	202-00400	REMOVAL OF BRIDGE	LS			1		1	
45	202-00180	REMOVAL OF UNDER-BRIDGE CHANNEL SLAB	LS			1		1	
46	503-00018	DRILLED CAISSON (18 INCH)	LF			432		432	
47	514-01015	BRIDGE RAIL (SPECIAL)	LF			168		168	
48	512-00101	BEARING DEVICE (TYPE I)	EA			36		36	
49	601-10350	SLAB STABILIZATION	EA			30		30	
50	618-06036	PRESTRESSED CONCRETE SLAB	LS			1		1	
51	519-03000	THIN BONDED EPOXY OVERLAY	SY			204		204	
52	601-03040	CONCRETE CLASS D (BRIDGE)	CY			171		171	
53	601-03540	CONCRETE CLASS DT (DECK TOPPING)	CY			37		37	
54	601-40401	STRUCTURAL CONCRETE STAIN	SF			1290		1,290	
55	601-40000	MASONRY VENEER	SF			644		644	
56	601-40005	CUT STONE VENEER	SF			644		644	
57	601-40210	CONCRETE FINISH (FORMLINER - TYPE 1)	SF			1060		1,060	

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION

Creation Date: 3/23/2011 Initials: BGB
Last Modification Date: 03/10/2015 Initials: MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\
Drawing File Name: SOQ01-02.dwg
Acad Ver. 2012 Scale: AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

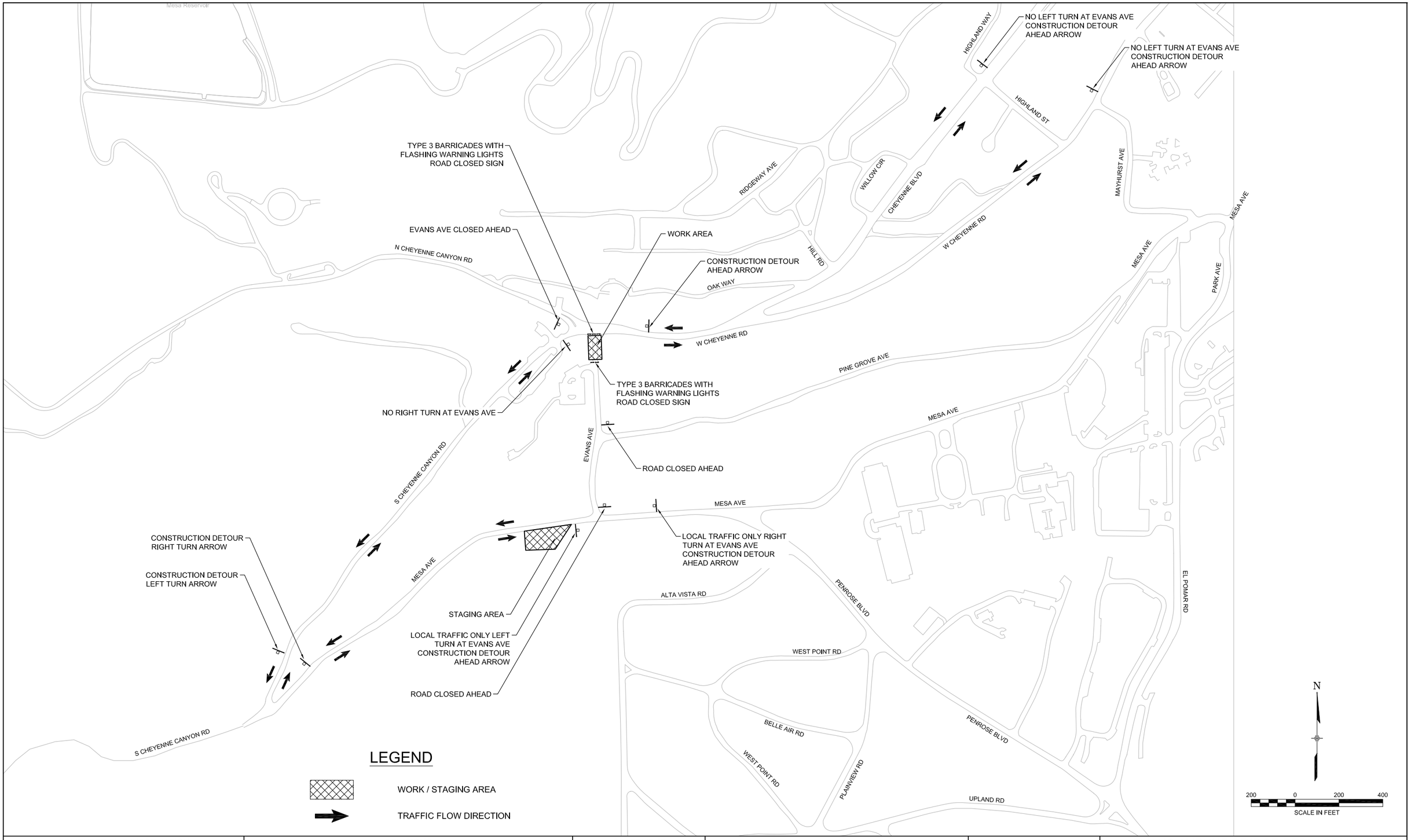
Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT
EVANS AVENUE OVER CHEYENNE CREEK
SUMMARY OF APPROXIMATE QUANTITIES

Subset: QTY | Subset Sheets: QT02 of QT02 | Sheet No: 6



PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	LG
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	TCP01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: LG
CHECKED BY: GS

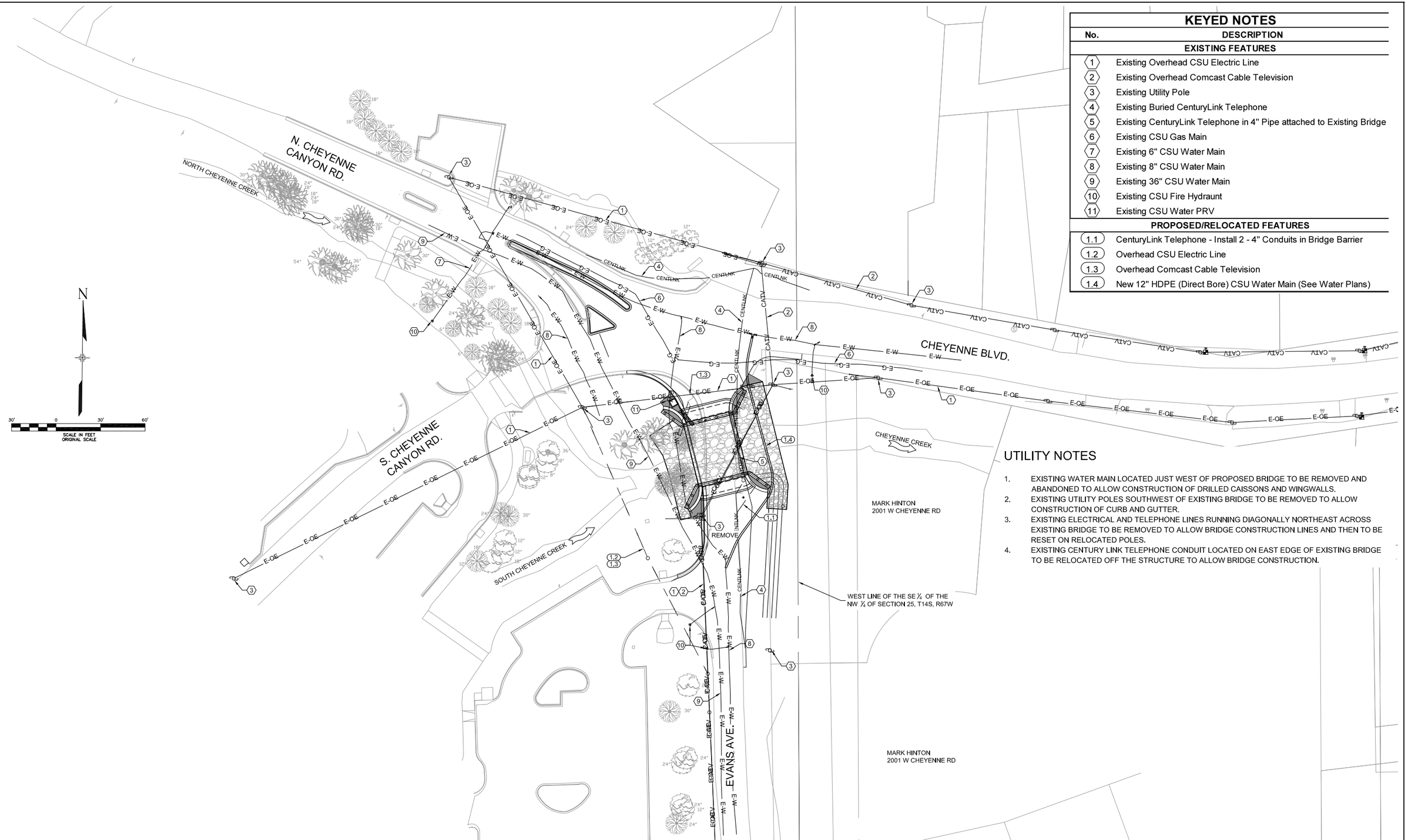
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

TRAFFIC CONTROL DETOUR PLAN

Subset: TCP | Subset Sheets: TCP01 of TCP01 | Sheet No: 7



KEYED NOTES

No.	DESCRIPTION
	EXISTING FEATURES
1	Existing Overhead CSU Electric Line
2	Existing Overhead Comcast Cable Television
3	Existing Utility Pole
4	Existing Buried CenturyLink Telephone
5	Existing CenturyLink Telephone in 4" Pipe attached to Existing Bridge
6	Existing CSU Gas Main
7	Existing 6" CSU Water Main
8	Existing 8" CSU Water Main
9	Existing 36" CSU Water Main
10	Existing CSU Fire Hydraunt
11	Existing CSU Water PRV
	PROPOSED/RELOCATED FEATURES
1.1	CenturyLink Telephone - Install 2 - 4" Conduits in Bridge Barrier
1.2	Overhead CSU Electric Line
1.3	Overhead Comcast Cable Television
1.4	New 12" HDPE (Direct Bore) CSU Water Main (See Water Plans)

UTILITY NOTES

1. EXISTING WATER MAIN LOCATED JUST WEST OF PROPOSED BRIDGE TO BE REMOVED AND ABANDONED TO ALLOW CONSTRUCTION OF DRILLED CAISSONS AND WINGWALLS.
2. EXISTING UTILITY POLES SOUTHWEST OF EXISTING BRIDGE TO BE REMOVED TO ALLOW CONSTRUCTION OF CURB AND GUTTER.
3. EXISTING ELECTRICAL AND TELEPHONE LINES RUNNING DIAGONALLY NORTHEAST ACROSS EXISTING BRIDGE TO BE REMOVED TO ALLOW BRIDGE CONSTRUCTION LINES AND THEN TO BE RESET ON RELOCATED POLES.
4. EXISTING CENTURY LINK TELEPHONE CONDUIT LOCATED ON EAST EDGE OF EXISTING BRIDGE TO BE RELOCATED OFF THE STRUCTURE TO ALLOW BRIDGE CONSTRUCTION.

COMPUTER FILE INFORMATION			
Creation Date:	11/12/2003	Initials:	JY
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	EUT01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

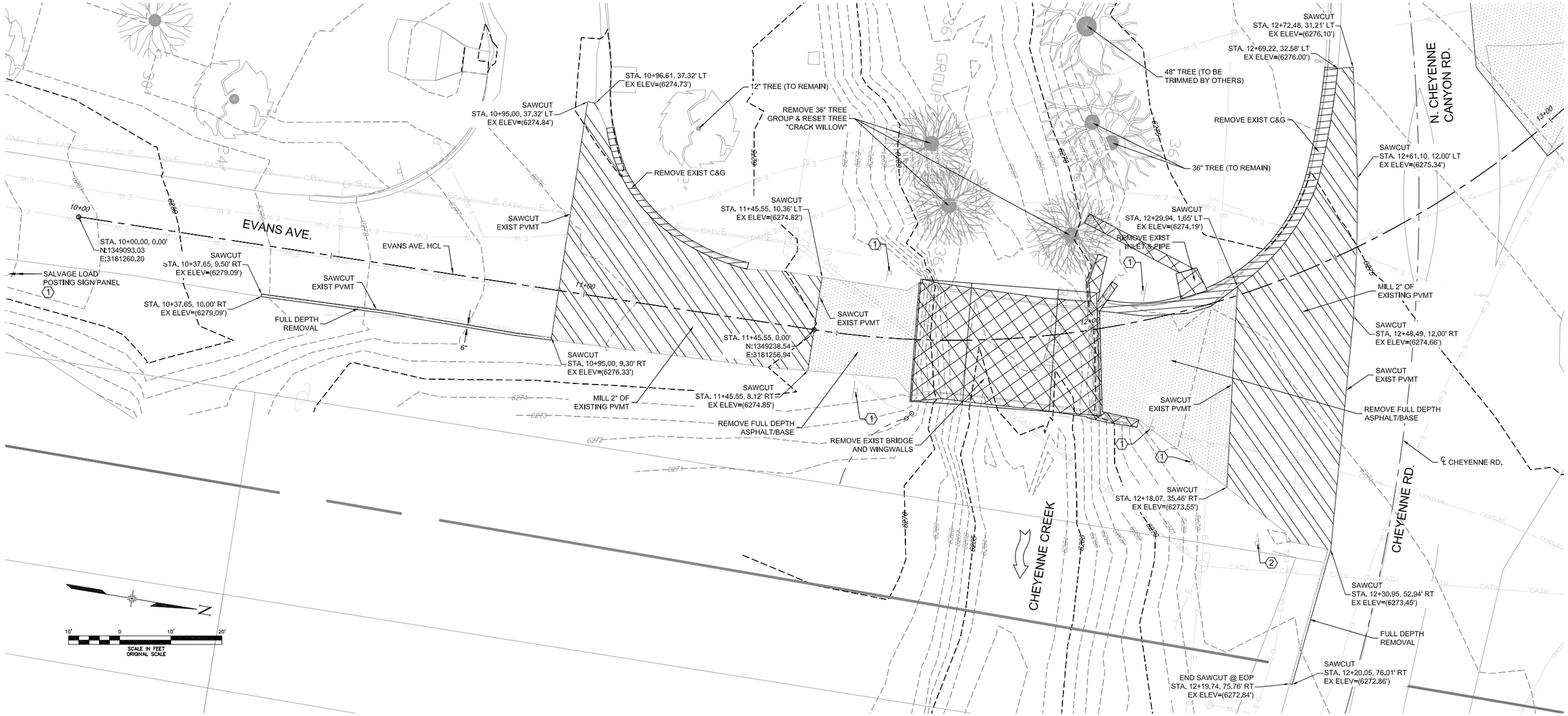
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

UTILITY PLAN

Subset:	UTILITY	Subset Sheets:	EUT01 OF EUT01	Sheet No:	8



LEGEND

- REMOVAL OF ASPHALT (PLANING)(2 INCH)
- REMOVAL OF FULL DEPTH ASPHALT/BASE
- REMOVAL OF CONCRETE OR STRUCTURES
- REMOVAL OF CURB & GUTTER
- REMOVAL OF UNDER BRIDGE CHANNEL SLAB-ON-GRADE CONCRETE

KEYED NOTES

1. SALVAGE SIGN
2. RESET SIGN

COMPUTER FILE INFORMATION			
Creation Date:	11/12/2012	Initials:	LG
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	RM01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY:
CHECKED BY:

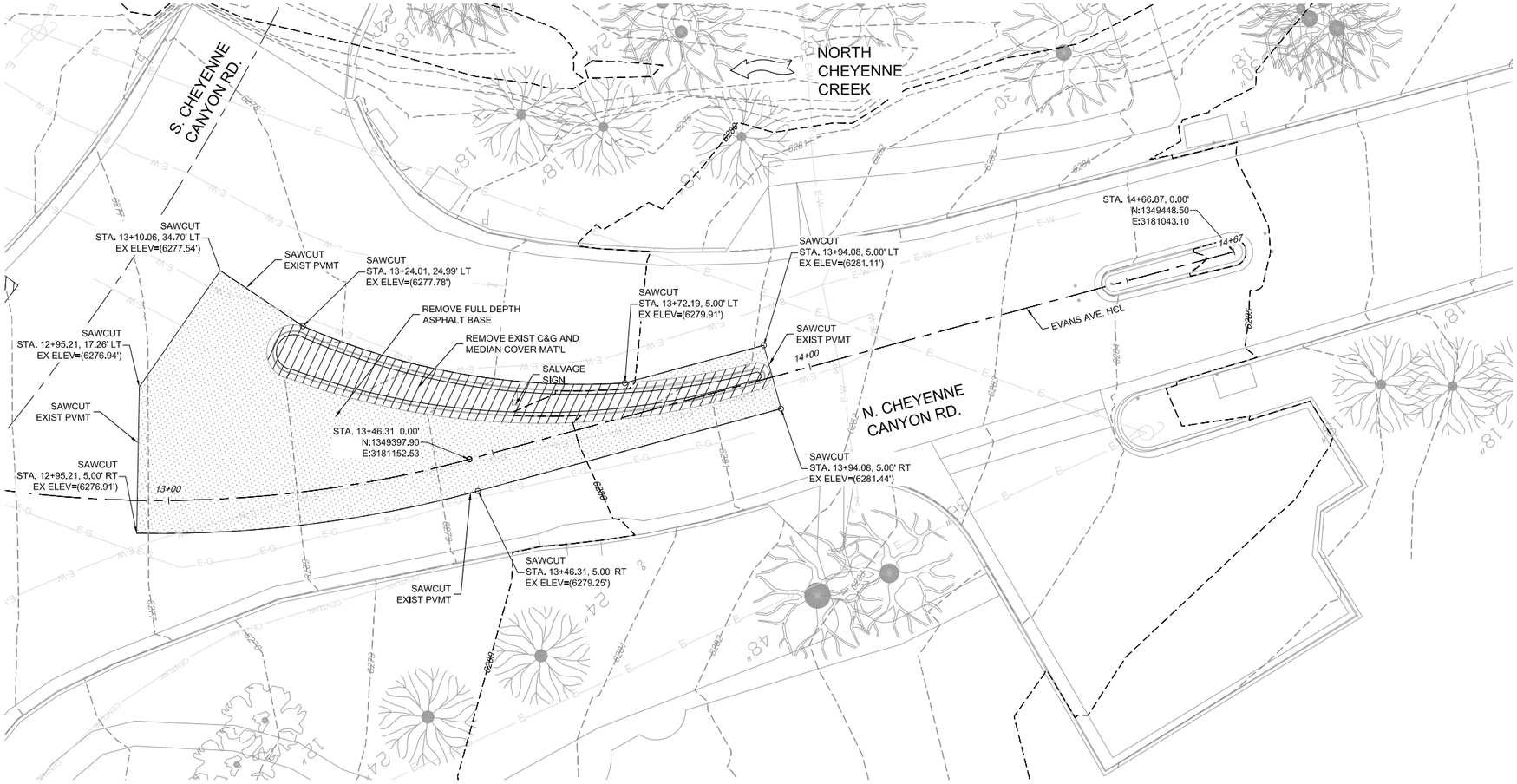
CITY OF COLORADO SPRINGS
We Create Community

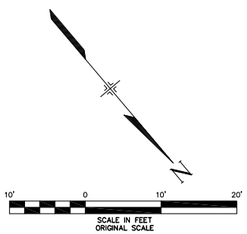
EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

REMOVAL PLAN (1 OF 2)

Subset:	REMOVAL	Subset Sheets:	RM01 OF RM02	Sheet No:	9





LEGEND

REMOVAL OF CURB & GUTTER/MEDIAN COVER MATERIAL

REMOVAL OF FULL DEPTH ASPHALT/BASE

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	11/12/2012	Initials:	LG
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	RM01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

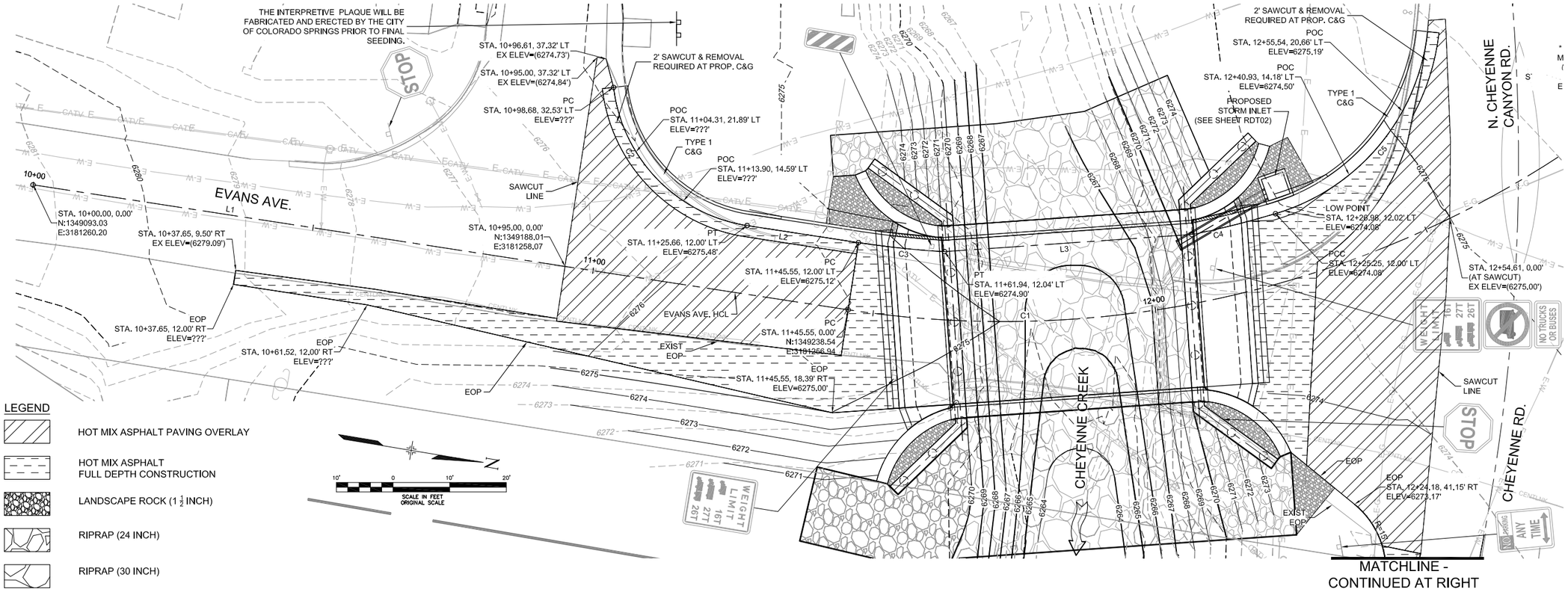
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

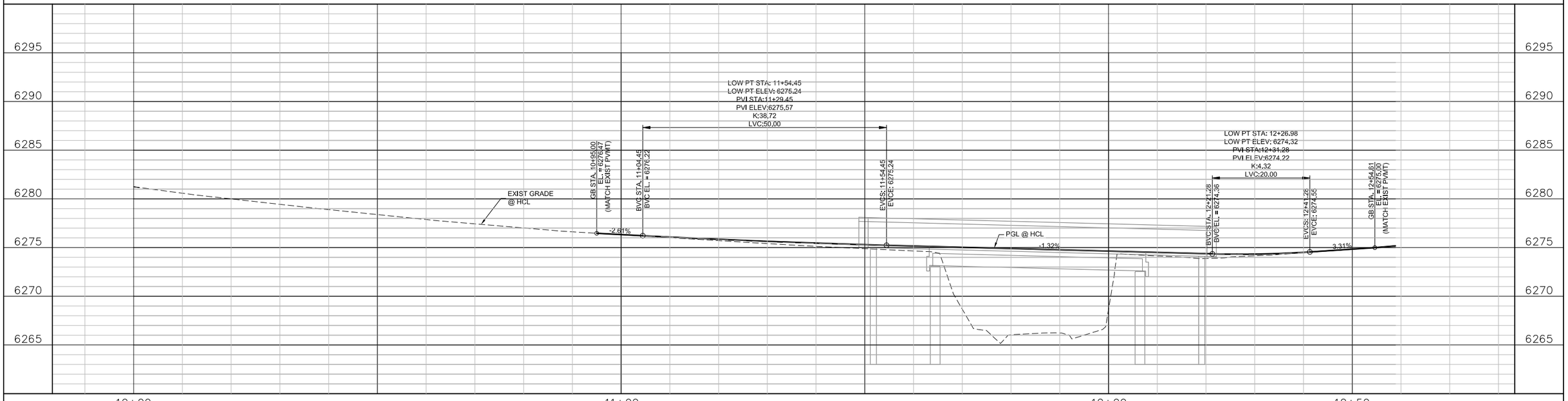
REMOVAL PLAN (2 OF 2)

Subset: REMOVAL | Subset Sheets: RM02 OF RM02 | Sheet No: 10



LINE TABLE		
LINE	LENGTH	DIRECTION
L1	145.55'	N1° 16' 52.92"W
L2	19.89'	N1° 16' 52.92"W
L3	43.72'	N13° 58' 33.94"W

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C1	180.00'	200.76'	63°54'14"
C2	28.00'	36.42'	74°31'47"
C3	170.23'	15.30'	5°08'54"
C4	170.23'	15.24'	5°07'45"
C5	37.83'	44.38'	67°13'04"



COMPUTER FILE INFORMATION			
Creation Date:	####	Initials:	XXX
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	RD01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

ROADWAY PLAN AND PROFILE (1 OF 2)

Subset: ROADWAY | Subset Sheets: RD01 OF RD02 | Sheet No: 11

PLOT DATE: 09/26/2014

KEYED NOTES

(1) 4" PATTERNED COLORED CONCRETE MEDIAN COVER MATERIAL

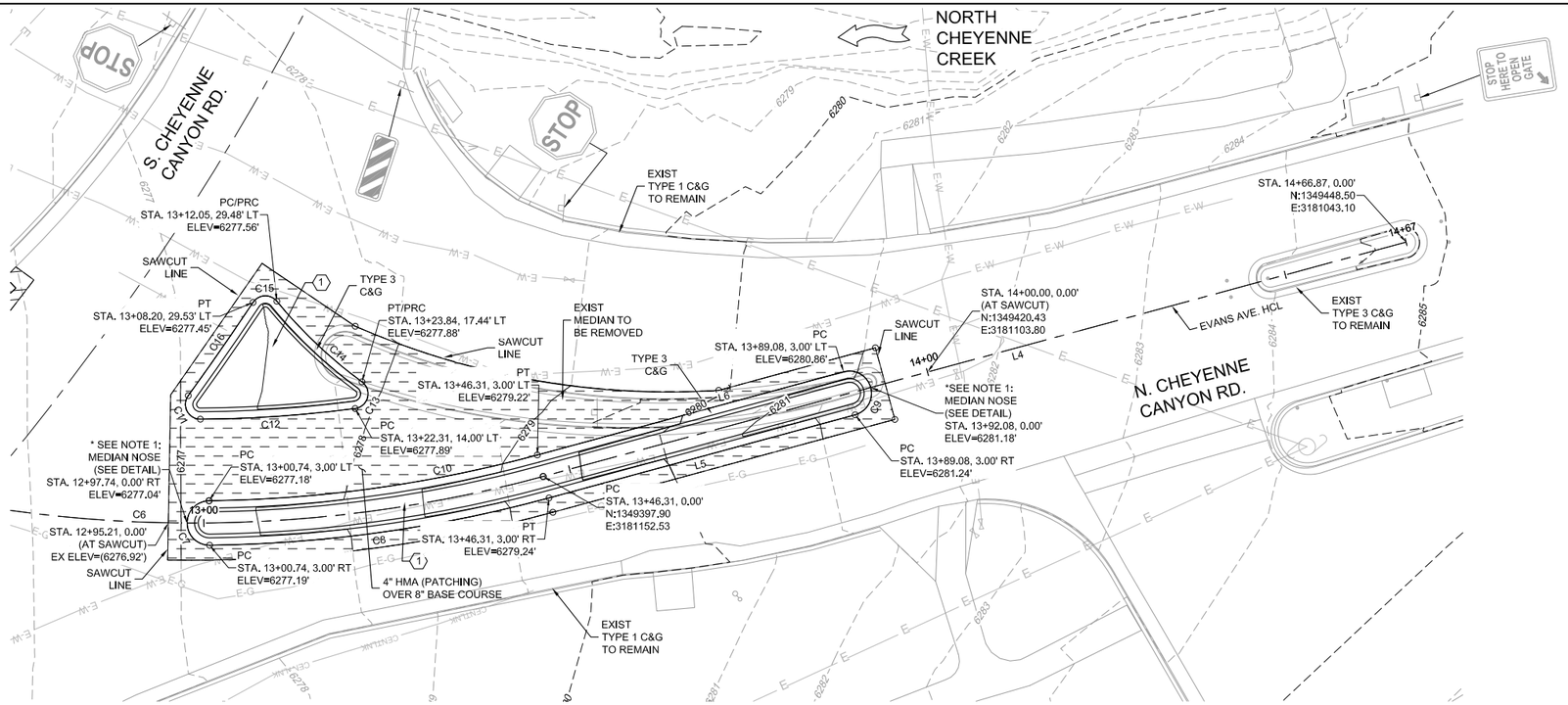
LINE TABLE		
LINE	LENGTH	DIRECTION
L4	120.56'	N65° 11' 06.65"W
L5	42.77'	N65° 11' 06.65"W
L6	42.77'	N65° 11' 06.65"W

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C6	180.00'	200.76'	63°54'14"
C7	3.00'	9.42'	180°00'00"
C8	183.00'	46.33'	14°30'19"
C9	3.00'	9.42'	180°00'00"
C10	177.00'	44.81'	14°30'19"
C11	2.00'	4.41'	126°17'06"
C12	166.00'	20.94'	7°13'38"
C13	2.00'	4.75'	136°12'24"
C14	63.27'	15.85'	14°21'21"
C15	2.00'	3.73'	106°58'08"
C16	376.00'	15.30'	2°19'54"

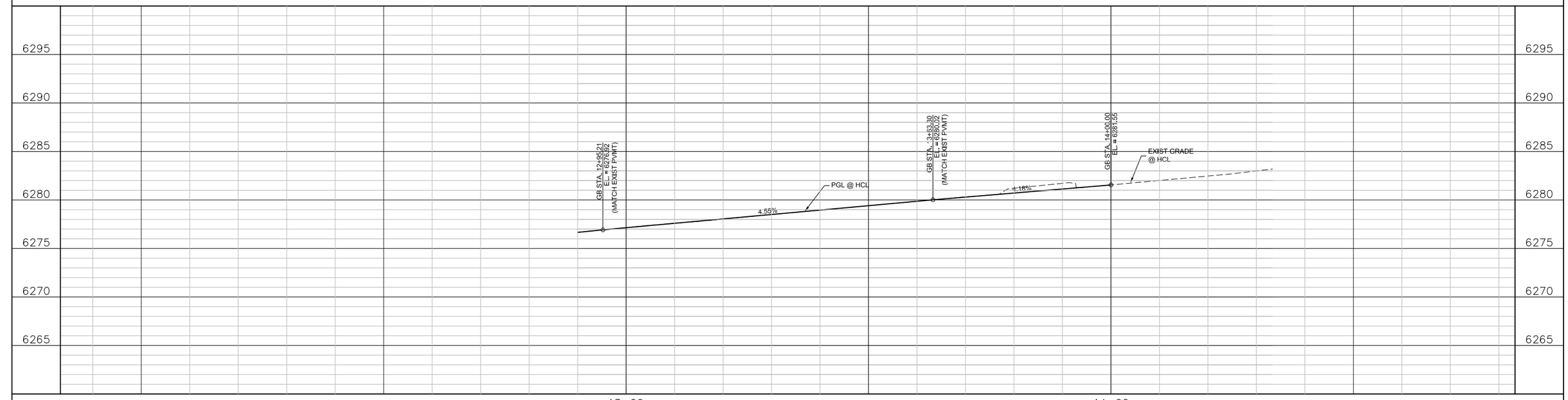
LEGEND

HOT MIX ASPHALT
FULL DEPTH CONSTRUCTION

10' 0 10' 20'
SCALE IN FEET
ORIGINAL SCALE



*NOTE 1:
WORK FOR MEDIAN NOSE TO BE PAID AS TYPE 3 CURB & GUTTER



COMPUTER FILE INFORMATION			
Creation Date:	####	Initials:	XXX
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	RD01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

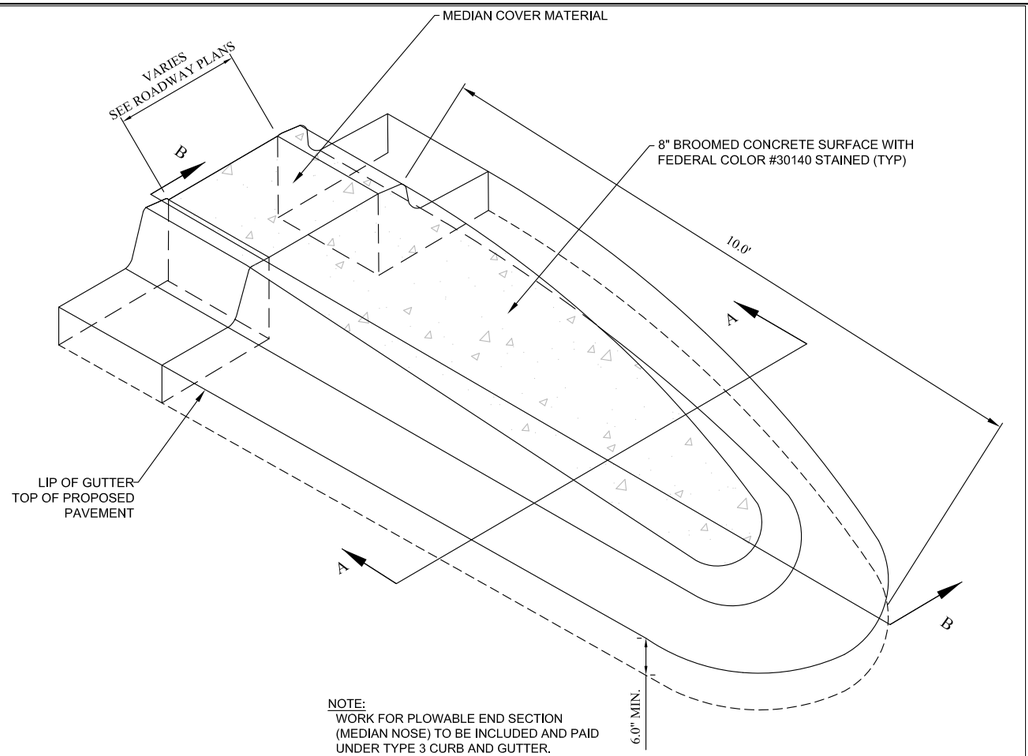
EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

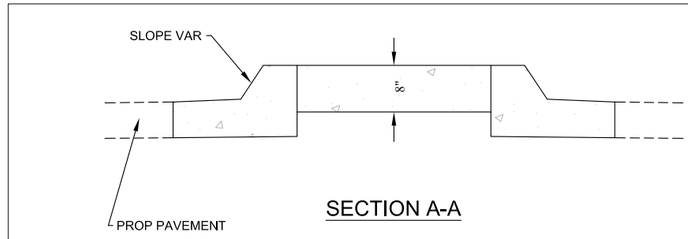
ROADWAY PLAN AND PROFILE (2 OF 2)

Subset: ROADWAY | Subset Sheets: RD02 OF RD02 | Sheet No: 12

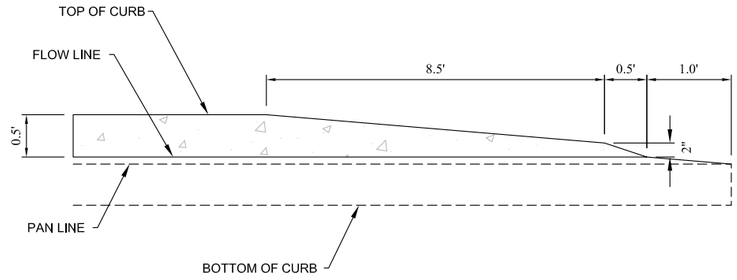
PLOT DATE: 09/26/2014



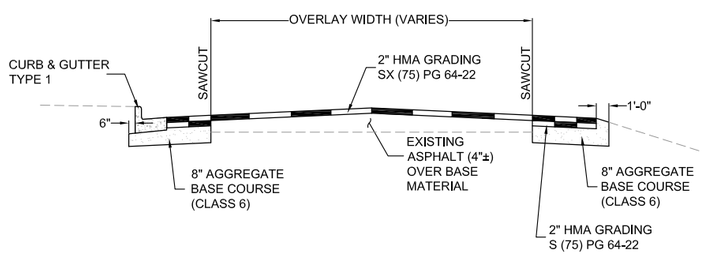
PLOWABLE END SECTION DETAIL



SECTION A-A

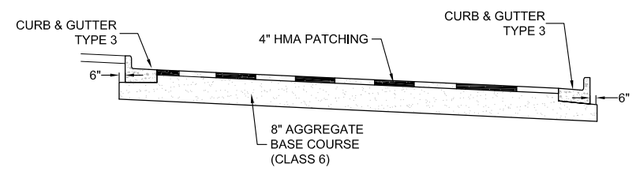


SECTION B-B



PAVEMENT DETAIL - EVANS AVE

SEE ROADWAY PLANS FOR
LIMITS OF PAVING
NOT TO SCALE



PAVEMENT DETAIL - N. CHEYENNE CANYON RD

SEE ROADWAY PLANS FOR
LIMITS OF PAVING
NOT TO SCALE

COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	BGB
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	RDT01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

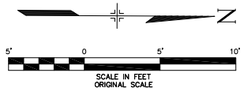
CITY OF COLORADO SPRINGS
We Create Community

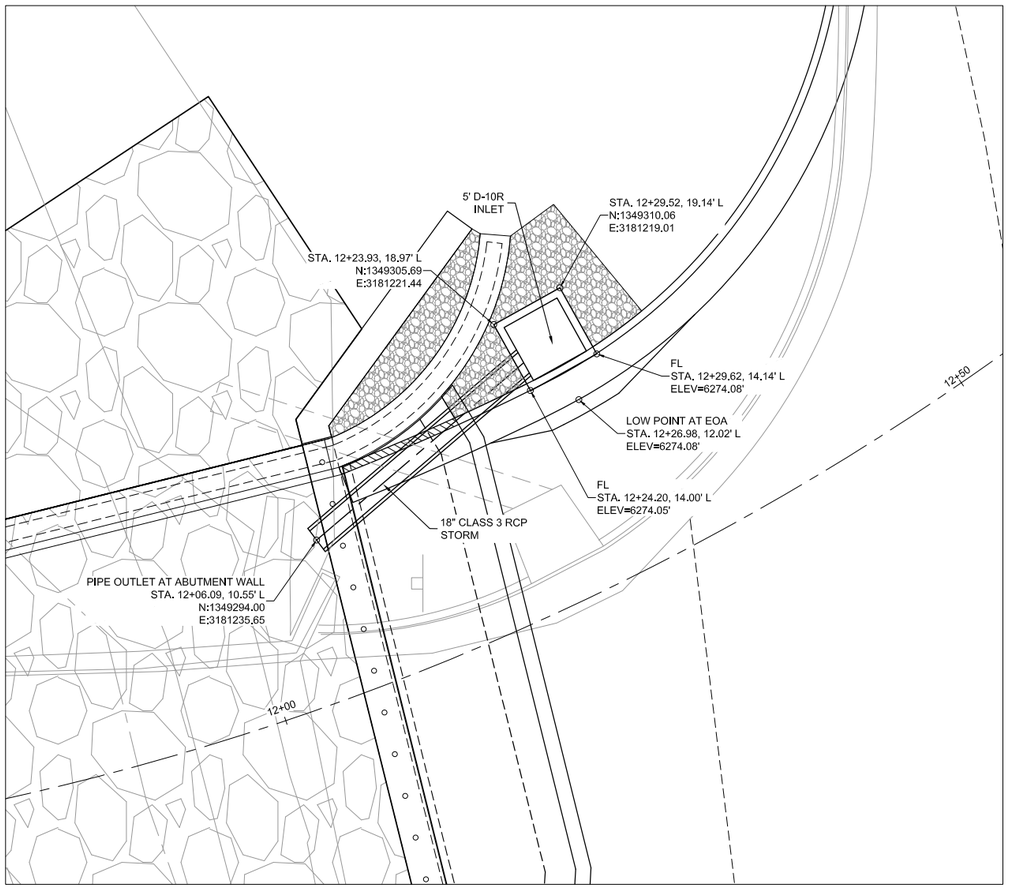
EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

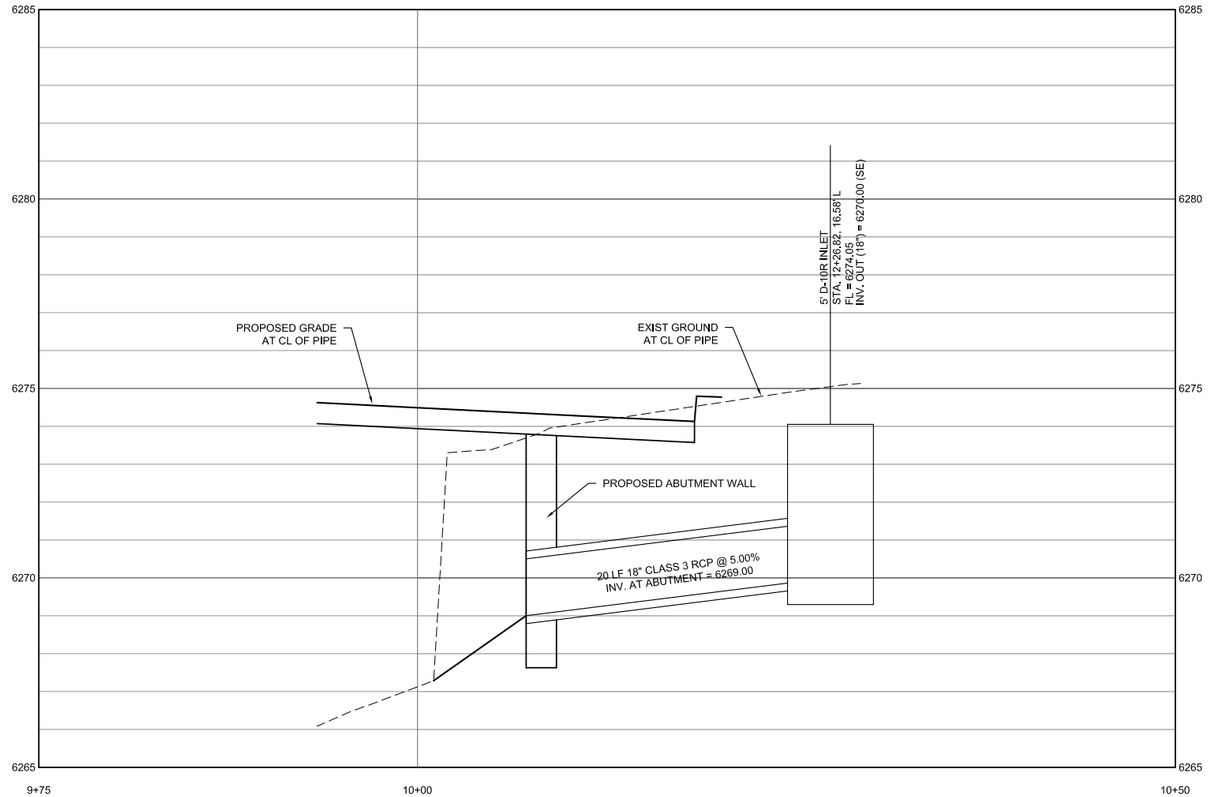
ROADWAY DETAILS (1 of 2)

Subset:	RDT	Subset Sheets:	RDT01 of RDT02	Sheet No:	13





DRAINAGE DETAIL



COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	BGB
Last Modification Date:	12/11/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	RDT02.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

ROADWAY DETAILS (2 of 2)

Subset:	RDT	Subset Sheets:	RDT02 of RDT02	Sheet No:	14

PLOT DATE: 09/26/2014

GENERAL NOTES

EXCEPT AS SHOWN IN THE PLANS, STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH M-206-2 EXCAVATION AND BACKFILL FOR BRIDGES.

STRUCTURE EXCAVATION AND BACKFILL SHALL BE AS SHOWN ON THE PLANS, EXCEPT SHORING MAY BE REQUIRED FOR EXCAVATION ADJACENT TO THE EXISTING ROADWAY. TEMPORARY EXCAVATION SUPPORT SHALL BE PAID FOR BY ITEM 206 SHORING.

COSTS FOR TEMPORARY EXCAVATION SUPPORT SHALL BE INCLUDED AND PAID FOR UNDER THE STRUCTURE EXCAVATION BID ITEM.

EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M213.

A COLORED STRUCTURAL STAIN WILL BE REQUIRED, AS SHOWN ON THE PLANS, ON EXPOSED CONCRETE SURFACES. BASE COLOR SHALL BE BEIGE, CONFORMING TO FEDERAL STANDARD 595 B COLOR 33446. ACCENT COLOR SHALL BE BROWN, CONFORMING TO FEDERAL STANDARD 595 B COLOR 30140. APPROVAL OF COLORS REQUIRES TEST PANELS PROVIDED BY THE CONTRACTOR. SEE SPECIFICATIONS.

THE FINAL FINISH FOR THE SURFACES OF THE BRIDGE RAIL CURB SHALL BE CLASS 2. ALL OTHER EXPOSED CONCRETE SURFACES SHALL RECEIVE A CLASS 1 FINAL FINISH TO ONE FOOT BELOW THE GROUND LINE.

ALL STRUCTURAL STEEL NOT OTHERWISE NOTED SHALL BE PAINTED IN ACCORDANCE WITH SECTION 509 OF THE STANDARD SPECIFICATIONS. THE COLOR SHALL BE BEIGE, EQUIVALENT TO FEDERAL STANDARD 595B COLOR NO. 33446.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 36 (ASTM A-36) UNLESS OTHERWISE NOTED IN THE DRAWINGS AS GRADE 50 (ASTM A709)

AASHTO M-222 (ASTM A-588) MAY BE SUBSTITUTED FOR M270 GRADE 50 (ASTM A-572) AT NO ADDITIONAL COST TO THE PROJECT.

ALL BOLTS SHALL BE 3/4" DIAMETER, HIGH STRENGTH, UNLESS OTHERWISE NOTED.

LEVELING PADS ARE UNLAMINATED BEARINGS. THEY SHALL BE CUT OR MOLDED FROM AASHTO ELASTOMER GRADE 3, 4, OR 5 AS DESCRIBED IN TABLES 705-1 AND 705-2 WITH A DUROMETER (SHORE "A") HARDNESS OF 60.

GRADE 60 REINFORCING STEEL IS REQUIRED.

ALL REINFORCING STEEL SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED.

(N) DENOTES NON COATED REINFORCING STEEL.

ALL PROJECT TECHNICAL SPECIFICATIONS (AND REVISIONS TO THE STANDARDS) APPLICABLE TO THE BRIDGE DECK CONCRETE AND REINFORCING (SEC. 601 AND 602) SHALL ALSO APPLY TO THE APPROACH SLAB.

AN EMERGENCY DECK CONSTRUCTION JOINT MAY BE LOCATED AT THE ONE QUARTER SPAN POINT BACK FROM A PIER OR ABUTMENT WITH RESPECT TO THE DIRECTION OF THE DECK PLACEMENT.

TO THE EXTENT POSSIBLE, MASONRY ROCK FROM THE EXISTING (REMOVED) BRIDGE SHALL BE SALVAGED AND RE-USED FOR CONSTRUCTION OF THE BRIDGE RAIL (SPECIAL). SEE DRAWINGS AND SPECIFICATIONS.

DESIGN DATA

AASHTO, SECOND EDITION LRFD WITH CURRENT INTERIMS

DESIGN METHOD: LOAD AND RESISTANCE FACTOR DESIGN

LIVE LOAD: HL-93 (DESIGN TRUCK OR TANDEM, AND DESIGN LANE LOAD)
DEAD LOAD: ASSUMES 36 LBS. PER SQ. FT. FOR BRIDGE DECK OVERLAY
ASSUMES 5 LBS. PER SQ. FT. FOR PERMANENT STEEL DECK FORMS

REINFORCED CONCRETE:

CLASS B CONCRETE: f'c = 3,000 psi
CLASS D CONCRETE: f'c = 4,500 psi
REINFORCING STEEL: fy = 60,000 psi

CAISSON CONCRETE:

CLASS BZ CONCRETE: f'c = 4,000 psi
CLASS D CONCRETE: f'c = 4,500 psi
REINFORCING STEEL: fy = 60,000 psi

THE FOLLOWING TABLE GIVES THE MINIMUM LAP SPLICE LENGTH FOR EPOXY COATED REINFORCING BARS PLACED IN ACCORDANCE WITH SUBSECTION 602.06. THESE SPLICE LENGTHS SHALL BE INCREASED BY 25% FOR BARS SPACED AT LESS THAN 6" ON CENTER.

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

WHEN THE CONTRACTOR ELECTS TO SUBSTITUTE EPOXY COATED REINFORCEMENT FOR BLACK REINFORCING BARS, THE MINIMUM LAP SPLICE SHALL BE AS DESCRIBED ABOVE.

THE FOLLOWING TABLE GIVES THE MINIMUM LAP SPLICE LENGTH FOR BLACK REINFORCING BARS PLACED IN ACCORDANCE WITH SUBSECTION 602.06. THESE SPLICE LENGTHS SHALL BE INCREASED BY 25% FOR BARS SPACED AT LESS THAN 6" ON CENTER.

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
SPLICE LENGTH FOR CLASS B CONCRETE	1'-1"	1'-4"	1'-8"	2'-4"	3'-0"	3'-10"	4'-10"	5'-11"
SPLICE LENGTH FOR CLASS D CONCRETE	1'-1"	1'-4"	1'-7"	1'-11"	2'-6"	3'-1"	3'-11"	4'-10"

THE ABOVE SPLICE LENGTHS SHALL BE INCREASED BY 20 PERCENT FOR 3 BAR BUNDLES AND 33 PERCENT FOR 4 BAR BUNDLES.

THE ABOVE SPLICE LENGTHS MAY BE REDUCED BY 20% WHEN 3" OF CLEAR COVER EXISTS AND BAR SPACING IS 6" OR GREATER ON CENTER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.

STATIONS, ELEVATIONS, AND DIMENSIONS CONTAINED IN THESE PLANS ARE CALCULATED FROM A RECENT FIELD SURVEY. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.

THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND 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 THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 AT LEAST 2 DAYS (NOT INCLUDING THE DAY OF NOTIFICATION) PRIOR TO ANY ESCAVATION OR OTHER EARTHWORK.

STRUCTURAL STEEL: AASHTO M270 (ASTM A709) GRADE 36 Fy = 36,000.
AASHTO M270 (ASTM A709) GRADE 50 Fy = 50,000.
AASHTO M270 (ASTM A709) GRADE 70 Fy = 70,000.
ASSUMED SINGLE-LANE DESIGN- LIFE ADTT FOR FATIGUE =
BOLTED SURFACE CONDITIONS = CLASS A (SLIP COEFFICIENT 0.33)

POST-TENSIONED CONCRETE:
CLASS S CONCRETE f'c = (SEE DETAILS)
f's = 270,000 psi

PRECAST PRESTRESSED CONCRETE:
CLASS PS CONCRETE f'c = (SEE DETAILS)
f's = 270,000 psi

INDEX OF DRAWINGS

ABBREVIATIONS

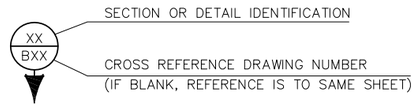
BOW = BOTTOM OF WALL
DH = DESIGN HEIGHT
BF = BACK FACE
EF = EACH FACE
FF = FRONT FACE
HCL = HORIZONTAL CONTROL LINE
LOL = LAYOUT LINE
LT = LEFT
MSE = MECHANICALLY STABILIZED EARTH
RT = RIGHT
ROW = RIGHT-OF-WAY
TOW = TOP OF WALL
Δ = DELTA ANGLE
R = RADIUS
T = TANGENT
L = LENGTH OF CURVE
N = NORTH COORDINATE
E = EAST COORDINATE

BRIDGE DESCRIPTION

1 - SPAN CONCRETE PRESTESS SLAB OVER CHEYENNE CREEK

30'-0" BRIDGE ROADWAY WIDTH

44'-5" DECK LENGTH



STRUCTURE NO CGS-E-22-05.64

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	03-17-2011	Initials:	KPS
Last Modification Date:	.	Initials:	KPS
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR01-General Notes.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

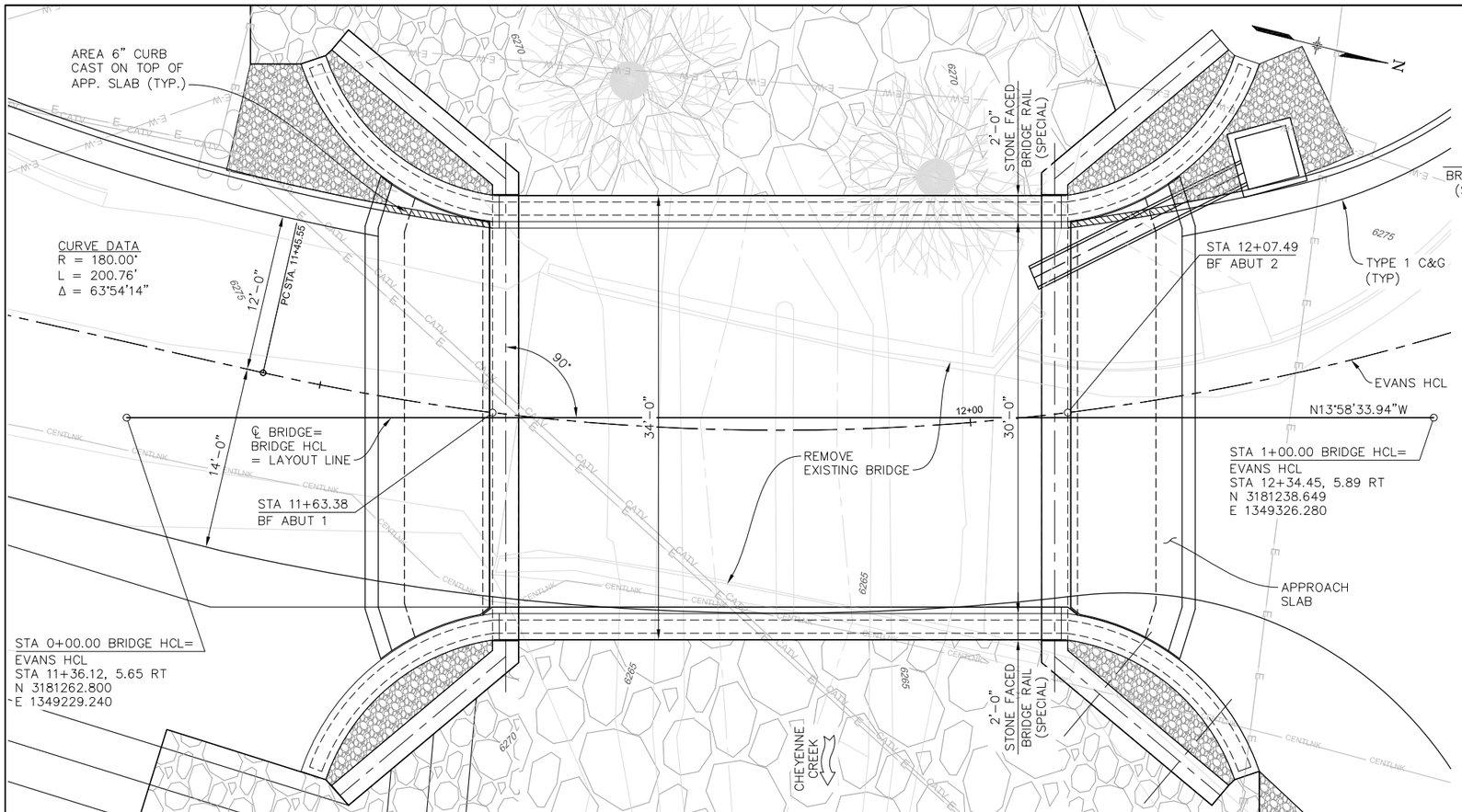
DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

CITY OF COLORADO SPRINGS
We Create Community

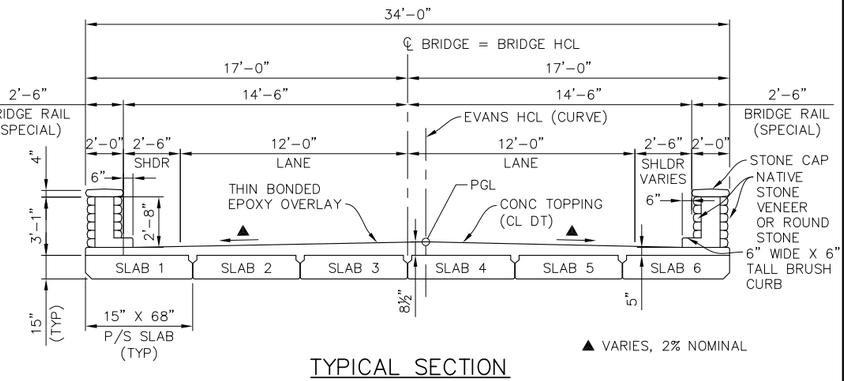
EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

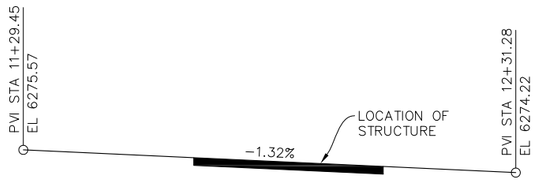
GENERAL INFORMATION



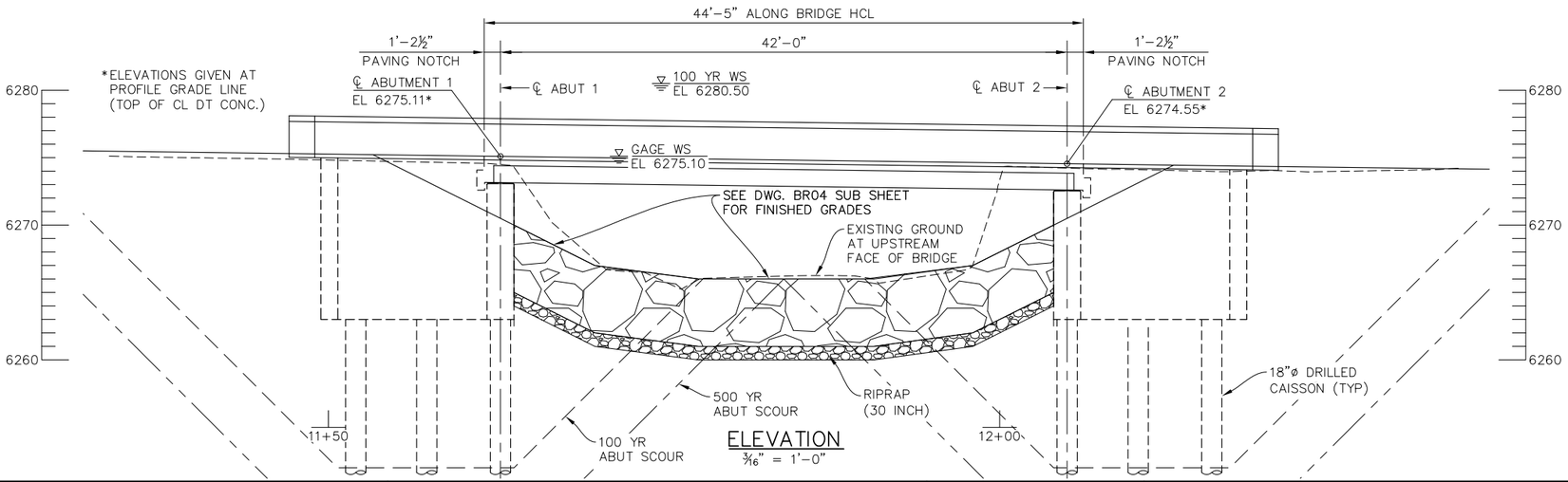
PLAN
3/16" = 1'-0"



TYPICAL SECTION
¼" = 1'-0"



PROFILE GRADE



ELEVATION
3/16" = 1'-0"

STRUCTURE NO CGS-E.22-05.64

COMPUTER FILE INFORMATION			
Creation Date:	03-17-2011	Initials:	KPS
Last Modification Date:	.	Initials:	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR02-General Layout.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

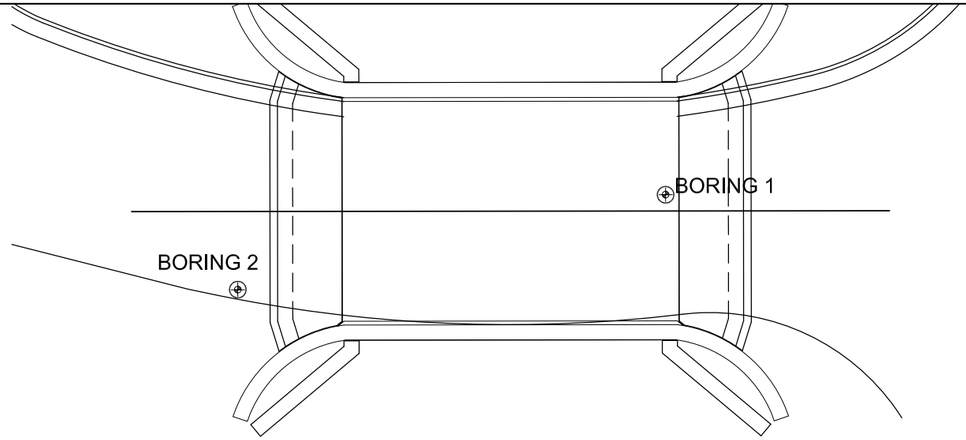
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

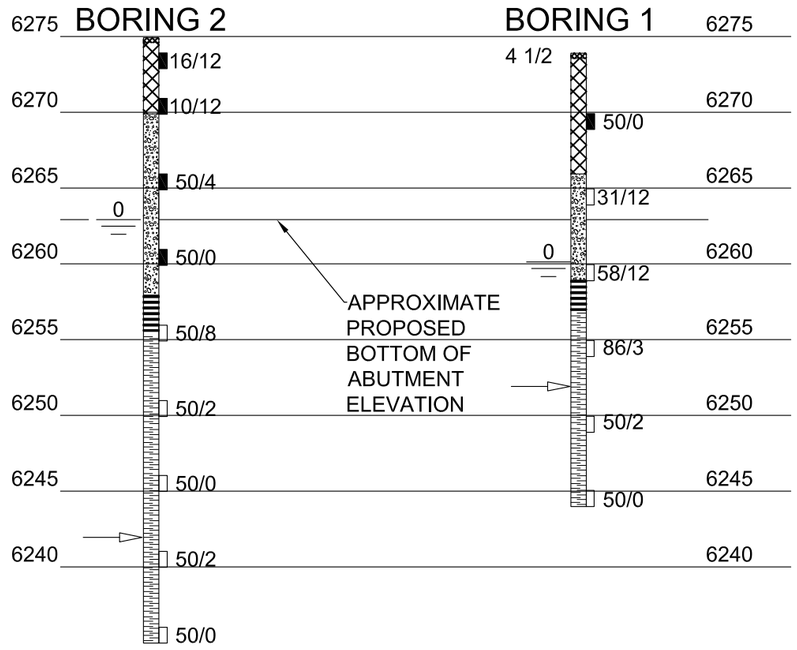
EVANS AVENUE OVER CHEYENNE CREEK

GENERAL LAYOUT

Subset:	BRIDGE	Subset Sheets:	BR02 of BR15	Sheet No:	16



10' PLAN SCALE 10'



50/0 Drive sample blow count, Indicates that 50 blows from a 140-pound hammer falling 30 inches were required to drive the California or SPT sampler 0 inches.

2-inch I.D. California liner drive sample.

Standard Penetration Test, 1⅜-inch I.D., split spoon drive sample.

0 Indicates depth to water level and number of days after drilling measurement was made.

Indicates depth to which caved material accumulated.

NOTES

1. Borings were drilled on November 8, 2011 with CME 75 drill rig equipped with ODEX air hammer system advancing 90 mm (approximately 3½-inches I.D. casing). Geotechnical sampling by 2" I.D. California liner samplers and 1⅜-inch split spoon samplers (SPT=Standard Penetration Testers).
2. Location of borings shown on Figure 1 are approximate.
3. The lines between strata represent approximate boundaries between material types. Transitions between materials may actually be gradual.
4. Boring logs are drawn to elevation. Elevations were obtained from plans provided by Matrix.
5. Water level readings shown on the logs were made at the time and under conditions indicated. Fluctuations in the water level may occur with time.

The boring logs of the above test holes are on file in the offices of Matrix Design Group, Inc. (719) 575–0100

SUMMARY OF TEST RESULTS

Sample No.	Depth (ft.)	Classification		Grading Analysis (AASHTO) Percent				Atterberg Limits			Water Content w %	Dry Unit Weight γ P.C.F.
		Corps of Engrs. or Visual	AASHTO	Gravel	Coarse Sand	Pass No. 200	Silt and Clay	Liquid Limit w_l	Plastic Limit w_p	Plastic Limit w_w		
1	4		A–1–a	32	59	9		NV	NP			
1	9			43	51	6						
1	14		A–1–a					NV	NP			
2	19										7.8	120
DS Bank	1/2–1		A–1–b	16	82	2		NV	NP			
US Bank	1/2–1		A–1–a	40	59	1		NV	NP			

TYPE OF MATERIAL

LEGEND

6 ASPHALT, thickness in inches shown to the left of the logs.

FILL, sand and gravel, silty with variable cobbles and small boulders up to 2' in diameter, loose to very dense, moist, medium brown, fine to coarse grained sand, small to large gravel.

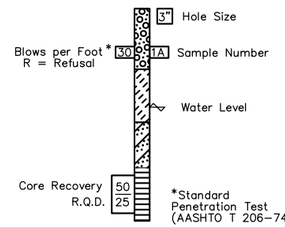
SAND with GRAVEL, silty in uppermost, variable granitic cobbles and boulders (Sound), medium dense to very dense, moist to wet, light brown, medium to coarse grained sand, small to large gravel.

WEATHERED SHALE BEDROCK, silty with slight sand, firm to medium hard, moist, rust to brown, very fine sand, blocky structure.

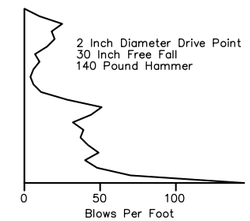
SHALE BEDROCK, silty to very silty, trace sand, very hard, slightly moist to dry, medium to dark gray, very fine sand, laminated.

LEGEND

TEST BORING



CONTINUOUS PENETRATION TEST



- Location of Test Boring
- Location of Continuous Penetration Test
- W 3" Wireline Boring
- Rotary Boring
- Auger Boring

COMPUTER FILE INFORMATION			
Creation Date:	11-9-12	Initials:	KPS
Last Modification Date:	.	Initials:	KPS
Full Path:	S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\		
Drawing File Name:	BR03-Engineering Geology.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

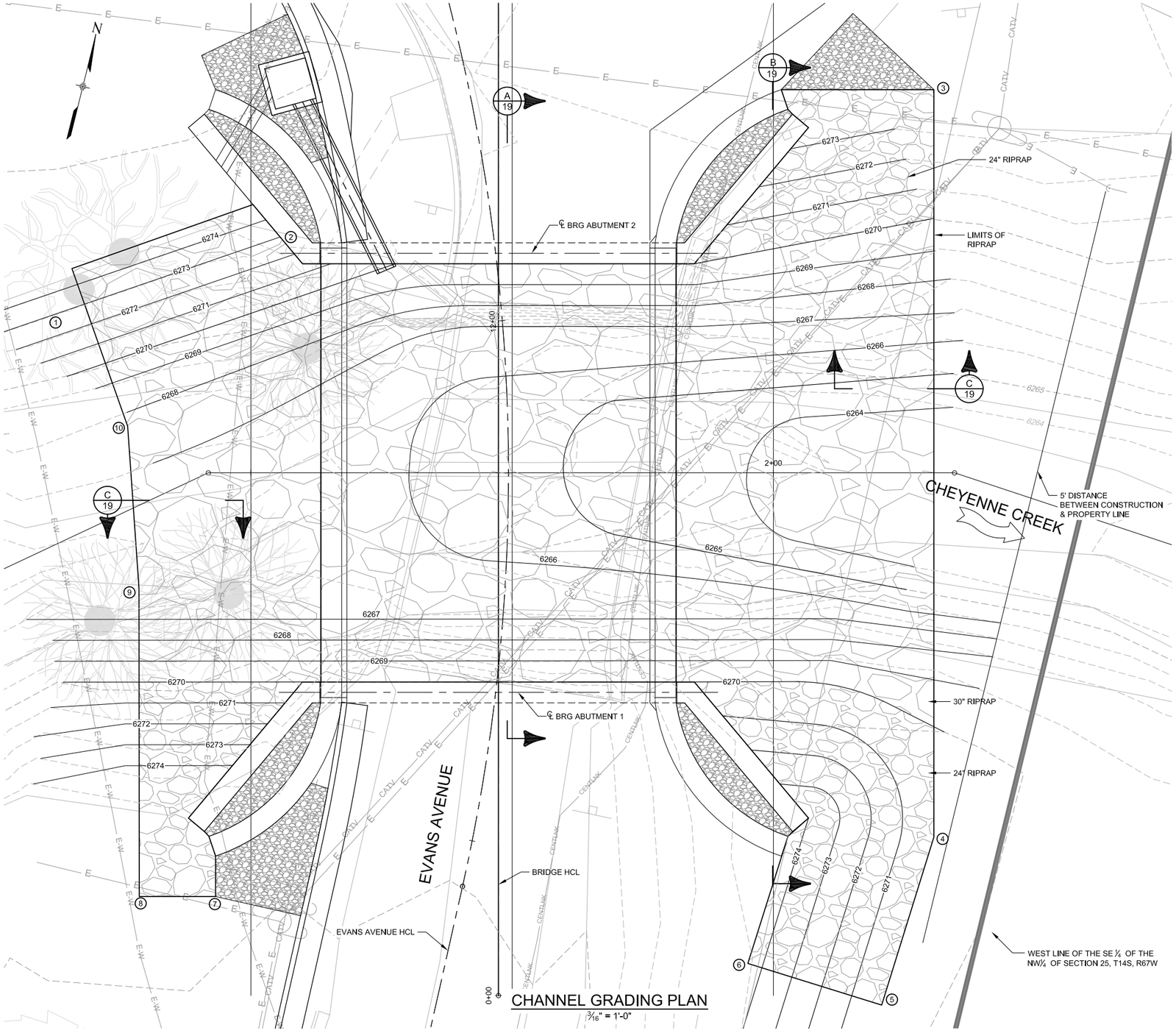
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYANNE CREEK

ENGINEERING GEOLOGY

Subset: BRIDGE | Subset Sheets: BR03 of BR15 | Sheet No: 17



CHANNEL GRADING PLAN

3/16" = 1'-0"

BRIDGE HYDRAULIC INFORMATION

CHANNEL DESCRIPTION

BOTTOM MATERIAL: NON-COHESIVE
BOTTOM MATERIAL SIZE: SANDS, GRAVEL, COBBELS & BOULDERS
STREAM FORM: STRAIGHT
DEBRIS: BRUSH AND TREES/LOGS
MANNINGS "n" FOR DESIGN: CHANNEL = 0.30 - 0.35
OVERBANK = 0.50

DRAINAGE AREA = 22 SQUARE MILES
USGS GAGE No. 07105490 (18 yrs of RECORDS)

EVENT	FLOW RATE	VELOCITY	WATER SURFACE ELEVATION
	(csf)	(ft/s)	(ft)
EXISTING BRIDGE			
Q_{500}	22,755	8.90	6287.60
Q_{100}	8,339	6.90	6281.30
Q_{gage}	2,000	9.00	6274.80
NEW BRIDGE			
Q_{500}	22,755	8.30	6283.40
Q_{100}	8,339	6.10	6280.50
Q_{gage}	2,000	9.10	6275.10

LEGEND

- RIPRAP (30 INCH)
- RIPRAP (24 INCH)
- LANDSCAPE ROCK (1 1/2 INCH)
- 4650 — NEW CONTOUR
- 4650 — EXISTING CONTOUR
- (1) COORDINATE POINT

COORDINATE TABLE		
POINT NO.	NORTHING	EASTING
1	1349286.86	3181206.40
2	1349296.99	3181221.72
3	1349323.40	3181282.31
4	1349254.01	3181299.58
5	1349237.21	3181298.61
6	1349237.99	3181285.22
7	1349231.90	3181234.24
8	1349230.13	3181227.16
9	1349258.76	3181220.00
10	1349273.51	3181215.22

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	11/07/2012	Initials:	JBN
Last Modification Date:	11/07/2012	Initials:	JBN
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR04 & BR05-Bridge Hydraulic Info.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

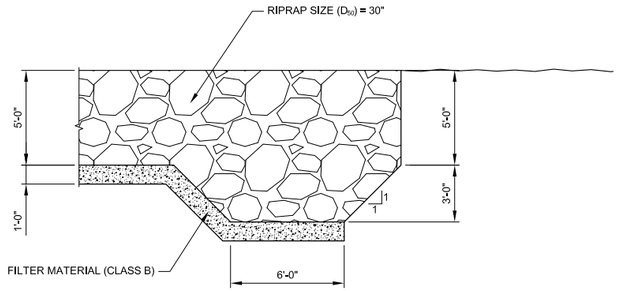
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

BRIDGE HYDRAULIC INFORMATION, & CHANNEL GRADING PLAN

Subset: BRIDGE | Subset Sheets: BR04 of BR15 | Sheet No: 18



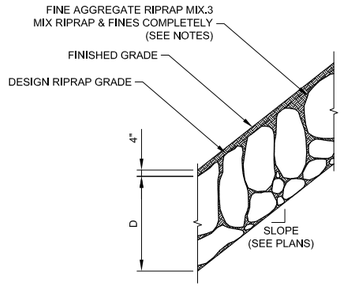
SECTION C/18

1/4" = 1'-0"

NOTES:

1. GENERAL PLACEMENT TECHNIQUES SHOULD RESULT IN THE LARGEST ROCK FRAGMENTS BEING ON THE SURFACE, SECURELY INTERLOCKING AT THE DESIGN THICKNESS AND GRADE. COMPACTION AND LEVELING SHOULD RESULT IN ALL VOIDS BEING FILLED WITH FINE AGGREGATE. ANY POCKETS OF SMALL ROCK SHALL BE REWORKED AT THE DIRECTION OF THE ENGINEER.

2. ALL RIPRAP PLACEMENTS ARE TO BE COMPACTED BY FULL LOADING OF EXCAVATOR BUCKET AND APPROVED BY THE ENGINEER. ANY SOFT OR YIELDING AREAS SHALL BE EXCAVATED, STABILIZED AND REINSTALLED AT NO ADDITIONAL COST TO THE PROJECT.



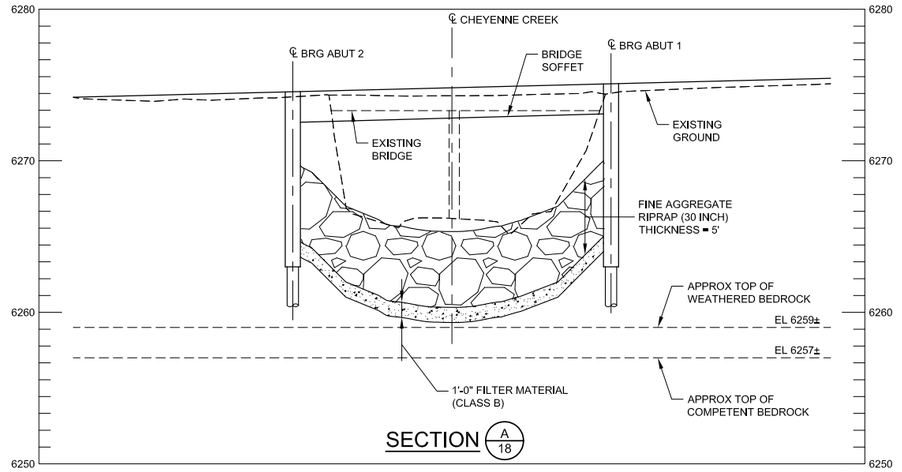
FINE AGGREGATE 30" RIPRAP DETAIL

1/4" = 1'-0"

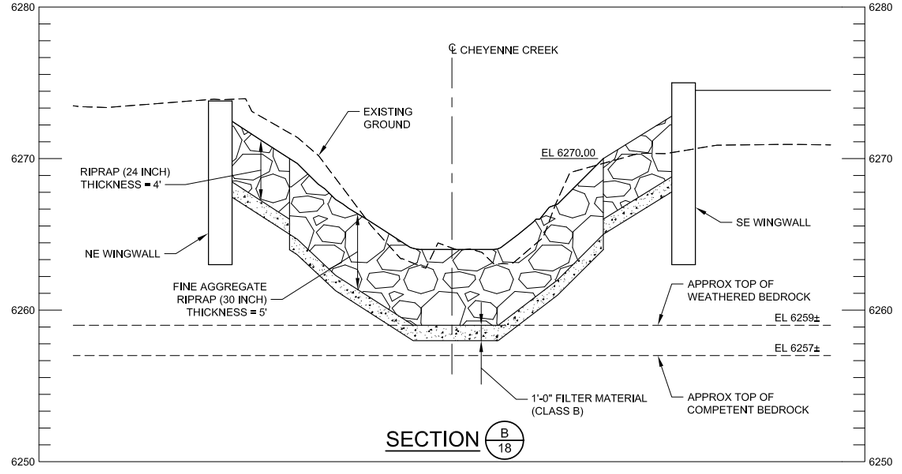
D = 5' FOR 30" RIPRAP AGGREGATE MIX

NOTES:

1. MIX UNIFORMLY 65%RIPRAP BY VOLUME WITH 35% OF APPROVED (NATIVE) FINE AGGREGATE SANDS & GRAVELS BY VOLUME PRIOR TO PLACEMENT.
2. PLACE FINE AGGREGATES OVER RIPRAP LAYER IN 2 FOOT LIFTS TO ASSURE MIXING TO THE BOTTOM OF RIPRAP LAYER.
3. FINE AGGREGATE SHALL BE INCLUDED IN THE COST OF D_{50} - 30" RIPRAP AGGREGATE.



SECTION A/18



SECTION B/18

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	11/07/2012	Initials:	JBN
Last Modification Date:	11/07/2012	Initials:	JBN
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR04 & BR05-Bridge Hydraulic Info.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY:
CHECKED BY:

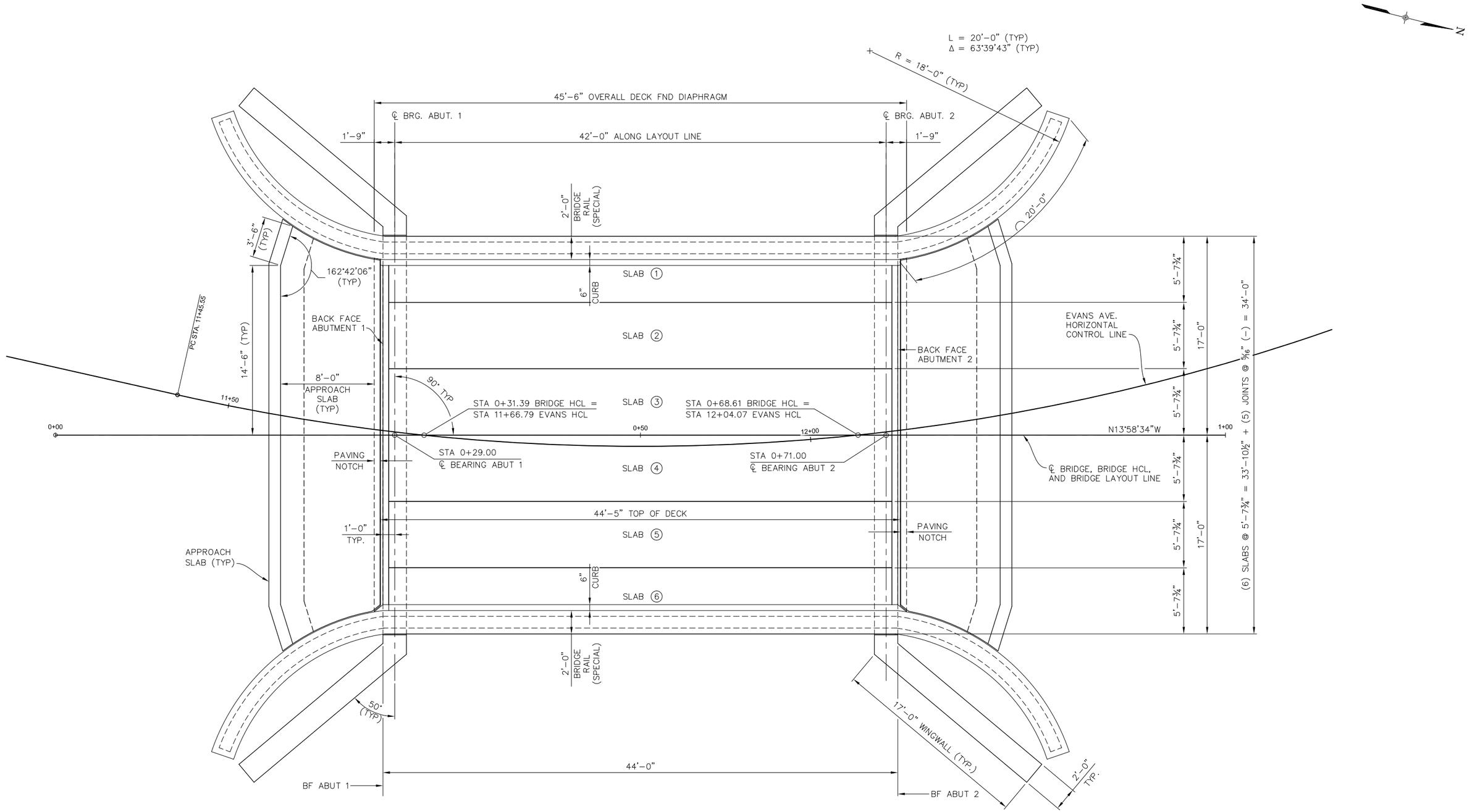
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

CHANNEL RIP RAP DETAILS

Subset:	BRIDGE	Subset Sheets:	BR05 of BR15	Sheet No:	19



CONSTRUCTION LAYOUT

¼" = 1'-0"

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	03-17-2011	Initials:	KPS
Last Modification Date:	.	Initials:	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR06-Construction Layout.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

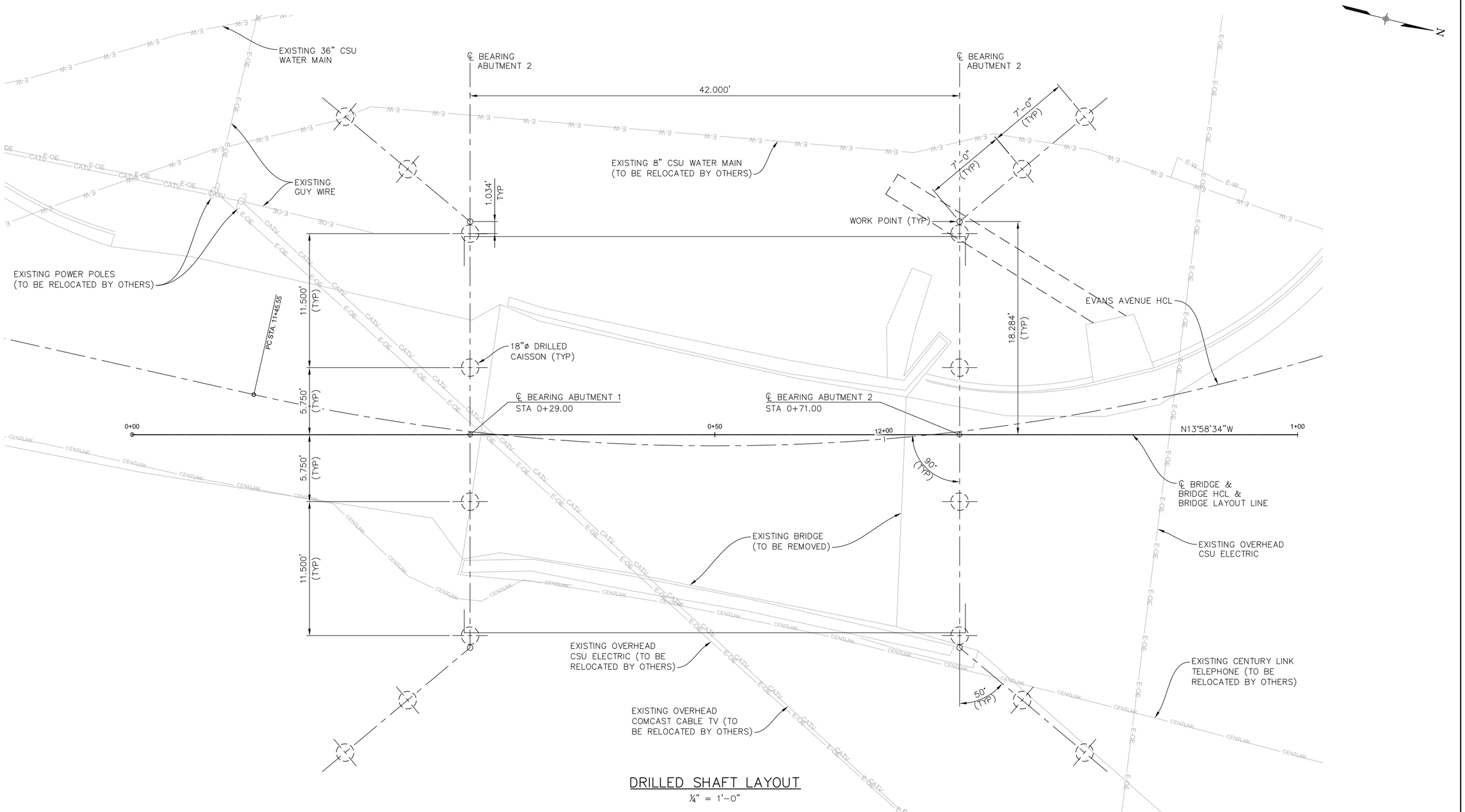
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

CONSTRUCTION LAYOUT

Subset:	BRIDGE	Subset Sheets:	BR06 of BR15	Sheet No:	20



DRILLED SHAFT LAYOUT

¼" = 1'-0"

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	03-17-2011	Initials:	KPS
Last Modification Date:	.	Initials:	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR07-Drilled Shaft Layout.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

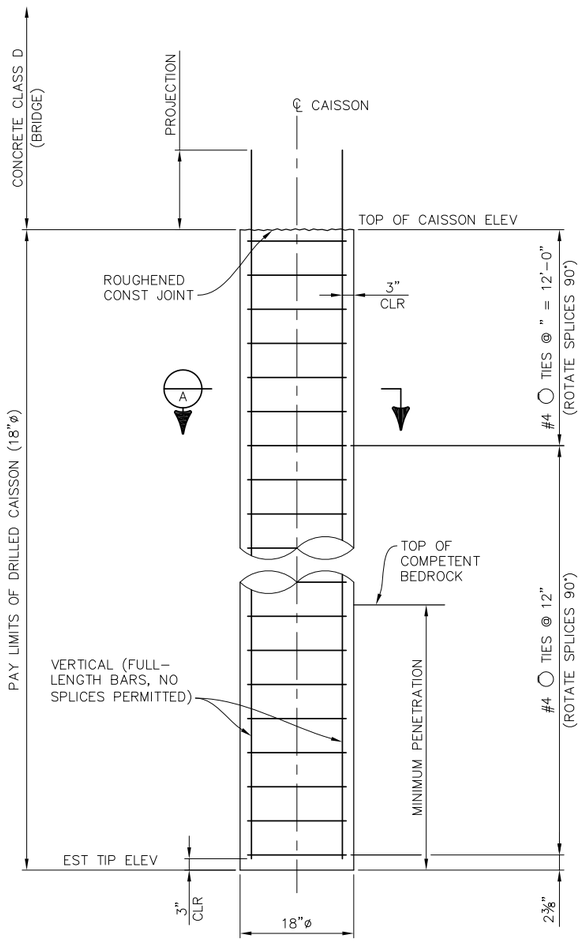
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

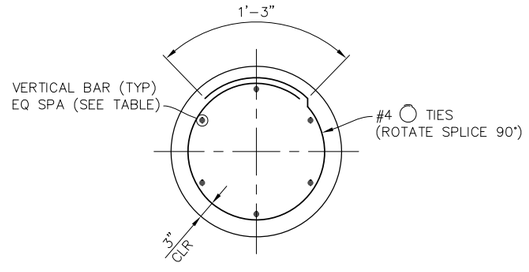
EVANS AVENUE OVER CHEYENNE CREEK

DRILLED SHAFT LAYOUT

Subset:	BRIDGE	Subset Sheets:	BR07 of BR15	Sheet No:	21



18"ø CAISSON DETAIL



SECTION (A)

CAISSON DATA

LOCATION	TOP OF CAISSON ELEV	TOP OF COMPETENT BEDROCK	ESTIMATED TIP ELEV	MIN PENETRATION (FEET)	NUMBER	CAISSON LENGTH (FEET)	MAX FACTORED LOAD (KIPS)	CAISSON DIAMETER (INCH)	REINFORCEMENT		
									NUMBER OF BARS	SIZE	PROJECTION
ABUTMENT 1	6263.0	6252.0	6236.0	16.0	8	27.0	234	18	8	#8	3'-0"
ABUTMENT 2	6263.0	6252.0	6236.0	16.0	8	27.0	234	18	8	#8	3'-0"

CAISSON NOTES:

1. CONCRETE SHALL BE CLASS BZ (BRIDGE).
2. ELEVATIONS SHOWN SHALL BE VERIFIED AT TIME OF CONSTRUCTION BY THE ENGINEER.
3. CLAYSTONE OR SANDSTONE ENCOUNTERED ABOVE THE "TOP OF COMPETENT BEDROCK" ELEVATION IS NOT CONSIDERED COMPETENT.
4. IT IS ANTICIPATED THAT TEMPORARY CASING MAY BE NEEDED TO PREVENT CAVING OF GRANULAR SOILS OR BEDROCK AND/OR TO REDUCE THE INTRUSION OF GROUNDWATER FROM THE WATER BEARING SOILS OF SANDSTONE OR BEDROCK. THE USE OF CASING AND DEWATERING SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
5. ALL REINFORCING SHALL BE NON-EPOXY COATED.

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION	
Creation Date: 03-17-2011	Initials: KPS
Last Modification Date: .	Initials:
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\	
Drawing File Name: BR08-Drilled Shaft Details.dwg	
Acad Ver. 2012	Scale: AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

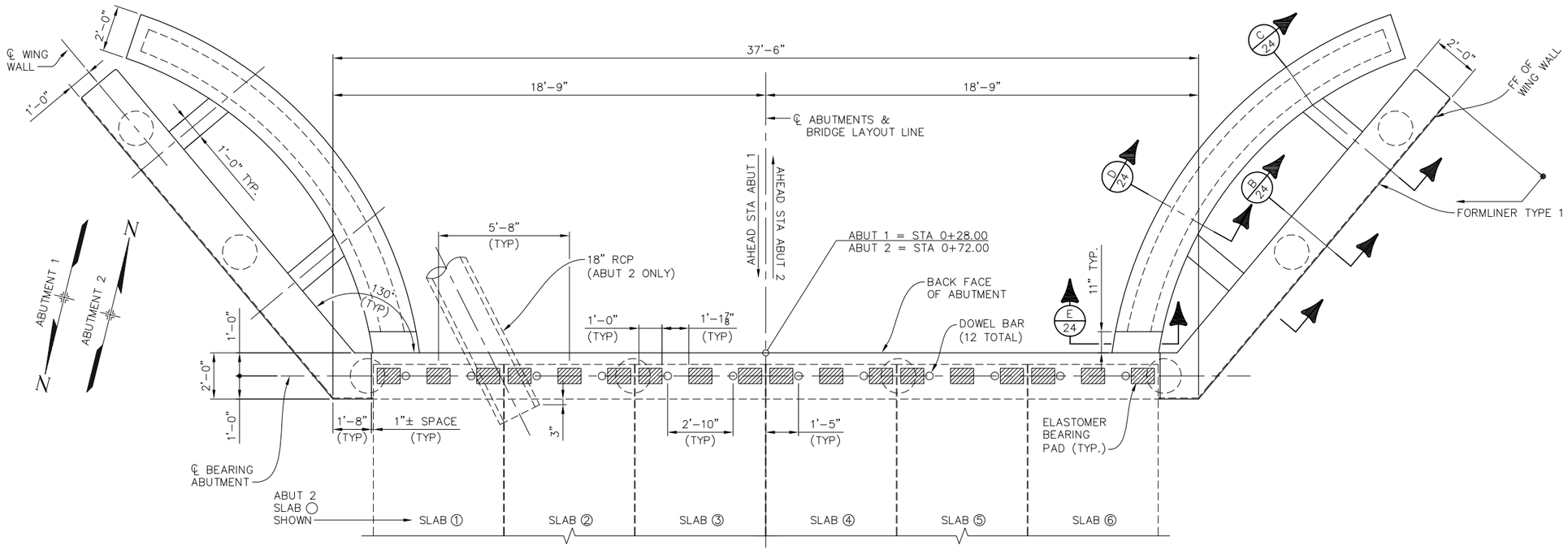
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

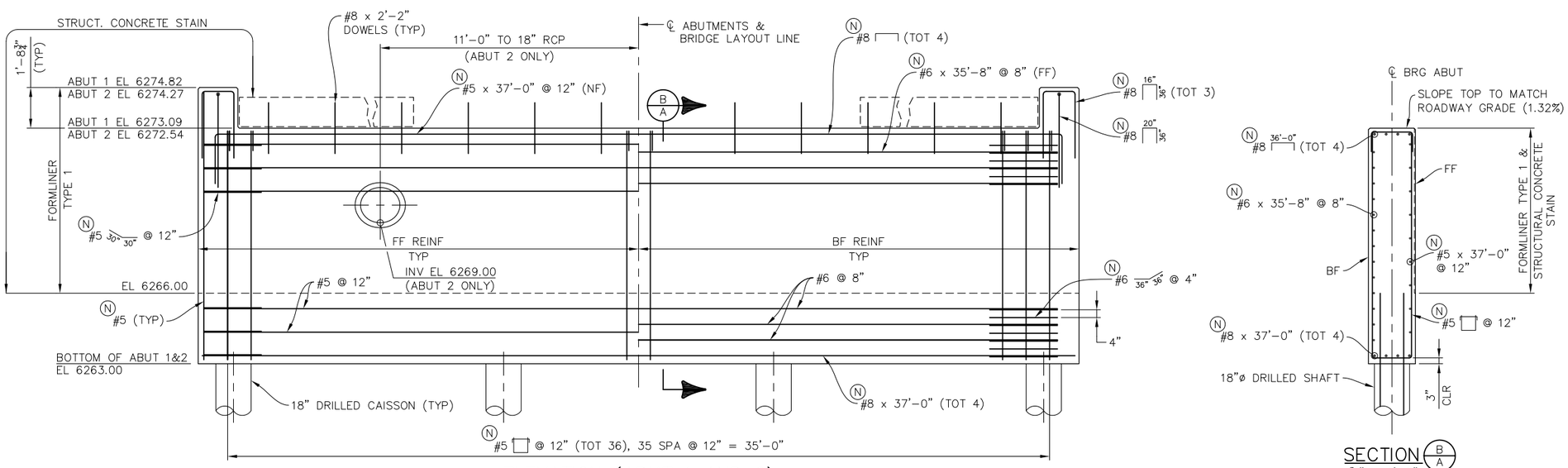
DRILLED SHAFT DETAILS

Subset: BRIDGE | Subset Sheets: BR08 of BR15 | Sheet No: 22



PLAN (ABUT 1 AND 2)

⅜" = 1'-0"



ELEVATION (ABUT 1 AND 2)

⅜" = 1'-0"

SECTION B/A

⅜" = 1'-0"

COMPUTER FILE INFORMATION			
Creation Date:	11-9-12	Initials:	KPS
Last Modification Date:	.	Initials:	KPS
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR09-Abutment.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

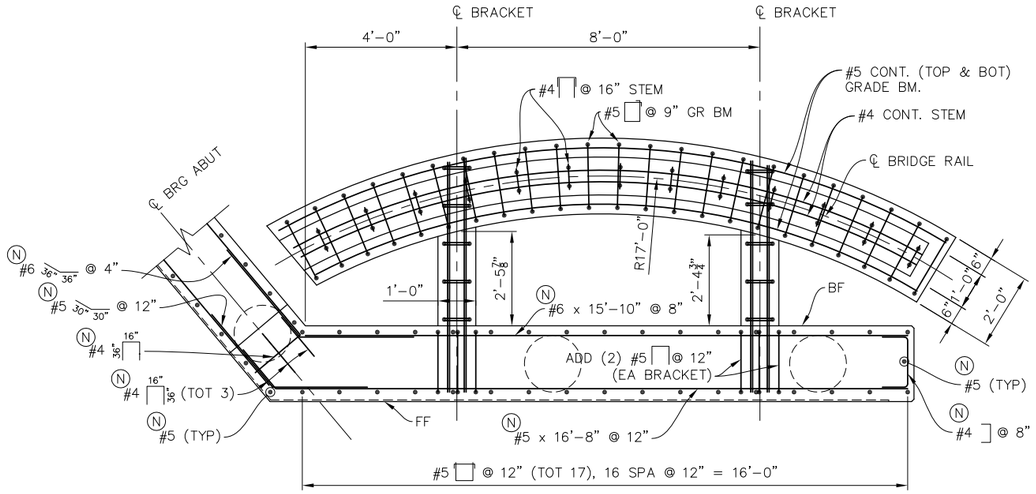
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

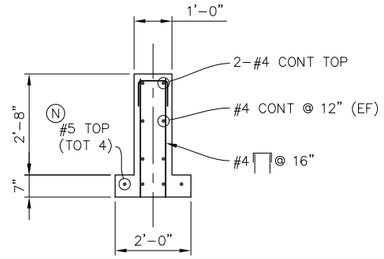
EVANS AVENUE OVER CHEYANNE CREEK

ABUTMENT DETAILS

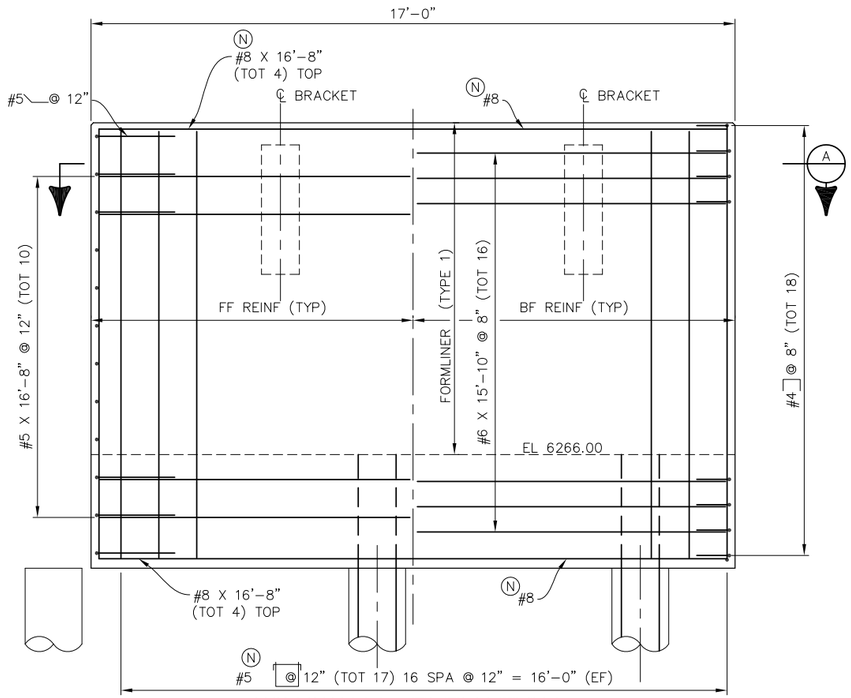
Subset:	BRIDGE	Subset Sheets:	BR09 of BR15	Sheet No:	23



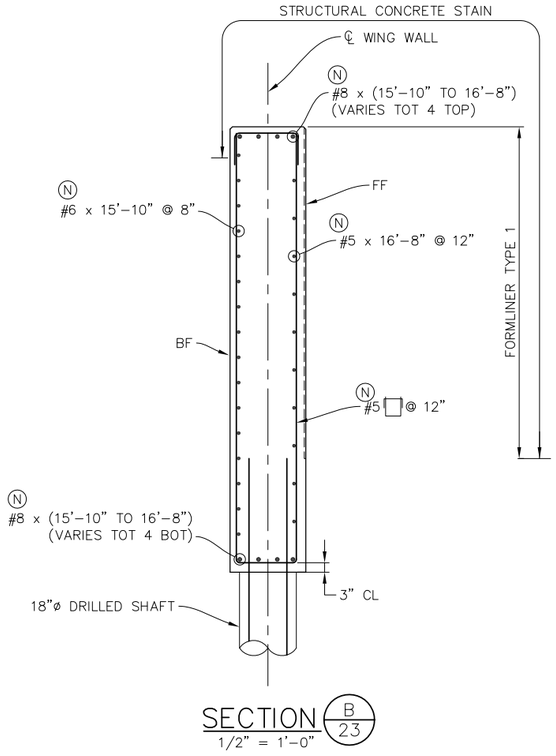
SECTION A
1/2" = 1'-0"



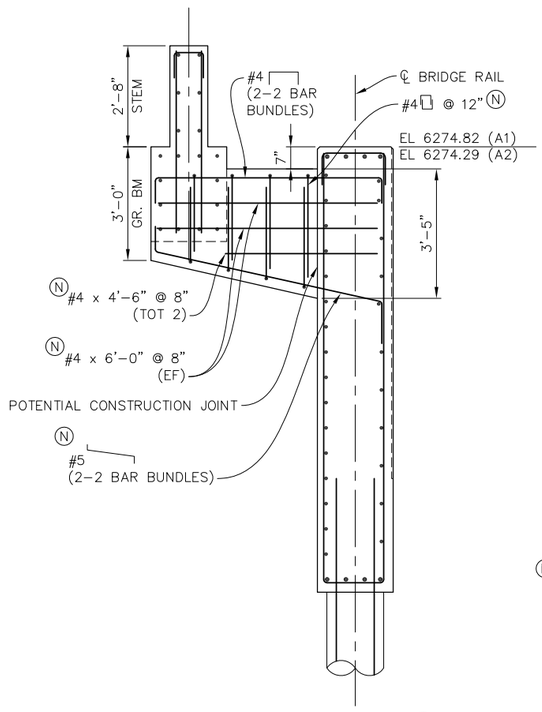
SECTION E
1/2" = 1'-0"



WINGWALL ELEVATION
1/2" = 1'-0"



SECTION B
1/2" = 1'-0"

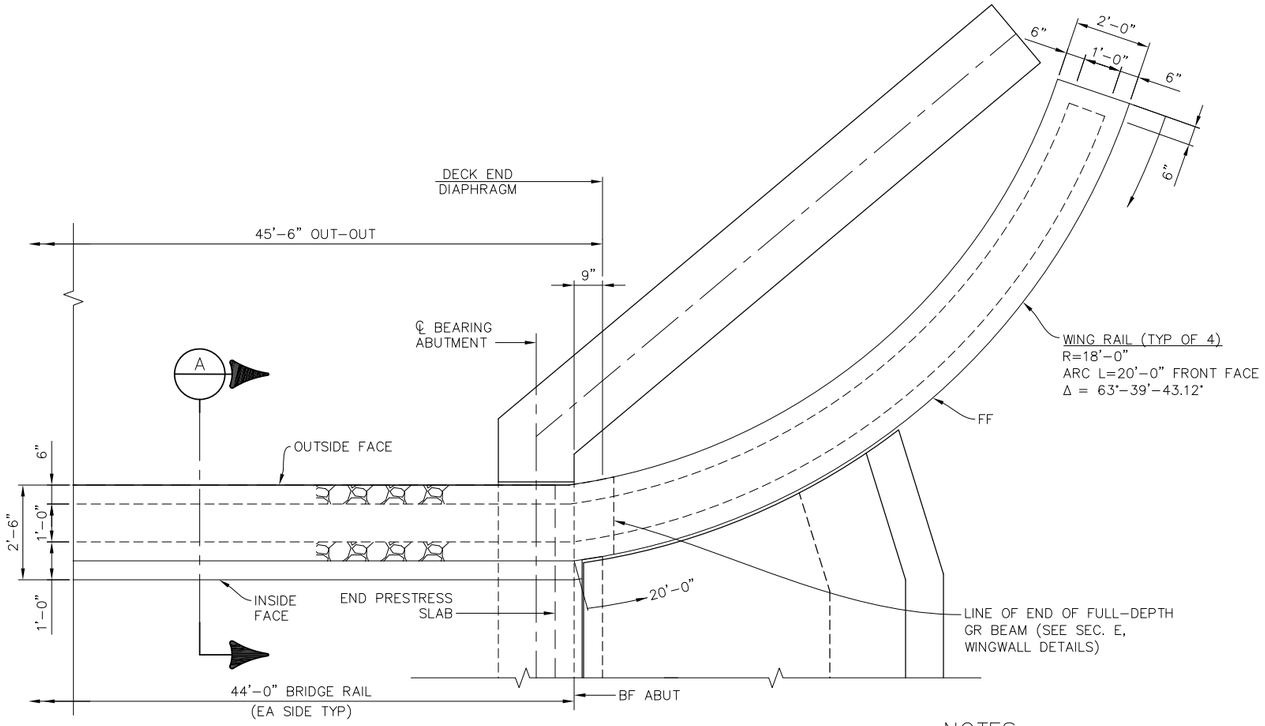


SECTION C
1/2" = 1'-0"

SECTION D
1/2" = 1'-0"

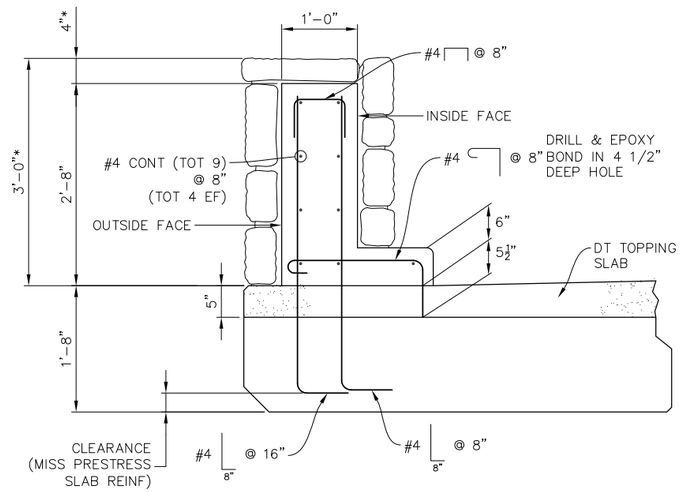
PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			REVISIONS			STATEMENT:		EVANS AVENUE BRIDGE REPLACEMENT
Creation Date: 11-9-12	Initials: KPS		No.	Description	Date	THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.	Matrix DESIGN GROUP DESIGNED BY: MJB DRAWN BY: KPS CHECKED BY: MJB	EVANS AVENUE OVER CHEYANNE CREEK
Last Modification Date: .	Initials: KPS						2435 Research Pkwy, Suite 300, Colorado Springs, CO 80920 719.575.0100	WING WALL DETAILS
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\							CITY OF COLORADO SPRINGS We Create Community	Subset: BRIDGE | Subset Sheets: BR10 of BR15 | Sheet No: 24
Drawing File Name: BR10-Wing Wall Details.dwg								
Acad Ver. 2012	Scale: AS SHOWN							



PLAN
1/2" = 1'-0"

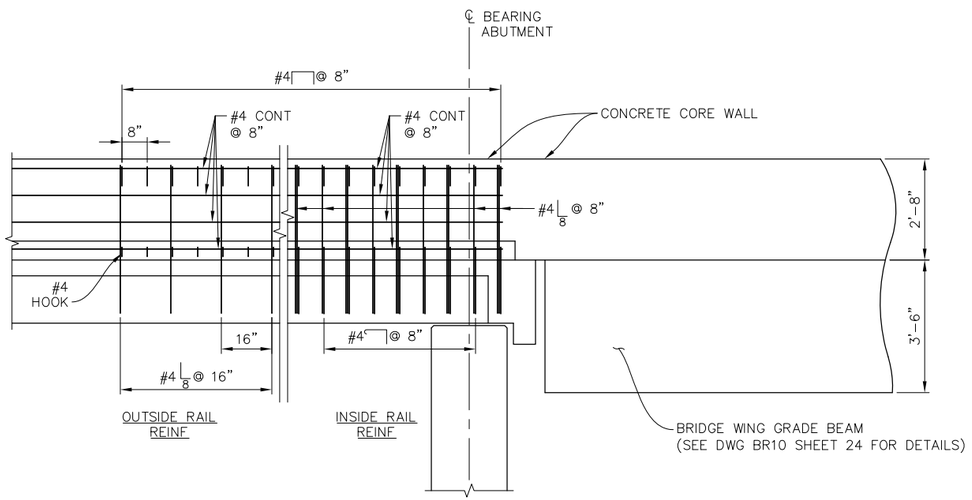
* = MIN. DIM. – SEE MASONRY ROCK DETAILS



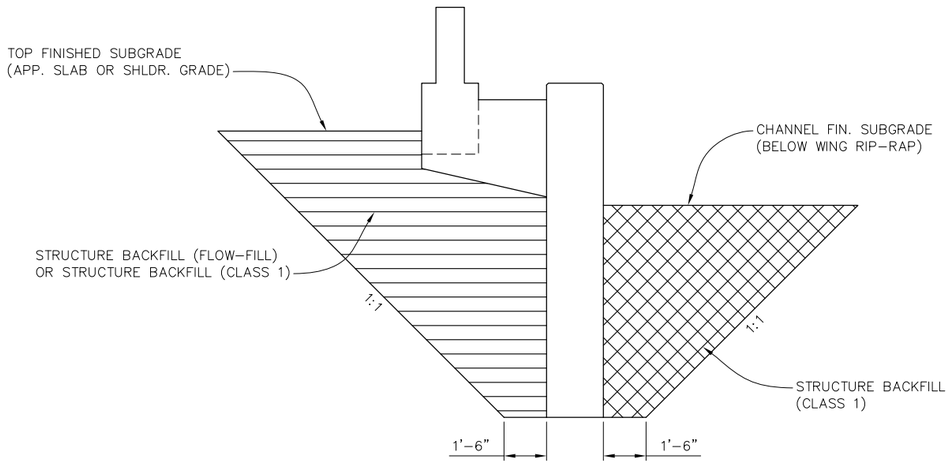
SECTION A
1" = 1'-0"

NOTES:

1. ALL REINFORCING SHOWN THIS DWG. IS EPOXY COATED.



BRIDGE RAIL ELEVATION
1/2" = 1'-0"



BACKFILL AT WINGWALLS/BRIDGE RAIL
3/8" = 1'-0"

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	11-9-12	Initials:	KPS
Last Modification Date:	.	Initials:	KPS
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR11 & BR12-Bridge Rail Details.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

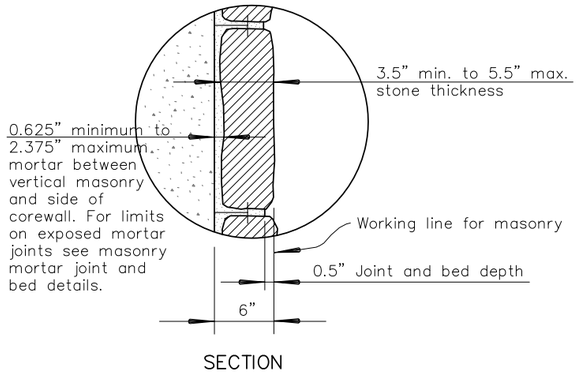
Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT
EVANS AVENUE OVER CHEYANNE CREEK
BRIDGE RAIL (SPECIAL) DETAILS

Subset:	BRIDGE	Subset Sheets:	BR11 of BR15	Sheet No:	25



SECTION

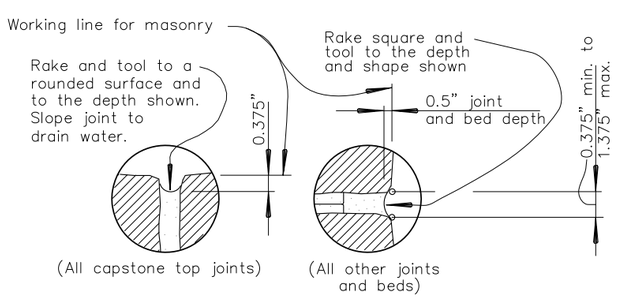
MASONRY NOTES:

1. The dovetail slots shall be type D/A 100 as manufactured by Dur–O Wal, Inc., or an approved equal. They shall be 22 gage hot–dipped galvanized steel, filled with foam and with a throat opening width of 0.625".

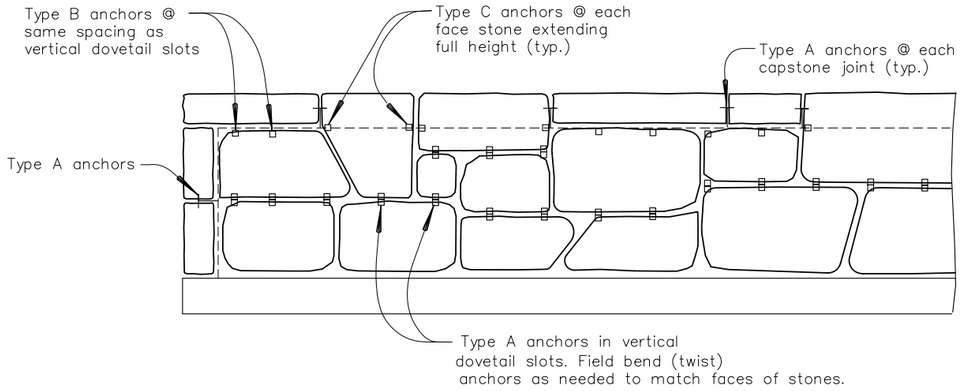
2. The dovetail anchors shall be as manufactured by Dur–O Wal, Inc., or an approved equal. Dovetail and strap anchors shall be 0.125" thick hot–dipped galvanized steel.

3. The locations of the dovetail anchors are as follows: The Type A dovetail anchors are required between all capstones, and at the intersection of the vertical dovetail slots and each horizontal joint. The Type B strap anchors are required in the bed beneath each Class B masonry capstone at a 9" maximum spacing. The Type C strap anchors are required in the vertical joints where face stones extend to the top surface of the capstones.

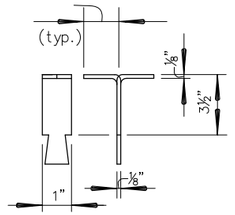
4. To the extent possible, masonry rock from the existing (removed) structure shall be salvaged and re–used for construction of bridge rail (special).



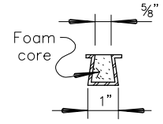
MASONRY MORTAR JOINT AND BED DETAILS



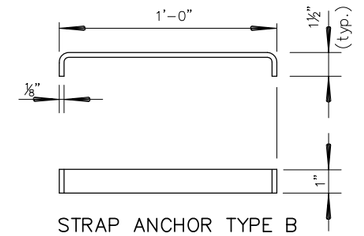
MASONRY ANCHOR DETAILS FOR USE WITH
STONE MASONRY BRIDGE RAIL (SPECIAL)



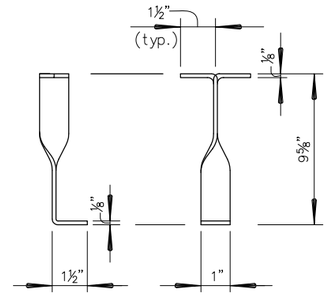
DOVETAIL ANCHOR
TYPE A



DOVETAIL
SLOT

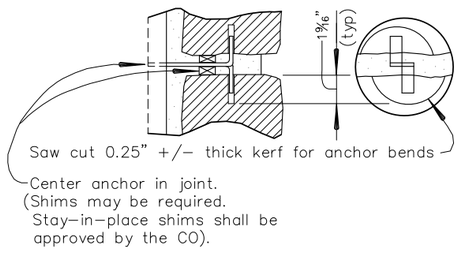


STRAP ANCHOR TYPE B

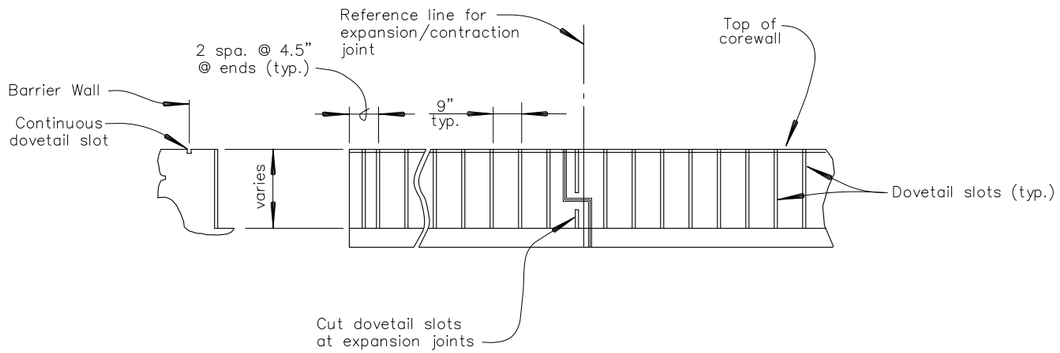


STRAP ANCHOR TYPE C

DOVETAIL SLOT & ANCHOR DETAILS



MASONRY KERF DETAIL



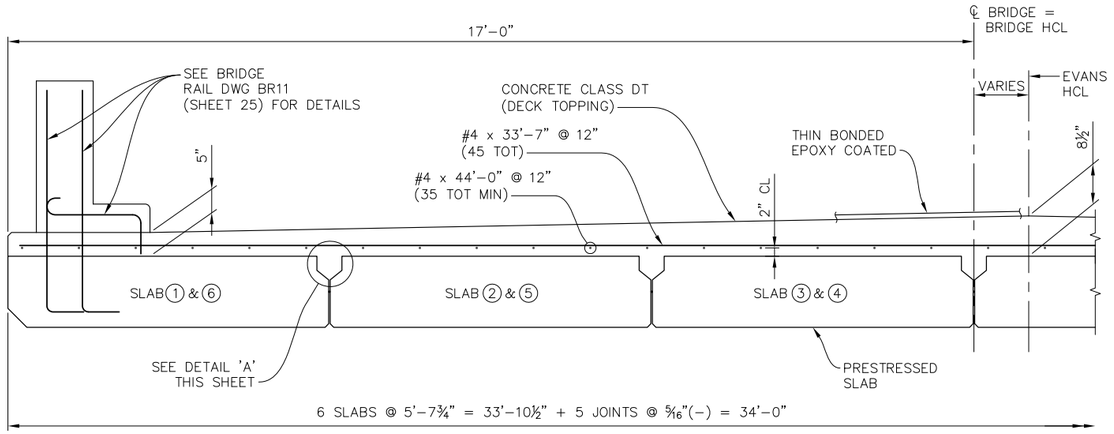
DOVETAIL SLOT DETAILS

COMPUTER FILE INFORMATION			REVISIONS			STATEMENT:		
Creation Date:	11-9-12	Initials: KPS	No.	Description	Date	THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.	EVANS AVENUE BRIDGE REPLACEMENT	
Last Modification Date:	.	Initials: KPS					EVANS AVENUE OVER CHEYENNE CREEK	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\							BRIDGE RAIL (SPECIAL) MASONRY ROCK DETAILS	
Drawing File Name: BR11 & BR12-Bridge Rail Details.dwg								
Acad Ver. 2012	Scale: AS SHOWN						Subset: BRIDGE	Subset Sheets: BR12 of BR15 / Sheet No: 26

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100
DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

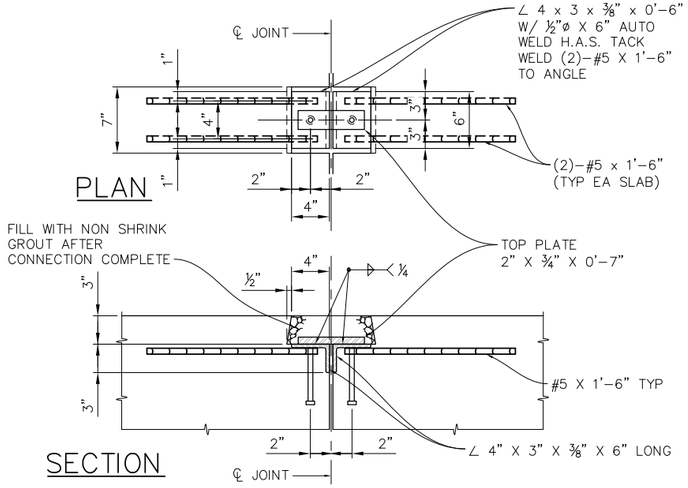
CITY OF COLORADO SPRINGS
We Create Community

PLOT DATE: 09/26/2014



PARTIAL TYPICAL SECTION A

3/4" = 1'-0"

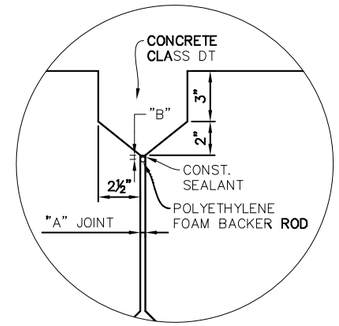


SLAB TIE DETAILS

SCALE: 1½" = 1"

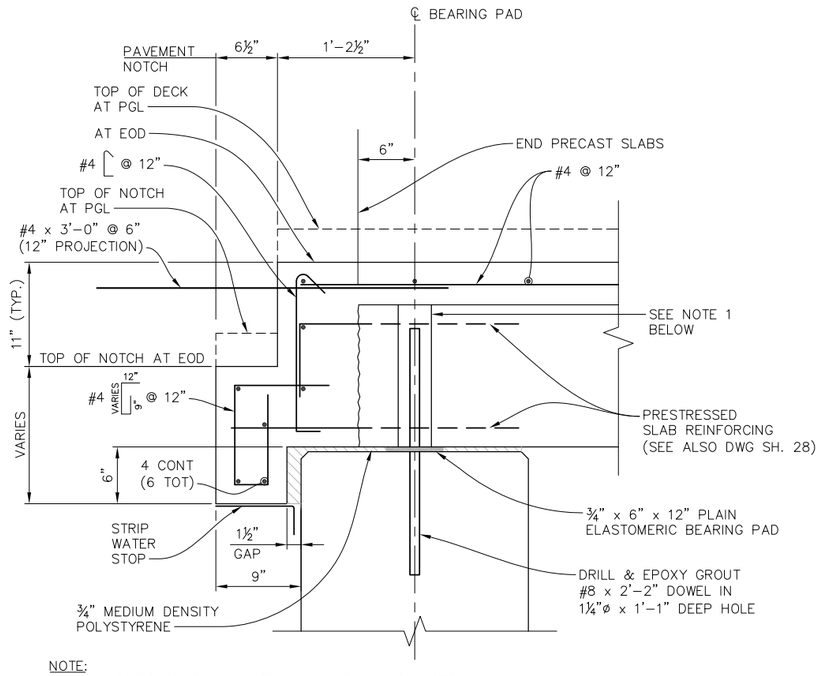
NOTES:

1. CONTRACTOR SHALL SUPPLY FOAM BACKER ROD APPROPRIATE TO FIT JOINT WIDTH DIM. "A"
2. RATIO OF DIM "A" TO DIM "B" SHALL BE 2:1.
3. CONSTRUCTION SEALANT NOT TO BE PAID SEPARATELY BUT INCLUDED IN THE COST OF ITEM 618 PRESTRESS CONCRETE SLAB.
4. FOAM BACKER ROD AND SEALANT TO BE APPLIED ENTIRE LENGTH OF SLAB.



DETAIL A

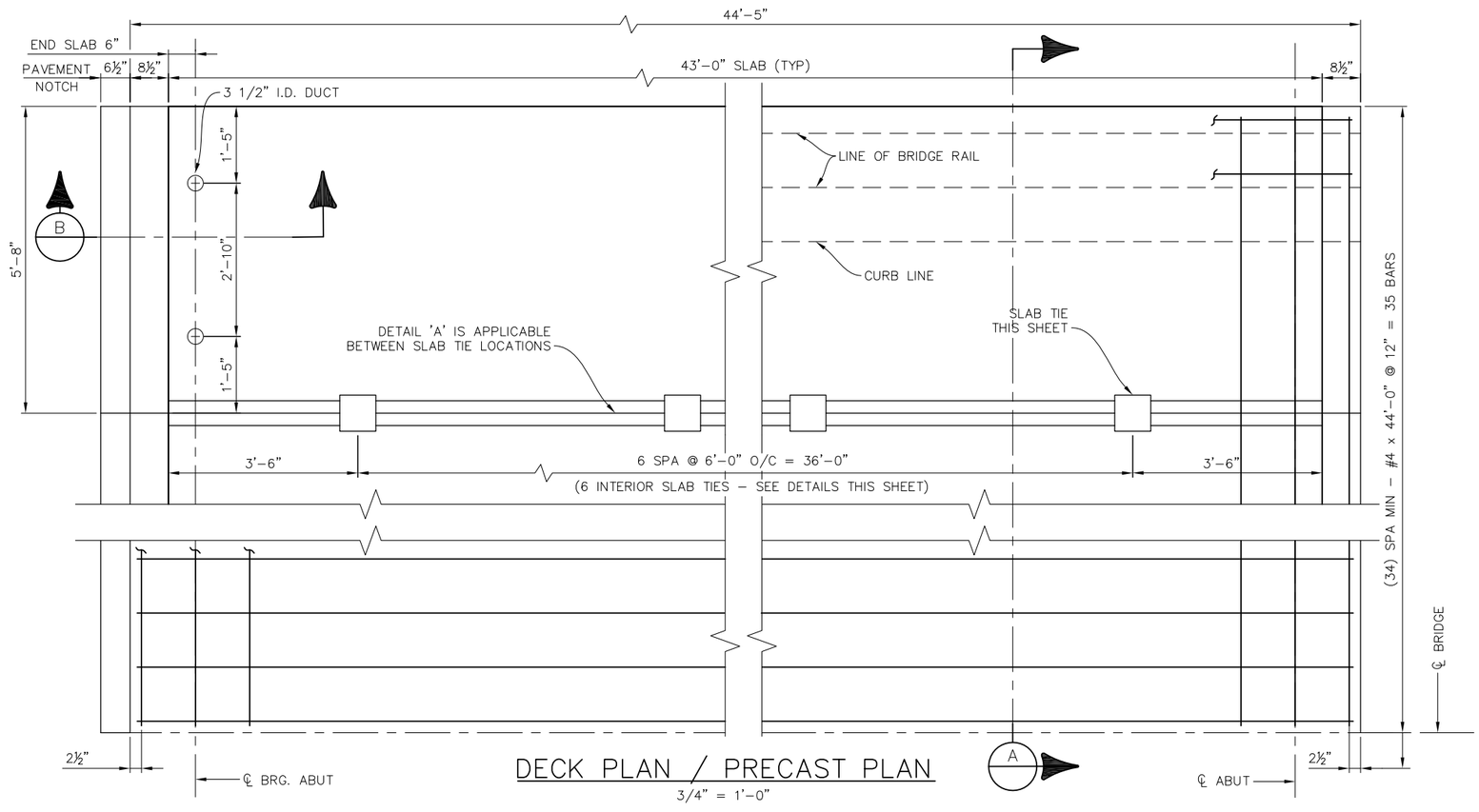
3/8" = 1"



NOTE:
1. 3½" I.D. PT DUCT, FILL WITH NON-SHRINK, NON-METALIC CEMENTITOUS GROUT (DAYTON SUPERIOR 1107A ADVANTAGE OR EQUAL) AT ABUTMENT 1 AND NON-SILICONE SEALANT (CRAFCO ROADSAVER SILICONE OR EQUAL) AT ABUTMENT 2.
2. ALL REINF. SHOWN THIS SHEET IS EPOXY-COATED.
3. ALL CAST-IN-PLACE CONCRETE SHOWN THIS SHEET IS CLASS DT.

SECTION B

1½" = 1'-0"



DECK PLAN / PRECAST PLAN

3/4" = 1'-0"

COMPUTER FILE INFORMATION			
Creation Date:	03-17-2011	Initials:	KPS
Last Modification Date:	.	Initials:	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR13-Superstructure Details.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

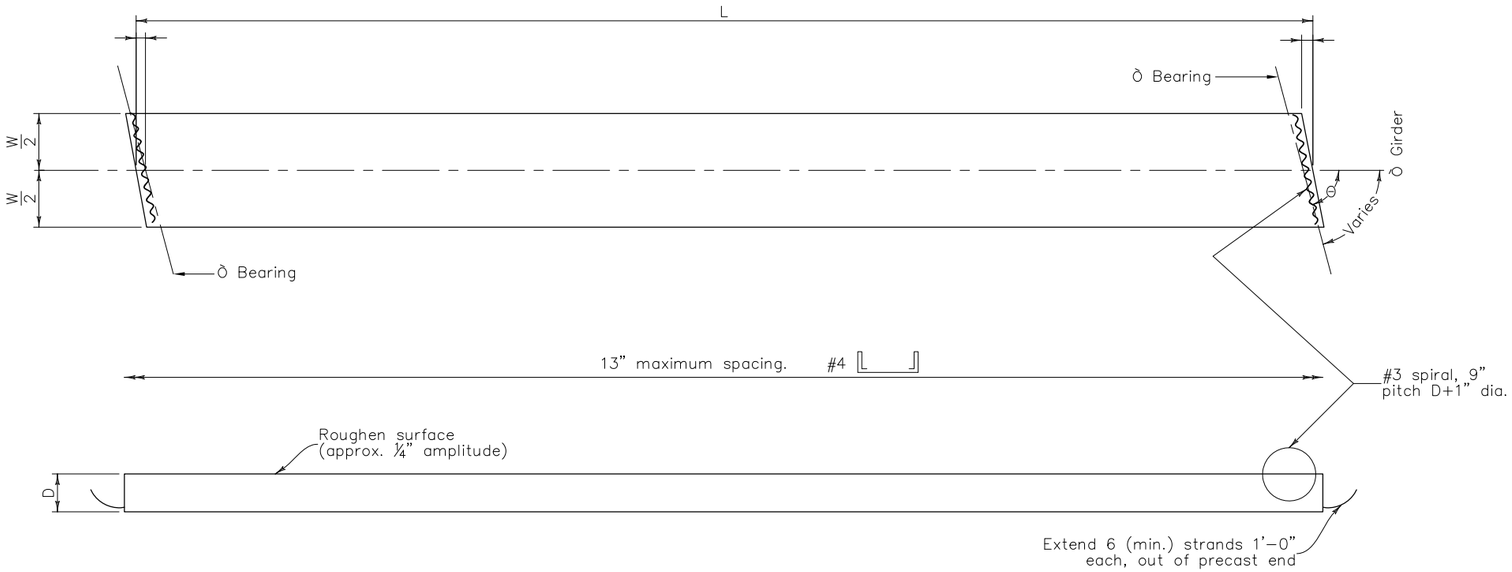
CITY OF COLORADO SPRINGS
We Create Community

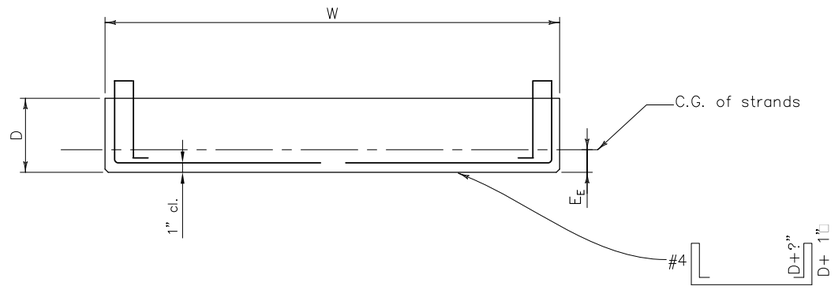
EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

SUPERSTRUCTURE DETAILS

Subset:	BRIDGE	Subset Sheets:	BR13of BR15	Sheet No:	27





Span No.	Girder No.	L (Feet)	W (Inch)	D (Inch)	Θ (Deg.)	A_s* (Square inch)	E_E (Inch)	F_j (KIPS)	F_f (KIPS)	Concrete Strength f'_{ci} (PSI)	Concrete Strength f'_c (PSI)	Δ (Inch)	Predicted Release Camber (Inch)	Predicted Camber (Inch)
1	1,6	43.00	68	15	90	4.34	2.25	878.9	791.4	6000	7000	0.498	0.647	1.050
1	2–5	43.00	68	15	90	4.34	2.25	878.9	792.1	6000	7000	0.315	0.647	1.050

NOTES:

All work necessary to fabricate and install the integral parts of the girder (including the intermediate diaphragms, if any, and leveling pads), as shown on the plans, shall be included in the bid price for Item No. 618, Prestressed Concrete Slab ( ), with a pay unit of Sq. Ft. measured by L x W.

When approved by the Engineer a minimum of tack welding will be permitted on ASTM A706 uncoated reinforcing steel.

Reinforcing projecting from the top of the girder and reinforcing within eight feet of an expansion device in the bridge deck shall be epoxy coated. Damaged coating on girder reinforcing need not be repaired. The minimum cover for reinforcing steel is 1".

Welded wire fabric may be used with D20 wires in lieu of the #4 bars shown.

At girder ends not embedded in concrete diaphragms, cut strands off 1" below the surface of the concrete and finish with an approved epoxy grout. At girder ends embedded in concrete diaphragms, cut strands to project 3", except as shown. Do not make cosmetic repairs (damage less than 1" deep) to the parts of the girders embedded in concrete.

Use low relaxation strands meeting the requirements of ASTM A416 Grade 270. The minimum clear distance between groups or individual strands shall be 2.3(d_s) but not less than 1¼". The minimum cover for prestressing steel is 1".

A_s*= minimum area of the prestressing steel.
d_s = nominal strand diameter.
f'_s = ultimate strength of prestressing steel.
F_j = jacking force per girder.
F_f = final force per girder after all losses.
f'_{ci} = required concrete strength at release of prestress force.
f'_c = required concrete strength at 28 days of age.
L = length of girder along the grade of the girder.
Δ = deflection at centerline of span due to cast–in–place slab, diaphragms, asphalt, curbs, rails, and walks.
Θ = bridge skew angle

Concrete shall be Class PS.

Entrained air is not required for girder concrete.

Use " chamfer on all corners, except as noted.

Predicted camber is the camber for the girder alone at 90 days. The Contractor shall limit the camber growth to a value not to exceed the predicted camber plus 1" prior to the deck pour by weighting, scheduling fabrication, post tensioning, or other means and must report to the Engineer values of camber which exceed the predicted camber plus 1". Remedial measures, as approved by the Engineer, shall be taken if the predicted camber plus 1" is exceeded. The approved remedial measures shall be free of any adverse impact. The costs associated with all remedial measures shall be borne by the Contractor.

Side by side slabs placed over roads or pedestrian facilities shall not have cambers of adjacent girders differ by more than 1" before the deck pour. Prior to placing deck reinforcing, the Contractor shall adjust this differential to within this limit by sorting the girders to minimize differentials, or by pulling the high boxes down and low boxes up.

The depth (D) tolerance shall be +½", –¼"

The Contractor is responsible for determining necessary bracing requirements, and for providing adequate bracing for the specific wind and weather conditions to be encountered for each specific project.

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	11-12-12	Initials:	KPS
Last Modification Date:	.	Initials:	KPS
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\			
Drawing File Name:	BR14-Prestressed Slab.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

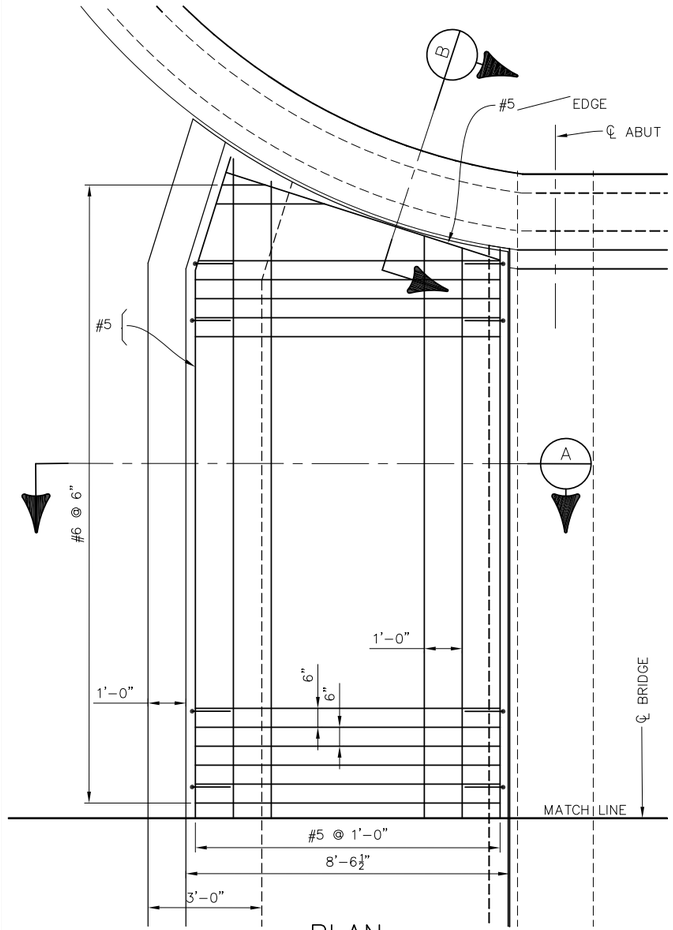
CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

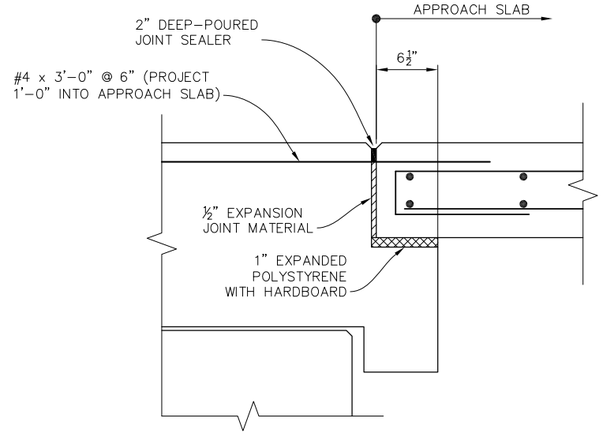
EVANS AVENUE OVER CHEYENNE CREEK

PRESTRESSED CONCRETE SLAB

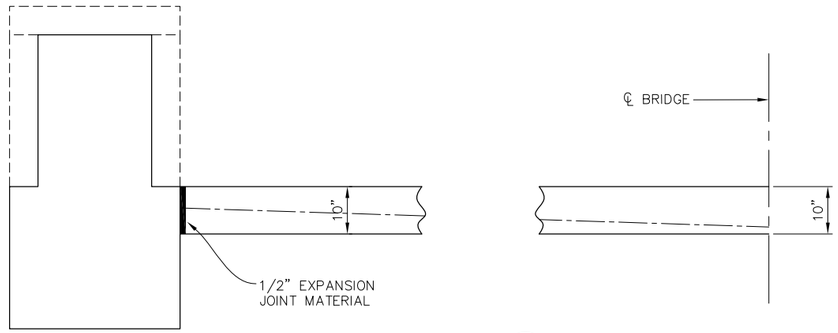
Subset: BRIDGE | Subset Sheets: BR14 of BR15 | Sheet No: 28



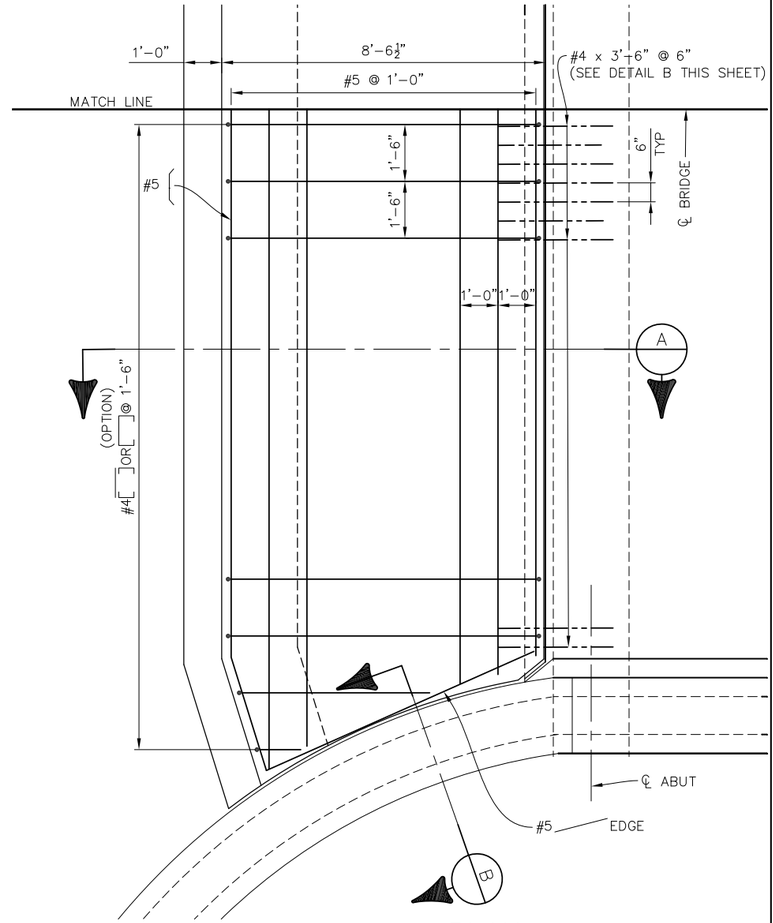
PLAN
BOT MAT SLAB REINF.
1/2" = 1'-0"



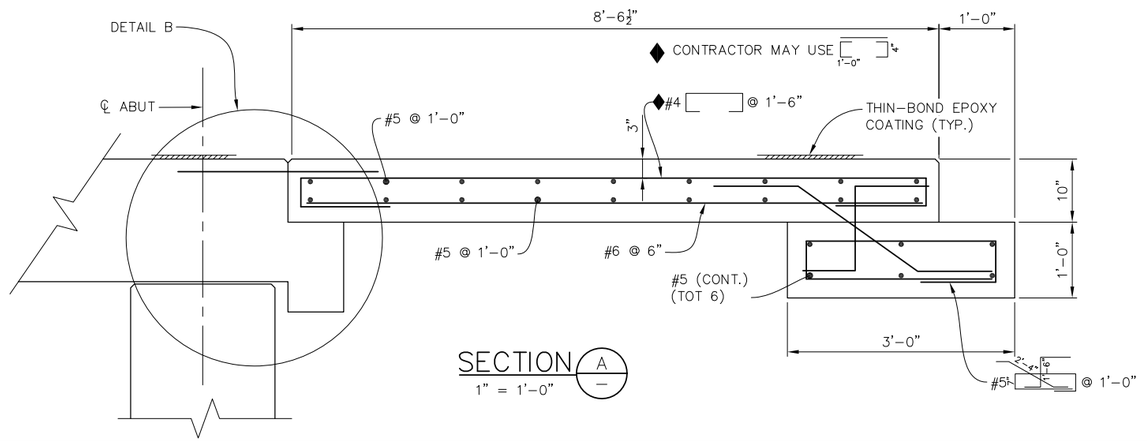
DETAIL B
1½" = 1'-0"



SECTION B
3/4" = 1'-0"



PLAN
TOP MAT SLAB REINF.
1/2" = 1'-0"



SECTION A
1" = 1'-0"

NOTES:

CONCRETE CLASS D (BRIDGE) SHALL BE USED FOR APPROACH SLABS.

1/2" EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPEC. M213.

1" EXPANDED POLYSTYRENE SHALL MEET ASTM C578

FOR BRIDGE AND RAIL DETAILS SEE DWG. NO. BR11 AND BR12 (SHEETS 25 AND 26.

APPROACH SLAB CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE SPECIFICATIONS FOR BRIDGE DECK CONCRETE IN SUBSECTION 601.

THE TOP SURFACE OF THE POST-TENSIONING BLOCK, IF ANY, SHALL BE COVERED WITH 1" OF LOW DENSITY POLYSTYRENE FOAM.

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	11-12-12	Initials:	KPS
Last Modification Date:	.	Initials:	KPS
Full Path:	S:\10.069.031 (Evans Ave Bridge)\dwg\Final\Bridge\		
Drawing File Name:	BR15-Approach Slab.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: KPS
CHECKED BY: MJB

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

APPROACH SLAB

Subset:	BR15	Subset Sheets:	BR15 of BR15	Sheet No:	29

1. SITE DESCRIPTION

The project will disturb less than 1 acre and involves removal and replacement of the existing Evans Avenue Bridge over Cheyenne Creek, waterline relocation and slight intersection realignment at Cheyenne Road and Evans Avenue; therefore, this project does not require a CDPS–SCP.

A. PROJECT SITE DESCRIPTION: The affected section of Evans Avenue and the bridge appear to be within the boundaries of North Cheyenne Canyon Park. The land on both sides of the roadway in the immediate vicinity of the bridge and creek is heavily wooded and undeveloped. This project consists of replacing the bridge, relocating the waterline and realigning the intersection of Cheyenne Road and Evans Avenue. The work will include line painting, signage, and delineator replacement.

B. PROPOSED SEQUENCING FOR MAJOR ACTIVITIES: The project will first demolish the existing bridge. Second, the waterline will be relocated followed by the construction of the new bridge. The project will conclude by make roadway improvements at the intersection of Evans Avenue and Cheyenne Road.

C. ACRES OF DISTRUBANCE:

1. Total area of disturbance: 0.38 acre
2. Area of seeding: 0.08 acres

D. SOIL CLASSIFICATION: (as outlined in the Unified Soil Classification System (USCS))

SW–SM (well–graded sand with silt and gravel)

SW (well–graded sand with gravel)

SP (poorly graded sand with gravel)

E. EXISTING VEGETATION: The existing vegetation consists of sagebrush, pinyon pine trees with some native grasses. Preservation of existing vegetation is done during construction whenever possible to reduce disturbed area and control sediment.

F. RECEIVING WATER: Cheyenne Creek is located on the project site. It is 303D listed for E coli. It does not have an approved TMDL.

2. SITE MAP COMPONENTS

Locations of the following items are noted on the Site Map, if the locations can be anticipated pre–construction.

A. Erosion and sediment control BMP's
B. Environmentally sensitive areas
C. Area used for stockpiling, staging and storing material
D. Concrete washout areas
E. Outfall locations
F. Flow Arrows

3. CONTROL MEASURES FOR STORM WATER POLLUTION PREVENTION

The project shall utilize any combination of Structural and Non–structural BMP's necessary to prevent sediment transport off site during construction in accordance with Standard Specification for Road and Bridge Construction, mainly section 208. The BMP's shall be installed per the applicable M–208–01. The guidance in the Erosion Control and Storm water Quality Field Guide will be followed.

A. Control Measures:

1. Perimeter control: The following temporary perimeter controls may be employed on the site to control sediment laden runoff from leaving the site and run–on water from entering the site: temporary berms and diversions, silt fence, and stabilized construction entrances. All perimeter BMP's shall be installed as per M–208–1.
2. Erosion Prevention: Grading techniques and temporary stabilization practices may be used first on site to prevent soil from dislodging. Erosion prevention control measures should be utilized before sediment control, because it is the first line of defense in Erosion Prevention. Grading techniques that may be used include: surface roughening, equipment tracking, terracing, project phasing, slope rounding, embankment protection, water bars, stockpile management, temporary drainage swales, berms/diversions, and outlet protection. Temporary stabilization/cover strategies include: bonded fiber matrix, hydro–mulch, crimped straw mulch, compost blanket, mulch tackifier.
3. Sediment Control: Sediment controls are a second line of defense in case erosion occurs. They are meant to intercept or detain the flow of stormwater allowing sediment to be trapped. The following are some common sediment control BMP's that may be utilized on the site: dewatering structure, ditch check dams constructed of various approved materials (riprap, erosion logs, silt barrier, erosion bales), inlet/outlet protection using approved materials, brush barrier, gravel barrier, and small detention ponds.
4. Temporary Stabilization: Bare areas that are not worked for 14 or more days shall be temporarily stabilized. The following practices to temporarily stabilize bare areas may be used alone or in combination as per subsection 208.04(e), section 213 and M–208–1.
   a) Slopes less than 3:1 Surface roughening, certified weed free hay or straw mulch with crimping, mulch tackifier, bonded fiber matrix.
   b) Slopes greater than 3:1 Equipment tracking, barrier at the toe of slope, spray on mulch blankets, temporary embankment protector.
5. Permanent Stabilization: Final stabilization shall begin with 48 hours of achieving final grade. The main difference between temporary and final stabilization is the addition of seed to the stabilization practice.
   a) Slopes less than 3:1 – Seed & mulch with tackifier or sod (sections 212 and 213). Inorganic mulch, such as landscaping rocks, may also be used.
   b) Slopes greater than 3:1 – Seed with soil retention blanket (M–208–1), or seed with Turf Reinforcement Mat (TRM) (Erosion Control and Storm water Quality Field Guide), riprap (section 506), inorganic mulch.
   c) Ditches – Slope and Ditch Paving (section 507). Riprap (section 506), Seeding and Turf Reinforcement Mat (TRM) (M–208–1), seeding and erosion blanket (M–208–1) may be used alone or in combination.

6. POLLUTION PREVENTION/GOOD HOUSEKEEPING 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. POTENTIAL POLLUTANT SOURCES: The contractor shall evaluate, identify, and describe all potential pollutant sources at the site in accordance with subsection 107.25 of the Standard Specifications book and place any BMP's required to contain potential pollutants.

B. MATERIALS HANDLING AND SPILL PREVENTION

a. Prior to construction commencing the Contractor shall submit a Spill Prevention, Control and Countermeasure Plan, see subsection 208.06 – Material Handling and Spill Prevention.

C. STOCKPILE MANAGEMENT

a. Shall be done in accordance with subsection 208.07 and 250.04 (b).
b. Toe protection shall be installed at the base of all asphalt milling stockpiles.

D. CONCRETE WASHOUT

a. Concrete wash out water or waste from field laboratories and paving equipment shall be contained in accordance with subsection 208.05 (n) and M–208–1.

E. SAW CUTTING

a. Shall be done in accordance with subsection 208.04(f).

F. STREET CLEANING

a. Shall be done in accordance with subsection 208.04(f). Sweeping with kick broom will not be allowed.

G. AIR QUALITY

a. Shall be done in accordance with subsection 107.24. The Contractor shall be responsible for obtaining the Air Quality Permit from local entities prior to the commencement of work.

H. MILLING MANAGEMENT

a. Shall be handled in one of the following manners:
i. Remove and disposed of by Contractor.
ii. Remove and stockpiled for CDOT Maintenance at a site designated by CDOT.
iii. Grade (blade) the shoulders, use millings over bare soil, and compact the millings. Note: even with the blading, the project will not exceed 1 acre of disturbed area.
iv. Do not grade shoulders, use millings over existing vegetation, and compact the millings.

I. NOXIOUS WEED MANAGEMENT

1. The contractor shall clean vehicles according to 107.25 (b) number 21.
2. Noxious weeds found on the project site will be removed to the maximum extent practicable.
3. All construction equipment shall remain on designated roadways and stay out of untreated weeds infested areas

J. BMP MAINTENANCE

1. Maintenance shall be in accordance with subsection 208.04 (f).

5. ENVIRONMENTALLY SENSITIVE AREAS

During project scoping and design, this project has been evaluated and cleared for the following resources: archeology, paleontology, historic resources, migratory birds, threatened and endangered species, waters of the US, and wetlands. If impacts are anticipated to these resources, mitigation has been provided as outlined in the table below. The CDOT Construction Project Engineer will ensure the implementation of mitigation for these resources. If new or unanticipated impacts to any of these resources occur, the CDOT Environmental Project Manager shall be notified. Construction activities shall not resume until all materials have been evaluated and adequate mitigation measures have been identified and implemented.

WETLANDS

In order to avoid both direct and indirect impacts to the wetlands, the following actions shall be implemented:

- No equipment staging or storage of construction materials (including fill material) shall occur within 50 feet of wetlands or other water features.
- If refueling is within 300 feet of a wetland or water feature, an impervious containment and absorbent lines shall be placed prior to refueling to collect spills.
- The use of chemicals, such as soil stabilizers, dust inhibitors, and fertilizers within 50 feet of the wetlands or other water feature shall be prohibited.
- Construction safety barrier fencing (orange fencing) should be used to protect wetlands and other environmentally sensitive areas from construction traffic and stated on pg. 1–1 of the Erosion Control and Stormwater Quality Field Guide.

6. 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 0.08 acres of disturbed area within the right–of–way limits which are not surfaced. The following types and rates shall be used:

COMMON NAME	BOTANICAL NAME	POUNDS (PLS/ACRE)
BLUE GRAMA	BOUTELOUA GRACILIS V. HACITA	0.8
SIDE OATS	BOUTELOUA CURTIPENDULA "VAUGHN"	1.8
BUFFALOGRASS	BUCHLOE DACTYLOIDES	6.2
GALLETA	HILARIA JAMESII	2.2
ALKALAI SACATON	SPOROBOLUS AIROIDES	0.3
GREEN NEEDLESGRASS	NASSELTA VIRIDULA "LODORM"	1.0
PRIAIRE GRASS JUNEGRASS	KOELERIA MACRANTHA	0.2
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	6.4
OATS	AVENA SATIVA	3.0
BLANKET FLOWER	GAILLARAIA ARTISTATA	0.3
PRAIRIE CONEFLOWER	RATIBIDA CLUMNIFERA	0.1
SCARLET GLOBEMALLOW	SPHAERALCEA COCCINEA	0.1
TALL BLUE RABBITBRUSH	CHRYSOTHUMNUS NAUSEOSUS ALBICAULIS	0.1
TALL WESTERN SAGE	ARTEMISIA TRIDENTATE	0.1
TOTAL		22.6

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. MULCHING APPLICATION:

Apply a minimum of 1–1/2 tons of certified weed free hay or straw per acre and in accordance with Section 213, and mechanically crimp it into the soil in combination with an organic mulch tackifier.

D. SPECIAL REQUIREMENTS:

Broadcast type seeders or hydraulic seeding will be permitted only on small areas not accessible to drills, subsection 212.04(c).

E. SOIL CONDITIONING AND FERTILIZER REQUIREMENTS:

SOIL CONDITIONER PAID FOR AS ITEM 212 – SOIL CONDITIONING (ACRE)		
BIOLOGICAL NUTRIENT ORGANIC BASED FERTILIZER (LBS/ACRE)*	HUMATE (LBS/ACRE)	COMPOST (CY/ACRE) ($\frac{1}{2}$ INCH DEPTH)
600	200	65

F. RESEEDING OPERATIONS/CORRECTIVE STABILIZATION

Prior to final acceptance the Contractor shall maintain seeding/mulch/tackifier, mow to control weeds or apply herbicide to control weeds in the seeded areas until Final Acceptance.

7. TABULATION OF STORMWATER QUANTITIES

PAY ITEM	DESCRIPTION	PAY UNIT	*QUANTITY
203	SWEEPING (PICKUP BROOM)	HOUR	
208	CONCRETE WASHOUT STRUCTURE	EACH	
208	STORM DRAIN INLET PROTECTION (TYPE 1)	LF	
208	STORM DRAIN INLET PROTECTION (TYPE 2)	LF	
208	REMOVAL AND DISPOSAL OF SEDIMENT (EQUIPMENT)	HOUR	
208	REMOVAL AND DISPOSAL OF SEDIMENT (LABOR)	HOUR	
208	EROSION LOG	LF	
208	AGGREGATE BAG	LF	
208	REMOVAL OF TRASH	HOUR	
208	SWEEPING (SEDIMENT REMOVAL)	HOUR	
700	EROSION CONTROL	FA	1

*It is anticipated that additional BMPs and BMP quantities shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsection 208.04(a). Quantities for all BMPs shown above are estimated, and have been increased for unforeseen Project conditions.

1 Maintenance of seeded areas shall not be paid for separately, but shall be included in the cost of the work.

2 It is anticipated the multiple applications of seeding, soil conditioning, soil retention blankets, and soil binder shall be required. It is anticipated that multiple mobilizations shall be required for these items. Mobilizations shall not be paid for separately, but shall be included in the cost of the work.

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. Maintenance of seeded areas shall be paid for as: [F/A Erosion Control, 212 – Seeding (Native), 213 – Mulching, 213 – Mulch Tackifier, 216 – Soil Retention Covering, 214 – Landscape Maintenance (Lump Sum), 203 – Labor Hours, or included in the cost of the work].

C. Final walk through: Prior to final acceptance, any changes or additions to the erosion and sediment controls or final stabilization recommended by the Project Engineer shall be implemented by the contractor. Work shall be paid for by the appropriate bid item.

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	3/23/2011	Initials:	BGB
Last Modification Date:	07/20/2015	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	ECGN01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS

No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

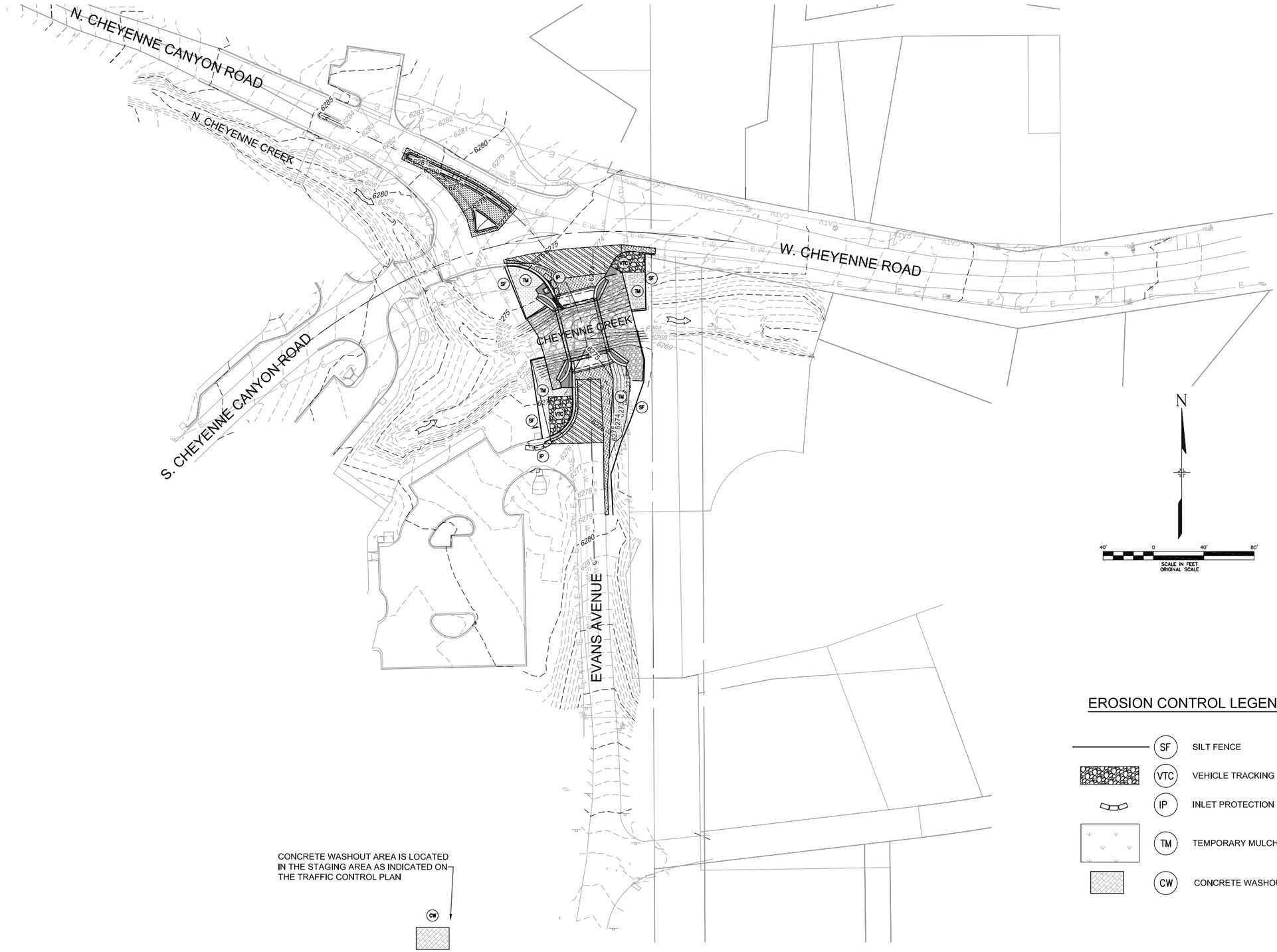
Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY:
DRAWN BY: KSL
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT
EVANS AVENUE OVER CHEYENNE CREEK
EROSION CONTROL GENERAL NOTES

Subset: EROSION | Subset Sheets: ECGN01 OF EC01 | Sheet No: 30



CONCRETE WASHOUT AREA IS LOCATED IN THE STAGING AREA AS INDICATED ON THE TRAFFIC CONTROL PLAN

CW

EROSION CONTROL LEGEND

- SF — SILT FENCE
- VTC — VEHICLE TRACKING PAD
- IP — INLET PROTECTION
- TM — TEMPORARY MULCH AND SEEDING
- CW — CONCRETE WASHOUT

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	12/17/2014	Initials:	MHH
Last Modification Date:	12/17/2014	Initials:	MHH
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	EC01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY:
CHECKED BY:

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

EROSION CONTROL PLAN

Subset:	EROSION	Subset Sheets:	EC01 OF EC01	Sheet No:	31

EVANS BRIDGE

COLORADO SPRINGS, COLORADO

12" PUBLIC WATERMAIN PLANS

JULY, 2015

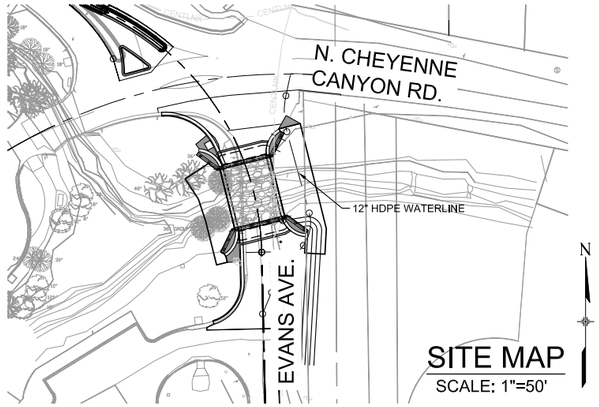
INDEX OF SHEETS		SHEET No.
TS01	TITLE SHEET	1
GN1	GENERAL NOTES	2
WT01	PUBLIC WATER MAIN PLANS	3

BENCHMARK

VERTICAL DATUM: THE ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929. THE PRIMARY BENCHMARK USED TO REFERENCE THIS VERTICAL NETWORK IS A COLORADO SPRINGS UTILITIES (FIMS) CONTROL MONUMENT DESIGNATED "VS29" BEING BRASS CAP SET IN THE NORTHWEST CORNER OF A STORM SEWER INLET, LOCATED AT THE NORTHEAST CORNER OF CRESTA ROAD AND LA VETA WAY HAVING A PUBLISHED ELEVATION OF 6164.37 FEET.

BASIS OF BEARING

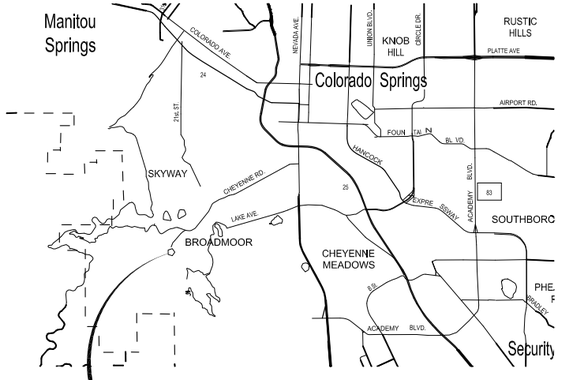
BEARINGS ARE REFERENCE TO COLORADO STATE PLANE GRID BEARINGS, CENTRAL ZONE NAD 83. BASED UPON GPS OBSERVATIONS ON THE WEST LINE OF THE SOUTHEAST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER OF SECTION 35, TOWNSHIP 14 SOUTH, RANGE 67 WEST OF THE 6TH P.M., MONUMENTED ON THE SOUTH END BY A FOUND ½" IRON PIPE AND BY A FOUND 1" IRON PIPE BEARING NORTH 00°17'08" WEST, 1080.56 FEET.



SITE MAP
SCALE: 1"=50'

CONTACT INFORMATION

	ENTITY	P.O.C.
CIVIL ENGINEER:	MATRIX DESIGN GROUP, INC. 2435 RESEARCH PARKWAY, SUITE 300 COLORADO SPRINGS, COLORADO 80920	SCOTT BARNHART (719) 575-0100
CITY PROJECT ENGINEERING DIVISION:	CITY OF COLORADO SPRINGS 30 SOUTH NEVADA AVENUE, SUITE 702 COLORADO SPRINGS, COLORADO 80903	ARRON EGBERT (719) 385-5408
TRAFFIC ENGINEERING:	CITY OF COLORADO SPRINGS 30 SOUTH NEVADA AVENUE, SUITE 405 COLORADO SPRINGS, COLORADO 80903	KATHLEEN KRAGER (719) 385-7628
WATER RESOURCES:	WASTEWATER/WATER: CITY OF COLORADO SPRINGS 111 S CASCADE AVENUE, SUITE 201 COLORADO SPRINGS, COLORADO 80903	ADAM BAKER (719) 668-4737
GAS DEPARTMENT:	CITY OF COLORADO SPRINGS 7710 DURANT DRIVE COLORADO SPRINGS, COLORADO 80920	TONY COLVIN (719) 668-5768
ELECTRIC DEPARTMENT:	CITY OF COLORADO SPRINGS 7710 DURANT DRIVE COLORADO SPRINGS, COLORADO 80920	TONY COLVIN (719) 668-5768
COMMUNICATION COMPANY:	CENTURY LINK 5555 TECH CENTER DRIVE COLORADO SPRINGS, COLORADO 80919	SHARON O'BRIEN (541) 852-5095 LOCATORS (800) 922-1987
	A.T.&T.	LOCATORS (800) 635-3674
	COMCAST 3440 ASTROZON PLACE COLORADO SPRINGS, COLORADO 80919	JAMES EDIE (303) 543-9563



VICINITY MAP
N.T.S.

Project Site

OWNER/DEVELOPER PLAN APPROVAL

THE UNDERSIGNED OWNER/DEVELOPER AGREES THAT THEY SHALL, AT THEIR EXPENSE, BE SOLELY RESPONSIBLE FOR 1) THE INSTALLATION OF THE PROPOSED UTILITY INFRASTRUCTURE IN ACCORDANCE WITH THESE PLANS, AND 2) ALL DAMAGES AND DEFECTS ARISING FROM, OR RELATED TO, THE INSTALLATION, MAINTENANCE OR OPERATION OF THE PUBLIC UTILITY INFRASTRUCTURE FROM THE DATE OF PRELIMINARY ACCEPTANCE FOR A PERIOD OF TWO YEARS, OR UNTIL FINAL ACCEPTANCE, WHICHEVER IS LATER.

THE UNDERSIGNED UNDERSTANDS THAT ALL PRIVATE UTILITY INFRASTRUCTURE, AS INDICATED ON THESE PLANS, SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE MAINTAINED BY THE OWNER, AS REQUIRED BY *COLORADO SPRINGS UTILITIES' LINE EXTENSION AND SERVICE STANDARDS*.

☒ PUBLIC FACILITIES PROPOSED ☐ PRIVATE FACILITIES PROPOSED

SIGNED _____ DATE _____
OWNER/DEVELOPER

_____
OWNER/DEVELOPER (PRINT NAME)

DBA: _____

ADDRESS: _____

COLORADO SPRINGS, CO

PHONE: _____

COLORADO SPRINGS UTILITIES
WATER PLAN APPROVAL

APPROVED BY: _____ DATE: _____

PROJECT NUMBER: 2014-W006 WORK ORDER NUMBER: 2681862

CSU SHEET 1 OF 3

APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

CSFD ACCEPTANCE

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO COLORADO SPRINGS UTILITIES' WATER LINE EXTENSION AND SERVICE STANDARDS. THE UMBER OF HYDRANTS AND HYDRANT LOCATIONS AS SHOWN ON THIS WATER PLAN ARE CORRECT AND ADEQUATE TO SATISFY THE FIRE PROTECTION REQUIREMENTS AS SPECIFIED BY THE CITY OF COLORADO SPRINGS FIRE DEPARTMENT.

SIGNED: _____
CSFD, DIVISION OF THE FIRE MARSHAL

CSFD PLAN REVIEW NO.: _____

COMPUTER FILE INFORMATION			
Creation Date:	03/20/2015	Initials:	BK
Last Modification Date:	.	Initials:	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	WO01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: BK
DRAWN BY: BK
CHECKED BY: GS

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

WATER TITLE SHEET

Subset:	UTILITY	Subset Sheets:	1	Sheet No:	9

PLOT DATE: 09/26/2014

THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES' INSPECTION OFFICE (NORTH: 668-4396 OR SOUTH: 668-4658) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET *COLORADO SPRINGS UTILITIES' WATER LINE EXTENSION AND SERVICE STANDARDS (WATER LESS)*.
2. THE CONTRACTOR SHALL OBTAIN LOCATES PRIOR TO ANY EXCAVATION.
3. COLORADO SPRINGS UTILITIES DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, HYDRANTS, VALVES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE ENGINEER OF RECORD IMMEDIATELY.
4. NO TREES OR STRUCTURES ARE PERMITTED WITHIN FIFTEEN FEET (15') OF A WATER MAIN.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF COLORADO SPRINGS UTILITIES.
6. ALL FIELD STAKING SHALL COMPLY WITH THE *WATER LESS*.
7. THE CONTRACTOR SHALL MAKE THEIR BEST EFFORT TO ENSURE THAT WATER SERVICES TO ADJACENT PROPERTIES IS MAINTAINED DURING CONSTRUCTION.
8. CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE WATER LESS.
9. NO SERVICE TAPS WILL BE ALLOWED UNTIL THE MAIN IS EXTENDED TO THE NEXT MAIN-LINE VALVE.
10. NO SERVICE TAPS SHALL BE MADE UNTIL AUTHORIZATION HAS BEEN GRANTED BY THE COLORADO SPRINGS UTILITIES' INSPECTOR.
11. ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION AND THE STATIONING ON THE FIELD STAKES SHALL MATCH THE STATIONING ON THE PLANS.
12. FIELD MODIFICATIONS TO A FIRE SERVICE LINE OR FIRE HYDRANT DESIGN OR LOCATION MAY NEED TO BE APPROVED BY THE DESIGN ENGINEER, COLORADO SPRINGS FIRE DEPARTMENT AND COLORADO SPRINGS UTILITIES, AS REQUIRED BY THE INSPECTOR.
13. REUSE OR SALVAGE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE COLORADO SPRINGS UTILITIES INSPECTOR.
14. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE *CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS MANUAL*.

	APPLICABLE	NOT-APPLICABLE	
1.	☒	☐	ANY EXISTING STUBS AND APPURTENANCES THAT WILL NOT BE USED SHALL BE REMOVED AND REPLACED WITH AN ACCEPTABLE SECTION OF MAIN AT THE EXPENSE OF THE CONTRACTOR.
2.	☒	☐	A CONNECTION TO AN EXISTING STUB IS PROPOSED. COLORADO SPRINGS UTILITIES DOES NOT GUARANTEE THE ACCURACY OF THE DEPTHS OR LOCATIONS OF EXISTING STUBS SHOWN ON ANY "AS-BUILT" DRAWINGS.
3.	☒	☐	A WATER STUB-OUT(S) IS/ARE PROPOSED. COLORADO SPRINGS UTILITIES DOES NOT GUARANTEE THAT THE DESIGN OR INSTALLATION OF THE PROPOSED WATER STUB-OUT WILL MEET FUTURE DEVELOPMENT NEEDS.
4.	☒	☐	A WATER QUALITY PLAN HAS BEEN APPROVED FOR THIS PROJECT.

THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES' INSPECTION OFFICE (NORTH: 668-4396 OR SOUTH: 668-4658) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

GENERAL
1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET *COLORADO SPRINGS UTILITIES' WASTEWATER AND LINE EXTENSION AND SERVICE STANDARDS (WATER/WASTEWATER LESS)*.
2. COLORADO SPRINGS UTILITIES DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, MANHOLES, HYDRANTS, VALVES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE DESIGN ENGINEER IMMEDIATELY.
3. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF COLORADO SPRINGS UTILITIES.
4. ALL FIELD STAKING SHALL COMPLY WITH THE *WATER/WASTEWATER LESS*.
5. CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE *WATER/WASTEWATER LESS*.
6. FINAL LOCATION OF ALL WASTEWATER AND WATER SERVICES SHALL BE APPROVED IN THE FIELD BY THE COLORADO SPRINGS UTILITIES INSPECTOR.
7. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE *CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS MANUAL* AND SECTION 5.18 OF THE *WATER LESS*.

WASTEWATER
1. SERVICE STUBS SHALL BE INSTALLED A MINIMUM OF SEVEN FEET (7') INTO THE PROPERTY, UNLESS OTHERWISE SHOWN, AND THE END OF THE STUB SHALL BE MARKED WITH A 2"X4"X12' STEEL OR WOODEN POST.
2. SERVICES SHALL BE CONNECTED A MINIMUM OF FIVE FEET (5') FROM THE OUTSIDE EDGE OF ANY MANHOLE ON THE MAIN LINE AND SHALL MAINTAIN TWO FEET (2') OF SEPARATION BETWEEN TAPS CENTER TO CENTER.
3. ALL CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LINE.
4. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT WHEN ANY SEPTIC TANK IS TO BE ABANDONED AND PAY ALL FEES NECESSARY TO OBTAIN A PERMIT.

WATER
1. SERVICE STUBS SHALL BE INSTALLED WITH THE CURB STOP AT OR NEAR PROPERTY LINE AND SHALL NOT BE INSTALLED WITHIN DRIVEWAYS OR SIDEWALKS (SEE DETAIL DRAWING B2-3).
2. SERVICE TAPS SHALL BE MADE A MINIMUM OF THREE FEET (3') FROM THE BELL OR APPURTENANCE ON THE WATER MAIN. TAPS SHALL BE A MINIMUM OF THREE FEET (3') APART ON THE SAME SIDE OF WATER MAIN AND A MINIMUM OF ONE-AND-A-HALF FEET (1.5') WHEN TAPS ARE MADE ON OPPOSITE SIDES OF THE WATER MAIN.
3. ALL SERVICES FOR COMMERCIAL USE AND SOME RESIDENTIAL USES REQUIRE INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY AFTER THE METER. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE APPROVED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH OF THE UNIVERSITY OF SOUTHERN CALIFORNIA (UCS-FCCCHR) AND INSTALLED IN ACCORDANCE WITH THIS LISTING. PLEASE REFERENCE THE WATER LINE EXTENSION STANDARDS FOR ADDITIONAL REQUIREMENTS.
4. ALL TAPS ON COLORADO SPRINGS UTILITIES WATER MAINS SHALL BE PERFORMED BY COLORADO SPRINGS UTILITIES. ALL OTHER TAPS SHALL BE PERFORMED BY THE CONTRACTOR.
5. ANY ABANDONED SERVICES MUST BE PHYSICALLY DISCONNECTED AT THE MAIN. ANY NECESSARY REPAIRS TO THE MAIN AND/OR SHUT DOWN OF THE TAPPING VALVE SHALL BE AS DIRECTED BY COLORADO SPRINGS UTILITIES.

ADDITIONAL
1. MINIMUM DEPTH FOR UTILITY SERVICES IS BETWEEN 6 AND 7 FEET OF BURY.*
2. MINIMUM DEPTH FOR UTILITY MAINS IS BETWEEN 5 AND 6 FEET OF COVER.*
3. ALL ELEVATIONS ON WATER PLANS LABELED AS 8" ELEV ARE TO BOTTOM OF PIPE. *

* UNLESS OTHERWISE NOTED

TOTAL	UOM	USED	MATERIAL DESCRIPTION
10	EA	(____)	MJ RSNTS, 8"
2	EA	(____)	MJ RSNTS, 12"
3	EA	(____)	8" GATE VALVE (CL 250)
1	EA	(____)	12" GATE VALVE (CL 250)
1	EA	(____)	8"X8" TEE, DIP
1	EA	(____)	BEND, 22.5° HORIZONTAL, DIP
2	EA	(____)	12"x8" REDUCER
2	EA	(____)	8" PUSH PULL CRA

ABBREVIATIONS

Ⓐ	ANODE
ACT	ACTUAL
ARV	AIR RELEASE VALVE
ASSY	ASSEMBLY
BFV	BUTTERFLY VALVE
BOP	BOTTOM OF PIPE
BOV	BLOWOFF ASSEMBLY AND VALVE
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CPLG. (INS.) (RED.) (STR.)	COUPLING (INSULATING) (REDUCING) (STRAIGHT)
CR	CURB RETURN
CRA	CONCRETE REVERSE ANCHOR
CTRB	CONCRETE THRUST REACTION BLOCK
DEFL	DEFLECT
DIP	DUCTILE IRON PIPE
EL.	ELEVATION
EX	EXISTING
FLG	FLANGE
FH	FIRE HYDRANT
GPM	GALLONS PER MINUTE
GRD BRK	V.P.I. GRADE BREAK
HYD ASSY	INCLUDES FIRE HYDRANT, LATERAL, VALVE, TIE RODS, AND REVERSE ANCHOR.
INV	INVERT
LT	LEFT OF CENTER LINE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N,S,E,W	NORTH,SOUTH,EAST,WEST
PH	POTHOLE
PL	PROPERTY LINE
PP	POWER POLE
PSI	POUNDS PER SQUARE INCH
PUPS	12" OR SMALLER, USE PLAIN END BY PLAIN END, 30" LENGTH, 16" OR LARGER USE PLAIN END BY PLAIN END, 24" LENGTH
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
RED	REDUCER
RSNTS	MJ RESTRAINT (i.e. MEGALUG)
RT	RIGHT OF CENTER LINE
SJ	SLIP JOINT
SS	SANITARY SEWER
STA	STATION
STS	STORM SEWER
TOP	TOP OF PIPE
TYP	TYPICAL
UOM	UNIT OF MEASURE
WL	WATER LINE
TS	TEST STATION
YDS	CUBIC YARDS
.333	4" ABOVE EXIST. TOP OF CURB OR GROUND

COLORADO SPRINGS UTILITIES
WATER PLAN APPROVAL

APPROVED BY: _____ DATE: _____

PROJECT NUMBER: 2014-W006 WORK ORDER NUMBER: 2681862

CSU SHEET 2 OF 3

APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

PLOT DATE: 09/26/2014

COMPUTER FILE INFORMATION			
Creation Date:	03/20/2015	Initials:	BK
Last Modification Date:	.	Initials:	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	WO01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

REVISIONS		
No.	Description	Date
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

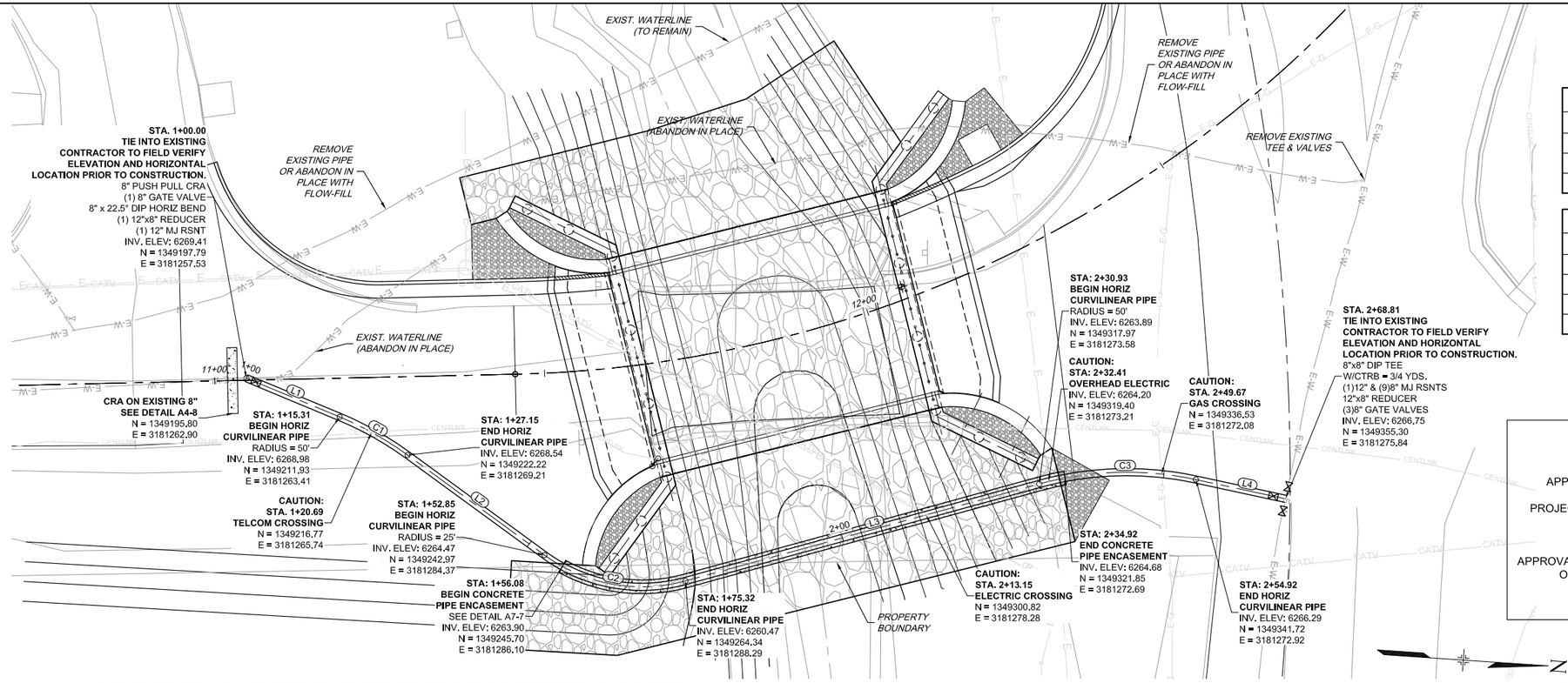
Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: BK
DRAWN BY: BK
CHECKED BY: GS

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT
EVANS AVENUE OVER CHEYENNE CREEK
WATER GENERAL NOTES

Subset: UTILITY | Subset Sheets: 2 | Sheet No: 9



CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C1	50.00'	11.84'	13°34'13"
C2	25.00'	22.47'	51°29'51"
C3	50.00'	23.99'	27°29'08"

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	15.31'	N22° 35' 06.46"E
L2	25.70'	N36° 09' 19.44"E
L3	55.62'	N15° 20' 31.21"W
L4	13.89'	N12° 08' 36.73"E

COLORADO SPRINGS UTILITIES
WATER PLAN APPROVAL

APPROVED BY: _____ DATE: _____

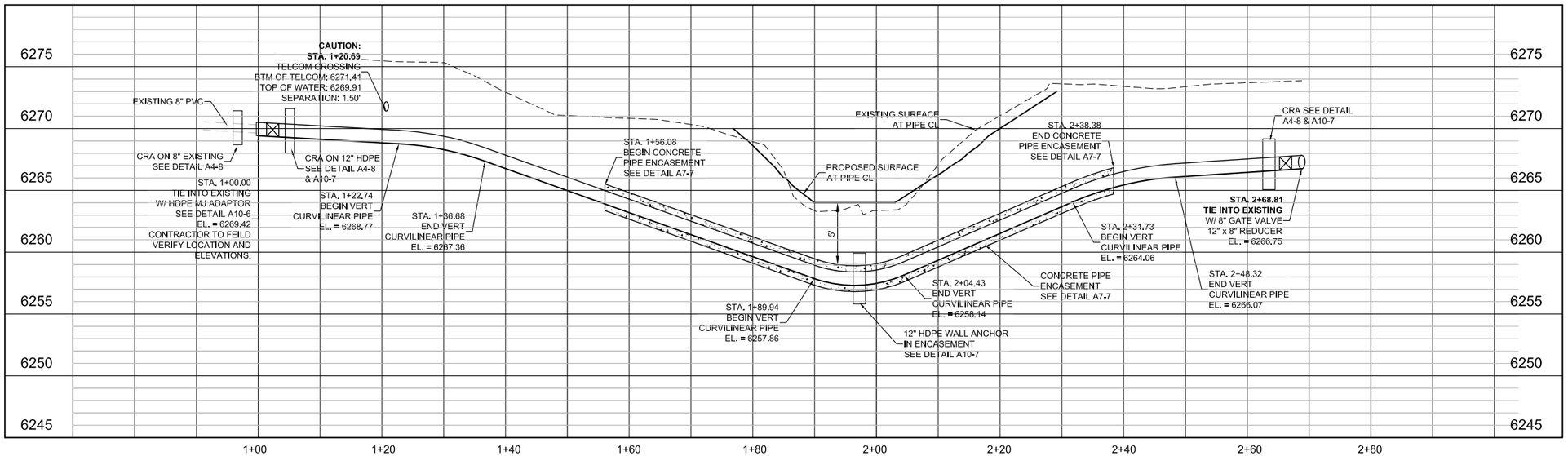
PROJECT NUMBER: 2014-W006 WORK ORDER NUMBER: 2681862

CSU SHEET 3 OF 3

APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

NOTE:
CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS, ALIGNMENTS, AND LOCATIONS OF EXISTING UTILITIES, INCLUDING PROPOSED CONNECTIONS, AND CROSSINGS LOCATIONS, ENGINEER OF RECORD SHOULD BE NOTIFIED IMMEDIATELY OF ANY CHANGES, DEVIATIONS, OR DIFFERENCES TO PLAN.

12" DR 9 DIPS HDPE WATER LINE



COMPUTER FILE INFORMATION			
Creation Date:	03/20/2015	Initials:	KSL
Last Modification Date:	.	Initials:	
Full Path: S:\10.069.031 (Evans Ave Bridge)\dwg\Final\			
Drawing File Name:	WO01.dwg		
Acad Ver.	2012	Scale:	AS SHOWN

PLOT DATE: 09/26/2014

REVISIONS		
No.	Description	Date

STATEMENT:

THE CITY OF COLORADO SPRINGS RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE CITY HAS LIMITED IT'S SCOPE OF REVIEW ACCORDINGLY.

Matrix DESIGN GROUP
2435 Research Pkwy, Suite 300,
Colorado Springs, CO 80920
719.575.0100

DESIGNED BY: MJB
DRAWN BY: BGB
CHECKED BY: GLS

CITY OF COLORADO SPRINGS
We Create Community

EVANS AVENUE BRIDGE REPLACEMENT

EVANS AVENUE OVER CHEYENNE CREEK

WATER LINE PLAN AND PROFILE

Subset:	UTILITY	Subset Sheets:	3	Sheet No:	9