



GILLETTE MADISON PIPELINE PROJECT CITY OF GILLETTE, WY PINE RIDGE POTABLE WATERLINE

CITY PROJECT NO. 07EN58 - CONTRACT #4B

EXHIBIT A
8"/12" TREATED WATER PIPELINE
CONSTRUCTION DRAWINGS
24 TOTAL SHEETS

OWNER/DEVELOPER:

CITY OF GILLETTE
MIKE COLE, PE
611 N. EXCHANGE AVE.
GILLETTE, WY 82716
307-686-5262 (PHONE)
307-686-6564 (FAX)

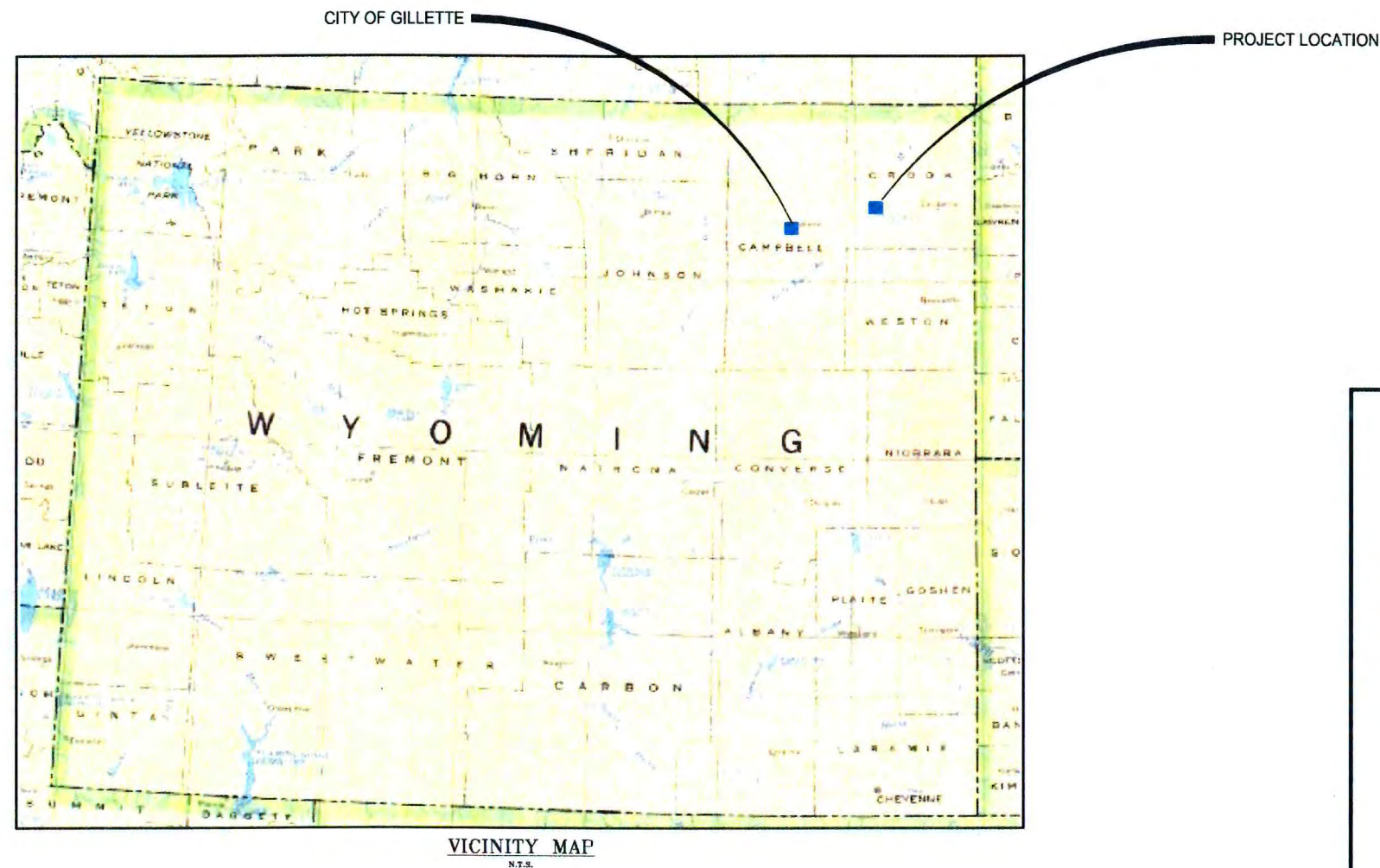
ENGINEER:

BURNS & MCDONNELL
ENGINEERING
DAN KORINEK, PE
9785 MAROON CIRCLE
SUITE 400
CENTENNIAL, CO 80112
303-721-9292 (PHONE)
303-721-0563 (FAX)

MORRISON MAIERLE INC.
CASEY HANSON, PE
315 N. 25TH ST.
SUITE 102
BILLINGS, MT 59101
406-656-6000 (PHONE)
406-237-1201 (FAX)

GENERAL CONTRACTOR:

S.J. LOUIS CONSTRUCTION, INC.
1351 BROADWAY STREET
P.O. BOX 459
ROCKVILLE, MN 56369-0459
320-253-9291 (PHONE)
320-253-3533 (FAX)



VICINITY MAP
N.T.S.

ISSUED FOR
CONSTRUCTION

AUTHORIZED BY:

4/18/14

STEVEN L. PETERSON, P.E.

DATE



CALL BEFORE YOU DIG
ONE-CALL OF WYOMING
1-800-849-2476
811
UTILITY NOTIFICATION CENTER OF WYOMING

BENCHMARK:

NORTHING: 1432666.53
EASTING: 737555.67
ELEVATION: 4472.98



MORRISON
MAIERLE, INC.

QUALITY ASSURANCE

Project Manager

Office Manager or QA Coordinator

Peer Reviewer

4/17/2014
Q.A. Approval Date

00211.13-12
Q.A. Project No.

REV	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR CONSTRUCTION	4-18-14	RL

GILLETTE MADISON PIPELINE PROJECT

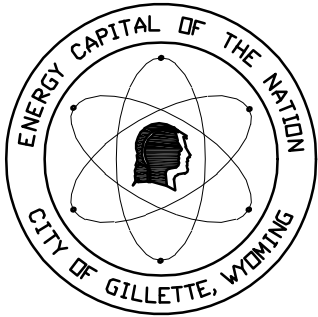
COVER SHEET

MORRISON
MAIERLE, INC.
A PROFESSIONAL SERVICE FIRM

Burns &
McDonnell
SINCE 1898

DATE: 10/07/2013
JOB NO: 1276.001
DRAWN BY: RL
APPROVED BY: CMH

CS-1



GILLETTE MADISON PIPELINE PROJECT
CITY OF GILLETTE, WY
CONTRACT DRAWINGS

EXHIBIT A
8"/12" TREATED WATER PIPELINE
CONSTRUCTION DRAWINGS
24 TOTAL SHEETS

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WA-10	PINE RIDGE POTABLE WATERLINE STA 112+50.00 TO 125+00.00
WA-11	PINE RIDGE POTABLE WATERLINE STA 125+00.00 TO 137+50.00
DT-1	PINE RIDGE POTABLE WATERLINE STANDARD DETAILS 1
DT-2	PINE RIDGE POTABLE WATERLINE STANDARD DETAILS 2
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REV. #	REVISION DESCRIPTION	DATE	BY

GILLETTE MADISON PIPELINE PROJECT

INDEX SHEET



DATE: 10/07/2013

JOB NO: 4776-001

DRAWN BY: RL

APPROVED BY: CMH

IS-1

[illegible]

GILLETTE MADISON PIPELINE PROJECT
PINE RIDGE POTABLE WATERLINE
PROJECT LOCATION SHEET



PL-1

EXISTING LINETYPES, SYMBOLS, AND HATCH PATTERNS

	TEMPORARY EASEMENT		HIGHWAY R-O-W MONUMENT		STORM SEWER MANHOLE
	PERMANENT EASEMENT		FOUND BRASS CAP		GRATED STORM INLET
	SANITARY SEWER		FOUND REBAR		TYPE "B" INLET
	SANITARY SEWER SERVICE		FOUND REBAR WITH CAP		SANITARY SEWER MANHOLE
	WATER LINE		FOUND IRON PIPE		CLEAN OUT
	WATER SERVICE		SET REBAR WITH CAP		GAS VALVE
	STORM SEWER		CONTROL POINT		GAS METER
	SWALE/FLOWLINE		FOUND SECTION CORNER		STREET LIGHT
	CULVERT		FOUND 1/4 CORNER		GUY WIRE ANCHOR
	OVERHEAD POWER (30)		FOUND 1/16 CORNER		POWER POLE
	OVERHEAD POWER (10)		BENCHMARK		POWER POLE W/LIGHT
	OVERHEAD FIBER AND POWER		REFERENCE MONUMENT		POWER POLE W/GUY
	UNDERGROUND POWER (30)		CABLE TV RISER		POWER POLE W/TRANSFORMER
	UNDERGROUND POWER (10)		TELEPHONE RISER		CAPACITOR BANK
	GAS LINE		WATER METER PIT		GANG SWITCH
	PHONE LINE		FIRE HYDRANT		COMMON SWITCH
	FIBER OPTIC		GATE VALVE		FUSED SWITCH
	CABLE TV		CURB STOP		TRANSFORMER SINGLE PHASE
	PROPERTY/R-O-W LINE		HEDGE/TREE LINE		TRANSFORMER 3 PHASE
	SUBDIVISION BOUNDARY				VARIABLE FREQUENCY INTERRUPT
	BUILDING SETBACK LINE				ELECTRICAL VAULT
	EASEMENT LINE				ELECTRICAL METER CABINET
	GUARDRAIL				ELECTRICAL METER
	CHAINLINK FENCE LINE				OVERCURRENT BAY
	BARBED WIRE FENCE LINE				SWITCH CABINET
	PRIVACY FENCE				STREET LIGHT PEDISTAL
	METAL FENCE LINE				SECONDARY PEDISTAL
	MAJOR (10') CONTOUR LINE				JUNCTION BOX SINGLE PHASE
	MINOR (2') CONTOUR LINE				JUNCTION BOX THREE PHASE
	TOWNSHIP LINE				FIBER OPTIC PEDISTAL
	QUARTER SECTION LINE				FIBER OPTIC VAULT
	SIXTEENTH SECTION LINE				SPRINKLER HEAD
	STRUCTURE				IRRIGATION CONTROL
					CONIFEROUS TREE
					DECIDUOUS TREE
					BUSH
					1 POLE SIGN
					BOREHOLE
					MONITORING WELL
					TRAFFIC SIGNAL

PROPOSED LINETYPES, SYMBOLS, AND HATCH PATTERNS

	TEMPORARY EASEMENT		CABLE TV RISER		STORM SEWER MANHOLE
	PERMANENT EASEMENT		TELEPHONE RISER		GRATED STORM INLET
	SANITARY SEWER		WATER METER PIT		TYPE "B" INLET
	SANITARY SEWER SERVICE		FIRE HYDRANT		SANITARY SEWER MANHOLE
	WATER LINE		GATE VALVE		CLEAN OUT
	WATER SERVICE		BUTTERFLY VALVE		GAS VALVE
	STORM SEWER		CURB STOP		GAS METER
	SWALE/FLOWLINE		CAP (END OF LINE PLUG)		STREET LIGHT
	CULVERT		REDUCER		GUY WIRE ANCHOR
	OVERHEAD POWER (30)		STORM SEWER MANHOLE		POWER POLE
	OVERHEAD POWER (10)				POWER POLE W/LIGHT
	UNDERGROUND POWER (30)				POWER POLE W/GUY
	UNDERGROUND POWER (10)				POWER POLE W/TRANSFORMER
	ELECTRICAL CONDUIT				CAPACITOR BANK
	GAS LINE				GANG SWITCH
	PHONE LINE				COMMON SWITCH
	FIBER OPTIC				FUSED SWITCH
	CABLE TV				TRANSFORMER SINGLE PHASE
	PROPERTY/R-O-W LINE				TRANSFORMER 3 PHASE
	SUBDIVISION BOUNDARY				VARIABLE FREQUENCY INTERRUPT
	BUILDING SETBACK LINE				ELECTRICAL VAULT
	EASEMENT LINE				ELECTRICAL METER CABINET
	GUARDRAIL				ELECTRICAL METER
	CHAINLINK FENCE LINE				OVERCURRENT BAY
	BARBED WIRE FENCE LINE				SWITCH CABINET
	PRIVACY FENCE				STREET LIGHT PEDISTAL
	METAL FENCE LINE				SECONDARY PEDISTAL
	MAJOR (10') CONTOUR LINE				JUNCTION BOX SINGLE PHASE
	MINOR (2') CONTOUR LINE				JUNCTION BOX THREE PHASE
	LIMITS OF CONSTRUCTION				FIBER OPTIC PEDISTAL
	SILT FENCE				FIBER OPTIC VAULT
					SPRINKLER HEAD
					IRRIGATION CONTROL
					CONIFEROUS TREE
					DECIDUOUS TREE
					BUSH
					1 POLE SIGN
					BOREHOLE
					MONITORING WELL
					TRAFFIC SIGNAL

DETAIL, LEGEND & TABLES TEXT

(TEXT WIDTH CAN VARY FROM 0.75 TO 1.0)

DETAIL VIEW, DIST./BRG. TEXT
(TEXT WIDTH CAN VARY FROM 0.75 TO 1.0)

PROPOSED STREET NAME TEXT
(TEXT WIDTH CAN VARY FROM 0.75 TO 1.0)

EXISTING STREET NAME TEXT
(TEXT WIDTH CAN VARY FROM 0.75 TO 1.0)

PROPOSED LABEL TEXT & DIMENSION TEXT
EXISTING LABEL TEXT & ALIGNMENT STATION LABEL

PROPOSED CONTOUR TEXT = MAJOR (10') INTERVAL
EXISTING CONTOUR TEXT = MAJOR (10') INTERVAL

PROPOSED CONTOUR TEXT = MINOR (2') INTERVAL
EXISTING CONTOUR TEXT = MINOR (2') INTERVAL

MINIMUM TEXT SIZE = SPOT ELEVATION LABELS

** Color-based Style table: COG 11x17.ctb **
** Named Style table: COG 11x17.stb **

REV. #	REVISION DESCRIPTION	DATE	BY

GILLETTE MADISON PIPELINE PROJECT

LEGEND SHEET

MORRISON
MAIERLE, INC.
An Employee-Owned Company

Burns &
McDonnell
SINCE 1898

DATE:	10/07/2013
JOB NO:	4776-001
DRAWN BY:	RLC
APPROVED BY:	CMH

NL-1

SHEET KEYED NOTES:

- 1

ALL DISTURBED VEGETATED AREAS ARE REQUIRED TO BE RESEEDED (SEED MIX PER THE SPECIFICATIONS) AND RESTORED TO ORIGINAL CONDITIONS.
- 2

CONTRACTOR SHALL CONTACT THE POWER COMPANY PRIOR TO WORKING IN THE AREA OF THE HIGH VOLTAGE POWER LINES.
- 3

REMOVE AND REPLACE FENCE AS REQUIRED TO FACILITATE CONSTRUCTION.
- 4

REMOVE AND REPLACE CULVERT, FLARED END SECTION, AND/OR END PROTECTION (RIP–RAP, BOULDERS, ETC) AS REQUIRED TO FACILITATE CONSTRUCTION. CONTRACTOR TO DOCUMENT EXISTING INVERTS, LINES, AND GRADES AND MATCH EXISTING WILL ALL REPLACEMENTS.
- 5

HIGHWAY 14 TO REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- 6

TRIM OR REMOVE TREE AS REQUIRED TO FACILITATE CONSTRUCTION.
- 7

REMOVE AND REPLACE ASPHALT DRIVEWAY AND/OR APPROACH TO ORIGINAL CONDITIONS.
- 8

RESTRAIN ALL JOINTS FROM TEE TO HYDRANT.
- 9

PROVIDE PLUG FOR WATER SERVICE.
- 10

PROVIDE PLUG AFTER VALVE AND RESTRAIN ALL JOINTS FROM PLUG BACK TO MAIN.
- 11

PROVIDE PLUG FOR BOTH ENDS OF DRY LINE WATER SERVICE
- 12

REMOVE AND REPLACE GRAVEL DRIVEWAY AND/OR APPROACH TO ORIGINAL CONDITIONS.
- 13

REMOVE AND REPLACE CULVERT, FLARED END SECTION, AND/OR END PROTECTION (RIP–RAP, BOULDERS, ETC) AS REQUIRED TO FACILITATE CONSTRUCTION. POUR FLOW FILL FROM SIX INCHES BELOW CULVERT INVERT UP TO THE SPRINGLINE OF THE NEW WATER PIPE. PAYMENT OF FLOW FILL WILL BE UNDER "BID ITEM 02530.14 INSTALL CULVERT FLOW FILL SADDLE". CONTRACTOR TO DOCUMENT EXISTING INVERTS, LINES, AND GRADES AND MATCH EXISTING WILL ALL REPLACEMENTS.
- 14

MINIMUM VERTICAL CLEARANCE OF 2’ BETWEEN WATER SERVICE AND EXISTING MADISON WATERLINE.
- 15

CONTRACTOR TO FIELD VERIFY LOCATION OF WATER SERVICE. CONNECT TO EXISTING WATER SERVICE AND ABANDON EXISTING SERVICE RUNNING INTO PUMP STATION. COORDINATE WITH CITY OF GILLETTE FOR ABANDONING WATER SERVICE IN PUMP STATION.
- 16

COORDINATE CONNECTION WITH CONTRACT #4F.
- 17

CONTRACTOR TO FIELD VERIFY SIZE. IT IS APPROXIMATELY AN 80” CMP CULVERT WITH FLARED END SECTION. THE CULVERT HAS A CONCRETE BOTTOM FOR CATTLE TO PASS. CONTRACTOR TO REPLACE WITH NEW, IF DISTURBED AND UNSUCCESSFULLY SALVAGED.
- 18

REMOVE SIGN AND POST, SALVAGE, AND REINSTALL PER WYDOT STANDARDS AS APPLICABLE. PROVIDE TEMPORARY SIGNING UNTIL PERMANENT REPLACEMENT IS COMPLETE. IF PERMANENT SIGN IS DAMAGED DURING SALVAGE, REPLACE WITH NEW.
- 19

PAYMENT FOR “INSTALL END OF LINE LARGE WATER METER VAULT AND APPURTENANCES” SCHEDULE 1 BID ITEM BEGINS AT THE EDGE OF THE VAULT (APPROXIMATE STA 126+35) AND INCLUDES EVERYTHING FROM THAT POINT ON INCLUDING THE VAULT, VALVES, REDUCERS, FITTINGS, HYDRANTS, SADDLES, AND RESTORATION. SCHEDULE 2 BID ITEM BEGINS AT THE 8” MAIN AND INCLUDES THE THREE SERVICE LINES, ISOLATION VALVES, CURB STOPS, METER INSTALLATION, AND THE ENTIRE 1 1/2” WATER SERVICE UP TO AND INCLUDING CONNECTING TO EXISTING. SEE SPECIAL PROVISIONS FOR MEASUREMENT AND PAYMENT.
- 20

REMOVE AND REPLACE CONCRETE DRAINAGE APRON TO MATCH EXISTING GRADES. PAYMENT OF THIS ITEM IS UNDER "02530.16 CONCRETE DRAINAGE APRON". REPLACEMENT SHALL BE WITH 4–INCH THICK CONCRETE MEETING WITH CITY OF GILLETTE STANDARD CONSTRUCTION SPECIFICATIONS AND 6–INCH BY 6–INCH WELDED WIRE FABRIC FOR REINFORCEMENT.
- 21

CAP AND MARK END OF 6” PVC ELECTRICAL CONDUIT.
- 22

TERMINATE 6” PVC ELECTRICAL CONDUIT INSIDE EDGE OF VAULT WALL.
- 23

REMOVE EXISTING HYDRANT, VALVE, AND VALVE BOX. INSTALL RESTRAINED 6” END OF LINE PLUG AFTER VALVE REMOVAL. SALVAGE TO CITY OF GILLETTE WAREHOUSE ON BURMA.
- 24

INSTALL WATER SERVICE BETWEEN CENTERLINE ELEVATION 4291.00’ AND 4290.50’ AT TRANSMISSION MAIN CROSSING.
- 25

HYDRANT SHALL NOT CONTAIN A WEEP HOLE DUE TO GROUNDWATER. CONTRACTOR SHALL CLOSE 6” GATE VALVE AT STA 126+54.00 AND PUMP HYDRANT DRY FOR NORMAL OPERATIONS AFTER HYDROSTATIC TESTING AND DISINFECTION HAS BEEN APPROVED.
- 26

CRANSTON IVAN EARL–PARCEL ID 5166 05 2 00 011.0 THE FOLLOWING EASEMENT REQUIREMENTS APPLY:

A.

ALL ROCKS (1–INCH AND LARGER) ON THE PROPERTY WHICH COULD IMPEDE OR INTERFERE WITH GRANTOR’S FARMING OR RANCHING OPERATIONS SHALL BE REMOVED FROM THE SITE.

B.

REMOVE EXISTING RIGHT OF WAY FENCE AND REPLACE WITH A NEW WOVEN WIRE SHEEP TIGHT FENCE IN CONFORMITY WITH WYDOT STANDARDS.

C.

THE REMOVED RIGHT OF WAY FENCE POSTS AND WIRE SHALL BE SAVED AND SPOOLED. THE MATERIAL SHALL BE PILED ON THE PROPERTY AS A LOCATION CHOSEN BY THE OWNER BUT WITHIN A REASONABLE DISTANCE OF THE WORK.

D.

TEMPORARY FENCE ALONG THE TEMPORARY EASEMENTS SHALL BE ERECTED TO PROTECT LIVESTOCK AND PREVENT CONSTRUCTION FROM EXTENDING OUTSIDE THE LIMITS OF THE EASEMENTS. TEMPORARY FENCE MATERIAL SHALL BE SAVED, SPOOLED AND PILED ON THE PROPERTY AT A LOCATION CHOSEN BY THE OWNER BUT WITHIN A REASONABLE DISTANCE OF THE WORK.

E.

THE EASEMENT AREA SHALL BE APPROPRIATELY RECLAIMED AFTER CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, REGARDING, PRESERVATION OF TOPSOIL, EROSION CONTROL AND RESEEDING WITH ALFALFA.

REV. #	REVISION DESCRIPTION	DATE	BY
1	ADDENDUM 1 REVISION	8-25-14	RL
2	ADDENDUM 2 REVISION	8-28-14	RL

GILLETTE MADISON PIPELINE PROJECT

PIPELINE KEYED NOTES

MORRISON MAIERLE, INC.

An Employee-Owned Company

Burns & McDonnell

SINCE 1898

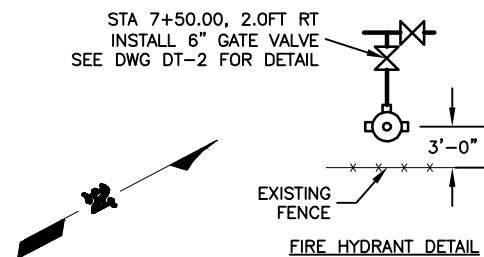
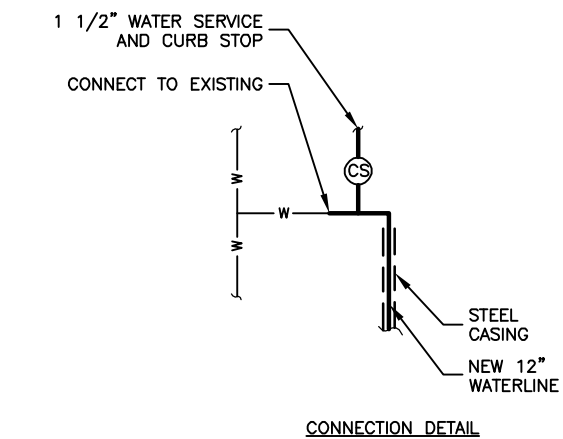
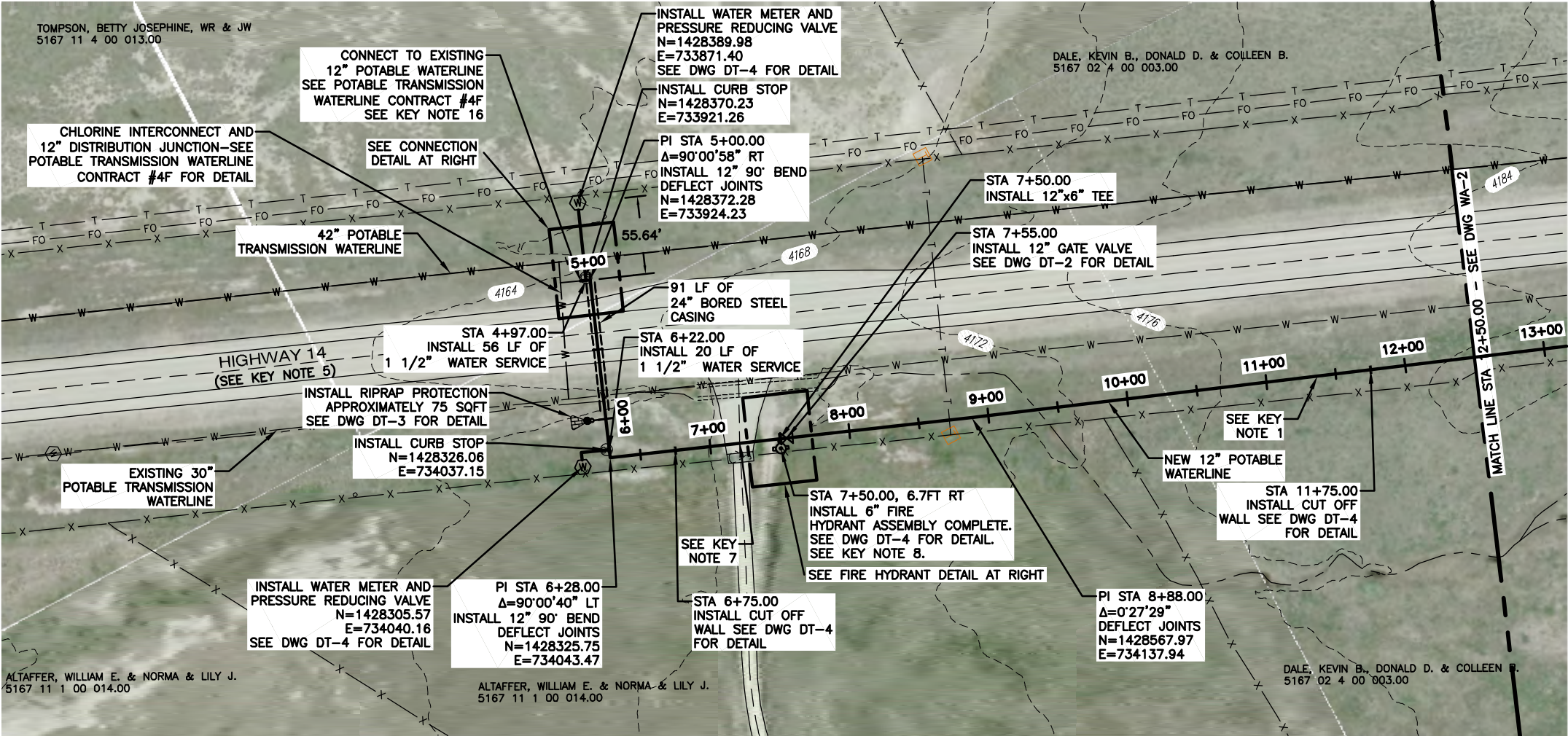
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JOB NO: 4776-001

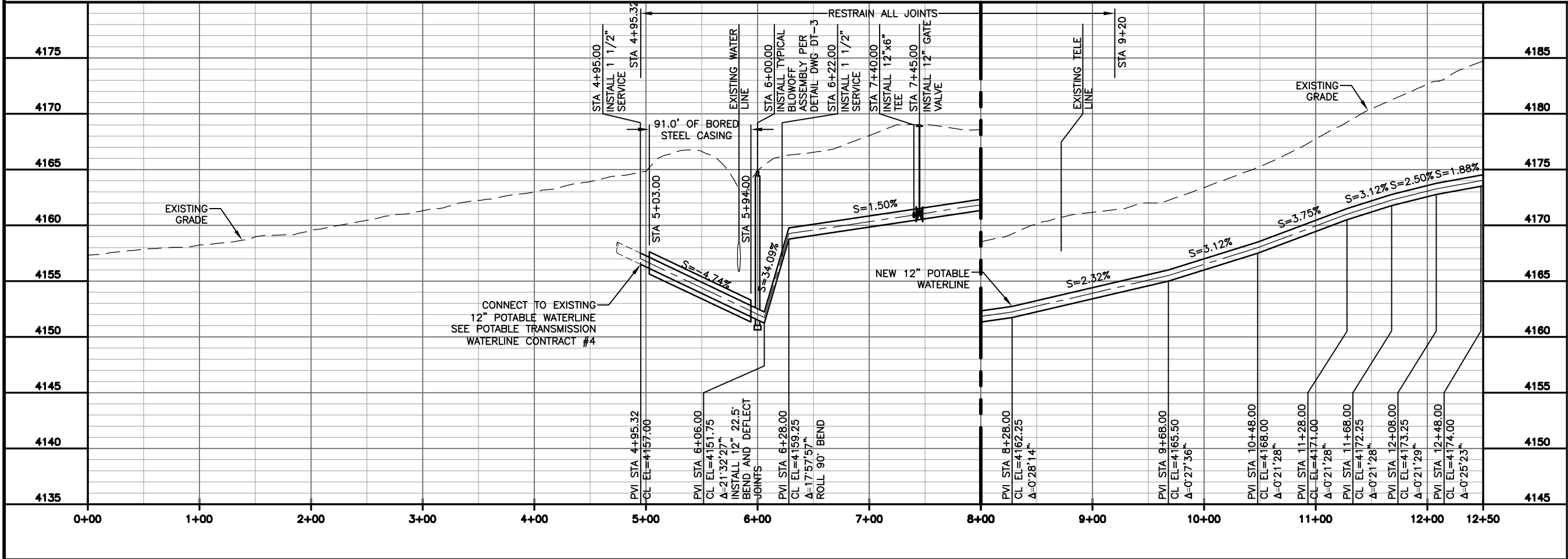
DRAWN BY: RL

APPROVED BY: CNH

NL-3



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.
- SCALE BAR
1" = 100'



REV. #	REVISION DESCRIPTION	DATE	BY


GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STA 0+00.00 TO 12+50.00



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MORRISON
MAIERLE, INC.
An Employee-Owned Company

DATE: 10/07/2013

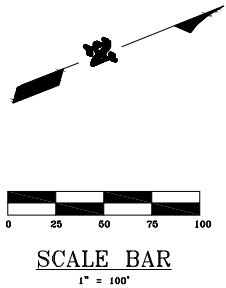
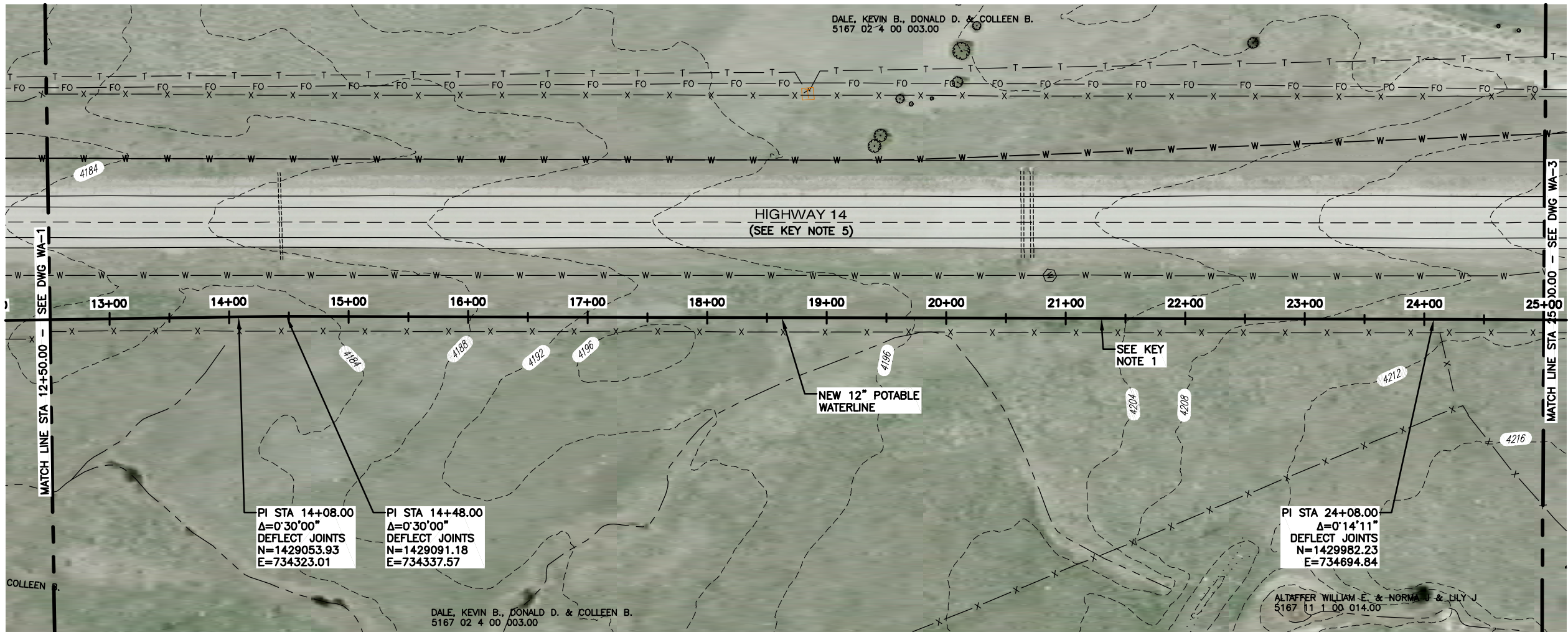
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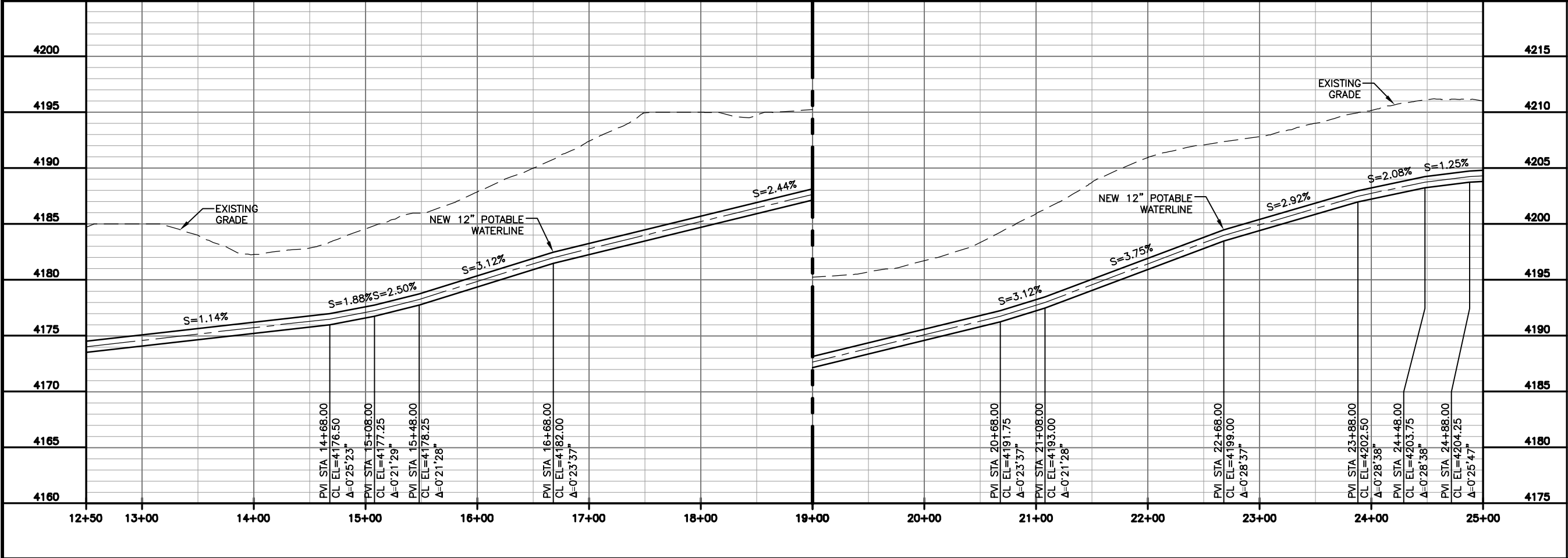
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PIPELINE P&P SHEET

WA-1



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.



REV. #	REVISION DESCRIPTION	DATE	BY

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STA 12+50.00 TO 25+00.00



SINCE 1898



MORRISON
MAIERLE, INC.
An Employee-Owned Company

DATE: 10/07/2013

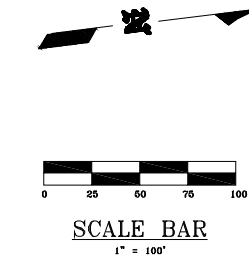
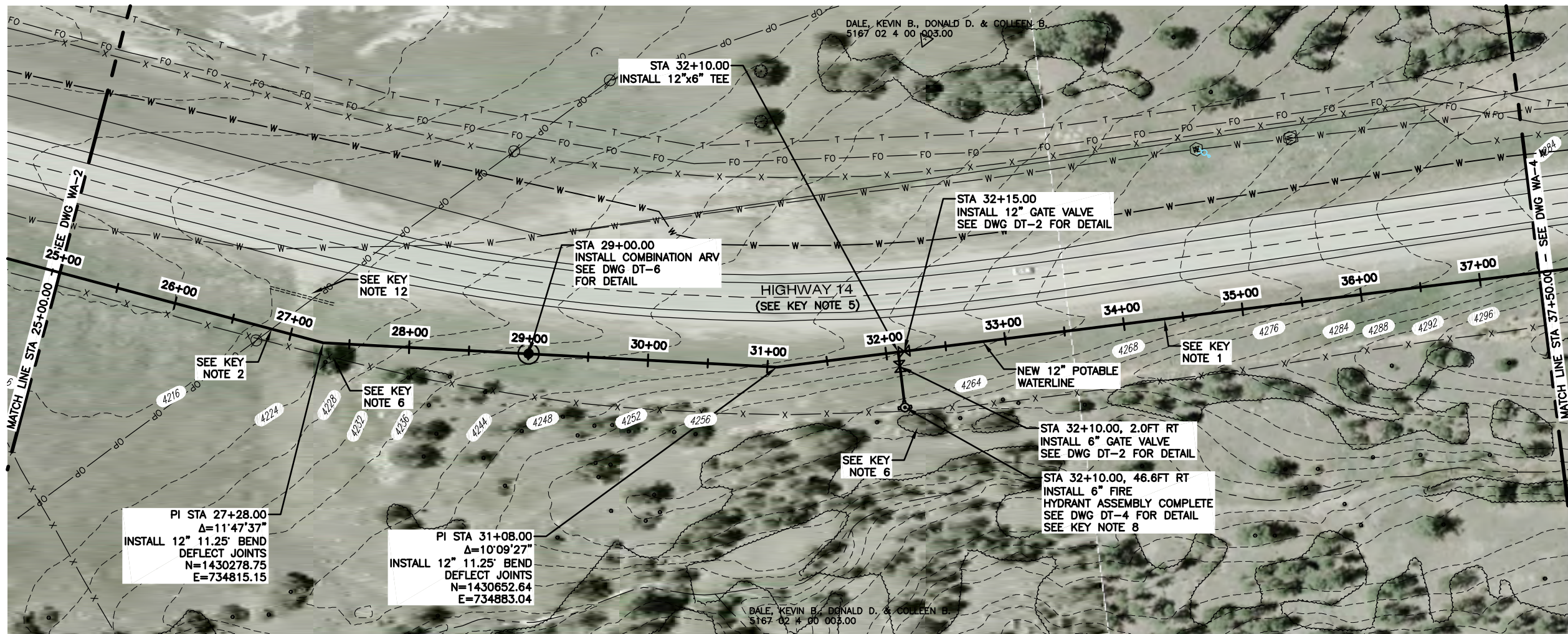
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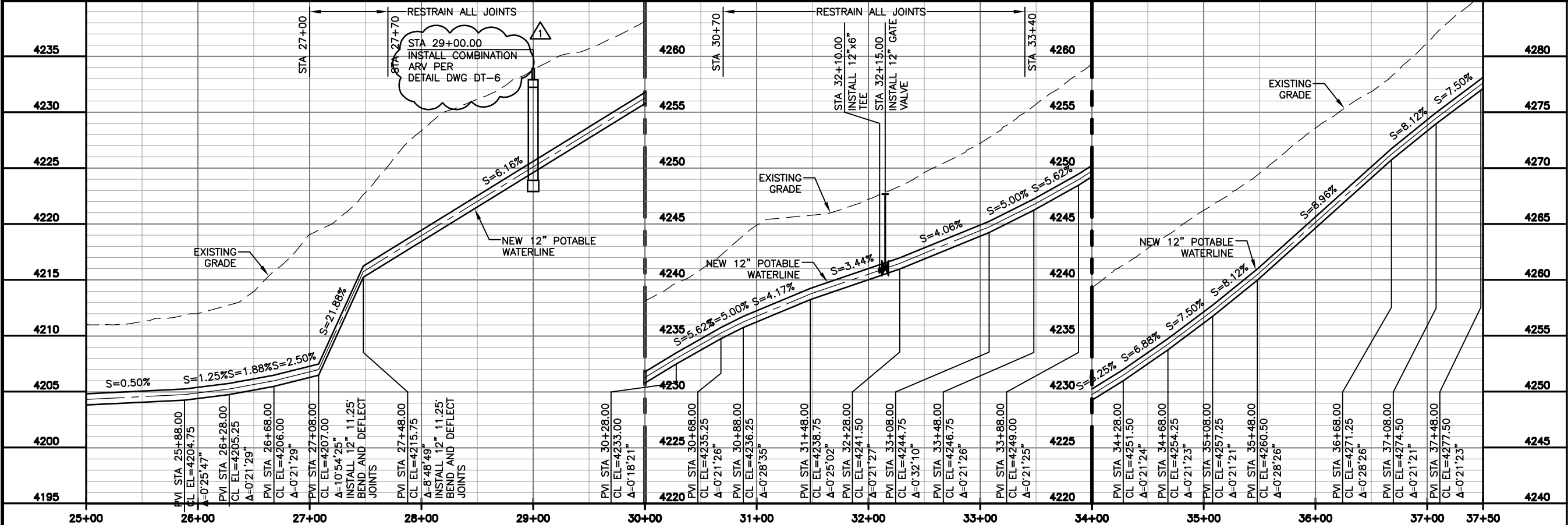
APPROVED BY: CE

PIPELINE P&P SHEET

WA-2



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.



REV. #	REVISION DESCRIPTION	DATE	BY
1	ADDENDUM 1 REVISION	8-25-14	MLL

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STA 25+00.00 TO 37+50.00



SINCE 1898



MORRISON
MAIERLE, INC.
An Employee-Owned Company

DATE: 10/07/2013

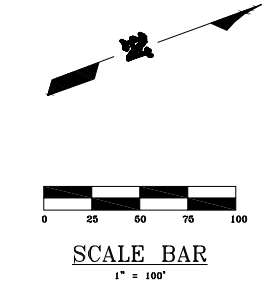
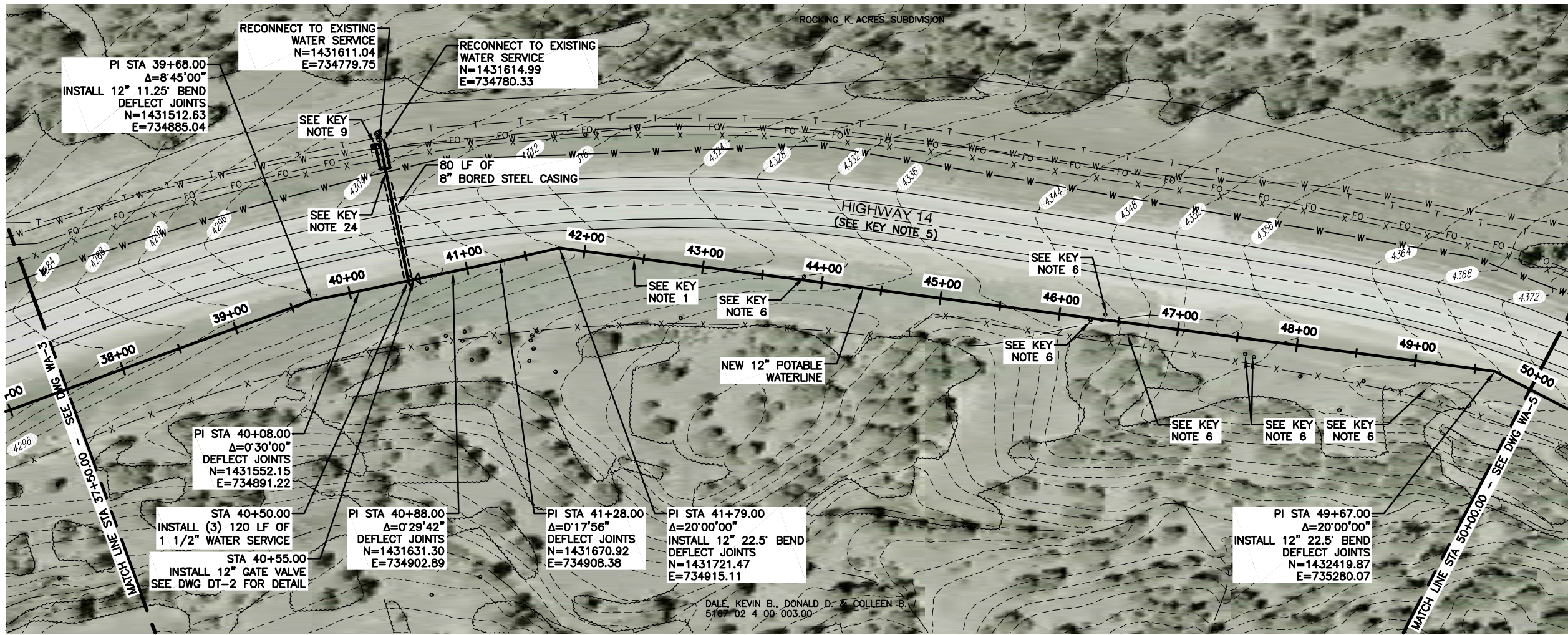
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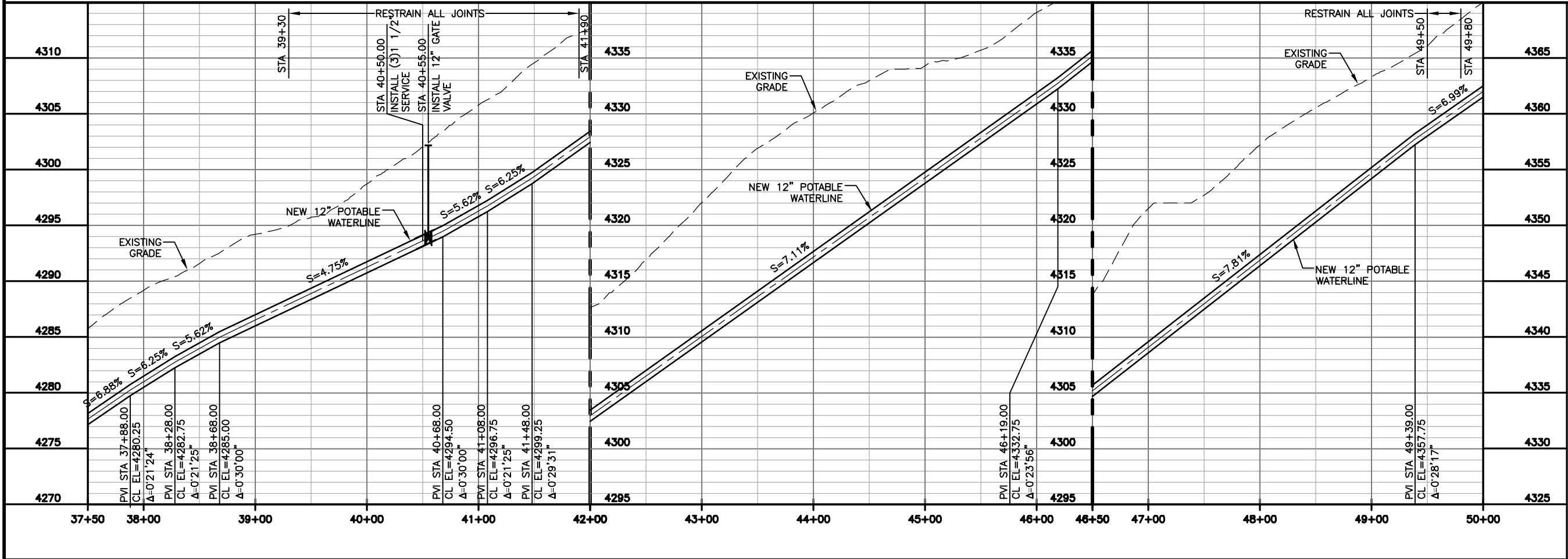
APPROVED BY: CE

PIPELINE P&P SHEET

WA-3



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.



GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STA 37+50.00 TO 50+00.00

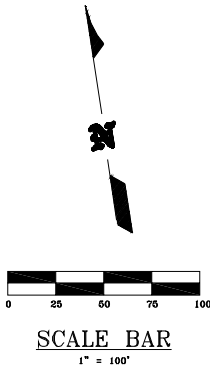
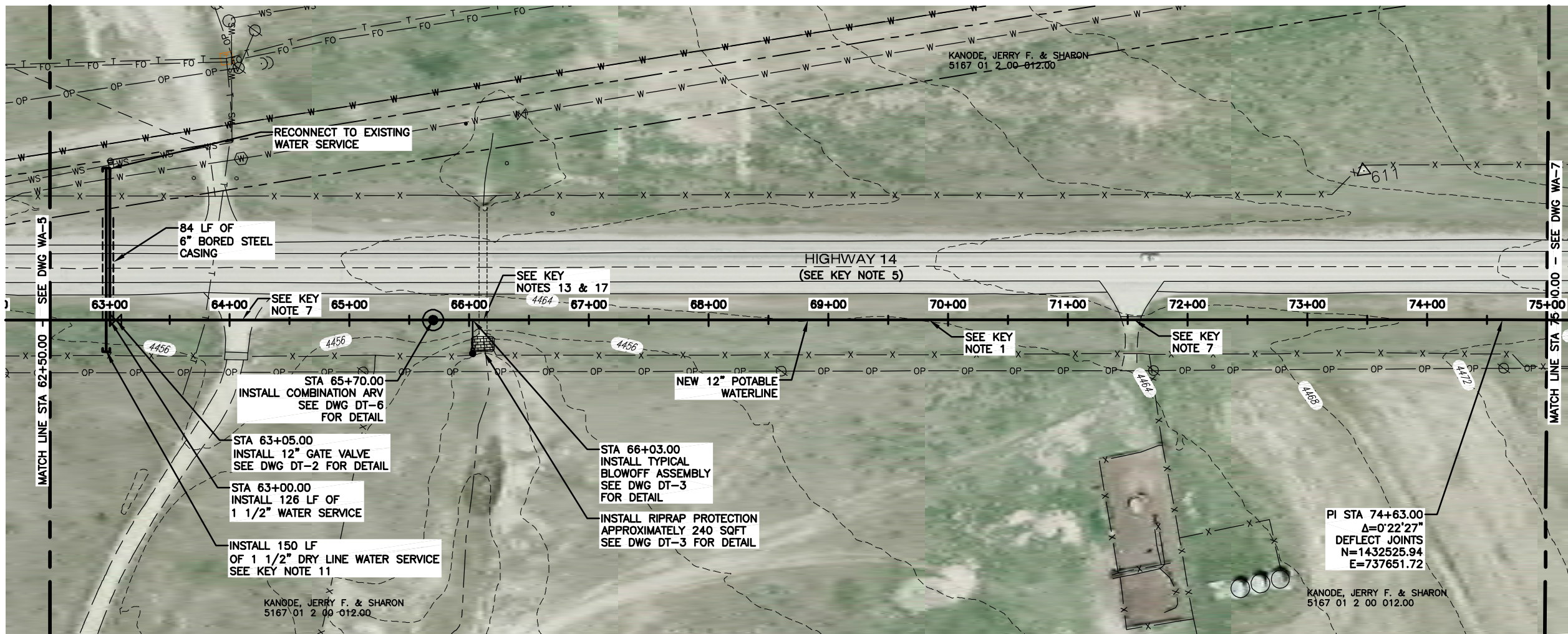
MORRISON MAIERLE, INC.
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SINCE 1898

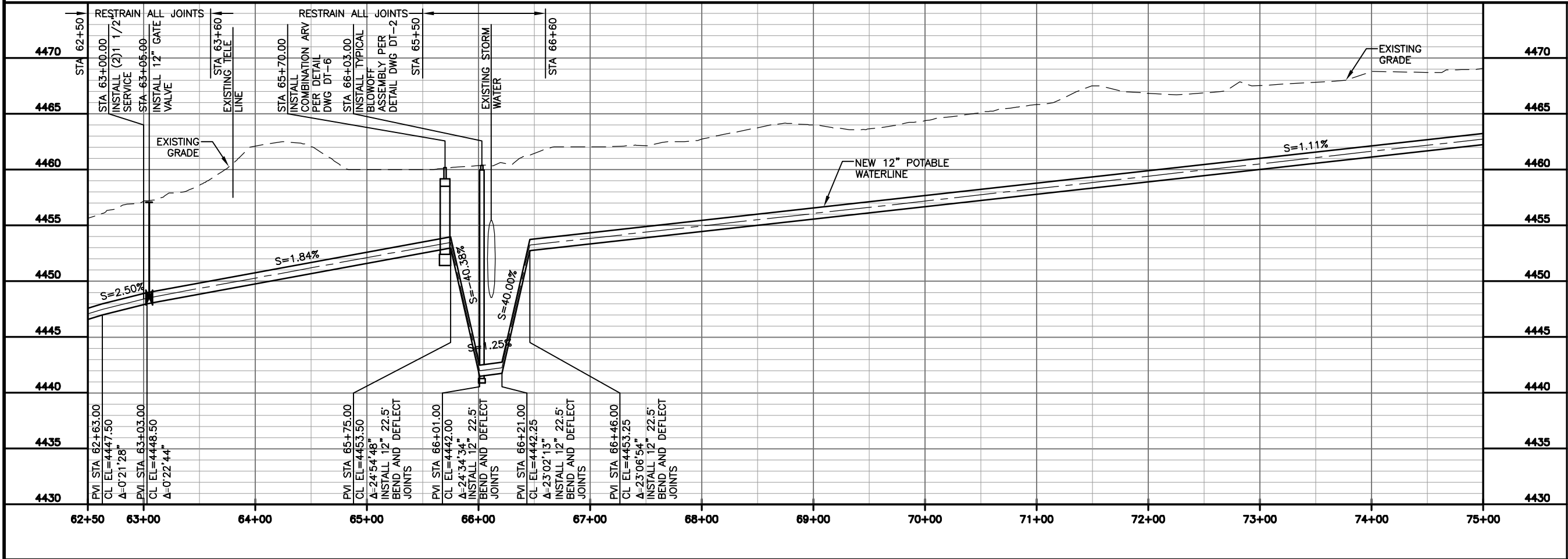
DATE: 10/07/2013
JOB NO: 4776.001
DRAWN BY: EIL
APPROVED BY: CE

PIPELINE P&P SHEET

WA-4



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.



REV. #	REVISION DESCRIPTION	DATE	BY

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STA 62+50.00 TO 75+00.00



SINCE 1898



MORRISON
MAIERLE, INC.
An Employee-Owned Company

DATE: 10/07/2013

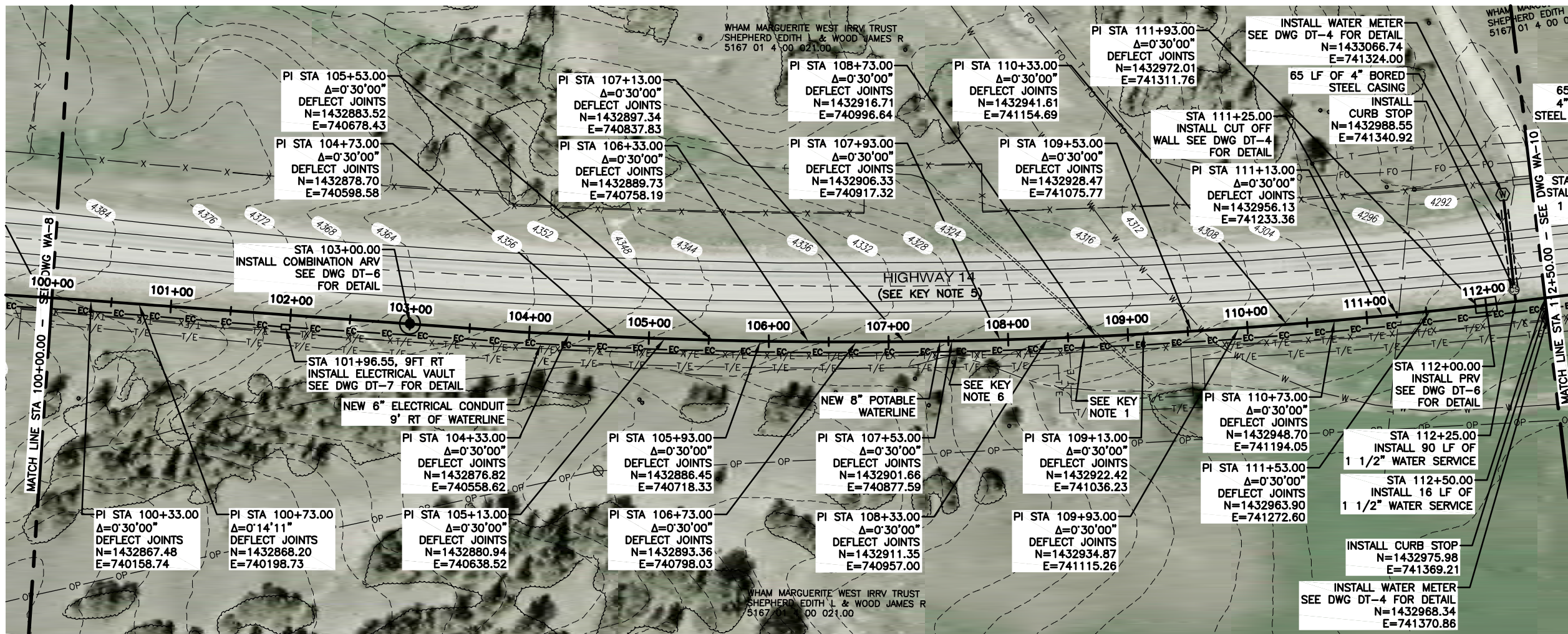
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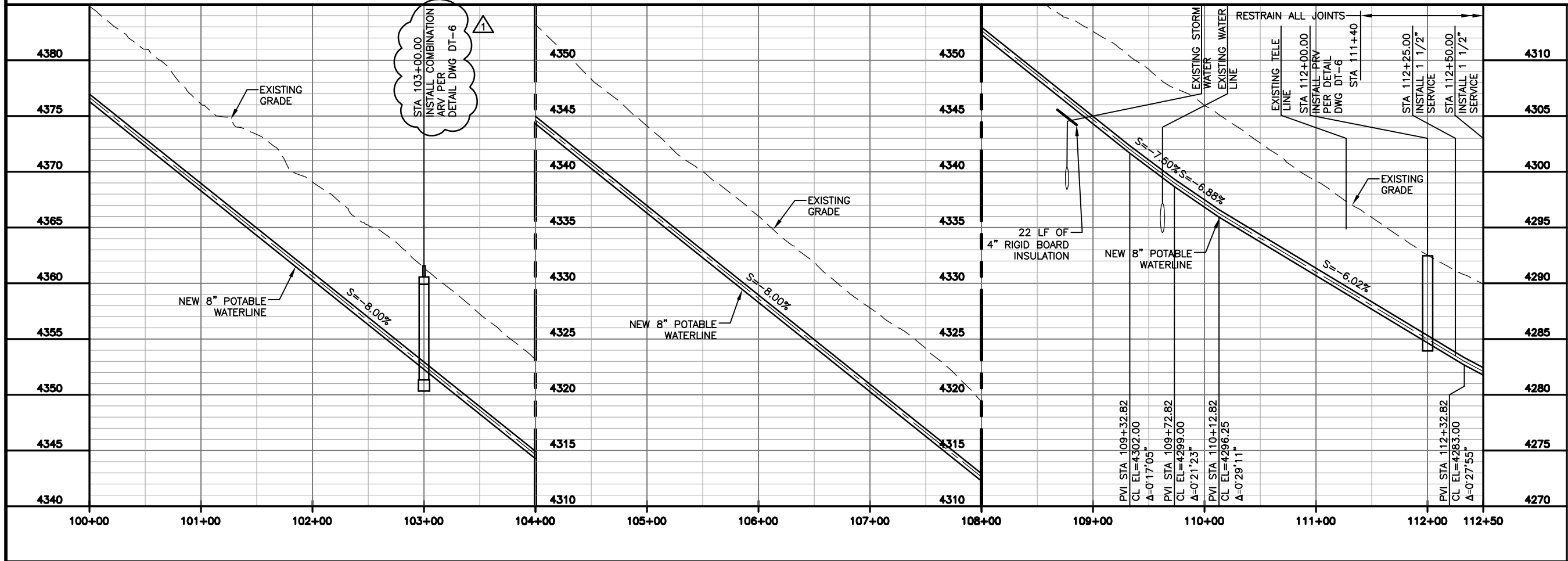
APPROVED BY: CE

PIPELINE P&P SHEET

WA-6



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.



REV.	DATE	DESCRIPTION
1	8-25-14	REVISION
2		REVISION
3		REVISION
4		REVISION
5		REVISION
6		REVISION
7		REVISION
8		REVISION
9		REVISION
10		REVISION

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STA 100+00.00 TO 112+50.00

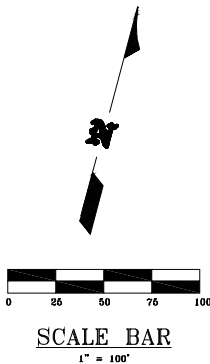
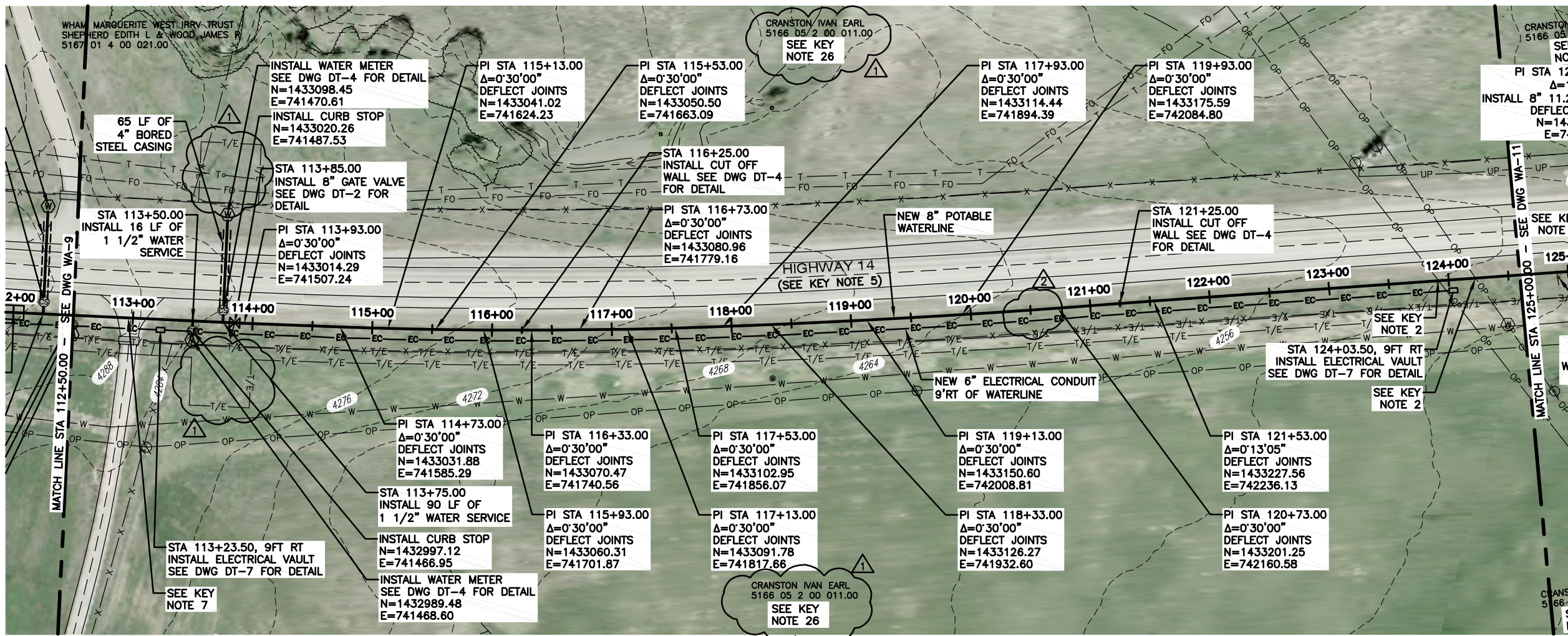
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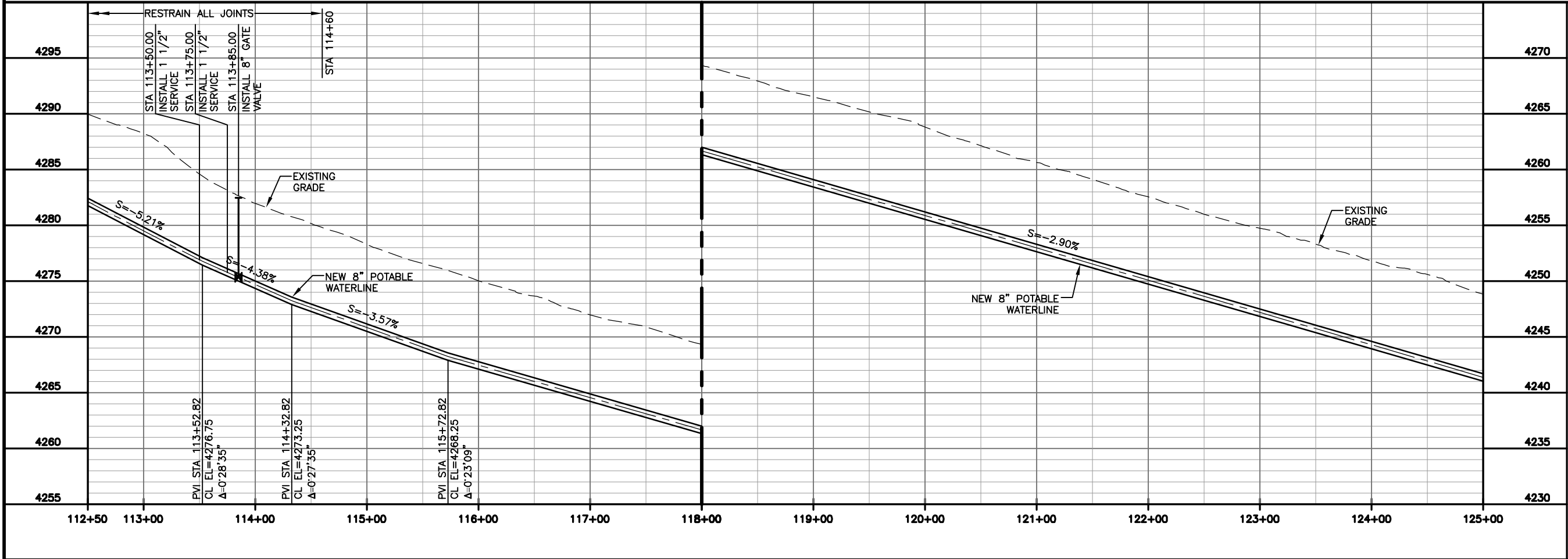
DATE: 10/07/2013
JOB NO: 4776.001
DRAWN BY: RL
APPROVED BY: CE

PIPELINE P&P SHEET

WA-9



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.



REV. #	REVISION DESCRIPTION	DATE	BY
1	ADDENDUM 1 REVISION	8-25-14	JLL
2	ADDENDUM 2 REVISION	8-28-14	JLL

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

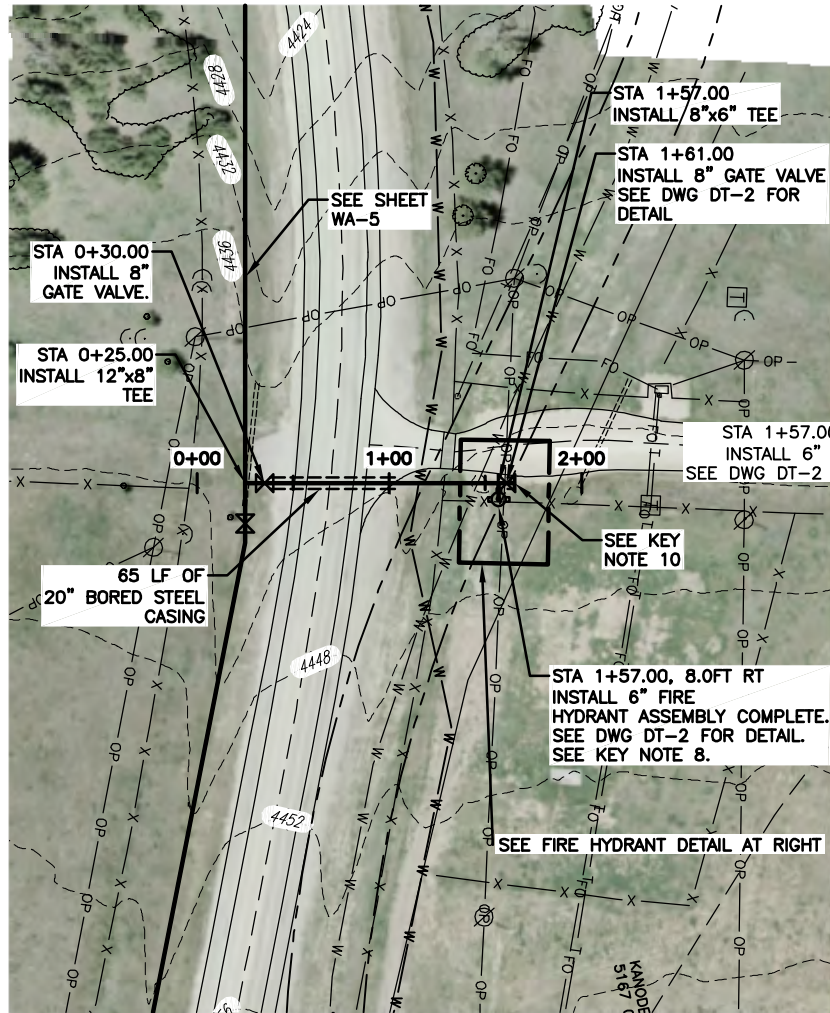
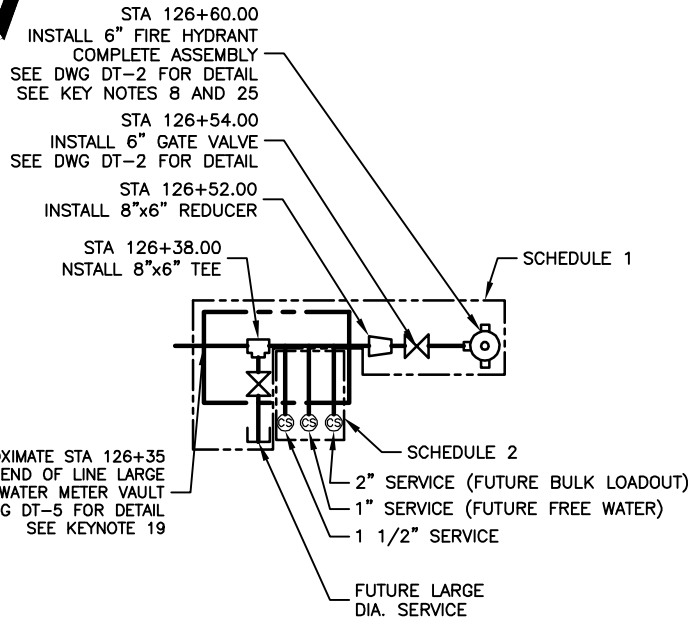
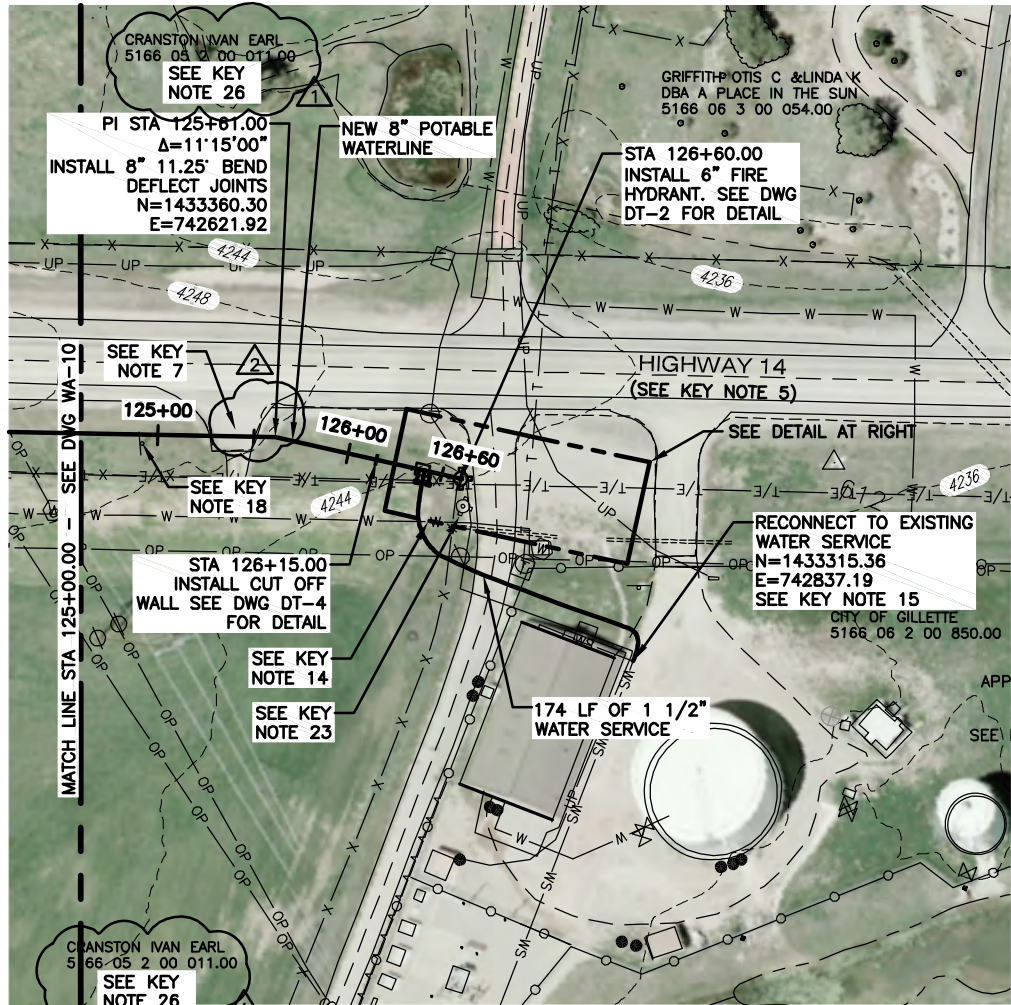
STA 112+50.00 TO 125+00.00

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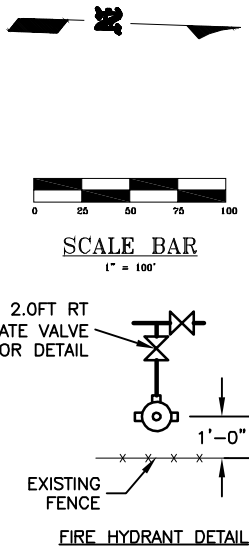
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DATE: 10/07/2013
JOB NO: 4776-001
DRAWN BY: BT
APPROVED BY: CE

PIPELINE P&P SHEET
WA-10



- NOTES:
1. SEE DWG NL-2 FOR GENERAL PIPELINE NOTES.
 2. SEE DWG NL-3 FOR NUMBERED KEY NOTES.



4260	STA 125+50.00	RESTRAIN ALL JOINTS	4260
4255	STA 126+52.00	INSTALL 8"x6" REDUCER	4255
4250	STA 126+54.00	INSTALL 6" GATE VALVE	4250
4245	STA 126+60.00	INSTALL 6" FIRE HYDRANT	4245
4240	STA 126+60.00	INSTALL 6" FIRE HYDRANT	4240
4235	STA 126+60.00	INSTALL 6" FIRE HYDRANT	4235
4230	STA 126+60.00	INSTALL 6" FIRE HYDRANT	4230
4225	STA 126+60.00	INSTALL 6" FIRE HYDRANT	4225
4220	STA 126+60.00	INSTALL 6" FIRE HYDRANT	4220

4455	STA 0+25.00	INSTALL 8" GATE VALVE	4455
4450	STA 0+30.00	INSTALL 8" GATE VALVE	4450
4445	STA 1+57.00	INSTALL 8"x6" TEE	4445
4440	STA 1+61.00	INSTALL 8" GATE VALVE	4440
4435	STA 1+65.00	INSTALL 8" PLUG	4435
4430	STA 1+65.00	INSTALL 8" PLUG	4430
4425	STA 1+65.00	INSTALL 8" PLUG	4425
4420	STA 1+65.00	INSTALL 8" PLUG	4420
4415	STA 1+65.00	INSTALL 8" PLUG	4415

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STA 125+00.00 TO 137+50.00



DATE: 10/07/2013
 JOB NO: 4776.001
 DRAWN BY: RLC
 APPROVED BY: CH

PIPELINE P&P SHEET

WA-11

CARSONITE UTILITY MARKER
NOT TO SCALE

PROJECT ID SIGN
NOT TO SCALE

SIGN INSTALLATION DETAIL
NOT TO SCALE

WATER/SEWER/STORM SEWER TRENCH & BEDDING
NOT TO SCALE

CEMENT TREATED FILL PIPE SADDLE
NOT TO SCALE

WATER VALVE ADJUSTMENT DETAIL
NOT TO SCALE

[illegible]

GILLETTE MADISON PIPELINE PROJECT
PINE RIDGE POTABLE WATERLINE
STANDARD DETAILS 1



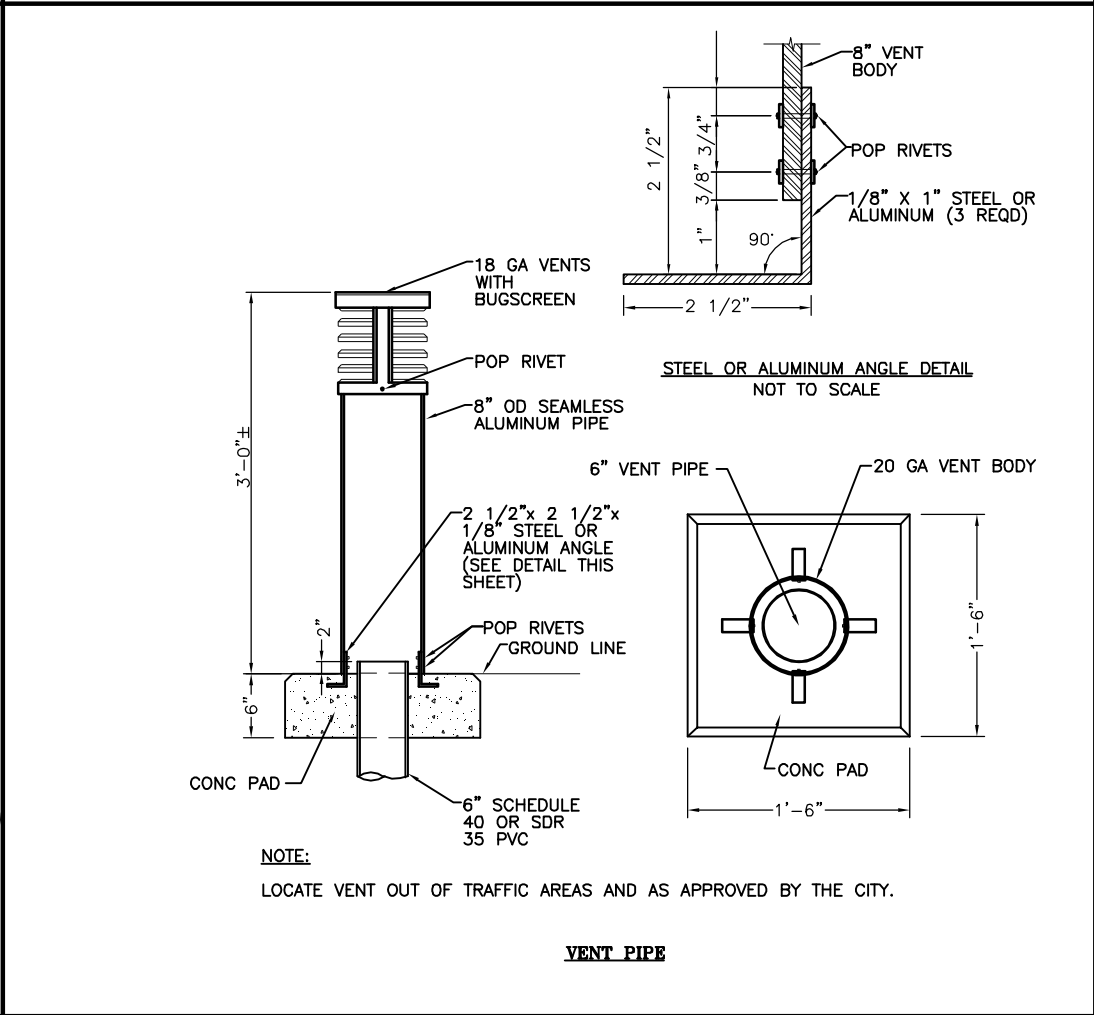
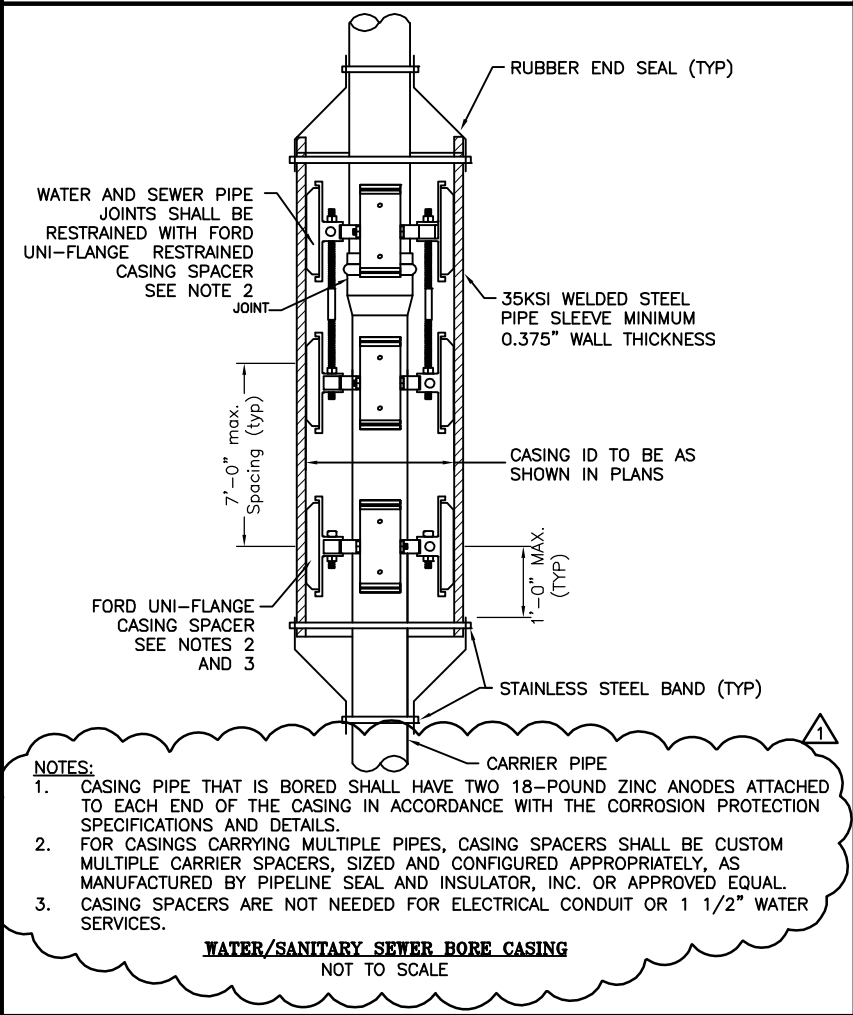
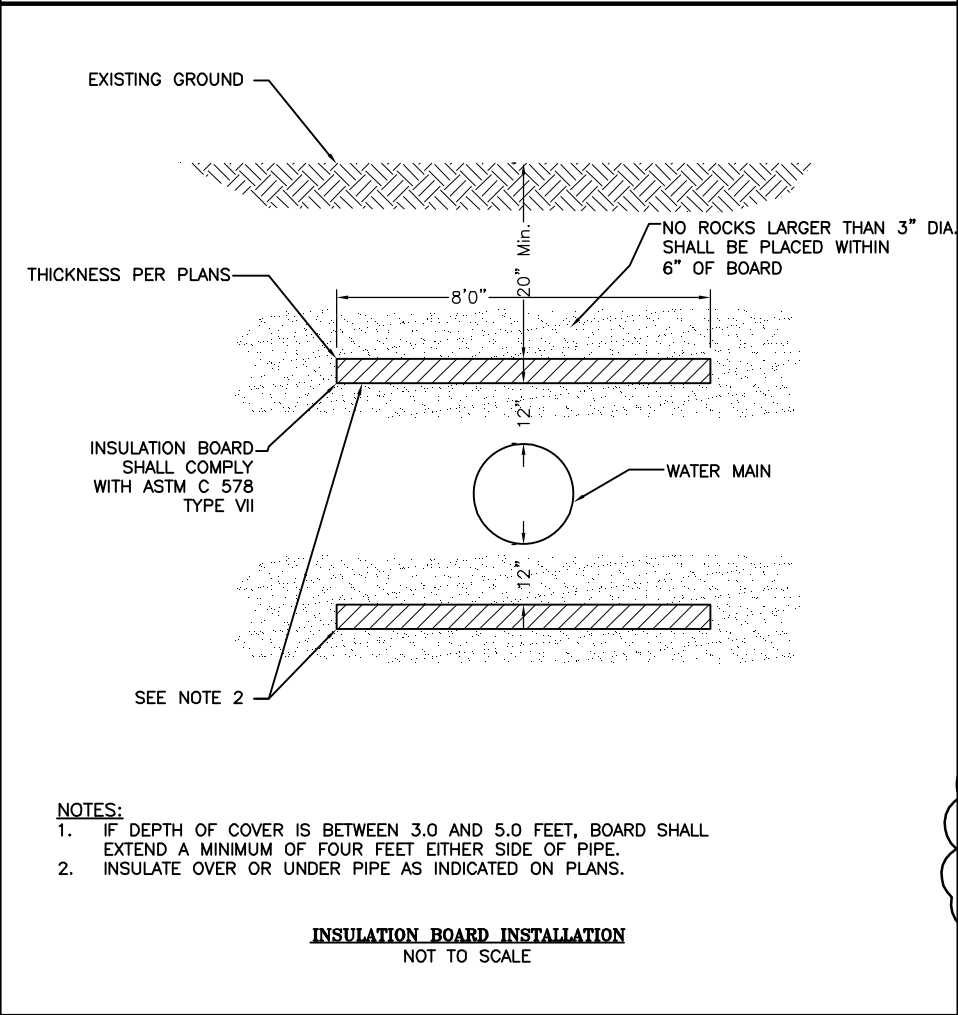
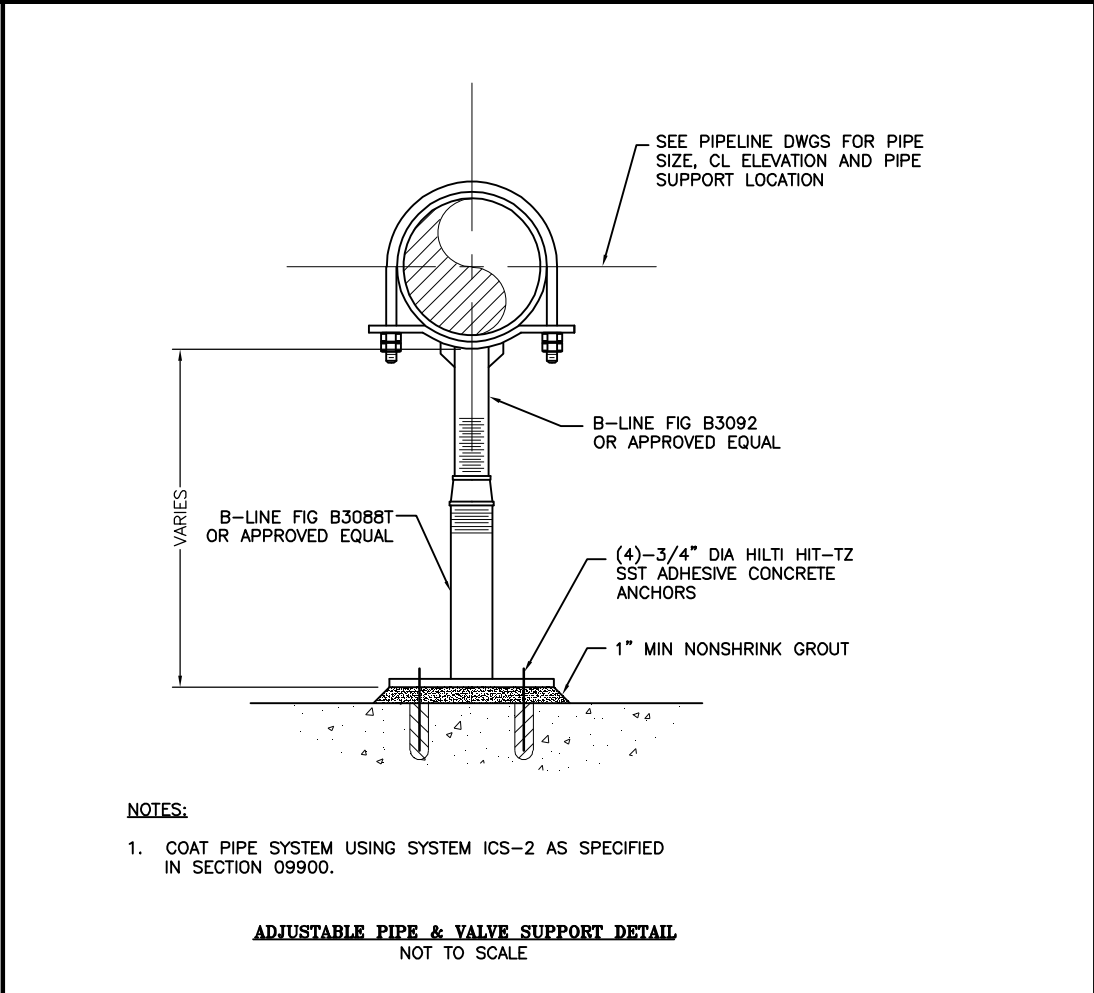
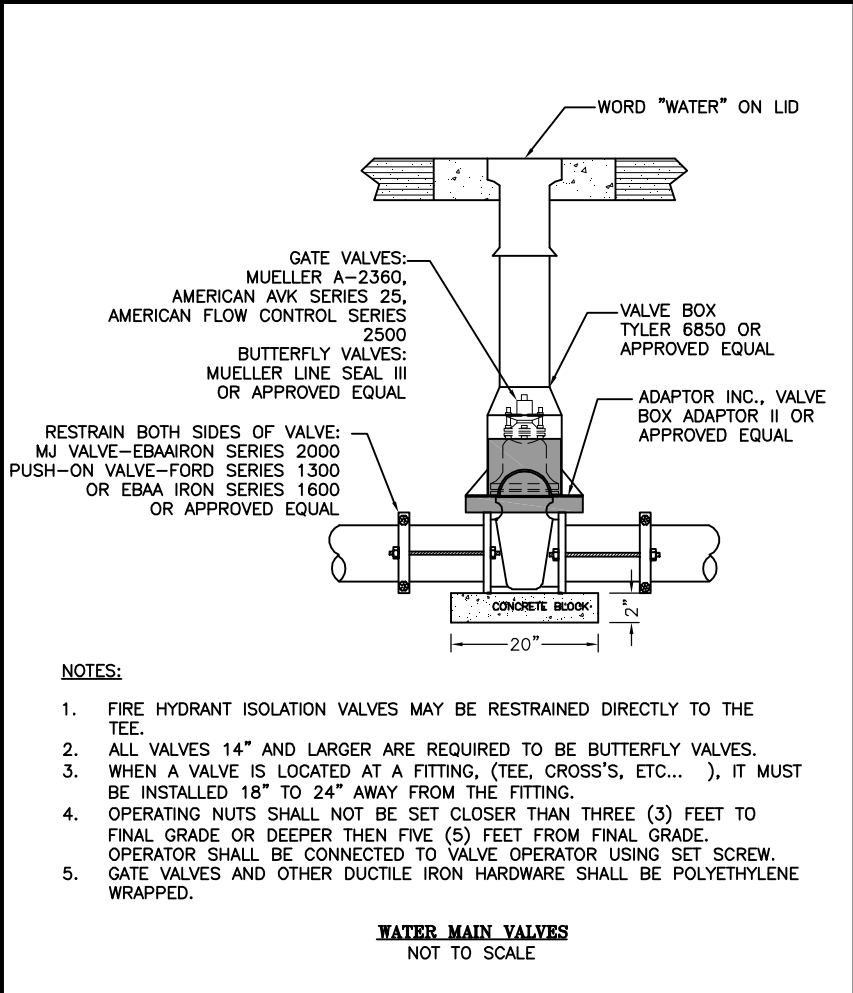
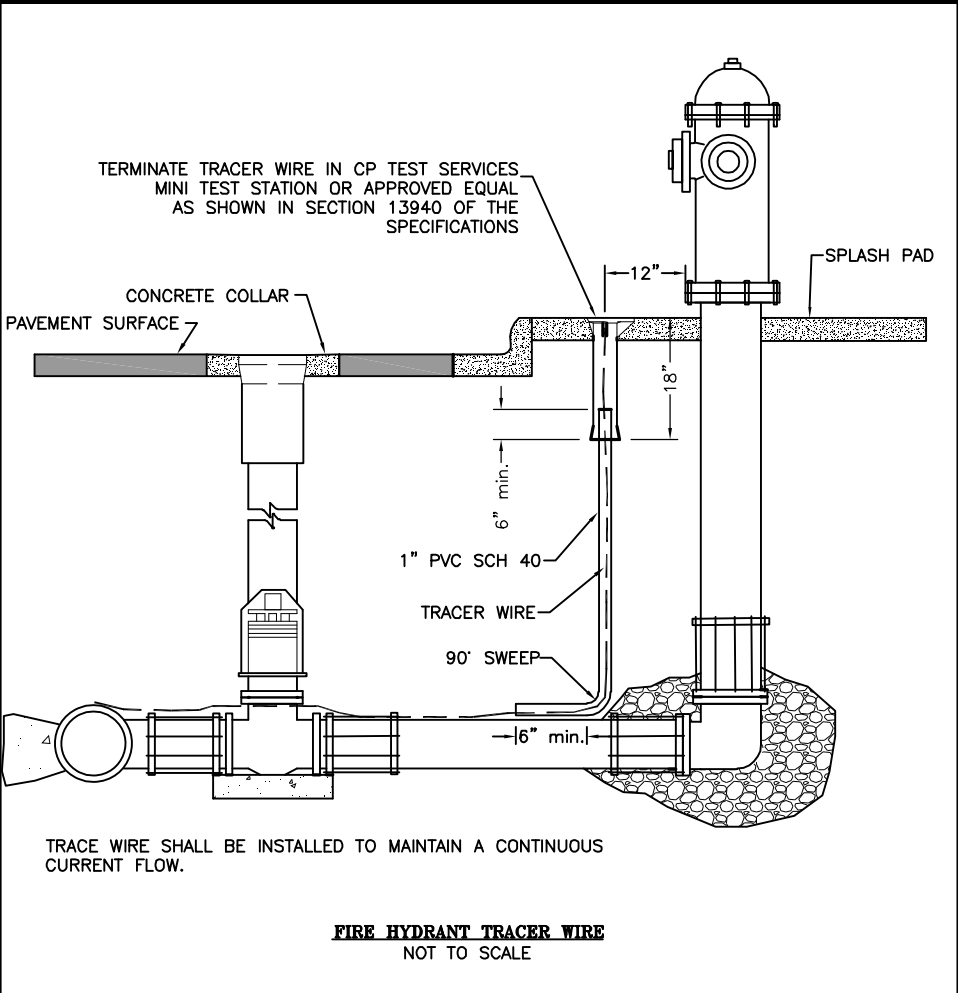
MORRISON
MAIERLE, INC.

**Burns &
McDonnell**
SINCE 1898

DATE:	10/07/2013
JOB NO:	4778.001
DRAWN BY:	RLI
APPROVED BY:	CMH

NOTES & LEGEND

DT-1



REV. #	REVISION DESCRIPTION	DATE	BY
1	ADDENDUM 2 REVISION	8-28-14	RL

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STANDARD DETAILS 2

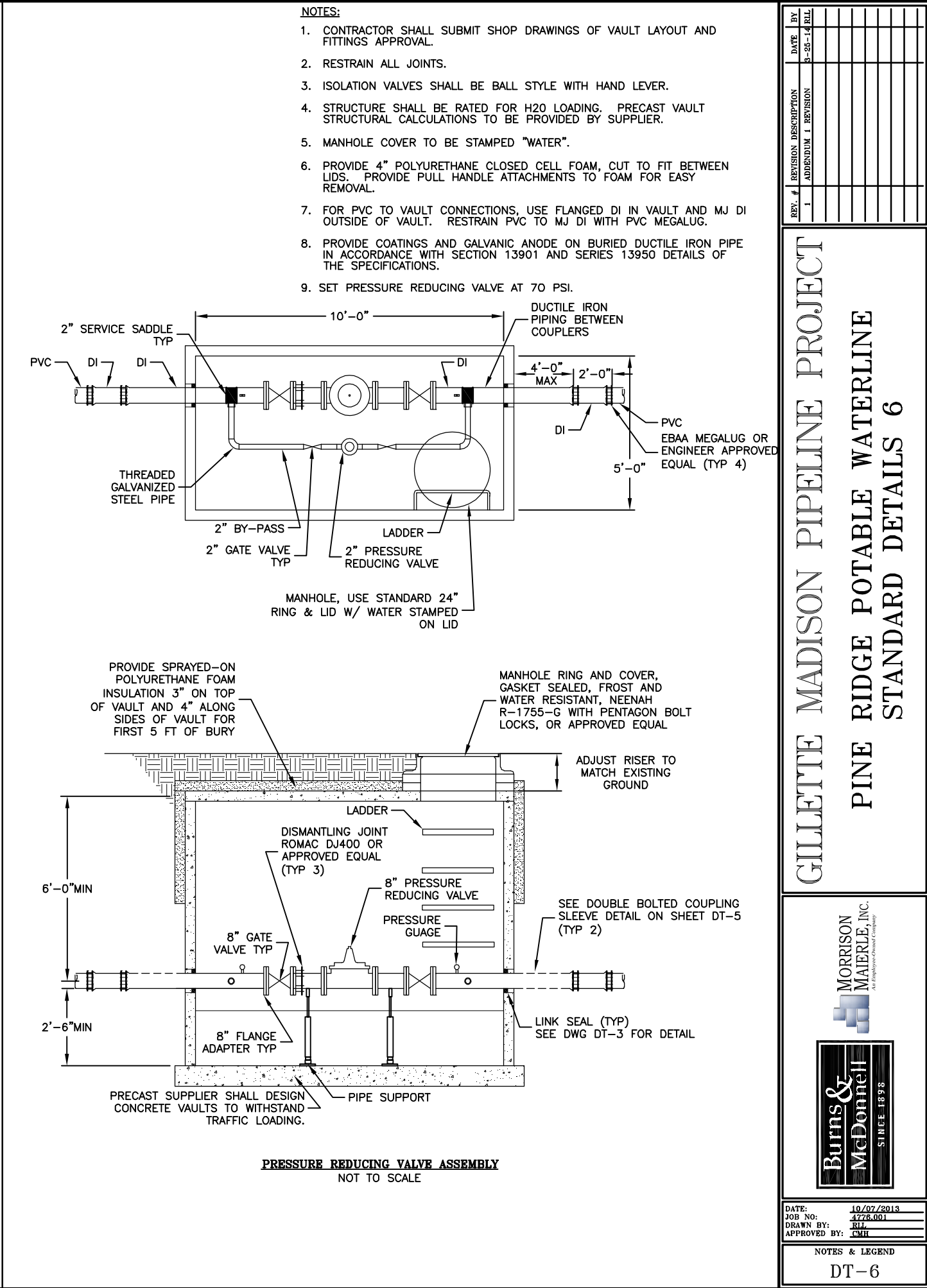
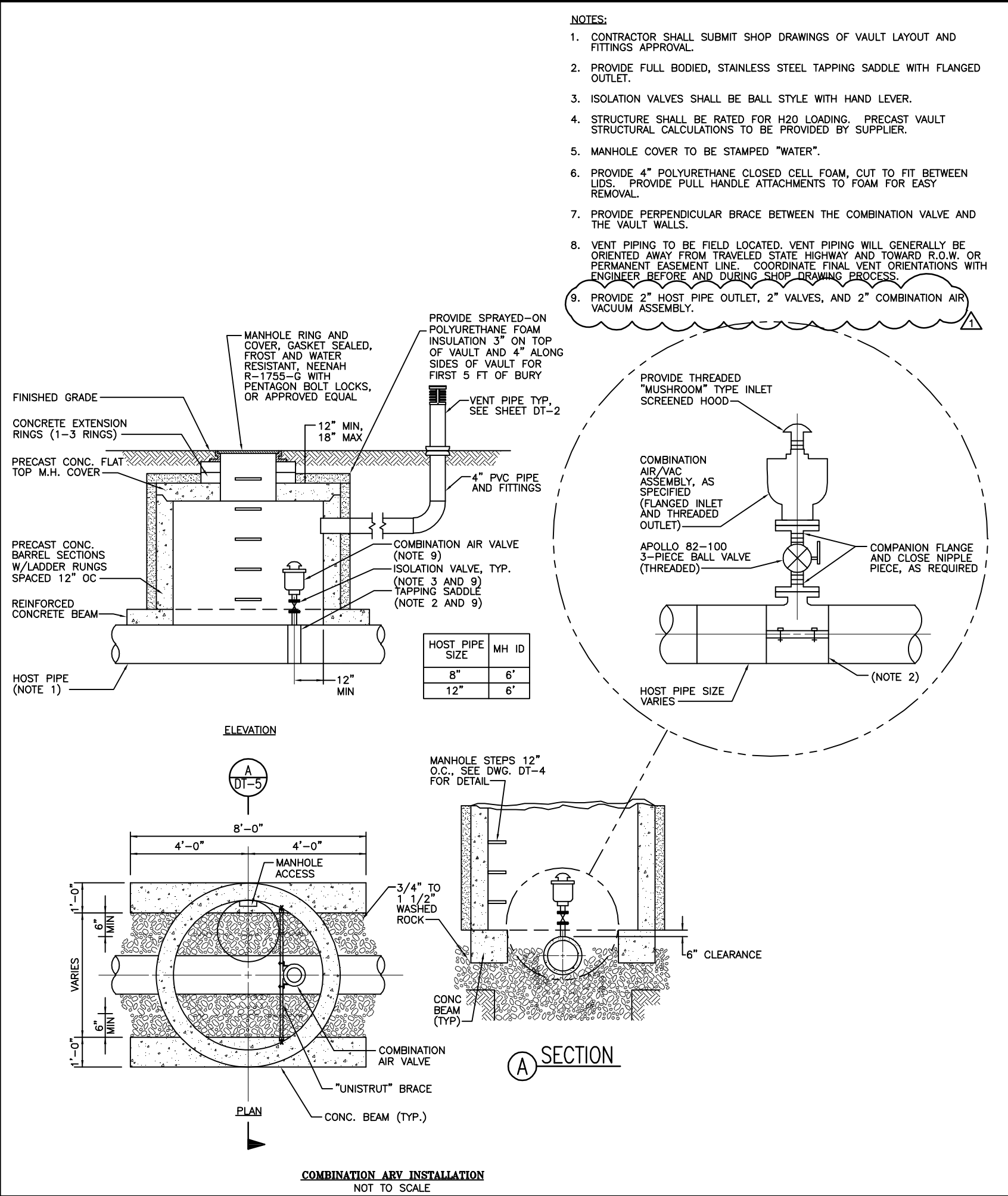
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DATE: 10/07/2013
JOB NO: 4776-001
DRAWN BY: RL
APPROVED BY: CMH

NOTES & LEGEND

DT-2



REV. #	REVISION DESCRIPTION	DATE	BY
1	ADDENDUM 1 REVISION	8-25-14	RL

GILLETTE MADISON PIPELINE PROJECT

PINE RIDGE POTABLE WATERLINE

STANDARD DETAILS 6

MORRISON MAIERLE, INC.
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DATE: 10/07/2013
JOB NO: 4776-001
DRAWN BY: RL
APPROVED BY: CMH

NOTES & LEGEND

DT-6

