

ERIE COUNTY WATER AUTHORITY
AUTHORIZATION FORM
For Approval/Execution of Documents
(check which apply)

Contract: 19-02-01

Project No.: 201900005

Project Description: Large Service Contract
February 1, 2019 to January 31, 2021

Item Description:

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> Agreement | <input type="checkbox"/> Professional Service Contract | <input type="checkbox"/> Amendment | <input checked="" type="checkbox"/> Change Order |
| <input type="checkbox"/> BCD | <input type="checkbox"/> NYSDOT Agreement | <input type="checkbox"/> Contract Documents | <input type="checkbox"/> Addendum |
| <input type="checkbox"/> Recommendation for Award of Contract | <input type="checkbox"/> Recommendation to Reject Bids | | |
| <input type="checkbox"/> Request for Proposals | | | |
| <input type="checkbox"/> Other _____ | | | |

Action Requested:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Board Authorization to Execute | <input checked="" type="checkbox"/> Legal Approval |
| <input type="checkbox"/> Board Authorization to Award | <input checked="" type="checkbox"/> Execution by the Chairman |
| <input type="checkbox"/> Board Authorization to Advertise for Bids | <input type="checkbox"/> Execution by the Secretary to the Authority |
| <input type="checkbox"/> Board Authorization to Solicit Request for Proposals | |
| <input type="checkbox"/> Other _____ | |

Approvals Needed:

APPROVED AS TO CONTENT:

- | | | |
|--|----------------------------|-----------------------|
| <input type="checkbox"/> Other (if Applicable) | _____ | Date: _____ |
| <input checked="" type="checkbox"/> Chief Operating Officer | <i>Russell F. Stoll</i> | Date: <u>2-5-2020</u> |
| <input checked="" type="checkbox"/> Executive Engineer | <i>Samuel F. Koralicki</i> | Date: <u>2-5-2020</u> |
| <input checked="" type="checkbox"/> Director of Administration | <i>Lanona Lester</i> | Date: <u>2/5/2020</u> |
| <input checked="" type="checkbox"/> Risk Manager | <i>Molly J. Musarra</i> | Date: <u>2/6/2020</u> |
| <input checked="" type="checkbox"/> Chief Financial Officer | <i>Karen A. Rendusast</i> | Date: <u>2/6/2020</u> |
| <input checked="" type="checkbox"/> Legal | <i>Margaret A. Murphy</i> | Date: <u>2/5/2020</u> |

APPROVED FOR BOARD RESOLUTION:

- | | | |
|--|-----------|-----------------------|
| <input checked="" type="checkbox"/> Secretary to the Authority | <i>TC</i> | Date: <u>02/06/20</u> |
|--|-----------|-----------------------|

Remarks: _____

P:\ECWA\201900005\Change Order #1 for Ball PS Emergency Bypass Piping\2020-02-05 Authorization Form Change Order #1.docx

Resolution Date: _____

Item No: _____




ERIE COUNTY WATER AUTHORITY

INTEROFFICE MEMORANDUM

February 5, 2020

To: Terrence D. McCracken, Secretary to the Authority

From: Leonard F. Kowalski, Executive Engineer 

Subject: Large Service Contract
ECWA Project No. 201900005
Change Order #1

Attached is Change Order No. 1 for the above referenced contract for Kandey Company Inc., (Kandey) to provide all labor, materials, equipment, and incidentals to install bypass piping at Ball Pump Station to mitigate possible failure of critical discharge piping that delivers water to our northern service area. The work was authorized under a Work Change Directive that was approved by the Board on January 16, 2020. Prior to the Work Change Directive being approved an Emergency Declaration was issued by the Authority on December 18, 2019. The Work Change Directive and Emergency Declaration are included as an attachment to Change Order No. 1.

I have previously reported that Ball Pump Station has been plagued with settlement issues since the mid 1990's and we've gotten some insight into why this is occurring. Under the current emergency work a Geotechnical Engineering firm was retained to perform soil borings and provide recommendations for the new pipe installation. The soil borings revealed an upper cap rock that is approximately 4ft below the surface. The cap rock is approximately 4ft to 5ft thick and is underlain by approximately 9ft of weathered rock and soil that contains voids and layers of gypsum. All the transmission piping at Ball Pump Station is located within the 9ft layer of weathered rock and soil, which is the reason why the piping has settled over the years.

We have been working at the site for over a month and the more transmission main we uncover, the more problems we are discovering. One of the joints that was uncovered was not protected properly, which is leading to corrosion of the bell bolts used to restrain the joint. There is no rhyme or reason why the joint wasn't properly diapered which leads us to believe that other joints could be in the same condition. The joints on another section of transmission main were inspected from the inside and it was discovered that the joint is deflected, and the restraint of the pipe is compromised. The intent of the work being performed is to replace the discharge piping in the vicinity of the pump station and to ensure it is supported on competent material to eliminate the issue with settling in the future. As we move forward with the project, we will inevitably uncover additional problems that will need to be corrected and we plan to correct them to keep the pump station supplying water to our customers.

The work is being performed under a time and material basis per Article 12 Section 00700, General Conditions of the contract. Per the contract, a fifteen percent (15%) markup for overhead and profit is allowed on labor, materials and equipment and a five percent (5%) markup

To: Terrence D.McCracken
Secretary to the Authority

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February 5, 2020

is allowed on subcontractors. Daily crew sheets document the equipment, manpower and number of hours worked each day and are reviewed and agreed upon at the end of each workday. Invoices for all subcontractors and material purchases are also provided. All the documentation provided by the contractor will reviewed by the Engineering Department prior to being submitted for payment.

Due to the unknowns involved with this project and due to the criticality of this pump station, an increase to the contract of \$1,500,000 is being requested to allow us to properly respond to situations as they arise in the field. The \$1,500,000 is a not to exceed amount and only the funds required to properly stabilize the pump station will be utilized.

The following documents are attached:

- Blue Authorization Form.
- Change Order No. 1 Form.

LFK:jmf

Attachments

cc: R.Stoll

L.Lester

AMTN-048-1901 (Ball PS Emergency)

ECWA-799-1903 (Large Service Cont)

CHANGE ORDER NO. 1

**Erie County Water Authority
350 Ellicott Square Building, 295 Main Street
Buffalo, New York 14203**

Contract No.: 19-02-01

Project No.: 201900005

Date: February 5, 2020

Project: Large Service Contract
February 1, 2019 to January 31, 2021

Contractor: Kandey Company, Inc.
19 Ransier Drive
West Seneca, New York 14224

Engineer: Erie County Water Authority
350 Ellicott Square Building
295 Main Street
Buffalo, New York 14203

DESCRIPTION OF CHANGE:

1. Provide labor, tools, equipment, materials and incidentals to perform emergency bypass piping work at Ball Pump Station. See attached Work Change Directive for Scope of Work.

REASON FOR CHANGE:

1. A Work Change Directive, Section 00700 General Conditions, was issued to respond to the emergency at Ball Pump Station to establish the Scope of Work. The Change Order is being issued per Section 00700 General Conditions to establish the change in contract price. Per Section 00700 Article 12.01.C.2 the work will be performed on a time and material basis.

ATTACHMENTS (LIST DOCUMENTS SUPPORTING CHANGE):

1. Work Change Directive #1.

COMPENSATION:

<u>Item</u>	<u>Description & Cost</u>
1.	Cost of the work shall be billed monthly on a time and material basis per Section 00700 Article 12.01.C.2. Total cost of the work shall not exceed \$1,500,000.

CHANGE IN CONTRACT PRICE:**Original Contract Price**\$2,563,925.00**Net Changes from previous Change Orders**
No. 0 to 0NA**Contract Price prior to this Change Order**\$2,563,925.00**Net Increase of this Change Order**\$1,500,000.00**Contract Price with all approved Change Orders**\$4,063,925.00**CHANGE IN CONTRACT TIMES:****Original Contract Times**Substantial Completion: No changeFinal Completion: No change

(Days or Dates)

Net changes from previous Change Orders
No. 0 to 0No change

(Days)

Contract Times prior to this Change OrderSubstantial Completion: No changeFinal Completion: No change

(Days or Dates)

Net Increase/Decrease of this Change OrderSubstantial Completion: No changeFinal Completion: No change

(Days)

Contract Times with all approved Change OrdersSubstantial Completion: No changeFinal Completion: No change

(Days or Dates)

APPROVALS:

ECWA: _____

Date: _____

CONTRACTOR: _____

Date: _____

ENGINEER: Jemal F. KonabluDate: 2-5-2020

Work Change Directive No. 1

Date of Issuance: 1/6/2020	Effective Date: 1/16/2020
Owner: Erie County Water Authority	Owner's Contract No.: 19-02-01
Contractor: Kandey Co.	Contractor's Project No.: 1750
Engineer: Erie County Water Authority	Engineer's Project No.: 201900005
Project: Ball Station Emergency Bypass	Contract Name: Large Service Contract

Contractor is directed to proceed promptly with the following change(s):

Description: Install bypass piping at the Ball Pump Station at the north and south discharge chambers to ensure the pump station remains operational in the event of a potential failure.

Attachments: See Attachment No. 1 and Erie County Water Authority, Declaration of State of Emergency, dated December 18, 2019

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

- ☐ Non-agreement on pricing of proposed change.
- ☒ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price \$ To be determined

Contract Time Not Applicable

Basis of estimated change in Contract Price:

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> Lump Sum | <input type="checkbox"/> Unit Price |
| <input checked="" type="checkbox"/> Cost of the Work | <input type="checkbox"/> Other |


RECOMMENDED:

By: 
Engineer (Authorized Signature)

Title: Executive Engineer

Date: 1-7-2020

AUTHORIZED BY:

By: 
Owner (Authorized Signature)

Title: Chair

Date: 1-21-2020

RECEIVED:

By: 
Contractor (Authorized Signature)

Title: V. Press

Date: 1-21-2020

Approved by Funding Agency (if applicable)

By:

Date:

Title:

ATTACHMENT No. 1
Scope of Work
Work Change Directive

Large Service Contract

Project No. 201900005

January 3, 2020

1. The Work Change Directive is necessary to install bypass piping at the Ball Pump Station to mitigate possible failure of critical piping that delivers water to our northern service area. While investigating a high-water alarm on December 16, 2019 at the northern venturi chamber at Ball Pump Station, it was discovered that the piping in the chamber is out of alignment. The venturi is currently lifted off its concrete support and the piping at the eastern end of the chamber is bearing on the chamber wall. Subsequent inspection has determined the central venturi is also displaced, but to a lesser extent. The southern venturi does not show signs of displacement.
2. The labor, equipment, materials and incidentals needing to perform the work is of a specialized nature due to the existing prestressed concrete cylinder pipe (PCCP). The contractor that is utilized must have experience working with PCCP to provide the best possible product in the shortest amount of time.
3. Kandey Co. is our contractor under the Large Service Contract and has the appropriate experience for this work.
4. The Work Change Directive consists of installing bypass piping to eliminate the potential failure at the venturi chambers. The work includes, but is not limited to:
 - a. Perform all excavation, rock excavation, dewatering and installation of temporary and/or permanent shoring as necessary;
 - b. Remove and dispose of all the existing 30-inch, 36-inch and/or 42-inch PCCP water transmission main from within the necessary excavations and other material including, but not limited to: asphalt, concrete, stone, rock, curbing, grass and fencing;
 - c. Install new 30-inch, 36-inch and 42-inch ductile iron pipe (DIP), poly wrap, fully restrained watermain, butterfly valves, fittings, blow-offs, PCCP to DIP adapters, hydrants, spool pieces, nipples and other materials as necessary to install the bypass piping at the locations as follows:

- i. At a point of connection on the west side of the northern venturi chamber, Line "F", install adapters, 30-inch DIP, valve, tee and fittings, to reach grade and alignment;
 - ii. Northerly with 30-inch DIP, valves, bends, reducer and fittings to reach grade and alignment;
 - iii. To a point of connection on the 36-inch PCCP "New Community Line" with adapters, 36-inch DIP, valves, tee and fittings to reach grade and alignment.
 - iv. At a point of connection on the west side of the southerly venturi chamber, Line "D", install adapters, 42-inch DIP, valve, tee and fittings, to reach grade and alignment;
 - v. Southerly with 36-inch DIP, valves, bends and fittings to reach grade and alignment;
 - vi. To a point of connection on the 36-inch PCCP "New Community Line" with adapters, 36-inch DIP, valves, tees, hydrant, fittings to reach grade and alignment.
- d. Provide all joint restraints, concrete anchor collars, concrete thrust blocking, bedding stone, select backfill material, temporary restoration, to properly stabilize, shore and brace the new water transmission mains, fittings and appurtenances.
 - e. Provide all labor, equipment and materials necessary to perform a hydrostatic pressure test of the newly installed piping following ECWA and ECDOH procedures.
 - f. Provide all labor, equipment and materials to perform chlorination, disinfection and bacteriological testing following ECWA and ECDOH procedures.
 - g. After approval of the testing procedure, place new bypass piping into service.
 - h. Perform necessary restoration of any disturbed areas.

Central Purchasing Declaration of State of Emergency

Work Order No.:

EC No.: 7081

Project No.: 201900289

Date of Emergency: 12/18/2019

Detailed Description of Emergency Condition:

On December 16, 2019 a Pump Mechanic was investigating a high-water alarm at the northern venturi chamber at Ball Pump Station. While he was in the chamber, he noticed that the piping in the chamber is out of alignment. The venturi is currently lifted off its concrete support and the piping at the eastern end of the chamber is bearing on the chamber wall. For the venturi to be lifted off its concrete support, the discharge header outside of the chamber had to move downward. Figure 1 shows the piping layout in the vicinity of the venturi chamber. The current condition of the northern venturi is shown in Picture 1. The central venturi is also displaced, but to a lesser extent. The southern venturi did not show signs of displacement.

Ball Pump Station is a critical pump station for delivering water to our northern service area and we need to ensure that the station stays in service. The Engineering Department is moving forward with installing bypass piping on the northern and southern sides of the station. The bypass piping will allow ECWA to keep the plant operational if there is a failure on the eastern side the discharge piping. The proposed work is depicted in Sketch 1 and Sketch 2.

It is imperative that this works gets started as soon as possible. The material and labor required to make the bypass piping modifications will need to be procured in a timely manner to ensure that the pump station stays operational. Due to the specialized nature of working with prestressed concrete cylinder pipe (PCCP), it will be necessary to utilize a contractor that is experienced with working with this pipe to provide the best possible product in the shortest amount of time.

Authorized Signature: Pursuant to the Purchasing Guidelines (Page 17) authorization granted to one or more of the following two (2) individuals: Any Commissioner, the Executive Director, Executive Engineer, and/or the Director of Administration.

Russell Stott 12/20/19
Laronya Lester 12/20/19

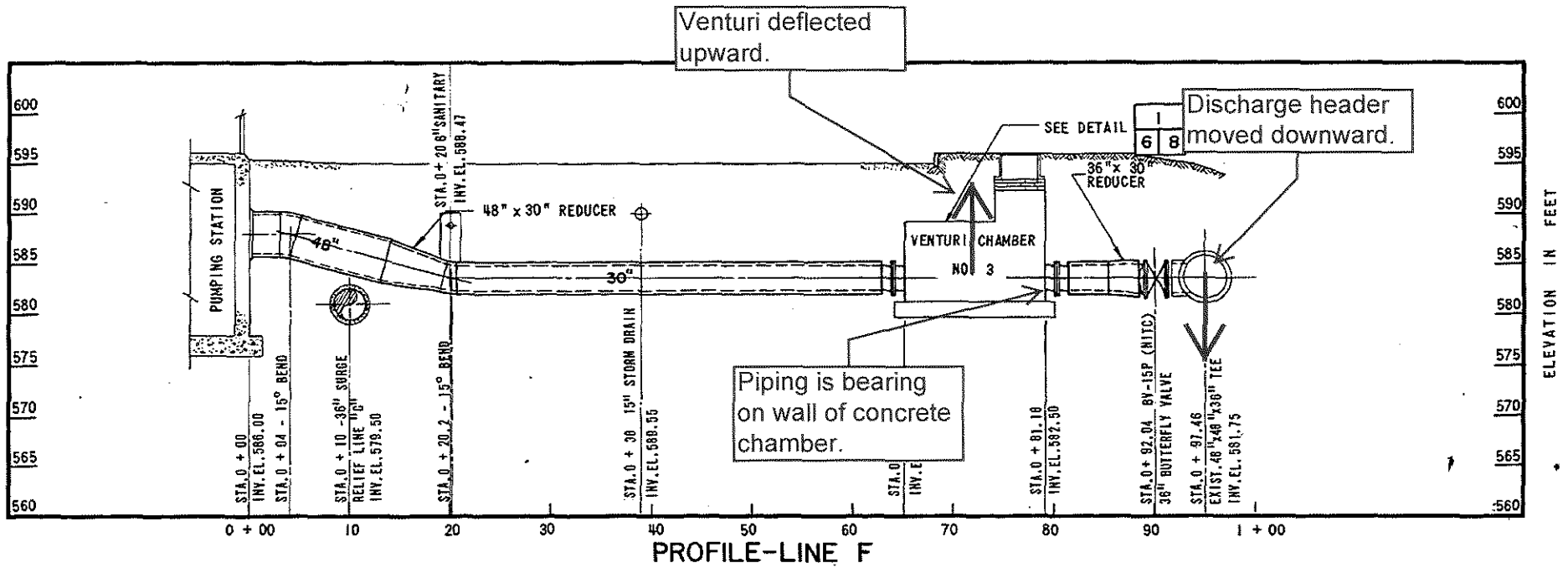
To: Purchasing System File

P:\EMERGAP201900289\Emergency Declaration.docx (goldenrod)

Rev. 10/06/2010

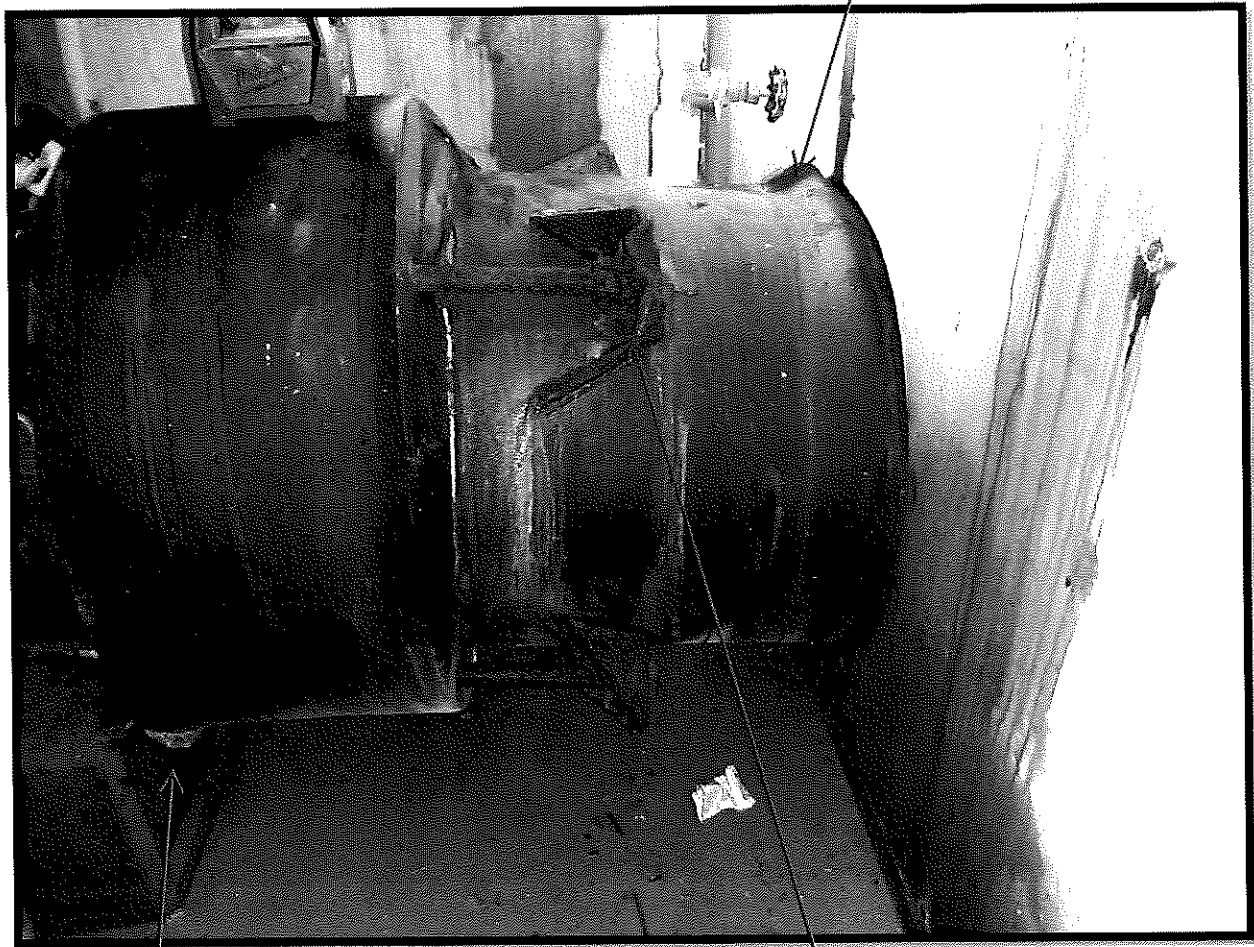
Attachments: Figure 1
Picture 1
Sketch 1
Sketch 2

Figure 1



FINISHED GRADE

600

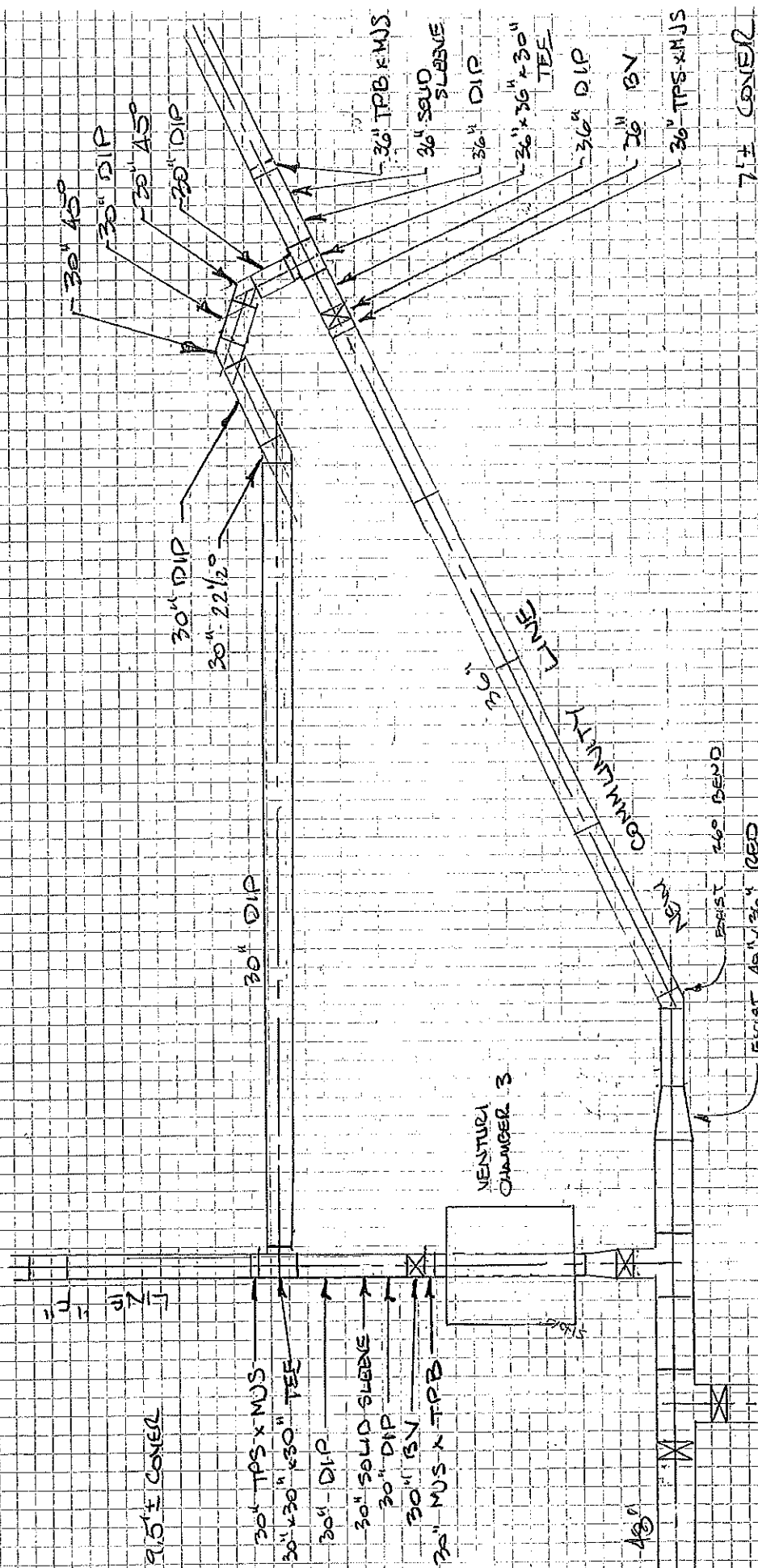


Picture 1
North Venturi

Venturi lifted off of
concrete support.

Restraint is
deformed.

Sketch 1 Northern Bypass Piping



2

Sketch 2

Southern Bypass Piping

(11' ± COVER @ 4'-10")

LINE "D"

LINE "A"

4 - 36" 11.25° BENDS
TO CROSS OVER
LINE "A"
(TOP)

36" 45°

36" 11.25°

36" TPS & MJS

36" x 36" x 36" MJ TEE

36" DIP

36" 5V

42" TPS & MJS

42" x 42" x 36" MJ TEE

42" 30° DIP

42" 5V

42" MUS & TPB

NEAR COMMUNITY
LINE