

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2026	2027	2028	2029	2030
Capital Expenditures	<u>\$2,008,047</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Operating Costs	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
External Revenues	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Program Income (County)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
In-Kind Match County	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
NET FISCAL IMPACT	<u>\$2,008,047</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
# ADDITIONAL FTE POSITIONS (Cumulative)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Budget Account No.: Fund 4011 Dept 721 Unit W007 Object 6543

Is Item Included in Current Budget? Yes X No

Is this item using Federal Funds? Yes No X

Is this item using State Funds? Yes No X

Reporting Category N/A

B. Recommended Sources of Funds/Summary of Fiscal Impact:

One (1) time expenditure from user fees, connection fees and balance brought forward.

C. Department Fiscal Review: *Erny Soreman*

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Development and Control Comments:

<p><u><i>Lisa Mack</i></u> 5/7/2026 OFMB</p>	<p><i>JA 97</i> <i>ESW 5.7.26</i></p>	<p><u><i>Kunda Mack</i></u> 5/13/26 Contract Development and Control 26 5.12.26</p>
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B. Legal Sufficiency:

[Signature] 5/19/26
Assistant County Attorney

C. Other Department Review:

Department Director

SUPPLEMENT NO. 2 TO WORK ORDER NO. 12
Palm Beach County Water Utilities Department
2022 Pipeline Continuing Construction Contract
Resolution No. R2025-0205 Work Order Dated February 11, 2025

Project Title: Turnpike Widening Belvedere Rd to North of Okeechobee Blvd, FDOT # 406143-8

PBCWUD Project No.: 24-007

Contractor: Johnson-Davis Incorporated

Address: 604 Hillbrath Drive, Lantana, FL 33462

Budget Line Item No.: 4011 - 721 – W007 - 6543

District: 2

Notice to Proceed: 09-02-2025

The Contract provides for 20.83% SBE participation. This Supplement includes 0.00% overall SBE participation. The cumulative SBE participation, including this Supplement is 16.17%.

The Contract and this Work Order is subject to the County Emergency Ordinance 2025-014, approved by the Board of County Commissioners on June 3, 2025.

You are directed to make the following changes in this work authorization:

2.1 Micro tunneling under turnpike proposal.	\$2,792,596.07
2.2 Credit, 48-inch Jack & Bore steal casing w/casing spacers and end seal.	-\$ 784,550.00

Total: \$2,008,046.07

All Attachments to this Supplement are made a part of this Supplement and incorporated herein.

NOT VALID UNTIL SIGNED BY BOTH OWNER AND ENGINEER. SIGNATURE OF THE CONTRACTOR INDICATES THEIR AGREEMENT HEREWITH INCLUDING ANY ADJUSTMENT IN THE WORK ORDER SUM OR WORK ORDER TIME, AND NO ADDITIONAL COST OR TIME INDICATED HEREIN WILL BE RELATED TO THIS CHANGE

The Original Work Order Sum was.....	\$2,770,166.12
Net Change by previous Supplements.....	\$148,507.55
The Work Order Sum prior to this Supplement was.....	\$2,918,673.67
The Work Order Sum will be increased/decreased by this Supplement.....	\$2,008,046.07
The New Work Order Sum indicating this Supplement will be.....	\$4,926,719.74
The Date of Substantial Completion prior to this Supplement was	03/11/2026
The Date of Final Completion prior to this Supplement was	04/10/2026
The Work Order Time will be increased/decreased by.....	90 Days
The Date of Substantial Completion including this Supplement.....	06/09/2026
The Date of Final Completion including this Supplement.....	07/09/2026

SUPPLEMENT NO. 2 TO WORK ORDER NO. 12
 Palm Beach County Water Utilities Department
 2022 Pipeline Continuing Construction Contract
 Resolution No. R2025-0205 Work Order Dated February 11, 2025

Execution of this supplement acknowledges final settlement of, and releases, all claims for costs and time associated, directly or indirectly, with the above stated modification(s); including all claims for cumulative delays or disruptions resulting from, caused by, or incident to such modification(s), and including any claim that the above stated modification(s) constitutes, in whole or part, a cardinal change to the work order.

Johnson-Davis Incorporated

Mock Roos & Associates, Inc.

Palm Beach County
Board of County Commissioners

CONTRACTOR

ENGINEER

OWNER

604 Hillbrath Drive
Lantana FL 33462

5720 Corporate Way
West Palm Beach, FL 33407

301 N. Olive Avenue
West Palm Beach, FL 33401

ADDRESS

ADDRESS

ADDRESS

SIGNATURE

SIGNATURE

SIGNATURE KBfix AB

William Clark Clifford Cryer
PRINT NAME

Thomas A Biggs
PRINT NAME

Sara Baxter
PRINT NAME

President

Exec. Vice President

Mayor

TITLE

TITLE

TITLE

3/26/26

3/26/26

DATE

DATE

DATE

STATE OF FLORIDA
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me by means of physical presence or online notarization this 26 day of March, 2026 by William Clark Clifford Cryer who is personally known to me or has produced _____ as identification.

Approved as to Form and Legal Sufficiency

By: _____
County Attorney

Attest: Michael A. Caruso, Clerk of the Circuit Court & Comptroller, Palm Beach County

By: _____
Deputy Clerk

(Signature of Notary Public -- State of Florida)



LARISA DITU PELKEY
Commission # HH 723424
Expires January 22, 2030

(Print, Type, or Stamp Commissioned Name of Notary Public)

SUPPLEMENT NO. 2 TO WORK ORDER NO. 12
Palm Beach County Water Utilities Department
2022 Pipeline Continuing Construction Contract
Resolution No. R2025-0205 Work Order Dated February 11, 2025

LIST OF ATTACHMENTS

ATTACHMENT A	Supplement Summary and Categorization
ATTACHMENT B	Supplement Additions/Deletions Summary
ATTACHMENT C	OSBD Schedule 1 and Schedule 2
ATTACHMENT D	Location Map
ATTACHMENT E	Bond Rider (if applicable)
ATTACHMENT F	Supporting Documentation

REVISED 01-27-26

ATTACHMENT C
OSBD SCHEDULE 1

OFFICE OF SMALL BUSINESS DEVELOPMENT

OSBD SCHEDULE 1

SOLICITATION/PROJECT/BID NAME: Turnpike Widening Belvedere Rd to North of Okeechobee Blvd
FDOT #406143-8
 SOLICITATION OPENING/SUBMITTAL DATE: 2-11-2025

SOLICITATION/PROJECT/BID NO.: PBCWUD No. 24-007
 COUNTY DEPARTMENT: Palm Beach County Water Utilities Department

Section A PLEASE LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY THE PRIME CONTRACTOR/CONSULTANT* ON THE PROJECT:

NAME OF PRIME RESPONDENT/BIDDER: Johnson-Davis Incorporated ADDRESS: 604 Hillbrath Dr. Lantana, FL 33462
 CONTACT PERSON: William Clark Clifford Cryer PHONE NO.: 561-718-4531 E-MAIL: ccryer@johnsondavis.com

PRIME'S DOLLAR AMOUNT OR PERCENTAGE OF WORK: 556,646.07
 SBE Prime's must include their percentage or dollar amount in the Total Participation line under section B.

Non-SBE SBE

Section B PLEASE LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY ALL SUBCONTRACTORS/SUBCONSULTANTS ON THE PROJECT BELOW:

Subcontractor/Sub consultant Name	(Check all Applicable Categories)		DOLLAR AMOUNT OR PERCENTAGE OF WORK
	Non-SBE	SBE	
1. HUXTED TRENCHLESS, LLC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$1,451,400.00
2.	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	<input type="checkbox"/>	<input type="checkbox"/>	_____
5.	<input type="checkbox"/>	<input type="checkbox"/>	_____

(Please use additional sheets if necessary)

Total Bid/Offer Price \$ 2,008,046.07 Total \$1,451,400.00
 Total Certified SBE Participation \$ 0.00

I hereby certify that the above information is accurate to the best of my knowledge: William Clark Clifford Cryer President
Name & Authorized Signature Title

- Note:**
- The amount listed on this form for a Subcontractor/sub consultant must be supported by price or percentage listed on the properly executed Schedule 2 or attached signed proposal.
 - Only those firms certified by Palm Beach County at the time of solicitation due date are eligible to meet the established OSBD Affirmative Procurement Initiative (API). Please
 - Modification of this form is not permitted and will be rejected upon submittal.
 - If a Mandatory API goal applies, failure to submit a properly executed Schedule 2 will result in a determination of non-responsiveness to the solicitation.

ATTACHMENT C
OSBD SCHEDULE 2

OFFICE OF SMALL BUSINESS DEVELOPMENT

REVISED 01-27-26

ATTACHMENT D

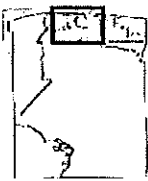
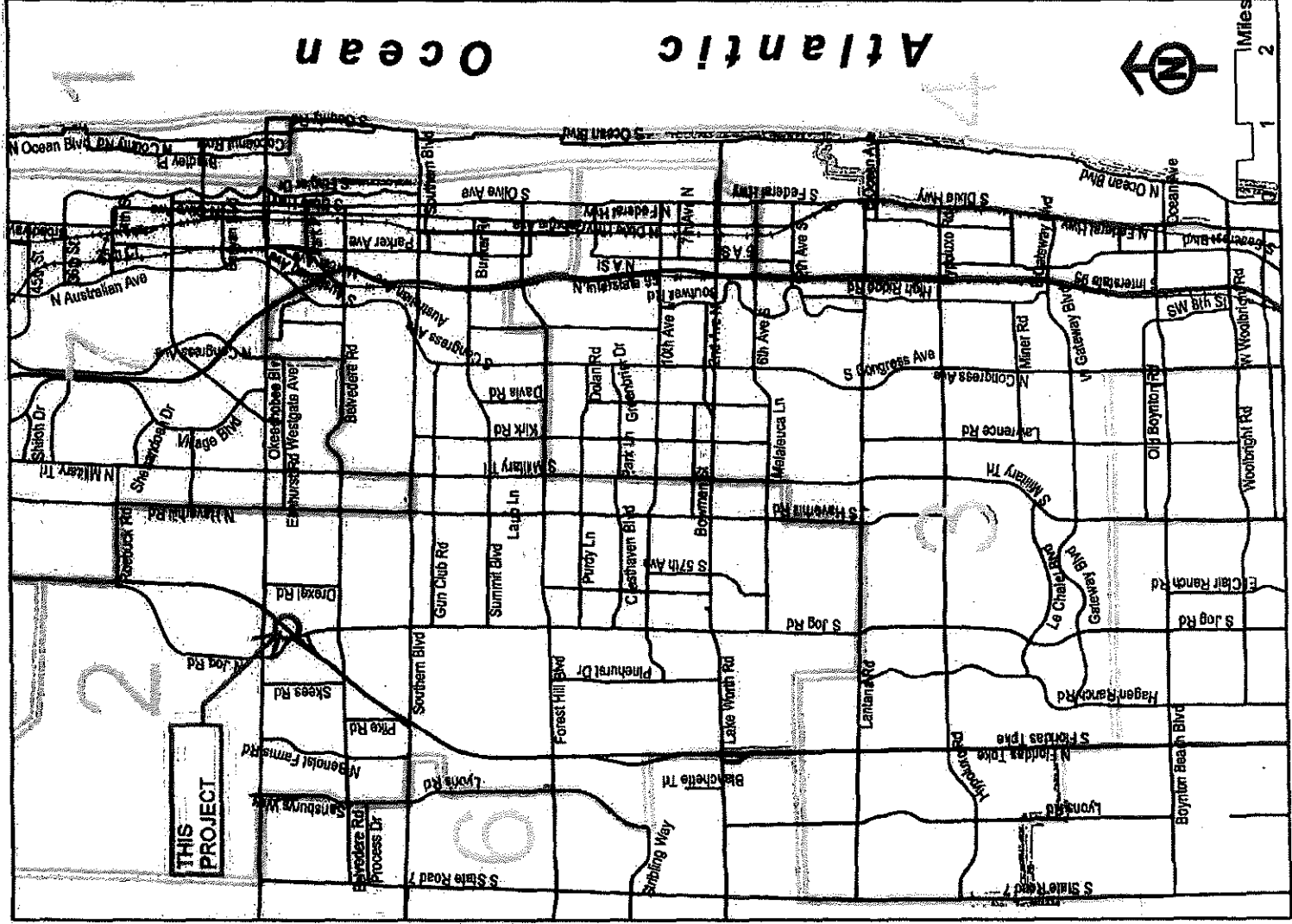
LOCATION MAP

PBCWUD Project No. 24-007

Revised 07-08-25

ATTACHMENT D

LOCATION MAP
PBCWUD PROJECT No. 24-007



ATTACHMENT E

BOND RIDER

~~(if applicable)~~

REVISED 01-27-26

SURETY RIDER

To be attached to and form a part of Bond No. 016241424
executed by Johnson-Davis Incorporated, as
principal and by Liberty Mutual Insurance Company as Surety,
in favor of Palm Beach County, and effective
as of February 11, 2025

In consideration of the mutual agreements herein contained the Principal and the Surety hereby consent to changing
Increasing bond amount - Supplement No. 2 to Work Order No. 12

From: \$2,911,731.66

To: \$4,941,373.12

Nothing herein contained shall vary, alter or extend any provision or condition of this bond except as herein
expressly stated. This rider is effective on the 3rd day of March, 2026.

Signed and sealed this 3rd day of March, 2026.

Johnson-Davis Incorporated



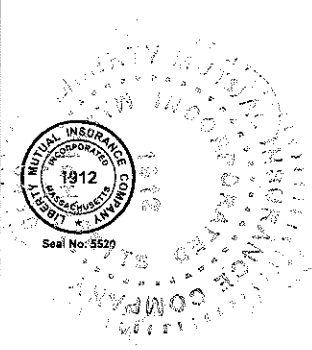
Principal

By William Clark Clifford Coker, President Title

Liberty Mutual Insurance Company

Surety

By Joshua R. Loftis, Attorney-in-Fact



Project: Turnpike Widening Belveder Rd to North of Okeechobee Blvd FDT #406-143-8; Emergency Water Main Replacement, PBCWUD Project No. 24-007, Palm Beach County, FL



POWER OF ATTORNEY

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8213401-190054

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Kristine M. Becks; Melinda C. Blodgett; R. C. Bowman; Joseph Cardinal; Tina Domask; Sandra M. Engstrum; R. W. Frank; Ted Jorgensen; Joshua R. Loftis; Ryan-Olivia E Lundy; Michelle Morrison; Austin Muchlschlegel; Brian J. Oestreich; Sarah Robinson; Ross S. Squires; Nicole Stillings; Nathan Weaver; Colby D. White

all of the city of St. Louis Park state of MN each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 19th day of March, 2025.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: Nathan J. Zangerle
Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 19th day of March, 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2029
Commission number 1128044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 3rd day of March, 2026.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

ATTACHMENT F

SUPPORTING DOCUMENTATION

REVISED 01-27-26

INTER-OFFICE COMMUNICATION
Palm Beach County
WATER UTILITIES DEPARTMENT

DATE: April 30, 2026

TO: File

FROM: Joseph Tanacredi P.E.



RE: Supplement No 2, PBCWUD 24-007, WO # 12

Turnpike widening Belvedere Rd to North of Okeechobee Blvd, FDOT # 406143-8

The attached documents have been reviewed and approved by the engineer of record Mock Roos. These items are required to complete this work and weren't part of the original work order cost.



MOCK•ROOS

CONSULTING ENGINEERS

March 23, 2026

Joe Tanacredi
Palm Beach County Water Utilities Department
8100 Foresthill Boulevard
West Palm Beach, FL 33413

Ref No: PA#C5008.00
Subject: Florida Turnpike Watermain Relocation WUD#24-007
Supplement No. 2

Dear Mr Tanacredi:

Mock•Roos, in coordination with its subconsultant WGI, has reviewed the attached documentation submitted by Johnson-Davis in support of Supplement Nos. 2 and, from an engineering standpoint, considers the information to be generally acceptable and reasonable. Based on our review, we recommend that PBCWUD move forward with installation of the casing pipe beneath the Turnpike at the project location by means of microtunneling to maintain the project schedule and avoid impacts to the Turnpike contractor's ongoing construction, for the amount identified in the supplement and with a 90-day extension to the contract time.

Sincerely,
Mock, Roos & Associates, Inc.



John Cairnes, P.E.
Senior Project Manager

Copies: GGG

Mock, Roos & Associates, Inc.

5720 Corporate Way, West Palm Beach, Florida 33407-2066, 561-683-3113, www.MockRoos.com

Wakefield Road Boring, Inc.
9223 Balsamo Drive
Palm Beach Gardens, FL 33412
(561)718-4703 Cell
wakefieldroadbor@aol.com

2/24/26

Palm Beach County Water Utilities
Department 8100 Forest Hill Blvd.
West Palm Beach, FL

Re: Turnpike Widening — 30" Water Main Relocation
Abandonment of Jack & Bore Due to Unforeseeable Subsurface Conditions

To Whom It May Concern:

Wakefield Road Boring, Inc., who was subcontracted to perform the jack and bore installation for the 30" water main relocation under Florida's Turnpike, submits this letter to document the conditions encountered and the basis for discontinuing the bore:

The project's design and method selection were dictated by the FDOT-issued utility relocation plans (e.g., U-4/U-5 jack & bore section) and supported by Owner-furnished geotechnical reports. These reports—covering roadway, utility, and bridge investigations—document subsurface profiles of sands, silty sands, and limestone with no artesian flow conditions observed anywhere along this alignment (e.g., Bridge B1 Geotechnical Report: "artesian flow conditions were not encountered during the field exploration").

1. Jack & Bore Proceeded in Full Reliance on FDOT/PBCWUD Geotechnical Data

Wakefield's methods, equipment, and risk evaluation were based on these representations.

[\[4061438 UW...Plans RFC | PDF\]](#)

2. Unforeseeable Artesian Condition at Launch Pit

During initial excavation, Wakefield encountered a pressurized artesian water condition not indicated in the Owner's geotechnical information. The upward hydraulic pressure caused rapid inflow and localized instability. Work was immediately stopped, and the zone was successfully stabilized via targeted injection grouting. Only after the pit was fully secured were boring operations resumed.

3. Second Artesian Event Beneath the Turnpike Embankment

Roughly 125 feet of casing was installed, including crossing under the canal without issue. When the bore advanced to within ~100 feet of the Turnpike roadway, another zone of flowing, unstable, water-bearing soil was encountered—again behaving as an artesian condition. Because this zone was beneath the Turnpike embankment, continued advancement carried clear risks of ground loss, voiding, or settlement that could affect the structural support of the roadway.

4. Differing Site Condition (Material Deviation From Contract Data)

Both artesian conditions represent materially differing subsurface conditions from those provided in the contract's FDOT/PBCWUD geotechnical data. Nothing in the boring logs, surveys, or soil classifications suggested artesian pressures or flowing sand behavior in this area. These conditions

were not reasonably foreseeable and are inconsistent with typical groundwater tables controlled by the NPBCID canal systems noted in the reports.

5. Safety-Driven Decision to Abandon Jack & Bore

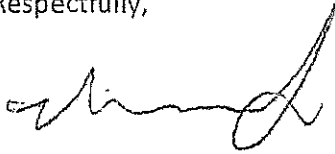
Proceeding in the presence of unpredictable artesian pressures beneath a high-speed, limited-access facility would pose an unacceptable risk of subsurface failure and potential roadway impact. FDOT standards, industry practice, and public-safety considerations required abandonment of the bore. This decision reflects responsible engineering judgment, not contractor error.

6. Commitment to Collaboration

Wakefield and the prime contractor remain committed to working with PBCWUD, FDOT, and the Engineer of Record to evaluate alternative methods or alignments.

Please contact us if further documentation, logs, or stabilization records are required.

Respectfully,

A handwritten signature in black ink, appearing to read 'Robert Wakefield', written in a cursive style.

Robert Wakefield
Wakefield Road Boring, Inc.



March 24, 2026

Mr. Ali Bayat
Palm Beach County Water Utilities Department
8100 Forest Hill Blvd
West Palm Beach, FL 33413

RE: 406143-8 UWHCA / PBCWUD Project No. 24-007
(Turnpike Widening Belvedere Rd. to North of Okeechobee Blvd. FDOT #406143-8)
Supplement No.1 and 2

Mr. Bayat,

Project 24-007 is a partial Utility Work by Highway Contractor Agreement (UWHCA) between Palm Beach County Water Utilities Department (PBCWUD) and Florida's Turnpike Enterprise's (FDOT) 406143-8-56-01. For this project, WGI performed design and permitting services for relocating PBCWUD existing 42-inch and 30-inch water mains to avoid conflicts with Turnpike widening improvements. During the design and permitting phases WGI closely coordinated with FDOT and FDOT's project design Engineer of Record (EOR) for the 406143-8-52-01 mainline widening project. WGI is currently providing post-design and EOR services, as a sub-consultant, under Mock, Roos and Associates, Inc.'s (Mock•Roos) continuing services contract with PBCWUD.

Prior to the 406143-8-52-01 mainline widening project letting date, PBCWUD obtained an executed Utility Work Schedule (UWS) from FDOT requiring completion within 364 working days after the FDOT's contractor received Notice to Proceed (May 21, 2025). Therefore, the UWHCA construction project must be completed prior to October 2026, otherwise PBCWUD may be subject to delay claims submitted by FDOT's contractor, OHLA, Inc. (OHLA). The delay claim amount would be dependent on activity and equipment, and therefore no amount is specified.

The UWHCA design proposed a 372-linear-foot, 48-inch steel casing installed by jack and bore at a proposed elevation of -3.10' (approximately 14 feet deep) to avoid conflicts with Turnpike widening improvements. The relocated 30-inch DIP water main would be pulled through the casing and connected to the existing water main on the east and west sides of the Turnpike.

PBCWUD awarded Johnson-Davis, Inc. (Johnson-Davis) a construction contract in the amount of \$2,770,166.12. Johnson-Davis subcontracted the jack and bore construction to Wakefield Road Boring, Inc. (Wakefield), a well-experienced jack and bore contractor in South Florida. During the preconstruction meeting, PBCWUD made specific reference to the uniqueness of the area and emphasized proper dewatering of the project. To expedite construction, Johnson-Davis proposed to shift the jack and bore alignment north approximately 40-feet which allowed for a longer jacking pit, thus reducing the amount of welding time for the steel casing while pushing under the Turnpike's roadway. To assist with Johnson-Davis' dewatering efforts, PBCWUD staff agreed to physically operate the Water Treatment Plant No. 8's existing raw water wells, adjacent to the Turnpike.

During clearing and preparation of the west jacking pit, Johnson-Davis encountered significant groundwater upwelling. Johnson-Davis proceeded with the work, while identifying the condition as a potential differing/unforeseen subsurface condition, and stated its intent to submit a proposed change order for additional time and grout-injection work associated with mitigating existing condition.

On December 15, 2025, during installation of the first 125-foot casing section for the jack and bore operation, representatives from PBCWUD, Johnson-Davis, Wakefield, Mock•Roos, and WGI observed substantial ground settlement along the jack and bore alignment. In response, Wakefield immediately directed that work be stopped. The turnpike and emergency contacts were notified of the issue. Johnson-Davis started to implement mitigation measures, including dewatering, excavation, and plugging the east end of the jacked casing, to limit further settlement propagation and prevent potential impacts to the Turnpike roadway shoulder.

During this period, Johnson-Davis performed and documented morning and evening elevation checks at the Turnpike shoulder and reported no measurable settlement attributable to the work. The jack and bore operation was ultimately terminated approximately 14-feet offset from the Turnpike shoulder, and the partially installed casing is to be grout filled and abandoned in place. FDOT's CEI consultant, BCC Engineering (BCC), was notified immediately.

PBCWUD, Mock•Roos, WGI, and BCC met and discussed the following three (3) options:

1. Use the newly installed jack and bore casing, install the water main and run a parallel segment of the water main within FDOT's Limited Access Right-of-Way (LA R/W). This option would require a Design Alternate approval from FDOT's Central Office, as well as require the redesign of FDOT's proposed roadway drainage infrastructure.
2. Utilize an existing Cost Savings Initiative (CSI) that would eliminate the need to relocate the existing 42-inch and 30-inch water main. This would however require Palm Beach County to transfer R/W from an existing dry detention pond to FDOT. The width of the area needed varies from 60 to 110 feet wide.
3. Construct a new trenchless crossing using either Horizontal Directional Drilling (HDD)-or microtunneling. This option would avoid conflicts with the Turnpike widening improvements and provide PBCWUD with a new crossing. While Johnson-Davis was unable to obtain a responsive HDD proposal within the required timeframe, they were able to obtain pricing from Huxted Tunneling, LLC for a microtunnel installation. The microtunneling proposal cost was valued at an addition of \$2,792,596.07; however, a credit of \$784,550.00 for returning the 48-inch casing material reduces the net increase to \$2,008,046.07.

These options were thoroughly reviewed and are discussed further below:

Option 1

Accordingly, approval Risk at FDOT's Central Office for the proposed design alternate is high. In addition, the existing casing and carrier pipe are approximately 30 years old; relying on this crossing would reduce PBCWUD's ability to rapidly access, repair, or replace the water main in the future. **Overall, this option presents high approval Risk and unfavorable long-term operability.**



Supplement 2 - Micro Tunneling Proposal

January 15, 2026
 Owner
 Palm Beach County Water Utilities Dept.
 8100 Forest Hill Blvd, West Palm Beach, FL 33413

Revised 2/26/26

Engineer
 Mock Roos
 5720 Corporate Way, West Palm Beach, FL

Attn: Joe Tanacredi / John Cairnes

Project: Turnpike Widening Project - 30" MW Relocation
 Re: MICRO TUNNEL UNDER THE TURNPIKE
 Joe / John,

Below is our proposal for the 30" watermain relocation under the turnpike via micro tunneling. This proposal consist of all labor, equipment, and materials required to prepare the launch shaft for microtunneling operations, including excavation, temporary sheeting and shoring and dewatering and mobilizing Huxted trenchless to perform the microtunneling.

DATE: TBD
 TASK: MICRO TUNNEL UNDER THE TURNPIKE

1	Mobilization	1	EA	\$10,000.00	\$10,000.00
2	Demobilization	1	EA	\$10,000.00	\$10,000.00
3	Prepare microtunneling launch shaft. Excavation, temp sheeting and shoring and dewatering, then perform mictotunnel under the turnpike	1	LS	\$2,762,596.07	\$2,762,596.07
5	Pipe casing spacers modification (if needed)	1	LS	\$10,000.00	\$10,000.00
Total Amount for Microtunneling change order:					\$2,792,596.07
CONTRACT ITEM THAT CAN BE DEDUCTED					
6	48" Jack and Bore Steel Casing w/Casing Spacers and End Seals	-221	LF	\$3,550.00	-\$784,550.00
CONTRACT ITEM DEDUCT					-\$784,550.00

Total Amount of Change Order: \$2,008,046.07

Total Amount of Days Added to The Contract: 90

- Note:
- Ground grout injection is not included in this proposal. If ground injection is needed JD will submit a separate proposal
 - No restoration included in this proposal. Items in the original contract will be billed for restoration.
 - Bid Item for Jack and bore casing contract item to be billed 100% to zero out the line item.

Please review and forward to the responsible parties for authorization. As always, should there be any questions or if you require any additional information please do not hesitate to contact our office.

Sincerely,

 Jun Homedia



Johnson-Davis Inc.

Job Name: Supplement 2 - Micro Tunneling Proposal

Date: 2/3/2026

JD Job #: 72282

Description of Work: MICRO TUNNEL UNDER THE TURNPIKE

Name	QTY	UNIT	RATE	Total
MOBILIZATION	1	EA	\$ 10,000.00	\$ 10,000.00
DEMOB	1	EA	\$ 10,000.00	\$ 10,000.00
mob/demob total				\$ 20,000.00

MICRO TUNNEL WORK

Name	QTY	UNIT	RATE	Total
LABOR	1	LS	\$ 190,018.25	\$ 190,018.25
EQUIPMENT	1	LS	\$ 494,489.35	\$ 494,489.35
MATERIALS	1	LS	\$ 308,574.27	\$ 308,574.27
SUB-CONTRACTOR	1	LS	\$ 1,769,514.20	\$ 1,769,514.20
MICRO TUNNEL WORK TOTAL				\$ 2,762,596.07
CASING SPACER MOD	1	LS	\$ 10,000.00	\$ 10,000.00

Total: \$ 2,792,596.07

Comments:

Empty rectangular box for comments.



Johnson-Davis Inc.

Job Name: Supplement 2 - Micro Tunneling Proposal
 JD Job #: 72282

Date: 2/3/2026

Description of Work: MICRO TUNNEL UNDER THE TURNPIKE

Name	Position	Standard Hours	Overtime Hours	Standard Rate	Overtime Rate	Total
MOBILIZATION		1		\$ 10,000.00		\$ 10,000.00
DEMOB		1		\$ 10,000.00		\$ 10,000.00
MOB/DEMOB TOTAL						\$ 20,000.00

LABOR

MICRO TUNNEL PREP WORK

Name	Position	Standard Hours	Overtime Hours	Standard Rate	Overtime Rate	Total
Superintendent		180		\$ 89.26	\$ 103.89	\$ 11,081.50
Foreman	Foreman	450		\$ 48.19	\$ 72.29	\$ 21,887.00
Operator - Excavator	Oper-Exc	450		\$ 27.84	\$ 41.46	\$ 12,436.50
Operator - Loader	Oper-Ldr	450		\$ 23.96	\$ 35.93	\$ 10,792.84
Pipe Layer	PL	450		\$ 28.03	\$ 39.05	\$ 11,715.19
Skilled Laborer	SL	450		\$ 21.37	\$ 32.05	\$ 9,615.23
Skilled Laborer	SL	450		\$ 21.37	\$ 32.05	\$ 9,615.23
Skilled Laborer	SL	450		\$ 21.37	\$ 32.05	\$ 9,615.23
Skilled Laborer	SL	306		\$ 21.37	\$ -	\$ 6,539.22
back up frm	Foreman	306		\$ 48.19	\$ 72.29	\$ 14,746.14
WELDER	W	63		\$ 48.19	\$ 72.29	\$ 3,036.97
Labor Subtotal						\$ 120,879.66
Burden						\$ 0.4179
Markup on Labor						\$ 15.0%
Labor Total						\$ 190,018.25

Equipment

Description	Qty	Hours	Rate	Total
WELDER TRUCK WITH TOOLS	1	63	\$ 42.86	\$ 2,700.18
Support Crew Truck with Hand Tools	1	306	\$ 34.00	\$ 10,404.00
Foreman Truck with Hand Tools	1	450	\$ 46.08	\$ 20,740.80
20-07 John Deere 380G	1	450	\$ 222.86	\$ 100,287.00
30-80 John Deere 644L	1	450	\$ 98.91	\$ 44,609.50
8" Well Point Pump & Disch Hose - (24 Hrs/day)	4	1008	\$ 40.59	\$ 163,658.88
20-39 Inter-Drain 606DHT (Sock Machine)	1	18	\$ 94.02	\$ 1,692.36
Komatsu PC290	1	306	\$ 81.00	\$ 24,786.00
8" HYDRAULIC PUMP	1	144	\$ 90.00	\$ 12,960.00
Superintendent Vehicle	1	180	\$ 45.86	\$ 7,337.80
8" Well Point Pump & Disch Hose - (24 Hrs/day)	3	336	\$ 40.59	\$ 40,914.72
Equipment Subtotal:				\$ 429,990.74
Markup on Equipment				\$ 15.0%
Equipment Total				\$ 494,489.36

Material

Description	Qty	Unit	Rate	Total
Sock Pipe	800	LF	\$ 2.10	\$ 1,680.00
SLIDE RAIL SYSTEM SHORING (PLANT SIDE SHORING)	4	MONTH	\$ 22,851.00	\$ 91,804.00
STEEL SHEETING RENTAL (1st month rate)	1	MONTH	\$ 18,000.00	\$ 18,000.00
STEEL SHEETING RENTAL (ea additional month)	3	MONTH	\$ 5,000.00	\$ 15,000.00
WALER BEAMS	7	EA	\$ 7,816.00	\$ 53,312.00
CONCRETE FOR PAD	10	CY	\$ 3,056.00	\$ 3,056.00
HAMMER RENTAL AND POWER UNIT 10K LBS	2	MONTH	\$ 10,120.00	\$ 20,240.00
STEEL SHEETING LIQUIDATION	24.11	TONS	\$ 1,995.00	\$ 48,099.46
Material Subtotal:				\$ 250,771.46
Tax				\$ 7%
Markup on Material				\$ 15.0%
Material Total				\$ 308,674.27

Subcontractor

Description	Qty	Unit	Rate	Total
CRANE MOB/DEMOB	4	EA	\$ 2,000.00	\$ 8,000.00
CRANE	184	HRS	\$ 297.00	\$ 54,648.00
HAMMER MOB/DEMOB	1	EA	\$ 2,600.00	\$ 2,600.00
SHEETS FREIGHT IN & OUT	8	LDS	\$ 1,495.00	\$ 11,960.00
ENGINEERED SHORING	1	LS	\$ 9,000.00	\$ 9,000.00
CONCRETE PUMPING	1	LS	\$ 1,200.00	\$ 1,200.00
Subcontractor Subtotal:				\$ 87,308.00
Markup on Subcontractors				\$ 15.0%
Subcontractor Total				\$ 100,404.28



Johnson-Davis Inc.

MICRO TUNNEL PREP WORK TOTAL \$ 1,093,486.87

Subcontractor				
Description	Qty	Unit	Rate	Total
MICRO TUNNEL SUB				\$ -
MOB	1	LS	\$ 100,000.00	\$ 100,000.00
51" MICROTUNNEL - 320LF	1	LS	\$ 1,310,000.00	\$ 1,310,000.00
51" STEEL CASING	60	LF	\$ 690.00	\$ 41,400.00
			Subcontractor Subtotal:	\$ 1,451,400.00
			Markup on Subcontractors 15.0%	\$ 217,710.00
MICRO TUNNEL Subcontractor Total				\$ 1,669,110.00

Subcontractor				
Description	Qty	Unit	Rate	Total
CASING SPACER MODIFICATION	1	LS	\$ 10,000.00	\$ 10,000.00
			Subcontractor Subtotal:	\$ 10,000.00
CASING SPACER MOD TOTAL				\$ 10,000.00

TOTAL \$ 2,792,596.07

Comments:

Empty rectangular box for comments.

334	Additional Work not included in Bid Items (See Bid Items 334A - 334H below)	LS	1	\$1,897,850.00	\$1,897,850.00
335	Mobilization (2.5% of Subtotal Bid Price [A])	LS	1	2.50%	\$21,070.44
336	Demobilization (1% of Subtotal Bid Price [A])	LS	1	1.00%	\$8,428.18
(B) SUBTOTAL ADDITIONAL WORK BID PRICE (Bid Items 334-336)					\$1,927,348.62
TOTAL BID PRICE (A + B)					\$2,770,166.12

Additional Work not included in Bid Items (See Bid Items 334 above:

Bid Item No.	Item (Furnish and Install with Appurtenances)	Units	Quantity	Units	Total
334A	Dewatering Due to Depth of Water Main	Lump Sum	1.00	\$190,000.00	\$190,000.00
334B	Bore Pit Excavation Protection	Lump Sum	1	\$95,000.00	\$95,000.00
334C	Bore Pit Exit Pit Sheeting	Lump Sum	1	\$90,000.00	\$90,000.00
334D	Casing Vents-4"	Each	2	\$7,500.00	\$15,000.00
334E	Grouting/Deactivation of Existing 30" / 42" Water Main Pipe	LF	450	\$195.00	\$87,750.00
334F	Concrete Slab for Casing Protection Beneath Future Box Culvert	Each	1	\$7,500.00	\$7,500.00
334G	42" Single Line Stop	Each	1	\$105,000.00	\$105,000.00
334H	48" Jack & Bore Steel Casing with with Casing Spacers and End Seals for 30" Water Main	LF	346	\$3,550.00	\$1,228,300.00
334I	Restrain Exist 30" DIP Pressure Pipe	Each	1	\$10,000.00	\$10,000.00
334J	Restrain Exist 42" DIP Pressure Pipe	Each	1	\$12,500.00	\$12,500.00
334K	Vibration Monitoring	Lump Sum	1	\$4,000.00	\$4,000.00
334L	Ground Penetrating Radar	Lump Sum	1	\$2,500.00	\$2,500.00
334M	Turbidity Barrier	L.F.	100.00	\$20.00	\$2,000.00
334N	Concrete Pile Removal - Extra Cost for Double Angle Piles on the Existing Aerial Crossing	Lump Sum	1	\$16,800.00	\$16,800.00
334O	Clearing and Grubbing	Lump Sum	1	\$31,500.00	\$31,500.00

Total Bid Price In Letters:

Two Million Seven Hundred Seventy Thousand One Hundred Sixty-Six Dollars and Twelve Cents

Revised 03-05-24

ID	Task Mode	Task Name	Start	Finish	% Complete	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	
1	▶	30" WATERMAIN RELOCATION- TURNPIKE WIDENING PROGRAM			0%																		
2	▶	SUPPLEMENT 2			0%																		
4	✓▶	PRECONSTRUCTION TASK	Thu 3/13/25	Thu 9/4/25	100%	[Gantt bar from March 13 to April 4, 2025]																	
5	✓▶	SHOP DRAWING SUBMITTALS BY JD APPROVALS BY MOCK ROOS	Thu 3/13/25	Wed 4/2/25	100%	[Gantt bar from March 13 to April 2, 2025]																	
6	✓▶	MATERIAL PROCUREMENT	Wed 4/2/25	Thu 9/4/25	100%	[Gantt bar from April 2 to April 4, 2025]																	
8	✓▶	NOTICE TO PROCEED	Tue 9/2/25	Tue 9/2/25	100%	[Gantt bar from September 2 to September 2, 2025]																	
9	▶	48" CASING JACK & BORE AND 30" WM INSTALLATION	Mon 10/6/25	Fri 2/6/26	0%	[Gantt bar from October 6 to February 6, 2026]																	
23	▶	CONTRACT SUBSTANTIAL COMPLETION	Tue 1/20/26	Mon 2/16/26	0%	[Gantt bar from January 20 to February 16, 2026]																	
24	▶	PUNCH LIST ITEMS	Tue 1/20/26	Mon 2/16/26	0%	[Gantt bar from January 20 to February 16, 2026]																	
25	▶	CONTRACT 30 DAY TIME EXTENSION PER SUPPLEMENT 1 NEW SUBSTANTIAL COMPLETION DATE	Tue 2/17/26	Wed 3/11/26	0%	[Gantt bar from February 17 to March 11, 2026]																	
26	▶	CONTRACT 30 DAY TIME EXTENSION PER SUPPLEMENT 2 NEW SUBSTANTIAL COMPLETION DATE	Wed 3/11/26	Wed 6/24/26	0%	[Gantt bar from March 11 to June 24, 2026]																	
27	▶	MICRO TUNNELING PREP WORK / DEWATERING / SHEETING AND SHORING	Thu 3/12/26	Fri 4/10/26	0%	[Gantt bar from March 12 to April 10, 2026]																	
28	▶	MICRO TUNNELING OPERATON	Mon 4/13/26	Wed 5/13/26	0%	[Gantt bar from April 13 to May 13, 2026]																	
29	▶	INSTALL 30" WATER MAIN VIA OPEN CUT WEST SIDE OF TURNPIKE	Thu 5/14/26	Fri 5/22/26	0%	[Gantt bar from May 14 to May 22, 2026]																	
30	▶	BACKFILL EXCAVATION	Mon 5/25/26	Wed 5/27/26	0%	[Gantt bar from May 25 to May 27, 2026]																	
31	▶	INSTALL 30" WATER MAIN VIA OPEN CUT EAST SIDE OF TURNPIKE (@ THE PLANT)	Thu 5/28/26	Mon 6/1/26	0%	[Gantt bar from May 28 to June 1, 2026]																	
32	▶	BAC-T SAMPLING	Tue 6/2/26	Fri 6/5/26	0%	[Gantt bar from June 2 to June 5, 2026]																	
33	▶	EXCAVATE AND INSTALL 30" LS FITTING	Tue 6/2/26	Thu 6/4/26	0%	[Gantt bar from June 2 to June 4, 2026]																	
34	▶	AS-BUILT	Tue 6/2/26	Wed 6/3/26	0%	[Gantt bar from June 2 to June 3, 2026]																	
35	▶	DEPLOY 30" LINE STOP @ PLANT SIDE / PBC TO TURN OFF EXISTING 42" VALVE WEST OF TURNPIKE AND TIE-IN BOTH SIDES OF THE WATER MAIN AFTER HD RELEASE (JD CREW OFF FOR THE HOLIDAY FROM 12/22/25-1/2/26)	Thu 6/4/26	Fri 6/5/26	0%	[Gantt bar from June 4 to June 5, 2026]																	
36	▶	REMOVE AND DISPOSE EXISTING AERIAL CROSSING THEN CUT & ABANDON EXISTING 30" WM UNDER THE TURNPIKE	Mon 6/8/26	Fri 6/19/26	0%	[Gantt bar from June 8 to June 19, 2026]																	
37	▶																						
38	▶	FINAL COMPLETION (30 DAYS AFTER SUBSTANTIAL)	Mon 7/13/26	Mon 7/13/26	0%	[Gantt bar from July 13 to July 13, 2026]																	

Project: 30in WM RELOCATION
Date: Thu 4/30/26

Task		Project Summary		Manual Task		Start-only		Deadline	
Split		Inactive Task		Duration-only		Finish-only		Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone			



JOHNSON-DAVIS INC.

“Construct with Confidence”

604 HILLBRATH DRIVE
LANTANA, FL 33462

EMAIL QUESTIONS RECEIVED FROM MOCK ROOS DATED 1/20/26

Q: Alignment / location: The new bore alignment shall be located 10 feet north of the existing HDD casing. **A:** Confirmed

Q:Casing size, length, and material: The work shall include 51-inch Permalok casing installed as follows: 320 LF by mined installation plus an additional 60 LF by open-cut installation, such that the casing is continuous 51-inch Permalok from the WTP right-of-way (east) to the entry pit (west). Please confirm your proposal includes this casing type and total length, including any required appurtenances, vents, and transitions. **A:** HUXTED has included the installation of the 51" Permalok casing pipe via microtunnel. Our proposal included the supply of an additional 60' of permalok pipe to be installed via open cut by JD.

Q:24-hour operations: It is anticipated that the microtunneling "mining" will be continuous (24-hour) mining operations or provide justification for an alternative plan. HXT plans on performing the work at 6/10's.

A: HUXTED will be using a closed face machine which will prevent material from entering and mitigating the risk of settlement. (SEE PICTURE OF THE MICROTUNNEL MACHINE IN THE ATTACHED SAMPLE DOCUMENTS)

Q:Settlement monitoring: Install a surface settlement monitoring grid extending to and beyond the Turnpike shoulders (East and West sides of the Turnpike). The grid shall extend along the alignment over the casing and a minimum of 40 feet on each side, with monitoring points at 10-foot intervals. Readings shall be taken at least every 12 hours (and more frequently if trigger levels are reached). **A:** Settlement monitoring is excluded in our proposal

Q:Shaft engineering: The launch shaft and associated temporary works shall be designed, signed, and sealed by a Florida-licensed Professional Engineer.

A: Launch shaft engineered shoring will be included in this proposal

Material balance: Track and report the volume of material removed and reconcile it against theoretical excavated volumes (daily, at minimum), including notes explaining any abnormal loss/gain. HXT will include in daily report.

Thrust block removal / casing extension: Remove the thrust block as necessary to extend the steel casing beyond the right-of-way limits, as required.

A:HUXTED included this in their work

Guidance and tolerances: Provide a laser guidance system (or better). Maintain a maximum deviation of 1 inch in line and grade. Guidance shall be continuously monitored and logged, and records included with daily reports.

A: HUXTED Included this in their work

As-built documentation: Provide as-built survey data for every casing joint as installed (horizontal/vertical position).

A: HUXTED Included this in their work

Submittals and control plan: Provide a list of proposed equipment and materials. Include a tunneling control plan identifying the target face pressure, allowable operating ranges, and specific response actions for pressure loss/gain or other anomalous conditions.

A: WILL BE PROVIDED

Jun Homedia- Project Manager
Johnson-Davis Inc.



Heavy Construction • CUC043087 • Underground Utilities

Main office: 604 Hillbrath Drive- Lantana, FL 33462 • Phone: 561-588-1170 • Fax: 561-585-5252 Ft. Pierce Office: 863 S. Kings Hwy- Ft. 3494 • Phone: 772-468-9200 • Fax: 772-468-9202



Microtunneling Work Plan

Project Overview

The scope of work includes installing one (1) microtunnel, 320 LF in length in West Palm Beach, Florida. The entry shaft will be constructed prior to Huxted's arrival on site, at one end of the proposed microtunnel, where the pipe will be jacked through the ground along the proposed alignment. Huxted will mobilize and set up at the Jacking Shaft and this location will accommodate for the ancillary microtunneling equipment such as the separation system, MTBM control container, generators, and material storage. Most of the equipment required for the microtunneling operation will be located inside or around this shaft. Such equipment within the shaft will include the hydraulic jacking frame, guide rails, slurry discharge pump, valve bank or pit bypass, concrete thrust block, etc.

The retrieval shaft (sometimes referred to as the receiving shaft or receiving pit) will be constructed prior to Huxted's arrival where the MTBM will be retrieved after the microtunnel has been completed. The only work proposed to occur within the single retrieval shaft on this project is the installation of the Exit Ring and the retrieval of the MTBM itself.

Microtunneling Procedure

Once the construction shafts have been completed, Huxted Trenchless will mobilize the equipment, materials, and labor necessary to complete the microtunneling scope. These materials and equipment will be delivered to the project site via over-the-road trucking. Maintenance of Traffic (MOT) will be in place prior to this by general contractor. General Contractor will provide supplemental flagging for traffic as necessary while loading or unloading trucks. All material and equipment will be unloaded and moved around site using a wheel loader and a rough terrain crane. General Contractor will provide ingress and egress points for each shaft, such as a OSHA approved ladder for regular use. This will act as the main ingress and egress point. Huxted will provide a man basket, or similar, to allow for a secondary shaft access point.

Crews will begin by setting up ancillary equipment such as separation systems, generators, control containers, etc. The general contractor employed as a project surveyor will provide accurate line and grade of the proposed microtunnel on each the front and back wall of the jacking shaft. General contractor will provide a concrete working slab at the bottom of the jacking shaft at the proposed elevation. Huxted will transfer the tunnel alignment and grade to the bottom of the shaft. The alignment will be transferred by pulling a stringline across the surveyor's marks on the shaft walls and dropping plumb bobs from this line. The alignment will be marked on the shaft walls as well as the concrete floor. The grade of the tunnel will be marked on the shaft walls as well.

Once the survey has been transferred, crews will begin installing the entrance seal assembly on the front shaft wall where the MTBM and pipe will enter the ground. A steel ring, with an OD approximately 7" larger than the Casing OD, and 24" long, will be welded to the front shaft wall. The steel ring will also have a bolting flange welded to it that will hold a 1" thick gum rubber "donut" seal to prevent ground and slurry loss into the shaft when launching the microtunnel boring machine (MTBM). As an added layer of protection, adjustable slide plates will be installed on the top of the gum rubber seal and will be adjusted based on the position of the MTBM and pipe as it travels through the seal.

The guide rails and jacking frame will then be installed on the concrete working slab to the proper

alignment. Any adjustment to the proper elevation will be achieved using steel shims. The frame and rails will then be braced to the shaft walls to prevent any lateral movement. After the jacking frame has been installed, crews will begin framing the concrete thrust wall or reaction wall between the back of the jacking frame and the back shaft wall. Once framed, 4000 psi concrete with added fiber reinforcement will be poured and allowed to cure to the necessary strength. Note that this concrete is temporary and will be removed upon completion of the microtunnel operation.

The laser guidance system will be installed on a stand within the jacking frame but attached to a floor mounted stand that will isolate it from any movement of the jacking frame or thrust wall. The laser will be set to the required grade and alignment and checked with the plumb bobs suspended from the stringline across the top of the shaft. The slurry piping, discharge pump, and electrical/communications/hydraulic lines will be installed from the shaft to the proper equipment above grade. The MTBM control cabin will be placed at the top of the shaft such that the operator has a clear view into the shaft.

The MTBM and all slurry, electric, and hydraulic systems will be tested for functionality. Once testing is complete, the MTBM will be lowered into the shaft and onto the guide rails between the entrance seal and the hydraulic jacking frame. The MTBM will be jacked about 2 feet in front of the entrance seal while crews will cut out the sheet piles from within the entrance seal assembly. General Contractor will provide portal stabilization prior to crew cutting sheets. The MTBM will immediately be pushed into the seal and against the existing ground. Crews will then hook up the necessary electrical, communication, hydraulic, lubrication, and slurry lines (tunnel utilities) to the back of the MTBM and launch the MTBM to begin excavation via the microtunneling process. After the lead section of the MTBM has been pushed through the seal, the valves at the head of the MTBM will be closed to seal off the head of the machine, all tunnel utilities will be disconnected, and the hydraulic jacks will be retracted. The MTBM trailing can which houses a booster pump will then be lowered into the shaft and attached to the MTBM and the microtunneling process will resume. The excavated soil will be pumped to the separation system where it will be separated from the slurry through a series of vibrating screens and hydro cyclone unit. If required, a centrifuge will be used to further separate the fine solid materials from the slurry. The General Contractor will dispose of the separated solid soil material. The cleaned slurry will then be pumped back to the MTBM where it will again mix with excavated soil.

The jacking pipe will be inspected and stored near the jacking shaft. The selected section of pipes will have 2-inch ports that will allow bentonite lubricant and grout to be placed as necessary. Each section of the jacking pipe will have the necessary tunnel utility lines pre-installed or staged within. The lead pipe (pipe #1) will be lowered into the jacking shaft and installed within the adapter ring on the back of the MTBM adapter. Tunnel utilities will be reconnected and microtunneling will resume. This process will repeat until the MTBM reaches the retrieval shaft.

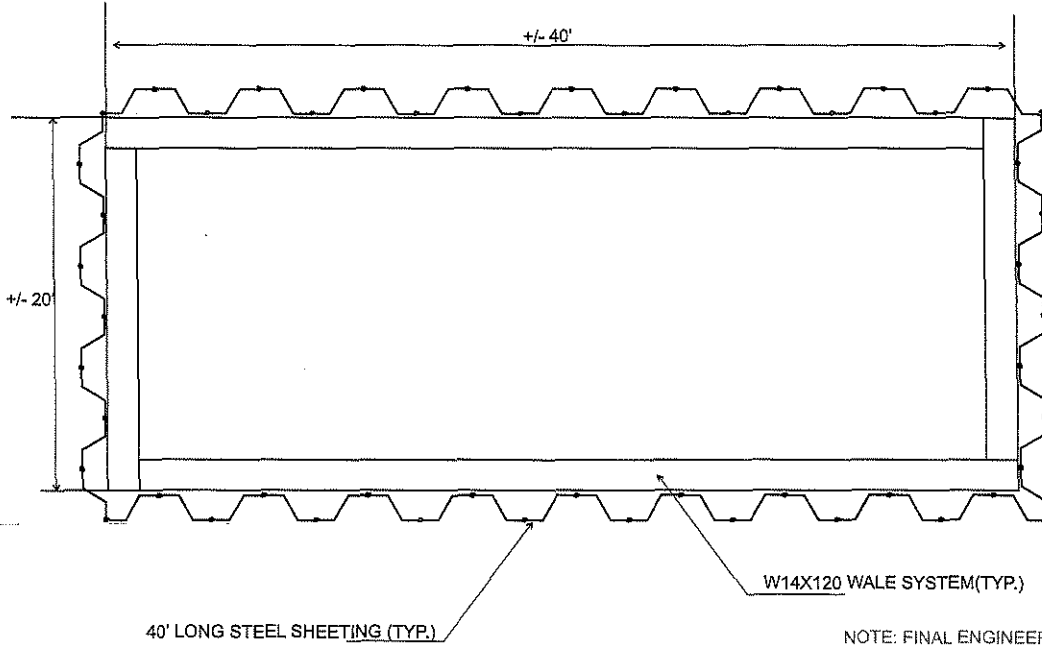
Pipe lubrication will be pumped continuously during the microtunneling process. Lubrication will be mixed and pumped using a Chemgrout mixing pump. The lubricant will be a potable water & bentonite mixture pumped through a 1-inch hose attached to ball valves behind the MTBM and in each section of jacking pipe, as required. The 2-inch ports within the jacking pipe will have one-way butterfly flapper type valves installed as well.

As the MTBM reaches the retrieval shaft, crews will cut out sheet piles from within the exit shaft side, as required and the MTBM will be pushed into the shaft. Care will be taken to ensure soil loss into the shaft is kept to a minimum. Any settlement that does occur will be limited to immediately

in front of the retrieval shaft wall and will be backfilled immediately by the General Contractor. Once the MTBM has been fully pushed into the shaft, it will be disconnected, removed with a crane, and set on a truck. The trailing can will then be removed in the same process. The crews will then retrieve the pipe adaptor mounted on the lead pipe

When the jacking pipe has been pushed to its final position, crews will then strip all tunnel utilities and in-shaft equipment. At the end of all tunnels, crews will then begin the demobilization process by dismantling equipment and placing it on trucks to be shipped off the project. The General Contractor will dispose of the slurry from within the separation tank. All jacking and retrieval shafts will be backfilled/removed, and the site will be restored by the General Contractor post installation of structures and tie-ins.

TURNPIKE WIDENING PROJECT- MICRO TUNNELING ENTRY PIT SHEET PILE COFFERDAM



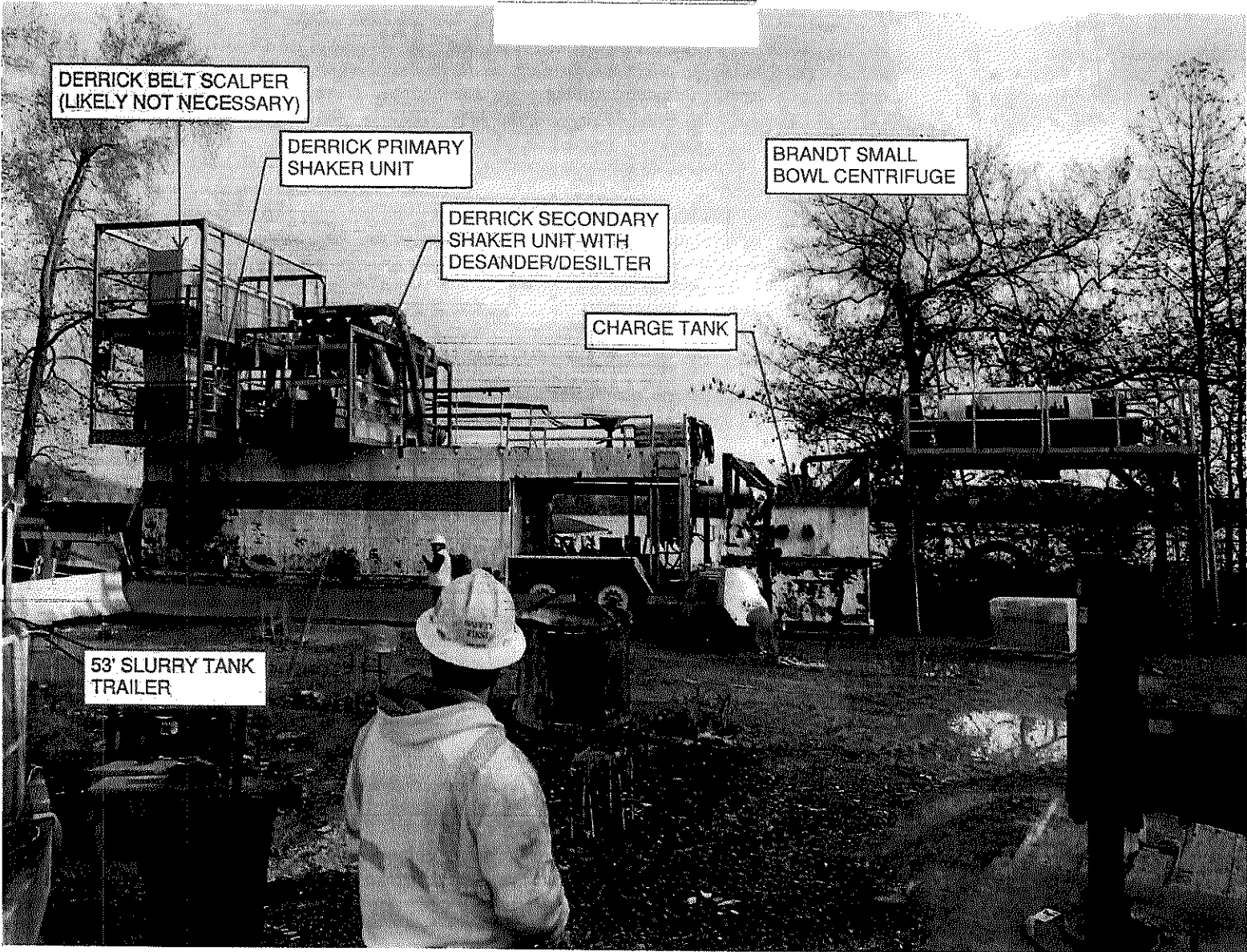
NOTE: FINAL ENGINEERING WILL BE PROVIDED
ONCE PROPOSAL IS APPROVED



JOHNSON-DAVIS, INC
604 HILLBRATH DR.
LANTANA, FL 33452
TEL: 561-588-1170

ENTRY PIT SHEET PILE COFFERDAM
DRAWING NOT TO SCALE

DRAWN BY: JH
DATE: 1/30/26



DERRICK BELT SCALPER
(LIKELY NOT NECESSARY)

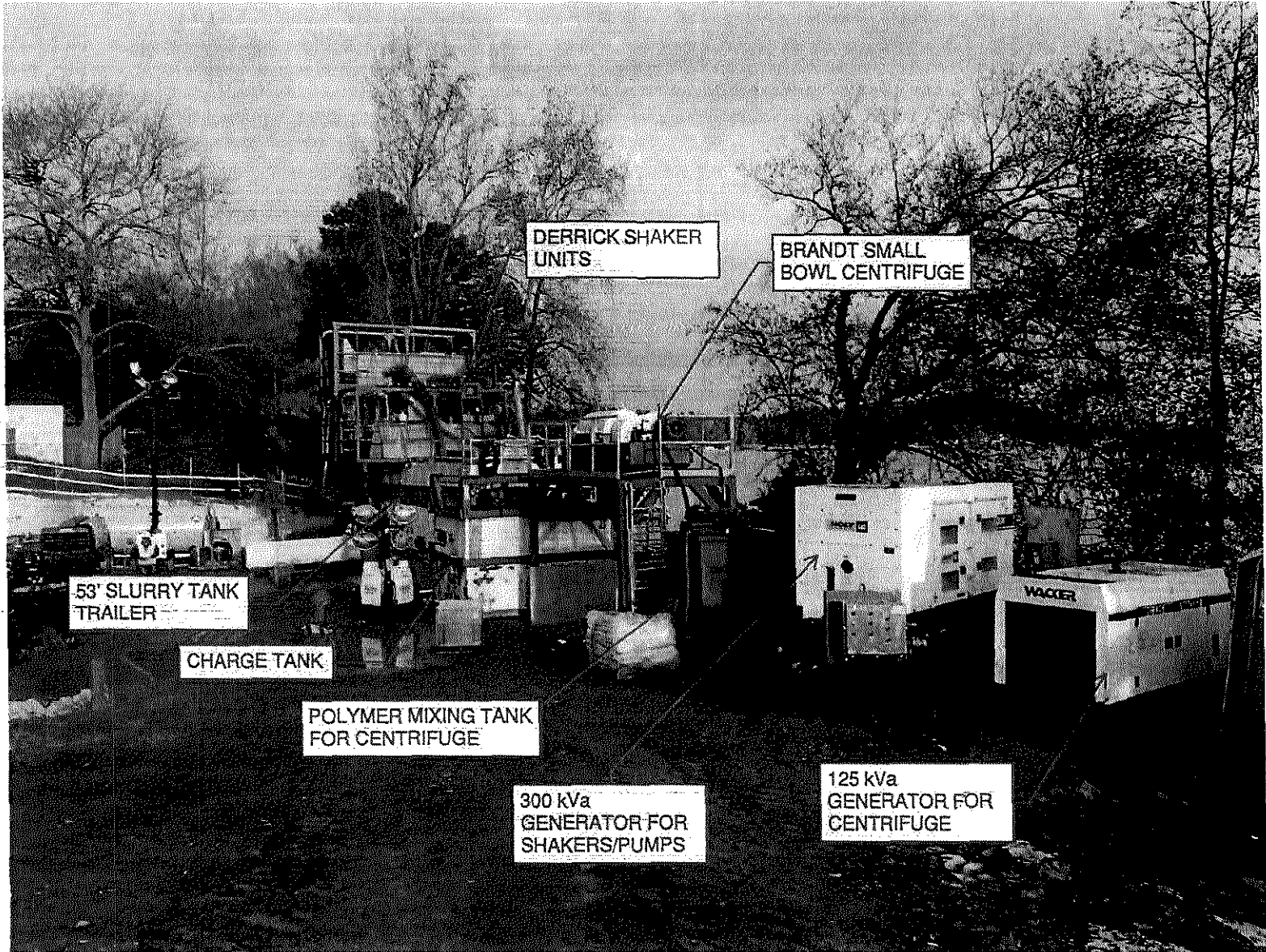
DERRICK PRIMARY
SHAKER UNIT

DERRICK SECONDARY
SHAKER UNIT WITH
DESANDER/DESILTER

CHARGE TANK

BRANDT SMALL
BOWL CENTRIFUGE

53' SLURRY TANK
TRAILER



53' SLURRY TANK
TRAILER

CHARGE TANK

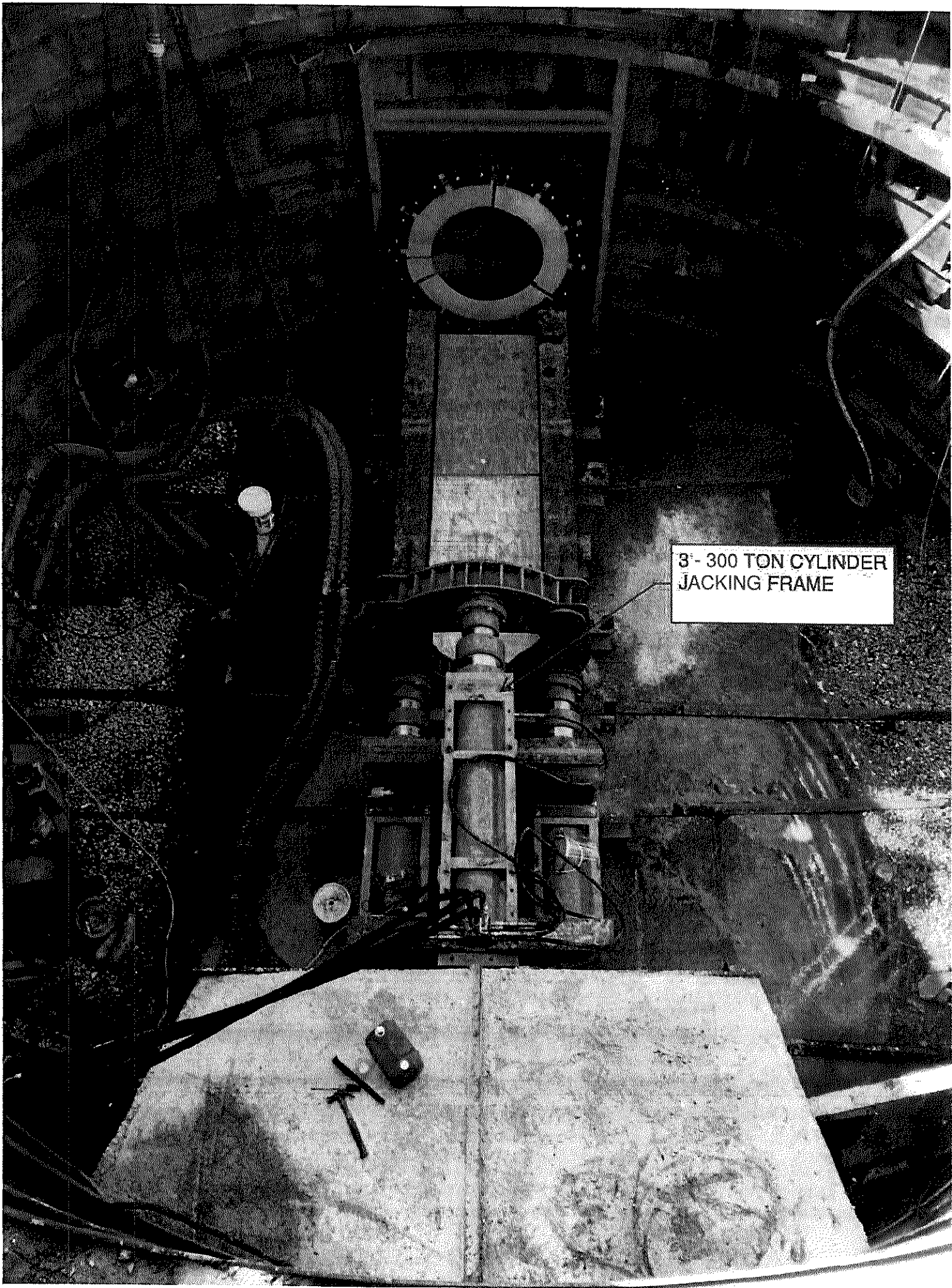
POLYMER MIXING TANK
FOR CENTRIFUGE

300 kVa
GENERATOR FOR
SHAKERS/PUMPS

DERRICK SHAKER
UNITS

BRANDT SMALL
BOWL CENTRIFUGE

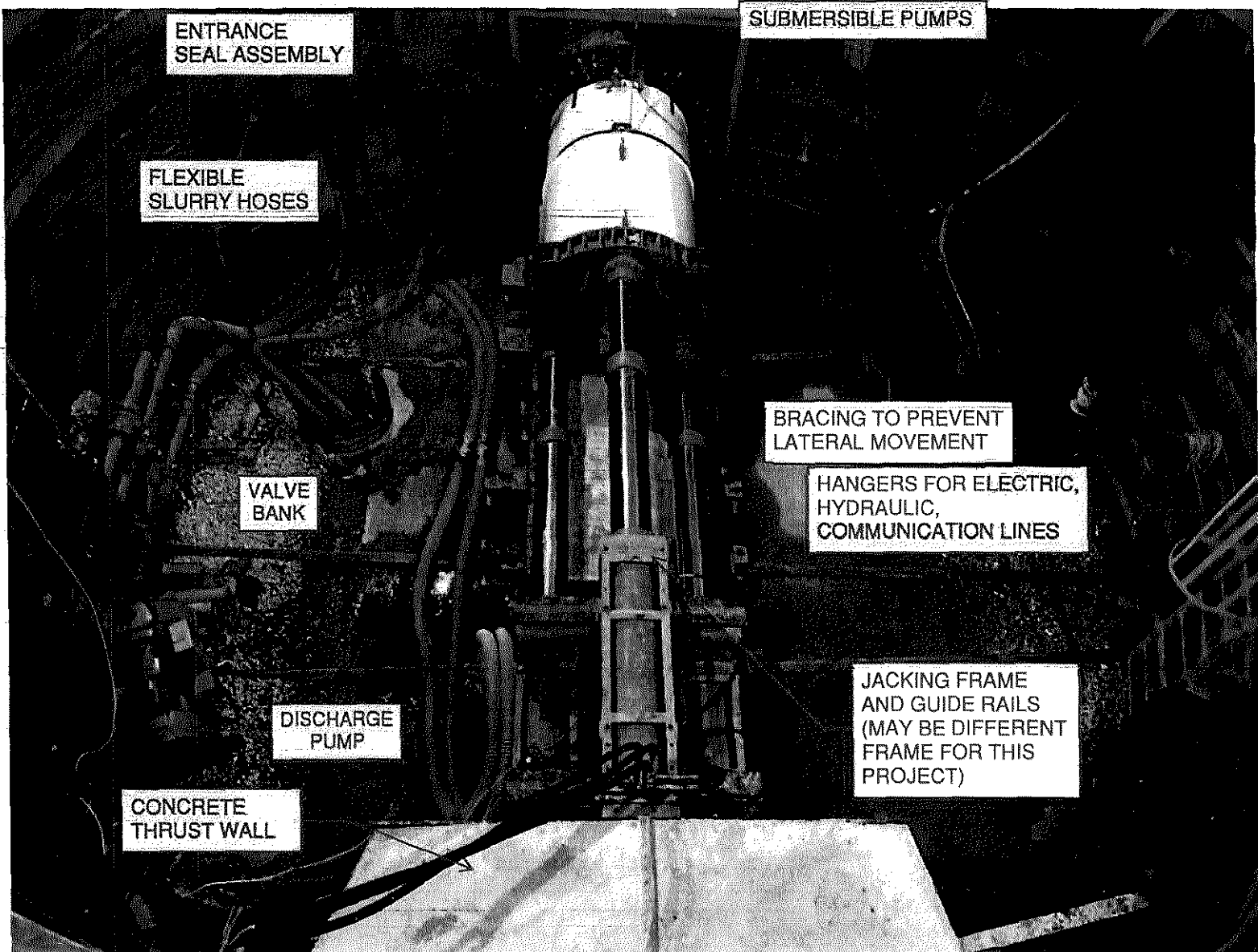
125 kVa
GENERATOR FOR
CENTRIFUGE

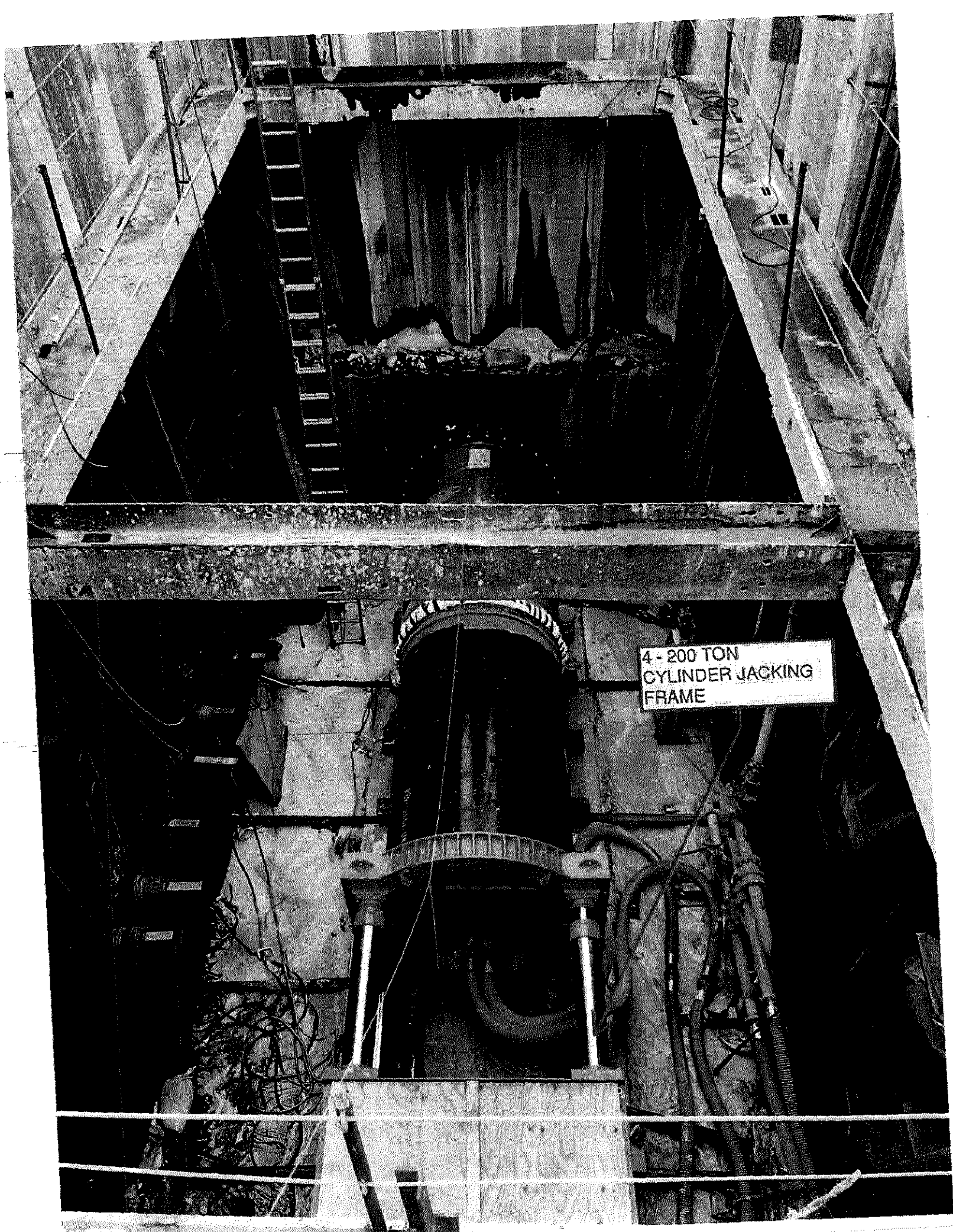


3 - 300 TON CYLINDER
JACKING FRAME

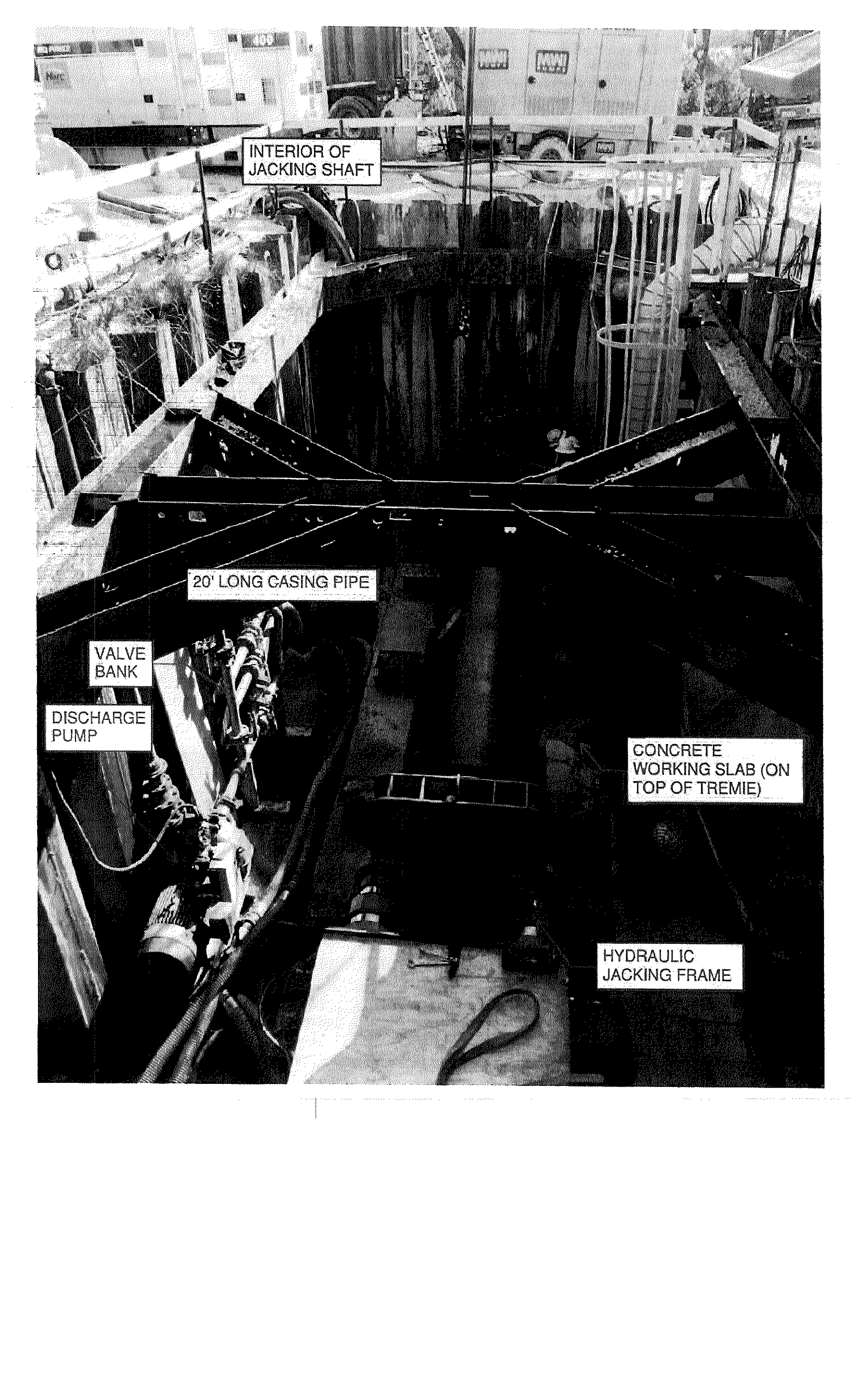
SHAFT EQUIPMENT LAYOUT

SHAFT TO BE 36' IN LENGTH x 16' IN WIDTH





4 - 200 TON
CYLINDER JACKING
FRAME



INTERIOR OF JACKING SHAFT

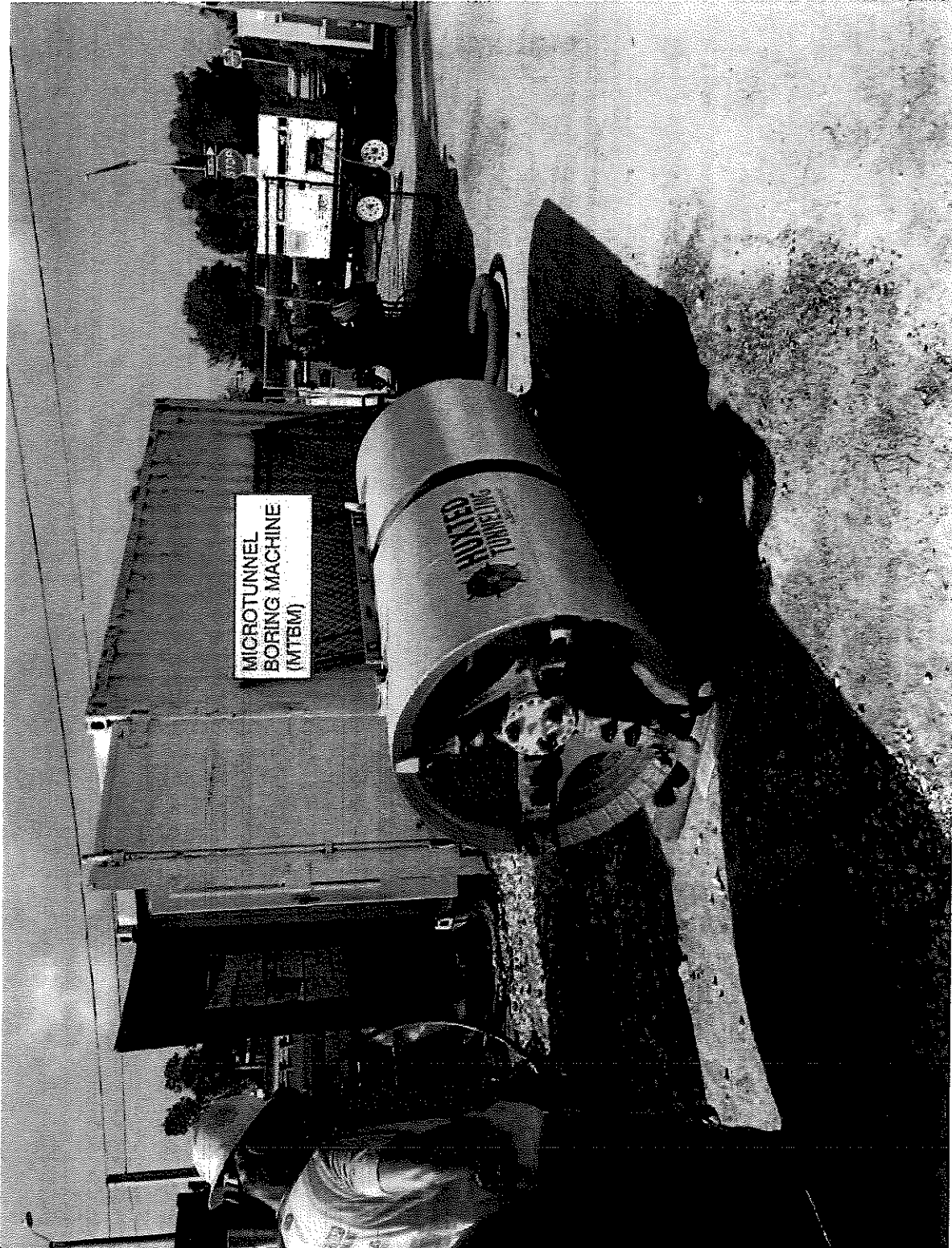
20' LONG CASING PIPE

VALVE BANK

DISCHARGE PUMP

CONCRETE WORKING SLAB (ON TOP OF TREMIE)

HYDRAULIC JACKING FRAME





July 14, 2025

Mr. William Cryer, Vice President
Johnson-Davis Incorporated
604 Hillbrath Drive
Lantana, Florida 33462

Water Utilities Department
Engineering Division

8100 Forest Hill Blvd
West Palm Beach, FL 33413

(561) 493-6000

Fax: (561) 493-6085

www.pbcwater.com

Palm Beach County
Board of County
Commissioners

Maria G. Marino, Mayor

Sara Baxter, Vice Mayor

Gregg K. Weiss

Joel G. Flores

Marci Woodward

Maria Sachs

Bobby Powell Jr.

Interim County Administrator

Todd J. Bonlarron

"An Equal Opportunity Employer"

Official Electronic Letterhead

Re: Project Number: 22-032
2022 Pipeline Continuing Construction Contract
Notification of Contract Clauses No Longer Being
Enforced Pursuant to Emergency Ordinance 2025-014

Dear Mr. Cryer,

On June 3, 2025, the Board of County Commissioners (BCC) approved an emergency ordinance to suspend the race and gender conscious provisions of the County's EBO ordinance. The suspension will remain in effect for two years or until further direction by the BCC, whichever comes first. As a result, the provisions relating to minority/women-owned business enterprise (M/WBEs) participation contained in the contract document (R2023-0675) Instructions to Bidders on section 5.3 will not be enforced as of June 3, 2025, only the small business enterprise (SBE) provisions will apply.

Please sign below to acknowledge receipt of this notification. This acknowledgement will be included in, and made part of, the contract file.

Should you require any additional information please contact Ms. Christina Bervin at cbervin@pbcwater.com or at (561) 493 5203.

Cordially,

Jane House, P.E., LEED AP
Director of Engineering Division

Receipt Acknowledged and In Agreement:

Johnson-Davis Inc.
(Consultant)

William Cryer
(Print Name)

(Signature)

15 June 2025
(Date)



**Palm Beach County
Compliance Summary Report**

Vendor Number	Vendor Name	AM Best Rating	Insurance Carrier	Policy #	Eff. Date	Exp. Date	Coverage	Contract Number	Contract Name
DX00002184	Johnson-Davis Incorporated	Modified	Compliant					22-032	2022 Pipeline Continuing Construction Contract
		A , XV	Continental Casualty Company	7033988744	7/1/2025	7/1/2026	Auto Liability		
		A , XV	Continental Casualty Company	7033984636	7/1/2025	7/1/2026	Excess Liability		
		Ag , XV	National Fire Insurance Company of Hartford	7033967643	7/1/2025	7/1/2026	General Liability		
		Ag , XV	Aspen American Insurance Company	IM011FG25	7/1/2025	7/1/2026	Installation Floater		
		Ag , XV	Valley Forge Insurance Company	7033972535	7/1/2025	7/1/2026	Workers Comp		

Risk Profile : Standard - Construction Services
Required Additional Insured : Palm Beach County Board of County Commissioners
Ownership Entity :