

**UNITED STATES OF AMERICA
U.S. DEPARTMENT OF ENERGY
NATIONAL NUCLEAR SECURITY ADMINISTRATION
GRANT OF EASEMENT**

AMENDMENT NO. 4 - TA-50 Waterline Relocation (Waterline Easement No. 9)

The UNITED STATES OF AMERICA, acting by and through the **U.S. DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY ADMINISTRATION (DOE/NNSA)**, hereinafter referred to as “**Grantor**,” entered into the Comprehensive Agreement for the Transfer of the Los Alamos Water Production System with **THE INCORPORATED COUNTY OF LOS ALAMOS**, hereinafter referred to as “**Grantee**,” under Contract No. DE-RE32-98AL79408, effective the June 30, 1998, hereinafter referred to as “**Agreement**”, that is Exhibit A to this document, which is hereby amended as follows:

RECITALS

WHEREAS, pursuant to the Agreement, the GRANTOR agreed to grant, and the GRANTEE agreed to accept easements where a water production device lays across, on, over, or under the GRANTOR’s property; and

WHEREAS, the GRANTOR has the authority to grant the Easements over the GRANTOR’s property relating to the Los Alamos Water Production System (“LAWPS”) to the GRANTEE under the Atomic Energy Act of 1954, Section 161(g), 42 U.S.C. §2201(g) and the County had authority to accept such Grant of Easement under N.M. Const., Art. X §5 and §§ 3-18-1, *et seq.*, 3-27-1, N.M. Stat. Ann. 1978.

NOW, THEREFORE, this Amendment No. 4 to the above referenced Agreement, is to modify Waterline Easement #9 to reflect the new location of the 16” water line that currently passes through TA-50 from the southeast heading northwest. The TA-50 Transmission Water Main Relocation drawing dated December 7, 2022, is attached as Exhibit B to this document. The 16” water transmission line along the Pajarito Right-of-Way (ROW) will be realigned for approximately 2,100 linear feet (0.4 miles) between Pecos Road and Puye Road. The easement will remain at 40 feet in width or 20 feet centerline. The Grantee shall provide the Grantor legal description within 30-days after the relocation is complete. Upon Grantor’s receipt of the legal description, the easement shall be recorded in the County Clerk’s office and shall be deemed to be incorporated herein by reference without the need to further amend the Agreement. The Grantee shall obtain an excavation permit at least 30 days before beginning relocation work.

The Grantee shall be solely responsible for the costs, claims, and damages arising from the release or spill of any toxic or hazardous waste, substance, or materials caused by Grantee, its employees, agents, or contractors during its activities on the Premises or arising from any neglect or fault of the Grantee its employees, agents, or contractors, in

using the Premises, or arising from the failure of the Grantee to comply and conform with all Federal and State Laws.

Except as provided herein, all other terms and conditions of said Comprehensive Agreement DE-RE32-98AL79408, as amended, remain unchanged and in full force and effect.

IN WITNESS WHEREOF, this Grant of Easement Amendment No. 4 shall be effective as of the date of execution by an authorized representative of the **UNITED STATES OF AMERICA**

GRANTEE: THE INCORPORATED COUNTY OF LOS ALAMOS

By: _____ Date: _____
Denise Derkacs
Council Chair

ACKNOWLEDGEMENT:

State of NEW MEXICO
County of LOS ALAMOS

On this _____ day of _____, 20____, before me the undersigned Notary Public, personally appeared _____, The Incorporated County of Los Alamos, known to me to be the person described in the foregoing instrument, who acknowledged that he executed the same in the capacity therein stated and for the purposes therein contained.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

Notary Public

My Commission Expires: _____

GRANTOR: UNITED STATES OF AMERICA

**BY: Department of Energy/National Nuclear Security Administration
(DOE/NNSA)**

By: _____ Date: _____

Monica B. Gastelum
Real Estate Contracting Officer
National Nuclear Security Administration

ACKNOWLEDGEMENT:

State of NEW MEXICO
County of BERNALLILO

On this _____ day of _____, 20____, before me the undersigned Notary Public, personally appeared Monica B. Gastelum, Real Estate Contracting Officer, Department of Energy/National Nuclear Security Administration (DOE/NNSA), known to me to be the person described in the foregoing instrument, who acknowledged that he executed the same in the capacity therein stated and for the purposes therein contained.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

Notary Public

My Commission Expires: _____

KR EXECUTION VERSION

6/29/98

Contract No. DE-RE32-98AL79408

COMPREHENSIVE AGREEMENT

FOR THE TRANSFER OF THE

LOS ALAMOS WATER PRODUCTION

SYSTEM

BY THE UNITED STATES OF AMERICA

ACTING BY AND THROUGH THE

UNITED STATES DEPARTMENT OF

ENERGY

TO THE

INCORPORATED COUNTY OF LOS ALAMOS

LOS ALAMOS COUNTY, NEW MEXICO



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**COMPREHENSIVE AGREEMENT
FOR THE TRANSFER OF THE

LOS ALAMOS WATER PRODUCTION SYSTEM
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LOS ALAMOS COUNTY, NEW MEXICO**

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PROPERTY DESCRIPTION

Real Property	EXHIBIT A-1
LAWPS Easements	EXHIBIT A-2
Water Rights	EXHIBIT A-3
New San Ildefonso Easement	EXHIBIT A-4

DEEDS FOR THE REAL PROPERTY	EXHIBIT B-1
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ASSIGNMENT OF EASEMENTS

Assignment of LAWPS Easements	EXHIBIT B-2
Assignment of New San Ildefonso Easement	EXHIBIT B-3

GRANT OF GOVERNMENT PROPERTY EASEMENTS	EXHIBIT C
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BILL OF SALE

Personal Property	EXHIBIT D-1
San Juan Chama Water	EXHIBIT D-2

RESERVED	EXHIBIT E
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WATER RIGHTS

Lease	EXHIBIT F-1
Deed	EXHIBIT F-2

WATER PRODUCTION SYSTEM LEASE	EXHIBIT G
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GOVERNMENT PROPERTY EASEMENTS DESCRIPTION	EXHIBIT H
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ASSIGNMENTS

San Juan Chama Contract	EXHIBIT I-1
El Vado Lake Contract	EXHIBIT I-2
Abiquiu Reservoir Contract	EXHIBIT I-3

RESERVED	EXHIBIT J
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GOVERNMENT CERTIFICATION OF WELLS

AND BOOSTER STATIONS	EXHIBIT K
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CERTIFICATIONS

Government	EXHIBIT L-1
County	EXHIBIT L-2

WATER SERVICES CONTRACT	EXHIBIT M
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ACCESS AGREEMENT	EXHIBIT N
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COMPREHENSIVE AGREEMENT
FOR THE TRANSFER OF THE
LOS ALAMOS WATER PRODUCTION SYSTEM
BY THE UNITED STATES OF AMERICA ACTING BY AND THROUGH
THE UNITED STATES DEPARTMENT OF ENERGY
TO THE
INCORPORATED COUNTY OF LOS ALAMOS
LOS ALAMOS COUNTY, NEW MEXICO

THIS AGREEMENT, effective when signed by both parties, is entered into by and between the United States of America, acting by and through the United States Department of Energy (hereinafter "DOE" or the "Government"), and the Incorporated County of Los Alamos, New Mexico (hereinafter the "County").

RECITALS

WHEREAS, the Government owns and operates a water production system (hereinafter "Water Production System" or "LAWPS") which provides water to the Los Alamos National Laboratory (hereinafter "LANL") and to the County to meet the needs of residents, businesses and other public and private entities in and around the County of Los Alamos; and

WHEREAS, the LAWPS consists of certain real property, personal property, water wells, pipelines, storage and other facilities; and

WHEREAS, the Government possesses certain easements, rights-of-way, water rights, contract rights to water, water storage agreements, and water in storage; and

WHEREAS, the County owns and operates a water distribution system which distributes water purchased from the Government to residences, businesses, DOE sites in the townsite, and other public and private entities in and around the County of Los Alamos; and

WHEREAS, the Government has determined that it is not in its best interest to continue to be in the business of producing water for sale to the County and for use at LANL; and

WHEREAS, the County is willing to acquire, own, and operate the LAWPS; and

WHEREAS, the Government and the County have determined that it is in their mutual best interest to provide for the conveyance by the Government to the County of the LAWPS and certain associated properties, including, but not limited to water rights and access rights, and for the County to operate LAWPS in order to provide water to DOE for LANL and to the County for its purposes; and

COMPREHENSIVE AGREEMENT LAWPS

WHEREAS, the Government and County desire to set forth in this Agreement all of the commitments and actions which are necessary to be carried out or completed for the purpose of completing the conveyance of the LAWPS by the Government to the County; and

WHEREAS, the Government has authority to convey the LAWPS to the County under the Atomic Energy Community Act of 1955, 42 U.S.C. §§ 2301 *et seq.* (Public Law 84-221, as amended) and the Atomic Energy Act of 1954, Section 161(g), 42 U.S.C. §2201(g) and the County has authority to accept such conveyance and to operate the system pursuant to N.M. Const., Art. X §5 and §§ 3-27-1, *et seq.* N.M. Stat. Ann. 1978.

AGREEMENTS:

NOW, THEREFORE, in consideration of the foregoing premises and the respective representations, warranties, agreements, covenants and conditions herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Government and the County agree as follows:

1. DEFINITIONS:

When used herein, the following terms shall have the respective meanings set forth opposite each such term:

a. **Agreement.** This Comprehensive Agreement, including the Exhibits attached hereto which are incorporated herein by reference and made a part of this Agreement.

b. **Claims.** Any and all losses, costs, liabilities, judgments, claims, proceedings, demands, actions, fines, penalties, expenses (including reasonable attorneys' fees), damages, or other fees.

c. **Closing.** The transaction during which portions of the Property conveyance documents, along with other documents, are executed and delivered by the Government and the County, and the Government conveys the Property to the County. The Closing includes the Initial Closing and Final Closing, as defined herein.

d. **Closing Documents.** Those documents required to be delivered by the Parties pursuant to Section 10.

COMPREHENSIVE AGREEMENT LAWPS

1 e. Deed. A recordable quitclaim deed in the form of Exhibit B-1 conveying to the
2 County all rights and title held by the Government in and to the Property, free from
3 encumbrances, covenants, conditions, restrictions, limitations on use or notices subject only to the
4 Permitted Title Exceptions, and including indemnities for the benefit of the County contained
5 therein.

6
7 f. LAWPS Easements. All related rights-of-way, easements, and permits for the use
8 of land not under the control of the Government which are generally described by the LAWPS
9 maps in Exhibit A-1 and will be described and listed in a manner jointly approved by the parties,
10 before the Initial Closing in Exhibit A-2 and recorded in the form of Exhibit B-2.

11
12 g. El Vado Lake and Abiquiu Reservoir Contracts. Contract No. DE-GM32-
13 98AL94773 between DOE and the Middle Rio Grande Conservancy District, for storage of water
14 at El Vado Lake and DOE's rights to store water in Abiquiu Reservoir through a letter agreement
15 dated April 3, 1998 between DOE and the City of Albuquerque.

16
17 h. Environmental Survey. The investigative report entitled Environmental Survey
18 ("ES") for the Property prepared by DOE and any supplements or amendments thereto.

19
20 i. Personal Property. All related Personal Property, including but not limited to the
21 SCADA, defined below, as listed on the Bill of Sale conveying the Personal Property to the
22 County, without warranty express or implied, in an as-is condition, except as otherwise provided
23 in this Agreement, substantially in the form of Exhibit D-1;

24
25 j. Property. All Main Property described in Exhibit A-1; Personal Property described
26 in Exhibit D-1; LAWPS Easements described in Exhibit A-2; New San Ildefonso Easement
27 described in Exhibit A-4; Government Property Easements described in Exhibit H; San Juan-
28 Chama Water described in Exhibit D-2; San Juan-Chama Contract and El Vado Lake and Abiquiu
29 Reservoir Contracts, defined herein; and Water Rights described in Exhibit A-3.

30
31 k. Main Property. That real property located in Los Alamos County, New Mexico,
32 and more particularly described by the LAWPS maps in Exhibit A-1, together with all buildings,
33 appurtenances, and improvements thereon or therein (including all replacements or additions
34 thereto between the date of this Agreement and the date of conveyance of the Property to the
35 County); all roads; all privileges, rights (including, but not limited to mineral rights), easements,
36 hereditaments, and appurtenances thereto belonging; all right, title and interest of the Government
37 in and to all streets, alleys, passages and other rights-of-way included therein or adjacent thereto
38 (before or after vacation). The Government and the County shall, in a manner jointly approved

COMPREHENSIVE AGREEMENT LAWPS

1 by the parties, before the Initial Closing include a description of the property by metes and bounds
2 in Exhibit A-1

3
4 1. San Juan-Chama Contract. Contract No. 7-07-51-X0833, and Amendments,
5 between DOE and the Bureau of Reclamation for 1200 acre feet of San Juan-Chama Project water
6 annually.

7
8 m. San Juan-Chama Water. Approximately, eleven-thousand (11,000) acre-feet of San
9 Juan-Chama Project water which is currently stored in El Vado Lake and Abiquiu Reservoir.

10
11 n. SCADA. The Supervisory Control and Data Acquisition portion of the Supervisory
12 Control and Data Acquisition/Equipment Surveillance System ("SCADA/ESS") which is
13 necessary to operate LAWPS.

14
15 o. Title Insurer. Title insurance company as designated by the County.

16
17 p. Title Policy. An owner's title insurance policy and endorsements thereto, pursuant
18 to and in accordance with the Title Commitment, subject only to the Permitted Title Exceptions,
19 insuring the County's interest in the Main Property, which shall be as fee simple owner to the
20 Property conveyed to the County by the Deeds.

21
22 q. Water Rights. The right to draw water described in Exhibit A-3 to this Agreement,
23 which is incorporated herein by reference, in the amount of 5,541.3 acre feet of water per year
24 ("Water Rights").

25
26 2. **AGREEMENT TO PURCHASE.** In accordance with 42 U.S.C. Section §§ 2301
27 *et seq.* (Public Law 84-221, as amended) and the Atomic Energy Act of 1954, Section 161(g),
28 42 U.S.C. §2201(g), this Agreement represents a contract whereby the Government agrees to
29 convey to the County, and the County agrees to acquire the Property as described in Exhibit A-1,
30 Exhibit A-2, Exhibit A-3, Exhibit A-4, Exhibit D-1, Exhibit D-2, Exhibit H, Exhibit I-1, Exhibit
31 I-2, and Exhibit I-3 through a no cost conveyance. The Property will be conveyed to the County
32 at two (2) Closings pursuant to the terms and schedule set forth in Section 10.

34 3. **LAWPS EASEMENTS.**

35
36 a. **LAWPS Easements.** The Government shall assign and convey all LAWPS
37 Easements at no cost to the County through an Assignment of Easements, in substantially the form
38 set forth in Exhibit B-2 at the Final Closing. If the Government has rights-of-way, easements,
39 or permits to property which cannot be assigned or conveyed to the County for any reason, the

COMPREHENSIVE AGREEMENT LAWPS

1 Government shall acquire the related rights-of-way, easements, and permits in the County's name
2 before the Final Closing.

3
4 b. The term of Assignment of LAWPS Easements shall be in perpetuity. The
5 Assignment of LAWPS Easements shall provide that the LAWPS Easements will be extinguished
6 when the LAWPS Easements cease to be used for purposes associated with the production,
7 transmission, transportation, storage or distribution of water.

8
9 c. The Government, at no cost to the County, shall acquire an easement for a period
10 of at least twenty (20) years along New Mexico State Road 4 across San Ildefonso tribal property
11 for use by the County to operate the LAWPS as described in Exhibit A-4 either: 1) in the
12 County's name; or 2) in the Government's name with the unrestricted right to assign the easement
13 to the County (hereinafter the "New San Ildefonso Easement"). The Government shall acquire the
14 New San Ildefonso Easement prior to the expiration of the current San Ildefonso easement on
15 December 31, 1999 (hereinafter the "Existing San Ildefonso Easement") for use by the County
16 to operate the LAWPS.

17
18 4. **FUTURE NEPA REVIEW.** DOE shall, at no cost to the County, undertake and
19 complete the appropriate National Environmental Policy Act of 1969, 42 U.S.C. §4321, et seq.
20 (1997) ("NEPA") documentation within two (2) years after the Final Closing to determine whether
21 DOE may lease property, grant access, convey rights-of-way and easements, and grant permits
22 and environmental approvals, for the County to construct a new operating water well and
23 transmission line(s) for the LAWPS to pump and transmit water from the most cost effective
24 source(s) available, as determined by the County (including, but not limited to, Government
25 property) ("New Well") to ensure continuous, long-term, water service to the County and Los
26 Alamos National Lab ("LANL"). If the NEPA decision document supports the transfer of the
27 property for the New Well, within one year after the completion of the NEPA documents, the
28 Government shall, at no cost to the County, lease the property, grant access, and convey the rights
29 of way and easements, and grant the permits and environmental approvals to the County for the
30 New Well.

31
32 5. **GOVERNMENT PROPERTY EASEMENTS.** The Government shall grant to
33 the County, at the Final Closing, easements over the Government's property, substantially in the
34 form set forth in Exhibit C, where a water production device lays across, on, over, or under the
35 Government's property, as mutually agreed upon by the Parties at least sixty (60) days before the
36 Final Closing, which will be described in Exhibit H.

37
38 6. **SAN JUAN-CHAMA, EL VADO LAKE AND ABIQUIU RESERVOIR**
39 **CONTRACTS.** The County shall assign to the Government, the San Juan-Chama, El Vado Lake

COMPREHENSIVE AGREEMENT LAWPS

1 and Abiquiu Reservoir Contracts if the County does not acquire the LAWPS pursuant to Section
2 10(c), below, if permitted.

3
4 7. **WATER RIGHTS CONVEYANCE.** The Government shall convey to the County
5 at Final Closing seventy percent (70%) of each of the water rights described in Exhibit A-3, which
6 constitutes a combined total of 3,878.91 acre feet of water per annum and which may be diverted
7 from any or all of the authorized points of diversion for the Water Rights, without cost,
8 substantially in accordance with the form, terms, and conditions set forth in Exhibit F-2.
9

10 8. **WATER RIGHTS LEASE.** The Government shall lease to the County at Final
11 Closing thirty percent (30%) of each of the water rights described in Exhibit A-3, which
12 constitutes a combined total of 1,662.39 acre feet per annum and which may be diverted from any
13 or all of the authorized points of diversion for the Water Rights, without cost, substantially in
14 accordance with the form, terms, and conditions set forth in a separate water rights lease, set forth
15 in Exhibit F-1 ("Water Rights Lease");
16

17 a. The initial term of the Water Rights Lease shall be ten years commencing on the
18 date of the Final Closing, with the County having options to renew the lease for four additional
19 ten-year terms;
20

21 b. The Water Rights Lease shall give the County full use of the water rights including
22 the right to change points of diversion and to obtain supplemental points of diversion; provided,
23 however, that the County shall have no power to sublease the water rights without the prior
24 approval of the Government, which approval shall not be unreasonably withheld;
25

26 c. In using the leased water rights, the County shall comply with all governmental
27 laws and regulations relating to such use, including all State Engineer rules, regulations and permit
28 conditions; and
29

30 d. If, during the term of the Water Rights Lease, including any renewal term, the
31 amount of water rights leased to the County, or the County's ability to use these water rights, is
32 reduced for any reason, so that the County, after such reduction, does not have control of
33 sufficient, useable water rights to meet the water supply needs of all its customers ("water rights
34 deficit"), the County shall be entitled, notwithstanding any other agreement between the
35 Government and the County, to reduce water service to the Government for use at LANL in an
36 amount equal to such water rights deficit.
37
38

COMPREHENSIVE AGREEMENT LAWPS

9. WATER SERVICES CONTRACT.

a. At the Initial Closing, the County and the Government shall execute a Water Service Contract.

b. The County shall provide water service to water users supplied by the County through the LAWPS to the extent reasonably practicable. This responsibility encompasses maintenance, renewal, and expansions resulting from normal growth and demand, as provided in the parties' Water Service Contract.

c. The County shall supply drinking water in compliance with applicable Federal, State and local laws and regulations governing safe drinking water.

10. **CLOSING SCHEDULE.** The Parties agree to abide by a schedule for conveyance of the Property as set forth in this Section; should an action described in this Section not take place by the date or time frame identified in the appropriate subsection, all subsequent dates or time frames for all subsequent actions, with the joint agreement of the Parties, in writing, shall be deferred on a day for day basis.

a. Initial Closing.

i. Time and Place. The Parties will use their best efforts to consummate the Initial Closing within fifteen (15) days after the Government delivers to the County:

1) the complete Property description, including valid and current abstract of title or title search, from inception of title, covering each interest in real property to be conveyed hereunder, in a manner and format which the County can utilize to acquire title insurance; and

2) the final, complete Environmental Survey report detailing the environmental contamination, if any, on the Property as required under the authority of regulations promulgated under Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund"), 42 U.S.C. Section 9620(h), in a manner prescribed by DOE guidance.

The Government shall deliver the documents described above to the County no later than the 17th day of August, 1998, or such other mutually agreeable date. The Initial Closing shall be consummated at the offices of the County, or such other place as the parties may mutually agree.

COMPREHENSIVE AGREEMENT LAWPS

1 ii. Government Deliveries. The Government shall deliver to the Initial Closing
2 the following documents reasonably satisfactory to the County and in a form previously
3 reviewed and approved by the County:
4

5 A. Executed Water Production System Lease in substantially the form set forth
6 in Exhibit G.
7

8 B. Executed Bill of Sale for the San Juan-Chama Water in substantially the
9 form set forth in Exhibit D-2.
10

11 C. Executed contracts assigning the El Vado Lake and Abiquiu Reservoir
12 Contracts to the County in substantially the form set forth in Exhibit I-2 and Exhibit I-3,
13 respectively.
14

15 D. The Environmental and Cultural Map, as defined in Section 23.
16

17 E. All required governmental approvals, if any, for the storage of water in
18 Abiquiu Reservoir.
19

20 F. Written Government Certification that all wells and booster stations in the
21 LAWPS are in production and good working order, except for those specifically stated.
22 in substantially the form set forth in Exhibit K.
23

24 G. Executed contract assigning the San Juan-Chama Contract to the County in
25 substantially the form set forth in Exhibit I-1.
26

27 H. Executed Water Services Contract.
28

29 I. Executed Access Agreement in substantially the form set forth in Exhibit
30 N.
31

32 J. Government Payment in the sum of two million five hundred thousand
33 dollars (\$2,500,000.00), as defined in Section 15.
34

35 K. Copies of all existing construction drawings, reports, and documents
36 concerning as-built conditions of the facilities as well as identification of and access to the
37 location of the repository for all environmental reports, studies, tests and records relating
38 to operation, maintenance or other matters associated with the LAWPS.
39

COMPREHENSIVE AGREEMENT LAWPS

1 L. Certification that all representations of the Government in the Agreement,
2 to the best of the DOE's knowledge and belief, are true and correct as of the date of the
3 Initial Closing, in substantially the form set forth in Exhibit L-1.

4
5 M. Such additional documents as might be required by New Mexico law, the
6 Title Insurer, or the County.

7
8 iii. County Deliveries. The County shall deliver to the Initial Closing the documents
9 reasonably satisfactory to the Government and in a form previously reviewed and approved by the
10 Government:

11
12 A. Executed Water Production System Lease in substantially the form set forth
13 in Exhibit G.

14
15 B. Executed contracts assigning the El Vado Lake and Abiquiu Reservoir
16 Contracts to the County in substantially the form set forth in Exhibit I-2 and Exhibit I-3,
17 respectively.

18
19 C. Executed Bill of Sale for the San Juan-Chama Water in substantially the
20 form set forth in Exhibit D-2.

21
22 D. Executed Water Services Contract.

23
24 E. Executed Access Agreement in substantially the form set forth in Exhibit
25 N.

26
27 F. Executed contract assigning the San Juan-Chama Contract to the County in
28 substantially the form set forth in Exhibit I-1.

29
30 G. Certification that all representations of the County in the Agreement, to the
31 best of the County's knowledge and belief, are true and correct as of the date of the Initial
32 Closing, in substantially the form set forth in Exhibit L-2.

33
34 H. Such additional documents as might be required by New Mexico law, the
35 Title Insurer, or the Government.

36
37 b. Notification to Proceed with Final Closing. If the Final Closing has not taken place,
38 within two (2) years after execution of the Initial Closing, the County in writing shall, at the
39 County's option, either: 1) notify the Government of its intention to proceed with the Final

COMPREHENSIVE AGREEMENT LAWPS

1 Closing for the Property, as hereinafter defined, or 2) notify the Government that it is rejecting
2 the Property; the County may withdraw from the Agreement without any penalty. If the
3 Government has not assigned or committed to assign to the County the New San Ildefonso
4 Easement, as defined above, and the Government has not committed to deliver executed deed(s)
5 for the Property with the Indemnification provision, as defined in Section 22, in a manner suitable
6 to the County, within such two (2) year period, the time by which the County must decide whether
7 or not to proceed with the acquisition of the Property shall be extended until sixty (60) days after
8 the Government assigns or commits to assign to the County a New San Ildefonso Easement and
9 the Government commits to deliver executed deed(s) for the Property with the Indemnification
10 provision, as defined in Section 22, in a manner suitable to the County. If the County rejects the
11 Property and withdraws from the Agreement, the County shall operate the LAWPS pursuant to
12 the Water Production System Lease until three (3) years after the Initial Closing, at that time the
13 County shall vacate the Property and return the Property rights and ownership to the Government
14 and the Access Agreement and Water Services Contract shall become null and void.

15
16 c. Final Closing.

17
18 i. Time and Place. The Parties will use their best efforts to consummate the Final
19 Closing no later than sixty (60) days after either: 1) the Government has assigned or committed
20 to assign to the County, in accordance with Section 3(c), the New San Ildefonso Easement,
21 defined above, and commits to convey deed(s) for the Property with the Indemnification
22 provision, as defined in Section 22, in a manner suitable to the County; or 2) the County provides
23 notice to the Government that it is willing to consummate the Final Closing, provided that such
24 notice must be provided by the County no later than sixty (60) days prior to the expiration of the
25 Water Production Lease, or such other mutually agreeable date. The Closing shall be
26 consummated at the offices of the County, or such other place as the Parties may mutually agree.

27
28 ii. Government Deliveries. The Government shall deliver to the Final Closing the
29 following documents reasonably satisfactory to the County and in a form previously reviewed and
30 approved by the County:

31
32 A. Executed Deed(s) conveying fee ownership to the County to the Main
33 Property in substantially the form set forth in Exhibit B-1;

34
35 B. Executed Deed conveying fee ownership to the County of seventy (70)
36 percent of the Water Rights, as defined in Section 7 and set forth in Exhibit F-2;

37
38 C. Executed Bill of Sale for Personal Property Conveyed to the County in
39 substantially the form set forth in Exhibit D-1;

COMPREHENSIVE AGREEMENT LAWPS

1 D. Executed Assignment of LAWPS Easements and Assignment of New San
2 Ildefonso Easement in a manner jointly approved by the Parties before the Final Closing,
3 which will be attached as Exhibit B-2 and Exhibit B-3.
4

5 E. Executed Grant of Government Property Easements to the County in
6 substantially the form set forth in Exhibit C;
7

8 F. Executed Water Rights Lease in substantially the form set forth in Exhibit
9 F-1.
10

11 G. Certification that all representations of the Government in the Agreement,
12 to the best of the Government's knowledge and belief, are true and correct as of the date
13 of Final Closing, in substantially the form set forth in Exhibit L-1.
14

15 H. Such additional documents as might be required by New Mexico law, the
16 Title Insurer, or the County.
17

18 iii. County Deliveries. The County shall deliver to the Final Closing the documents
19 reasonably satisfactory to the Government and in a form previously reviewed and approved by the
20 Government:
21

22 A. Executed Water Rights Lease in substantially the form set forth in Exhibit
23 F-1.
24

25 B. Executed Bill of Sale for Personal Property Conveyed to the County in
26 substantially the form set forth in Exhibit D-1;
27

28 C. Certification that all representations of the County in the Agreement, to the
29 best of the County's knowledge and belief, are true and correct as of the date of the Final
30 Closing, in substantially the form set forth in Exhibit L-2.
31

32 D. Such additional documents as might be required by New Mexico law, the
33 Title Insurer, or the Government.
34

35 11. **WATER PRODUCTION SYSTEM LEASE.** In furtherance of and pending
36 conveyance of portions of the Property, the Government agrees to lease: Main Property, Personal
37 Property, LAWPS Easements, and Water Rights, to the County, and the County agrees to accept
38 such lease in furtherance of conveyance, pursuant to the terms, covenants, and conditions
39 contained in the lease between the Government and the County, as attached hereto as Exhibit G

COMPREHENSIVE AGREEMENT LAWPS

(the "Water Production System Lease"). Any modifications to the Water Production System Lease must be mutually agreed to by the Government and the County.

12. **JOINT DEFENSE OF WATER CLAIMS.** The Government and the County will jointly defend any claims which challenge the validity or priority, or which seek to prevent or curtail the use, of the water rights conveyed or leased to the County, and in doing so each of the Parties will bear its own costs. This provision shall not prevent the County from including such costs, anticipated or actual, in establishing rates for water service to the Government and other water service customers.

13. **OTOWI WELL NO. 1.** The Government shall complete Otowi Well No. 1 and ensure the well is operational at the Initial Closing.

14. **COUNTY PAYMENT TO THE GOVERNMENT.** Pursuant to the Water Service Contract, Contract No. DE-SC04-91AL64447 and modification No. M001 between DOE and the County dated September 12, 1995, Settlement Account, the County owes DOE the amount in the Settlement Account on the date of the Initial Closing, as mutually agreed upon by the Parties, incurred by DOE for the operation of the LAWPS. The County will repay DOE over a seven (7) year period with no interest charged to the County. The County payments will begin within one (1) year after the Final Closing. The County payments shall be made as credits to DOE's Bulk Water invoice.

15. **GOVERNMENT PAYMENT TO THE COUNTY.** Pursuant to the Memorandum of Agreement DE-FG32-98AL78585, as amended by Amendment No. 1, the DOE shall pay to the County, at the Initial Closing, in addition to sums paid in consideration of termination of assistance payments under the Atomic Energy Community Act of 1955, the sum of two million five hundred thousand dollars (\$2,500,000.00).

16. **ACCESS AGREEMENT.** DOE, the County, and the University of California, DOE's operating contractor at LANL, shall execute an agreement regarding County access to the facilities to be conveyed ("Access Agreement"), attached as Exhibit N. The purpose of the Access Agreement is to assure that the County complies with all pertinent requirements defined in the Access Agreement and assure that University and Government employees do not unduly hinder the County's ability to use and maintain those segments of LAWPS inside LANL boundaries. DOE shall assure that this Access Agreement imposes only those controls which are necessary to protect the national security interests of the United States, to minimize impact on LANL's operations, to avoid damage to DOE's underground utilities and to assure the safety of County employees on Government property.

COMPREHENSIVE AGREEMENT LAWPS

17. SCADA/ESS.

a. DOE shall be responsible for the upkeep and maintenance of the Equipment Surveillance System ("ESS") portion of the SCADA/ESS system. DOE will maintain responsibility for the operation of the ESS.

b. The County shall be responsible for the upkeep and maintenance of the Supervisory Control and Data Acquisition ("SCADA") portion of the SCADA/ESS system. The County will maintain responsibility for the operation of the SCADA.

c. At no cost to the County, DOE shall divide the SCADA and ESS system by January 1, 1999.

- i. The County will maintain control over the SCADA; and
- ii. DOE will maintain control over the ESS.

18. GUAJE WELLS. DOE, at its sole expense, shall construct up to four new water wells in the Guaje well field ("Guaje Wells"). Completion of the Guaje Wells is subject to the availability of funds which can be used for such purposes. DOE represents that sufficient funds for these purposes are presently budgeted and DOE agrees to continue to budget for and use its best efforts to obtain sufficient funds to complete these wells. DOE shall use its best efforts to complete the Guaje Wells by June 30, 1999. Upon completion of the scope of work in LANL Contract Number C90120018-CG for the Guaje Wells, the Guaje Wells shall be conveyed by lease if before the Final Closing or deed if after the Final Closing, within 30 days, by DOE to the County at no cost.

19. TITLE EVIDENCE SURVEY. Any title insurance which may be desired by the County will be procured at its sole cost and expense. DOE will, however, cooperate with the County or its authorized agent, and will permit examination and inspection of any documents relating to the title of the Property as it may have available and shall assist the County to have the Permitted Title Exceptions, which will be made part of this Agreement and attached at the Final Closing as Exhibit O, removed, released or insured. The County may, at its sole cost and expense, on or before the Final Closing order such searches as it deems appropriate confirming the absence of Title Exceptions. Without the County's approval, DOE shall not remove or insure against any Title Exceptions. If the DOE violates any covenants in this Section, the County shall have the right to rescind this transaction without penalty. Nothing in the foregoing implies that DOE is ensuring against Title Exceptions or transferring any interest in the Property other than by quitclaim deed.

20. NOTICE TO THIRD PARTIES. If at any time the Government conveys the fee estate upon which are located any of the easements or rights-of-way described in Exhibit A-2 to

COMPREHENSIVE AGREEMENT LAWPS

1 this Agreement, the Government shall expressly provide in such conveyance that the conveyance
2 is subject to such easement or right-of-way.

3
4 **21. GOVERNMENT REPRESENTATIONS AND WARRANTIES.** The
5 Government makes the following representations and warranties to the County, each of which
6 shall not affect the quitclaim deed, each of which shall survive the Initial Closing and the Final
7 Closing of this transaction:

8
9 a. The Government is not in default under, and the Government has received no notice
10 that any event has occurred which, with the giving of notice or the passage of time, or both,
11 would constitute a default under any contract, transaction, agreement, covenant, condition,
12 restriction, lease, easement, encumbrance or instrument pertaining to LAWPS;

13
14 b. To the Government's best knowledge, there is not now, nor will the Closing of the
15 transaction contemplated by this Agreement constitute, any material violation of any law,
16 ordinance, rule or regulation, or any violation of any administrative or judicial order affecting
17 LAWPS;

18
19 c. There is no pending claim, suit, action or arbitration, or legal, administrative, or
20 other proceeding or governmental investigation, formal or informal, or any judgment or order
21 which affects the ownership or operation of LAWPS, other than administrative orders of general
22 applicability;

23
24 d. The Government has made no oral or written commitments or representations to,
25 or understandings or agreements with any other governmental authority which would in any way
26 be binding on the County or would interfere with the County's ability to develop and improve
27 LAWPS, and the Government will not make or enter into any such commitments, representations,
28 understandings or agreements without the County's written consent; and

29
30 e. The Government has no knowledge of any liens (including without limitation,
31 mechanics liens), suits, claims, judgments, encumbrances, easements, covenants, conditions,
32 restrictions or other matters affecting title to LAWPS except as disclosed in the abstract of title
33 or title search provided to the County pursuant to Section 19 above.

34
35 **22. ENVIRONMENTAL CONDITION.**

36
37 a. The Government and the County hereby agree to be bound by the following terms
38 and conditions which shall be incorporated verbatim in the Deed conveying the Main Property
39 (Exhibit B-1), Assignment of LAWPS Easements (Exhibit B-2), Assignment of the New San

COMPREHENSIVE AGREEMENT LAWPS

Ildefonso Easement (Exhibit B-3) and Grant of Government Property Easements (Exhibit C). For purposes of this Article, the term Grantor shall mean the Government, and the term Grantee shall mean the County:

"NOTICE OF HAZARDOUS SUBSTANCE ACTIVITY"

"The information contained in this notice is required under the authority of regulations promulgated under Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund"), 42 U.S.C. Section 9620(h)."

[APPROPRIATE CERCLA Compliance LANGUAGE TO BE ADDED - if any]

"GRANTOR covenants that all remedial action necessary to protect human health and the environment with respect to any known hazardous substance remaining on the Property has been taken, or is in place and operating to the satisfaction of the State and Federal regulatory agencies, before the date of transfer."

"GRANTOR covenants that any additional remedial action found to be necessary after such date of transfer shall be performed by the United States."

"GRANTEE covenants that the GRANTOR, its officers, agents, employees, contractors and subcontractors, in accordance with section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended shall have access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of the conveyance of the Property. The GRANTOR and the GRANTEE agree to cooperate in good faith to minimize any conflict between necessary environmental investigation and remediation activities and GRANTEE's operations. Any inspection, survey, investigation, or other response or remedial action will to the extent practicable, be coordinated with representatives designated by GRANTEE."

"The GRANTOR indemnifies and holds harmless the GRANTEE or its successor against any claim for injury to a person or property that results from the release or threatened release of a hazardous substance or pollutant or contaminant as a result of Department of Energy activities on the Property transferred under this Deed, consistent with the provisions of section 3158 of the National Defense Authorization Act of 1998 (Pub. L. No. 105-85)."

23. NOTICE OF ENVIRONMENTAL AND CULTURAL SITES ADJACENT TO THE PROPERTY

COMPREHENSIVE AGREEMENT LAWPS

DOE shall provide the County with a map and listing of all known potentially environmentally contaminated sites and cultural sites adjacent to or potentially impacted by the operation of the LAWPS at the Initial Closing ("Environmental and Cultural Map"). DOE shall provide the County with updates of the Environmental and Cultural Map, as new sites are discovered, as soon as possible, thereafter. DOE is providing the Environmental and Cultural Map and updates to the County only on the basis of the County's agreement to keep the information strictly confidential and not as a public record subject to inspection under Chapter 14, Article 2 NMSA 1978. The County shall not release the information, on the basis of its interest in protecting against the risk of loss of archeological resources, including its intent to comply with NMSA 1978, Section 18-6-11.1, "Confidentiality of Site Location."

24. EFFECT OF TRANSFER OF TITLE; CONTINUING OBLIGATIONS OF THE GOVERNMENT; AND RISK OF LOSS:

a. Effects of Deeds and Assignment of LAWPS Easements and Government Easements. The delivery of the executed Deeds and Assignment of LAWPS Easements and Government Easements pursuant to this Agreement from the Government to the County shall be deemed full performance by the Government of its obligations hereunder with regard to the portions of the Property conveyed by each Deed and Assignment of LAWPS Easements and Government Easements other than any obligations of the Government which are required by this Agreement or by law (including without limitation any obligations under CERCLA Section 120(h)) to be performed after the delivery of each such Deed and Assignment of LAWPS Easements and Government Easements. The County reserves the right to review and approve the title as conveyed by each Deed and Assignment of LAWPS Easements and Government Easements. Except as otherwise provided for in this Agreement, the Government agrees not to grant, after the execution of the Agreement, any encumbrances, covenants, conditions, restrictions, limitations on use or notices concerning the Property without the specific written consent of the County.

b. Risk of Loss. The Government shall remain responsible for all losses and damages to the Property, and for all damages or injuries to persons or property occurring thereon or related thereto (except as may be caused by acts of the County or its employees, agents, contractors, licensees or sublessees), prior to leasing or conveying the Property to the County.

c. Except as provided herein, all of the Property conveyed or leased hereunder will be "as is" and without any representation or warranty whatsoever and without any obligation on the part of the United States of America except as expressly provided for by law or in this Agreement.

COMPREHENSIVE AGREEMENT LAWPS

1 d. Liabilities.

2
3 A. In addition to all other obligations of the Government under this Agreement, the
4 Government shall be and remain responsible for all liabilities, costs, bills, penalties, claims,
5 demands, judgments, suits, litigation, amounts payable and other expenses of the Property
6 (collectively, "Pre-Closing Obligations") against the Government or the Property attributable to
7 the period prior to the conveyance or lease of the Property to the County and shall pay, settle or
8 dispose of any such Pre-Closing Obligations at no expense to the County. The County shall notify
9 the Government of the existence or occurrence of any such Pre-Closing Obligations and shall
10 cooperate with the Government in the payment, settlement and disposition thereof.

11
12 B. The Government agrees to indemnify and hold harmless the County, its employees
13 and agents for activities conducted on the Property by the Government, its agents, employees or
14 contractors under this Agreement.

15
16 C. A party which breaches a covenant set forth in this Section shall be liable to the
17 other party for all of the other party's damages and costs incurred, and attorneys fees as a result
18 of the breach.

19
20 25. **REPRESENTATIONS AND WARRANTIES.** All representations, warranties
21 and covenants of the parties in this Agreement are made as of the date of this Agreement and shall
22 survive the transfer hereunder and the recordation of all conveyances conveying LAWPS to the
23 County.

24
25 a. The County and the Government agree to work in good faith to accomplish the
26 commitments made in this Agreement, including the negotiation of agreements required under this
27 Agreement and the exchange of drafts of deeds, assignments, lists, drawings, and other documents
28 for review one by another in sufficient time to allow a reasonable period of review before
29 finalization of the documents.

30
31 b. After acceptance of the instruments of conveyance, the County shall, at no cost to
32 the Government, have such instruments recorded in Los Alamos County, Santa Fe County and
33 Sandoval County, as appropriate, and shall furnish to the Government certified copies of such
34 documents with the recording information affixed.

COMPREHENSIVE AGREEMENT LAWPS

26. NOTICES

All notices and communications to any party hereunder shall be in writing and shall be deemed properly given if delivered personally or sent by registered or certified mail, postage prepaid, or by Federal Express or similar generally recognized overnight carrier regularly providing proof of delivery to the following addresses or at such other address or to such other persons as such party may specify from time to time by written notice to the other party:

To DOE:

U.S. Department of Energy
Los Alamos Area Office
Area Manager
528 35th Street
Los Alamos, New Mexico 87544

To the County:

County of Los Alamos
Department of Public Utilities
901 Trinity Drive
Post Office Drawer 1030
Los Alamos, New Mexico 87544
Attention: Utilities Manager
Telephone: (505) 662-8130
Telefax: (505) 662-8005

27. **AUTHORIZED REPRESENTATIVES.** Except as otherwise specifically provided, any reference herein to "Government" and "DOE" shall include their duly authorized representatives. Any reference to "County" shall include any sublessees, assignees, transferees, successors and their duly authorized representatives.

28. **NO RIGHT OF RESCISSION.** There shall be no right of rescission in the Government as to the Property, or any portion thereof, once conveyed to the County. The foregoing shall not be interpreted to limit any future exercise of the power of eminent domain by the Government.

COMPREHENSIVE AGREEMENT LAWPS

29. INTERPRETATION:

a. The headings and captions herein are inserted for convenient reference only and the same shall not limit or construe the paragraphs or sections to which they apply or otherwise affect the interpretation hereof.

b. The terms "hereby," "hereof," "hereto," "herein," "hereunder" and any similar terms shall refer to this Agreement, and the term "hereafter" shall mean after, and the term "heretofore" shall mean before, the date of this Agreement.

c. Words of the masculine, feminine or neuter gender shall mean and include the correlative words of other genders, and words importing the singular number shall mean and include the plural number and vice versa.

d. Words importing persons shall include firms, associations, partnerships (including limited partnerships), trusts, corporations and other legal entities, including public bodies, as well as natural persons.

e. The terms "include," "including" and similar terms shall be construed as if followed by the phrase "without being limited to."

f. This Agreement and any document or instrument executed pursuant hereto may be executed in any number of counterparts each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

g. Whenever under the terms of this Agreement the time for performance of a covenant or condition falls upon a Saturday, Sunday or holiday observed by the performing party, such time for performance shall be extended to the next business day. Otherwise all references herein to "days" shall mean calendar days.

h. Time is of the essence of this Agreement.

i. If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each such term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

COMPREHENSIVE AGREEMENT LAWPS

30. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress or County Councilor shall be permitted to share any part of this Agreement or to receive any direct financial benefits to arise therefrom.

31. AGREEMENT.

a. This Agreement is binding upon and shall inure to the benefit of the Parties and their successors and assigns.

b. This Agreement sets forth the entire agreement of the parties concerning the matters covered. No party shall be liable or bound to any party in any manner by any warranties, representations or covenants other than those set forth in this Agreement.

c. This Agreement shall be interpreted under the laws of the State of New Mexico.

d. This Agreement shall not be altered, changed, modified or amended except by an instrument in writing executed by the parties hereto.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the County and the Government have caused this Agreement to be executed by their duly authorized representatives on the respective dates set forth beneath each of their signatures and hereby deem this Agreement to be effective as of the latest such date which date shall be considered the date of this Agreement for all purposes.

By: Lawry W. Mann
Council Chair
Date: June 30, 1998

ATTEST: Nita K Taylor
County Clerk
DATE: 10-30-98

By: C. S. Przybylek
Acting Area Manager
Date: June 30, 1998

[illegible]

The foregoing Agreement for the conveyance of the Water Production System was acknowledged before me this 30th day of June, 1998 by C.S. Przybylek, Acting Area Manager on behalf of the United States of America acting by and through the United States Department of Energy.

Pauline V. Macosta
Notary Public

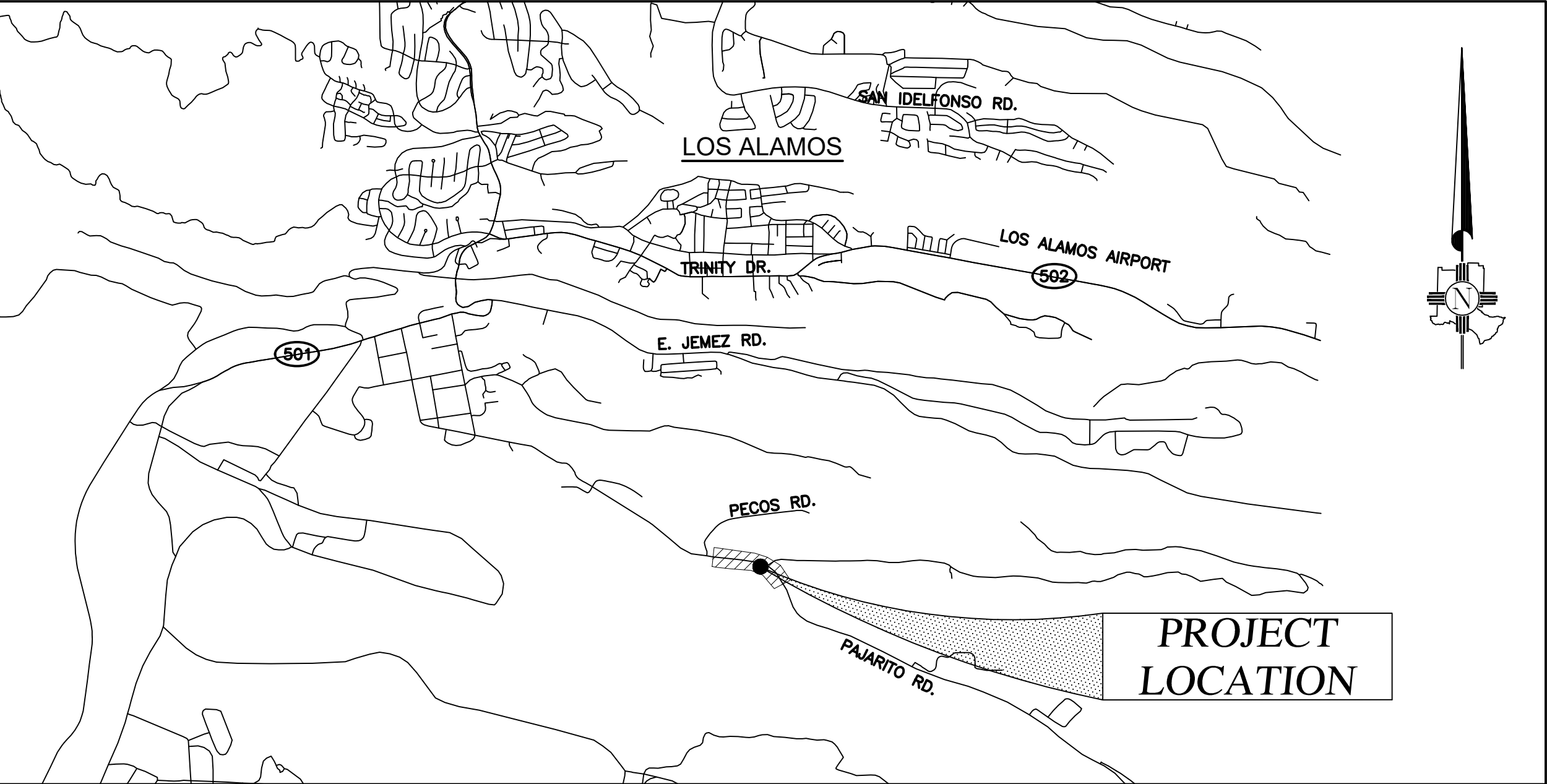
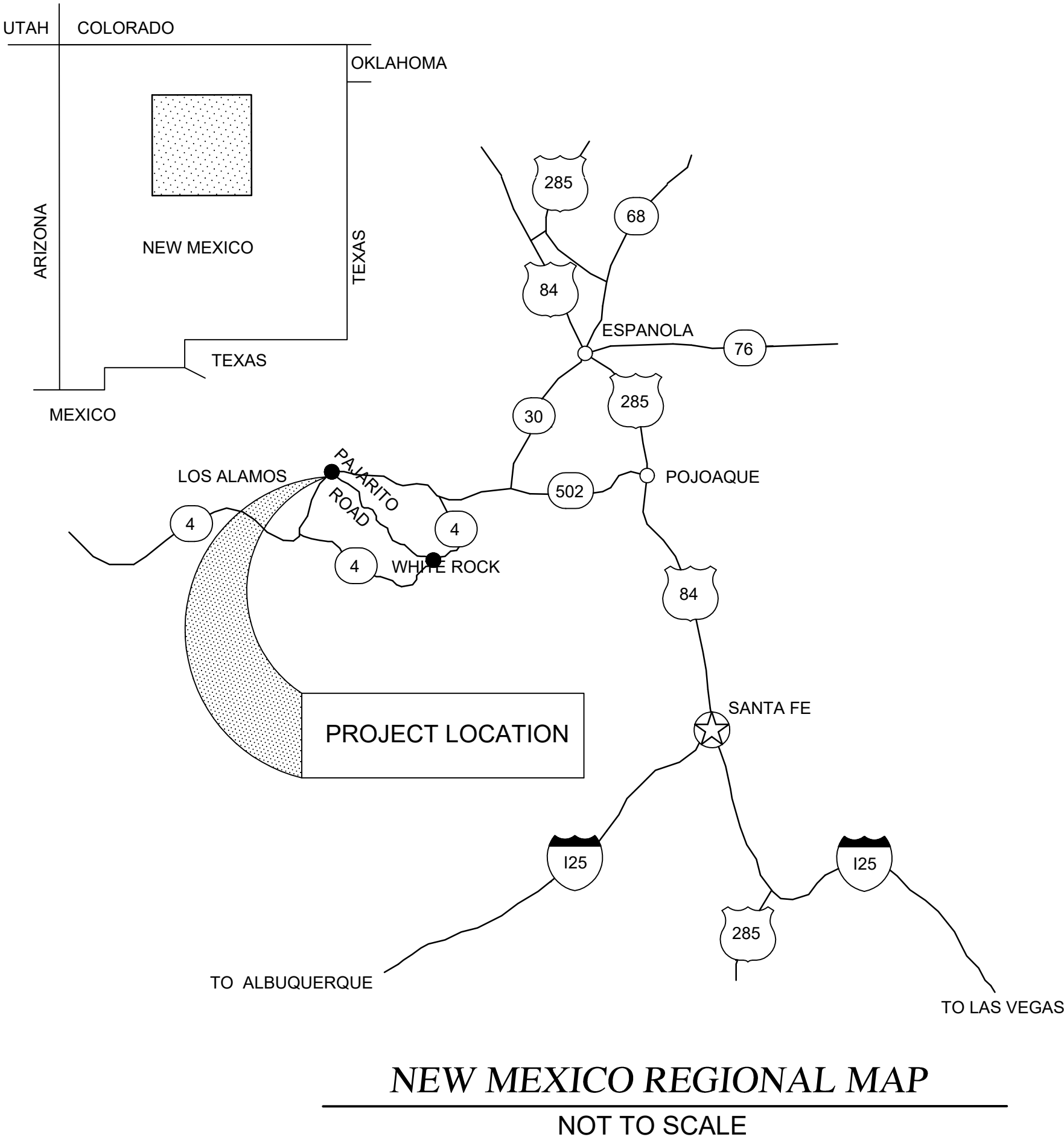
11-17-99

DEPARTMENT OF PUBLIC UTILITIES

TA-50 TRANSMISSION WATER MAIN RELOCATION

LOS ALAMOS COUNTY - NEW MEXICO

IFB 23-05



LOS ALAMOS VICINITY MAP

SCALE: 1" = 3000'

SHEET INDEX

- | | | |
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| 2 | G-1 | GENERAL NOTES, SYMBOLOGY CONTROL POINTS AND KEY MAP |
| 3 | C-1 | PLAN AND PROFILE PAJARITO ROAD FROM STA 1+00 TO STA 8+00 |
| 4 | C-2 | PLAN AND PROFILE PAJARITO ROAD FROM STA 8+00 TO STA 15+00 |
| 5 | C-3 | PLAN AND PROFILE PAJARITO ROAD FROM STA 15+00 TO END |
| 6 | C-4 | ENLARGED 16" WATER LINE CONNECTION PLANS |
| 7 | CD-1 | CIVIL STANDARD DETAILS I |
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| 9 | CD-3 | CIVIL STANDARD DETAILS III |
| 10 | CD-4 | CIVIL STANDARD DETAILS IV |
| 11 | TC-1 | TEMPORARY TRAFFIC CONTROL GENERAL NOTES & SIGNAGE DETAILS |
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COUNTY COUNCIL

RANDALL RYTI
DENISE DERKACS
DAVID IZRAELEVITZ
SARA SCOTT
DAVID REAGOR
KEITH LEPSCH
MELANEE HAND

COUNCIL CHAIRMAN
COUNCIL VICE-CHAIR
COUNCILOR
COUNCILOR
COUNCILOR
COUNCILOR
COUNCILOR

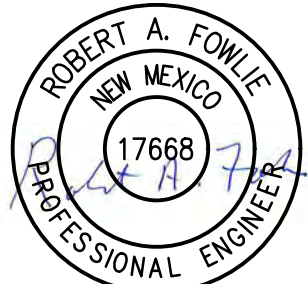
APPROVED BY: _____ DATE _____

Department of Public Utilities
Utilities Manager - Philo S. Shelton, III, PE

Department of Public Utilities
Project Manager - James A. Martinez Jr, PE, PMP

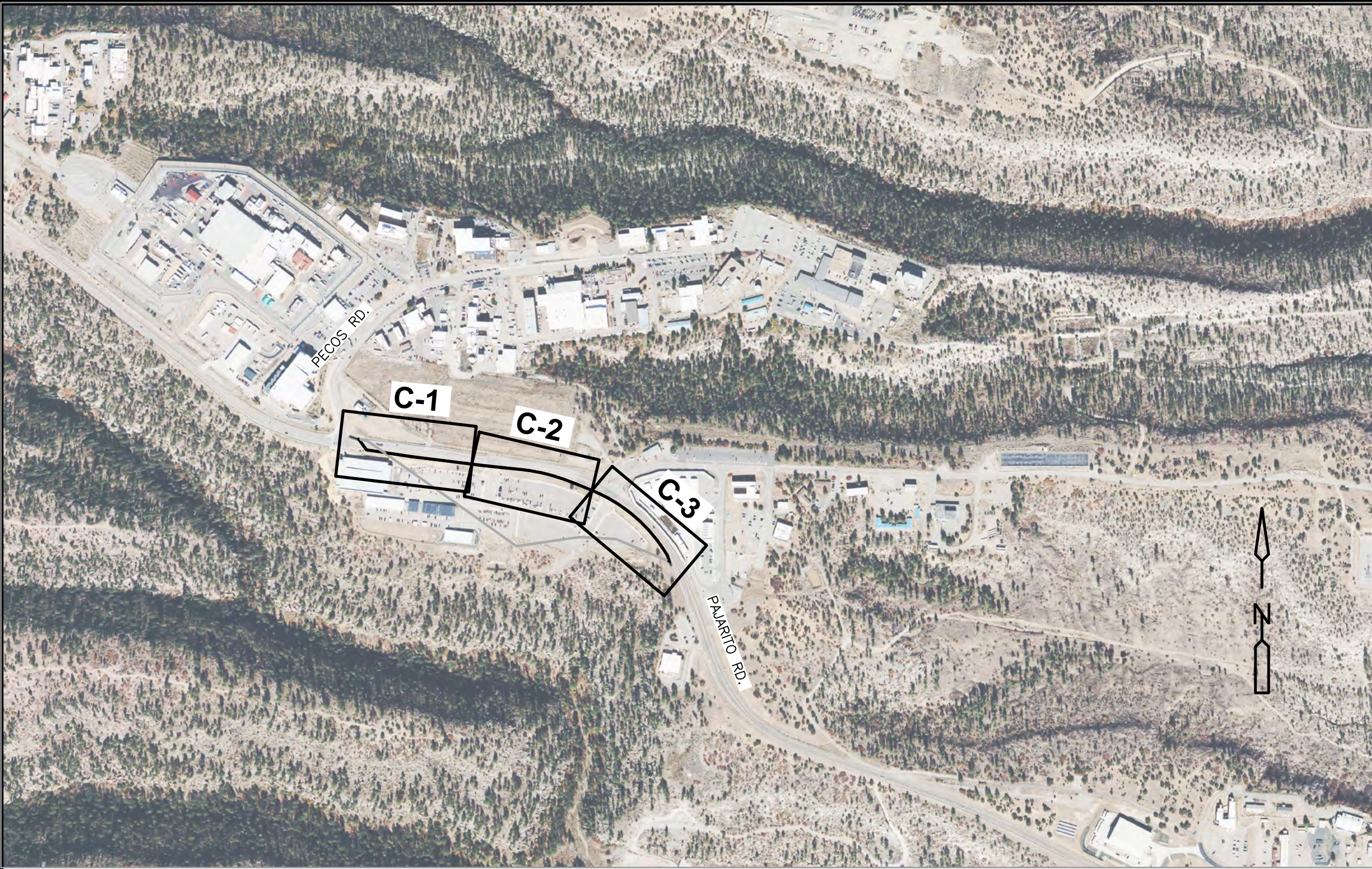


6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
Tel: (505) 243-3200



12/07/2022

Drawing File: C:\USERS\RODRIGUEZ\GA\ONEDRIVE - CDM\SMITH\GLBERTO-NO-PDF\ALBUQUERQUE\257115-271058_TA50_RELOCATE WATERLINE\PW\DWGS\G002\NOLG.DWG



PLAN

SCALE: 1"=600'

GENERAL NOTES:

- G-1: GENERAL NOTES APPLY TO ALL SHEETS, EXCEPT WHERE MORE SPECIFIC REQUIREMENTS ARE PROVIDED.
- G-2: THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL THE EXISTING ITEMS WITHIN OR ADJACENT TO THE WORK OR THAT MAY BE DISTURBED BY THE WORK (AND THEIR CURRENT CONDITION).
- G-3: LOCATION OF ALL EXISTING UTILITIES, STRUCTURES, PROPERTY LINES, SUBSURFACE SOIL OR ROCK CONDITIONS ARE BASED ON THE BEST AVAILABLE INFORMATION AND ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL ARE SHOWN. ITEMS SHOWN IN PROFILE ARE APPROXIMATE ELEVATIONS ONLY. IN PARTICULAR, ALL UNDERGROUND GAS LINES, UNDERGROUND AND/OR OVERHEAD ELECTRICAL AND TELEPHONE CABLES, AND POLES, ARE NOT WARRANTED TO BE SHOWN.
- G-4: THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL PROPERTY LINES, EASEMENTS AND EXISTING UTILITIES AND OTHER EXISTING ITEMS. REPORT FINDINGS TO THE ENGINEER PRIOR TO CONSTRUCTION. IT IS THE INTENT TO SHOW ALL PROPERTY LINES, EASEMENTS, UTILITIES, AND UNDERGROUND STRUCTURES, HOWEVER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SATISFY THEMSELVES THAT ALL EXISTING UTILITIES AND OTHER ITEMS, WHETHER SHOWN ON THESE DRAWINGS OR NOT, HAVE BEEN PROPERLY LOCATED.
- G-5: THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING ITEMS, UTILITIES, OR STRUCTURES, WHETHER SHOWN OR NOT.
- G-6: IF ANY ITEM REQUIRES RELOCATION AND/OR BEING TEMPORARILY OUT OF SERVICE, THE CONTRACTOR SHALL NOTIFY THE OWNER OF THE ITEM WELL IN ADVANCE OF APPROACH TO THE ITEM; AND SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS WITH THE OWNER OF THE ITEM FOR TIMELY RELOCATIONS OF THE ITEM. RELOCATION OF MINOR FACILITIES MAY BE DONE BY THE CONTRACTOR IF ACCEPTABLE TO THE ENGINEER OF RECORD AND FACILITIES OWNER.
- G-7: WITHIN THE WORK AREA: THE CONTRACTOR SHALL ALSO CONTACT UTILITY OR OTHER OWNERS AND MAKE EXPLORATORY EXCAVATIONS AS NECESSARY, AND AS ACCEPTABLE TO THE ENGINEER OF RECORD, TO DETERMINE THE EXACT LOCATION AND STATUS OF OPERATIONS OF UNDERGROUND UTILITIES AND STRUCTURES, AND THE LIMITS AND CHARACTER OF SOIL AND/OR ROCK; ALSO TO DETERMINE THE STATUS OF OPERATIONS OF ALL ABOVE GROUND UTILITIES.
- G-8: SEVEN DAYS PRIOR TO ANY WORK, THE CONTRACTOR IS REQUIRED TO CONTACT NM ONE CALL (1-800-321-2537) FOR UTILITY LOCATES.
- G-9: THE CONTRACTOR SHALL LIMIT ITS ACTIVITY TO WITHIN THE PROPERTY BOUNDARIES UNLESS OTHERWISE NOTED. WHERE TEMPORARY EASEMENTS OR RIGHT OF WAYS ARE REQUIRED, CONTRACTOR TO COORDINATE WITH LOS ALAMOS COUNTY NEW MEXICO AND APPLICABLE ENTITIES.
- G-10: THE CONTRACTOR SHALL RESTORE ALL DAMAGED OR DISTURBED AREAS AND EXISTING SITE IMPROVEMENTS TO THEIR ORIGINAL CONDITION AFTER COMPLETION OF THE WORK. ALL EXCESS MATERIALS AND SPOIL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN OFF-SITE LOCATION ACCORDING TO ALL APPLICABLE LAWS AND REGULATIONS.
- G-11: THE TERM "ACCEPTABLE TO THE ENGINEER" SHALL MEAN WRITTEN ACCEPTANCE BY ENGINEER IS TO BE RECEIVED BY THE CONTRACTOR BEFORE WORK IS STARTED.
- G-12: ANY DEVIATIONS FROM CONTRACT DOCUMENTS, INCLUDING DRAWINGS AND/OR SPECIFICATIONS, MUST BE ACCEPTED BY THE DESIGN CONSULTANT AND ENGINEER OF RECORD, IN WRITING, PRIOR TO THE WORK BEING DONE. ANY DEVIATIONS PERFORMED WITHOUT THE ENGINEER OF RECORD'S ACCEPTANCE WILL NOT BE PAID FOR, AND MAY BE REQUIRED TO BE REDONE AT THE CONTRACTOR'S EXPENSE.
- G-13: UNLESS NOTED OTHERWISE, ALL WORK SHOWN IN THESE DOCUMENTS IS NEW AND TO BE PERFORMED UNDER THIS CONTRACT. ON SHEETS WHERE IT IS INDICATED THAT EXISTING IS TO BE MODIFIED AND/OR ADDED TO, WORK UNDER THIS CONTRACT IS NORMALLY SHOWN IN HEAVY LINES.
- G-14: CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS FROM APPROPRIATE GOVERNMENTAL AGENCIES FOR ALL WORK IN LANL RIGHTS-OF-WAY.
- G-16: CONTRACTOR SHALL NOTIFY LOS ALAMOS COUNTY DEPARTMENT 48 HOURS IN ADVANCE OF ANY CONSTRUCTION. WHEN APPOINTMENTS ARE SCHEDULED AT LEAST 48 HOURS IN ADVANCE, THE INSPECTION/TEST WILL BE CONDUCTED AS SCHEDULED, OTHERWISE THE REQUEST WILL BE SCHEDULED BASED ON AVAILABILITY.
- G-17: CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING VALVE BOXES, MANHOLES, SEWER SERVICES, PAVEMENTS, PAVEMENT MARKINGS, CURB AND GUTTER, DRIVE PADS, WHEEL CHAIR RAMPS, SIDEWALKS, AND ANY OTHER PUBLIC WORKS STRUCTURE OR PRIVATE PROPERTY DURING CONSTRUCTION, APART FROM SECTIONS INDICATED ON PLANS AND SHALL RESTORE TO APPLICABLE STANDARD.
- G-18: CONTRACTOR MAY SOURCE UNMETERED CONSTRUCTION WATER FROM LOS ALAMOS NATIONAL LABORATORY (LANL) OWNED HYDRANT NEAR STA 4+60.
- G-19: TRAFFIC CONTROL PERMITTING WILL REQUIRE COORDINATION WITH LOS ALAMOS COUNTY (LAC) AND LOS ALAMOS NATIONAL LABORATORY (LANL). SEE SPECIFICATIONS FOR ADDITIONAL DETAIL ON PERMITTING PROCESS.
- G-20: COORDINATION WITH LOS ALAMOS COUNTY PERTAINING TO OUTAGE AND TIE-IN TO EXISTING TRANSMISSION LINE TO BEGIN AT LEAST 14-DAYS PRIOR TO OUTAGE DATE. LOS ALAMOS COUNTY WILL REQUIRE SUFFICIENT TIME AND INFORMATION TO ISSUE A NOTIFICATION OF OUTAGE.

WATER SYSTEM MATERIAL SPECIFICATION:

- WS-1: ALL MATERIALS AND PRODUCTS USED IN THE POTABLE WATER SYSTEM SHALL CONFORM TO NSF STANDARDS 60 AND 61.
- WS-2: ALL DIP SECTIONS SHALL BE CONSTRUCTED OF RESTRAINED DUCTILE IRON PIPE (DIP). ALL DIP SECTIONS SHALL BE JOINT RESTRAINED DIP. ALL MJ PARTS AND FITTING SHALL BE WRAPPED IN POLYETHYLENE WRAP FOR THE ENTIRE LENGTH.
- WS-3: DUCTILE IRON PIPE, MORTAR LINED (DIP) WILL BE IN ACCORDANCE WITH AWWA STANDARDS C150 & C151, PRESSURE CLASS 250. PRESSURE CLASS 250 MORTAR LINING SHALL BE IN ACCORDANCE WITH AWWA C104. ALL DIP SHALL BE POLYETHYLENE WRAPPED FOR THE ENTIRE LENGTH.
- WS-4: ALL WATER LINES SHALL INCLUDE INSTALLATION OF TRACER WIRE.
- WS-5: CONTRACTOR NOT TO EXCEED THE MAXIMUM ANGULAR DEFLECTION (PER PARAGRAPH 3.2.D OF SPECIFICATION 601) DURING INSTALLATION OF THE PIPE.

HEALTH AND SAFETY NOTES:

- HS-1: THE CONTRACTOR IS RESPONSIBLE FOR ALL HEALTH AND SAFETY PROCEDURES, FACILITIES PERTAINING TO THE WORK (IN ACCORDANCE WITH THE APPROVED CONTRACTOR'S HEALTH AND SAFETY PLAN(S)), THE SPECIFICATIONS, AND ALL GOVERNING REGULATIONS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PROTECTIVE DEVICES, MONITORING OF AIR, WATER AND SOILS, TRENCH EXCAVATION AND PROTECTIONS, TRAFFIC CONTROL, SECURITY, ETC.
- HS-2: ALL HEALTH AND SAFETY PROTECTION MEASURES SHALL BE INSTALLED AND FUNCTIONS AT THE SITE PRIOR TO PERFORMING ANY WORK. THE CONTRACTOR SHALL MAINTAIN ALL HEALTH AND SAFETY MEASURES UNTIL FINAL COMPLETION.
- HS-3: SPECIAL CONSIDERATION IS TO BE MADE TO WORK AROUND AND/OR ON EXISTING UTILITIES.
- HS-4: THE CONTRACTOR IS RESPONSIBLE FOR OBSERVING AND MEETING ALL OSHA REQUIREMENTS.

ENVIRONMENTAL PROTECTION AND EROSION, STORM WATER AND SEDIMENTATION CONTROL NOTES:

- EP-1: EXCEPT AS NOTED, THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION, STORM WATER "SWPPP" AND SEDIMENTATION CONTROL AND ENVIRONMENTAL PROTECTION MEASURES.
- EP-2: ALL ENVIRONMENTAL PROTECTION MEASURES SHALL BE INSTALLED AND FUNCTIONAL AT THE SITE PRIOR TO PERFORMING ANY WORK, UNLESS NOTED. THE CONTRACTOR SHALL MAINTAIN ALL ENVIRONMENTAL PROTECTION MEASURES UNTIL FINAL COMPLETION.
- EP-3: SOIL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH SPEC. 103.
- EP-4: ALL EXISTING DRAINAGE FEATURES SHALL BE PROPERLY PROTECTED.

GEOTECHNICAL NOTES:

- GO-1: RECOMMENDATION FOR EARTHWORK, FOUNDATIONS, LATERAL EARTH PRESSURES, TRENCHING, BACKFILLING, AND OTHER GEOTECHNICAL CONSIDERATIONS ARE DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY WOOD ENVIRONMENTAL AND INFRASTRUCTURE AUGUST, 2022.
- MEASUREMENT NOTES:
- GM-1: WRITTEN DISTANCES AND ELEVATIONS SHALL GOVERN OVER SCALED DISTANCES AND ELEVATIONS.
- GM-2: DETAILS & DRAWINGS IDENTIFIED AS NTS (NOT-TO-SCALE) SHALL NOT BE SCALED IF DIMENSIONS ARE NOT PROVIDED.

UTILITY CONTACT INFORMATION

- NEW MEXICO ONE-CALL
• 800-321-2537

SURVEY DATA

Cobb Fendley & Associates, Inc. 3820 Academy Pkwy N NE Albuquerque, New Mexico 87109 United States of America		Phone: (505) 508-0786 Fax: (505) 508-0837 www.cobbfendley.com wneish@cobbfendley.com	
Project file data Name: Q:\Projects\2022\05060_Windstream\02032_CDM_Smith_Inc\01_LANL_Topo\300_DEPT_DOCS\302_Survey\Field\Daily Survey Files_Download\03-29-22 KD GROUND.vce Size: 452 KB Modified: 3/30/2022 3:52:26 PM (UTC-6) Time zone: Mountain Standard Time Reference number: Description: Comment 1: Comment 2: Comment 3:		Coordinate System Name: United States/State Plane 1983 Zone: New Mexico Central 3002 Datum: NAD 1983 (Conus) Global reference datum: WGS 1984 Global reference epoch: Geoid: GEOID18 (Conus) Vertical datum: NAVD 88 Calibrated site: Default	

Additional Coordinate System Details

Local Site Settings			
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Project longitude:	W111°28'36.02951"	False northing offset:	0.000
Project height:	6398.428	False easting offset:	0.000

Point List

ID	Northing (US survey foot)	Easting (US survey foot)	Elevation (US survey foot)	Feature Code
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11	1769115.262	1626422.627	7272.382	SET MAG/WSHR
12	1768667.904	1627825.047	7213.314	SET MAG/WSHR
7/13/2022 3:32:31 PM		Q:\Projects\2022\05060_Windstream\02032_CDM_Smith_Inc\01_LANL_Topo\300_DEPT_DOCS\302_Survey\Field\Daily Survey Files_Download\03-29-22 KD GROUND.vce		Trimble Business Center

SURVEY LINETYPES

	EXIST FENCES
	EXIST EDGE OF ASPH.
	EXIST CURBING
	EXIST EDGE OF CONC.
	EXIST SIDEWALK
	EXIST BUILDING OUTLINE
	EXIST CONTOUR MAJOR
	EXIST CONTOUR MINOR
	OVERHEAD TELE. TELEPHONE/COMM.
	CABLE TV
	OVERHEAD ELEC.
	ELECTRIC
	OVERHEAD UTILITY
	FIBER OPTIC
	NATURAL GAS
	UNKNOWN UTILITY
	WATER
	SANITARY SEWER
	FORCE MAIN
	RECLAIMED WATER LINE (NON POTABLE WATER)
	TRANSMISSION MAIN

PROPOSED LINETYPES

UTILITY / SURVEY LEGEND

	ELECTRIC PANEL		WATER METER
	ELECTRIC TRANSFORMER		WATER VALVE
	ELECTRIC BOX		FIRE HYDRANT
	ELECTRIC MANHOLE		WATER MANHOLE
	LIGHT POLE		WATER FAUCET
	UTILITY POLE		IRRIGATION CONTROL BOX
	SERVICE POLE		GAS METER
	GUY ANCHOR		GAS VALVE
	ELECTRIC PULL BOX		GAS REGULATOR
	ELEC HAND HOLE		GAS TANK
	TELEPHONE PULL BOX		SANITARY SEWER MANHOLE
	TELEPHONE PEDESTAL		STORM DRAIN MANHOLE
	TELEPHONE MANHOLE		DROP INLET
	FIBER OPTIC PEDESTAL		CLEAN OUT
	TELE HAND HOLE		CATV PEDESTAL
	FO HAND HOLE		CATV HAND HOLE
	COMM HAND HOLE		CONTROL POINT
	EXIST BOLLARD		MONUMENT FOUND
	EXIST ROOF DRAIN		EXIST SPOT ELEVATION
	EXIST SIGNS		EXIST CONC.
	EXIST TREES & SHRUBS		



TA-50 TRANSMISSION WATER
MAIN RELOCATION

GENERAL NOTES, SYMBOLOGY,
CONTROL POINTS AND KEY MAP



6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
Tel: (505) 243-3200

INCORPORATED COUNTY
OF LOS ALAMOS

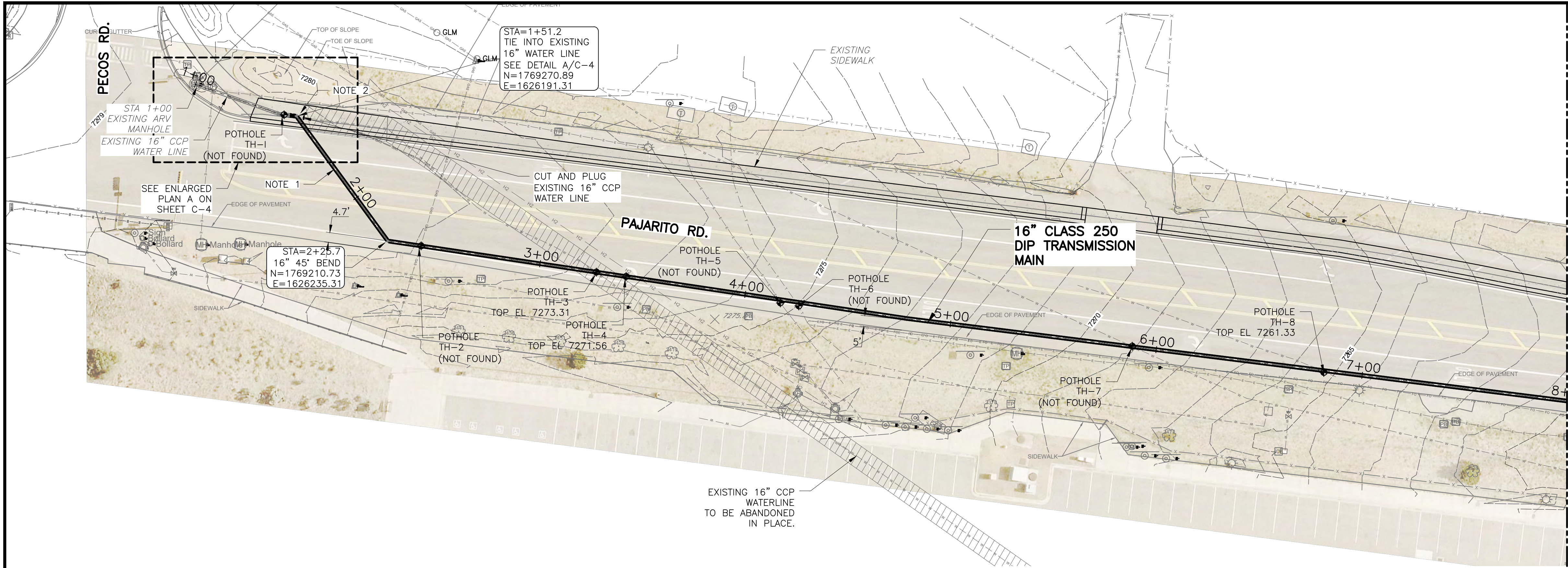
DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544

(505) 662-8333 FAX: (505) 662-8005

SHEET

G-1

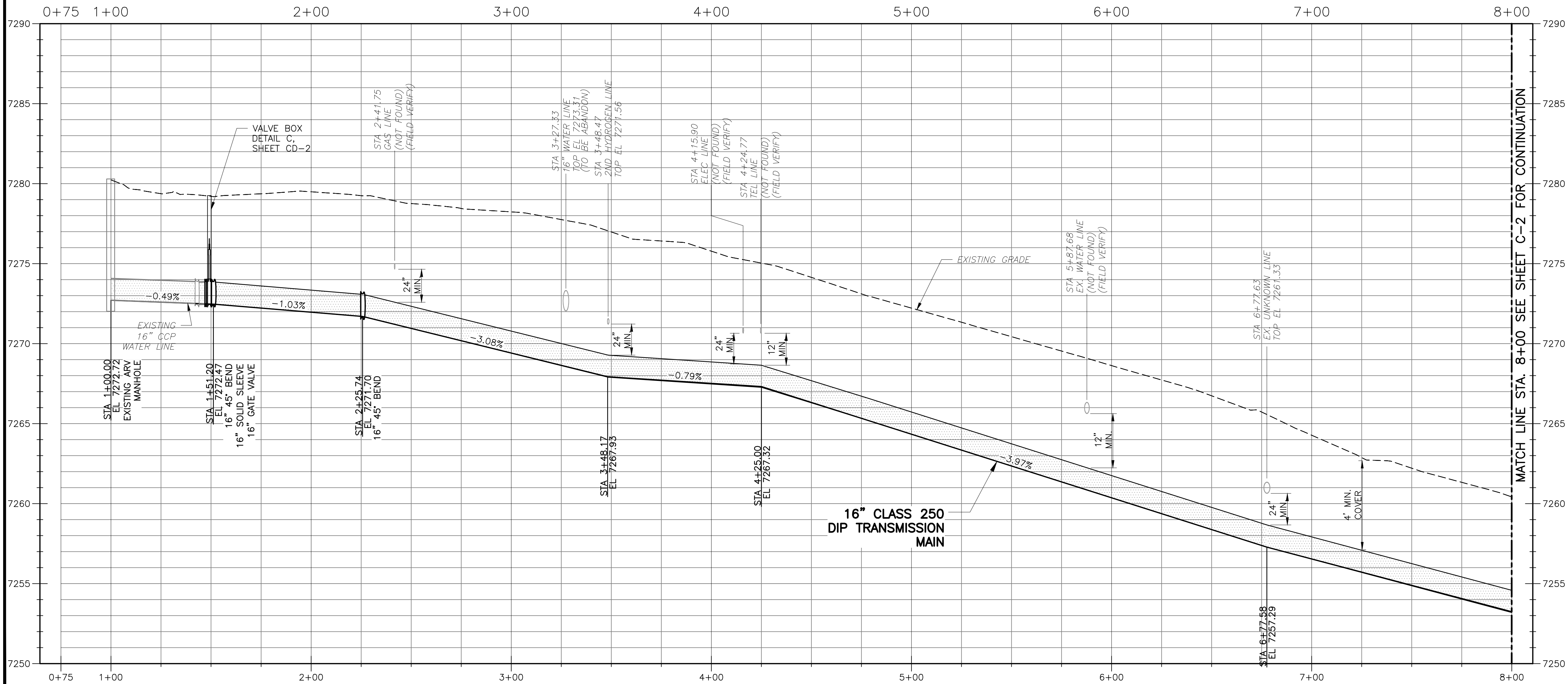
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CONSTRUCTION NOTES:

1. WHERE ALIGNMENT IS UNDER EXISTING PAVEMENT, CONTRACTOR TO REMOVE AND REPAIR IN ACCORDANCE WITH DETAIL A/CD-1.
2. SIDEWALK TO BE REMOVED TO NEAREST CONSTRUCTION JOINTS, AND AFTER PIPE IS INSTALLED, REINSTALLED IN ACCORDANCE WITH DETAILS C-D/CD-1.
3. LONG LEAD PIPE AND FITTINGS SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.

MATCH LINE STA: 8+00 SEE SHEET C-2 FOR CONTINUATION



ELEVATION (FEET)

1" = 30'
HORIZONTAL SCALE:

1" = 5'
VERTICAL SCALE:

ROBERT A. FOWLE
NEW MEXICO
17668
PROFESSIONAL ENGINEER

12/07/2022

REVISION DESCRIPTION	
NO.	DESCRIPTION
1	
2	
3	
4	
5	

DESIGNED BY:	D.W.M.
DRAWN BY:	G.R.
APPROVED BY:	R.F.
DATE:	12-07-22
SCALE:	AS SHOWN

TA-50 TRANSMISSION WATER
MAIN RELOCATION

PAJARITO ROAD
FROM STA 1+00 TO STA 8+00

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

CDM
Smith

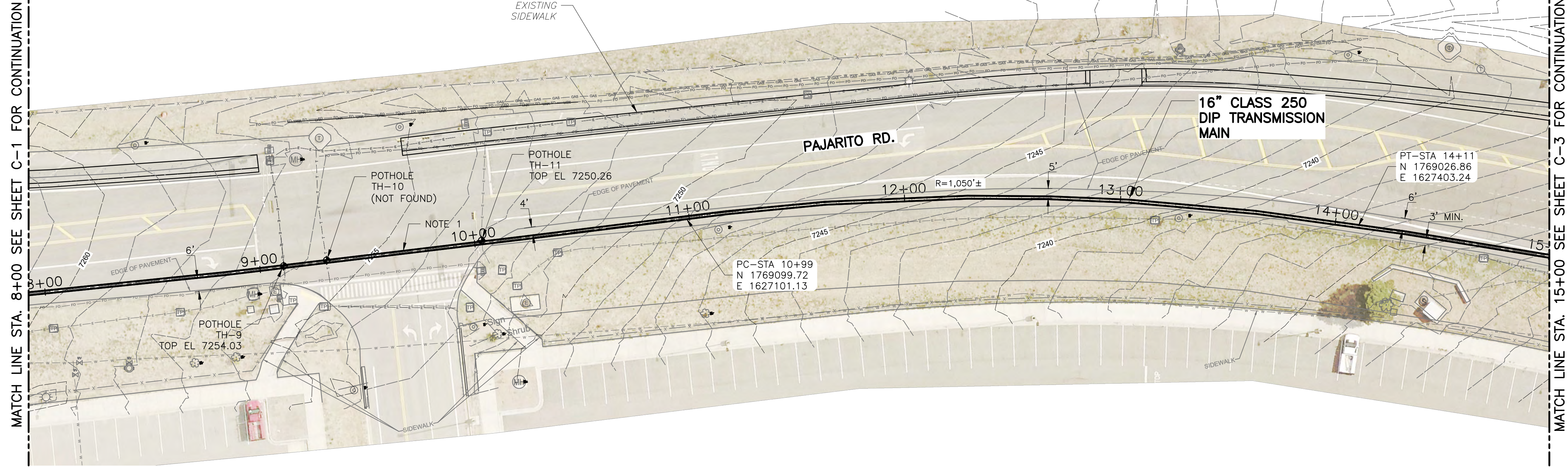
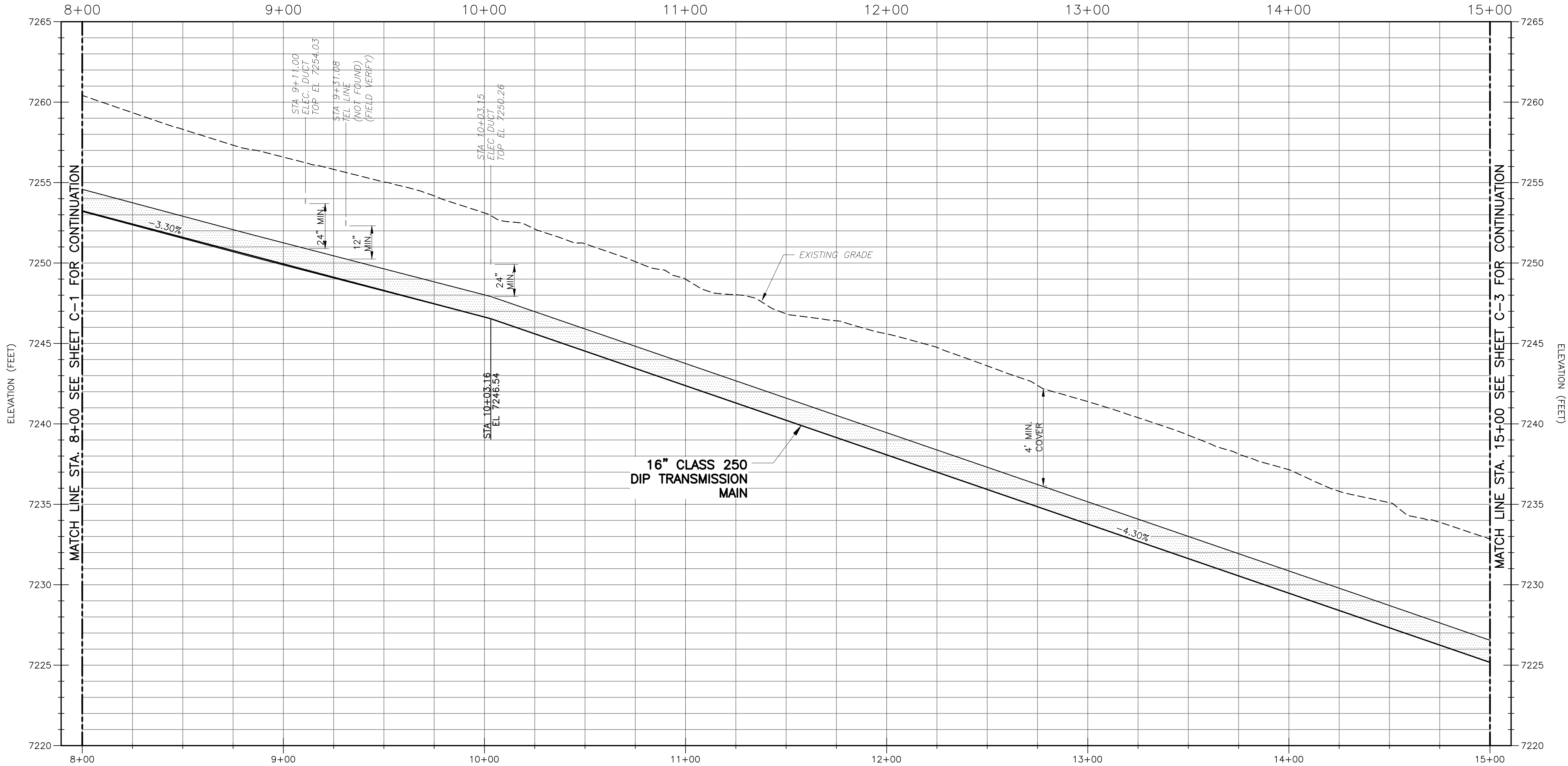
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Tel: (505) 243-3200

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OF LOS ALAMOS

DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
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(505) 662-8933 FAX: (505) 662-8005

SHEET
C-1

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- CONSTRUCTION NOTES:
- WHERE ALIGNMENT IS UNDER EXISTING PAVEMENT, CONTRACTOR TO REMOVE AND REPAIR IN ACCORDANCE WITH DETAIL /CD-1.
 - LONG LEAD PIPE AND FITTINGS SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.

12/07/2022

ROBERT A. FOWLE
NEW MEXICO
17668
PROFESSIONAL ENGINEER

1" = 30'
HORIZONTAL SCALE:

1" = 5'
VERTICAL SCALE:

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OF LOS ALAMOS
DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

SHEET
C-2

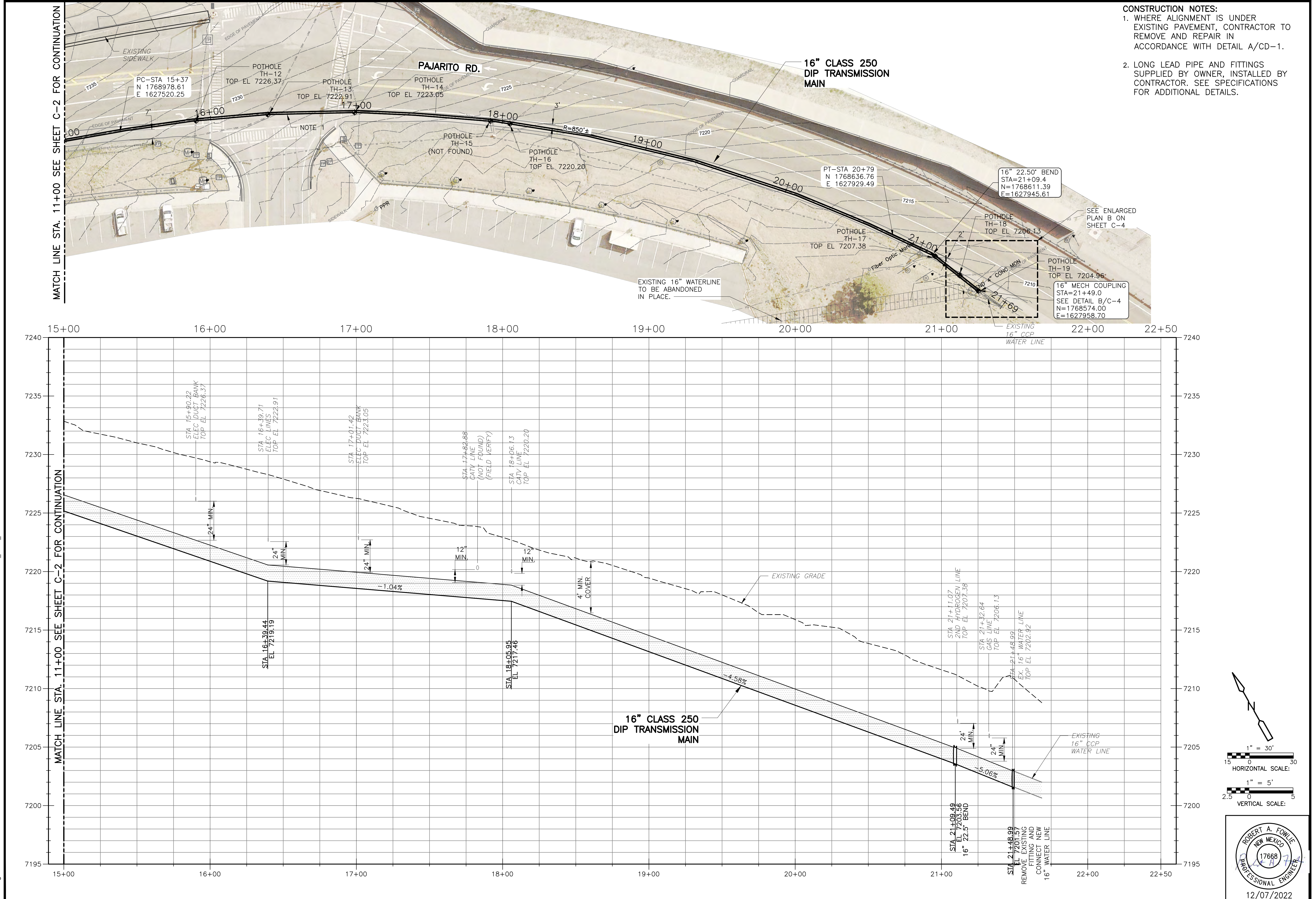
LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

CDM
Smith
6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
Tel: (505) 243-3200

TA-50 TRANSMISSION WATER
MAIN RELOCATION
PAJARITO ROAD
FROM STA 8+00 TO STA 15+00

DESIGNED BY: D.W.M.
DRAWN BY: G.R.
APPROVED BY: R.F.
DATE: 12-07-22
SCALE: AS SHOWN

NO. REVISION DESCRIPTION
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NO.	REVISION DESCRIPTION
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DESIGNED BY:	D.W.M.
DRAWN BY:	G.R.
APPROVED BY:	R.F.
DATE:	12-07-22
SCALE:	AS SHOWN

TA-50 TRANSMISSION WATER MAIN RELOCATION	PAJARITO ROAD FROM STA 15+00 TO END
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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

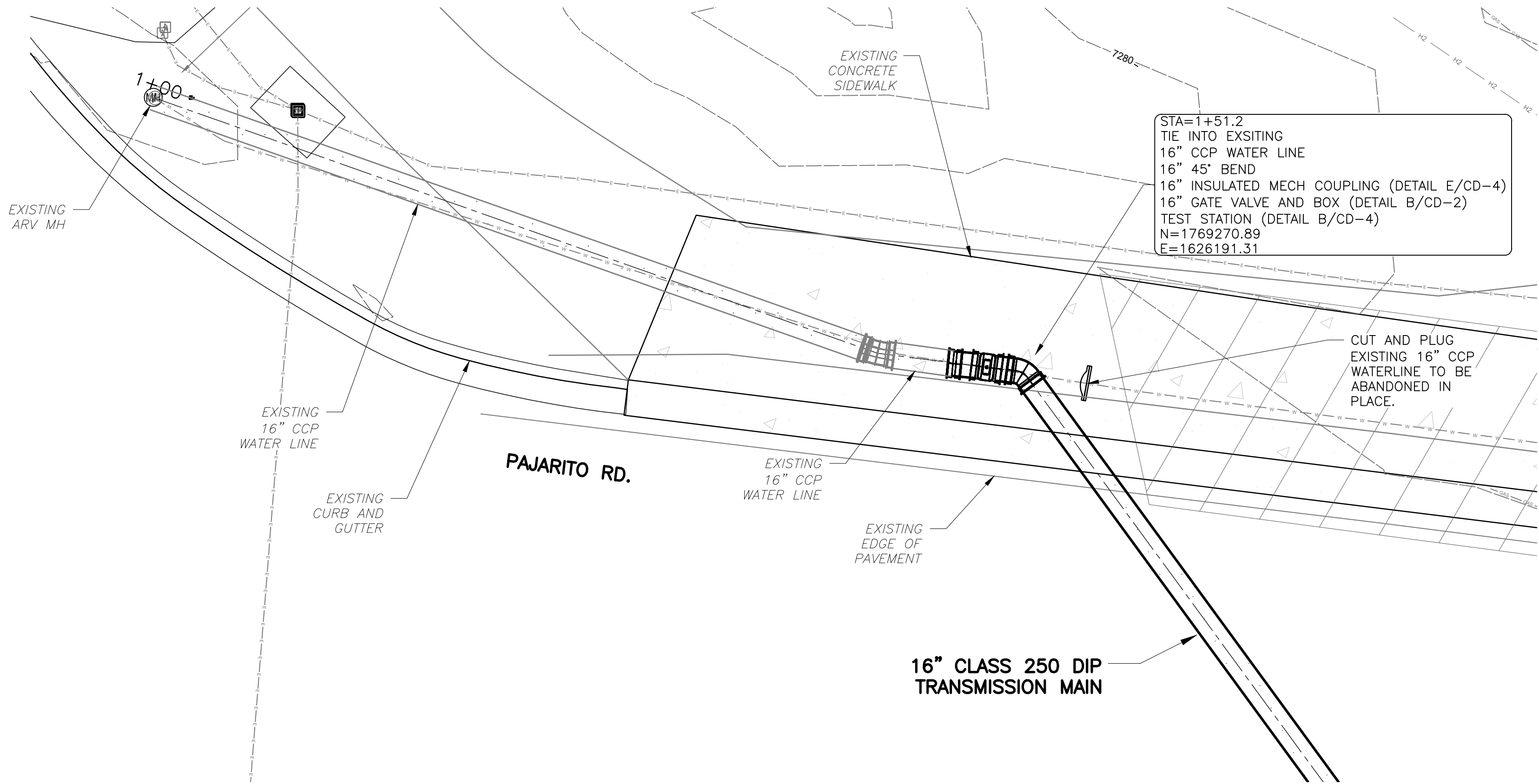
**CDM
Smith**

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Tel: (505) 243-3200

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OF LOS ALAMOS**
DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

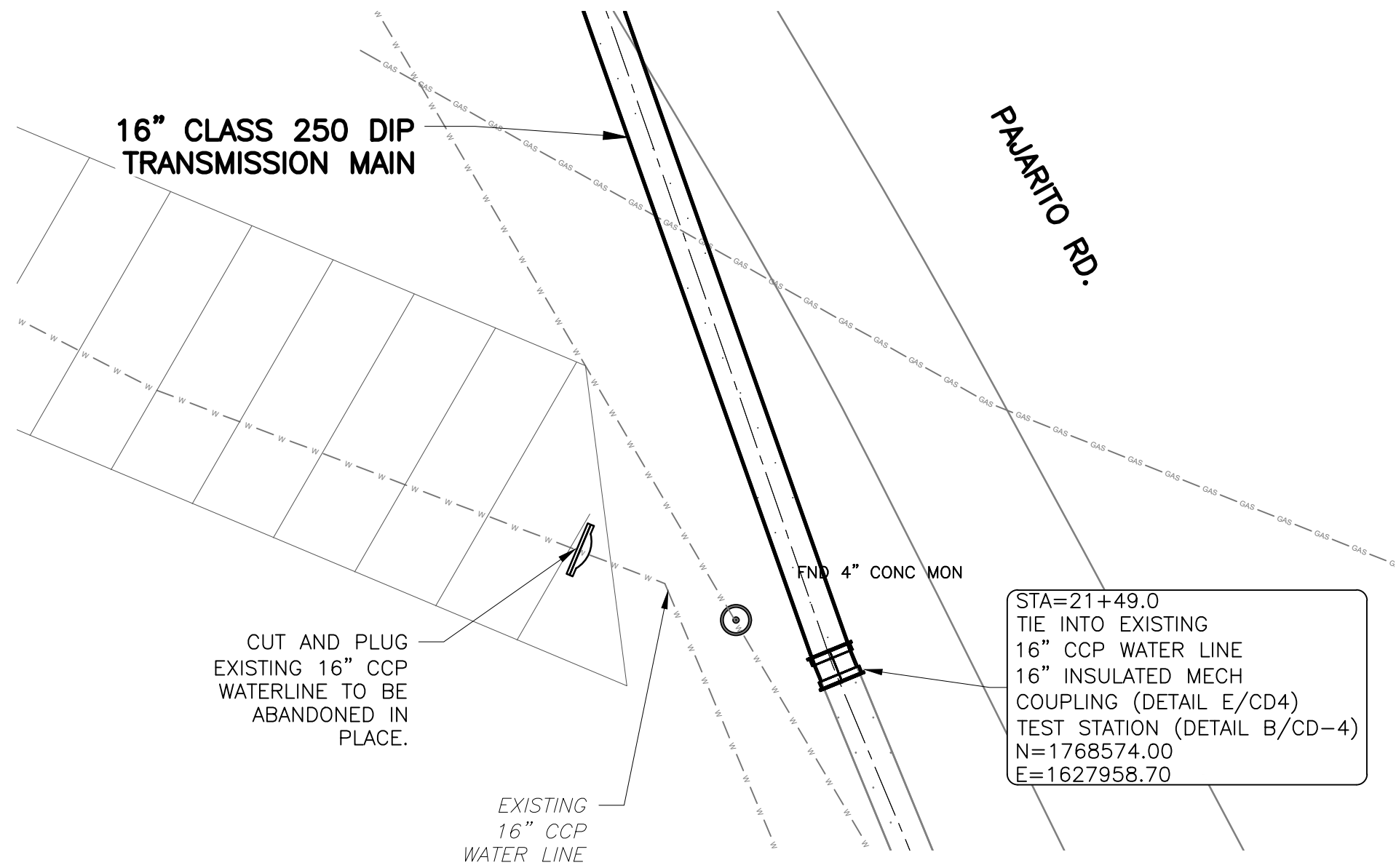
SHEET
C-3

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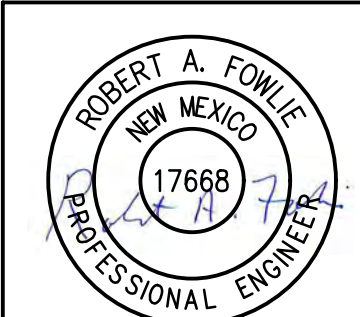
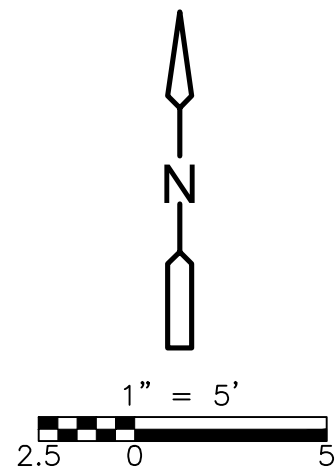
CONNECTION TO EXISTING
16" CCP TRANSMISSION MAIN
ENLARGED PLAN
SCALE: 1"=5'

A



CONNECTION TO EXISTING
16" CCP TRANSMISSION MAIN
ENLARGED PLAN
SCALE: 1"=5'

B



12/07/2022

REVISION DESCRIPTION	
NO.	
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DESIGNED BY:	D.W.M.
DRAWN BY:	G.R.
APPROVED BY:	R.F.
DATE:	12-07-22
SCALE:	AS SHOWN

TA-50 TRANSMISSION WATER
MAIN RELOCATION

ENLARGED 16" SCCP WATER
LINE CONNECTION PLANS

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

CDM Smith
6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
Tel: (505) 243-3200

INCORPORATED COUNTY
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DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

SHEET

C-4

DEPARTMENT OF PUBLIC UTILITIES LOS ALAMOS COUNTY LOS ALAMOS, NEW MEXICO		C:\GIS\TEMP\00005\NEW LOGO2.DWG	UTILITY CONSTRUCTION STANDARD WATER MAIN PAVED TRENCH DETAIL		SECTION ### ###
No. DATE:					
REVISION:	MATERIALS AND WORKMANSHIP SHALL BE IN COMPLIANCE WITH THE MOST CURRENT NMDOT STANDARD SPECIFICATIONS.				
APPROVED BY:	DATE: December 22				

LOS ALAMOS Department of Public Utilities <small>Electric, Gas, Water, and Wastewater Services</small>	UTILITY CONSTRUCTION STANDARDS - WATER
	WATER MAIN TRENCH DETAIL

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

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.

NO.	REVISION DESCRIPTION
1	
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DESIGNED BY:	D.W.M.
DRAWN BY:	G.R.
APPROVED BY:	R.F.
DATE:	12-07-22
SCALE:	AS SHOWN

TA-50 TRANSMISSION WATER MAIN RELOCATION	CIVIL STANDARD DETAILS I
---	-----------------------------

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

**CDM
Smith**

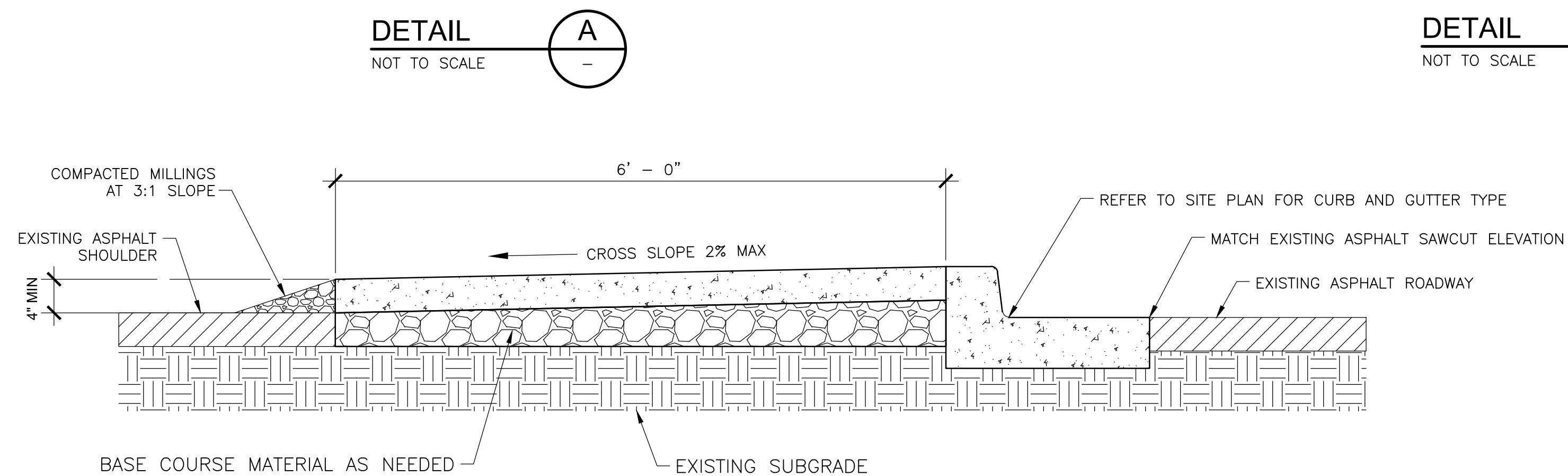
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Albuquerque, NM 87110

**INCORPORATED COUNTY
OF LOS ALAMOS**

**DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544**

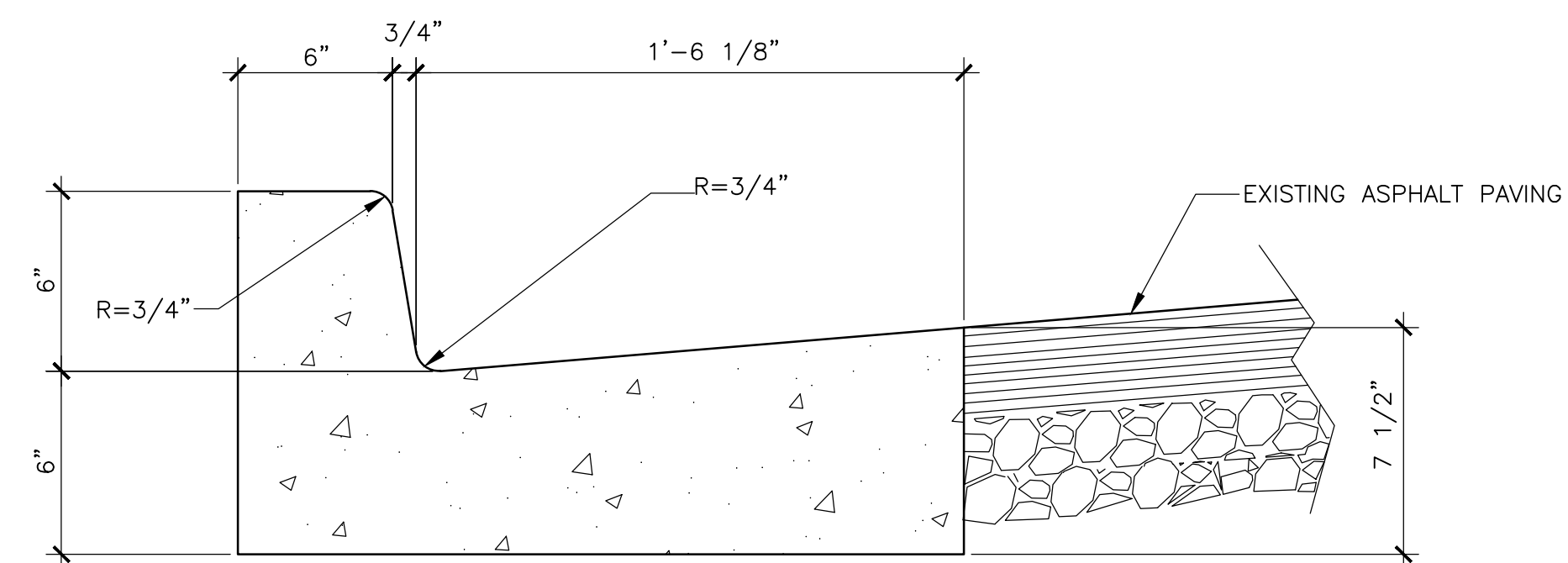
(505) 662-8333 FAX: (505) 662-8005

SHEET
CD-1

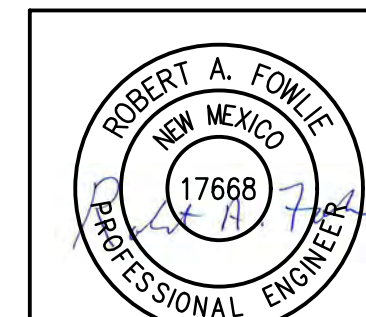


- GENERAL NOTES:**

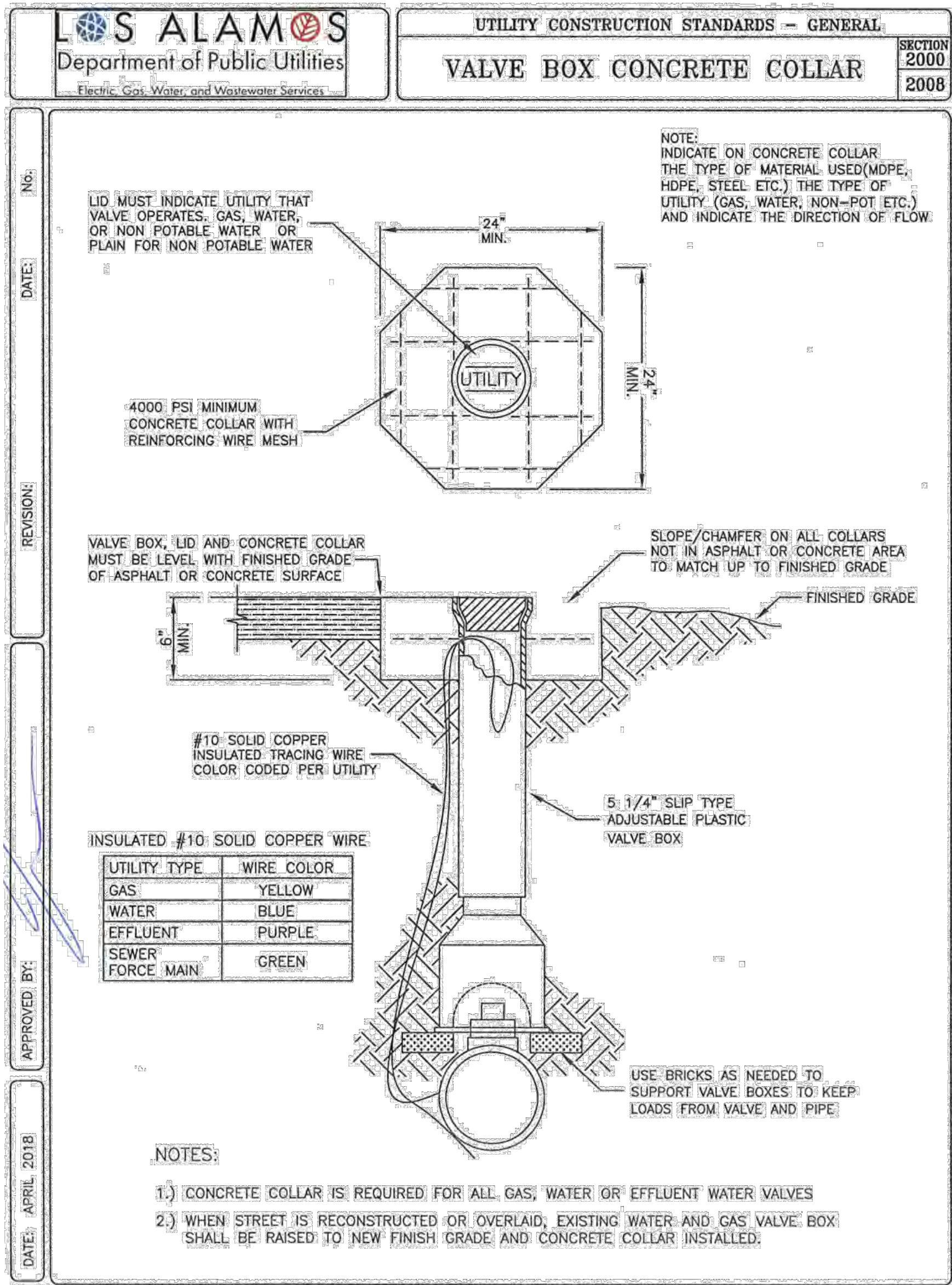
- | | |
|---|--|
| 1. PLACE 1/2" WIDE PREMOLED EXPANSION JOINT FILLER MATERIAL AT INTERVALS NOT TO EXCEED 3 CONTROL JOINTS. | 5. CAST-IN-PLACE CONCRETE TESTING REQUIRED TO BE IN COMPLIANCE WITH LANL SPECIFICATIONS. FINAL MATERIAL ACCEPTANCE TO BE DETERMINED BY THE TRAFFIC SYSTEMS ENGINEER. |
| 2. PLACE CONTROL JOINTS IN THE SIDEWALKS TO FORM A SQUARE. | |
| 3. JOINTS MAY BE TOOLED OR SAWED AND SHALL EXTEND AT LEAST 1/3 OF THE DEPTH OF CONCRETE. | 6. COMPACTION TESTING TO BE PERFORMED AS NEEDED. FINAL MATERIAL COMPACTION ACCEPTANCE TO BE DETERMINED BY THE LANL TRAFFIC SYSTEMS ENGINEER. |
| 4. SIDEWALKS, SIDEWALK RAMPS AND HANDRAIL SHALL BE COMPLIANT WITH AMERICANS WITH DISABILITIES ACT (ADAA) AND NEW MEXICO DOT STANDARD DRAWINGS, SECTION 608. | 7. USE BASE COURSE WHEN NEEDED TO REPAIR SOFT SPOTS, AND, OR USE BASE COURSE TO BRING THE FINAL GRADE UP TO THE FINISHED ELEVATION PRIOR TO CONCRETE PLACEMENT. |



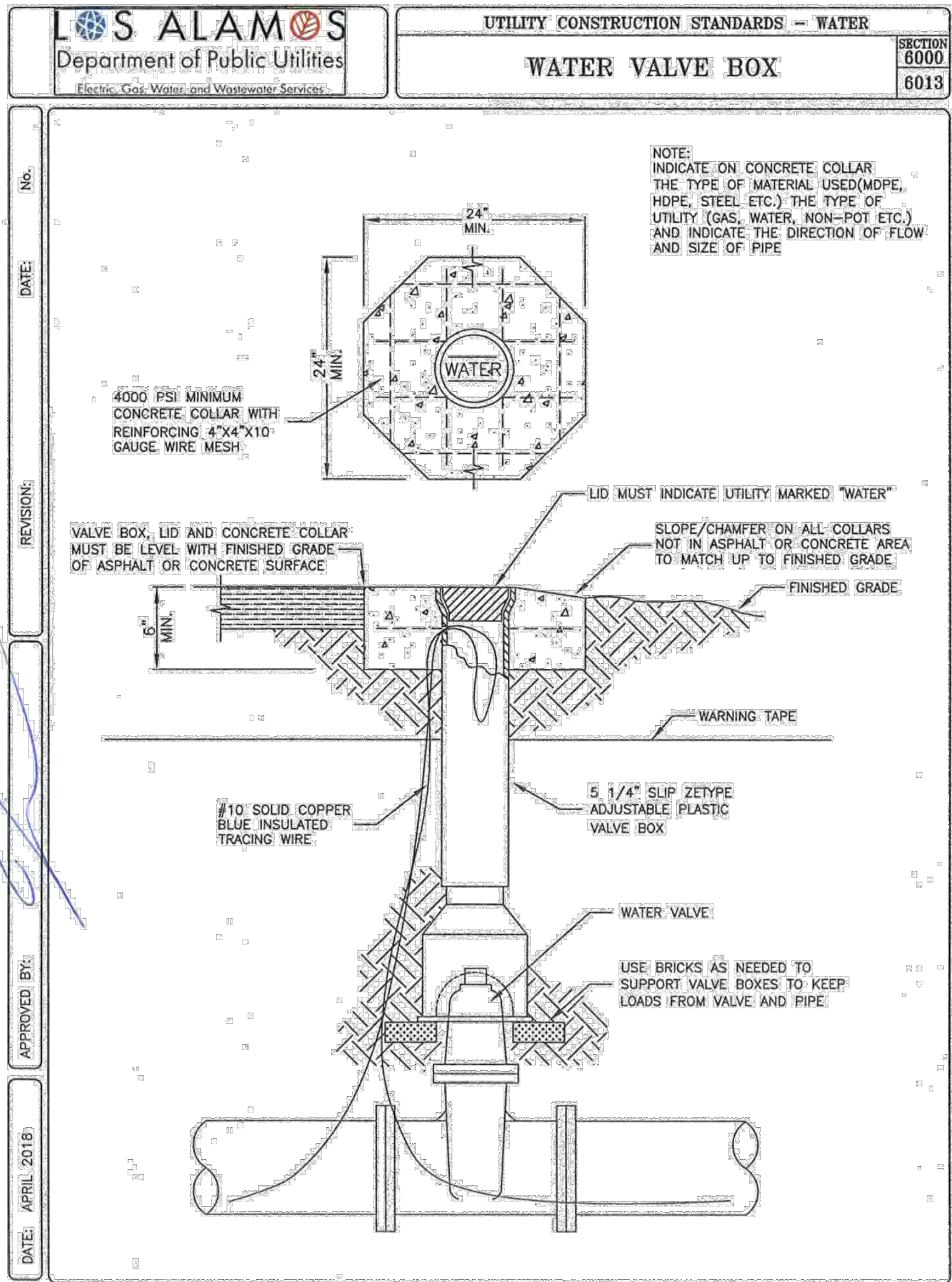
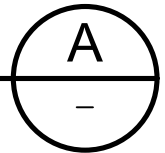
CONCRETE CURB AND GUTTER
DETAIL
NOT TO SCALE



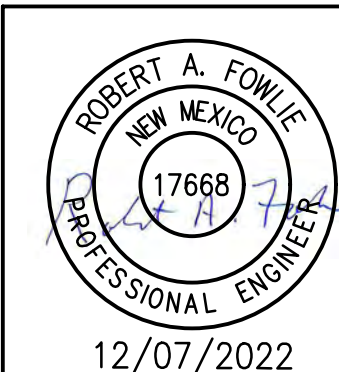
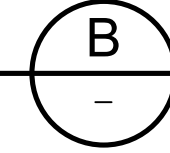
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DETAIL
NOT TO SCALE



DETAIL
NOT TO SCALE



12/07/2022

INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

SHEET

CD-2

TA-50 TRANSMISSION WATER
MAIN RELOCATION
CIVIL
STANDARD DETAILS I

DESIGNED BY: D.W.M.
DRAWN BY: G.R.
APPROVED BY: R.F.
DATE: 12-07-22
SCALE: AS SHOWN

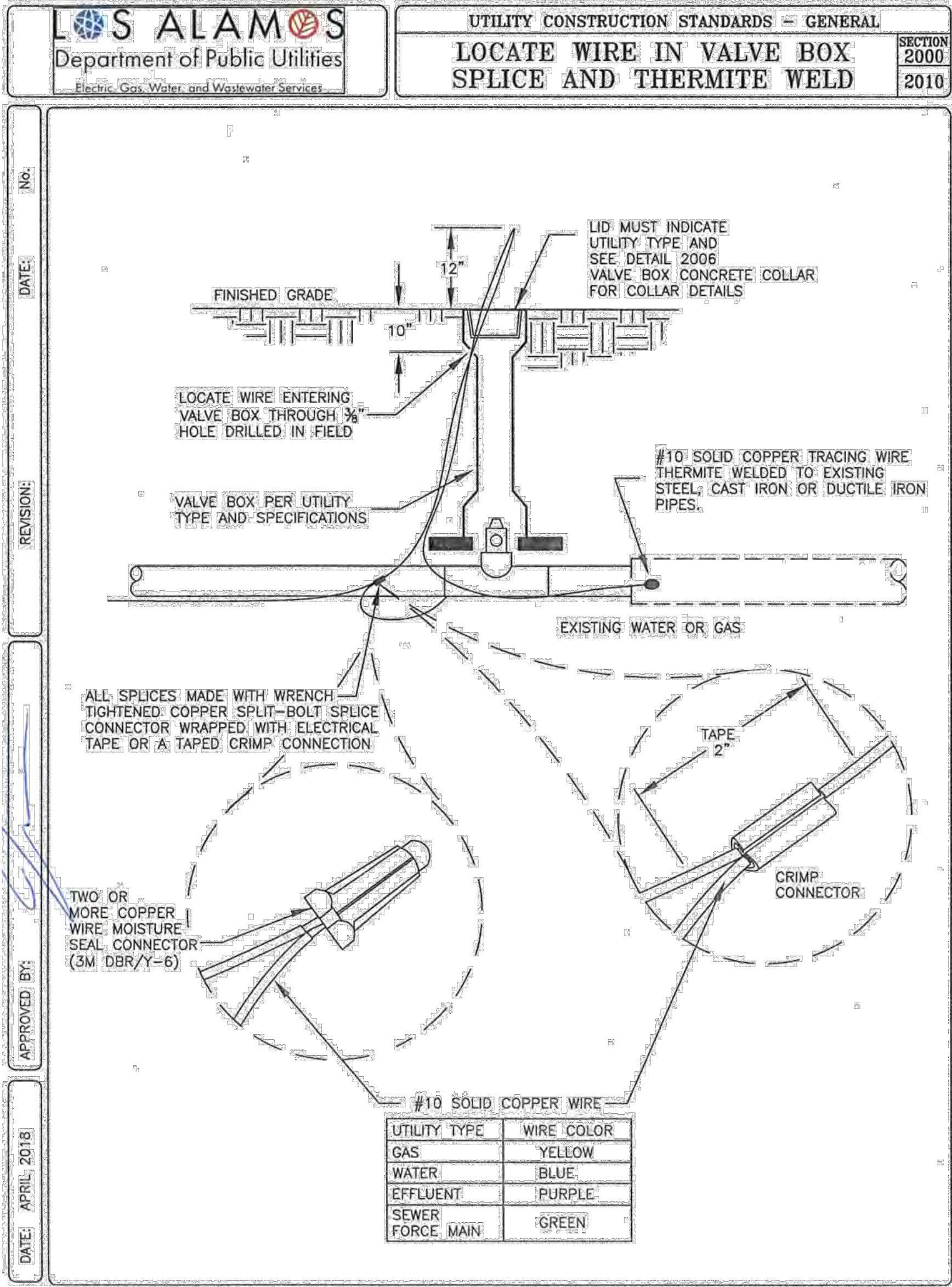
NO.	REVISION DESCRIPTION
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LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

CDM
Smith

6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
Tel: (505) 243-3200

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No.

DATE:

REVISION:

APPROVED BY:

DATE: APRIL 2018

FINISHED GRADE

12"

10"

LOCATE WIRE ENTERING VALVE BOX THROUGH 3/4" HOLE DRILLED IN FIELD

VALVE BOX PER UTILITY TYPE AND SPECIFICATIONS

LID MUST INDICATE UTILITY TYPE AND SEE DETAIL 2006 VALVE BOX CONCRETE COLLAR FOR COLLAR DETAILS

EXISTING WATER OR GAS

#10 SOLID COPPER TRACING WIRE THERMITE WELDED TO EXISTING STEEL, CAST IRON OR DUCTILE IRON PIPES.

ALL SPLICES MADE WITH WRENCH TIGHTENED COPPER SPLIT-BOLT SPLICE CONNECTOR WRAPPED WITH ELECTRICAL TAPE OR A TAPED CRIMP CONNECTION

TAPE 2"

CRIMP CONNECTOR

TWO OR MORE COPPER WIRE MOISTURE SEAL CONNECTOR (3M DBR/Y-6)

#10 SOLID COPPER WIRE

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

DETAIL

NOT TO SCALE

A

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

No.

DATE:

REVISION:

APPROVED BY:

DATE: APRIL 2018

PVC Mechanical Joint Restraint Table

PIPE SIZE	BENDS				TEES			VERTICAL OFFSETS				DEAD ENDS & VALVES	
	11 1/4	22 1/2	45	90	LRN = 5	LRN = 10	LRN = 20	45		22 1/2			
								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	
	11 1/4	22 1/2	45	90	LRN = 5	LRN = 10	LRN = 18	45		22 1/2			
								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.

DEAD ENDS

HORIZONTAL BENDS

TEES

VERTICAL UP BEND

VERTICAL DOWN BENDS

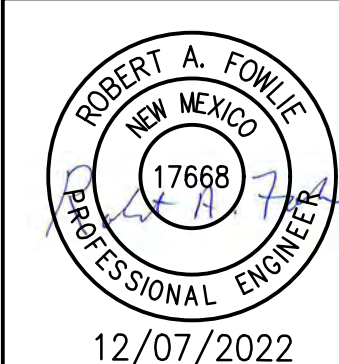
LRN = SHORTEST LENGTH OF PIPE RESTRAINED TO THE RUN OF THE TEE FITTING (BOTH SIDES OF TEE).

UNDISTURBED SOIL

DETAIL

NOT TO SCALE

B



INCORPORATED COUNTY OF LOS ALAMOS

DEPARTMENT OF PUBLIC UTILITIES

1000 CENTRAL AVE., SUITE 130

LOS ALAMOS, NEW MEXICO 87544

(505) 662-8333 FAX: (505) 662-8005

TA-50 TRANSMISSION WATER MAIN RELOCATION

CIVIL STANDARD DETAILS II

DESIGNED BY: D.W.M.

DRAWN BY: G.R.

APPROVED BY: R.F.

DATE: 12-07-22

SCALE: AS SHOWN

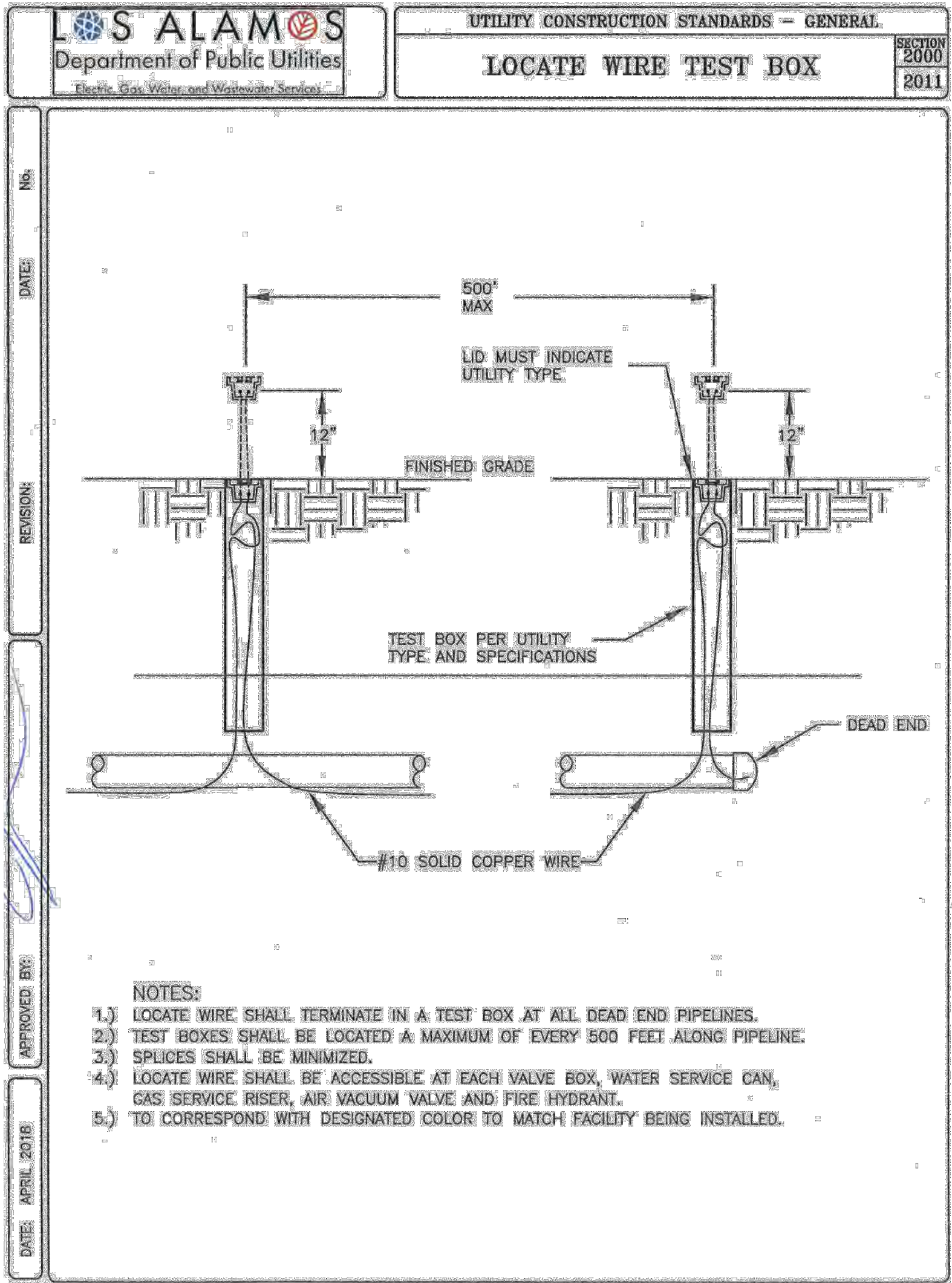
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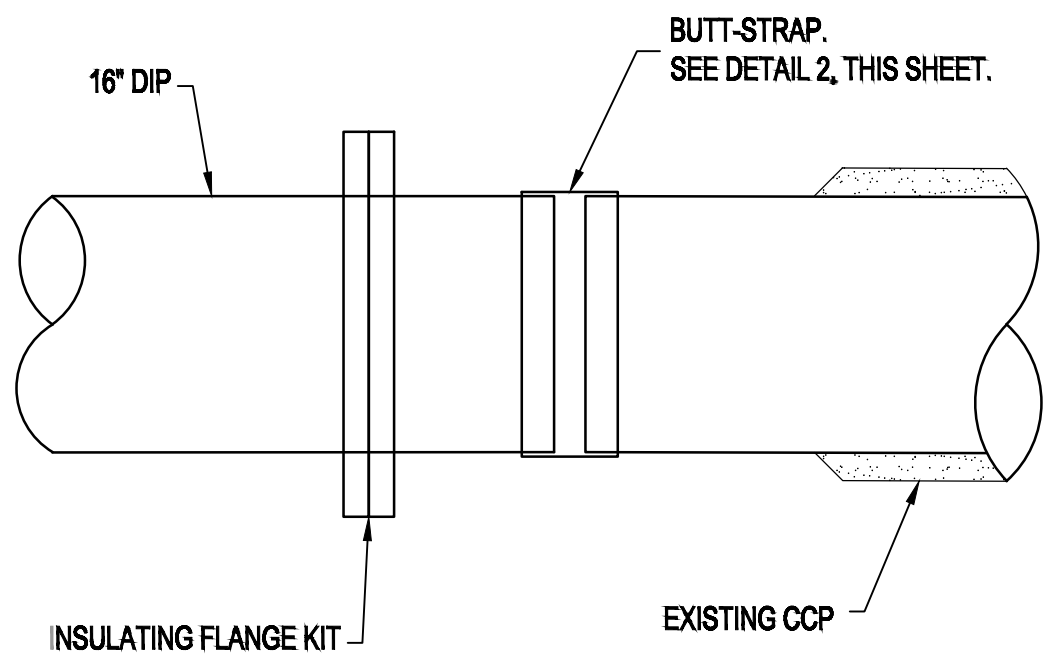
SHEET

CD-3

Drawing File: C:\USERS\RODRIGUEZ\GA\ONEDRIVE - CDM\SMITH\GILBERTO-NO-PDF\ALBUQUERQUE\257115-271058_TA50_RELOCATE WATERLINE\DWG\SCD04\STDT.DWG

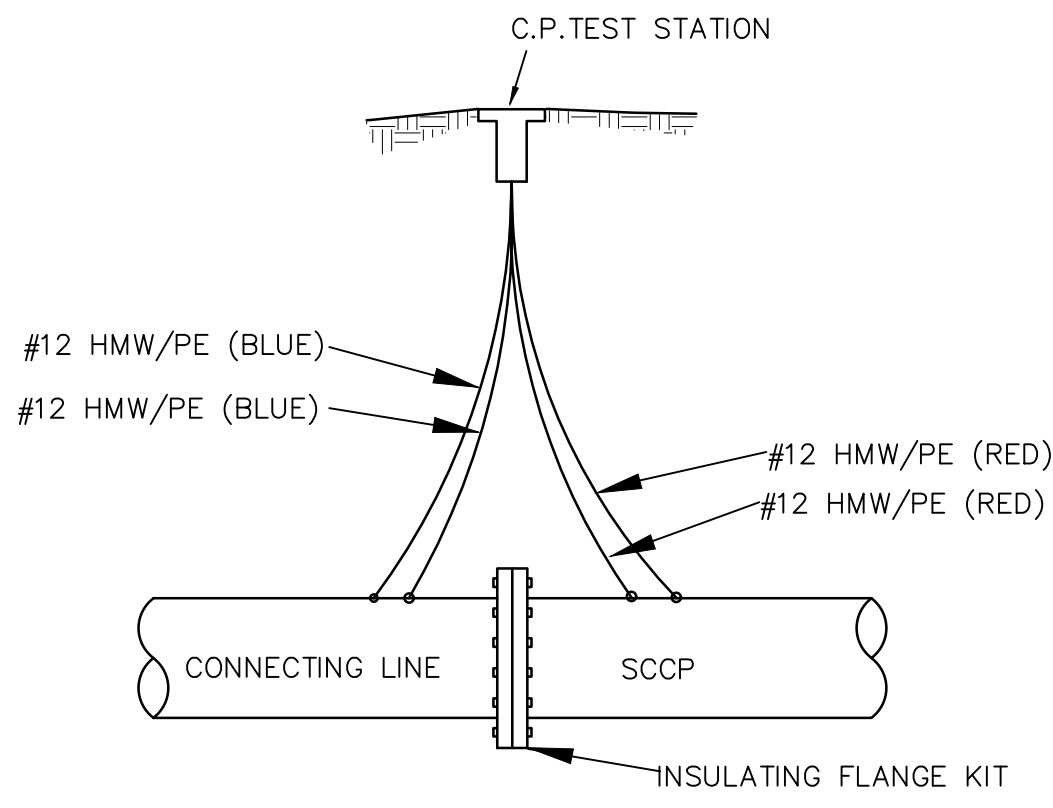


DETAIL A
NOT TO SCALE



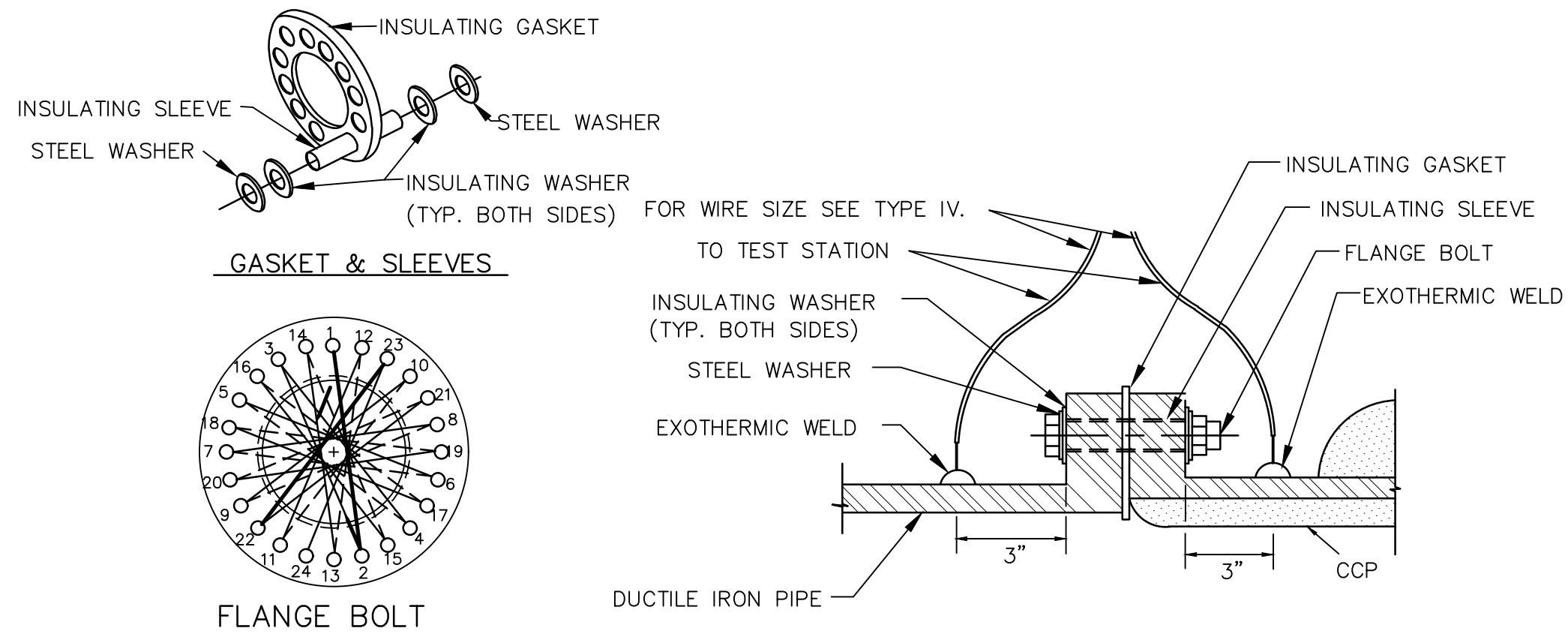
CONNECTION DETAIL TO EXISTING CCP

DETAIL E
NOT TO SCALE



TYPE IV
INSULATING FLANGE KIT
NOT TO SCALE

TEST STATION TYPES
DETAIL B
NOT TO SCALE



TIGHTENING SEQUENCE

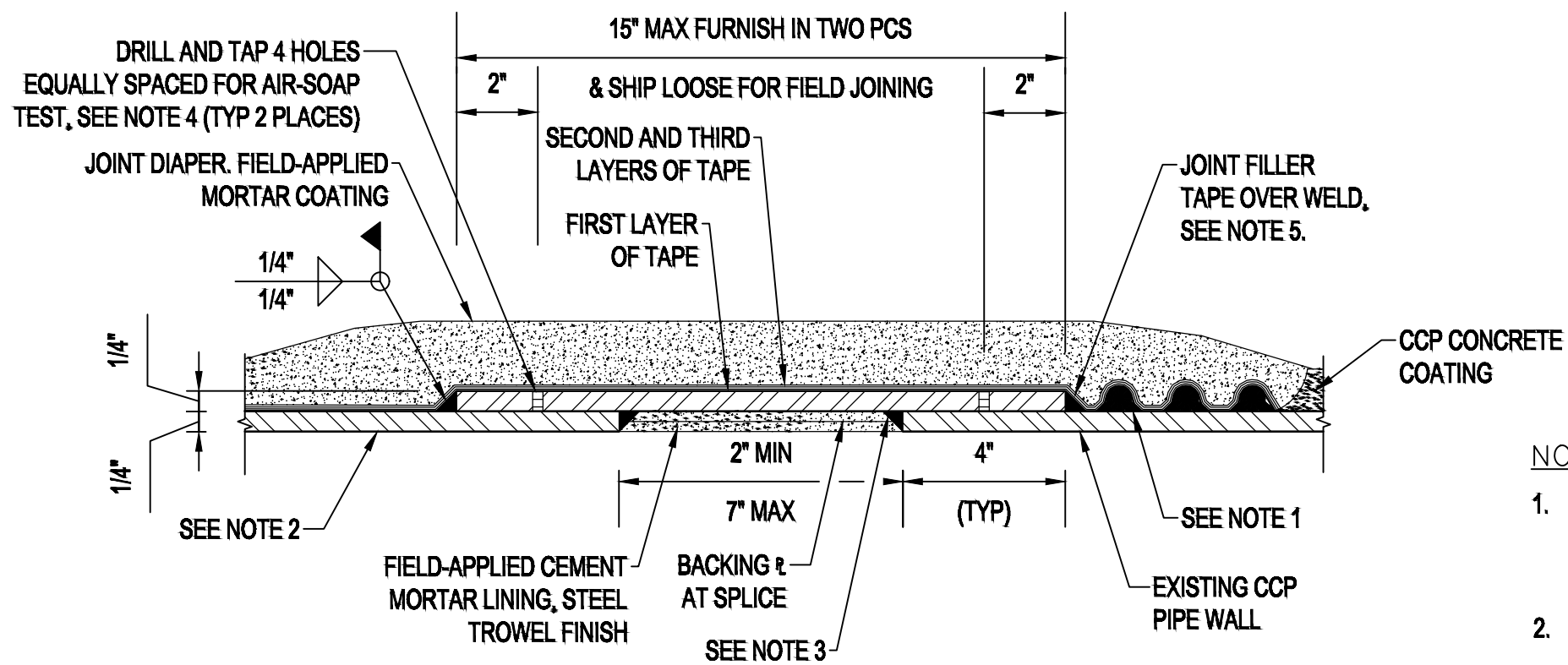
DETAIL C
NOT TO SCALE

INSULATING FLANGE KIT ASSEMBLY

DETAIL D
NOT TO SCALE

NOTES:

1. TIGHTENING SEQUENCE SHALL BE PERFORMED IN THE PRESENCE OF ENGINEER.
2. MATERIAL USED SHALL BE AS NOTED IN THE SPECIFICATIONS.
3. DURING BACKFILLING, THE CONTRACTOR SHALL USE CAUTION TO PREVENT DISPLACEMENT OF THE TEST WIRES.
4. WHEN INSTALLING GASKETS MADE OF DIALECTIC ASBESTOS AND TIGHTENED COLD (REFER TO BOLT TIGHTENING SEQUENCE DIAGRAM ABOVE), "HOT FLOW" OF THE GASKET MATERIAL MAY OCCUR UNDER OPERATING CONDITIONS, RESULTING IN THE LOSS OF BOLT PRESSURE. IT IS ADVISABLE THEREFORE, TO RETIGHTEN BOLTS AFTER OPERATING TEMPERATURE HAS BEEN REACHED—PREFERABLY AT ZERO LINE PRESSURE AND AMBIENT TEMPERATURE. UNDER NO CIRCUMSTANCES SHOULD THE SYSTEM BE ALLOWED TO RETURN TO OPERATING TEMPERATURE AFTER THE INITIAL CYCLING TO AMBIENT TEMPERATURE WITHOUT RECHECKING AND RETIGHTENING BOLTS WHERE NEEDED.
5. TO PROVIDE EVEN SEALING ON A FLANGE GASKET THE BOLTS SHALL BE PARTIALLY TIGHTENED IN THE SEQUENCE SHOWN HEREON UNTIL THE FLANGE FACES ARE IN CONTACT WITH THE GASKET. AFTER THE FLANGE FACES ARE IN CONTACT WITH THE GASKET, FIRMLY TIGHTEN THE BOLTS IN THE SAME SEQUENCE.
6. ALTHOUGH THIS DIAGRAM SHOWS 24 BOLTS, THE SAME BASIC PROCEDURE SHOULD BE USED WITH FLANGES HAVING MORE OR LESS BOLTS.
7. BOLT TORQUE REQUIREMENT SHALL BE 75 FT.-LBS.

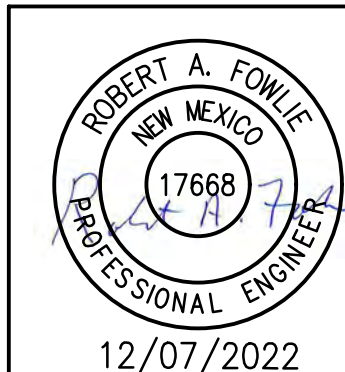


BUTT-STRAP CONNECTION DETAIL

DETAIL F
NOT TO SCALE

NOTES:

1. CCP PIPE SPIRAL WOUND STEEL REINFORCEMENT, TO BE CUT BACK TO ALLOW FOR BUTT-STRAP INSTALLATION. REINFORCEMENT SHALL BE WELDED TO PIPE WALL PRIOR TO CUTTING WITH A MIN. 8" LONG FILLET WELD, WITH A WELD 1/2 OF THE DIAMETER OF THE REINFORCEMENT, ALONG EACH SIDE, ON TWO CONSECUTIVE WINDS.
2. STEEL PIPE OUTSIDE DIAMETER SHALL MATCH EXISTING CCP PIPE WALL OUTSIDE DIAMETER, +/- 1/16".
3. CONTRACTOR SHALL BEVEL ENDS OF BACKING PLATE AT BUTT-STRAP PRIOR TO WELDING OR BACKGOUGE AT CONTACT WITH ADJACENT CYLINDER PRIOR TO COMPLETING INSIDE FILLET WELD.
4. BEFORE WELDING, CONTRACTOR SHALL DRILL AND TAP HOLES AS NOTED FOR 1/2" PIPE NIPPLE. CONTRACTOR SHALL AIR AND SOAP TEST AFTER WELDING IS COMPLETED. CONTRACTOR SHALL PLUG WELD HOLES AFTER SUCCESSFUL COMPLETION OF JOINT TESTS.
5. CONTRACTOR SHALL USE LAYERS OF 125 MIL SEALANT TAPE PER TAPE MANUFACTURERS RECOMMENDATIONS BETWEEN OD OF BUTT-STRAP AND STEEL PIPE PRIOR TO APPLICATION OF PROTECTIVE WRAPS.



TA-50 TRANSMISSION WATER
MAIN RELOCATION
CIVIL
STANDARD DETAILS III

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

CDM Smith
6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
Tel: (505) 243-3200

INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8933 FAX: (505) 662-8005

SHEET
CD-4

NO.	REVISION DESCRIPTION
1	
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DESIGNED BY: D.W.M.
DRAWN BY: G.R.
APPROVED BY: R.F.
DATE: 12-07-22
SCALE: AS SHOWN

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CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTACT INFORMATION:

LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES (505) 662-8333
LOS ALAMOS COUNTY TRAFFIC AND STREETS DIVISION (505) 662-8333
LOS ALAMOS POLICE (505) 662-8222
LOS ALAMOS NATIONAL LABS (LANL) TRAFFIC ENGINEER

2. FOR WORK IN PAJARITO ROAD (LANL) RIGHT OF WAY, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE LANL TRAFFIC ENGINEER AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND PREPARED BY A PROFESSIONAL ENGINEER CERTIFIED AS A PROFESSIONAL TRAFFIC OPERATIONS ENGINEER AND MUST BE APPROVED BY LANL TRAFFIC ENGINEER PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT.

3. A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. INDIVIDUALS WHO ARE KNOWLEDGEABLE (IMS A OR AATSA TRAINED AND CERTIFIED) IN THE PRINCIPLES OF PROPER TEMPORARY TRAFFIC CONTROL SHALL BE ASSIGNED RESPONSIBILITY FOR SAFETY IN TEMPORARY TRAFFIC CONTROL ZONES. TRAFFIC CONTROL ZONES SHALL BE MONITORED UNDER VARYING CONDITIONS OF ROAD USED VOLUME, LIGHT, AND WEATHER TO CHECK THAT APPLICABLE TEMPORARY TRAFFIC CONTROL DEVICES ARE EFFECTIVE, CLEARLY VISIBLE, CLEAN, AND IN COMPLIANCE WITH THE TRAFFIC CONTROL PLAN.

4. FOR ALL WORK DURING THIS PROJECT THE DAILY TRAFFIC CONTROL LOG SHALL BE SUBMITTED TO THE LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES MANAGER, AND THE LANL TRAFFIC ENGINEER, IF APPLICABLE, UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT MANAGER.

5. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY AND LANL TRAFFIC ENGINEER.

6. FOR ARTERIAL ROADWAYS, PAJARITO ROAD, MAINTAIN AT LEAST ONE LANE OF TRAFFIC EACH WAY AT ALL TIMES.

7. TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.

8. TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

9. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY THE COUNTY DEPARTMENT OF PUBLIC UTILITIES MANAGER AND LANL TRAFFIC ENGINEER.

10. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF THE LOS ALAMOS DEPARTMENT OF PUBLIC UTILITIES MANAGER AND LANL TRAFFIC ENGINEER.

11. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP FOR EACH PHASE SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORK SITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORK SITE TRAFFIC SUPERVISOR OR EQUIVALENT.

12. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

13. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

14. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY NMDOT DISTRICTS PER MUTCD SECTION 6A-4 CHAPTER 6.

15. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF THE LOS ALAMOS DEPARTMENT OF PUBLIC UTILITIES MANAGER AND LANL TRAFFIC ENGINEER.

16. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

17. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

18. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND OR RESIDENTS AT ALL TIMES.

19. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE

CONSTRUCTION AREA UNDER THE SUPERVISION OF LOS ALAMOS DEPARTMENT OF PUBLIC UTILITIES MANAGER. EACH ACCESS SIGN SHALL HAVE 5 INCH, ORANGE LETTERING ON WHITE BACKGROUND. SHOPPING CENTERS AND MALLS SHALL BE LISTED.

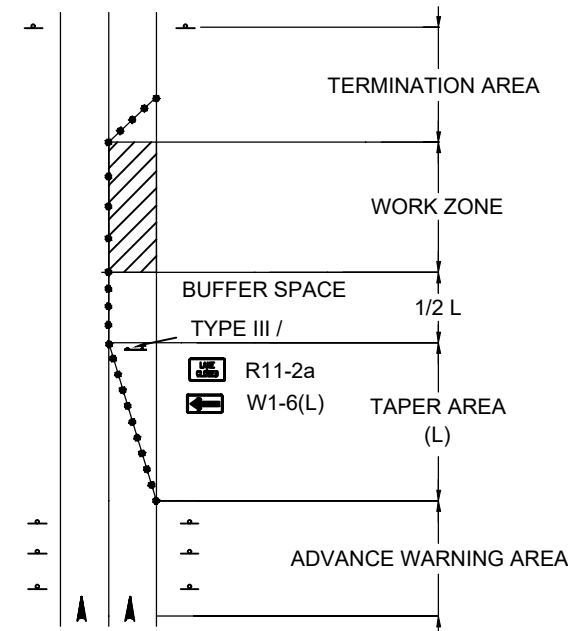
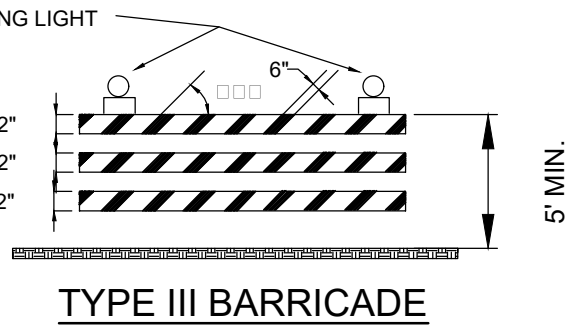
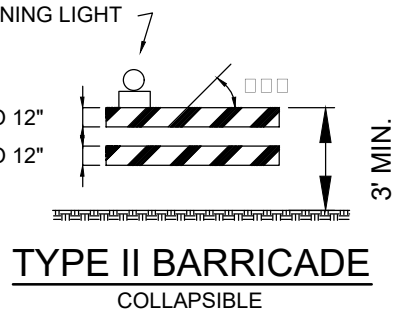
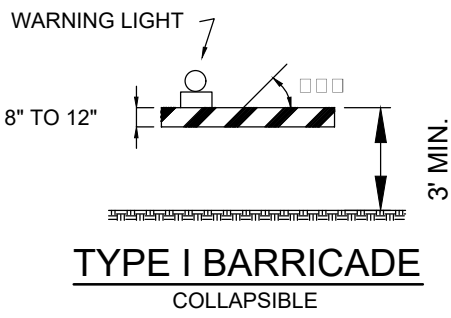
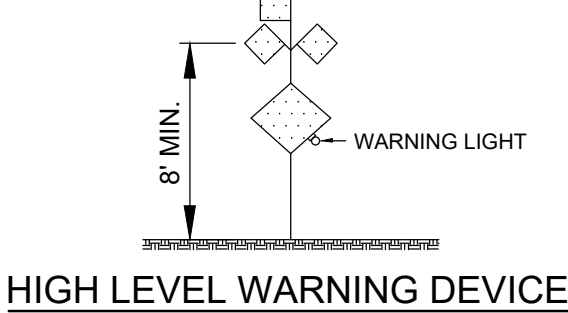
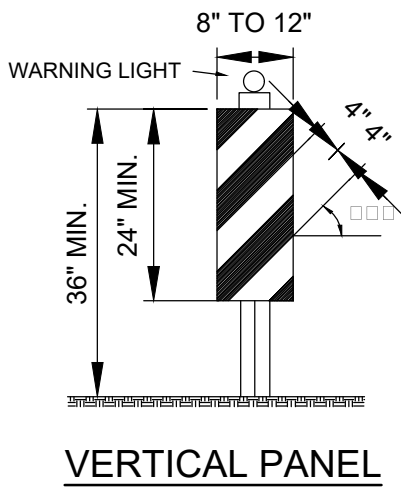
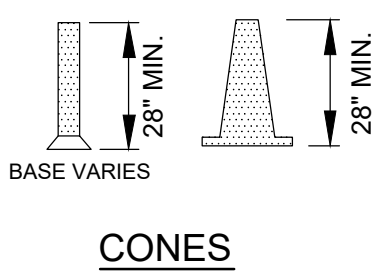
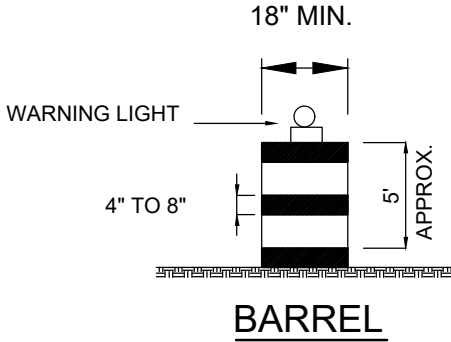
CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

20. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

21. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE LOS ALAMOS DEPARTMENT OF PUBLIC UTILITIES MANAGER AND LANL TRAFFIC ENGINEER.

22. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET, SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

23. PAVEMENT DROP-OFF POLICY: IF A PAVEMENT DROP-OFF IS CREATED DURING CONSTRUCTION, THE CONTRACTOR SHALL INITIATE PROTECTIVE ACTION IN ACCORDANCE WITH DEPARTMENT'S CURRENT "DROP-OFF POLICY". THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.



LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- VERTICAL PANEL
- WARNING SIGN
- FLAGMAN POSITION
- DISTANCE BETWEEN SIGNS (A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET)
- SPACING BETWEEN BARRICADES (A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET)
- TAPER LENGTH (SEE CHART BELOW)
*THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH IN FEET (L)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

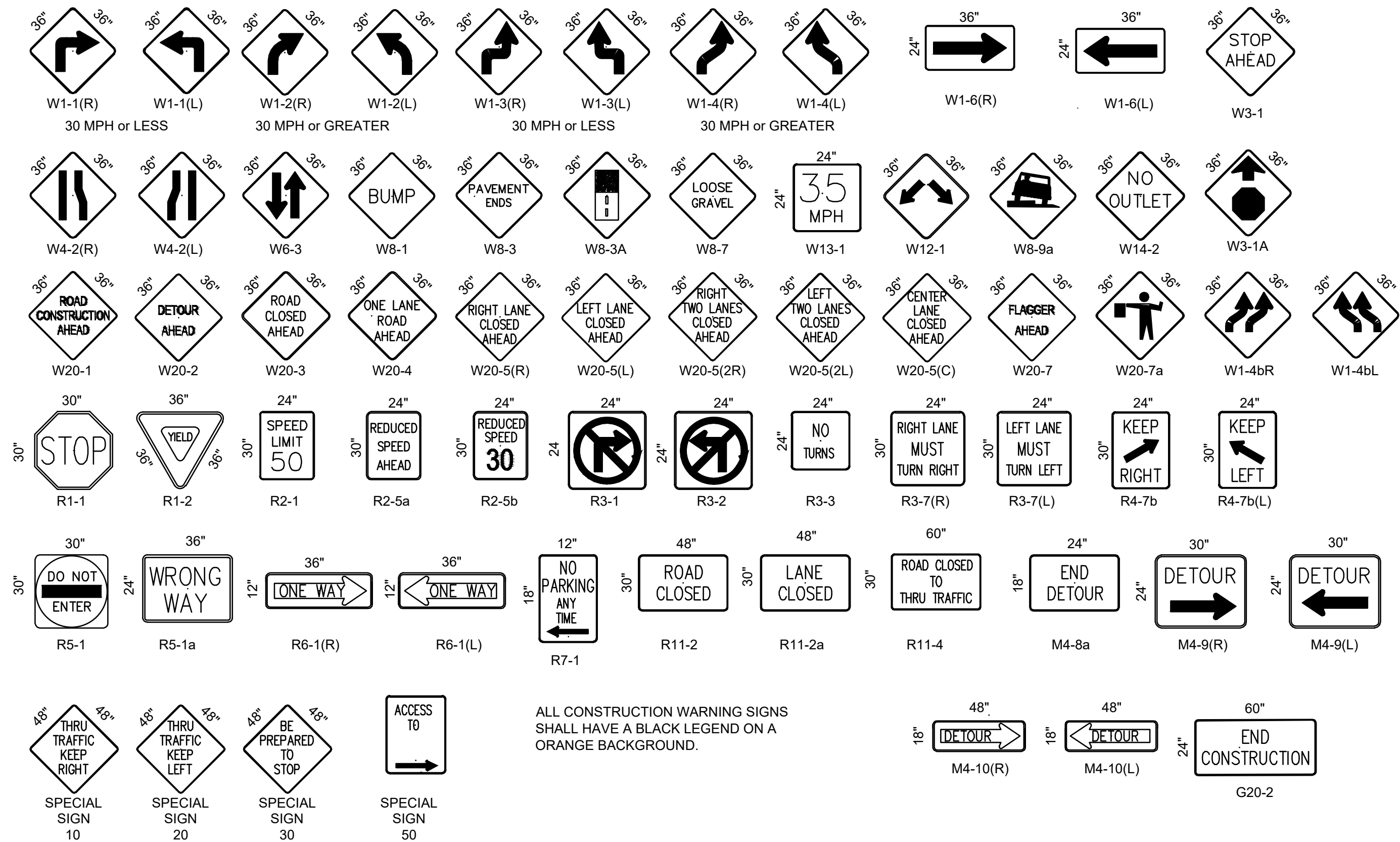
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPER:	100 FEET PER LANE

TAPER LENGTH COMPUTATION

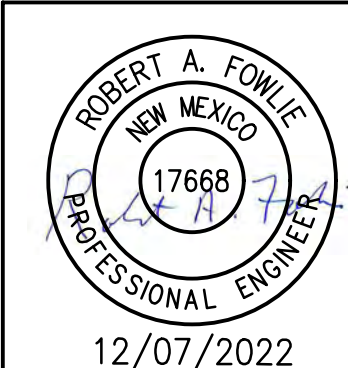
SPEED LIMIT
40 MPH OR LESS
45 MPH OR GREATER

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85 PERCENTILE SPEED, IN MPH

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.



REVISION DESCRIPTION	
NO.	
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DESIGNED BY:	D.W.M.
DRAWN BY:	G.R.
APPROVED BY:	R.F.
DATE:	12-07-22
SCALE:	AS SHOWN

TA-50 TRANSMISSION WATER MAIN RELOCATION

TEMPORARY TRAFFIC CONTROL GENERAL NOTES & SIGNAGE DETAILS

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

CDM Smith

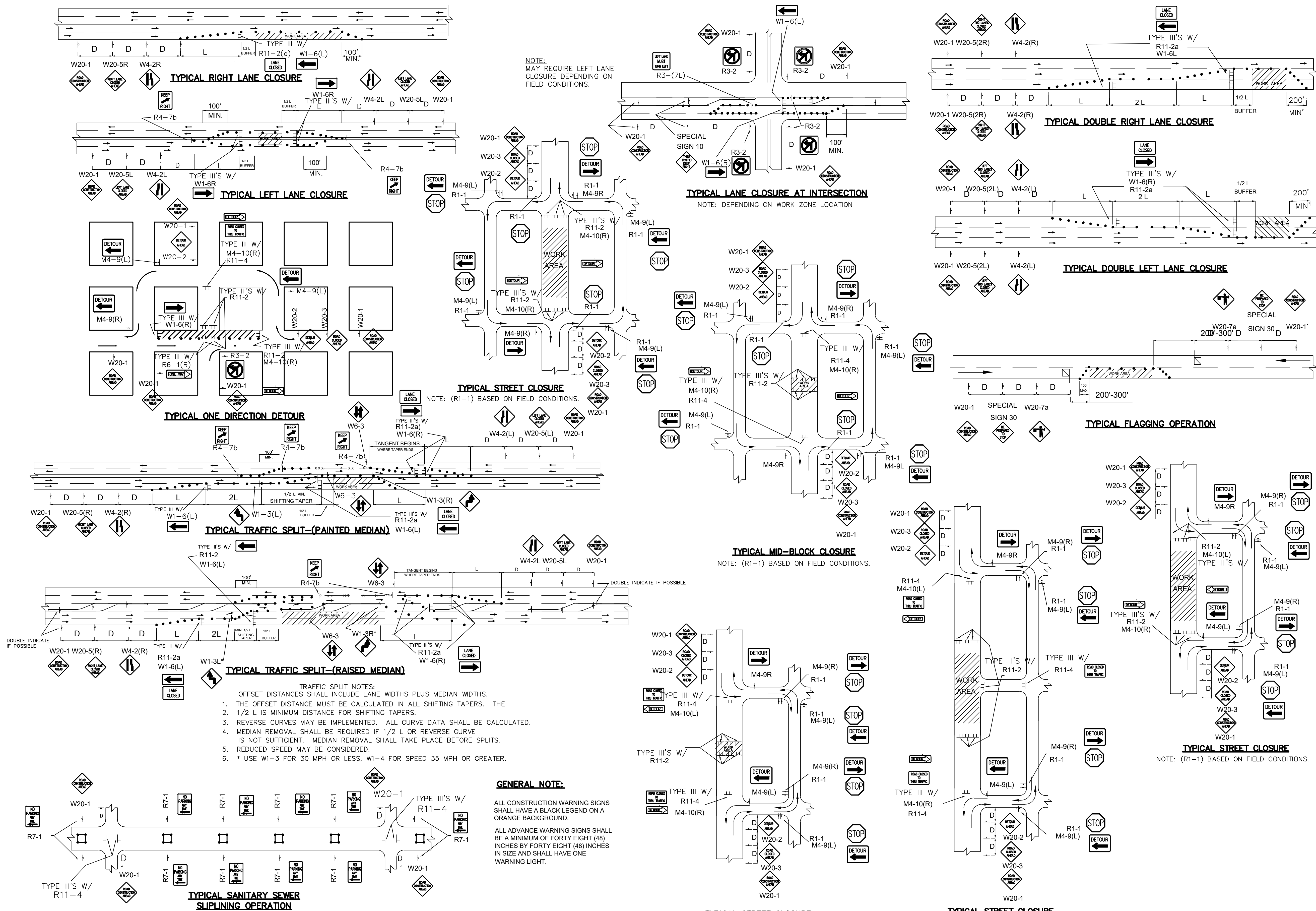
6001 Indian School Road NE, Suite 310 Albuquerque, NM 87110 Tel: (505) 243-3200

INCORPORATED COUNTY OF LOS ALAMOS

DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

SHEET

TC-1



NO.	REVISION DESCRIPTION
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DESIGNED BY:	D.W.M.
DRAWN BY:	G.R.
APPROVED BY:	R.F.
DATE:	12-07-22
SCALE:	AS SHOWN

TA-50 TRANSMISSION WATER
MAIN RELOCATION

TEMPORARY TRAFFIC CONTROL
GENERAL NOTES & STANDARDS

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

**CDM
Smith**

6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
Tel: 505.242.3200
Fax: 505.242.3201

**INCORPORATED COUNTY
OF LOS ALAMOS**

**DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544**

(505) 662-8333 FAX: (505) 662-8005

SHEET
TC-2