

ADDENDUM NO. 5
HWEA CONTRACT # 133-2019-01
HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPANSION
HOPKINSVILLE WATER ENVIRONMENT AUTHORITY
HOPKINSVILLE, KENTUCKY
WAUFORD PROJECT NO. 1983

Date of Addendum: Friday, January 24, 2020
Bid Opening: Thursday, February 6, 2020, 2:00 p.m. Central Time

1. Attached is a revised Questions and Clarifications document.
2. Attached is the sign in sheet from the Pre-Bid Conference conducted on Tuesday, January 21, 2020.
3. Advertisement for Bids:
Replace Page AB-3 with the attached revised Page AB-3*.
4. C-520 Agreement:
Replace Page A-3 with the attached revised Page A-3*.
5. C-550 Notice to Proceed:
Replace Page NP-1 with the attached revised Page NP-1*.
6. Supplementary Conditions – SRF Projects Commonwealth of Kentucky:
Replace Page SC-2 with the attached revised Page SC-2*.
7. Detailed Specifications, Section 1, General Scope and Special Provisions, Paragraph 3. Time of Completion and Liquidated Damages, Page DS 1-4:
Modify the paragraph as follows:
 - “3. Time of Completion and Liquidated Damages
Time is the essence of this contract and work shall proceed in a timely manner.

Time of completion after issuance of notice to proceed will be as follows:

One Thousand Eighty (1,080) calendar days

If the work is not completed within the time specified, liquidated damages in the amount of \$1,500 per calendar day will be deducted from the compensation otherwise due the Contractor(s) in accordance with the Contract Documents for each calendar day thereafter, Sundays and holidays included, that the work remains uncompleted.

The Contractor's attention is called to **Article 4** of the General Conditions regarding contract completion date time extensions.

If the Contractor works during inclement weather delays, said days shall not be accounted as a weather delay."

8. Detailed Specifications, Section 5, Piping, Fittings, Valves, Manholes and Accessories, Paragraph 8. Flanged Adapters, Page DS 5-15:

Add the following sentence to the end of the paragraph.

"All flange adapters shall be restrained by pin type restraints or mechanical joint retainer glands."

9. Detailed Specifications, Section 10, Miscellaneous Equipment, Paragraph 12. Diaphragm Chemical Metering Pump (One Required), Page DS 10-5:

Modify the last sentence of the paragraph as follows:

"Diaphragm chemical metering pumps shall be Pulsatron LMH4TA-PTC1-G19, **Lutz-JESCO American Corp MEMDOS Smart LP10** or approved equal."

10. Detailed Specifications, Sub-Section 11E, Coarse Bubble Diffused Aeration System, Paragraph 3. Performance Requirements, Page DS 11E-2:

Modify the second sentence as follows:

"Mixing energy shall be sufficient so that after five minutes of aeration at the air flow rates specified hereinafter, the concentration of mixed liquor suspended solids, up to a maximum **30,000** mg/l concentration, shall not vary more than ten percent from the statistical mean value in a basin operating at maximum liquid level."

11. Detailed Specifications, Sub-Section 11I, Positive Displacement Blowers (Post Aeration), Paragraph 2. Vendors, Page DS 11I-1:

Modify the paragraph as follows:

“2. Vendors

The rotary positive displacement blowers and appurtenance shall be provided as a system by one of the manufacturers listed below:

- Aerzen of Coatesville, PA
- Gardner Denver of Quincy, IL
- **Hardy Pro-Air, Antioch, IL**
- Approved Equal as Determined by the Engineer”

12. Detailed Specifications, Sub-Section 11I, Positive Displacement Blowers (Post Aeration), Paragraph 4.a.(1). Scope , Page DS 11I-2*:

Modify the last sentence of the paragraph as follows:

“Package shall be Aerzen Model GM 25S, Gardner Denver Model ES 46/2P, **Tuthill CP Series 5009 (Hardy Pro-Air)**, or pre-approved equal.”

13. Detailed Specifications, Sub-Section 11I, Positive Displacement Blowers (Post Aeration), Paragraph 4.a.(2). Performance Criteria , Page DS 11I-2*:

Modify the paragraph as follows:

“(2) Performance Criteria

Quantity of Blowers	2
Design Inlet Temperature	100°F
Site Elevation	510 feet above sea level
Design Inlet Pressure	14.42 psia
Design Relative Humidity	75%
Design Flow	582 scfm / 625 icfm per Blower
Design Discharge Pressure	6.0 psig
Maximum Blower Speed	3,580 rpm
Motor Hp (Maximum)	30

Package BHP to include pressure loss through a clean inlet filter/ silencer, pressure loss of the exhaust silencer and check valve.

Package Performance shall be guaranteed to ISO 1217 with a tolerance is +/- 5% on volume flow and +/- 5% on package horsepower.

Sound data shall be from an ISO 2151 method of measurement, in an ISO 3745 qualified test facility. Sound data shall be compliant with a Declaration of Conformity assessment standard.

Blower units shall be provided with an acoustical sound enclosure suitable for installation outdoors while under a canopy as shown on the Plans. Acoustical enclosures shall be designed for a free field noise pressure of 75 dB(A) at design point.

14. Detailed Specifications, Sub-Section 11L, Screw Press Equipment and Accessories, Paragraph 3. Performance and Design Requirements, Page DS 11L-2:

Under "System Performance Requirements", delete item no. 3.

15. Detailed Specifications, Sub-Section 11P, Part II – Control and Monitoring System-Equipment, Paragraph 7. Variable Frequency Drives, Page DS 11P-37:

Modify sub-paragraph a. General as follows:

"a. General

The variable frequency drive units for motors larger than 30 HP shall be an ***Active Front End (AFE) Low Harmonic design and shall contain all components required to meet the performance, protection, safety and certification criteria of this specification.*** Drive units 30 HP and smaller may be 6-pulse design ***with passive filters.*** All drive units shall be suitable for continuous duty operation and shall infinitely vary output speed between the limits of full speed and the minimum speed to be manually adjusted by system operators or in response to a 4 to 20 milliamp signal ***or networked control signals*** received from the control system.

The variable frequency drive shall comply with all of the applicable provisions of NEMA, ANSI, NEC, and IEEE, and shall be U.L. or E.T.L. listed. A U.L. or E.T.L. listed label shall be attached to the inside of each drive enclosure for verification of listing. Any variable frequency drive supplied on this project shall be capable of communicating via Allen-Bradley IP protocol.

The variable frequency drive ampere rating shall be equal to or greater than the ampere rating listed on the motor being driven by the variable frequency drive. **Drives shall be Allen-Bradley, ABB or approved equal.**”

16. Detailed Specifications, Sub-Section 11P, Part II – Control and Monitoring System-Equipment, Paragraph 7. Variable Frequency Drives, Page DS 11P-37:

Modify sub-paragraph b. Variable Frequency Drive Enclosures as follows:

- “b. Variable Frequency Drive Enclosures

VFD enclosures for operation in indoor/environmentally controlled areas shall be floor mounted and shall comply with the requirements for NEMA Type 12 enclosures.

VFD for operation in outdoor or corrosive environments shall be housed in control panels to comply with the requirements for NEMA Type 4X stainless steel enclosures.

The drive enclosure shall include fan and filter that will maintain the drive unit within its rated operating temperature and humidity ranges at ambient temperatures ranging from 0°F to 110°F and ambient relative humidity ranging from five to 95 percent. If drives are installed inside a control panel, the panel shall include a **properly sized fan and filter or air conditioning** sized as described hereinbefore.”

17. Detailed Specifications, Sub-Section 11P, Part II – Control and Monitoring System-Equipment, Paragraph 7. Variable Frequency Drives, Page DS 11P-37:

Modify sub-paragraph d. Input Power Conditioning / Harmonic Mitigation as follows:

- “d. Input Power Conditioning / Harmonic Mitigation

Harmonics introduced by the system shall meet the **current requirements of IEEE519** for General Systems. The VFD manufacturer shall furnish a complete system that includes harmonic mitigating equipment such as harmonic filters, phase multiplication devices, or any other device required to limit harmonic distortion to an acceptable level. Acceptable level shall mean limiting total harmonic distortion (THD) to a level that does not result in any noticeable

disturbance to proposed and existing control systems including a maximum voltage THD of 3% and a maximum current THD of 5% as measured at the VFD circuit breaker terminals.”

18. Detailed Specifications, Sub-Section 11P, Part II – Control and Monitoring System-Equipment, Paragraph 12.d. TSS Probes, Page DS 11P-66:

Modify the paragraph as follows:

“d. TSS Probes

The solids analyzers shall measure the concentration of the solids pumped through the process pipeline. Each analyzer shall utilize a flow-through style in-line sensor, remote transmitter display with LCD, and 33-foot interconnecting cable. The analyzer shall use microwave “time of flight” measurement, utilizing microwave propagation time to calculate the concentration of the solids flowing in the pipeline independent of flow velocity.

The flow-through, in-line sensor body shall be 316 stainless steel. The pipeline sensor shall be wafer-style, flangeless body. The sensor shall be provided for wafer-style installation between 4-inch ANSI flanges by others in pipeline. The internals shall be glass lined coated **or stainless steel with sloped lenses**. The sensor housing and remote transmitter display unit shall both meet IP 65 (NEMA type 4). The transmitter shall have no moving parts.

The transmitter shall include both internal process and ambient temperature compensation sensors.

The transmitter shall have internal conductivity compensation; not external conductivity probe required.

The analyzer shall be Valmet TS, Metso TS, Cerlic **CMC** TS, or pre-approved equal.”

19. Plans, Sheet 1, General Notes:

Add the following note:

“17. The Contractor shall remove and dispose of all solids within existing structures as required to complete the scope of work.”

20. Plans, Sheet 2, Construction Notes:

Modify Note 4 as follows:

“EXISTING STRUCTURES TO BE RAZED SHALL BE RAZED TWO FEET BELOW FINISHED **GRADE** OR PROPOSED STRUCTURE SUBGRADE. **THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL SOLIDS IN THE EXISTING STRUCTURES**, PLUG ALL PIPES (SEE PLUG DETAIL). DRILL HOLES IN BOTTOM OF STRUCTURES FOR ADEQUATE DRAINAGE AND FILL WITH SHOT ROCK AND CRUSHED STONE. COVER AREAS TO BE SEEDED WITH TOPSOIL.”

21. Plans, Sheet 25:

Modify as shown on the attached 8 ½” x 11” sheet.

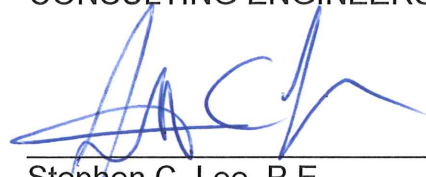
22. Plans, Sheet 74:

Modify as shown on the attached 8 ½” x 11” sheet.

23. Plans, Sheet 75:

Modify as shown on the attached 8 ½” x 11” sheet.

J. R. WAUFORD & COMPANY,
CONSULTING ENGINEERS, INC.



Stephen C. Lee, P.E.
Kentucky License No. 27833

PRE-BID QUESTIONS AND CLARIFICATIONS
HWEA CONTRACT # 133-2019-01
HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPANSION
HOPKINSVILLE WATER ENVIRONMENT AUTHORITY
HOPKINSVILLE, KENTUCKY

Bid Date: Thursday, February 6, 2020
Time: 2:00 PM Central Time

Questions/Answers and Clarifications:

1. **Clarification** – Any prospective bidder wishing to visit the Hammond-Wood Wastewater Treatment Plant site may call the plant at 270-887-4298.
2. **Question** – *Can the requirements for the Contractor’s warranty and major equipment warranties be clarified?*

Answer – Refer to the following:

Standard General Conditions of the Construction Contract, Article 15, Paragraph 15.08, Detailed Specifications, Section 1, Paragraph 4, and, Detailed Specifications, Sub-Sections 11A through 11P – Part I, Last Paragraph of each Sub-Section.

3. **Question** – *What will the effluent reuse system water system pressure be at the WWTP?*

Answer – The effluent reuse water system pressure is expected to vary between 75 psi and 125 psi. Pressure reducers suitable for effluent reuse water shall be provided by the equipment vendor where proposed equipment requires lower water pressures.

4. **Question** – *Where is Addendum No. 1?*

Answer – Addendum No. 1 was incorporated into the documents issued to plan holders and plan rooms. Addendum No. 1 is dated November 25, 2019 as shown in the title block on the applicable plan sheets.

5. **Question** – *With Addendum No. 1 included as part of the original bid documents, are we required to list receipt of Addendum No. 1 on the Bid Form?*

Answer – Yes.

6. **Question** – *Detailed Specifications, Sub-Section 11A, Paragraph 3 requires the screen to be designed to resist hydraulic pressure due to 100% blinding of the screen at full channel depth. Is this required?*

Answer – Yes.

7. **Comment** – *Plan notes on sheet 35 call for “specially lined DIP Vent” for the grit system. Please specify the ductile iron pipe interior lining for the grit system at the headworks. Also, please specify the pipe material from the grit removal unit to the grit transfer pumps.*

Response – Please refer to the Interior and Above Ground Piping Schedule on sheet 84 of the Plans and Section 5, Paragraph 4.d.(5) Special Linings and Coatings.

8. **Comment** – *Please specify “special lining” for piping under structure as noted on Sheet 35.*

Response – Please refer to Section 5, Paragraph 4.d.(5) Special Linings and Coatings.

9. **Comment** – *Please specify “special coating” for the 18” ductile iron piping as noted on sheet 42.*

Response – Please refer to Section 5, Paragraph 4.d.(5) Special Linings and Coatings.

10. **Question** – *Will push-on wall bell wall pipes be allowed in lieu of MJ bell wall pipes?*

Answer – No.

11. **Question** – *Since buried fittings are required to utilize retainer glands, do MJ bell wall pipes require restraint?*

Answer – Yes.

12. **Question** – *Is it your intent to use PVC coated 90 degree bends (electrical conduit) at stub-ups and/or galvanized 90 degree bends with bitumastic paint?*

Answer – Please refer to Section 12. Electrical, Pages DS 12-13 and DS 12-14.

13. **Question** – *What are the influent and effluent flow rates of the wastewater treatment plant?*

Answer – The existing influent pumping station discharges approximately 7 MGD when one pump is operating and 14 MGD when two pumps are operating. The Contractor must plan to accommodate these influent flow rates for bypass pumping purposes.

14. **Question** – *Are AutoCAD files of the site plan available?*

Answer – Yes, please contact the Engineer via email for additional information.

15. **Question** - *Is it possible for contractors to access the easement for the influent gravity sewer prior to the bid date?*

Answer – Yes, access to the property can be arranged by contacting the owner, John Smithson, at 270-348-1526.

16. **Question** – *What are the building permit requirements/fees?*

Answer – Please refer to Section 1, Paragraph 13. Permits, Codes, Agreements, and/or Contracts with Private Utilities and Local Governments. Bidders may contact Cameron Sumner at Community & Development Services, csumner@comdev-services.com, concerning questions relating to building permit requirements/fees.

17. **Question** – *Does the Owner have a dump site for excess materials?*

Answer – No. Please refer to Section 1, Paragraph 33. Disposal of Excess Materials and Debris.

18. **Question** – *If the Contractor chooses to install temporary electrical services to supply existing or proposed wastewater treatment plant facilities, who is responsible for the cost of the electrical power?*

Answer – Please refer to Section 1, Paragraph 9. Utilities Required by the Contractor. Where utilities are used for the Contractor's facilities, all costs shall be the Contractor's responsibility. If temporary electrical services are constructed to power the Owner's facilities, the cost of the temporary electrical service installation shall be the Contractor's responsibility; however, the Owner will be responsible for the cost of the electric power used by the Owner's facilities.

19. **Clarification** – Bids are good for 90 days after the bid date.

20. **Clarification** – Liquidated damages are \$1,500 per calendar day.

21. **Clarification** – The bidder's attention is called to Section 1, Paragraph 16. Work Hours.

22. **Clarification** – The bidder's attention is called to the Easement and Temporary Roadway Requirements located at the end of Section 1.

23. **Clarification** – The bidder's attention is called to the ECS Southeast, LLP Revised Geotechnical Engineering Report located at the end of Section 1 and to Detailed Specifications Section 1, Paragraph 35, Subsurface Conditions/Site Conditions.

24. **Clarification** – The bidder's attention is called to Section 11, Paragraph 5.b. Alternative Equipment or Systems.

25. **Question** – *Are there any DBE requirements on this project?*

Answer – Yes, please refer to the Project Manual including the Supplemental General Conditions for Clean Water State Revolving Fund Drinking Water State Revolving Fund.

26. **Question** – *Does the American Iron and Steel Act Apply?*

Answer – Yes, please refer to the Project Manual including the Supplemental General Conditions for Clean Water State Revolving Fund Drinking Water State Revolving Fund.

27. **Question** – *How should pre-approval requests for alternate electrical equipment be submitted?*

Answer – Pre-approval requests for alternate electrical equipment should be submitted to stephenl@jrwauford.com no later than 10 days before the bid opening date.

28. **Question** – *Who should the Contractor contact for information related to the cost of the new electrical service installation and existing electrical service demolition?*

Answer – Joshua Johnson with Pennyrile Electric, phone – 270-584-5157.

29. **Clarification** – A revised BID FORM will be issued prior to bid opening reflecting pre-approved major equipment vendors / manufacturers.



HOPKINSVILLE WATER ENVIRONMENT AUTHORITY
HWEA CONTRACT # 133-2019-01
Hammond Wood Wastewater Treatment Plant Expansion
Wauford Project No. 1983

Pre-Bid Conference
Tuesday, January 21, 2020
9:00 A.M. Central Time

Name	Organization	Email
Stephen Lee	Wauford	stephenL@jrwauford.com
Mike Beck	HWEA	mbeck@hwea-ky.com
Greg Davenport	Wauford	gregd@jrwauford.com
Matt Crick	State Electric	mcrick@StateElectricKY.com
Bill Jackson	HWEA	bjackson@hwea-ky.com
Wendell Lancaster	HWEA	wlancaster@hwea-ky.com
Jim Taylor	HWEA	jtaylor@hwea-ky.com
Kerry Smith	Smith Contractors	ks@sci82.com
JOE SMITH	SMITH CONTRACTORS	js@sci82.com
JASON BIVINS	JAGS ENVIRONMENTAL	JASON@JAGSENV.COM
GLENN FISCHER	XYLEM	GLENN.FISCHER@XYLEMINC.COM
Chuck McElroy	Groves Electrical Services	cmcelroy@wegroves.com
KENNY GRAHAM	SOUTHERN SALES	KGRAHAM@SOUTHERNSALESTX.COM

Pre-Bid Conference
 Tuesday, January 21, 2020

Name	Organization	Email
Joel Womack	Carboline Co.	juomack@carboline.com
OWEN S. YOCUM	JUDY CONSTRUCTION CO.	OWEN@JUDYCONSTRUCTIONCO.COM
Ryan Thorpe	Story Electric	rthorpe@storyelectserv.com
Kay Wilkey	Bl Anderson	Ra@blanderson.com
Bedford McRae	Trans Electric	frankel@tranelectric.com@bellsouth.net
Mark Arkhipenko	Trans Electric Co	franselectri.com@bellsouth.net
Donovan Bemiss	BR Electrical	donovan@br-electrical.com
Andy Ford	BR Electrical	Andy@br-electrical.com
JOE SCHMITS	BAR ENVIRONMENTAL	JSCHMITS@BAR-ENVIRO.COM
Jason Ainslie	L.E. Bregg Associates	jainslie@legregg.com
GREG DILLS	LANE CONSTRUCTION	gdills@laneconstruct.com
Cody Gooden	Lane Construction	dkgooden@laneconstruct.com
Blake Roberts	CROM	broberts@cromcorp.com CBARTON@CROMCORP.COM
CHRIS BARTON	CROM COATINGS & RESTORATIONS	
Phil Hargrove	Timmons Electric Co	teci.Phil@owens.tuch.com
LUKE RITTER	SCOTT & RITTER, INC	lukeritter@scottandritter.com
JESSIE ALMON	WHITEHEAD ELECTRIC	jessiea@whitehead-electric.com

Pre-Bid Conference
 Tuesday, January 21, 2020

Name	Organization	Email
Ann Schmucker	Carboline Co	aschmucker@carboline.com
Ben Williams	Judy Const Co	bwilliams@judyconstructionco.com
Jason Henshaw	Kylem, Inc	Jason.Henshaw@KylemInc.com
DUSTEN DOWNS	ADAMS ROBINSON CONSTRUCTION	ARCO@ADAMSROBINSON.COM
Ron Timmons	Timmons Electric	teei.Ron@owens.twdc.com
CHARLES VICKERS	B3 ELECTRIC	CHARLES.VICKERS@B3ELECTRIC.COM
Chad Holt	United Rentals	cholt1@ur.com
Jenny Moss	HWEA	jmoss@hwea-ky.com
DAVID BLANE	HWEA	dblane@hwea-ky.com
Brent Fulghum	Southern Sales	bfulghum@southernsalesinc.com
Derrick Watson	HWEA	dwatson@hwea-ky.com
DAVID JONES	ROGERS GROUP, INC	DAVID.JONES@ROGERSGROUPINC.COM
BRANSON POPP	Nixon Power	bpopp@nixonpower.com
Steven Greenwell	HWEA	sgreenwell@hwea-ky.com
ROBERT WHITEHEAD	WHITEHEAD ELECTRIC	robertw@whitehead-electric.com
JAY ELMORE PE	NIXON POWER (KOHLER)	JELMORE@NIXONPOWER.COM
Jeff Morris	HTI Inc	jeff@hti-usa.com
DWIGHT PHILLIPS	PHILLIPS ENGR, INC.	DPHILLIPS@PHILLIPSENGR.COM
David Wicker	Braco Inc	Dwicker@BracoInc.com
Nathan Brandon	DeBra-Kuempel	nbrandon@dkemcor.com

Printed copies of the Bidding Documents may be obtained from the Issuing Office, during the hours indicated above, upon a non-refundable payment of \$1,500.00 for each set. Checks for Bidding Documents shall be payable to "J. R. Wauford & Company". Upon request and receipt of the document payment indicated above, the Issuing Office will transmit the Bidding Documents via delivery service. The date that the Bidding Documents are transmitted by the Issuing Office will be considered the Bidder's date of receipt of the Bidding Documents. Partial sets of Bidding Documents will not be available from the Issuing Office. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office. Bid security shall be furnished in accordance with the Instructions to Bidders.

The Contract is being funded through a Kentucky Infrastructure Authority (KIA) loan.

The Contract Time is **one thousand eighty (1,080)** calendar days.

The procurement is subject to DOW Procurement Guidance, including the Davis-Bacon Act. Overtime pay applies to all hourly workers who work greater than 8 hours per day.

Bidders must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, the Contract Work Hours Standard Act, and 40 CFR 31.36 L (3, 4 & 6).

Bidders must comply and the project will be in compliance with the President's Executive Order No. 11246 (Equal Employment Opportunity) as amended, which prohibits discrimination in employment regarding race, creed, color, sex, or national origin.

The Contractor/Subcontractor will comply with 41 CFR 60-4, in regard to affirmative action, to ensure equal opportunity to females and minorities, and will apply the time tables and goal set forth in 41 FR 60-4, if applicable, to the area of the project.

Bidders will make positive efforts to use small, minority, women-owned and disadvantaged businesses. Minorities and small businesses are encouraged to submit Bids on this project.

This Contract includes adherence to the American Iron and Steel (AIS) Requirement.

The Contract(s) will be awarded to the lowest, responsive, responsible bidder whose bid provides the best value. The term "best value" means a procurement which is based on the primary objective of meeting the specific business requirements and best interests of the Owner.

If proposal(s) is forwarded by mail, the envelope containing the proposal shall be placed in a separate envelope and marked as follows:

Sealed Bid for Contract # 133-2019-01
Hammond Wood Wastewater Treatment Plant Expansion
Not to Be Opened until 2:00 P.M. CST, Thursday, February 6, 2020

The Bid shall be mailed to HWEA at 401 East Ninth Street, Hopkinsville, KY 42240 allowing sufficient time for such mailing to reach the address prior to closing time for receipt of Bids.

HWEA may consider any Bid not prepared and submitted in accordance with the provisions of the Advertisement Contract Documents, and/or the Specifications to be non-responsive. HWEA may waive any informalities or reject any and all Bids.

No bidder may withdraw a bid within ninety (90) days after the actual date of bid opening. HWEA is an equal opportunity employer.

HOPKINSVILLE WATER ENVIRONMENT AUTHORITY

Derrick W. Watson, President & CEO

- **New Solar Drying Units and Biosolids Storage Building**
- **Site piping and other miscellaneous work**

ARTICLE 1 – ENGINEER

- 1.01 The Project has been designed by **J. R. Wauford & Company, Consulting Engineers, Inc.**
- 1.02 The Owner has retained **J. R. Wauford & Company, Consulting Engineers, Inc.** (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 2 – CONTRACT TIMES

2.01 *Time of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

2.02 *Contract Times: Days*

- A. The Work will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **1,080** days after the date when the Contract Times commence to run.

2.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
1. Completion of Work: **If** Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner **\$1,500** for each day that expires after such time until the Work is completed and ready for final payment.

ARTICLE 3 – CONTRACT PRICE

- 3.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
- A. For all Work, at the prices stated in Contractor’s Bid, attached hereto as an exhibit.

NOTICE TO PROCEED (IF REQUIRED BY FUNDING AGENCY)

Owner:	Hopkinsville Water Environment Authority	Owner's Contract No.:	133-2019-01
Contractor:		Contractor's Project No.:	
Engineer:	J. R. Wauford & Company, Consulting Engineers, Inc.	Engineer's Project No.:	1983
Project:	Wastewater Treatment Plant Expansion	Contract Name:	Hammond-Wood Wastewater Treatment Plant Expansion
		Effective Date of Contract:	

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on _____, 2019. *[see Paragraph 4.01 of the General Conditions]*

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the number of days to achieve Completion and readiness for final payment is **1,080** calendar days.

Before starting any Work at the Site, Contractor must comply with the following:
[Note any access limitations, security procedures, or other restrictions]

Owner: Hopkinsville Water Environment Authority

Authorized Signature _____

By:

Title: Derrick W. Watson

Date Issued: President & CEO

Copy: Engineer

6. Contract Time and Liquidated Damages

The time of completion for this Contract is **One Thousand Eighty (1,080)** calendar days. If the contractor fails to complete the work within the specified time, liquidated damages in the amount of One Thousand Five Hundred Dollars (\$1,500.00) per calendar day will apply.

7. Trees, Vegetation, and Soil Erosion

Reasonable care shall be taken to avoid damage to vegetation during construction. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate, to minimize damage. Damaged trees shall be trimmed to improve appearance of tree. Damaged tree trunks shall be treated with dressing. The Contractor shall take reasonable care to prevent siltation and soil erosion during construction.

8. Work Hours and Safety

The Contractor shall comply with OSHA (P.L. 91-596) and the Contract Work Hours and Safety Standards Act (P.L. 91-54).

9. Change Orders

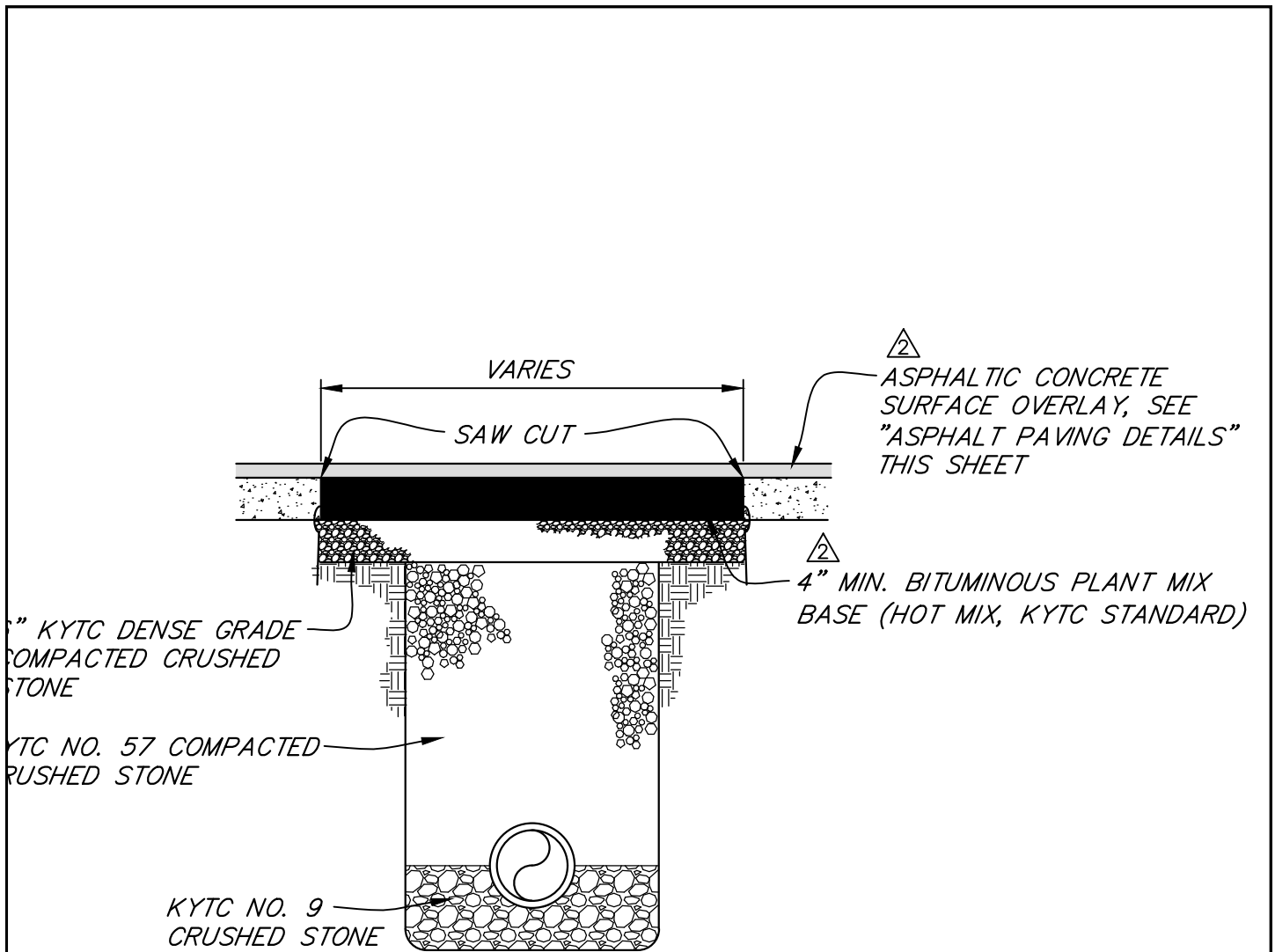
Change orders for the construction contract shall comply with KIA Procurement Guidance for Construction and Equipment Contracts. Change orders exceeding \$100,000 shall include cost, pricing, and certification as required by Procurement Guidance for Construction and Equipment Contracts.

10. Compliance with Title VI of the Civil Rights Act of 1964

Bidders must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, the Contract Work Hours Standard Act, and 40 CFR 31.36 L (3, 4 & 6).

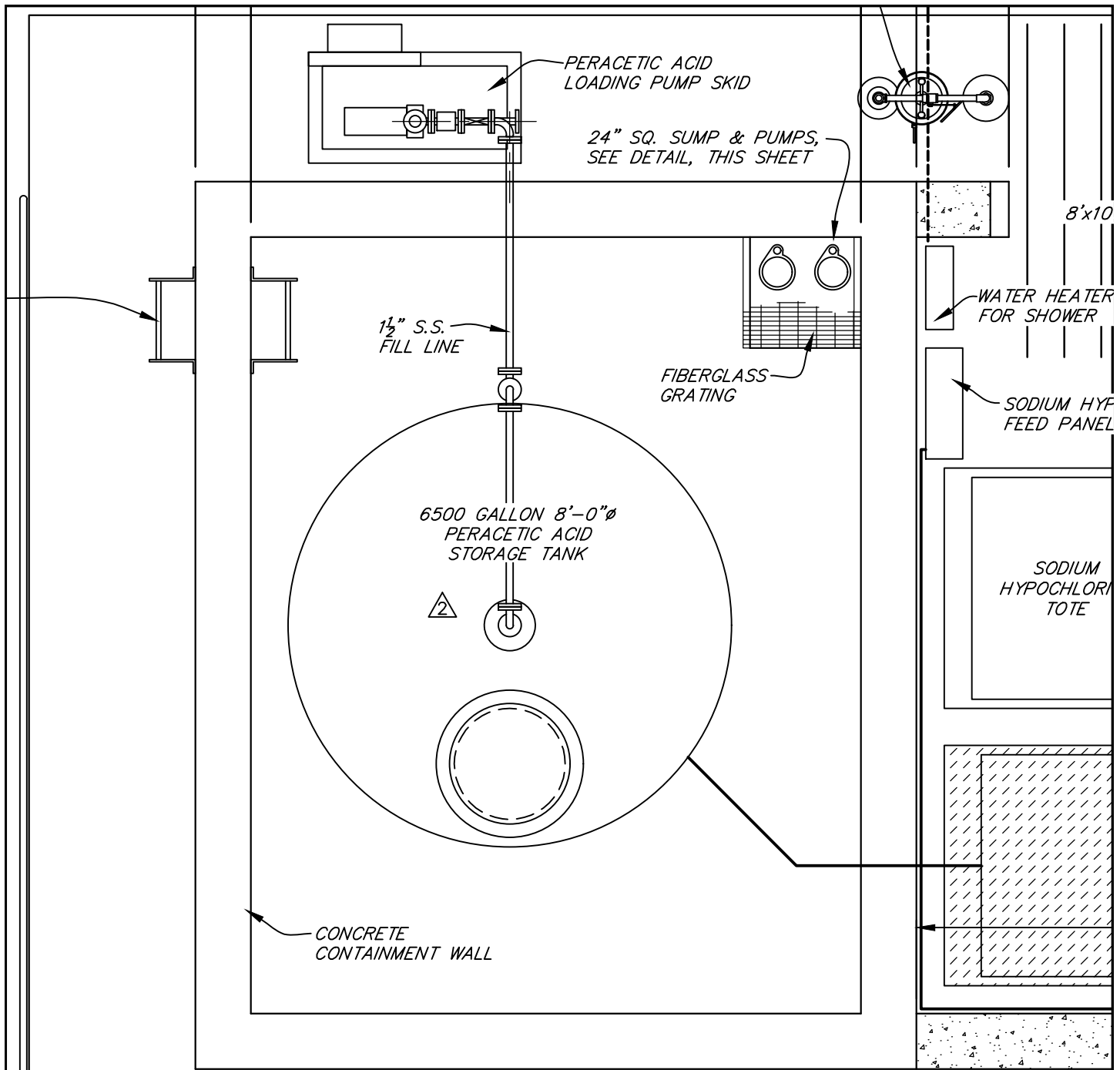
11. Wastewater Bypassing

No wastewater bypassing shall occur during construction unless a schedule has been approved by the Commonwealth and/or EPA/NEPA permit if required.

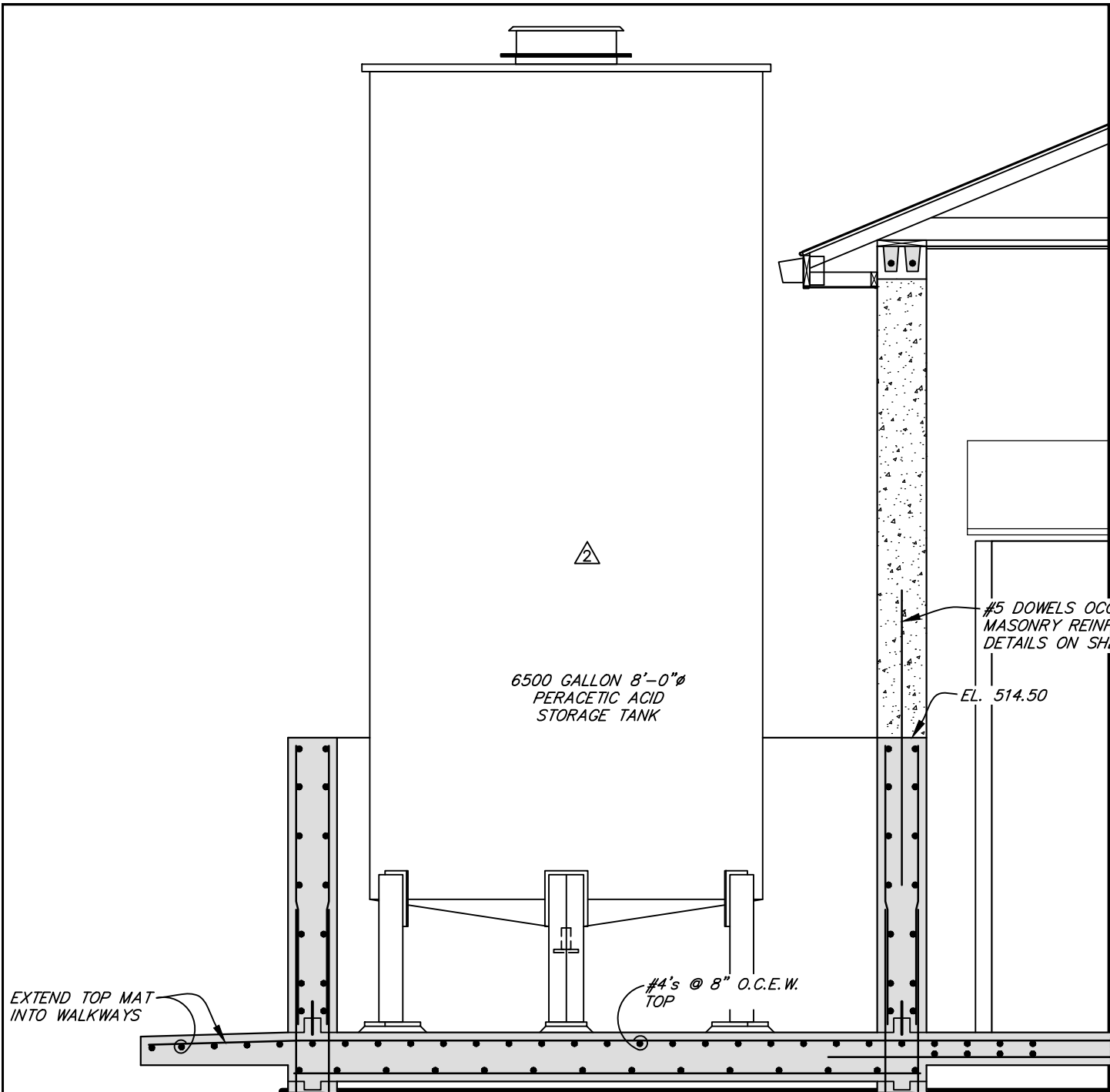


ASPHALT PAVEMENT PATCH DETAIL

SHEET 25 OF 97	SEWER SYSTEM IMPROVEMENTS CONTRACT NO. 133-2019-01 HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPANSION		
REVISIONS ▲ ADDENDUM NO. 1 11/25/19 AWR ▲ ADDENDUM NO. 5 1/24/20 AWR	MISCELLANEOUS SITE DETAILS		
	FOR HOPKINSVILLE WATER ENVIRONMENT AUTHORITY		
	SCALE AS SHOWN	<div style="font-size: 2em; font-weight: bold; margin: 0;">WAUFORD</div> <small>J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com</small>	DESIGNED SCL
PROJECT NUMBER 1983	DATE FEB. 2019		DRAWN AWR
			CHECKED JGD



SHEET 74 OF 97		SEWER SYSTEM IMPROVEMENTS	
REVISIONS		CONTRACT NO. 133-2019-01	
△	ADDENDUM NO. 3 1/10/20 AWR	HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPANSION	
△	ADDENDUM NO. 5 1/24/20 AWR	EFFLUENT DISINFECTION BUILDING	
PROJECT NUMBER		PLAN, SECTIONS AND DETAILS	
1983	DATE	FOR	
	FEB. 2019	HOPKINSVILLE WATER	
		ENVIRONMENT AUTHORITY	
	SCALE	WAUFORD	
	AS SHOWN		
		J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com	
		DESIGNED	SCL
		DRAWN	AWR
		CHECKED	JGD



SHEET 75 OF 97		SEWER SYSTEM IMPROVEMENTS	
		CONTRACT NO. 133-2019-01	
		HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPANSION	
REVISIONS △ ADDENDUM NO. 3 1/10/20 AWR △ ADDENDUM NO. 5 1/24/20 AWR		EFFLUENT DISINFECTION BUILDING SECTION AND EXTERIOR ELEVATIONS	
		FOR HOPKINSVILLE WATER ENVIRONMENT AUTHORITY	
PROJECT NUMBER 1983		SCALE AS SHOWN	WAUFORD J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com
		DATE FEB. 2019	