



Purchasing Division

ADDENDUM NO. 1

DATE: July 30, 2019
FROM: City of Grand Junction Purchasing Division
TO: All Offerors
RE: 2019 Sewer Line Replacement Project – Phase B IFB-4675-19-DH

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. Q. There are several manholes in the plans that show no fall in the manhole. Are these to be precast inverts with either an epoxy coating or castagna product applied or would the City like a pipe through the manhole with cast in place inverts?
 - A. After reviewing the plans, there are two sewer manholes that have no drop through the manhole and don't have a call-out for a PVC pipe invert. There is one manhole on Formay Ave. (Sta. 11+61.49) and one manhole on Sandra Ave. (Sta. 8+08.15) that have no drop shown through the manhole. There needs to be clarification provided for these two manholes. Attached to this Addendum #1 are updated construction plans that provide clarification for these two manholes.

2. Q. The plans are showing 4 Reliner/Duran inside drop systems the bid schedule is showing 3. Additionally, Will there be any requirement for coating the interior of the drop manholes in conjunction with the utilization of the internal drop system?
 - A. Go with the quantity provided in the bid schedule at three (3). There are three (3) Reliner/Duran inside drop systems required along 31 Road. There will be no requirement for coating the interior of the drop manholes.

3. Q. What about traffic control for CMU? What about student cars?
 - A. Colorado Mesa University has been notified of the City's intent to replace the sewer line in Elm Ave. in September. The City and its Contractor will need to work with CMU staff on determining what is acceptable for traffic control along Elm Ave. The City's goal would be to close Elm Ave. down for sewer installation and provide detours using either Texas Ave. and/or Kennedy Ave. for CMU construction access and student access to parking lots.

The original solicitation for the project noted above is amended as noted.

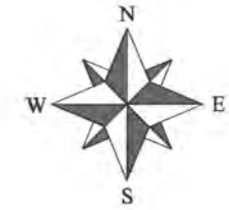
All other conditions of subject remain the same.

Respectfully,

A handwritten signature in black ink, appearing to read "Duane Hoff Jr.", written in a cursive style.

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado

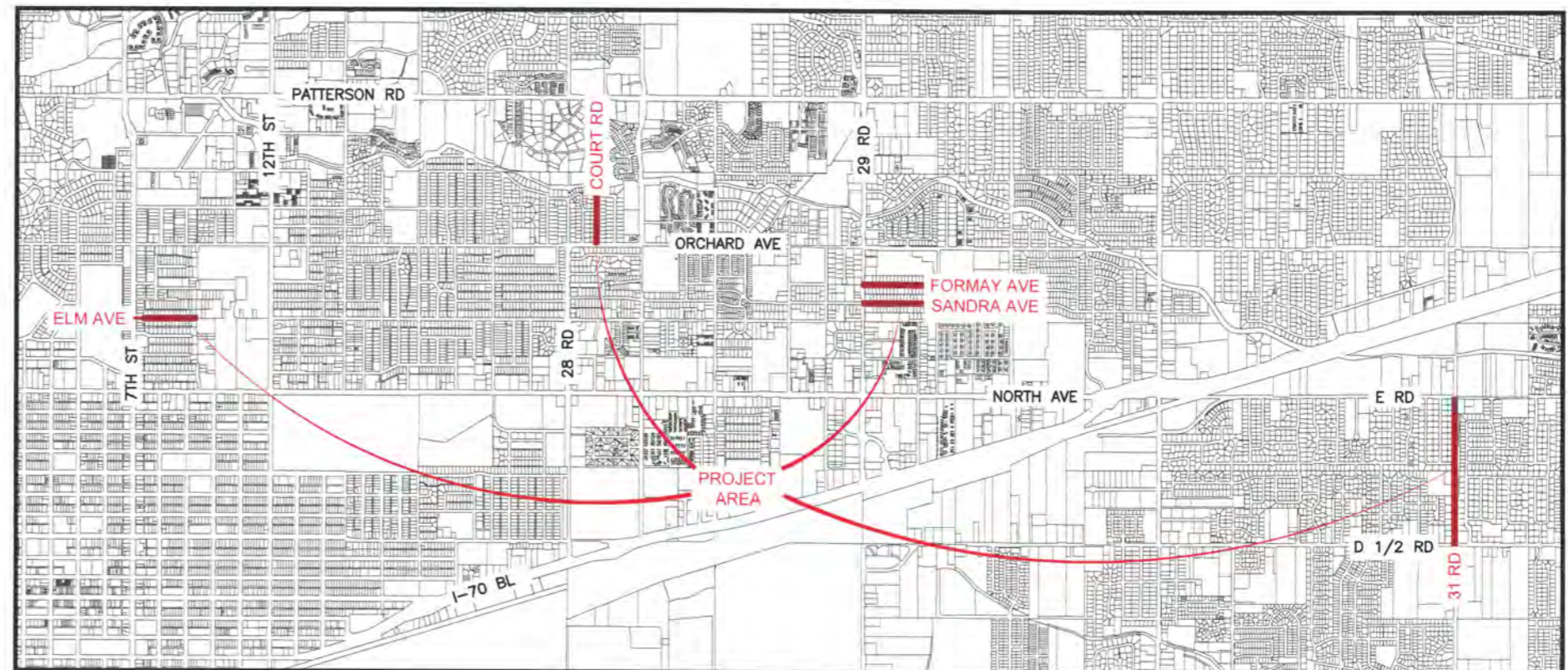
CITY OF GRAND JUNCTION 2019 PHASE B SEWER LINE REPLACEMENT PROJECT JULY 2019



VICINITY MAP

Sheet List Table

Sheet Number	Sheet Title
1	COVER SHEET
2	STANDARD ABBREVIATIONS, LEGEND, SYMBOLS
3	SUMMARY OF APPROXIMATE QUANTITIES
4	PROJECT CONTROL MAP
5	COURT RD PLAN & PROFILE (1 OF 2)
6	COURT RD PLAN & PROFILE (2 OF 2)
7	FORMAY AVE PLAN & PROFILE (1 OF 3)
8	FORMAY AVE PLAN & PROFILE (2 OF 3)
9	FORMAY AVE PLAN & PROFILE (3 OF 3)
10	SANDRA AVE PLAN & PROFILE (1 OF 3)
11	SANDRA AVE PLAN & PROFILE (2 OF 3)
12	SANDRA AVE PLAN & PROFILE (3 OF 3)
13	ELM AVE PLAN & PROFILE (1 OF 3)
14	ELM AVE PLAN & PROFILE (2 OF 3)
15	ELM AVE PLAN & PROFILE (3 OF 3)
16	31 RD PLAN & PROFILE (1 OF 7)
17	31 RD PLAN & PROFILE (2 OF 7)
18	31 RD PLAN & PROFILE (3 OF 7)
19	31 RD PLAN & PROFILE (4 OF 7)
20	31 RD PLAN & PROFILE (5 OF 7)
21	31 RD PLAN & PROFILE (6 OF 7)
22	31 RD PLAN & PROFILE (7 OF 7)
23	31 RD CROSS-SECTIONS



UTILITIES AND AGENCIES

AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE-WK	FAX
CITY OF GRAND JUNCTION	LEE COOPER	PROJECT ENGINEER	PROJECT ENGINEER	333 WEST AVE BLDG C	333 WEST AVE BLDG C	GRAND JCT., CO 81501	---	(970) 256-4022
CITY OF GRAND JUNCTION	LEE COOPER	PROJECT ENGINEER	SANITARY SEWER	333 WEST AVE BLDG C	333 WEST AVE BLDG C	GRAND JCT., CO 81501	(970) 256-4155	(970) 256-4022
GRAND VALLEY IRRIGATION CO.	PHIL BERTRAND	MANAGER	IRRIGATION	688 26 RD	688 26 RD	GRAND JCT., CO 81506	(970) 242-2762	
SPECTRUM	JEFF VALDEZ	MANAGER	CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245-8750	(970) 245-6803
CENTURYLINK	CHRIS JOHNSON	ENGINEER	TELEPHONE	2524 Blichmann Ave	2524 Blichmann Ave	GRAND JCT., CO 81504	(970) 244-4311	(970) 240-4349
UTE WATER	JUSTIN BATES	SUPERVISOR	WATER	PO BOX 460	2190 H 1/4 RD	GRAND JCT., CO 81502	(970) 242-7491	(970) 242-9189
XCEL	TILLMON MCSHOOLER	UNIT MANAGER	ELECTRIC	2538 Blichmann Ave	2538 Blichmann Ave	GRAND JCT., CO 81506	(970) 244-2664	(970) 244-2664
XCEL	SARAH BARRICAU	UNIT MANAGER	GAS	2538 Blichmann Ave	2538 Blichmann Ave	GRAND JCT., CO 81506	(970) 244-2656	(970) 244-2656



DRAWING STATUS:	
<input type="radio"/>	PROGRESS
<input checked="" type="radio"/>	FINAL CONSTRUCTION DRAWINGS
<input type="radio"/>	ASBUILT
DESIGNED BY:	
JOB ENGINEERS	2019
REVIEWED BY:	
LEE COOPER	2019
AUTHORIZED FOR CONSTRUCTION	
ACCEPTED AS CONSTRUCTED	



Know what's below.
Call before you dig.

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 A	ADDENDUM #1	7/30/2019
REVISION B		
REVISION C		
REVISION D		

CITY OF GRAND JUNCTION 2019 PHASE B SEWER LINE, REPLACEMENT PROJECT

ABBREVIATIONS

AASTHO	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
CL	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
E	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
PIC	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

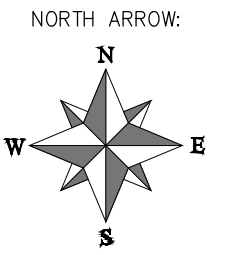
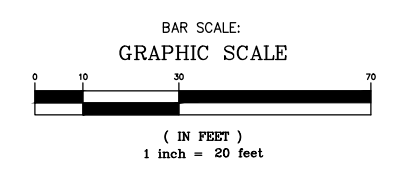
LEGEND

BSWMP DRAINAGE BASIN BOUNDARY	
BSWMP ANCHORED STRAW BALES	
BSWMP SILT FENCE	
BUILDING	
CONCRETE CURB AND GUTTER	
CONCRETE CURB, GUTTER, & SIDEWALK	
CONCRETE DITCH	
CONCRETE SIDEWALK	
CULVERT	
EARTH DITCH	
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	
HATCHING: INDICATES CONCRETE REMOVAL	
HATCHING: INDICATE GROUND REMOVAL	
HATCHING: INDICATES GRAVEL REMOVAL	
HATCHING: INDICATES STAGING AREA	
LINE (CENTER OF IMPROVEMENTS)	
LINE (CITY LIMITS)	
LINE (CONTROL)	
LINE (EASEMENT)	
LINE (MONUMENT/SECTION)	
LINE (PROPERTY)	
LINE (RIGHT OF WAY)	

MATCH LINE	MATCH LINE	SEE SHEET NO. ?
PIPE (IRRIGATION)		
PIPE (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)		
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		
STRIPING (CONTINUOUS WHITE)		
STRIPING (DASHED WHITE)		
STRIPING (CONTINUOUS YELLOW)		
STRIPING (DASHED YELLOW)		
TOP OF SLOPE		
CONTOUR LINES (SHOWN BETWEEN TOP & TOE)		
TOE OF SLOPE		
TRAFFIC DETECTOR LOOP		
UTILITY LINE (ABANDON) (THIS CASE A WATER LINE)		
UTILITY LINE (CABLE TV)		
UTILITY LINE (ELECTRIC)		
UTILITY LINE (FIBER OPTIC)		
UTILITY LINE (GAS)		
UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER)		
UTILITY LINE (OVERHEAD POWER)		
UTILITY LINE (OVERHEAD TELEPHONE)		
UTILITY LINE (SANITARY SEWER)		
UTILITY LINE (SANITARY SEWER FORCE MAIN)		
UTILITY LINE (SANITARY SEWER SERVICE)		
UTILITY LINE (STORM SEWER)		
UTILITY LINE (STORM SEWER, PERFORATED)		
UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION)		
UTILITY LINE (TELEPHONE)		
UTILITY LINE (WATER)		

SYMBOLS

BENCH MARK	
BORE HOLE	
CATCH BASIN	
CLEAN OUT	
CURB STOP	
FIRE HYDRANT	
GUY WIRE ANCHOR	
HEADGATE	
IRRIGATION PUMP	
MAILBOX	
MANHOLE (ELECTRIC)	
MANHOLE (GAS)	
MANHOLE (SANITARY/STORM)	
MANHOLE (TELEPHONE)	
MANHOLE (TV)	
MANHOLE (WATER)	
METER (GAS)	
METER (WATER)	
PEDESTAL (TELEPHONE)	
PEDESTAL (TV)	
PROPERTY PIN	
PULL BOX	
REDUCER FITTING	
SIGN OR POST (SIGN TYPE NOTED)	
SPRINKLER HEAD	
STREET LIGHT	
SURVEY MONUMENT (CITY)	
SURVEY MONUMENT (TYPE NOTED)	
TEST HOLE	
TRAFFIC PAINT MARKING	
TRAFFIC SIGNAL POLE AND MAST ARM	
UTILITY POLE	
VALVE (GAS)	
VALVE (IRRIGATION)	
VALVE (WATER)	
VEGETATION (HEDGE OR BUSH)	
VEGETATION (TREE STUMP)	
VEGETATION (TREE) (CALIPER SIZE NOTED)	
WATER HYDRANT	
WEIR	
YARD LIGHT	



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			DESIGNED BY	DATE
REVISION			CHECKED BY	DATE
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2019 SEWER LINE REPLACEMENTS
PHASE B SEWER
STANDARD ABBREVIATIONS, LEGEND, SYMBOLS

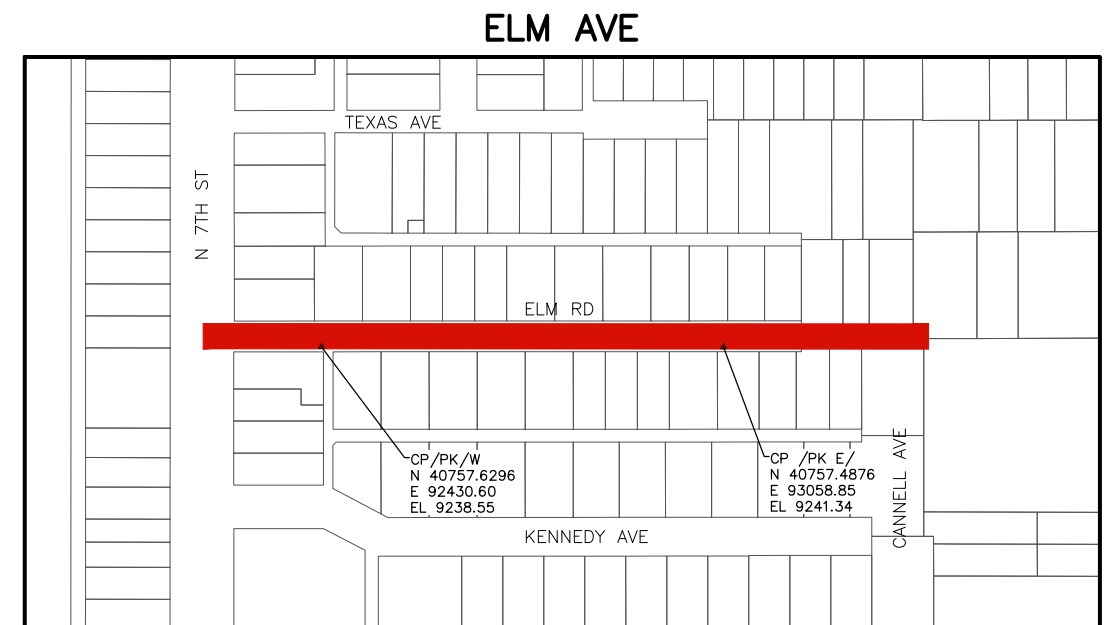
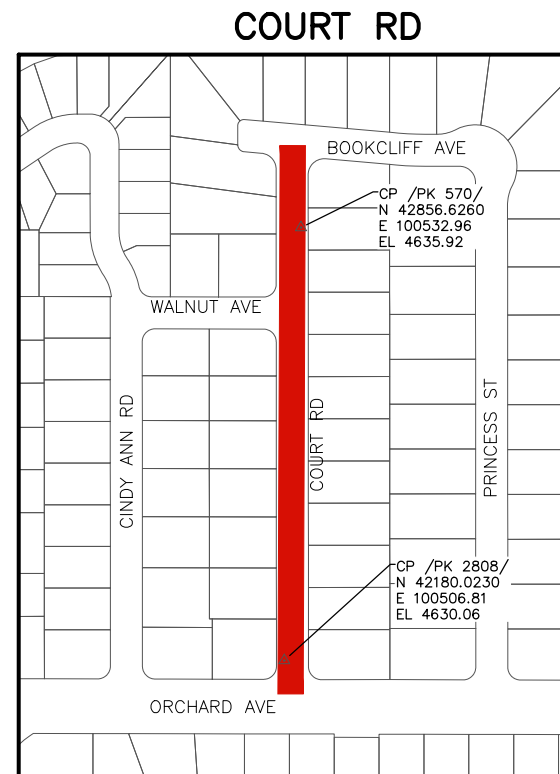
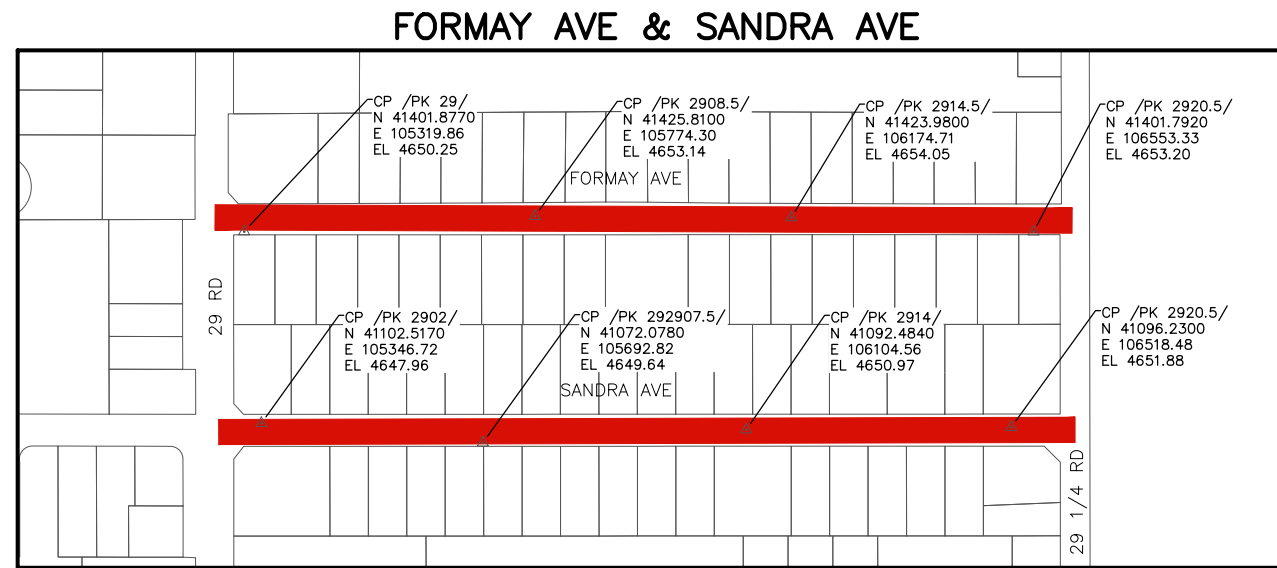
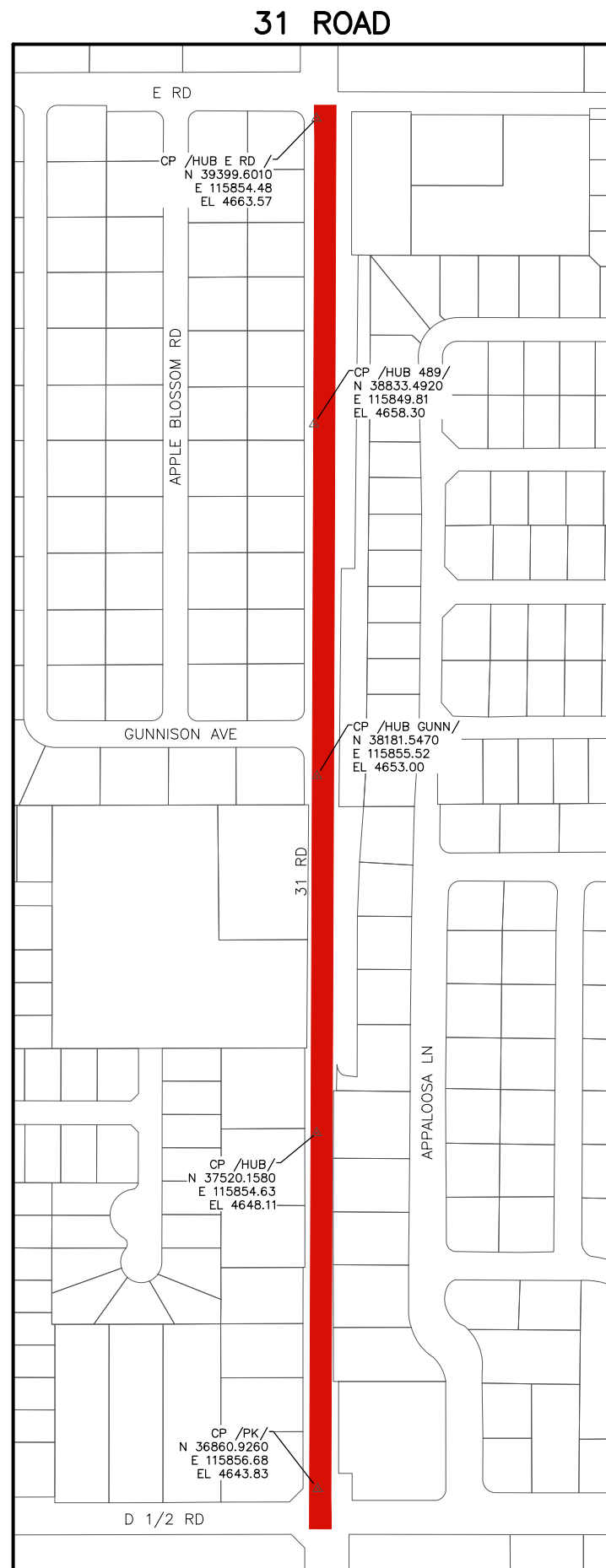
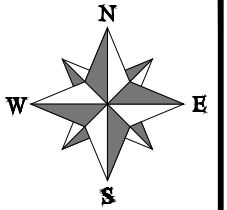
1	108.2	4" Gravity Sewer Pipe (SDR-35 PVC) (Includes cost of connection to the existing sewer service line)	2371	Lin. Ft.
2	108.2	6" Gravity Sewer Pipe (SDR-35 PVC) (Includes cost of connection to the existing sewer pipe and/or manhole)	3	Lin. Ft.
3	108.2	8" Gravity Sewer Pipe (SDR-35 PVC) (Includes cost of connection to the existing sewer pipe and/or manhole)	6803	Lin. Ft.
4	108.2	Imported Trench Backfill (Class 3) (Includes haul and disposal of unsuitable excavated material) (Assumed material unit weight = 133 lbs/ft ³)	11098	Ton
5	108.3	8" X 4" Sewer Service Tap (Full Body Wye w/ Street 45-deg.) (Includes full body wye, cleanout, and all fittings required to align and connect into the existing sewer service pipe at the locations shown on the plans) (See City Std. Detail SS-06)	107	Each
6	108.3	Sewer Service Clean out Ring and Cover (Castings Inc. CO-8030-CI or Approved Equal) (Includes concrete collar in unpaved areas per City Std. Detail SS-07)	107	Each
7		Connect to Existing Sewer Pipe with Max Adapter PVC Repair Coupling (The Contract Price for Sewer Pipe Shall Include the Cost of Connection to Existing Pipeline)	3	Each
8	108.3	End Cap/Plug (Size as Shown)	2	Each
9	108.5	Sanitary Sewer Basic Manhole (48" I.D.) (Includes connection of adjacent sewer line, forming inverts and adjusting to final grade) (See City Std. Detail SS-02) (No steps required in sewer manholes)	27	Each
10	108.5	Manhole Barrel Section (D>5') (48" I.D.) Granular Stabilization Material (Type B) (Crushed Rock) (18" Thick Min.) (Includes haul and disposal of unsuitable excavated material)	102	Lin. Ft.
11	108.7	(Assumed Unit Weight = 138 lbs/ft ³)	3623	Ton
12	202	Abandon Pipe (Abandon pipe by plugging ends with concrete)	27	Each
13	202	Abandon Manhole (Remove cone section, ring & cover, and fill remaining barrel sections with flow-fill material)	1	Each
14	202	Removal of Existing Pipe (Size & type as shown on plans)	9100	Lin. Ft.
15	202	Removal of Asphalt Mat (Full-Depth)	5156	Sq. Yd.
16	202	Removal of Asphalt Mat (Planing) (2" Thick for T Top Section)	389	Sq. Yd.
17	202	Removal of Concrete (Includes but not limited to curb, gutter, sidewalk, driveway, slabs, V-pan, curb ramps, intersection corners, aprons, landscape borders, and concrete walls.)	726	Sq. Ft.
18	202	Removal of Shrub	1	Each
19	202	Removal of Sod	441	Sq. Ft.
20	202	Removal of Manhole. Contractor Shall Salvage Ring and Cover and Deliver to City Shops.	27	Each
21	203	Disposal of Radioactive Material (Dispose at City Shops, 333 West Ave.)	100	Cu. Yd.
22	206	Structure Backfill (Flow-Fill) (Use at CDOT Right-of Way road crossing and as required on the Project)	2	Cu. Yd.

23	208	Storm Drain Inlet Protection (Gravel Filter at Curb Inlet) (Includes Maintenance & Removal of Debris, & Removal of Inlet Protection)	7	Each
24	208	Concrete Washout Facility	1	Lump Sum
25	210	Ground Cover Material (Match Existing)	288	Sq. Ft.
26	210	Reset/Repair Sprinkler Irrigation System. (Complete In Place)(Various Locations)	1	Lump Sum
27	210	Reset Guard Rail.	70	Lin. Ft.
28	210	Reset Fence (All Types)	40	Lin. Ft.
29	212	Re. Sod Area as Shown (Includes 6" Thick Imported Topsoil Placed Prior to Sod Placement)	441	Sq. Ft.
30	304	Aggregate Base Course (Class 6) (6" thick) (Shoulder Base)	410	Sq. Yd.
31	304	Aggregate Base Course (Class 6) (15" thick)	4233	Sq. Yd.
32	401	Hot Bituminous Pavement (Patching) (2" Thick) (Grading SX, Binder Grade PG 64-22, GYR=75) (One 2" Top Mat) (T-Top Patch)(See City Std. Detail GU-03)	2219	Sq. Yd.
33	401	Hot Bituminous Pavement (3" Thick) (Grading SX, Binder Grade PG 64-22, GYR=75) (One 3" Lift Bottom Mat)	1830	Sq. Yd.
34	401	Hot Bituminous Pavement (3" Thick) (Grading SX, Binder Grade PG 64-22, GYR=75) (One 3" Lift)	617	Sq. Yd.
35	401	Hot Bituminous Pavement (4" Thick) (Grading SX, PG 64-22) (Two 2" Lifts)	2709	Sq. Yd.
36	407	Emulsified Asphalt (Tack Coat)	900	Gallon
37	608	Bituminous Sidewalk (3" Thick)	7	Sq. Yd.
38	608	Monolithic Drive Over Curb, Gutter, and Sidewalk (Match Existing Width)	68	Sq. Yd.
39	608	Monolithic Vertical Curb, Gutter, and Sidewalk (Match Existing Width)	6	Sq. Yd.
40	608	Concrete Drainage Pan (4" Wide) (Match in Kind)	4	Sq. Yd.
41	608	Concrete Curb and Gutter (Match Existing Width)	6	Lin. Ft.
42	608	Concrete Pavement (8" Thick) (CDOT Class D, 4500 PSI at 28 Days)	13	Sq. Yd.
43	608	Cap Top Half of Sewer Pipe in concrete per City Std. Detail GU-04 (20' long) (If necessary)	1	Each
44	608	Encase Sewer Pipe in Concrete per City Std. Detail GU-04 (20' long) (If necessary)	1	Each
45	620	Portable Sanitary Facility	1	Each
46	625	Construction Surveying (Includes As-Built Drawings)	1	Lump Sum
47	626	Mobilization (7%)	1	Lump Sum
48	630	Traffic Control Plan	1	Lump Sum
49	630	Traffic Control (Complete in Place)	1	Lump Sum
50	630	Flagging	700	Hour
51	SP	Core through MH D2-302-056 and Modify Sewer Drop	1	Lump Sum
52	SP	Install New 8" Inside Drop System by Reliner/Duran Inc. Or Equal Approved by the Project Engineer. All Fasteners and Bolts Shall be 316 Stainless Steel.	4	Each
53	SC 3.3.18	Quality Control Testing	1	Lump Sum
54	Pump	Bypass Sewage Pumping (As Deemed Necessary by City or Contractor)	1	Lump Sum
MCR		Minor Contract Revisions	1	Lump Sum

REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			DESIGNED BY	DATE
REVISION			CHECKED BY	DATE
REVISION			APPROVED BY	DATE



2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 SUMMARY OF APPROXIMATE QUANTITIES



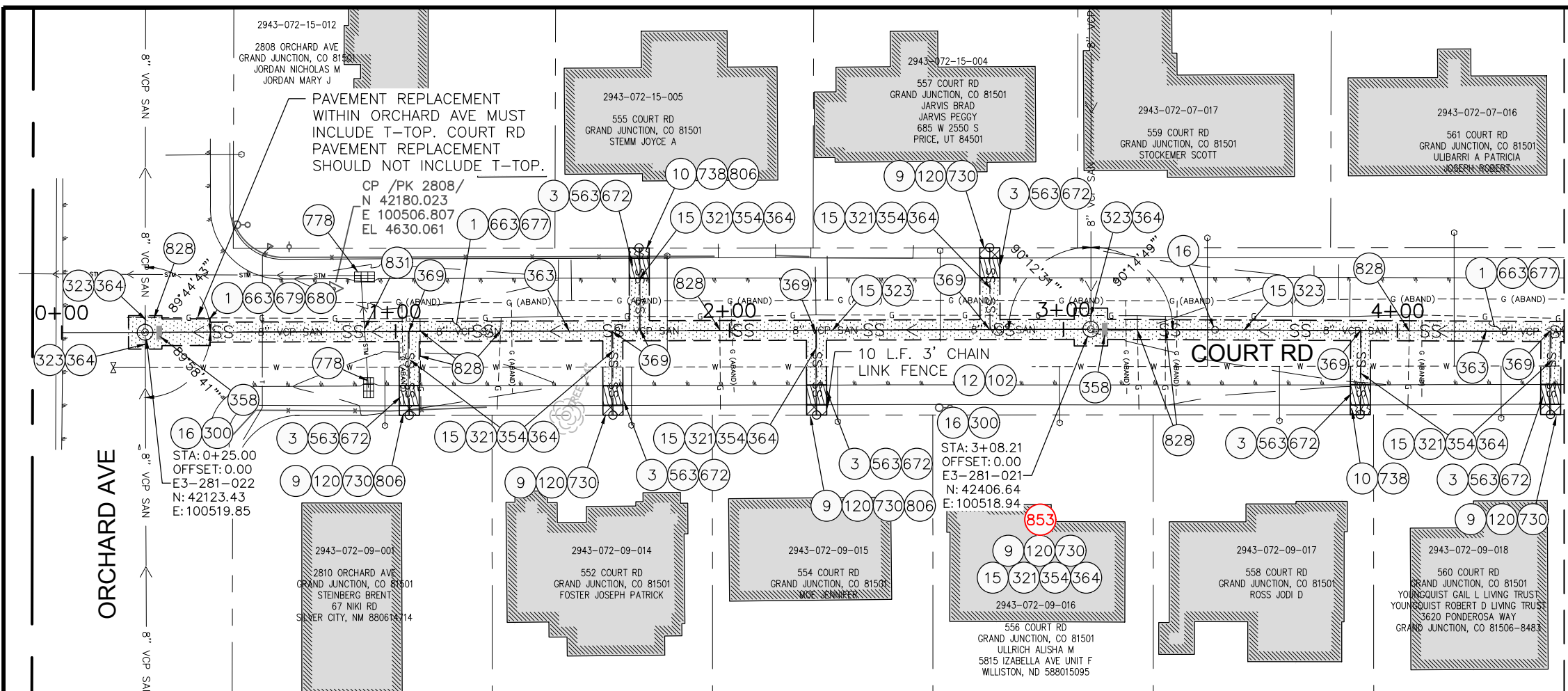
REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			BY KY	03/2019
REVISION			DESIGNED BY ES	06/2019
REVISION			CHECKED BY BG	06/2019
REVISION			APPROVED BY BG	06/2019



CONSTRUCTION NOTES

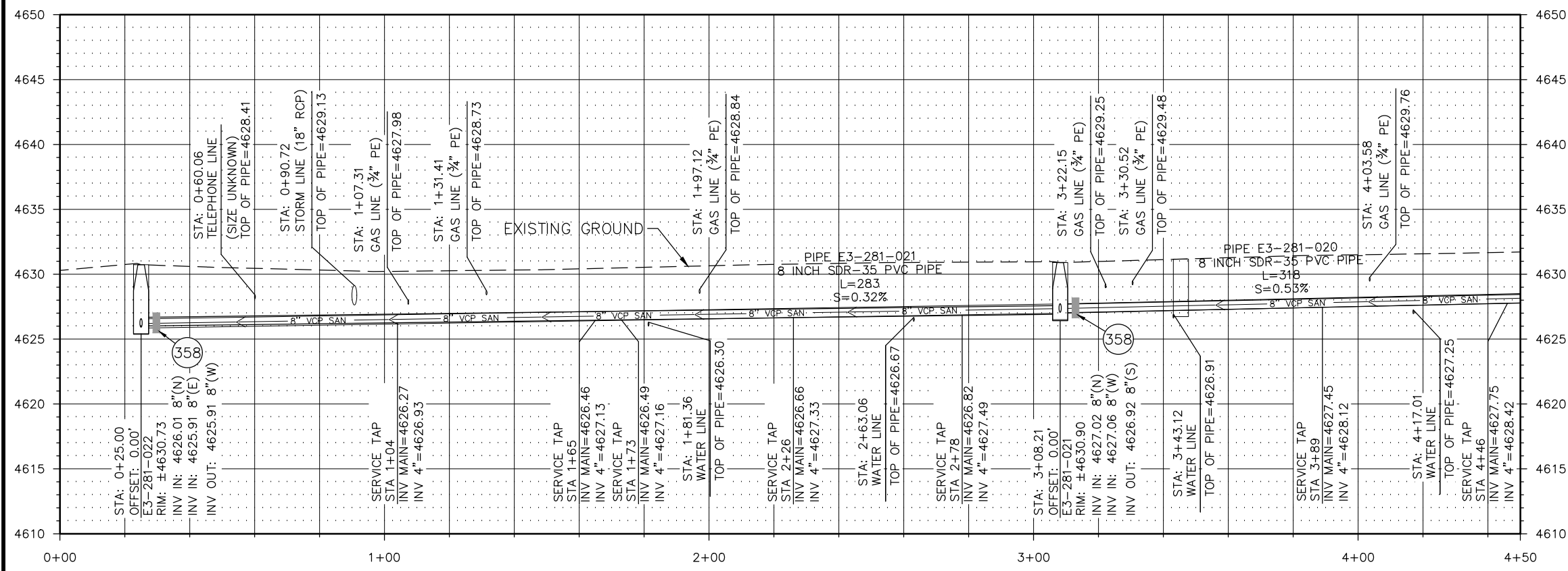
- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS
- 9 202 - REMOVAL OF SOD.
- 10 202 - REMOVAL OF LANDSCAPE GROUND COVER AND ANY UNDERLYING BARRIER. STOCKPILE PER PROPERTY OWNERS RECOMMENDATION.
- 12 202 - REMOVAL OF FENCE AS SHOWN. (HEIGHT AND MATERIAL AS SHOWN ON PLAN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 102 210 - RESET FENCE. (HEIGHT AND MATERIALS AS SHOWN ON PLAN)
- 120 210 - RESET/REPAIR SPRINKLER IRRIGATION SYSTEM. (IF NECESSARY)
- 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)
- 321 102.9/108.2 - 4" 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
- 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
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 563 608.06 - MONOLITHIC DRIVE OVER CURB, GUTTER AND SIDEWALK (MATCH EXISTING WIDTH)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR = 75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR = 75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 730 212 - RESOD AREA AS SHOWN.
- 738 610 - GROUND COVER MATERIAL (MATCH EXISTING)
- 778 208 - STORM DRAIN INLET PROTECTION (GRAVEL FILTER AT CURB INLET) (AS SHOWN AND PER DETAIL)
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE
- 831 PROTECT STORM PIPE
- 853 CITY UNABLE TO LOCATE SEWER TAP FOR PROPERTY. CONTRACTOR TO LOCATE SEWER TAP DURING INSTALLATION OF NEW 8" MAIN.

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



SEE SHEET 6

MATCH LINE 4+50



REVISION	DESCRIPTION	DATE	DRAWN BY	HMC/JCS	DATE
REVISION A					
REVISION B					
REVISION C					
REVISION D					

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



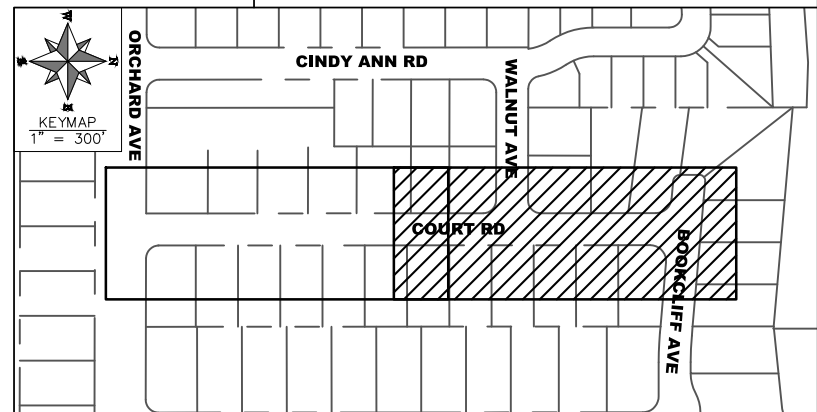
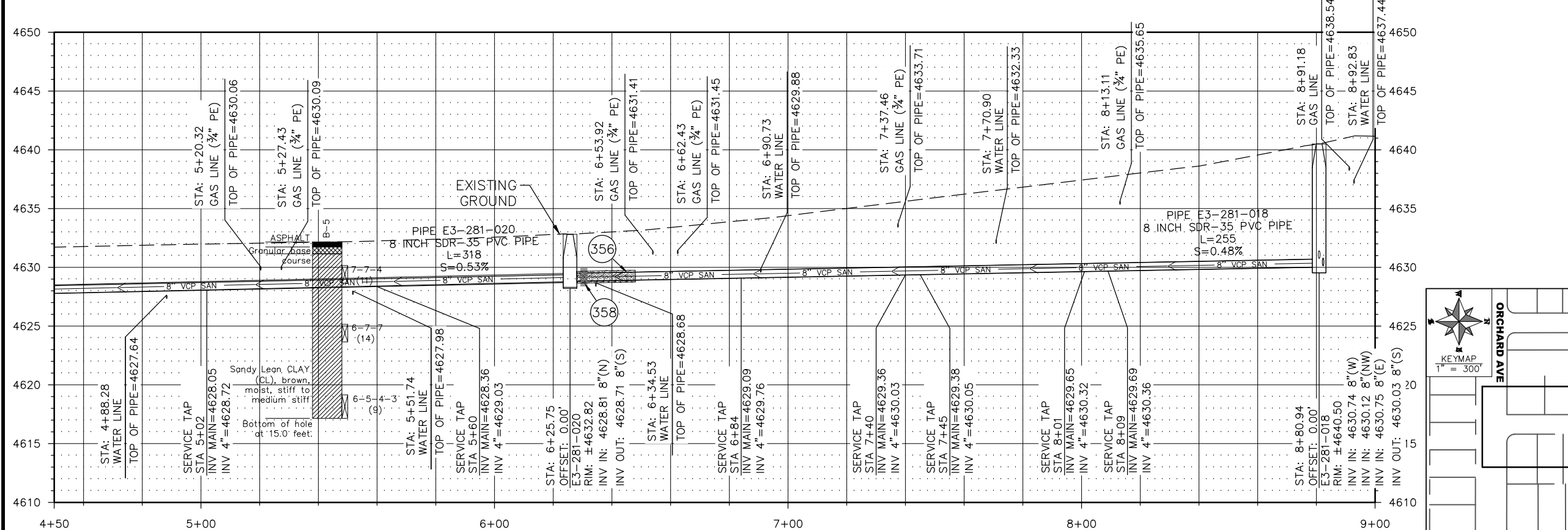
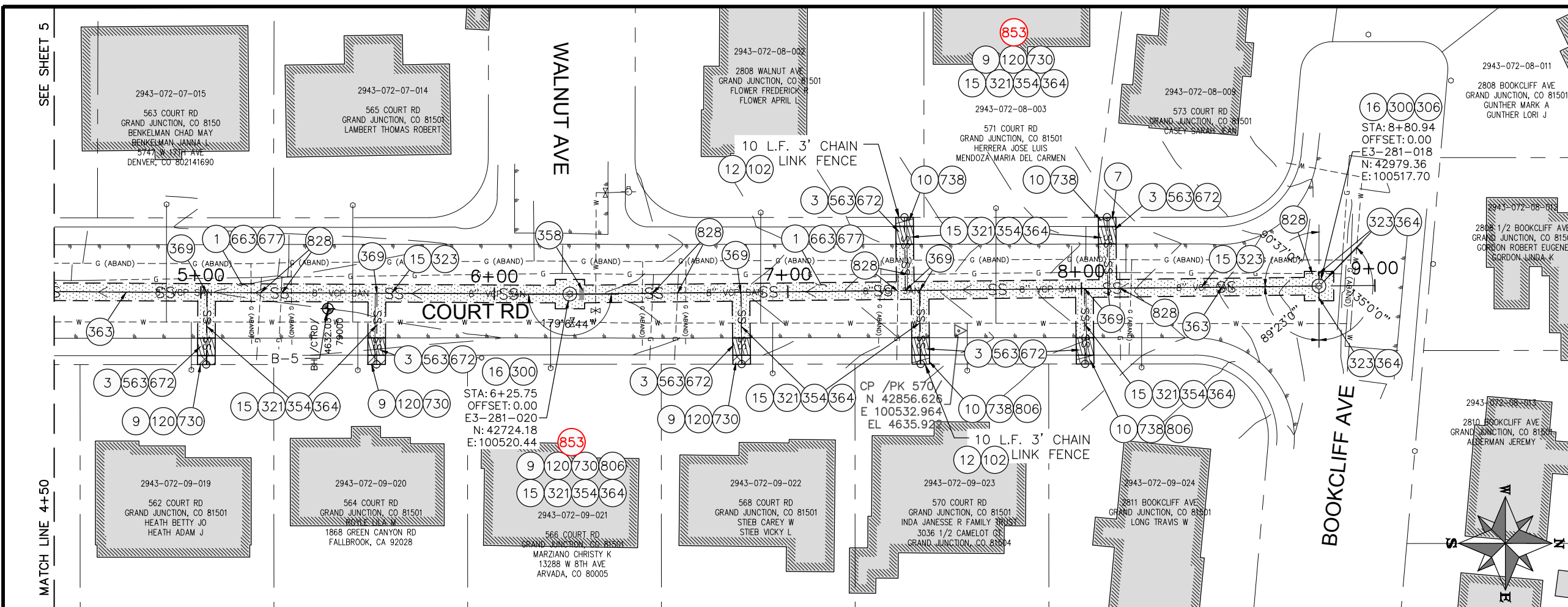
2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 COURT ROAD

5

CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS
- 7 202 - REMOVAL OF SHRUB. (AS NECESSARY)
- 9 202 - REMOVAL OF SOD.
- 10 202 - REMOVAL OF LANDSCAPE GROUND COVER AND ANY UNDERLYING BARRIER. STOCKPILE PER PROPERTY OWNERS RECOMMENDATION.
- 12 202 - REMOVAL OF FENCE AS SHOWN. (HEIGHT AND MATERIAL AS SHOWN ON PLAN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 102 210 - RESET FENCE. (HEIGHT AND MATERIAL AS SHOWN ON PLAN)
- 120 210 - RESET/REPAIR SPRINKLER IRRIGATION SYSTEM. (IF NECESSARY)
- 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)
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5) (48" I.D.).
- 321 102.9/108.2 - 4" 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
- 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
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07).
- 356 ENCASE ENTIRE SEWER IN REINFORCED CONCRETE PER STD. DETAIL GU-04. (ALL CASES WHERE WATER LINE BELOW SEWER LINE OR AT WATERWAY CROSSING)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 563 608.06 - MONOLITHIC DRIVE OVER CURB, GUTTER AND SIDEWALK (MATCH EXISTING WIDTH)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 730 212 - RESOD AREA AS SHOWN (INCLUDES 6" OF TOPSOIL PLACEMENT PRIOR TO SOD PLACEMENT)
- 738 610 - GRUND COVER MATERIAL (MATCH EXISTING)
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE
- 853 CITY UNABLE TO LOCATE SEWER TAP FOR PROPERTY. CONTRACTOR TO LOCATE SEWER TAP DURING INSTALLATION OF NEW 8" MAIN.

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



REVISION	DESCRIPTION	DATE	DRAWN BY	HMC/JCS	DATE	2016
REVISION			DESIGNED BY	MF	DATE	06/2019
REVISION			CHECKED BY	EWS	DATE	06/2019
REVISION			APPROVED BY	BG	DATE	06/2019

SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'	0 10 20 40
VERTICAL: 1" = 5'	0 2.5 5 10

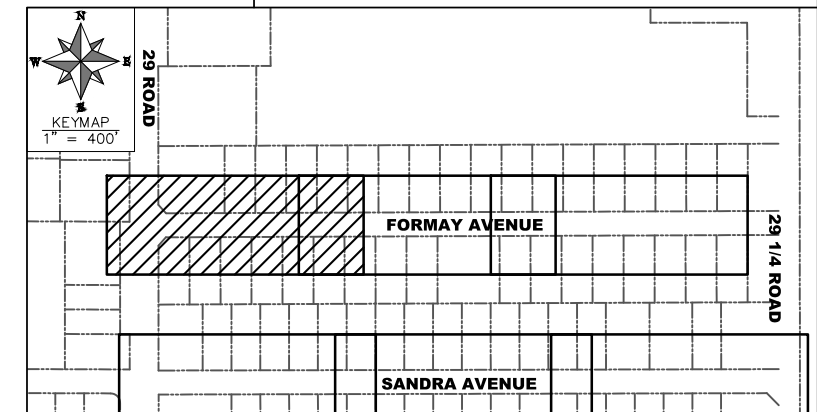
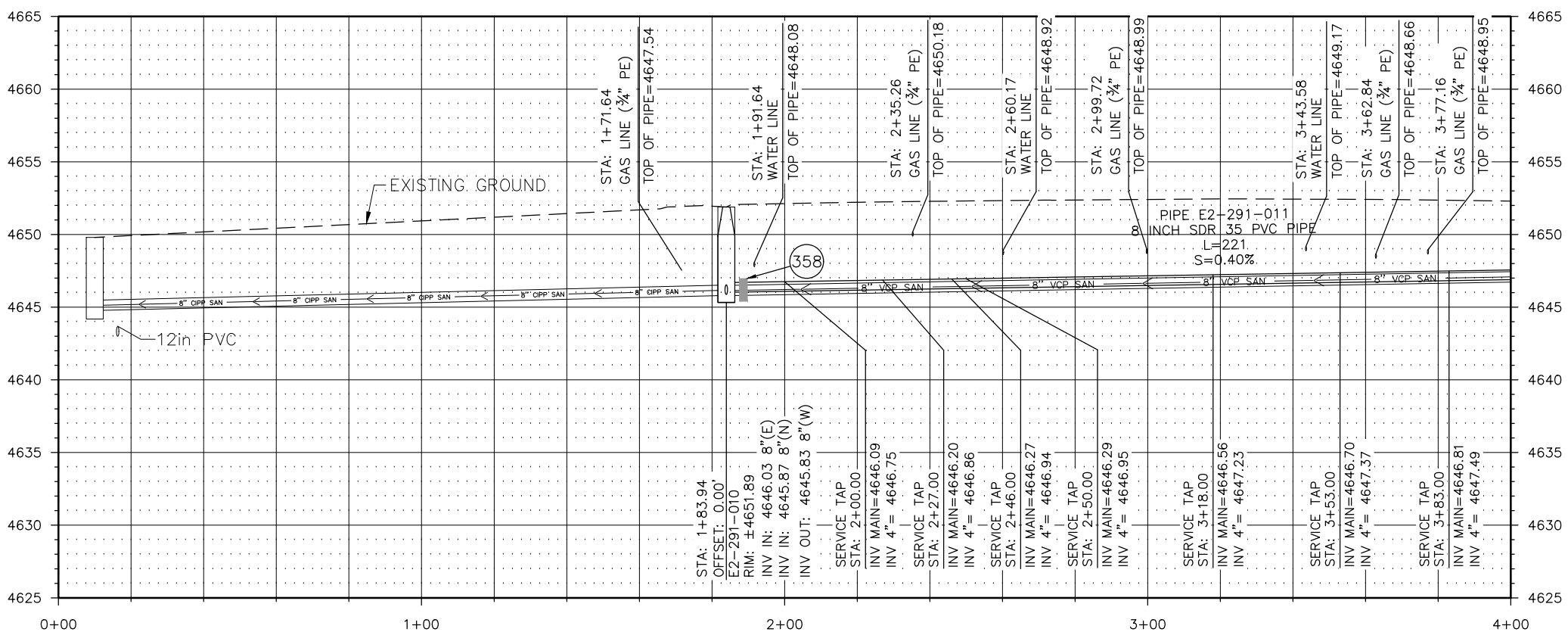
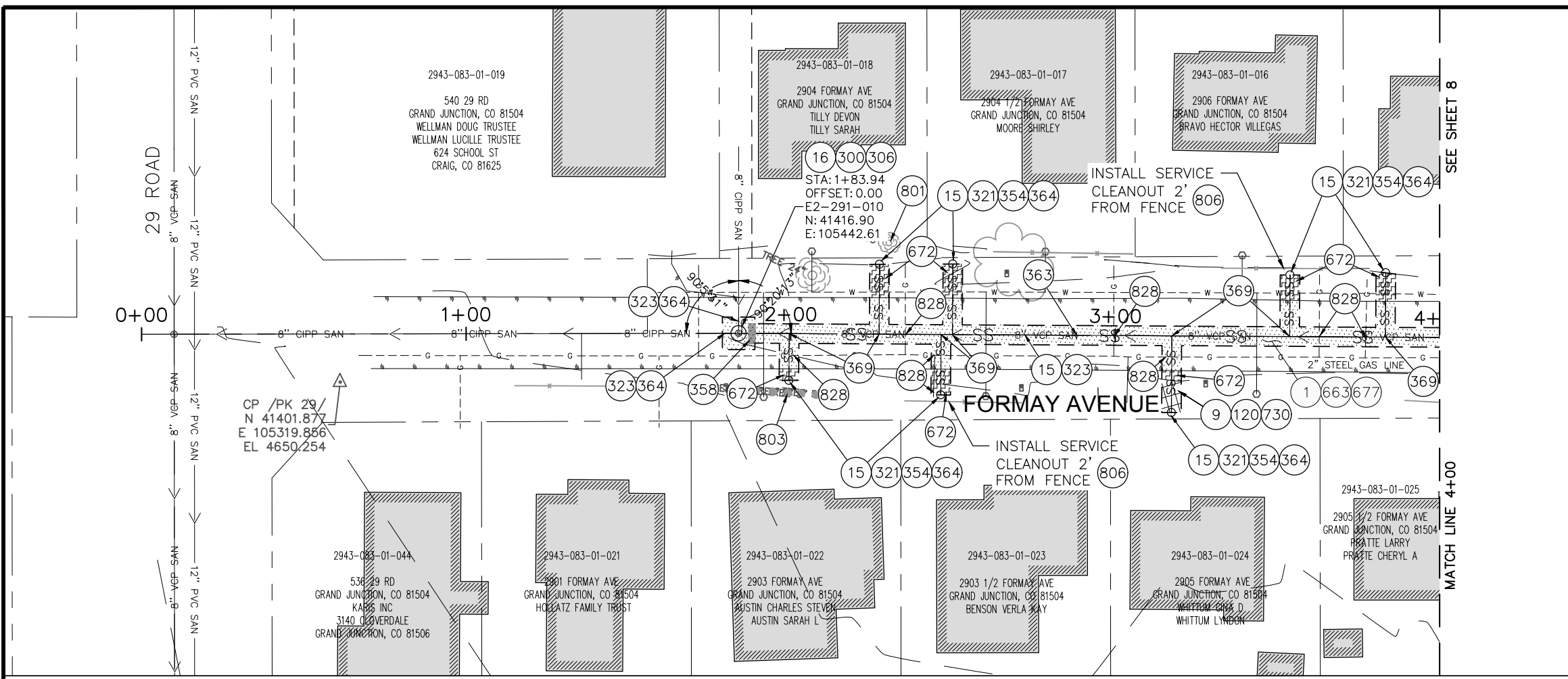
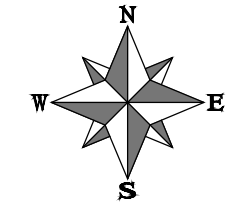


2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 COURT ROAD

6

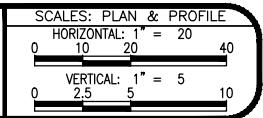
CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 9 202 - REMOVAL OF SOD
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 120 210 - RESET/REPAIR SPRINKLER IRRIGATION SYSTEM. (IF NECESSARY)
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5) (48" I.D.).
- 321 102.9/108.2 - 4" 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.
- 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.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 730 212 - RESOD AREA AS SHOWN
- 801 PROTECT TREE
- 803 PROTECT HEDGE
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE



NOTES:
• DO NOT INSTALL STEPS IN NEW MANHOLES.

REVISION	DESCRIPTION	DATE	DRAWN BY	HMC/JCS	DATE	2016
REVISION			DESIGNED BY	MF	DATE	06/2019
REVISION			CHECKED BY	EWS	DATE	06/2019
REVISION			APPROVED BY	BG	DATE	06/2019



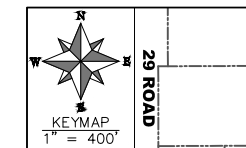
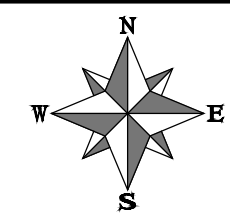
**2019 SEWER LINE REPLACEMENTS
PHASE B SEWER
FORMAY AVENUE**

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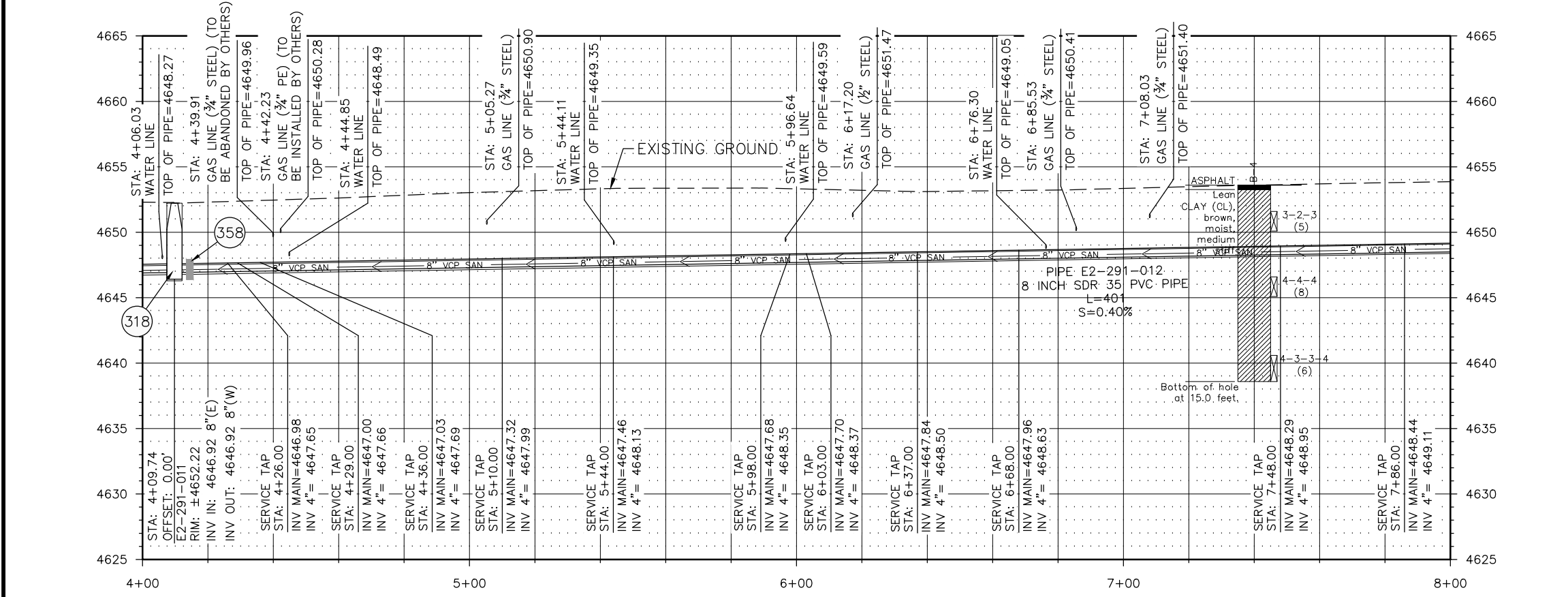
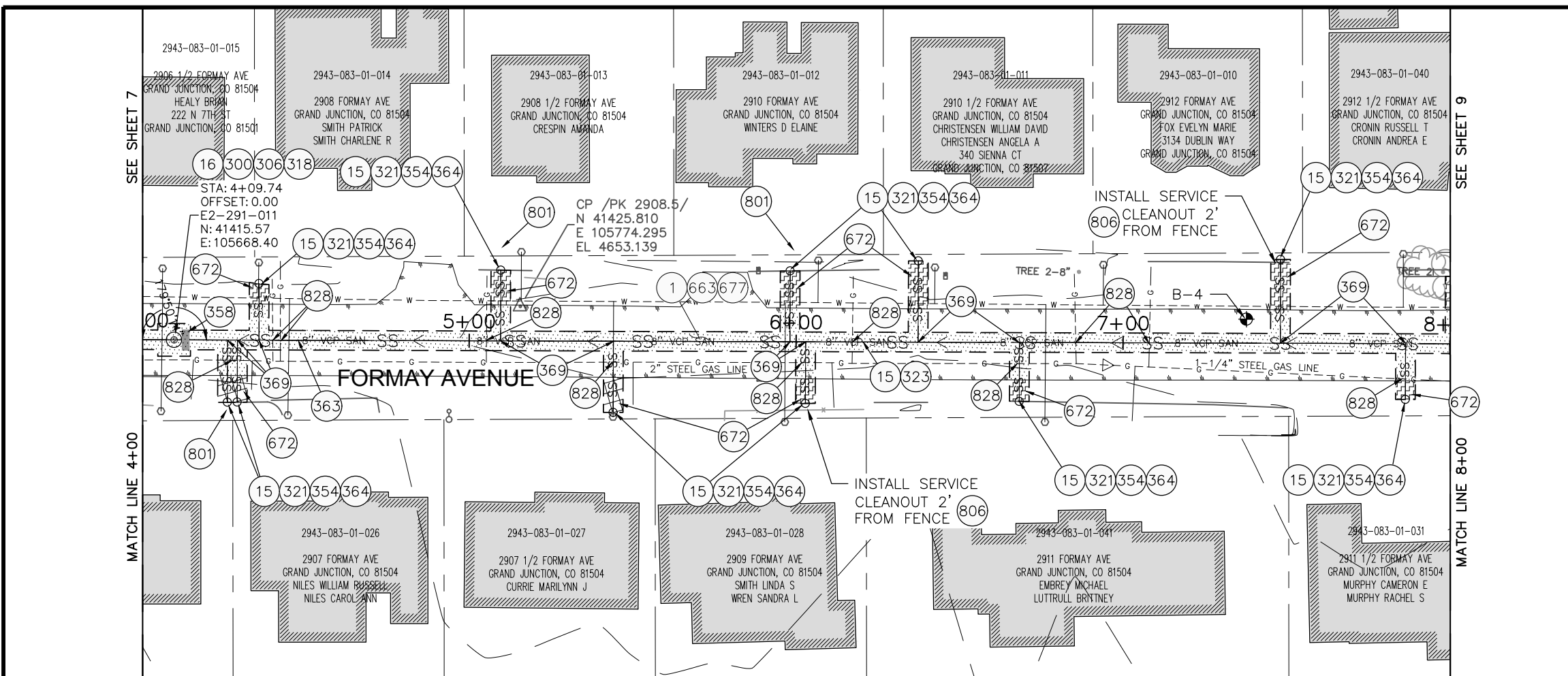
CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5') (48" I.D.).
- 318 PROVIDE PVC INVERT. (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE). COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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.
- 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.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 801 PROTECT TREE
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE

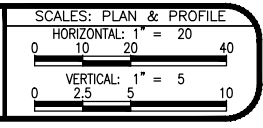
NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 FORMAY AVENUE



REVISION	DESCRIPTION	DATE	DRAWN BY	HMC/JCS	DATE	2016
REVISION			DESIGNED BY	MF	DATE	06/2019
REVISION			CHECKED BY	EWS	DATE	06/2019
REVISION			APPROVED BY	BG	DATE	06/2019

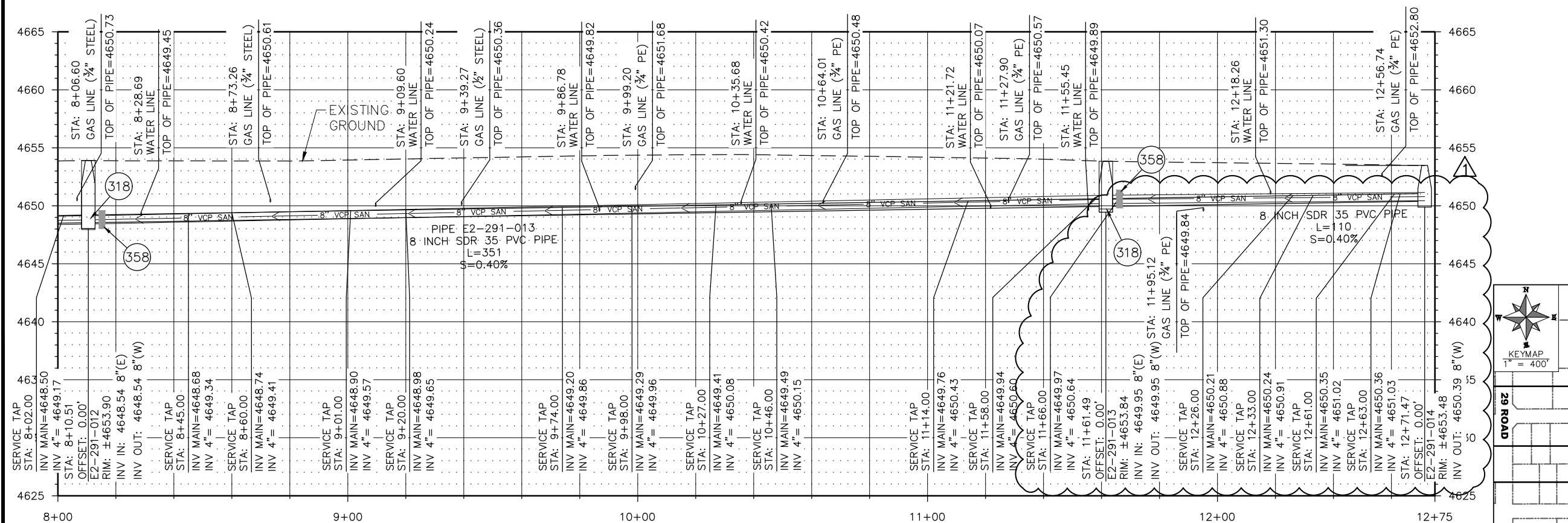
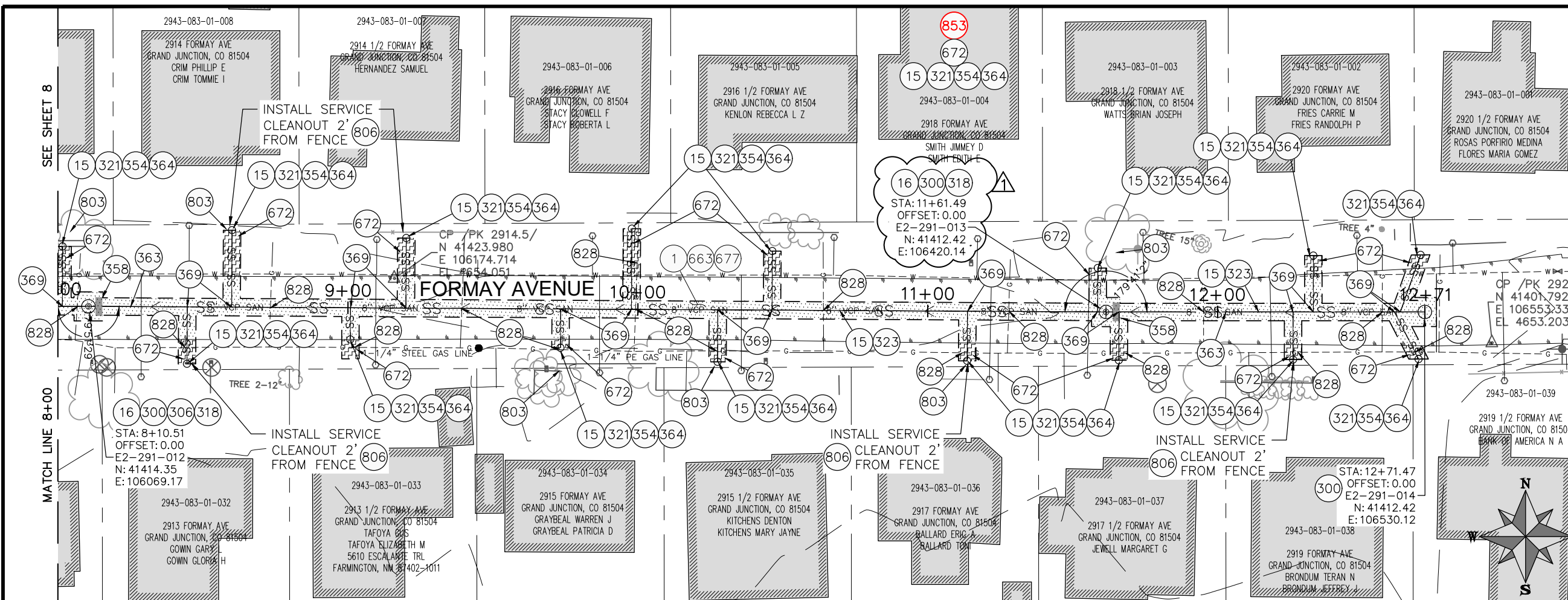


CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5) (48" I.D.).
- 318 PROVIDE PVC INVERT. (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE). COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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.
- 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.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 803 PROTECT HEDGE
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE

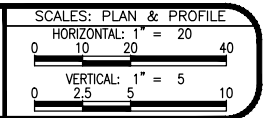
853 CITY UNABLE TO LOCATE SEWER TAP FOR PROPERTY. CONTRACTOR TO LOCATE SEWER TAP DURING INSTALLATION OF NEW 8" MAIN.

NOTES:
• DO NOT INSTALL STEPS IN NEW MANHOLES.



REVISION	DESCRIPTION	DATE
REVISION 1	ADDENDUM #1	07/30/2019
REVISION 2		
REVISION 3		
REVISION 4		

DRAWN BY	DATE
HMC/JCS	2016
DESIGNED BY	DATE
MF	06/2019
CHECKED BY	DATE
EWS	06/2019
APPROVED BY	DATE
BG	06/2019



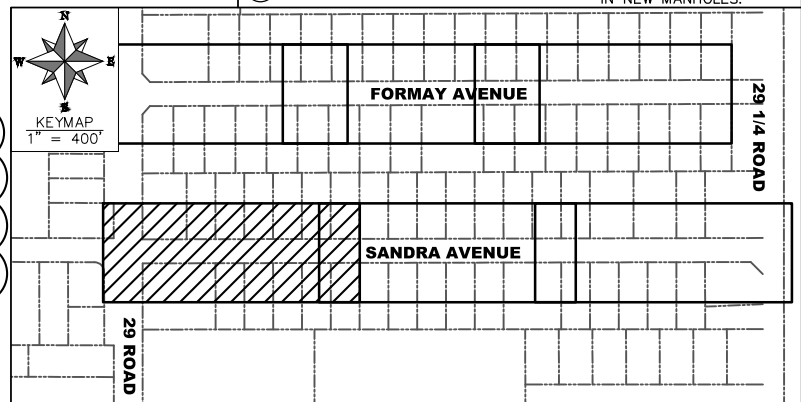
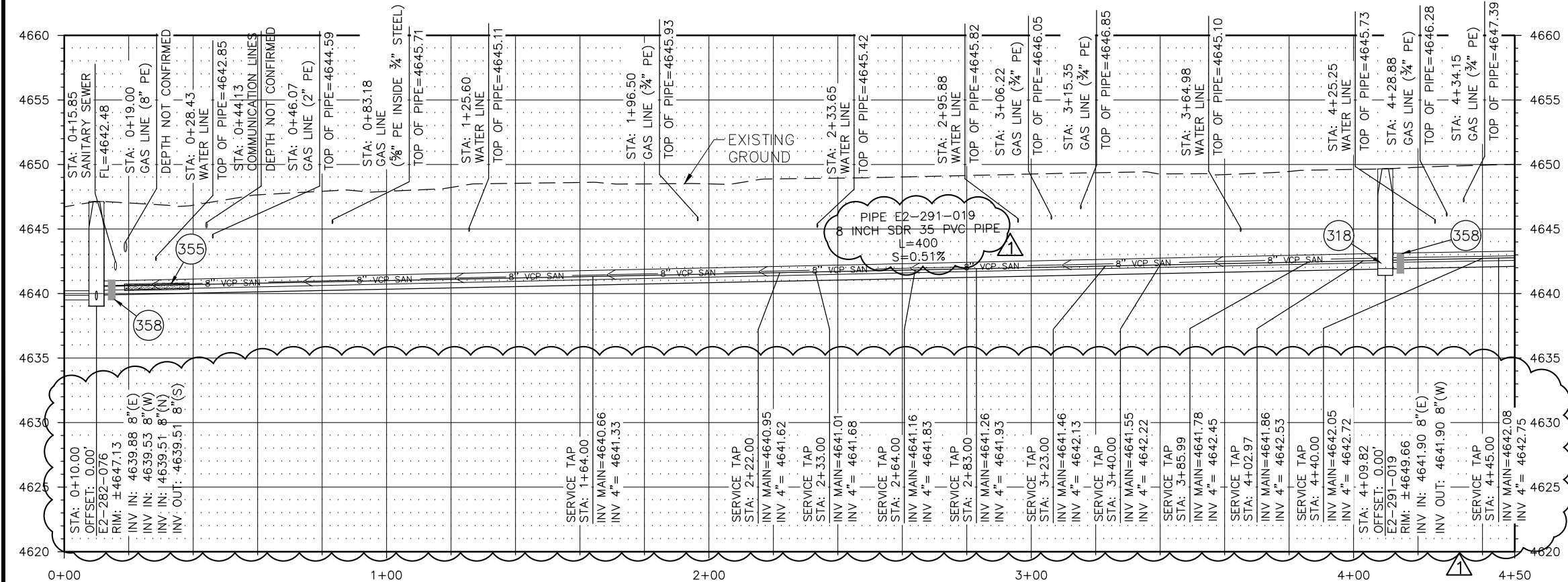
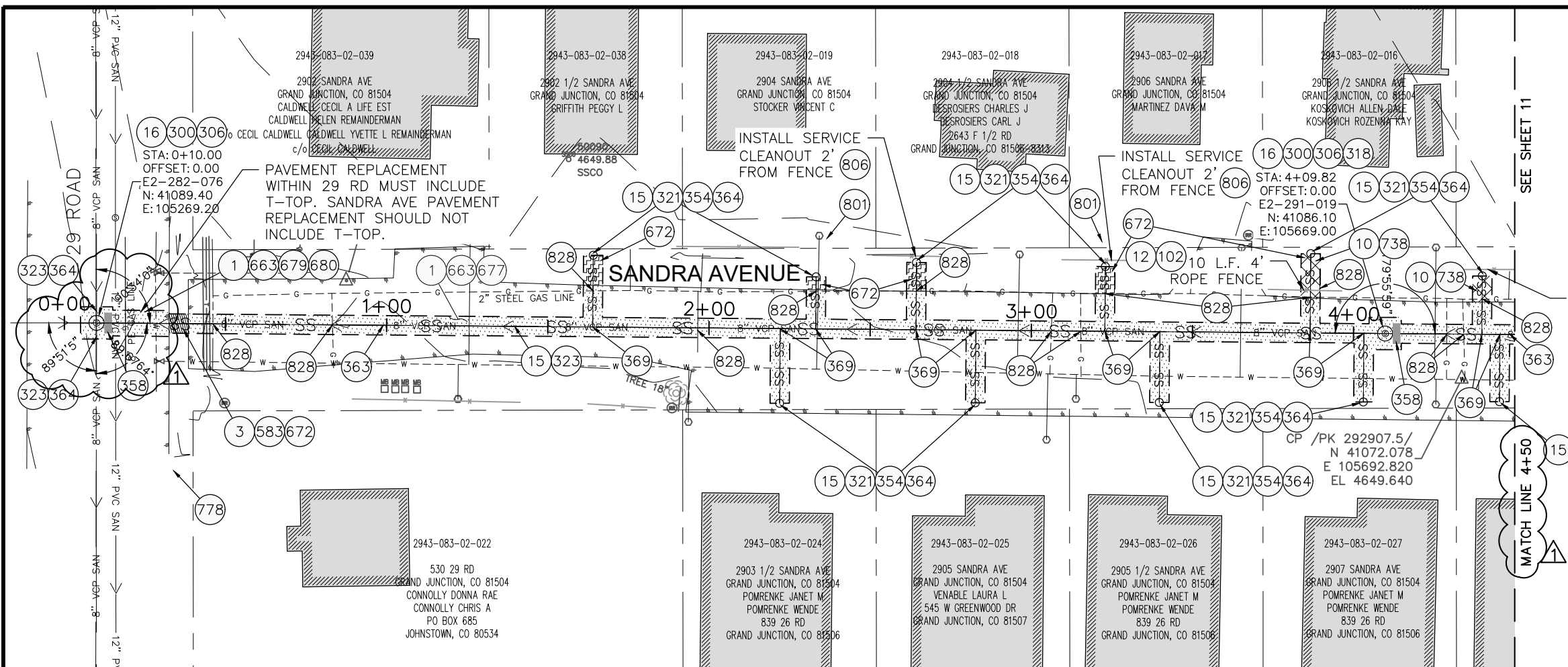
**2019 SEWER LINE REPLACEMENTS
PHASE B SEWER
FORMAY AVENUE**

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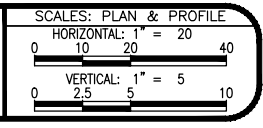
CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 10 202 - REMOVAL OF LANDSCAPE GROUND COVER AND ANY UNDERLYING BARRIER. STOCKPILE PER PROPERTY OWNERS RECOMMENDATION.
- 12 202 - REMOVAL OF FENCE AS SHOWN. (HEIGHT AND MATERIAL AS SHOWN ON PLAN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 102 210 - RESET FENCE. (HEIGHT AND MATERIAL AS SHOW ON PLAN)
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5') (48" I.D.).
- 318 PROVIDE PVC INVERT. (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE). COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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.
- 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.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- 355 104.40 - CAP TOP HALF OF SEWER IN CONCRETE PER STD. DETAIL GU-04. (WATER LINE LESS THAN 18" ABOVE SEWER LINE)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 583 608.06 - CONCRETE DRAINAGE PAN (4" WIDE)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR = 75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR = 75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 738 610 - GROUND COVER MATERIAL (MATCH EXISTING)
- 778 208 - STORM DRAIN INLET PROTECTION (GRAVEL FILTER AT CURB INLET) (AS SHOWN AND PER DETAIL)
- 801 PROTECT TREE
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



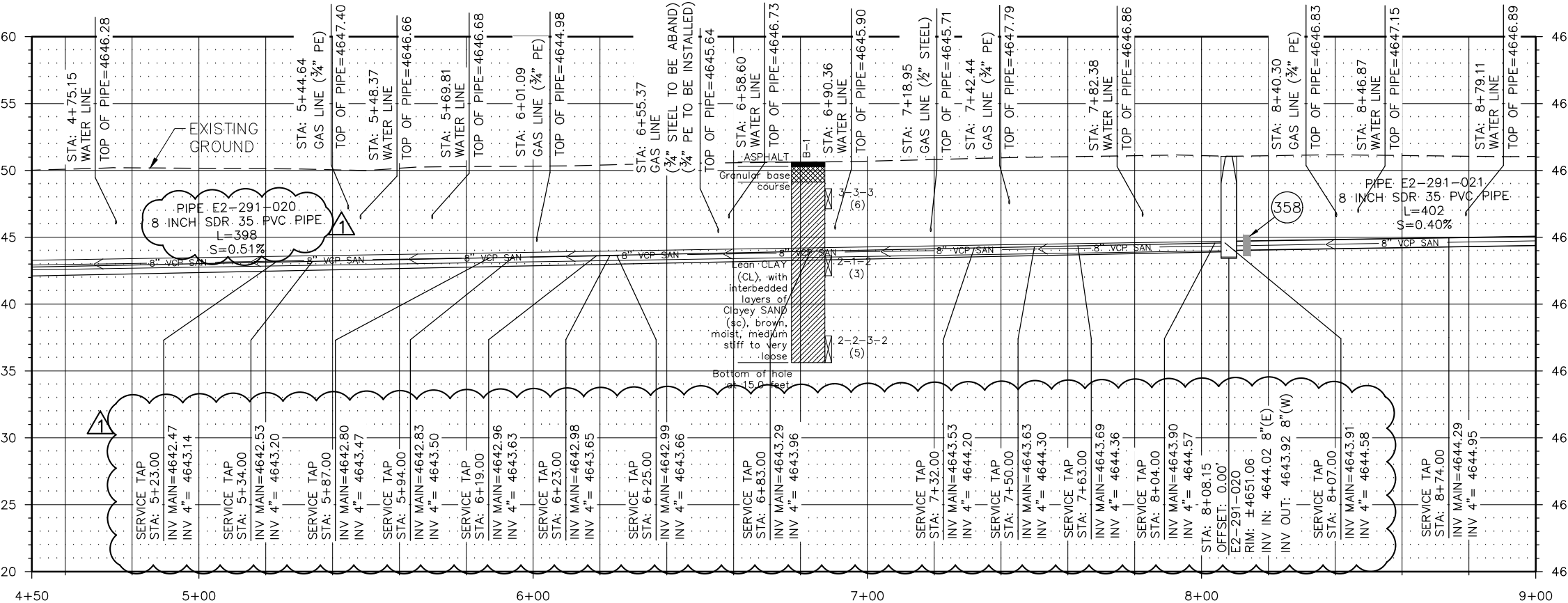
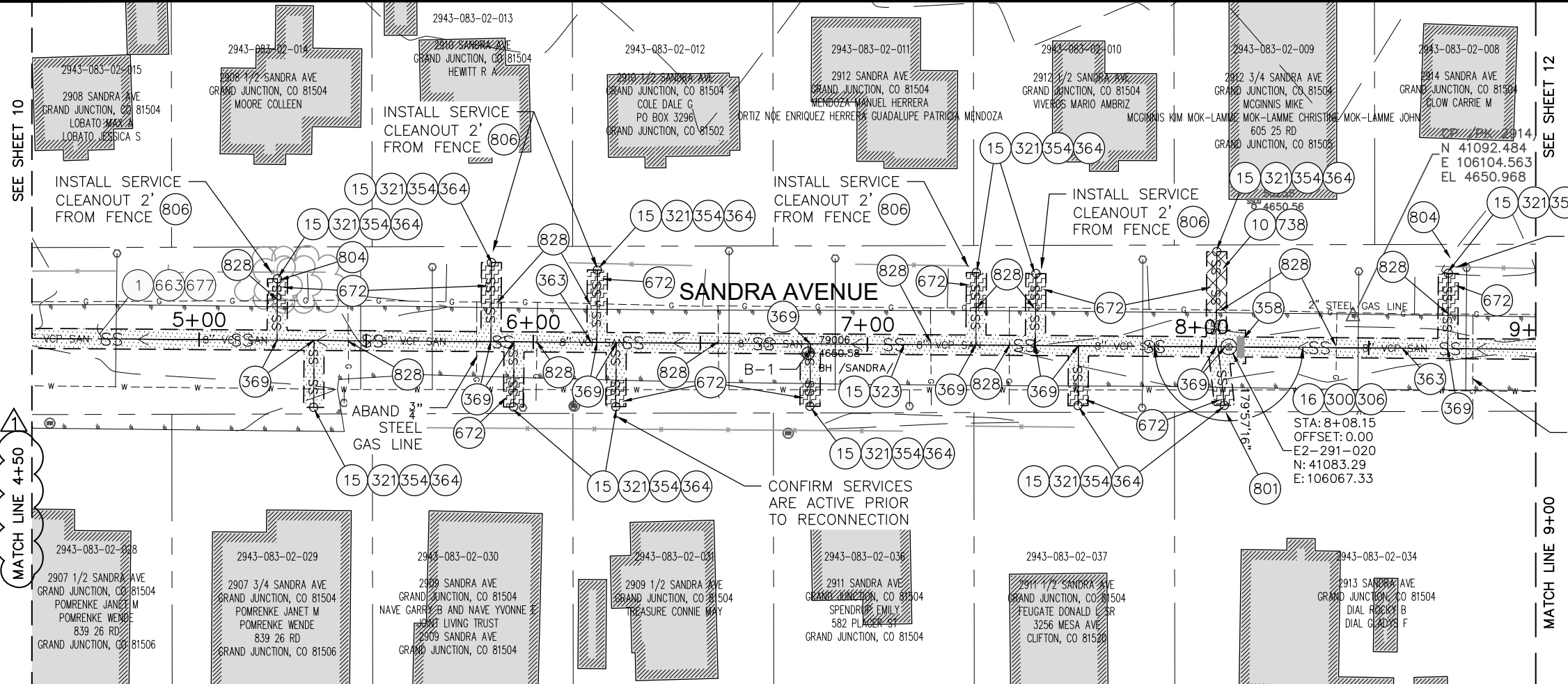
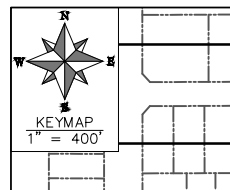
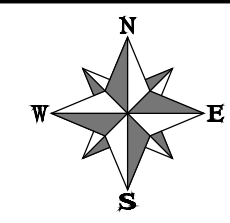
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REVISION A	ADDENDUM #1	07/30/2019	HMC/JCS	2016
REVISION B			MF	06/2019
REVISION C			EWS	06/2019
REVISION D			BG	06/2019



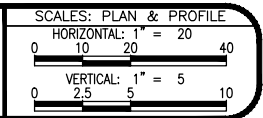
CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 10 202 - REMOVAL OF LANDSCAPE GROUND COVER AND ANY UNDERLYING BARRIER. STOCKPILE PER PROPERTY OWNERS RECOMMENDATION.
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.).
- 321 102.9/108.2 - 4" 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.
- 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.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06))
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 738 610 - GROUND COVER MATERIAL (MATCH EXISTING)
- 801 PROTECT TREE
- 804 PROTECT SHRUB
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.

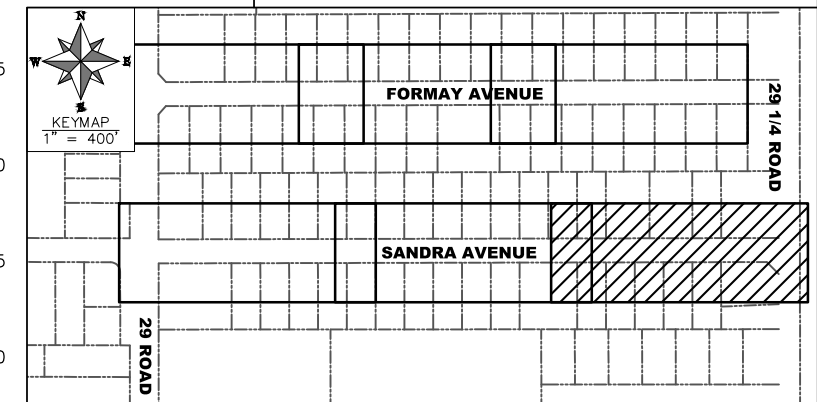
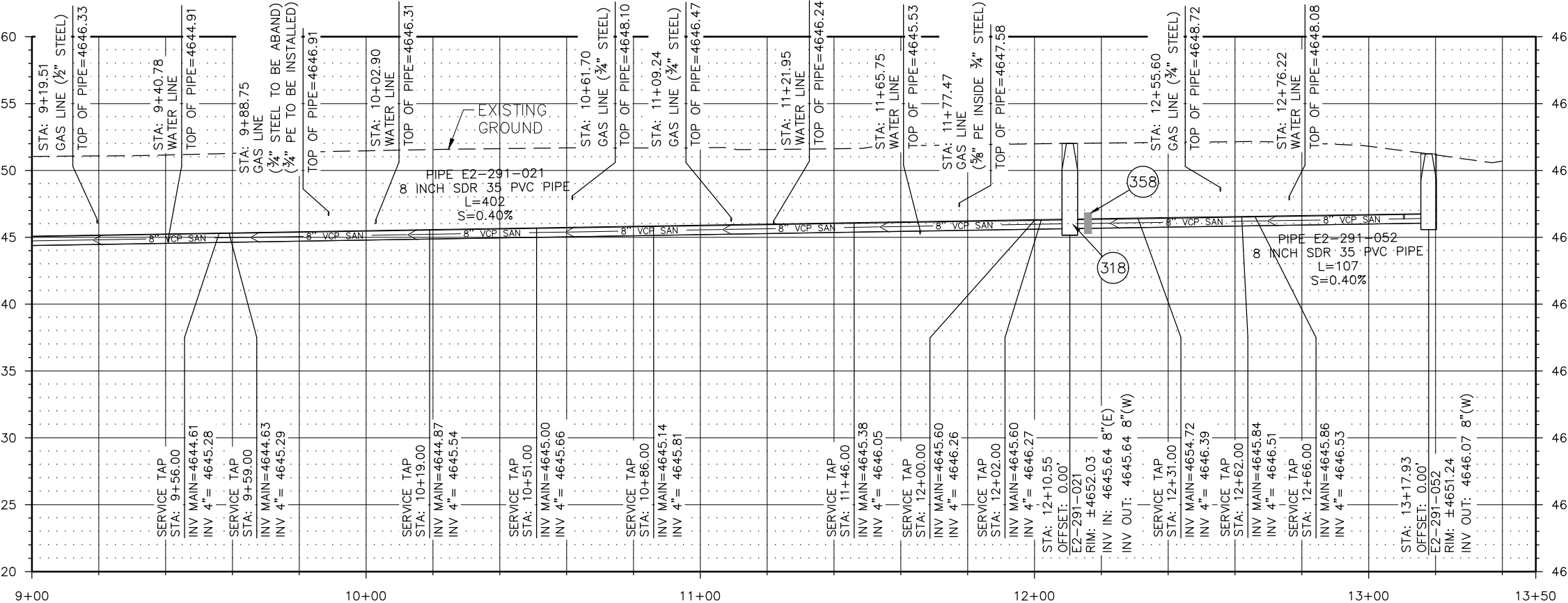
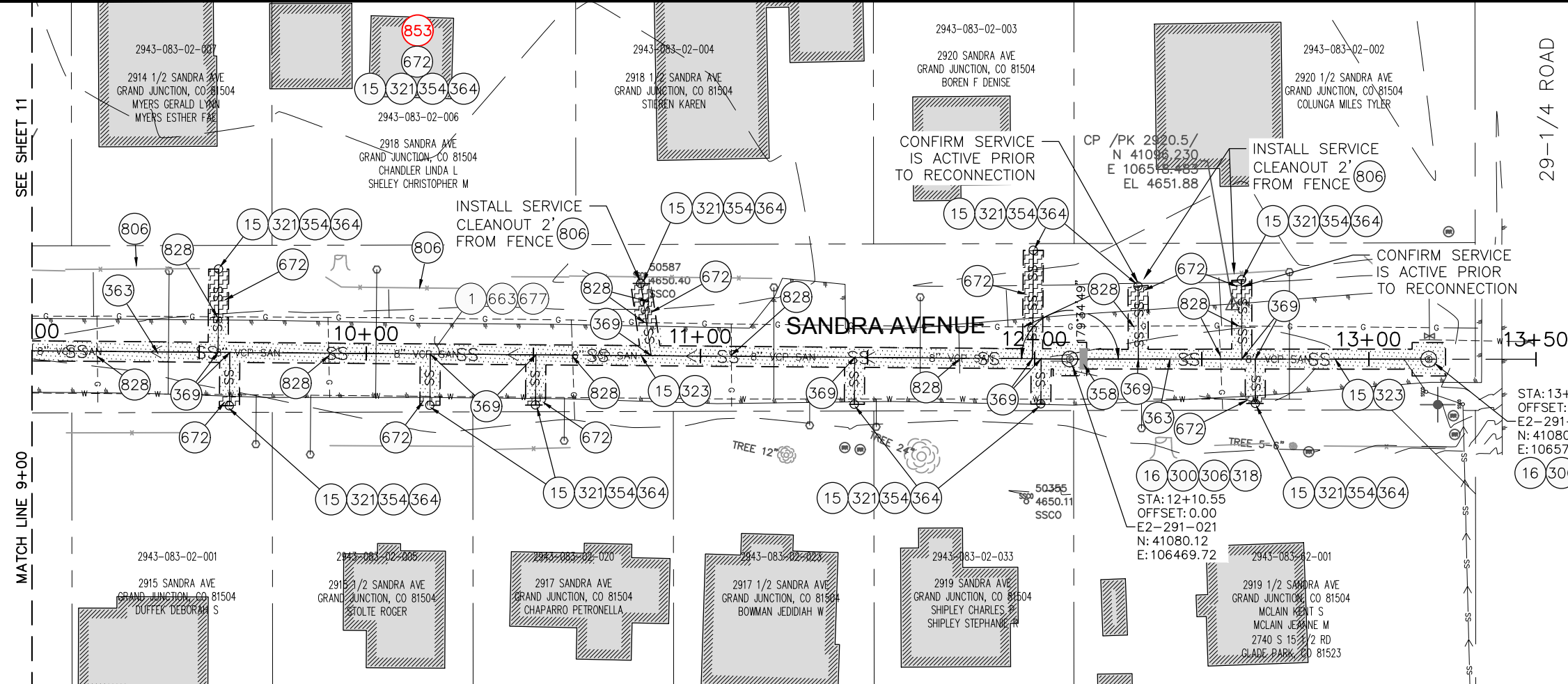
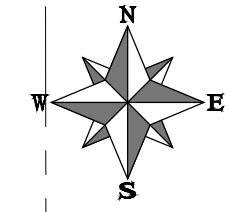


REVISION	DESCRIPTION	DATE	DRAWN BY	HMC/JCS	DATE
REVISION A	ADDENDUM #1	07/30/2019	DESIGNED BY	MF	DATE 06/2019
REVISION B			CHECKED BY	EWS	DATE 06/2019
REVISION C			APPROVED BY	BG	DATE 06/2019

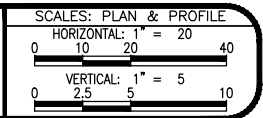


CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5') (48" I.D.).
- 318 PROVIDE PVC INVERT. (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE). COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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.
- 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.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 677 401.08 - HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE
- 853 CITY UNABLE TO LOCATE SEWER TAP FOR PROPERTY. CONTRACTOR TO LOCATE SEWER TAP DURING INSTALLATION OF NEW 8" MAIN.

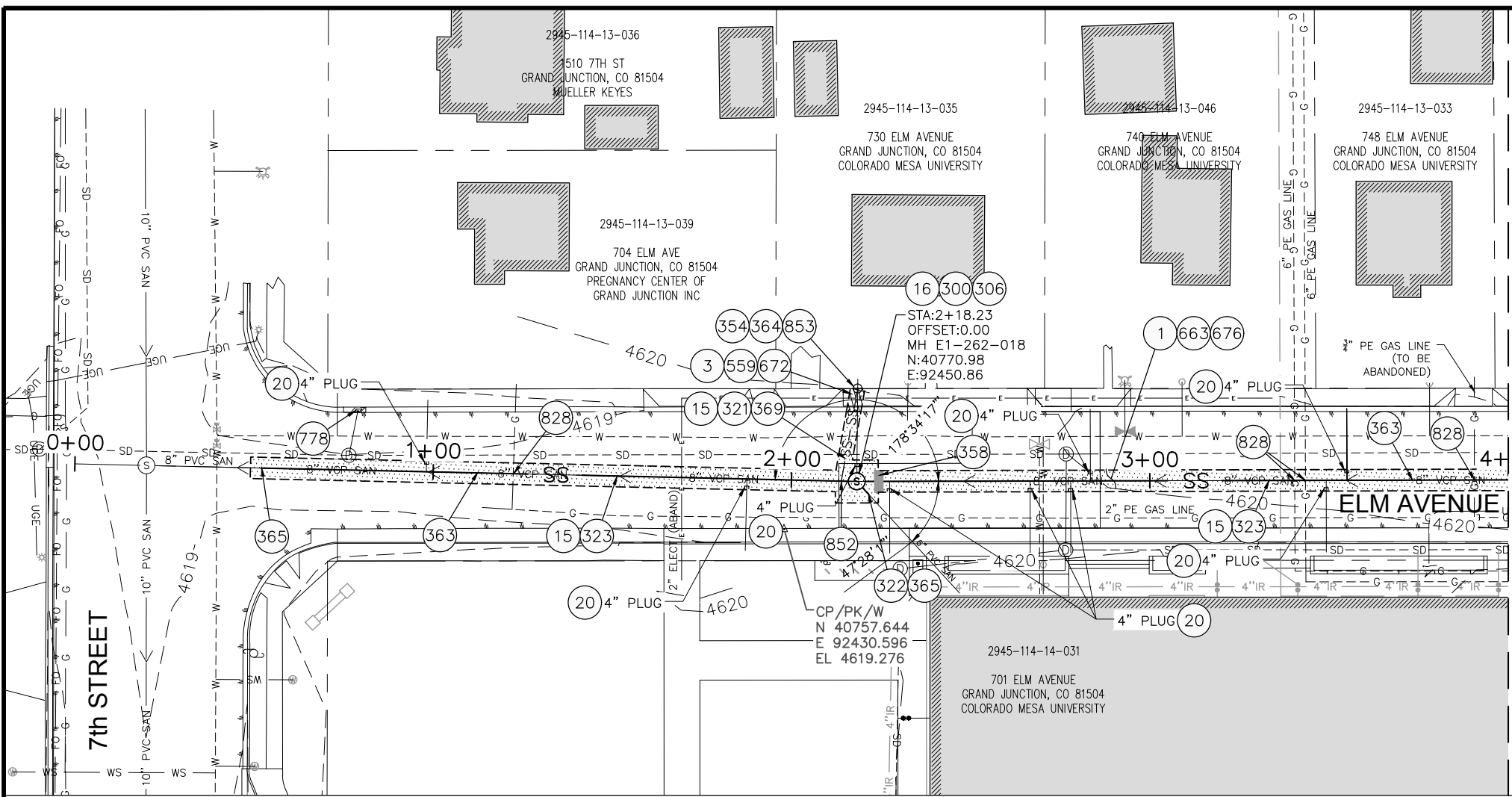
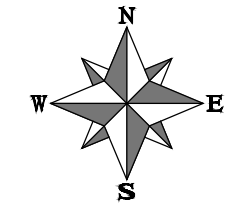


REVISION	DESCRIPTION	DATE	DRAWN BY	HMC/JCS	DATE
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REVISION			CHECKED BY	EWS	DATE 06/2019
REVISION			APPROVED BY	BG	DATE 06/2019



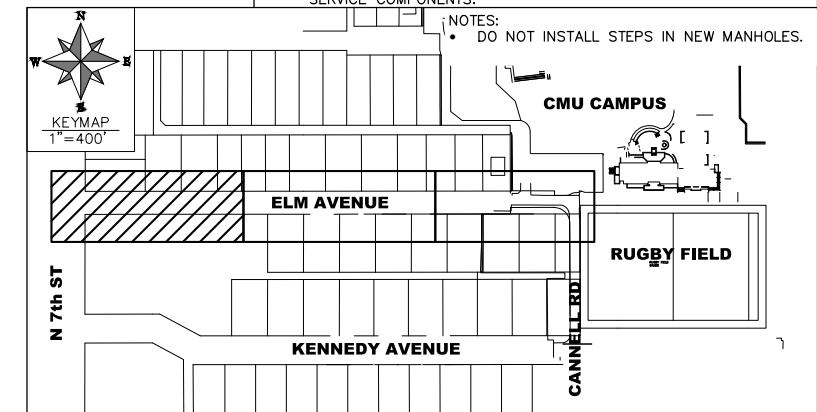
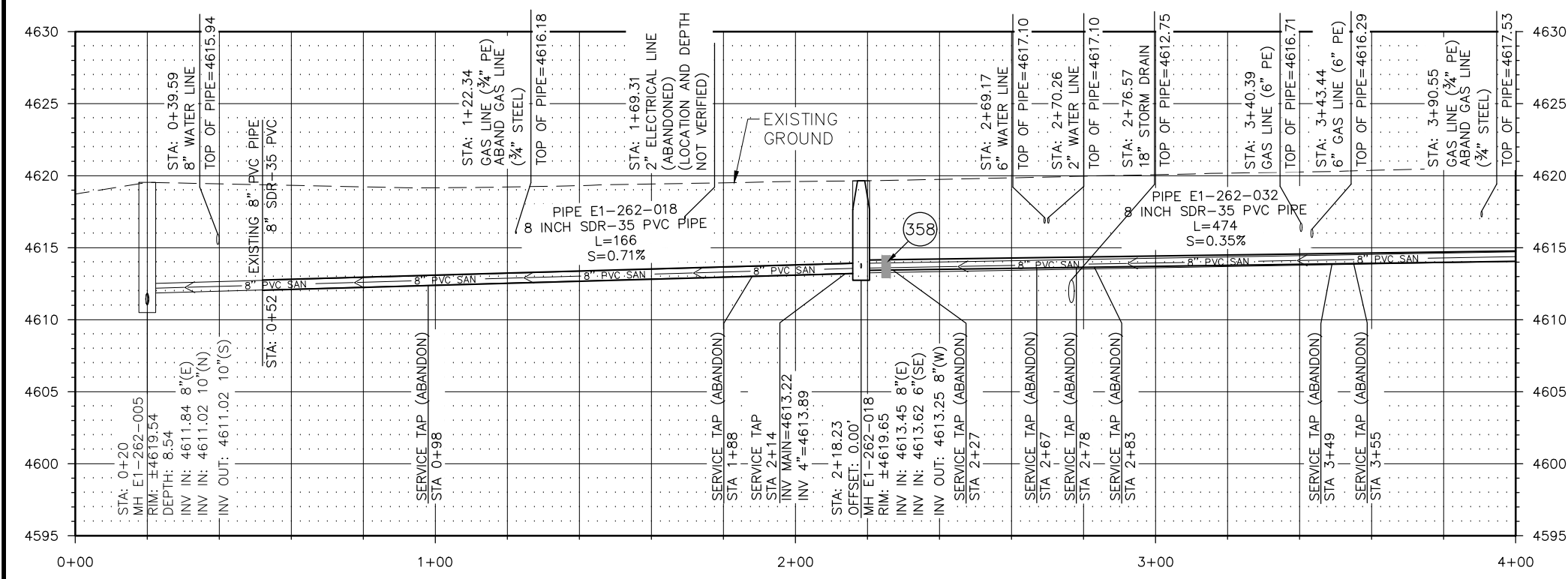
CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 20 202 - ABANDON PIPE. ABANDON BY PLUGGING REMAINING ENDS WITH CONCRETE.
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5) (48" I.D.).
- 321 102.9/108.2 - 4" 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.
- 322 102.9/108.2 - 6" 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. THE COST OF PIPE AND CONNECTION IS INCIDENTAL TO THE COST OF THE PROPOSED MANHOLE.
- 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.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- 359 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- 365 CONNECT TO EXISTING SEWER PIPE WITH MAX ADAPTOR PVC REPAIR COUPLING. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 559 608.06 - MONOLITHIC VERTICAL CURB, GUTTER AND SIDEWALK (MATCH EXISTING WIDTH)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 676 401.08 - HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64-22) (ONE 3" LIFTS)
- 778 208 - STORM DRAIN INLET PROTECTION (GRAVEL FILTER AT CURB INLET) (AS SHOWN AND PER DETAIL)
- 828 PROTECT GAS LINE
- 852 RELOCATE EXISTING 4" VCP SERVICE FROM CONNECTION TO MANHOLE, TO DOWNSTREAM OF MANHOLE.
- 853 CONTRACTOR TO COORDINATE WITH CMU OFFICIALS TO CONFIRM SERVICE IS TO BE RECONNECTED PRIOR TO INSTALLATION OF ANY SERVICE COMPONENTS.



SEE SHEET 14

MATCH LINE 4+00



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
1			KCY	03/2019
2			MF	06/2019
3			EWS	06/2019
4			BG	06/2019

SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'

VERTICAL: 1" = 5'

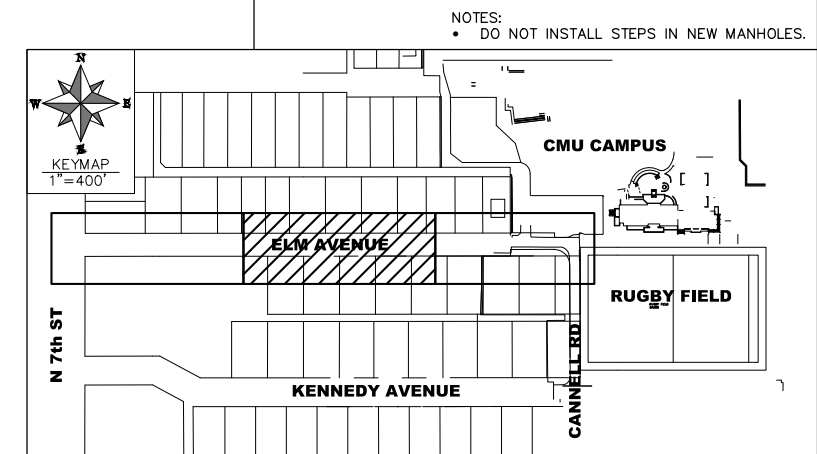
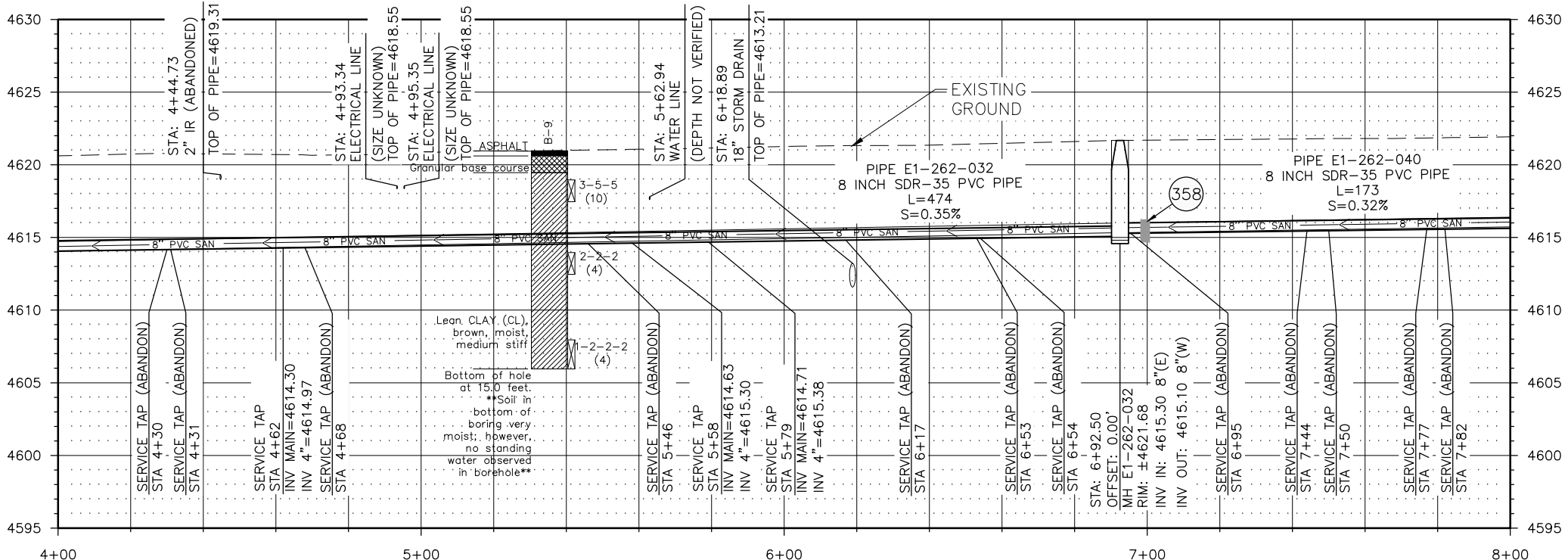
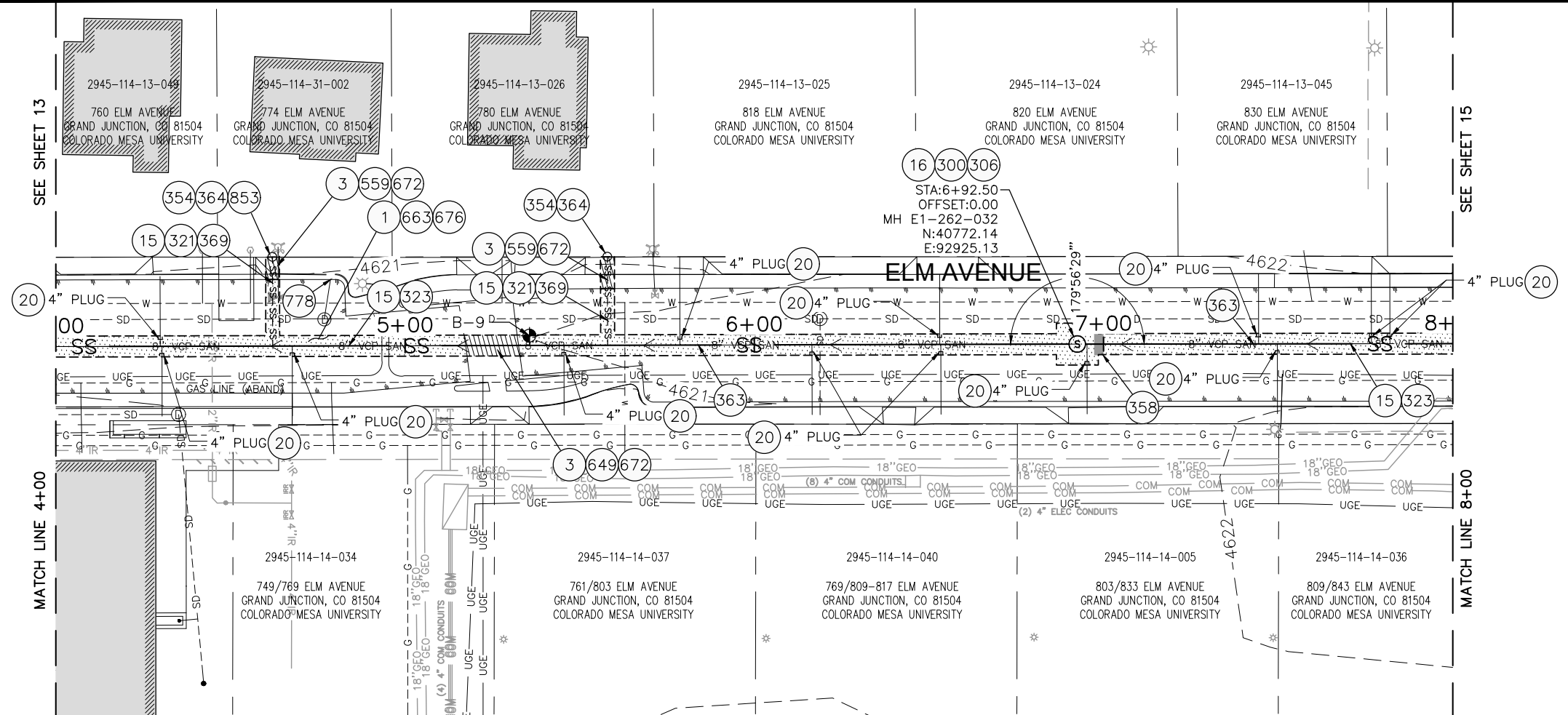
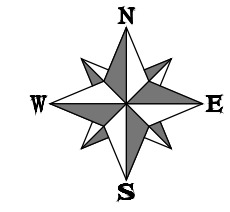


2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 ELM AVENUE

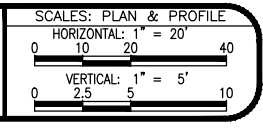
13

CONSTRUCTION NOTES

- ① 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- ③ 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- ⑮ 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- ⑰ 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- ⑳ 202 - ABANDON PIPE. ABANDON BY PLUGGING REMAINING ENDS WITH CONCRETE.
- 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).
- ③06 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.).
- ③21 102.9/108.2 - 4" 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.
- 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.
- ③54 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07).
- ③58 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INTALLATION PAY ITEM)
- ③63 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- ③64 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- ③69 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- ⑤59 608.06 - MONOLITHIC VERTICAL CURB, GUTTER AND SIDEWALK (MATCH EXISTING WIDTH)
- ⑥49 412 - CONCRETE PAVEMENT (8" THICK) (PATCHING) (CDOT CLASS D, 4,500 PSI AT 28-DAYS)
- ⑥63 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- ⑥72 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- ⑥76 401.08 - HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64-22) (ONE 3" LIFT)
- ⑦78 208 - STORM DRAIN INLET PROTECTION (GRAVEL FILTER AT CURB INLET) (AS SHOWN AND PER DETAIL)
- ⑧53 CONTRACTOR TO COORDINATE WITH CMU OFFICIALS TO CONFIRM SERVICE IS TO BE RECONNECTED PRIOR TO INSTALLATION OF ANY SERVICE COMPONENTS.



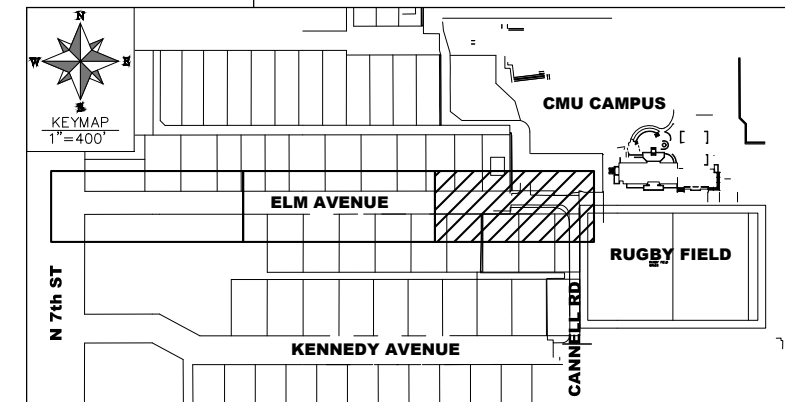
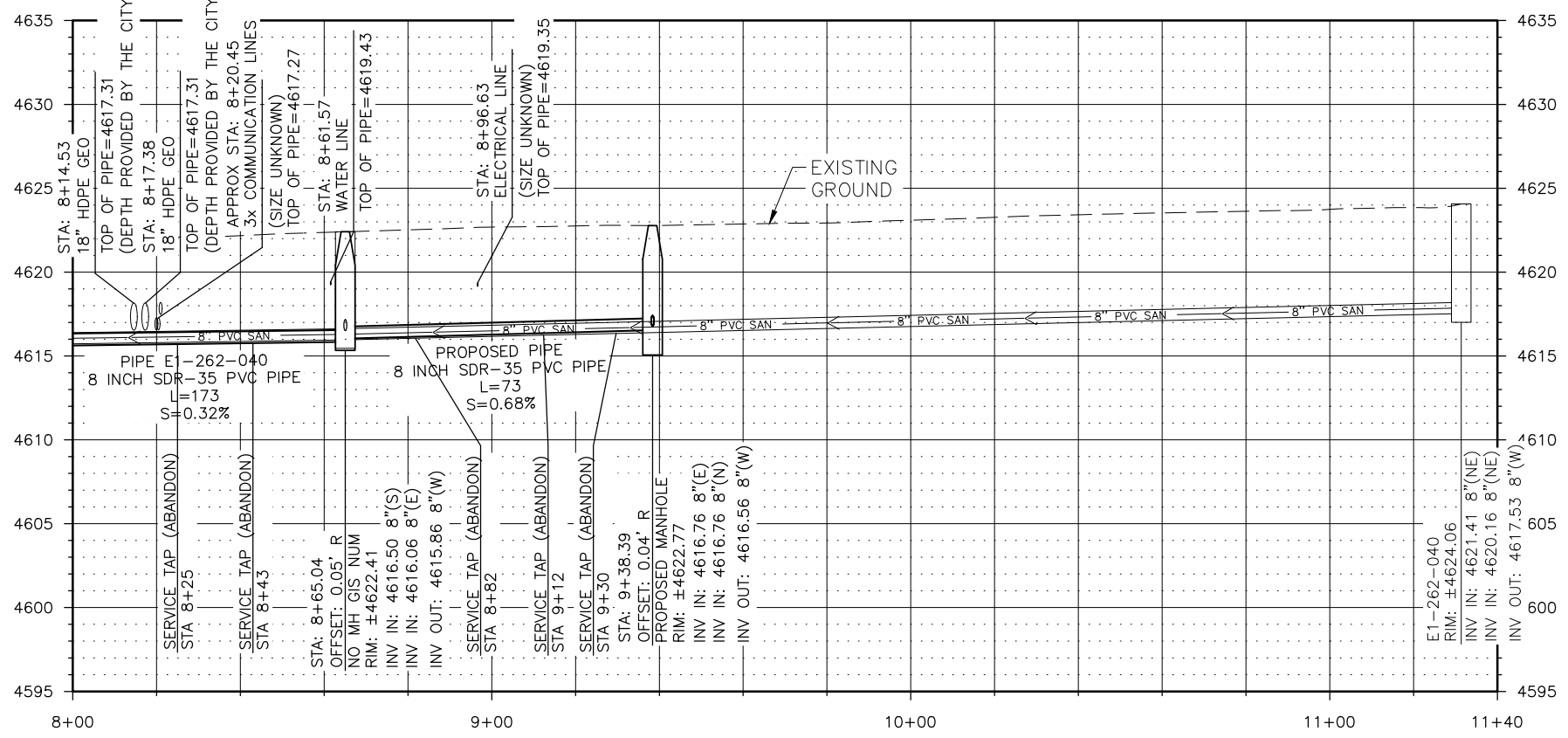
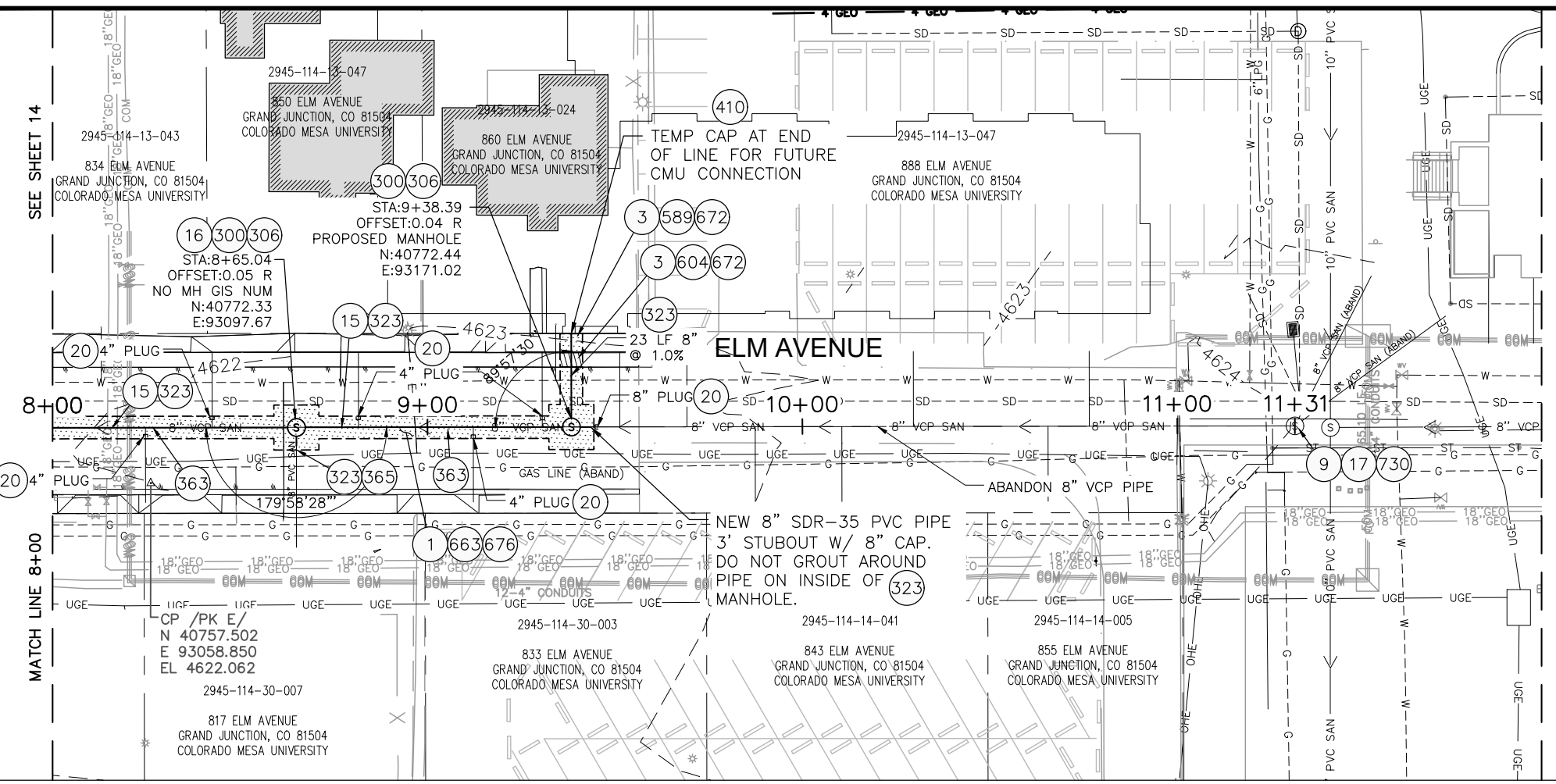
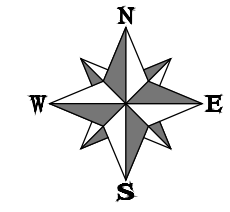
REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION A			KCY	03/2019
REVISION B			MF	06/2019
REVISION C			EWS	06/2019
REVISION D			BG	06/2019



CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 3 202 - REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 9 202 - REMOVAL OF SOD
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 17 202 - REMOVE MANHOLE CONE SECTION, RING, AND COVER. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS. CONTRACTOR SHALL FILL REMAINING BARREL SECTIONS WITH FLOW FILL MATERIAL.
- 20 202 - ABANDON PIPE. ABANDON BY PLUGGING REMAINING ENDS
- 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).
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.).
- 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.
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- 365 CONNECT TO EXISTING SEWER PIPE WITH MAX ADAPTOR PVC REPAIR COUPLING. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- 410 102.8/108.3 - END CAP / PLUG (SIZE AS SHOWN).
- 589 608.06 - BITUMINOUS SIDEWALK (3" THICK)
- 604 608.06 - CONCRETE CURB AND GUTTER (MATCH EXISTING WIDTH)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 676 401.08 - HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64-22) (ONE 3" LIFTS)
- 730 212 - RESOD AREA AS SHOWN (INCLUDES 6" OF TOPSOIL PLACEMENT PRIOR TO SOD PLACEMENT)

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION A			KCY	03/2019
REVISION B			MF	06/2019
REVISION C			EWS	06/2019
REVISION D			BG	06/2019

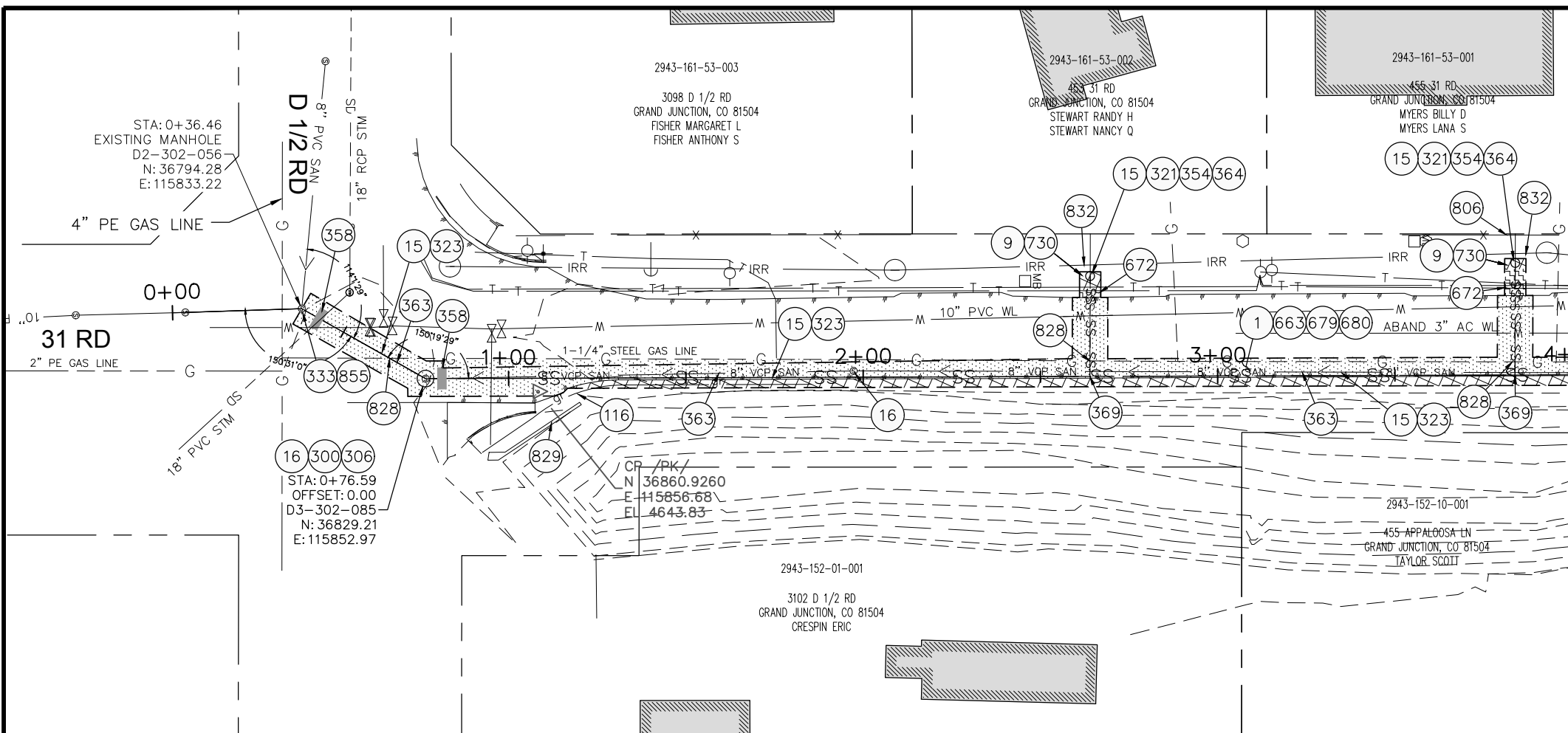
SCALES: PLAN & PROFILE
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 VERTICAL: 1" = 5'
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CONSTRUCTION NOTES

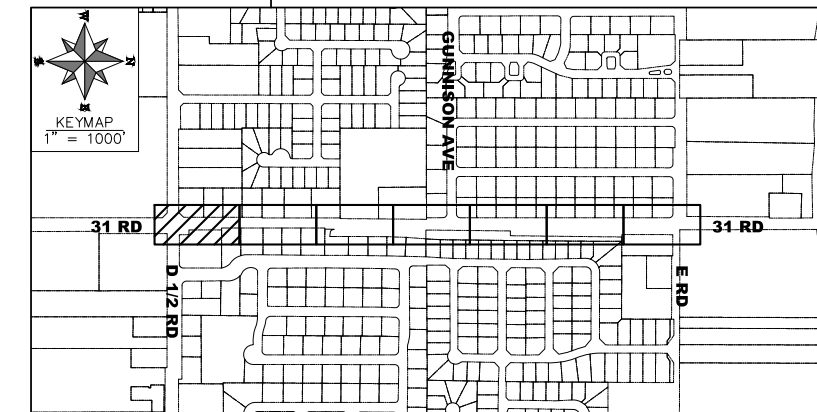
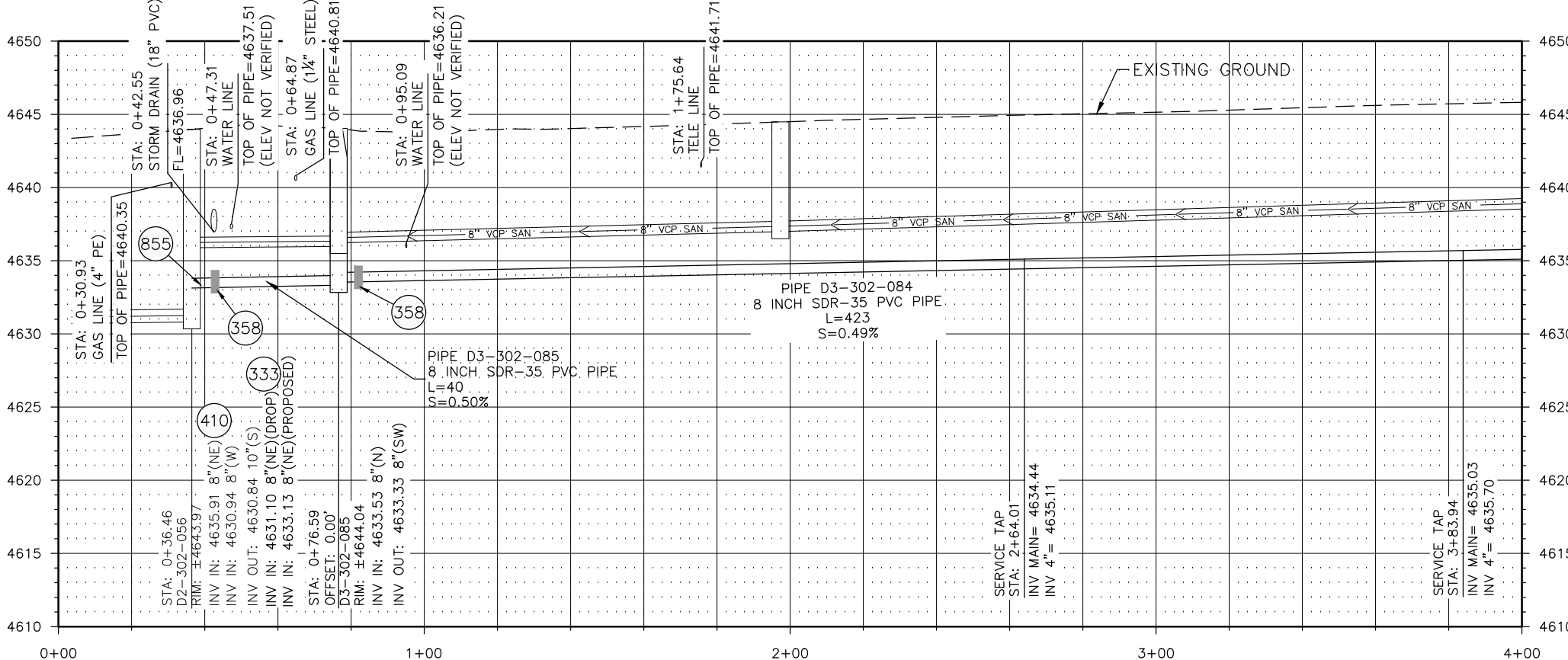
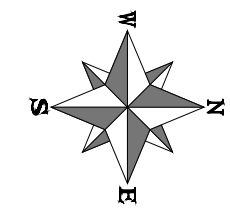
- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 9 202 - REMOVAL OF SOD.
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 116 210 - RESET GUARD RAIL.
- 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)
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.).
- 321 102.9/108.2 - 4" 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
- 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 INSTALL NEW 8" INSIDE DROP SYSTEM BY RELINER/DURAN INC. OR EQUAL APPROVED BY THE PROJECT ENGINEER. ALL FASTENERS AND BOLTS SHALL BE 316 STAINLESS STEEL.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 410 102.8/108.3 - END CAP / PLUG (SIZE AS SHOWN)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 730 212 - RESOD AREA AS SHOWN (INCLUDES 6" OF TOPSOIL PRIOR TO SOD PLACEMENT)
- 806 PROTECT FENCE.
- 828 PROTECT GAS LINE.
- 829 PROTECT CONCRETE BRIDGE ABUTMENT.
- 832 PROTECT IRRIGATION PIPE.
- 855 CORE THROUGH EXISTING MANHOLE FOR PROPOSED PIPE CONNECTION. MODIFY EXISTING DROP PIPING AS NECESSARY.

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.

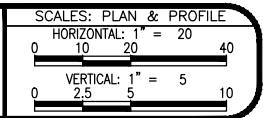


SEE SHEET 17

MATCH LINE 4+00



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
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REVISION			ES	06/2019
REVISION			ES	06/2019
REVISION			BG	06/2019

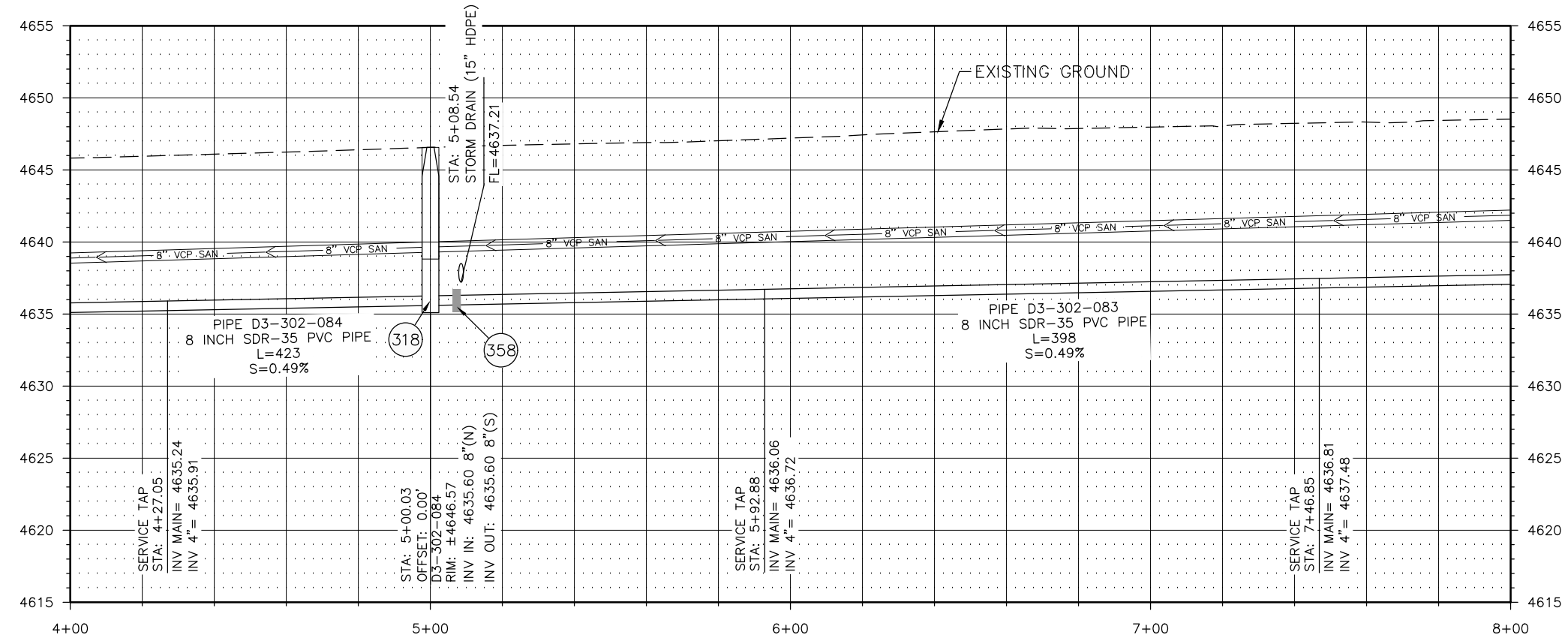
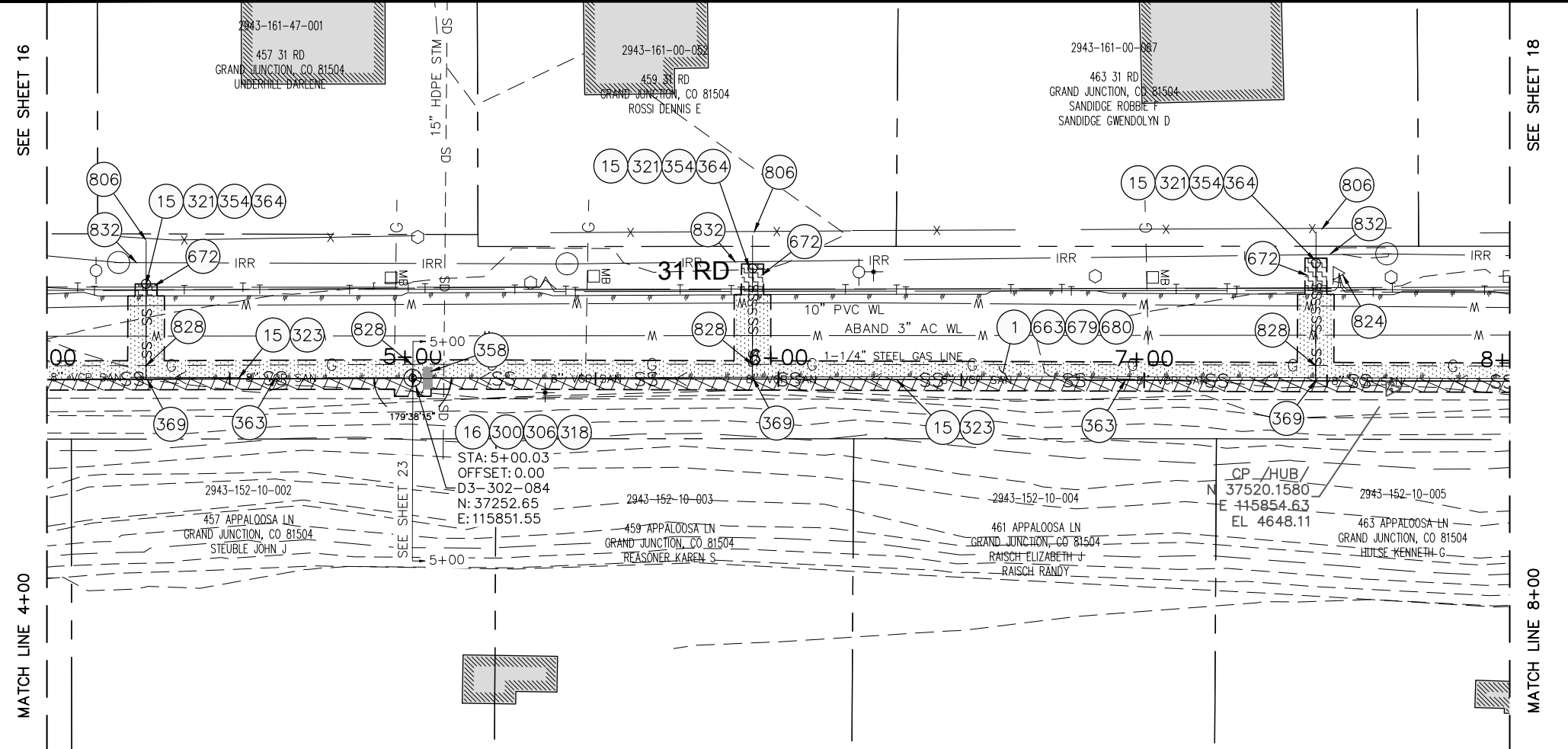
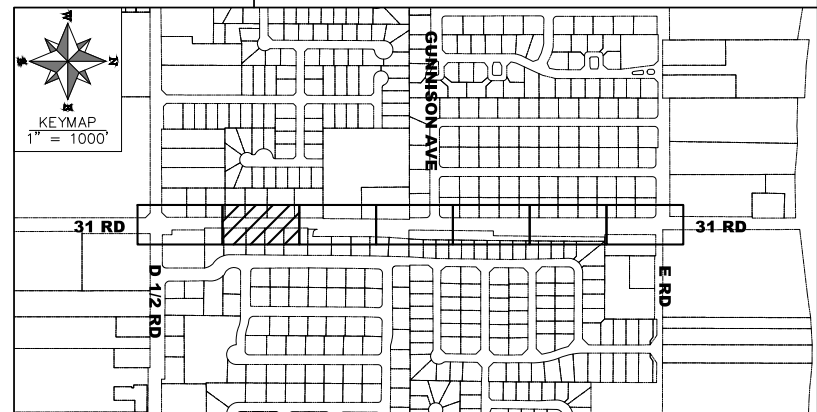


**2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 31 ROAD**

CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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)
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.).
- 318 PROVIDE PVC INVERT (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE.) COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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
- 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
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 806 PROTECT FENCE.
- 824 PROTECT UTILITY PEDESTAL.
- 828 PROTECT GAS LINE.
- 832 PROTECT IRRIGATION PIPE.

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



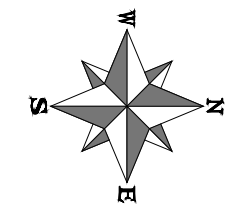
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REVISION A			MF	05/2019
REVISION B			ES	06/2019
REVISION C			ES	06/2019
REVISION D			BG	06/2019

SCALES: PLAN & PROFILE
 HORIZONTAL: 1" = 20'
 0 10 20 40
 VERTICAL: 1" = 5'
 0 2.5 5 10

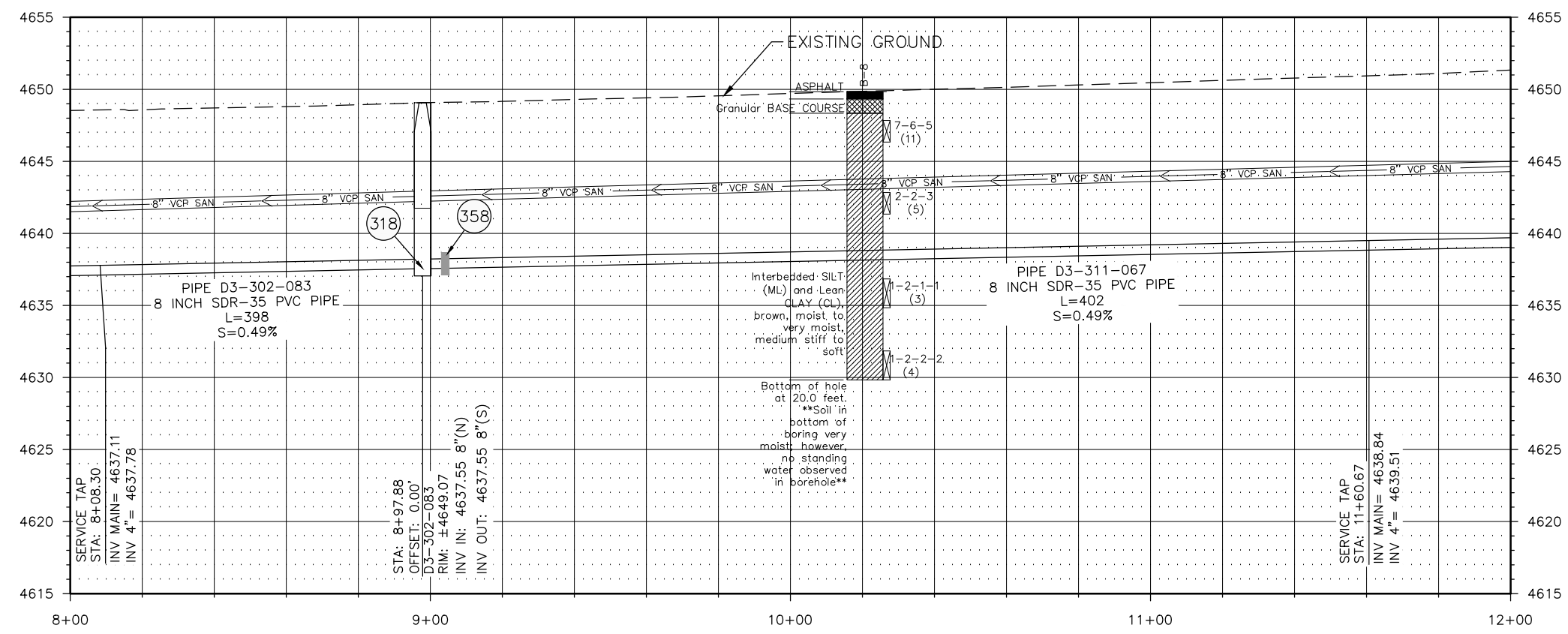
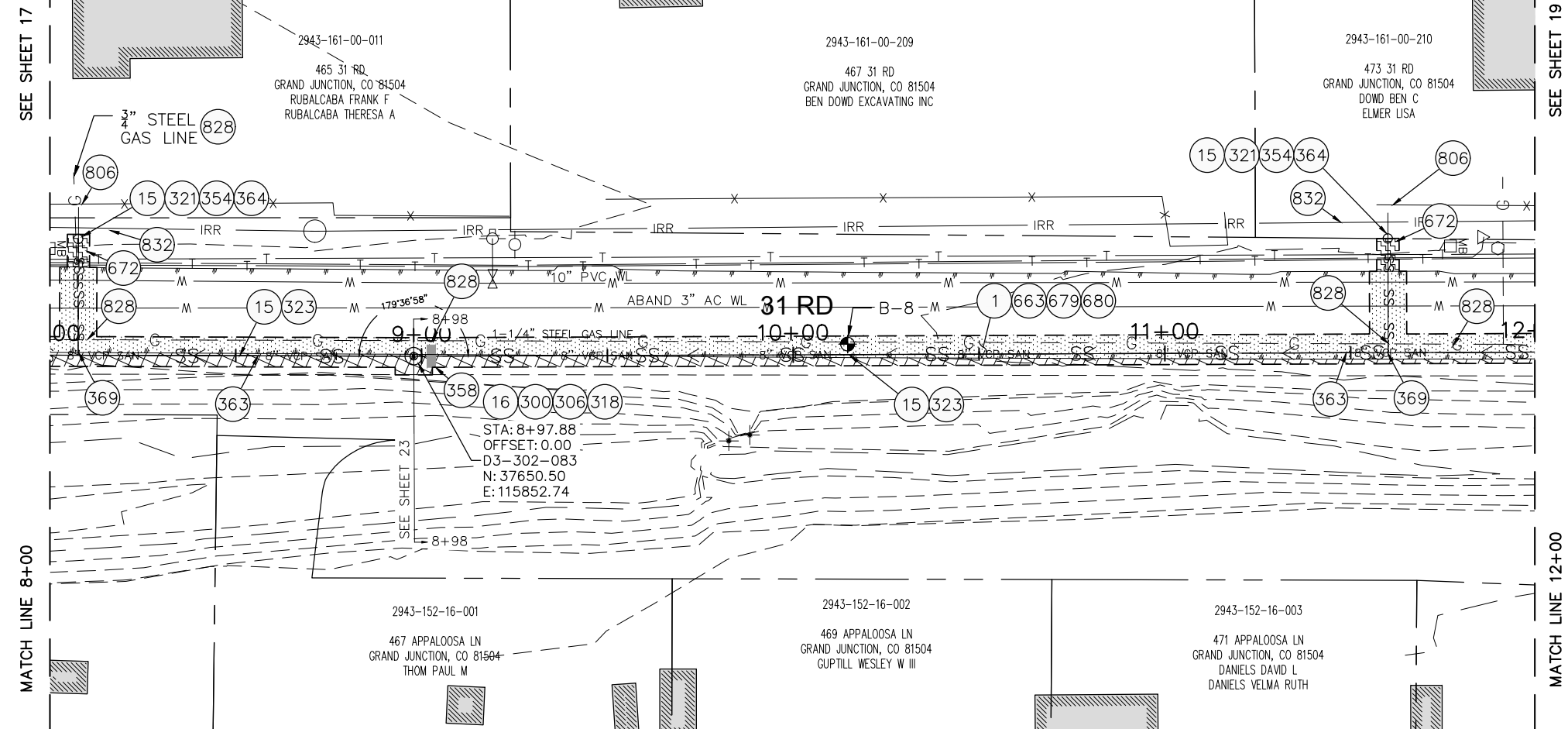
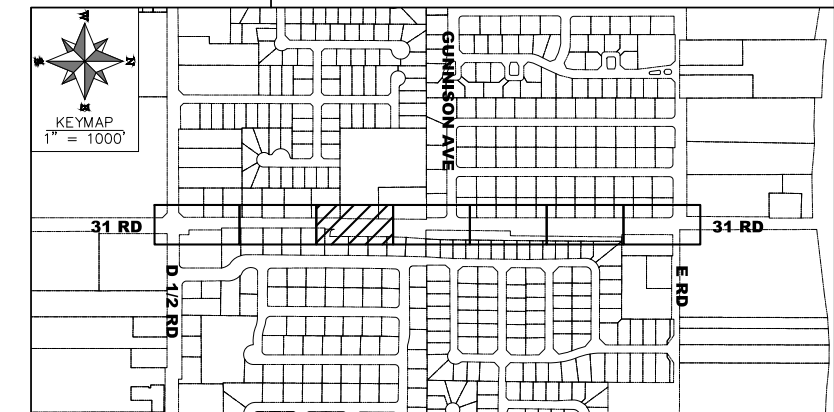


CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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)
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.).
- 318 PROVIDE PVC INVERT (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE.) COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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
- 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
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 806 PROTECT FENCE.
- 828 PROTECT GAS LINE.
- 832 PROTECT IRRIGATION LINE.



NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



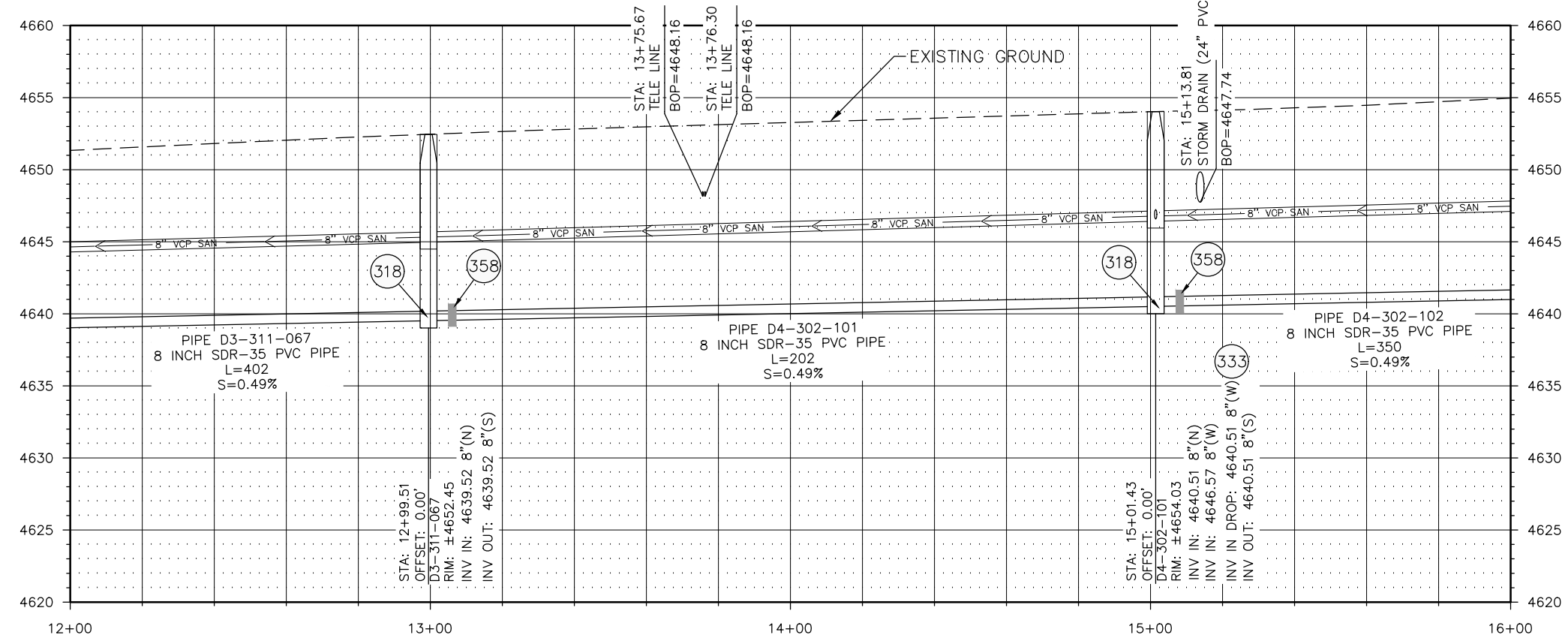
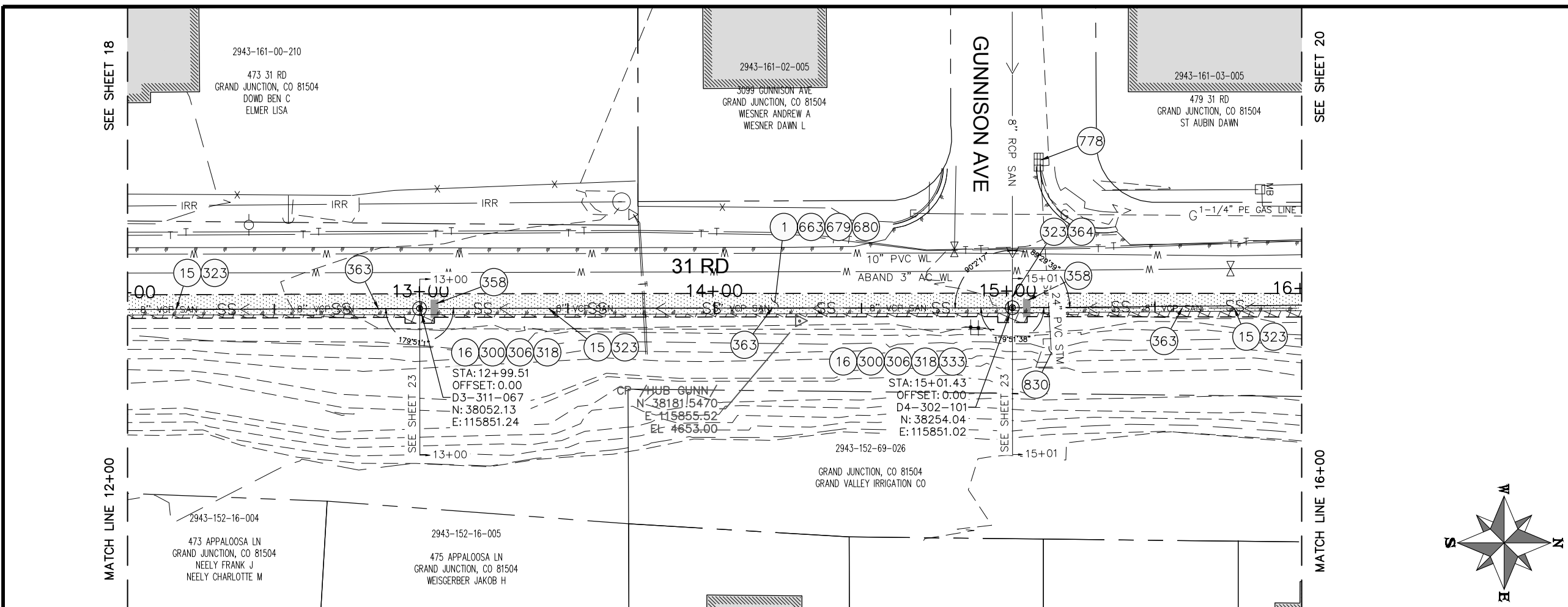
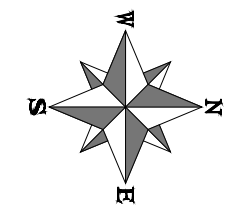
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REVISION B			ES	06/2019
REVISION C			ES	06/2019
REVISION D			BG	06/2019

SCALES: PLAN & PROFILE
 HORIZONTAL: 1" = 20'
 0 10 20 40
 VERTICAL: 1" = 5'
 0 2.5 5 10

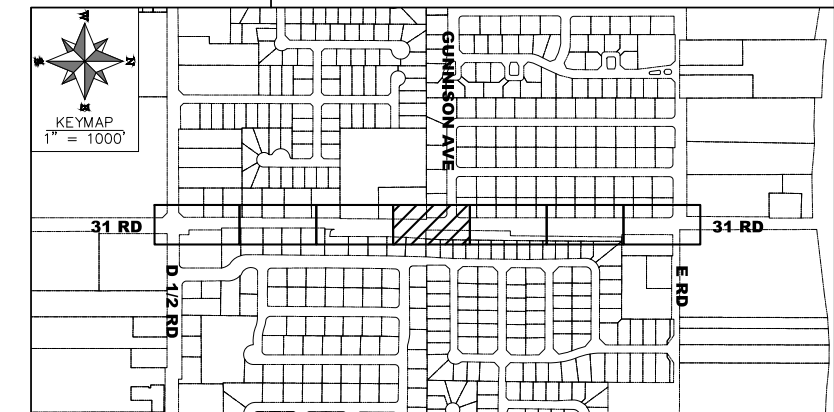


CONSTRUCTION NOTES

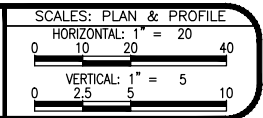
- ① 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- ⑮ 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- ⑯ 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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)
- ③06 102.11/108.5 - MANHOLE BARREL SECTION (D>5) (48" I.D.).
- ③18 PROVIDE PVC INVERT (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE.) COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 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 INSTALL NEW 8" INSIDE DROP SYSTEM BY RELINER/DURAN INC. OR EQUAL APPROVED BY THE PROJECT ENGINEER. ALL FASTENERS AND BOLTS SHALL BE 316 STAINLESS STEEL.
- ③58 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- ③63 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- ③64 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- ⑥63 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- ⑥79 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 3" LIFT BOTTOM MAT)
- ⑥80 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- ⑦79 208 - STORM DRAIN INLET PROTECTION (GRAVEL FILTER AT CURB INLET) (AS SHOWN AND PER DETAIL)
- ⑧30 PROTECT STORM DRAIN OUTLET STRUCTURE.



NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



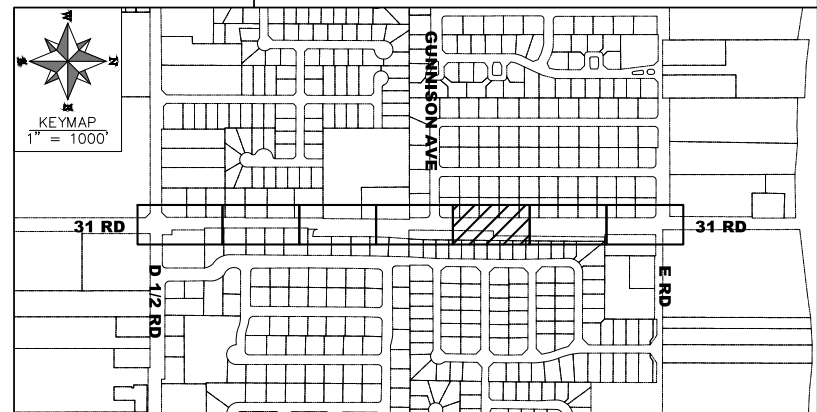
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REVISION			ES	06/2019
REVISION			ES	06/2019
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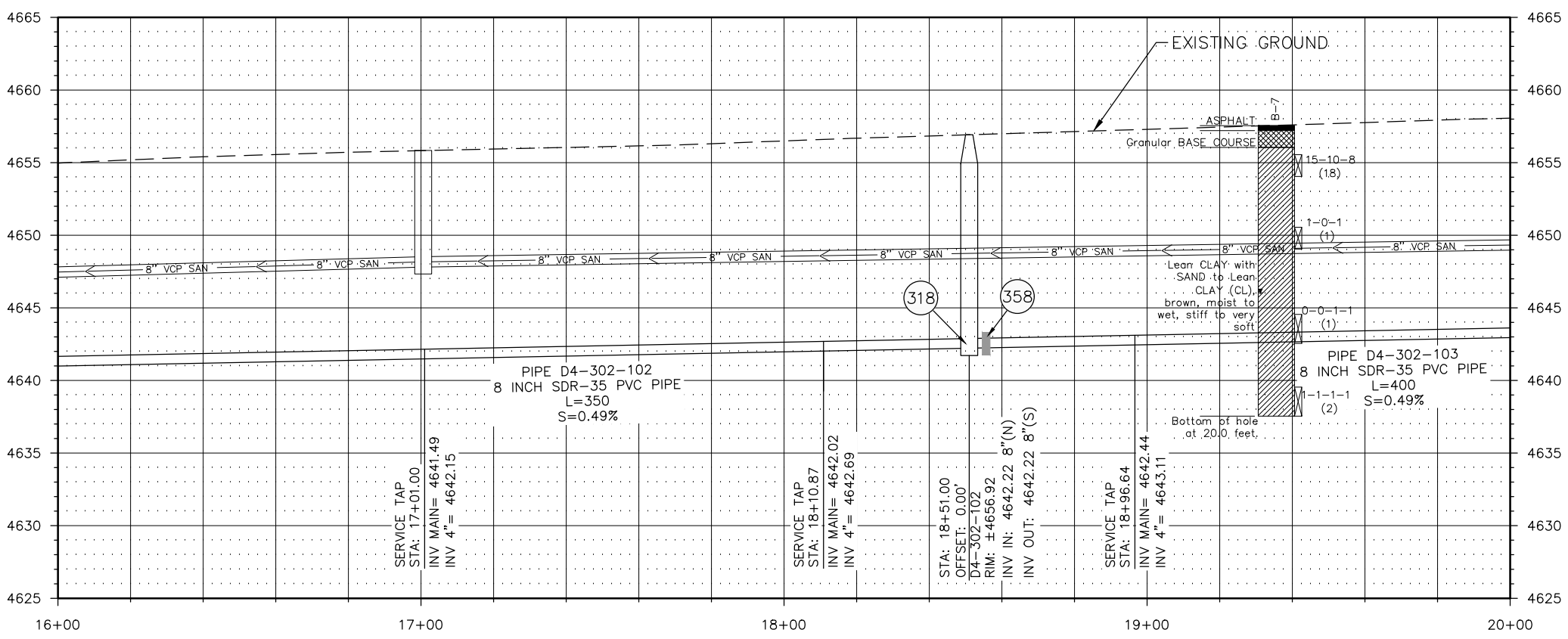
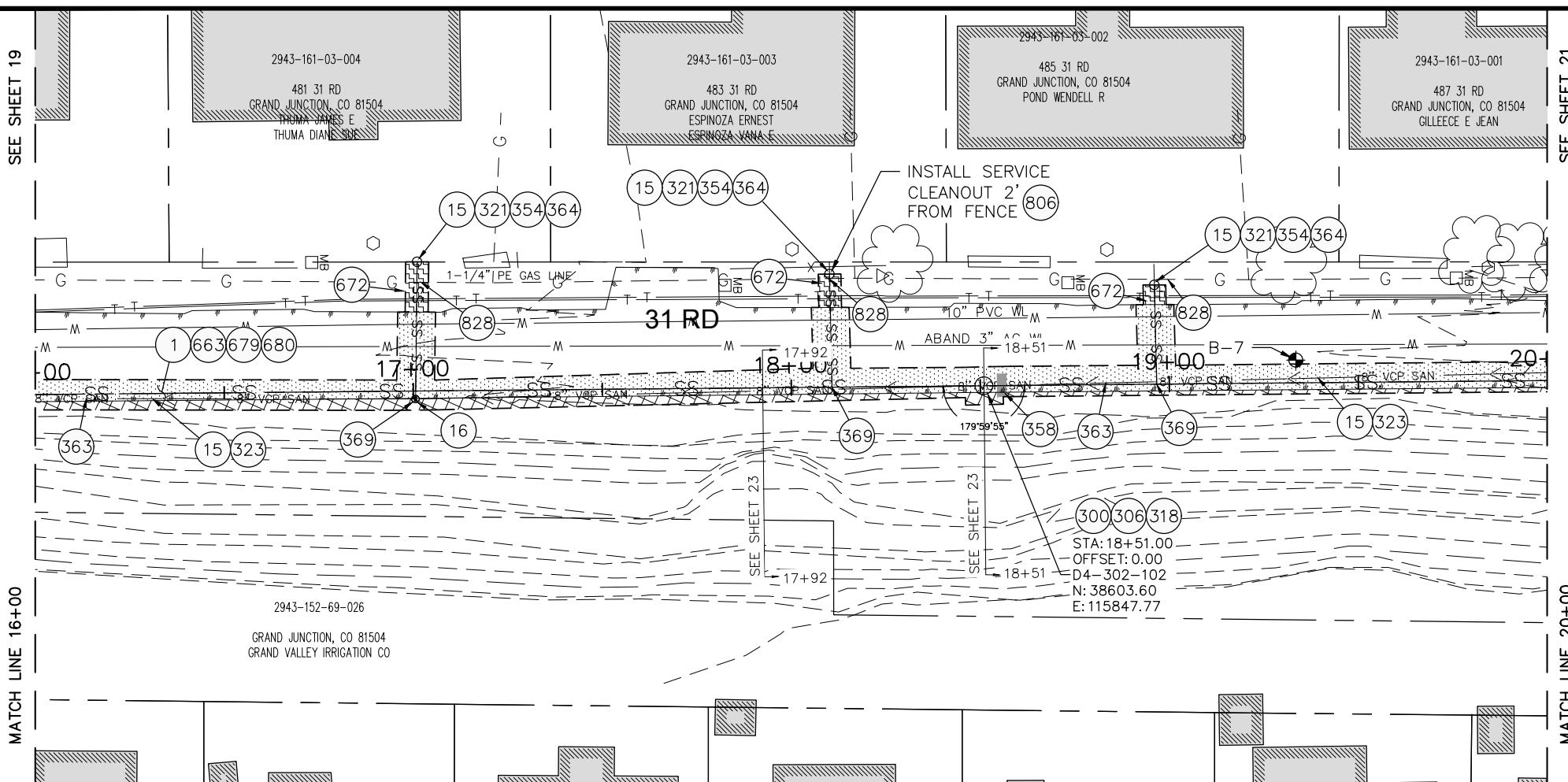
CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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)
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5') (48" I.D.).
- 318 PROVIDE PVC INVERT (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE.) COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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
- 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
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 806 PROTECT FENCE.
- 828 PROTECT GAS LINE.

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 31 ROAD



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION A			MF	05/2019
REVISION B			ES	06/2019
REVISION C			ES	06/2019
REVISION D			BG	06/2019

SCALES: PLAN & PROFILE

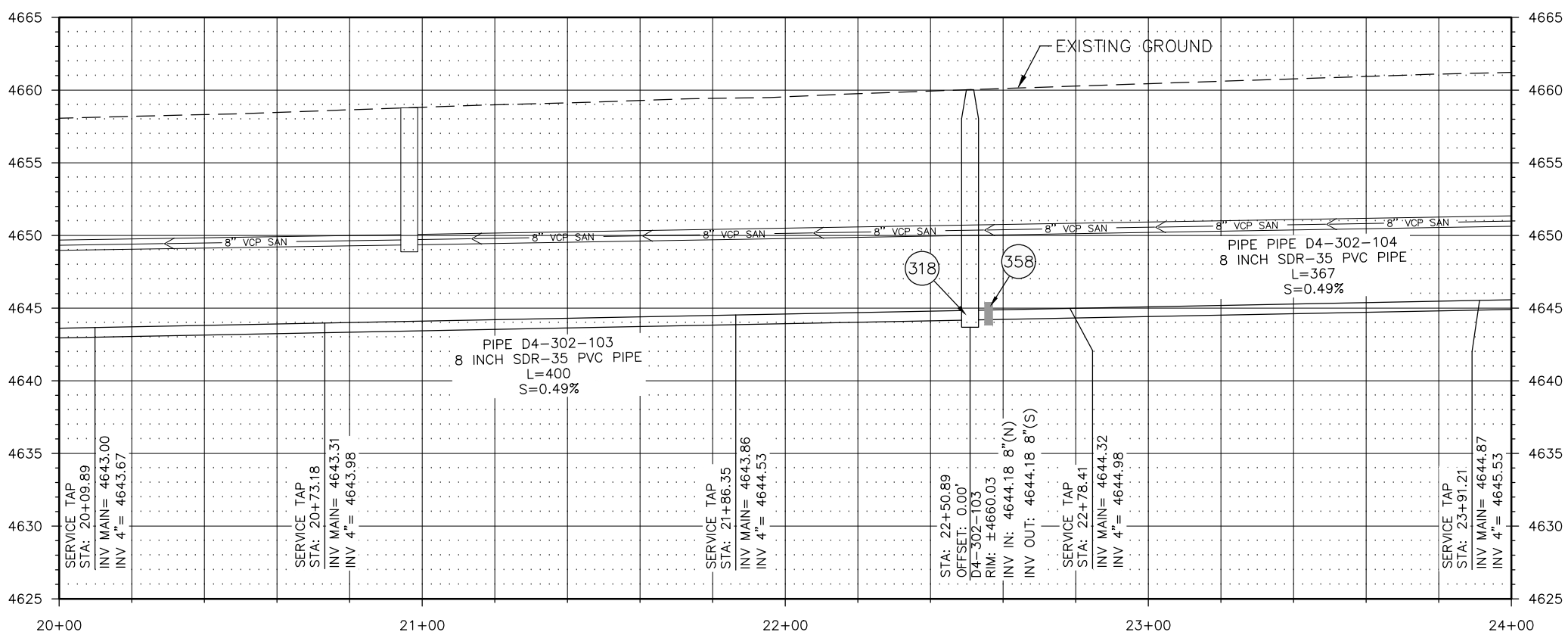
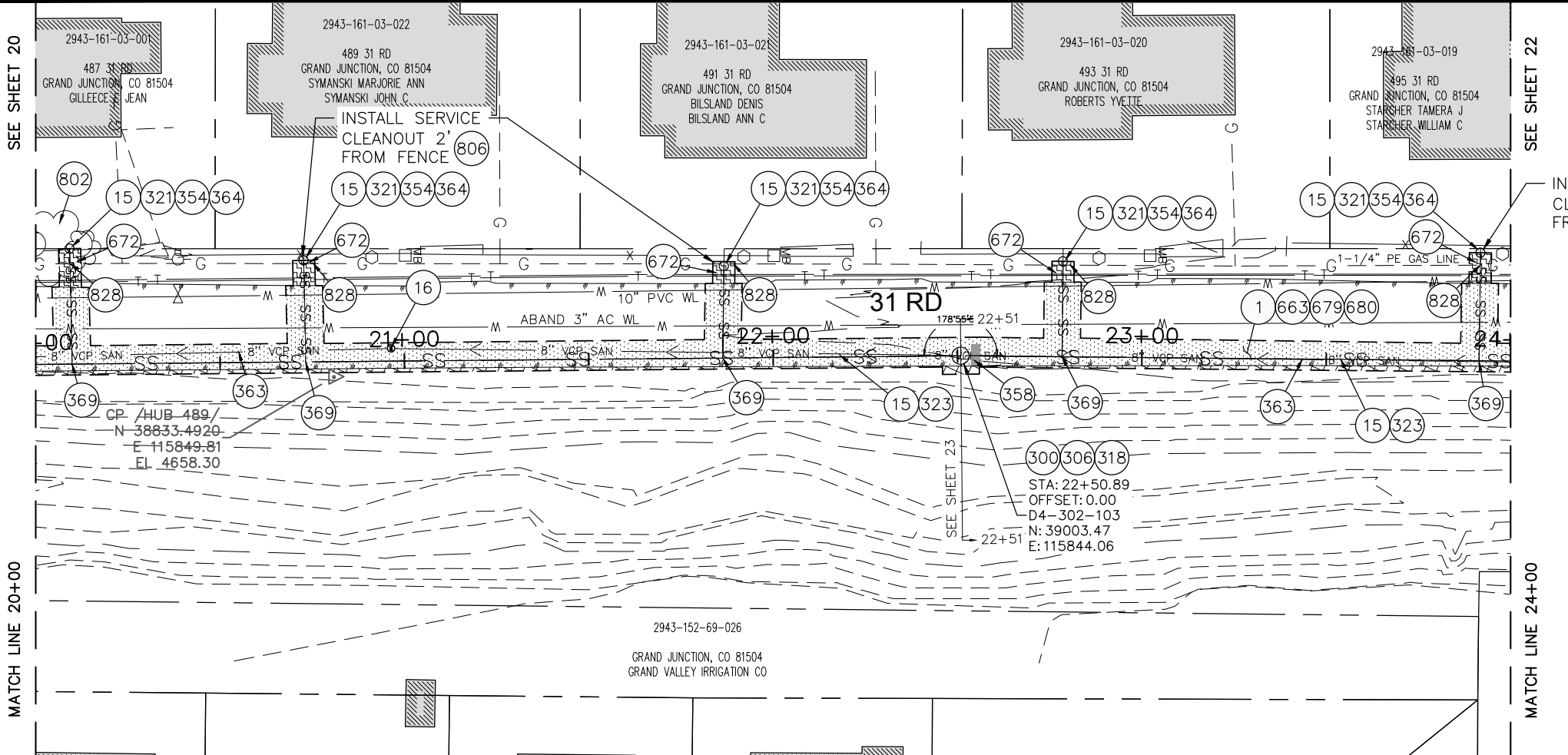
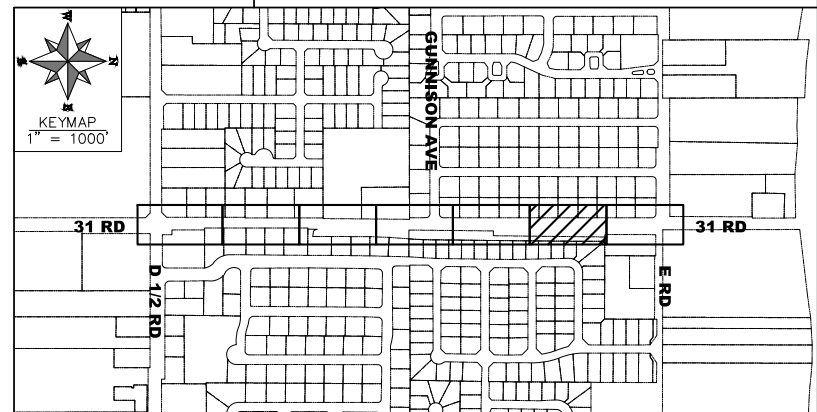
HORIZONTAL: 1" = 20'	0 10 20 40
VERTICAL: 1" = 5'	0 2.5 5 10



CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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)
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5) (48" I.D.).
- 318 PROVIDE PVC INVERT (PIPE SHALL BE LAID CONTINUOUSLY THROUGH MANHOLE.) COST IS INCIDENTAL TO COST OF MANHOLE INSTALLATION.
- 321 102.9/108.2 - 4" 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
- 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
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 802 PROTECT BUSH.
- 806 PROTECT FENCE.
- 828 PROTECT GAS LINE.

NOTES:
 • DO NOT INSTALL STEPS IN NEW MANHOLES.



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			MF	05/2019
REVISION			ES	06/2019
REVISION			ES	06/2019
REVISION			BG	06/2019

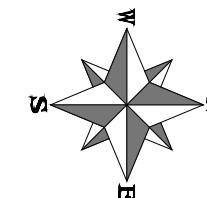
SCALES: PLAN & PROFILE

HORIZONTAL: 1" = 20'	0	10	20	40
VERTICAL: 1" = 5'	0	2.5	5	10

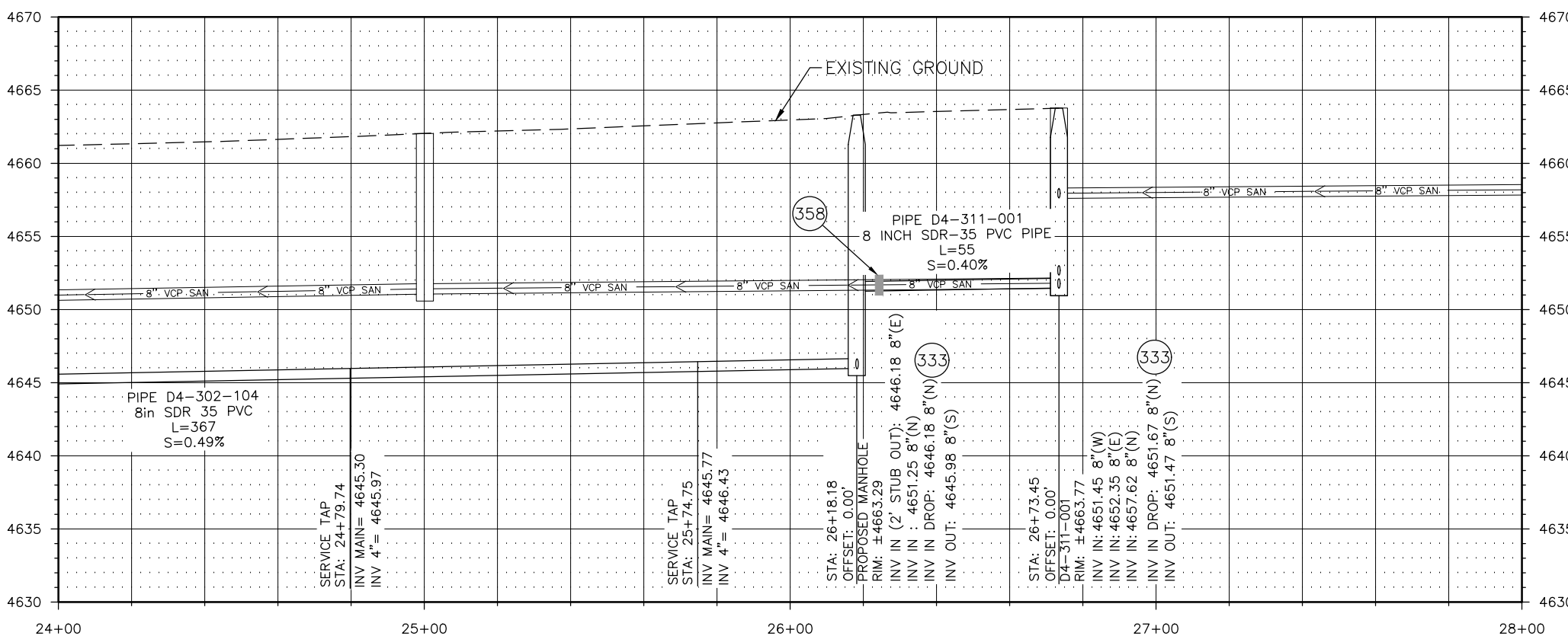
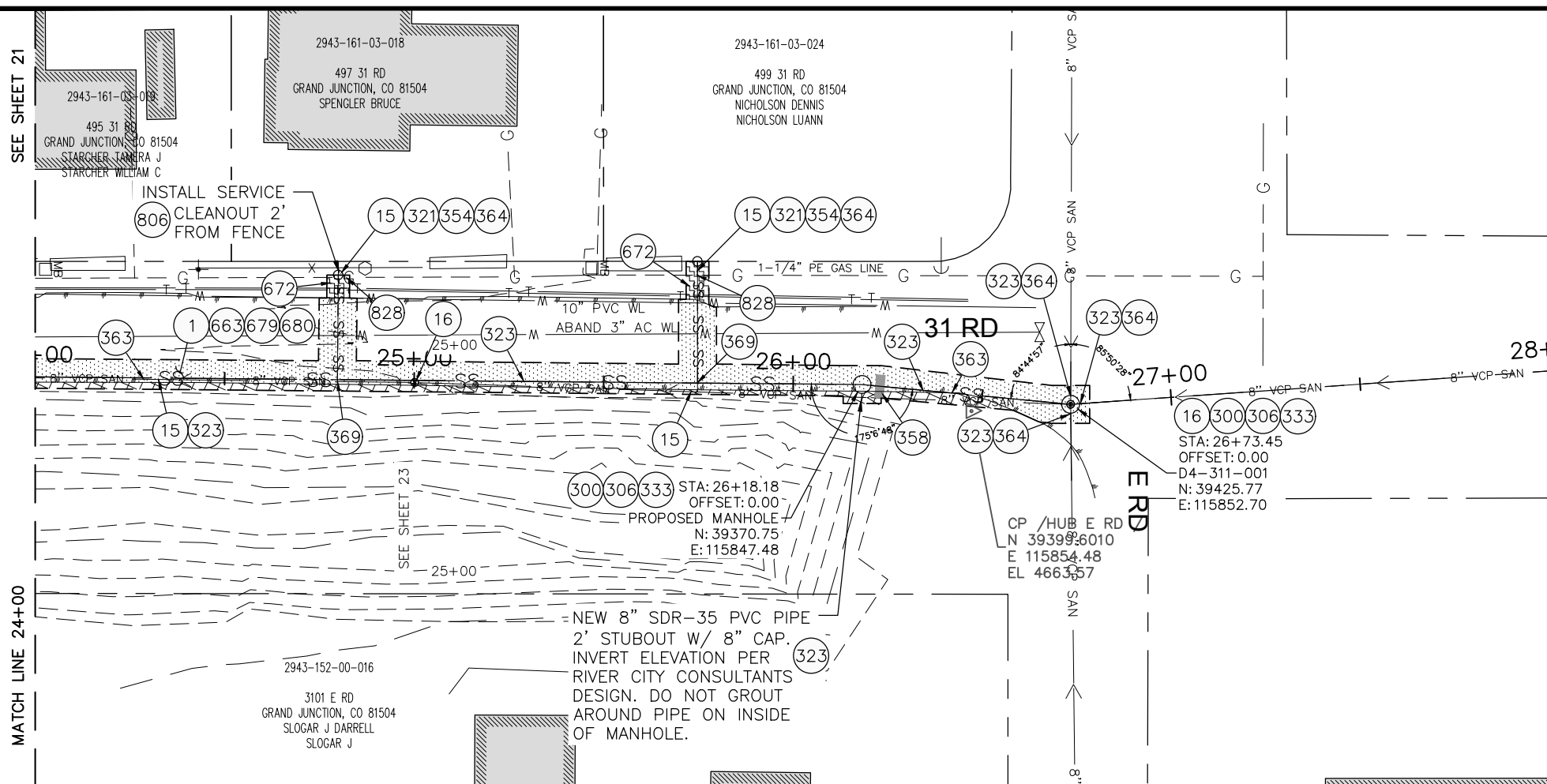
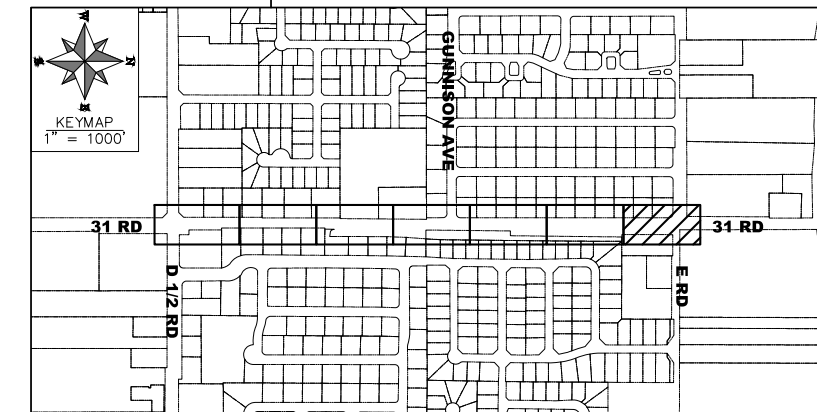


CONSTRUCTION NOTES

- 1 202 - REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 15 202 - REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN)(4" SERVICE PIPE MATERIALS MAY VARY)
- 16 202 - REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- 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)
- 306 102.11/108.5 - MANHOLE BARREL SECTION (D>5") (48" I.D.).
- 321 102.9/108.2 - 4" 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
- 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 INSTALL NEW 8" INSIDE DROP SYSTEM BY RELINER/DURAN INC. OR EQUAL APPROVED BY THE PROJECT ENGINEER. ALL FASTENERS AND BOLTS SHALL BE 316 STAINLESS STEEL.
- 354 104.20 - INSTALL 2-WAY SANITARY SEWER SERVICE CLEANOUT (STD. DETAIL SS-07). INCLUDES CLEANOUT RING AND COVER AND CONCRETE COLLAR IN UNPAVED AREAS (SEE STD. DETAIL SS-07)
- 358 103 - CLAY CUT-OFF WALL (INCIDENTAL TO SEWER INSTALLATION PAY ITEM)
- 363 BYPASS PUMPING (AS DEEMED NECESSARY BY THE CITY OR CONTRACTOR)
- 364 CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- 369 102.9/108.3 - 8" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAILS SS-06)
- 663 304 - AGGREGATE BASE COURSE (CLASS 6) (15" THICK)
- 672 304 - AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
- 679 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (3" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 3" LIFT BOTTOM MAT)
- 680 401.08 - HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22, GYR=75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH) (SEE CITY STD. DETAIL GU-03)
- 806 PROTECT FENCE
- 828 PROTECT GAS LINE.



NOTES:
• DO NOT INSTALL STEPS IN NEW MANHOLES.

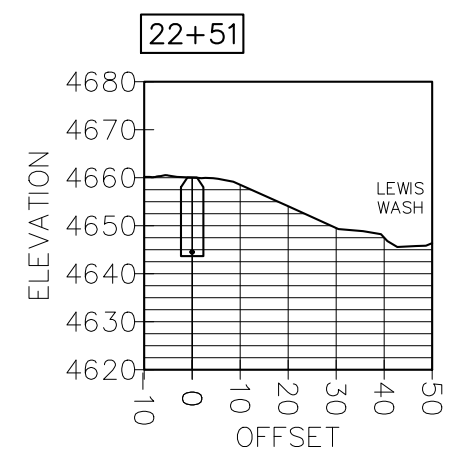
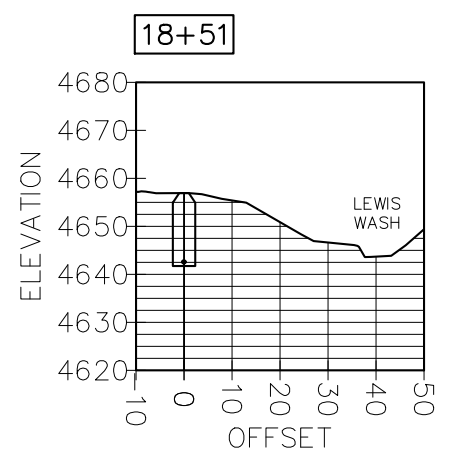
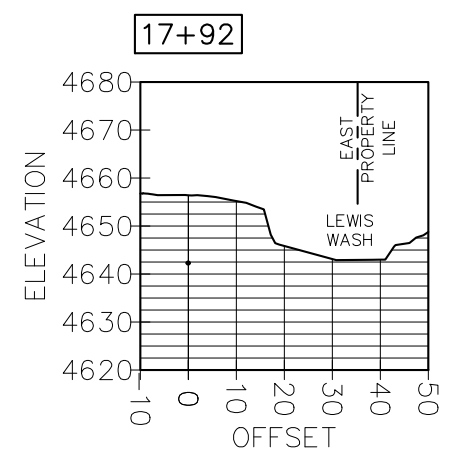
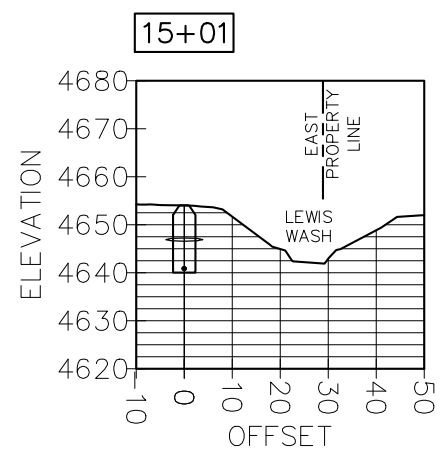
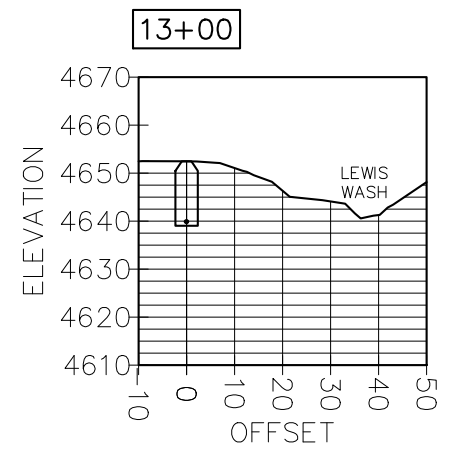
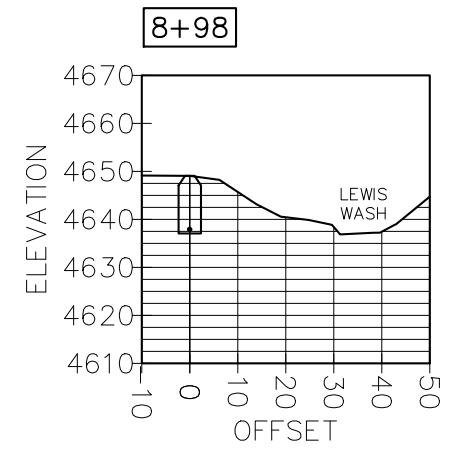
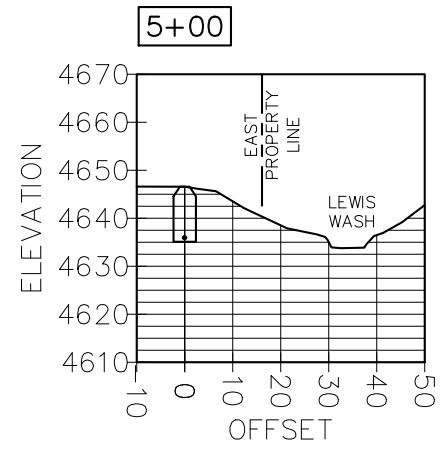


REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			MF	05/2019
REVISION			ES	06/2019
REVISION			ES	06/2019
REVISION			BG	06/2019

SCALES: PLAN & PROFILE
 HORIZONTAL: 1" = 20'
 VERTICAL: 1" = 5'



2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 31 ROAD



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE
REVISION			MF	05/2019
REVISION			ES	06/2019
REVISION			ES	06/2019
REVISION			BG	06/2019

SCALES: PLAN & PROFILE	
HORIZONTAL: 1" = 20'	
VERTICAL: 1" = 20'	



2019 SEWER LINE REPLACEMENTS
 PHASE B SEWER
 31 ROAD CROSS-SECTIONS