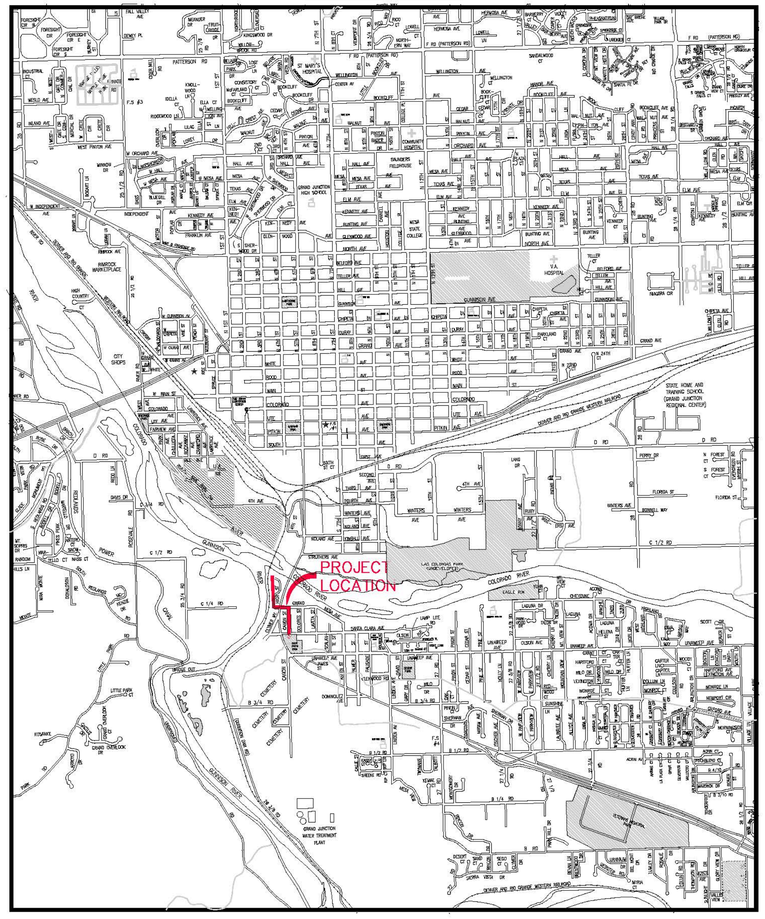
PROJECT NO. 904-F10114

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION MAY 5, 2005

AS BUILT 2007-10-17

VICINITY MAP



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	SEWER/WATER	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 BLICKMAN ROAD	2524 BLICKMAN ROAD	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 BLICKMAN ROAD	2538 BLICKMAN ROAD	GRAND JCT., CO 81504	(970) 244-2698	(970) 244-2661

CITY OF Grand Junction COLORADO

Public Works & Utilities
Engineering Division

DRAWING STATUS:
- ○ PROGRESS
- ● FINAL CONSTRUCTION DRAWINGS
- ○ ASBUILT

REVIEW BY
BRET GUILLORY, UTILITY ENGINEER — DATE

AUTHORIZED FOR CONSTRUCTION
D. PAUL JAGIM, PROJECT ENGINEER — DATE

AUTHORIZED FOR CONSTRUCTION
MIKE MCDILL, CITY ENGINEER — DATE

ACCEPTED AS CONSTRUCTED
CITY OF GRAND JUNCTION — DATE

DUCK POND PARK LIFT STATION, MAY 5, 2005 ALT, Plan Set No. —

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PROJECT NO. 904-F10114

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ABC	AGGREGATE BASE COURSE
AC	ASBESTOS CEMENT
AP	ANGLE POINT
ASB	ANCHORED STRAW BALES
ASP	ALUMINIZED STEEL PIPE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BF	BUTTERFLY VALVE
BOW	BACK OF WALK
BCR	BEGIN CURB RETURN
BOT	BOTTOM
BSWMP	BETTER STORM WATER MANAGEMENT PRACTICES
CH	CHORD
CAP	CORRUGATED ALUMINUM PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CI	CAST IRON
C,G,& SW	CURB, GUTTER & SIDEWALK
℄	CENTER LINE
CL	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COMB	COMBINATION (AS IN STORM SEWER AND SANITARY SEWER)
CONC	CONCRETE
CSM	CITY SURVEY MONUMENT
CSP	CORRUGATED STEEL PIPE
CU	COPPER
DI	DUCTILE IRON
DWY	DRIVEWAY
E	ELECTRIC
ECR	END CURB RETURN
EG	EDGE OF GUTTER
EL	ELEVATION
EP	EDGE OF PAVEMENT
EX	EXISTING
FB	FULL BODY
FC	FACE OF CURB
FG	FINISHED GRADE
℄	FLOW LINE
FL	FLANGE
FM	FORCE MAIN
FO	FIBER OPTICS
FS	FAR SIDE
FTG	FOOTING
G	GAS
GB	GRADE BREAK
GM	GAS METER
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
IRR	IRRIGATION
L	LENGTH OF ARC
LC	LONG CHORD
LF	LINEAR FEET
LL	LONG ARC
LS	SHORT ARC
LT	LEFT
MB	MAILBOX
MCSM	MESA COUNTY SURVEY MONUMENT
MH	MANHOLE
MJ	MECHANICAL JOINT
MW	MILL WRAP
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOP	NO ONE PERSON
NRCP	NON-REINFORCED CONCRETE PIPE
NS	NEAR SIDE
NTS	NOT TO SCALE
OHP	OVERHEAD POWER
OHT	OVERHEAD TELEPHONE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	POLYETHYLENE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RG	RESTRAINED GLANDS
RL	LONG RADIUS
ROW	RIGHT OF WAY
RP	RADIUS POINT
RR	RAIL ROAD
RS	SHORT RADIUS
RT	RIGHT
S	SLOPE
SAN	SANITARY
SC	SHORT CHORD
SCD	STANDARD CONTRACT DOCUMENTS
SCH	SCHEDULE
SF	SILT FENCE
SL	SECTION LINE
SSRB	STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION
SSUU	STANDARD SPECIFICATIONS FOR CONSTRUCTION OF UNDERGROUND UTILITIES
STA	STATION
STL	STEEL
STM	STORM
T	TELEPHONE
TAN	LENGTH OF TANGENT
TC	TOP OF CURB
TH	TEST HOLE
TV	TELEVISION
(TYP)	TYPICAL
UU	UNDERGROUND UTILITIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPCC	VERTICAL POINT OF COMPOUND CURVATURE
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WATER
△	DELTA ANGLE

LEGEND

BSWMP DRAINAGE BASIN BOUNDARY

BSWMP ANCHORED STRAW BALES — ASB ASB ASB ASB ASB ASB ASB

BSWMP SILT FENCE — SF SF SF SF SF SF SF

BUILDING

CONCRETE CURB AND GUTTER — 2' CURB AND GUTTER

CONCRETE CURB,GUTTER, & SIDEWALK — 7' C, G, & SW

CONCRETE DITCH — CONCRETE

CONCRETE SIDEWALK — 4' SW

CULVERT — 18" RCP

EARTH DITCH — EARTH EARTH EARTH

EDGE OF GRAVEL

EDGE OF PAVEMENT

FENCE (BARBED WIRE)

FENCE (CHAIN LINK)

FENCE (IRON)

FENCE (PLASTIC)

FENCE (TEMPORARY CONSTRUCTION)

FENCE (WOOD)

FENCE (WOVEN WIRE)

GUARD RAIL

HATCHING: INDICATES ASPHALT REMOVAL/ REPLACEMENT

HATCHING: INDICATES ABC AND/OR DECO-RATIVE ROCK AS NOTED ON PLAN

HATCHING: INDICATES SOD

HATCHING: INDICATES CONCRETE REMOVAL/ REPLACEMENT

HATCHING: INDICATES NATIVE SEED MIX

LINE (CENTER OF IMPROVEMENTS) — CENTERLINE

LINE (CITY LIMITS) — CITY LIMITS

LINE (CONTROL) — CONTROL LINE

LINE (EASEMENT)

LINE (MONUMENT/SECTION) — MONUMENT/SECTION LINE

LINE (PROPERTY)

LINE (RIGHT OF WAY)

MATCH LINE — MATCH LINE SEE SHEET NO ?

PIPE (IRRIGATION) — 4" IRR

PIPE (SIPHON) — 4" SIPHON

PROPOSED CONCRETE CURB AND GUTTER

PROPOSED CONCRETE CURB,GUTTER,& SIDEWALK

PROPOSED CONCRETE SIDEWALK

PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN) — 8" PVC SANITARY SEWER

ALL PROPOSED FEATURES NOT SHOWN IN LEGEND WILL BE SHOWN THE SAME AS THEIR EXISTING COUNTERPART, BUT INDICATED BY BOLDER LINETYPE

RAIL ROAD

RETAINING WALL — 1' RETAINING WALL

STRIPING (CONTINUOUS WHITE) — WHITE

STRIPING (DASHED WHITE) — WHITE

STRIPING (CONTINUOUS YELLOW) — YELLOW

STRIPING (DASHED YELLOW) — YELLOW

4570

TOP OF SLOPE — 4580

CONTOUR LINES (SHOWN BETWEEN TOP & TOE)

TOE OF SLOPE — 4570

TRAFFIC DETECTOR LOOP

UTILITY LINE (ABANDON) (THIS CASE A WATER LINE) — W (ABANDONED) 8" W

UTILITY LINE (CABLE TV) — TV TV

UTILITY LINE (ELECTRIC) — E E

UTILITY LINE (FIBER OPTIC) — FO QWEST FO

UTILITY LINE (GAS) — G 1 1/4" MW G

UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER) — HVOHP

UTILITY LINE (OVERHEAD POWER) — OHP

UTILITY LINE (OVERHEAD TELEPHONE) — OHT

UTILITY LINE (SANITARY SEWER) — 8" SAN

UTILITY LINE (SANITARY SEWER FORCE MAIN) — 8" FM

UTILITY LINE (SANITARY SEWER SERVICE) — SS

UTILITY LINE (STORM SEWER) — 8" STM

UTILITY LINE (STORM SEWER, PERFORATED) — 8" PERF

UTILITY LINE (STORM/SANITARY SEWER COMBINATION) — 18" COMB

UTILITY LINE (TELEPHONE) — T T

UTILITY LINE (WATER) — W 8" W

SYMBOLS

BENCH MARK — A

CATCH BASIN

CLEAN OUT

CURB STOP

FIRE HYDRANT

GUY WIRE ANCHOR

HEADGATE

IRRIGATION PUMP

MAILBOX

MANHOLE (ELECTRIC) — E

MANHOLE (GAS) — G

MANHOLE (SANITARY/STORM)

MANHOLE (TELEPHONE) — T

MANHOLE (TV) — tv

MANHOLE (WATER) — W

METER (GAS) — GM

METER (WATER)

PEDESTAL (TELEPHONE)

PEDESTAL (TV) — TV

PROPERTY PIN

PULL BOX

REDUCER FITTING

SIGN OR POST (SIGN TYPE NOTED) — STOP

SPRINKLER HEAD

STREET LIGHT

SURVEY MONUMENT (CITY) — CSM

SURVEY MONUMENT (TYPE NOTED) — MCSM

TEST HOLE — TH #1

TRAFFIC PAINT MARKING

TRAFFIC SIGNAL POLE AND MAST ARM

UTILITY POLE

VALVE (GAS) — GV

VALVE (IRRIGATION) — IRR

VALVE (WATER)

VEGETATION (HEDGE OR BUSH)

VEGETATION (TREE STUMP)

VEGETATION (TREE) (CALIPER SIZE NOTED) — 6"

WATER HYDRANT — WH

WEIR

YARD LIGHT

NORTH ARROW:

BAR SCALE:

GRAPHIC SCALE

10 0 20 40

(IN FEET)
1 inch = 20 ft.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JCS DATE 4-02
DESIGNED BY DATE
CHECKED BY DATE
APPROVED BY DATE

SCALE
PLAN: HORIZ. 1"=20'
PROFILE: HORIZ. VERT.

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

CITY OF GRAND JUNCTION
STANDARD ABBREVIATIONS, LEGEND, AND SYMBOLS SHEET

2

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PROJECT NO. 904-F10114

BID ALTERNATE A: OPEN TRENCH

ITEM NO.	CDOT/ CITY REF. NO.	DESCRIPTION	QUANTITY	UNITS
1	108.2	Imported Trench Backfill (including haul and disposal of unsuitable excavated material).	~~500~~ 4500	TON
2	108.2	~~Fly Ash Fill Material.~~	~~1068~~	~~LF~~
3	108.2	6" Pressure Sewer Pipe (C-900, CLASS 150, DR-18, PVC).	50	LF
4	108.2	4" Gravity Sewer Pipe (SDR 35 PVC).	50	LF
5	108.2	8" Gravity Sewer Pipe (SDR 35 PVC).	145	LF
6	108.2	18" Gravity Sewer Pipe (SDR 35 PVC).	115	LF
7	108.2	24" Gravity Sewer Pipe (PVC)(SDR 35 or Profile Wall).	~~880~~ 904	LF
8	108.2	24" Gravity Sewer Pipe (PVC)(SDR 35 or Profile Wall)(In Steel Casing).	~~1172~~ 1068	LF
9	108.2	~~40" Dia. Steel Casing (Roll Plate, 1/2" wall thickness).~~	~~1068~~	~~LF~~
10	108.2	12" Irrigation Pipe (C-900, CLASS 150, DR-18, PVC).	35	LF
11	108.2	6" Water Main (C-900, CLASS 150, DR-18, PVC).	31	LF
12	108.2	24" Water Main (C-905, CLASS 165, DR-25, PVC).	695	LF
13	108.3	6" x 4" Sewer Service Connection.	3	EA
14	108.3	Cap Existing Water Service.	6	EA
15	108.3	6" DIP 90 degree bend.	1	EA
16	108.3	6" DIP 22 1/2 degree bend.	2	EA
17	108.3	24" DIP 90 degree bend.	1	EA
18	108.3	24" DIP 45 degree bend.	2	EA
19	108.3	24" PVC 45 degree bend.	1	EA
20	108.3	24" x 24" x 6" DIP Tee.	1	EA
21	108.3	24" x 16" Eccentric Reducer.	1	EA
22	108.3	6" Gate Valve.	1	EA
23	108.3	24" Butterfly Valve.	2	EA
24	108.4	3/4" Water Service Line (Type K Copper).	365	LF
25	108.4	24" x 3/4" Tapping Saddle.	12	EA
26	108.4	3/4" Corporation Stop.	12	EA
27	108.5	Connect to Existing Manhole (18" pipe).	1	EA
28	108.5	Connect to Existing Manhole (24" pipe).	1	EA
29	108.5	Temporary Manhole for Bypass Pumping (48" I.D.).	1	EA
30	108.5	Basic Manhole Components (48" I.D.)(Monitoring MH including 2" Sch 80 PVC Conduit).	1	EA
31	108.5	Sanitary Sewer Basic Manhole Components (48" I.D.)(Force Main Outlet).	1	EA
32	108.5	Manhole Barrel (D > 5') (48" I.D.)(Force Main Outlet).	1	LF
33	108.5	Sanitary Sewer Basic Manhole Components (60" I.D.).	8	EA
34	108.5	Manhole Barrel (D > 5') (60" I.D.).	132	LF
35	108.7	Granular Stabilization Material (Type B).	250	TON
36	201	Clearing and Grubbing.	1	LS
37	202	Abandon Manhole.	2	EA
38	202	Remove Structure/Obstruction.	1	LS
39	202	Remove Pipe.	1026	LF
40	202	Remove Valve and Return to City.	3	EA
41	202	Removal of Asphalt Pavement.	1540	SY
42	202	Abandon 18" Sanitary Sewer Pipe.	1	LS
43	202	Abandon 16" Sanitary Sewer Force Main.	1	LS
44	108.8/203	Rock Excavation.	4100	CY
45	207	Topsoil (6" thick).	281	SY
46	209	Dust Abatement.	90	DAY
47	210	Reset Sprinkler System.	1	LS
48	210	Reset Post.	7	EA
49	212	Sod.	281	SY
50	304	Aggregate Base Course (Class 6)(4" thick).	1555	SY
51	304	Aggregate Base Course (Class 6)(6" thick).	1540	SY
52	401	Hot Bituminous Pavement (Grading SX, Binder Grade PG 64-22).	530	TON
53	620	Portable Sanitary Facility.	1	EA
54	625	Construction Surveying.	1	LS
55	626	~~Mobilization.~~	~~1~~	~~LS~~
56	629	Survey Monument (Complete in Place)(City Survey Monument).	1	EA
57	630	Traffic Control (Complete in Place).	1	LS
58	630	Traffic Control Plan.	1	LS
59	630	~~Flagging.~~	~~2000~~	~~Hour~~

BID ALTERNATE B: BORING

ITEM NO.	CDOT/ CITY REF. NO.	DESCRIPTION	QUANTITY	UNITS
1	108.2	Imported Trench Backfill (including haul and disposal of unsuitable excavated material).	2000	TON
2	108.2	Fly Ash Fill Material.	1680	LF
3	108.2	6" Pressure Sewer Pipe (C-900, CLASS 150, DR-18, PVC).	50	LF
4	108.2	4" Gravity Sewer Pipe (SDR 35 PVC).	50	LF
5	108.2	8" Gravity Sewer Pipe (SDR 35 PVC).	145	LF
6	108.2	18" Gravity Sewer Pipe (SDR 35 PVC).	115	LF
7	108.2	24" Gravity Sewer Pipe (PVC)(SDR 35 or Profile Wall).	372	LF
8	108.2	24" Gravity Sewer Pipe (PVC)(SDR 35 or Profile Wall)(In Steel Casing).	1680	LF
9	108.2	40" Dia. Steel Casing (Roll Plate, 1/2" wall thickness).	1680	LF
10	108.2	6" Water Main (C-900, CLASS 150, DR-18, PVC).	31	LF
11	108.2	24" Water Main (C-905, CLASS 165, DR-25, PVC).	695	LF
12	108.3	6" x 4" Sewer Service Connection.	3	EA
13	108.3	Cap Existing Water Service.	6	EA
14	108.3	6" DIP 90 degree bend.	1	EA
15	108.3	6" DIP 22 1/2 degree bend.	2	EA
16	108.3	24" DIP 90 degree bend.	1	EA
17	108.3	24" DIP 45 degree bend.	2	EA
18	108.3	24" PVC 45 degree bend.	1	EA
19	108.3	24" x 24" x 6" DIP Tee.	1	EA
20	108.3	24" x 16" Eccentric Reducer.	1	EA
21	108.3	6" Gate Valve.	1	EA
22	108.3	24" Butterfly Valve.	2	EA
23	108.4	3/4" Water Service Line (Type K Copper).	365	LF
24	108.4	24" x 3/4" Tapping Saddle.	12	EA
25	108.4	3/4" Corporation Stop.	12	EA
26	108.5	Connect to Existing Manhole (18" pipe).	1	EA
27	108.5	Connect to Existing Manhole (24" pipe).	1	EA
28	108.5	Temporary Manhole for Bypass Pumping (48" I.D.).	1	EA
29	108.5	Basic Manhole Components (48" I.D.)(Monitoring MH including 2" Sch 80 PVC Conduit).	1	EA
30	108.5	Sanitary Sewer Basic Manhole Components (48" I.D.)(Force Main Outlet).	1	EA
31	108.5	Manhole Barrel (D > 5') (48" I.D.)(Force Main Outlet).	1	LF
32	108.5	Sanitary Sewer Basic Manhole Components (60" I.D.).	8	EA
33	108.5	Manhole Barrel (D > 5') (60" I.D.).	132	LF
34	108.7	Granular Stabilization Material (Type B).	250	TON
35	201	Clearing and Grubbing.	1	LS
36	202	Abandon Manhole.	2	EA
37	202	Remove Structure/Obstruction.	1	LS
38	202	Remove Pipe.	441	LF
39	202	Remove Valve and Return to City.	3	EA
40	202	Removal of Asphalt Pavement.	1065	SY
41	202	Abandon 18" Sanitary Sewer Pipe.	1	LS
42	202	Abandon 16" Sanitary Sewer Force Main.	1	LS
43	108.8/203	Rock Excavation.	2000	CY
44	207	Topsoil (6" thick).	281	SY
45	209	Dust Abatement.	60	DAY
46	210	Reset Sprinkler System.	1	LS
47	210	Reset Post.	7	EA
48	212	Sod.	281	SY
49	304	Aggregate Base Course (Class 6)(4" thick).	570	SY
50	304	Aggregate Base Course (Class 6)(6" thick).	1065	SY
51	401	Hot Bituminous Pavement (Grading SX, Binder Grade PG 64-22).	450	TON
52	620	Portable Sanitary Facility.	1	EA
53	625	Construction Surveying.	1	LS
54	626	Mobilization.	1	LS
55	629	Survey Monument (Complete in Place)(City Survey Monument).	1	EA
56	630	Traffic Control (Complete in Place).	1	LS
57	630	Traffic Control Plan.	1	LS
58	630	Flagging.	2000	Hour

CO1-1 — 108.2 Revised Fly Ash Fill Material. — 1172 LF
CO1-2 — 108.2 42" or 48" Dia. Steel Casing (Roll Plate, 375" wall thickness). — 1172 LF
CO1-3 — 626 Revised Mobilization. — 1 LS
CO2-1 — 108.3 4" Gate Valve. — 1 EA
CO2-2 — 108.3 6" Gate Valve. — 5 EA
CO2-3 — 108.3 24" Butterfly Valve. — 3 EA
CO2-4 — 108.3 24" DIP 90 degree bend. — 1 EA
CO2-5 — 108.3 24" x 24" x 6" x 6" DIP Cross. — 1 EA
CO2-6 — 108.3 6" x 6" x 6" DIP Tee. — 1 EA
CO2-7 — 108.3 24" x 24" x 16" DIP Tee. — 1 EA
CO2-8 — 108.3 24" x 24" x 6" DIP Tee. — 1 EA
CO2-9 — 108.3 24" x 24" x 4" DIP Tee. — 1 EA
CO2-10 — 108.3 24" x 24" x 24" DIP Tee. — 1 EA
CO2-11 — 108.3 4" Water Main (C-900, CLASS 150, DR-18, PVC.) — 35 LF
CO2-12 — 108.3 Fire Hydrant. — 1 EA
CO2-13 — 108.2 6" Storm Drain (C-900, CLASS 150, DR-18, PVC). — 20 LF

DESCRIPTION	DATE
REVISION 1 CHANGES TO QUANTITIES PER CHANGE ORDERS 1 & 2	5/5/05
REVISION 2	
REVISION 3	

DRAWN BY _____ DATE _____
DESIGNED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALE
N.T.S.

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION
SUMMARY OF APPROXIMATE QUANTITIES

3

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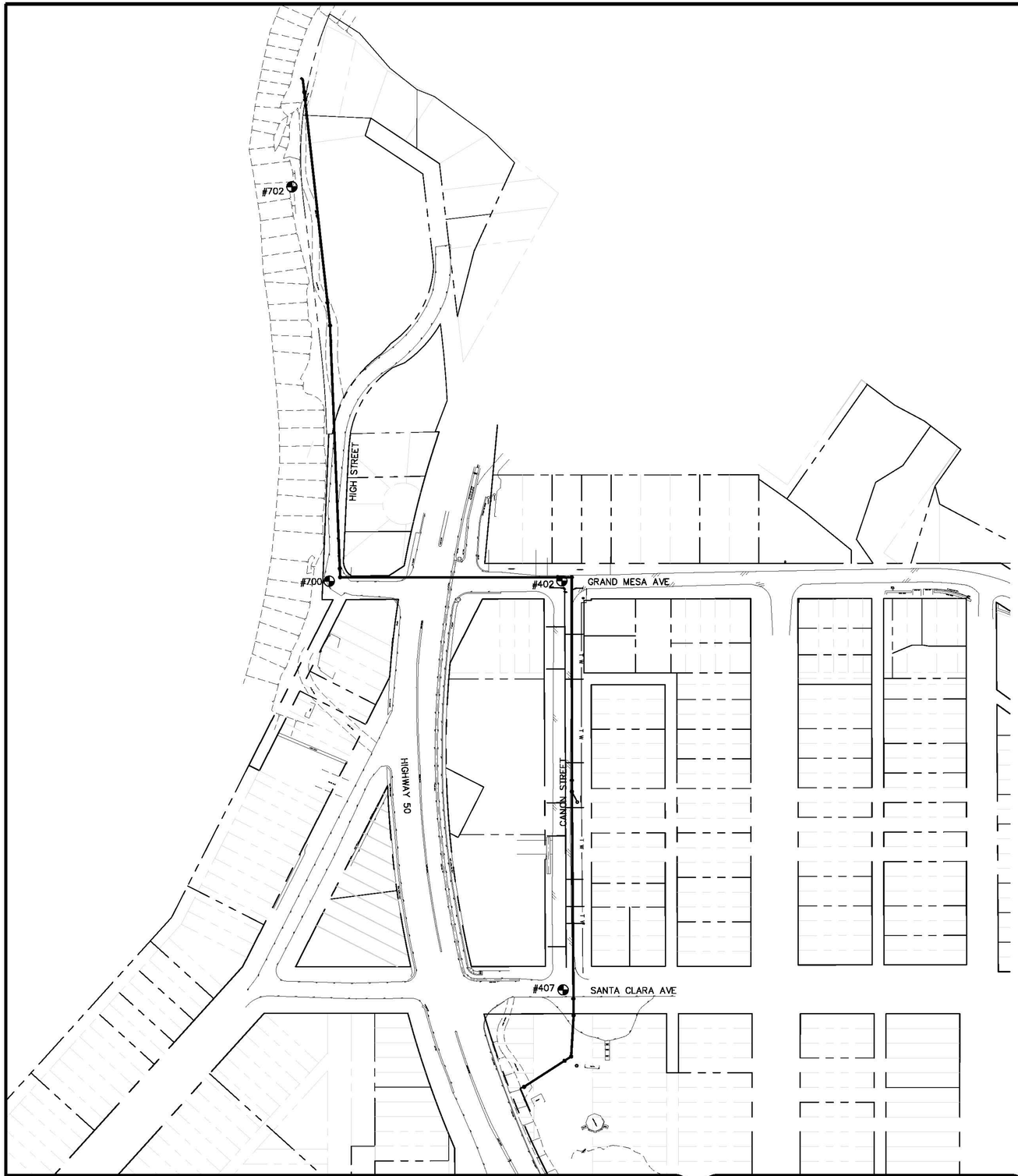
PROJECT NO. 904-F10114



PROJECT CONTROL DATA

POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
702	30876.29	90338.28	2+82.29	38.43	4628.05	NO 5 REBAR MARKED DOE 1 AT THE EAST TOP OF BANK OF THE UNION PACIFIC RAILROAD
700	30208.76	90401.55			4629.01	GIS HINGE NAIL AT THE SOUTHWEST CORNER OF HIGH STREET
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT AT THE INTERSECTION OF CANON AND GRAND MESA AVE
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT AT THE INTERSECTION OF CANON AND SANTA CLARA

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY _____ DATE _____
DESIGNED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALE
N.T.S.

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

DUCK POND PARK LIFT STATION
ELIMINATION AND GRAVITY SEWER CONSTRUCTION
SURVEY CONTROL PLAN

4

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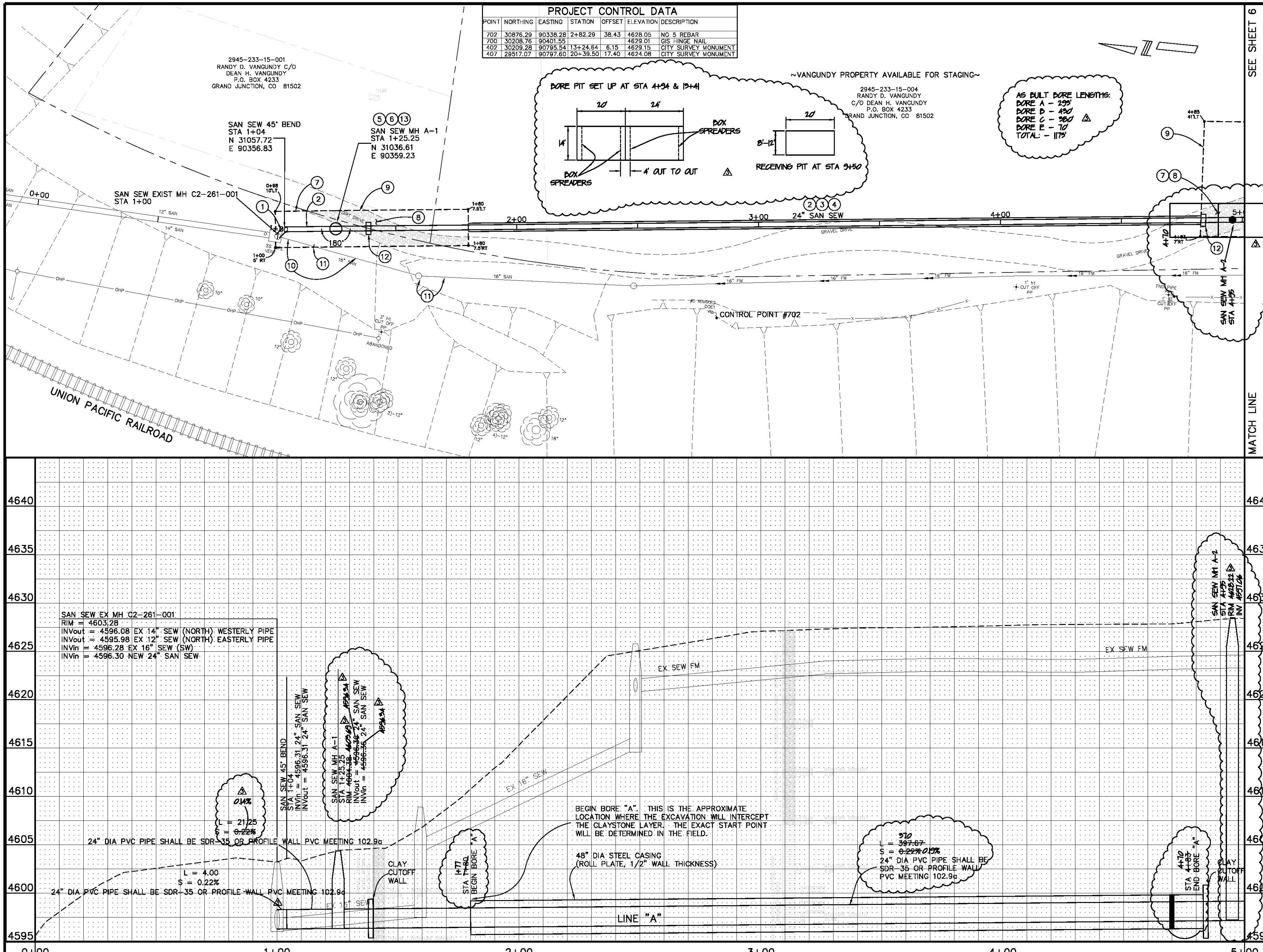
PROJECT CONTROL DATA

POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
702	30876.29	90338.28	2+82.29	38.43	4628.05	NO 5 REBAR
700	30208.76	90401.55			4629.01	GIS HINGE NAIL
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT

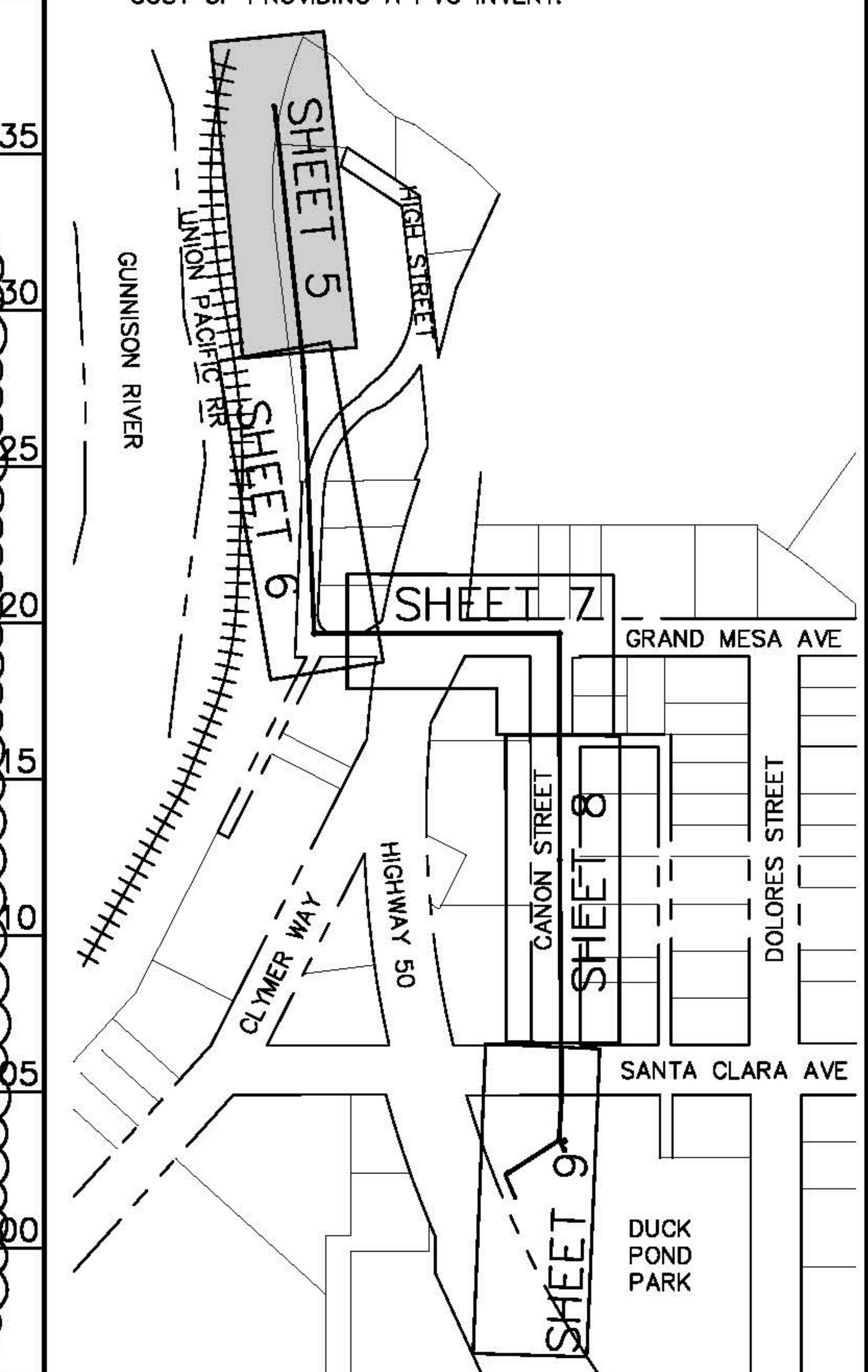


2945-233-15-001
RANDY D. VANGUNDY C/O
DEAN H. VANGUNDY
P.O. BOX 4233
GRAND JUNCTION, CO 81502
BORE PIT SET UP AT STA 4+94 & 13+41
BOX SPREADERS
4' OUT TO OUT
RECEIVING PIT AT STA 9+50
~VANGUNDY PROPERTY AVAILABLE FOR STAGING~
2945-233-15-004
RANDY D. VANGUNDY
C/O DEAN H. VANGUNDY
P.O. BOX 4233
GRAND JUNCTION, CO 81502
AS BUILT BORE LENGTHS:
BORE A - 295
BORE B - 430
BORE C - 380
BORE E - 70
TOTAL: - 1175
SAN SEW 45° BEND
STA 1+04
N 31057.72
E 90356.83
SAN SEW MH A-1
STA 1+25.25
N 31036.61
E 90359.23
SAN SEW EXIST MH C2-261-001
STA 1+00
24" SAN SEW
CONTROL POINT #702
UNION PACIFIC RAILROAD
SEE SHEET 6
MATCH LINE
SAN SEW EX MH C2-261-001
RIM = 4603.28
INVout = 4596.08 EX 14" SEW (NORTH) WESTERLY PIPE
INVout = 4595.98 EX 12" SEW (NORTH) EASTERLY PIPE
INVin = 4596.28 EX 16" SEW (SW)
INVin = 4596.30 NEW 24" SAN SEW
24" DIA PVC PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a
L = 4.00
S = 0.22%
CLAY CUTOFF WALL
BEGIN BORE "A". THIS IS THE APPROXIMATE LOCATION WHERE THE EXCAVATION WILL INTERCEPT THE CLAYSTONE LAYER. THE EXACT START POINT WILL BE DETERMINED IN THE FIELD.
48" DIA STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)
EX SEW FM
EX 16" SEW
LINE "A"
24" DIA PVC PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a
SAN SEW MH A-2

PROJECT NO. 904-F10114

CONSTRUCTION NOTES

1. 102.9A/102.11 – 45° BEND, 24" GRAVITY SEWER PIPE (SDR-35 PVC) CONNECT TO EXISTING MANHOLE (24" PIPE)
2. 102.9A – 24" GRAVITY SEWER PIPE. PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a.
3. 102.9A – 48" DIA. STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)
4. 104.2A – INSTALL SEWER PIPE BY BORING AND JACKING. SET CARRIER PIPE TO GRADE USING CUSTOM STEEL SUPPORTS AND FILL ANNULAR SPACE WITH FLY ASH MIXTURE PER PROJECT SPECIAL PROVISIONS. SEAL ENDS OF CASING TO FACILITATE INSTALLATION OF FLY ASH MIXTURE.
5. 102.11 – SANITARY SEWER BASIC MANHOLE COMPONENTS (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
6. 102.11 – MANHOLE BARREL (D>5') (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
7. 103.14 – BACKFILL EXCAVATIONS WITH NATIVE MATERIAL MEETING 103.16 EARTH BACKFILL MATERIAL.
8. 304 – AGGREGATE BASE COURSE (CLASS 6) (4" THICK)
9. LIMITS OF EXCAVATION
10. EXISTING MANHOLE CONTAINS A BAFFLE WALL WHICH DIVERTS THE MAJORITY OF SEWAGE FLOWS FROM THE 16" UPSTREAM GRAVITY SEWER TO THE 14" DOWNSTREAM GRAVITY SEWER. THE BAFFLE WALL WILL NEED TO BE TEMPORARLY EXTENDED UP DURING THE CONNECTION OF THE 24" PVC TO THE EXISTING MANHOLE SO AS TO DIVERT ALL SEWER FLOWS INTO THE 14" DOWNSTREAM GRAVITY SEWER PIPE, ELIMINATE FLOWS TO THE OTHER 12" DOWNSTREAM GRAVITY SEWER PIPE, AND THEREBY FREE UP THE THE MANHOLE ON THE EASTERLY SIDE OF THE BAFFLE FOR WORK.
11. ABANDON EXISTING 16" FORCE MAIN SEWER. MARK END OF EXISTING REMAINING SEWER PIPE WITH 4 X 4 GREEN TREATED TIMBER POST. ALL MANHOLES ON FORCE MAIN SHALL REMAIN IN PLACE.
12. 103.10 – CUTOFF WALL. THE CONTRACT UNIT PRICE FOR GRAVITY SEWER PIPE SHALL INCLUDE THE COST OF CUTOFF WALLS.
13. PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE PROVIDING A PVC INVERT. THE CONTRACT UNIT PRICE FOR SANITARY SEWER BASIC MANHOLE SHALL INCLUDE THE COST OF PROVIDING A PVC INVERT.



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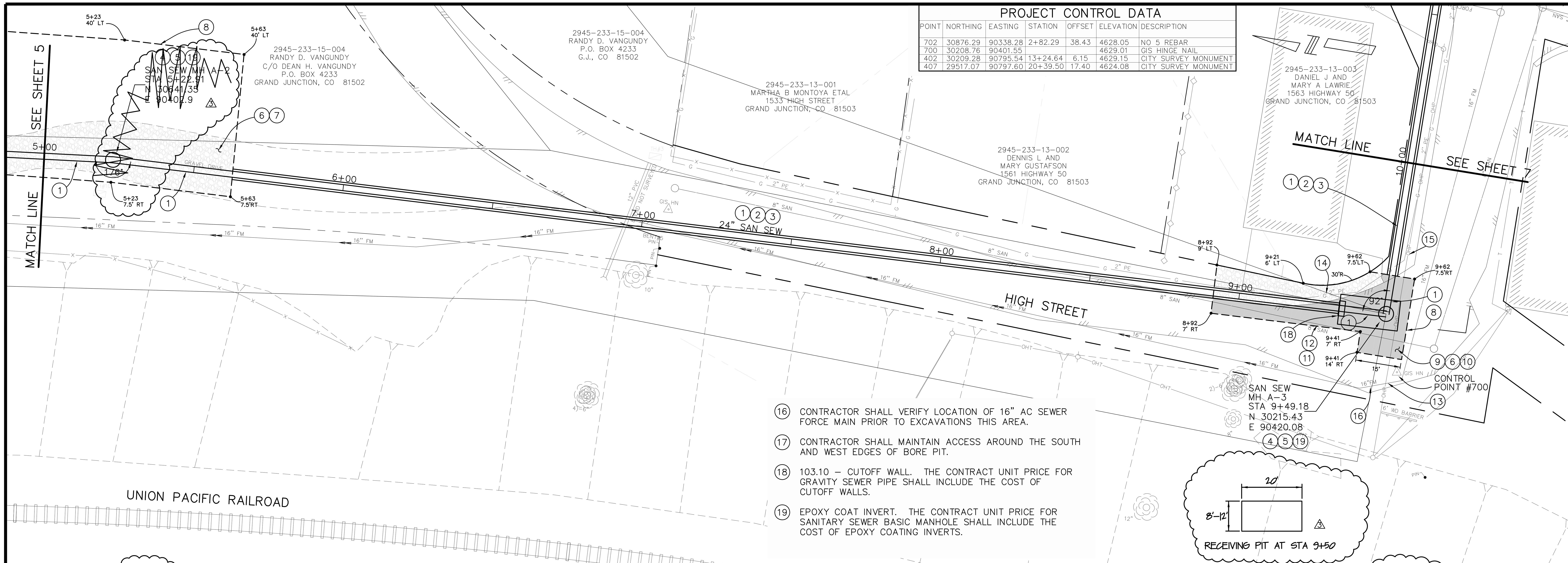
APPROVED BY ____ DATE ____

SCALES: PLAN HORIZONTAL 0 5 10 20; PROFILE HORIZONTAL 0 5 10 20, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION SANITARY SEWER PLAN AND PROFILES ADJACENT TO UNION PACIFIC RAILROAD



PROJECT CONTROL DATA

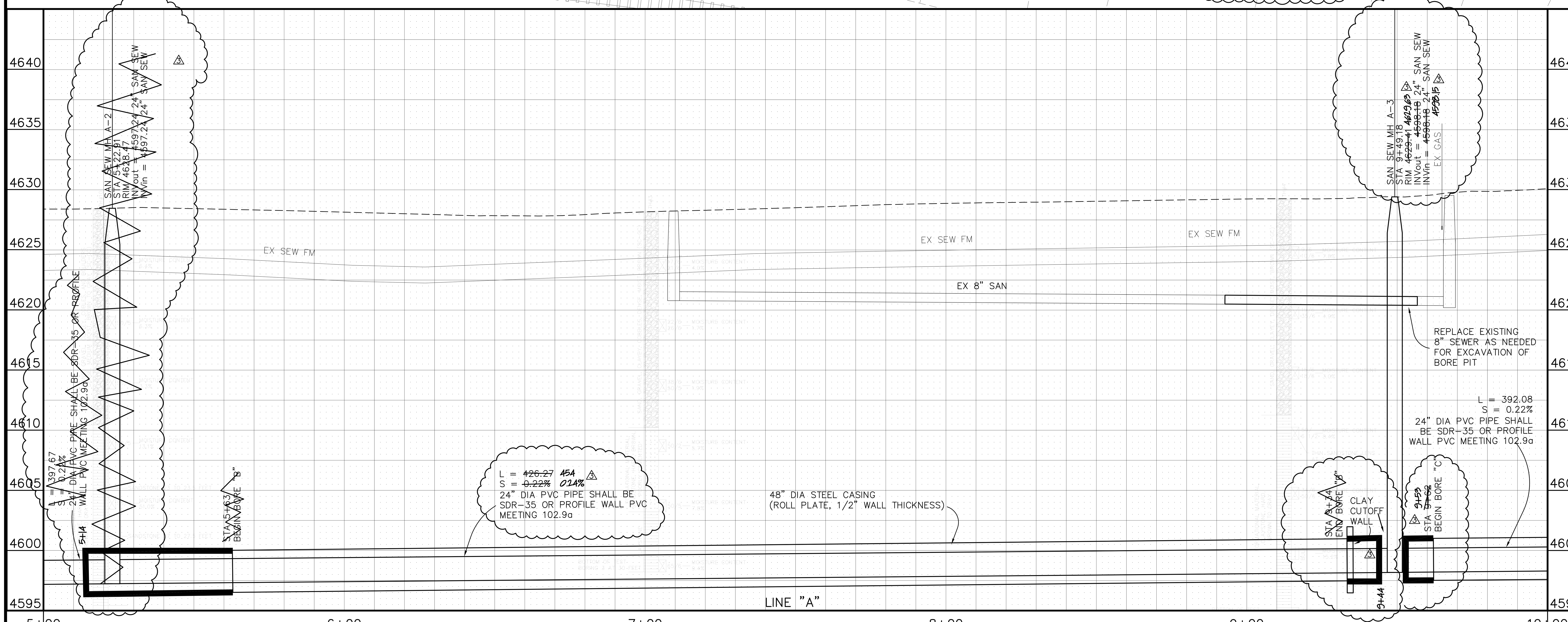
POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
702	30876.29	90338.28	2+82.29	38.43	4628.05	NO 5 REBAR
700	30208.76	90401.55			4629.01	GIS HINGE NAIL
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT

(16) CONTRACTOR SHALL VERIFY LOCATION OF 16" AC SEWER FORCE MAIN PRIOR TO EXCAVATIONS THIS AREA.

(17) CONTRACTOR SHALL MAINTAIN ACCESS AROUND THE SOUTH AND WEST EDGES OF BORE PIT.

(18) 103.10 – CUTOFF WALL. THE CONTRACT UNIT PRICE FOR GRAVITY SEWER PIPE SHALL INCLUDE THE COST OF CUTOFF WALLS.

(19) EPOXY COAT INVERT. THE CONTRACT UNIT PRICE FOR SANITARY SEWER BASIC MANHOLE SHALL INCLUDE THE COST OF EPOXY COATING INVERTS.



CONSTRUCTION NOTES

(1) 102.9A – 24" GRAVITY SEWER PIPE. PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a.

(2) 102.9A – 48" DIA. STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)

(3) 104.2A – INSTALL SEWER PIPE BY BORING AND JACKING. SET CARRIER PIPE TO GRADE USING CUSTOM STEEL SUPPORTS AND FILL ANNULAR SPACE WITH FLY ASH MIXTURE PER PROJECT SPECIAL PROVISIONS. SEAL ENDS OF CASING TO FACILITATE INSTALLATION OF FLY ASH MIXTURE.

(4) 102.11 – SANITARY SEWER BASIC MANHOLE COMPONENTS (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).

(5) 102.11 – MANHOLE BARREL (D>5') (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).

(6) 103.14 – BACKFILL EXCAVATIONS WITH NATIVE MATERIAL MEETING 103.16 EARTH BACKFILL MATERIAL.

(7) 304 – AGGREGATE BASE COURSE (CLASS 6) (4" THICK)

(8) LIMITS OF EXCAVATION

(9) 103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT AS SHOWN.

(10) 401–HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL GU-03)

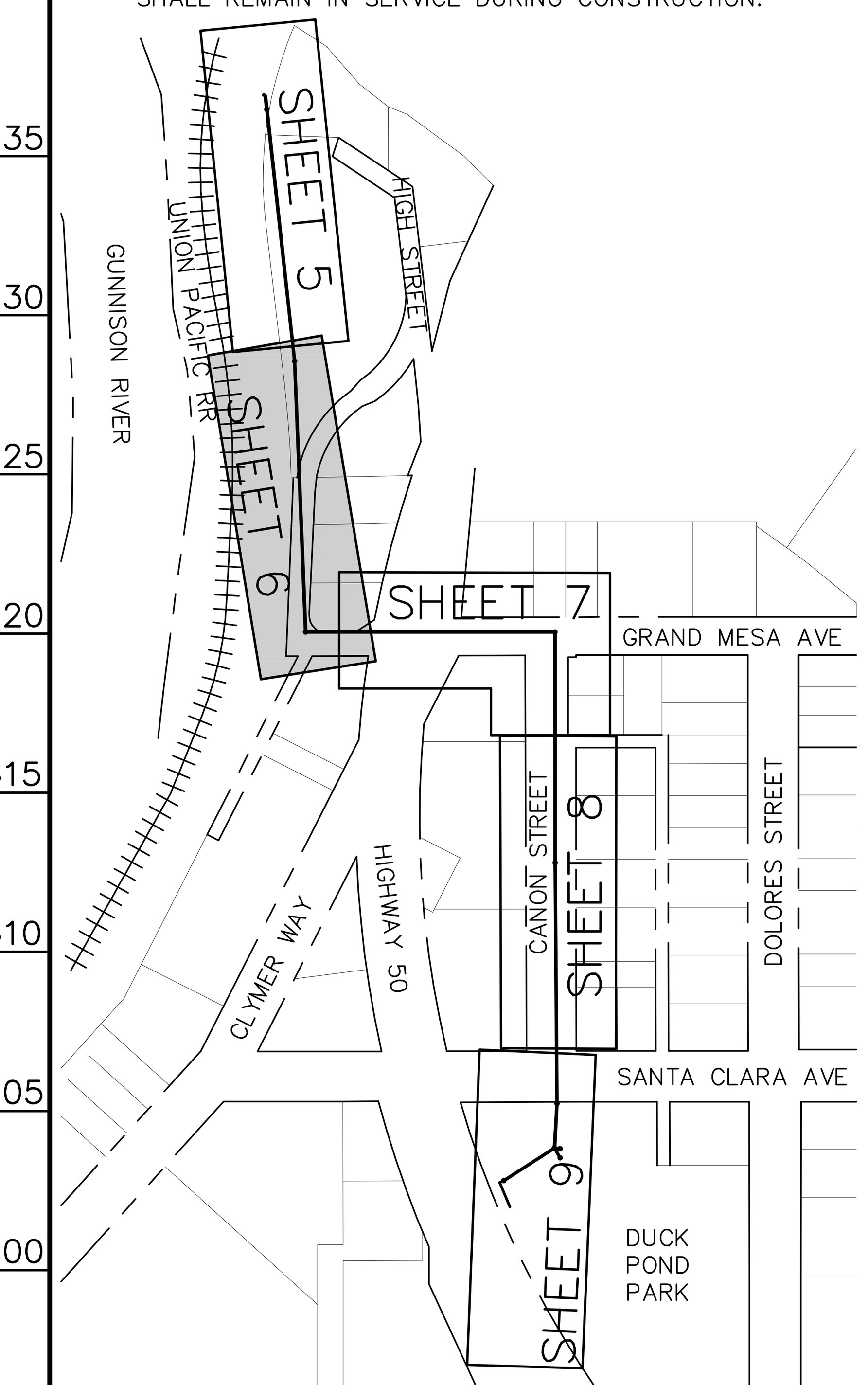
(11) 202 – REMOVE PIPE AS NEEDED FOR EXCAVATION.

(12) 102.9A – 8" GRAVITY SEWER PIPE (SDR-35 PVC).
4" GRAVITY SEWER PIPE (SDR-35 PVC).
SERVICE "Y" CONNECTION
REPLACE SEWER MAIN AND SEWER SERVICE AS NEEDED FOR EXCAVATION OF BORE PIT. 8" SANITARY SEWER AND 4" SANITARY SEWER SERVICE TO 1563 HIGHWAY 50 SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. THE COST OF CONNECTIONS TO EXISTING PIPE AND BYPASS PUMPING SEWER FLOWS WILL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED AND PAID FOR SEPARATELY.

(13) PROTECT 16" AC SEWER FORCE MAIN. 16" AC SEWER FORCE MAIN SHALL REMAIN IN SERVICE DURING CONSTRUCTION.

(14) EXISTING GAS LINE TO BE RELOCATED BY EXCEL ENERGY.

(15) PROTECT OVERHEAD POWER LINE. OVERHEAD POWER LINE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.



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CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION SANITARY SEWER PLAN AND PROFILES HIGH STREET

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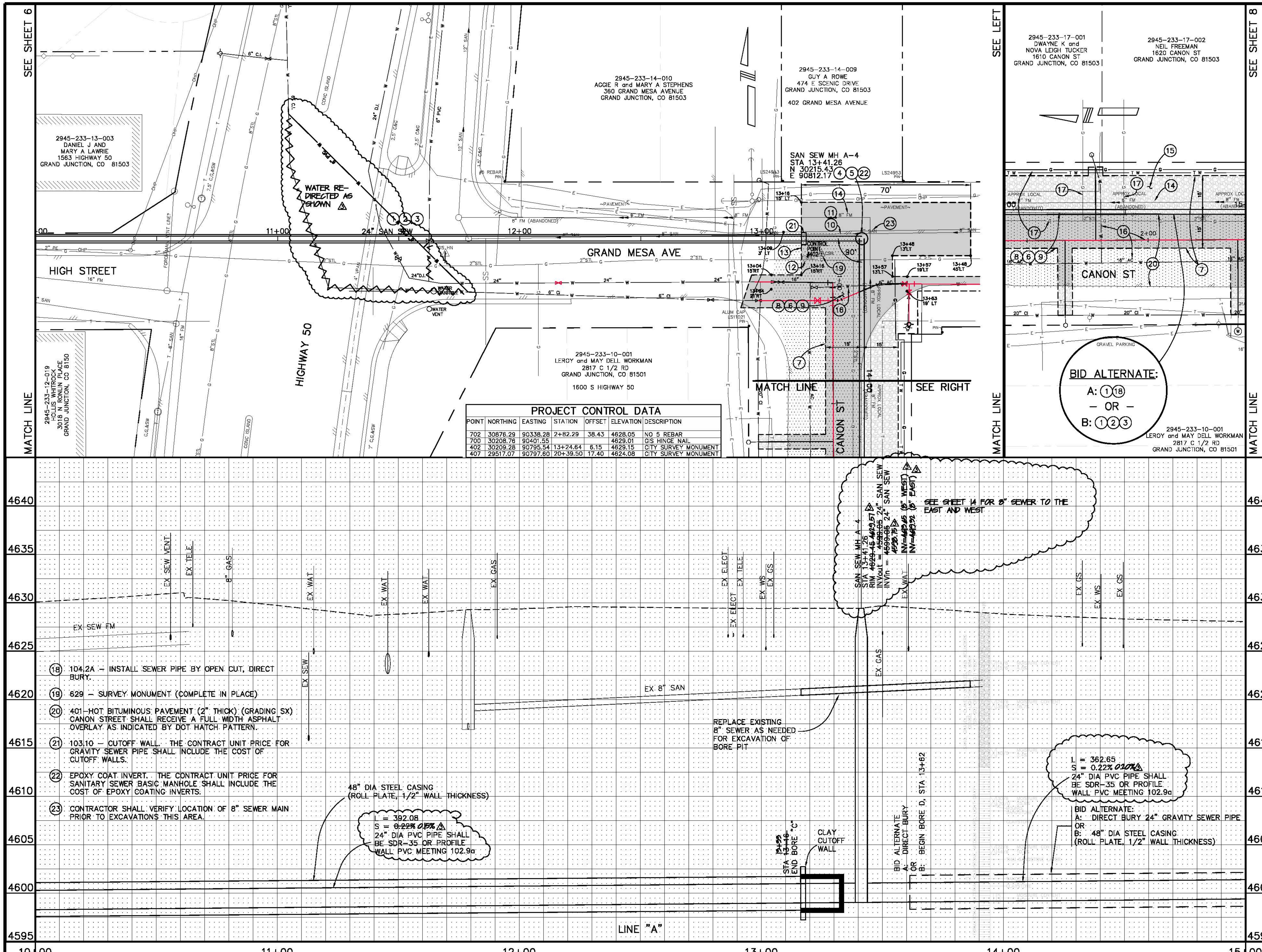

SEE SHEET 6
MATCH LINE
2945-233-13-003
DANIEL J AND
MARY A LAWRIE
1563 HIGHWAY 50
GRAND JUNCTION, CO 81503
2945-233-12-019
HOLLIS WHITROCK
3018 N RONLIN PLACE
GRAND JUNCTION, CO 81504
2945-233-14-010
AGGIE R and MARY A STEPHENS
360 GRAND MESA AVENUE
GRAND JUNCTION, CO 81503
2945-233-14-009
GUY A ROWE
474 E SCENIC DRIVE
GRAND JUNCTION, CO 81503
402 GRAND MESA AVENUE
2945-233-10-001
LEROY and MAY DELL WORKMAN
2817 C 1/2 RD
GRAND JUNCTION, CO 81501
1600 S HIGHWAY 50
WATER RE-DIRECTED AS SHOWN
HIGH STREET
HIGHWAY 50
GRAND MESA AVE
CANON ST
SAN SEW MH A-4
STA 13+41.26
N 30215.43
E 90812.17
MATCH LINE
SEE RIGHT
SEE LEFT
2945-233-17-001
DWAYNE K and
NOVA LEIGH TUCKER
1610 CANON ST
GRAND JUNCTION, CO 81503
2945-233-17-002
NEIL FREEMAN
1620 CANON ST
GRAND JUNCTION, CO 81503
BID ALTERNATE:
A: 1 18
- OR -
B: 1 2 3
2945-233-10-001
LEROY and MAY DELL WORKMAN
2817 C 1/2 RD
GRAND JUNCTION, CO 81501
SEE SHEET 8
MATCH LINE
SEE SHEET 14 FOR 8" SEWER TO THE EAST AND WEST
EX SEW FM
EX 8" SAN
REPLACE EXISTING 8" SEWER AS NEEDED FOR EXCAVATION OF BORE PIT
48" DIA STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)
L = 392.08
S = 0.22%
24" DIA PVC PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a
STA 13+16 END BORE "C"
CLAY CUTOFF WALL
BID ALTERNATE
A: DIRECT BURY
OR
B: BEGIN BORE D, STA 13+62
L = 362.65
S = 0.22%
24" DIA PVC PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a
BID ALTERNATE:
A: DIRECT BURY 24" GRAVITY SEWER PIPE
OR
B: 48" DIA STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)
LINE "A"
10+00
11+00
12+00
13+00
14+00
15+00

PROJECT CONTROL DATA

POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
702	30876.29	90338.28	2+82.29	38.43	4628.05	NO 5 REBAR
700	30208.76	90401.55			4629.01	GIS HINGE NAIL
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT

(18) 104.2A – INSTALL SEWER PIPE BY OPEN CUT, DIRECT BURY.

(19) 629 – SURVEY MONUMENT (COMPLETE IN PLACE)

(20) 401–HOT BITUMINOUS PAVEMENT (2" THICK) (GRADING SX) CANON STREET SHALL RECEIVE A FULL WIDTH ASPHALT OVERLAY AS INDICATED BY DOT HATCH PATTERN.

(21) 103.10 – CUTOFF WALL. THE CONTRACT UNIT PRICE FOR GRAVITY SEWER PIPE SHALL INCLUDE THE COST OF CUTOFF WALLS.

(22) EPOXY COAT INVERT. THE CONTRACT UNIT PRICE FOR SANITARY SEWER BASIC MANHOLE SHALL INCLUDE THE COST OF EPOXY COATING INVERTS.

(23) CONTRACTOR SHALL VERIFY LOCATION OF 8" SEWER MAIN PRIOR TO EXCAVATIONS THIS AREA.

PROJECT NO. 904–F10114

CONSTRUCTION NOTES

(1) 102.9A – 24" GRAVITY SEWER PIPE. PIPE SHALL BE SDR–35 OR PROFILE WALL PVC MEETING 102.9a.

(2) 102.9A – 48" DIA. STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)

(3) 104.2A – INSTALL SEWER PIPE BY BORING AND JACKING. SET CARRIER PIPE TO GRADE USING CUSTOM STEEL SUPPORTS AND FILL ANNULAR SPACE WITH FLY ASH MIXTURE PER PROJECT SPECIAL PROVISIONS. SEAL ENDS OF CASING TO FACILITATE INSTALLATION OF FLY ASH MIXTURE.

(4) 102.11 – SANITARY SEWER BASIC MANHOLE COMPONENTS (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS–02).

(5) 102.11 – MANHOLE BARREL (D>5') (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS–02).

(6) 103.14 – BACKFILL EXCAVATIONS WITH NATIVE MATERIAL MEETING 103.16 EARTH BACKFILL MATERIAL.

(7) LIMITS OF EXCAVATION

(8) 103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT AS SHOWN.

(9) 401–HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL GU–03)

(10) 202 – REMOVE PIPE AS NEEDED FOR EXCAVATION.

(11) 102.9A – 8" GRAVITY SEWER PIPE (SDR–35 PVC). REPLACE AS NEEDED FOR EXCAVATION OF BORE PIT. 8" SANITARY SEWER SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. THE COST OF CONNECTIONS TO EXISTING PIPE AND BYPASS PUMPING SEWER FLOWS WILL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED AND PAID FOR SEPARATELY.

(12) GAS LINE RESET BY OTHERS.

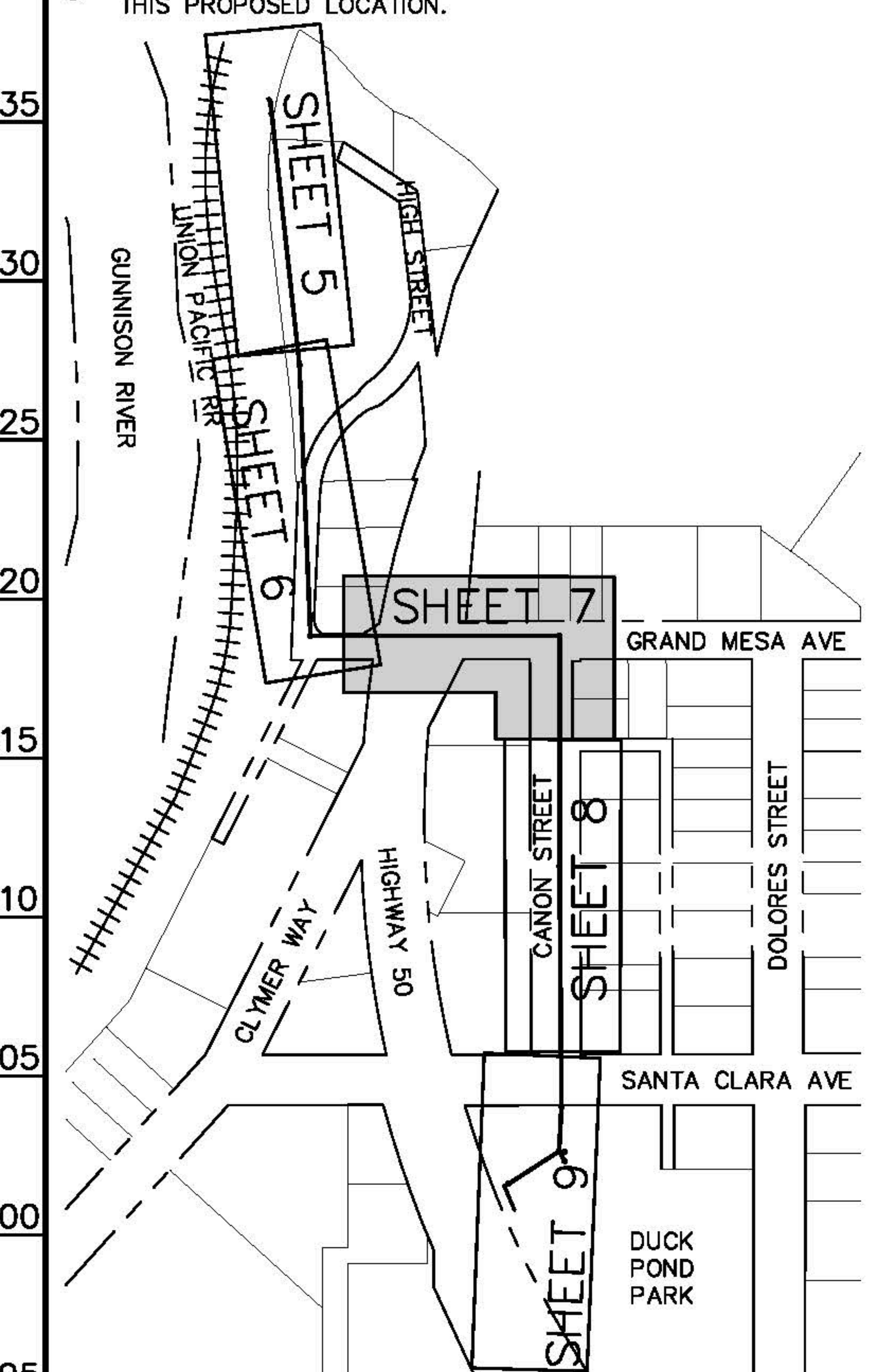
(13) LIMITS OF EXCAVATION. IF THE BORE ALTERNATE IS SELECTED, ACCESS PIT DIMENSIONS AND LOCATIONS MAY BE SELECTED BY THE CONTRACTOR BUT MUST BE WITHIN THE LIMITS OF EXCAVATION.

(14) 202 – REMOVE PIPE – ABANDONED 8" FORCE MAIN TO BE REMOVED AS NEEDED FOR EXCAVATION.

(15) 304 – AGGREGATE BASE COURSE (CLASS 6) (4" THICK)

(16) SEE SHEET 10 FOR WATER LINE REPLACEMENT

(17) EXISTING GAS LINE TO BE RELOCATED BY XCEL ENERGY TO THIS PROPOSED LOCATION.



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CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

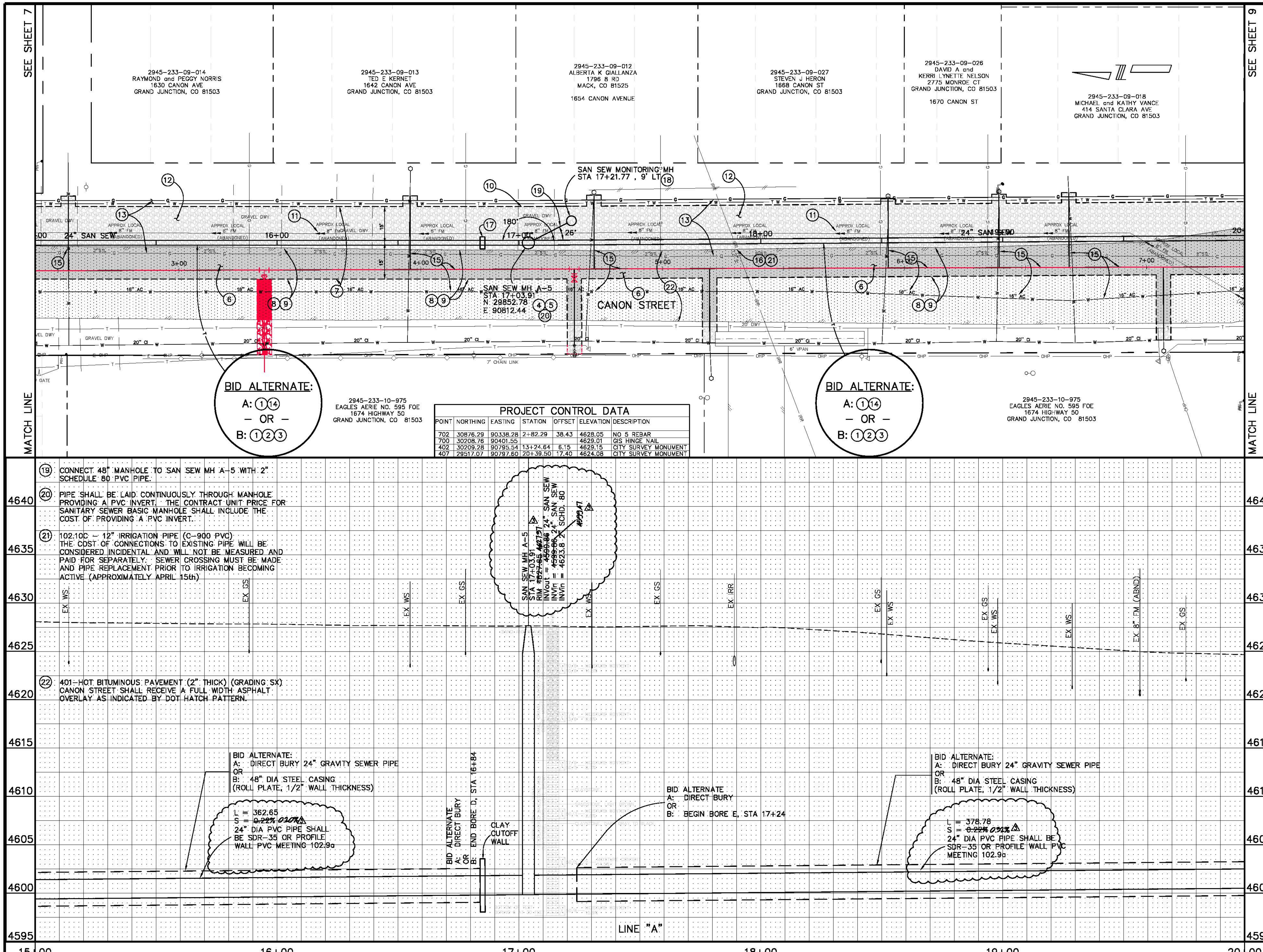
DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION
SANITARY SEWER PLAN AND PROFILES
HIGH ST, GRAND MESA AVE, AND CANON ST

7

PROJECT NO. 904-F10114

CONSTRUCTION NOTES

1. 102.9A – 24" GRAVITY SEWER PIPE. PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a.
2. 102.9A – 48" DIA. STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)
3. 104.2A – INSTALL SEWER PIPE BY BORING AND JACKING. SET CARRIER PIPE TO GRADE USING CUSTOM STEEL SUPPORTS AND FILL ANNULAR SPACE WITH FLY ASH MIXTURE PER PROJECT SPECIAL PROVISIONS. SEAL ENDS OF CASING TO FACILITATE INSTALLATION OF FLY ASH MIXTURE.
4. 102.11 – SANITARY SEWER BASIC MANHOLE COMPONENTS (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
5. 102.11 – MANHOLE BARREL (D>5') (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
6. 103.14 – BACKFILL EXCAVATIONS WITH NATIVE MATERIAL MEETING 103.16 EARTH BACKFILL MATERIAL.
7. LIMITS OF EXCAVATION
8. 103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT AS SHOWN.
9. 401-HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL GU-03)
10. LIMITS OF EXCAVATION. IF THE BORE ALTERNATE IS SELECTED, ACCESS PIT DIMENSIONS AND LOCATIONS MAY BE SELECTED BY THE CONTRACTOR BUT MUST BE WITHIN THE LIMITS OF EXCAVATION.
11. 202 – REMOVE PIPE – ABANDONED 8" FORCE MAIN TO BE REMOVED AS NEEDED FOR EXCAVATION.
12. 304 – AGGREGATE BASE COURSE (CLASS 6) (4" THICK)
13. EXISTING GAS LINE TO BE RELOCATED BY XCEL ENERGY TO THIS PROPOSED LOCATION.
14. 104.2A – INSTALL SEWER PIPE BY OPEN CUT, DIRECT BURY.
15. SEE SHEET 10 FOR WATER LINE REPLACEMENT
16. 202 – REMOVE PIPE AS NEEDED FOR EXCAVATION.
17. 103.10 – CUTOFF WALL. THE CONTRACT UNIT PRICE FOR GRAVITY SEWER PIPE SHALL INCLUDE THE COST OF CUTOFF WALLS.
18. 102.11 – SANITARY SEWER BASIC MANHOLE COMPONENTS (48" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02). RIM=4627.8, FLOOR=4623.8 (NO FORMED INVERT)



SEE SHEET 7
MATCH LINE
SEE SHEET 9
MATCH LINE
2945-233-09-014
RAYMOND and PEGGY NORRIS
1630 CANON AVE
GRAND JUNCTION, CO 81503
2945-233-09-013
TED E KERNET
1642 CANON AVE
GRAND JUNCTION, CO 81503
2945-233-09-012
ALBERTA K GIALLANZA
1796 8 RD
MACK, CO 81525
1654 CANON AVENUE
2945-233-09-027
STEVEN J HERON
1668 CANON ST
GRAND JUNCTION, CO 81503
2945-233-09-026
DAVID A and
KERRI LYNETTE NELSON
2775 MONROE CT
GRAND JUNCTION, CO 81503
1670 CANON ST
2945-233-09-018
MICHAEL and KATHY VANCE
414 SANTA CLARA AVE
GRAND JUNCTION, CO 81503
SAN SEW MONITORING MH
STA 17+21.77 , 9' LT
24" SAN SEW
SAN SEW MH A-5
STA 17+03.91
N 29852.78
E 90812.44
CANON STREET
7' CHAIN LINK
BID ALTERNATE:
A: 1 14
– OR –
B: 1 2 3
2945-233-10-975
EAGLES AERIE NO. 595 FOE
1674 HIGHWAY 50
GRAND JUNCTION, CO 81503
19 CONNECT 48" MANHOLE TO SAN SEW MH A-5 WITH 2" SCHEDULE 80 PVC PIPE.
20 PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE PROVIDING A PVC INVERT. THE CONTRACT UNIT PRICE FOR SANITARY SEWER BASIC MANHOLE SHALL INCLUDE THE COST OF PROVIDING A PVC INVERT.
21 102.10C – 12" IRRIGATION PIPE (C-900 PVC) THE COST OF CONNECTIONS TO EXISTING PIPE WILL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED AND PAID FOR SEPARATELY. SEWER CROSSING MUST BE MADE AND PIPE REPLACEMENT PRIOR TO IRRIGATION BECOMING ACTIVE (APPROXIMATELY APRIL 15th)
22 401-HOT BITUMINOUS PAVEMENT (2" THICK) (GRADING SX) CANON STREET SHALL RECEIVE A FULL WIDTH ASPHALT OVERLAY AS INDICATED BY DOT HATCH PATTERN.
SAN SEW MH A-5
STA 17+03.91
RIM = 4627.65
INVout = 4599.86 24" SAN SEW
INVin = 4599.86 24" SAN SEW
INVin = 4623.8 2" SCHD. 80
BID ALTERNATE:
A: DIRECT BURY 24" GRAVITY SEWER PIPE
OR
B: 48" DIA STEEL CASING
(ROLL PLATE, 1/2" WALL THICKNESS)
L = 362.65
S = 0.22% 0.20%
24" DIA PVC PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a
BID ALTERNATE
A: DIRECT BURY
OR
B: END BORE D, STA 16+84
CLAY CUTOFF WALL
BID ALTERNATE
A: DIRECT BURY
OR
B: BEGIN BORE E, STA 17+24
L = 378.78
S = 0.22% 0.32%
24" DIA PVC PIPE SHALL BE SDR-35 OR PROFILE WALL PVC MEETING 102.9a
LINE "A"
4640
4635
4630
4625
4620
4615
4610
4605
4600
4595
15+00
16+00
17+00
18+00
19+00
20+00

PROJECT CONTROL DATA

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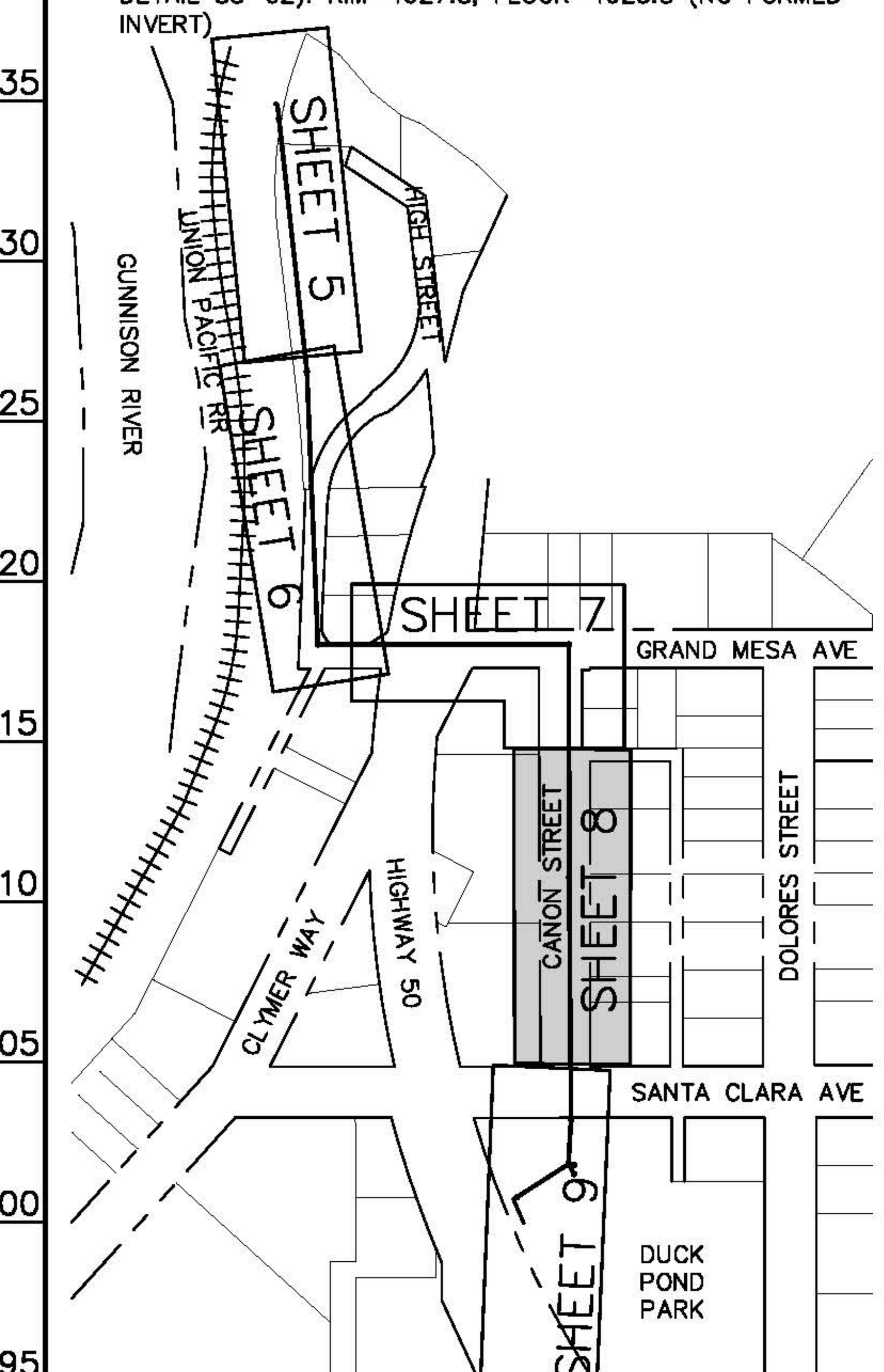
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT



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CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION
SANITARY SEWER PLAN AND PROFILES
CANON STREET

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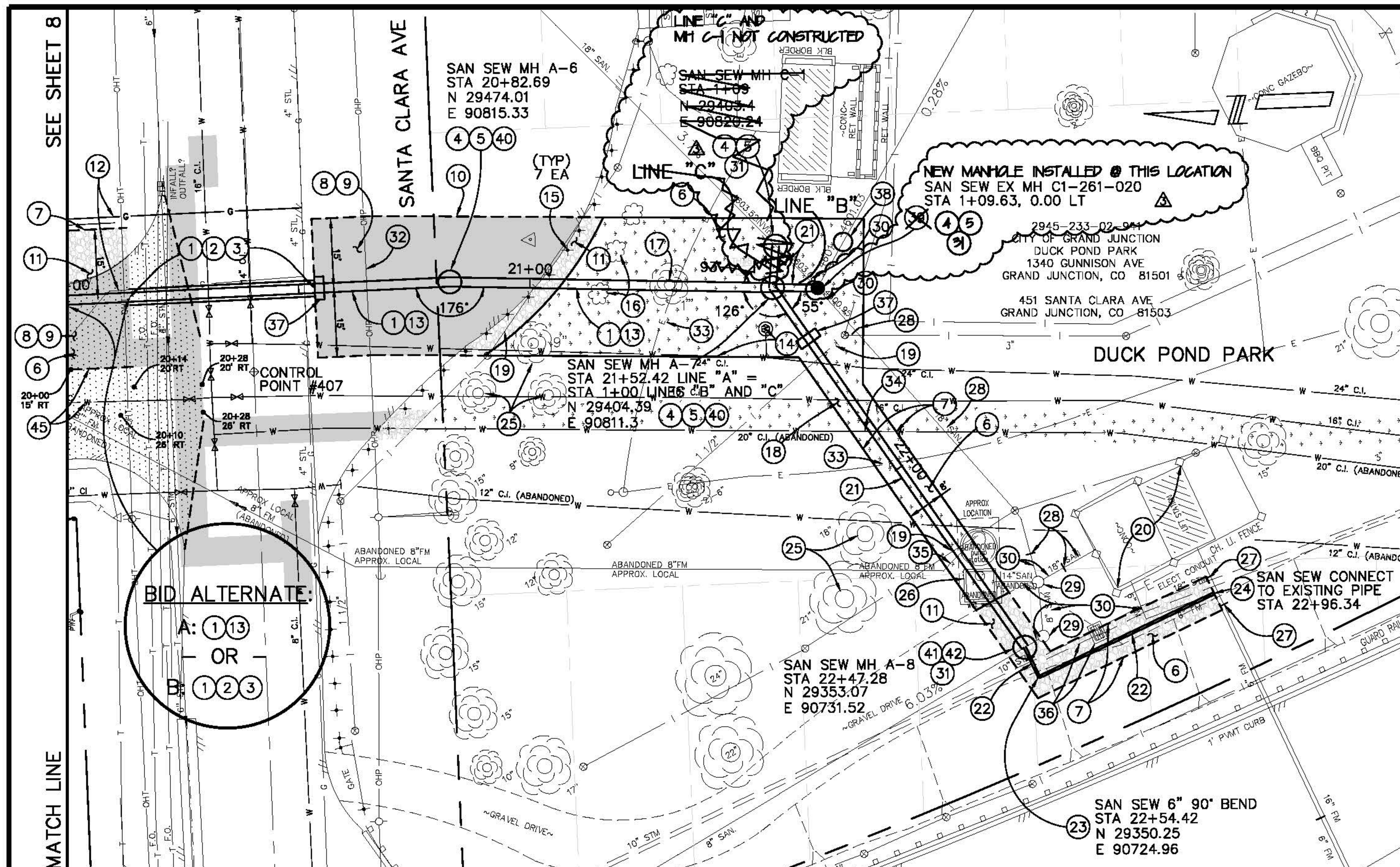


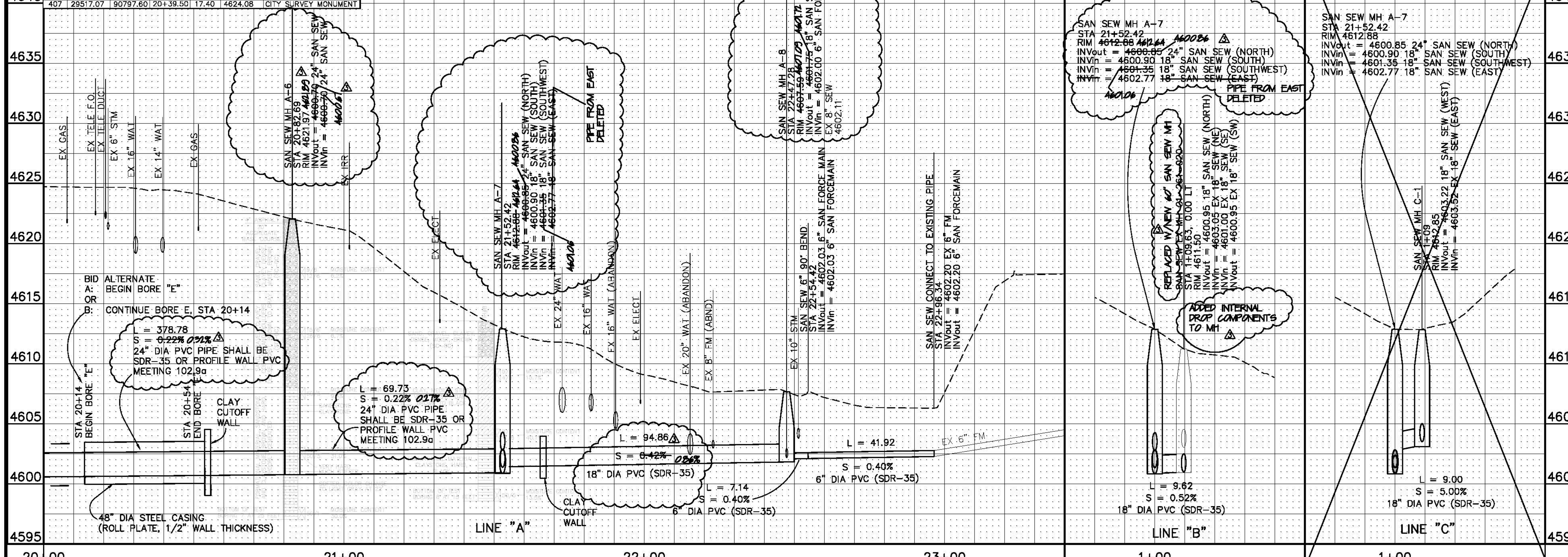
1. 102.9A – 24" GRAVITY SEWER PIPE. PIPE SHALL BE SDR–35 OR PROFILE WALL PVC MEETING 102.9a.
2. 102.9A – 48" DIA. STEEL CASING (ROLL PLATE, 1/2" WALL THICKNESS)
3. 104.2A – INSTALL SEWER PIPE BY BORING AND JACKING. SET CARRIER PIPE TO GRADE USING CUSTOM STEEL SUPPORTS AND FILL ANNULAR SPACE WITH FLY ASH MIXTURE PER PROJECT SPECIAL PROVISIONS. SEAL ENDS OF CASING TO FACILITATE INSTALLATION OF FLY ASH MIXTURE.
4. 102.11 – SANITARY SEWER BASIC MANHOLE COMPONENTS (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS–02).
5. 102.11 – MANHOLE BARREL (D>5') (60" I.D.) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS–02).
6. 103.14 – BACKFILL EXCAVATIONS WITH NATIVE MATERIAL MEETING 103.16 EARTH BACKFILL MATERIAL.
7. LIMITS OF EXCAVATION
8. 103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT AS SHOWN.
9. 401–HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL GU–03)
10. LIMITS OF EXCAVATION. IF THE BORE ALTERNATE IS SELECTED, ACCESS PIT DIMENSIONS AND LOCATIONS MAY BE SELECTED BY THE CONTRACTOR BUT MUST BE WITHIN THE LIMITS OF EXCAVATION.
11. 304 – AGGREGATE BASE COURSE (CLASS 6) (4" THICK)
12. EXISTING GAS LINE TO BE RELOCATED BY XCEL ENERGY TO THIS PROPOSED LOCATION.
13. 104.2A – INSTALL SEWER PIPE BY OPEN CUT, DIRECT BURY.
14. PROTECT & SUPPORT WATER LINE AND MANHOLE. WATER LINE AND MANHOLE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
15. 210 – RESET POST
16. 202 – REMOVE BUSH
17. TREE WILL BE REMOVED BY OTHERS.
18. 207/212 – TOPSOIL, 6" THICK, AND SOD.
19. 210 – RESET SPRINKLER SYSTEM.
20. 202 – REMOVE STRUCTURE/OBSTRUCTIONS. REMOVE REMAINING STRUCTURE AFTER CITY HAS COMPLETED SALVAGE OF EQUIPMENT AND MATERIALS. REMOVE CONCRETE TO A DEPTH OF 4' BELOW EXISTING GRADE.
21. 102.9A – 18" GRAVITY SEWER PIPE (SDR–35 PVC). BACKFILL TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
22. 102.9B – 6" PRESSURE SEWER PIPE (C–900, CLASS 150, DR–18, PVC).
23. 102.9B – 90° D.I.P. BEND.
24. 102 – CONNECT NEW 6" PRESSURE SEWER PIPE TO EXISTING PIPE. THE CONTRACT UNIT PRICE FOR 6" PRESSURE SEWER PIPE SHALL INCLUDE THE COST OF CONNECTIONS TO EXISTING PIPE.
25. PROTECT TREE
26. 202 – REMOVE STRUCTURE/OBSTRUCTIONS. REMOVE REMAINING PORTION OF ABANDON WET WELL AS NEEDED FOR EXCAVATION. ABANDON WET WELL AND PUMP STATION HAS ALREADY BEEN REMOVED TO APPROXIMATELY 4' BELOW EXISTING GRADE.
27. 202 – ABANDON EXISTING 16" FORCE MAIN SEWER PIPE. POUR CONCRETE PLUGS AT EACH END AND ABANDON IN PLACE.
28. 202 – ABANDON EXISTING 18" SANITARY SEWER PIPE. POUR CONCRETE PLUGS AT EACH END AND ABANDON IN PLACE.
29. 202 – ABANDON EXISTING MANHOLE. PLUG INLET AND OUTLET PIPES WITH CONCRETE. REMOVE RING AND COVER AND DELIVER TO CITY SHOPS. REMOVE AND DISPOSE OF CONE SECTION. FILL REMAINING BARREL SECTION WITH FLOW FILL MATERIAL.
30. 202 – REMOVE PIPE. REMOVE EXISTING 8" SANITARY SEWER, 18" SANITARY SEWER, 14" SANITARY SEWER AND/OR 6" FORCE MAIN AS SHOWN.
31. CONNECT MANHOLE TO EXISTING PIPE. THE CONTRACT UNIT PRICE FOR THESE MANHOLES SHALL INCLUDE THE COST OF CONNECTIONS TO EXISTING PIPE.

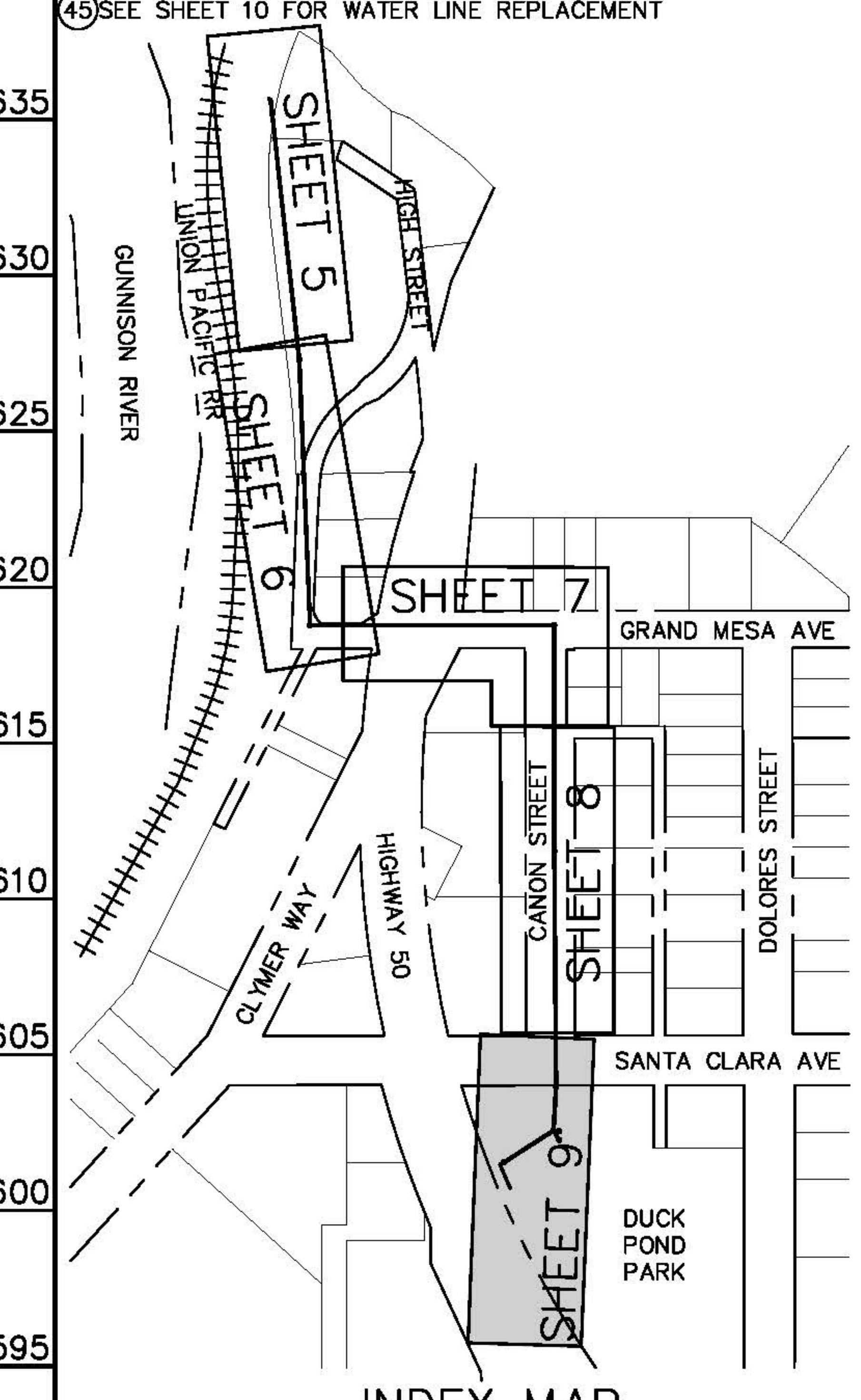
PROJECT NO. 904–F10114

32. PROTECT OVERHEAD POWER LINE. OVERHEAD POWER LINE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
33. PROTECT UNDERGROUND ELECTRIC LINE. ELECTRIC LINE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
34. REMOVE PIPE. REMOVE EXISTING ABANDONED WATER LINE AND PLUG REMAINING ENDS OF PIPE AT TRENCH EDGE WITH CONCRETE.
35. REMOVE PIPE. REMOVE EXISTING ABANDONED SEWER FORCE MAIN AND PLUG REMAINING ENDS OF PIPE AT TRENCH EDGE WITH CONCRETE.
36. PROTECT STORM DRAIN LINE AND INLET. STORM DRAIN LINE AND INLET SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
37. 103.10 – CUTOFF WALL. THE CONTRACT UNIT PRICE FOR GRAVITY SEWER PIPE SHALL INCLUDE THE COST OF CUTOFF WALLS.
38. 102.11 – TEMPORARY SANITARY SEWER MANHOLE FOR BYPASS PUMPING OPERATIONS. (48" I.D.) MANHOLE SHALL HAVE A POURED IN PLACE BASE. CARE SHALL BE TAKEN TO NOT FLOAT THE EXISTING LINE WHEN THE MANHOLE BASE IS POURED. "O" RING GASKETS OR OTHER APPROVED WATER STOPS ARE TO BE PLACED AROUND THE INLET AND OUTLET PIPES TO ENSURE A WATER TIGHT SEAL AT THE MH BASE. THE TOP HALF OF THE EXISTING PIPE SHALL BE CUT TO PROVIDE FOR A NEW INVERT. CARE SHOULD BE TAKEN AT THE TIME OF THE CUT TO NOT ALLOW THE EXISTING PIPE TO SAG BY MEANS OF BRACING AND TO CONTROL ALL LIVE SEWAGE NOT ALLOWING DEBRIS FROM WORK TO ENTER THE PIPE OUT. MANHOLE HEIGHT SHALL BE LIMITED TO 1 BARREL SECTION. CONTRACTOR SHALL PLACE A FLAT TOP LID WITH NO ACCESS HOLE ON TOP OF BARREL SECTION PRIOR TO BACKFILLING.
39. 102 – CONNECT TO EXISTING MANHOLE (18" PIPE)
40. EPOXY COAT INVERT. THE CONTRACT UNIT PRICE FOR SANITARY SEWER BASIC MANHOLE SHALL INCLUDE THE COST OF EPOXY COATING INVERTS.
41. 102.11 – SANITARY SEWER BASIC MANHOLE COMPONENTS (48" I.D.) (FORCE MAIN OUTLET) (SEE PROJECT SPECIAL PROVISIONS)
42. 102.11 – MANHOLE BARREL (D>5') (48" I.D.) (FORCE MAIN OUTLET) (SEE PROJECT SPECIAL PROVISIONS)
43. CONTRACTOR SHALL COORDINATE THE RELOCATION OF THE EXISTING ELECTRICAL SERVICE TO THE PARK RESTROOMS WITH THE PROJECT ENGINEER.
44. 401–HOT BITUMINOUS PAVEMENT (2" THICK) (GRADING SX) CANON STREET SHALL RECEIVE A FULL WIDTH ASPHALT OVERLAY AS INDICATED BY DOT HATCH PATTERN.
45. SEE SHEET 10 FOR WATER LINE REPLACEMENT

PROJECT CONTROL DATA

POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
702	30876.29	90338.28	2+82.29	38.43	4628.05	NO 5 REBAR
700	30208.76	90401.55			4629.01	GIS HINGE NAIL
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT





DESCRIPTION	DATE
REVISION △ AS BUILT	2007-10-15
REVISION △	–
REVISION △	–
REVISION △	–

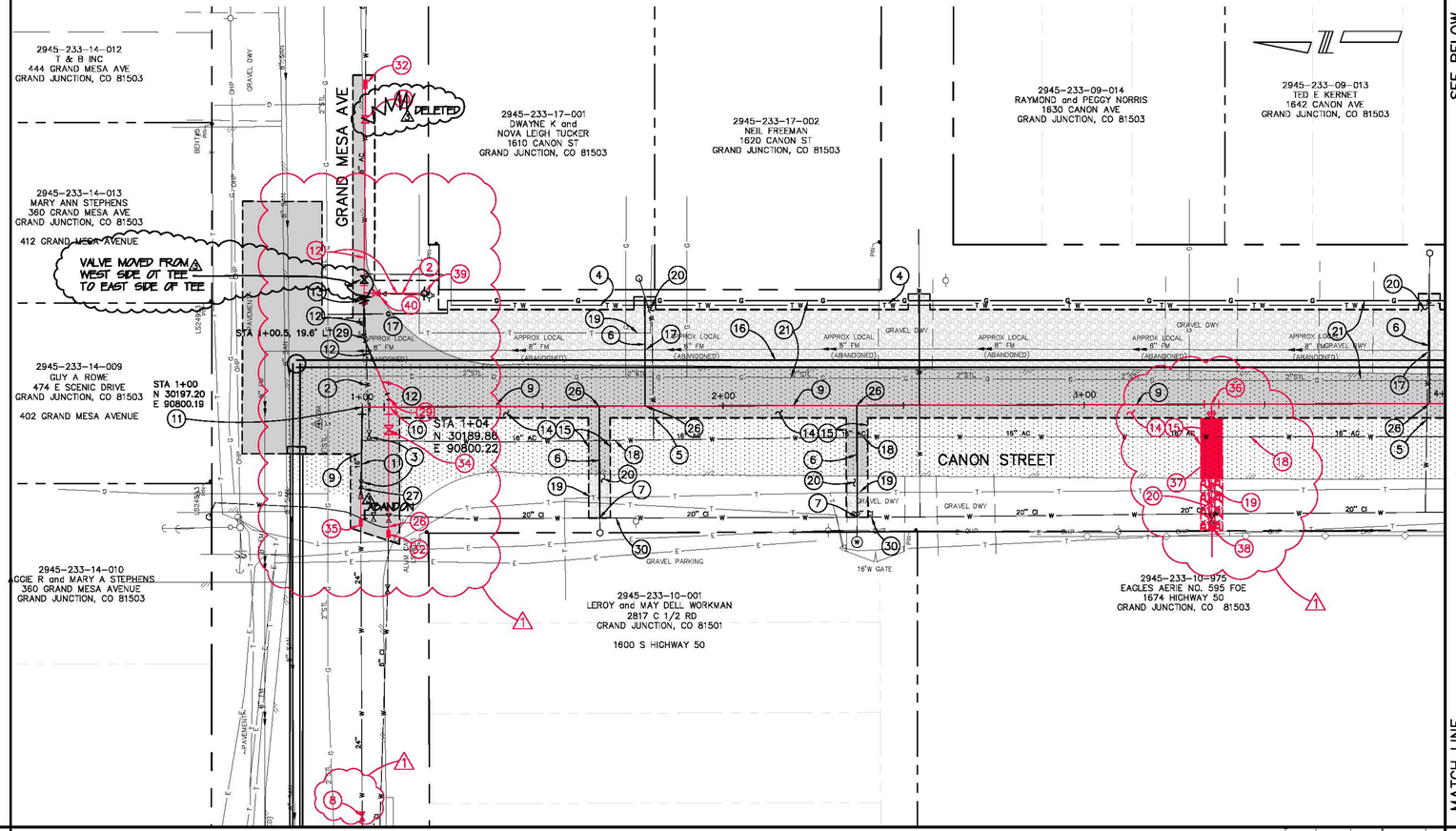
DRAWN BY JCS DATE 2005
DESIGNED BY ______ DATE ______
CHECKED BY ______ DATE ______
APPROVED BY ______ DATE ______

SCALES: PLAN HORIZONTAL 0 5 10 20; PROFILE HORIZONTAL 0 5 10 20, VERTICAL 2.5

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION
SANITARY SEWER PLAN AND PROFILES
CANON STREET / DUCK POND PARK



CONSTRUCTION NOTES

PROJECT NO. 904-F10114

1. 202 – REMOVE EXISTING 16" AC WATERLINE.
2. 202 – REMOVE EXISTING 6" AC WATERLINE.
3. 202 – REMOVE EXISTING WATER VALVE AND RETURN TO CITY SHOPS.
4. CITY CREWS WILL BE PROVIDING WATER SERVICE THROUGH A TEMPORARY WATER LINE FOR THE RESIDENCES ON THE EAST SIDE OF CANON.
5. 202 – CAP EXISTING WATER SERVICE. WATER SERVICE WILL BE CAPPED OFF AT THE WEST EDGE OF TRENCH. REMOVE EXISTING WATER SERVICE AS NEEDED TO FACILITATE WATER CONSTRUCTION. THE CONTRACT UNIT PRICE FOR WATER LINE SHALL INCLUDE THE COST OF REMOVING EXISTING WATER SERVICE.
6. 104 – EXTEND WATER SERVICE FROM METER PIT FOR SERVICES ON THE EAST SIDE OF CANON AND FROM THE EXISTING WATER LINE FOR SERVICES ON THE WEST SIDE OF CANON AS NEEDED TO CONNECT TO THE CORP STOP ON THE NEW WATER LINE. THERE WILL BE NO SEPARATE PAY FOR EXCAVATIONS TO COMPLETE WORK AFTER WATER MAIN TESTING.
7. TURN OF CORP STOP AT EXISTING WATER LINE. THE CONTRACT UNIT PRICE FOR WATER LINE SHALL INCLUDE THE COST OF TURNING OFF CORP STOPS AS NEEDED.
8. FURNISH AND INSTALL 24" BUTTERFLY VALVE. CONNECT VALVE TO EXISTING 24" DIP WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR THE 24" BUTTERFLY VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS.
9. 104 – FURNISH AND INSTALL 24" C-905, CLASS 165, DR25, PVC WATERLINE. TRENCH BACKFILL SHALL MEET THE REQUIREMENTS OF CITY SPECIFICATION 103.15, 103.16, AND TYPICAL TRENCH DETAIL GU-03.
10. 104 – FURNISH AND INSTALL A 24" X 24" X 6" X 6" DIP CROSS. CONNECT (MJ BY MJ) TO 24" PVC, (MJ BY MJ) TO 6" PVC. THE CONTRACT UNIT PRICE FOR 24" X 24" X 6" X 6" DIP CROSS SHALL INCLUDE THE COST OF ALL CONNECTIONS. RESTRAIN ALL JOINTS ON THE 24" PVC AND 6" PVC WATER LINES WITHIN 55' OF THE CROSS. (REFER TO PAGE W-07 OF THE STANDARD CONTRACT DOCUMENTS)
11. 104 – FURNISH AND INSTALL A 24" – 90° DIP BEND, CONNECT (MJ BY MJ) TO 24" PVC, PLACE CONCRETE THRUST BLOCK AT 90° BEND TO RESTRAIN 24" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR 24" – 90° DIP BEND SHALL INCLUDE THE COST OF ALL CONNECTIONS. (REFER TO PAGE W-07 OF THE STANDARD CONTRACT DOCUMENTS)
12. 104 – FURNISH AND INSTALL 6" C-900, CLASS 150, DR18, PVC WATERLINE. ALL JOINTS SHALL HAVE JOINT RESTRAINT.
13. FURNISH AND INSTALL 6" GATE VALVE AND 6" X 6" X 6" DIP TEE. ALL CONNECTIONS SHALL BE RESTRAINED. THE CONTRACT UNIT PRICE FOR THE 6" GATE VALVE AND 6" X 6" X 6" DIP TEE SHALL INCLUDE THE COST OF ALL CONNECTIONS.
14. 103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT AS SHOWN.
15. 401-HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL GU-03)
16. SEE SHEETS 7, 8, AND 9 FOR SEWER LINE CONSTRUCTION.
17. 202 – REMOVE PIPE – ABANDONED 8" FORCE MAIN TO BE REMOVED AS NEEDED TO FACILITATE WATER INSTALLATION.
18. AFTER CITY CREWS HAVE ESTABLISHED TEMPORARY WATER SERVICES THE EXISTING 16" AC WATER LINE WILL BE TAKEN OUT OF SERVICE.
19. PROTECT UNDERGROUND TELEPHONE LINE. TELEPHONE LINE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
20. 304 – AGGREGATE BASE COURSE (CLASS 6) (4" THICK)
21. EXISTING GAS LINE TO BE RELOCATED BY XCEL ENERGY TO THIS PROPOSED LOCATION. PROTECT NEW GAS LINE. NEW GAS LINE SHALL REMAIN IN SERVICE DURING CONSTRUCTION. ABANDON GAS LINE MAY BE REMOVED AS NEEDED TO FACILITATE WATER CONSTRUCTION.
22. PROTECT IRRIGATION PIPE. IRIGATION PIPE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
23. NOT USED
24. 202 – REMOVE 6" STORM DRAIN PIPE AS NEEDED FOR EXCAVATION.
    102.106 – 6" STORM DRAIN (C-900 PVC). THE COST OF CONNECTIONS TO EXISTING PIPE SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED AND PAID FOR SEPARATELY.
25. FURNISH AND INSTALL 24" BUTTERFLY VALVE. CONNECT VALVE TO 24" PVC WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR THE 24" BUTTERFLY VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS.
26. FURNISH AND INSTALL A TAPPING SADDLE AND CORP. STOP.
27. 202 – REMOVE EXISTING 24" X 16" REDUCER. THE CONTRACT UNIT PRICE FOR REMOVING 16" AC WATERLINE SHALL INCLUDE THE COST OF REMOVING THIS REDUCER.
28. ~~104 – FURNISH AND INSTALL A 24" X 24" X 16" DIP TEE. CONNECT 16" LEG OF TEE (SOUTH) TO SOLID SLEEVE AND SOLID SLEEVE TO EXISTING 16" CI WATER LINE. CONNECT 24" LEG (EAST) TO 24" PVC WATER MAIN (MJ BY MJ). CONNECT 24" LEG OF TEE (WEST) TO RESTRAINED CAP. RESTRAIN ALL JOINTS ON THE 24" PVC WATER LINE WITHIN 135' OF THE TEE. PLACE CONCRETE THRUST BLOCK NORTH OF TEE TO RESTRAIN EXISTING 16" AC WATER LINE. THE CONTRACT UNIT PRICE FOR 24" X 24" X 16" DIP TEE SHALL INCLUDE THE COST OF SOLID SLEEVE, RESTRAINED CAP, AND CONNECTIONS TO PIPE.~~ 2
29. 104 – FURNISH AND INSTALL A 6" – 22 1/2° DIP BEND, CONNECT (MJ BY MJ) TO 6" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR BENDS SHALL INCLUDE THE COST OF ALL CONNECTIONS (REFER TO PAGES W-07 OF THE STANDARD CONTRACT DOCUMENTS)
30. PROTECT EXISTING 20" CI WATER MAIN IN PLACE. WATER MAIN SHALL REMAIN IN SERVICE DURING CONSTRUCTION.
31. 104 – FURNISH AND INSTALL A 24" X 24" X 6" DIP TEE. CONNECT (MJ BY MJ) TO 24" PVC AND 6" PVC. FURNISH AND INSTALL 6" GATE VALVE. CONNECT (MJ BY MJ) TO 6" PVC. THE CONTRACT UNIT PRICE FOR TEE AND VALVE SHALL INCLUDE THE COST FOR ALL CONNECTIONS. RESTRAIN ALL JOINTS ON THE 24" AND 6" PVC WATER LINES WITHIN 18' OF THE TEE. (REFER TO PAGE W-07 OF THE STANDARD CONTRACT DOCUMENTS)
32. 104 – FURNISH AND INSTALL SOLID SLEEVE OR DRESSER COUPLING (HIGH MAX). CONNECT EXISTING 6" AC WATER LINE TO NEW 6" PVC WATER LINE USING DRESSER. CONNECT EXISTING 6" CI WATER LINE TO NEW 6" PVC WATER LINE USING SOLID SLEEVE. THE CONTRACT UNIT PRICE FOR 6" WATERLINE SHALL INCLUDE THE COST OF SOLID SLEEVE OR DRESSER AND CONNECTIONS TO EXISTING PIPE.
33. ~~104 – FURNISH AND INSTALL A 24" X 24" X 24" DIP TEE. CONNECT THE WEST AND NORTH LEGS OF THE TEE TO 24" PVC WATER MAIN (MJ BY MJ). CONNECT SOUTH LEG OF TEE TO RESTRAINED CAP. THE CONTRACT UNIT PRICE FOR 24" X 24" X 24" DIP TEE SHALL INCLUDE THE COST OF RESTRAINED CAP AND CONNECTIONS TO PIPE.~~ SEE SHEET 11 2
34. 104 – FURNISH AND INSTALL 6" GATE VALVE. CONNECT (MJ BY MJ) TO 6" PVC WATER LINE. THE CONTRACT UNIT PRICE FOR 6" VALVE SHALL INCLUDE COST FOR ALL CONNECTIONS.
35. 104 – FURNISH AND INSTALL SOLID SLEEVE. CONNECT EXISTING 24" DIP WATER LINE TO NEW 24" PVC WATER LINE ON THE WEST SIDE OF THE EXISTING 24" X 24" X 20" TEE. THE CONTRACT UNIT PRICE FOR 24" WATERLINE SHALL INCLUDE THE COST OF SOLID SLEEVE AND CONNECTIONS TO EXISTING PIPE.
36. 104 – FURNISH AND INSTALL A 24" X 24" X 4" DIP TEE. CONNECT (MJ BY MJ) TO 24" PVC AND 4" PVC. FURNISH AND INSTALL 4" GATE VALVE. CONNECT (MJ BY MJ) TO 4" PVC. THE CONTRACT UNIT PRICE FOR TEE AND VALVE SHALL INCLUDE THE COST FOR ALL CONNECTIONS. RESTRAIN ALL JOINTS ON THE 24" AND 4" PVC WATER LINES WITHIN 18' OF THE TEE. (REFER TO PAGE W-07 OF THE STANDARD CONTRACT DOCUMENTS).
37. 104 – FURNISH AND INSTALL 4" C-900, CLASS 150, DR18, PVC WATERLINE. ALL JOINTS SHALL HAVE JOINT RESTRAINT.
38. 104 – FURNISH AND INSTALL SOLID SLEEVE. CONNECT EXISTING 4" PVC FIRE LINE TO NEW 4" PVC WATER LINE. THE CONTRACT UNIT PRICE FOR 4" WATER LINE SHALL INCLUDE THE COST OF SOLID SLEEVE AND CONNECTIONS TO EXISTING PIPE.
39. 202/104 – REMOVE EXISTING HYDRANT AND RETURN TO CITY SHOPS. FURNISH AND INSTALL FIRE HYDRANT.
40. 104 – FURNISH AND INSTALL 6" GATE VALVE. CONNECT VALVE TO 6" PVC WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR 6" GATE VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS. 1

DESCRIPTION		DATE
REVISION 1	CHANGES TO DESIGN AND CONST. NOTES	4/14/05
REVISION 2	CHANGES TO DESIGN AND CONST. NOTES	7/13/05
REVISION 3	AS BUILT	2007-10-15
REVISION 4		

DRAWN BY JCS DATE 2005
DESIGNED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

SCALE: 0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION
WATER LINE REPLACEMENT PLANS
CANON STREET

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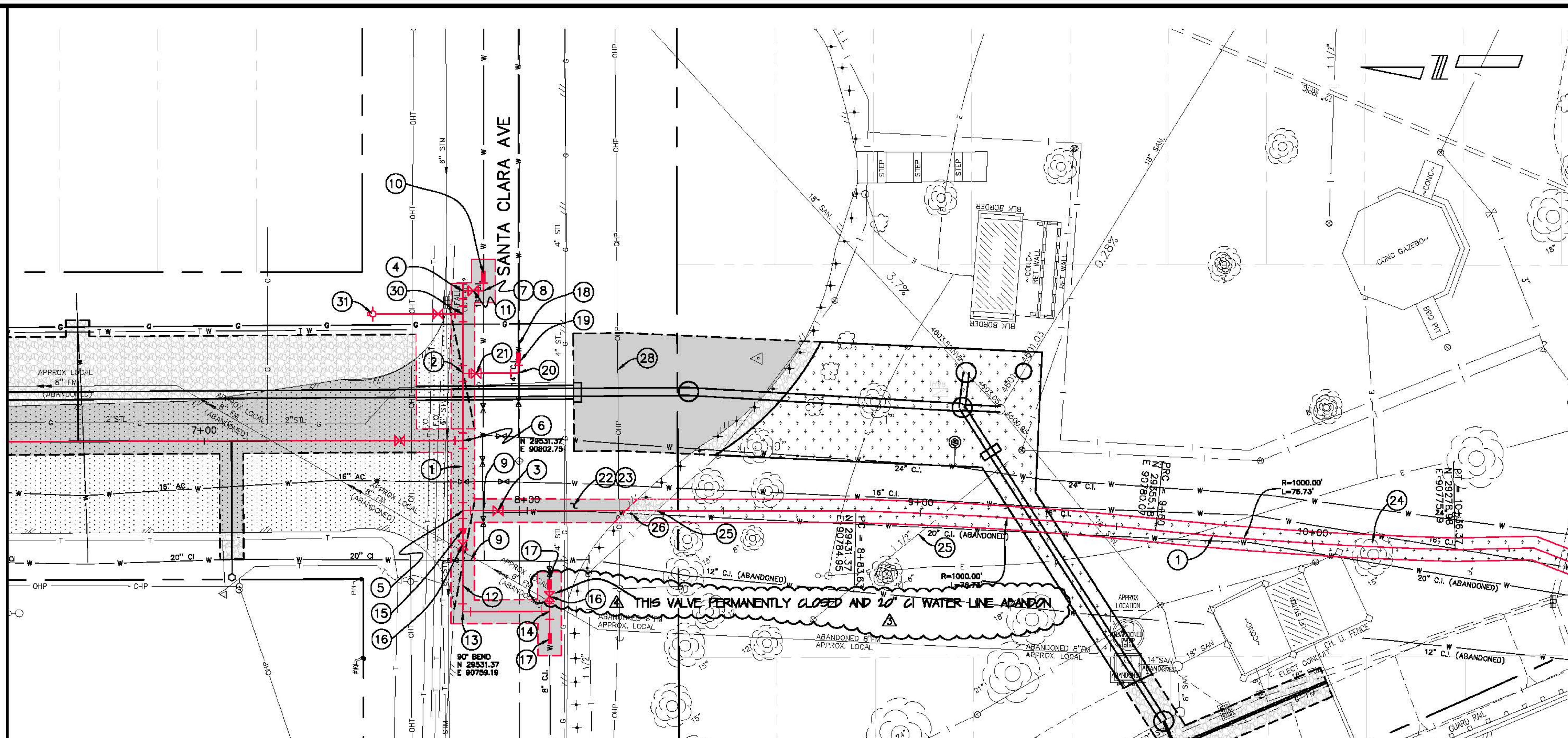
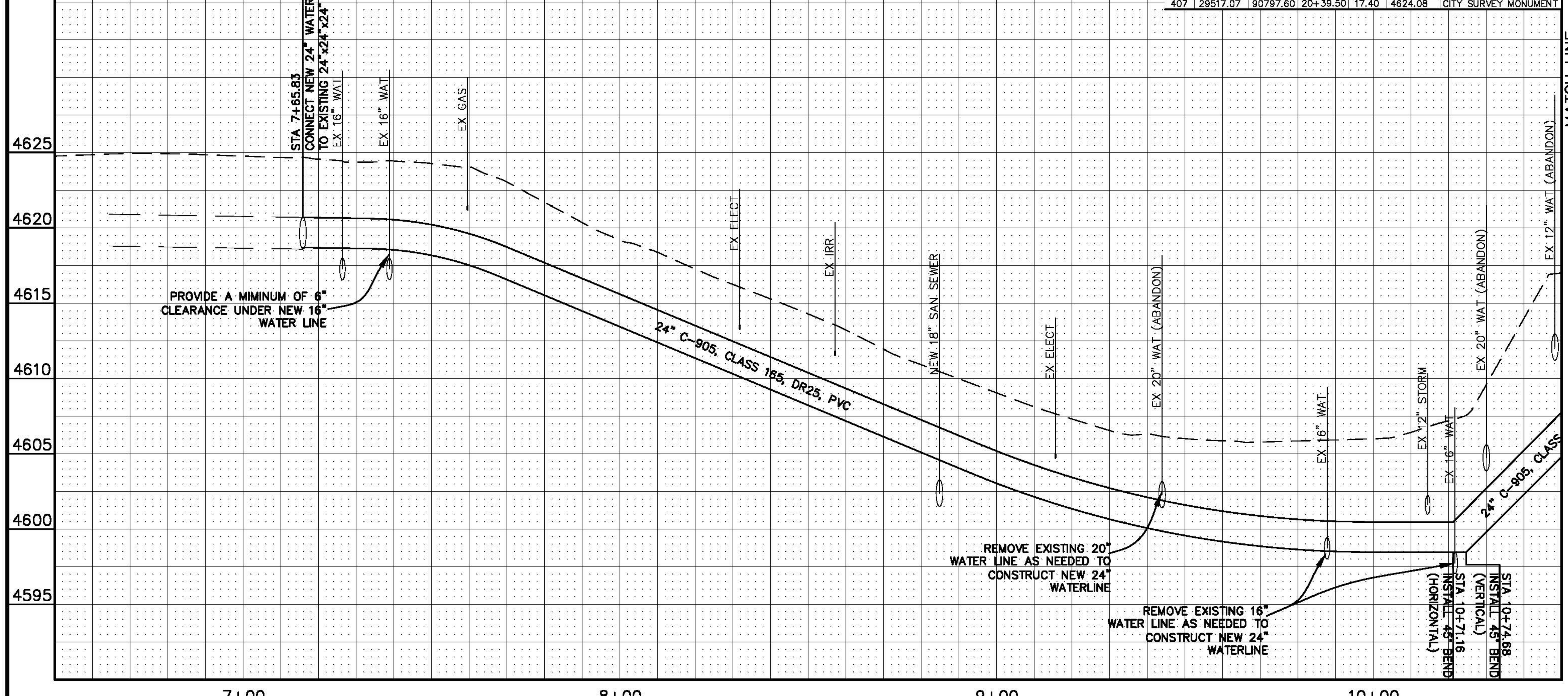


PROJECT CONTROL DATA

POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
702	30876.29	90338.28	2+82.29	38.43	4628.05	NO 5 REBAR
700	30208.76	90401.55			4629.01	GIS HINGE NAIL
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT



CONSTRUCTION NOTES

PROJECT NO. 904–F10114

(1) 104 – FURNISH AND INSTALL 24" C–905, CLASS 165, DR25, PVC WATERLINE. TRENCH BACKFILL SHALL MEET THE REQUIREMENTS OF CITY SPECIFICATION 103.15, 103.16, AND TYPICAL TRENCH DETAIL GU–03.

(2) 104 – FURNISH AND INSTALL A 24"x24"x14" DIP TEE, CONNECT (MJ BY MJ) TO 14" AND 24" PVC, PLACE CONCRETE THRUST BLOCK AT TEE TO RESTRAIN 24" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR 24"x24"x14" DIP TEE SHALL INCLUDE THE COST OF ALL CONNECTIONS. (REFER TO PAGE W–07 OF THE STANDARD CONTRACT DOCUMENTS)

(3) FURNISH AND INSTALL 24" BUTTERFLY VALVE. CONNECT VALVE TO 24" PVC WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR THE 24" BUTTERFLY VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS.

(4) 104 – FURNISH AND INSTALL A 24" X 24" X 16" DIP TEE. CONNECT 16" LEG OF TEE (SOUTH) TO 16" BUTTERFLY VALVE. CONNECT 24" LEG TO 24" PVC WATER MAIN (MJ BY MJ). CONNECT 24" LEG (EAST) TO RESTRAINED CAP. RESTRAIN ALL JOINTS ON THE 24" PVC WATER LINE WITHIN 40' OF THE TEE. PLACE CONCRETE THRUST BLOCK NORTH OF TEE TO RESTRAIN EXISTING 16" CI WATER LINE. THE CONTRACT UNIT PRICE FOR 24" X 24" X 16" DIP TEE SHALL INCLUDE THE COST OF, RESTRAINED CAP, AND CONNECTIONS TO PIPE.

(5) 104 – FURNISH AND INSTALL A 24"x24"x24" DIP TEE. CONNECT EAST AND SOUTH LEGS OF THE TEE TO 24" PVC WATER MAIN (MJ BY MJ). CONNECT WEST LEG TO 24"x8" DIP REDUCER. RESTRAIN ALL JOINTS ON THE 24" PVC WATER LINE FROM WATER LINE STA. 6+42 TO STA. 9+10 (268 L.F.) AND THE 24" WATER MAIN GOING EAST ON SANTA CLARA (40 L.F.). PLACE CONCRETE THRUST BLOCK NORTH OF THE TEE. THE CONTRACT UNIT PRICE FOR THE 24"x24"x24" DIP TEE SHALL INCLUDE THE COST OF ALL CONNECTIONS.

(6) 104 – FURNISH AND INSTALL A 24" X 24" X 24" DIP TEE. CONNECT ALL LEGS OF THE TEE TO 24" PVC WATER MAIN (MJ BY MJ). PLACE CONCRETE THRUST BLOCK SOUTH OF TEE. THE CONTRACT UNIT PRICE FOR 24" X 24" X 24" DIP TEE SHALL INCLUDE THE COST OF CONNECTIONS TO PIPE.

(7) 104 – FURNISH AND INSTALL 16" C–905, CLASS 165, DR25, PVC WATERLINE. ALL JOINTS SHALL HAVE JOINT RESTRAINT.

(8) 104 – FURNISH AND INSTALL A 16" 90° DIP BEND, CONNECT (MJ BY MJ) TO 16" PVC, PLACE CONCRETE THRUST BLOCK AT 90° BEND TO RESTRAIN 16" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR 16" 90° DIP BEND SHALL INCLUDE THE COST OF ALL CONNECTIONS (REFER TO PAGES W–07 OF THE STANDARD CONTRACT DOCUMENTS)

(9) PROTECT EXISTING 20" CI WATER MAIN IN PLACE. WATER MAIN SHALL REMAIN IN SERVICE DURING CONSTRUCTION.

(10) 104 – FURNISH AND INSTALL SOLID SLEEVE. CONNECT EXISTING 16" CI WATER LINE TO NEW 16" PVC WATER LINE USING SOLID SLEEVE. THE CONTRACT UNIT PRICE FOR 16" WATERLINE SHALL INCLUDE THE COST OF SOLID SLEEVE AND CONNECTIONS TO EXISTING PIPE.

(11) 104 – FURNISH AND INSTALL 16" BUTTERFLY VALVE. CONNECT VALVE TO 16" PVC WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR 16" BUTTERFLY VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS.

(12) 104 – FURNISH AND INSTALL 8" C–900, CLASS 150, DR18, PVC WATERLINE. ALL JOINTS SHALL HAVE JOINT RESTRAINT.

(13) 104 – FURNISH AND INSTALL A 8" – 90° DIP BEND, CONNECT (MJ BY MJ) TO 8" PVC, PLACE CONCRETE THRUST BLOCK AT 90° BEND TO RESTRAIN 8" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR 8" – 90° DIP BEND SHALL INCLUDE THE COST OF ALL CONNECTIONS. (REFER TO PAGE W–07 OF THE STANDARD CONTRACT DOCUMENTS)

(14) 104 – FURNISH AND INSTALL A 8"x8"x8" DIP TEE. CONNECT ALL LEGS OF THE TEE TO 8" PVC WATER MAIN, (MJ BY MJ). PLACE CONCRETE THRUST BLOCK SOUTH OF TEE. THE CONTRACT UNIT PRICE FOR 8"x8"x8" DIP TEE SHALL INCLUDE THE COST OF CONNECTIONS TO PIPE.

(15) 104 – FURNISH AND INSTALL A 24"x8" DIP REDUCER, CONNECT (MJ BY MJ) TO 24"x24"x24" DIP TEE AND 8" GATE VALVE. THE CONTRACT UNIT PRICE FOR 8"x8"x8" DIP TEE SHALL INCLUDE THE COST OF CONNECTIONS TO PIPE.

(16) 104 – FURNISH AND INSTALL 8" GATE VALVE. CONNECT VALVE TO 8" PVC WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR 8" GATE VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS.

(17) 104 – FURNISH AND INSTALL SOLID SLEEVE. CONNECT EXISTING 8" CI WATER LINE TO NEW 8" PVC WATER LINE USING SOLID SLEEVE. THE CONTRACT UNIT PRICE FOR 8" WATERLINE SHALL INCLUDE THE COST OF SOLID SLEEVE AND CONNECTIONS TO EXISTING PIPE.

(18) 104 – FURNISH AND INSTALL 14" C–905, CLASS 165, DR25, PVC WATERLINE. ALL JOINTS SHALL HAVE JOINT RESTRAINT.

(19) 104 – FURNISH AND INSTALL SOLID SLEEVE. CONNECT EXISTING 14" PVC WATER LINE TO NEW 14" PVC WATER LINE. THE CONTRACT UNIT PRICE FOR 14" WATER LINE SHALL INCLUDE THE COST OF SOLID SLEEVE AND CONNECTIONS TO EXISTING PIPE.

(20) 104 – FURNISH AND INSTALL A 14" 90° DIP BEND, CONNECT (MJ BY MJ) TO 14" PCV, PLACE CONCRETE THRUST BLOCK AT 90° BEND TO RESTRAIN 14" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR 14" 90° DIP BEND SHALL INCLUDE THE COST OF ALL CONNECTIONS (REFER TO PAGES W–07 OF THE STANDARD CONTRACT DOCUMENTS)

(21) 104 – FURNISH AND INSTALL 14" BUTTERFLY VALVE. CONNECT VALVE TO 14" PVC WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR 14" BUTTERFLY VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS.

(22) 103.3 – <u>ASPHALT REMOVAL:</u> CUT AND REMOVE PAVEMENT AS SHOWN.

(23) 401–HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL GU–03)

(24) 202 – REMOVE TREE

(25) 210 – RESET SPRINKLER SYSTEM.

(26) 210 – RESET POST

(27) 210 – RESET GUARDRAIL AS NEEDED FOR WATER LINE CONSTRUCTION AND PAVEMENT RESTORATION.

(28) PROTECT OVERHEAD POWER LINE. OVERHEAD POWER LINE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.

(29) PROTECT UNDERGROUND ELECTRIC LINE. ELECTRIC LINE SHALL REMAIN IN SERVICE DURING CONSTRUCTION.

(30) FURNISH AND INSTALL 6" GATE VALVE AND 24" X 24" X 6" DIP TEE. ALL CONNECTIONS SHALL BE RESTRAINED. THE CONTRACT UNIT PRICE FOR THE 6" GATE VALVE AND 24" X 24" X 6" DIP TEE SHALL INCLUDE THE COST OF ALL CONNECTIONS.

(31) FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY.

	DESCRIPTION	DATE
REVISION 1	NEW DRAWING FOR CONTINUATION OF	7/15/05
REVISION 2	NEW 24in WATER LINE IN CANON STREET	
REVISION 3	ADDITIONAL EXISTING TOPO	7/27/05
REVISION 4	AS BUILT	2007-10-15

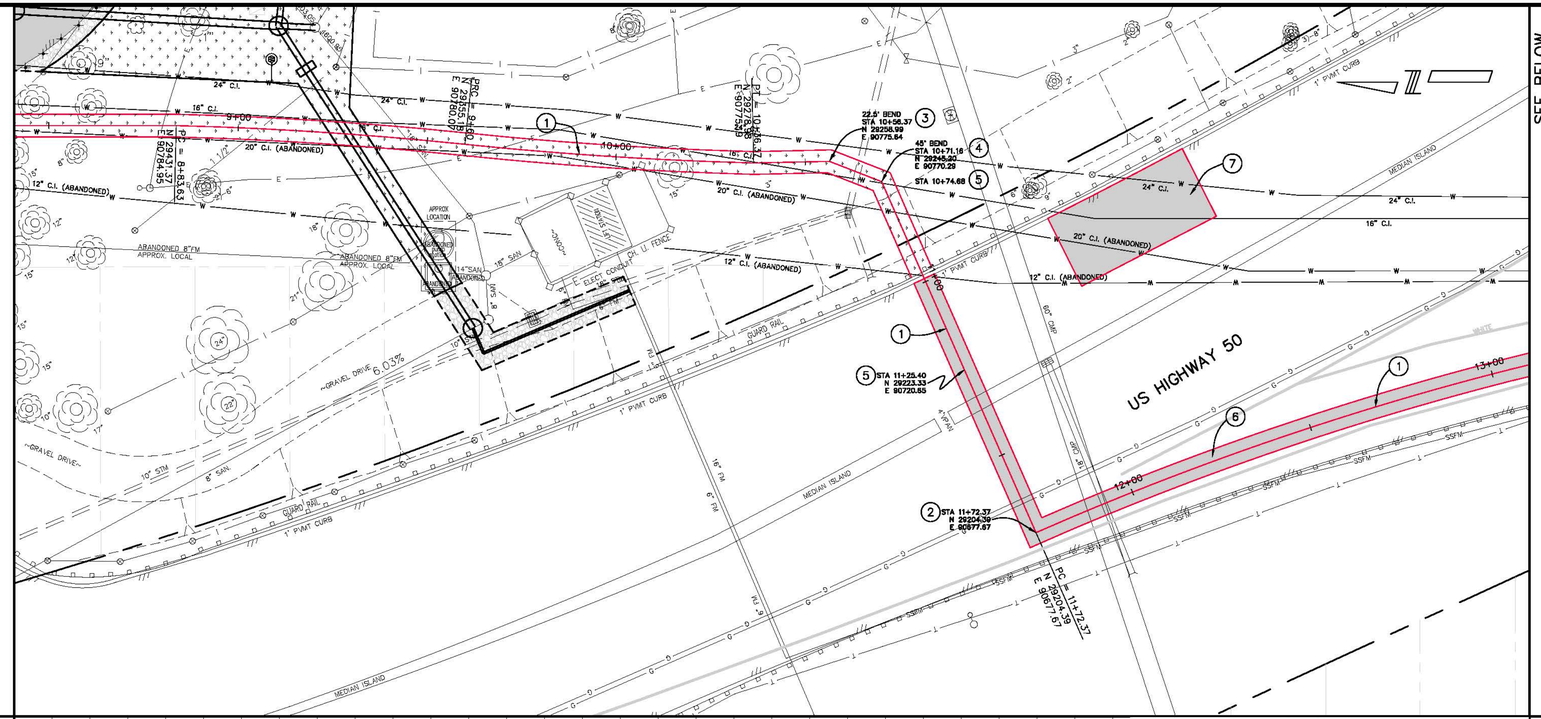
DRAWN BY JCS DATE 2005
DESIGNED BY ______ DATE ______
CHECKED BY ______ DATE ______
APPROVED BY ______ DATE ______

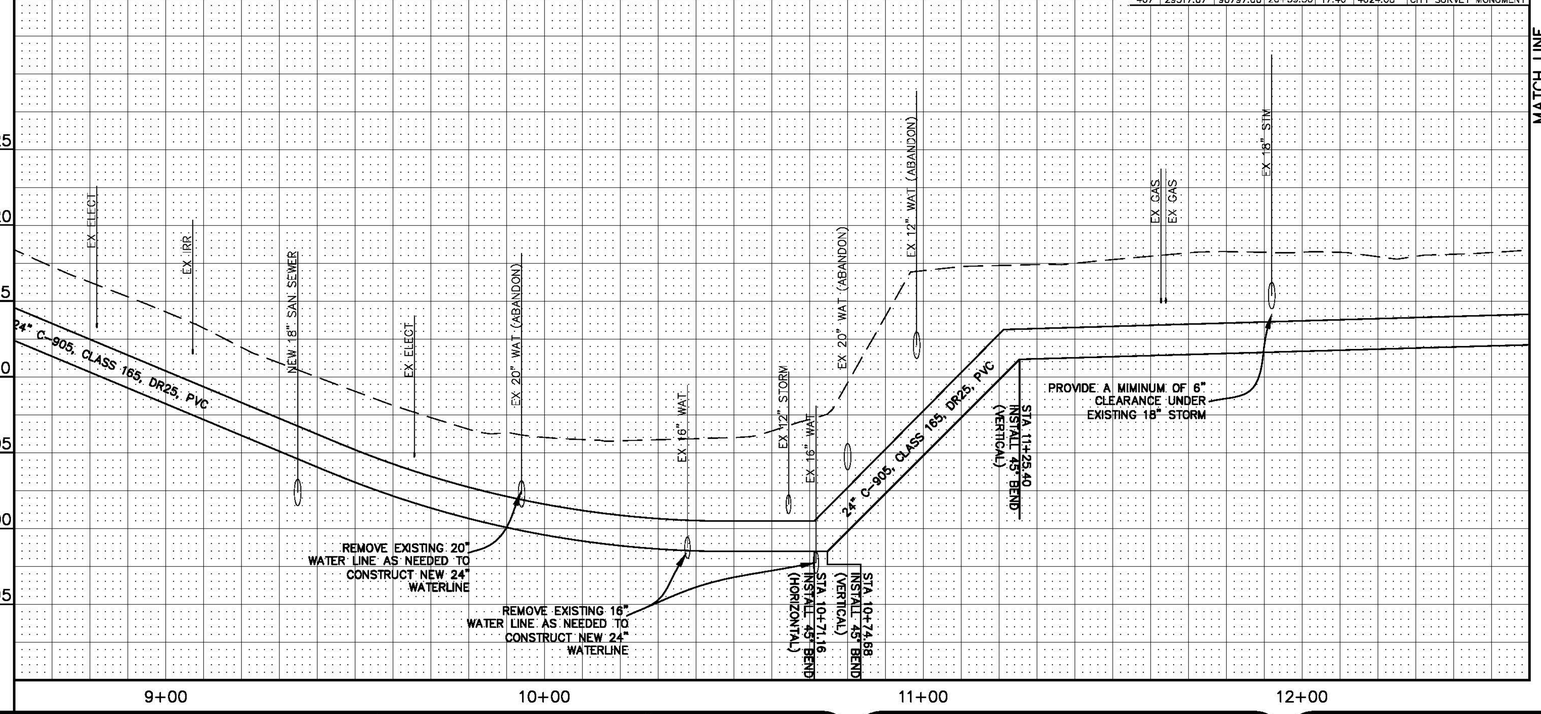
SCALE: 0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION WATER LINE REPLACEMENT PLANS CANON STREET





PROJECT CONTROL DATA

POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
702	30876.29	90338.28	2+82.29	38.43	4628.05	NO 5 REBAR
700	30208.76	90401.55			4629.01	GIS HINGE NAIL
402	30209.28	90795.54	13+24.64	6.15	4629.15	CITY SURVEY MONUMENT
407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT

CONSTRUCTION NOTES

PROJECT NO. 904-F10114

(1) 104 – FURNISH AND INSTALL 24" C-905, CLASS 165, DR25, PVC WATERLINE.

ADDITIONAL REQUIREMENTS WHEN WATER LINE IS INSTALLED WITHIN CDOT ROW: (WATER LINE STA. 10+88 TO STA. 14+50)

MINIMUM COVER TO TOP OF PIPE SHALL BE 54" (FINISHED GRADE TO TOP OF PIPE).
206 – STRUCTURAL BACKFILL (FLOW-FILL)

THE TOP 36" OF BACKFILL MATERIAL (FROM BOTTOM OF ASPHALT) SHALL BE FLOWFILL. FLOWFILL WILL BE PAID FOR SEPARATELY. THE PAID QUANTITY FOR FLOWFILL WILL HAVE A MAXIMUM WIDTH OF 6 FEET AND MAXIMUM DEPTH OF 36".

TRAFFIC CONTROL PLAN MUST BE REVIEWED AND APPROVED BY CDOT PRIOR TO ISSUING PERMIT AND START OF WORK. REQUIREMENTS AS LISTED ON ATTACHED PAGE 2 OF UTILITY PERMIT APPLICATION.

NO CONSTRUCTION ACTIVITY OR LANE CLOSURES (OTHER THAN TRAFFIC CONTROL SETUP) MAY OCCUR OUTSIDE OF 9 PM TO 6 AM.

FINAL PAVEMENT SURFACE MUST BE IN PLACE BEFORE LANES CAN RE-OPENED.

ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE MAINTAINED DURING THE WORK. FLAGGERS WILL BE REQUIRED IF NEEDED TO DIRECT TRAFFIC.

(2) 104 – FURNISH AND INSTALL A 24" – 90° DIP BEND, CONNECT (MJ BY MJ) TO 24" PVC, PLACE CONCRETE THRUST BLOCK AT 90° BEND TO RESTRAIN 24" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR 24" – 90° DIP BEND SHALL INCLUDE THE COST OF ALL CONNECTIONS. (REFER TO PAGE W-07 OF THE STANDARD CONTRACT DOCUMENTS)

(3) 104 – FURNISH AND INSTALL A 24" – 22 1/2° DIP BEND, CONNECT (MJ BY MJ) TO 24" PVC WATER MAIN. PLACE CONCRETE THRUST BLOCK AT 22 1/2° BEND. THE CONTRACT UNIT PRICE FOR BENDS SHALL INCLUDE THE COST OF ALL CONNECTIONS (REFER TO PAGES W-07 OF THE STANDARD CONTRACT DOCUMENTS)

(4) 104 – FURNISH AND INSTALL A 24" – 45° DIP BEND (HORIZONTAL). THE CONTRACT UNIT PRICE FOR BENDS SHALL INCLUDE THE COST OF ALL CONNECTIONS (REFER TO PAGES W-07 OF THE STANDARD CONTRACT DOCUMENTS)

(5) 104 – FURNISH AND INSTALL A 24" – 45° DIP BEND (VERTICAL). THE CONTRACT UNIT PRICE FOR BENDS SHALL INCLUDE THE COST OF ALL CONNECTIONS (REFER TO PAGES W-07 OF THE STANDARD CONTRACT DOCUMENTS)

(6) ASPHALT REMOVAL AND T-TOP PATCH WITHIN CDOT ROW:

103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT 6' WIDE AS SHOWN. MILL (2" THICK) AND REMOVE ASPHALT PAVEMENT FOR AN ADDITIONAL 2 FEET ON BOTH SIDES OF THE FULL DEPTH REMOVAL. 2 FEET IS THE MINIMUM WIDTH. WIDTH OF MILL SHALL BE GREATER THAN 2 FEET IF NECESSARY TO KEEP JOINT OUT OF WHEEL PATH.

401-HOT BITUMINOUS PAVEMENT (6" THICK) (GRADING SX) (BINDER GRADE PG 64-22). HBP SHALL BE PLACED ON FLOWFILL BACKFILL MATERIAL.

(7) REPAIR PAVEMENT DAMAGED BY WATER LINE LEAK.

103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT AS SHOWN, OR AS DIRECTED BY CITY.

304.08 – SUBGRADE STABILIZATION (CLASS 6 ABC) (CIP). SUBGRADE STABILIZATION SHALL BE A MINIMUM OF 12" IN DEPTH. DEPTH MAY BE INCREASED AS DIRECTED BY CITY TO REMOVE SATURATED SUBGRADE.

401-HOT BITUMINOUS PAVEMENT (6" THICK) (GRADING SX) (BINDER GRADE PG 64-22).

DESCRIPTION	DATE
REVISION 1 NEW DRAWING FOR CONTINUATION OF	7/15/05
REVISION 2 NEW 24in WATER LINE IN CANON STREET	
REVISION 3 ADDITIONAL EXISTING TOPO	7/27/05
REVISION 4 AS BUILT	2007-10-15

DRAWN BY JCS DATE 2005
DESIGNED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

SCALE: 0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION
ELIMINATION AND GRAVITY SEWER CONSTRUCTION
WATER LINE REPLACEMENT PLANS
CANON STREET

12

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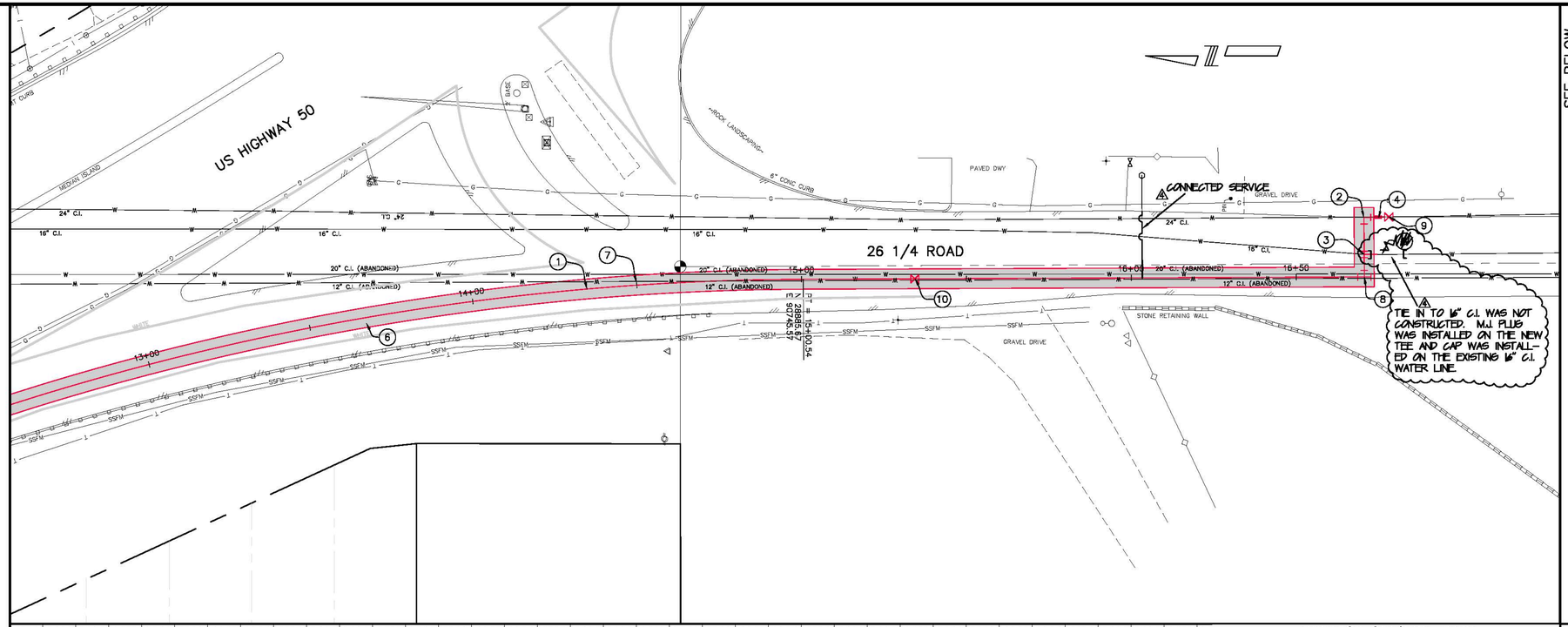

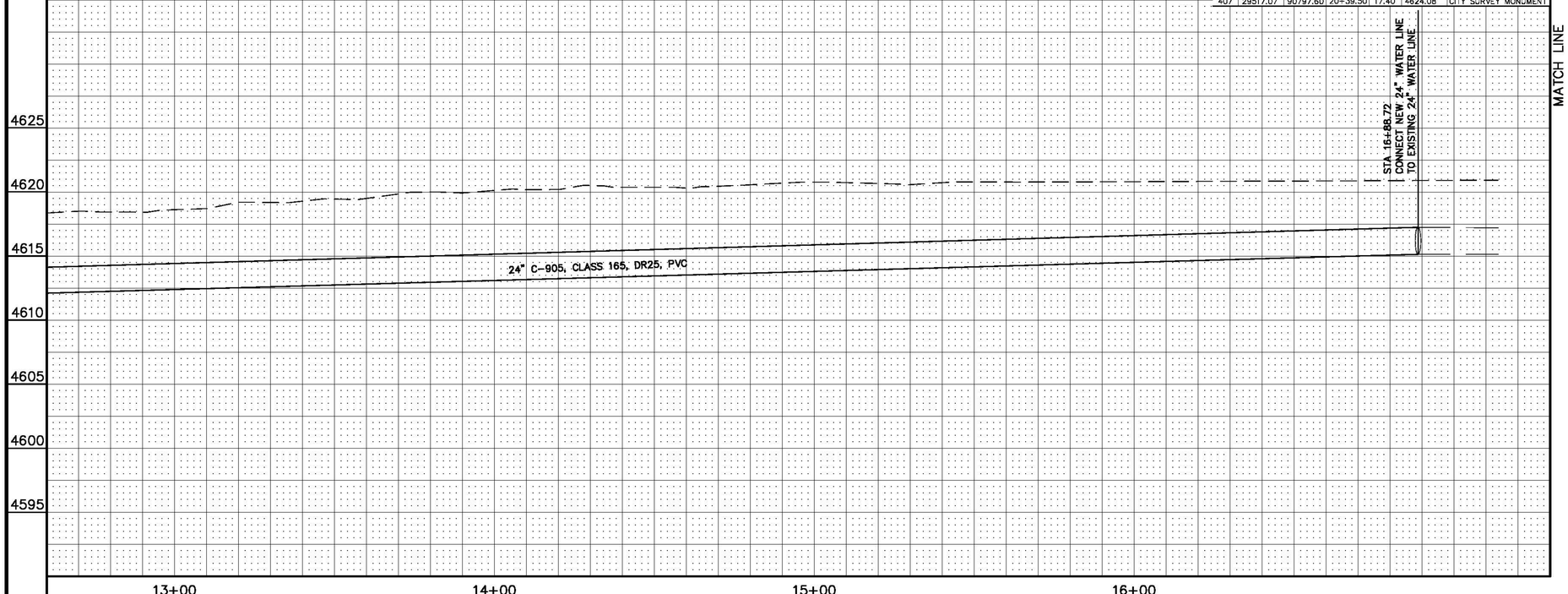

PROJECT CONTROL DATA

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407	29517.07	90797.60	20+39.50	17.40	4624.08	CITY SURVEY MONUMENT

PROJECT NO. 904-F10114

CONSTRUCTION NOTES

(1) 104 – FURNISH AND INSTALL 24" C-905, CLASS 165, DR25, PVC WATERLINE.

ADDITIONAL REQUIREMENTS WHEN WATER LINE IS INSTALLED WITHIN CDOT ROW: (WATER LINE STA. 10+88 TO STA. 14+50)

MINIMUM COVER TO TOP OF PIPE SHALL BE 54" (FINISHED GRADE TO TOP OF PIPE).

THE FIRST 36" OF BACKFILL MATERIAL (FROM BOTTOM OF ASPHALT) SHALL BE FLOWFILL. FLOWFILL WILL BE PAID FOR SEPARATELY. THE PAID QUANTITY FOR FLOWFILL WILL HAVE A MAXIMUM WIDTH OF 6 FEET AND MAXIMUM DEPTH OF 36".

TRAFFIC CONTROL PLAN MUST BE REVIEWED AND APPROVED BY CDOT PRIOR TO ISSUING PERMIT AND START OF WORK. REQUIREMENTS AS LISTED ON ATTACHED PAGE 2 OF UTILITY PERMIT APPLICATION.

NO CONSTRUCTION ACTIVITY OR LANE CLOSURES (OTHER THAN TRAFFIC CONTROL SETUP) MAY OCCUR OUTSIDE OF 9 PM TO 6 AM.

FINAL PAVEMENT SURFACE MUST BE IN PLACE BEFORE LANES CAN RE-OPENED.

ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE MAINTAINED DURING THE WORK. FLAGGERS WILL BE REQUIRED IF NEEDED TO DIRECT TRAFFIC.

(2) 104 – FURNISH AND INSTALL A 24" – 90° DIP BEND, CONNECT (MJ BY MJ) TO 24" PVC, PLACE CONCRETE THRUST BLOCK AT 90° BEND TO RESTRAIN 24" PVC WATER MAIN. THE CONTRACT UNIT PRICE FOR 24" – 90° DIP BEND SHALL INCLUDE THE COST OF ALL CONNECTIONS. (REFER TO PAGE W-07 OF THE STANDARD CONTRACT DOCUMENTS)

(3) 104 – FURNISH AND INSTALL A 24" X 24" X 16" DIP TEE. CONNECT 16" LEG OF TEE (SOUTH) TO SOLID SLEEVE AND SOLID SLEEVE TO EXISTING 16" CI WATER LINE. CONNECT 24" LEGS TO 24" PVC WATER MAIN (MJ BY MJ). PLACE CONCRETE THRUST BLOCK NORTH OF TEE TO RESTRAIN EXISTING 16" CI WATER LINE. THE CONTRACT UNIT PRICE FOR 24" X 24" X 16" DIP TEE SHALL INCLUDE THE COST OF SOLID SLEEVE, AND CONNECTIONS TO PIPE.

(4) 104 – FURNISH AND INSTALL SOLID SLEEVE. CONNECT EXISTING 24" CI WATER LINE TO NEW 24" PVC WATER LINE. THE CONTRACT UNIT PRICE FOR 24" WATERLINE SHALL INCLUDE THE COST OF SOLID SLEEVE AND CONNECTIONS TO EXISTING PIPE.

(5) 104 – FURNISH AND INSTALL SOLID SLEEVE. CONNECT EXISTING 16" CI WATER LINE TO NEW 16" PVC WATER LINE USING SOLID SLEEVE. THE CONTRACT UNIT PRICE FOR 16" WATERLINE SHALL INCLUDE THE COST OF SOLID SLEEVE AND CONNECTIONS TO EXISTING PIPE.

(6) ASPHALT REMOVAL AND T-TOP PATCH WITHIN CDOT ROW:

103.3 – ASPHALT REMOVAL: CUT AND REMOVE PAVEMENT 6' WIDE AS SHOWN. MILL (2" THICK) AND REMOVE ASPHALT PAVEMENT FOR AN ADDITIONAL 2 FEET ON BOTH SIDES OF THE FULL DEPTH REMOVAL. 2 FEET IS THE MINIMUM WIDTH. WIDTH OF MILL SHALL BE GREATER THAN 2 FEET IF NECESSARY TO KEEP JOINT OUT OF WHEEL PATH.

401-HOT BITUMINOUS PAVEMENT (6" THICK) (GRADING SX) (BINDER GRADE PG 64-22). HBP SHALL BE PLACED ON FLOWFILL BACKFILL MATERIAL.

(7) END OF ADDITIONAL REQUIREMENTS FOR CDOT ROW.

(8) 104 – FURNISH AND INSTALL A 24" X 24" X 24" DIP TEE. CONNECT 24" LEGS OF TEE (NORTH AND EAST) 24" PVC WATER MAIN (MJ BY MJ). CONNECT 24" LEG OF TEE (SOUTH) TO RESTRAINED CAP. PLACE CONCRETE THRUST BLOCK WEST AND SOUTH OF TEE. CONCRETE THRUST BLOCK SHOULD BE PLACED IN SUCH A WAY THAT IT DOES NOT PREVENT FUTURE TIE IN TO THE SOUTH LEG OF THE TEE. THE CONTRACT UNIT PRICE FOR 24" X 24" X 24" DIP TEE SHALL INCLUDE THE COST OF THE RESTRAINED CAP AND CONNECTIONS TO PIPE.

(9) 24" BUTTERFLY VALVE INSTALLED BY CITY CREWS. THIS VALVE HAS BEEN INSTALLED WITH A THRUST RESTRAINT WALL, ALLOWING PRESSURE TO REMAIN ON THE SOUTH SIDE OF THE VALVE DURING CONNECTION OF 24" PVC ON THE NORTH SIDE.

(10) FURNISH AND INSTALL 24" BUTTERFLY VALVE. CONNECT VALVE TO 24" PVC WATER MAIN (MJ BY MJ). THE CONTRACT UNIT PRICE FOR THE 24" BUTTERFLY VALVE SHALL INCLUDE THE COST OF ALL CONNECTIONS.

DESCRIPTION	DATE
REVISION ⚠ NEW DRAWING FOR CONTINUATION OF	7/15/05
REVISION ⚠ NEW 24in WATER LINE IN CANON STREET	
REVISION ⚠ ADDITIONAL EXISTING TOPO	7/27/05
REVISION ⚠ AS BUILT	2007-10-15

DRAWN BY JCS DATE 2005
DESIGNED BY DATE
CHECKED BY DATE
APPROVED BY DATE

SCALE: 0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

DUCK POND PARK LIFT STATION ELIMINATION AND GRAVITY SEWER CONSTRUCTION
WATER LINE REPLACEMENT PLANS
CANON STREET

13

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CANON AVENUE
MH A-4
SAN SEW MH
STA 1+00.00
N 30215.43
E 90812.17
SEE PLAN AND PROFILE FAR RIGHT
GRAND MESA AVENUE
2945-233-10-001
LEROY and MAY DELL WORKMAN
2817 C 1/2 RD
GRAND JUNCTION, CO 81501
1600 S HIGHWAY 50
ABANDON SERVICE
2945-233-14-009
GUY A ROWE
474 E SCENIC DRIVE
GRAND JUNCTION, CO 81503
402 GRAND MESA AVE
2945-233-14-010
AGGIE R and MARY A STEPHENS
360 GRAND MESA AVENUE
GRAND JUNCTION, CO 81503
SEE PLAN VIEW MIDDLE
DRIVE TO GRIFFIN RIVER VIEW MOBILE HOME PARK
WATER RE-DIRECTED AS SHOWN
U.S. HIGHWAY 50
GRIFFIN RIVER VIEW MOBILE HOME PARK DRIVE
MH A-4a
SAN SEW MH
STA 2+67.01
N 30215.38
E 90645.16
EXISTING MANHOLE ABANDON BY FILLING WITH FLOWFILL
NEW 48" MH INSTALLED & CONNECTED
GRAND MESA AVENUE
SEE PLAN VIEW LEFT
NOTE:
SEE SHT 7 OF THE DUCK POND PARK LIFT STATION ELIMINATION PROJECT PLANS FOR REMOVALS, RESETS, & GROUND RESTORATION IN THE BORE PIT AREA AND CONSTRUCTION OF THE NEW 24" SANITARY SEWER MAIN
2945-233-14-013
MARY ANN STEPHENS
360 GRAND MESA AVE
G.J., CO 81503
412 GRAND MESA AVENUE
SEE PLAN AND PROFILE FAR LEFT
GRAND MESA AVENUE
2945-233-17-001
DWAYNE K and NOVA LEIGH TUCKER
1610 CANON ST
G.J., CO 81503

CONSTRUCTION NOTES

(15) 202 – REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)

(16) 202 – REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.

(20) 202 – ABANDON PIPE. ABANDON 12" SEWER TO NW AFTER CONNECTION TO NEW SEWER HAS BEEN MADE. ABANDON EXISTING SEWER BY RECONFIGURING MH INVERT AND PLUGGING EXISTING LINE WITH CONCRETE.

(110) 629 – REFERENCE AND RESET SURVEY MONUMENT.

CONSTRUCTION NOTES CONTINUED

(300) 102.11/108.5 – SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).

(303) 102.11/108.5 – SANITARY SEWER DROP MANHOLE (60" I.D.). CONTRACTOR SHALL USE AN INSIDE DROP SYSTEM (RELINER/DURAN INC. OR ENGINEER APPROVED EQUAL) WITH TYPE "B" DROP BOWLS HAVING 8" OUTLETS, 8" DIA SDR-35 PVC DROPS, AND STAINLESS STEEL ADJUSTABLE PIPE BRACKETS FOR BOTH EAST AND WEST INVERTS IN. INCLUDES MANHOLE COATING AS PER 102.11. (SEE MANUFACTURES RECOMENDATIONS AND SPECIFICATIONS FOR INSIDE DROP SYSTEMS).

CONSTRUCTION NOTES CONTINUED

(311) 102.11/108.5 – CONNECT TO EXISTING MANHOLE (8" PIPE). (SEE CITY OF GRAND JUNCTION STANDA DETAIL SS-08).

(312) 102.11/108.5 – CONNECT TO EXISTING PIPE (4" SEWER SERVICE PIPE)

(313) 102.11/108.5 – CONNECT TO EXISTING PIPE (8" PIPE). DEFLECT PIPE AT NEW JOINT AS NEEDED TO TIE INTO MH A-4.

(323) 102.9/108.2 – 8" 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.

(333) 102.9/108.2 – 4" SEWER SERVICE PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL, BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.

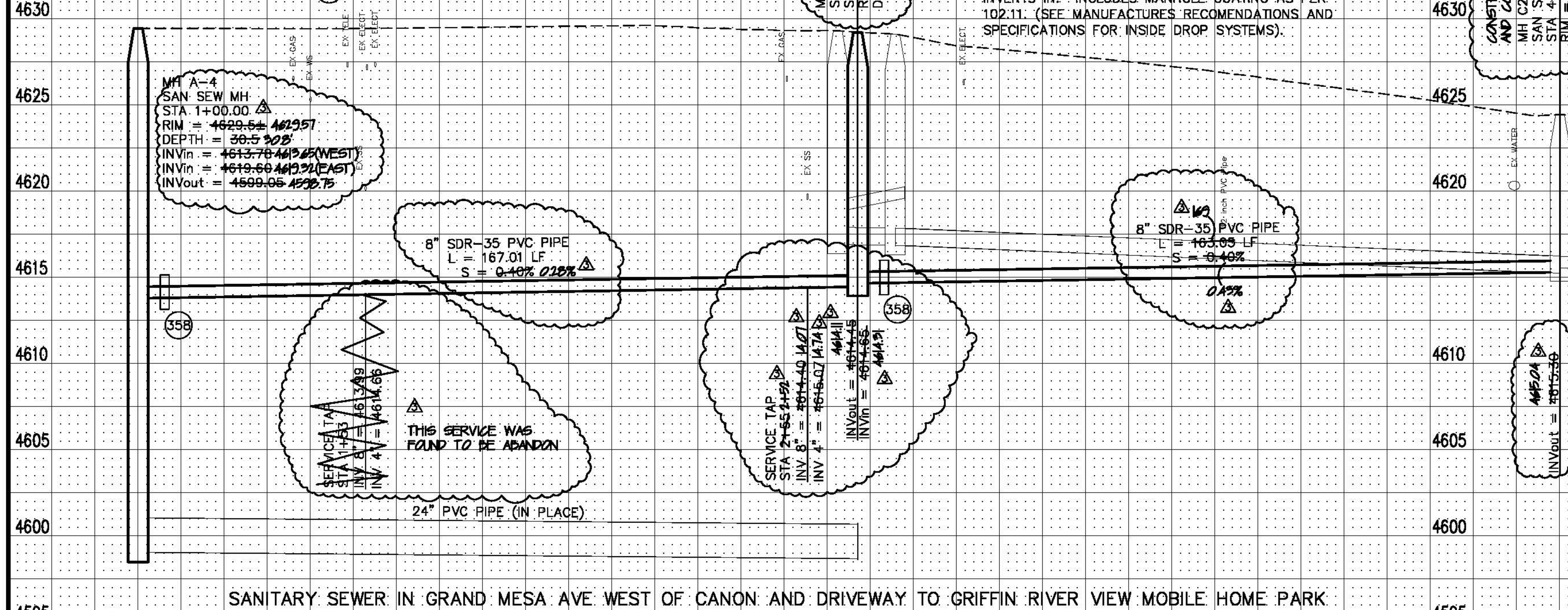
(347) 102.9/108.5 – 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAIL SS-06).

(358) 103 – CLAY CUT-OFF WALL (INCEDENTAL TO SEW INTALLATION PAY ITEM)

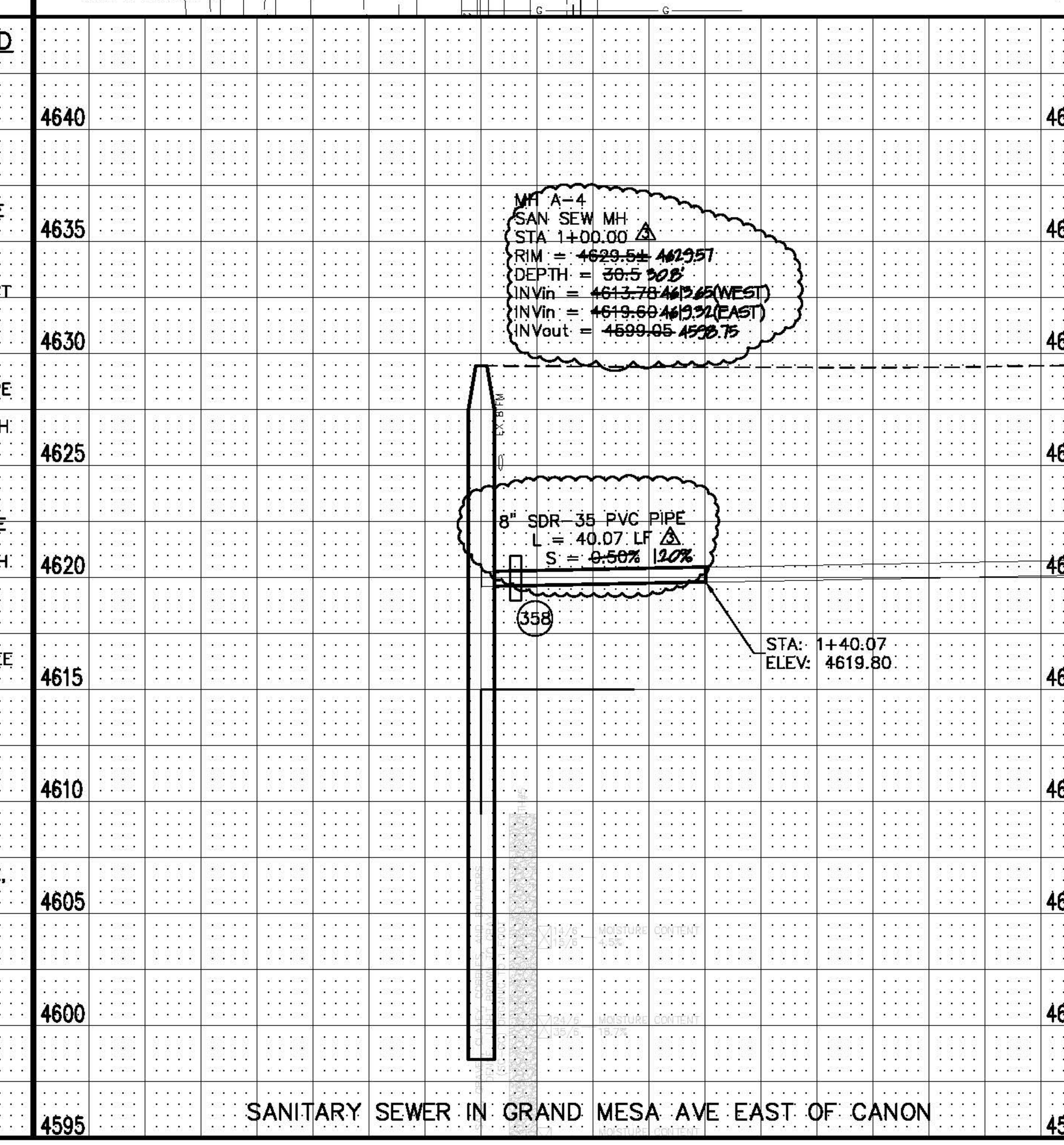
(663) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK)

(676) 401.08 – HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 1 1/2 LIFTS)

(800) PROTECT CONCRETE FEATURE IN PLACE AS SHOWN.



MH A-4
SAN SEW MH
STA 1+00.00
8" SDR-35 PVC PIPE
L = 167.01 LF
THIS SERVICE WAS FOUND TO BE ABANDON
24" PVC PIPE (IN PLACE)
MH A-4a
SAN SEW MH
STA 2+67.01
8" SDR-35 PVC PIPE
L = 163.05 LF
CONSTRUCTED NEW MANHOLE AND CONNECTED TO EX PIPE
MH C2-261-006
SAN SEW MH
STA 4+30.06
SANITARY SEWER IN GRAND MESA AVE WEST OF CANON AND DRIVEWAY TO GRIFFIN RIVER VIEW MOBILE HOME PARK



DESCRIPTION	DATE
REVISION △ AS BUILT	2007-10-15
REVISION △	
REVISION △	
REVISION △	

DRAWN BY JCS DATE 2006
DESIGNED BY DATE
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 5 10 20; PROFILE HORIZONTAL 0 5 10 20; VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

INTERCEPT FOR SEWER CROSSING COLORADO RIVER AT HWY 50 BRIDGE SANITARY SEWER PLAN AND PROFILES