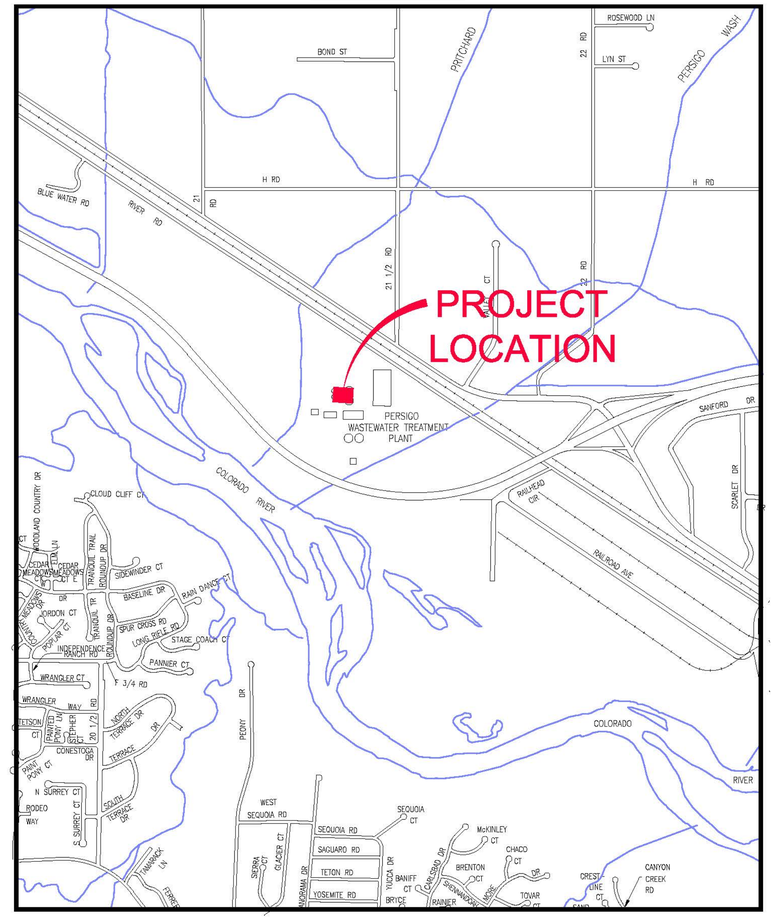
PROJECT NO. 904-F001002

PERSIGO
SLUDGE LINE REHABILITATION
DECEMBER, 2008

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	JUSTIN VENSEL	PROJECT ENGINEER	PROJECT ENGINEER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 256–4017	(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 JUNCTION, CITY OF	LARRY BROWN	MAINTENANCE SUPERVISOR		2145 RIVER ROAD	2145 RIVER ROAD	GRAND JCT., CO 81505	(970) 256–4168	(970) 245–8620

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.

	DESCRIPTION	DATE
REVISION 1		
REVISION 2		
REVISION 3		
REVISION 4		

CITY OF Grand Junction COLORADO

Public Works & Utilities
Engineering Division

DRAWING STATUS:
- PROGRESS
- FINAL CONSTRUCTION DRAWINGS
- ASBUILT

DESIGNED BY:
JUSTIN VENSEL, PROJECT ENGINEER — DATE

REVIEWED BY:
BRET GUILLORY, UTILITY ENGINEER — DATE

AUTHORIZED FOR CONSTRUCTION
TRENTON C. PRALL, CITY ENGINEER — DATE

ACCEPTED AS CONSTRUCTED
JUSTIN VENSEL, PROJECT ENGINEER — DATE

PERSIGO SLUDGE LINE REHABILITATION, DECEMBER, 2008, Plan Set No. —

PROJECT NO. xxxx-Fxxxxx

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
Δ	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
- CHLORINE LINE — CL2
- 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)
- 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
- PLANT WATER — PW
- PROPOSED CONCRETE CURB AND GUTTER
- PROPOSED CONCRETE CURB,GUTTER,& SIDEWALK
- PROPOSED CONCRETE SIDEWALK
- PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN) — 8" PVC SANITARY SEWER

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

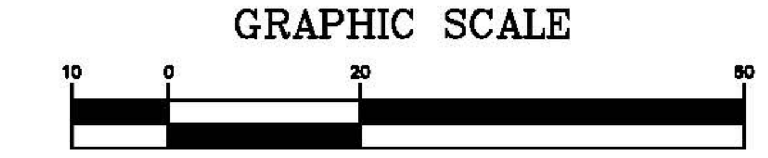
- RAIL ROAD
- RETAINING WALL — 1' RETAINING WALL
- STRIPING (CONTINUOUS WHITE) — WHITE
- STRIPING (DASHED WHITE) — WHITE
- STRIPING (CONTINUOUS YELLOW) — YELLOW
- STRIPING (DASHED YELLOW) — YELLOW
- TOP OF SLOPE — 4570 4580
- CONTOUR LINES (SHOWN BETWEEN TOP & TOE)
- TOE OF SLOPE — 4570
- TRAFFIC DETECTOR 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

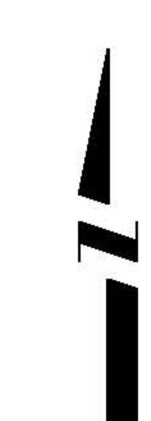
BAR SCALE:

GRAPHIC SCALE



(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

Bid Schedule: Sludge Line Replacement

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	103.16	Import Pit Run	1,800.	Ton	$ _____	$ _____
2	108.2	6" Pressure Sewer Pipe (C-900 PVC)	720.	LF	$ _____	$ _____
3	108.2	4" Electric conduit (Schedule 80)	250.	LF	$ _____	$ _____
4	108.2	Concrete cap on Sewer and Grease Lines	60.	LF	$ _____	$ _____
5	108.2	Sanitary Sewer Cleanout Cover (standard Detail SS-07)	4.	EA	$ _____	$ _____
6	108.3	6" Sanitary Sewer Cleanout (include pipe, fittings, mechanincal restraints and cover per cleanout detail)	4.	EA	$ _____	$ _____
7	108.3	6" Fitting (special) (Mega Flange)	5.	EA	$ _____	$ _____
8	108.3	6" Fitting (special) (Grease Line Detail)	1.	EA	$ _____	$ _____
9	108.3	6" 11 1/4° Elbow	6.	EA	$ _____	$ _____
10	108.3	6" 22 1/2° Elbow	1.	EA	$ _____	$ _____
11	108.7	Granular Stabilization Material (Type B)	300.	Ton	$ _____	$ _____
12	202	Removal of asphalt	50.	SY	$ _____	$ _____
13	202	Saw Cuts	200.	LF	$ _____	$ _____
14	207	Topsoil	60.	Tons	$ _____	$ _____
15	208	Erosion Control (Complete in place)	Lump	sum	---	$ _____
16	210	Reset Sprinkler Head	5.	EA	$ _____	$ _____
17	304	Aggregate Base Course (Class 6) (16 inch Thick)	50.	SY	$ _____	$ _____
18	608	Concrete Curb and Gutter (2' wide)	40.	SY	$ _____	$ _____
19	608	Concrete Sidewalk (4" Thick)	170.	SY	$ _____	$ _____
20	608	Concrete Intersection Fillet	30.	SY	$ _____	$ _____
21	626	Construction Surveying	Lump	sum	---	$ _____
22	626	Mobilization	Lump	sum	---	$ _____
23	707	Bollard	2.	EA	$ _____	$ _____
MCR		Minor Contract Revisions	---	---	---	$ 7,000.00

Bid Amount: $ _____

Bid Amount:

_____ **dollars**

BF-2 (1 of 1)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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

SCALE: N.T.S.

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

PERSIGO SLUDGE LINE REHABILITATION
SUMMARY OF APPROXIMATE QUANTITIES

N:\Land Proj\Persigo\Jeep\Persigo Line Replacements 11-25-08.dwg, 3, 1/13/2009 1:28:31 PM

PROJECT NO. 904-F001002

CP-1
NORTHING : 52302.11
EASTING : 64931.78
ELEVATION : 4516.93
DESCRIPTION : CP PK@SLUDGE BLD

CP-2
NORTHING : 52495.10
EASTING : 64932.11
ELEVATION : 4516.15
DESCRIPTION : CP PK ANAEROBIC

CP-3
NORTHING : 52648.60
EASTING : 64932.35
ELEVATION : 4515.89
DESCRIPTION : CP PK@DWYS

CP-4
NORTHING : 52381.65
EASTING : 65144.56
ELEVATION : 4527.64
DESCRIPTION : RB PRIMARY SLUDGE

CP-5
NORTHING : 52647.71
EASTING : 65177.23
ELEVATION : 4519.35
DESCRIPTION : RB RAW SEWAGE

ANAEROBIC DIGESTERS (APPROX. LOCATION)

SLUDGE PROCESSING UNIT (APPROX. LOCATION)

AERATION BASINS

PRIMARY CLARIFIER NO. 2

PRIMARY CLARIFIER NO. 1

FINAL CLARIFIER NO. 1 (APPROX. LOCATION)

FINAL CLARIFIER NO. 2 (APPROX. LOCATION)

FLOW EQUALIZATION BASINS

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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

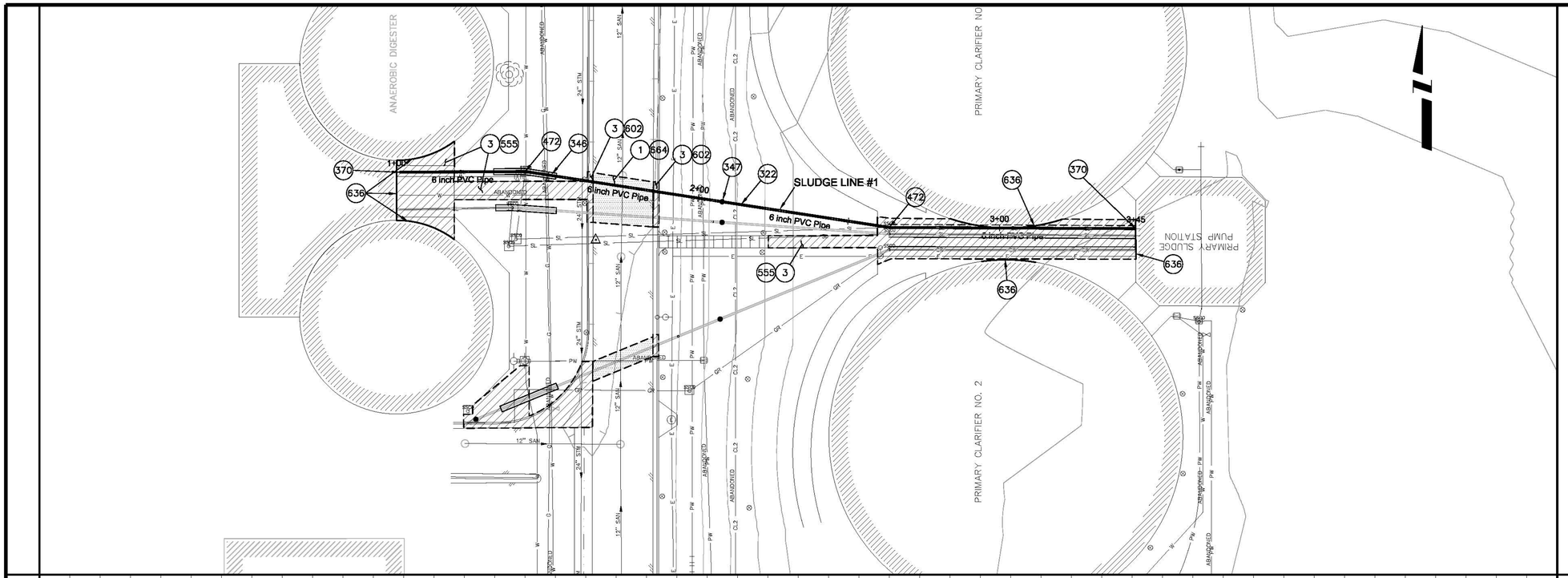
SCALE
N.T.S.

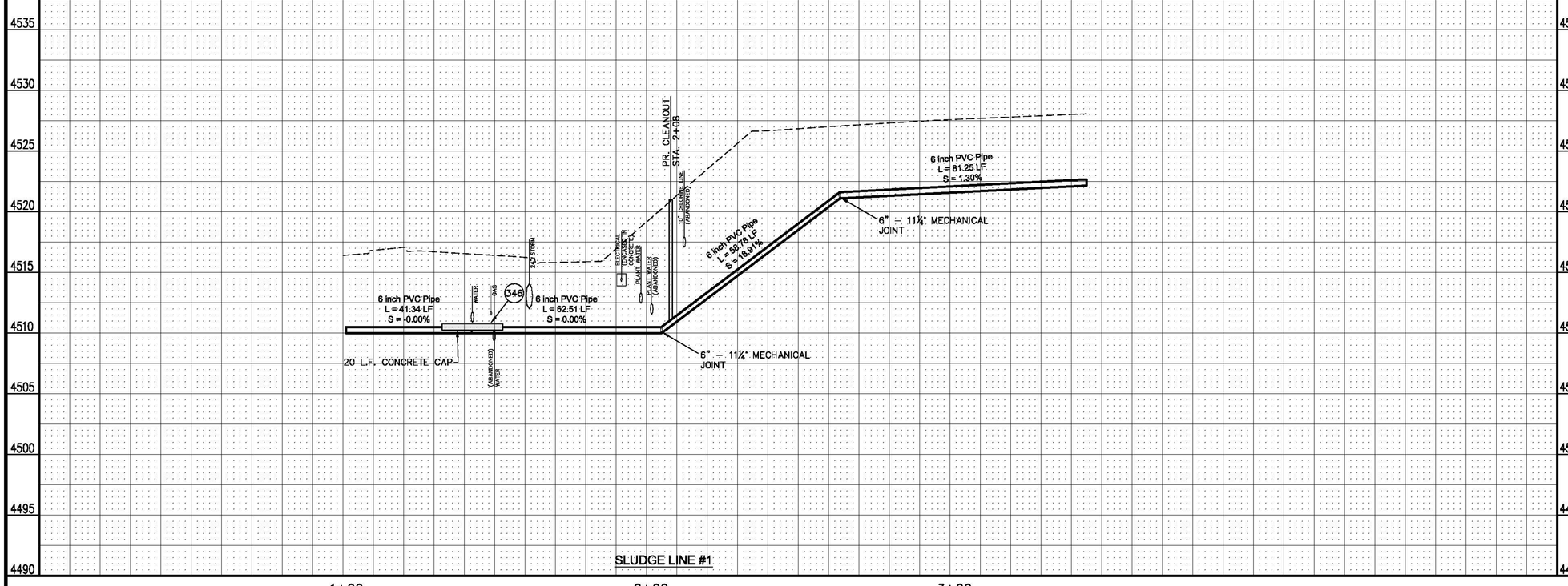
CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

PERSIGO SLUDGE LINE REHABILITATION
PROJECT CONTROL MAP

4





PROJECT NO. 904-F001002

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 TO NEAREST JOINT. (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.

(322) 102.9/108.2 – 6" GRAVITY SEWER PIPE (C-900 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL AND TRACING WIRE.

(346) 104.40 – CAP TOP HALF OF SEWER IN CONCRETE PER STD. DETAIL GU-04. (WATER LINE LESS THAN 18" ABOVE SEWER LINE)

(347) INSTALL SANITARY SEWER CLEANOUT, CLEANOUT RING & COVER AND CONCRETE COLLAR. ALL JOINTS ON CLEANOUT SHALL BE FULLY RESTRAINED. SEE DETAIL THIS SHEET.

(370) CONNECT NEW PIPE TO EXISTING PIPE/FITTING.

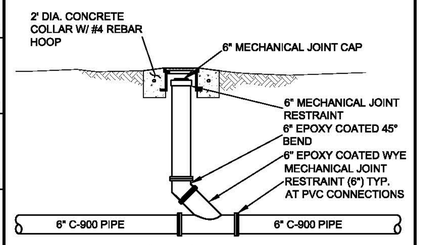
(472) 102.8/108.3 – 6", 11.25° ELBOW (MECHANICAL JOINT).

(555) 608.06 – CONCRETE SIDEWALK (4" THICK) CLASS B CONCRETE W/ 4" CLASS 6 AGGREGATE BASE COURSE COMPACTED TO 95% AASHTO T-180 METHOD A.

(602) 608.06 – CONCRETE CURB AND GUTTER (2' WIDE).

(636) INSTALL EXPANSION MATERIAL AND CAULKING.

(664) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK) COMPACTED TO 95% AASHTO T-180 METHOD A.



CLEANOUT DETAIL
N.T.S.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JAH DATE 11/2008
DESIGNED BY JV DATE 11/2008
CHECKED BY DATE
APPROVED BY DATE

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

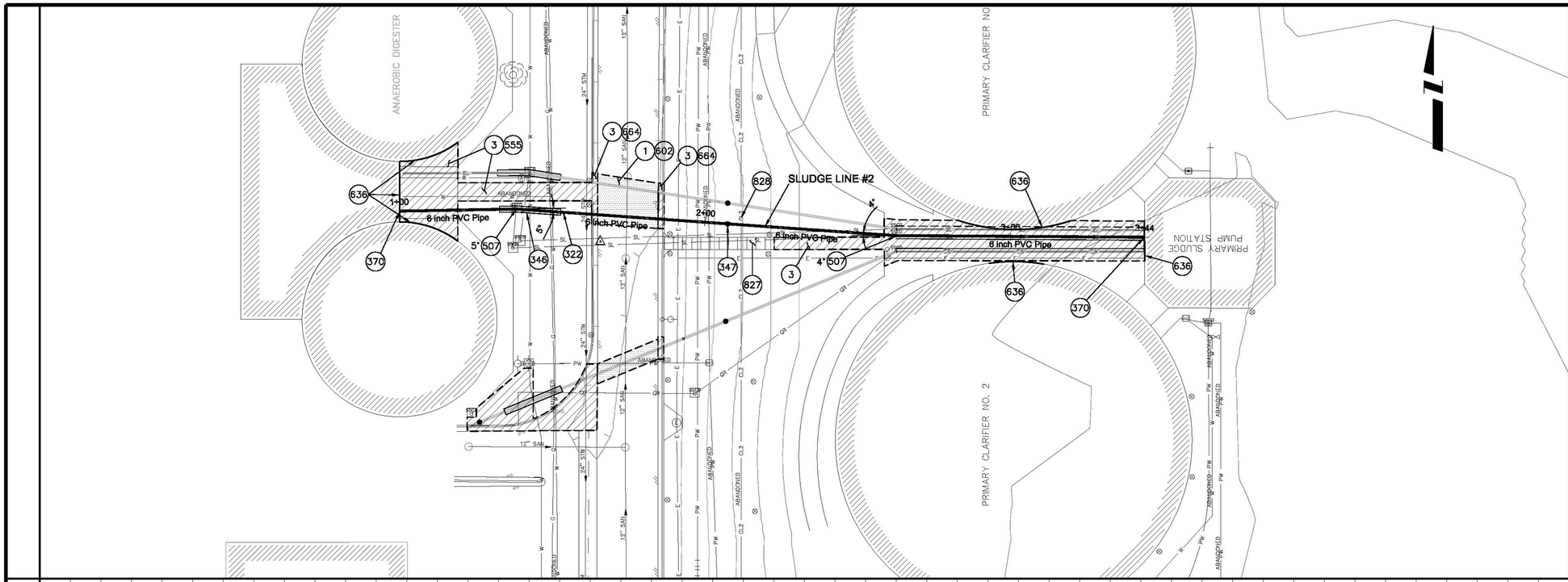
CITY OF Grand Junction COLORADO

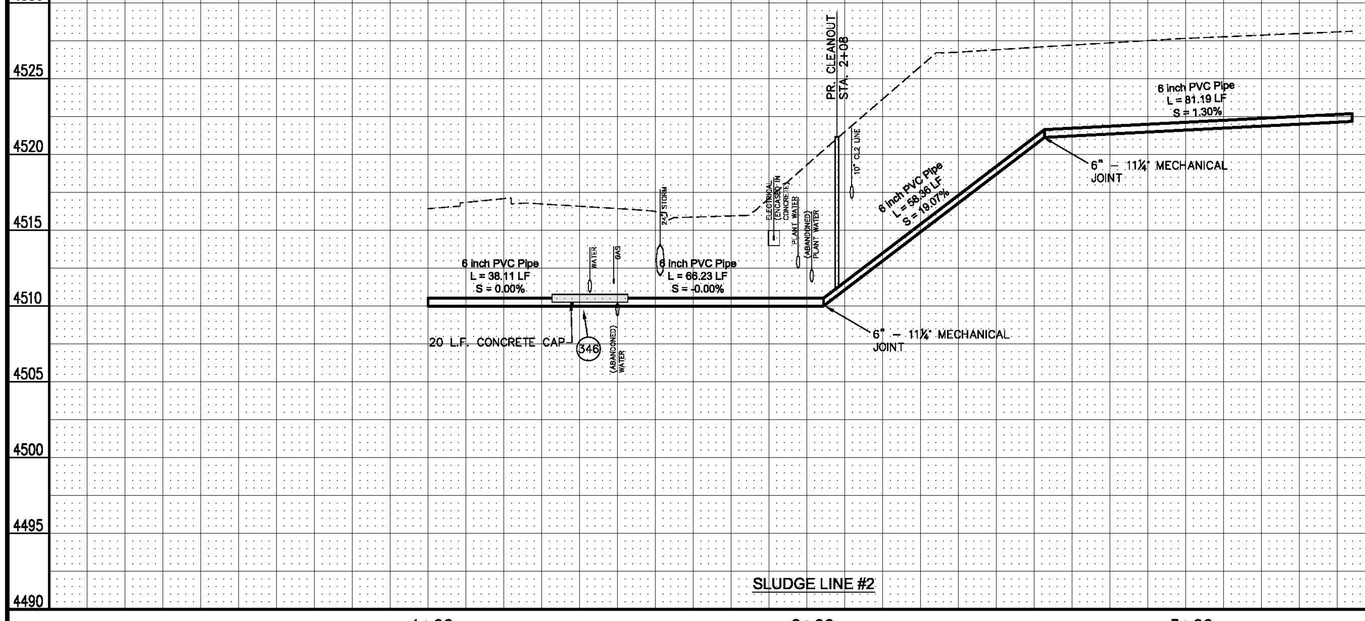
PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

PERSIGO SLUDGE LINE REHABILITATION SLUDGE LINE #1 PLAN AND PROFILE STA 1+00 TO STA 3+45

5

K:\Land Proj\Projects\Persigo\Persigo Line Rehabs\sheets 11-26-08.dwg, PLAN AND PROFILE, 5/13/2009 1:28:52 PM





PROJECT NO. 904–F001002

CONSTRUCTION NOTES

(1) 202 – REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)

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(322) 102.9/108.2 – 6" GRAVITY SEWER PIPE (C–900 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL AND TRACING WIRE.

(346) 102/104.3.C – ENCLOSE 6" SANITARY SEWER IN 10" C–900 CASING PIPE POLYETHYLENE CASING SPACERS REQUIRED.

(347) INSTALL SANITARY SEWER CLEANOUT, CLEANOUT RING & COVER AND CONCRETE COLLAR (SS–07).

(370) CONNECT NEW PIPE TO EXISTING PIPE/FITTING.

(472) 102.8/108.3 – 6", 11.25° ELBOW (MECHANICAL JOINT).

(507) DEFLECT PIPE AS SHOWN.

(555) 608.06 – CONCRETE SIDEWALK (4" THICK) CLASS B CONCRETE W/ 4" CLASS 6 AGGREGATE BASE COURSE COMPACTED TO 95% AASHTO T–180 METHOD A.

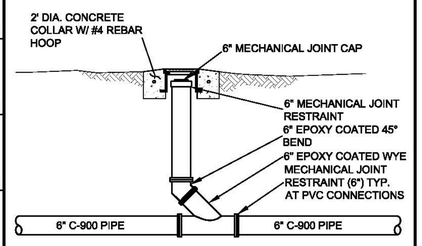
(602) 608.06 – CONCRETE CURB AND GUTTER (2' WIDE).

(636) INSTALL EXPANSION MATERIAL AND CAULKING.

(664) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK) COMPACTED TO 95% AASHTO T–180 METHOD A.

(827) PROTECT EXISTING STAIRS AND HANDRAIL IN PLACE.

(828) CUT AND CAP EXISTING ABANDONED CHLORINE LINE.



CLEANOUT DETAIL
N.T.S.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JAH DATE 11/2008
DESIGNED BY JV DATE 11/2008
CHECKED BY DATE
APPROVED BY DATE

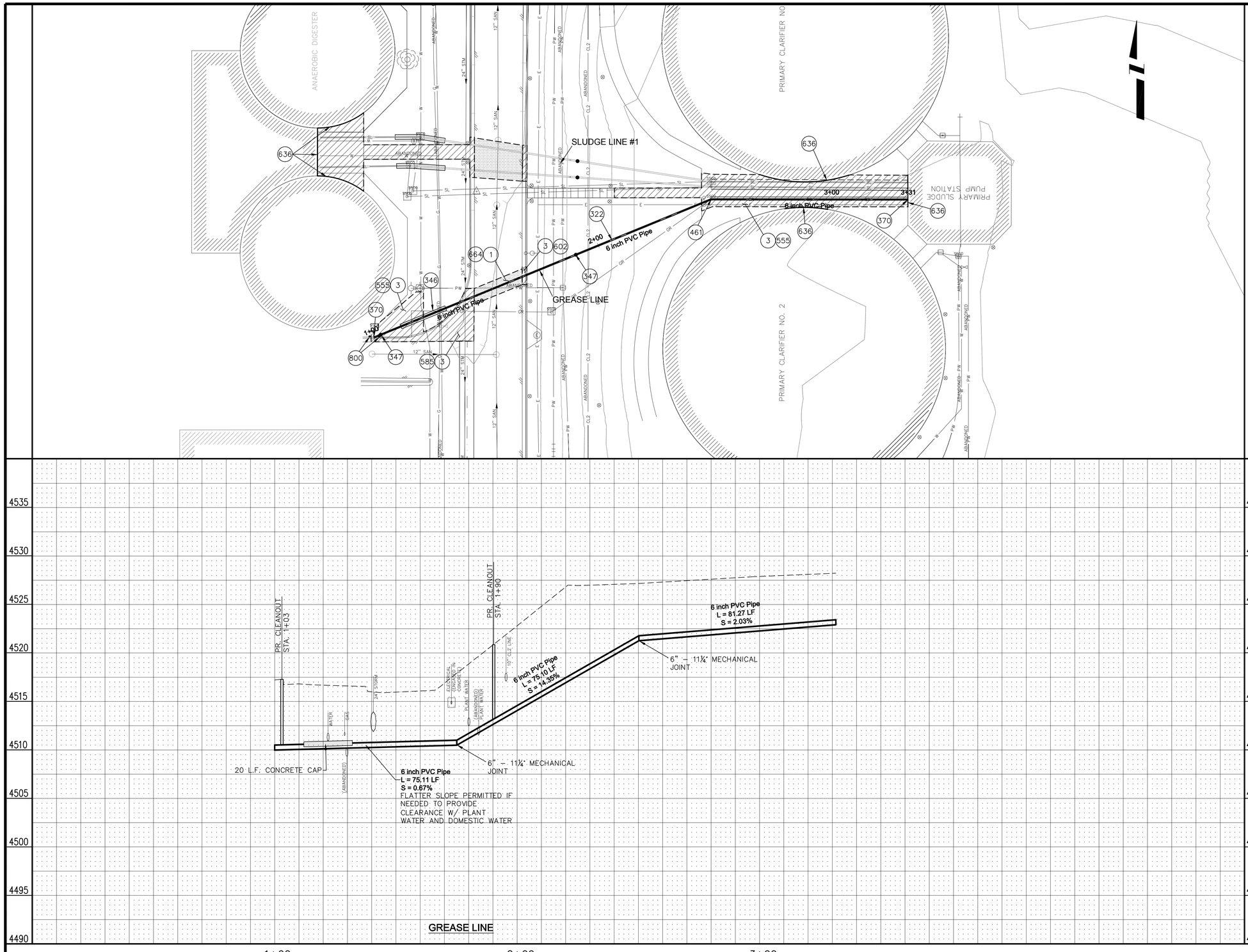
SCALES: PLAN HORIZONTAL 0 5 10 20; PROFILE HORIZONTAL 0 5 10 20, VERTICAL 2.5 0

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

PERSIGO LINE REPLACEMENTS
SLUDGE LINE #2 PLAN AND PROFILE
STA 1+00 TO STA 3+45

6



PROJECT NO. 904-F001002

CONSTRUCTION NOTES

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(322) 102.9/108.2 – 6" GRAVITY SEWER PIPE (C-900 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL AND TRACING WIRE.

(346) 102/104.3.C – ENCLOSE 6" SANITARY SEWER IN 10" C-900 CASING PIPE POLYETHYLENE CASING SPACERS REQUIRED.

(347) INSTALL SANITARY SEWER CLEANOUT, CLEANOUT RING & COVER AND CONCRETE COLLAR (SS-07).

(370) CONNECT NEW PIPE TO EXISTING PIPE/FITTING. SEE CONNECTION DETAIL THIS SHEET

(461) 102.8/108.3 – 6", 22½° ELBOW (MECHANICAL JOINT).

(555) 608.06 – CONCRETE SIDEWALK (4" THICK) CLASS B CONCRETE W/ 4" CLASS 6 AGGREGATE BASE COURSE COMPACTED TO 95% AASHTO T-180 METHOD A.

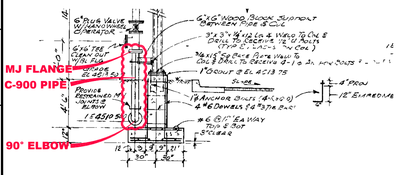
(585) 608.06 – CONCRETE CORNER FILLET PER CITY STANDARD DETAIL C-12.

(602) 608.06 – CONCRETE CURB AND GUTTER (2' WIDE).

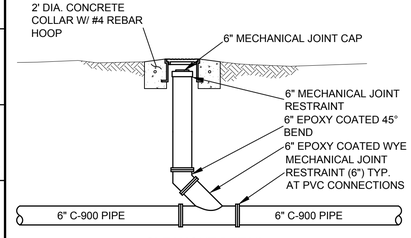
(636) INSTALL EXPANSION MATERIAL AND CAULKING.

(664) 304 – AGGREGATE BASE COURSE (CLASS 6) (12" THICK) COMPACTED TO 95% AASHTO T-180 METHOD A.

(800) INSTALL 2 BOLLARDS TO PROTECT EXPOSED PIPE ASSEMBLY.



CONNECTION DETAIL
N.T.S.



CLEANOUT DETAIL
N.T.S.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JAH DATE 11/2008
DESIGNED BY JV DATE 11/2008
CHECKED BY DATE
APPROVED BY DATE

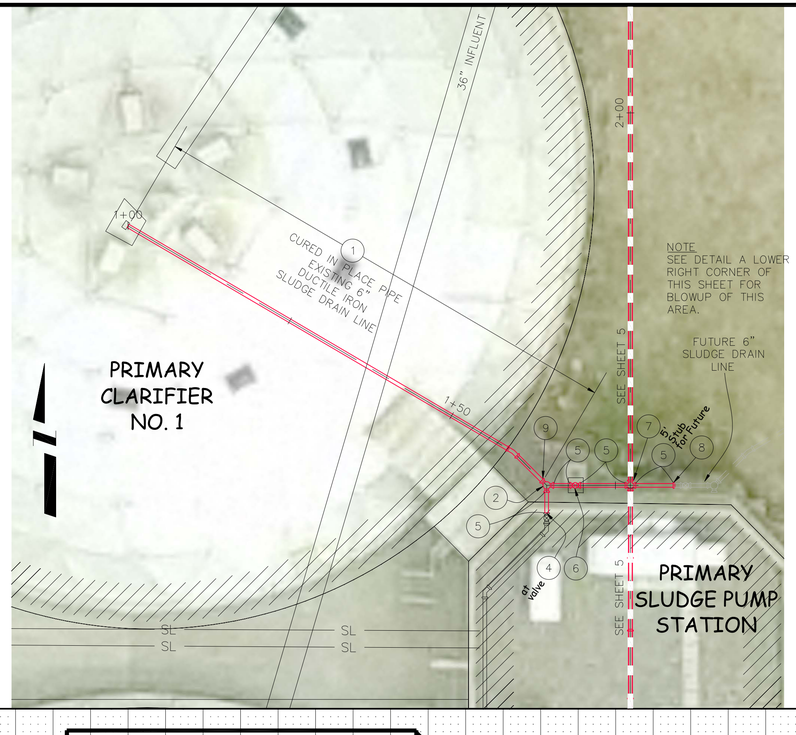
SCALES:
PLAN HORIZONTAL 0 5 10 20
PROFILE HORIZONTAL 0 5 10 20; VERTICAL 0 2.5 5

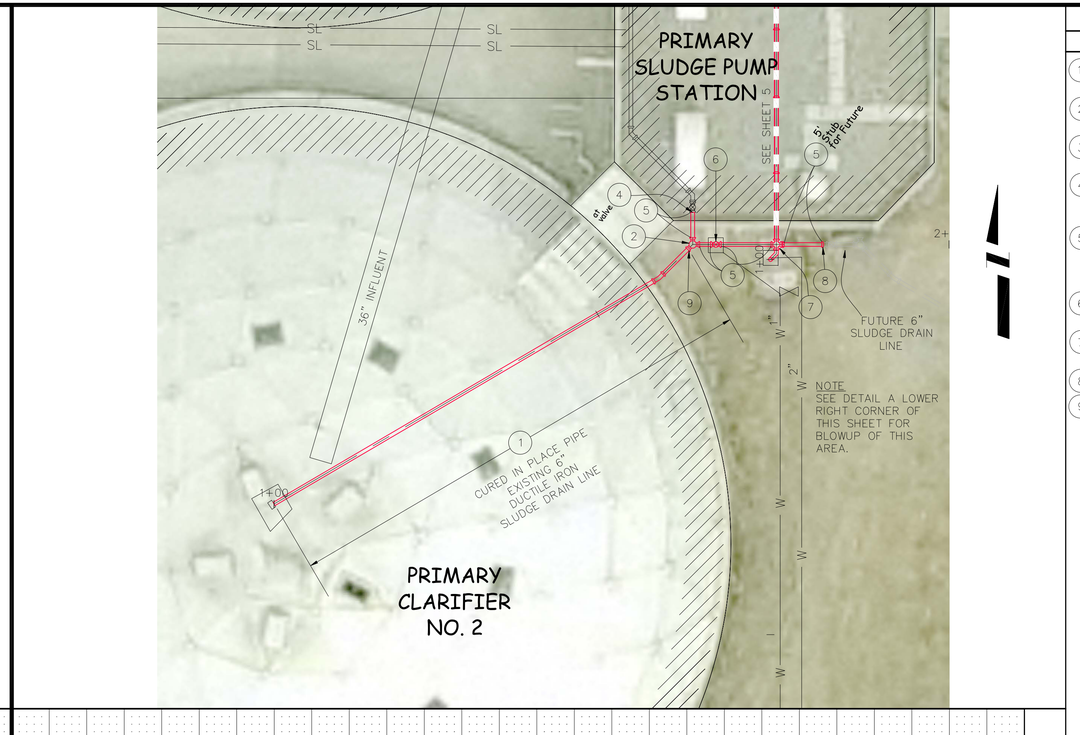
CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

PERSIGO SLUDGE LINE REHABILITATION
GREASE LINE PLAN AND PROFILE
STA 1+00 TO STA 3+32

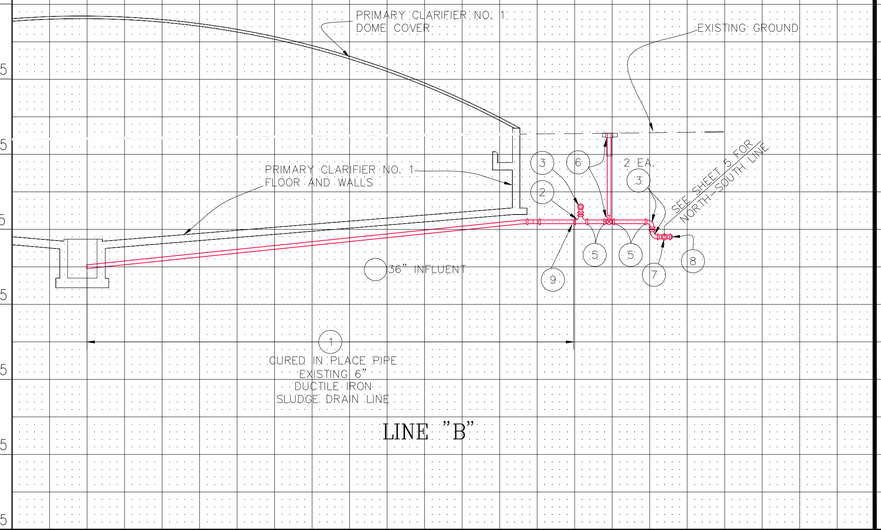
7





NOTE

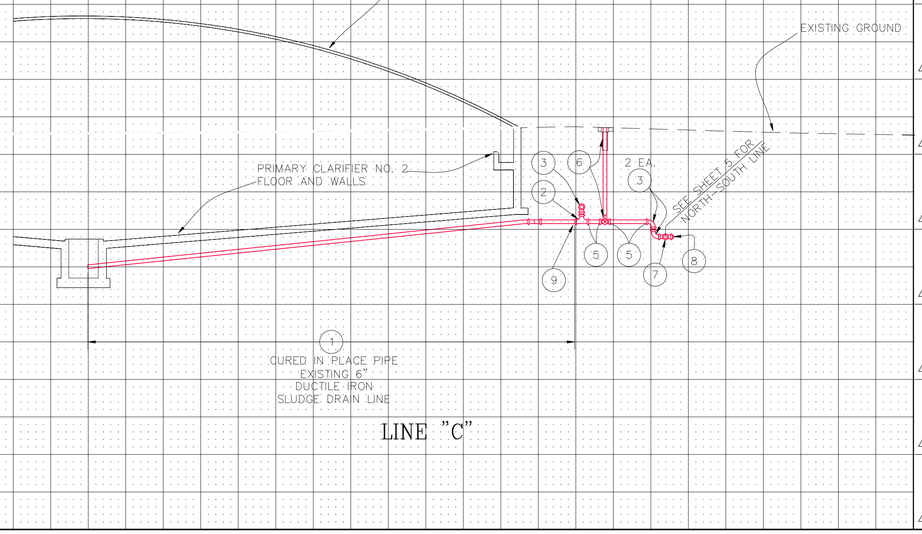
CONTRACTOR SHALL FIELD VERIFY ALL PIPE LOCATIONS AND CONFIGURATIONS. PIPE LOCATION AND CONFIGURATION SHOWN ARE TAKEN FROM CITY OF GRAND JUNCTION PLANS FOR CONSTRUCTION OF THE PERSIGO WASH WASTEWATER TREATMENT PLANT (CIRCA 1980) FOR ESTIMATING PURPOSES ONLY, MAY VARY FROM WHAT IS SHOWN, AND HAVE NOT BEEN FIELD VERIFIED.



LINE "B"

NOTE

CONTRACTOR SHALL FIELD VERIFY ALL PIPE LOCATIONS AND CONFIGURATIONS. PIPE LOCATION AND CONFIGURATION SHOWN ARE TAKEN FROM CITY OF GRAND JUNCTION PLANS FOR CONSTRUCTION OF THE PERSIGO WASH WASTEWATER TREATMENT PLANT (CIRCA 1980) FOR ESTIMATING PURPOSES ONLY, MAY VARY FROM WHAT IS SHOWN, AND HAVE NOT BEEN FIELD VERIFIED.

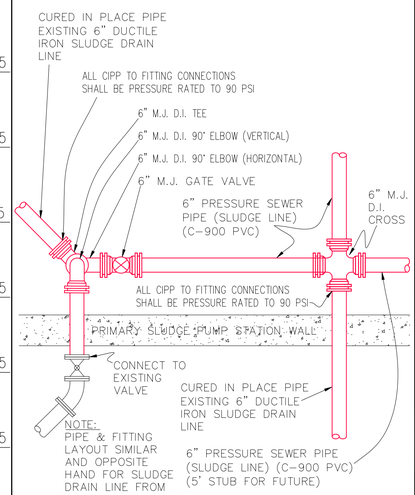


LINE "C"

PROJECT NO. 902-F001502

CONSTRUCTION NOTES

1. 108.2 – CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS.
2. 102.8/108.2 – REPLACE 6" M.J. D.I. TEE WITH JOINT RESTRAINTS.
3. 102.8/108.2 – REPLACE 6" M.J. D.I. 90° ELBOW WITH JOINT RESTRAINTS.
4. CONNECT TO EXISTING PIPE. THE CONTRACT UNIT PRICE FOR 6" C-900 PVC SLUDGE LINE SHALL INCLUDE THE COST OF ALL CONNECTIONS TO EXISTING PIPES.
5. 102.9/108.2 – 6" PRESSURE SEWER PIPE (SLUDGE LINE) (C-900 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
6. 102.8/108.2 – NEW 6" M.J. GATE VALVE WITH JOINT RESTRAINTS, VALVE BOX, AND CONCRETE COLLAR.
7. 102.8/108.2 – REPLACE 6" M.J. D.I. CROSS WITH JOINT RESTRAINTS.
8. 102.8/108.2 – REPLACE 6" M.J. D.I. PLUG.
9. ALL CIPP TO FITTING CONNECTIONS SHALL BE PRESSURE RATED TO 90 PSI



DETAIL A

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JCS DATE 2009
DESIGNED BY DATE
CHECKED BY DATE
APPROVED BY DATE

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

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

Persigo Sludge Line Rehabilitation
Sanitary Sewer Plan and Profiles Persigo Wash Wastewater Treatment Plant

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PROJECT NO. 902-F001502

CONSTRUCTION NOTES

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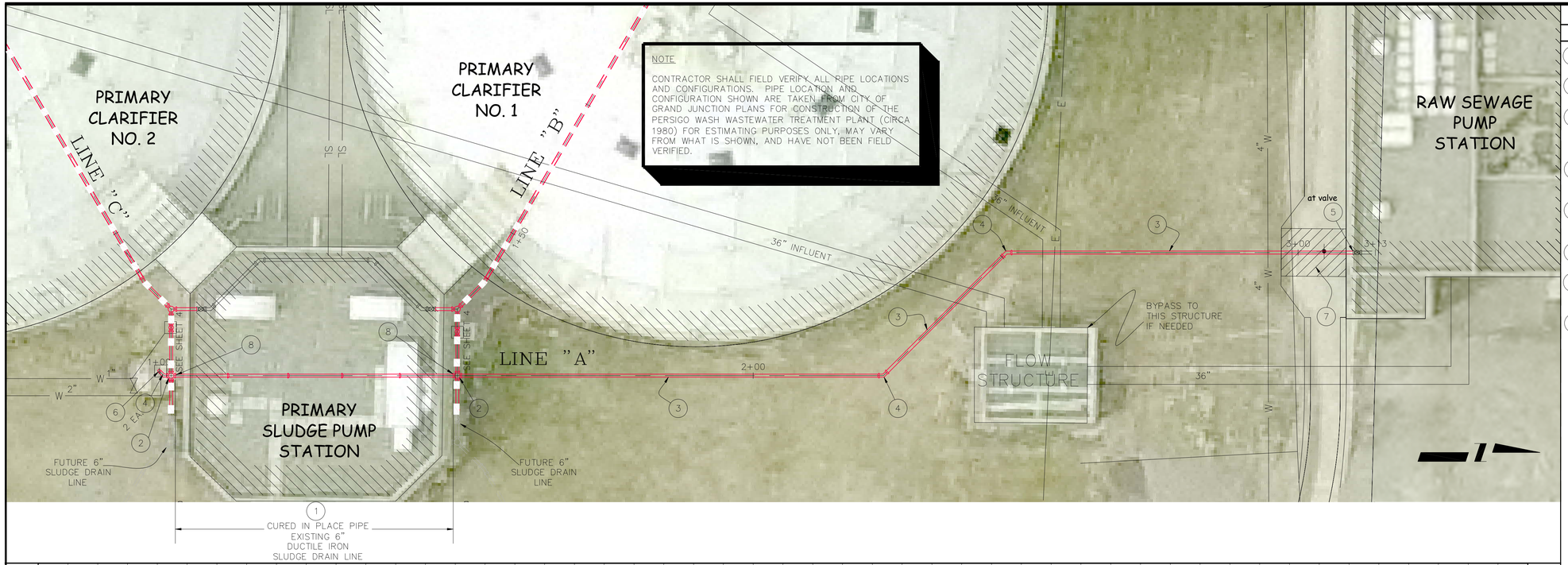
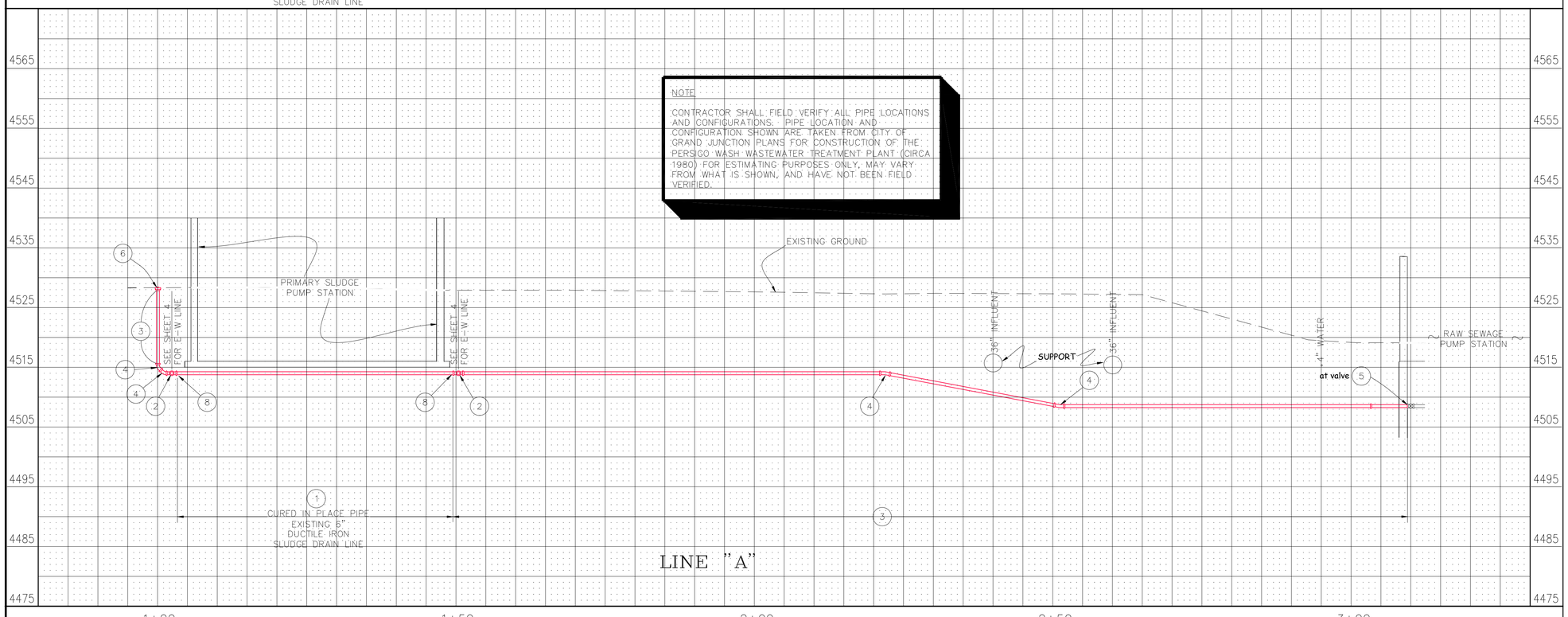
3. 102.9/108.2 – 6" PRESSURE SEWER PIPE (SLUDGE LINE) (C-900 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
4. 102.8/108.2 – REPLACE EXISTING 6" M.J. D.I. 45° ELBOW WITH JOINT RESTRAINTS. (MINIMUM 1 PIPE JOINT EACH SIDE OF FITTING
5. CONNECT TO EXISTING PIPE. THE CONTRACT UNIT PRICE FOR 6" C-900 PVC SLUDGE LINE SHALL INCLUDE THE COST OF ALL CONNECTIONS TO EXISTING PIPES.
6. 102.9/108.2 – REPLACE CLEAN OUT RING, COVER, AND CONCRETE COLLAR.
7. 202.0/608.0 SAWCUT, REMOVE, AND REPLACE EXISTING CONCRETE IN KIND AS SHOWN TO FACILITATE SLUDGE LINE REPLACEMENT.
8. ALL CIPP TO FITTING CONNECTIONS SHALL BE PRESSURE RATED TO 90 PSI





DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JCS DATE 2009
DESIGNED BY DATE
CHECKED BY DATE
APPROVED BY DATE

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

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

Persigo Sludge Line Rehabilitation
Sanitary Sewer Plan and Profiles Persigo Wash Wastewater Treatment Plant