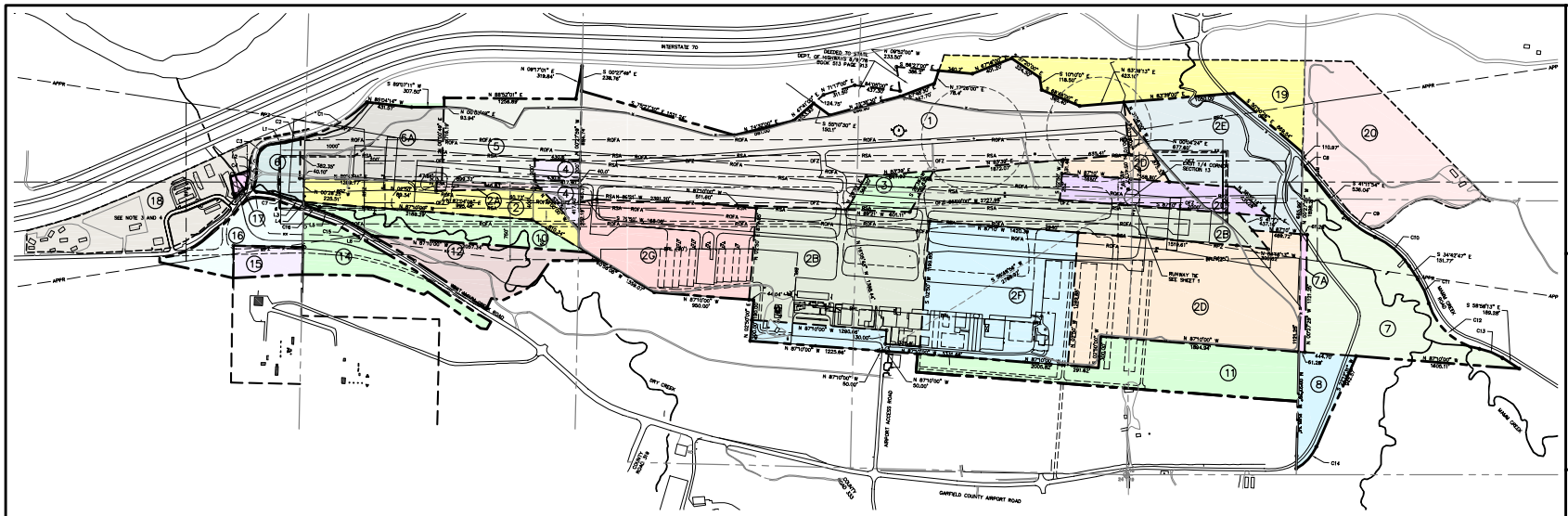


PROPERTY MAP
HORIZONTAL SCALE: 1"=500'

GENERAL NOTES:

1. LOT 13 HAS BEEN COMBINED WITH LOT 14.
2. R.A.C.P.&S. – RIFLE AIRPORT COMMERCIAL PLAZA & STORAGE FINAL PLAT.
3. GRANTORS WITHIN R.A.C.P.&S. ARE: DAN LEVINSON; ANNA CRUZ; MARK SILLS; TOM CASPERSON; WESTERN SLOPE TRAILOR SALES, INC.; JOHN ROBINSON; ROBERT TAYLOR; TIM MEN PROPERTIES LLC; STORM KING PROPERTIES LLC; MICHAEL PAZIN; REYNOLD WEIDENAAR; EMPTY ENTERPRIZES, LLC.
4. PARCEL 18 IS AN EXISTING HEIGHT EASEMENT REQUIRING AMENDMENT TO A LOWER ELEVATION.

LINE TABLE

| | DISTANCE | BEARING |
|---|---|---|
| L1 | 184.60' | N78°28'57"E |
| L2 | 84.89' | N00°03'03"E |
| L3 | 125.04' | N78°58'52"W |
| L4 | 23.12' | N00°28'25"W |
| L5 | 140.69' | N72°56'35"W |
| L6 | 93.94' | N60°03'41"W |

CURVE TABLE

| | RADIUS | LENGTH | CHORD | BEARING | DELTA |
|---|---|---|---|---|---|
| C1 | 1,378.94' | 684.07' | 677.30' | | 27°57'25" |
| C2 | 1,378.94' | 137.66' | 137.61' | | 5°37'34" |
| C3 | 172.92' | 236.71' | 218.66' | | 78°25'54" |
| C4 | 532.26' | 67.82' | 67.77' | | 7°18'01" |
| C5 | 532.26' | 99.69' | 99.55' | | 10°43'54" |
| C6 | 30.96' | 56.93' | 49.24' | | 105°21'03" |
| C7 | 1,126.16' | 335.66' | 334.42' | | 17°04'38" |
| C8 | 1,729.03' | 60.57' | 60.57' | S42°12'07"E | 2°00'26" |
| C9 | 843.33' | 395.45' | 391.84' | | 26°52'01" |
| C10 | 739.92' | 430.71' | 424.66' | | 33°21'08" |
| C11 | 859.50' | 253.31' | 252.40' | | 16°53'11" |
| C12 | 618.40' | 683.55' | 649.28' | | 63°19'55" |
| C13 | 618.29' | 239.44' | 237.95' | | 22°11'18" |
| C14 | 350.00' | 375.88' | 360.00' | | 61°31'55" |
| C15 | 1,423.47' | 279.39' | 278.94' | N65°41'03"W | 11°14'44" |
| C16 | 2,921.50' | 156.35' | 156.35' | N71°26'36"E | 61°31'55" |

PROPERTY TABLE

| | GRANTOR | TYPE OF INTEREST | ACREAGE | RECORDING DATA | PURPOSE | DATE ACQUIRED | COMMENTS |
|---|---|---|---|---|---|---|---|
| 1 | RIFLE LAND ASSOCIATION | FEE SIMPLE | 69.61± | BOOK 538, PAGE 993 | AIRFIELD | MAY 22, 1978 | |
| 2 | RIFLE LAND ASSOCIATION | QUITCLAIM | 16.66± | BOOK 538, PAGE 993 | AIRFIELD (TAXIWAY) | MAY 22, 1978 | DONATED LAND–AVAILABLE FOR MATCHING FUNDS |
| 2A | RIFLE LAND ASSOCIATION | QUITCLAIM | 1.46± | BOOK 538, PAGE 993 | AIRFIELD | MAY 22, 1978 | DEDICATED ADAP PROJ. No. 5–08–0048–02 |
| 2B | RIFLE LAND ASSOCIATION | QUITCLAIM | 75.10± | BOOK 538, PAGE 993 | AIRFIELD | MAY 22, 1978 | DEDICATED ADAP PROJ. No. 5–08–0048–02 |
| 2C | RIFLE LAND ASSOCIATION | QUITCLAIM | 10.56± | BOOK 538, PAGE 993 | AIRFIELD | MAY 22, 1978 | DEDICATED AIP PROJ. No. 3–08–0048–01 |
| 2D | RIFLE LAND ASSOCIATION | QUITCLAIM | 65.00± | BOOK 538, PAGE 993 | AIRFIELD | MAY 22, 1978 | DEDICATED AIP PROJ. No. 3–08–0048–03 |
| 2E | RIFLE LAND ASSOCIATION | QUITCLAIM | 30.00± | BOOK 538, PAGE 993 | APPROACH PROTECTION | MAY 22, 1978 | DEDICATED AIP PROJ. No. 3–08–0048–03 |
| 2F | RIFLE LAND ASSOCIATION | QUITCLAIM | 47.85± | BOOK 538, PAGE 993 | AIRFIELD | MAY 22, 1978 | DEDICATED AIP PROJ. No. 3–08–0048–05 |
| 2G | RIFLE LAND ASSOCIATION | QUITCLAIM | 29.32± | BOOK 538, PAGE 993 | AIRFIELD | MAY 22, 1978 | DEDICATED AIP PROJ. NO. 3–08–0048–05 |
| 3 | BETTY J. CLARK AND PATRICIA J. SULLIVAN | FEE SIMPLE | 5.00± | BOOK 190, PAGE 221 | AIRFIELD | JULY 18, 1979 | DEDICATED AIP PROJ. NO. 3–08–0048–06 |
| 4 | F. KENT WILSON | FEE SIMPLE | 4.00± | BOOK 217, PAGE 496 | AIRFIELD | AUG. 8, 1980 | DEDICATED AIP PROJ. NO. 3–08–0048–06 |
| 5 | CITY OF RIFLE | FEE SIMPLE | 21.20± | BOOK 492, PAGE 754 | AIRFIELD | JAN. 21, 1977 | DONATED LAND–AVAILABLE FOR MATCHING FUNDS |
| 6 | AGNUS HUNT | FEE SIMPLE | 4.97± | BOOK 563, PAGE 739 | APPROACH PROTECTION | JULY 22, 1981 | DEDICATED AIP PROJ. NO. 3–08–0048–07 |
| 6A | AGNUS HUNT | FEE SIMPLE | 19.74± | BOOK 563, PAGE 739 | AIRFIELD | JULY 22, 1981 | DEDICATED AIP PROJ. NO. 3–08–0048–06 |
| 7 | ANDREW AND BEVERLY JULIUS | FEE SIMPLE | 36.77± | BOOK 531, PAGE 239 | APPROACH PROTECTION | FEB. 13, 1979 | DEDICATED AIP PROJ. NO. 3–08–0048–06 |
| 7A | ANDREW AND BEVERLY JULIUS | FEE SIMPLE | 1.58± | BOOK 531, PAGE 239 | APPROACH PROTECTION | FEB. 13, 1979 | DEDICATED AIP PROJ. No. 3–08–0048–03 |
| 8 | ANDREW AND BEVERLY JULIUS | FEE SIMPLE | 9.06± | BOOK 534, PAGE 618 | AIRPORT ACCESS ROAD | SEPT. 10, 1979 | --- |
| 9 | NOT USED | | | | | | |
| 10 | RIFLE LAND ASSOCIATION | FEE SIMPLE | 13.08± | BOOK 1014, PAGE 259 | AIRFIELD (TAXIWAY) | APRIL 2, 1997 | SPONSOR ACQUIRED |
| 11 | RIFLE LAND ASSOCIATION | FEE SIMPLE | 27.71± | | AIRFIELD (BUILDING AREA) | | TO BE ACQUIRED |
| 12 | RIFLE LAND ASSOCIATION | FEE SIMPLE | 13.12± | | APPROACH PROTECTION | | TO BE ACQUIRED |
| 13 | COMBINED WITH 14 | | | | | | |
| 14 | RIFLE LAND ASSOCIATION | FEE SIMPLE | 11.28± | | APPROACH PROTECTION | | TO BE ACQUIRED |
| 15 | PUBLIC SERVICE COMPANY OF COLORADO | FEE SIMPLE | 4.32± | | APPROACH PROTECTION | | TO BE ACQUIRED |
| 16 | CONTINENTAL RIFLE LLC | FEE SIMPLE | 10.60± | | APPROACH PROTECTION | | TO BE ACQUIRED |
| 17 | DAN LEVINSON | FEE SIMPLE | 0.65± | | APPROACH PROTECTION | | TO BE ACQUIRED, R.A.C.P.&S., PART OF PARCEL 9 |
| 18 | RIFLE AIRPORT COMMERCIAL PLAZA & STORAGE | EASEMENT | 23.30± | | APPROACH PROTECTION | | SEE NOTE 3 AND 4 |
| 19 | RIFLE LAND ASSOCIATION | EASEMENT | 28.04± | | APPROACH PROTECTION | | TO BE ACQUIRED |
| 20 | PHYLLIS R. AND FRED S. BILLMEYER | EASEMENT | 30.10± | | APPROACH PROTECTION | | TO BE ACQUIRED |

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LEGEND

| | EXISTING (E) | FUTURE (F) |
|---|---|---|
| PROPERTY LINE | | |
| EASEMENT | | |
| TRACT | | |
| PAVED ROADS | | |
| GRAVEL ROADS | | |

NORTH
MAGNETIC

SCALES
500 0 250 500 1000
SCALE IN FEET

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Garfield County Regional Airport

| NO. | DATE | DESCRIPTION |
|---|---|---|
| 3 | 12/06 | UPDATED |
| 1 | 01/04 | ISSUED FOR FAA REVIEW |

REVISIONS

AIRPORT PROPERTY MAP
EXHIBIT "A"

AIRPORT LAYOUT PLAN UPDATE

GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

drawn by: MPK
checked by: PJM
approved by: PJM
project no.: 2006-1424
dwg name: ALP
date: 12/06
SHEET

Attachment 1

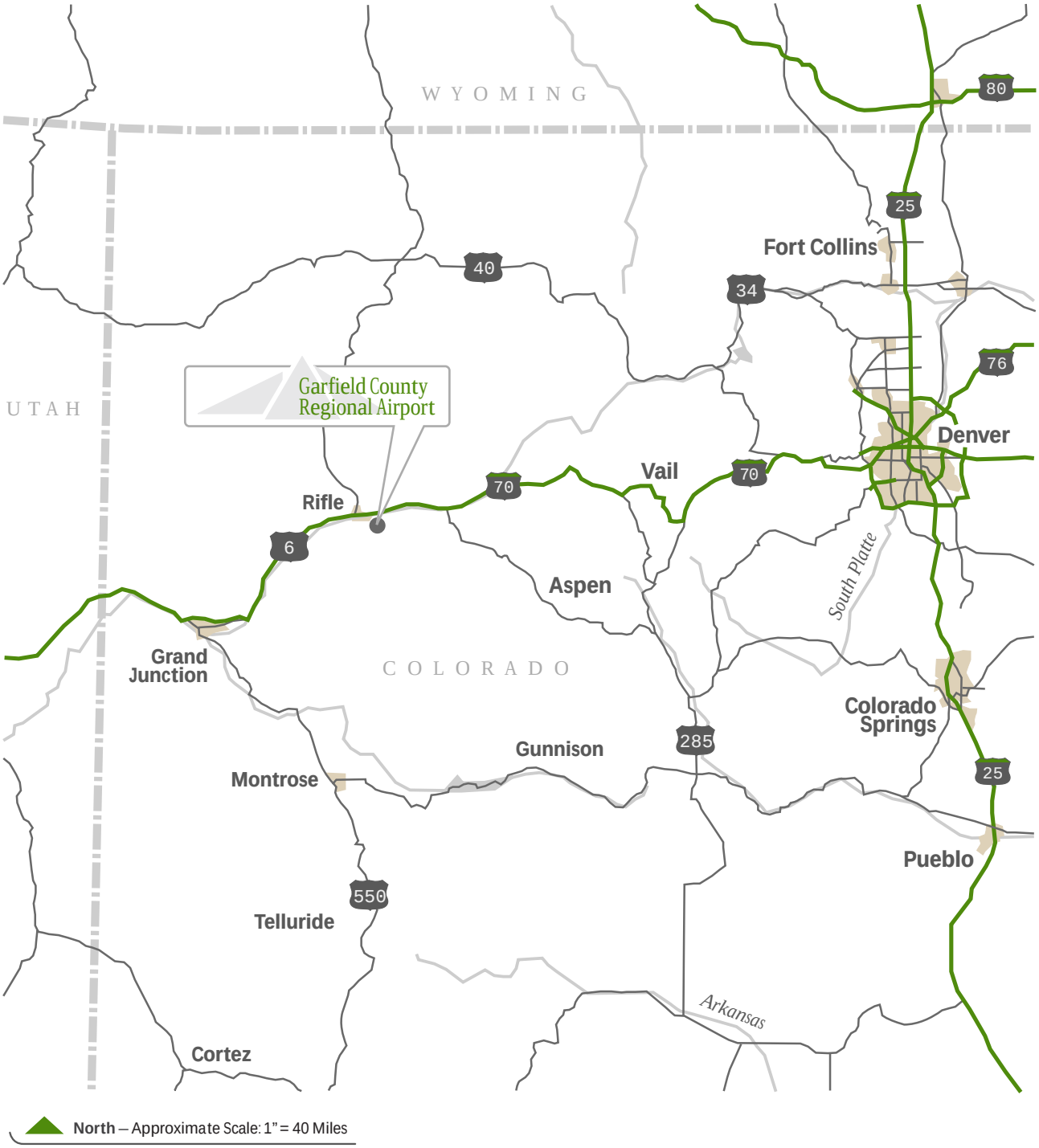



**Figure 1** Airport Location Map

Garfield County Regional Airport
Rifle, Colorado

**Source:** Microsoft Streets & Trips, 2005.

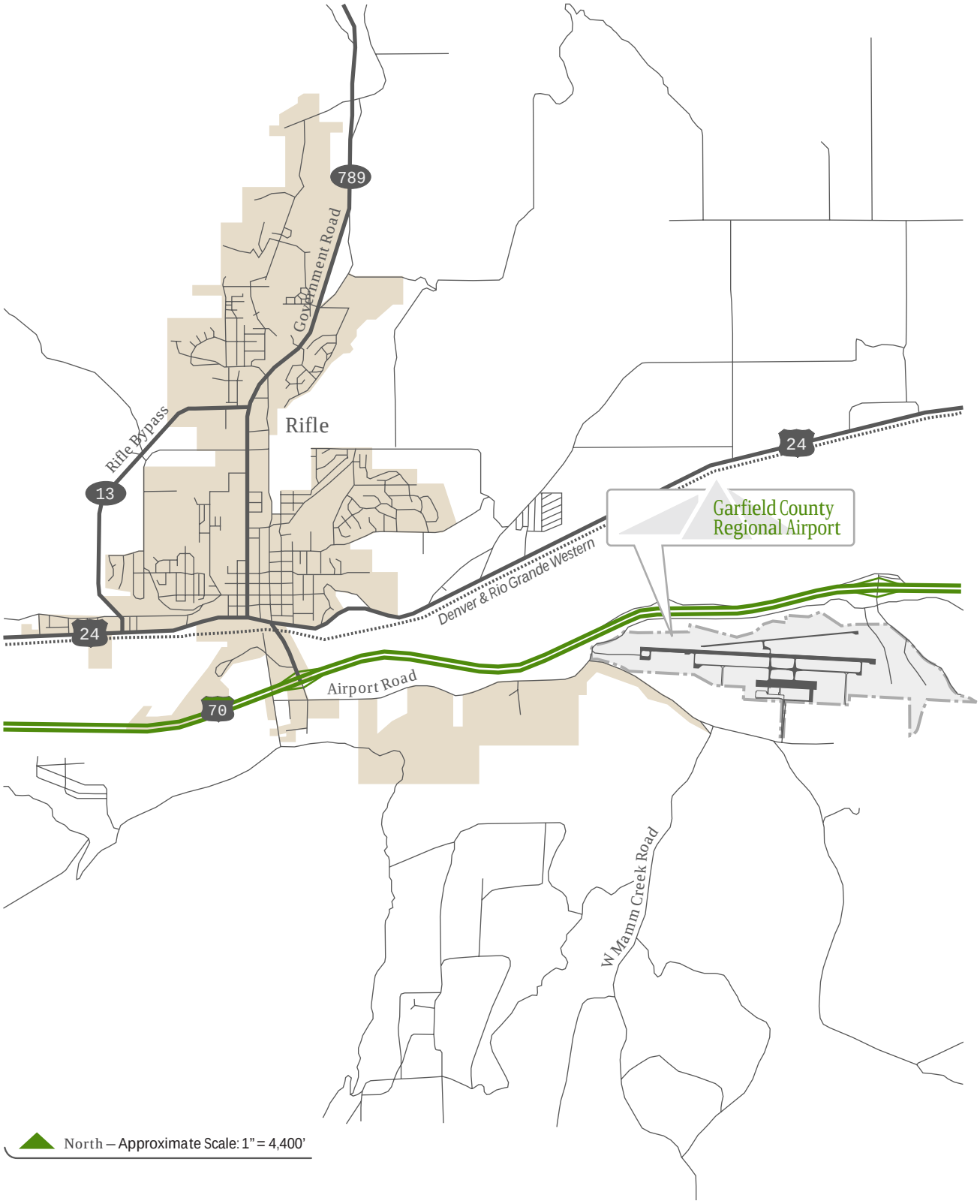



**Figure 2** Airport Vicinity Map

Garfield County Regional Airport
Rifle, Colorado

**Source:** Microsoft Streets & Trips, 2005.

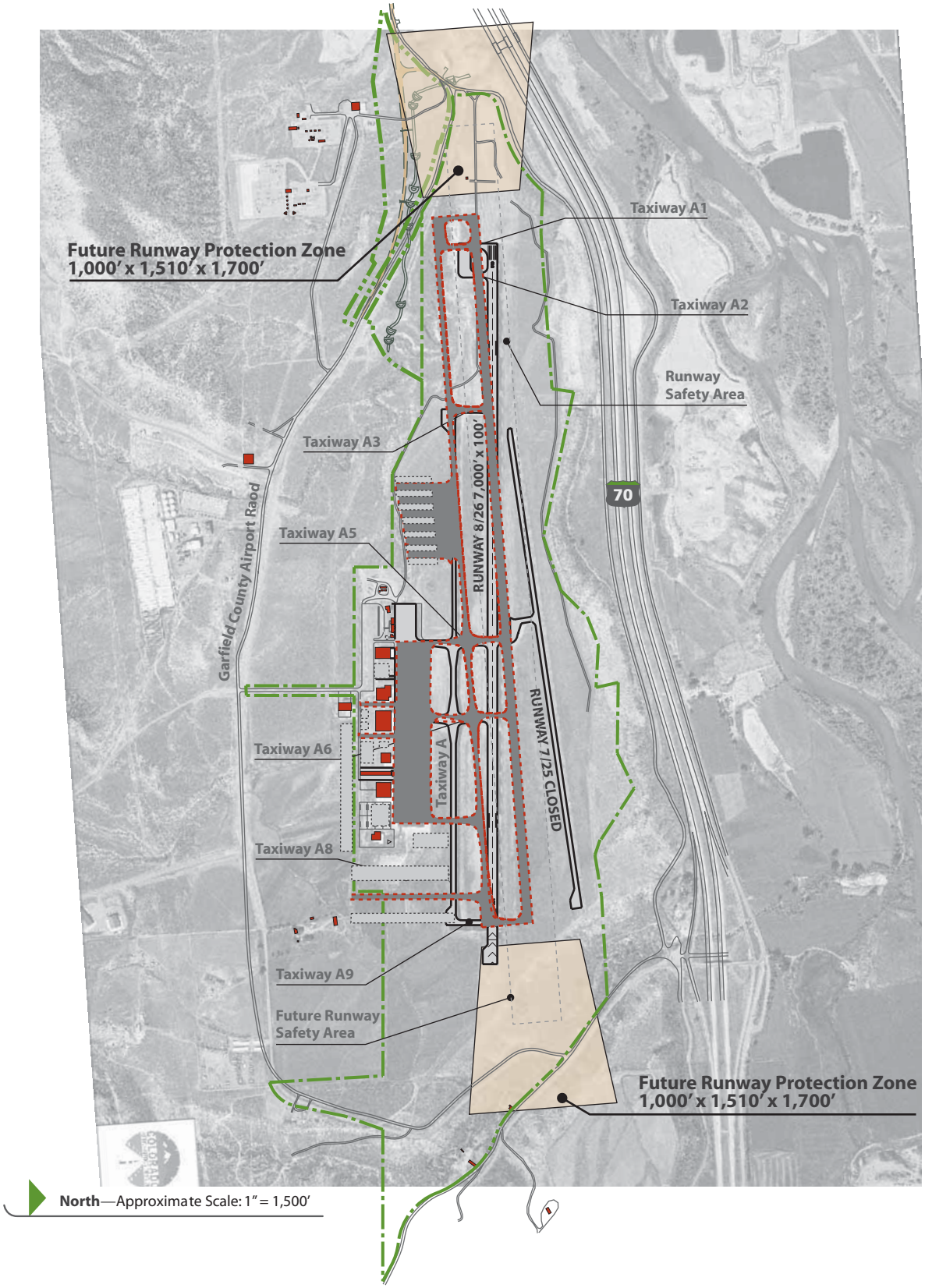
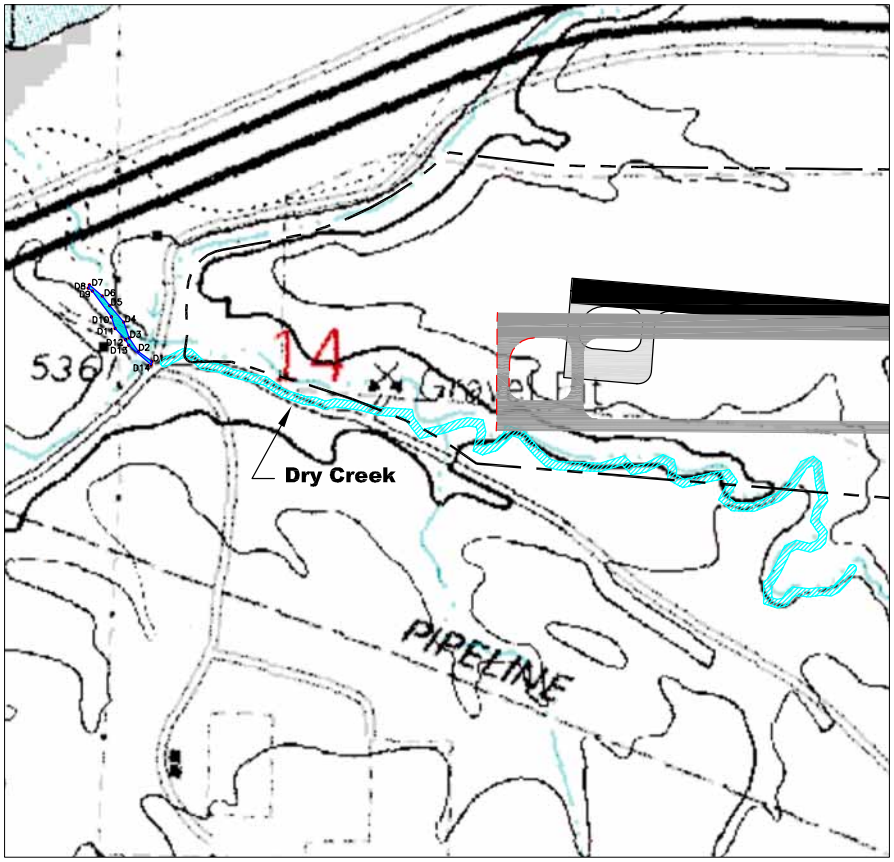
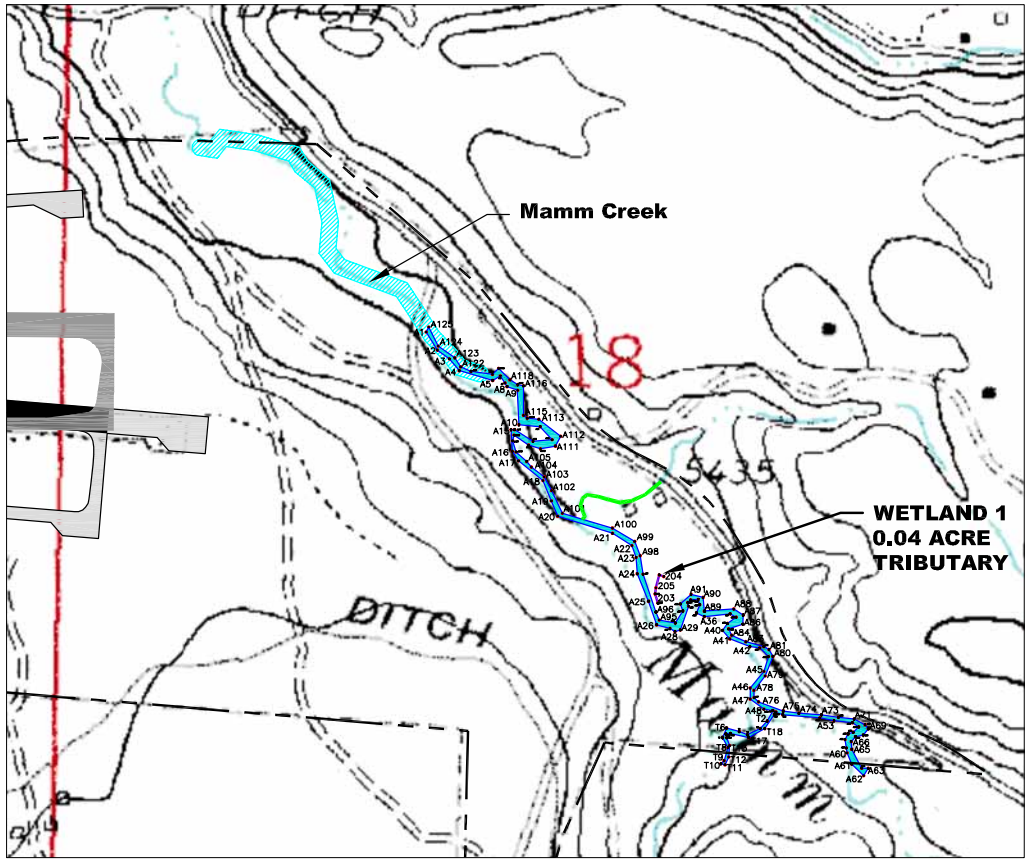



**Figure 3** Preferred Alternative




Approximate Scale: 1" = 500'




Approximate Scale: 1" = 500'

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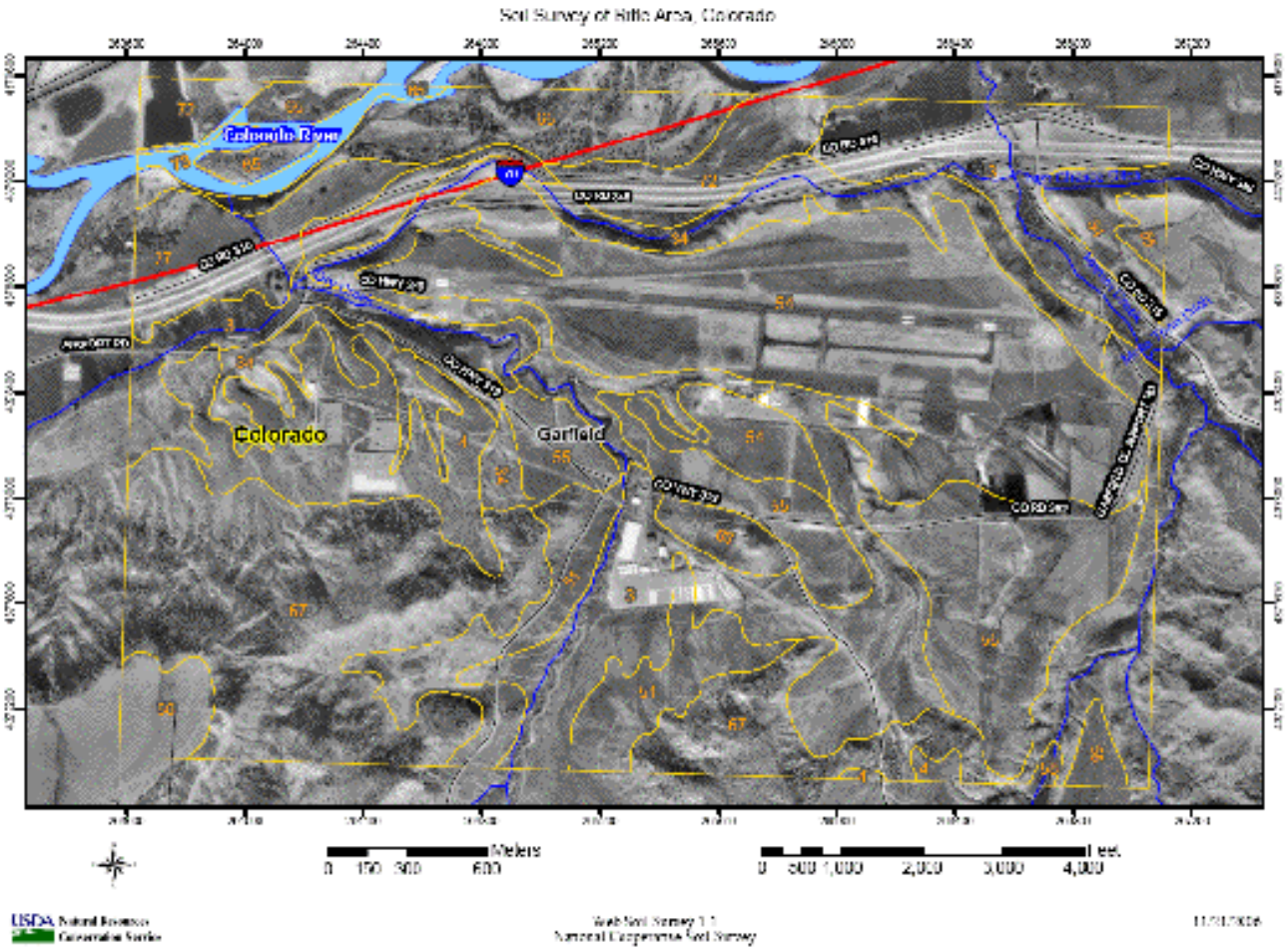
**Rifle Falls Quadrangle**
**Colorado Central Zone 13**
**Township 6 South**
**Range 93 West, Section 13 &14**
**Range 92 West, Section 18**

AIRPORT PROPERTY LINE
WATERS OF THE U.S.
PREVIOUSLY DELINEATED WATERS OF THE U.S.
UNNAMED TRIBUTARY (CONVEYANCE DRAINAGE)
WETLANDS

Garfield County Regional Airport
Rifle, Colorado

**Figure 4**

SOIL SURVEY OF RIFLE AREA, COLORADO, PARTS OF GARFIELD AND MESA COUNTIES

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Garfield County Regional Airport
Rifle, Colorado

**Figure 5**

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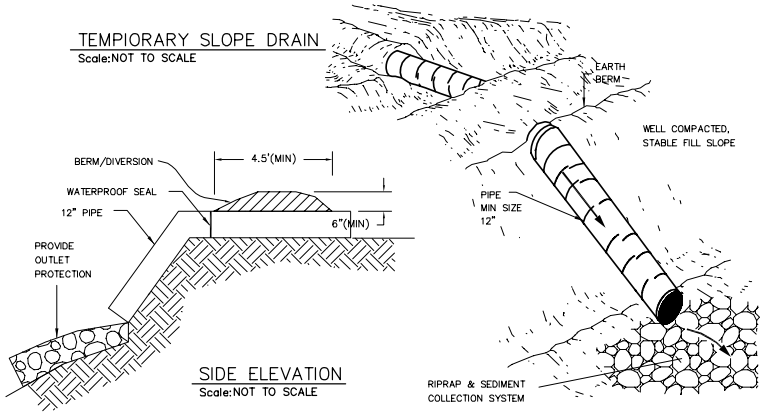
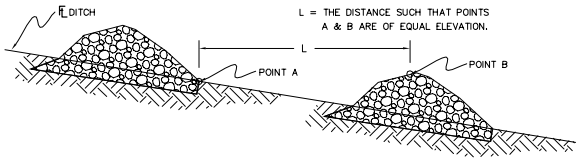


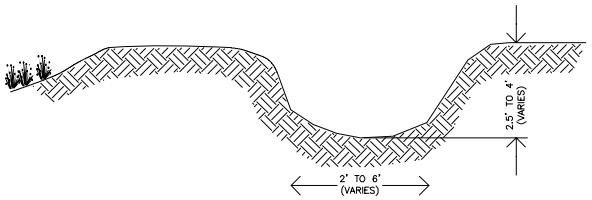

TEMPIORARY SLOPE DRAIN
Scale:NOT TO SCALE

SIDE ELEVATION
Scale:NOT TO SCALE

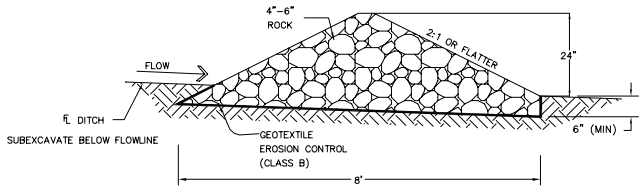
1/28 EARTH BERM
Scale:NOT TO SCALE




2/28 PROFILE VIEW ALONG DITCH FLOWLINE
Scale:NOT TO SCALE




3/28 TYPICAL EXISTING CHANNEL SECTION
Scale:NOT TO SCALE




4/28 PROFILE VIEW OF RIPRAP CHECK DAM FOR DTICH
Scale:NOT TO SCALE

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Garfield County
REGIONAL AIRPORT

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 06/15/06 | ISSUED FOR REVIEW |
| 1 | 06/15/06 | DRY CREEK PRELIMINARY DESIGN |

REVISIONS

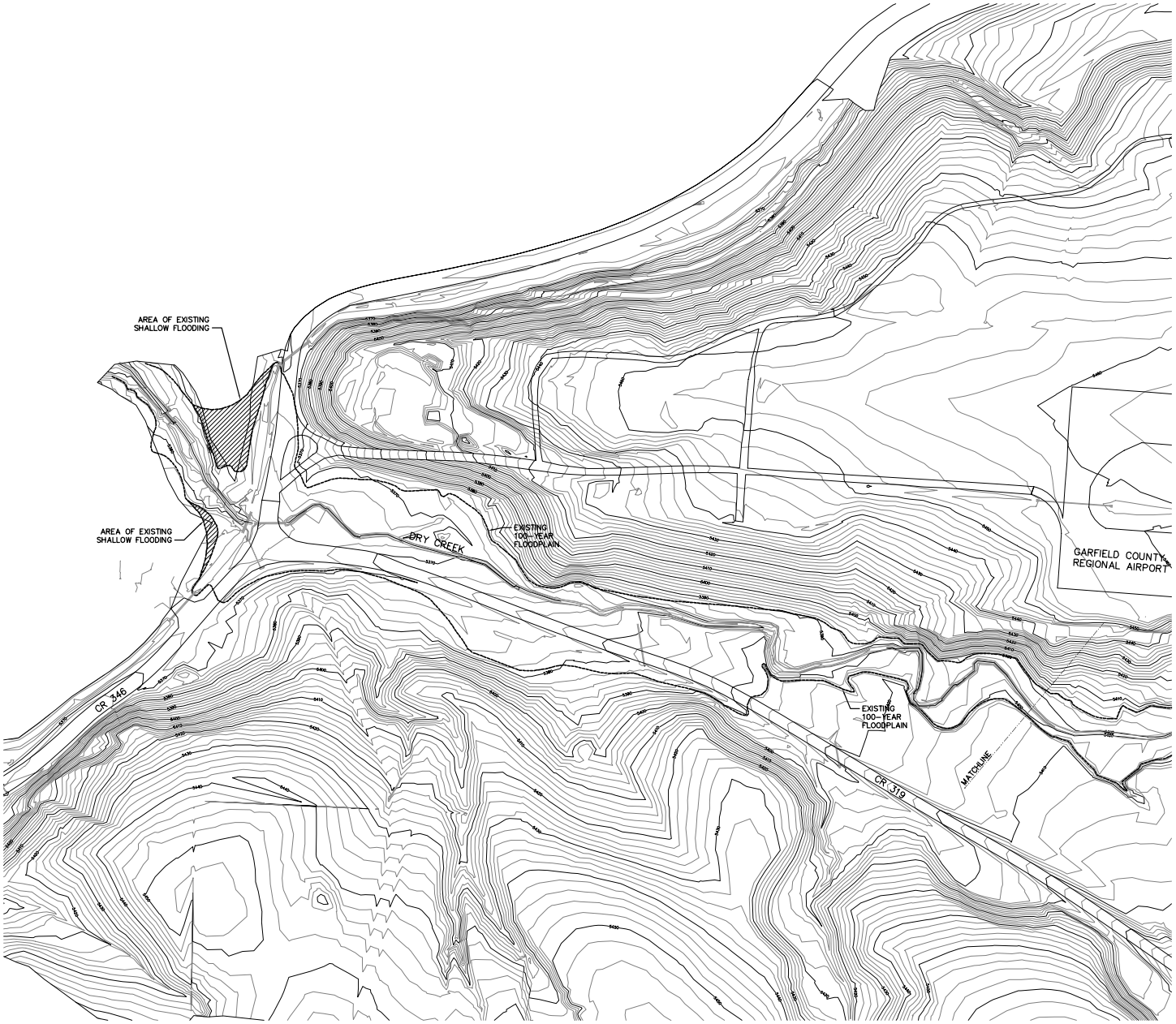
SEDIMENT AND EROSION CONTROL
TYPICAL DETAILS

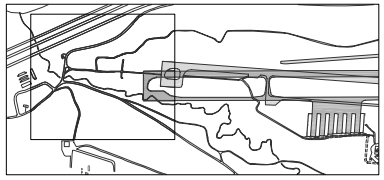
RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15

GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

| | |
|---|---|
| drawn by: | DS |
| checked by: | DO |
| approved by: | DK |
| project no.: | 20051470 |
| dwg name: | CD |
| date: | 06/06 |

SHEET
**Figure 6**



KEY MAP

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| PROJECT LEGEND | EXISTING | THIS PROJECT |
|---|---|---|
| ELEVATION CONTOURS – MAJOR | 910 | |
| ELEVATION CONTOURS – MINOR | | |
| 100–YEAR FLOODPLAIN | | |
| CULVERTS | | |

NORTH

SCALE
100 0 50 100 200
SCALE IN FEET

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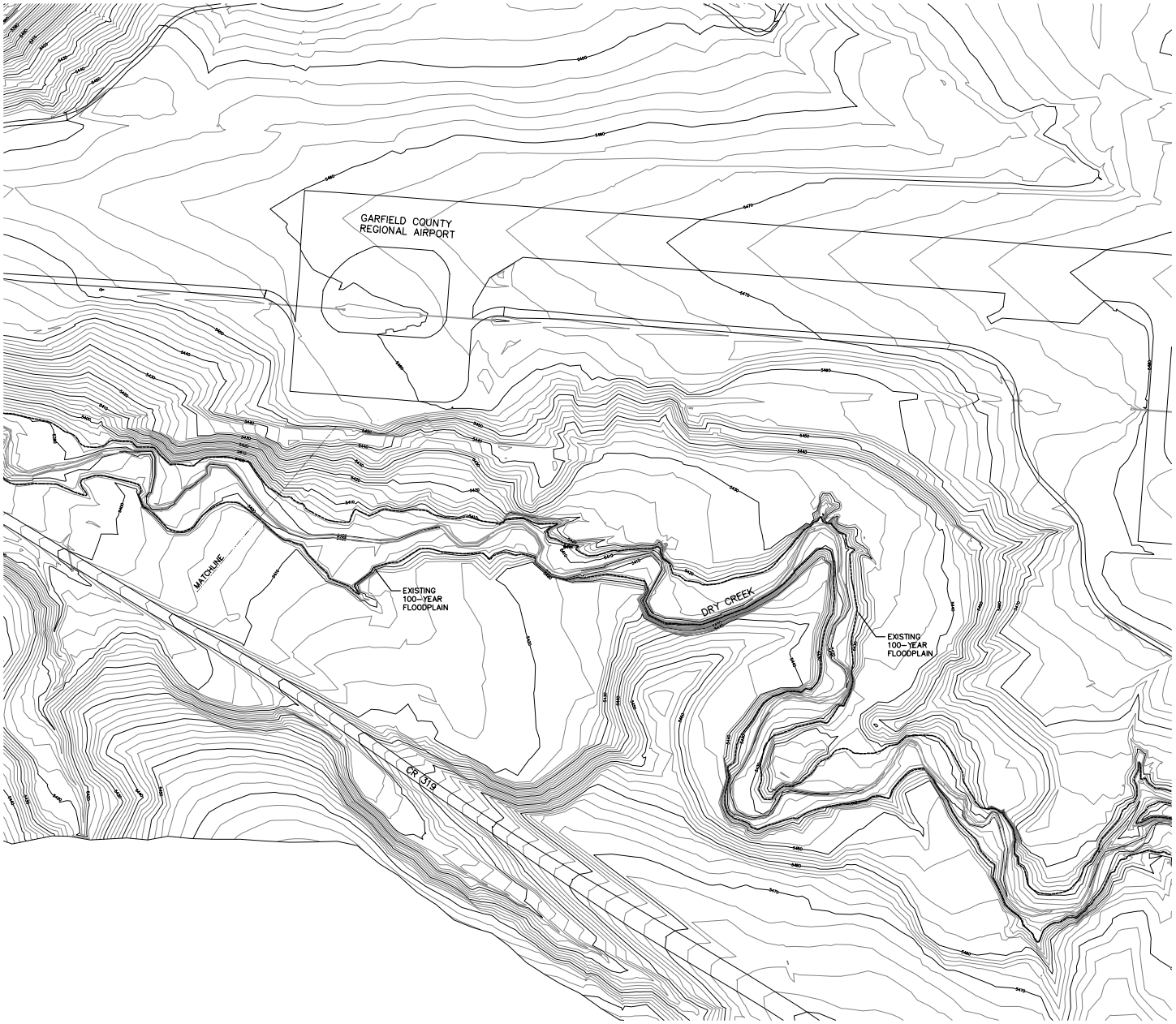
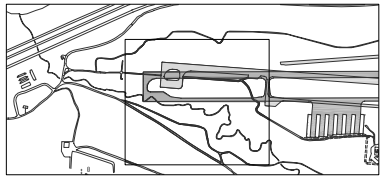
REVISIONS

DRY CREEK EXISTING 100–YEAR FLOODPLAIN
RUNWAY 8/26 UPGRADE TO D–III STANDARDS
AIP 3–08–0048–15
GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

| | |
|---|---|
| drawn by: | AK |
| checked by: | DO |
| approved by: | DK |
| project no.: | 20051470 |
| dwg name: | EX FP |
| date: | 06/06 |

**Figure 7**



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| PROJECT LEGEND | EXISTING | THIS PROJECT |
|---|---|---|
| ELEVATION CONTOURS – MAJOR | 910 | |
| ELEVATION CONTOURS – MINOR | | |
| 100-YEAR FLOODPLAIN | | |
| CULVERTS | | |

NORTH

SCALE

100 0 50 100 200

SCALE IN FEET

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REVISIONS

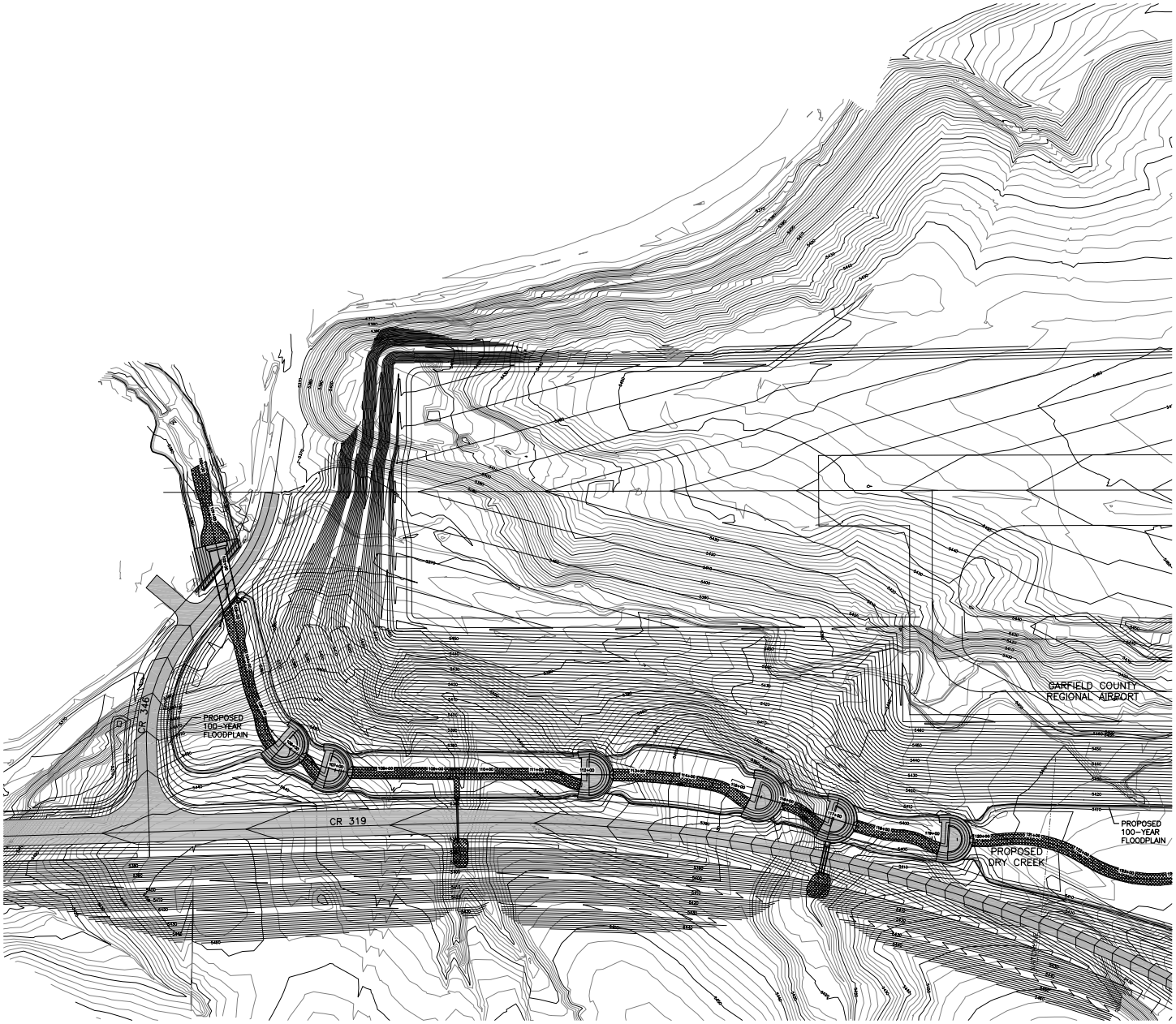
DRY CREEK EXISTING 100-YEAR FLOODPLAIN

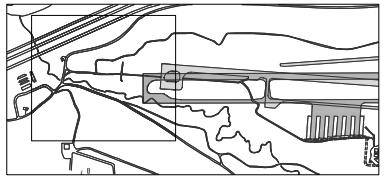
RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15

GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

| | |
|---|---|
| drawn by: | AK |
| checked by: | DO |
| approved by: | DK |
| project no.: | 20051470 |
| dwg name: | EX FP |
| date: | 06/06 |

**Figure 8**



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|---|---|---|
| ELEVATION CONTOURS - MAJOR | 910 | 910 |
| ELEVATION CONTOURS - MINOR | | |
| 100-YEAR FLOODPLAIN | | |

NORTH

SCALE
100 0 50 100 200
SCALE IN FEET

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|---|---|---|
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| 1 | 06/15/06 | DRY CREEK PRELIMINARY DESIGN |

REVISIONS

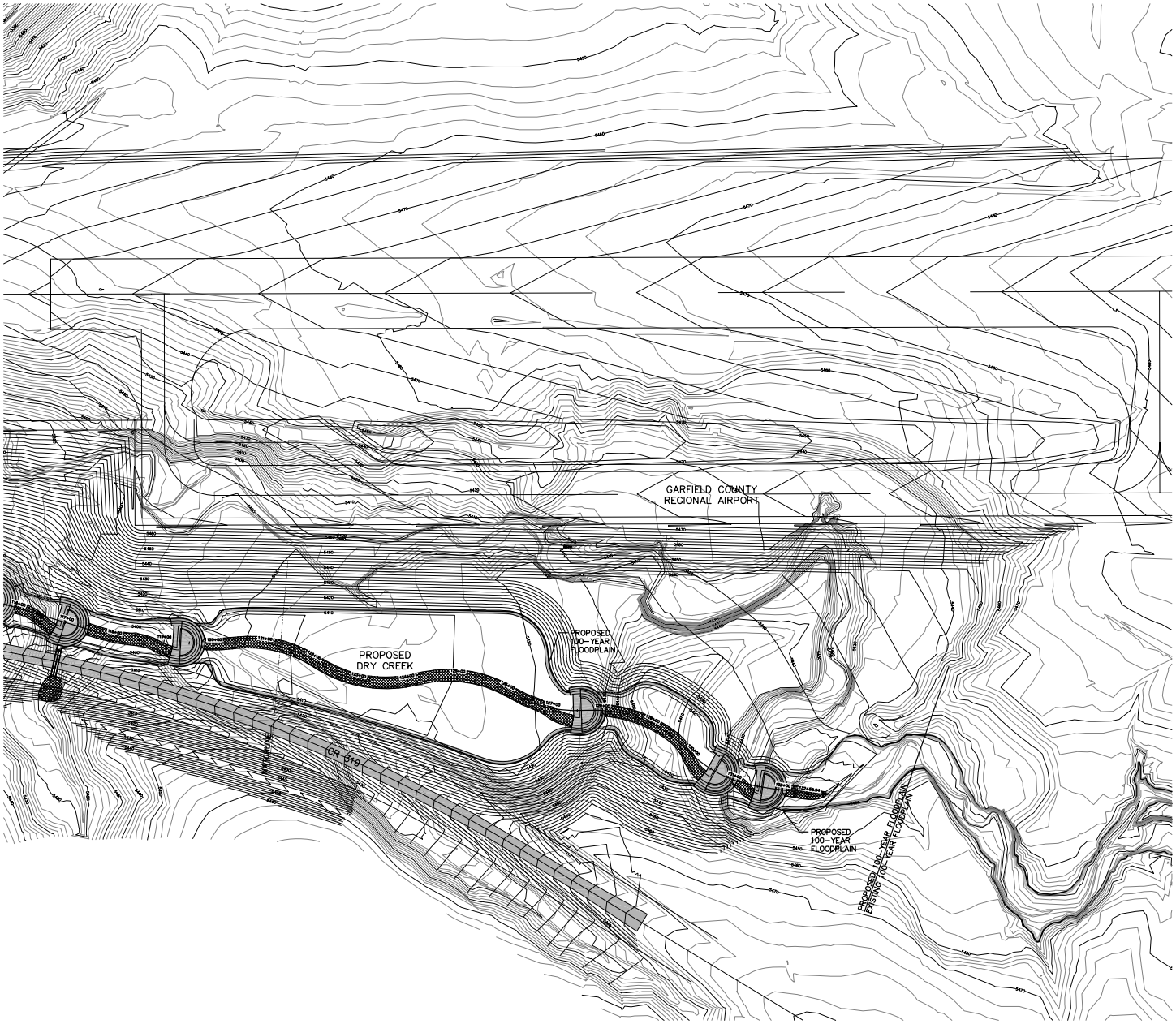
DRY CREEK PROPOSED 100-YEAR FLOODPLAIN

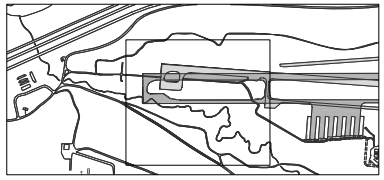
RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15

GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

| | |
|---|---|
| drawn by: | AK |
| checked by: | DO |
| approved by: | DK |
| project no.: | 20051470 |
| dwg name: | PR FP |
| date: | 06/06 |

**Figure 9**



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|---|---|---|
| ELEVATION CONTOURS – MAJOR | 910 | 910 |
| ELEVATION CONTOURS – MINOR | | |
| 100-YEAR FLOODPLAIN | | |

NORTH

SCALE
100 0 50 100 200
SCALE IN FEET

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| 1 | 06/15/06 | DRY CREEK PRELIMINARY DESIGN |

REVISIONS

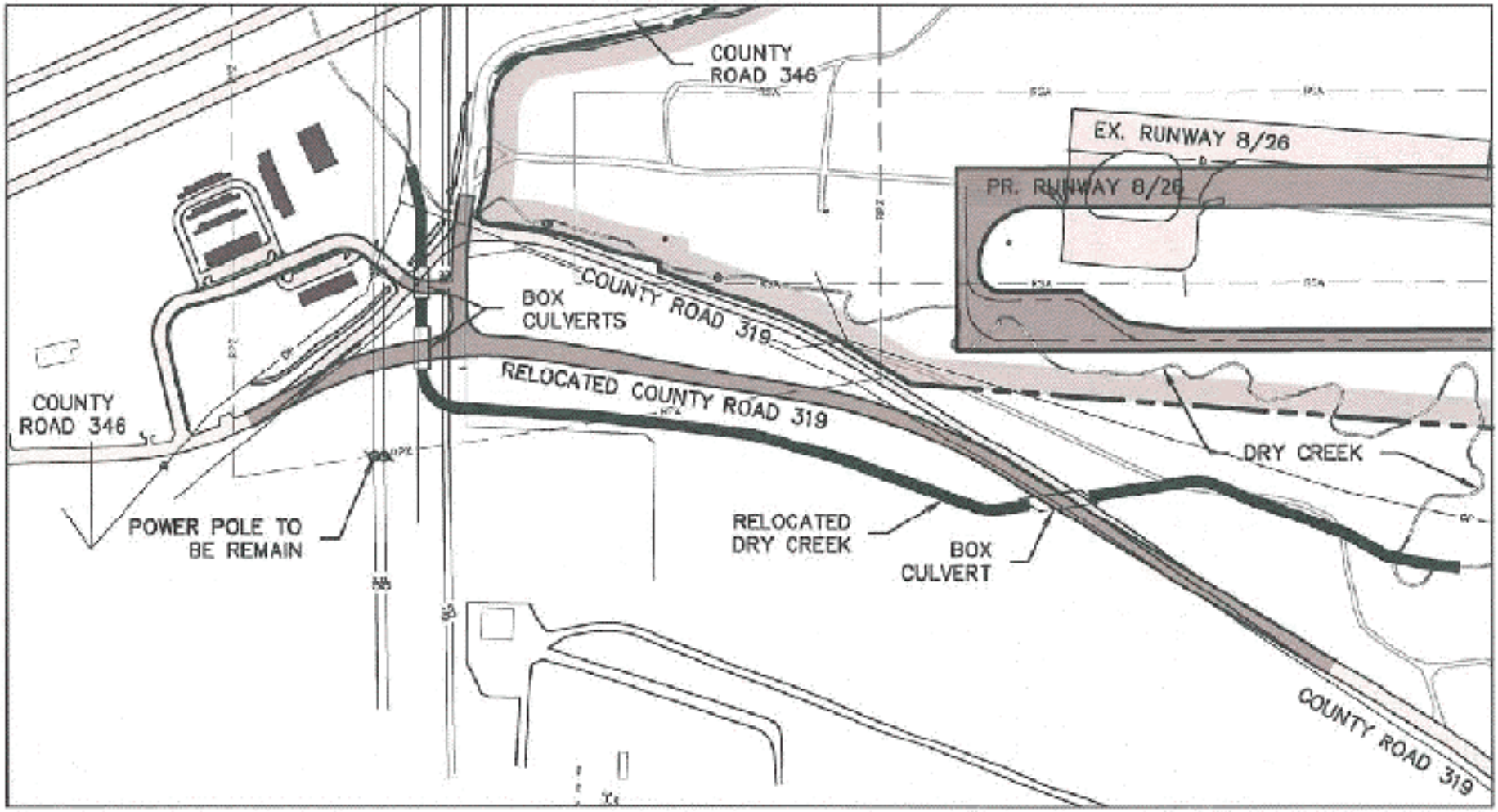
DRY CREEK PROPOSED 100-YEAR FLOODPLAIN

RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15

GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

| | |
|---|---|
| drawn by: | AK |
| checked by: | DO |
| approved by: | DK |
| project no.: | 20051470 |
| dwg name: | PR FP |
| date: | 06/06 |

**Figure 10**




ROADWAY RELOCATION ALTERNATIVE 1

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Tulsa, Oklahoma 74120
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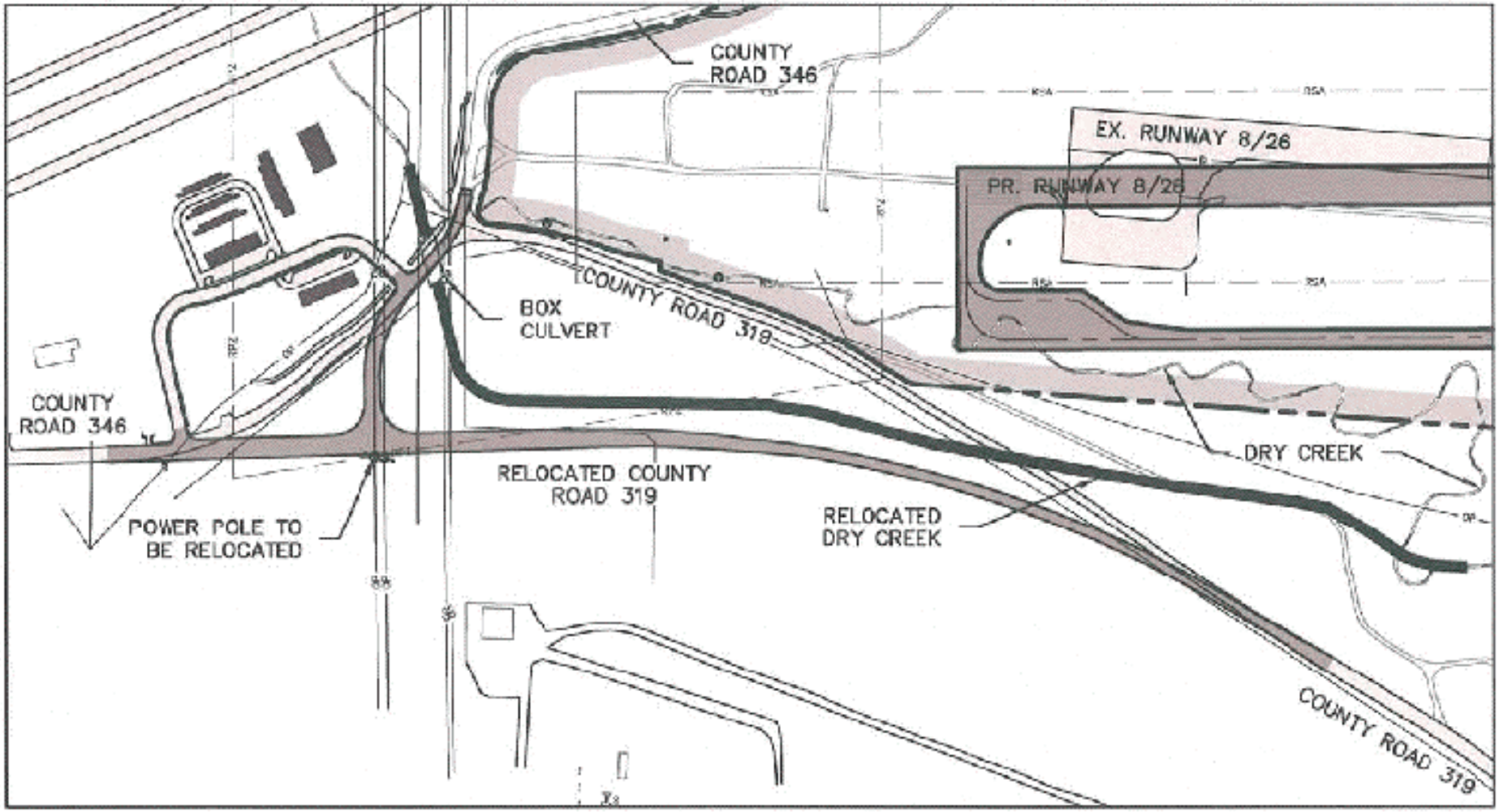
DENVER
1743 Wazee Street, Suite 400
Denver, Colorado 80202
303.825.8844

Garfield County Regional Airport
Rifle, Colorado

**Figure 11**




ROADWAY RELOCATION ALTERNATIVE 2

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Tulsa, Oklahoma 74120
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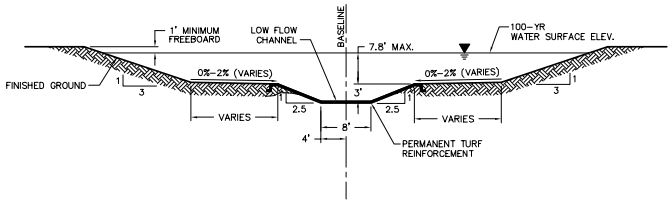
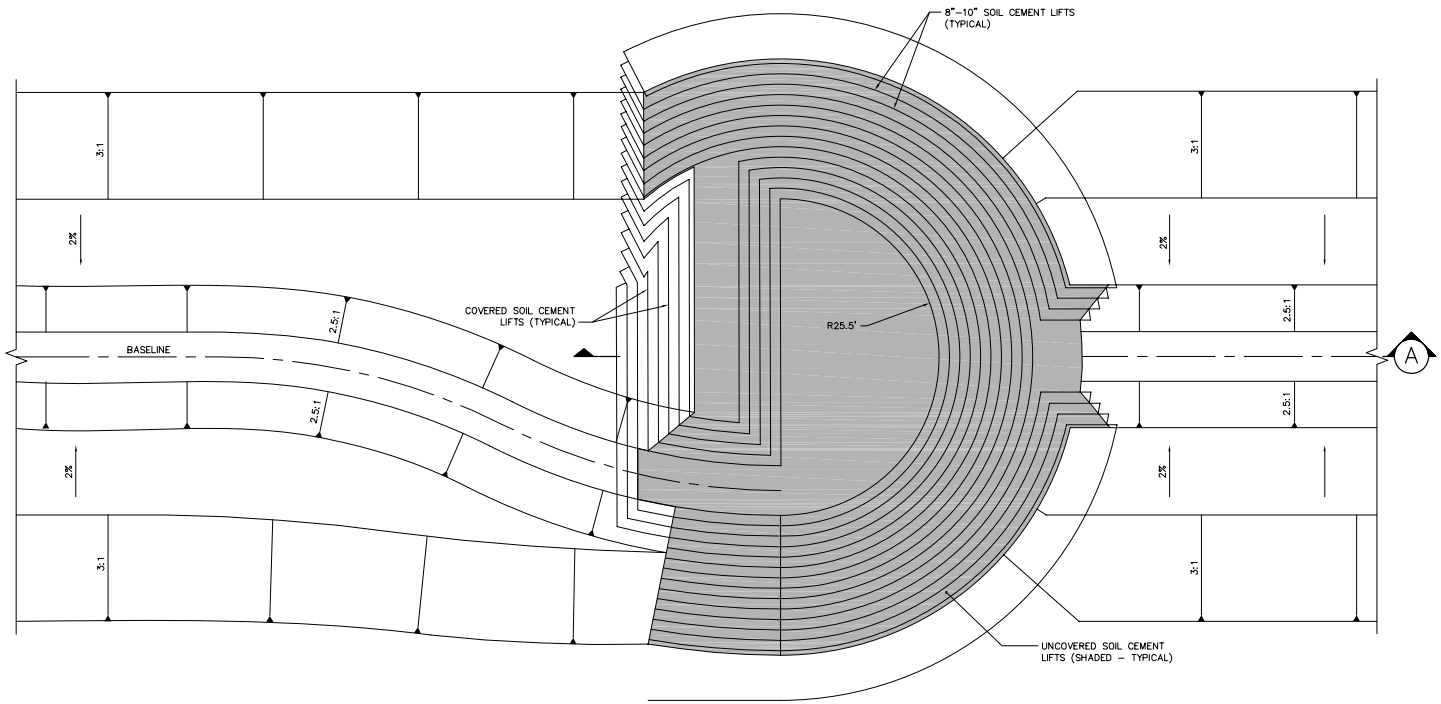
DENVER
1743 Wazee Street, Suite 400
Denver, Colorado 80202
303.825.8844

Garfield County Regional Airport
Rifle, Colorado

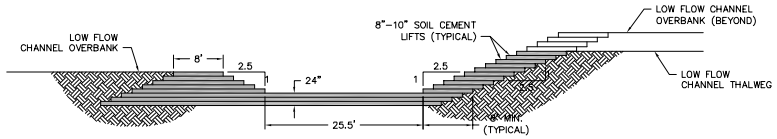
**Figure 12**




1/29 TYPICAL CHANNEL SECTION
Scale: NOT TO SCALE




2/29 TYPICAL SOIL CEMENT DROP STRUCTURE PLAN
Scale: 1"=10'




A TYPICAL SOIL CEMENT DROP STRUCTURE SECTON
Scale: 1"=10'

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Garfield County Regional Airport

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 06/15/06 | ISSUED FOR REVIEW |
| 1 | 06/15/06 | DRY CREEK PRELIMINARY DESIGN |

REVISIONS

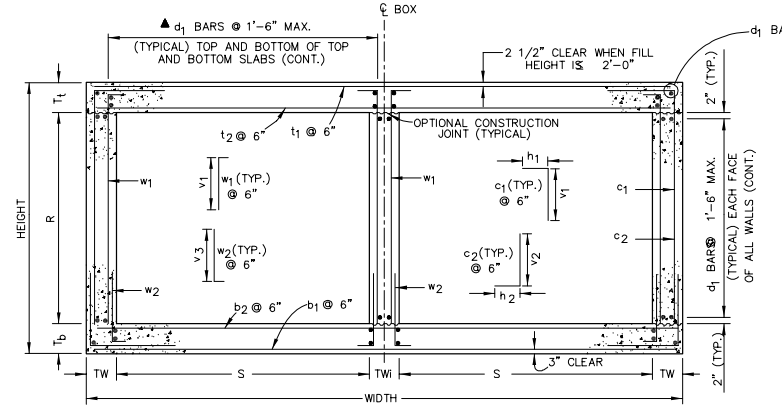
DRY CREEK IMPROVEMENTS
TYPICAL DETAILS

RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15

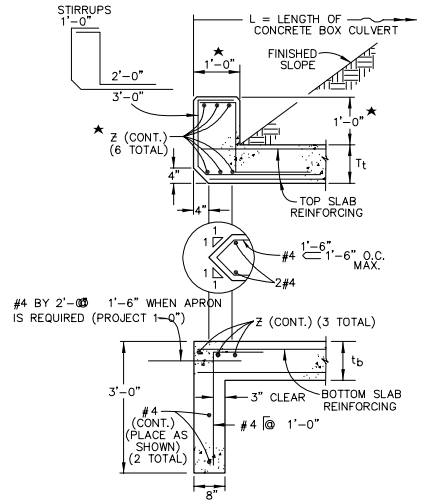
GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

| | |
|---|---|
| drawn by: | DS |
| checked by: | DO |
| approved by: | DK |
| project no.: | 20051470 |
| dwg name: | CD |
| date: | 06/06 |

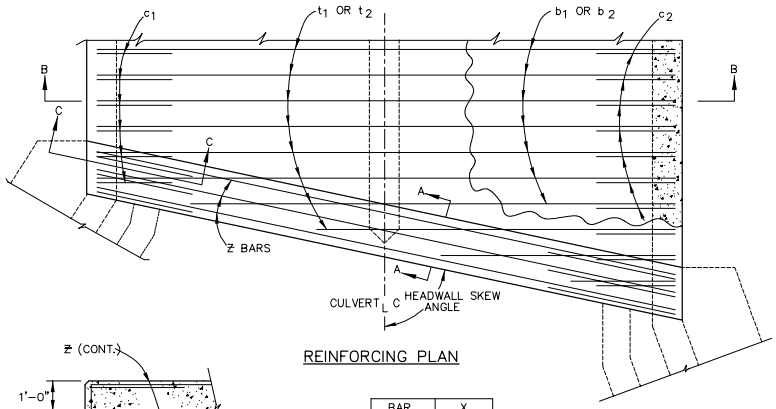
**Figure 13**



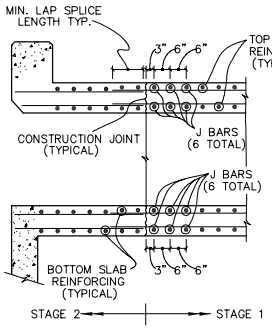

SECTION B–B




SECTION A–A




REINFORCING PLAN

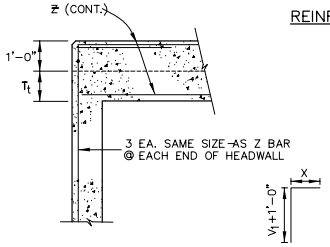



NOT TO SCALE

| SPAN (FT.) | J BAR SIZE (#) |
|---|---|
| 6 | 5 |
| 8 | 6 |
| 10 | 7 |
| 12 | 8 |
| 14 | 8 |
| 16 | 9 |
| 18 | 10 |
| 20 | 10 |

CONSTRUCTION JOINT DETAIL FOR STAGED CONSTRUCTION

NOTE: THIS DETAIL IS FOR CONSTRUCTION JOINTS PERPENDICULAR TO THE ℄ OF THE BOX ONLY!




SECTION C–C

| BAR SIZE (#) | X (FT–IN) |
|---|---|
| 4 | 1–9 |
| 5 | 2–2 |
| 6 | 2–7 |
| 7 | 3–1 |
| 8 | 4–0 |
| 9 | 5–1 |
| 10 | 6–5 |
| 11 | 7–11 |

HEADWALL CORNER REINFORCING DETAIL

## GENERAL NOTES

1. ALL CONCRETE SHALL BE CLASS D (BOX CULVERT).
2. ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED BEFORE FRESH CONCRETE IS POURED.
3. ALL CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS SHALL BE APPROVED BY THE ENGINEER.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.
5. STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH STD. M–206–1.
6. FOR ANY CULVERT SPAN 20 FT. OR GREATER, A FOUNDATION INVESTIGATION AND REPORT ARE REQUIRED.
7. DO NOT BACKFILL UNTIL TOP SLAB HAS REACHED DESIGN STRENGTH, $f'_c$.
8. SPLICE QUANTITIES FOR LONGITUDINAL AND TRANSVERSE BARS ARE NOT INCLUDED.
9. GRADE 60 REINFORCING STEEL IS REQUIRED.
10. THE MINIMUM LAP SPLICE LENGTH FOR EPOXY COATED REINFORCING BARS SHALL BE:

| BAR SIZE: | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
|---|---|---|---|---|---|---|---|---|
| SPLICE LENGTH: | 1'–3" | 1'–6" | 1'–10" | 2'–2" | 3'–8" | 4'–8" | 5'–11" | 7'–3" |

THE MINIMUM LAP SPLICE LENGTH FOR BLACK REINFORCING BARS SHALL BE:

| BAR SIZE: | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
|---|---|---|---|---|---|---|---|---|
| SPLICE LENGTH: | 1'–0" | 1'–4" | 1'–7" | 1'–10" | 2'–5" | 3'–1" | 3'–11" | 4'–10" |

11. ALL DIMENSIONS ARE PERPENDICULAR TO THE CENTERLINE OF THE BOX.
12. WINGWALLS SHALL BE TIED TO CONCRETE BOX CULVERT PER STD. M–601–20.
13. ALL TRANSVERSE REINFORCING SHALL BE NORMAL TO THE CENTERLINE OF THE BOX.
14. FILL HEIGHT IS THE DISTANCE MEASURED FROM TOP OF TOP SLAB TO TOP OF PAVEMENT.
15. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED $\frac{3}{4}$ IN.

▲ WHEN THE FILL HEIGHT IS LESS THAN OR EQUAL TO 2 FT., THE SPACING OF THE $d_1$ BARS IN THE BOTTOM OF THE TOP SLAB SHALL BE 6 INCHES MAXIMUM. USE THE FOLLOWING EQUATION TO CALCULATE THE ADDITIONAL REINFORCING QUANTITY. WHERE S IS IN FEET:

$$\text{ADDED REINFORCING, LBS./LIN FT.} = 2 \times \left(\frac{S}{0.5} - \frac{S}{1.5}\right) \times 0.668 = 1.781\ S$$

DESIGN DATA: 16TH EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES

SERVICE LOAD DESIGN METHOD

UNIT STRESSES: $f_s$ = 24,000 psi., $f_y$ = 60,000 psi., $f_c$ = 1,800 psi., $f'_c$ = 4,500 psi., n = 8

LOADING DATA:

LIVE LOAD = AASHTO, HS 20–44 AND ALTERNATE MILITARY LOADING

DEAD LOAD CASE 1: VERTICAL EARTH LOAD = 120 LBS./CU. FT.
HORIZONTAL EARTH LOAD = 30 LBS./CU.FT.

DEAD LOAD CASE 2: VERTICAL EARTH LOAD = 120 LBS./CU. FT.
HORIZONTAL EARTH LOAD = 60 LBS./CU. FT.

FUTURE ASPHALT OVERLAY = 48 LBS./SQ. FT.

LIVE LOAD SURCHARGE ON EXTERIOR WALLS = 2 FT. OF EARTH

★ IF HEADWALL MOUNT GUARDRAIL IS USED (SEE M–606–1, SHEET 15):
- ALL REINFORCING STEEL SHALL BE ACCORDING TO THIS BOX CULVERT PLAN.
- ANY ADDITIONAL STIRRUP LENGTH WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
- HEADWALL DIMENSION AND CONCRETE QUANTITY SHALL BE ACCORDING TO M–606–1 SHEET 15.
- POST ANCHORS SHALL BE PROVIDED ACCORDING TO M–606–1 SHEET 15.
- POST ANCHORS AND CONCRETE FOR HEADWALL MOUNT OF GUARDRAIL WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
- POST ANCHORS WHEN REQUIRED AND ENCASED IN HEADWALL CONCRETE, SHALL BE ASTM A36 OR AASHTO M–169 STEEL.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Garfield County Regional Airport

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 06/15/06 | ISSUED FOR REVIEW |
| 1 | 06/15/06 | DRY CREEK PRELIMINARY DESIGN |

REVISIONS

DOUBLE CONCRETE BOX CULVERT
CDOT STANDARD PLAN NO. M–601–2
RUNWAY 8/26 UPGRADE TO D–III STANDARDS
AIP 3–08–0048–15
GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

drawn by: DS
checked by: DO
approved by: DK
project no.: 20051470
dwg name: CD
date: 06/06

**Figure 14**

## DOUBLE CONCRETE BOX CULVERT DIMENSIONS & QUANTITIES (EXCLUDING HEADWALLS & TOEWALLS)

| BOX SIZE | | | | FILL HEIGHT ALLOWED | SLAB & WALL THICKNESS (INCHES) | | | BAR SIZES | | | | | | | $d_1$▲ | DIMENSIONS | | | | | QUANTITIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | R | HT. | WIDTH | | | | | $t_1$* | $t_2$ | $b_1$ | $b_2$ | $w_1$* & $w_2$ | $c_1$* | $c_2$ | | $h_1$ | $h_2$ | $v_1$ | $v_2$ | $v_3$ | CONCRETE | REBAR STL |
| FT. | FT. | FT.–IN. | FT.–IN. | FT.–FT. | $T_t$ | $T_b$ | TW & $TW_i$ | # | # | # | # | # | # | # | NO. | FT.–IN. | FT.–IN. | FT.–IN. | FT.–IN. | FT.–IN. | CU.YDS./LIN.FT. | LBS./LIN.FT. |
| 6 | 6 | 7–5 | 14–6 | 0 TO 10 | 8 | 9 | 10 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 74 | 2–7 | 2–7 | 6–6 | 2–3 | 2–3 | 1.316 | 248 |
| | | 7–8 | 14–6 | >10 TO 15 | 9 | 11 | 10 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | | 2–7 | 2–7 | 6–7 | 2–5 | 2–5 | 1.457 | 250 |
| | | 7–11 | 14–6 | >15 TO 20 | 11 | 12 | 10 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | | 2–7 | 2–7 | 6–9 | 2–6 | 2–6 | 1.585 | 241 |
| | 8 | 9–5 | 14–6 | 0 TO 10 | 8 | 9 | 10 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 86 | 2–7 | 2–7 | 8–6 | 2–3 | 2–3 | 1.502 | 272 |
| | | 9–8 | 14–6 | >10 TO 15 | 9 | 11 | 10 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | | 2–7 | 2–7 | 8–7 | 2–5 | 2–5 | 1.636 | 264 |
| | | 9–11 | 14–6 | >15 TO 20 | 11 | 12 | 10 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | | 2–7 | 2–7 | 8–9 | 2–6 | 2–6 | 1.770 | 263 |
| | 10 | 11–6 | 14–6 | 0 TO 10 | 8 | 10 | 10 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 92 | 2–9 | 2–9 | 10–6 | 2–9 | 2–4 | 1.731 | 299 |
| | | 11–8 | 14–6 | >10 TO 15 | 9 | 11 | 10 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | | 2–9 | 2–9 | 10–7 | 2–10 | 2–11 | 1.821 | 353 |
| | | 12–0 | 14–10.5 | >15 TO 20 | 11 | 13 | 11.5 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | | 2–11 | 2–11 | 10–9 | 3–0 | 3–0 | 2.167 | 360 |
| 8 | 6 | 7–9 | 18–6 | 0 TO 10 | 10 | 11 | 10 | 6 | 5 | 6 | 5 | 4 | 4 | 5 | 90 | 2–7 | 2–9 | 6–8 | 2–10 | 2–5 | 1.755 | 349 |
| | | 8–2 | 18–6 | >10 TO 15 | 12 | 14 | 10 | 6 | 5 | 6 | 5 | 4 | 4 | 4 | | 2–7 | 2–7 | 6–10 | 2–8 | 2–8 | 2.040 | 342 |
| | | 8–6 | 18–6 | >15 TO 20 | 14 | 16 | 10 | 6 | 5 | 6 | 5 | 4 | 4 | 4 | | 2–7 | 2–7 | 7–0 | 2–11 | 2–11 | 2.269 | 344 |
| | 8 | 9–9 | 18–6 | 0 TO 10 | 10 | 11 | 10 | 6 | 5 | 6 | 4 | 4 | 4 | 5 | 102 | 2–7 | 2–9 | 8–8 | 2–10 | 2–5 | 1.940 | 357 |
| | | 10–2 | 18–6 | >10 TO 15 | 12 | 14 | 10 | 6 | 5 | 5 | 5 | 4 | 4 | 4 | | 2–7 | 2–7 | 8–10 | 2–8 | 2–8 | 2.225 | 348 |
| | | 10–6 | 18–6 | >15 TO 20 | 14 | 16 | 10 | 6 | 5 | 6 | 5 | 4 | 4 | 4 | | 2–7 | 2–7 | 9–0 | 2–11 | 2–11 | 2.454 | 368 |
| 10 | 6 | 7–7 | 22–6 | 0 TO 5 | 9 | 10 | 10 | 7 | 6 | 7 | 5 | 4 | 5 | 6 | 98 | 2–9 | 3–4 | 6–7 | 3–2 | 2–4 | 1.875 | 490 |
| | | 8–1 | 22–6 | >5 TO 10 | 12 | 13 | 10 | 7 | 5 | 7 | 5 | 4 | 4 | 5 | | 2–7 | 2–9 | 6–10 | 3–0 | 2–7 | 2.292 | 435 |
| | | 8–7 | 22–6 | >10 TO 15 | 15 | 16 | 10 | 7 | 5 | 7 | 5 | 4 | 4 | 4 | | 3–1 | 2–7 | 7–1 | 2–10 | 2–10 | 2.708 | 439 |
| | | 9–1 | 22–6 | >15 TO 20 | 18 | 19 | 10 | 7 | 6 | 7 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 7–4 | 3–6 | 3–1 | 3.125 | 512 |
| | 8 | 9–7 | 22–6 | 0 TO 5 | 9 | 10 | 10 | 7 | 6 | 7 | 5 | 4 | 5 | 6 | 110 | 2–9 | 3–4 | 8–7 | 3–2 | 2–4 | 2.060 | 519 |
| | | 10–1 | 22–6 | >5 TO 10 | 12 | 13 | 10 | 7 | 5 | 7 | 5 | 4 | 4 | 5 | | 2–7 | 2–9 | 8–10 | 3–0 | 2–7 | 2.477 | 470 |
| | | 10–7 | 22–6 | >10 TO 15 | 15 | 16 | 10 | 7 | 5 | 7 | 5 | 4 | 4 | 4 | | 3–1 | 2–7 | 9–1 | 2–10 | 2–10 | 2.894 | 465 |
| | | 11–0 | 22–6 | >15 TO 20 | 17 | 19 | 10 | 7 | 6 | 7 | 5 | 4 | 5 | 5 | | 3–6 | 2–9 | 9–3 | 3–6 | 3–1 | 3.241 | 520 |
| | 10 | 11–8 | 22–6 | 0 TO 5 | 9 | 11 | 10 | 7 | 6 | 6 | 5 | 4 | 5 | 6 | 116 | 2–9 | 3–4 | 10–7 | 3–3 | 2–5 | 2.315 | 519 |
| | | 12–1 | 22–6 | >5 TO 10 | 12 | 13 | 10 | 6 | 5 | 7 | 5 | 4 | 5 | 5 | | 2–9 | 2–9 | 10–10 | 3–0 | 2–7 | 2.662 | 487 |
| | | 12–6 | 22–6 | >10 TO 15 | 14 | 16 | 10 | 7 | 5 | 6 | 5 | 4 | 5 | 5 | | 2–9 | 2–9 | 11–0 | 3–3 | 2–10 | 3.009 | 491 |
| | | 13–0 | 22–10.5 | >15 TO 20 | 17 | 19 | 11.5 | 7 | 5 | 7 | 5 | 5 | 5 | 5 | | 3–8 | 2–11 | 11–3 | 3–6 | 3–6 | 3.606 | 582 |
| 12 | 6 | 7–9 | 26–6 | 0 TO 5 | 10 | 11 | 10 | 8 | 6 | 8 | 5 | 4 | 6 | 6 | 106 | 2–9 | 3–4 | 6–8 | 3–3 | 2–5 | 2.273 | 634 |
| | | 8–5 | 26–6 | >5 TO 10 | 14 | 15 | 10 | 7 | 6 | 8 | 6 | 4 | 4 | 5 | | 2–7 | 2–9 | 7–0 | 3–2 | 2–9 | 2.927 | 583 |
| | | 9–0 | 26–6 | >10 TO 15 | 17 | 19 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 7–3 | 3–6 | 3–2 | 3.500 | 640 |
| | 8 | 9–10 | 26–6 | 0 TO 5 | 10 | 12 | 10 | 8 | 6 | 7 | 5 | 4 | 6 | 6 | 118 | 2–9 | 3–4 | 8–8 | 3–4 | 2–6 | 2.540 | 633 |
| | | 10–5 | 26–6 | >5 TO 10 | 14 | 15 | 10 | 7 | 6 | 8 | 6 | 4 | 4 | 5 | | 2–7 | 2–9 | 9–0 | 3–2 | 2–9 | 3.113 | 607 |
| | | 11–0 | 26–6 | >10 TO 15 | 17 | 19 | 10 | 8 | 6 | 7 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 9–3 | 3–6 | 3–1 | 3.685 | 633 |
| | 10 | 11–11 | 26–6 | 0 TO 5 | 11 | 12 | 10 | 8 | 6 | 7 | 5 | 4 | 5 | 6 | 124 | 2–9 | 3–4 | 10–9 | 3–4 | 2–6 | 2.807 | 635 |
| | | 12–5 | 26–6 | >5 TO 10 | 14 | 15 | 10 | 7 | 6 | 7 | 6 | 4 | 5 | 6 | | 2–9 | 3–4 | 11–0 | 3–7 | 2–9 | 3.298 | 632 |
| | | 13–0 | 26–6 | >10 TO 15 | 17 | 19 | 10 | 8 | 6 | 7 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 11–3 | 3–6 | 3–1 | 3.870 | 656 |
| 14 | 6 | 8–2 | 30–6 | 0 TO 5 | 13 | 13 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 6 | 122 | 2–9 | 3–4 | 6–11 | 3–5 | 2–7 | 3.003 | 722 |
| | | 9–0 | 30–6 | >5 TO 10 | 17 | 19 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 7–3 | 3–6 | 3–1 | 3.944 | 717 |
| | | 9–2 | 30–6 | >10 TO 12 | 19 | 19 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 7–5 | 3–6 | 3–1 | 4.133 | 718 |
| | 8 | 10–1 | 30–6 | 0 TO 5 | 12 | 13 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 6 | 134 | 2–9 | 3–4 | 8–10 | 3–5 | 2–7 | 3.094 | 753 |
| | | 10–11 | 30–6 | >5 TO 10 | 17 | 18 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 9–3 | 3–5 | 3–0 | 4.035 | 743 |
| | | 11–2 | 30–6 | >10 TO 12 | 19 | 19 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 9–5 | 3–6 | 3–1 | 4.318 | 746 |
| | 10 | 12–0 | 30–6 | 0 TO 5 | 12 | 13 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 6 | 140 | 2–9 | 3–4 | 10–10 | 3–5 | 2–7 | 3.279 | 772 |
| | | 12–4 | 30–6 | >5 TO 7 | 13 | 15 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 6 | | 2–9 | 3–4 | 10–11 | 3–7 | 2–9 | 3.562 | 774 |
| | | 13–1 | 30–6 | >7 TO 12 | 18 | 19 | 10 | 8 | 6 | 8 | 6 | 4 | 5 | 5 | | 3–6 | 2–9 | 11–4 | 3–6 | 3–1 | 4.409 | 768 |
| 16 | 6 | 8–5 | 34–6 | 0 TO 5 | 14 | 15 | 10 | 9 | 7 | 9 | 6 | 4 | 6 | 6 | 130 | 3–4 | 3–4 | 7–0 | 3–7 | 2–9 | 3.644 | 955 |
| | | 8–9 | 34–6 | >5 TO 7 | 16 | 17 | 10 | 9 | 7 | 9 | 7 | 4 | 5 | 5 | | 3–6 | 2–9 | 7–2 | 3–4 | 2–11 | 4.069 | 960 |
| | | 9–5 | 34–6 | >7 TO 10 | 19 | 22 | 10 | 9 | 7 | 8 | 7 | 4 | 5 | 5 | | 3–6 | 2–9 | 7–5 | 3–9 | 3–4 | 4.921 | 917 |
| | 8 | 10–5 | 34–6 | 0 TO 5 | 14 | 15 | 10 | 9 | 7 | 9 | 6 | 4 | 5 | 6 | 142 | 2–9 | 3–4 | 9–0 | 3–7 | 2–9 | 3.829 | 961 |
| | | 10–9 | 34–6 | >5 TO 7 | 16 | 17 | 10 | 9 | 7 | 9 | 7 | 4 | 5 | 5 | | 3–6 | 2–9 | 9–2 | 3–4 | 3–0 | 4.255 | 987 |
| | | 11–4 | 34–6 | >7 TO 10 | 19 | 21 | 10 | 9 | 7 | 9 | 7 | 4 | 5 | 5 | | 3–6 | 2–9 | 9–5 | 3–8 | 3–3 | 5.000 | 993 |
| | 10 | 12–1 | 34–6 | 0 TO 2 | 12 | 13 | 10 | 8 | 7 | 8 | 6 | 4 | 6 | 7 | 148 | 3–4 | 3–8 | 10–10 | 3–11 | 2–7 | 3.588 | 930 |
| | | 12–5 | 34–6 | >2 TO 5 | 14 | 15 | 10 | 9 | 7 | 9 | 6 | 4 | 6 | 6 | | 3–4 | 3–4 | 11–0 | 3–7 | 2–9 | 4.014 | 1013 |
| | | 12–10 | 34–6 | >5 TO 7 | 16 | 18 | 10 | 9 | 7 | 8 | 6 | 4 | 6 | 5 | | 4–3 | 2–9 | 11–2 | 3–10 | 3–0 | 4.546 | 957 |
| 18 | 6 | 8–5 | 38–6 | 0 TO 2 | 14 | 15 | 10 | 9 | 8 | 9 | 6 | 5 | 7 | 7 | 138 | 3–8 | 3–8 | 7–0 | 4–1 | 3–2 | 4.002 | 1179 |
| | | 8–7 | 38–6 | >2 TO 5 | 15 | 16 | 10 | 10 | 7 | 10 | 7 | 4 | 6 | 6 | | 4–3 | 3–4 | 7–1 | 3–8 | 2–10 | 4.239 | 1229 |
| | | 9–2 | 38–6 | >5 TO 7 | 19 | 19 | 10 | 9 | 7 | 10 | 7 | 4 | 5 | 5 | | 3–6 | 2–9 | 7–5 | 3–6 | 3–1 | 5.071 | 1125 |
| | 8 | 10–5 | 38–6 | 0 TO 2 | 14 | 15 | 10 | 9 | 8 | 9 | 7 | 4 | 7 | 7 | 150 | 3–8 | 3–8 | 9–0 | 4–1 | 2–11 | 4.187 | 1209 |
| | | 10–9 | 38–6 | >2 TO 5 | 15 | 18 | 10 | 10 | 7 | 9 | 7 | 4 | 6 | 6 | | 4–3 | 3–4 | 9–1 | 3–10 | 3–0 | 4.662 | 1193 |
| | | 11–2 | 38–6 | >5 TO 7 | 19 | 19 | 10 | 9 | 7 | 10 | 7 | 4 | 5 | 5 | | 3–6 | 2–9 | 9–5 | 3–6 | 3–2 | 5.256 | 1152 |
| | 10 | 12–7 | 38–6 | 0 TO 2 | 14 | 17 | 10 | 9 | 8 | 8 | 6 | 4 | 7 | 7 | 156 | 3–8 | 3–8 | 11–0 | 4–3 | 2–9 | 4.610 | 1151 |
| | | 12–9 | 38–6 | >2 TO 5 | 15 | 18 | 10 | 10 | 7 | 9 | 7 | 4 | 6 | 6 | | 4–3 | 3–4 | 11–1 | 3–10 | 3–0 | 4.847 | 1222 |
| | | 13–4 | 38–6 | >5 TO 7 | 19 | 21 | 10 | 9 | 7 | 9 | 9 | 4 | 5 | 5 | | 3–6 | 2–9 | 11–5 | 3–8 | 3–3 | 5.679 | 1214 |
| 20 | 6 | 8–7 | 42–6 | 0 TO 2 | 15 | 16 | 10 | 10 | 8 | 10 | 7 | 5 | 7 | 7 | 154 | 4–9 | 3–8 | 7–1 | 4–2 | 3–3 | 4.622 | 1487 |
| | | 9–1 | 42–6 | >2 TO 5 | 19 | 18 | 10 | 9 | 8 | 10 | 7 | 4 | 5 | 6 | | 3–6 | 3–4 | 7–5 | 3–10 | 3–0 | 5.409 | 1300 |
| | 8 | 10–9 | 42–6 | 0 TO 2 | 15 | 18 | 10 | 10 | 8 | 9 | 7 | 4 | 7 | 6 | 166 | 4–9 | 3–4 | 9–1 | 4–4 | 3–0 | 5.069 | 1387 |
| | | 11–0 | 42–6 | >2 TO 5 | 18 | 18 | 10 | 10 | 8 | 10 | 7 | 4 | 5 | 6 | | 3–6 | 3–4 | 9–4 | 3–10 | 3–0 | 5.463 | 1402 |
| | 10 | 12–8 | 42–6 | 0 TO 2 | 15 | 17 | 10 | 10 | 8 | 9 | 7 | 4 | 7 | 7 | 172 | 4–9 | 3–8 | 11–1 | 4–3 | 2–11 | 5.123 | 1437 |
| | | 12–11 | 42–6 | >2 TO 5 | 17 | 18 | 10 | 10 | 8 | 10 | 7 | 4 | 6 | 6 | | 4–3 | 3–4 | 11–3 | 3–10 | 3–0 | 5.517 | 1456 |

## HEADWALL AND TOEWALL QUANTITIES

| HEADWALL SKEW ANGLE | 90~o TO 75~o | | | 74~o TO 60~o | | | 59~o TO 45~o | | |
|---|---|---|---|---|---|---|---|---|---|
| SPAN – S | Z | STIRRUPS | REBAR QUANT. | Z | STIRRUPS | REBAR QUANT. | Z | STIRRUPS | REBAR QUANT. |
| FT. | # | # | LBS./LIN.FT. | # | # | LBS./LIN.FT. | # | # | LBS./LIN.FT. |
| 6 | 4 | 4 | 22.8 | 4 | 4 | 22.5 | 4 | 4 | 21.9 |
| 8 | 4 | 4 | 21.4 | 4 | 4 | 21.2 | 5 | 4 | 25.5 |
| 10 | 5 | 4 | 26.4 | 5 | 4 | 25.3 | 7 | 4 | 38.3 |
| 12 | 5 | 4 | 25.4 | 6 | 4 | 30.9 | 8 | 5 | 44.9 |
| 14 | 6 | 4 | 30.6 | 7 | 4 | 37.0 | 10 | 5 | 68.9 |
| 16 | 6 | 4 | 29.9 | 8 | 5 | 47.8 | ★ | ★ | ★ |
| 18 | 7 | 4 | 35.8 | 9 | 5 | 56.1 | ★ | ★ | ★ |
| 20 | 7 | 4 | 34.0 | 11 | 6 | 83.8 | ★ | ★ | ★ |
| CONCRETE QUANTITY = 0.085 CU.YDS./LIN.FT. | | | | | | | | | |

NOTES: QUANTITIES ARE PER LINEAR FOOT (OF HEADWALL) FOR ONE HEADWALL AND TOEWALL AND INCLUDE ALL HEADWALL AND TOEWALL REINFORCING STEEL.

★ A SKEWED HEADWALL IS NOT RECOMMENDED FOR THESE SPANS. A SPECIAL DESIGN IS REQUIRED.

FOR HEADWALL AND TOEWALL DETAILS SEE PREVIOUS SHEET.

WHEN THE NOMINAL FILL HEIGHT FOR THE CONCRETE BOX CULVERT IS 2'–0", ALL REINFORCING STEEL IN THE HEADWALL SHALL BE EPOXY–COATED. ALSO, THOSE REINFORCING BARS DESIGNATED BY AN ASTERISK (*) AND THE d BARS IN THE TOP MAT OF THE TOP SLAB SHALL BE EPOXY–COATED.

REINFORCING QUANTITIES INCLUDE BOTH EPOXY–COATED AND UNCOATED BARS.

WHEN AN R (RISE) OF LESS THAN SIX FEET IS REQUIRED, USE THE BAR SIZES AND THE SLAB AND WALL THICKNESSES FOR THE SIX FOOT RISE (IF AVAILABLE).

▲ THE SIZE OF $_1$d BARS IS #4. THE NUMBER OF BARS REQUIRED IS LISTED.

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REVISIONS

DOUBLE CONCRETE BOX CULVERT TABLE
CDOT STANDARD PLAN NO. M-601-2
RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15
GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

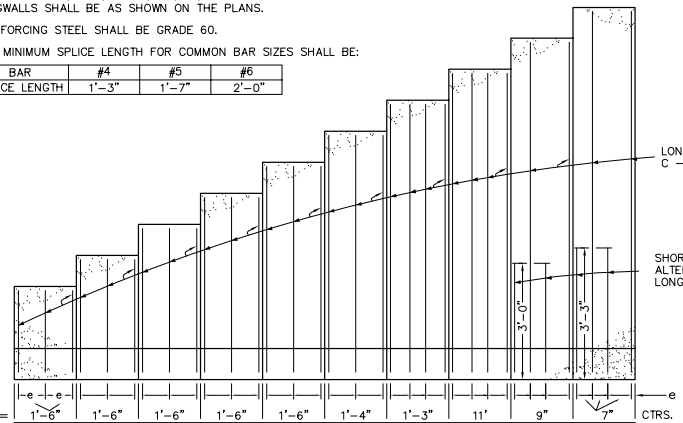
drawn by: DS
checked by: DO
approved by: DK
project no.: 20051470
dwg name: CD
date: 06/06

**Figure 15**

## GENERAL NOTES

1. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/4.
2. WINGWALL FOOTINGS AND FLOOR OF BOX CULVERT SHALL BE PLACED MONOLITHICALLY.
3. DIMENSIONS "H", "Ba", "RISE", "k", "l", "m" AND ANGLES FOR WINGWALLS SHALL BE AS SHOWN ON THE PLANS.
4. REINFORCING STEEL SHALL BE GRADE 60.
5. THE MINIMUM SPLICE LENGTH FOR COMMON BAR SIZES SHALL BE:

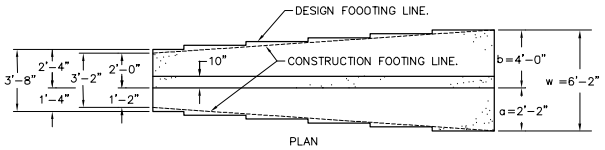
| BAR | #4 | #5 | #6 |
|---|---|---|---|
| SPLICE LENGTH | 1'-3" | 1'-7" | 2'-0" |



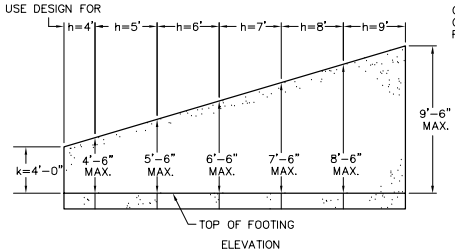

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| e = | 1'-6" | 1'-6" | 1'-6" | 1'-6" | 1'-6" | 1'-4" | 1'-3" | 11' | 9" | 7" |
| h = | 2' | 3' | 4' | 5' | 6' | 7' | 8' | 9' | 10' | 11' |
| a = | 1'-0" | 1'-2' | 1'-4" | 1'-6' | 1'-8" | 1'-10" | 2'-0" | 2'-2" | 2'-4" | 2'-6" |
| b = | 1'-8" | 2'-0" | 2'-4' | 2'-8' | 3'-0" | 3'-4" | 3'-8" | 4'-0" | 4'-4" | 4'-8" |
| w = | 2'-8" | 3'-2" | 3'-8" | 4'-2" | 4'-8" | 5'-2" | 5'-8" | 6'-2" | 6'-8" | 7'-2" |
| c & d BARS | #4@1'-6" | #4@1'-6" | #4@1'-6" | #4@1'-6" | #4@1'-6" | #4@1'-4" | #5@1'-3" | #5@11" | #6@9" | #6@7" |
| * CONC.CU.YD./L.F. | 0.161 | 0.210 | 0.259 | 0.308 | 0.358 | 0.407 | 0.457 | 0.506 | 0.556 | 0.604 |
| * REINF. LB./L.F. | 8.0 | 9.3 | 10.7 | 12.1 | 14.3 | 16.4 | 23.0 | 28.6 | 41.8 | 54.6 |

*DOES NOT INCLUDE TOE WALL QUANTITIES

DESIGN TABLE

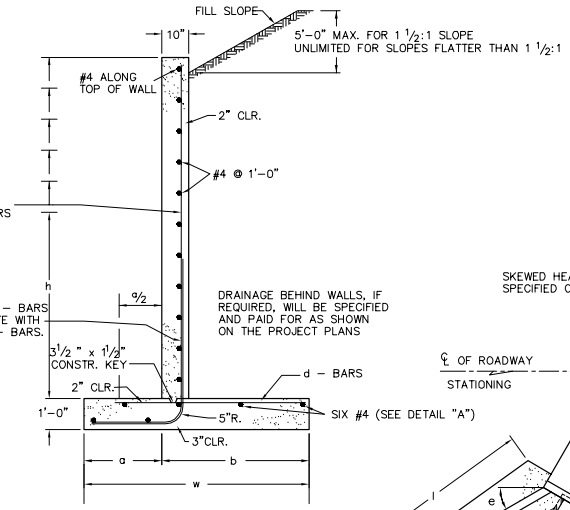



PLAN

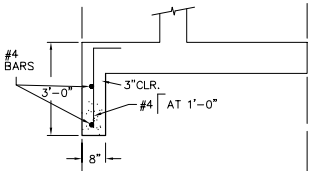



ELEVATION

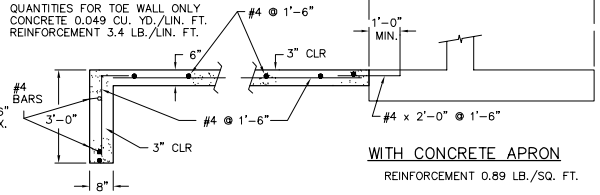
DESIGN EXAMPLE




TYPICAL SECTION



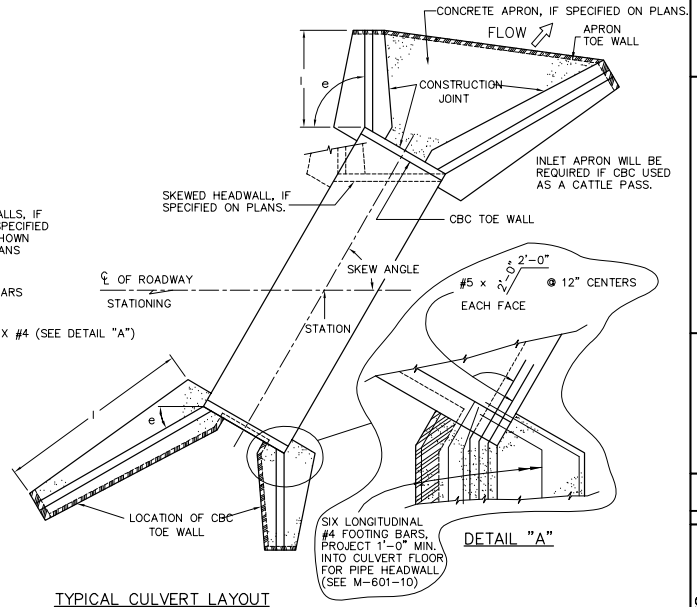

WITH TOE WALL




APRON TOE WALL

WITH CONCRETE APRON

REINFORCEMENT 0.89 LB./SQ. FT.




DETAIL "A"

TYPICAL CULVERT LAYOUT

DESIGN DATA:
UNIT STRESSES: $f_s$ = 24,000 PSI
$f_c$ = 1,200 PSI
n = 9

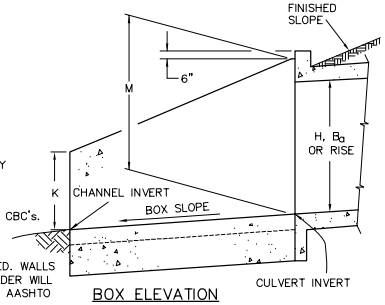
EQUIVALENT FLUID PRESSURE = 36 LBS./CU. FT.
MAXIMUM TOE PRESSURE = 1 TON/SQ. FT.

ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED BEFORE CONCRETE IS POURED.

WINGWALL AND APRON CONCRETE SHALL BE:
CONCRETE CLASS B, OR D (BOX CULVERT) FOR CBC's.
CONCRETE CLASS B, OR D (WALL) FOR PIPES.

LIVE LOAD SURCHARGE HAS NOT BEEN CONSIDERED. WALLS WITHIN OF THE EDGE OF THE ROADWAY SHOULDER WILL REQUIRE A SPECIAL DESIGN IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

APRON REQUIRED AT INLET OF THE CBC, IF USED FOR CATTLE PASSAGE.




BOX ELEVATION

M = H, Ba OR RISE + (1'-4")
UNLESS OTHERWISE SHOWN ON PLANS.

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REVISIONS

WINGWALLS FOR BOX CULVERTS
CDOT STANDARD PLAN NO. M-601-20
RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15
GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

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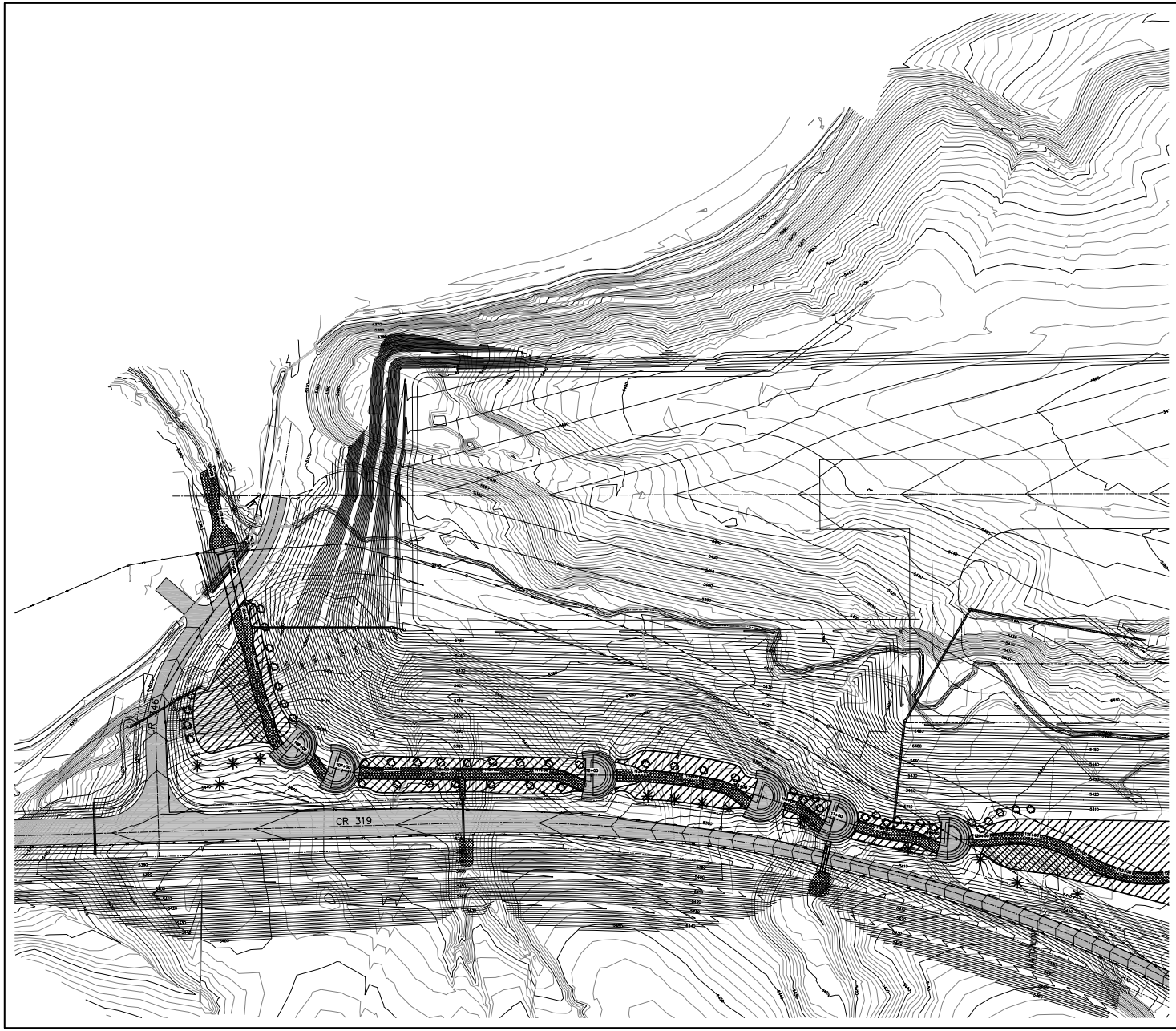
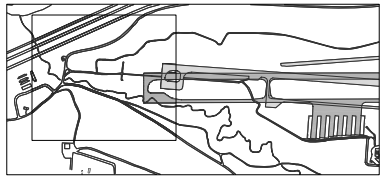
| approved by: | DK |
| project no.: | 20051470 |
| dwg name: | CD |
| date: | 06/06 |

**Figure 16**



KEY MAP

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NOTE:
1. ALL GRADED UPLAND AREAS = UPLAND SEED MIX

| PROJECT LEGEND | EXISTING | THIS PROJECT |
|---|---|---|
| ELEVATION CONTOURS - MAJOR | 910 | 910 |
| ELEVATION CONTOURS - MINOR | | |
| UPLAND GRASS AND FORB MIX | | |
| | | |
| SHRUB PLANTINGS | | |
| TREE PLANTINGS | | |

NORTH

SCALE
100 0 50 100 200
SCALE IN FEET

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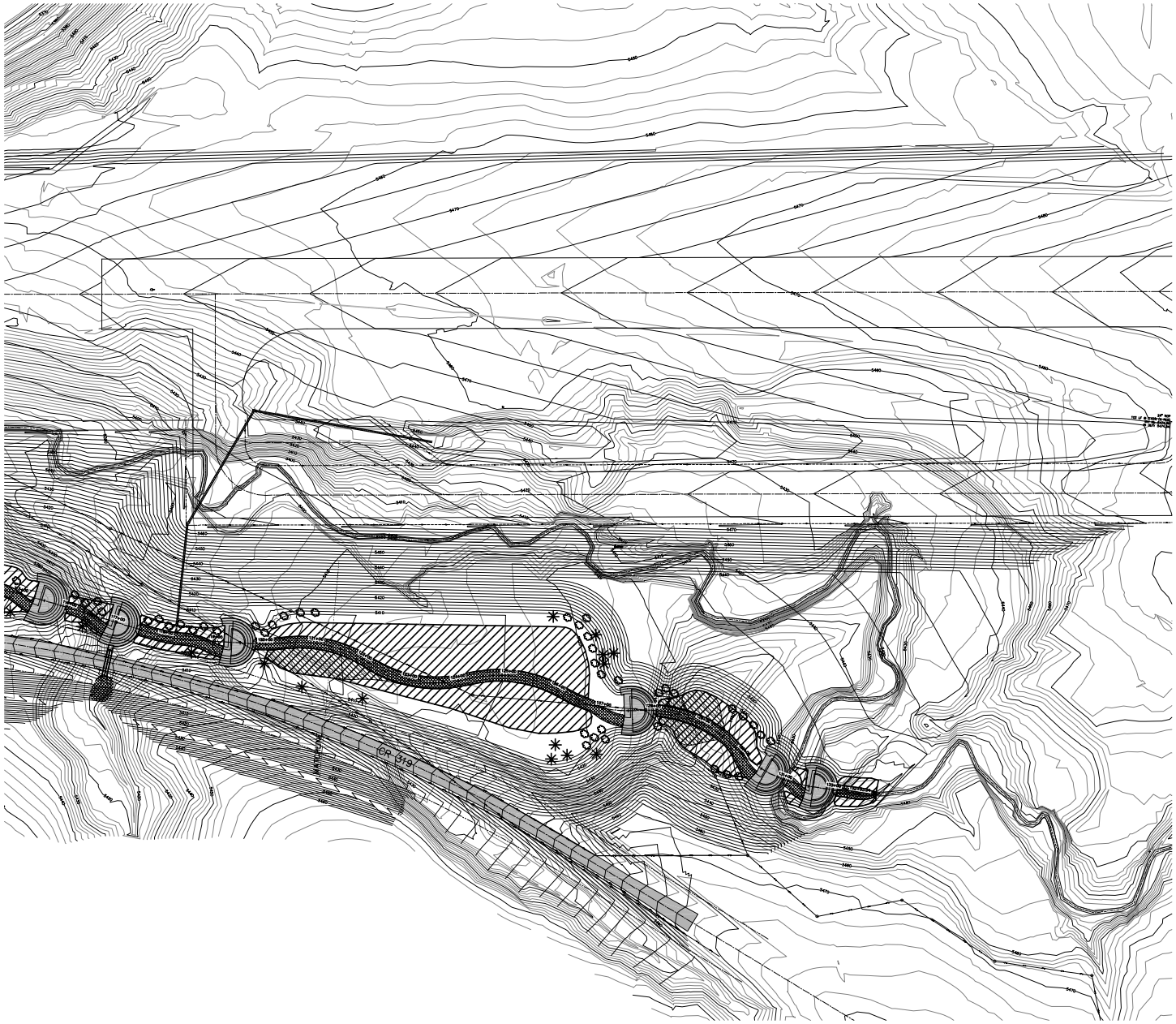
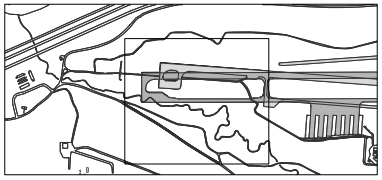
REVISIONS

DRY CREEK MITIGATION PLANTING PLAN
RUNWAY 8/26 UPGRADE TO D-III STANDARDS
AIP 3-08-0048-15
GARFIELD COUNTY REGIONAL AIRPORT
RIFLE, COLORADO

drawn by: AK
checked by: DO
approved by: DK
project no.: 20051470
dwg name: WetlandPlan
date: 06/06

Figure 17





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|---|---|---|
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| ELEVATION CONTOURS - MINOR | | |
| UPLAND GRASS AND FORB MIX | | |
| | | |
| SHRUB PLANTINGS | | |
| TREE PLANTINGS | | |

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SCALE IN FEET

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REVISIONS

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AIP 3-08-0048-15

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| date: | 06/06 |

**Figure 18**