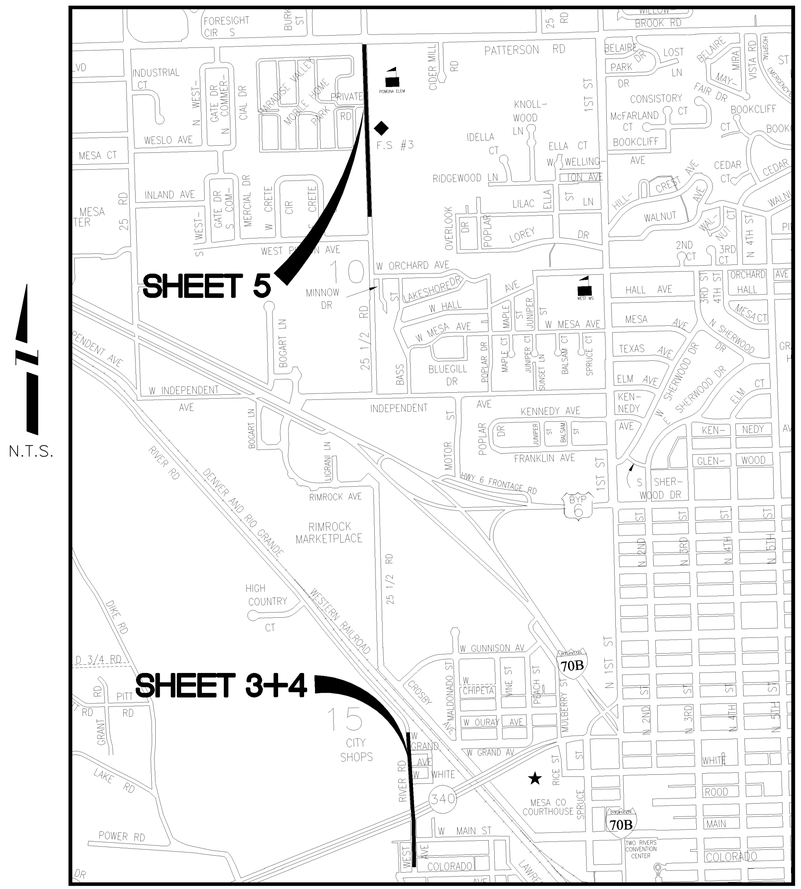
PROJECT NO. 904-F10116

2005 SEWER INTERCEPTOR REHABILITATIONS AUGUST, 2005

1 —— Cover Sheet
2 —— Standard Abbreviations, Legend, and Symbols
3 —— West Avenue Sewer Rehabilitation
4 —— River Road Sewer Rehabilitation
5 —— Pomona School Sewer Rehabilitation

VICINITY MAP



N.T.S.

UTILITIES AND AGENCIES								
AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE-WK	FAX
GRAND JUNCTION, CITY OF	MIKE CURTIS	PROJECT ENGINEER	PROJECT ENGINEER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 256-4004	(970) 256-4022
GRAND JUNCTION, CITY OF	BRET GUILLORY	UTILITY ENGINEER	SANITARY SEWER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 244-1590	(970) 256-4022
GRAND VALLEY IRRIGATION CO.	PHIL BERTRAND		IRRIGATION	688 26 ROAD	688 26 ROAD	GRAND JCT., CO 81506	(970) 242-2762	
BRESNAN	SCOTT WRIGHT		CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 986-1211	(970) 245-6803
QWEST	TIM HALE	ENGINEER	TELEPHONE	2524 BLICHMANN AVENUE	2524 BLICHMANN AVENUE	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	ELECTRIC	2538 BLICHMANN AVENUE	2538 BLICHMANN AVENUE	GRAND JCT., CO 81504	(970) 244-2698	(970) 244-2661
XCEL	DANNY MOORE	PROJECT MANAGER	GAS	2538 BLICHMANN AVENUE	2538 BLICHMANN AVENUE	GRAND JCT., CO 81504	(970) 244-2698	(970) 244-2661

CITY OF Grand Junction COLORADO

Public Works & Utilities
Engineering Division

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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

DESIGNED BY:
Mike Curtis — September 1, 2005
MIKE CURTIS, PROJECT ENGINEER — DATE

REVIEWED BY:
SBG — 9/1/05
BRET GUILLORY, UTILITY ENGINEER — DATE

AUTHORIZED FOR CONSTRUCTION
MICHAEL G. MCDILL, CITY ENGINEER — DATE

ACCEPTED AS CONSTRUCTED
MIKE CURTIS, PROJECT ENGINEER — DATE

904-F19116 WEST AVENUE SEWER INTERCEPTOR, AUGUST, 2005, Plan Set No. —

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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
- HATCHING: INDICATES CONCRETE REMOVAL
- HATCHING: INDICATES STAGING AREA — STAGING AREA
- 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 — 5' RETAINING WALL
- STRIPING (CONTINUOUS WHITE) — WHITE
- STRIPING (DASHED WHITE) — WHITE
- STRIPING (CONTINUOUS YELLOW) — YELLOW
- STRIPING (DASHED YELLOW) — YELLOW
- 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) — 6" PERF
- UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION) — 18" COMB
- UTILITY LINE (TELEPHONE) — T T
- UTILITY LINE (WATER) — W 8" W

SYMBOLS

- BENCH MARK
- 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) — 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)
- VALVE (IRRIGATION)
- VALVE (WATER)
- VEGETATION (HEDGE OR BUSH)
- VEGETATION (TREE STUMP)
- VEGETATION (TREE) (CALIPER SIZE NOTED)
- WATER HYDRANT
- WEIR
- YARD LIGHT

BAR SCALE:

GRAPHIC SCALE

10 0 20 60

(IN FEET)
1 inch = 20 ft.

NORTH ARROW:

DESCRIPTION	DATE
REVISION △	
REVISION △	
REVISION △	
REVISION △	

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

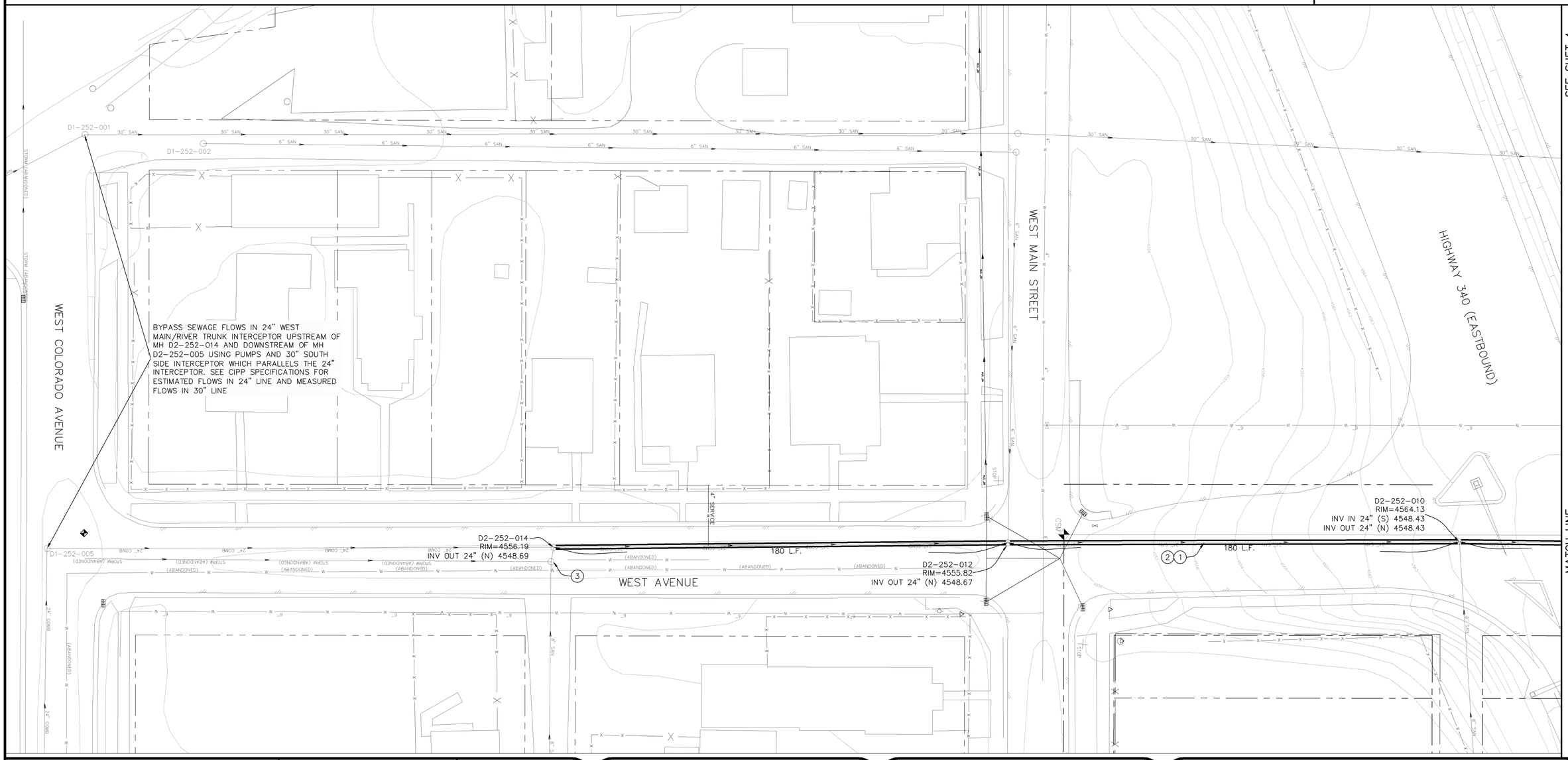
PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

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

PROJECT NO. 904-F10116

CONSTRUCTION NOTES

1. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. EXISTING PIPE IS 24" DIA VCP. FIELD VERIFY BEFORE ORDERING LINER.
2. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK TO A DOWNSTREAM MANHOLE, OR ADJACENT 30" SEWER LINE.
3. VERIFY FLOW IN 8" LINE. IF NECESSARY, BYPASS FLOW TO MH D1-252-005.



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY CM DATE 2005
DESIGNED BY DATE
CHECKED BY MC DATE 2005
APPROVED BY DATE

SCALE: PLAN 0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2005 SEWER INTERCEPTOR REHABILITATIONS
WEST AVENUE / RIVER ROAD REHABILITATION
MH D2-252-014 TO MH D2-252-010

3

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PROJECT NO. 904-F10116

CONSTRUCTION NOTES

1. CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. EXISTING PIPE IS 24" DIA VCP. FIELD VERIFY BEFORE ORDERING LINER.
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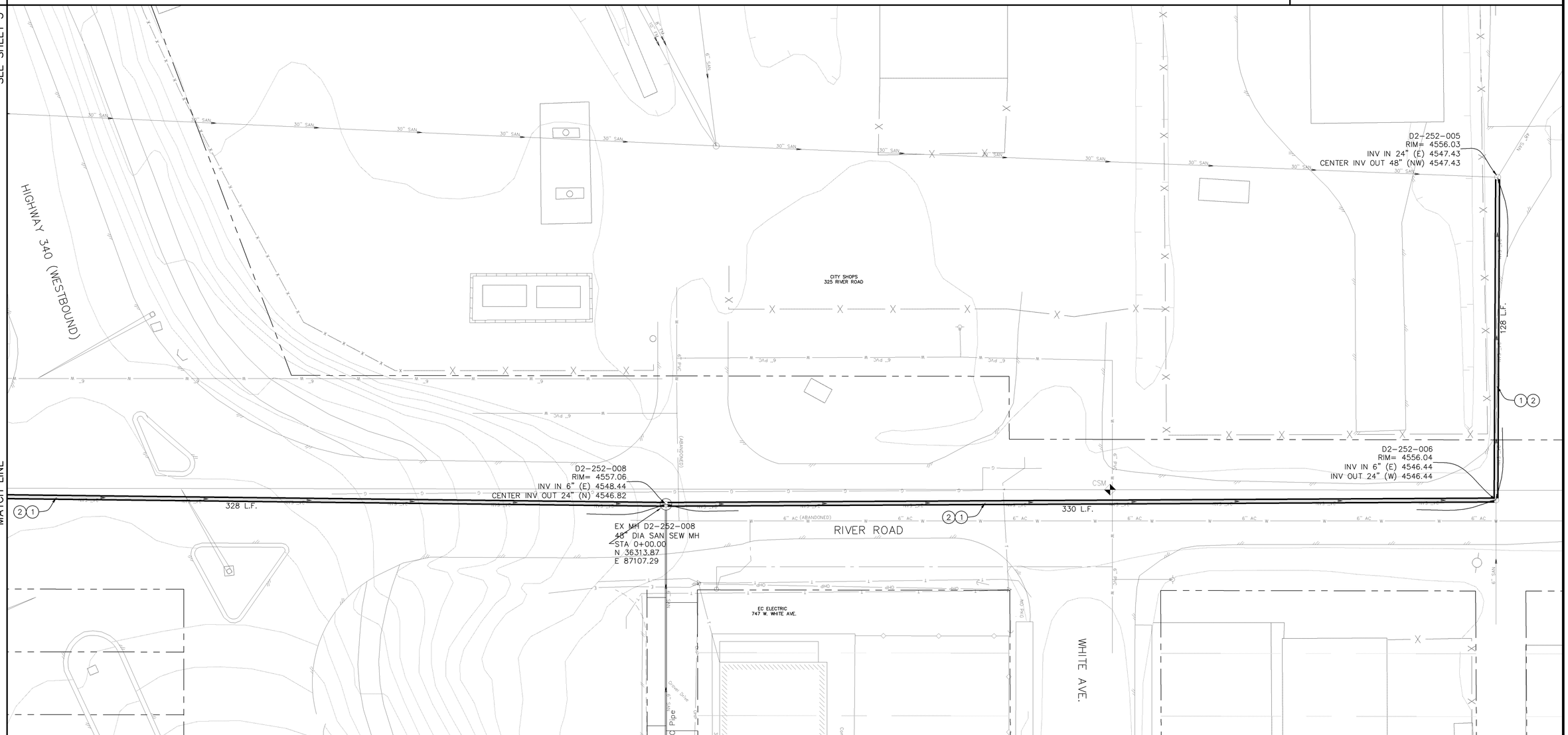


DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY	CM	DATE	2005
DESIGNED BY		DATE	
CHECKED BY	MC	DATE	2005
APPROVED BY		DATE	

SCALE:

PLAN

0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2005 SEWER INTERCEPTOR REHABILITATIONS
WEST AVENUE / RIVER ROAD REHABILITATION
MH D2-252-008 TO MH D2-252-005

4

N:\Admin\Proj2004\F-10116 (West Avenue Sewer Interceptor)\dwg\[BASE F-10116 CON_SS-2.dwg, PLAN AND PLAN VIEW (RIVER ROAD_SS0008 TO MH)

PROJECT NO. 904–F10116

CONSTRUCTION NOTES

(1) CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. EXISTING PIPE IS 8" DIA VCP. FIELD VERIFY BEFORE ORDERING LINER.

Bid Schedule: 2005 Sewer Interceptor Rehabilitation

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price		Rounding & contingency	West Avenue/River Road	Pomona School
		West Avenue Interceptor								
WAI-1	SP	24 inch CIPP inclusive (cleaning, video, cipp, & service connections	1,146.	LF	$ ________	$ ________			1,146.	
WAI-2	SP	Bypass pumping per City Specifications	7.	24 HR DAY	$ ________	$ ________			7.	
		Pomona School Collector								
PSC-1	SP	8 inch CIPP inclusive (cleaning, video, cipp, & service connections)	544.	LF	$ ________	$ ________				544.
		Common Items								
1	626	Mobilization	Lump	Sum	---	$ ________		1.		
2	630	Traffic Control inclusive	Lump	Sum	---	$ ________		1.		
3	630	Traffic Control Plan	Lump	Sum	---	$ ________		1.		
FA		Force Account (minor contract revisions)	---	---	---	$ 5,000.00			5,000.	

DESCRIPTION	DATE
REVISION 1 ADDED LINE BTWN E4–252–005 & 006	SEPT 2005
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY CM DATE 2005
DESIGNED BY DATE
CHECKED BY MC DATE 2005
APPROVED BY DATE

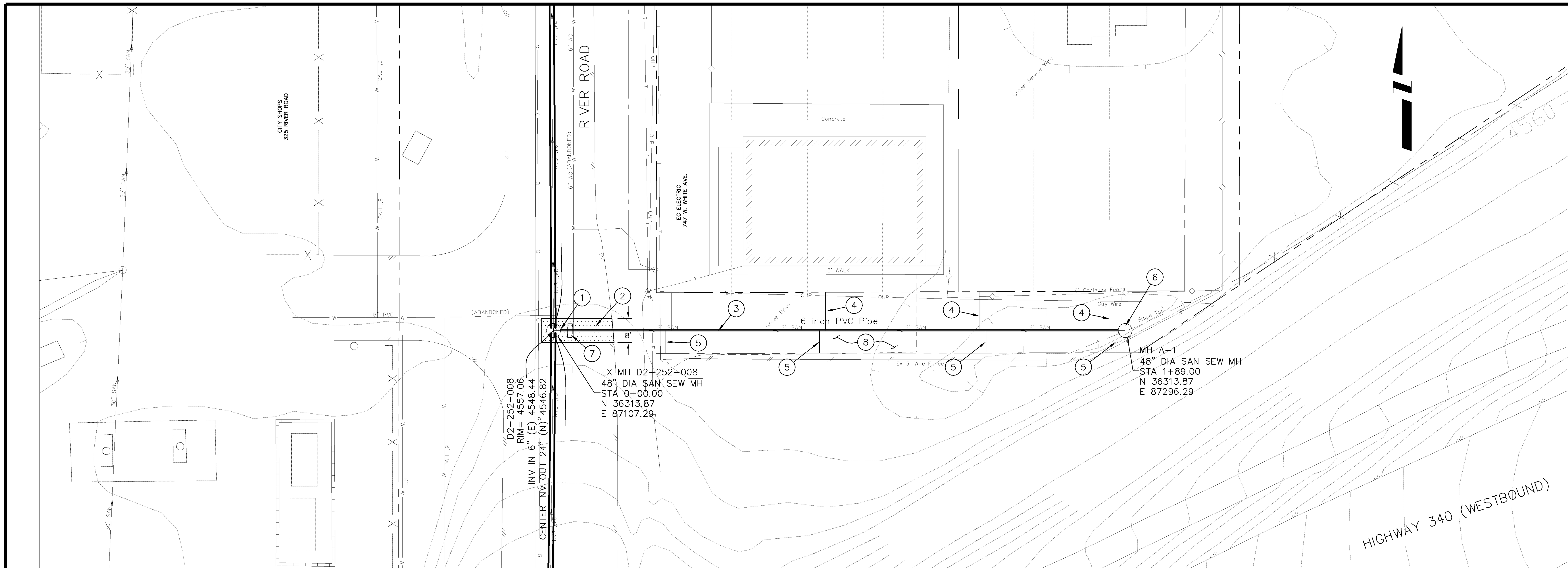
SCALE: PLAN 0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2005 SEWER INTERCEPTOR REHABILITATIONS
POMONA SCHOOL SEWER REHABILITATION
MH E4–252–002 TO MH E4–252–006

PROJECT NO. 904–F10116



CONSTRUCTION NOTES

1. 210.00 – CONNECT NEW 6" SDR–35 PVC PIPE TO EXISTING MH. PER STANDARD DETAIL SS–08.
2. 103.3 – <u>ASPHALT REMOVAL:</u> CUT AND REMOVE PAVEMENT AS SHOWN. GENERALLY WIDTH TO INSTALL MANHOLES WILL BE 8' CENTERED ON THE MANHOLE AND SQUARED OFF AS SHOWN. FOR MAIN LINE REMOVAL WIDTH WILL BE 6' MINIMUM AND 8' MAXIMUM CENTERED ON THE PIPE. SERVICE TRENCH WIDTH SHALL BE 8' MAXIMUM.

   103.18 – <u>PAVEMENT REPLACEMENT:</u>
   304.00 – CDOT CLASS–6 AGGREGATE BASE COURSE. SAME THICKNESS AS EXISTING (6" MIN.). COMPACTED TO 95% AASHTO T–180.
   401.00 – HOT BITUMINOUS PAVEMENT (GRADING SX) MATCH EXISTING THICKNESS (4" MIN.). (SEE CITY OF GRAND JUNCTION STANDARD DETAIL GU–03).
3. 102.9B – REPLACE EXISTING 6" PIPE WITH NEW 6" PVC – SDR 35 SEWER PIPE AT EXISTING SLOPE.
4. 102.9 – CONNECT ACTIVE SEWER TAPS TO NEW 6" SEWER LINE. VERIFY LOCATIONS AND ELEVATIONS OF ACTIVE TAPS.
5. ABANDON EXISTING (SOUTH) TAPS IF INACTIVE.
6. 102.11 – INSTALL NEW 48" DIA. SANITARY SEWER MANHOLE (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS–02).
7. CLAY CUT–OFF WALL.
8. 304 – REGRADE GRAVEL ROAD WITH CLASS 6 ABC, 6" DEPTH, INSTALLED AND COMPACTED TO 90% AASHTO T–180.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY CM DATE 2005
DESIGNED BY ____ DATE ____
CHECKED BY MC DATE 2005
APPROVED BY ____ DATE ____

SCALE: PLAN 0 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2005 SEWER INTERCEPTOR REHABILITATIONS
EC ELECTRIC SERVICE REPLACEMENT
MH D2–252–008 TO MH A–1