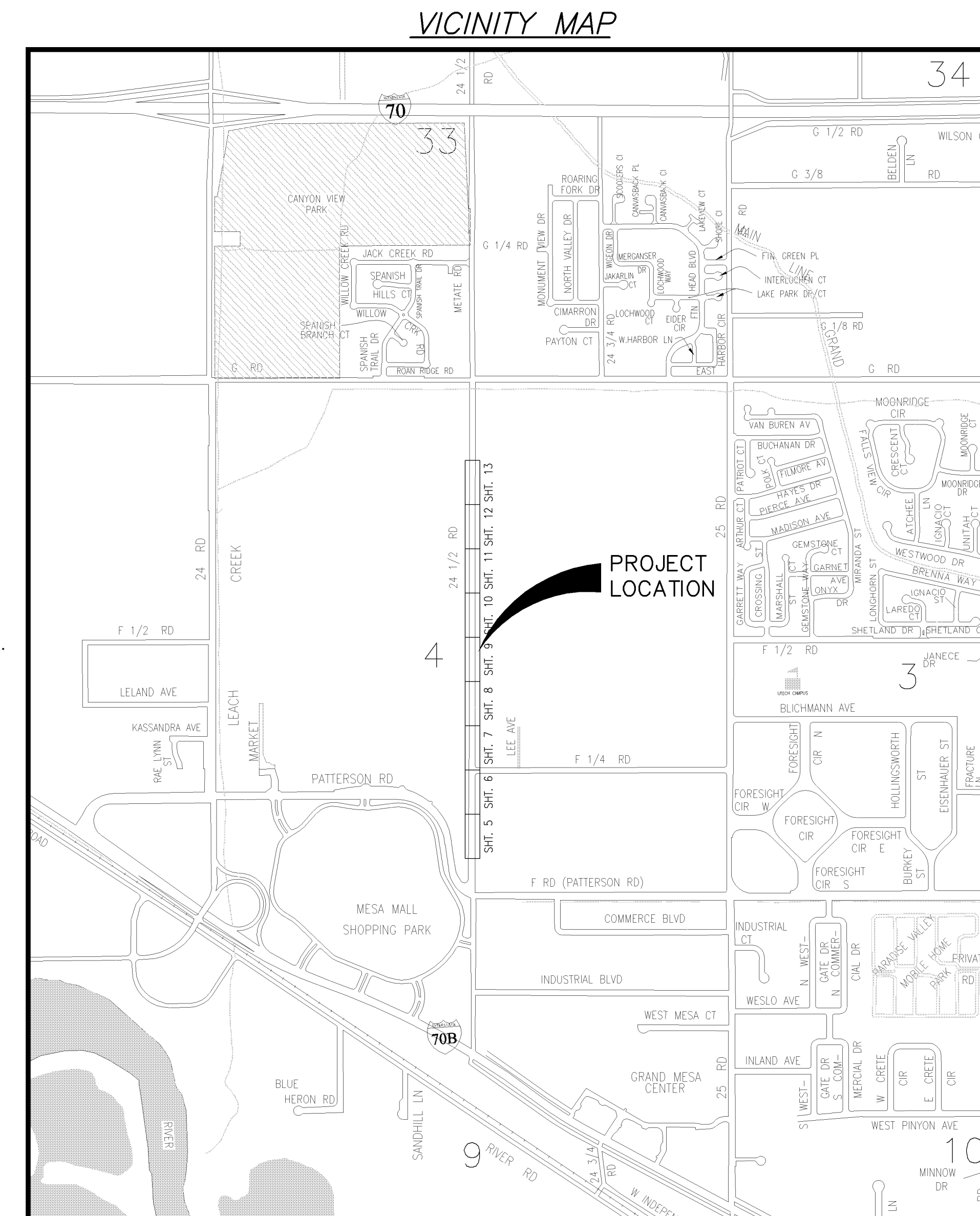


# 24-1/2 ROAD SEWER TRUNK EXTENSION JANUARY, 2006

AS BUILT JANUARY 17, 2007

- 1 ————— Cover Sheet
- 2 ————— Standard Abbreviations, Legend, and Symbols
- 3 ————— Summary of Approximate Quantities
- 4 ————— Project Control Map
- 5-13 ————— Sanitary Sewer Plan and Profiles
- 14 ————— Work Zone Limits and Access Plan



UTILITIES AND AGENCIES								
AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE-WK	FAX
GRAND JUNCTION, CITY OF	PAUL JAGIM	PROJECT ENGINEER	PROJECT ENGINEER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 256-4023	(970) 256-4022
GRAND JUNCTION, CITY OF	BRET GUILLORY	UTILITY ENGINEER	SANITARY SEWER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 244-1590	(970) 256-4022
GRAND VALLEY IRRIGATION CO.	PHIL BERTRAND		IRRIGATION	688 26 ROAD	688 26 ROAD	GRAND JCT., CO 81506	(970) 242-2762	
BRESNAN	GLENN VANCIL		CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245-8750	(970) 245-6803
U.S. WEST/QWEST	DAN WISEMAN	ENGINEER	TELEPHONE	2524 BLICHMANN AVE	2524 BLICHMANN AVE	GRAND JCT., CO 81504	(970) 244-4311	(970) 240-4349
UTE WATER	DARYL MOORE	ENGINEER	WATER	PO BOX 460		GRAND JCT., CO 81502	(970) 242-7491	(970) 242-9189
XCEL	STEVE LOPEZ	PROJECT MANAGER	GAS, ELECTRIC	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81504	(970) 244-2698	(970) 244-2661
GRAND JCT. DRAINAGE DIST.	JOHN BALLAGH		STORM SEWER	PO BOX 964		GRAND JCT., CO 81502	(970) 242-4343	(970) 242-4348



*Public Works & Utilities  
Engineering Division*

<b>DRAWING STATUS:</b>	
<input type="checkbox"/> PROGRESS	<input checked="" type="checkbox"/> FINAL CONSTRUCTION DRAWINGS
<input type="checkbox"/> ASBUILT	
<b>DESIGNED BY:</b>	
D. PAUL JAGIM, PROJECT ENGINEER	1/13/06 DATE
<b>REVIEWED BY:</b>	
BRET GUILLORY, UTILITY ENGINEER	DATE
<b>AUTHORIZED FOR CONSTRUCTION</b>	
MICHAEL G. MCDILL, CITY ENGINEER	DATE
<b>ACCEPTED AS CONSTRUCTED</b>	
D. PAUL JAGIM, PROJECT ENGINEER	DATE

NOTE: NOTIFY AFFECTED UTILITY VENDOR 48 HOURS PRIOR TO EXCAVATIONS THAT WILL EXPOSE UTILITY LINES. THE COVER SHEET WILL HAVE A LISTING OF UTILITY VENDORS AND TELEPHONE NUMBERS.

REVISION	DESCRIPTION	DATE
REVISION Δ	SAN. SEW REALIGNED 26+74.59 TO 43+50 FROM 5.75' RT. OF MON. LINE TO 5.75' LT. OF MON. LINE	4-25-06
REVISION Δ	AS BUILT	1-17-07
REVISION Δ		

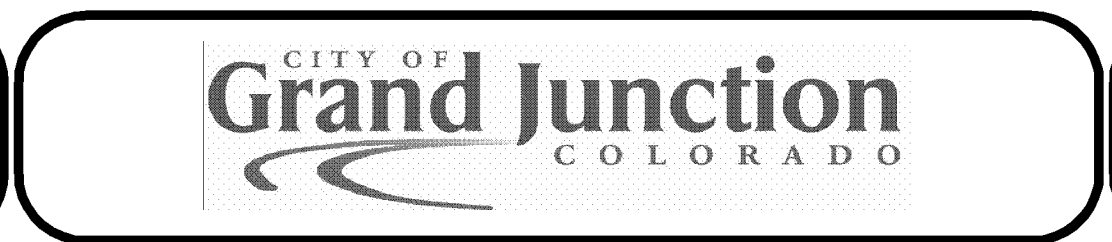


24 1/2 Road Trunk Extension - Summary of Approximate Quantities			1/13/2006	
CDOT/City Ref. #	Description	FINAL - Bid Set ACTUAL	Quantity	Units
1	108.2 Imported Trench Backfill (including haul and disposal of unsuitable excavated material).	18,095	8725	TON
2	108.2/202 8" Culvert (C-900 PVC, Class 150)(including removal of existing stormwater/irrigation culvert).	100	380	LF
3	108.2/202 12" Culvert (C-900 PVC, Class 150)(including removal of existing stormwater/irrigation culvert).	149	140	LF
4	108.2/202 15" Culvert (C-900 PVC, Class 150)(including removal of existing stormwater/irrigation culvert).	0	55	LF
5	108.2/202 18" Culvert (C-900 PVC, Class 150)(including removal of existing stormwater/irrigation culvert).	0	145	LF
6	108.2 4" Gravity Sewer Pipe (SDR 35 PVC)(Single Service Line per trench).	972	470	LF
7	108.2 15" Gravity Sewer Pipe (SDR 35 PVC).	4153	4250	LF
8	108.3 15" x 4" Sewer Service Connection.	14	14	EA
9	108.5 Connect to Existing Manhole (15" pipe).	1	1	EA
10	108.5 Sanitary Sewer Basic Manhole Components (60" I.D.).	12	11	EA
11	108.5 Manhole Barrel (D > 5') (60" I.D.).	16	16	LF
12	108.7 Granular Stabilization Material (Type B).	1715	2050	TON
13	108.9/304 Aggregate Base Course for shoulders and driveways (Class 6)(4" thick).	400	400	SY
14	108.9/304 Aggregate Base Course (Class 6)(12" thick).	6150	6250	SY
15	108.9/401 Hot Bituminous Pavement (5" thick)(Grading SX, Binder Grade PG 64-22).	6150	6250	SY
16	202 Removal of Asphalt Pavement.	6150	6250	SY
17	209 Dust Abatement.	40	40	DAY
18	420 Geotextile (Non-Woven Separator for use with Type B Granular Stabilization Material).	0	6900	SY
19	608 Concrete Curb (Width and Style may vary).	5	15	LF
20	620 Portable Sanitary Facility.	1	1	EA
21	625 Construction Surveying.	1	1	Lump Sum
22	626 Mobilization.	1	1	Lump Sum
23	629 Survey Monument (Complete in Place)(Type: Quarter & Sixteenth Corner).	3	3	EA
24	630 Traffic Control (Complete in Place).	1	1	Lump Sum
25	630 Traffic Control Plan.	1	1	Lump Sum
26	630 Flagging.	240	420	Hour
27	GCC56 Newsletter (Approximately 150 per distribution. Distributed Weekly).		1	Lump Sum
28	FA Force Account (minor contract revisions).		\$15,000.00	

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REVISION $\Delta$	DESCRIPTION	DATE	DRAWN BY	CM	DATE	2006
REVISION $\Delta$	AS BUILT	1-17-07	DESIGNED BY	DPJ	DATE	2006
REVISION $\Delta$			CHECKED BY	DPJ	DATE	2006
REVISION $\Delta$			APPROVED BY		DATE	

SCALE	N.T.S.
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PUBLIC WORKS  
AND UTILITIES  
ENGINEERING DIVISION

24-1/2 ROAD SEWER TRUNK LINE  
SUMMARY OF APPROXIMATE QUANTITIES



F ROAD (PATTERSON)

NO. 571  
 N 44736.493  
 E 81536.98  
 EL 4560.71  
 DESC MCSM C4 S04/S08 S071

NO. 402  
 N 46053.73  
 E 81537.48  
 EL 4567.30  
 DESC MCSM CS16 S04 CP

N0° 01' 36"E  
 1317.05'

24-1/2 ROAD

F 1/4 ROAD

NO. 570  
 N 47371.13  
 E 81538.17  
 EL 4571.10  
 DESC MCSM C4 S08 S070

N0° 01' 53"E  
 1317.25'

24-1/2 ROAD

N0° 01' 43"E  
 1317.46'

F-1/2 ROAD  
 (FUTURE)

NO. 404  
 N 48688.44  
 E 81538.86  
 EL 4572.95  
 DESC MCSM CN16 S04 CP

NO. 450  
 N 50005.89  
 E 81539.46  
 EL 4578.87  
 DESC MCSM C4 S04/S33 CP

24-1/2 ROAD

N0° 01' 34"E  
 1317.43'

F-3/4 ROAD  
 (FUTURE)

G ROAD

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
△			CM	2006
△			DPJ	2006
△			DPJ	2006
△				

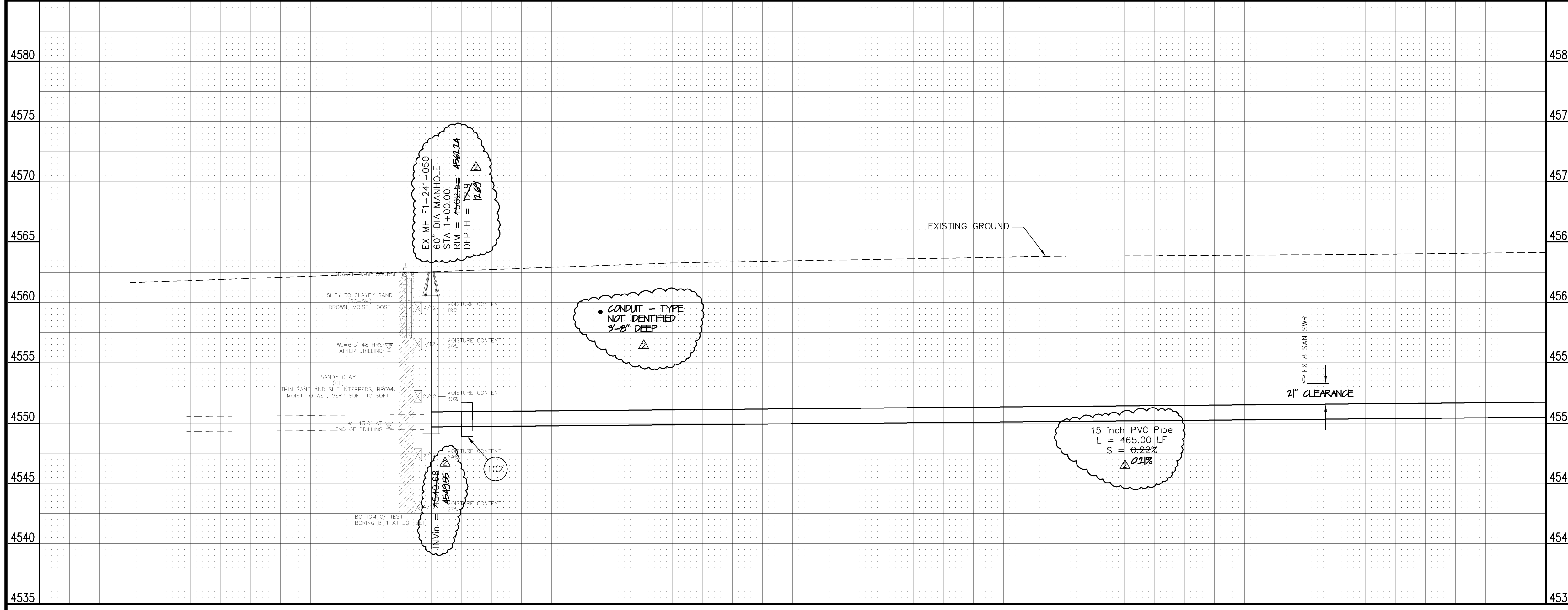
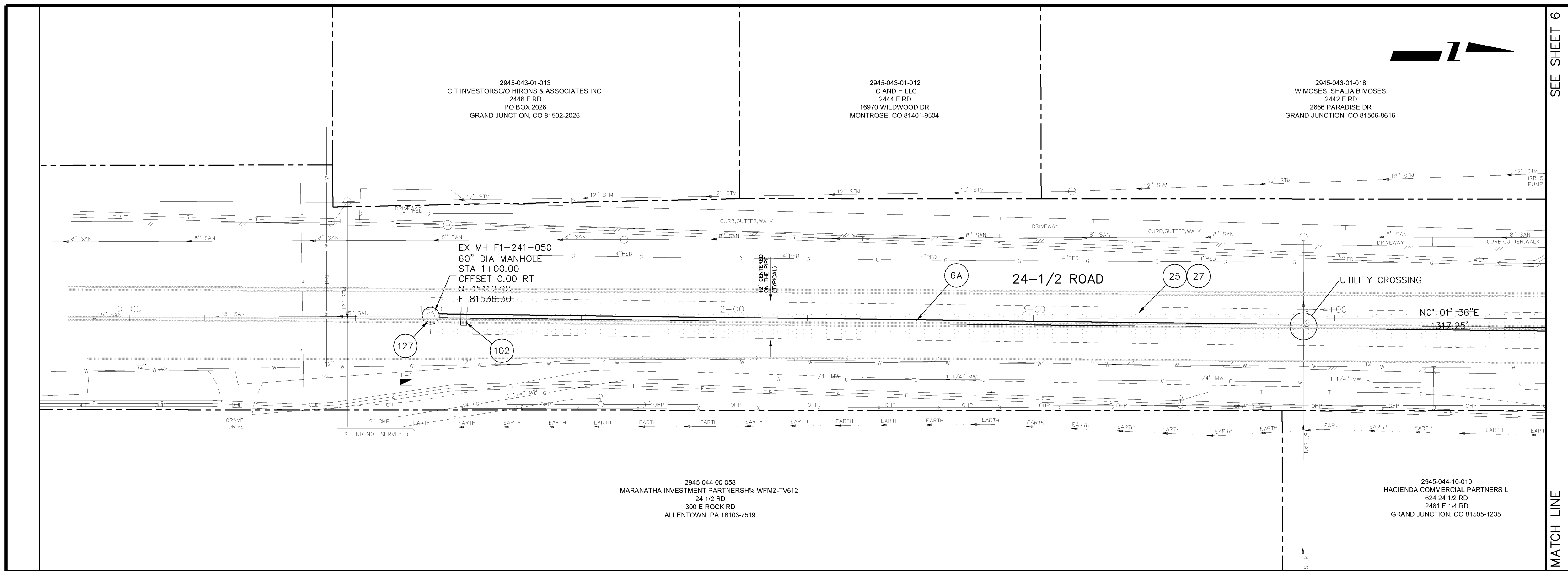
SCALE:  
 PLAN



PUBLIC WORKS  
 AND UTILITIES  
 ENGINEERING DIVISION

24-1/2 ROAD SEWER TRUNK LINE  
 PROJECT CONTROL MAP

- 6A 102.9A - 15" GRAVITY SEWER PIPE (SDR-35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 25 103.3 - ASPHALT REMOVAL FOR TRENCH EXCAVATION: CUT AND REMOVE (OR FULL-DEPTH MILL) ASPHALT AS SHOWN.
- 27 103.18/304/401 - PAVEMENT AND ROAD BASE REPLACEMENT: 5" HOT BITUMINOUS PAVEMENT (GRADING SX, PG 64-22 OIL), OVER 12" CLASS 6 ABC (SEE STD. DETAIL GU-03). PAID PER SY.
- 102 CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM).
- 127 EXISTING MANHOLE HAS A 15" PVC PIPE STUBBED OUT 2'. CONTRACTOR SHALL REMOVE CAP AND CONNECT THE NEW 15" SEWER PIPE TO THE EXISTING STUB USING A SOLID SLEEVE.



REVISION $\Delta$ REVISION $\Delta$ AS BUILT REVISION $\Delta$ REVISION $\Delta$	DESCRIPTION DATE DATE DATE DATE	DRAWN BY CM DATE 2006 DESIGNED BY DPJ DATE 2006 CHECKED BY DPJ DATE 2006 APPROVED BY DATE	SCALES: PLAN HORIZONTAL 0 5 10 20 PROFILE HORIZONTAL 0 5 10 20 VERTICAL 0 2.5 5		PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION	24-1/2 ROAD SEWER TRUNK LINE SANITARY SEWER PLAN AND PROFILE STA 1+00 TO STA 4+50	5
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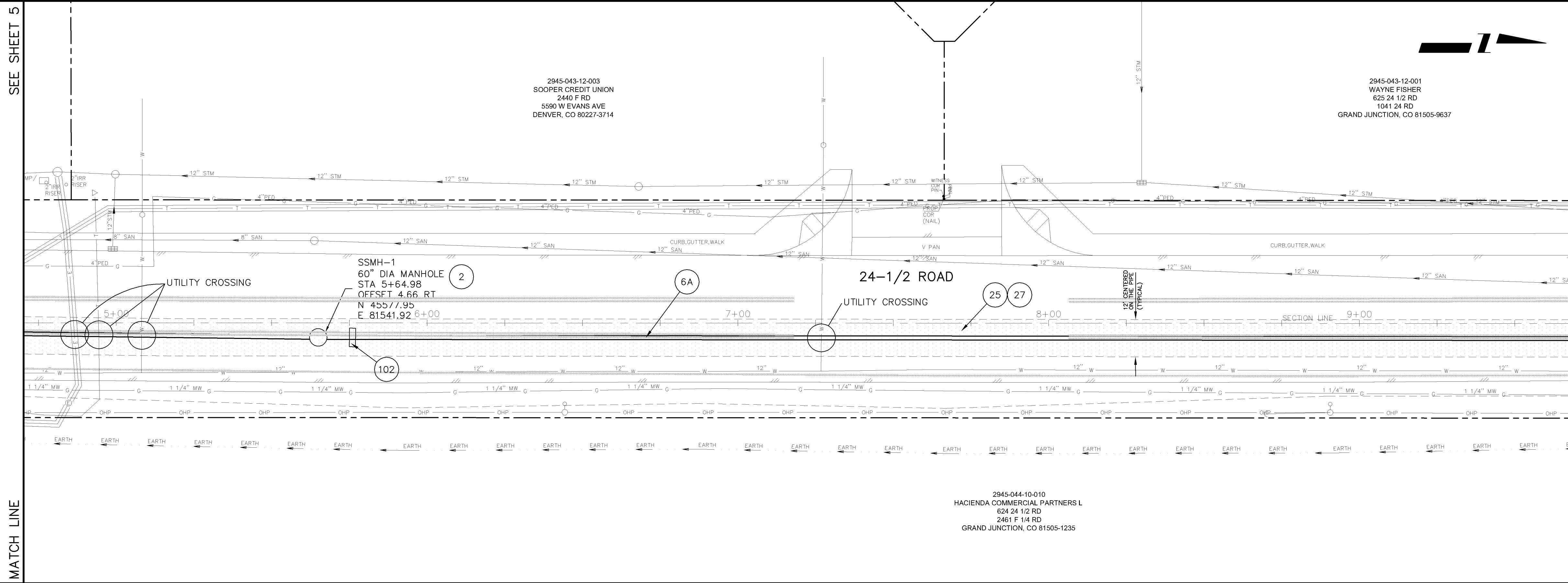
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SEE SHEET 5

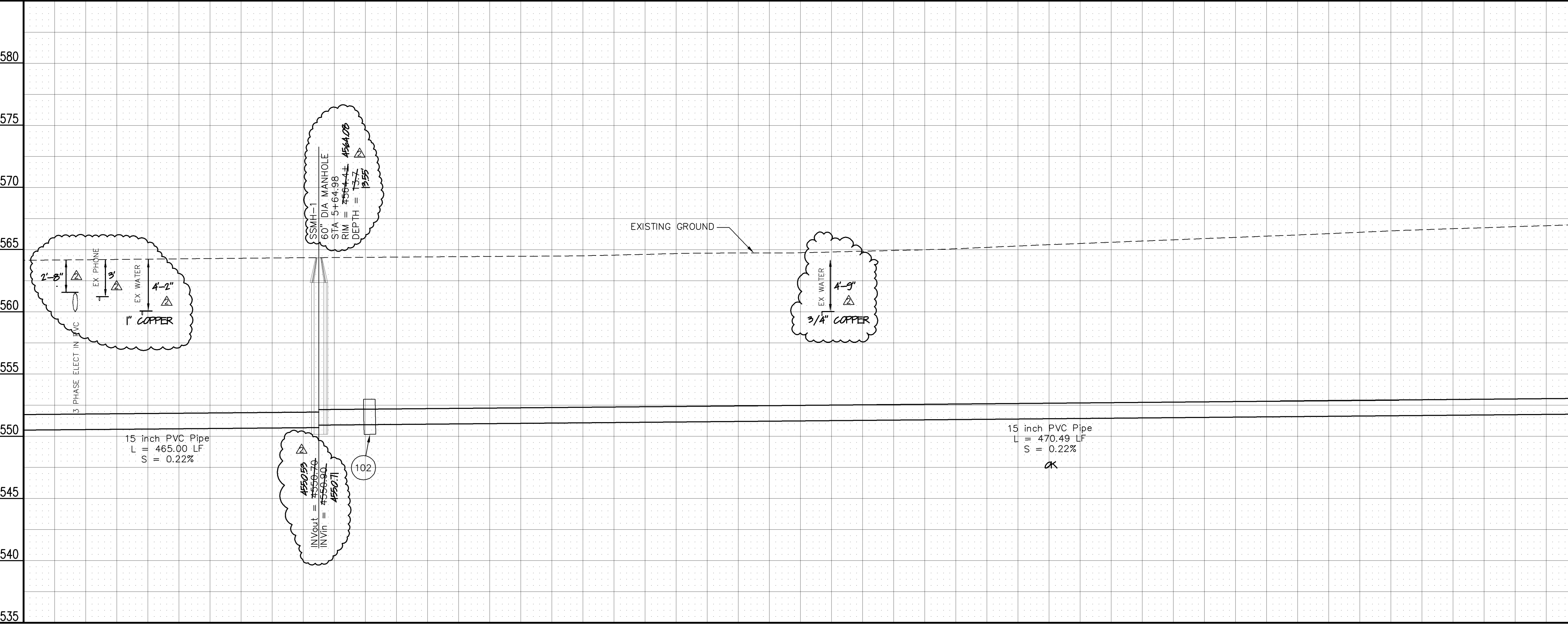
SEE SHEET 7

2945-043-12-003  
SOOPER CREDIT UNION  
2440 F RD  
5590 W EVANS AVE  
DENVER, CO 80227-3714

2945-043-12-001  
WAYNE FISHER  
625 24 1/2 RD  
1041 24 RD  
GRAND JUNCTION, CO 81505-9637

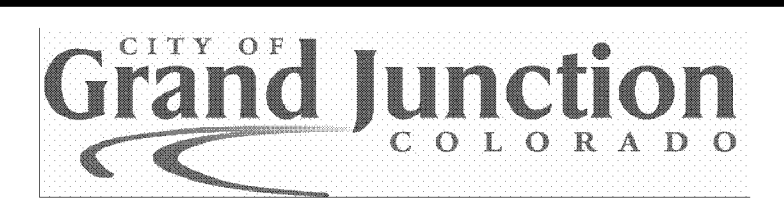
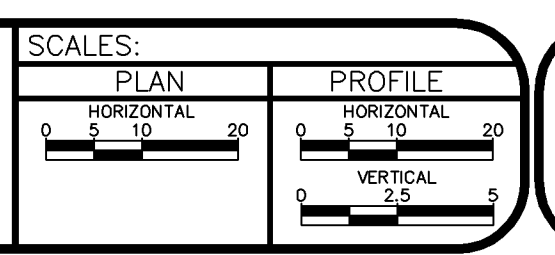


2945-044-10-010  
HACIENDA COMMERCIAL PARTNERS L  
624 24 1/2 RD  
2461 F 1/4 RD  
GRAND JUNCTION, CO 81505-1235



- 2 102.11/108.5 - STANDARD 60" DIAMETER SANITARY SEWER MANHOLE; INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
- 6A 102.9A - 15" GRAVITY SEWER PIPE (SDR-35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 25 103.3 - ASPHALT REMOVAL FOR TRENCH EXCAVATION: CUT AND REMOVE (OR FULL-DEPTH MILL) ASPHALT AS SHOWN.
- 27 103.18/304/401 - PAVEMENT AND ROAD BASE REPLACEMENT: 5" HOT BITUMINOUS PAVEMENT (GRADING SX, PG 64-22 OIL), OVER 12" CLASS 6 ABC (SEE STD. DETAIL GU-03). PAID PER SY.
- 102 CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM).

REVISION	DESCRIPTION	DATE	DRAWN BY	CM	DATE	2006
AS BUILT		11-07	DESIGNED BY	DPJ	DATE	2006
			CHECKED BY	DPJ	DATE	2006
			APPROVED BY		DATE	



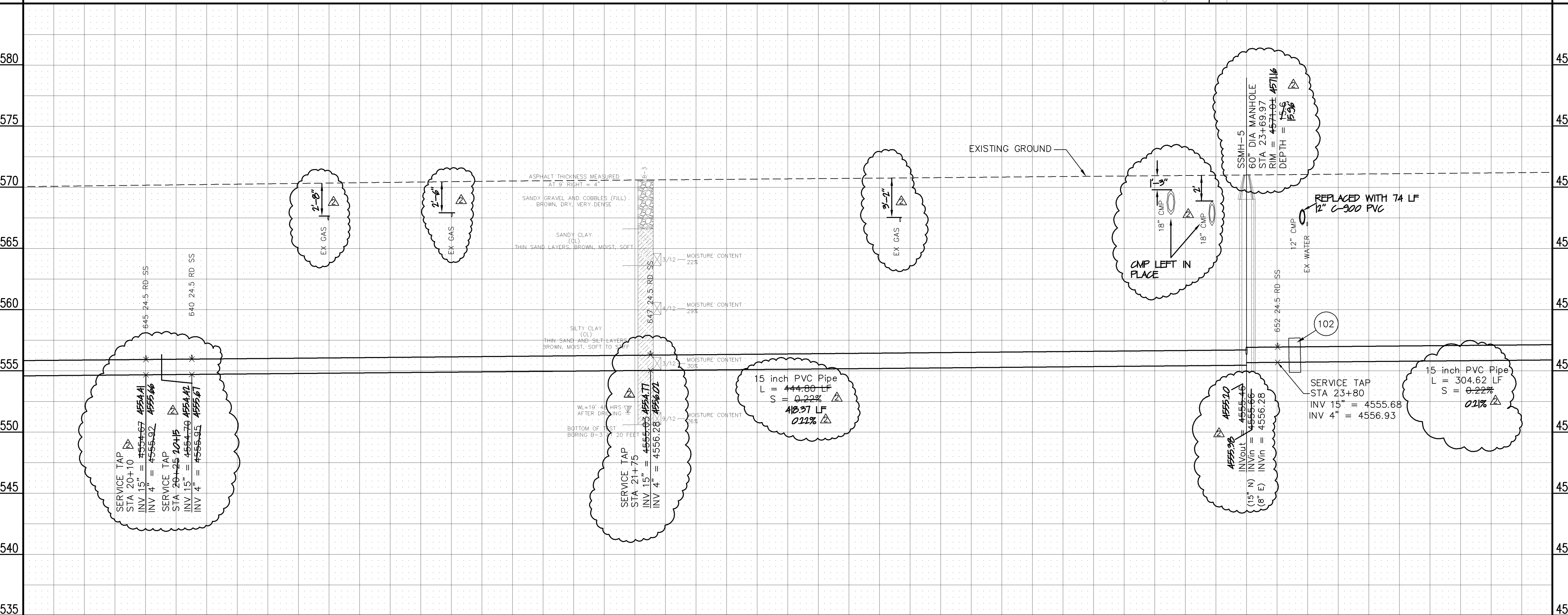
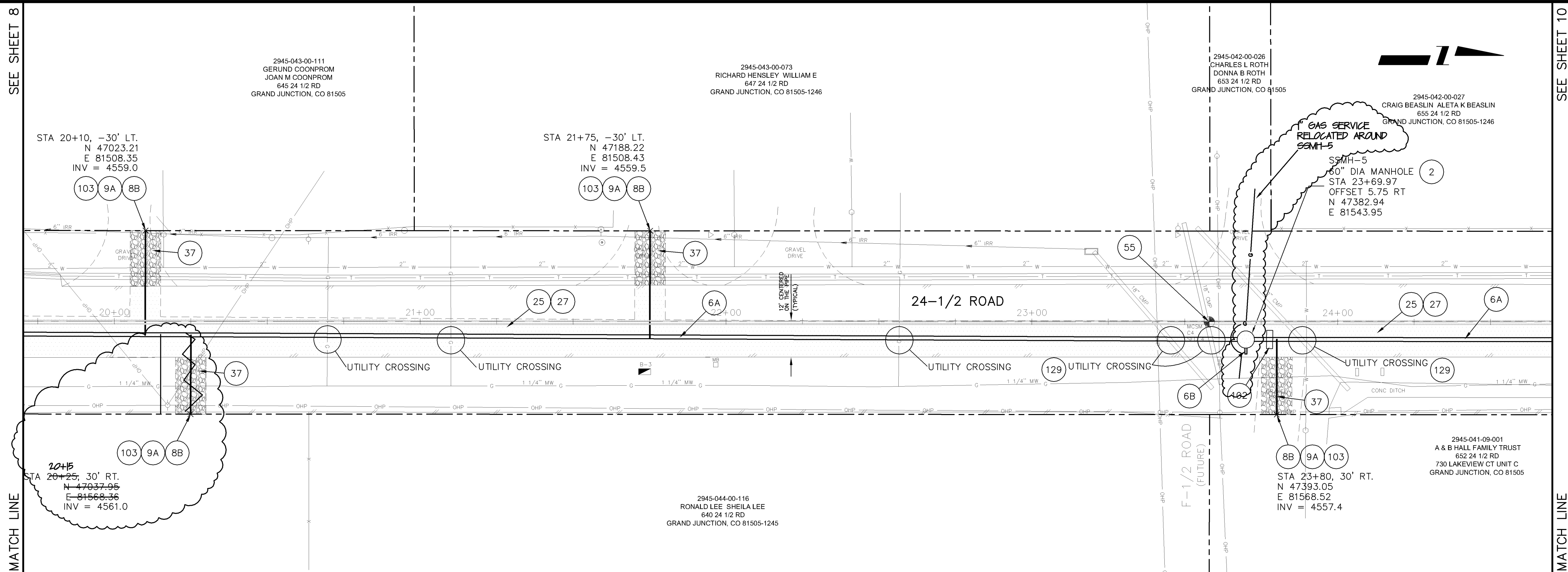
**PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION**

**24-1/2 ROAD SEWER TRUNK LINE  
SANITARY SEWER PLAN AND PROFILE  
STA 5+00 TO STA 9+50**









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- 8B 102/103/104 - 4" SEWER SERVICE TAP, 15" X 4" FULL BODY WYE (SEE STD. DETAIL SS-06).
- 9A 102/103/104 - 4" SDR-35 PVC SANITARY SERVICE LINE WITH NATIVE BACKFILL MEETING 103.16 EARTH BACKFILL MATERIAL. INCLUDES SINGLE SERVICE LINE PER TRENCH, TYPE A BEDDING AND HAUNCHING, AND END-OF-SERVICE CAP.
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- 37 304 - 4" CLASS 6 ABC FOR SHOULDERS AND GRAVEL DRIVEWAYS. COMPACTED TO 90% AASHTO T-180.
- 55 629 - REFERENCE AND RESET SURVEY MONUMENT (QUARTER CORNER).
- 102 CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM).
- 103 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
- 129 CONTRACTOR SHALL NOTIFY INSPECTOR WHEN AN IRRIGATION CULVERT IS ENCOUNTERED.

IF EXISTING PIPE IS IN GOOD CONDITION, CONTRACTOR SHALL:

SPAN/SUPPORT/PROTECT EXISTING STORMWATER/IRRIGATION CULVERT. AMEND BACKFILL WITH BENTONITE POND LINER (MIXED AS PER MFG. SPECIFICATIONS) FOR PLACEMENT AROUND CULVERT (2' ALL SIDES OF PIPE OVER EXPOSED LENGTH) DURING BACKFILL OPERATION. INCIDENTAL TO SEWER INSTALLATION PAY ITEM.

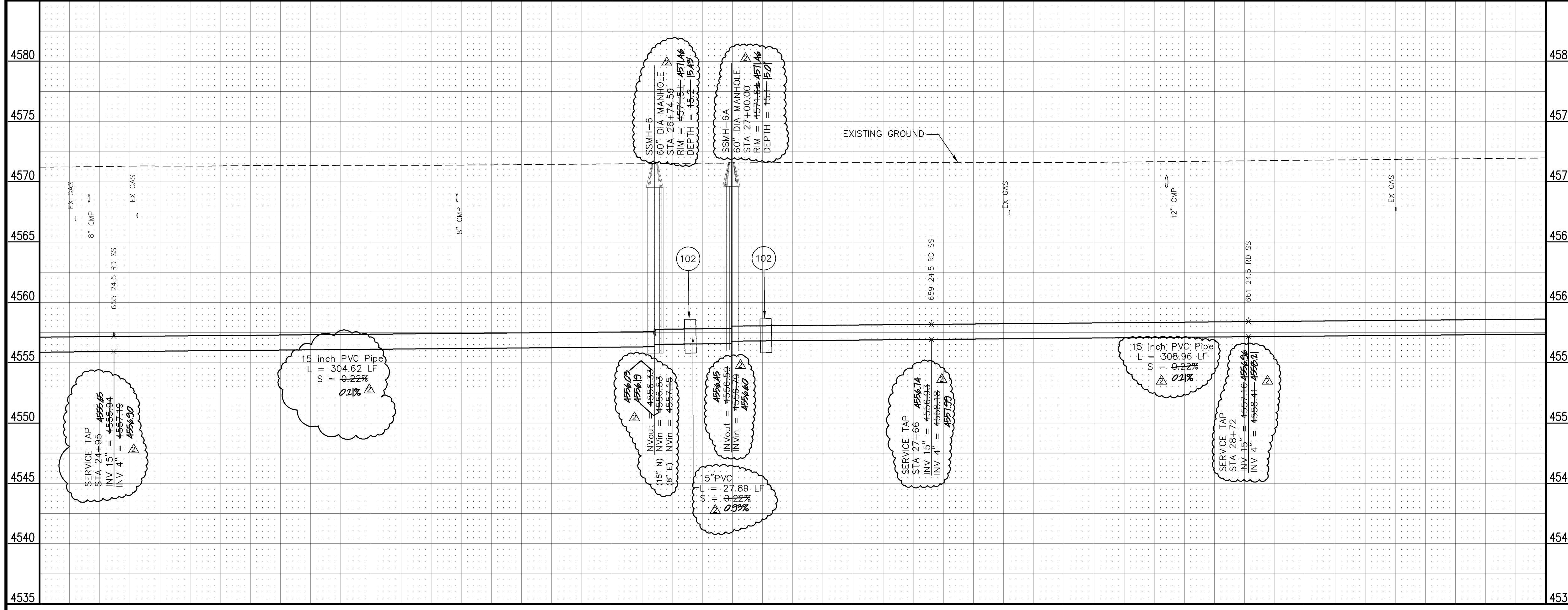
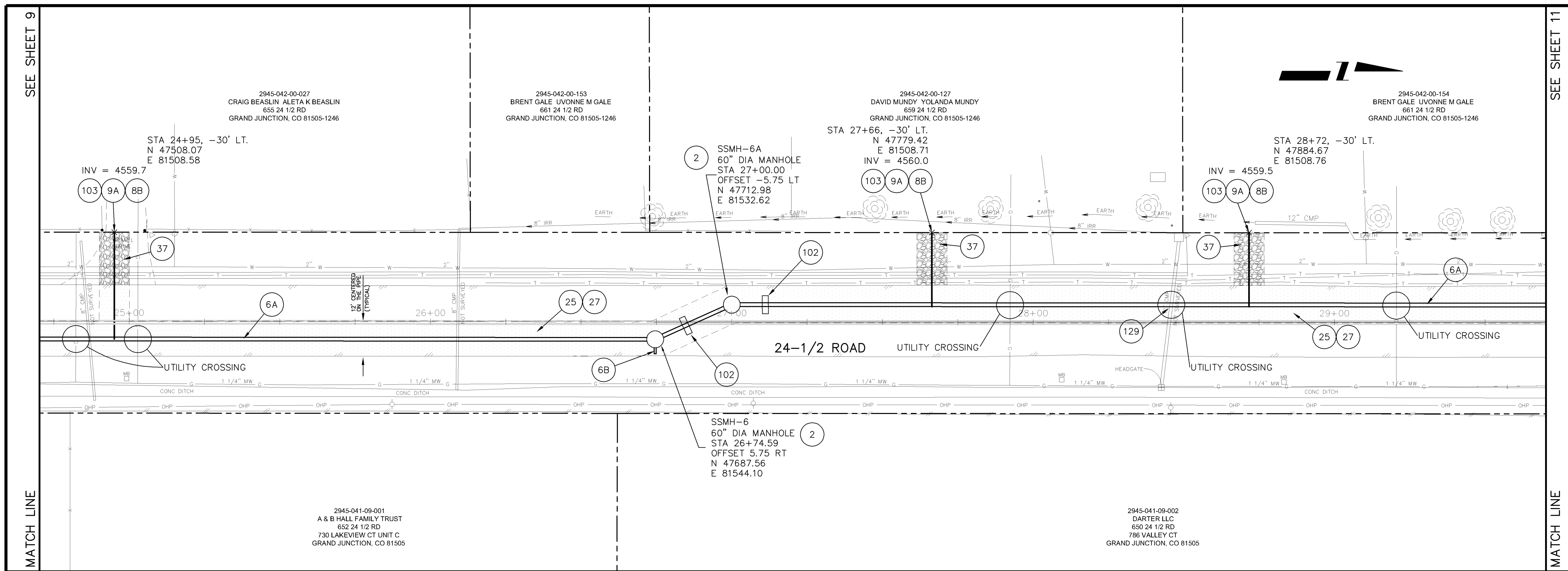
OR

108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE EXISTING CULVERT AS NEEDED FOR SANITARY SEWER INSTALLATION. THE CONNECTIONS TO EXISTING PIPE WILL BE INCIDENTAL TO CULVERT PAY ITEM.

IF THE EXISTING PIPE IS IN POOR CONDITION, CONTRACTOR SHALL:

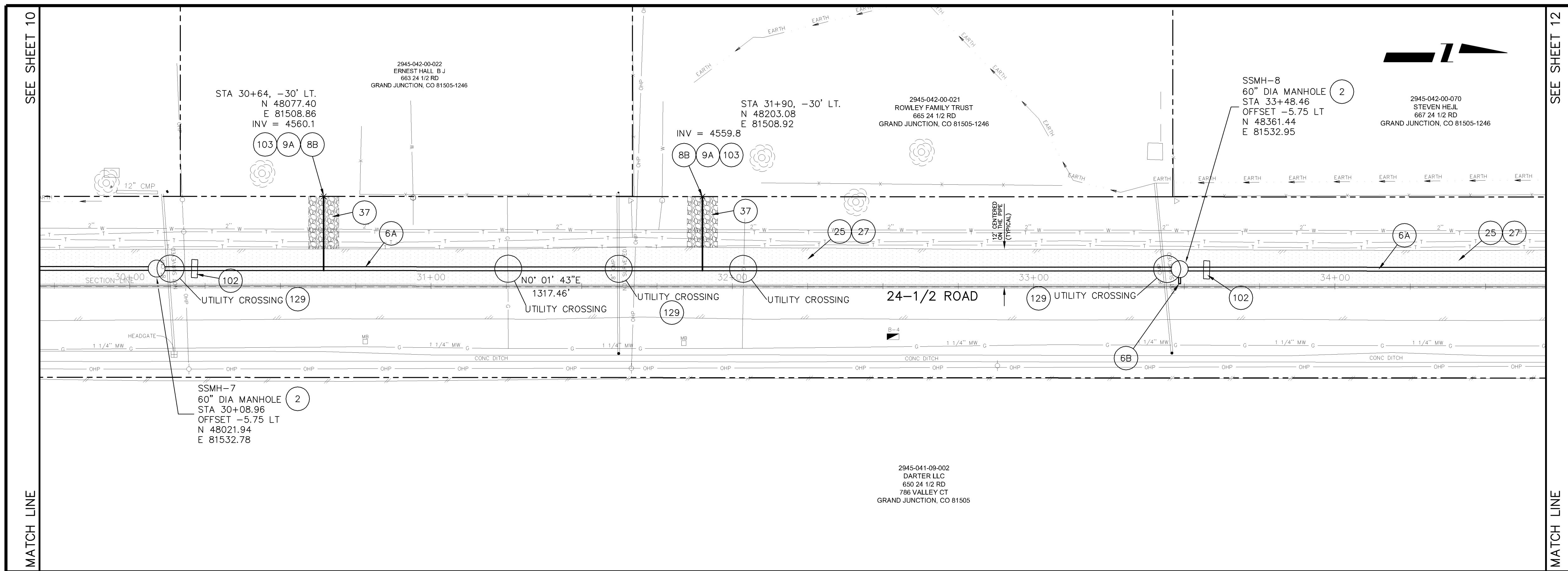
108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE ENTIRE LENGTH OF EXISTING CULVERT. GROUT SEAL/REPAIR AT EXISTING CONCRETE INLET/OUTLET STRUCTURE WHERE PRESENT; INCIDENTAL TO PAY ITEM.

REVISION $\Delta$ REVISION $\Delta$ AS BUILT REVISION $\Delta$ REVISION $\Delta$	DESCRIPTION DATE H-17-01	DRAWN BY CM DATE 2006 DESIGNED BY DPJ DATE 2006 CHECKED BY DPJ DATE 2006 APPROVED BY _____ DATE _____	SCALES: PLAN HORIZONTAL 0 5 10 20 PROFILE HORIZONTAL 0 5 10 20 VERTICAL 0 2.5 5		PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION	24-1/2 ROAD SEWER TRUNK LINE SANITARY SEWER PLAN AND PROFILE STA 20+00 TO STA 24+00
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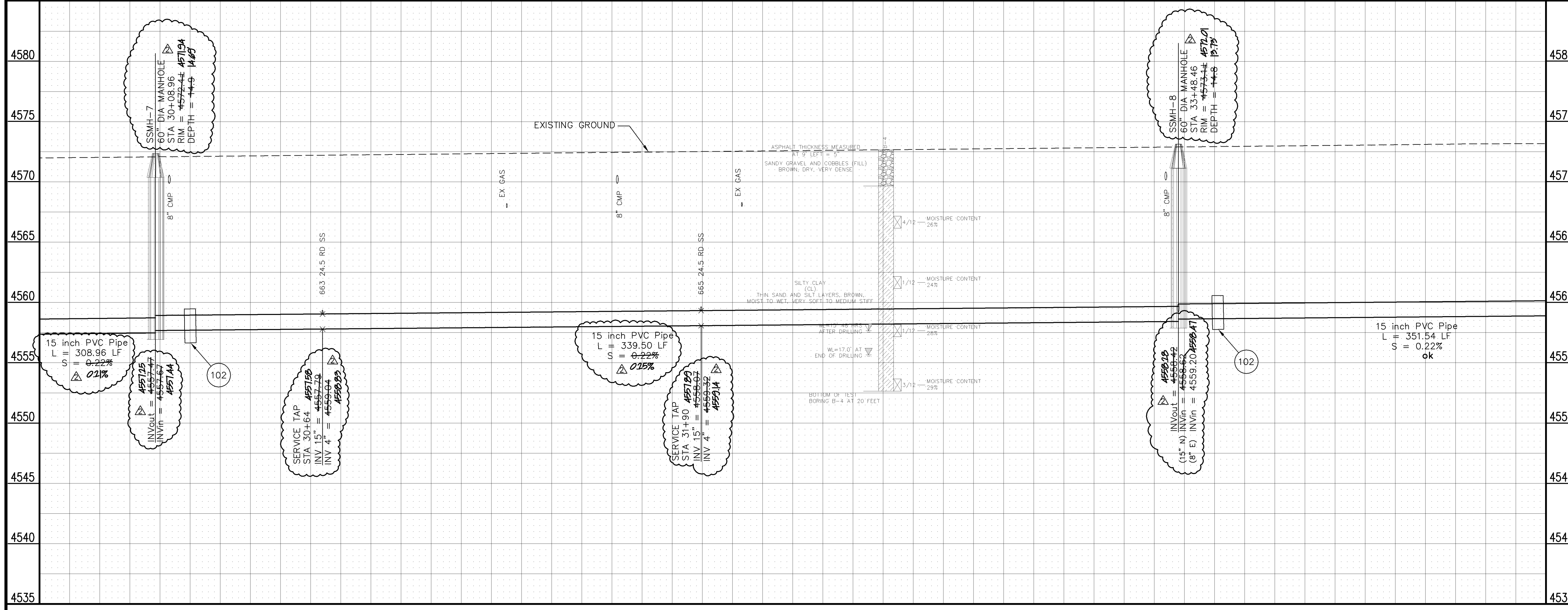


- 2 102.11/108.5 - STANDARD 60" DIAMETER SANITARY SEWER MANHOLE; INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
  - 6A 102.9A - 15" GRAVITY SEWER PIPE (SDR-35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
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  - 8B 102/103/104 - 4" SEWER SERVICE TAP, 15" X 4" FULL BODY WYE (SEE STD. DETAIL SS-06).
  - 9A 102/103/104 - 4" SDR-35 PVC SANITARY SERVICE LINE WITH NATIVE BACKFILL MEETING 103.16 EARTH BACKFILL MATERIAL. INCLUDES SINGLE SERVICE LINE PER TRENCH, TYPE A BEDDING AND HAUNCHING, AND END-OF-SERVICE CAP.
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  - 37 304 - 4" CLASS 6 ABC FOR SHOULDERS AND GRAVEL DRIVEWAYS. COMPACTED TO 90% AASHTO T-180.
  - 102 CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM).
  - 103 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
  - 129 CONTRACTOR SHALL NOTIFY INSPECTOR WHEN AN IRRIGATION CULVERT IS ENCOUNTERED.
- IF EXISTING PIPE IS IN GOOD CONDITION, CONTRACTOR SHALL:  
SPAN/SUPPORT/PROTECT EXISTING STORMWATER/IRRIGATION CULVERT. AMEND BACKFILL WITH BENTONITE POND LINER (MIXED AS PER MFG. SPECIFICATIONS) FOR PLACEMENT AROUND CULVERT (2' ALL SIDES OF PIPE OVER EXPOSED LENGTH) DURING BACKFILL OPERATION. INCIDENTAL TO SEWER INSTALLATION PAY ITEM.  
OR  
108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE EXISTING CULVERT AS NEEDED FOR SANITARY SEWER INSTALLATION. THE CONNECTIONS TO EXISTING PIPE WILL BE INCIDENTAL TO CULVERT PAY ITEM.
- IF THE EXISTING PIPE IS IN POOR CONDITION, CONTRACTOR SHALL:  
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<p>REVISION <math>\Delta</math> SAN SEW REALIGNED 26+74.59 TO 43+50 FROM 5.75' RT OF MON. LINE TO 5.75' LT OF MON. LINE - 4-25-06</p> <p>REVISION <math>\Delta</math> AS BUILT - H7-07</p> <p>REVISION <math>\Delta</math> - - -</p>	<p>DESCRIPTION DATE</p> <p>DESIGNED BY DPJ DATE 2006</p> <p>CHECKED BY DPJ DATE 2006</p> <p>APPROVED BY _____ DATE _____</p>	<p>SCALES:</p> <p>PLAN HORIZONTAL 1" = 20'</p> <p>PROFILE HORIZONTAL 1" = 20'</p> <p>VERTICAL 1" = 5'</p>	<p>CITY OF Grand Junction COLORADO</p>	<p>PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION</p>	<p>24-1/2 ROAD SEWER TRUNK LINE SANITARY SEWER PLAN AND PROFILE STA 25+00 TO STA 29+50</p>	<p>10</p>
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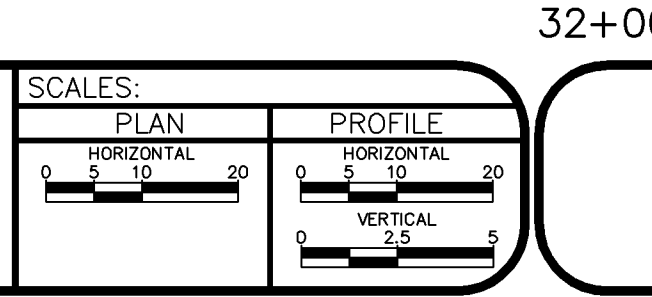
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IF EXISTING PIPE IS IN GOOD CONDITION, CONTRACTOR SHALL:  
 SPAN/SUPPORT/PROTECT EXISTING STORMWATER/IRRIGATION CULVERT. AMEND BACKFILL WITH BENTONITE POND LINER (MIXED AS PER MFG. SPECIFICATIONS) FOR PLACEMENT AROUND CULVERT (2' ALL SIDES OF PIPE OVER EXPOSED LENGTH) DURING BACKFILL OPERATION. INCIDENTAL TO SEWER INSTALLATION PAY ITEM.  
 OR  
 108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE EXISTING CULVERT AS NEEDED FOR SANITARY SEWER INSTALLATION. THE CONNECTIONS TO EXISTING PIPE WILL BE INCIDENTAL TO CULVERT PAY ITEM.

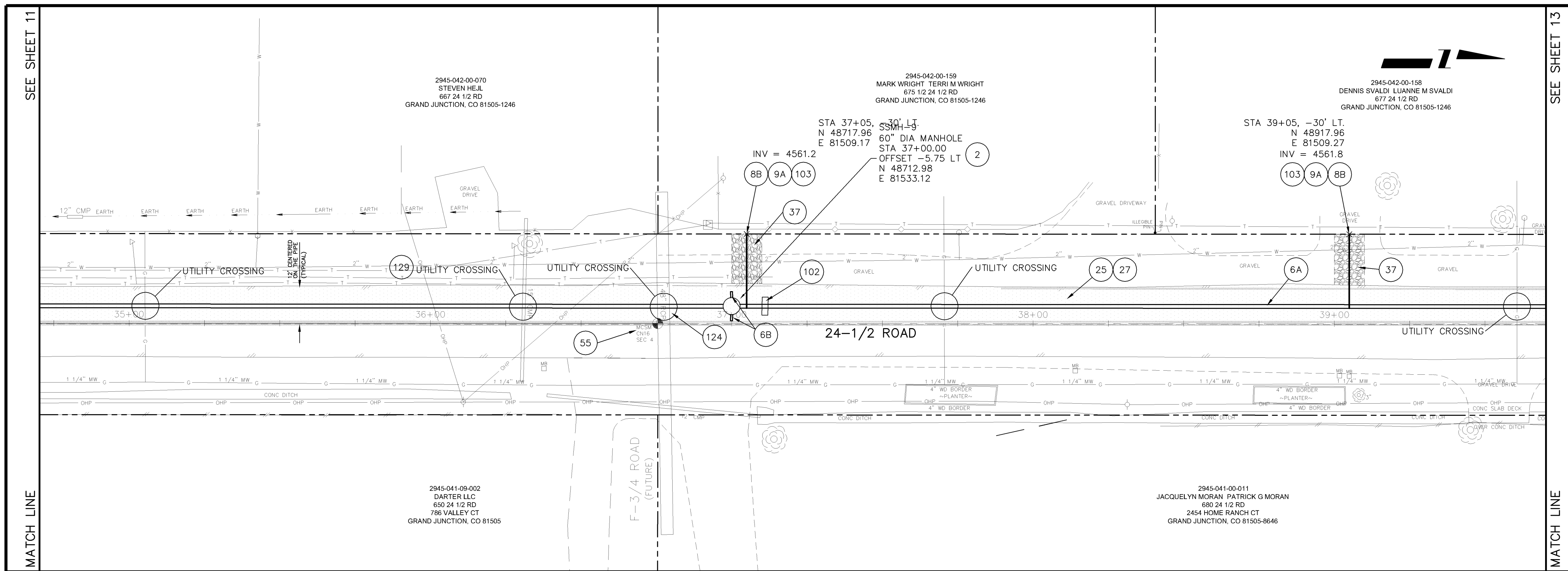
IF THE EXISTING PIPE IS IN POOR CONDITION, CONTRACTOR SHALL:  
 108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE ENTIRE LENGTH OF EXISTING CULVERT. GROUT SEAL/REPAIR AT EXISTING CONCRETE INLET/OUTLET STRUCTURE WHERE PRESENT; INCIDENTAL TO PAY ITEM.

REVISION	DESCRIPTION	DATE	DRAWN BY	CM	DATE
REVISION Δ	SAN SEW REALIGNED 26+74.59 TO 43+50 FROM 5.75' RT OF MON. LINE TO 5.75' LT OF MON. LINE	4-25-06	DESIGNED BY	DPJ	DATE 2006
REVISION Δ	BUILT	H7-07	CHECKED BY	DPJ	DATE 2006
REVISION Δ			APPROVED BY		DATE

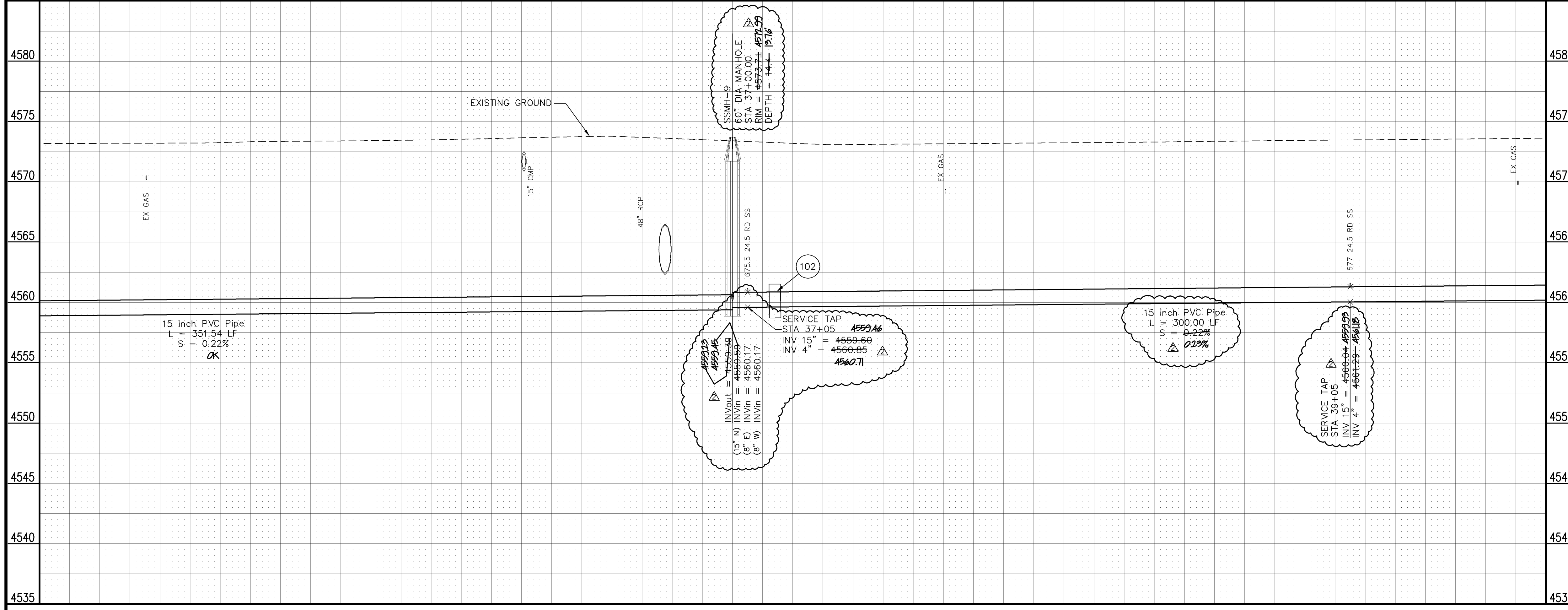


**PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION**

**24-1/2 ROAD SEWER TRUNK LINE  
 SANITARY SEWER PLAN AND PROFILE  
 STA 30+00 TO STA 34+50**



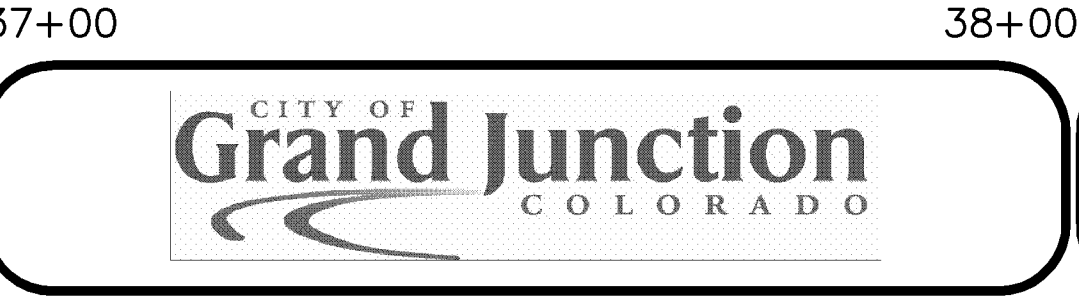
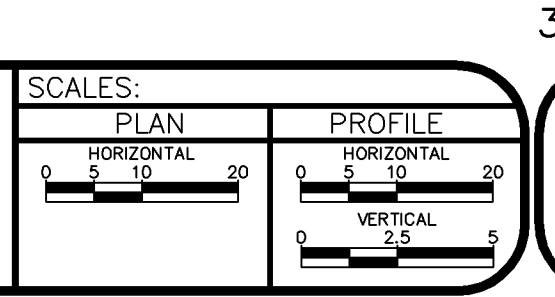
- 2 102.11/108.5 - STANDARD 60" DIAMETER SANITARY SEWER MANHOLE; INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
- 6A 102.9A - 15" GRAVITY SEWER PIPE (SDR-35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 6B 102.9A - STUB 8" GRAVITY SEWER PIPE (SDR-35 PVC). 2 L.F. OUT OF MANHOLE AND CAP END. (INCIDENTAL TO SEWER MANHOLE PAY ITEM).
- 8B 102/103/104 - 4" SEWER SERVICE TAP, 15" X 4" FULL BODY WYE (SEE STD. DETAIL SS-06).
- 9A 102/103/104 - 4" SDR-35 PVC SANITARY SERVICE LINE WITH NATIVE BACKFILL MEETING 103.16 EARTH BACKFILL MATERIAL. INCLUDES SINGLE SERVICE LINE PER TRENCH, TYPE A BEDDING AND HAUNCHING, AND END-OF-SERVICE CAP.
- 25 103.3 - ASPHALT REMOVAL FOR TRENCH EXCAVATION: CUT AND REMOVE (OR FULL-DEPTH MILL) ASPHALT AS SHOWN.
- 27 103.18/304/401 - PAVEMENT AND ROAD BASE REPLACEMENT: 5" HOT BITUMINOUS PAVEMENT (GRADING SX, PG 64-22 OIL), OVER 12" CLASS 6 ABC (SEE STD. DETAIL GU-03). PAID PER SY.
- 37 304 - 4" CLASS 6 ABC FOR SHOULDERS AND GRAVEL DRIVEWAYS. COMPACTED TO 90% AASHTO T-180.
- 55 629 - REFERENCE AND RESET SURVEY MONUMENT (SIXTEENTH CORNER).
- 102 CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM).
- 103 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
- 124 PROTECT EXISTING 48" RCP IN PLACE.
- 129 CONTRACTOR SHALL NOTIFY INSPECTOR WHEN AN IRRIGATION CULVERT IS ENCOUNTERED.



IF EXISTING PIPE IS IN GOOD CONDITION, CONTRACTOR SHALL:  
 SPAN/SUPPORT/PROTECT EXISTING STORMWATER/IRRIGATION CULVERT. AMEND BACKFILL WITH BENTONITE POND LINER (MIXED AS PER MFG. SPECIFICATIONS) FOR PLACEMENT AROUND CULVERT (2' ALL SIDES OF PIPE OVER EXPOSED LENGTH) DURING BACKFILL OPERATION. INCIDENTAL TO SEWER INSTALLATION PAY ITEM.  
 OR  
 108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE EXISTING CULVERT AS NEEDED FOR SANITARY SEWER INSTALLATION. THE CONNECTIONS TO EXISTING PIPE WILL BE INCIDENTAL TO CULVERT PAY ITEM.

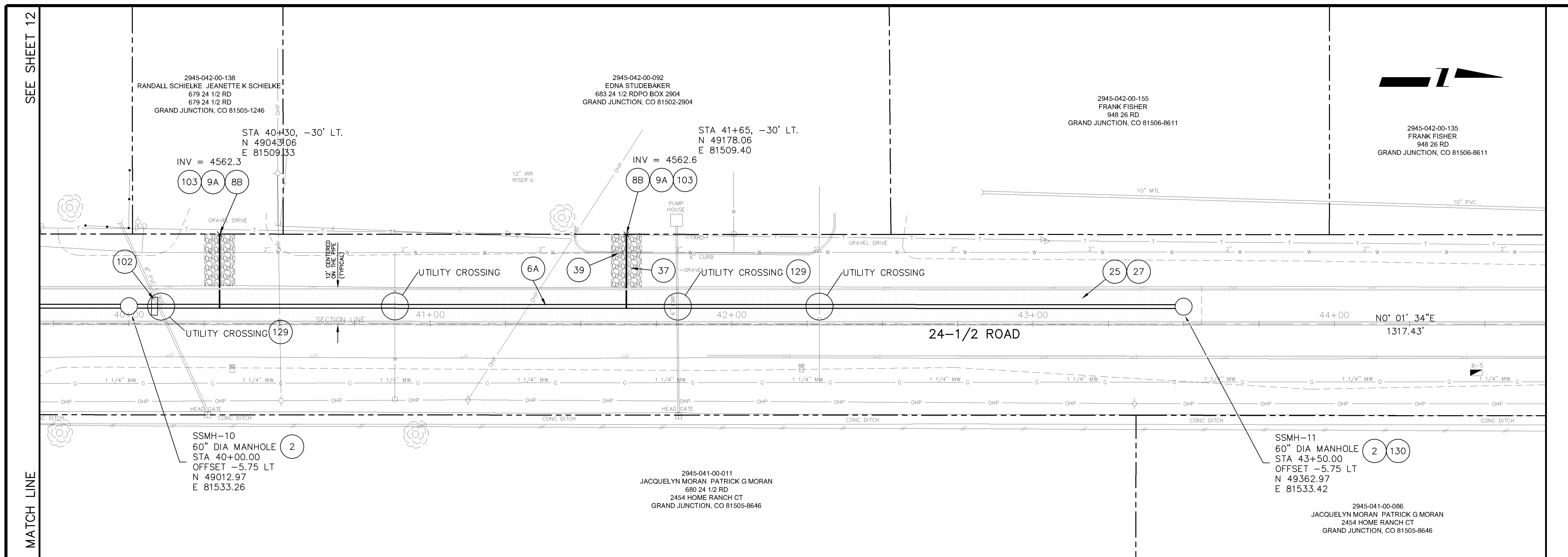
IF THE EXISTING PIPE IS IN POOR CONDITION, CONTRACTOR SHALL:  
 108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE ENTIRE LENGTH OF EXISTING CULVERT. GROUT SEAL/REPAIR AT EXISTING CONCRETE INLET/OUTLET STRUCTURE WHERE PRESENT; INCIDENTAL TO PAY ITEM.

REVISION	DESCRIPTION	DATE	DRAWN BY	CM	DATE
REVISION Δ	SAN SEW REALIGNED 26+74.59 TO 43+50 FROM 5.75' RT OF MON. LINE TO 5.75' LT OF MON. LINE	4-25-06	DPJ	DPJ	2006
REVISION Δ	AS BUILT	H7-07	DPJ	DPJ	2006
REVISION Δ					



**PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION**

**24-1/2 ROAD SEWER TRUNK LINE  
 SANITARY SEWER PLAN AND PROFILE  
 STA 35+00 TO STA 39+50**



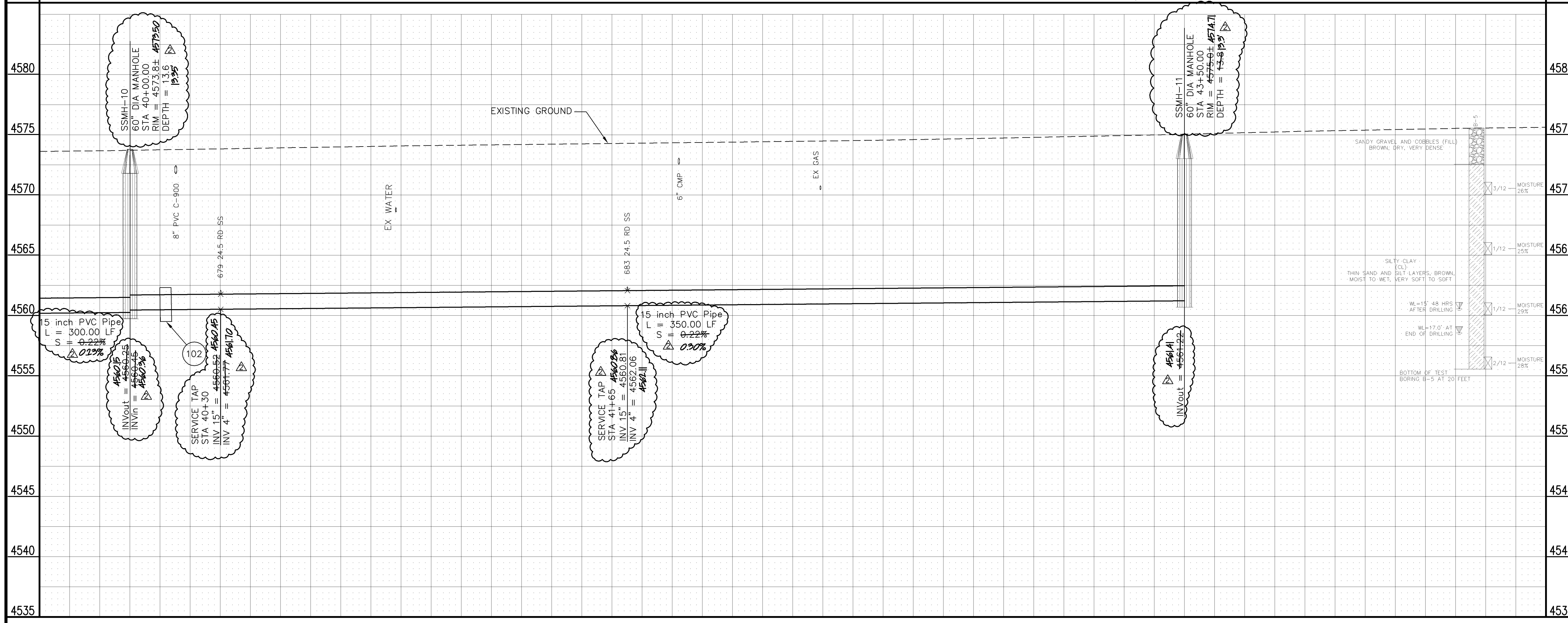
- 2 102.11/108.5 - STANDARD 60" DIAMETER SANITARY SEWER MANHOLE; INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
- 6A 102.9A - 15" GRAVITY SEWER PIPE (SDR-35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- 8B 102/103/104 - 4" SEWER SERVICE TAP, 15" X 4" FULL BODY WYE (SEE STD. DETAIL SS-06).
- 9A 102/103/104 - 4" SDR-35 PVC SANITARY SERVICE LINE WITH NATIVE BACKFILL MEETING 103.16 EARTH BACKFILL MATERIAL. INCLUDES SINGLE SERVICE LINE PER TRENCH, TYPE A BEDDING AND HAUNCHING, AND END-OF-SERVICE CAP.
- 25 103.3 - ASPHALT REMOVAL FOR TRENCH EXCAVATION: CUT AND REMOVE (OR FULL-DEPTH MILL) ASPHALT AS SHOWN.
- 27 103.18/304/401 - PAVEMENT AND ROAD BASE REPLACEMENT: 5" HOT BITUMINOUS PAVEMENT (GRADING SX, PG 64-22 OIL), OVER 12" CLASS 6 ABC (SEE STD. DETAIL GU-03). PAID PER SY.
- 37 304 - 4" CLASS 6 ABC FOR SHOULDERS AND GRAVEL DRIVEWAYS. COMPACTED TO 90% AASHTO T-180.
- 39 202/608 - REMOVE AND RESTORE CONCRETE OR ASPHALT CURBING/GUTTER/BORDER. SIZE AND STYLE VARY. MATCH EXISTING.
- 102 CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM).
- 103 CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
- 129 CONTRACTOR SHALL NOTIFY INSPECTOR WHEN AN IRRIGATION CULVERT IS ENCOUNTERED.

IF EXISTING PIPE IS IN GOOD CONDITION, CONTRACTOR SHALL:  
 SPAN/SUPPORT/PROTECT EXISTING STORMWATER/IRRIGATION CULVERT. AMEND BACKFILL WITH BENTONITE POND LINER (MIXED AS PER MFG. SPECIFICATIONS) FOR PLACEMENT AROUND CULVERT (2' ALL SIDES OF PIPE OVER EXPOSED LENGTH) DURING BACKFILL OPERATION. INCIDENTAL TO SEWER INSTALLATION PAY ITEM.

OR

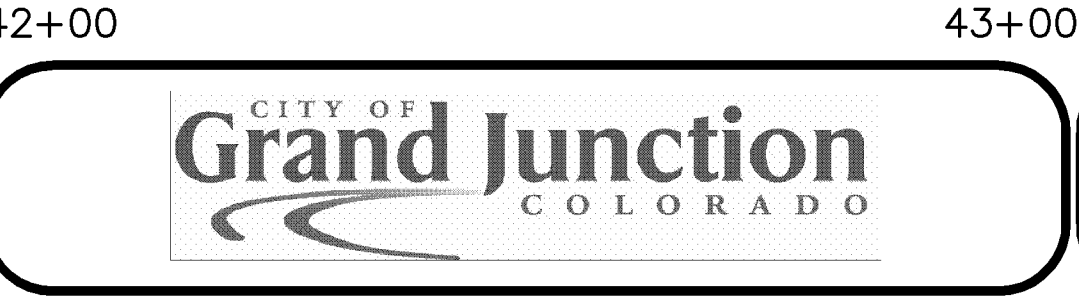
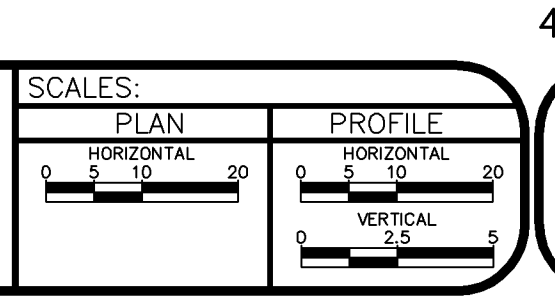
108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE EXISTING CULVERT AS NEEDED FOR SANITARY SEWER INSTALLATION. THE CONNECTIONS TO EXISTING PIPE WILL BE INCIDENTAL TO CULVERT PAY ITEM.

IF THE EXISTING PIPE IS IN POOR CONDITION, CONTRACTOR SHALL:  
 108.2/202 - (SIZE TO MATCH EXISTING) CULVERT (C-900 PVC) (INCLUDING REMOVAL OF EXISTING STORMWATER/IRRIGATION CULVERT). REPLACE ENTIRE LENGTH OF EXISTING CULVERT. GROUT SEAL/REPAIR AT EXISTING CONCRETE INLET/OUTLET STRUCTURE WHERE PRESENT; INCIDENTAL TO PAY ITEM.



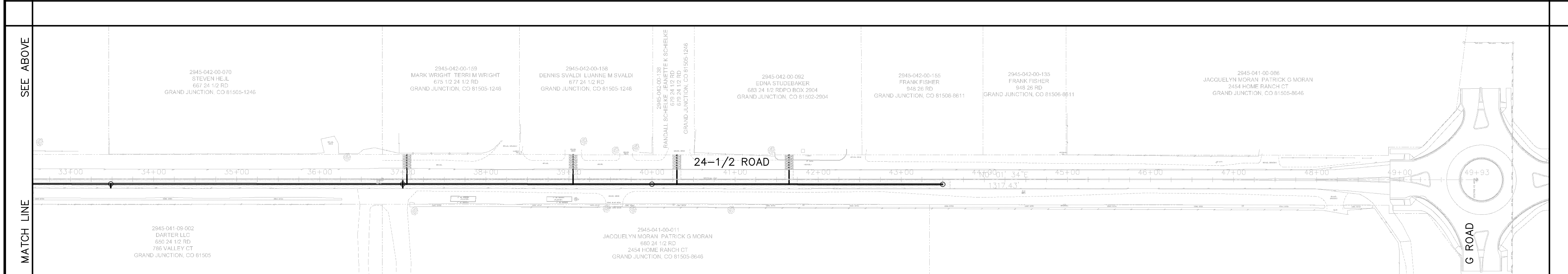
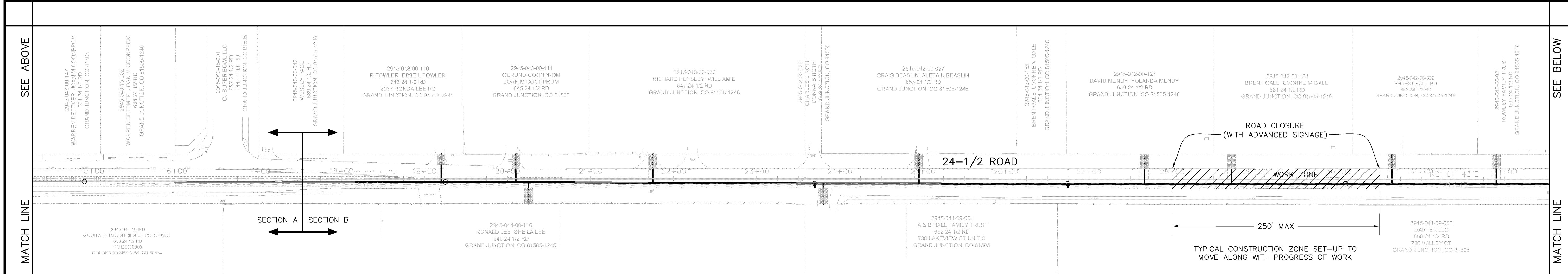
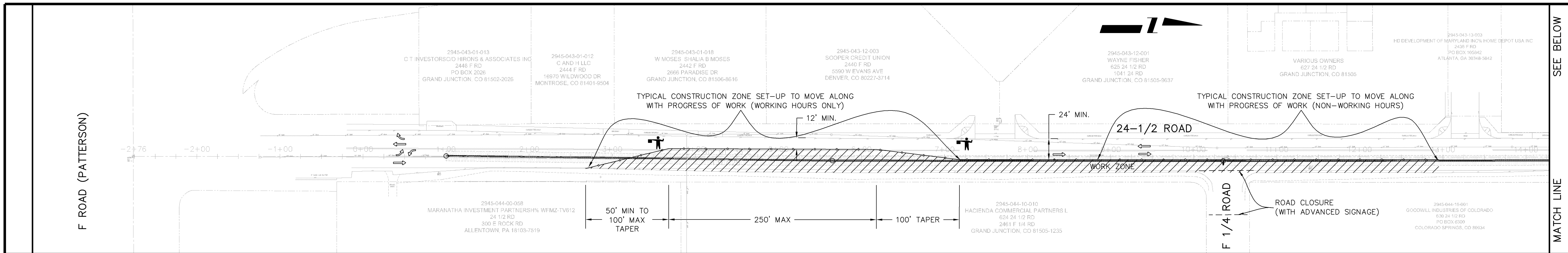
- 130 DO NOT CONSTRUCT A FORMED INVERT AT THIS MANHOLE. INSTALL "BLANK" PRECAST MANHOLE BASE WITH CONNECTION TO SOUTH ONLY.

REVISION	DESCRIPTION	DATE	DRAWN BY	CM	DATE
REVISION Δ	SAN SEW REALIGNED 26+74.59 TO 43+50 FROM 5.75' RT OF MON. LINE TO 5.75' LT OF MON. LINE	4-25-06	DESIGNED BY	DPJ	DATE 2006
REVISION Δ	AS BUILT	H7-07	CHECKED BY	DPJ	DATE 2006
REVISION Δ			APPROVED BY		DATE



**PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION**

**24-1/2 ROAD SEWER TRUNK LINE  
 SANITARY SEWER PLAN AND PROFILE  
 STA 40+00 TO STA 44+00**



**GENERAL NOTES:**

1. THIS "WORK ZONE LIMITS AND ACCESS PLAN" PROVIDES GUIDELINES AND LIMITATIONS THAT THE CONTRACTOR SHALL COMPLY WITH WHEN PREPARING THE FINAL TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL PREPARE AND SUBMIT FOR APPROVAL, A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE MUTCD AND THIS "WORK ZONE LIMITS AND ACCESS PLAN".

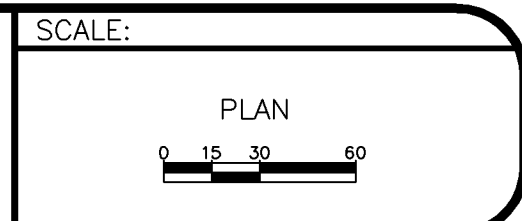
**REQUIREMENTS FOR SECTION A: STA 1+00 TO 17+25**

1. DURING WORK HOURS, FLAGGERS SHALL BE PRESENT TO MAINTAIN 2-WAY TRAFFIC PAST THE CONSTRUCTION ZONE. (MINIMUM DETOUR ROADWAY WIDTH OF 12')
2. DURING NON-WORKING HOURS, A PORTION OF THE CONSTRUCTION ZONE SUFFICIENT TO PROVIDE 2-WAY TRAFFIC WITHOUT FLAGGERS (MINIMUM DETOUR ROADWAY WIDTH OF 24') SHALL BE CLEARED. IF ASPHALT PAVEMENT HAS BEEN REMOVED, AN ALL-WEATHER, DRIVEABLE SURFACE SHALL BE MAINTAINED AT ALL TIMES.
3. REMOVAL OF ASPHALT PAVEMENT SHALL NOT EXCEED 1200 L.F. AT ANY ONE TIME. IF THE MAXIMUM DISTANCE HAS BEEN REACHED, ASPHALT PAVEMENT SHALL BE REPLACED PRIOR TO ADDITIONAL REMOVAL. (UNLESS ASPHALT PLANTS ARE NOT OPEN).
4. ACCESS TO DRIVEWAYS ON WEST SIDE OF ROAD SHALL BE MAINTAINED AT ALL TIMES.

**REQUIREMENTS FOR SECTION B: STA 17+25 TO 43+50**

1. DURING WORKING HOURS ACCESS TO INDIVIDUAL DRIVEWAYS MAY BE TEMPORARILY CLOSED WHILE THE CONSTRUCTION ZONE PROGRESSES PAST. CONTRACTOR SHALL MAKE REASONABLE EFFORTS TO ACCOMMODATE LOCAL TRAFFIC AND NOTIFY RESIDENTS AT LEAST 24 HOURS PRIOR TO TEMPORARY CLOSURE.
2. DURING NON-WORKING HOURS A PORTION OF THE CONSTRUCTION ZONE SUFFICIENT TO PROVIDE ACCESS FOR LOCAL TRAFFIC TO ALL DRIVEWAYS SHALL BE CLEARED.
3. THE CONTRACTOR IS NOT REQUIRED TO MAINTAIN THROUGH TRAFFIC PAST THE CONSTRUCTION ZONE.
4. IF ASPHALT PAVEMENT HAS BEEN REMOVED, AN ALL-WEATHER, DRIVEABLE SURFACE SHALL BE MAINTAINED AT ALL TIMES.

REVISION	DESCRIPTION	DATE	DRAWN BY	CM	DATE	2006
REVISION			DESIGNED BY	DPJ	DATE	2006
REVISION			CHECKED BY	DPJ	DATE	2006
REVISION			APPROVED BY		DATE	



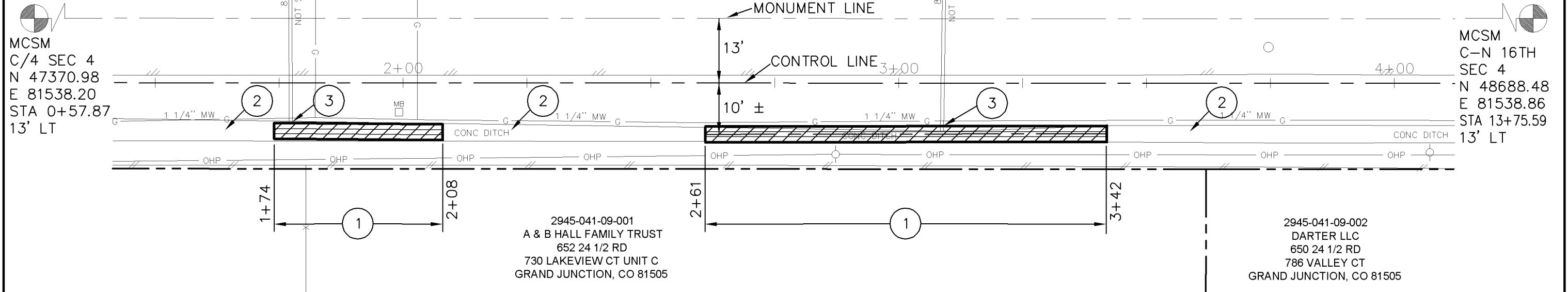
**PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION**

**24-1/2 ROAD SEWER TRUNK LINE WORK ZONE LIMITS AND ACCESS PLAN F ROAD TO G ROAD**

2945-042-00-027  
 CRAIG BEASLIN ALETA K BEASLIN  
 655 24 1/2 RD  
 GRAND JUNCTION, CO 81505-1246

2945-042-00-153  
 BRENT GALE UVONNE M GALE  
 661 24 1/2 RD  
 GRAND JUNCTION, CO 81505-1246

2945-042-00-127  
 DAVID MUNDY YOLANDA MUNDY  
 659 24 1/2 RD  
 GRAND JUNCTION, CO 81505-1246

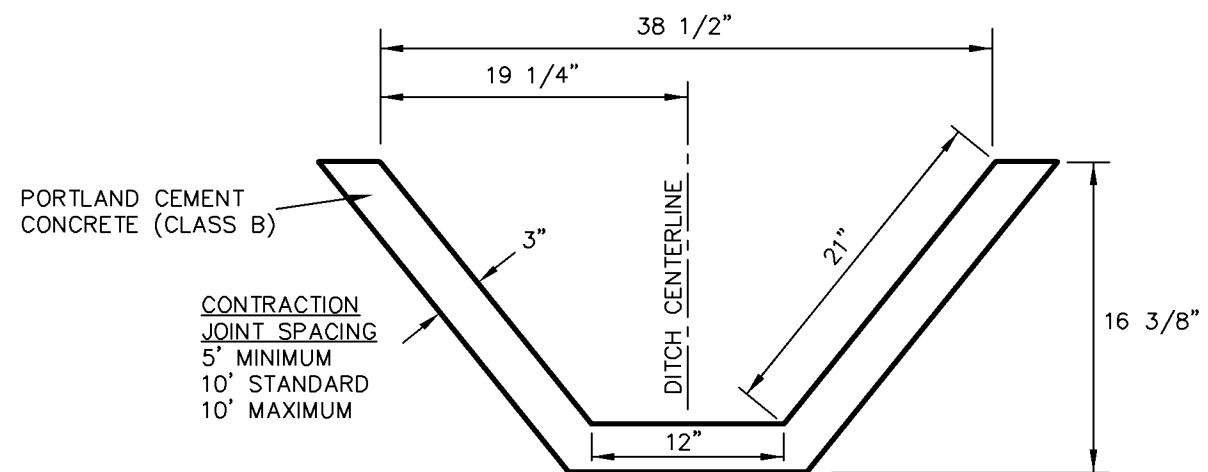


MCSM  
 C/4 SEC 4  
 N 47370.98  
 E 81538.20  
 STA 0+57.87  
 13' LT

MCSM  
 C-N 16TH  
 SEC 4  
 N 48688.48  
 E 81538.86  
 STA 13+75.59  
 13' LT

**CONSTRUCTION NOTES**

- 1 202/608 - REMOVE AND REPLACE CONCRETE IRRIGATION DITCH. REFER TO CONCRETE IRRIGATION DITCH DETAIL. EXACT LIMITS OF REMOVAL WILL BE PAINTED IN THE FIELD BY THE ENGINEER.
- 2 EXISTING CONCRETE DITCH TO REMAIN IN PLACE AND BE PROTECTED.
- 3 108.3 - 8" METAL IRRIGATION SLIDE GATE. FORM AND POUR THE SLIDE GATE INTO THE WALL OF THE CONCRETE DITCH, WARPING THE WALL AS NEEDED. CONNECT TO EXISTING 8" CMP USING A RUBBER REPAIR COUPLER. CONNECTION MAY REQUIRE UP TO 5 FEET OF NEW 8" CMP.



**CONCRETE IRRIGATION DITCH DETAIL**

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION Δ			JCS	2007
REVISION Δ			DPJ	2007
REVISION Δ			DPJ	2007
REVISION Δ				

SCALES:  
 PLAN  
 HORIZONTAL  
 1" = 20'



**PUBLIC WORKS  
 AND UTILITIES  
 ENGINEERING DIVISION**

**24-1/2 ROAD  
 CONCRETE IRRIGATION DITCH REPLACEMENT**

N:\LandProj\90825 (24.5 Rd Sewer Tank Exc)\dwg\ir Ditch Repair Feb 2007\recover.dwg, SHEET 1 of 1, 2/6/2007 4:48:00 PM