

# 2017 KANNAH CREEK INTAKE REHABILITATION SEPTEMBER, 2017

PROJECT NO. \_\_\_\_\_

- 1 \_\_\_\_\_ Cover Sheet
- 2 \_\_\_\_\_ Standard Abbreviations, Legend, and Symbols
- 3 \_\_\_\_\_ Summary of Approximate Quantities
- 4 \_\_\_\_\_ Vicinity Map
- 5 \_\_\_\_\_ Demo Plan
- 6 \_\_\_\_\_ Concrete Plan
- 7 \_\_\_\_\_ Water Line Plan & Profile 0+00-2+50
- 8 \_\_\_\_\_ Water Line Plan & Profile 2+50-5+00
- 9 \_\_\_\_\_ Water Line Plan & Profile 5+00-7+50
- 10 \_\_\_\_\_ Service & Bypass Lines Plan
- 11 \_\_\_\_\_ Service & Bypass Lines Profiles
- E1-E5 \_\_\_\_\_ Electrical & Control Plans

UTILITIES AND AGENCIES							
AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE-WK FAX
GRAND JUNCTION, CITY OF	JOHN EKLUND	PROJECT ENGINEER	PROJECT ENGINEER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 244-1558 (970) 256-4022
GRAND JUNCTION, CITY OF	TRENT FRALL	ENGINEERING MANAGER	ENGINEERING MANAGER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 256-4047 (970) 256-4022
GRAND JUNCTION, CITY OF	RICK BRINKMAN	WATER SERVICES MANAGER	WATER	333 WEST AVENUE	333 WEST AVENUE	GRAND JCT., CO 81501	(970) 244-1429
GRAND VALLEY POWER		UNIT MANAGER	GAS, ELECTRIC	845 22 RD	845 22 RD	GRAND JCT., CO 81505	(970) 242-0040

DRAWING STATUS:	<input type="radio"/> PROGRESS
	<input checked="" type="radio"/> FINAL CONSTRUCTION DRAWINGS
	<input type="radio"/> ASBUILT
DESIGNED BY:	JOHN EKLUND, PROJECT ENGINEER
REVIEWED BY:	TRENTON C. FRALL, ENGINEERING MANAGER
	AUTHORIZED FOR CONSTRUCTION
	TRENTON C. FRALL, ENGINEERING MANAGER
	ACCEPTED AS CONSTRUCTED
	JOHN EKLUND, PROJECT ENGINEER



Know what's below.  
Call before you dig.



*Public Works  
Engineering Division*

REVISION	DESCRIPTION	DATE
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NOTE: NOTIFY AFFECTED UTILITY VENDOR 48 HOURS PRIOR TO EXCAVATIONS THAT WILL EXPOSE UTILITY VENDOR'S RECORDS AND TELEPHONE NUMBERS.



### Bid Schedule: Kannah Creek Intake Rehabilitation

Item No.	City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	Irrigation Pipe (6" ( SDR 35 PVC)	38.5	LF	\$	\$
2	108.2	Water Main (6" (C900, DR-18)	27.	LF	\$	\$
3	108.2	Water Main (8" (C900, DR-18)	34.	LF	\$	\$
4	108.2	Water Main (18" (C-905, DR-18) (Includes all Bell Joint Restraints and Connection to existing pipe)	282.	LF	\$	\$
5	108.2	Water Main (24" (C-960, DR-18) (Includes all Bell Joint Restraints and Connection to existing pipe and make inlets)	237.		\$	\$
6	108.3	Check Valve (6" (Tideflex Checkmate Series 35 or Engineer approved equal)	2.	EA	\$	\$
7	108.3	Check Valve (8" (Tideflex Checkmate Series 35 or Engineer approved equal)	1.	EA	\$	\$
8	108.3	Combination Air Valve and Vault Assembly (6" (Includes Bedding material, flanged butterfly valve w/ 90 degree nut, air valve, 60" concrete vault, frost proof ring and cover, galvanized vent pipe, and all necessary fittings to complete assembly)	2.	EA	\$	\$
9	108.3	Elbow (2" x 90 deg)	14.	EA	\$	\$
10	108.3	Elbow (6" x 22.5 deg)	1.	EA	\$	\$
11	108.3	Elbow (6" x 90 deg)	2.	EA	\$	\$
12	108.3	Elbow (8" x 90 deg)	3.	EA	\$	\$
13	108.3	Elbow (18" x 22.5 deg)	1.	EA	\$	\$
14	108.3	Elbow (18" x 45 deg)	4.	EA	\$	\$
15	108.3	Elbow (24" x 11.25 deg)	2.	EA	\$	\$
16	108.3	Elbow (24" x 22.5 deg)	1.	EA	\$	\$
17	108.3	Electromagnetic Flow Sensor (8" (Sitrax-Sarco MagFlow MAG 5100 W or Engineer approved equal) (Includes fittings to connect to waterline)	1.	EA	\$	\$
18	108.3	Electromagnetic Flow Sensor (18" (Sitrax-Sarco MagFlow MAG 5100 W or Engineer approved equal) (Includes fittings to connect to waterline)	1.	EA	\$	\$
19	108.3	Gate Valve (6" (Manual)	1.	EA	\$	\$
20	108.3	Gate Valve (8" (Includes Actuator)	1.	EA	\$	\$
21	108.3	Slide Gate (24" (Whipps 800 Series or Engineering approved equivalent) (Includes modification of existing concrete structure to accommodate new gate and actuator)	2.	EA	\$	\$
22	108.3	Tea (18" x 6")	1.	EA	\$	\$
23	108.3	Tea (18" x 8")	1.	EA	\$	\$
24	108.4	Irrigation Connection (2" (Include connection to irrigation pump, pump starter, well pump VFD)	Lump Sum		\$	\$
25	108.4	Irrigation Service Line (2" (Sch 40) (Include Elbows and Fittings to complete assembly and connect to Water Service Line (2" (Sch 40) Tapping Saddle and service line)	56.	LF	\$	\$
26	108.4	Water Treatment Connection (Include Elbows and Fittings to complete assembly and connect to existing well and service line)	53.	LF	\$	\$
27	108.4	Water Treatment Connection (Includes Water meter, Expansion Tank, Filters, UV Filter, Water Softener, Potable Water System Pressure Transmitter (Water service to house must remain in operation for the duration of the project)	Lump Sum		\$	\$
28	108.5	Pipe Valve Vault (60" I.D.) (8" Inside Height) (Inverted Ring/Cover) (Includes 6" thick Type A Bedding, adjustable pipe saddles (2) and all necessary fittings to complete assembly)	4.	EA	\$	\$
29	201	Cleaning and Gubbing (Includes trees, bushes, and native vegetation)	0.27	AC	\$	\$
30	202	Abandon Pipe (Abandon pipe by plugging both ends with concrete)	1.	EA	\$	\$
31	202	Rawse Building (Includes removal of concrete spawley and foundation wall to minimum 12" below finished grade)	Lump Sum		\$	\$
32	202	Remove Existing Air Valve	1.	EA	\$	\$
33	202	Remove Existing Pipe ( Size as shown on plans)	350.	LF	\$	\$
34	202	Remove Sidewalk	6.44	SY	\$	\$
35	203	Embankment Fill (Complete-in-Place)	735.	CY	\$	\$
36	203	Rock Excavation (1 CY and larger)	75.	CY	\$	\$
37	207	Stripping and Stockpiling Topsoil	90.	CY	\$	\$
38	207	Topsoil	160.	CY	\$	\$
39	210	Modify Structure (Remove Steel bars from inlet opening)	Lump Sum		\$	\$
40	212	Seeding (Native)	0.3	AC	\$	\$
41	202	Seeding (Lawn)	0.02	AC	\$	\$
42	216	Soil Retention Blanket (Biodegradable Straw/Coconut)	725.	SY	\$	\$
43	304	Aggregate Base Course (Class 3) (Place in maximum 12" lifts compacted to 95% Standard Proctor)	70.	CY	\$	\$
44	506	Riprap Protection (6" D50 CDOT Gradation) Contractor shall use as much riprap from project trench excavation for rock protection where called out on the plans	13.	CY	\$	\$
45	608	Concrete Sidewalk (4") (Includes 6" Class 6 Aggregate Base Course)	11.	SY	\$	\$
46	620	Sanitary Facility	Lump Sum		\$	\$
47	625	Construction Surveying	Lump Sum		\$	\$
48	626	Mobilization	Lump Sum		\$	\$
49	SP	Electrical & Control (Installation only)	Lump Sum		\$	\$
50	SP	FCA Modular Farmers Screen	Lump Sum		\$	\$
51	SP	Prefabricated Shed (10' x 12' Interior Dimensions) (Refer to Appendix for information) (Include 4" concrete foundation on 6" Class 6 Aggregate Base Course)	Lump Sum		\$	\$
52	MCR	Dewater Inlet	Lump Sum		\$	\$
		Minor Contract Revisions	---		\$	\$
<b>Bid Amount:</b>						\$ 30,000.00

dollars



**Grand Junction**  
CITY OF GRAND JUNCTION, COLORADO

**PUBLIC WORKS**  
ENGINEERING DIVISION

**2017 KANNAH CREEK INTAKE REHABILITATION**  
SUMMARY OF APPROXIMATE QUANTITIES

DATE: \_\_\_\_\_ DATE 2017 \_\_\_\_\_

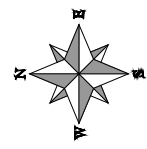
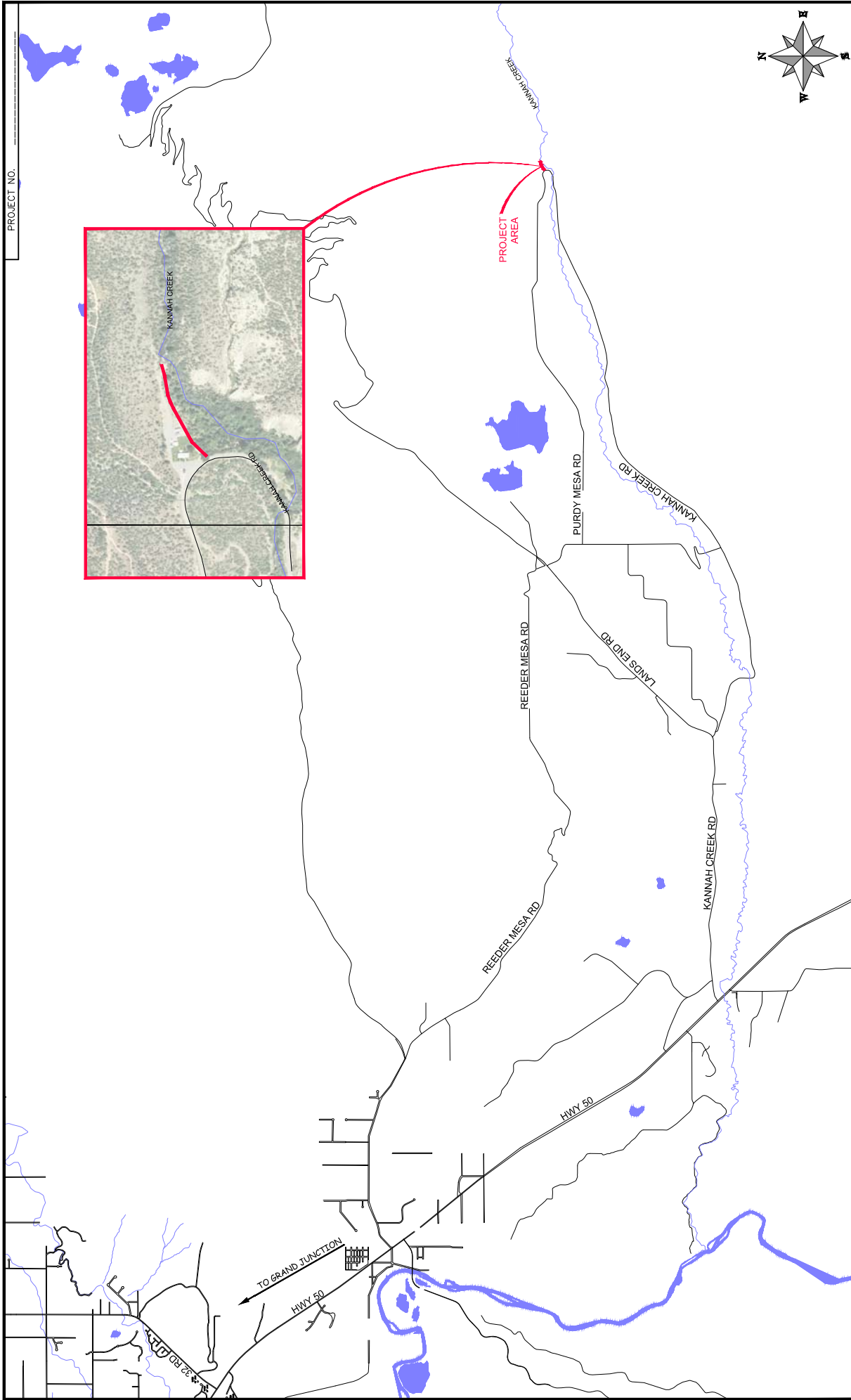
DESIGNED BY: JHE DATE 2017 \_\_\_\_\_

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SCALE: PLAN & PROFILE  
HORIZONTAL: 1" = \_\_\_\_\_  
VERTICAL: 1" = \_\_\_\_\_

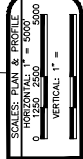
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2017 KANNAH CREEK INTAKE REHABILITATION VICINITY MAP

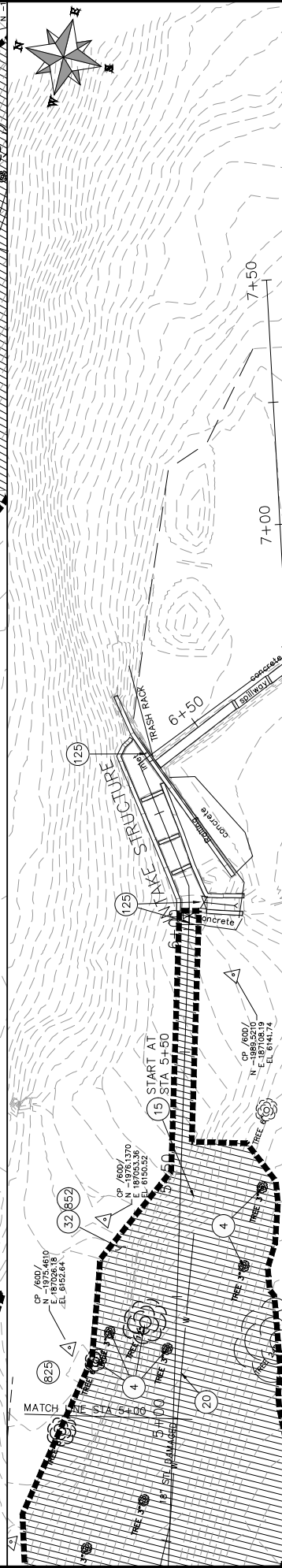
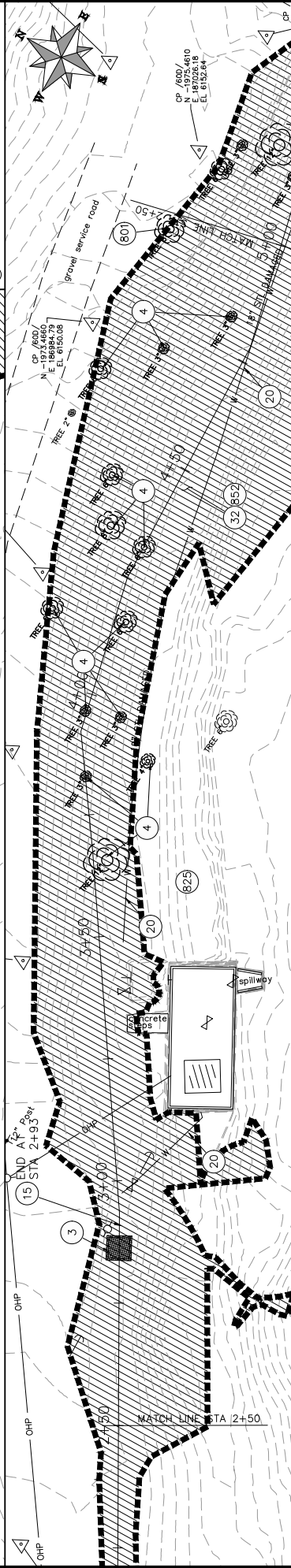
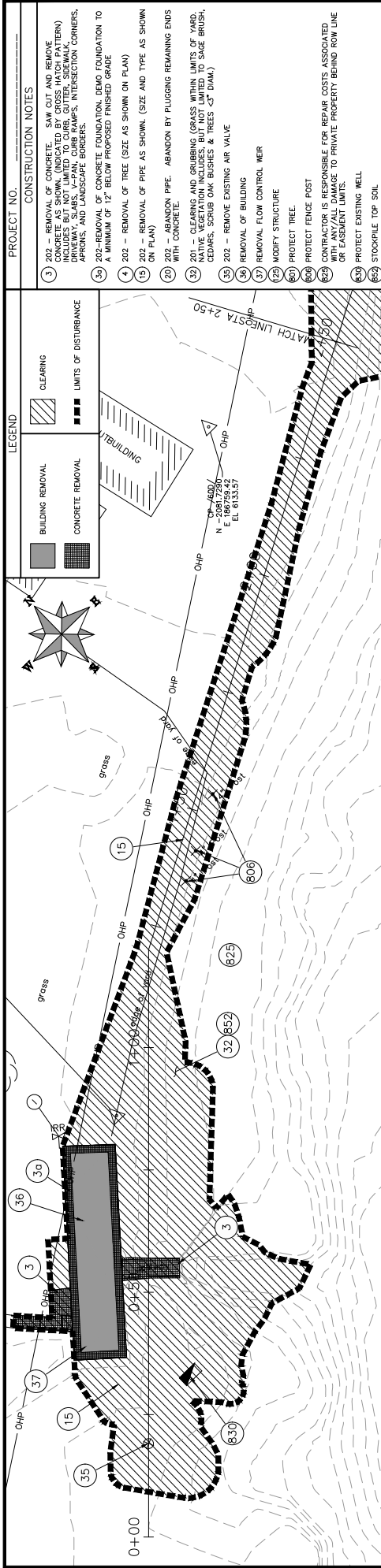
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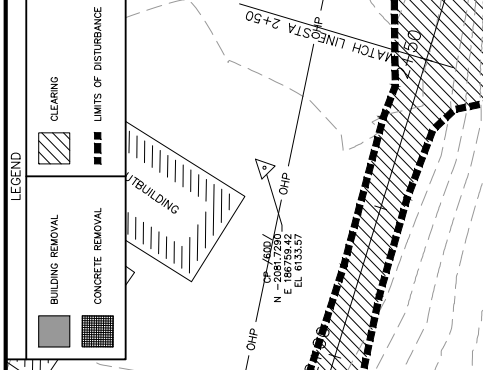
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DESIGNED BY	JAE	DATE	2017
CHECKED BY	JAE	DATE	2017
APPROVED BY		DATE	

REVISION	DATE	DESCRIPTION
REVISION A		
REVISION B		
REVISION C		
REVISION D		

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- PROJECT NO.**
- CONSTRUCTION NOTES**
- 3 REMOVAL OF CONCRETE. SAW CUT AND REMOVE EXISTING CONCRETE. CONCRETE DEBRIS TO BE INCLUDED BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
  - 35 REMOVAL OF CONCRETE FOUNDATION. DEMO FOUNDATION TO A MINIMUM OF 12" BELOW PROPOSED FINISHED GRADE.
  - 4 202 - REMOVAL OF TREE (SIZE AS SHOWN ON PLAN)
  - 15 202 - REMOVAL OF TREE (SIZE AS SHOWN ON PLAN)
  - 20 202 - ABANDON PIPE. ABANDON BY PLUGGING REMAINING ENDS WITH CONCRETE.
  - 32 201 - CLEARING AND GRUBBING (GRASS WITHIN LIMITS OF YARD. NATIVE VEGETATION INCLUDES, BUT NOT LIMITED TO SAGE BRUSH, CEDARS, SCRUB OAK BUSHES & TREES 3" DIAM).
  - 35 202 - REMOVE EXISTING AIR VALVE
  - 36 REMOVAL OF BUILDING
  - 37 REMOVAL FLOW CONTROL WEIR
  - 125 MODIFY STRUCTURE
  - 801 PROTECT TREE.
  - 806 PROTECT FENCE POST
  - 825 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
  - 838 PROTECT EXISTING WELL
  - 852 STOCKPILE TOP SOIL



DATE	DATE	DATE	DATE
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REVISION	REVISION	REVISION	REVISION
DESCRIPTION	DATE	DATE	DATE

SCALE: PLAN & PROFILE  
 HORIZONTAL: 1" = 20'  
 VERTICAL: 1" = 10'

**Grand Junction**  
 CITY OF GRAND JUNCTION  
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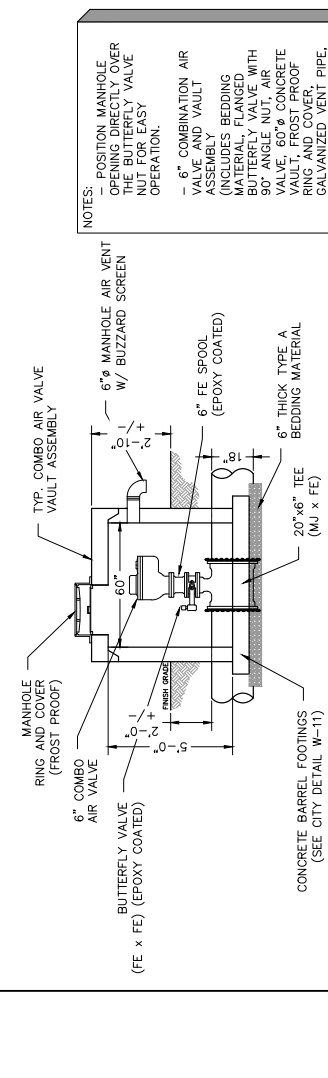
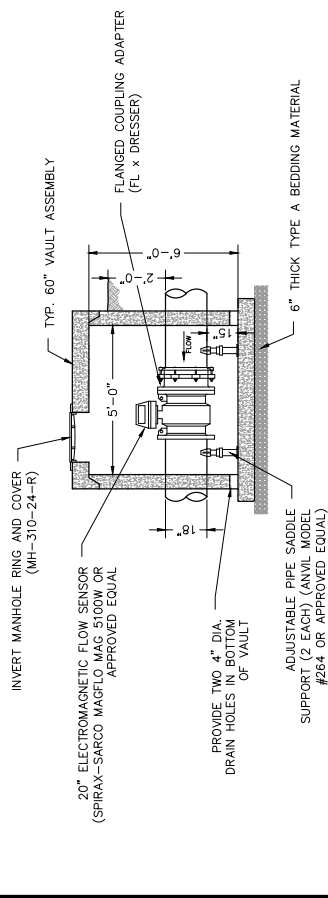
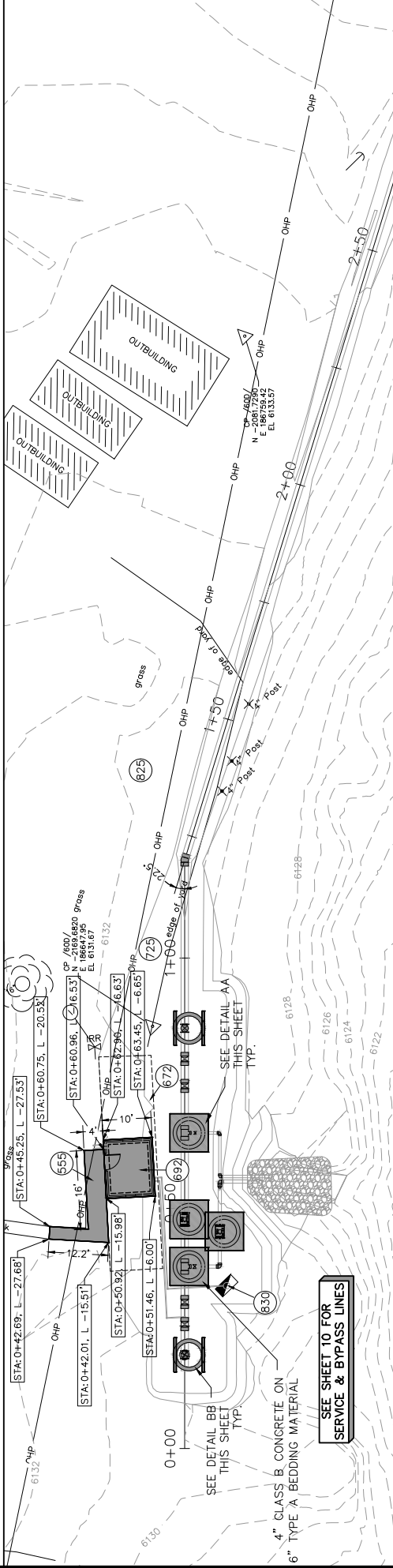
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**2017 KANNAH CREEK INTAKE REHABILITATION**  
**DEMO PLAN**  
 STA 0+00 TO STA 7+50

**5**

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- 808.06 - CONCRETE SLEEWAY (4" THICK) INCLUDES 6" AGGREGATE BASE COURSE
- 672 304-AGGREGATE BASE COURSE (CLASS 3) FULL CONCRETE FOUNDATION TO DEPTH 6" BELOW FINISHED GRADE, OR TO PROPOSED CONTROL BUILDING FOUNDATION. FILL IN MAX 12" LIFTS COMPACTED TO 95% STANDARD PROCTOR
- 822 622-BUILDING FOUNDATION (4") INCLUDES 6" AGGREGATE BASE COURSE
- 207 - PLACE, GRADE, AND COMPACT 4" SUITABLE TOPSOIL AS SHOWN
- CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
- PROTECT EXISTING WELL



DETAIL AA  
EQUIPMENT VAULT DETAIL ASSEMBLY  
N.I.S.

DETAIL BB  
COMBINATION AIR VALVE DETAIL ASSEMBLY  
N.I.S.

REVISION	DATE	BY	DATE
REVISION Δ		HMC	2017
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CITY OF  
**Grand Junction**  
COLORADO

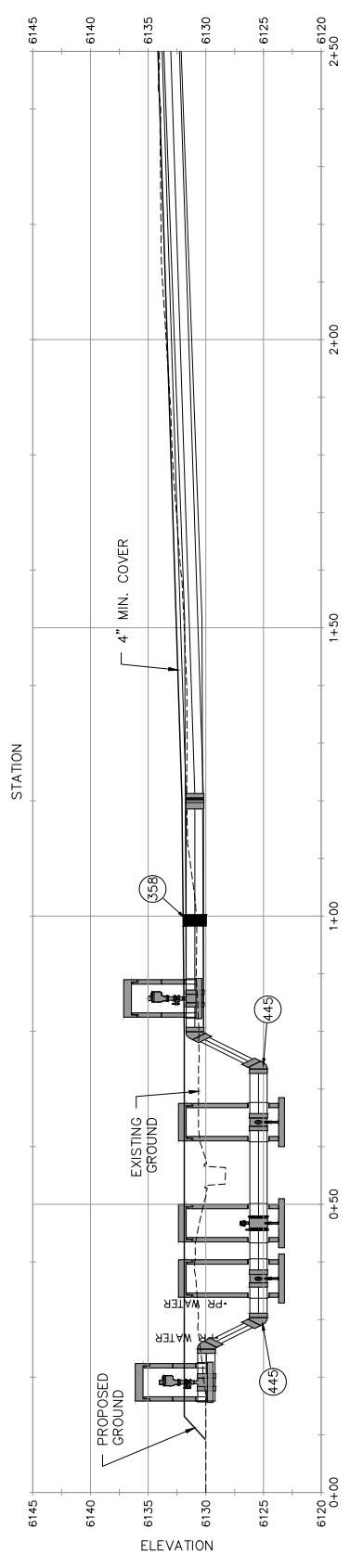
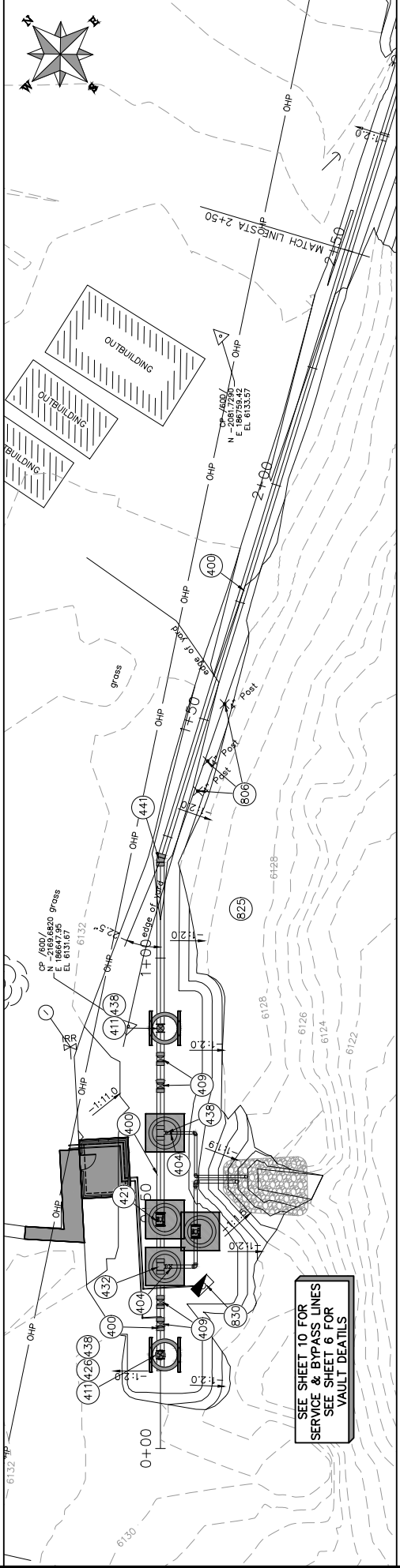
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ENGINEERING DIVISION

2017 KANNAH CREEK INTAKE REHABILITATION  
CONCRETE PLAN  
STA 0+00 TO STA 2+50

PROJECT NO.

CONSTRUCTION NOTES

- 1) SPECIAL PROVISION CURED IN PLACE
- 503 103 - CLAY CUT-OFF WALL (INCIDENTAL TO WATER INSTALLATION PAY ITEM)
- 600 102.7/108.2 - 18" WATER MAIN PIPE (SRP-18 PVC), INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL
- 601 102.8/108.3 - 18" WATER MAIN PIPE (SRP-18 PVC), INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL
- 602 102.8/108.3 - 18" WATER MAIN PIPE (SRP-18 PVC), INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL
- 603 102.8/108.3 - BUTTERFLY VALVE (SIZE AS SHOWN) (SEE SHEET 10)
- 604 102.8/108.3 - 18" 45° ELBOW
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- 699 102.8/108.3 - 18" 45° ELBOW
- 700 102.8/108.3 - 18" 45° ELBOW



REVISION	DATE	DESCRIPTION

DATE	DATE	DATE	DATE

SCALE: PLAN & PROFILE  
 HORIZONTAL 1" = 20'  
 VERTICAL 1" = 10'

DRAWN BY: JMC DATE: 2017  
 DESIGNED BY: JAE DATE: 2017  
 CHECKED BY: JAE DATE: 2017  
 APPROVED BY: DATE: 2017

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 COLORADO

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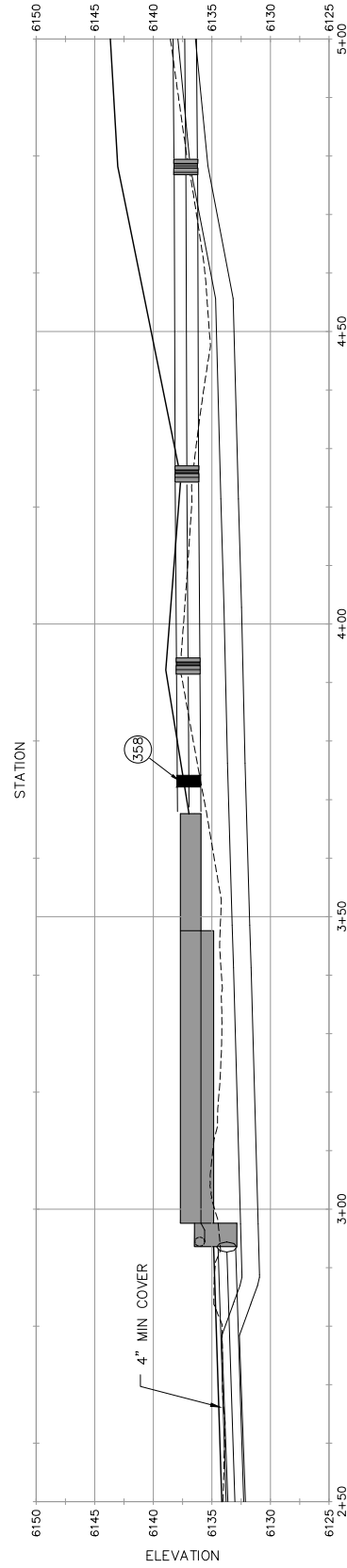
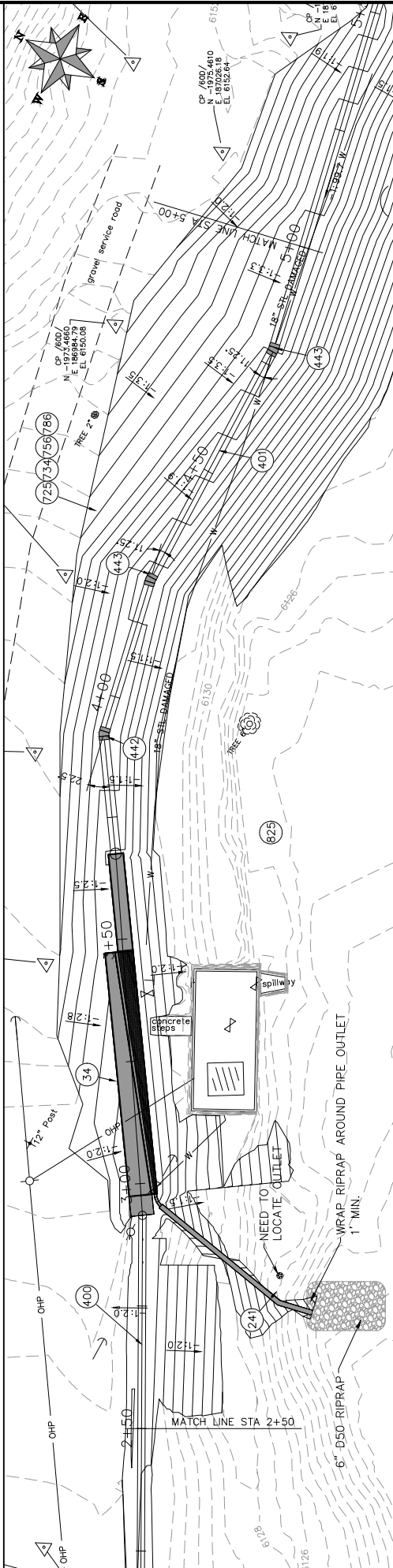
2017 KANNAH CREEK INTAKE REHABILITATION  
 WATERLINE PLAN AND PROFILE  
 STA 0+00 TO STA 2+50

7

PROJECT NO.

CONSTRUCTION NOTES

- 1) FISHSCREEN INSTALLATION AND CONNECTION PER PROJECT SPECIFICATIONS
- 2) 108.2 - 6" IRRIGATION PIPE (SIR 35 PVC).
- 3) 103 - CLAY CUT-OFF WALL (INCIDENTAL TO WATER INSTALLATION PAY ITEM)
- 4) 103.7/108.2 - 14" WIRE MESH PIPE (SIR-16 PVC). INCLUDES PIPE, BEDDING AND HAUNCHING MATERIAL AND BACKFILL
- 5) 103.7/108.2 WITH NATIVE MATERIALS MEETING 10.5% EARTH BACKFILL MATERIAL.
- 6) 103.7/108.2 WITH 24" WIRE MESH PIPE (SIR-16 PVC). INCLUDES PIPE, BEDDING AND HAUNCHING MATERIAL AND BACKFILL
- 7) 103.7/108.2 WITH NATIVE MATERIALS MEETING 10.5% EARTH BACKFILL MATERIAL.
- 8) 102.8/108.3 - 24", 22.5' ELOBW
- 9) 102.8/108.3 - 24", 11.25' ELOBW
- 10) 207 - PLACE, GRADE, AND COMPACT 4" SUITABLE TOPSOIL AS SHOWN
- 11) 212 - SEED VARIATION (NATIVE MIX)
- 12) 216 - SOIL RETENTION BLANKET (BIODEGRADABLE STRAW (COCONUT))
- 13) 203 - EMBANKMENT FILL (COMPLETION IN PLACE)
- 14) CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.



REVISION	DATE	DESCRIPTION

DATE	DATE	DATE	DATE

SCALE: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 10'

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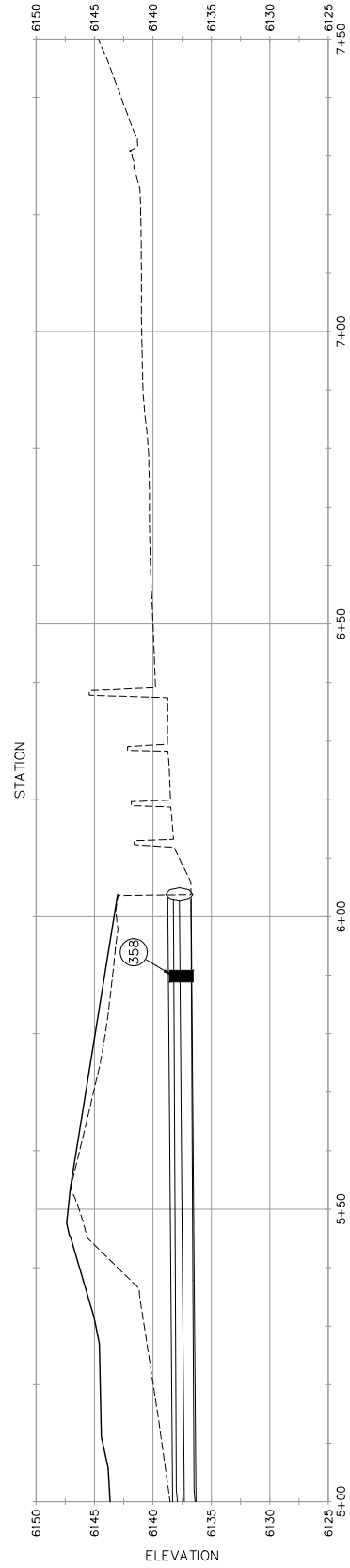
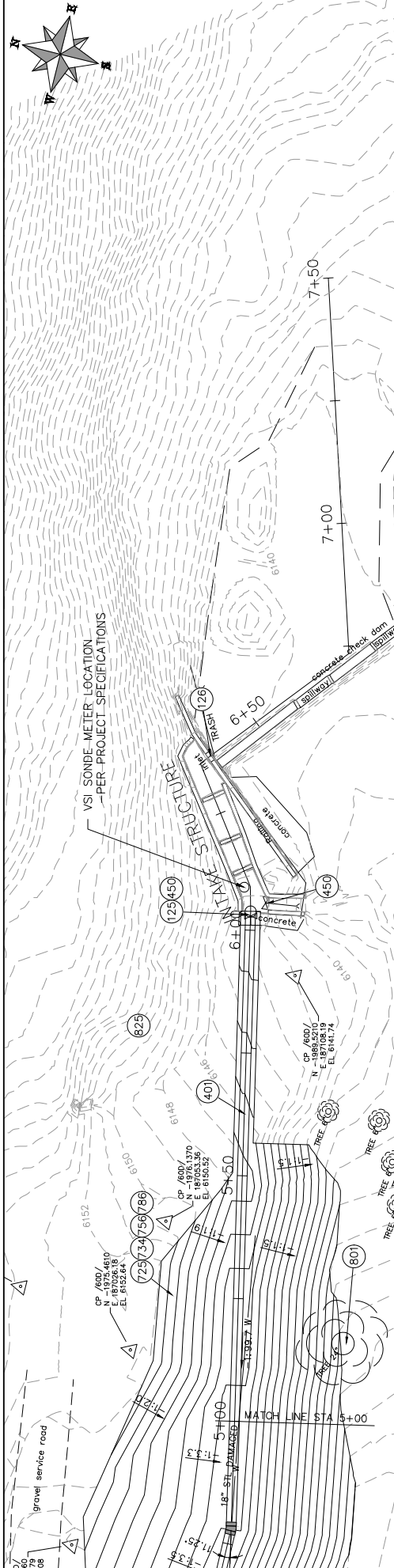
2017 KANNAH CREEK INTAKE REHABILITATION  
WATERLINE PLAN AND PROFILE  
STA 2+50 TO STA 5+00



PROJECT NO.

CONSTRUCTION NOTES

- 125 REMOVE STEEL BARS FROM INLET
- 553 103 - CLAY CUT-OFF WALL (INCIDENTAL TO WATER INSTALLATION PAY ITEM)
- 401 102-7/108-2 - 24" WATER MAIN PIPE (SFR-18 PVC), INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 453 102-8/108-3 - WHIPPS 800 SERIES SUBEGATE OR ENGINEER EQUIVALENT PER PROJECT SPECS
- 723 207 - PLACE, GRADE, AND COMPACT 4" SUITABLE TOPSOIL AS SHOWN
- 724 212 - SEED VARIATION (NATIVE MIX)
- 763 216 - 50L RETENTION BLANKET (BIODEGRADABLE STRAW COCONUT)
- 768 203 - EMBANKMENT FILL (COMPLETION IN PLACE)
- 801 PROTECT TREE.
- 825 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.



REVISION	DATE	DESCRIPTION

DATE	DATE	DATE	DATE

SCALE: PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 10'

DRAWN BY: JMC DATE: 2017  
 DESIGNED BY: JAE DATE: 2017  
 CHECKED BY: JAE DATE: 2017  
 APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



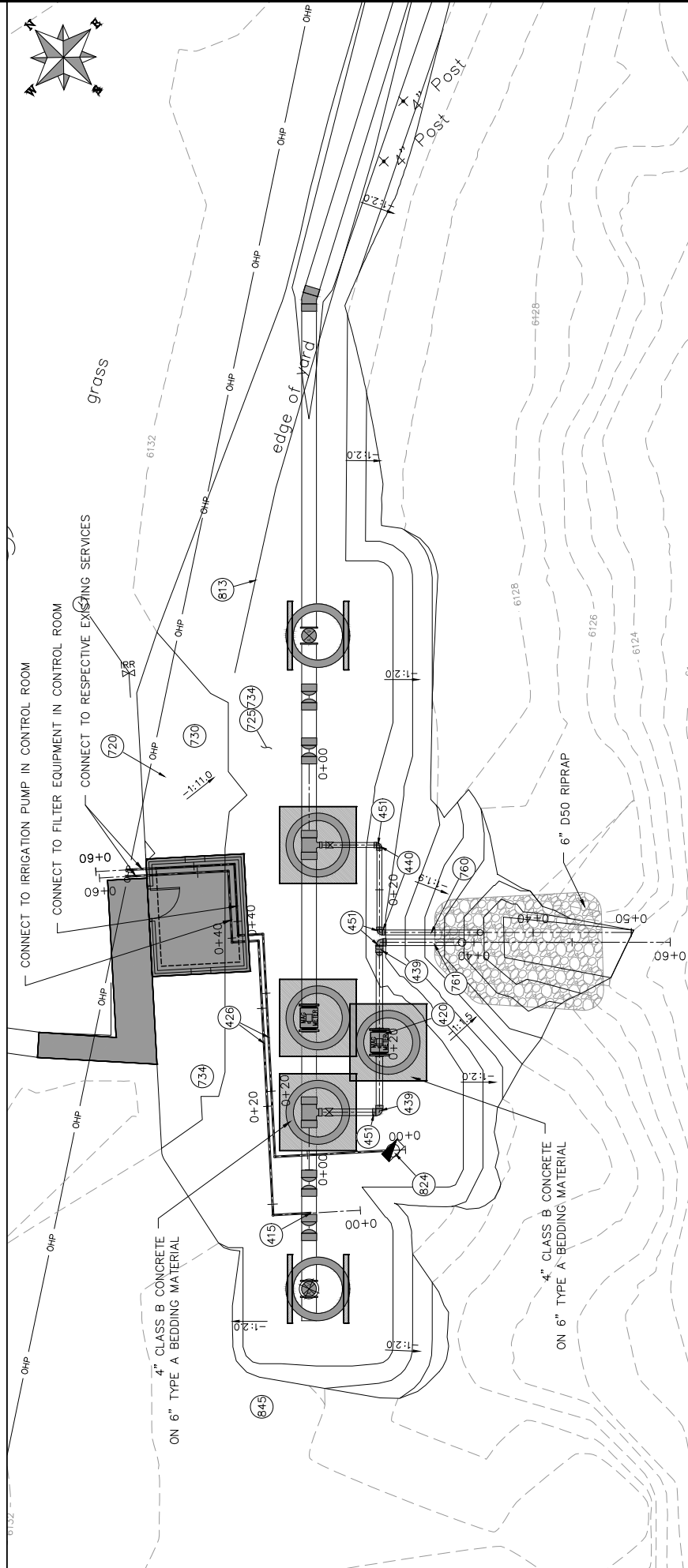
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 ENGINEERING DIVISION

2017 KANNAH CREEK INTAKE REHABILITATION  
 WATERLINE PLAN AND PROFILE  
 STA 5+00 TO STA 7+50

PROJECT NO.

CONSTRUCTION NOTES

- 43 102.8/108.4 - TAPPING SADDLE (18"x27")
- 42 102.8/108.4 - METER SETTER (SIZE AS SHOWN ON PLAN)
- 62 CONNECT TO EXISTING WATER PIPE/VALVE/FITTING. THE CONTRACT UNIT PRICE FOR WATER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 43 102.8/108.3 - 8", 90° ELBOW
- 44 102.8/108.3 - 6", 90° ELBOW
- 45 108.3 THRUSTRIBLOCK
- 70 207 - PLACE AND COMPACT FILL TO LEVEL EVEN WITH TOP OF FOUNDATION WALL
- 72 207 - PLACE, GRADE, AND COMPACT 4" SUITABLE TOPSOIL AS SHOWN
- 73 212 - RESEED AREA AS SHOWN
- 74 212 - SEED VARIATION 1
- 76 607 - 6" CHECK VALVE (TIDEFLEX, CHECKMATE OR ENGINEER APPROVED EQUIVALENT)
- 80 607 - 8" CHECK VALVE (TIDEFLEX, CHECKMATE OR ENGINEER APPROVED EQUIVALENT)
- 81 613 PROTECT LANDSCAPE APPURTENANCE (TYPE AS SHOWN ON PLAN).
- 82 PROTECT UTILITY FEDESTAL.
- 84 NOTE: NOTIFY AFFECTED UTILITY VENDORS 48 HOURS PRIOR TO EXCAVATIONS THAT WILL EXPOSE UTILITY LINES. THE COVER SHEET WILL HAVE A LISTING OF UTILITY VENDORS AND TELEPHONE NUMBERS.



REVISION $\Delta$	DATE	DESCRIPTION

DRAWN BY	JAE	DATE	2017
DESIGNED BY	JAE	DATE	2017
CHECKED BY	JAE	DATE	2017
APPROVED BY		DATE	

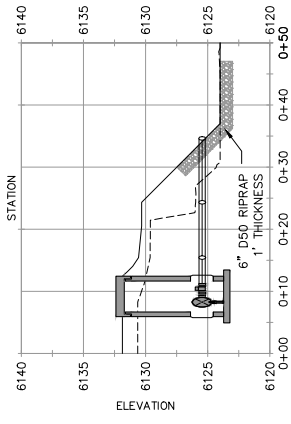
SCALE: PLAN & PROFILE  
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 VERTICAL 1" = 10'

**Grand Junction**  
 CITY OF GRAND JUNCTION, COLORADO  
 PUBLIC WORKS  
 ENGINEERING DIVISION

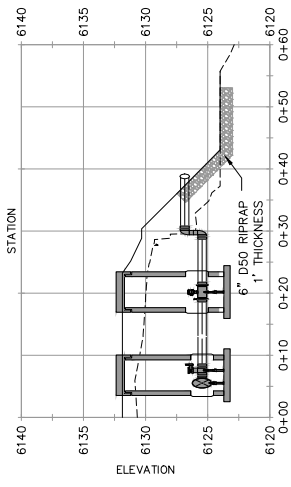
2017 KANNAH CREEK INTAKE REHABILITATION  
 PLAN  
 OVERFLOW AND ADDITIONAL LINES

10

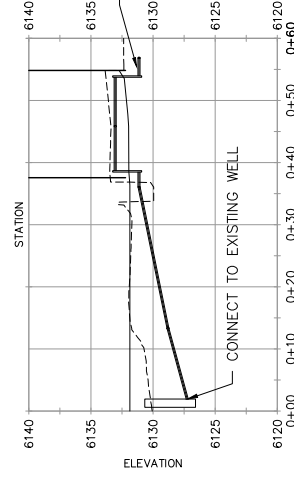
PROJECT NO.



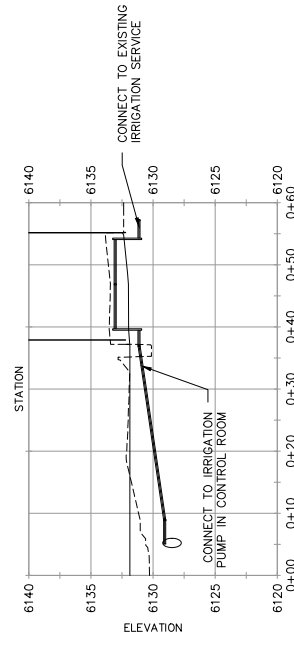
8IN OVERFLOW LINE



2IN IRRIGATION LINE



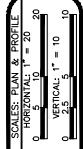
2IN WATER LINE



2IN IRRIGATION LINE

REVISION	DATE	DESCRIPTION

DRAWN BY	HMC	DATE	2017
DESIGNED BY	JAE	DATE	2017
CHECKED BY	JAE	DATE	2017
APPROVED BY		DATE	



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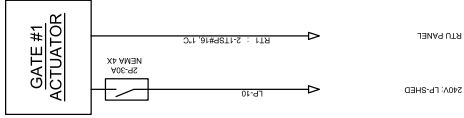
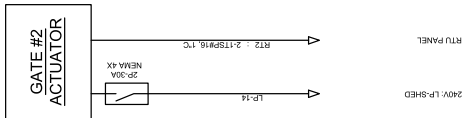
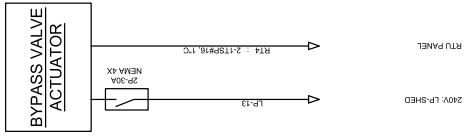
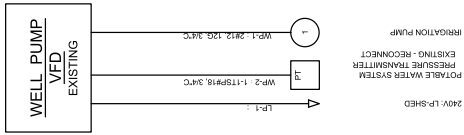
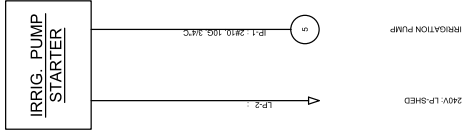
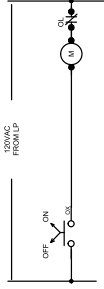
2017 KANNAH CREEK INTAKE REHABILITATION  
PROFILES  
OVERFLOW AND ADDITIONAL LINES

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PROJECT NO. \_\_\_\_\_



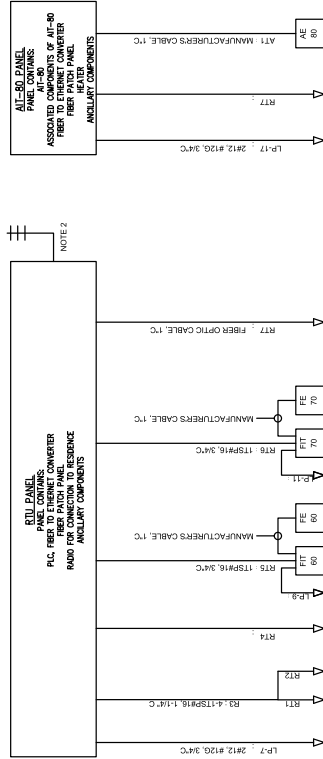
IRRIGATION PUMP STARTER ONE-LINE DIAGRAM

WELL PUMP VFD (EXISTING) ONE-LINE DIAGRAM

BYPASS VALVE ACTUATOR ONE-LINE DIAGRAM

DIVERSION STRUCTURE GATE #2 ONE-LINE DIAGRAM

DIVERSION STRUCTURE GATE #1 ONE-LINE DIAGRAM



RTU PANEL ONE-LINE DIAGRAM

AIT-80 PANEL ONE-LINE DIAGRAM

- NOTES:
1. THE EXISTING CIRCUIT TO THE EXISTING SHED SHALL BE RELOCATED TO CONNECT TO THE NEW LIGHTING PANEL, LP-SHED.
  2. AN ETHERNET RADIO SHALL BE INSTALLED TO CONNECT THE SHED TO THE RESIDENCE'S INTERNET SERVICE.

REVISION	DATE	DESCRIPTION

SCALE: PLAN & PROFILE	DATE 8-17
HORIZONTAL	DATE 8-17
VERTICAL 1" =	DATE

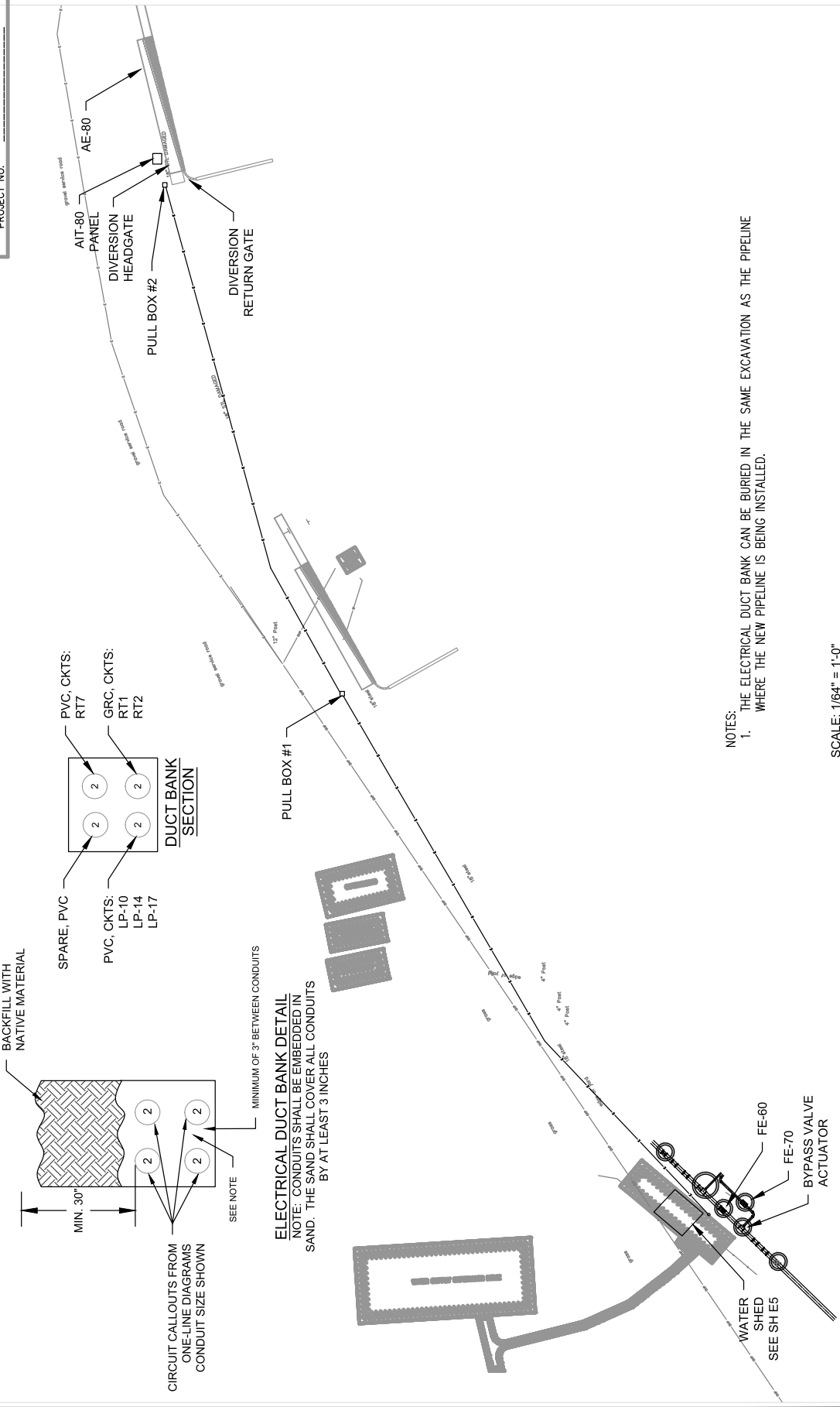
DRAWN BY: JEW	DATE 8-17
DESIGNED BY: JEW	DATE 8-17
CHECKED BY:	DATE
APPROVED BY:	DATE



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CITY OF GRAND JUNCTION  
2017 KANNAH CREEK INTAKE REHABILITATION  
ELECTRICAL ONE-LINE DIAGRAMS

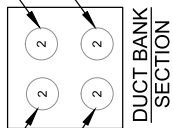
PROJECT NO.



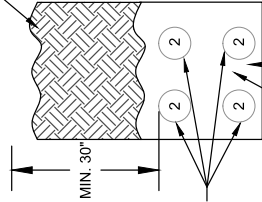
BACKFILL WITH NATIVE MATERIAL

PVC, CKTS:  
RT7

GRC, CKTS:  
RT1  
RT2



SPARE, PVC  
LP-10  
LP-14  
LP-17



CIRCUIT CALLOUTS FROM ONE-LINE DIAGRAMS CONDUIT SIZE SHOWN

SEE NOTE

MINIMUM OF 3" BETWEEN CONDUITS

**ELECTRICAL DUCT BANK DETAIL**  
NOTE: CONDUITS SHALL BE EMBEDDED IN SAND. THE SAND SHALL COVER ALL CONDUITS BY AT LEAST 3 INCHES

NOTES:  
1. THE ELECTRICAL DUCT BANK CAN BE BURIED IN THE SAME EXCAVATION AS THE PIPELINE WHERE THE NEW PIPELINE IS BEING INSTALLED.

SCALE: 1/64" = 1'-0"

REVISION A	DATE	DESIGNED BY	DATE
REVISION B	DATE	CHECKED BY	DATE
REVISION C	DATE	APPROVED BY	DATE

SCALE: PLAN & PROFILE
HORIZONTAL 1" = 100'
VERTICAL 1" = 10'

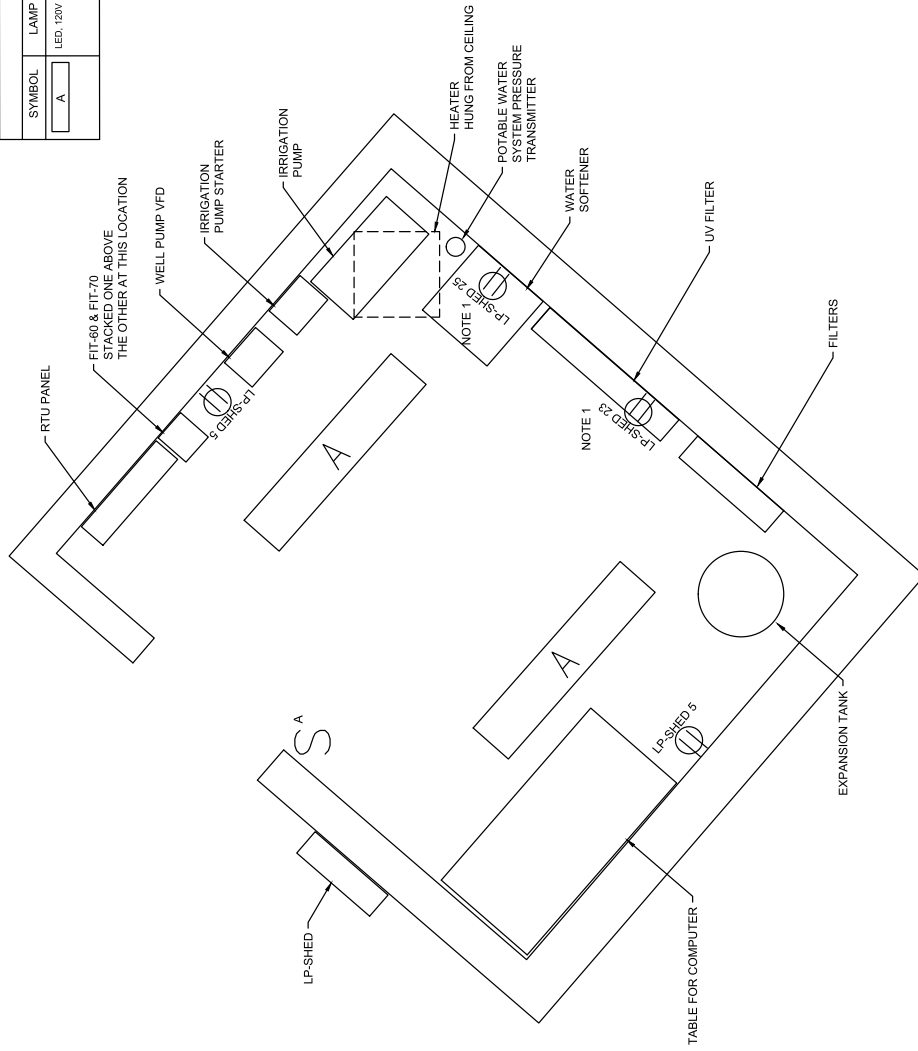


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CITY OF GRAND JUNCTION  
2017 KANNAH CREEK INTAKE REHABILITATION  
ELECTRICAL SITE PLAN

PROJECT NO.

LIGHTING FIXTURE SCHEDULE			
SYMBOL	LAMP	MTG HEIGHT	DESCRIPTION
A	LED, 120V	MOUNT ON CEILING	4 FOOT FIXTURE-HEAVY DUTY AND MOUNTING HARDWARE SUITABLE FOR WET LOCATIONS
			MANUFACTURER
			DIALIGHT, LPK44-2C30IF



NOTES:  
 1. MOUNT THE RECEPTACLE NEAR THE EQUIPMENT IT IS DEDICATED FOR.

**WATER SHED - PLAN VIEW**  
 NTS

REVISION A	DATE 8-17	DESIGNED BY JEW	DATE 8-17
REVISION B	DATE	CHECKED BY	DATE
REVISION C	DATE	APPROVED BY	DATE



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CITY OF GRAND JUNCTION  
 2017 KANNAH CREEK INTAKE REHABILITATION  
 ELECTRICAL ONE-LINE DIAGRAMS  
**E5**