

Gilbane Building Company  
Authorization To Proceed



**CONTRACT FOR:** Brookline - Driscoll School  
**OWNER:** Town of Brookline  
**ADDRESS:** 333 Washington Street  
Brookline , MA, 02445

**PROJECT NUMBER:** J08864.000  
**ATP NO:** ATP-0012  
**ATP VERSION:** 0  
**DATE OF ISSUANCE:** 10/05/2021  
**SUBMITTED BY:** Gilbane Building Company

**ARCHITECT:** Jonathan Levi Architects LLC, Mark Warner

**ALTERNATE  
TRACKING #:**

The Contract Documents are hereby amended to include the additional Work described below, which is outside of the current scope of the Work and constitutes a change.

**Upon Owner approval,** Gilbane Building Company **will proceed with the Work promptly.**

Costs as incurred are in addition to the current contract Sum and will be invoiced and paid on a monthly basis and identified as separate items within the requisition. Once final cost of the Work involved and change in Sum and Time (if any) are fully determined, it will be submitted for inclusion in a final Change Order adjusting the Contract Sum and/or Time.

**TITLE:** Add GEOTHERMAL Wells

**DESCRIPTION:** This ATP represents cost to add 49 wells at 900', includes erosion control, dewatering (containment up to 100gpm), excavation, backfill, piping, glycol, rygan piping, testing, grouting. Includes Temporary Adiabiatic cooler installed at ground level, glycol inside the building. Underground piping as shown per M001. Adding this scope of work will add months to the schedule. New Substantial completion date for Phase 2 is July 8, 2024.

**Attachments:**

| Number | Description: | PCI Number | Change Date | Revision |
|--------|--------------|------------|-------------|----------|
|        |              |            |             |          |

The Following information is provided by Gilbane Building Company  
**Method of determining change in Contract:**

- ☐ Guaranteed Maximum Price
- ☐ Cost Plus Fee
- ☐ Unit Price
- ☐ Lump Sum
- ☐ Other

**Change In Contract Sum**

Dollar Amount: \$4,700,307.00

- ☐ Fixed
- ☐ Maximum
- ☐ Estimated
- ☐ Time and Material

**Change In Contract Time**

Time (Days): 50

- ☐ Fixed
- ☐ Maximum
- ☐ Estimated

| Job        | PCI No.  | Description | Phase Code       | SubContractor                | Amount      | Accept?  |
|------------|----------|-------------|------------------|------------------------------|-------------|--|
| J08864.000 | OS-00014 | Plumbing    | 01.22A.220000.TC | Patrick J Kennedy & Sons Inc | \$63,000.00 | <input type="radio"/> Yes <input type="radio"/> No |

| Job                        | PCI No.  | Description                      | Phase Code       | SubContractor                   | Amount         | Accept?  |
|----------------------------|----------|----------------------------------|------------------|---------------------------------|----------------|--|
| J08864.000                 | OS-00014 | HVAC                             | 01.23A.230000.TC | Patrick J Kennedy & Sons Inc    | \$440,000.00   | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | Electrical                       | 01.26A.110000.X  | Wayne J. Griffin Electric, Inc. | -\$8,000.00    | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | Sitework                         | 01.31A.311000.X  | J. Derenzo Company              | \$3,740,800.00 | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | General Superintendent           | 90.920.912000.Z  |                                 | \$27,000.00    | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | Superintendent-Seifirth          | 90.920.912001.Z  |                                 | \$23,000.00    | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | Gen & Excess Liability Insurance | 99.970.950050.Z  |                                 | \$119,809.00   | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | Performance & Payment Bond       | 99.970.997000.Z  |                                 | \$25,984.00    | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | Subcontractor Default Insurance  | 99.975.996000.Z  |                                 | \$44,890.00    | <input type="radio"/> Yes <input type="radio"/> No |
| J08864.000                 | OS-00014 | Fee                              | 99.999.999000.Z  |                                 | \$223,824.00   | <input type="radio"/> Yes <input type="radio"/> No |
| TOTAL FOR PCI No. OS-00014 |          |                                  |                  |                                 | \$4,700,307.00 |  |

**Submitted Amt:** \$4,700,307.00

Gilbane Building Company

Gilbane Building Company

Signed: 10/5/2021 4:52:11 PM Eastern Standard Time - By:  
Michael O'Brien (Business Unit Leader )

Gilbane Building Company: 10.129.22.138

Jonathan Levi Architects LLC

By: Carol Harris

Title: Project Manager

Company: Jonathan Levi Architects

Date: 10/6/21

Printed Name: Carol Harris

LEFTFIELD, LLC

By: Lynn Stapleton

Title: OPM

Company: LeftField Project Management

Date: October 6, 2021

Printed Name: Lynn Stapleton

Town of Brookline

By:

Title:

Company:

Date:

Printed Name:

|                         |                |           |           |            |          |             |               |                     |
|-------------------------|----------------|-----------|-----------|------------|----------|-------------|---------------|---------------------|
| GEO THERMAL WELLS       |                |           |           |            |          |             |               |                     |
| Michael Driscoll School |                |           |           |            |          |             |               |                     |
| Line Name               | Employee Name  | Start     | End       | Total Days | Hrs/Week | Total Hours | Cost Rate/Hr  | Total Cost          |
| Superintendent          | Derek Ullman   | 6/30/2024 | 8/19/2024 | 50.00      | 40.00    | 285.71      | 91.43         | \$ 26,121.43        |
| Superintendent          | Lucas Seiferth | 5/31/2024 | 7/20/2024 | 50.00      | 40.00    | 285.71      | 83.86         | \$ 23,959.03        |
|                         |                |           |           |            |          |             | <b>TOTAL:</b> | <b>\$ 50,080.46</b> |

Date: 10/5/2021  
Revised:

Project Name: Michael Driscoll School  
Project No: J08864.000

### Change Summary

|                |                  |
|----------------|------------------|
| Change Number: | OS-00014         |
| Description:   | GEOTHERMAL WELLS |

| Bid Package / Scope of Work     | Subcontractor          | Cost                  |
|---------------------------------|------------------------|-----------------------|
| 02A Abatement / Demolition      | American               | \$0.00                |
| 03A Concrete                    | Marguerite Concrete    | \$0.00                |
| 05A Structural Steel            | Supermetal             | \$0.00                |
| 06A Millwork                    | Polybois               | \$0.00                |
| 07D Metal Panels                | Salem Glass            | \$0.00                |
| 08B Doors, Frames, and Hardware | Kamco/Oconnor          | \$0.00                |
| 08C Special Doors               | Frommelt               | \$0.00                |
| 09A Drywall & General Trades    | Central Ceilings       | \$0.00                |
| 09E Wood Flooring               | Keifer Northeast       | \$0.00                |
| 09F Epoxy Flooring              | Stonhard               | \$0.00                |
| 09G Carpeting                   | Pavilion               | \$0.00                |
| 10A Specialties                 |                        |                       |
| 10B Signage                     |                        | \$0.00                |
| 11A Food Service Equipment      | Kitteridge             | \$0.00                |
| 11B Gym Equipment and Bleachers | Robert H. Lord Company | \$0.00                |
| 11D Theater Equipment           | Barbazon               | \$0.00                |
| 12A Window Treatment            | Walker Specialties     |                       |
| 31A Site Enabling               | J. Derenzo Co.         | \$3,740,800.00        |
| 32A Landscaping                 |                        | \$0.00                |
| Subguard Insurance (CDI)        | 1.20%                  | \$44,890.00           |
| <b>Subcontractor Total</b>      |                        | <b>\$3,785,690.00</b> |

| Bid Package / Scope of Work    | Trade Contractor                 | Cost                |
|--------------------------------|----------------------------------|---------------------|
| 04A Masonry                    | Lighthouse Masonry, Inc.         | \$0.00              |
| 07A Foundation Waterproofing   | P.J. Spillane Company Inc.       | \$0.00              |
| 07B Waterproofing and Caulking | P.J. Spillane Company Inc.       | \$0.00              |
| 07C Roofing and Flashing       | Stanley roofing Company, Inc.    | \$0.00              |
| 08A Metal Windows              | Chandler Architectural Products, | \$0.00              |
| 08D Glass and Glazing          | Kapiloff Glass                   | \$0.00              |
| 09B Tile                       | Joseph Cohn & Son                | \$0.00              |
| 09C Acoustical Ceiling Tile    | Central Ceilings                 | \$0.00              |
| 09D Resilient Flooring         | CJM                              | \$0.00              |
| 09H Painting                   | Color Concepts                   | \$0.00              |
| 14A Elevator                   | Delta Beckwith Elevator Company  | \$0.00              |
| 21A Fire Protection            | Johnson Controls                 | \$0.00              |
| 22A Plumbing                   | PJ Kennedy                       | \$63,000.00         |
| 23A HVAC                       | PJ Kennedy                       | \$440,000.00        |
| 26A Electric                   | Wayne J. Griffin                 | (\$8,000.00)        |
| Bond (included in above cost)  |                                  |                     |
| <b>Trade Contractor Total</b>  |                                  | <b>\$495,000.00</b> |

|  |        |                       |
|--|--------|-----------------------|
| Subcontractor/Trade Contractor Total   | -      | \$4,280,690.00        |
| General Conditions                     |        | \$50,000.00           |
| CM Bond                                | 0.600% | \$25,984.00           |
| Total CCIP (including mark-up on CCIP) | 2.750% | \$119,809.00          |
| Fee                                    | 5.00%  | \$223,824.00          |
| <b>TOTAL</b>                           |        | <b>\$4,700,307.00</b> |



Patrick J. Kennedy & Sons, Inc.

MECHANICAL CONTRACTORS

39 Gibson Street  
Boston, MA 02122-1222  
Ph : (617)265-5535

## PROPOSED CHANGE ORDER

Number: 1-R1

Date: 10/4/21

Phone:

**Job:** 2021-05 Driscoll School - HVAC

**To:** Colleen Shouldice  
Gilbane Building Co  
Driscoll School  
10 Channel Center St, Suite 10  
Boston, MA 02120

**Description:** Alternate 1 Scope

Additional costs to add Alternate #1 Scope.

We include the following changes in this proposal:

Remove Adiabatic Cooler and associated 10 Piping from Scope  
Remove (2) Buffer Tanks from Scope  
Add Filtration System to scope (PC-1)  
Add 400 Ton Cooling Tower Rental & Associated Temp Piping (6 Mths Included)  
Add 8 Underground & Above Ground Piping Indicated on Drawing (M001) 2/15/21 Drawing.  
Includes Glycol Solution in all Above Ground Piping Systems per Equipment Schedule.

This is Not accepted  
for use- Open cell too  
close to plume,  
odors.-See adjustment  
below.

This proposal is valid until 10/12/21, after this date it will need to be re-evaluated due to material cost escalation.

| Description | Quantity | Unit | Unit Price | Price        |
|-------------|----------|------|------------|--------------|
| Lump Sum    |          |      |            | \$396,000.00 |
|             |          |      | Subtotal:  | \$396,000.00 |
|             |          |      | Total:     | \$396,000.00 |
|             |          |      |            | \$44,000     |
|             |          |      |            | \$440,000.00 |

Add \$40,000 x 10% OHP = \$44,000 to provide Temporary Fluid Cooler at Ground Level in lieu of open cell cooling tower rental.

\*\* The Fluid Cooler and associated piping in the orginial design at roof has been deleted from scope of work

If you have any questions, please contact me at 617-446-8000.

Submitted by: Patrick Kennedy  
Patrick J. Kennedy & Sons, Inc

Approved by: \_\_\_\_\_  
Date: \_\_\_\_\_



Patrick J. Kennedy & Sons, Inc.

MECHANICAL CONTRACTORS

39 Gibson Street  
Boston, MA 02122-1222  
Ph : (617)265-5535

## PROPOSED CHANGE ORDER

Number: P-002

Date: 9/28/21

Phone:

**Job:** 2021-04 Driscoll School Plumbing

**To:** Colleen Shouldice  
Gilbane Building Co  
Driscoll School  
10 Channel Center St, Suite 10  
Boston, MA 02120

**Description:** Plumbing Alternate 1 Pricing

Source: Other # Alt1

Additional Plumbing Costs associated with Alternate #1 Plumbing Scope.

Notes:

-This proposal is valid until 10/12/21, after this date it will need to re-evaluated due to material cost escalation.

| Description | Quantity | Unit | Unit Price  | Price       |
|-------------|----------|------|-------------|-------------|
| Lump Sum    | 1.00     | ls   | \$63,000.00 | \$63,000.00 |
|             |          |      | Subtotal:   | \$63,000.00 |
|             |          |      | Total:      | \$63,000.00 |

Please note that Patrick J. Kennedy & Sons, Inc. will require an extra 0 days.

If you have any questions, please contact me at 617-446-8000.

Submitted by: Raymond Hanley  
Patrick J. Kennedy & Sons, Inc

Approved by: \_\_\_\_\_  
Date: \_\_\_\_\_

**Callahan, Lynda M.**

**From:** Andrew Paul <apaul@WJGEL.com>  
**Sent:** Monday, August 9, 2021 2:16 PM  
**To:** Callahan, Lynda M.  
**Cc:** Ullman, Derek R.; Tom Donahue  
**Subject:** RE: 2732 MDS - GEO THERAML - Alternate #1

**[EXTERNAL]** Cannot take this credit-Generator in base bid has been released.

Generator Credit = \$95,000  
Material/Labor credit = \$8,000

Most of the credit/savings in Alt #1 is the generator system.

AJ

**From:** Callahan, Lynda M. <LCallahan@gilbaneco.com>  
**Sent:** Monday, August 9, 2021 2:13 PM  
**To:** Andrew Paul <apaul@WJGEL.com>  
**Cc:** Ullman, Derek R. <DUllman@gilbaneco.com>; Tom Donahue <tdonahue@WJGEL.com>  
**Subject:** RE: 2732 MDS - GEO THERAML - Alternate #1

**Note:** This email originated outside Wayne J. Griffin Electric. Use caution with replies, links and attachments. Please forward any suspicious looking email to [spamcatcher@wjgel.com](mailto:spamcatcher@wjgel.com).

Can you provide the breakout on the generator? In otherwords if they decide to keep the larger Generator what does the alternate look like?

**From:** Andrew Paul <apaul@WJGEL.com>  
**Sent:** Monday, August 9, 2021 1:44 PM  
**To:** Callahan, Lynda M. <LCallahan@gilbaneco.com>  
**Cc:** Ullman, Derek R. <DUllman@gilbaneco.com>; Tom Donahue <tdonahue@WJGEL.com>  
**Subject:** 2732 MDS - GEO THERAML - Alternate #1

**[EXTERNAL]**

Good afternoon Lynda,



Please see the following Rough Order of Magnitude (ROM) for the Alternate #1 package regarding the Michael Driscoll School.

Alternat #1 (ROM) = -\$103,000.00 – Credit of one hundred and three thousand dollars.

This credit factors in the increased cost for the Generator units and Copper since last bid. With that said, material and equipment cost are fluctuating daily; therefore, this ROM is only valid through the end of the week, 8/13/2021 5:00pm Eastern time.

Please see the detailed outline below of what is included within the credit provided above.

*WJGEI is providing the following proposal for the scope outlined in the project changed referred below.*

*Per direction of Gilbane and the Town of Brookline WJGEI has been requested to revisit Alternate #1. Since there is no direct package for Alternate #1 WJGEI is performing the takeoff based on the notes provided by the team as well as drawing and spec sets dated 2/15/2021. WJGEI reserves our rights to capture costs or deductions related to Alternate #1 that are not clearly identified in the take-off description below.*

***Drawing E200:***

*Adds equipment BT-1 and RP-3, both units are fed from panel MP3 and are located in the mechanical room. All feeder characteristics were provided on Drawing E308.*

***Drawing E201A:***

*Adds Geothermal System "FCT-1", this is a temp unit that shall be used on the project and removed once its use is no longer needed. This unit is fed from "MSBG" at 480volts. Per the unit description on Drawing E307, this also calls for 120v receptacle and light at the unit. Also, the ADC-1 unit will need to be removed upon completion.*

***Drawing E301:***

*The Electrical Riser changes the size of the Stand-by generator and ATS-OS. The generator is now reduced from 900KW to 400KW and ATS-OS is reduced from 2,000amps to 1,600amps. ATS-LS remains the same.*

***Drawing E307:***

*Adds equipment "EBP-1A and EBP-1B" these items are shown on the equipment schedule drawing but are not located on the floor plan drawing E200A. WJGEI locating these units at the intersection of column AV / A17.*

*Removes equipment "EBP-3 & HRC-1".*

***Excludes:***

*This Cost Proposal does not include any cutting, patching, painting, ceiling tile replacement, floor protection, controls, equipment other than what is specified above, overtime, acceleration, permit.*

Thank you,

AJ Paul

Project Manager

Wayne J. Griffin Electric, Inc.  
Office: (508)306-5408  
Cell: (774)217-3272  
Email: [apaul@wjgei.com](mailto:apaul@wjgei.com)

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**From:** Callahan, Lynda M. <[LCallahan@Gilbaneco.com](mailto:LCallahan@Gilbaneco.com)>  
**Sent:** Monday, August 9, 2021 8:47 AM  
**To:** Andrew Paul <[apaul@WJGEI.com](mailto:apaul@WJGEI.com)>  
**Cc:** Ullman, Derek R. <[DUllman@GilbaneCo.com](mailto:DUllman@GilbaneCo.com)>  
**Subject:** RE: MDS - GEO THERAML - Alternate #1  
**Importance:** High

**Note:** *This email originated outside Wayne J. Griffin Electric. Use caution with replies, links and attachments. Please forward any suspicious looking email to [spamcatcher@wjgei.com](mailto:spamcatcher@wjgei.com).*

Hello AJ  
I know you spoke to Derek about breaking out the Generator portion of this request so that the owner could evaluate it separately, just wanted to follow up on Overall pricing of this Request? Please let me know.  
Thanks  
Lynda

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**From:** Andrew Paul <[apaul@WJGEI.com](mailto:apaul@WJGEI.com)>  
**Sent:** Thursday, August 5, 2021 7:47 AM  
**To:** Callahan, Lynda M. <[LCallahan@Gilbaneco.com](mailto:LCallahan@Gilbaneco.com)>  
**Cc:** Ullman, Derek R. <[DUllman@GilbaneCo.com](mailto:DUllman@GilbaneCo.com)>  
**Subject:** RE: MDS - GEO THERAML - Alternate #1

[EXTERNAL]

Good morning Lynda,

I am currently working on pricing this Alternate.  
AS I am sure you are aware this is a very involved Alternate that changes Switchgear and Generator sizes as well as adding and removing equipment.

I am working with our vendors to get quotes for these changes. With that I will try my best to get something out the door Friday end of day but most likely this will be Monday. With a 3-4 day turn around this request is difficult, but WJGEI is here to do our very best for the Gilbane Team and the client.



338 HOWARD ST. | BROCKTON, MA | 02302

August 10, 2021

**Gilbane Building Company**

10 Channel Center St.  
Boston, MA 02210

Attn: Lynda Callahan, Sr. Project Manager  
Project: Michael Driscoll School – Brookline, MA  
Re: JDC PCO 002 – Furnish & Install Geothermal Well System

Lynda,

J. Derenzo Co. proposes to perform the scope detailed herein, based on the stated qualifications, inclusions, and exclusions, for a lump sum price of ~~\$3,583,000.00~~.

A detailed breakdown of change in scope referenced in this cover sheet is enclosed.

**Qualifications:**

- Furnish & Install Geothermal Well System
  - o Per drawings GT1.1/1.2, dated 2/15/21
  - o Per specification section 332313 – HPGX Geothermal Well Field (Add Alternate), dated 2/15/21

**Inclusions:**

- Mobilization
- Excavation & Backfill (piping, vault, etc.)
- Furnish & Install drilled wells (49 ea – 905' wells, 6" diameter casing)
- Material containment up to 50 gpm ← 100gpm add
- Horizontal piping/supply vault/glycol/testing
- Rygan piping/grouting/testing

Added Cost  
Dewatering \$129,800  
Storage/Ins \$28,000 (26 months)

**Total**  
**\$3,740,800.00**

**Exclusions:**

- Premium time - Nights, weekends, holidays, etc.
- Furnish & Install geothermal vault
- Glycol in building
- Interior piping
- Electrical conduit, wiring, etc.

If you have any questions concerning this proposal, please do not hesitate to contact me using the information listed below.

Respectfully,  
J. DERENZO CO.

Ryan Little  
Project Manager  
508-649-9702  
[rlittle@jderenzo.com](mailto:rlittle@jderenzo.com)

UNIT PRICES: (do not include mark up)  
Cement for well if needs abandoning \$4,120 /ea  
add well \$31,500  
"6 casing /ft \$40.50 per ft

# Proposal

---

From:

Project:  
Description:

DRISCOLL SCHOOL - PCO 002 - G  
ADDED COSTS FOR GEOTHERMA  
WELLS

| ITEM / DESCRIPTION                               | BID QTY   | U/M        | UNIT BID       | AMOUNT         |
|--|-----------|------------|----------------|----------------|
| 001.1<br>F/I WELLS (500CY SPOILS)                | 1.000     | LUMP SUM   | 3,384,104.20 * | \$3,384,104.20 |
| 002.1<br>E/B WELL PIPING (515CY SPOILS)          | 2,240.000 | LINEAR FEE | 71.25 *        | \$159,607.00   |
| 002.2<br>E/B 2-8" SUPPLY & RETURN (105CY SPOILS) | 230.000   | LINEAR FEE | 93.80 *        | \$21,574.55    |
| 002.3<br>E/B WELL VAULT (30CY SPOILS)            | 1.000     | EACH       | 17,974.55 *    | \$17,974.55    |
| TOTAL BID:                                       |           |            |                | \$3,583,260.30 |

\* CAUTION!!! The total bid shown may not be correct because of rounding. To correct rounding, return to the bid sheet and physically type Bid Units for all items with an \* next to the Bid Unit value.

Signature: \_\_\_\_\_

\_\_\_\_\_

**PROJECT :  
DRISCOLL SCHOOL - PC**

**ITEM SHEET COSTS  
AS SHOWN**

**Date : 8/10/2021 11:02:00 A**

ITEM : 001.1  
DESCRIPTION : F/I WELLS (500CY SPOILS)  
  
COST CODE :  
PRODUCTION : Days  
HRS/DAY : 8

U/M : LUMP SUM  
BID QTY : 1.00  
TO QTY : 1.00  
TOTAL MHS : 400.00  
MHS / UNIT : 400.0000  
UNITS / MH : 0.0025

Item Production

| <u>ITEM#</u> | <u>DESCRIPTION</u>       | <u>U/M</u> | <u>QTY</u> | <u>UNITS/DAY</u> | <u>DAYS REQD</u> |
|--------------|--------------------------|------------|------------|------------------|------------------|
| 001.1        | F/I WELLS (500CY SPOILS) | LUMP       | 1.00       | 0.05             | 20.00            |

Cost Detail for Item 001.1

| <u>C CODE</u>                        | <u>DESCRIPTION</u>                              | <u>QUANTITY</u> | <u>U/M</u> | <u>FACTORS</u> | <u>RATE</u> | <u>COSTS</u>                          |
|--------------------------------------|---|-----------------|------------|----------------|-------------|---------------------------------------|
| S WRITEIN                            | WELL INSTALL                                    | 1.000           | LS         | 1.000          | 2896628.000 | 2896628.00                            |
| S WRITEIN                            | ADD FOR PUMPING RATE                            | 1.000           | LS         | 1.000          | 65240.000   | 65240.00                              |
| -----                                |   |                 |            |                |             |                                       |
| E JDC- 94                            | STOCKPILE SPOILS (500CY)<br>Cat 950 loader w/OP | 0.500           |            | 20.000         | 2334.360    | 23343.60                              |
| -----                                |   |                 |            |                |             |                                       |
| L JDC-LAB                            | BUILD & MAINTAIN RECHARGE PIT<br>LABORER        | 2.000           |            | 5.000          | 764.480     | 7644.80                               |
| E JDC-909                            | Cat 328 Excavator w/OP                          | 1.000           |            | 5.000          | 3348.360    | 16741.80                              |
| M 9.99.1                             | 4" TRAP ROCK                                    | 200.000         | TONS       | 1.000          | 17.250      | 3450.00                               |
| -----                                |   |                 |            |                |             |                                       |
| L JDC-LAB                            | JDC SUPPORT FOR DRILLING SUB<br>LABORER         | 2.000           |            | 20.000         | 764.480     | 30579.20                              |
| -----                                |   |                 |            |                |             |                                       |
| S WRITEIN                            | SPOIL DISPOSAL                                  | 850.000         | TON        | 1.000          | 47.000      | 39950.00                              |
| <b>Item Unit Cost : 3,083,577.40</b> |   |                 |            |                |             | <b>Item Total Cost : 3,083,577.40</b> |

|         | <u>Labor</u> | <u>Equipment</u> | <u>Rental Eq</u> | <u>Material</u> | <u>Subcontract</u> | <u>Other</u> |
|---------|--------------|------------------|------------------|-----------------|--------------------|--------------|
| Total : | 38,224.00    | 40,085.40        | 0.00             | 3,450.00        | 3,001,818.00       | 0.00         |
| Unit :  | 38,224.00    | 40,085.40        | 0.00             | 3,450.00        | 3,001,818.00       | 0.00         |

Bid Data for Item: 001.1

|              | <u>Quantity</u> | <u>Bid Unit</u> | <u>Bid Amt.</u> | <u>Total Cost</u> | <u>Prof &amp; Ovhd</u> | <u>Windfall</u> |
|--------------|-----------------|-----------------|-----------------|-------------------|------------------------|-----------------|
| Bid Qty.     | 1.00            | 3,384,104.20 *  | 3,384,104.20    | 3,083,577.40      | 300,526.80             |                 |
| Takeoff Qty. | 1.00            | 3,384,104.20    | 3,384,104.20    | 3,083,577.40      | 300,526.80             | 0.00            |

**PROJECT :  
DRISCOLL SCHOOL - PC**

**ITEM SHEET COSTS  
AS SHOWN**

**Date : 8/10/2021 11:02:00 A**

ITEM : 002.1  
DESCRIPTION : E/B WELL PIPING (515CY SPOILS)  
  
COST CODE :  
PRODUCTION : Days  
HRS/DAY : 8

U/M : LINEAR FEET  
BID QTY : 2240.00  
TO QTY : 2240.00  
TOTAL MHS : 360.00  
MHS / UNIT : 0.1607  
UNITS / MH : 6.2222

Item Production

| <u>ITEM#</u> | <u>DESCRIPTION</u>             | <u>U/M</u> | <u>QTY</u> | <u>UNITS/DAY</u> | <u>DAYS REQD</u> |
|--------------|--------------------------------|------------|------------|------------------|------------------|
| 002.1        | E/B WELL PIPING (515CY SPOILS) | LINEAR     | 2240.00    | 149.33           | 15.00            |

Cost Detail for Item 002.1

| <u>C CODE</u>    | <u>DESCRIPTION</u>     | <u>QUANTITY</u> | <u>U/M</u> | <u>FACTORS</u> | <u>RATE</u> | <u>COSTS</u> |
|------------------|------------------------|-----------------|------------|----------------|-------------|--------------|
| L JDC-FOR        | FOREMAN                | 1.000           |            | 15.000         | 831.360     | 12470.40     |
| L JDC-LAB        | LABORER                | 2.000           |            | 15.000         | 764.480     | 22934.40     |
| E JDC-909        | Cat 328 Excavator w/OP | 1.000           |            | 15.000         | 3348.360    | 50225.40     |
| E RENTAL2        | 10 WHEEL DUMP W/ TM    | 1.000           |            | 15.000         | 1611.040    | 24165.60     |
| E TRENCH-1       | TRENCH BOX 16` LONG    | 2.000           |            | 15.000         | 300.000     | 9000.00      |
| E JDC- 94        | Cat 950 loader w/OP    | 0.500           |            | 15.000         | 2334.360    | 17507.70     |
| <b>MATERIALS</b> |                        |                 |            |                |             |              |
| M 9.98           | MARKING TAPE           | 2240.000        | LF         | 1.000          | 0.250       | 560.00       |
| M 9.99.2.1       | SAND BACKFILL          | 825.000         | TON        | 1.000          | 25.000      | 20625.00     |

**Item Unit Cost : 70.31**

**Item Total Cost : 157,488.50**

|         | <u>Labor</u> | <u>Equipment</u> | <u>Rental Eq</u> | <u>Material</u> | <u>Subcontract</u> | <u>Other</u> |
|---------|--------------|------------------|------------------|-----------------|--------------------|--------------|
| Total : | 35,404.80    | 100,898.70       | 0.00             | 21,185.00       | 0.00               | 0.00         |
| Unit :  | 15.81        | 45.04            | 0.00             | 9.46            | 0.00               | 0.00         |

Bid Data for Item: 002.1

|              | <u>Quantity</u> | <u>Bid Unit</u> | <u>Bid Amt.</u> | <u>Total Cost</u> | <u>Prof &amp; Ovhd</u> | <u>Windfall</u> |
|--------------|-----------------|-----------------|-----------------|-------------------|------------------------|-----------------|
| Bid Qty.     | 2,240.00        | 71.25 *         | 159,607.00      | 157,488.50        | 2,118.50               |                 |
| Takeoff Qty. | 2,240.00        | 71.25           | 159,607.00      | 157,488.50        | 2,118.50               | 0.00            |

**PROJECT :  
DRISCOLL SCHOOL - PC**

**ITEM SHEET COSTS  
AS SHOWN**

**Date : 8/10/2021 11:02:00 A**

ITEM : 002.2  
DESCRIPTION : E/B 2-8" SUPPLY & RETURN (105CY SPOILS)  
  
COST CODE :  
PRODUCTION : Days  
HRS/DAY : 8

U/M : LINEAR FEET  
BID QTY : 230.00  
TO QTY : 230.00  
TOTAL MHS : 48.00  
MHS / UNIT : 0.2087  
UNITS / MH : 4.7917

Item Production

| <u>ITEM#</u> | <u>DESCRIPTION</u>                    | <u>U/M</u> | <u>QTY</u> | <u>UNITS/DAY</u> | <u>DAYS REQD</u> |
|--------------|---------------------------------------|------------|------------|------------------|------------------|
| 002.2        | E/B 2-8" SUPPLY & RETURN (105CY SPOIL | LINEAR     | 230.00     | 115.00           | 2.00             |

Cost Detail for Item 002.2

| <u>C CODE</u>    | <u>DESCRIPTION</u>     | <u>QUANTITY</u> | <u>U/M</u> | <u>FACTORS</u> | <u>RATE</u> | <u>COSTS</u> |
|------------------|------------------------|-----------------|------------|----------------|-------------|--------------|
| L JDC-FOR        | FOREMAN                | 1.000           |            | 2.000          | 831.360     | 1662.72      |
| L JDC-LAB        | LABORER                | 2.000           |            | 2.000          | 764.480     | 3057.92      |
| E JDC-909        | Cat 328 Excavator w/OP | 1.000           |            | 2.000          | 3348.360    | 6696.72      |
| E RENTAL2        | 10 WHEEL DUMP W/ TM    | 1.000           |            | 2.000          | 1611.040    | 3222.08      |
| E JDC- 94        | Cat 950 loader w/OP    | 0.500           |            | 2.000          | 2334.360    | 2334.36      |
| -----            |                        |                 |            |                |             |              |
| <b>MATERIALS</b> |                        |                 |            |                |             |              |
| M 9.98           | MARKING TAPE           | 230.000         | LF         | 1.000          | 0.250       | 57.50        |
| M 9.99.2.1       | SAND BACKFILL          | 165.000         | TON        | 1.000          | 25.000      | 4125.00      |

**Item Unit Cost : 91.98**

**Item Total Cost : 21,156.30**

|         | <u>Labor</u> | <u>Equipment</u> | <u>Rental Eq</u> | <u>Material</u> | <u>Subcontract</u> | <u>Other</u> |
|---------|--------------|------------------|------------------|-----------------|--------------------|--------------|
| Total : | 4,720.64     | 12,253.16        | 0.00             | 4,182.50        | 0.00               | 0.00         |
| Unit :  | 20.52        | 53.27            | 0.00             | 18.18           | 0.00               | 0.00         |

Bid Data for Item: 002.2

|              | <u>Quantity</u> | <u>Bid Unit</u> | <u>Bid Amt.</u> | <u>Total Cost</u> | <u>Prof &amp; Ovhd</u> | <u>Windfall</u> |
|--------------|-----------------|-----------------|-----------------|-------------------|------------------------|-----------------|
| Bid Qty.     | 230.00          | 93.80 *         | 21,574.55       | 21,156.30         | 418.25                 |                 |
| Takeoff Qty. | 230.00          | 93.80           | 21,574.55       | 21,156.30         | 418.25                 | 0.00            |

**PROJECT :  
DRISCOLL SCHOOL - PC**

**ITEM SHEET COSTS  
AS SHOWN**

**Date : 8/10/2021 11:02:00 A**

ITEM : 002.3  
DESCRIPTION : E/B WELL VAULT (30CY SPOILS)  
  
COST CODE :  
PRODUCTION : Days  
HRS/DAY : 8

U/M : EACH  
BID QTY : 1.00  
TO QTY : 1.00  
TOTAL MHS : 48.00  
MHS / UNIT : 48.0000  
UNITS / MH : 0.0208

Item Production

| <u>ITEM#</u> | <u>DESCRIPTION</u>           | <u>U/M</u> | <u>QTY</u> | <u>UNITS/DAY</u> | <u>DAYS REQD</u> |
|--------------|------------------------------|------------|------------|------------------|------------------|
| 002.3        | E/B WELL VAULT (30CY SPOILS) | EACH       | 1.00       | 0.50             | 2.00             |

Cost Detail for Item 002.3

| <u>C CODE</u> | <u>DESCRIPTION</u>       | <u>QUANTITY</u> | <u>U/M</u> | <u>FACTORS</u> | <u>RATE</u> | <u>COSTS</u> |
|---------------|--------------------------|-----------------|------------|----------------|-------------|--------------|
| L JDC-FOR     | FOREMAN                  | 1.000           |            | 2.000          | 831.360     | 1662.72      |
| L JDC-LAB     | LABORER                  | 2.000           |            | 2.000          | 764.480     | 3057.92      |
| E JDC-909     | Cat 328 Excavator w/OP   | 1.000           |            | 2.000          | 3348.360    | 6696.72      |
| E RENTAL2     | 10 WHEEL DUMP W/ TM      | 1.000           |            | 2.000          | 1611.040    | 3222.08      |
| E JDC- 94     | Cat 950 loader w/OP      | 0.500           |            | 2.000          | 2334.360    | 2334.36      |
| E TRENCH-1    | TRENCH BOX 16' LONG      | 1.000           |            | 2.000          | 300.000     | 600.00       |
| E TRENCH-5    | STEEL PLATES 8' X 20' LO | 2.000           |            | 2.000          | 50.000      | 200.00       |

| <u>MATERIALS</u> |                        |        |      |       |        |        |
|------------------|------------------------|--------|------|-------|--------|--------|
| M 9.99.1.1       | 3/4" STONE FOR DRAINAG | 10.000 | TONS | 1.000 | 18.250 | 182.50 |

**Item Unit Cost : 17,956.30**

**Item Total Cost : 17,956.30**

|         | <u>Labor</u> | <u>Equipment</u> | <u>Rental Eq</u> | <u>Material</u> | <u>Subcontract</u> | <u>Other</u> |
|---------|--------------|------------------|------------------|-----------------|--------------------|--------------|
| Total : | 4,720.64     | 13,053.16        | 0.00             | 182.50          | 0.00               | 0.00         |
| Unit :  | 4,720.64     | 13,053.16        | 0.00             | 182.50          | 0.00               | 0.00         |

Bid Data for Item: 002.3

|              | <u>Quantity</u> | <u>Bid Unit</u> | <u>Bid Amt.</u> | <u>Total Cost</u> | <u>Prof &amp; Ovhd</u> | <u>Windfall</u> |
|--------------|-----------------|-----------------|-----------------|-------------------|------------------------|-----------------|
| Bid Qty.     | 1.00            | 17,974.55 *     | 17,974.55       | 17,956.30         | 18.25                  |                 |
| Takeoff Qty. | 1.00            | 17,974.55       | 17,974.55       | 17,956.30         | 18.25                  | 0.00            |



120 Northgate Plaza  
Morrisville, VT 05661

(800) 544-7666  
(802) 888-5722  
(802) 888-4681 Fax  
nickm@manosh.com Email

# The Manosh Corporation

*Well Drilling & Excavating Since 1959*

## Revised Geothermal PROPOSAL

|   |  |   |
|---|--|---|
| PROPOSAL SUBMITTED TO:<br><b>J. Derenzo Company attn: Troy D.</b> | DATE:<br>8/10/2021                             | PHONE NO.<br>1-508-897-8547 or 617-212-4519 |
| STREET<br>338 Howard St   | JOB NAME:<br>Geothermal Well Field             |   |
| CITY, STATE AND ZIP CODE:<br>Brockton, MA 02302                   | JOB LOCATION:<br>Driscoll School Brookline, MA |   |
| ARCHITECT:<br>McPhail Assoc./ Jonathan Levi Architects            | PLAN DATE:<br>9/20/2020                        | FAX NUMBER/Email<br>tmorgado@jderenzo.com   |

We hereby submit specifications and estimates for:

We propose to drill 49- 905' foot deep geothermal wells as per design. Erosion control items will be onsite as well as containment system and filter bags for drilling cuttings control.

Mobilization - \$18,000.00

Material containment as proposed above – (\$38,000.00 in proposal) add \$65,240.00 per specifications on Bid to 50 gpm.

Horizontal piping/supply vault/ glycol, testing & installation - \$321,000.00

(49) 905' Drilling/casing 6-inch diameter 160 feet each minimum – \$1,546,084.00

Rygan piping/Grouting/, testing & installation – \$973,544.00

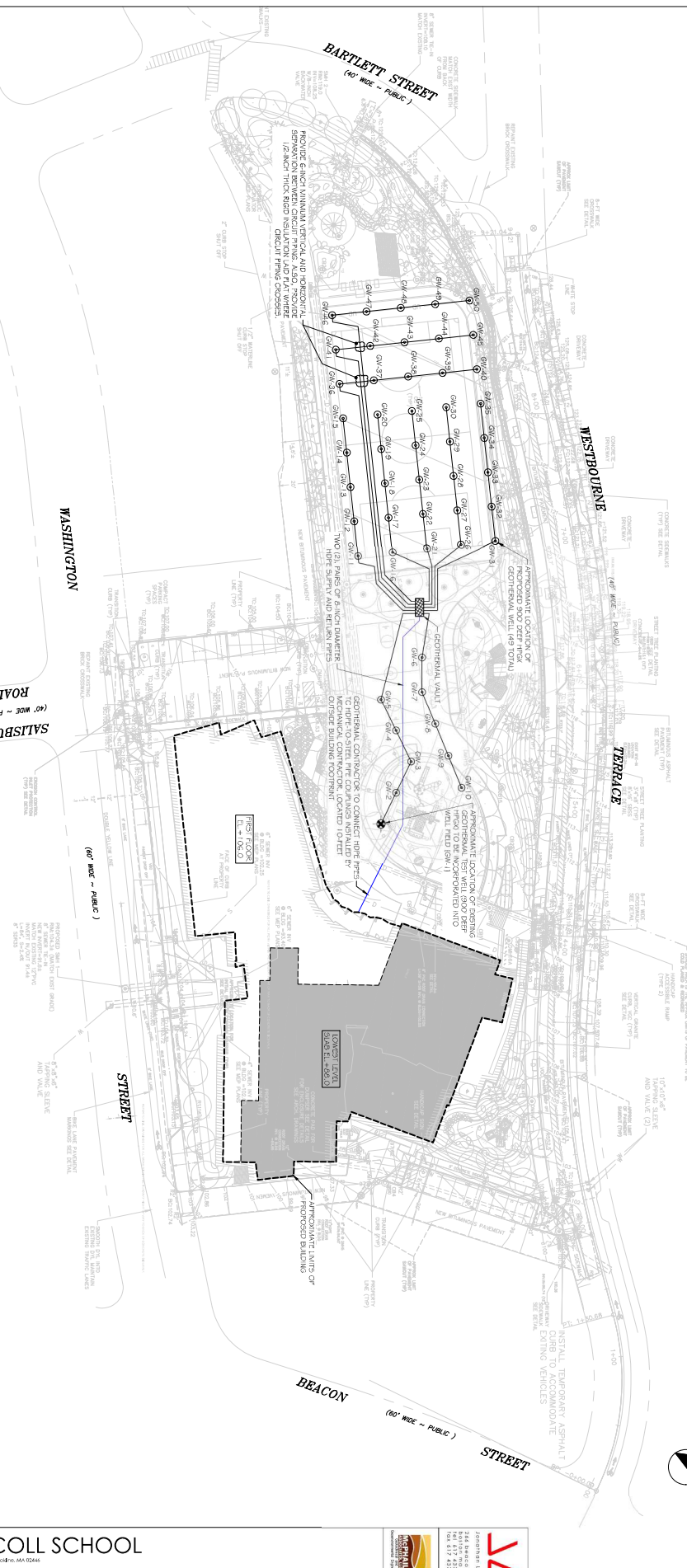
Exclusions: Dig Safe, excavation, backfill, compaction, site prep, interior piping, plumbing, electrical. Bond can be provided at additional cost if needed.

|   |  |                                    |
|---|--|------------------------------------|
| <b>WE PROPOSE hereby to furnish material and labor - complete in accordance with above specifications, for the sum of: →\$ 2,896,628.00</b> |  | <b>\$2,896,628.00 And no/cents</b> |
| PAYMENT TO BE MADE AS FOLLOWS:<br>Per Requisition   |  |                                    |
| AUTHORIZED SIGNATURE (CONTRACTOR)<br>Nick A. Manosh   |  |                                    |

Note: This proposal may be withdrawn by us if not accepted within 10 days.

Date of acceptance

Signature



RVANS ROAD  
(60' WIDE ~ PUBLIC)

WASHINGTON  
ROAD  
(60' WIDE ~ PUBLIC)

SALISBURY  
ROAD  
(60' WIDE ~ PUBLIC)

BARTLETT STREET  
(60' WIDE ~ PUBLIC)

BEACON  
STREET  
(60' WIDE ~ PUBLIC)

STREET

PLAN  
1" = 30'

LEGEND

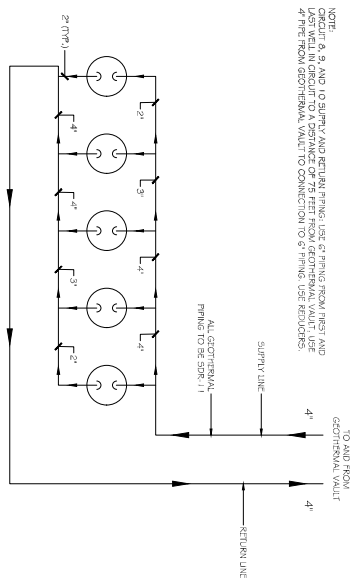
- APPROXIMATE LOCATION OF EXISTING GEOTHERMAL WELL
- APPROXIMATE LOCATION OF PROPOSED GEOTHERMAL WELL
- APPROXIMATE LOCATION OF PROPOSED GEOTHERMAL VAULT
- APPROXIMATE LOCATION OF PROPOSED SUPPLY-RETURN CIRCUIT (TWO PIPES, ONE SUPPLY AND ONE RETURN)
- APPROXIMATE LOCATION OF PROPOSED SUPPLY-RETURN MAIN LINES (TWO PIPES, ONE SUPPLY AND ONE RETURN)



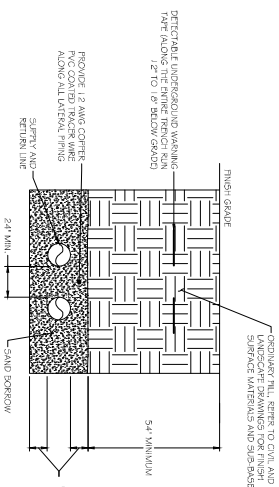
| CIRCUIT SCHEDULE |                |
|------------------|----------------|
| CIRCUIT No.      | WELL No.       |
| 1                | GW-1 TO GW-5   |
| 2                | GW-6 TO GW-10  |
| 3                | GW-11 TO GW-15 |
| 4                | GW-16 TO GW-20 |
| 5                | GW-21 TO GW-25 |
| 6                | GW-26 TO GW-30 |
| 7                | GW-31 TO GW-35 |
| 8                | GW-36 TO GW-40 |
| 9                | GW-41 TO GW-45 |
| 10               | GW-46 TO GW-50 |

- NOTES:
- NOTIFY DESIGN AND UTILITY COMPANIES TO MARK LOCATION OF EXISTING UNDERGROUND SERVICES. DO NOT BEGIN WORK ON THIS SECTION UNTIL EXISTING UNDERGROUND SERVICES ARE MARKED. PROTECT UNDERGROUND UTILITIES AND STRUCTURES NEAR THE WORK AREA.
  - COORDINATE EXIST OF WORK WITH DRAINAGE AND OTHER TRADES.
  - EACH WELL WILL BE CONNECTED TO ONE SUPPLY AND RETURN BRANCH AS SHOWN ON THE DRAWINGS. ADJACENT WELLS SHALL BE SPACED AT A MINIMUM OF 25 FEET.
  - GROUND LOOP CIRCUIT PIPING AND DISTRIBUTION PIPING SHALL BE SDR-11 PIPE.
  - ALL GROUND LOOP PIPING AND OTHER GEOTHERMAL WELL CONNECTIONS SHALL BE A MINIMUM OF 5 FEET BELOW FINISHED GROUND SURFACE.
  - GROUND LOOP PIPING IS SHOWN SCHEMATICALLY. NO SHARP BENDS ARE ALLOWED.
  - INSTALL HORIZONTAL GROUND LOOP PIPING IN A REVERSE RETURN CIRCUIT. USE PIPE REDUCERS/ADAPTERS AS REQUIRED.
  - PROVIDE 6 INCH MINIMUM SPACE BETWEEN HORIZONTAL GROUND LOOP PIPING.
  - THE GEOTHERMAL WELL DRILLERS WORK SHALL BE AT CONNECTION OF THE SUPPLY AND RETURN LINES TO THE HOPE-10 STEEL CONTAINERS.
  - LOCATED TO THE OUTSIDE BUILDING FOOTPRINT DOES NOT INCLUDE GROUND PILES.
  - SEE SPECIFICATION SECTION 33.03.1.3 - GEOTHERMAL WELL FIELD FOR ADDITIONAL INFORMATION.
  - COORDINATE GEOTHERMAL WELLS AND PIPING WITH ALL OTHER PROPOSED AND EXISTING UTILITIES. NOTIFY THE AGENCY IN WRITING OF ANY POTENTIAL CONFLICTS AND REQUEST A MEETING TO DISCUSS AND RESOLVE. HORIZONTAL PIPING SHALL BE INSTALLED IN THE GROUND SURFACE AND NOT IN THE BUILDING FOOTPRINT. HORIZONTAL PIPING SHALL BE INSTALLED IN THE GROUND SURFACE AND NOT IN THE BUILDING FOOTPRINT. HORIZONTAL PIPING SHALL BE INSTALLED IN THE GROUND SURFACE AND NOT IN THE BUILDING FOOTPRINT.
  - FOR DETAILS REFER TO SHEET GT-1.2.
  - REFERS TO THE REPORT ENTITLED "THERMAL CONDUCTIVITY TEST REPORT FOR HEAT GEOTHERMAL TEST WELL DATED MAY 29, 2020 PREPARED BY METAL ASSOCIATES, LLC FOR THE RESULTS OF THE TEST WELL INSTALLATION."

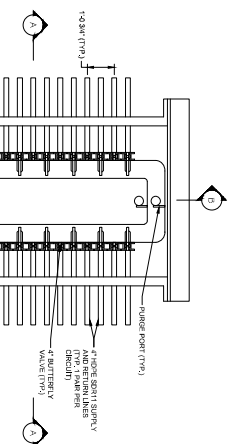
DRISCOLL SCHOOL



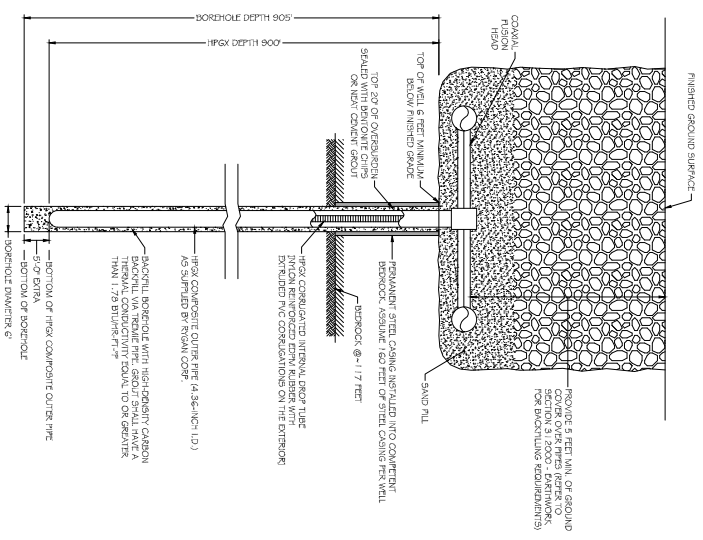
WELL CIRCUIT PIPING DETAIL  
N.T.S.



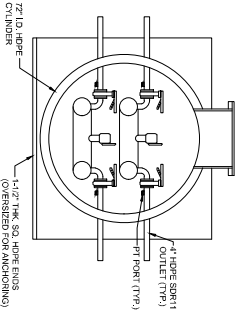
SUPPLY - RETURN MAIN SECTION  
N.T.S.



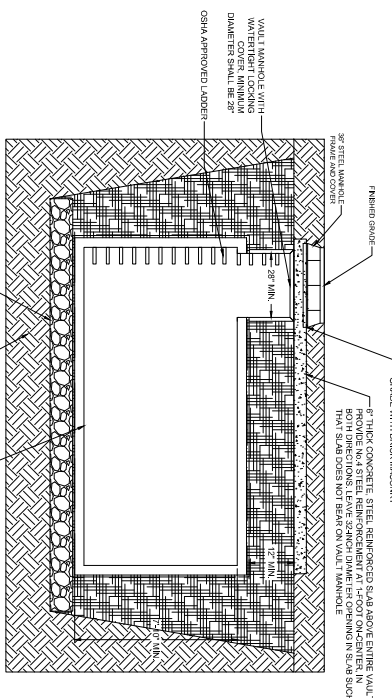
TYPICAL CIRCUIT PIPING SECTION  
N.T.S.



TYPICAL WELL DETAIL (RIGAN SYSTEM)  
N.T.S.



GEO THERMAL VAULT CROSS SECTION A-A  
N.T.S.



GEO THERMAL VAULT CROSS SECTION B-B (PIPING NOT SHOWN FOR CLARITY)  
N.T.S.

## Callahan, Lynda M.

---

**From:** Ryan Little <rlittle@JDerenzo.com>  
**Sent:** Thursday, September 30, 2021 12:46 PM  
**To:** Callahan, Lynda M.; Troy Morgado  
**Subject:** RE: MDS - Update on GEOTHERMAL notes

[EXTERNAL]

Lynda

Here is a breakdown on Manosh pricing and durations, their pricing has increased 200k from the last proposal sent on August 10<sup>th</sup>.

### Manosh Pricing

Drill 49- 905' foot deep geothermal wells as per design. Erosion control items will be onsite as well as containment system, and filter bags for drilling cuttings control.

Mobilization - \$18,000.00

Material containment as proposed above – \$103,240.00 (per specifications on Bid to 50 gpm)

Horizontal piping/supply vault/ glycol, testing & installation - \$321,000.00

(49) 905' Drilling/casing 6-inch diameter 160 feet each minimum – \$1,546,084.00

Rygan piping/Grouting/, testing & installation – \$973,544.00

Additional frac water tanks, filters to storm drain management to 100 gpm. – allowance of \$118,000.00

Cementing of problematic wells each occurrence - \$4120.00/ea – allowance of \$82,400.00

**Total Bid - \$3,162,268.00**

6-inch Casing beyond 160 feet – per foot @ \$40.50/per foot **(Not included in contract price.)**

Storage/insurance on stored materials per month @ \$1050.00-month **(Not included in contract price) No retainage on these stored materials.**

Exclusions: Dig Safe, excavation, backfill, compaction, site prep, interior piping, plumbing, electrical. Bond can be provided at additional cost if needed.

### Manosh Schedule

Week One: 3 personnel onsite

Day one: Mobilize setup and prepare sediment and water measures onsite.

Day two: DR 24 starts drilling advances 160 feet of casing in 1.5 wells.

Day Three : DR 24 starts casing next 1.5 wells with 160 feet of casing each.

Day four : Same scenario

Day Five : Same scenario at the end of 1<sup>st</sup> week everything goes as planned we have 6 cased holes each to 160 feet. **Manosh is assuming we can work a minimum 10 – 12 hour days, machines operable.**

Week Two: 7 Personnel onsite

Day one : DR 24 continues casing same as above schedule, 2<sup>nd</sup> Drill mobilizes to site and starts advancing borehole to achievable 905 foot depth, one per day with no complications.

Day Two : Same scenario

Day Three : Same scenario

Day Four Same scenario

Day Five : Same scenario at the end of 2<sup>nd</sup> week we have 13.5 wells cased total and 4.5 wells drilled to 905 foot depth total.

Week Three : 9 Personnel onsite

Same scenario with drilling and Horizontal piping starts.

At the end of this week we should have 20.5 wells Cased and 9 wells drilled to depth.

Week : Four : 9 Personnel onsite

3<sup>rd</sup> Drill arrives onsite and starts setting over already cased holes.

At the end of this week and no complications 26.5 wells cased and 17.5 wells drilled to depth.

Weeks 5 thru 9 : 9 Personnel onsite

49 wells cased/drilled to spec depth in 45 days and Rygan piping installed and pre tested. The exterior horizontal piping is 95% completed to building

Week 10 : 9 personnel onsite

Finish Rygan piping Cleanup and prepare for mobilization out of site of all personnel and equipment along with some testing verification. **This is the best case scenario with no complications and longer hours onsite ( if only 8 hours equipment operable then this time frame will not work and time would be extended. If schedule must be completed in this period we would want the option of working Saturdays. Manosh would ask for an additional 12k per working day for making the schedule work regardless of circumstances as we would have to provide standby equipment and personnel to achieve such a tight schedule of completion.**

Thanks

---

**From:** Callahan, Lynda M. <LCallahan@Gilbaneco.com>

**Sent:** Thursday, September 30, 2021 12:23 PM

**To:** Troy Morgado <TMorgado@JDerenzo.com>

**Cc:** Ryan Little <rlittle@JDerenzo.com>

**Subject:** RE: MDS - Update on GEOTHERMAL notes

Any ETA on this?

---

**From:** Troy Morgado <[TMorgado@JDerenzo.com](mailto:TMorgado@JDerenzo.com)>  
**Sent:** Thursday, September 30, 2021 7:51 AM  
**To:** Callahan, Lynda M. <[LCallahan@Gilbaneco.com](mailto:LCallahan@Gilbaneco.com)>  
**Cc:** Ryan Little <[rlittle@JDerenzo.com](mailto:rlittle@JDerenzo.com)>  
**Subject:** RE: MDS - Update on GEOTHERMAL notes

[EXTERNAL]

Hi Lynda,  
Ryan is putting it together. Ryan please try and get Lynda info ASAP

Thanks!

**Troy Morgado**  
Sr. Estimator  
**J. Derenzo Co.**

338 Howard St., Brockton, MA 02302  
O 508-897-8047 | F 508-897-8547 | C 617-212-4519  
[tmorgado@jderenzo.com](mailto:tmorgado@jderenzo.com)  
[www.jderenzo.com](http://www.jderenzo.com)

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---

**From:** Callahan, Lynda M. <[LCallahan@Gilbaneco.com](mailto:LCallahan@Gilbaneco.com)>  
**Sent:** Thursday, September 30, 2021 7:45 AM  
**To:** Troy Morgado <[TMorgado@JDerenzo.com](mailto:TMorgado@JDerenzo.com)>  
**Subject:** MDS - Update on GEOTHERMAL notes  
**Importance:** High

Hi Troy  
Just checking to see when I can expect to have the items we discussed Tuesday related to Geothermal. Please let me know. Thanks!  
Lynda

Lynda Callahan | Sr. Project Manager | [Gilbane Building Company](#)

10 Channel Center St | Boston, MA | 02210  
O: (617)960-2956 | M: (617)320-5153 | F: (617)478-3001  
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## Callahan, Lynda M.

---

**From:** Ryan Little <riddle@JDerenzo.com>  
**Sent:** Friday, October 1, 2021 8:00 AM  
**To:** Troy Morgado  
**Cc:** Callahan, Lynda M.  
**Subject:** Re: MDS - Geothermal Unit price to add a well?  
**Attachments:** image001.png

[EXTERNAL]

\$31500/well plus any markup

Ryan Little  
J Derenzo Co.  
5086499702

On Sep 30, 2021, at 2:32 PM, Troy Morgado <TMorgado@jderenzo.com> wrote:

I spoke to Ryan this morning and I'm pretty sure Ryan asked him for that Ryan did he give you that yet?

Troy Morgado  
Sr. Estimator  
J. Derenzo Co.  
338 Howard St., Brockton, MA 02302  
O 508-897-8047 | F 508-897-8547 | C 617-212-4519 tmorgado@jderenzo.com<mailto:tmorgado@jderenzo.com>  
www.jderenzo.com<http://www.jderenzo.com/>  
LinkedIn<http://www.linkedin.com/company/2549288?trk=tyah&trkinfo=tas%3A%20derenzo> / Twitter<https://twitter.com/JDerenzoCos> /  
Flickr<http://www.flickr.com/photos/99548239@N07/>  
<image001.png>

From: Callahan, Lynda M. <LCallahan@Gilbaneco.com>  
Sent: Thursday, September 30, 2021 2:11 PM  
To: Troy Morgado <TMorgado@JDerenzo.com>  
Subject: MDS - Geothermal Unit price to add a well?



I see a unit price for casing, what about cost to add 1 well? I do recall we asked for that cost in the event that we need to fill one in with cement.

Lynda Callahan | Sr. Project Manager | Gilbane Building Company

10 Channel Center St | Boston, MA | 02210

O: (617)960-2956 | M: (617)320-5153 | F: (617)478-3001 [www.gilbaneco.com](http://www.gilbaneco.com)<<http://www.gilbaneco.com/>> | Like us on

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