

**ORDER FOR  
HIGH DENSITY POLYETHYLENE GEOTHERMAL AMBIENT LOOP PIPE**

By the City Council of the City of Framingham, Massachusetts notice having been given and a public hearing held, as provided by law, **IT IS HEREBY ORDERED:**

That permission be and hereby granted to **NSTAR Gas Company (d/b/a EVERSOURCE Energy) F.W.O #NTGT0N2Y** locations for and permission to install one (1) new 8 inch diameter High- Density Polyethylene (HDPE) Geothermal Ambient Loop Pipe, one (1) ancillary 8-inch HDPE loop pipe and associated valves, fixtures, and appurtenances to be owned and used by your petitioner, along and across the following public ways: Normandy Road, Berkshire Road, Prindiville Avenue, Hampshire Road, Lindberg Road, and Concord Street in support of new geothermal ambient loop pipe, as requested by Patricia A. Quinn, Supervisor T&D Rights and Survey on **March 13, 2023**.

**Hampshire Road – Extending northerly from Prindiville Avenue along West side for a for a distance of approximately 275± feet then crossing easterly to the north side of Lindbergh Road**

Plan Ref. PROJECT NO. 253460-273904 (Issued For Construction),

FILE NAME: **C009STPL, C-9** Dated: **2/23/2023**

Install one (1) 8” diameter HDPE Geothermal Ambient Loop Pipe, six (6) 1 ½” service connections and all associated valves and fixtures necessary or useful in connection therewith.

All construction under this order shall be in accordance with the conditions set forth in a letter dated April 24, 2023 from the Framingham Department of Public Works as follows:

1. The applicant (or applicant’s designee) shall be registered as a utility within the Dig-Safe system and will be responsible to comply with all applicable laws and regulations pertaining to utility location and marking, including MGLc.82, sec.40 and 220 CMR 99. The applicant (or applicant’s designee) shall fulfill the definition of “Company” as set forth in the aforementioned law and regulations.
2. The Geothermal pipe shall be colored black and labeled appropriately as Geothermal piping on four sides evenly spaced around and through-out the length of the pipe
3. The proposed 8-inch HDPE pipe shall be installed a minimum three feet away from City utilities.
4. The DPW requests notification prior to the start of work to verify final location in the field.
5. Pavement restoration: all trenches shall be appropriately backfilled and compacted with minimum 4-inches of binder (6-inches on Concord Street) or match existing pavement thickness if greater. The trenches shall settle minimum 120-days or a winter season. After the settlement period, the trenches shall be restored as follows:
  - a. Berkshire Road, Prindiville Avenue, Hampshire Road, and Lindbergh Road: shall be milled and paved the trench width plus minimum 2-feet past the trench boundaries.
  - b. For the section of Concord Street in the vicinity of the intersection of Hartford Street, the restoration will be determined at the time of the Street Opening Permit and may include full width restoration depending on the coordination with the planned intersection

improvements.

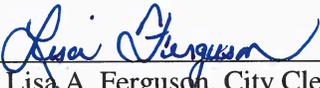
c. The remaining length of Concord Street shall be milled for the entire width of the vehicular travel lane in which the trench is located.

d. Normandy Road: the restoration will include full-width milling and paving for the section between Arsenal Road and the project limits. For the section between Arsenal Road and Concord Street, the restoration shall include trench mill and pave to the edge of the road provided that the pipe is installed at the location included in the plans. If the pipe is moved significantly, the restoration may include full-width mill and pave.

e. Rose Kennedy Lane: Eversource Gas shall accelerate their planned gas pipe replacement scheduled for next year and conduct that work this year. Eversource shall then mill and pave the entire width of the roadway to account for the impact for both utilities. For the cul-de-sac where the Geothermal well field will be located, Eversource shall coordinate with the City for a comprehensive reconstruction of this area.

6. All work shall conform to the City of Framingham construction standards.

I hereby certify that the foregoing order was adopted at a meeting of the City Council of the City of Framingham, Massachusetts held on the 25th day of April 2023.

  
\_\_\_\_\_  
Lisa A. Ferguson, City Clerk

We hereby declare that on April 25, 2023 at 7:00 PM at 150 Concord Street, Framingham, Massachusetts a public hearing was held on the petition of **NSTAR Gas (EVERSOURCE) F.W.O #NTGT0N2Y** for permission to construct, and a location for, such High Density Polyethylene Geothermal Ambient Loop Pipe and associated valves, fixtures, and appurtenances therein, described in the order herewith recorded, and that we mailed at least seven days before said hearing a written notice of the time and place of said hearing to each of the owners of real estate (as determined by the last preceding assessment for taxation) along the ways or parts of ways upon which the Companies are permitted to erect poles, wires, cables, fixtures and connections under said order.

It is noted that, due to the COVID-19 pandemic, this meeting and public hearing was held with City Council members present either in person or via Zoom. The meeting is available for viewing on the City of Framingham website under Government Channel.

And that thereupon said order was duly adopted.

City Council  
City of Framingham, Massachusetts

**CERTIFICATE**

I hereby certify that the foregoing is a true copy of a joint location order and certificate of hearing with notice adopted by the Framingham City Council of the City of Framingham, Massachusetts on the 25<sup>th</sup> day of April, 2023 and recorded with the records of location orders of said City, Book 17, Page 23-4. This certified copy is made under the provisions of Chapter 166 of General Laws and any additions thereto or amendments thereof.

Attest:

  
\_\_\_\_\_

Lisa A. Ferguson, City Clerk



# CITY OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS | OPERATIONS

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OPERATIONS CENTER  
100 Western Avenue  
Framingham, MA 01702

508-532-6010  
engineering@framinghamma.gov  
www.framinghamma.gov

April 24, 2023

City Council  
City of Framingham  
Memorial Building  
150 Concord Street  
Framingham, MA 01702

Re: Grant of Location Request Eversource F.W.O. #NTGT0N2Y – Normandy Road, Berkshire Road, Prindiville Avenue, Hampshire Road, Lindbergh Road, Rose Kennedy Lane and Concord Street.

Dear City Council,

The Department of Public Works (DPW) is in receipt of a request from NSTAR Gas Company d/b/a Eversource Energy to install one (1) new 8-inch diameter High-Density Polyethylene (HDPE) Geothermal Ambient Loop Pipe, one (1) ancillary 8-inch diameter (HDPE) loop pipe and associated valves, fixtures, and appurtenances to be owned and used by your petitioner, along and across the following public ways: Normandy Road, Berkshire Road, Prindiville Avenue, Hampshire Road, Lindbergh Road, and Concord Street in support of new geothermal ambient loop pipe.

We have reviewed this Grant of Location request submitted to the City Council and recommend approval subject to the following conditions:

1. The applicant (or applicant's designee) shall be registered as a utility within the Dig-Safe system and will be responsible to comply with all applicable laws and regulations pertaining to utility location and marking, including MGL c.82, sec.40 and 220 CMR 99. The applicant (or applicant's designee) shall fulfill the definition of "Company" as set forth in the aforementioned law and regulations.
2. The Geothermal pipe shall be colored black and labeled appropriately as Geothermal piping on four sides evenly spaced around and throughout the length of the pipe.
3. The proposed 8-inch HDPE pipe shall be installed a minimum three feet away from City utilities.
4. The DPW requests notification prior to the start of work to verify final location in the field.





247 Station Drive  
Westwood, Massachusetts 02090

March 13, 2023

City of Framingham, City Council  
Memorial Building  
150 Concord Street  
Framingham, MA 01704

RE: **Hampshire Road** – Grant of Location (GOL) Petition  
Eversource Networked Geothermal Pilot – City of Framingham, MA (“City”)  
F.W.O.# NTGT0N2Y

Hearing Required

Dear Members of the City Council:

The enclosed petition and plan are being presented by NSTAR GAS COMPANY d/b/a EVERSOURCE ENERGY for the purpose of obtaining a Grant of Location (GOL) to install one (1) new 8” diameter High-Density Polyethylene (HDPE) Geothermal Ambient Loop Pipe, six (6) 1 ½” service connections and associated valves, fixtures, and appurtenances necessary or useful in connection therewith, pursuant to provisions of Massachusetts General Laws and City policy.

This work is necessary for installation and operation of a networked geothermal system providing clean and sustainable heating and cooling for customers within the City, and to demonstrate the effectiveness and benefits of operating a networked geothermal energy distribution system, a portion of which will be installed at **Hampshire Road**.

If you have any further questions, please contact James Blais at (781) 441-8732 or Eric Bosworth at (508) 836-7278.

Your prompt attention to this matter would be greatly appreciated.

Very truly yours,

*Patricia A. Quinn*

Patricia A. Quinn  
Supervisor, T&D Rights and Survey

PAQ  
enclosures  
Attachments

PETITION OF NSTAR GAS COMPANY, dba EVERSOURCE ENERGY FOR  
GEOTHERMAL ENERGY LOOP

March 13, 2023

To City Council of the City of Framingham, Massachusetts:

Respectfully represent NSTAR GAS COMPANY, dba Eversource Energy, a Massachusetts corporation having a place of business at 247 Station Drive, Westwood, MA 02090, its successors and assigns, or any licensee from it (hereinafter the "Petitioner"), subject to Massachusetts General Laws (Ter.Ed.), that they desire to locate, construct and maintain one (1) new 8" diameter High-Density Polyethylene (HDPE) Geothermal Ambient Loop Pipe, six (6) 1 1/2" service connections and all associated valves, fixtures, and appurtenances necessary or useful in connection therewith along and across the public way or ways hereinafter specified.

WHEREFORE, your Petitioner prays that after due notice and hearing as provided by law the City Council may by Order grant your Petitioner joint or identical locations for and permission for erection, construction, operation and maintenance of one (1) new 8" diameter HDPE Geothermal Ambient Loop Pipe and six (6) 1 1/2" service connections, to be owned and used by Petitioner, and for such other valves, fixtures and appurtenances as may be necessary or useful in connection therewith to sustain said geothermal network loop to be located, substantially as shown on the plans entitled "EVERSOURCE NETWORKED GEOTHERMAL DEMONSTRATION PILOT PROJECT, GEOTHERMAL LOOP PIPING PLAN IV LINDBERGH ROAD & HAMPSHIRE ROAD", SHEET NO. C-9 , prepared by CDM Smith, dated February 23, 2023, and filed herewith, upon along and across the following public way or ways of said town:

**Hampshire Road – Extending northerly from Prindiville Avenue along West side for a for a distance of approximately 275± feet then crossing easterly to the north side of Lindbergh Road**

Plan Ref. PROJECT NO. 253460-273904 (Issued For Construction),  
FILE NAME: C009STPL, C-9 Dated: 2/23/2023

Install one (1) 8" diameter HDPE Geothermal Ambient Loop Pipe, six (6) 1 1/2" service connections and all associated valves and fixtures necessary or useful in connection therewith

Hearing Required

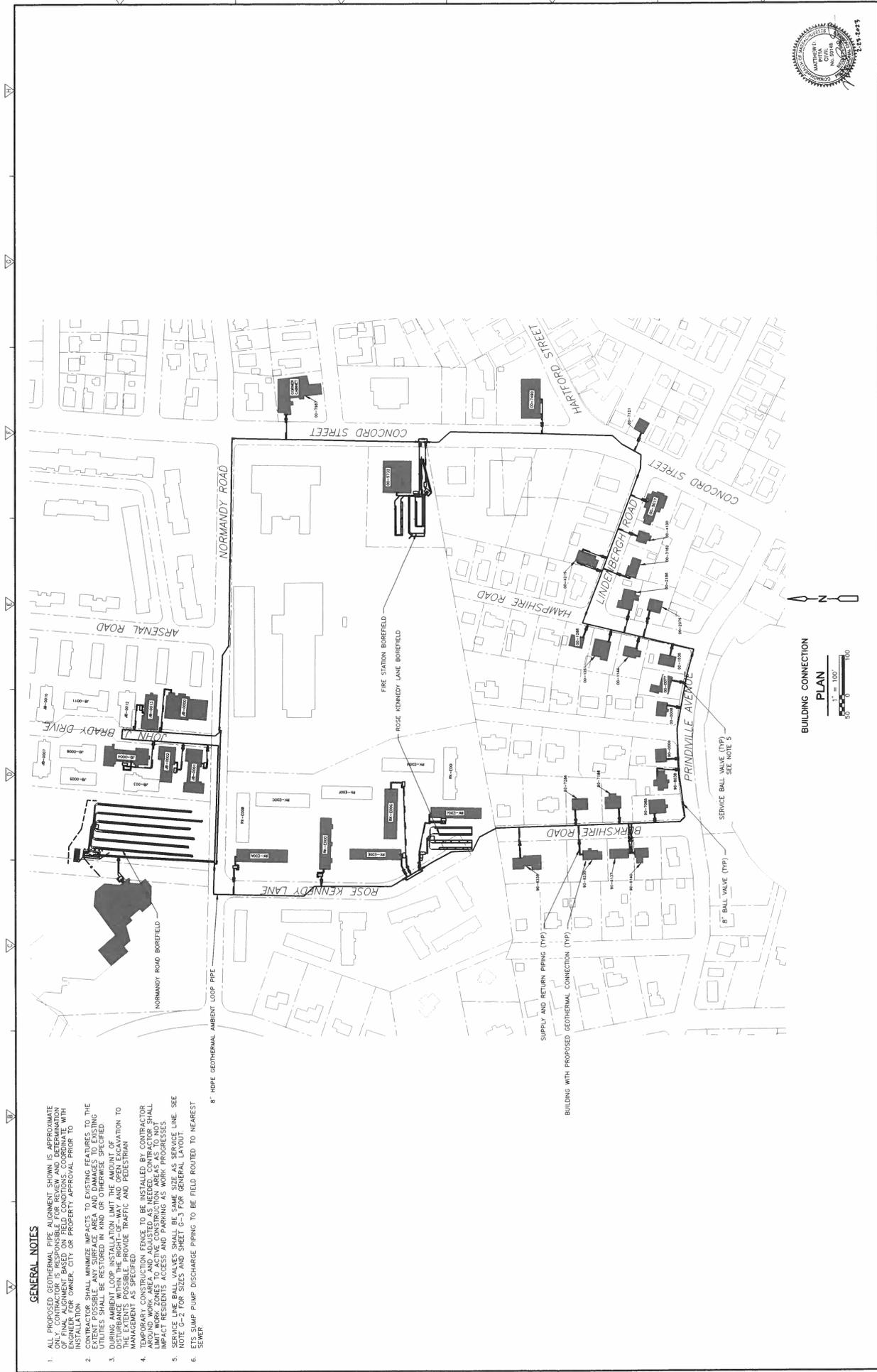
Also, for permission to excavate, lay and maintain underground laterals, pipes, cables, and wires in the above or intersecting public ways for the purpose of making connections with such associated, pipe, borefield, equipment, facilities and adjacent buildings as Petitioner may desire. Your Petitioner agrees to reserve space for sidewalks and passageway belonging to the municipality and used exclusively for municipal purposes.

NSTAR GAS COMPANY, dba EVERSOURCE ENERGY

By: Patricia A. Quinn  
Patricia A. Quinn  
Supervisor, T&D Rights and Survey

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 2023

City of FRAMINGHAM, Massachusetts  
Received and filed \_\_\_\_\_ 2023



BUILDING CONNECTION PLAN  
 1" = 100'  
 0 50 100

**GENERAL NOTES**

1. ALL PROPOSED GEOTHERMAL PIPE ALIGNMENT SHOWN IS APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR REVIEW AND DETERMINATION OF PIPE ALIGNMENT BASED ON FIELD CONDITIONS AND WITH CONSTRUCTION OF THE PROJECT. APPROVAL PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL MINIMIZE IMPACTS TO EXISTING FEATURES TO THE MAXIMUM EXTENT POSSIBLE. ALL EXISTING UTILITIES SHALL BE IDENTIFIED AND PROTECTED. ALL UTILITIES SHALL BE RESTORED IN KIND OR OTHERWISE SPECIFIED.
3. DURING AMBIENT LOOP INSTALLATION LIMIT THE AMOUNT OF EXCAVATION TO THE EXTENTS POSSIBLE. PROVIDE TRAFFIC AND PEDESTRIAN MANAGEMENT AS SPECIFIED.
4. TEMPORARY CONSTRUCTION USES TO BE INSTALLED BY CONTRACTOR TO MAINTAIN ACCESS TO ADJACENT PROPERTIES. CONTRACTOR SHALL LIMIT WORK ZONES TO ACTIVE CONSTRUCTION AREAS AS TO NOT IMPACT RESIDENTS ACCESS AND PARKING AS WELL AS SERVICES.
5. NOTE G-2 FOR SIZES AND SHEET G-3 FOR GENERAL LAYOUT. SEE GENERAL NOTES FOR SIZES AND SHEET G-3 FOR GENERAL LAYOUT.
6. ETS SUMP PUMP DISCHARGE PIPING TO BE FIELD ROUTED TO NEAREST SEWER.

8" HOPE GEOTHERMAL AMBIENT LOOP PIPE

FIRE STATION BOREFIELD

ROSE KENNEDY LANE BOREFIELD

SUPPLY AND RETURN PIPING (TYP)

BUILDING WITH PROPOSED GEOTHERMAL CONNECTION (TYP)

8" BALL VALVE (TYP) SEE NOTE 5

|  |  |             |         |
|--|--|-------------|---------|
| PROJECT NO. 251462-23364<br>FILE NAME: C06825FL<br>SHEET NO. C-6<br>DATE: 11.15.2023       |  |             |         |
| BUILDING CONNECTION PLAN   |  |             |         |
| NETWORKED GEOTHERMAL DEMONSTRATION PILOT PROJECT   |  |             |         |
| EVERSOURCE   |  |             |         |
|  |  |             |         |
| PREPARED BY: D. FLAHERTY<br>CHECKED BY: C. ERICSSON<br>SHEET NO. 70<br>DATE: FEBRUARY 2023 | DESIGNED BY: S. LAWRE<br>CHECKED BY: D. FLAHERTY<br>APPROVED BY: M. PITTA<br>DATE: FEBRUARY 2023 |             |         |
| REV. NO.   | DATE   | DESCRIPTION | REMARKS |
|  |  |             |         |

ISSUED FOR CONSTRUCTION

**GENERAL NOTES**

1. ALL PROPOSED GEOTHERMAL PIPE ALIGNMENT SHOWN IS APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR REVIEW AND DETERMINATION OF EXISTING UTILITIES AND DETERMINATION OF PROPERTY BOUNDARIES PRIOR TO INSTALLATION.
2. INSTALLATIONS SHALL MINIMIZE IMPACTS TO EXISTING FEATURES TO THE EXTENT POSSIBLE. ANY SURFACE AREA AND DAMAGES TO EXISTING UTILITIES SHALL BE RESTORED IN KIND OR OTHERWISE SPECIFIED.
3. THE EXTENTS POSSIBLE SHALL PROVIDE TRAFFIC AND PEDESTRIAN DISTURBANCE WITHIN THE RIGHT-OF-WAY AND OPEN EXCAVATION TO THE EXTENT POSSIBLE.
4. TEMPORARY CONSTRUCTION FENCE TO BE INSTALLED BY CONTRACTOR AROUND WORK AREA AND ADJUSTED AS NEEDED. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND PROVIDE ACCESS AND PARKING AS WORK PROGRESSES.
5. SERVICE LINE BALL VALVES SHALL BE SAME SIZE AS SERVICE LINE. SEE NOTE G-2 FOR SIZES AND SHEET G-3 FOR GENERAL LAYOUT.



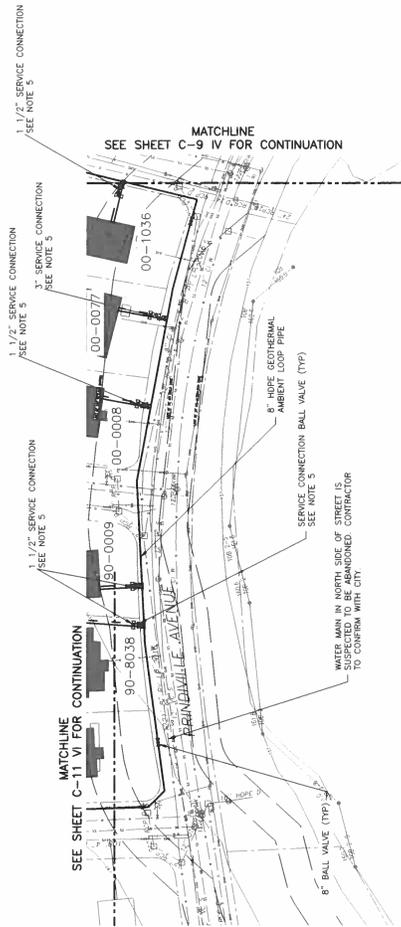
GEOTHERMAL LOOP PIPING PLAN IV - LINDBERGH ROAD AND HAMPSHIRE ROAD



|   |      |   |         |
|---|------|---|---------|
| PROJECT NO. 25146-020004<br>FILE NAME: 25146-020004<br>SHEET NO. C-9  |      | GEOHERMAL LOOP PIPING PLAN IV<br>LINDBERGH ROAD & HAMPSHIRE ROAD  |         |
| ISSUED FOR CONSTRUCTION   |      | EVERSOURCE<br>NETWORKED GEOTHERMAL DEMONSTRATION<br>PILOT PROJECT   |         |
| DESIGNED BY: C. REBERSON<br>DRAWN BY: C. REBERSON<br>CHECKED BY: D. FLAHERTY<br>APPROVED BY: M. PITTA<br>DATE: FEBRUARY, 2023 |      | <b>GDM Smith</b><br>Geotechnical Design & Construction<br>1000 Massachusetts Avenue, Suite 100<br>Boston, MA 02115<br>Tel: (617) 462-0000 |         |
| NO.   | DATE | BY  | REMARKS |
|   |      |   |         |

**GENERAL NOTES**

1. ALL PROPOSED GEOTHERMAL PIPE ALIGNMENT SHOWN IS APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR REVIEW AND DETERMINATION OF EXISTING UTILITIES AND TO VERIFY ALL INFORMATION WITH ENGINEER FOR OWNER, CITY OR PROPERTY APPROVAL PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL MINIMIZE IMPACTS TO EXISTING UTILITIES TO THE EXTENT POSSIBLE. ALL UTILITIES SHALL BE RESTORED IN KIND OR OTHERWISE SPECIFIED.
3. DURING AMBIENT LOOP INSTALLATION LIMIT THE AMOUNT OF EXCAVATION TO THE EXTENTS POSSIBLE. PROVIDE TRAFFIC AND PEDESTRIAN MANAGEMENT AS SPECIFIED.
4. AMBIENT LOOP AREA AND DEPTH TO BE INSTALLED BY CONTRACTOR SHALL BE LIMITED TO ACTIVE CONSTRUCTION AREAS AS TO NOT IMPACT RESIDENTS ACCESS AND PARKING. WORK AREAS SHALL BE LIMITED TO THE SIZES AND LOCATIONS SHOWN ON SHEET P-3 FOR GENERAL LAYOUT. SEE NOTE C-2 FOR SIZES AND SHEET P-3 FOR GENERAL LAYOUT.
5. SEE SHEET P-3 FOR SIZES AND SHEET P-3 FOR GENERAL LAYOUT.



GEOTHERMAL LOOP PIPING PLAN V - PRINDVILLE AVENUE



PROJECT NO. 251460-27304  
 FILE NUMBER: 0310312  
 SHEET NO. C-10

**GEOTHERMAL LOOP PIPING PLAN V  
 PRINDVILLE AVENUE**

**EVERSOURCE  
 NETWORKED GEOTHERMAL DEMONSTRATION  
 PILOT PROJECT**



DESIGNED BY: C. PETERSON  
 DRAWN BY: C. KILPATRICK  
 CHECKED BY: D. FLAHERTY  
 APPROVED BY: M. PITTA  
 DATE: FEBRUARY, 2023

| NO. | DATE | BY | CHKD | REMARKS |
|-----|------|----|------|---------|
|     |      |    |      |         |
|     |      |    |      |         |
|     |      |    |      |         |

ISSUED FOR CONSTRUCTION