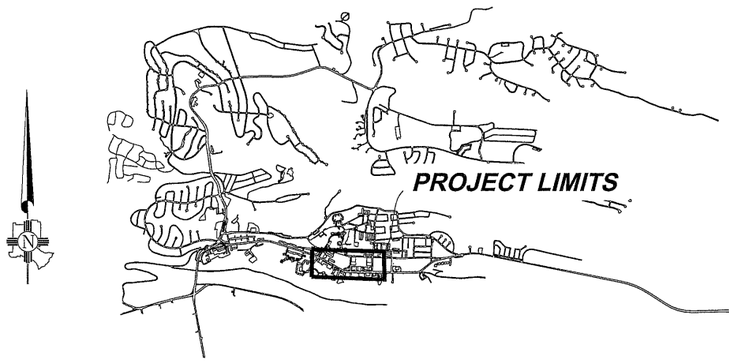
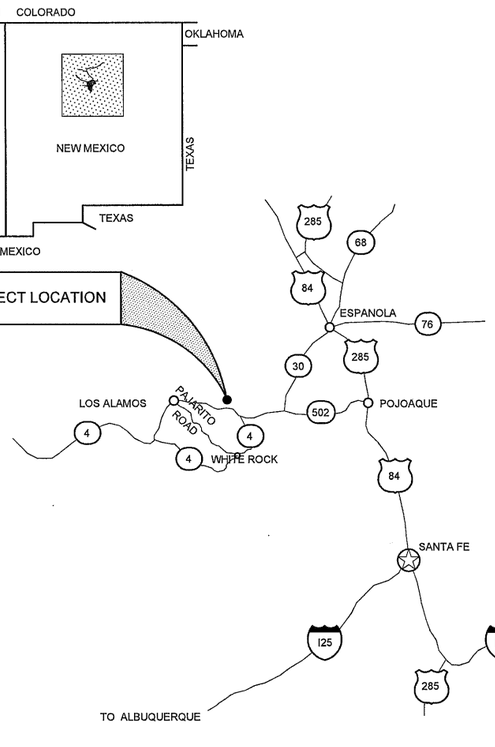
UTILITIES IMPROVEMENTS

TRINITY DRIVE ROAD AND UTILITY PROJECT
IFB-26-31
LOS ALAMOS COUNTY - NEW MEXICO

LOS ALAMOS



LOS ALAMOS VICINITY MAP
NOT TO SCALE



NEW MEXICO REGIONAL MAP
NOT TO SCALE

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APPROVED BY:

DEPARTMENT OF PUBLIC
UTILITIES PROJECT ENGINEER — DATE 10/7/25

DEPARTMENT OF PUBLIC UTILITIES
ENGINEERING ASSOCIATE — DATE 10/7/25

10/7/25
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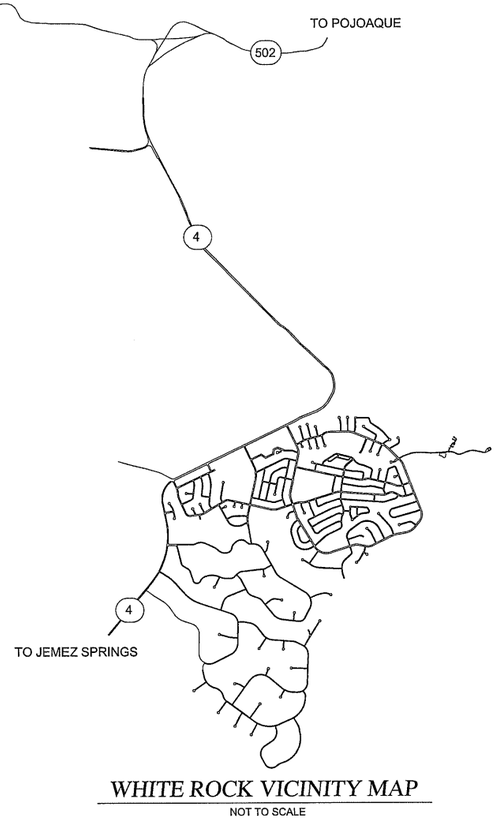
REGISTERED PROFESSIONAL ENGINEER



WHITE ROCK VICINITY MAP
NOT TO SCALE

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DEPARTMENT OF PUBLIC UTILITIES CONSTRUCTION NOTES

GENERAL

1. ALL WATER, GAS AND ELECTRIC UTILITY INSTALLATIONS, RE-CONSTRUCTION OR REPAIR SHALL COMPLY WITH LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES (DPU) CONSTRUCTION STANDARDS AND THE RELEVANT STANDARD DRAWINGS. THE CONSTRUCTION STANDARDS CAN BE FOUND AT:

   https://losalamosnm.egnyte.com/fl/4wY6y9xDFMDH

2. SUBMITTALS FOR ALL GAS, WATER, ELECTRIC AND COUNTY OWNED COMMUNICATION INFRASTRUCTURE SHALL BE SUBMITTED TO THE DPU PROJECT MANAGER FOR REVIEW AND APPROVAL PER THE DPU STANDARD SPECIFICATIONS. SUMBMITTALS SHALL INCLUDE THE COVER SHEET IN THE DPU CONSTRUCTION STANDARDS.
3. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A NEW MEXICO LICENSED PROFESSIONAL SURVEYOR (NMPS), FOR CONSTRUCTION STAKING, AS WELL AS VERIFICATION OF ALL CRITICAL HORIZONTAL AND VERTICAL CONTROL DATA SHOWN ON THESE CONTRACT DRAWINGS.
4. FOR ANY WORK INVOLVING NEW WATER, GAS OR SEWER PIPELINE CONNECTING TO AN EXISTING PIPELINE, CONTRACTOR SHALL OBTAIN A PENETRATION PERMIT FROM THE COUNTY. THE PERMIT MUST BE COORDINATED WITH THE DPU AND SIGNED OFF BY DPU AT LEAST 48 HOURS IN ADVANCE OF ANY SUCH WORK. THE PERMIT APPLICATION FORM FOR THIS PERMIT CAN BE FOUND AT:

   https://www.losalamosnm.us/files/sharedassets/public/v/2/departments/utilities/documents/utility-system-penetration-permit.pdf

5. CONTRACTOR SHALL BE RESPONSIBLE FOR POTHOLING, TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES, PRIOR TO PERFORMING ANY EXCAVATION WORK.
6. PRIOR TO CONNECTING NEW WATER LINES OR GAS LINES INTO THE EXISTING SYSTEM, THE NEW LOCATE WIRE SHALL BE TESTED AS FOLLOWS. CONTRACTOR WILL ENSURE THAT ALL LOCATE WIRE HAS BEEN INSTALLED AND MADE ACCESSIBLE IN ALL REQUIRED LOCATIONS. CONTRACTOR WILL VERIFY CONTINUITY IN THE LOCATE WIRE WITH THEIR OWN LOCATE EQUIPMENT. THE LOCATED LOCATION WILL BE PAINTED WITH WHITE PAINT AND DPU STAFF WILL THEN VERIFY THE LOCATION AND CONTINUITY OF THE LOCATE WIRE WITH THEIR OWN EQUIPMENT. ANY AREAS WHERE CONTINUITY IS LOST MUST BE REPAIRED AND RE-VERIFIED BY DPU STAFF TO BE LOCATEABLE. CONTRACTOR SHALL COORDINATE THE LOCATE WIRE VERIFICATION WITH DPU PROJECT MANAGER.
7. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS SHOWING THE AS-BUILT CONDITIONS, DEVIATIONS FROM THE PLANS, INDICATING EXISTING UITLIY CROSSINGS, DETAILED DIMENSIONED SKETCHES OF TIE-INS AND OTHER PERTINENT DIMENSIONS, LABELS AND NOTATION. THE AS-BUILT DRAWINGS SHALL BE MAINTAINED THROUGH OUT THE PROJECT AND BE AVAIABLE FOR REVIEW BY THE DPU PROJECT MANAGER. COMPLETE AS-BUILT DRAWING PREPARED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE DPU PROJECT MANAGER PRIOR TO FINAL PAYMENT. ACCEPTABLE FORMATS ARE CAD DRAWINGS OR NEATLY PREPARED, RED-LINED SET OF CONSTRUCTION DRAWINGS.
8. CONTRACTOR SHALL COMPLY WITH ALL THE PROVISIONS OF THE CLEAN WATER ACT, RELATED TO STORM WATERS. CONTRACTOR SHALL PREPARE, EXECUTE AND MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), IF THE AREA DISTURBED BY THE CONSTRUCITON OPERATIONS IS ONE ACRE OR MORE IN SIZE.
9. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE COSTS OF REPAIRING ANY DAMAGE OR ALTERATIONS CAUSED DURING EXECUTION OF THIS PROJECT TO THE ORIGINAL CONDITION LOCATED WITHIN OR OUT OF THE PROJECT BOUNDARIES.
10. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF ALL PROJECT-RELATED MATERIALS OR EQUIPMENT, BEFORE INSTALLATION, UNTIL FINAL WRITTEN ACCEPTANCE APPROVAL OF THE PROJECT BY THE DPU PROJECT MANAGER.
11. ALL MATERIAL QUALITY TESTS SHALL BE PERFORMED BY A QUALITY LABORATORY. SUCH A LABORATORY SHALL BE OPERATED UNDER THE AUSPICES/DIRECTION OF AN NMPE. NAME AND CONTACT OF THE LABORATORY SHALL BE SUBMITTED BY THE CONTACTOR TO THE DPU PROJECT MANAGER AS SOON AS PRACTICAL AFTER THE CONTRACTOR'S RECEIPT OF THE NOTICE TO PROCEED.
12. CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF TRAFFIC CONTROL PLANS SEALED BY A NEW MEXICO PROFESSIONAL ENGINEER. CONTRACTOR SHALL COORDINATE THE SUBMITTAL, REVIEW AND APPROVAL OF THE TRAFFIC CONTOL PLANS WITH THE LOS ALAMOS COUNTY TRAFFIC DIVISION AND THE NMDOT DISTRICT 5 OFFICE. CONTCONTRACTOR SHALL PROVIDE THE INSTALLATION AND MAINTENANCE OF ANY NECESSARY TRAFFIC CONTROL DEVICES AS REQUIRED BY LOS ALAMOS COUNTY TRAFFIC MANAGER AND THE NMDOT. TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MOST CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
13. CONTRACTOR SHALL NOTIFY THE DPU PROJECT MANAGER, AT LEAST FIVE (5) DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT THE OPERATION OF THE PUBLIC UTILITY SYSTEMS (WATER, GAS AND ELECTRIC).
14. ALL STRUCTURAL OR UTILITY TRENCH FILL OR BACKFILL SHALL BE FREE OF VEGETATION AND DEBRIS AND CONTAIN NO ROCKS LARGER THAN 3-INCHES.
15. ALL AREAS DISTURBED BY THE CONSTRUCTION ACTIVITIES OF THIS PROJECT, INCLUDING PRIVATE LANDSCAPING, SHALL BE RESTORED.

WATER PIPELINES

1. THE PIPELINE SHALL BE SUPPLIED AND INSTALLED IN STRICT COMPLIANCE WITH THE DEPARTMENT OF PUBLIC UTILITIES CONSTRUCTION STANDARDS. CONTRACTOR SHALL NOTIFY THE DPU PROJECT MANAGER IMMEDIATELY UPON ENCOUNTERING FIELD CONDITIONS THAT MAY REQUIRE DEVIATIONS FROM THESE STANDARDS.
2. CONTRACTOR SHALL INSTALL PIPELINE SO THAT HIGH POINTS ARE NOT CREATED, UNLESS SPECIFICALLY SHOWN ON APPROVED CONSTRUCTION DRAWINGS.
3. MINIMUM BURY SHALL BE 48 INCHES FOR MAINS AND 36 INCHES FOR SERVICE LINES, AT ALL POINTS ALONG THE ALIGNMENT.
4. ALL FIRE HYDRANTS SHALL BE INSTALLED WITH A MINIMUM 4-FOOT HORIZONTAL CLEARANCE ALL AROUND THEM.
5. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE DISINFECTION, CHLORINATION, CHLORINE RESIDUAL TESTING, AND HYDROSTATIC (PRESSURE) TESTING OF ALL WATER PIPES INSTALLED. PRESSURE TEST SHALL BE DOCUMENTED ON FORM INCLUDED IN STANDARD SPECIFICATION. DPU PROJECT MANAGER SHALL WITNESS ALL SUCH TESTING.

GAS PIPELINES

1. CONTRACTOR AND SUBCONTRACTOR PERSONNEL PERFORMING ANY WORK ON EXISTING LIVE GAS LINES SHALL BE OPERATOR-QUALIFIED (OQ). THEY SHALL ALSO BE ENROLLED IN AN APPROVED DRUG AND ALCOHOL PROGRAM APPROVED IN ACCORDANCE WITH THE US DEPARTMENT OF TRASPORTATION PIPELINE SAFETY REGULATIONS.
2. PRIOR TO INITIATING ANY FIELD WORK ON OPERATOR QUALIFIED TASKS, CONTRACTOR AND/OR SUBCONTRACTORS SHALL SUBMIT TO THE DPU PROJECT MANAGER THE FOLLOWING: (1) LIST OF COVERED-TASKS FOR EMPLOYEES, AS WELL AS THE SPECIFIC TASKS THEY HAVE BEEN APPROVED FOR IN THE CONTRACTOR'S OQ PROGRAM; (2) COPY OF THE CONTRACTOR'S QUALIFICATION STATEMENTS FOR EACH TASK EMPLOYEE; (3) COPY OF THE OPERATOR QUALIFICATION PLAN; (4) COPY OF THE CONTRACTOR'S DRUG AND ALCOHOL PROGRAM. NO OQ TASKS SHALL BE PERFORMED UNTIL DPU PROJECT MANAGER APPROVES THE ABOVE SUBMITTALS.
3. PRIOR TO INITIATING ANY FIELD WORK, CONTRACTOR SHALL PROVIDE CURRENT POLYETHYLENE PIPE FUSION CERTIFICATIONS FOR ALL STAFF WHO WILL PERFORM FUSING OF GAS PIPE.
4. PRIOR TO INITIATING ANY FIELD OR SHOP WELDING ON STEEL PIPELINES, CONTRACTOR SHALL PROVIDE CURRENT API 1104 WELDING CERTIFICATION FOR PERSON(S) PERFORMING THE WELDING OF GAS PIPE.
5. CONTRACTOR SHALL COORDINATE ALL GASLINE PRESSURE TESTING WITH DPU PROJECT MANAGER. PRESSURE TESTS SHALL PERFORMED PER THE REQUIREMENTS IN DPU STANDARD SPECIFICATION 301 GAS SYSTEMS. TEST RECORDS SHALL BE PROVIDED TO THE DPU PROJECT MANAGER.
6. ALL GAS MAINS, GAS SERVICE LINES AND OTHER GAS SYSTEM FACILITIES SHALL BE INSTALLED, RELOCATED, REMOVED, OR ABANDONED IN PLACE, IN COMPLIANCE WITH 49 CFR PART 192, AND WITH DPU STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT BETWEEN THESE DOCUMENTS, THE MOST RESTRICTIVE REQUIREMENTS SHALL PREVAIL. UP UNTIL FINAL COMPLETION OF THE PROJECT, CONTRACTOR SHALL MAINTAIN ALL PERTINENT COMPLIANCE RECORDS AND REQUIRED DOCUMENTATION, BEFORE TURNING IN TO THE OWNER'S PROJECT REPRESENTATIVE.
7. ALL PIPELINES TO BE ABANDONED SHALL BE PURGED AND CAPPED.

10/14/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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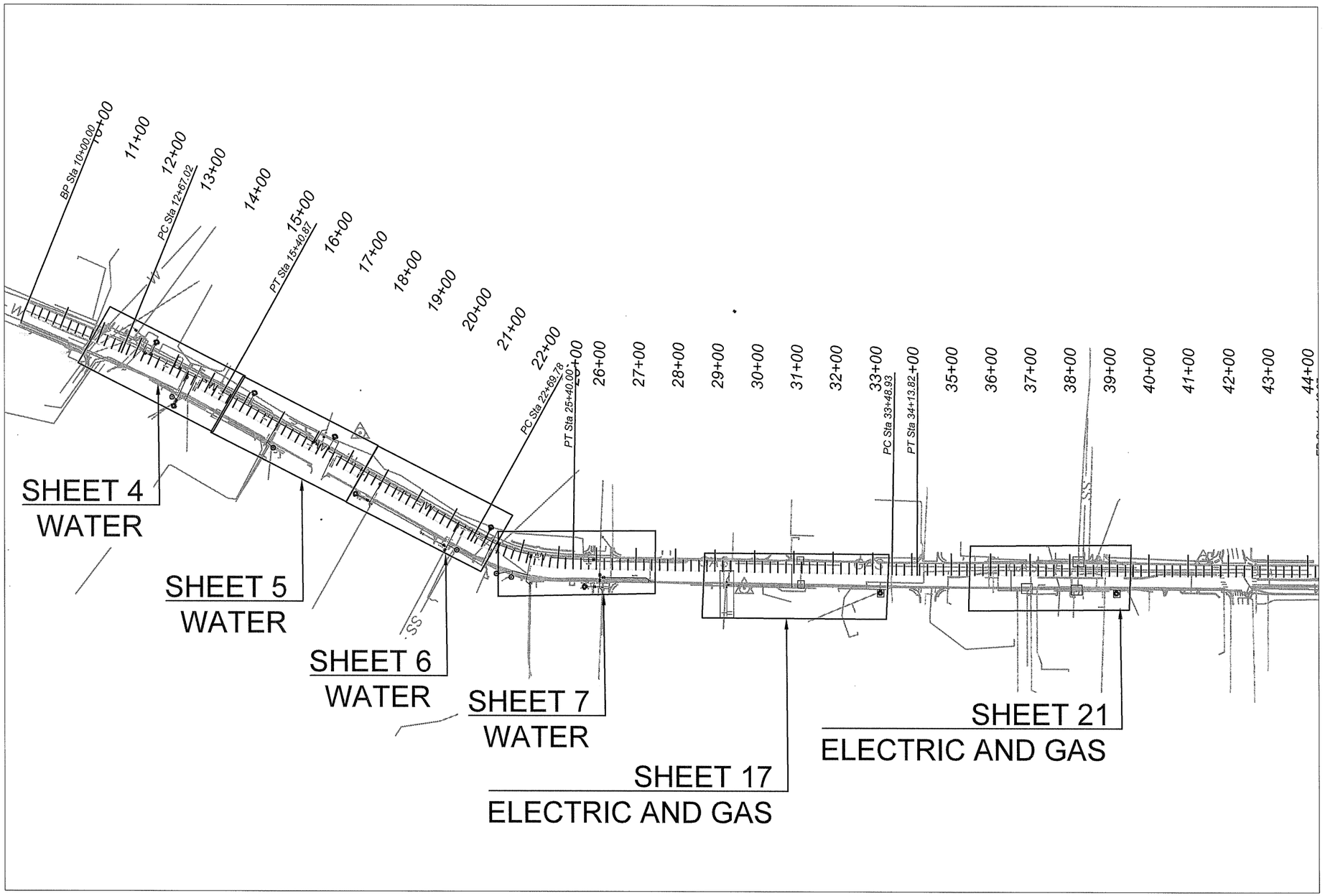
TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
CONSTRUCTION NOTES

PROJECT CONTROL NUMBER: #######



LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
PLAN SHEET OVERVIEW

10/7/25
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

AUMACK, CASEY
5-Nov-25

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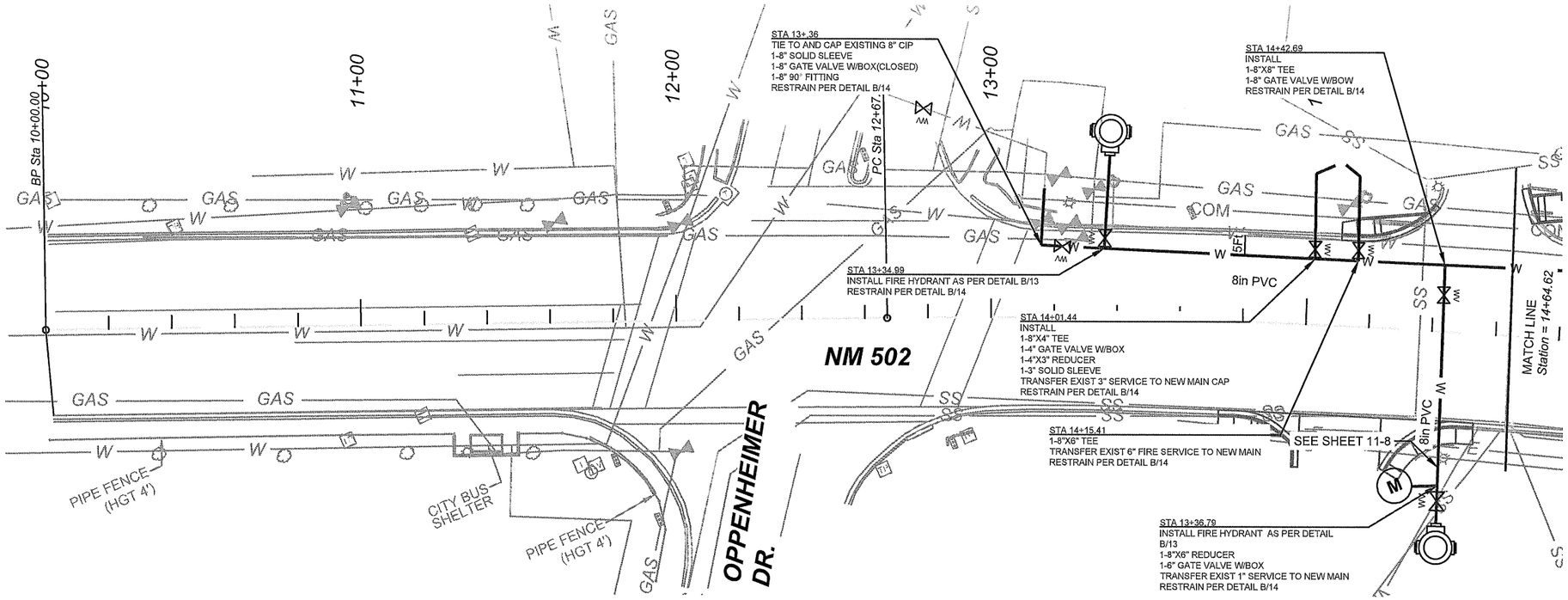
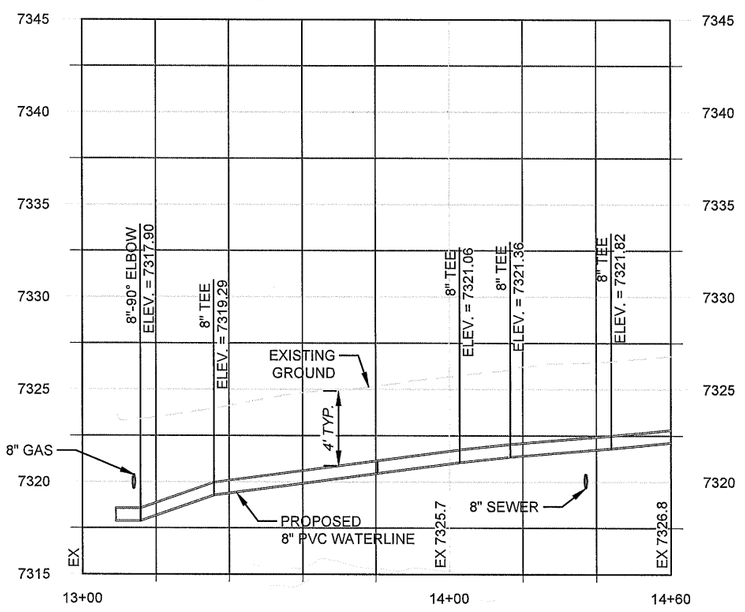


GENERAL NOTES

1. ALL WATERLINES AND GAS LINES THAT WILL BE ABANDONED SHALL BE PURGED AND CAPPED. PIPELINES WILL BE ABANDONED IN PLACE. ALL SURFACE FEATURES ASSOCIATED WITH THE ABANDONED UITLITIES SHALL BE REMOVED AND DISPOSED. THIS INCLUDES FIRE HYDRANTS, VALVE BOXES, METER CANS AND FIRE HYDRANTS.
2. ALL ASPHALT, SIDEWALK AND CURB & GUTTER REQUIRING REMOVAL TO ACCOMMODATE THE NEW UTILITY LINES SHALL BE REPLACED PER THE NMDOT STANDARD SPECIFICATIONS. THESE QUANTITIES ARE INCLUDED IN THE UTILITY BID ITEMS.
3. ON BOTH SHOULDERS OF TRINITY DRIVE, BENEATH THE SIDEWALKS AND DRIVEWAYS, THERE ARE MULTIPLE EXISTING UTILITIES IN A COMMON TRENCH THAT MY REQUIRE THE 6" ELECTRIC CONDUIT AND WATER PIPE BE INSTALLED AT ADDITIONAL DEPTH TO CROSS THE EXISTING UTILITES. ADDITIONAL PAY ITEM IS INCLUDED IN THE UTILITY BID SHEET FOR CROSSING THE EXISTING UTILITIES IF CONFLINCT IS ENCOUNTERED.
   a. WATERLINE CROSSING INCLUDES 4 EACH 8" 45 DEGREE FITTINGS, INCLUIDNG JOINT RESTRAINTS, AND 20 FEET OF TRENCH UP TO 8 FEET DEEP.
   b. ELECTRIC CROSSING INCLUDES UP TO 30 FEET OF TRENCH UP TO 8 FEET DEEP. NO VERTICAL FITTINGS ARE ALLOWED TO LOWER THE CONDUIT BENEATH THE EXISTING UTILITIES.



GRAPHIC SCALE
0 40' 80'
SCALE: 1" = 40'
(IN FEET)

10/7/25
JAMES J. ALARID
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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER PLANS
STA 10+00 TO STA 14+60

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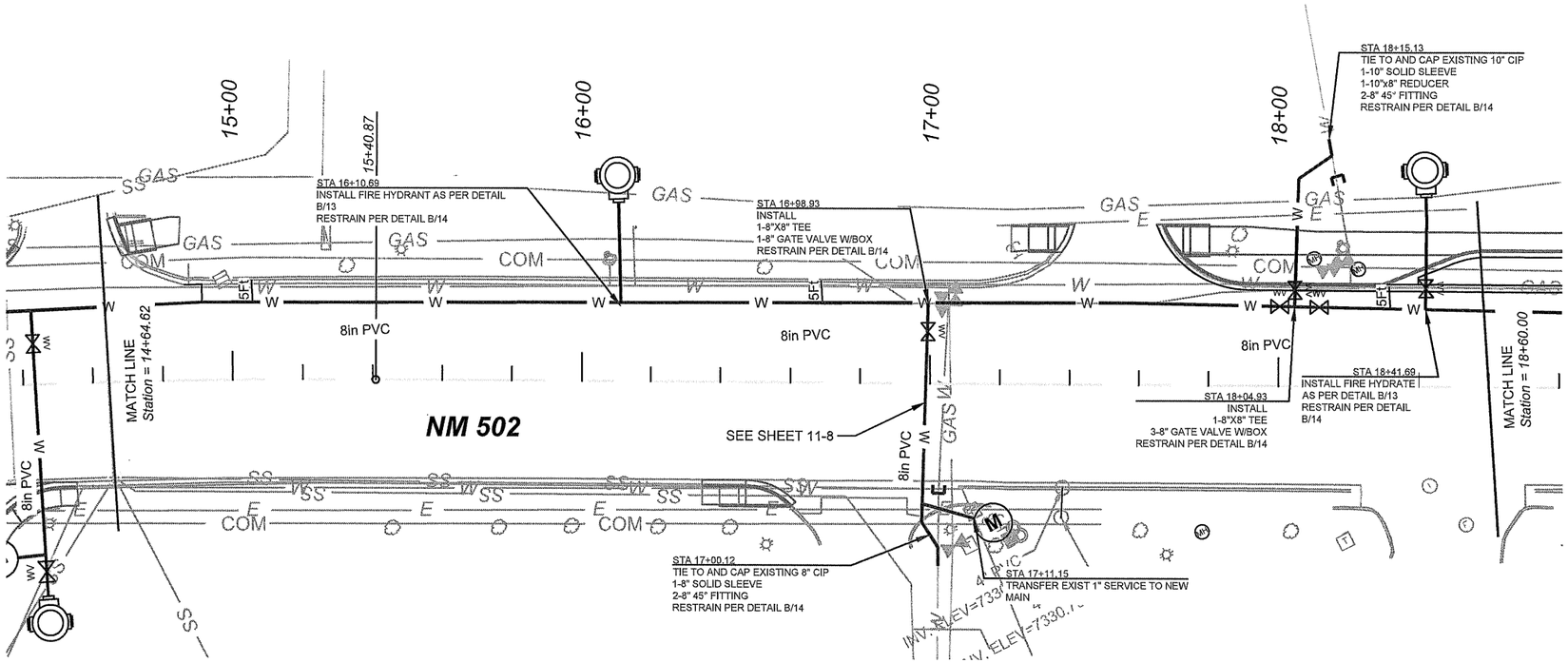

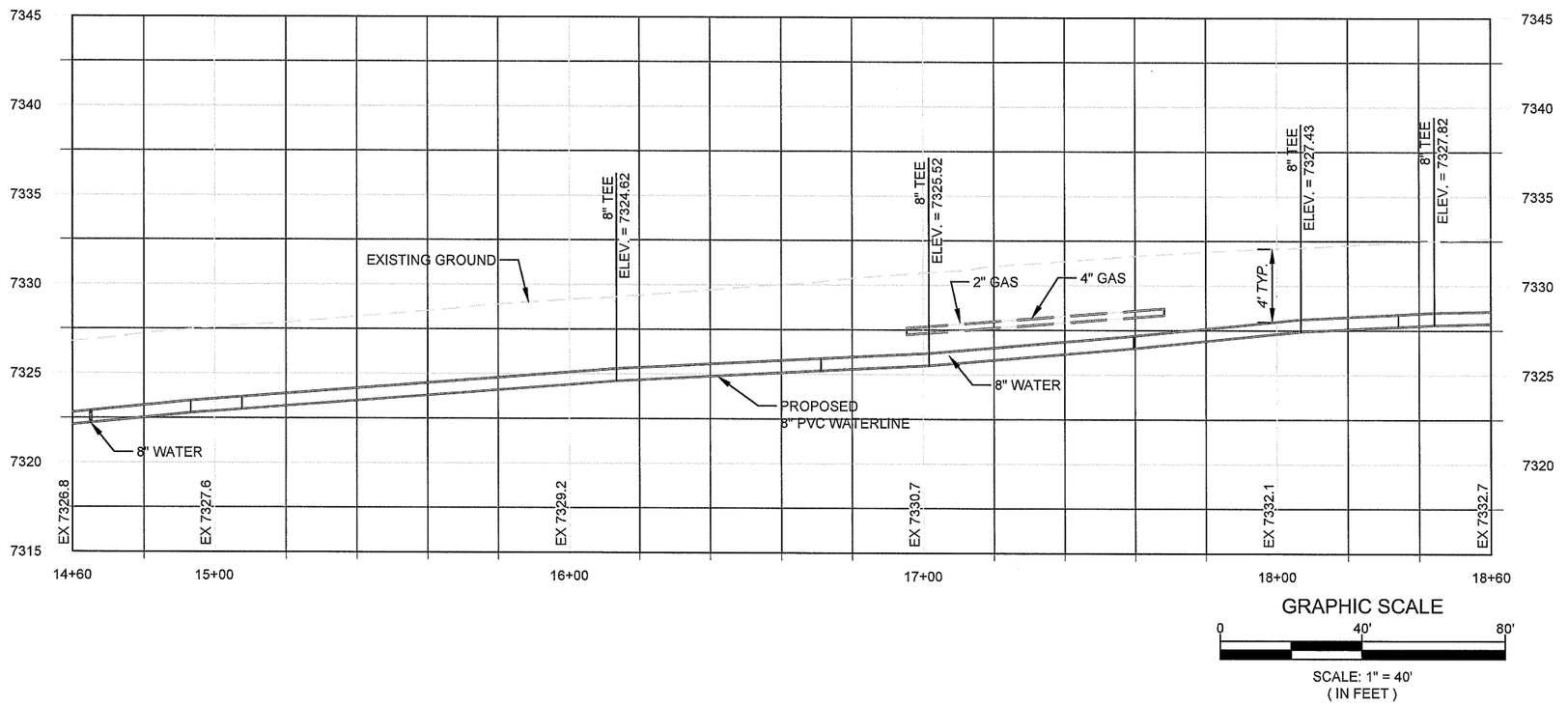

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GRAPHIC SCALE

0 40' 80'

SCALE: 1" = 40'
(IN FEET)

10/1/25

JAMES J. ALARID
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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER PLANS
STA 14+60 TO STA 18+60

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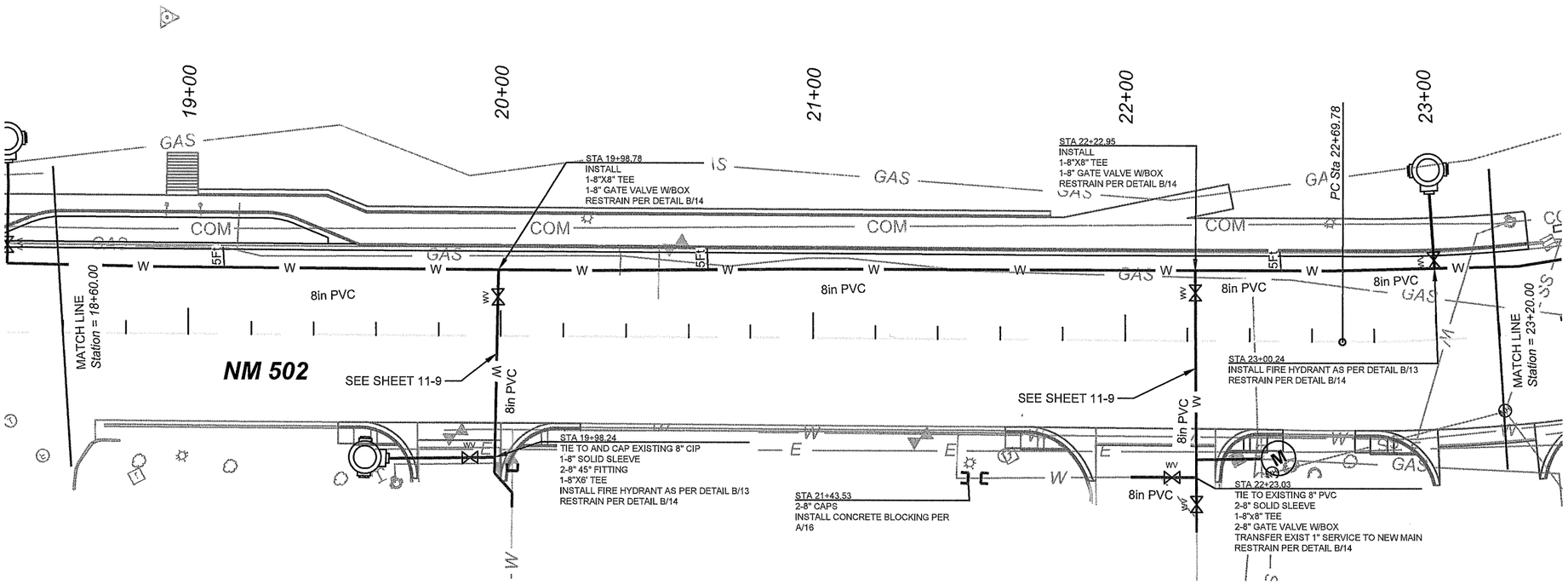

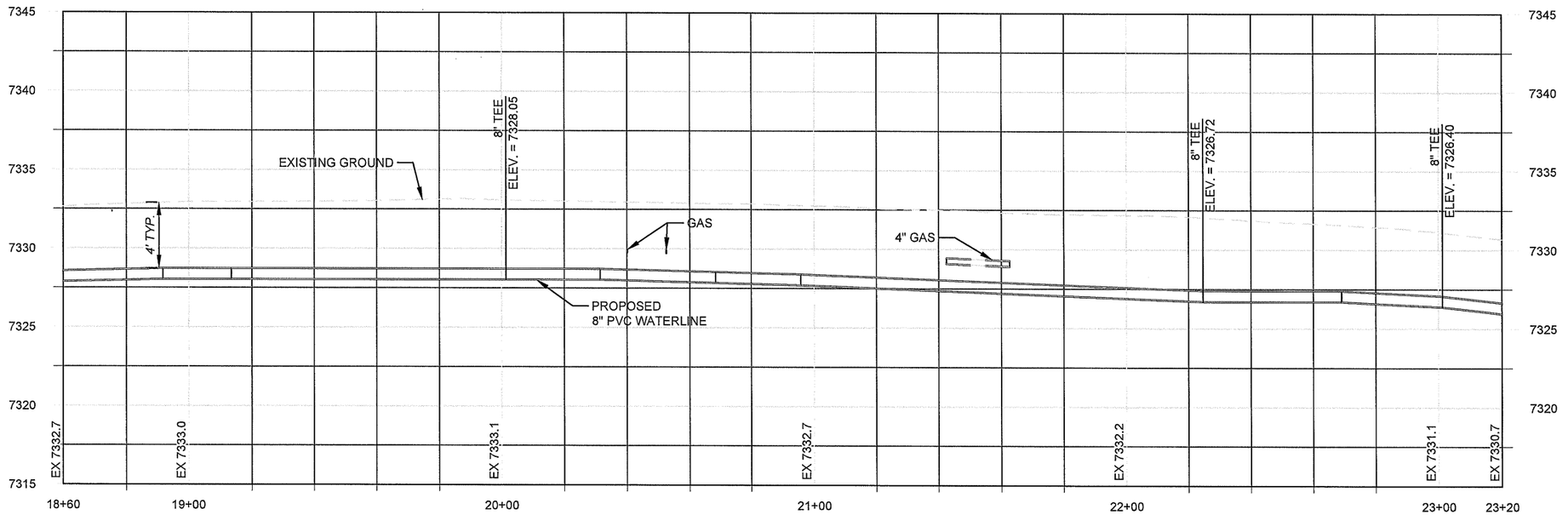

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GRAPHIC SCALE

0 40' 80'

SCALE: 1" = 40'
(IN FEET)

10/7/25
JAMES J. ALARID
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Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER PLANS
STA 18+60 TO STA 23+20

AUMACK, CASEY
5-Nov-25

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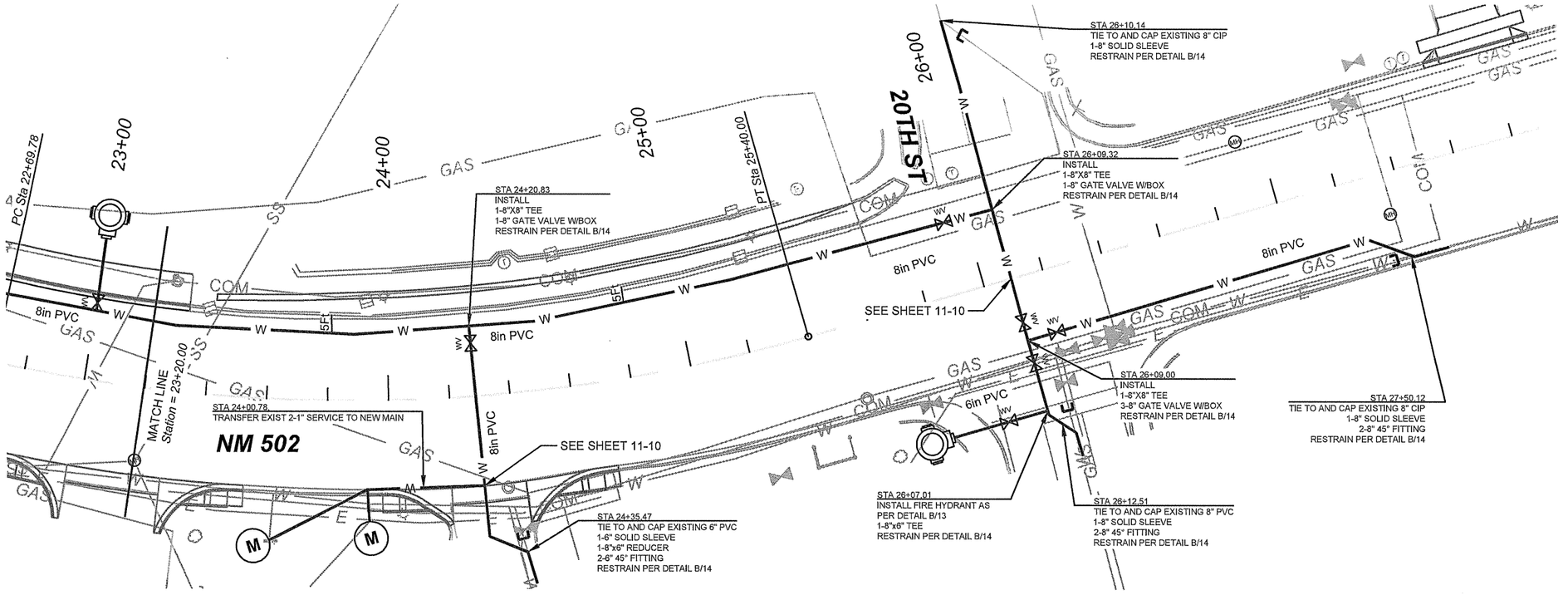

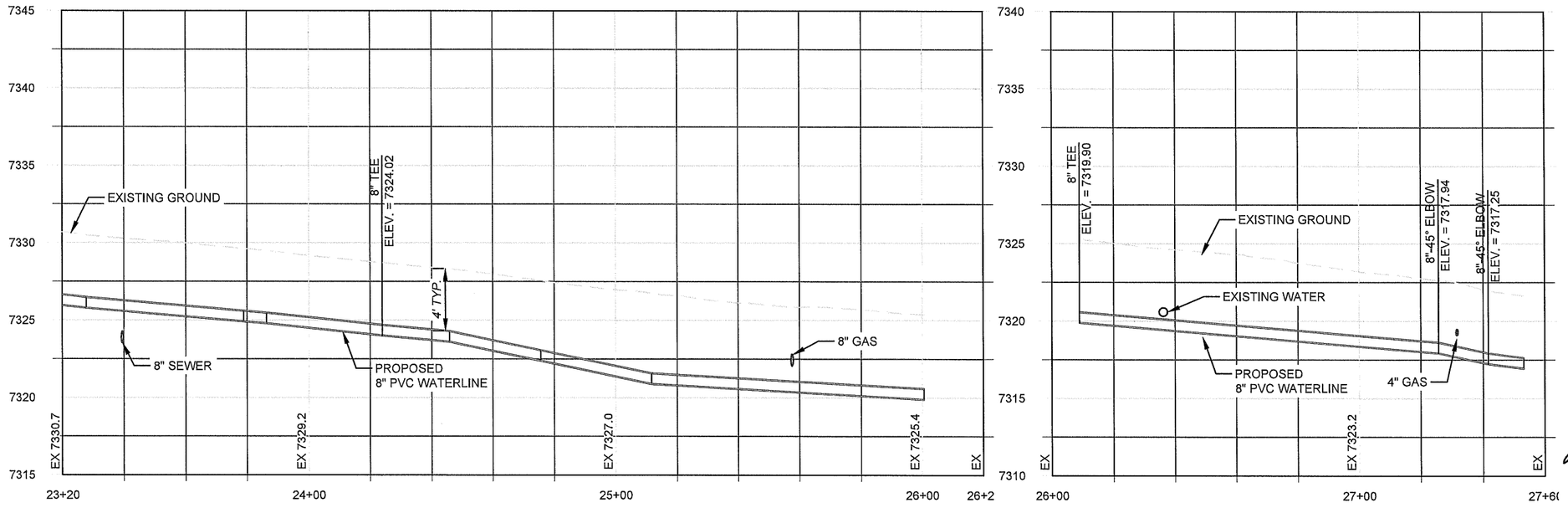

GRAPHIC SCALE

0 40' 80'

SCALE: 1" = 40'
(IN FEET)

10/1/25

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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER PLANS
STA 23+20 TO STA 28+00

AUMACK, CASEY
5-Nov-25

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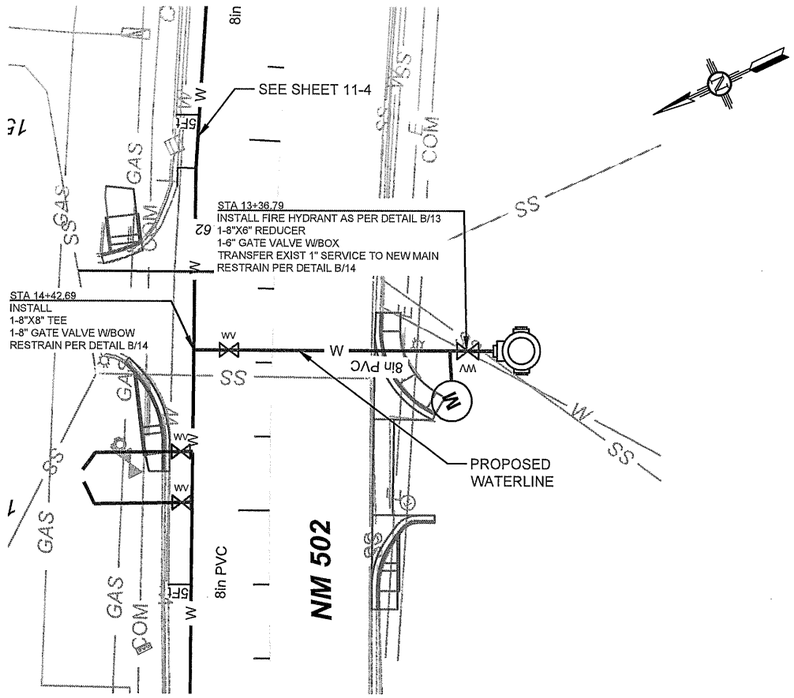

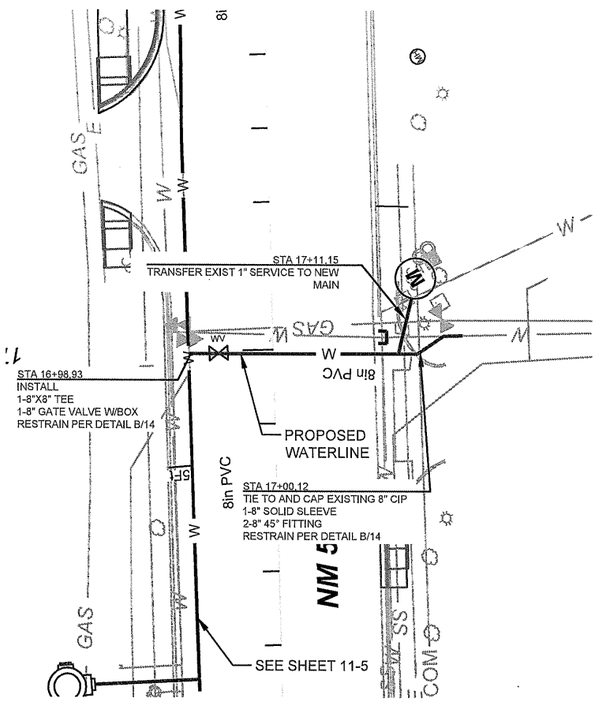

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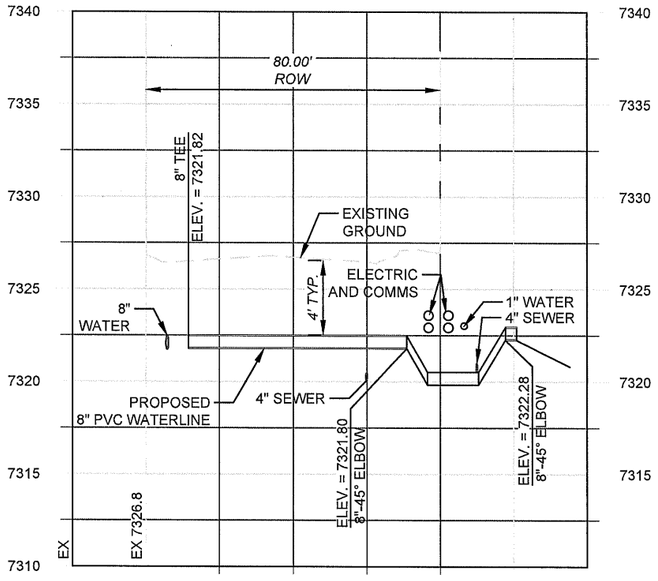

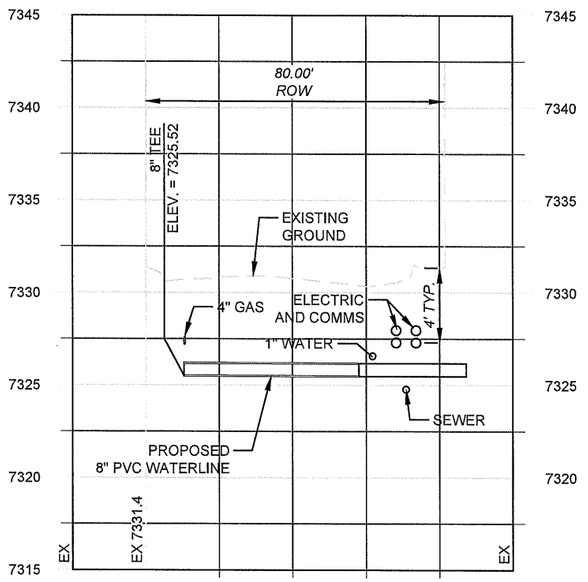

GRAPHIC SCALE

0 40' 80'

SCALE: 1" = 40'
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10/1/25

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Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER CROSSING PROFILE

AUMACK, CASEY
5-Nov-25

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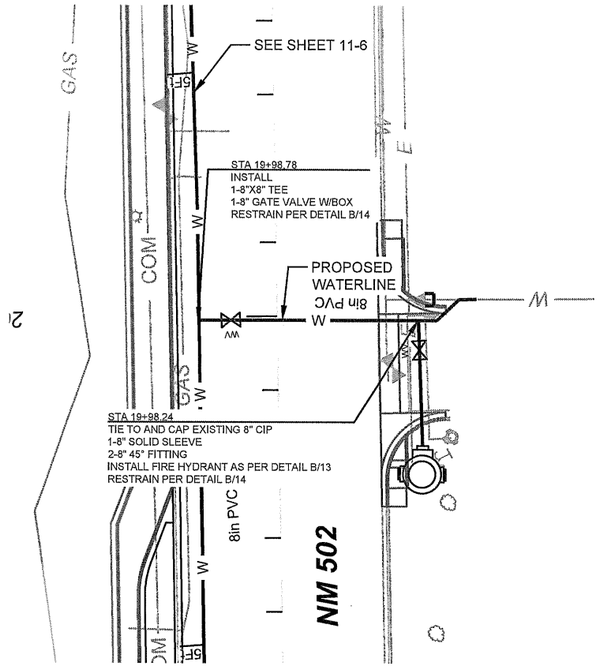
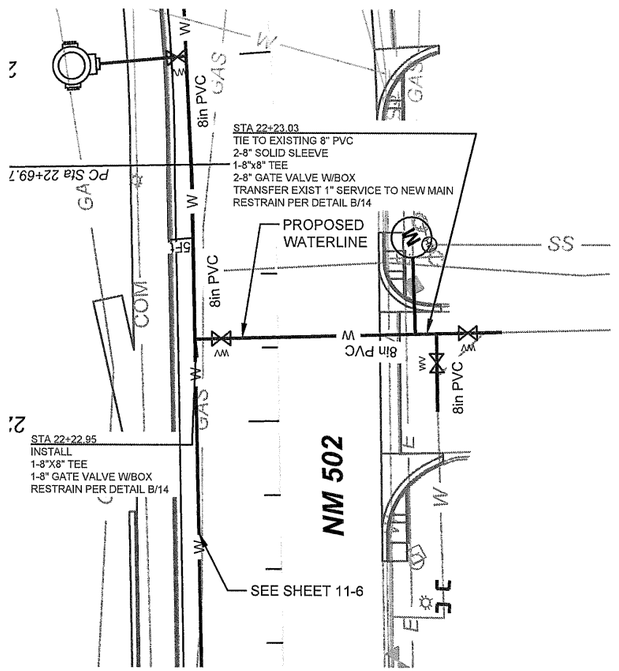
DRAWING SCALE: 1" = 40'





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GRAPHIC SCALE

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SCALE: 1" = 40'
(IN FEET)

10/7/25

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Electric, Gas, Water, and Wastewater Services

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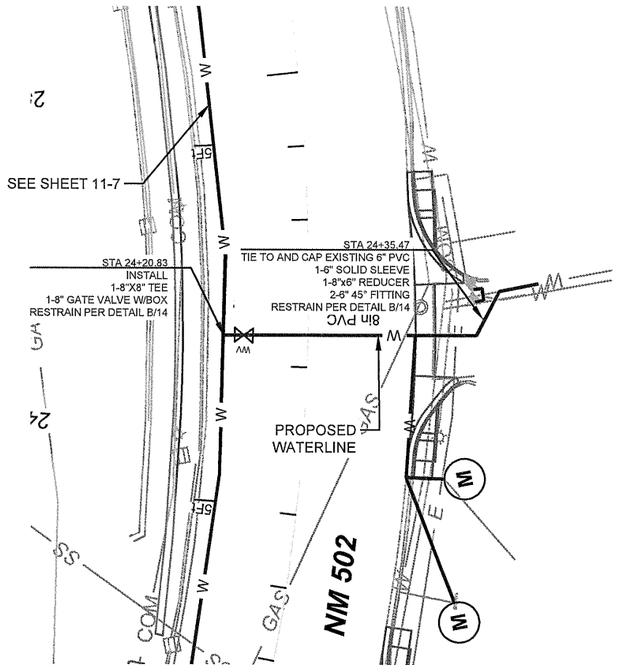
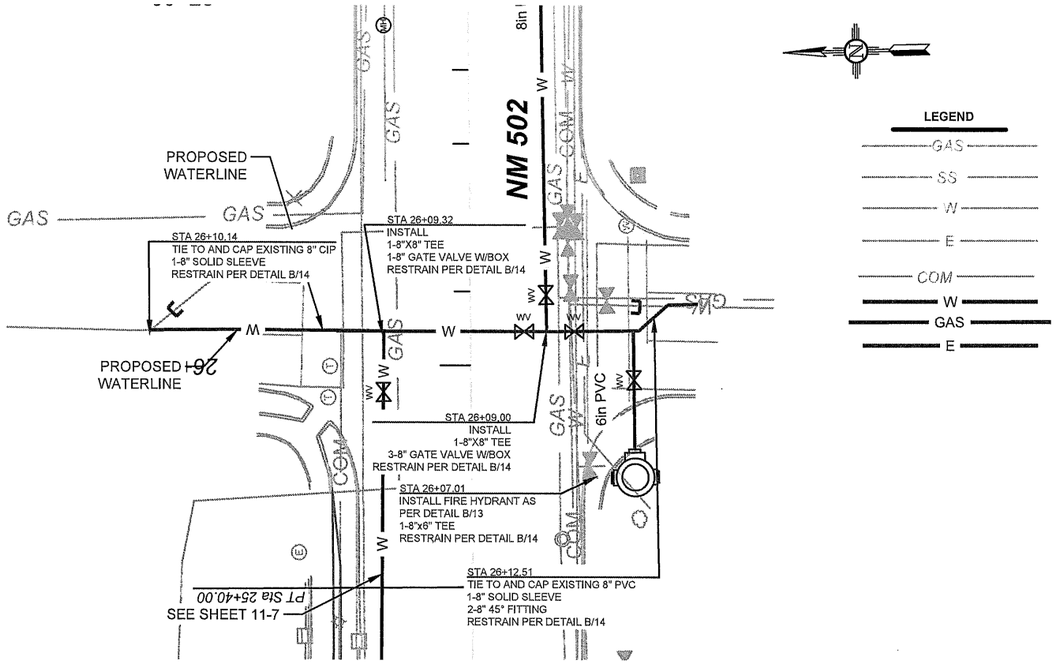
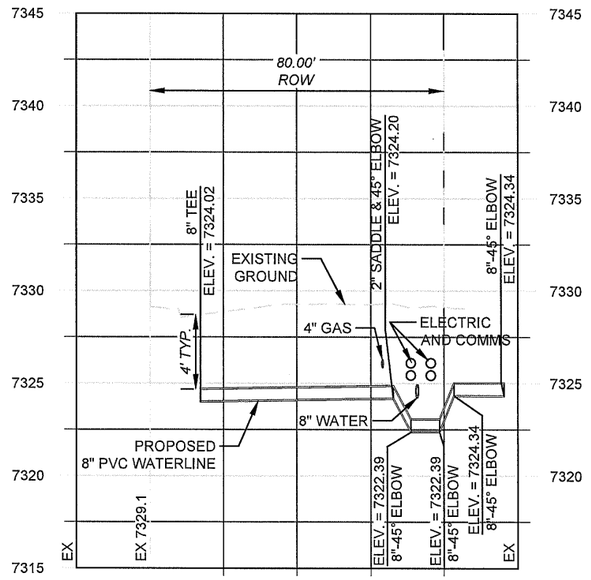
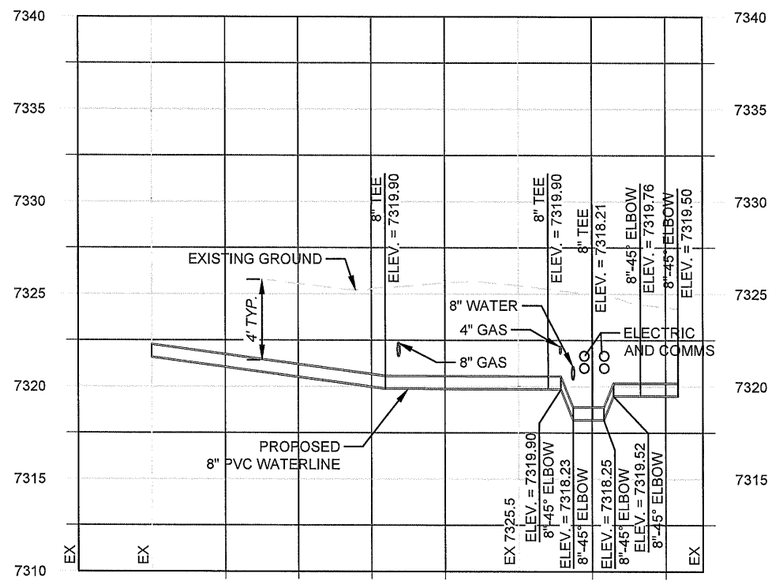
TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER CROSSING PROFILE

PROJECT CONTROL NUMBER: ########









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GRAPHIC SCALE

0 40' 80'

SCALE: 1" = 40'
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10/7/25

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Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER CROSSING PROFILE

AUMACK, CASEY
5-Nov-25

Drawing File: L:\PROJECTS\IFB XX-XX TRINITY WATER GAS PROJECT\03_DESIGN\CAD_DWGS\NM 502 UTIL P&PS_RECOVER000.DWG
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PROJECT DEVELOPED BY: ################

DRAWING SCALE: 1" = 40'

SHEET NO. 11 - 10

PROJECT CONTROL NUMBER: #######

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

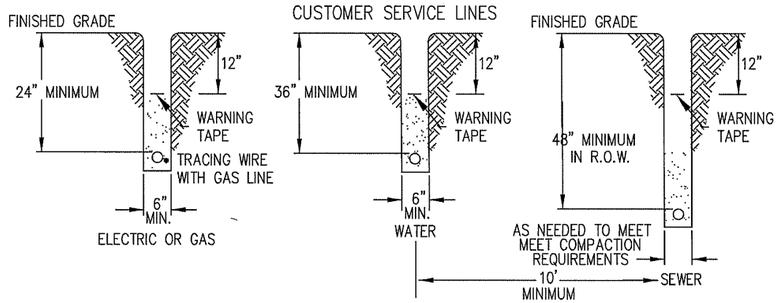
UTILITY CONSTRUCTION STANDARDS – UTILITY SERVICES

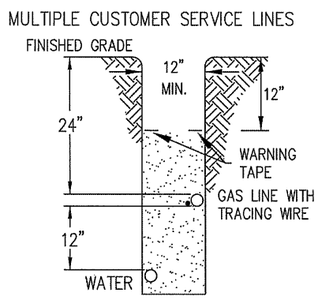
UTILITY SERVICE LINE TRENCHING

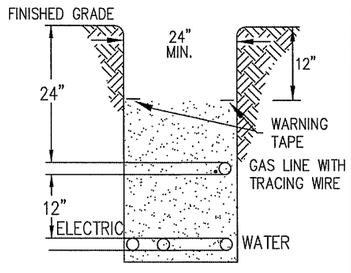
SECTION 2000 2002

REVISION: | No. | DATE: | APPROVED BY:

DATE: APRIL 2018







NOTES:

1.) WHERE APPLICABLE, COMPACTION IN COUNTY OR STATE RIGHT–OF–WAY SHALL MEET OR EXCEED MINIMUM SPECIFIED REQUIREMENTS OF ORGANIZATION HAVING AUTHORITY. COMPACTION OUTSIDE ROAD RIGHT–OF–WAY SHALL BE 85%.
2.) BEDDING MATERIAL TO BE SANDY SOIL WITH NO SHARP ROCKS OR ROCKS LARGER THAN 1/2 INCH. 3 INCHES OF BEDDING MATERIAL REQUIRED AT TRENCH BOTTOM.
3.) IF TRENCH–RUN MATERIAL MEETS BEDDING MATERIAL TYPE REQUIREMENTS 3 INCH BEDDING MAY BE OMITTED PROVIDED THE TRENCH BOTTOM IS SMOOTH, FLAT AND WITHOUT IRREGULARITIES.
4.) A MINIMUM OF 3 INCHES OF APPROVED BEDDING UNDER AND 6 INCHES OF APPROVED SHADING OVER THE UTILITIES IS REQUIRED.
5.) LATEST OSHA TRENCH SAFETY REQUIREMENTS SHALL BE STRICTLY OBSERVED.
6.) TRACER WIRE TO BE INSTALLED WITH GAS SERVICE PIPE. SEE SPECIFICATION 301 GAS SYSTEMS.
7.) WHERE UTILITIES CROSS ONE ANOTHER, A 12 INCH SEPARATION IS RECOMMENDED WITH A MIN. OF 4 INCHES WITH WRITTEN APPROVAL OF DPU.
8.) TRENCH MUST BE INSPECTED AND APPROVED BY DEPARTMENT OF PUBLIC UTILITIES PRIOR TO SERVICE LINE INSTALLATION.
9.) IN ALL CASES MINIMUM UTILITY SEPARATION WILL BE REQUIRED AND BACK FILLING ON GAS LINE MUST BE DIRECTLY SUPERVISED BY LOS ALAMOS COUNTY OPERATOR QUALIFIED PERSONNEL.
10.) WARNING TAPE MUST BE A MINIMUM OF 6" WIDE AND READ: CAUTION – BURIED (GAS, WATER, SEWER ELECTRIC) LINE. WARNING TAPE MUST BE CONSISTENT WITH UTILITY LINE BEING INSTALLED AND MUST BE ABOVE THE UTILITY LINE EXTENDED THE ENTIRE DISTANCE OF THE LINE BEING INSTALLED. THIS REQUIREMENT INCLUDES ALL GAS, WATER, SEWER AND ELECTRIC RESIDENTIAL SERVICES.
11.) IF SEWER LINE IS ABOVE WATERLINE, SEWER LINE MUST BE ENCASED.

A / 11

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

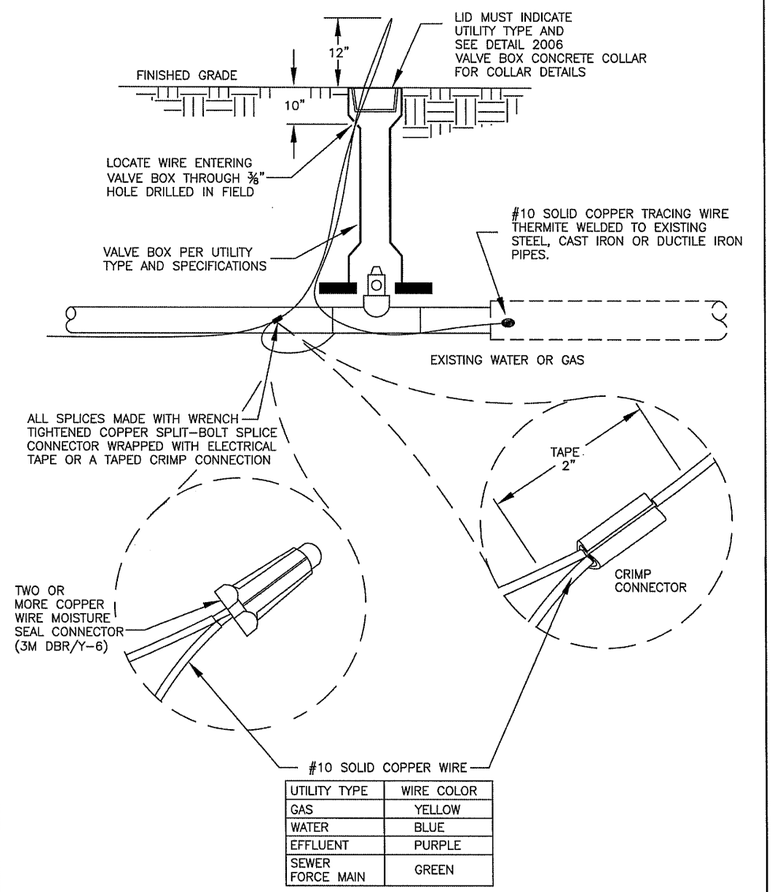
UTILITY CONSTRUCTION STANDARDS – GENERAL

LOCATE WIRE IN VALVE BOX SPLICE AND THERMITE WELD

SECTION 2000 2010

REVISION: | No. | DATE: | APPROVED BY:

DATE: APRIL 2018



UTILITY TYPE	WIRE COLOR
GAS	YELLOW
WATER	BLUE
EFFLUENT	PURPLE
SEWER FORCE MAIN	GREEN

B / 11

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER STANDARDS

10/7/25
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

AUMACK, CASEY
5-Nov-25

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PROJECT DEVELOPED BY: ###

DRAWING SCALE: ########

SHEET NO. 11 - 11

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – WATER

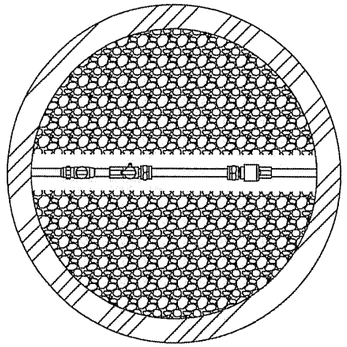
1" SINGLE WATER METER PIT SETTER ASSEMBLY

SECTION 6000 6003

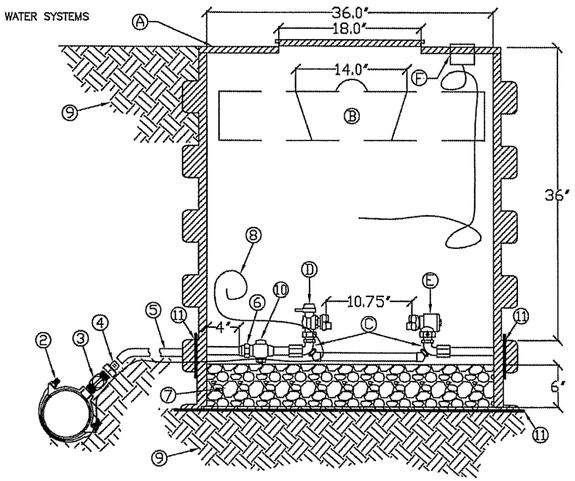
DATE: 7/15/25 No.
REVISION:
APPROVED BY:
DATE: JULY 2021

KEYED NOTES

1. METER BOX ASSEMBLY
   - (A) 36" DIA. CAST IRON METER BOX COVER WITH 18" DIA. KEY LOCK LID WITH 2" CUT OUT FOR TOUCH READ HDPE METER BOX WITH SMOOTH INTERIOR
   - (B) INSULATING PAD: CLOSED CELL POLYETHYLENE PAD, 6" THICK WITH 14" INNER PAD OPENING BY IN-FACT CORPORATION
   - (C) 1" METER YOKE, STRAIGHT LINE INLET AND OUTLET MIP INLET AND OUTLET
   - (D) ANGLE SHUT OFF VALVE
   - (E) 1" TOP ENTRY DUAL CHECK VALVE ASSE CERTIFIED (FIP x METER SADDLE NUT)
   - (F) METER TOUCH READ ATTACHMENT WITH WIRE LOOPED FOR SLACK
2. DUCTILE IRON BODY WITH DOUBLE STRAP SERVICE SADDLE
3. 1" CORPORATION STOP
4. 1 EA. 1" PEX x FIP BRASS FITTING
5. 1" PEX TUBING (WIRSBO) OR TYPE-K COPPER
6. 1" PEX TUBING TO 1" MIP BRASS FITTING
7. 3/4" GRAVEL 6" MINIMUM THICKNESS
8. #10 COPPER BLUE INSULATED TRACING WIRE
9. FOR COMPACTION(SEE SPECIFICATION SECTION 202)
10. 1" SERVICE VALVE
11. SEAL METER BOX BOTTOM OPENING WITH 1/4" X 1/4" STEEL MESH, 19 GAUGE OR LARGER, GALVANIZED OR 304 STAINLESS STEEL. SEAL PIPE ENTRY THROUGH METER BOX WALL WITH NON-SHRINK CEMENT GROUT, SPRAY FOAM INSULATION OR APPROVED EQUIVALENT.



NOTE:
REFER TO SPECIFICATION 601 WATER SYSTEMS



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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – WATER

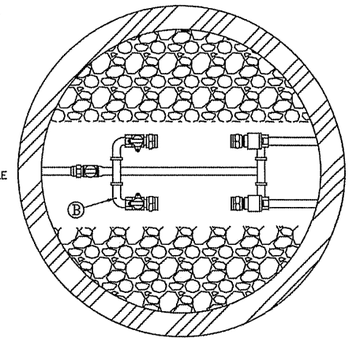
1" DOUBLE WATER METER PIT SETTER ASSEMBLY

SECTION 6000 6004

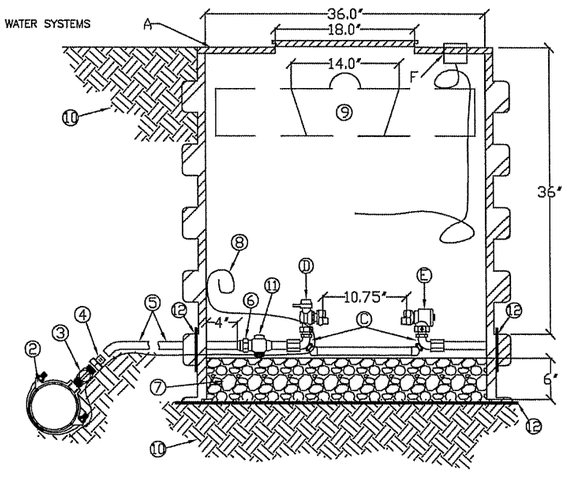
DATE: 7/15/25 No.
REVISION:
APPROVED BY:
DATE: JULY 2021

KEYED NOTES

1. METER BOX ASSEMBLY
   - (A) 36" DIA. CAST IRON METER BOX COVER WITH 18" DIA. KEY LOCK LID WITH 2" CUT OUT FOR TOUCH READ HDPE METER BOX WITH SMOOTH INTERIOR
   - (B) SPLITTER MANIFOLD
   - (C) 2 EA. 1" METER YOKE
   - (D) ANGLE SHUT OFF VALVE
   - (E) 1" TOP ENTRY DUAL CHECK VALVE ASSE CERTIFIED (FIP x METER SADDLE NUT)
   - (F) METER TOUCH READ ATTACHMENT WITH WIRE LOOPED FOR SLACK
2. DUCTILE IRON BODY WITH DOUBLE STRAP SERVICE SADDLE
3. 1" CORPORATION STOP
4. 1" PEX x FIP BRASS FITTING
5. 1" PEX TUBING (WIRSBO) OR TYPE-K COPPER
6. 1" PEX TUBING TO 1" MIP BRASS FITTING
7. 3/4" GRAVEL 6" MINIMUM THICKNESS
8. #10 COPPER BLUE INSULATED TRACING WIRE
9. INSULATING PAD: CLOSED CELL POLYETHYLENE PAD, 6" THICK WITH 14" INNER PAD OPENING BY IN-FACT CORPORATION
10. FOR COMPACTION(SEE SPECIFICATION SEC.202)
11. 1" SERVICE VALVE
12. SEAL METER BOX BOTTOM OPENING WITH 1/4" X 1/4" STEEL MESH, 19 GAUGE OR LARGER, GALVANIZED OR 304 STAINLESS STEEL. SEAL PIPE ENTRY THROUGH METER BOX WALL WITH NON-SHRINK CEMENT GROUT, SPRAY FOAM INSULATION OR APPROVED EQUIVALENT.



NOTE:
REFER TO SPECIFICATION 601 WATER SYSTEMS



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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER STANDARDS

10/1/25

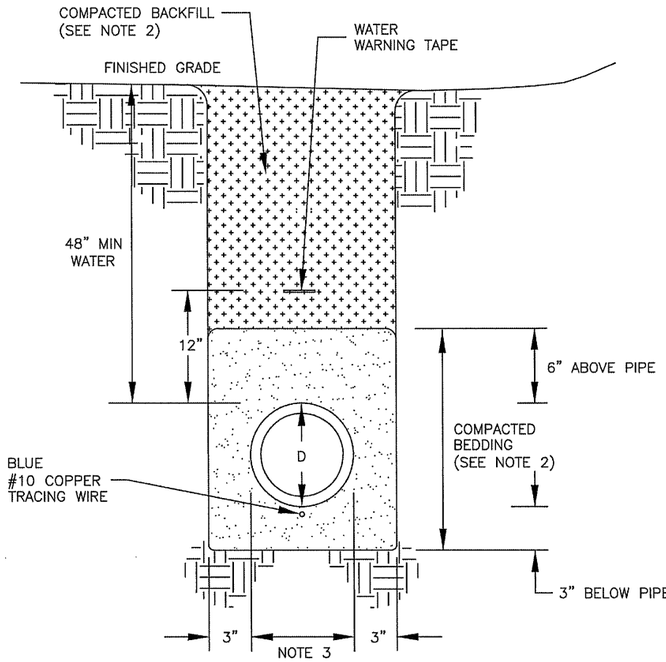
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – WATER

WATER MAIN TRENCH DETAIL

SECTION 6000
6009



NOTES:
1.) D IS THE OUTSIDE PIPE DIAMETER IN INCHES.
2.) SEE COMPACTION SPECIFICATIONS (SECTION 202) FOR ALL REQUIREMENTS.
3.) TRENCH WIDTH SHALL BE DISTANCE FROM OUTSIDE FACE OF OUTER MOST PIPE PLUS 6 INCHES.

REVISION: DATE: No.

APPROVED BY:

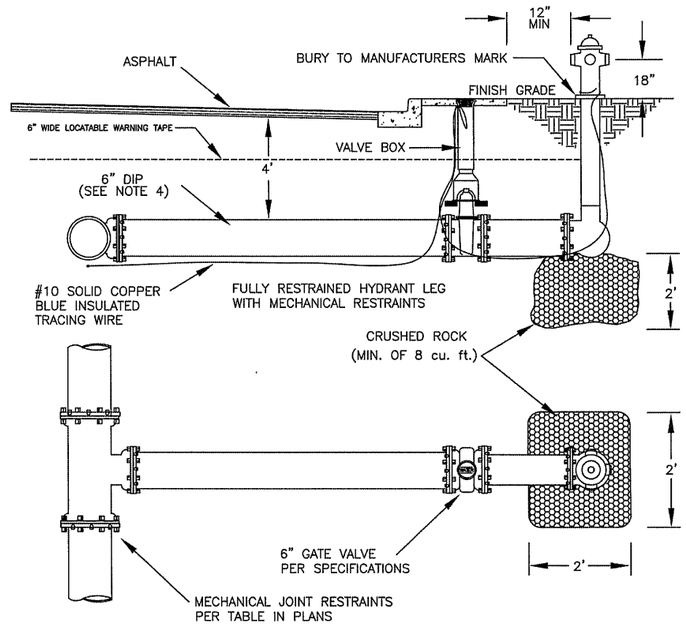
DATE: FEBRUARY 2022

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – WATER

FIRE HYDRANT DETAIL

SECTION 6000
6011



NOTES:
1.) THE CENTER OF THE 4" PUMPER HOSE CONNECTION SHALL BE A MINIMUM OF 18" ABOVE ALL OBSTRUCTIONS, OR AT THE MANUFACTURERS BURY / DEPTH MARK ON BARREL OF THE HYDRANT.
2.) ALL FITTINGS AND JOINTS ON HYDRANT LEG SHALL BE MECHANICALLY RESTRAINED.
3.) FIRE HYDRANT BY MULLER, KENNEDY OR AMERICAN PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARDS SPECIFICATION SECTION 601 WATER SYSTEMS.
4.) HYDRANT LEG PIPE MATERIAL MUST BE DIP.
5.) ALL UNDERGROUND FLANGED FITTING FASTENERS MUST BE STAINLESS STEEL TORQUE RATED. MECHANICAL JOINT FITTING FASTENERS MAY BE TYPICAL CARBON STEEL.

REVISION: DATE: No.

APPROVED BY:

DATE: APRIL 2018

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER STANDARDS

10/7/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

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PROJECT CONTROL NUMBER: #######

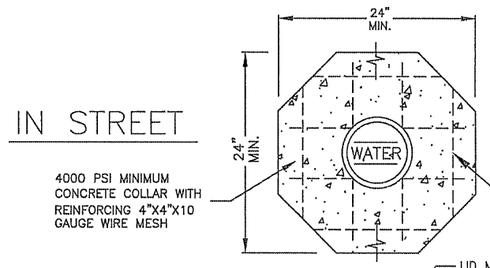
LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

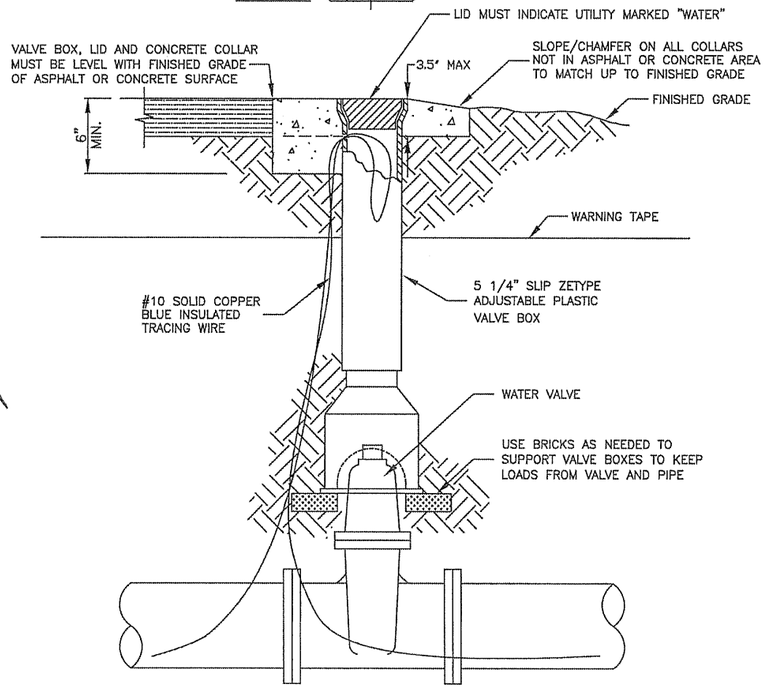
UTILITY CONSTRUCTION STANDARDS – WATER

WATER VALVE BOX

SECTION 6000 6013

NOTE:
INDICATE ON CONCRETE COLLAR THE TYPE OF MATERIAL USED(MDPE, HDPE, STEEL ETC.) THE TYPE OF UTILITY (GAS, WATER, NON-POT ETC.) AND INDICATE THE DIRECTION OF FLOW AND SIZE OF PIPE





DATE: SEPTEMBER 2022 | APPROVED BY: | REVISION: | DATE: | No.

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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – WATER

JOINT RESTRAINT FOR POLYETHYLENE WRAPPED DUCTILE IRON AND C-900 PVC

SECTION 6000 6014

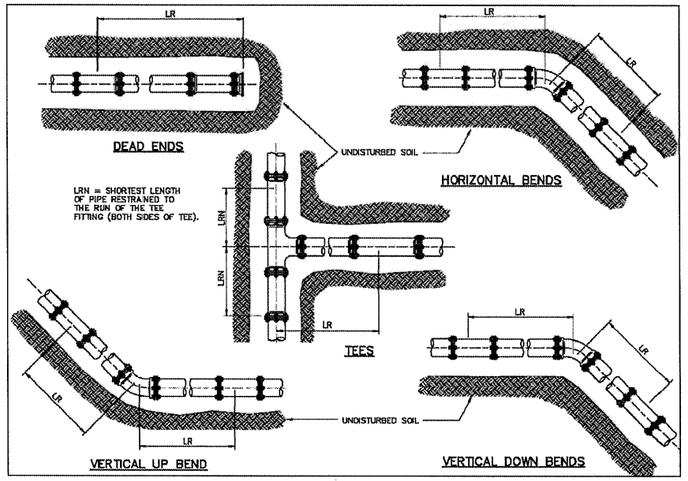
PVC Mechanical Joint Restraint Table

PIPE SIZE	BENDS				TEES			VERTICAL OFFSETS				DEAD ENDS & VALVES
								45		22 1/2		
	11 1/4	22 1/2	45	90	LRN = 5	LRN = 10	LRN = 20	DOWN	UP	DOWN	UP	
4"	2	4	7	18	15	1	1	16	4	8	2	39
6"	2	5	10	25	30	7	1	23	5	11	3	55
8"	3	7	14	33	48	24	1	30	7	15	3	73
10"	4	8	16	39	61	37	1	36	8	17	4	88
12"	5	9	19	46	76	52	5	43	10	21	5	104

Ductile Iron/Poly Wrap Mechanical Joint Restraint Table

PIPE SIZE	BENDS				TEES			VERTICAL OFFSETS				DEAD ENDS & VALVES
								45		22 1/2		
	11 1/4	22 1/2	45	90	LRN= 5	LRN = 10	LRN = 18	DOWN BEND	UP BEND	DOWN BEND	UP BEND	
4"	2	4	9	21	23	1	1	24	4	12	2	59
6"	3	6	12	29	47	10	1	34	6	17	3	83
8"	4	8	16	38	74	37	1	45	8	22	4	109
10"	5	9	19	46	94	57	1	54	10	26	5	131
12"	5	11	22	54	118	80	20	64	12	31	6	155
14"	6	12	25	61	139	101	41	73	14	35	7	177
16"	7	14	29	69	162	124	63	83	15	40	7	200
18"	7	15	32	76	183	145	84	92	17	44	8	222

1. Restrained lengths provided are in feet.
2. Lr - the minimum attached length of solid pipe without joints, fittings, etc. to extend in each direction along the run of the tee.
3. Restrained lengths computed for pipe with 4' of cover from top of pipe.
4. Maximum test pressure of 150 psi.
5. All pipe joints and fittings within the restrained length specified in the table shall be restrained.



DATE: APRIL 2018 | APPROVED BY: | REVISION: | DATE: | No.

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10/7/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER STANDARDS

AUMACK, CASEY
5-Nov-25

Drawing File: L:\PROJECTS\IFB XX-XX TRINITY WATER GAS PROJECT\03_DESIGN\CAD_DWGS\NM 502 UTILITIES_RECOVER_RECOVER.DWG
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DRAWING SCALE: ########

SHEET NO. 11 - 14

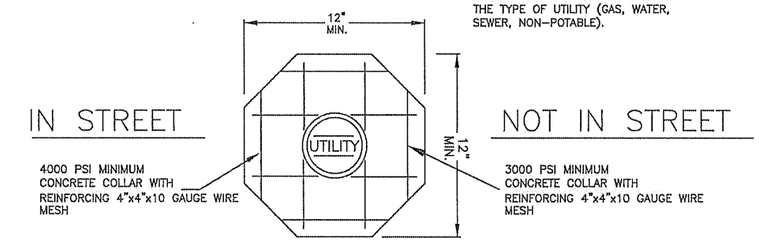
LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

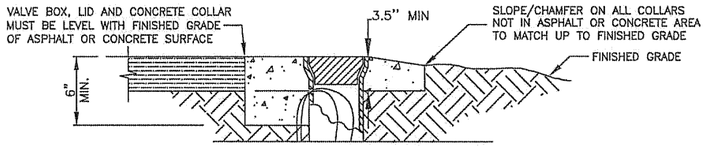
UTILITY CONSTRUCTION STANDARDS – GENERAL

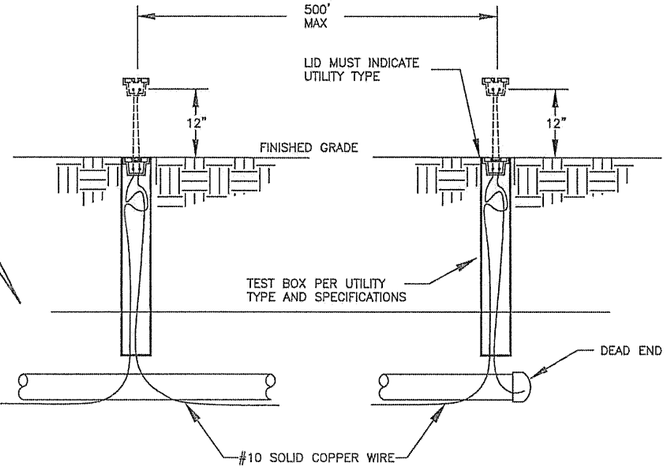
LOCATE WIRE OR CATHODIC PROTECTION TEST BOX

SECTION 2000 2011

NOTE:
INDICATE ON CONCRETE COLLAR THE TYPE OF UTILITY (GAS, WATER, SEWER, NON–POTABLE).







NOTES:
1.) LOCATE WIRE SHALL TERMINATE IN A TEST BOX AT ALL DEAD END PIPELINES.
2.) TEST BOXES SHALL BE LOCATED A MAXIMUM OF EVERY 500 FEET ALONG PIPELINE.
3.) SPLICES SHALL BE MINIMIZED.
4.) LOCATE WIRE SHALL BE ACCESSIBLE AT EACH VALVE BOX, WATER SERVICE CAN, GAS SERVICE RISER, AIR VACUUM VALVE AND FIRE HYDRANT.
5.) TO CORRESPOND WITH DESIGNATED COLOR TO MATCH FACILITY BEING INSTALLED.

REVISION: | No. | DATE: | BY
APPROVED BY:
DATE: SEPTEMBER 2022

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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

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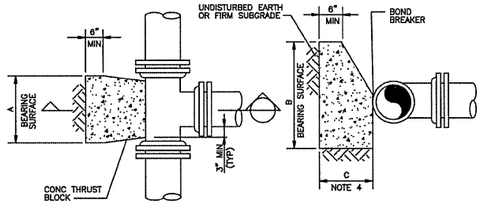
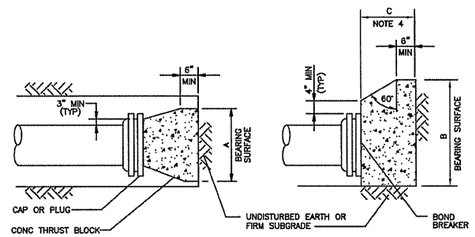
TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER STANDARDS

10/7/25
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER



PLAN SECTION

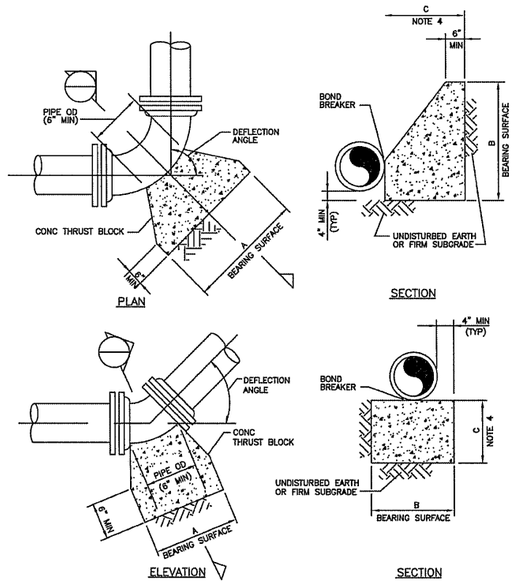


PLAN ELEVATION

NOMINAL PIPE SIZE (IN)	MAXIMUM PIPE OD (IN)	REQUIRED BEARING AREA (SQ FT)
3	3.96	1.4
4	4.80	2.0
6	6.90	4
8	9.05	7
10	11.10	11
12	13.20	15
14	15.30	21
16	17.40	27
18	19.50	34
20	21.60	41
24	25.80	59

NOTES:
1. MAXIMUM TEST PRESURE = 1.50x150 PSI
2. MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
3. BEARING AREA = A x B
4. C SHALL BE GREATER THAN A/2 AND B/2.
5. THIS DETAIL TO BE USED IN SITUATIONS WHERE EXISTING PIPE IS NOT RESTRAINED.
6. CONTRACTOR TO USE AFTER APPROVAL BY THE PROJECT MANAGER.

THRUST BLOCK FOR TEES, CAPS AND PLUGS



PLAN SECTION ELEVATION SECTION

NOMINAL PIPE SIZE (INCHES)	MAXIMUM PIPE OD (INCHES)	REQUIRED BEARING AREA (SQ FT)			
		90 DEG	45 DEG	22.50 DEG	11.25 DEG
3	3.96	2.0	1.1	0.5	0.3
4	4.80	2.9	1.6	0.8	0.4
6	6.90	6	3	1.6	0.8
8	9.05	10	6	3	1.4
10	11.10	15	8	4	2.1
12	13.20	22	12	6	3
14	15.30	29	16	8	4
16	17.40	38	20	10	5
18	19.50	48	26	13	7
20	21.60	58	32	16	8
24	25.80	83	45	23	12

NOTES:
1. MAXIMUM TEST PRESURE = 1.5 x 150 PSI
2. MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
3. BEARING AREA = A x B
4. C SHALL BE GREATER THAN A/2 AND B/2.
5. THIS DETAIL TO BE USED IN SITUATIONS WHERE EXISTING PIPE IS NOT RESTRAINED.
6. CONTRACTOR TO USE AFTER APPROVAL BY THE PROJECT MANAGER.

THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS

UTILITY CONSTRUCTION STANDARDS - WATER

SECTION 6000 6015

CONCRETE BLOCKING

LOS ALAMOS Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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DATE: APRIL 2018 | APPROVED BY: | REVISION: | DATE: | No.

10/7/25

JAMES J. ALARID NEW MEXICO 14691 REGISTERED PROFESSIONAL ENGINEER

TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
WATER STANDARDS

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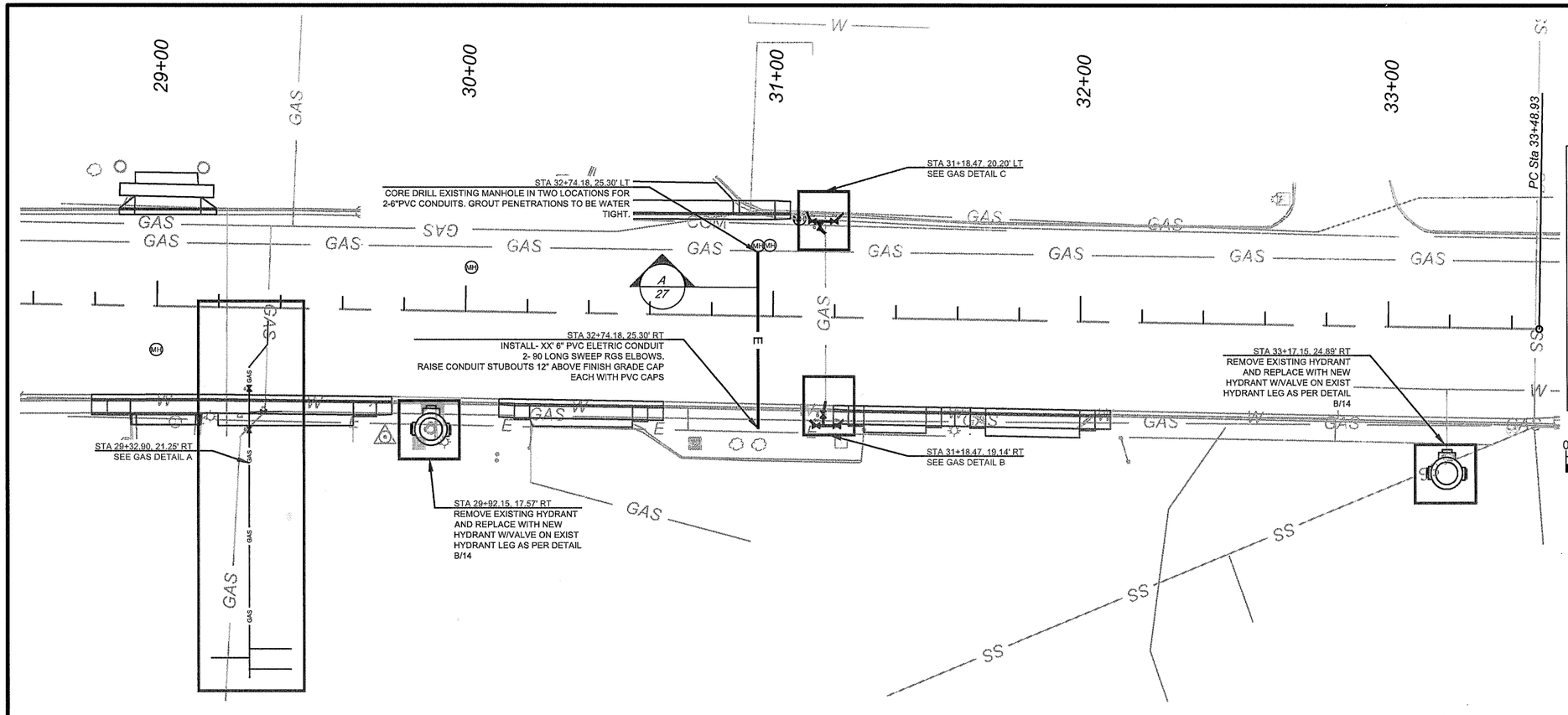
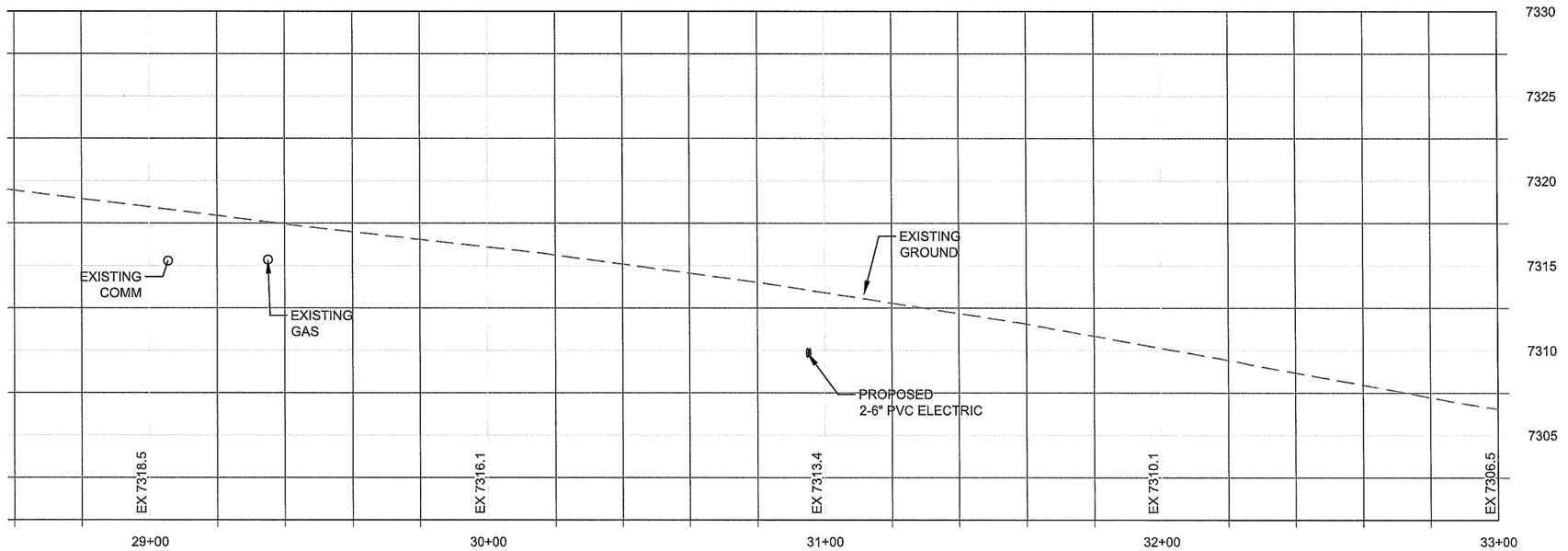
PROJECT CONTROL NUMBER: ########





GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
2. THE EXISTING GAS LINES ARE EXPECTED TO BE INSERTED IN AN EXISTING STEEL PIPE. CONTRACTOR SHALL CUT OUT THE STEEL CASING PIPE AS REQUIRED TO SQUEEZE OFF THE MDPE LINE TO BE ISOLATED. A PAY ITEM IS INCLUDED FOR CUTTING OUT UP TO 4 FEET OF 2" AND 6" STEEL CASING PIPE.
3. ONCE THE EXISTING GAS PIPE IS EXPOSED, A BY-PASS MAY BE REQUIRED TO ISOLATE THE GAS LINE TO AVOID A LARGE AREA SERVICE DISRUPTION. A PAY ITEM IS INCLUDED TO INSTALL A 1" BY-PASS.

10/13/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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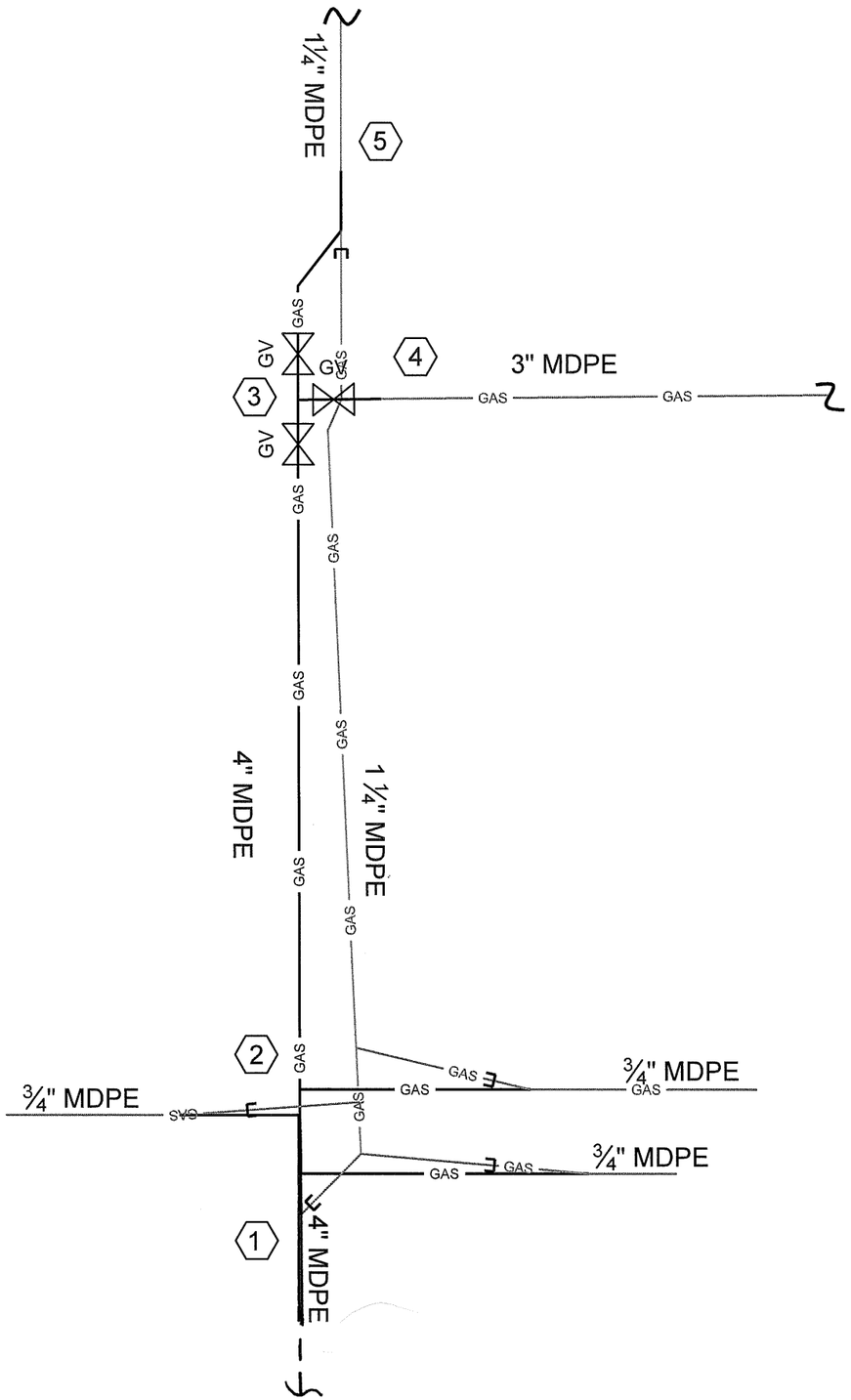
TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
ELECTRIC AND GAS PLANS
STA 29+00 TO STA 32+00

DETAIL A



KEYED NOTES

1. CONNECT NEW 4" MDPE TO EXISTING 4" MDPE WITH 1- 4" ELECTRO FUSION COUPLING
2. TRANSFER THREE ¾" GAS SERVICE TO NEW 4" MDPE. PRESSURE TEST EXISTING LINE UP TO SERVICE RISER. INSTALL EXCESS FLOW VALVES
3. INSTALL-
   - 1- 4" MDPE TEE
   - 2- 4" MDPE VALVES W/ VALVE BOX
   - 1- 4" X 3" REDUCER (EAST)
   - 1- 4" X 2" REDUCER (NORTH)
   - 1- 4" X 1¼" REDUCER (NORTH)
   - 1- 1¼" MDPE VALVES W/ VALVE BOX
4. TIE IN NEW LINE TO EXISTING 3" MDPE LINE.
   INSTALL-
   - 1-3" ELECTROFUSION COUPLING
5. TIE IN NEW LINE TO EXISTING 1¼" MDPE LINE.
   INSTALL-
   - 1-1¼" ELECTROFUSION COUPLING

GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
2. THE EXISTING GAS LINES ARE EXPECTED TO BE INSERTED IN AN EXISTING STEEL PIPE. CONTRACTOR SHALL CUT OUT THE STEEL CASING PIPE AS REQUIRED TO SQUEEZE OFF THE MDPE LINE TO BE ISOLATED. A PAY ITEM IS INCLUDED FOR CUTTING OUT UP TO 4 FEET OF 2" AND 6" STEEL CASING PIPE.
3. ONCE THE EXISTING GAS PIPE IS EXPOSED, A BY-PASS MAY BE REQUIRED TO ISOLATE THE GAS LINE TO AVOID A LARGE AREA SERVICE DISRUPTLION. A PAY ITEM IS INCLUDED TO INSTALL A 1" BY-PASS.

10/7/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
GAS DETAILS

DETAIL B

KEYED NOTES

1. TIE IN NEW LINE TO EXISTING 3" MDPE LINE.
   INSTALL-
   1-3" ELECTROFUSION COUPLING
2. TIE IN NEW LINE TO EXISTING 2" MDPE LINE.
   INSTALL-
   1-2" ELECTROFUSION COUPLING
3. INSTALL-
   1-3" MDPE TEE
   3- 3" MDPE VALVES W/ VALVE BOX
   1- 2" X 3" REDUCER (NORTH)

GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
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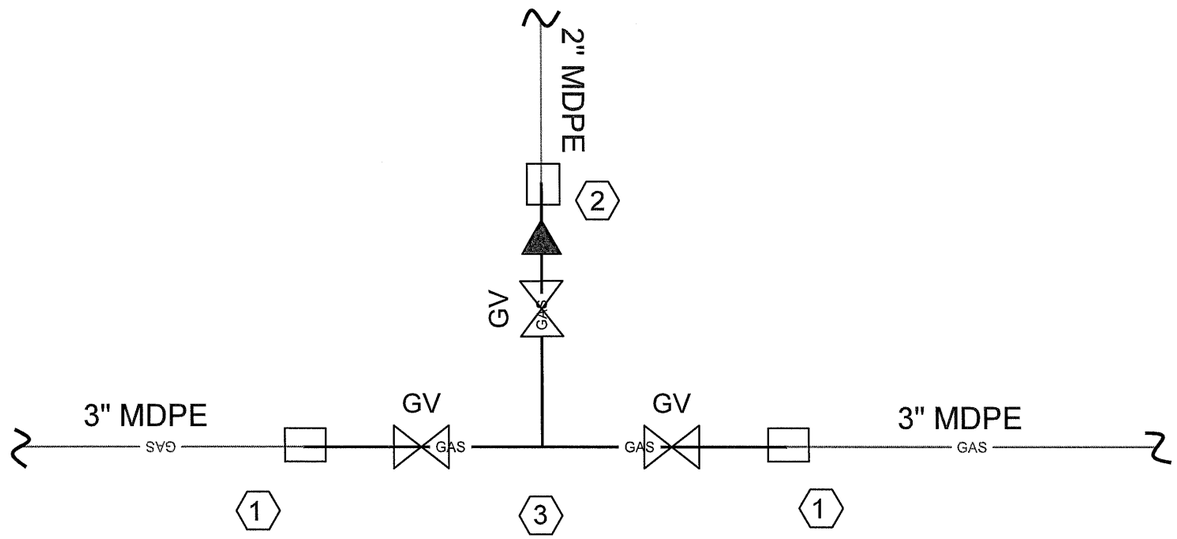
3. ONCE THE EXISTING GAS PIPE IS EXPOSED, A BY-PASS MAY BE REQUIRED TO ISOLATE THE GAS LINE TO AVOID A LARGE AREA SERVICE DISRUPTLION. A PAY ITEM IS INCLUDED TO INSTALL A 1" BY-PASS.



10/1/05

JAMES J. ALARID
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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
GAS DETAILS

DETAIL C

KEYED NOTES

1. TIE IN NEW LINE TO EXISTING 1 ¼" MDPE LINE.
   INSTALL-
   1 ¼" ELECTROFUSION COUPLING
2. TIE IN NEW LINE TO EXISTING 2" MDPE LINE.
   INSTALL-
   1-2" X 1 ¼" REDUCER
   1-2" ELECTROFUSION COUPLING
3. INSTALL-
   1-1 ¼" MDPE TEE
   3- 1 ¼" MDPE VALVES W/ VALVE BOX

GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
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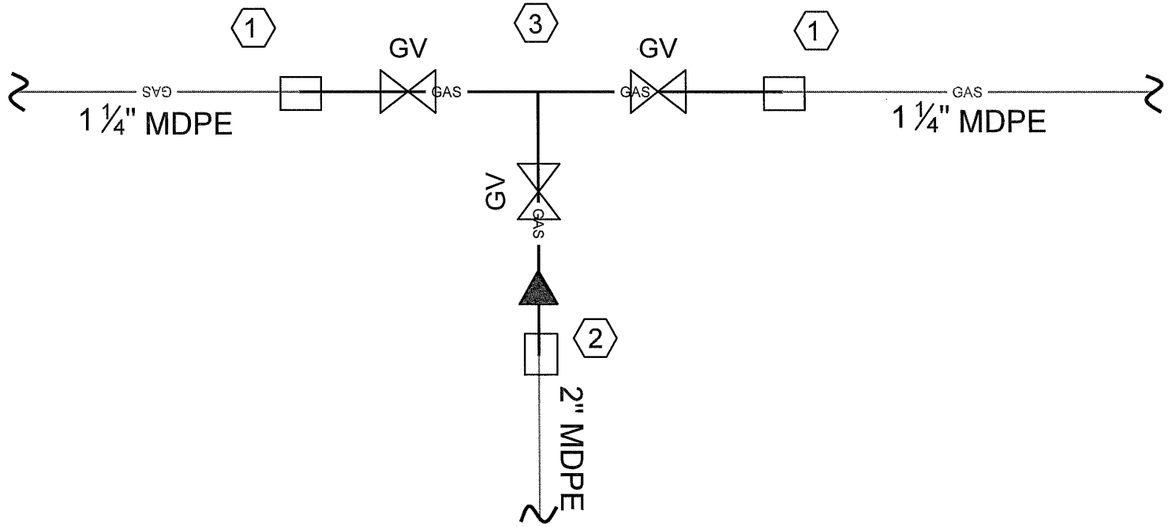
3. ONCE THE EXISTING GAS PIPE IS EXPOSED, A BY-PASS MAY BE REQUIRED TO ISOLATE THE GAS LINE TO AVOID A LARGE AREA SERVICE DISRUPTLION. A PAY ITEM IS INCLUDED TO INSTALL A 1" BY-PASS.



LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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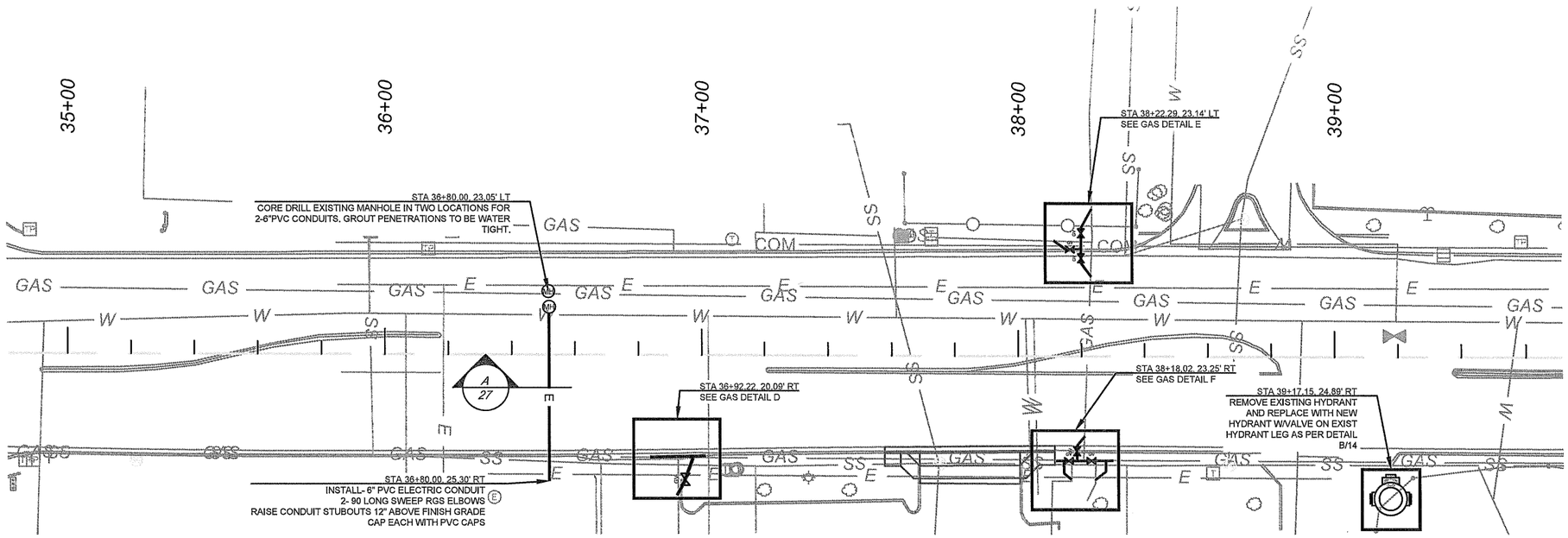
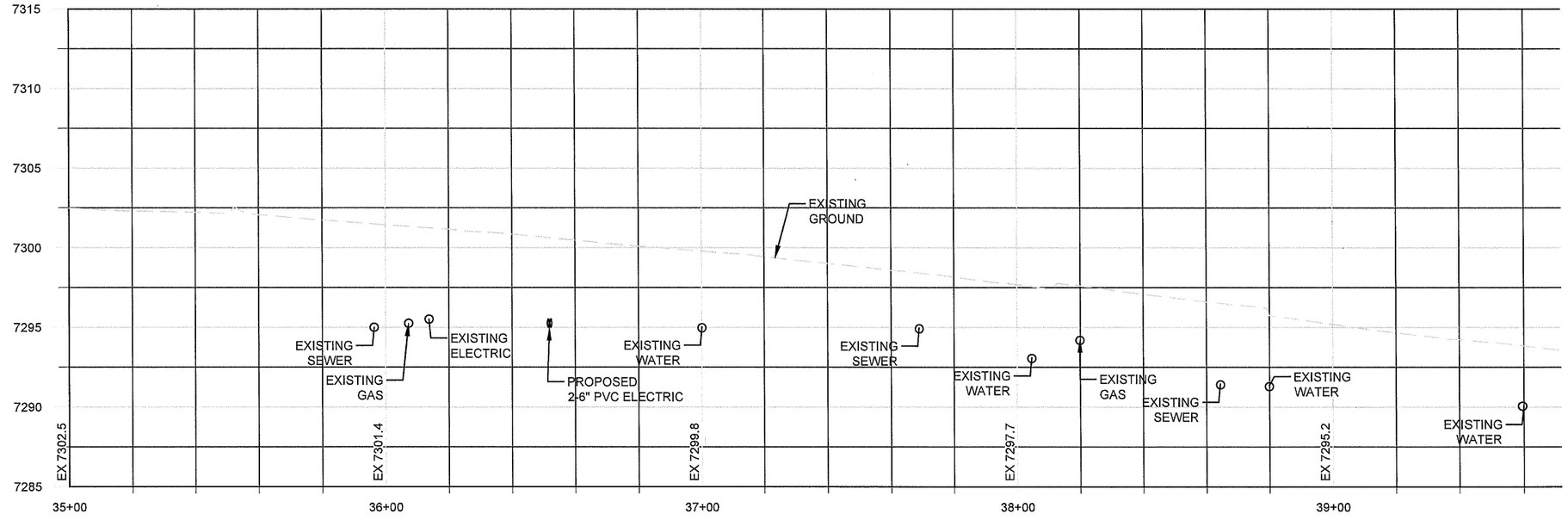
TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
GAS DETAILS

10/1/25
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

PROJECT CONTROL NUMBER: #######





GRAPHIC SCALE

0 40' 80'

SCALE: 1" = 40'
(IN FEET)

LEGEND

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GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
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3. ONCE THE EXISTING GAS PIPE IS EXPOSED, A BY-PASS MAY BE REQUIRED TO ISOLATE THE GAS LINE TO AVOID A LARGE AREA SERVICE DISRUPTION. A PAY ITEM IS INCLUDED TO INSTALL A 1" BY-PASS.

10/7/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
ELECTRIC AND GAS PLANS
STA 36+00 TO STA 39+00

DETAIL D

KEYED NOTES

1. INSTALL- 1- 1¼" MDPE VALVE W/ VALVE BOX
2. INSTALL- 2-1¼" ELECTROFUSION COUPLING

GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
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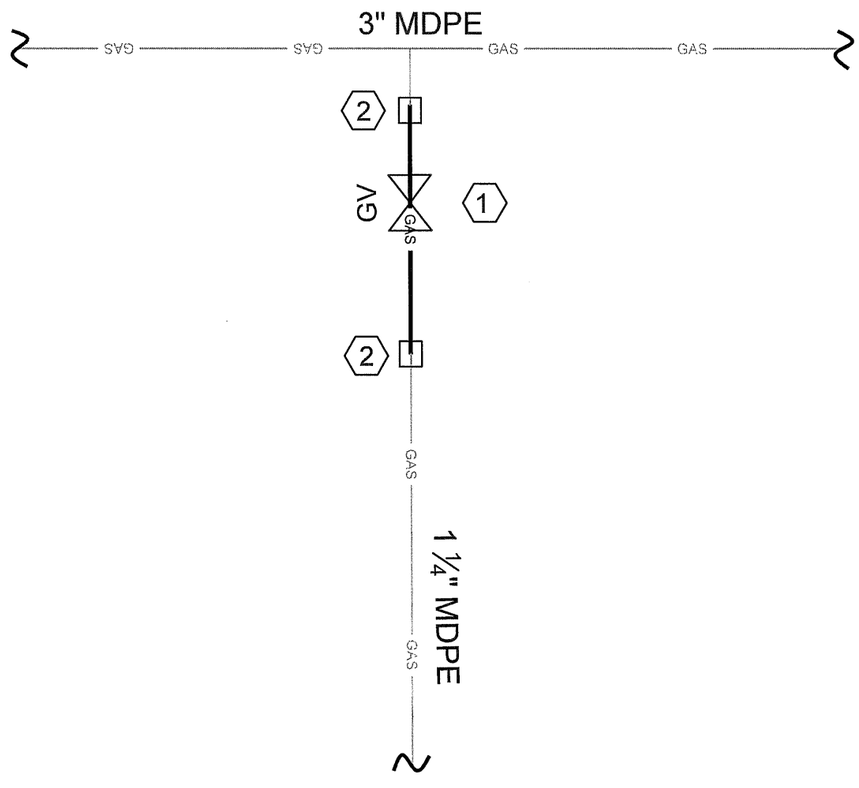

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
GAS DETAILS

10/7/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

DETAIL E

KEYED NOTES

1. TIE IN NEW LINE TO EXISTING 3" MDPE LINE.
   INSTALL-
   1-3" ELECTROFUSION COUPLING
2. TIE IN NEW LINE TO EXISTING 2" MDPE LINE.
   INSTALL-
   1-2" ELECTROFUSION COUPLING
3. INSTALL-
   1-3" MDPE TEE
   3- 3" MDPE VALVES W/ VALVE BOX
   1- 2" X 3" REDUCER (NORTH)

GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
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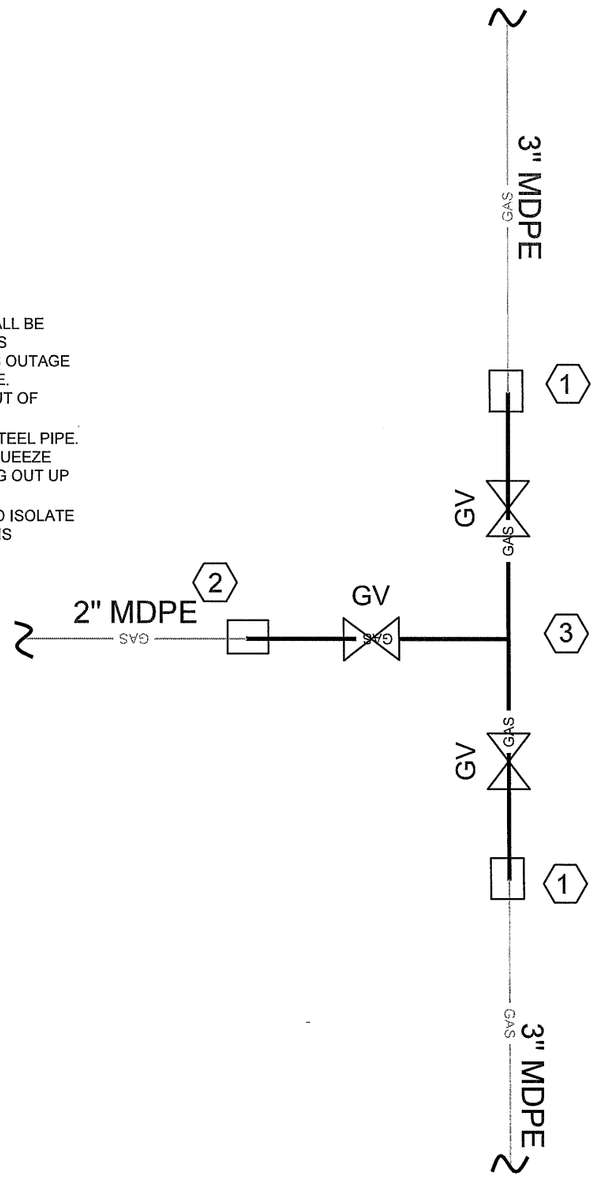

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
GAS DETAILS

10/7/25
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

DETAIL F

KEYED NOTES

1. TIE IN NEW LINE TO EXISTING 3" MDPE LINE.
   INSTALL-
   1-3" ELECTROFUSION COUPLING
2. TRANSFER TWO 1" GAS SERVICE TO NEW 3" MDPE. PRESSURE TEST EXISTING LINE UP TO SERVICE RISE. INSTALL EXCESS FLOW VALVES
3. INSTALL-
   1-3" MDPE TEE
   3- 3" MDPE VALVES W/ VALVE BOX

GAS NOTES

1. ALL SERVICE LINES THAT WILL BE TRANSFERRED TO THE NEW GAS LINE SHALL BE PRESSURE TESTED UP TO THE RISER VALVE FOR 15 MINUTES AT 95 PSI. THIS REQUIRES A SERVICE OUTAGE. CONTRACTOR SHALL COORDINATE THE GAS OUTAGE WITH THE CUSTOMER AND LAC CREWS A MINIMUM OF 48 HOURS IN ADVANCE. COUNTY CREWS WILL RE-LIGHT PILOTS TO CUSTOMERS WHO ARE TAKEN OUT OF SERVICE WHEN THE SERVICE TRANSFER IS COMPLETE.
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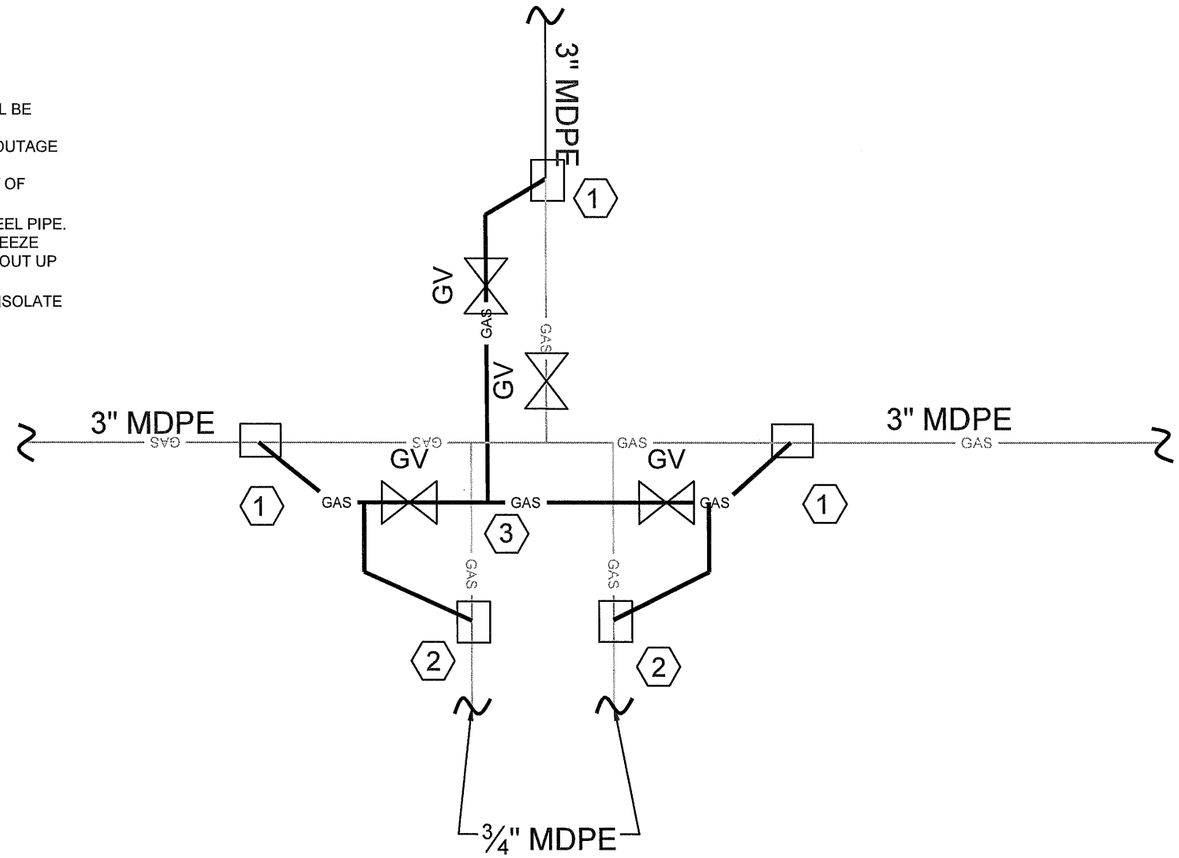

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

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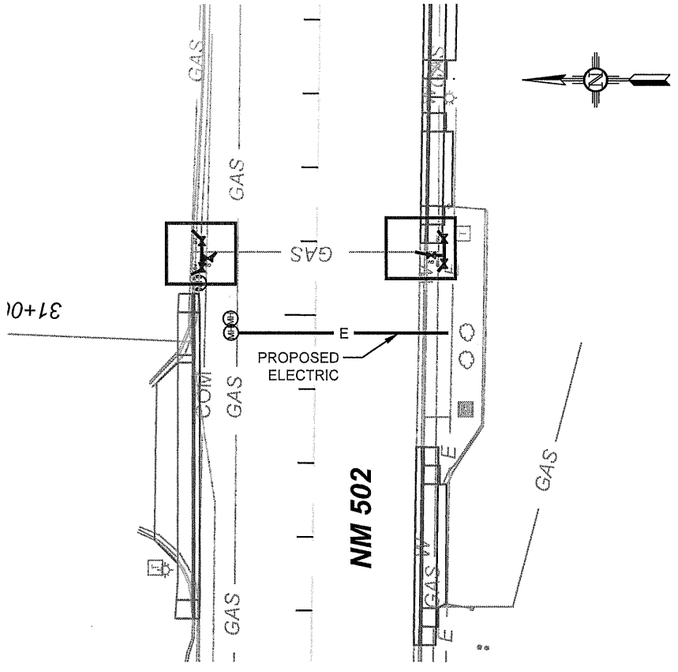
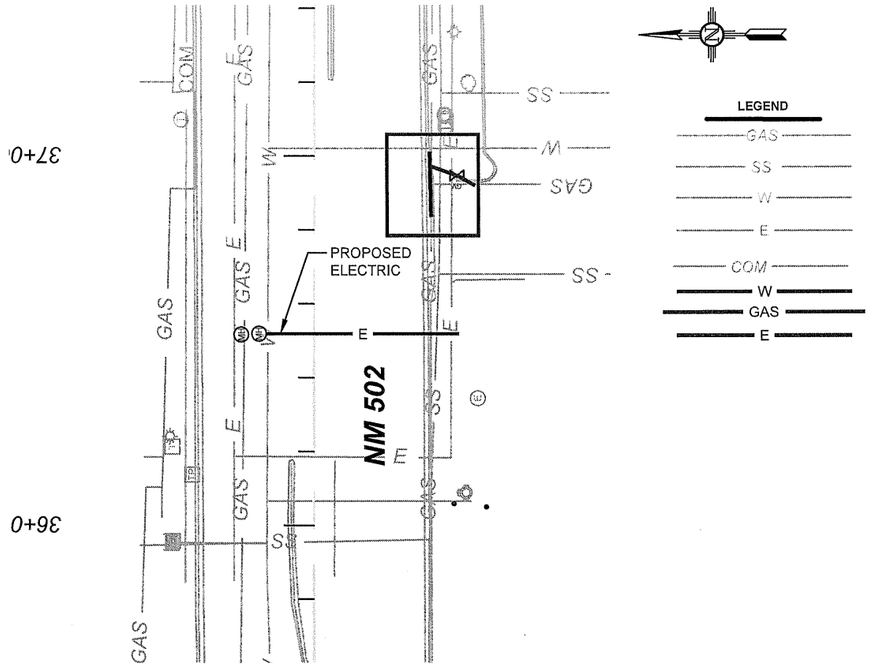
TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
GAS DETAILS

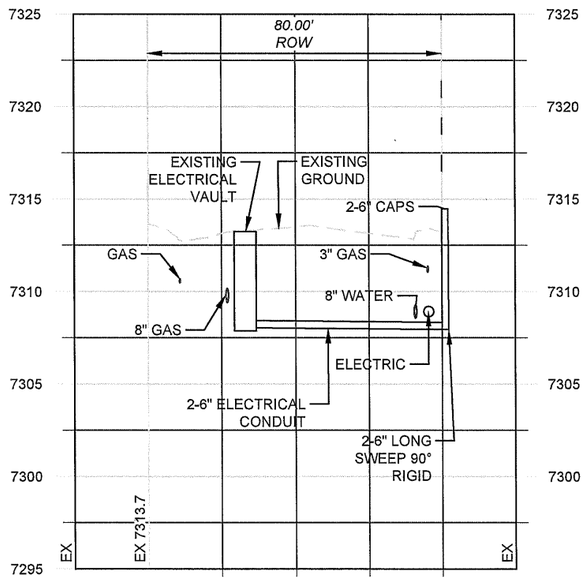
10/7/25

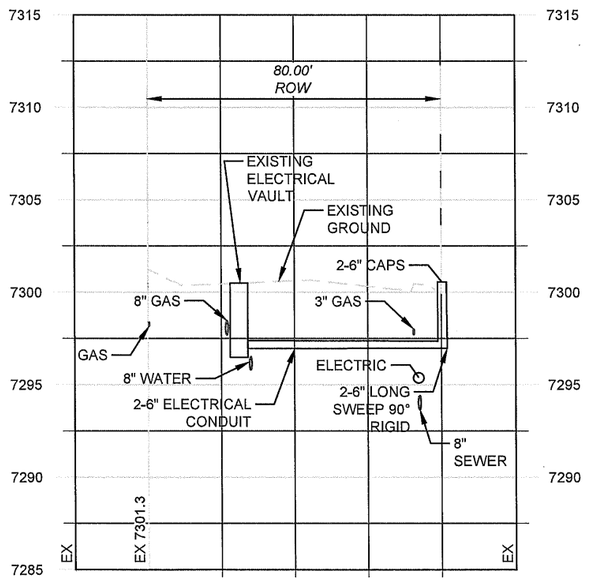
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

PROJECT CONTROL NUMBER: #######









GRAPHIC SCALE

0 40' 80'

SCALE: 1" = 40'
(IN FEET)

10/7/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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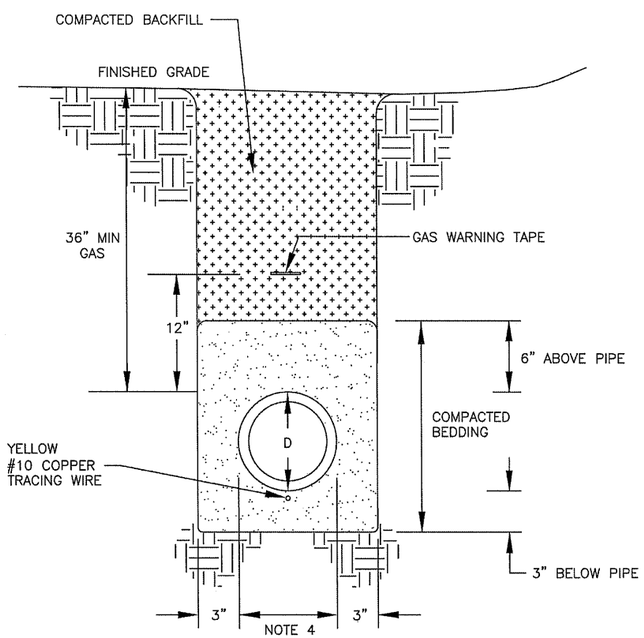
TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
ELECTRIC AND GAS PLANS CROSSINGS

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – GAS

GAS MAIN TRENCH DETAIL

SECTION 3000 3003



NOTES:

1.) D IS THE OUTSIDE PIPE DIAMETER IN INCHES.
2.) 95% COMPACTION REQUIRED UNDER PAVED ROADS, SIDEWALK AND CURB.
3.) 85% COMPACTION REQUIRED AT ALL LOCATIONS NOT IN NOTE 2.
4.) TRENCH WIDTH SHALL BE DISTANCE FROM OUTSIDE FACE OF OUTER MOST PIPE PLUS 6 INCHES.
5.) DEPTH OF MAIN MAY BE LESS THAN 36 INCHES UPON APPROVAL OF DPU PROJECT MANAGER WITH WRITTEN EXCEPTION STATING JUSTIFICATION OF SECTION OF MAIN WHERE 36 INCHES CAN NOT BE OBTAINED MIN. OF 24 INCHES IS REQUIRED.

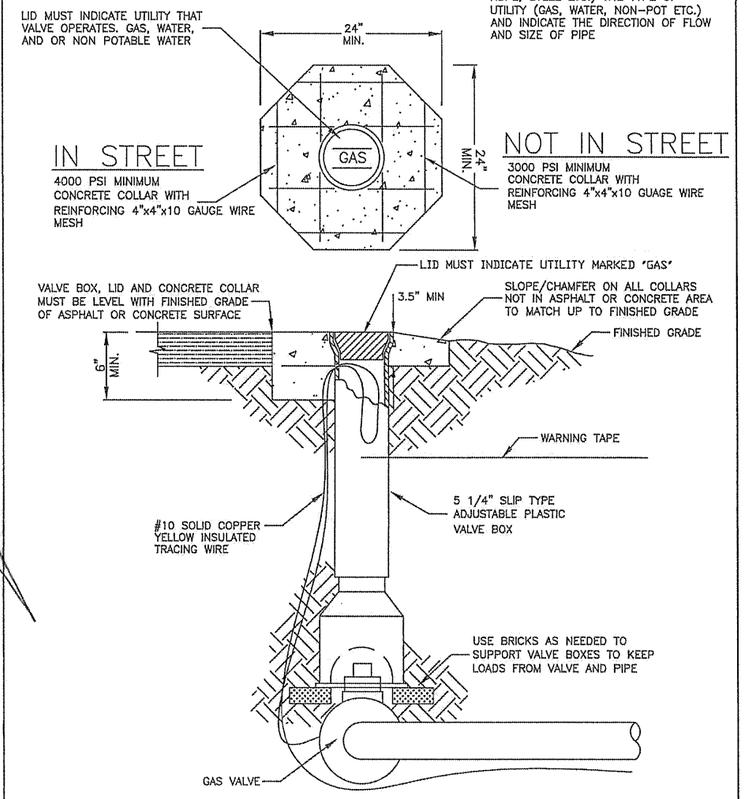
DATE: FEBRUARY 2022 | APPROVED BY: | REVISION: | DATE: | No.

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARD

VALVE BOX

SECTION 3000 3004



DATE: SEPTEMBER 2022 | APPROVED BY: | REVISION: | DATE: | No.

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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
GAS STANDARDS

10/7/25
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

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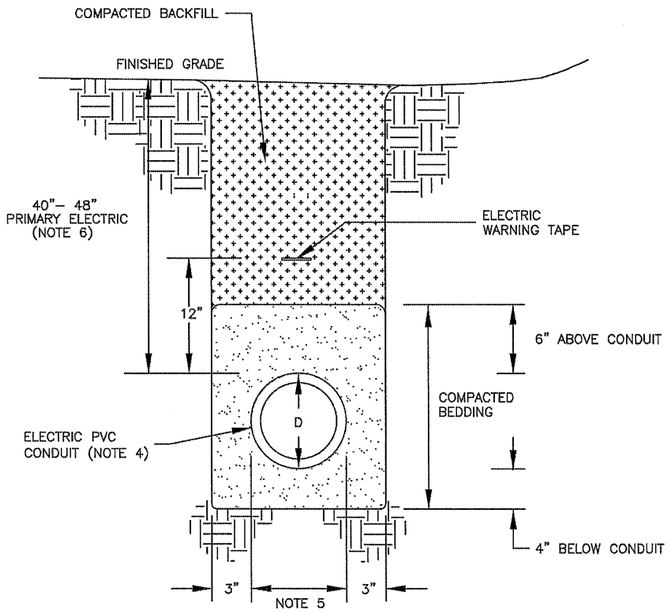
LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – ELECTRIC

ELECTRIC PRIMARY TRENCH DETAIL

SECTION 4000
4026



ELECTRICAL PVC CONDUIT SIZE

	D	CONDUCTOR TYPE
	3"	SINGLE PHASE PRIMARY
*	4" OR 6"	THREE PHASE PRIMARY

* 4" BY LACU PERMISSION ONLY– EX: SHORT RUNS OF 1/0 15KV

NOTES:

1.) 95% COMPACTION REQUIRED UNDER PAVED ROADS, SIDEWALK AND CURB, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION – SPECIFICATION 202.
2.) 85% COMPACTION REQUIRED AT ALL LOCATIONS NOT IN NOTE 1, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION – SPECIFICATION 202.
3.) CONDUIT PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION – SPECIFICATION 401.
4.) NUMBER OF CONDUITS AS SHOWN ON PLANS.
5.) TRENCH WIDTH SHALL BE DISTANCE FROM OUTSIDE FACE OF OUTER MOST CONDUITS PLUS 6 INCHES.
6.) WHEN APPROVED BY LOS ALAMOS COUNTY UTILITY ENGINEERING DEPARTMENT, ELECTRIC PRIMARY DUCTBANK CAN BE INSTALLED WITH A MINIMUM COVER OF 24 INCHES IF THE FOLLOWING REQUIREMENTS ARE MET.
   - A 6 INCH THICK CONCRETE CAP IS PLACED 6 INCHES ABOVE CONDUIT THE ENTIRE TRENCH WIDTH
   - 6 INCH BEDDING MATERIAL BETWEEN CAP AND CONDUIT
   - WARNING TAPE PLACED OVER CONCRETE CAP
   - CONCRETE CAP SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 (PSI)

REVISION: No. DATE:
APPROVED BY:
DATE: FEBRUARY 2022

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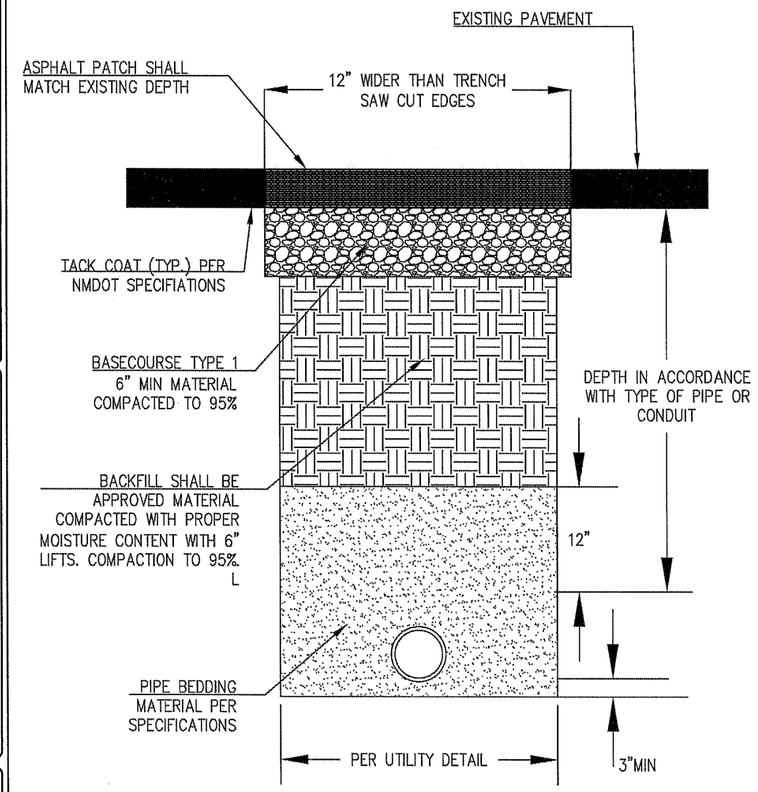
27

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

UTILITY CONSTRUCTION STANDARDS – GENERAL

ASPHALT TRENCH PATCHING

SECTION 2000
2013



NOTE: WORK SHALL COMPLY WITH NMDOT STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION 2019 EDITION

REVISION: No. DATE:
APPROVED BY:
DATE: APRIL 2018

B
27

16/14/25
JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

NO.	DESCRIPTION	DATE	BY
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TRINITY UTILITY RECONSTRUCTION PROJECT UTILITY PLAN
ELECTRIC STANDARDS