



Robertson County Tennessee

Jody Stewart, Finance Director

Finance Department

523 South Brown Street, Springfield, TN 37172

(615) 384-0202 Fax (615) 384-0237

POST DATE: **September 24, 2019**

BID 1428: SOLID WASTE LOADING PIT PROJECT

Pre-Bid Meeting: October 2nd, 2019 at 2:00 P.M. CST (see details below)

Sealed bids must be received by: **OCTOBER 8th, 2019 at 10:00 A.M. CST**

at

Robertson County Finance Office

523 South Brown Street

Springfield, TN 37172

THE OUTSIDE OF THE ENVELOPE MUST BE MARKED WITH THE BIDDER'S COMPANY NAME, ITEM BID, TIME OF BID OPENING, DATE OF BID OPENING, BID NO. 1428 AND MUST BE MARKED "SEALED BID, DO NOT OPEN."

Bids shall be opened and read aloud to the public at the Robertson County Finance Office, 523 S. Brown Street, Springfield, TN 37172 immediately following the bid receipt deadline. Each bid must be submitted in a separate sealed envelope with the appropriate notation on the outside. All bids must be signed by an authorized agent and submitted on the prescribed forms. Submission of bids by telegraph, telephone, or other electronic means is strictly prohibited. Any proprietary items offered for bid must be equivalent as to function, basic design, type and quality of material, method of construction, and any required dimensions as required in plans with no restrictions or exclusions.

A non-mandatory pre-bid meeting will be conducted at the project site at 2 p.m. on October 2nd, 2019. Pre-bid meeting will begin at the Robertson County Solid Waste Facility (2916 W County Farm Rd, Springfield, TN 37172) **Advance notification is requested, but not required, for pre-bid coordination with jason.reynolds@csrengineers.com.** For assistance with technical / product information contact CSR Engineering, Inc., 1116 Main St., Pleasant View, TN 37146 (615-247-5381). For assistance with bid procedures contact Taylor Tomblin, Robertson County Finance Office at (615) 384-0202 or by email: ttomblin@robcotn.org.

Note: Robertson County reserves the right to reject any or all bids, to waive any technicalities or informalities, and to accept any bid deemed in the best interest of the County. All bids will be considered in accordance with Title VI and without regard to age, sex, color, race, creed, national origin, religious persuasion, marital status, political belief, or disability that does not prohibit the performance of duty.

INFORMATION FOR BIDDERS

BIDS will be received by The Robertson County Finance Department (herein after called the "OWNER"), at 523 South Brown Street, Springfield, TN 37172 until 10:00 A.M. (Central Standard Time) October 8, 2019, and then at said office will be publicly opened and read aloud.

Each BID must be submitted in a sealed envelope, addressed to the OWNER at Springfield, Tennessee. Each sealed envelope containing a BID must be plainly marked on the outside as BID for SOLID WASTE LOADING PIT PROJECT and the envelope should bear on the outside the name of the BIDDER, his address and his contractor's license number, if applicable. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at Springfield, Tennessee. All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required.

Should there be reasons why the contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the OWNER and the BIDDER.

The BIDDER shall have been engaged, for at least five (5) years, and properly experienced in the business of performing the type work required on the PROJECT and hold the appropriate classification of a Tennessee contractor's license.

Bidder must clearly be a manufacturer's certified installer at time of bidding, hold a current Robertson County Business License (at time of contracting) and must provide proof of automobile insurance, liability insurance and workers' compensation insurance. Robertson County assumes no liability for accidents incurred to bidder's employees while on the job site.

The BIDDER shall furnish to the OWNER all such information and data as the OWNER may request, to assist the OWNER in determining the ability of the BIDDER to perform the WORK.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities of work in the Bid Schedule by examination of the site and a review of the drawings and specifications including any issued ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or

any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance bond and labor and material payment bond within ten (10) calendar days from the date when NOTICE OF AWARD is delivered to the bidder. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and project bond forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may at his option consider the BIDDER in default, in which case the BID bond accompanying the proposal shall become the property of the OWNER.

The OWNER within ten (10) days of receipt of acceptable performance bond, labor and material payment bond, and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by written notice withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within ten (10) days of the execution of the Agreement by the OWNER. Should there be any reasons why the NOTICE TO PROCEED cannot be issued within such period; the time may be extended by mutual agreement between the OWNER and CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the ten (10) day period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated herein.

A conditional or qualified BID will not be accepted.

Award will be made as a whole to one BIDDER.

SCOPE OF WORK

Contractor shall provide all labor, material, tools, equipment, and supervision necessary to remove and legally dispose demolition material and complete the installation, including all necessary components of a new solid waste loading pit, building modifications, grading, utilities, concrete and related details for the Robertson County Solid Waste Facility, located at 2916 West County Farm Road, Springfield, TN 37172. See also the attached September 2019 drawings defining existing conditions and required scope of work.

BASIS OF AWARD

The AWARD of the CONTRACT will go to the lowest responsible BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID.

The ENGINEER is: CSR Engineering, Inc.
 1116 Main St.
 Pleasant View, TN 37146
 (615-247-5381)

BID FORM

Proposal of _____ (hereinafter called "BIDDER"),
organized and existing under the laws of the State of _____, doing
business as _____* to
the County of Robertson (Springfield, TN) (hereinafter called "OWNER").

**Insert a corporation, a partnership, or an individual as applicable.*

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all
WORK for the construction of SOLID WASTE LOADING PIT PROJECT in strict accordance
with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices
stated below.

By submission of the BID, BIDDER certifies, and in the case of a joint BID each party
thereto certifies as to his own organization, that this BID has been arrived at
independently, without consultation, communication, or agreement as to any matter
relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence work under this contract on or before a date to be
specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 120
consecutive calendar days thereafter (to be reviewed during pre-bid meeting). BIDDER
also agrees to complete all work in a manner so as not to adversely affect the daily
operation of the existing Solid Waste Facility operations.

BID FORM CONT'D

BIDDER further agrees to pay as liquidated damages, the sum of \$1000 for each calendar day in which he is in default of the 120 days stipulated above.

BIDDER acknowledges receipt of the following ADDENDUM (A):

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following itemized prices:

ITEM	QUANTITY	UNIT	UNIT PRICE	ITEM TOTAL
MOBILIZATION	1	LS		
EXCAVATION/GRADING (UNCLASSIFIED & ROCK)	1	LS		
DEMOLITION	1	LS		
CONCRETE (includes all reinforcing as shown in plans)	382	CY		
WATERLINE RELOCATION	1	LS		
SUMP PUMP (with all connections)	1	LS		
BOLLARDS	6	EA		

BID FORM CONT'D

BUILDING MODIFICATIONS	1	LS		
GUARDRAIL	260	LF		
TRAFFIC CONTROL/WORK ZONE PROTECTIVE MEASURES	1	LS		

and for the **Project** total of

(\$_____)

_____ Dollars.

(Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

The above itemized prices, and total price for the project shall include all labor, materials, shoring, removal, overhead, profit, insurance, etc. to cover the finished work of the several kinds called for. Any items required in plans and not shown as a separate bid item shall be included in other items bid.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informality in the bidding. The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids. Upon receipt of written notice of the acceptance of this bid, Bidder will execute a formal Agreement and deliver a Surety Bond or Bonds and Insurance Certificates as defined in the attached bid documents.

The undersigned Bidder does hereby declare and stipulate that this bid is made in good faith, without collusion or connection with any other person or persons bidding for the same work, and that it is made in pursuance of and subject to all the terms and conditions of the Bid Documents and Specifications, and the Plans pertaining to the work to be done.

BID FORM CONT'D

The bid security attached in the sum of (5% of bid, including all items):

_____ (\$_____)
shall become the property of the Owner in the event the Agreement, Bond and Insurance are not executed or delivered within the time above set forth as liquidated damages for the delay and additional expense to the Owner caused thereby.

Respectfully submitted:

Prime Contractor Signature

Name: _____

Company: _____

Title: _____

Business Address: _____

Contractor's License No: _____

License Expiration Date: _____

Telephone Number: _____

Email Contact: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____
_____ as PRINCIPAL, and _____
_____ as Surety, are hereby held and firmly
bound unto The County of Robertson (Springfield, TN) as **OWNER** in the penal sum of
_____ for the payment of which, well and
truly to be made, we hereby jointly and severally bind ourselves, successor and assigns.

Signed, this _____ day of _____, 20____.

The Condition of the above obligation is such that whereas the PRINCIPAL has submitted
to Robertson County a certain Bid, attached hereto and hereby made a part hereof to
enter into a contract in writing, for the SOLID WASTE LOADING PIT PROJECT.

NOW, THEREFORE,

- a. If said BID shall be rejected, or in the alternate,
- b. If said BID shall be accepted and the PRINCIPAL shall execute and deliver a contract
in the Form of Contract attached hereto (properly completed in accordance with
said BID) and shall furnish a bond for his faithful performance of said contract, and
for the payment of all persons performing labor or furnishing materials in
connection therewith, and shall in all other respects perform the agreement created
by the acceptance of said **BID**, then this obligation shall be void, otherwise the same

shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the PRINCIPAL and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper offices, the day and year first set forth above.

Principal

Surety

By: _____

IMPORTANT – Surety companies executing bonds must appear on the Treasury Department’s most current list (Circular 570 as amended) and be authorized to transact business in the State of Tennessee where the project is located.

DRUG-FREE WORKPLACE AFFIDAVIT

The undersigned, principal officer of _____, an employer of five (5) or more employees contracting with Robertson County, Tennessee government to provide construction services, hereby states under oath as follows:

1. The undersigned is a principal officer of _____ (hereinafter referred to as the "Company"), and is duly authorized to execute this affidavit on behalf of the Company.
2. The Company submits this Affidavit pursuant to T.C.A. § 50-9-113, which requires each employer with no less than five (5) employees receiving pay who contracts with the state or any local government to provide construction services to submit an affidavit stating that such employer has a drug-free workplace program that complies with Title 50, Chapter 9, of the *Tennessee Code Annotated*.
3. The Company is in compliance with T.C.A. § 50-9-113.

Authorized Signature, Title (Owner/ Corporate Officer)

Date

Printed Name

Company Name

Mailing Address

Telephone No.

Fax No.

Witness Signature

Date

Witness printed name

Robertson County, Tennessee
NON-COLLUSION AFFIDAVIT

The agent of the bidding firm hereby certifies to the best of his/her knowledge and belief that this bid proposal to Robertson County, Tennessee has not been prepared in collusion with any other seller of similar products. The agent also certifies that the prices, terms and conditions of said bid proposal have not been communicated by the undersigned, nor by any employee or agent of the bidding firm, to any other seller of similar products and will not be communicated to any such seller prior to the official opening of said bid. The agent further states that no official or employee of Robertson County Government has promised any personal financial or other beneficial interest, either directly or indirectly in order to influence award of this bid.

Authorized Signature, Title (Owner/ Corporate Officer)

Date

Printed Name

Company Name

Mailing Address

Telephone No.

Fax No.

Contact preferred email address

STATE OF TENNESSEE IRAN DIVESTMENT ACT AGREEMENT

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to Tennessee Code Annotated § 12-12-106.

Tenn. Code Ann. § 12-12-106 requires the chief procurement officer to publish, using credible information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105.

While inclusion on this list would make a person ineligible to contract with the state of Tennessee, if a person ceases its engagement in investment activities in Iran, it may be removed from the list.

If you feel as though you have been erroneously included on this list please contact the Central Procurement Office at CPO.Website@tn.gov.

COMPANY NAME

DATE

REPRESENTATIVE

TITLE

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 20_____, by and between The County of Robertson (Springfield, TN), hereinafter called "OWNER" and _____ doing business as (an individual,) or (a partnership,) or (a corporation) hereinafter called "CONTRACTOR".

WITNESSETH: that for an in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of the SOLID WASTE LOADING PIT PROJECT.
2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the project described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS on or before a date to be specified in the NOTICE TO PROCEED and shall complete the work within bid document requirements for consecutive calendar days and all stated requirements thereafter.
4. The CONTRACTOR agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the sum of \$_____.
5. The term "CONTRACT DOCUMENTS" means and includes the following:
 - A. Advertisement For Bids
 - B. Information For Bidders

- C. Bid
- D. Bid Bond
- E. Agreement
- F. General Conditions
- G. Supplemental General Conditions
- H. Payment Bond
- I. Performance Bond
- J. Notice of Award
- K. Notice to Proceed
- L. Change Orders
- M. DRAWINGS and SPECIFICATIONS prepared or issued by CSR Engineering,
Inc. dated September 2019.
- N. ADDENDA:
 - No. _____, dated _____, 20__
 - No. _____, dated _____, 20__
 - No. _____, dated _____, 20__
 - No. _____, dated _____, 20__

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two (2) (number of copies) each of which shall be deemed an original on the date first above written.

OWNER:

By: _____

Name: _____

(Please Type)

Title: _____

ATTEST:

Name: _____

(Please Type)

Title: _____

CONTRACTOR:

By: _____

Name: _____

(Please Type)

Address: _____

(SEAL)

ATTEST:

Name: _____

(Please Type)

Address: _____

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called
(Corporation, Partnership, or Individual)

PRINCIPAL, and _____
(Name of Surety)

(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto **The County of Robertson
(Springfield, TN) located at 523 Brown Street, Springfield, Tennessee 37172**

hereinafter called OWNER, in the penal sum of _____
_____ Dollars, \$ (_____) in lawful

money of the United States, for the payment of which sum well and truly to be made,
we bind ourselves, successor and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered
into a certain contract with the OWNER, dated the _____ day of _____, 20____
a copy of which is hereto attached and made a part hereof for construction of: SOLID
WASTE LOADING PIT PROJECT.

NOW THEREFORE, if the PRINCIPAL, shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alternation or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alternation or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in two (2) counterparts, each of which shall be deemed an original, this the _____ day of _____, 20__

ATTEST:

Principal

(Principal) Secretary

(SEAL)

By: _____ (s)

(Address)

Witness as to Principal

(Address)

ATTEST:

Surety

(Surety) Secretary

(SEAL)

By: _____
Attorney-in-Fact

Witness as to Surety

(Address)

NOTE: Date of the Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute the bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Tennessee where the project is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called
(Corporation, Partnership, or Individual)

PRINCIPAL, and _____
(Name of Surety)

(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto

The County of Robertson (Springfield, TN)

523 Brown Street, Springfield, Tennessee 37172

hereinafter called OWNER, in the penal sum of _____
_____ Dollars,

\$ (_____) in lawful money of the United States, for the payment of
which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly
and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered
into a certain contract with the OWNER, dated the _____ day of ____
_____, 20____, a copy of which is hereto attached and made a part hereof for the
construction of: SOLID WASTE LOADING PIT PROJECT.

NOW, THEREFORE, if the PRINCIPAL shall well, truly and faithfully perform its duties, all the undertaking, covenants, terms, conditions, and agreements of said contract during the original term thereof, and extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alternation or addition of the terms of the contract or to work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this __ day of _____, 20__.

ATTEST:

Principal

(Principal) Secretary

(SEAL)

By: _____ (s)

(Address)

Witness as to Principal

(Address)

(Address)

ATTEST:

Surety

(Surety) Secretary

(SEAL)

_____	By: _____
Witness to Surety	Attorney-in-Fact
_____	_____
(Address)	(Address)
_____	_____

NOTE: Date of bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Tennessee where the project is located.

NOTICE OF AWARD

To: _____

PROJECT Description:

SOLID WASTE LOADING PIT PROJECT, The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated _____, 20____, and Information for Bidders. You are hereby notified that your BID has been accepted for the work in the amount of \$ _____.

You are required by the Information for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond and Payment Bond within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said bonds within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out

of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your Bid Bond. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20 _____

SOLID WASTE LOADING PIT PROJECT

Owner

By: _____

Title: _____

ACCEPTANCE OF NOTICE OF AWARD

Receipt of the NOTICE OF AWARD is hereby acknowledged by _____

_____, this the _____ day of _____, 20_____

SOLID WASTE LOADING PIT PROJECT

By: _____

Title: _____

Contractor should send one completed copy of this form to:

Ms. Taylor Tomblin
Purchasing Officer
Robertson County
523 South Brown Street
Springfield, TN 37172

NOTICE TO PROCEED

To: _____

Date: _____

Project: SOLID WASTE LOADING PIT PROJECT

You are hereby notified to commence work in accordance with the Agreement dated

_____, 20____, on or before _____,

and you are to complete all WORK within 120 consecutive calendar days thereafter.

The County of Robertson (Springfield, TN)

Owner

By: _____

Title: _____

ACCEPTANCE OF NOTICE TO PROCEED

Receipt of the NOTICE TO PROCEED is hereby acknowledged by _____

_____, this the _____ day of _____ 20____.

SOLID WASTE LOADING PIT PROJECT

By: _____

Title: _____

Contractor should send one completed copy of this form to:

Ms. Taylor Tomblin
Purchasing Officer
Robertson County
523 South Brown Street
Springfield, TN 37172

CHANGE ORDER

Order No. _____

Date: _____

Agreement Date: _____

NAME OF PROJECT: SOLID WASTE LOADING PIT PROJECT

OWNER: The County of Robertson (Springfield, TN)

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE: \$ _____

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER: \$ _____

The CONTRACT PRICE due to this CHANGE ORDER will be (increased) by: \$ _____

The CONTRACT PRICE including this CHANGE ORDER will be: \$ _____

Change to CONTRACT TIME:

The CONTRACT TIME will be (increased) (decreased) by _____ calendar days.

The date for completion of all work will be _____ (Date). Sketch should accompany Change Order when necessary for clarification.

Approvals Required:

To be effective this Order must be approved by the owner if it changes the scope or objective of the project, or if it will increase the budgeted amounts of funds needed to complete the project, or as may otherwise be required by the SUPPLEMENTAL GENERAL CONDITIONS.

Requested by: County of Robertson (Springfield, TN)

Recommended by: CSR Engineering, Inc.

Ordered by: County of Robertson (Springfield, TN)

Accepted by: (Contractor)

Federal Agency Approval (where applicable): _____

GENERAL CONDITIONS

1. Definitions
2. Additional Instructions and Detail Drawings
3. Schedules, Reports and Records
4. Drawings and Specifications
5. Shop Drawings
6. Materials, Services and Facilities
7. Inspection and Testing
8. Substitutions
9. Patents
10. Surveys, Permits, Regulations
11. Protection of Work, Property, Persons
12. Supervision by Contractor
13. Changes in Quantities, Plans or Character of the Work
14. Extra Work
15. Time for Completion and Liquidated Damages
16. Correction of Work
17. Suspension of Work, Termination and Delay
18. Payments to Contractor
19. Acceptance of Final Payment as Release
20. Contract Security
21. Assignments

22. Separate Contracts

23. Subcontracting

24. Engineer's Authority

25. Land and Rights-of-Way

26. Guarantee

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- 1.2 **ADDENDA** – Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS, and SPECIFICATIONS, by additions, deletions, clarifications or corrections.
- 1.3 **BID** – The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4 **BIDDER** – Any person, firm or corporation submitting a BID for the WORK.
- 1.5 **BONDS** – Bid, Performance, and Payment Bonds and other instruments of security, furnished by the CONTRACTOR and his SURETY in accordance with the CONTRACT DOCUMENTS.
- 1.6 **GENERAL CONTRACT PROVISIONS** – Modifications to the General Conditions required by OWNER and/or a Federal Agency for participation in the Project.
- 1.7 **SPECIAL CONTRACT PROVISIONS** – Additional Modifications to the General Conditions and/or the OWNER General Contract Provisions required by OWNER and/or Federal Agency for participation in the Project.
- 1.8 **CHANGE ORDER** – A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.9 **CONTRACT DOCUMENTS** – The contract, including Advertisement For Bids, Information For Bidders, BID, Bid Bond, Agreement, Payment Bond, Performance Bond, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, GENERAL PROVISIONS, SUPPLEMENTAL GENERAL CONDITIONS AND OWNER'S GENERAL AND SPECIAL CONTRACT PROVISIONS and ADDENDA.
- 1.10 **CONTRACT ITEM (PAY ITEM)** – A specifically described unit of work for which a price is provided in the CONTRACT DOCUMENTS.
- 1.11 **CONTRACT TIME** – The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

- 1.13 **CONTRACTOR** – The person, firm or corporation with whom the OWNER has executed the Agreement.
- 1.14 **DRAWINGS** – The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.15 **ENGINEER** – The person, firm or corporation named as such in the CONTRACT DOCUMENTS.
- 1.16 **FIELD ORDER** – A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.17 **NOTICE OF AWARD** – The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.18 **NOTICE TO PROCEED** – Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.
- 1.19 **OWNER** – A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.
- 1.20 **PROJECT** – The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.21 **RESIDENT PROJECT REPRESENTATIVE** – Authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.22 **SHOP DRAWINGS** – All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.23 **SUBCONTRACTOR** – An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.25 **SUBSTANTIAL COMPLETION** – That date as certified by the ENGINEER when the construction of the PROJECT is sufficiently completed, in accordance with the CONTRACT

DOCUMENTS, so that the PROJECT can be utilized for the purposes for which it is intended.

- 1.26 **SUPERINTENDENT** – The CONTRACTOR’S authorized representative in responsible charge of the work.
- 1.27 **SUPPLIERS** – Any person, supplier or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.
- 1.28 **WORK** – All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated in the PROJECT.
- 1.29 **WRITTEN NOTICE** – Any notice to any part of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the WORK.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- 2.1 The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the **CONTRACT DOCUMENTS**.
- 2.2 The additional drawings and instruction thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. SCHEDULES, REPORTS AND RECORDS

- 3.1 The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the OWNER may request concerning WORK performed or to be performed.
- 3.2 Within 10 days after receipt of the NOTICE OF AWARD, the CONTRACTOR shall submit schedules showing the order in which he proposes to carry on the WORK, including dates at which he will start the various parts of the WORK, estimated date of completion of each part, and, as applicable:

- 3.2.1 The dates at which special detail drawings will be required, and
- 3.2.2 The respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.
- 3.3 The **CONTRACTOR** shall also submit a schedule of payments that he anticipates he will earn during the course of the **WORK** when requested by the **OWNER**.
- 3.4 If the **CONTRACTOR'S** operations are materially affected by changes in the plan or in the amount of the work or if he has failed to comply with submitted progress schedule, the **CONTRACTOR** shall submit a revised project schedule, if requested by the **ENGINEER**, which schedule will show how he proposes to prosecute the balance of the work. The **CONTRACTOR** shall incorporate into every progress schedule submitted, any contract requirements regarding the order of performance of portions of the work. The **CONTRACTOR** shall use all practical means to make the progress of the work conform to that shown on the progress schedule which is in effect. No payment will be made to the **CONTRACTOR** while he is delinquent in the submission of a progress schedule. Should the prosecution of the work, for any reason, be discontinued, the **CONTRACTOR** shall notify the **ENGINEER** at least 24 hours in advance of resuming operations.

4. DRAWINGS AND SPECIFICATIONS

- 4.1 The intent of the **DRAWINGS** and **SPECIFICATIONS** is that the **CONTRACTOR** shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the **WORK** in accordance with the **CONTRACT DOCUMENTS** and all incidental work necessary to complete the **PROJECT** in an acceptable manner, ready for use, occupancy or operation by the **OWNER**.
- 4.2 In case of conflict between the **DRAWINGS** and **SPECIFICATIONS**, the **SPECIFICATIONS** shall govern. Figure dimensions on **DRAWINGS** shall govern over scale dimensions, and detailed **DRAWINGS** shall govern over general **DRAWINGS**.
- 4.3 Any discrepancies found between the **DRAWINGS** and **SPECIFICATIONS** and site conditions or any inconsistencies or ambiguities in the **DRAWINGS** or **SPECIFICATIONS** shall be immediately reported to the **ENGINEER**, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. **WORK** done by the **CONTRACTOR** after his

discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SHOP DRAWINGS

- 5.1 The CONTRACTOR shall prepare and submit SHOP DRAWINGS as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS, showing all details of fabrication for all parts of the structure. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S review and acceptance of any SHOP DRAWINGS shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS and shall require a CHANGE ORDER.
- 5.2 When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3 SHOP DRAWINGS prepared by the CONTRACTOR and accepted by the ENGINEER shall be deemed the correct interpretation of the work to be done, but they do not relieve the CONTRACTOR of the responsibility for the accuracy of details and dimensions. Fabrication tolerances shall be shown on the shop drawings. Where necessary to assure proper fit-up members, closer tolerances than those required herein shall be shown.
- 5.4 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES

- 6.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of

any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.

- 6.2 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and continued as directed by the manufacture.
- 6.4 Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5 Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING

- 7.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards.
- 7.2 The CONTRACTOR shall provide at his expense the necessary testing and inspection services required by the CONTRACT DOCUMENTS, unless otherwise provided.
- 7.3 The ENGINEER shall provide all other inspection and testing services not required by the CONTRACT DOCUMENTS. Any damage to existing facilities will be the responsibility of the CONTRACTOR and the CONTRACTOR shall reimburse the OWNER prior to final payment.
- 7.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require and WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

- 7.5 Neither observations by the ENGINEER nor inspections, test or approvals by persons other than the CONTRACTOR shall relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6 The ENGINEER and his representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.
- 7.7 If any WORK is covered contrary to the written request of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and replaced at the CONTRACTOR'S expense.
- 7.8 If any WORK has been covered which the ENGINEER has not specifically requested to observe prior to its being covered, or if the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS

- 8.1 Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient

requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment or equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to the specified, the ENGINEER may approve, with the OWNER'S approval, its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitution will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

- 9.1 The CONTRACTOR shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, but if the CONTRACTOR has reason to believe that the design, process or product specified in an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS

- 10.1 The OWNER shall furnish all land surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for constructing such as

slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations, and cut sheets.

10.2 The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or dues.

10.3 Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY AND PERSONS

11.1 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, laws, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.

11.2 The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the WORK may

affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.

11.3 In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

11.4 Until final acceptance of the project, the CONTRACTOR shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements or from any other cause arising from the execution or from the non-execution of the work. The CONTRACTOR shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the CONTRACTOR, including but not limited to acts of God, or the public enemy or governmental authorities.

12. SUPERVISION BY CONTRACTOR

12.1 The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the

CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN QUANTITIES, PLANS OR CHARACTER OF THE WORK

13.1 The ENGINEER reserves the right to make, by CHANGE ORDER, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alternations shall not invalidate the contract nor release the surety, and by signing a CHANGE ORDER, the CONTRACTOR agrees to perform the work as altered and agrees to accept, as payment in full for such work, the monetary amounts set forth in such CHANGE ORDER, as balanced by the ENGINEER. In addition, by signing the CHANGE ORDER, the CONTRACTOR releases the OWNER from any and all claims for compensation with regard to the items of work specified in the CHANGE ORDER, including but not limited to, any and all claims for delay and overhead, unless the ENGINEER is notified in writing at the time of signing the CHANGE ORDER that the CONTRACTOR refuses to release the OWNER from such claims. All increases in quantities which appear in the CONTRACT as PAY ITEMS shall be paid for at the contract unit prices. Decreases in quantities shall be deducted from the contract at the contract unit price.

13.1a If the alterations or changes in quantities significantly change the character of the work under the Contract, whether or not changed by any such different quantities or alterations, an adjustment will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for on the basis of the actual quantity completed at the unit price for such named in the Contract.

The term "significant change" shall be construed to apply only to the following circumstances:

1. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or
 2. When an item or work, whose total cost is determined by multiplying the contract quantity by the contract unit price and is greater than 5 percent of the original contract price, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed, or
 3. When such changes or alterations are sufficient in magnitude to affect the unit cost by 10 percent or more, considering all of the estimated quantity used for bidding purposes, or considering the altered portion of the item, the change in cost shall equal 25,000 dollars or more whichever is the lesser.
- 13.1b During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed. Upon written notification, the ENGINEER will investigate the conditions, and if the ENGINEER determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the CONTRACT, an adjustment will be made and the CONTRACT modified in writing accordingly. The ENGINEER will notify the CONTRACTOR of the determination whether or not an adjustment of the CONTRACT is warranted.

No contract adjustment which results in a benefit to the CONTRACTOR will be allowed unless the CONTRACTOR has provided the required written notice.

No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

No contract adjustment will be allowed unless such changes or alterations are sufficient in magnitude to affect the unit cost by 10 percent or more, considering all of the estimated quantity used for bidding purposes, or considering the altered portion of the item, the change in cost shall equal 25,000 dollars or more, whichever is lesser.

In no event shall a differing site condition invalidate the contract or release Surety.

14. EXTRA WORK

14.1 In connection with the work covered by the contract, the ENGINEER may, at any time during the progress of the work, order extra work, including materials incidental thereto. The CONTRACTOR shall perform this work whenever it is deemed necessary by the ENGINEER to fully complete the project as contemplated, and such work shall be done in accordance with the intent of the SPECIFICATIONS under the direction of the ENGINEER. Prior to ordering any extra work, the ENGINEER shall furnish written notification stating the location, kind and estimated quantity of the extra work to be done. The CONTRACTOR shall indicate in writing to the Engineer the compensation (unit price or lump sum) for which the extra work will be performed. This proposal shall be submitted to the ENGINEER for approval. If the ENGINEER considers the unit price or lump sum price excessive, the proposal may be disapproved and the work ordered done by force account in accordance with Subsection 14.2.

14.2 When extra work is required, it shall be performed in accordance with the requirements and provisions of Subsection 14.1. Payment for such work will be on the unit price or lump sum basis agreed upon in accordance with Subsection 14.1. When such agreement cannot be reached, the ENGINEER may order such work, including any off-site work, to be done by force account. The compensation as herein provided shall be accepted by the CONTRACTOR as payment in full for extra work done by force account, and the said percentages shall cover profit, superintendence, general expense, overhead, miscellaneous tools and equipment. For approved subcontract work, the CONTRACTOR will be paid an amount equal to 6 percent of the total cost of the subcontract work, as reimbursement for administrative costs incurred in connection with the subcontract work.

When it is necessary for the CONTRACTOR to hire a firm to perform a specialized type of work or service for which the CONTRACTOR or SUBCONTRACTORS are not qualified to do, payment will be made at the invoice cost. The CONTRACTOR will be paid an amount equal to 6 percent of invoice cost, as reimbursement for administrative costs. Prior approval by the ENGINEER is required.

- 14.2a The CONTRACTOR shall furnish to the ENGINEER, itemized reports of the costs of all force account work. The reports shall be furnished each week and shall include a certified copy of the weekly payroll and copies of bills for the materials used and the freight charges paid on same. Discount for prompt payment or penalty for late payment will not be considered in determining the net amount of the bill. The net amount of the bill shall be charged to the force account work. Where materials used are not specifically purchased for use on extra work but are taken from the CONTRACTOR'S stock, the CONTRACTOR shall submit a certification of the quantity, price, and freight on such materials in lieu of original bills and invoices.

The CONTRACTOR shall prepare itemized statements containing the following detailed information:

- Name, class, dates, number of hours worked each day, total hours computed to nearest half hour, rate, and extension for each laborer and foreman engaged.
- Designation, number of hours computed to nearest half hour worked each day, total hours and rental rate for each unit of equipment engaged.
- Quantities of materials and prices.
- Freight on materials.

The CONTRACTOR and the ENGINEER shall compare records of force account work and bring them into agreement at the end of each day.

- 14.2b For all labor and all craft foremen directly engaged in the specific work, the CONTRACTOR shall be paid the actual rate of wages and the number of hours paid said labor and foremen in accordance with approved labor agreements, computed to the nearest half hour, to which the sum of 26 percent will be added. Project Foremen will be classified as

Superintendents and their compensation will not be included in the payment provided herein.

Bond premium; Workmen's Compensation Insurance; Personal Injury Public Liability and Property Damage Public Liability Insurance; Unemployment Compensation; Federal Social Security; and payments required to be made to Employer and Employee Trusteships, the proceeds from which accrue exclusively to the benefit of the employee; will be paid for at actual cost, to which sum 20 percent will be added to the taxable fringe benefits. The CONTRACTOR shall furnish satisfactory evidence of the amounts paid for each of these required costs as related to force account work.

- 14.2c For materials, the CONTRACTOR will receive the actual cost delivered on the work including freight charges, as shown by copies of bills, to which the sum of 20 percent will be added.

If a change in the amount or type of force account work results in a surplus of the material ordered and delivered to the project site, the OWNER will reimburse the CONTRACTOR for the costs incurred returning the surplus material to the supplier.

- 14.2d No payment will be allowed for small hand and power tools which are not listed in the Rental Rate Blue Book for Construction Equipment as published by the Equipment Guide-Book Company. All small hand and power tools listed in the Rental Rate Blue Book at a rate of less than one dollar per hour will be considered as part of overhead and will not be paid for separately.

- 14.2e For any machinery and equipment, including the foreman's transportation unit, which the ENGINEER approves for use on extra work done by force account, the CONTRACTOR will be paid as follows:

The time paid for shall be the period that the equipment is required at the site of the extra work and, in addition, shall include traveling time to the location of the extra work when the equipment is moved under its own power, the actual operating time during periods of loading and unloading will be paid at the regular rental rate and transportation costs will be allowed. When the periods of work are not consecutive and the interval between termination of a period of work and the commencement of the subsequent

period does not exceed 30 days, the rates allowed will be the same as if the periods of work were consecutive.

The rental rate established for each piece of CONTRACTOR owned equipment, including appurtenances and attachments to equipment, used will be determined by use of the Rental Rate Blue Book for Construction Equipment Volume 1, 2, or 3 as applicable; the edition which is current at the time the force account work was started will apply. The established rental rate will be equal to the "Monthly" rate divided by 176; modified by the rate adjustment factor and the applicable map adjustment factor, plus the "Estimated Operating Costs per Hour", to which the sum of 10 percent will be added.

For equipment not listed in the Rental Rate Blue Book, Volume 1, 2, or 3, the rental rate will be determined by using the rate listed for a similar piece of equipment or by proportioning a rate listed so that the capacity, size, horsepower, and age are properly considered.

For equipment for which there are no comparable in the Rental Rate Blue Book, Volume 1, 2, or 3, the monthly rate shall be reasonable, but not more than 5 percent of the current list price, or invoice, of the equipment. The base hourly rate shall then be determined by dividing the monthly rate by 176 to which the sum of 20 percent will be added. The 20 percent includes adjustments and operating costs.

The rental rate for the foreman's transportation unit will be 7 dollars per hour, to which the sum of 20 percent will be added.

When leased or rented equipment is used on force account work, the hourly rate used in computation of payment will be the leased or rented rate, except that if the leased or rented rate exceeds the rental rate established by the Rental Rate Blue Book, the established rate determined from the Blue Book will apply. In either case, the Estimated Operating Cost per Hour will be added to the appropriate hourly rate to which the sum of 10 percent will be added.

In all cases the "Estimated Operating Cost per Hour" includes all fuel, oil, lubricants, tires, parts, and other operating expendables such as truck and labor assigned to the truck for servicing the equipment.

The rental rates allowed herein include the cost of insurance covering usual insurable risks, including fire and theft. The OWNER will not be liable for losses which can be covered by insurance.

In no instance, however, will the OWNER pay, on a total project basis, equipment costs in excess of the equipment's original invoice cost plus any documented improvements to the piece of equipment. The CONTRACTOR shall furnish to the ENGINEER either original bills and invoices or a certification documenting the equipment's original invoice price plus improvements in any instance which equipment costs are being sought under this Subsection for a period in excess of 30 days.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- 15.1 The date of beginning and the time for completion of the work are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 15.2 The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. The CONTRACTOR shall have completed the work on or before the calendar date specified in the CONTRACT DOCUMENTS, or on or before a later date as extended by CHANGE ORDER. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 15.3 If the CONTRACTOR finds it impossible for reasons beyond his control to complete the WORK by the date as specified in the CONTRACT DOCUMENTS or as extended by CHANGE ORDER, he may make a written request to the ENGINEER for an extension of time setting forth therein the reasons he believes will justify the granting of his request. Requests for extensions of time shall be filed in writing by the CONTRACTOR with the ENGINEER. The CONTRACTOR'S plea that insufficient time was specified is not a valid reason for extension of time. If the OWNER and ENGINEER find that the WORK was delayed because of

conditions beyond the control and without the fault of the CONTRACTOR, the OWNER may extend the time for completion in such amount as the conditions justify. An appropriate CHANGE ORDER will be issued for the granting of any time extensions and the extended time for completion shall then be in full force and effect the same as though it were the original time for completion.

- 15.4 Delays caused by weather or season conditions should be anticipated and will be considered as the basis for an extension of time only when the actual number of work days lost exceeds the number of workdays lost each month due to inclement weather as determined by the following schedule:

MONTH	NUMBER OF WORK DAYS LOST DUE TO WEATHER
January	9
February	8
March	8
April	8
May	5
June	5
July	4
August	4
September	5
October	6
November	6
December	8

A work day will be counted as lost if the CONTRACTOR'S efficiency is reduced by more than 50 percent on the critical item under construction at that time. Weekends and Holidays will not be counted as lost work days.

- 15.5 If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted through CHANGE ORDER by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.
- 15.5.1 If the CONTRACTOR fails to complete the work within the CONTRACT TIME or extension of time granted by CHANGE ORDER, the OWNER, if satisfied that the CONTRACTOR is carrying the work forward with reasonable progress, may allow him to continue in control of the work. It shall be necessary for the CONTRACTOR to make written application to the OWNER to warrant such continuance. Payments to the CONTRACTOR for work performed and material furnished will be made.
- 15.5.2 For each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS, the amount for liquidated damages as specified in the BID will be deducted from any money due to the CONTRACTOR; provided, however, that the due amount shall be taken of any adjustment of completion dates granted.
- 15.5.3 Permitting the CONTRACTOR to continue and furnish WORK or any part of it after the date or dates of completion fixed for its completion or after which the date or dates to which completion may have been extended will in no way operate as a waiver on the part of the OWNER of any of its rights under the CONTRACT.
- 15.6 The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.
- 15.6.1 To any preference, priority or allocation order duly issued by the OWNER.
- 15.6.2 To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather as defined in Section 15.4; and

15.6.3 To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK

16.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2 All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUSPENSION OF WORK, TERMINATED AND DELAY

17.1 The OWNER may at any time and without cause, suspend the WORK or any portion thereof for a period of not more than ninety (90) days of such further time as agrees upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

17.2 If the CONTRACTOR is adjudged as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or

equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction the WORK or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his SURETY a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.

- 17.3 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 17.4 Upon delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the contract. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus a prorate share of their profit based on an independent audit of their records. The OWNER shall select and pay the auditor and all parties shall make their records available.
- 17.5 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days

after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by the arbitrators within sixty (60) days of its approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all work executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days notice to the OWNER and the ENGINEER stop the work until he has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of WORK.

- 17.6 If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessary caused by the failure of the OWNER or ENGINEER.

18. PAYMENTS TO CONTRACTOR

- 18.1 At least ten (10) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER'S title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER

will, within ten (10) days after receipt of each partial payment estimate either indicate in writing his approval of payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within thirty (30) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimated. The OWNER shall retain ten percent (10%) of the amount of each payment until final completion and acceptance of all WORK covered by the CONTRACT DOCUMENTS. The OWNER at any time, however, after fifty percent (50%) of the WORK has been completed, if he finds that satisfactory progress is being made, shall reduce retainage to five percent (5%) on the current and remaining estimates. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

18.2 The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site. This shall be verified by paid invoices.

18.3 Payment for materials stored offsite will be allowed in the following manner:

- Receipted bills or paid invoices must be presented with the partial pay estimate.
- Certificates of compliance with the specifications and plan details shall be provided with each pay estimate for the material which is paid for.
- Off-site storage area shall be identified and accessible for inspection.
- The price allowed for the stored materials shall not exceed 80% of the price of the delivered materials.
- Payment for unpaid bills will be limited to 40% of the total cost of the material. Upon proof of payment to the supplier for the materials, an additional 40% shall be paid. When the partial payment is made for the materials, such materials shall become the property of the OWNER but this does not relieve the CONTRACTOR of the

responsibility for any loss or damage to such materials until they are incorporated into the work and the work is accepted.

- 18.4 All WORK covered by partial payment made shall thereupon become the sole property of the OWNER, but this provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK upon which payments have been made or the restoration of any damaged WORK, or as a waiver of the right of the OWNER to require the fulfillment of all terms of the CONTRACT DOCUMENTS.
- 18.5 Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by him under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the WORK.
- 18.6 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, material men, and furnishes or machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, his SURETY, or any third party. In paying an unpaid bill of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment

made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

18.7 Sales tax on all material shall be paid for by the Contractor. The cost of the tax shall be passed on to OWNER in the appropriate bid items. No separate compensation or waiver will be given for sales tax on this project.

19. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

19.1 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance Bond and Payment Bonds.

20. CONTRACT SECURITY

20.1 The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNERS with a Performance Bond and a Labor and Material Payment Bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the State of Tennessee in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared a bankrupt or loses its right to do business in the State of Tennessee in which the WORK is to be performed or is removed

from the list of Surety Companies accepted on Federal Bonds, CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums of such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due not shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

21. ASSIGNMENTS

21.1 Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

22. SEPARATE CONTRACTS

22.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

22.2 The OWNER may perform additional WORK related to the PROJECT by himself, or he may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.

22.3 If the performance of additional WORK by other CONTRACTORS or the OWNERS is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written

notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim therefore as provided in Sections 14 and 15.

23. SUBCONTRACTING

23.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty CONTRACTORS.

23.2 The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of fifty percent (50%) of the CONTRACT PRICE, without prior written approval of the OWNER. Assignment of any portion of the work by subcontract must be approved in advance by the OWNER.

23.3 The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

23.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.

23.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

24. ENGINEER'S AUTHORITY

24.1 The ENGINEER shall act as the OWNER'S representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. He shall interpret the intent of the CONTRACT

DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.

24.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the WORK. Inspection may be made at the factory or fabrication plant of the source of material supply.

24.3 The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

24.4 The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

25. LAND AND RIGHTS-OF-WAYS

25.1 Prior to insurance of NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.

25.2 The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.

25.3 The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

26. GUARANTEE

26.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will

give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR shall fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period. This section does not preclude any stated material or workmanship warranties otherwise stated in the contract and bidding documents.

- 26.2 Nothing in the above intends or implies that this guarantee shall apply to work which has been abused or neglected by the OWNER.

SUPPLEMENTAL GENERAL CONDITIONS

1. CONTRACT CHANGES

Any proposed change in this contract shall be submitted to the County of Robertson (Springfield, TN) for its prior approval.

2. GOVERNMENT INSPECTION

The government shall have access to the site of construction and shall have the right to inspect all project works.

3. NOTICE TO ROBERTSON COUNTY OF LABOR DISPUTES

Whenever the contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the contractor shall immediately give notice thereof, including all relevant information with respect thereto, to THE COUNTY.

4. CONVICT LABOR

In connection with the performance of work under this contract the contractor agrees not to employ any person undergoing sentence of imprisonment at hard labor. This does not include convicts who are on parole or probation.

6. OWNERSHIP OF DOCUMENTS

ROBERTSON COUNTY will retain ownership of all plans, specifications, and related documents.

7. PROTEST PROCEDURES

Protests concerning these instructions, the contract requirements, the specifications, the bidding procedures or the contract award, or any other request for explanation or clarification shall be submitted in writing and will include the following information:

1. The name of the protester;
2. The name and telephone number of the protester's contract person having responsibility; and
3. A complete statement of the ground of the protest with full documentation of the protester's claim.

Protests regarding the bid documents, specifications, instructions, or bidding procedure must be received by ROBERTSON COUNTY not less than ten (10) working days before the scheduled bid opening. Protest involving the award of the bid must be received by ROBERTSON COUNTY no later than five (5) working days after notification of the award of the bid.

8. REQUESTS

Requests for approved equals, clarification of specifications and protest of specifications must be received by ROBERTSON COUNTY, in writing, not less than ten (10) days before the scheduled bid opening. Any request for an approved equal or protest of the specifications must be fully supported with all necessary technical data, test results, or other pertinent information. ROBERTSON COUNTY's replies to requests will be postmarked at least five (5) days before the scheduled bid opening. The supplier must demonstrate the equality of his product to ROBERTSON COUNTY in order that ROBERTSON COUNTY may determine whether the supplier's product is or is not equal to that specified.

DETAILED SPECIFICATIONS

All Items of Work, Reference Standards, Measurements and Payments, and Shop Drawings shall be in strict accordance with Plans attached herein and according to the latest version of **Standard Specifications for Road and Bridge Construction of the Tennessee Department of Transportation**, unless noted otherwise in the Plans and Bid Documents, which are referenced herein and made a part thereof. All questions related to the Contract Proposal, Plans or Specifications shall be directed to the Engineer. Information received from other persons or offices shall be strictly advisory.

(Specification Attached by Reference)

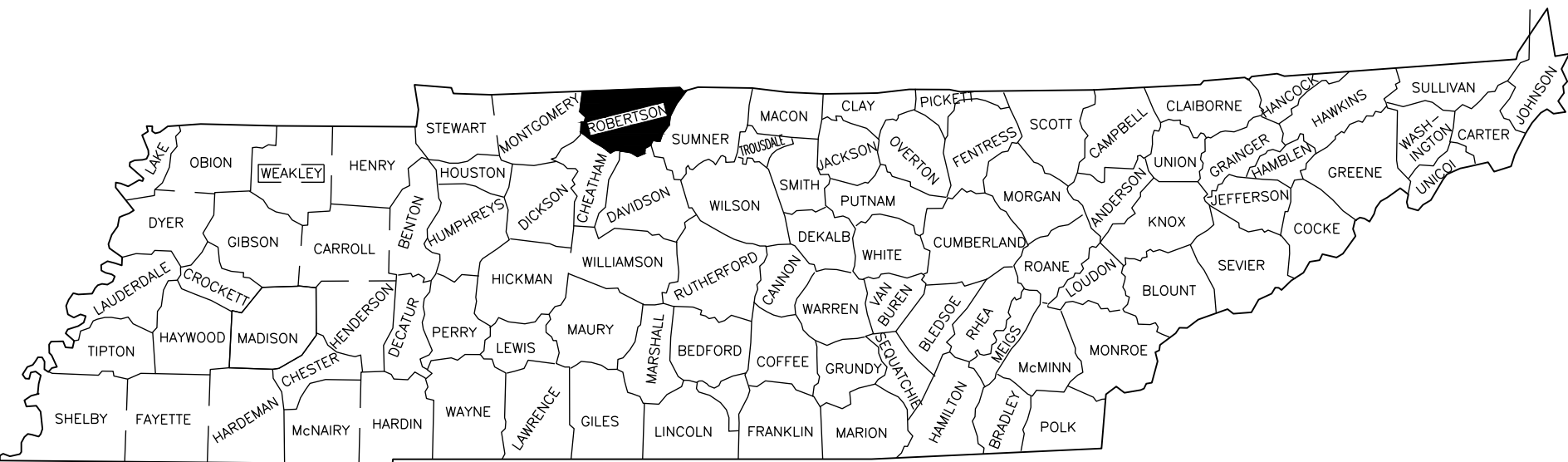
END OF SECTION

Construction Plans

(attached and dated September 16, 2019, full size at 24"x36")

SOLID WASTE LOADING PIT FOR THE TRANSFER FACILITY AT THE ROBERTSON COUNTY SOLID WASTE & RECYCLING

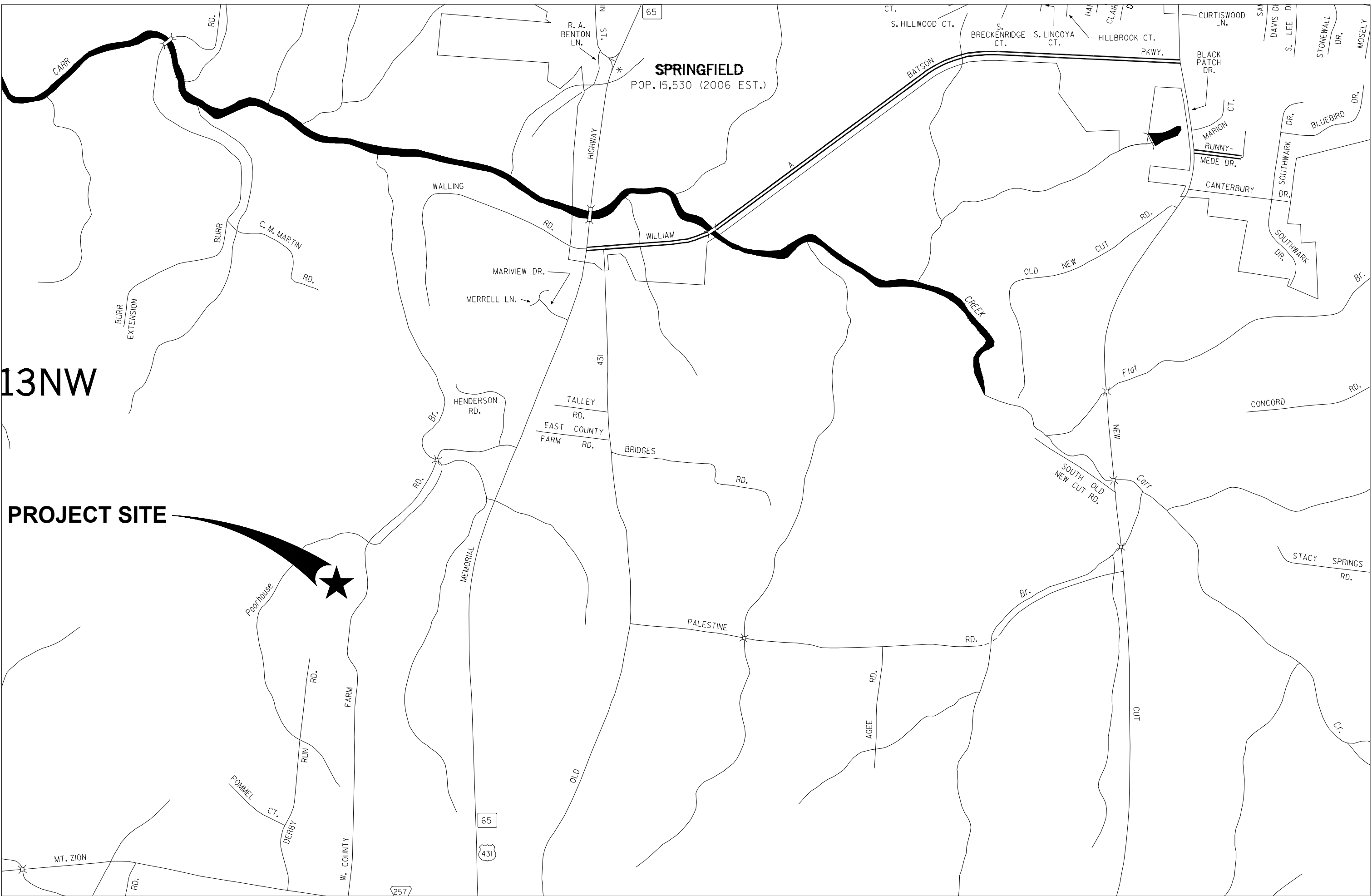
SEPTEMBER 2019



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UTILITY OWNERS
NATURAL GAS UTILITY SERVICE
SPRINGFIELD GAS DEPARTMENT 1311 R. W. GORDON DRIVE, SPRINGFIELD TN (615) 382-2200
WATER SERVICE
SPRINGFIELD WATER DEPARTMENT 824 CENTRAL AVE, SPRINGFIELD, TN (615) 382-1600
SANITARY SEWER SERVICE
SPRINGFIELD WASTEWATER DEPT 824 CENTRAL AVE, SPRINGFIELD, TN (615) 382-1600
ELECTRIC SERVICE
CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION 1201 5TH AVE NORTH, SPRINGFIELD, TN (615) 384-5566



LOCATION MAP

CSR Engineering
CSR Engineering, Inc.
1116 Main Street
Pleasant View, TN 37146
P: 615.212.2389
F: 615.246.3815
www.csrengineers.com

ROBERTSON COUNTY
AGRICULTURE
INDUSTRY
1796

TITLE SHEET
OF
SOLID WASTE LOADING PIT
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
WEST COUNTY FARM RD.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY

JASON LEE REYNOLDS
REGISTERED ENGINEER
AGRICULTURE
No. 108721
STATE OF TENNESSEE

REVISIONS	
NO.	DESCRIPTION

DESIGNER DKH
REVIEWER JLR

PROJECT 18-142

DATE 9-16-19

SHEET G-1



CONTRACTOR'S NOTES:

THE CONTRACTOR'S WORK TO BE PERFORMED UNDER THIS PROJECT WILL CONSIST OF FURNISHING ALL EQUIPMENT, LABOR, MATERIALS, TOOLS AND SUPERVISION NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS AND RELATED WORK AS LISTED IN THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, UTILITY LOCATIONS, ELEVATIONS, EXISTING INVERTS PRIOR TO ORDERING ANY MATERIAL. IF A DISCREPANCY IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR REPRESENTATIVE IMMEDIATELY.

ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES AND LAWS. ALL NECESSARY LICENSES AND PERMITS NOT OBTAINED BY THE OWNER SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

ALL WORK PERFORMED SHALL BE IN THE BEST RECOGNIZED TRADE PRACTICES AND TO THE ENTIRE SATISFACTION OF THE OWNER.

ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE SPECIFICALLY AUTHORIZED BY THE OWNER.

ALL DISTURBED GRASS AREAS WITHIN THE PROJECT LIMITS SHALL BE RE-ESTABLISHED.

RIGHT - OF - WAY/WORK ZONE LIMITS

ALL CONSTRUCTION ACTIVITIES WILL BE CONFINED WITHIN THE LIMITS OF THE OWNER'S PROPERTY AND ADJACENT EASEMENTS UNLESS ARRANGEMENTS HAVE BEEN MADE BY THE CONTRACTOR, IN WRITING, WITH ADJOINING PROPERTY OWNERS.

IF ADDITIONAL STAGING ROOM OR SITE ACCESS IS REQUIRED, THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EASEMENTS, AND WILL FURNISH PROOF OF EASEMENTS TO THE ENGINEER.

ANY AREAS DISTURBED BY ANY DIRECT OR INDIRECT ACTION ASSOCIATED WITH CONSTRUCTION INCLUDING ALL SITE ACCESS ROADS, WILL BE RETURNED TO PRE-CONSTRUCTION CONDITIONS OR BETTER, AND/OR FINISHED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AT THE CONTRACTOR'S EXPENSE.

DEWATERING

WHEN WATER ENCOUNTERED ALL PLANS AND SPECIFICATION MUST BE SUBMITTED TO THE OWNER'S ENGINEER REPRESENTATIVE FOR APPROVAL BEFORE THE PROCESS BEGINS. PUMPS OF SUFFICIENT CAPACITY TO HANDLE THE FLOW SHALL BE MAINTAINED AT THE SITE, PROVIDED THE CONTRACTOR HAS RECEIVED APPROVAL FROM THE OWNER TO OPERATE THEM.

PUMPS IN OPERATION SHALL BE CONSTANTLY ATTENDED ON A 24-HOUR BASIS UNTIL, IN THE SOLE JUDGMENT OF THE OWNER, THE OPERATION CAN BE SAFELY HALTED.

WHEN DEWATERING, A PROCESS FOR MONITORING FOR ANY SETTLEMENT OF ADJACENT FACILITIES OR STRUCTURES MUST BE IN PLACE.

SAFETY REQUIREMENTS

ALL OPERATIONS SHALL BE CONDUCTED SO AS NOT TO INTERFERE WITH, INTERRUPT, OR ENDANGER THE OPERATION OF THE OWNER NOR DAMAGE, DESTROY, OR ENDANGER THE INTEGRITY OF OWNER'S FACILITIES.

ALL WORK ON OR NEAR WORK ZONE PROPERTY SHALL BE CONDUCTED IN ACCORDANCE WITH APPLICABLE SAFETY RULES AND REGULATIONS. SPECIFICALLY ALL LICENSEE'S EMPLOYEES AND AGENTS, WHILE ON PROPERTY, SHALL BE REQUIRED TO WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT REQUIRED FOR CERTAIN OPERATIONS INCLUDING ABRASIVE CUTTING, USE OF TORCHES, USE OF CHAINSAWS, ETC.. THE CONTRACTOR AND ITS EMPLOYEES SHALL COMPLY WITH ALL APPLICABLE SAFETY RULES AT ALL TIMES WHILE ON OWNER'S PROPERTY. OPERATIONS WILL BE SUBJECT TO OWNER'S INSPECTION AT ANY AND ALL TIMES.

WHENEVER EQUIPMENT OR PERSONNEL ARE WORKING CLOSER THAN 25 FEET FROM THE ADJACENT SITE OPERATIONS, THAT SITE OPERATION SHALL BE CONSIDERED AS BEING OBSTRUCTED. INSOFAR AS POSSIBLE, ALL OPERATIONS SHALL BE CONDUCTED NO LESS THAN THIS DISTANCE.

INTERFERING OR OBSTRUCTING OF ADJACENT OWNER OPERATIONS AT THE WORK SITE BY EQUIPMENT AND PERSONNEL IS PROHIBITED EXCEPT BY PRIOR ARRANGEMENT WITH AND AS DIRECTED BY THE OWNER OR THEIR DULY APPOINTED REPRESENTATIVE.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY MEASURES NEAR AND AROUND THE PROPOSED PIT. THESE SAFETY MEASURES SHALL BE AS TO ASSURE NORMAL OPERATIONS AS POSSIBLE AND TO KEEP RECYCLING EQUIPMENT AND VEHICLES OUT OF THE CONSTRUCTION AREA .

BLASTING

BLASTING WILL NOT BE PERMITTED ON THIS PROJECT.

PROTECTION OF DRAINAGE FACILITIES

IF, IN THE COURSE OF CONSTRUCTION, IT MAY BE NECESSARY TO BLOCK A DITCH, PIPE, OR OTHER DRAINAGE FACILITY, TEMPORARY PIPES, DITCHES, OR OTHER DRAINAGE FACILITIES SHALL BE INSTALLED TO MAINTAIN ADEQUATE DRAINAGE, AS APPROVED BY THE OWNER. UPON COMPLETION OF THE WORK, THE TEMPORARY FACILITIES SHALL BE REMOVED AND THE PERMANENT FACILITIES RESTORED.

GENERAL NOTES:

FINISH GRADE TOLERANCES SHALL BE AS NOTED IN THE DETAILED SPECIFICATIONS. THE ENGINEER MAY MAKE GRADE CHANGES AS REQUIRED IN THE FIELD WITHOUT EFFECTING THE UNIT BID PRICE FOR UNCLASSIFIED EXCAVATION.

UNLESS OTHERWISE STATED, ALL FILL AREAS SHALL BE CONSTRUCTED IN LAYERS OF 8" LIFTS, WITH WATER ADDED OR SOIL CONDITIONED TO THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE ENGINEER OR OWNER'S REPRESENTATIVE AND COMPACTED WITH A SHEEP'S FOOT ROLLER TO COMPACTION EQUAL TO OR GREATER THAN 95% (100% IN THE TOP 2 FT. OF THE SUB-GRADE BELOW ROADWAYS, ASPHALT AND CONCRETE DRIVEWAYS OR PARKING AREAS) OF THE DENSITY OBTAINED BY COMPACTING A SAMPLE OF MATERIAL IN ACCORDANCE WITH THE STANDARD PROCTOR METHOD OF MOISTURE-DENSITY RELATIONSHIP TEST, ASTM D1557 OR AASHTO-99 UNLESS SPECIFIED ELSEWHERE.

ALL SOIL EROSION CONTROL MEASURES REQUIRED BY THE GRADING PLAN SHALL BE PERFORMED PRIOR TO GRADING, CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES/WADDLES ETC. SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT AND SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY UPON THE ENGINEER/OWNER REPRESENTATIVE'S APPROVAL. IF DURING THE LIFE OF THE PROJECT, A STORM CAUSES SOIL/MATERIAL EROSION WHICH CHANGES THE FINISH GRADES OR CREATES "GULLIES" AND "WASHED AREAS". THESE SHALL BE REPAIRED AT NO EXTRA COST. ALL SILT WASHED OFF THE PROJECT SITE ONTO ADJACENT PROPERTIES SHALL BE REMOVED AS DIRECTED BY THE ENGINEER/OWNER REPRESENTATIVE AT NO EXTRA COST. THE CONTRACTOR SHALL ADHERE TO ANY APPROVED EROSION CONTROL PLANS WHETHER INDICATED IN THE CONSTRUCTION PLANS OR UNDER SEPARATE COVER.

DISPOSABLE MATERIAL

A. DEMOLITION OR CLEARING AND GRUBBING WASTES SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE, UNLESS SPECIFIED OTHERWISE.

B. SOLID WASTES TO BE REMOVED, SUCH AS SIDEWALKS, CURBS, PAVEMENT, ETC., MAY BE PLACED IN SPECIFIC DISPOSAL AREAS DELINEATED IN THE PLANS OR REMOVED FROM THE SITE AS REQUIRED BY THE SPECIFICATIONS. THIS MATERIAL SHALL HAVE A MINIMUM COVER OF 2 FT.. THE CONTRACTOR SHALL MAINTAIN SPECIFIED COMPACTION REQUIREMENTS IN THESE AREAS. WHEN DISPOSAL SITES ARE NOT PROVIDED, THE CONTRACTOR SHALL REMOVE THE WASTE FROM THE SITE AND PROPERLY DISPOSE OF AT THEIR EXPENSE.

C. ABANDONED UTILITIES, SUCH AS CULVERTS, WATER PIPE, HYDRANTS, CASTINGS, PIPE APPURTENANCES, UTILITY POLES, ECT., SHALL BE THE PROPERTY OF THE SPECIFIC UTILITY OWNER OR THE ORGANIZATION HAVING JURISDICTION. BEFORE THE CONTRACTOR CAN REMOVE, DESTROY, SALVAGE, REUSE, SELL OR STORE FOR HIS OWN USE OF ANY ABANDONED UTILITY, HE MUST PRESENT THE OWNER'S WRITTEN PERMISSION FROM THE UTILITY INVOLVED.

D. ALL SOILS EXCAVATED WITHIN OWNER'S PROPERTY LIMITS SHALL REMAIN ON SAID PROPERTY IN ACCORDANCE WITH ALL OTHER APPROVALS. FOR ANY EXCAVATED SOIL THAT REQUIRES OFF-SITE DISPOSAL, THE LICENSEE IS REQUIRED TO USE ONLY OWNER APPROVED LABORATORIES, TRANSPORTERS, AND DISPOSAL FACILITIES THAT ARE IN COMPLIANCE WITH ALL APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS. SOIL RESULTING FROM EXCAVATION OUTSIDE OWNER'S PROPERTY SHALL NOT BE BROUGHT ONTO SAID PROPERTY UNLESS OTHERWISE APPROVED. OWNER SHALL NOT INCUR ANY COSTS RELATED TO THE DISPOSAL OF SOILS GENERATED DUE TO CONSTRUCTION ACTIVITY RELATED TO THIS PROJECT.

IN THE EVENT EXCESSIVE GROUNDWATER OR SPRINGS ARE ENCOUNTERED WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL NECESSARY UNDER DRAINS AND STONE AS DIRECTED BY THE ENGINEER. ALL WORK SHALL BE PAID BASED UPON ITEMS BID, UNLESS SPECIFIED OTHERWISE.

THE FINISHED SURFACE SHALL BE SMOOTH, FREE OF ALL ROCKS LARGER THAN 3", EQUIPMENT TRACKS, DIRT CLODS, BUMPS, RIDGES AND GOUGES PRIOR TO SEEDING; THE SURFACE SHALL BE LOOSENEED TO A DEPTH OF ±4"-6" TO ACCEPT SEED. THE CONTRACTOR SHALL NOT PROCEED WITH SEEDING OPERATIONS WITHOUT FIRST OBTAINING THE ENGINEER/OWNER REPRESENTATIVE'S APPROVAL OF THE GRADED SURFACE. HAND SEEDING IN CERTAIN AREAS SHALL BE AUTHORIZED ON A CASE BY CASE BASES BY THE ENGINEER/OWNER REPRESENTATIVE.

THE NAMES OF PROPERTY OWNERS, PROPERTY LINES, STREET AND ROAD RIGHTS-OF-WAY SHOWN ON THE PLANS WERE OBTAINED FROM THE CONSULTANT SURVEYORS AND/OR PROPERTY GIS. INFORMATION IS ONLY GENERAL IN NATURE AND IS NOT GUARANTEED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ALL EXISTING DRAINAGE CULVERTS DISTURBED DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

SEQUENCE OF WORK

- 1) SUBMIT PLANS AND SAFETY PROCEDURES TO THE ENGINEER AND ROBERTSON COUNTY FOR APPROVAL.
- 2) LIMITS OF WORK AROUND THE PIT SHALL BE PROTECTED WITH TEMPORARY CONSTRUCTION BARRIERS AS REQUIRED.
- 3) INSTALL DEWATERING AND RELATED EPSC MEASURES AND ALLOW RELEASE OF FILTERED STORMWATER BACK INTO THE ACTIVE DOWNSTREAM STORMWATER FACILITIES.
- 4) BUILDING MODIFICATIONS AS SHOWN - CONCRETE WALL AND FLOOR DEMOLITION, REMOVE BUILDING PANELS AS SHOWN ON SOUTH WALL AND INSTALL NEW CONCRETE APRON AND BOLLARDS.
- 5) CONSTRUCT THE PROPOSED PIT AND APPURTENANCES
- 6) INSTALL CONCRETE BARRIERS FOR NEW METALS AND APPLIANCE AREA AS SHOWN.
- 7) RELOCATE AND INSTALL UTILITIES AS SHOWN. CONTRACTOR SHALL COORDINATE WITH THE CITY OF SPRINGFIELD WATER DEPARTMENT FOR THE WATER LINE RELOCATION.
- 8) EXTEND 60 INCH CMP AND REGRADE DITCH AS SHOWN FOR DRIVE WIDENING

EPSC NOTES

SOIL EROSION METHODS SHALL BE USED TO PROTECT EXISTING DITCHES AND OTHER DRAINAGE FACILITIES DURING CONSTRUCTION ON AND ADJACENT TO OWNER'S PROPERTY.

EROSION CONTROL WORK PERFORMED BY THE CONTRACTOR SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DETAILS OF TDEC EROSION CONTROL HANDBOOK, LATEST VERSION.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND AND MATERIAL DISTURBING ACTIVITIES. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

ALL SEDIMENT CONTROLS AND CRITICAL SLOPES MUST BE STABILIZED WITHIN SEVEN CALENDAR DAYS OF DISTURBANCE. ALL OTHER DISTURBED AREAS OF THE PROJECT SITE MUST BE STABILIZED WITHIN FOURTEEN CALENDAR DAYS.

ALL POINTS OF INGRESS AND EGRESS SHALL BE PROTECTED TO MINIMIZE TRACKING OF MUD ONTO PUBLIC RIGHTS-OF-WAY AND ROADS. ANY EARTH, GRAVEL, AND/OR OTHER MATERIAL TRACKED, SPILLED, OR WASHED ONTO ROADS OR ADJACENT PROPERTIES MUST BE IMMEDIATELY REMOVED AND DISPOSED OF IN A LEGAL MANNER.

FLUSHING WILL NOT BE PERMITTED. ALL MATERIAL MUST BE REMOVED BY MEANS OF SHOVELING AND SWEEPING.

SEDIMENT CONTROL DEVICES ARE TO REMAIN IN PLACE UNTIL SITE IS PERMANENTLY STABILIZED.

SOD SHALL SHALL BE PLACED ON ALL 1:1 SLOPES AND ALL OTHER DISTURBED SLOPES SHALL BE COVERED WITH DOUBLE NET STRAW BLANKETS.

AFTER SITE IS PERMANENTLY STABILIZED AND BEFORE EROSION CONTROL MEASURES ARE REMOVED, THE CONTRACTOR SHALL CLEAN DEBRIS AND SILT FROM ALL STORM SEWERS, STRUCTURES AND DITCHES IN AREA OF WORK.

ALL EXCAVATED MATERIAL SHALL BE PLACED ON HIGH SIDE OF EPSC DEVICES WHEREVER POSSIBLE AND CONFINED TO AN AREA WHERE IT WILL NOT OBSTRUCT THE NORMAL FLOW OF THE DRAINAGE.

PUMPING OF SEDIMENT LADEN WATER WILL NOT BE ALLOWED UNLESS IT IS FILTERED BY WAY OF AN APPROVED SEDIMENT TRAPPING DEVICE.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING FILTERS AND SILT FENCES/WADDLES CLEAR OF SEDIMENT BUILDUP DURING CONSTRUCTION.

AN INSPECTION OF THE EPSC MEASURES SHALL BE PERFORMED AT LEAST TWICE EVERY CALENDAR WEEK AND DOCUMENTED ON THE TDEC CONSTRUCTION STORMWATER INSPECTION FORM. INSPECTIONS SHALL BE PERFORMED AT LEAST 72 HOURS APART.

BASED ON THE RESULTS OF INSPECTIONS ANY INADEQUATE CONTROL STRUCTURES OR CONTROL MEASURES IN DISREPAIR SHALL BE REPLACED OR MODIFIED, OR REPAIRED AS NECESSARY, BEFORE THE NEXT RAIN EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE NEED IS IDENTIFIED.

ANY SEDIMENT CONTROL DEVICES DISTURBED DURING SITE GRADING AND UTILITY CONSTRUCTION MUST BE RESTORED IMMEDIATELY.

EXPPOSE THE SMALLEST AREAS OF SOIL FOR AS SHORT A TIME AS POSSIBLE.

KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS. USE TEMPORARY VEGETATION AND / OR MULCH TO PROTECT BARE AREAS FROM EROSION DURING CONSTRUCTION.

ALL CUT/FILL AREAS TO HAVE A MINIMUM OF 6-INCH DEPTH TOPSOIL COVER. AREAS DRESSED WITH TOPSOIL WILL RECEIVE 12 POUNDS PER 1000 SQUARE FEET OF FERTILIZER, 8 POUNDS OR MORE OF SEED PER 1000 SQUARE FEET (SEE TDOT SEED CHART) AND A STRAW MULCH OF 70% - 80% COVERAGE (APPROXIMATELY 125 POUNDS PER 1000 SQUARE FEET) EXCEPT AS OTHERWISE DETERMINED BY PLAN.

DISTURBED AREAS ARE TO BE GRADED TO DRAIN AS INDICATED ON PLANS TO SEDIMENT BARRIERS DURING AND UPON COMPLETION OF CONSTRUCTION.

UPON STABILIZATION OF THE PROJECT SITE WITH A GOOD (ACCEPTABLE) STAND OF GRASS AND/OR OTHER APPROVED GROUND COVER, THE EPSC INSTALLATIONS WILL BE REMOVED AND THE AREA DISTURBED WILL BE STABILIZED WITH THE SAME TREATMENT AS OTHER NEW AREAS OF THE PROJECT. ANY AREAS THAT ARE LEFT DISTURBED FOR OVER 14 DAYS, THE CONTRACTOR SHALL STABILIZE WITH THE SAME TREATMENT AS OTHER AREAS OF THE PROJECT.

INSTALLATION LOCATION AND CONNECTIONS BETWEEN TWO SECTIONS OF EROSION EELS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

WHEN TWO SECTIONS OF SILT FENCE/WADDLES ARE JOINED TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN IT REACHES 50% OF THE HEIGHT OF THE FABRIC.

ALL EPSC MEASURES SHALL ACCOMMODATE A 2-YEAR, 24-HOUR STORM EVENT.

PRE ENGINEERED METAL BUILDINGS

THE BUILDING AND/OR MODIFICATIONS ARE TO BE A PRE-ENGINEERED METAL BUILDING MANUFACTURED TO MEET THE AISC CERTIFICATION STANDARD FOR CATEGORY MB. THE DESIGN LOADS FOR THE BUILDING SHALL BE THE DEAD, LIVE, WIND, SNOW, AND SEISMIC LOADS THAT MEET THE BUILDING CODE FOR THE LOCATION.

IN ADDITION TO THE LOADING ABOVE, THE PRE-ENGINEERED METAL BUILDING SHALL BE DESIGNED FOR AN ADDITIONAL COLLATERAL LOAD OF 6 PSF. THE MECHANICAL, PLUMBING, AND ELECTRICAL PLANS SHALL BE COORDINATED WITH FOR THE LOCATION AND MAGNITUDE OF ANY ADDITIONAL CONCENTRATED LOADS DUE TO SUSPENDED EQUIPMENT, PIPES, ETC..

THE MANUFACTURER SHALL FURNISH A CERTIFICATE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TENNESSEE STATING THAT THE BUILDING DESIGN MEETS THE PROJECT DESIGN CRITERIA AND IS IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES.

ALL STRUCTURAL STEEL SHALL HAVE A ONE MIL RED OXIDE PRIMER COAT. PRIMER SHALL BE TOUCHED UP IN AREAS THAT ARE DAMAGED DURING FABRICATION.

WATER NOTES

ALL WATER LINE CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND STANDARD DETAILS OF CITY OF SPRINGFIELD WATER DEPARTMENT.

UTILITY NOTES

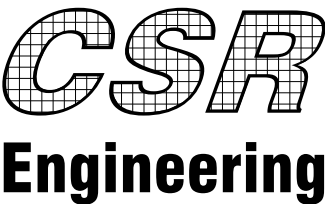
UTILITIES SHOWN HEREON WERE TAKEN FROM VISIBLE OBSTRUCTIONS IN THE FIELD, LOCATIONS SHOWN ARE APPROXIMATE AND SHOULD NOT BE RELIED UPON AS ACCURATE. ADDITIONALLY, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED.

PRIOR TO CONSTRUCTION, EXCAVATION, OR DISTURBANCE OF THE EXISTING GROUND ELEVATION, THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY AND EXPENSE OF CONTACTING THE LOCAL UTILITY OWNERS AND DEFINITIVELY ESTABLISHING THE EXISTENCE, EXACT LOCATIONS AND SIZES OF UNDERGROUND UTILITIES TO AVOID ANY HAZARD OR CONFLICT.

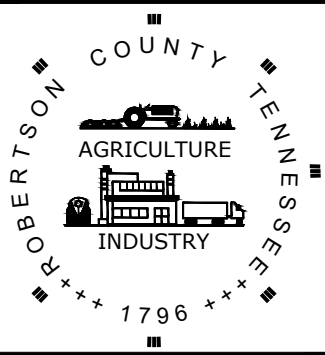
TENNESSEE LAW REQUIRES NO LESS THAN THREE NOR MORE THAN TEN WORKING DAYS NOTICE TO UNDERGROUND UTILITY OWNERS PRIOR TO INTENT TO EXCAVATE. A LIST OF THESE UTILITIES MAY BE OBTAINED FROM EACH COUNTY'S REGISTER OF DEEDS. THOSE UTILITIES THAT PARTICIPATE IN THE TN ONE-CALL SYSTEM CAN BE NOTIFIED AT 1-800-351-1111.

CONTRACTOR IS TO PROTECT UTILITIES THAT ARE TO REMAIN AND ALL EXISTING IMPROVEMENTS INCLUDING BUT NOT LIMITED TO STRUCTURES, PAVEMENT, RAMPS, TREES, SIDEWALKS, CULVERTS, ETC. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES TO REMAIN ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. CONTRACTOR IS TO COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY AUTHORITIES.

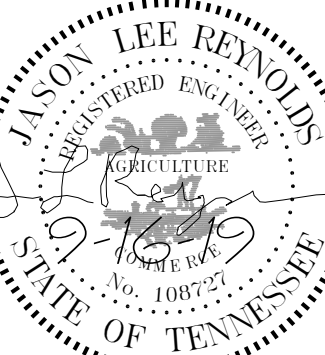
ESTIMATED BID QUANTITIES		
ITEM	UNIT	TOTAL QTY
MOBILIZATION	L.S.	1
EXCAVATION (UNCLASSIFIED & ROCK)	L.S.	1
CONCRETE - DEMOLITION	L.S.	1
CONCRETE - PIT	C.Y.	350
CONCRETE JERSEY BARRIERS	L.F.	140
CONCRETE - TIPPING AREA APRON	C.Y.	32
REINFORCING	LB.	33288
8" WATER LINE INCLUDING APPURTENANCES	L.F.	210
SUMP PUMP AND APPURTENANCES	L.S.	1
BOLLARDS	EACH	6
METAL BUILDING MODIFICATIONS	L.S.	1
GUARDRAILING	L.F.	260
60 INCH CMP (INCLUDE COUPLING)	L.F.	10



CSR Engineering, Inc.
1116 Main Street
Pleasant View, TN 37146
P: 615.212.2389
F: 615.246.3815
www.csrengineers.com



GENERAL NOTES AND
ESTIMATED QUANTITIES
OF
SOLID WASTE LOADING PIT
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
MANAGEMENT, INC.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY



REVISIONS				
NO.	DATE	BY	DESCRIPTION	

DESIGNER DKH
REVIEWER JLR

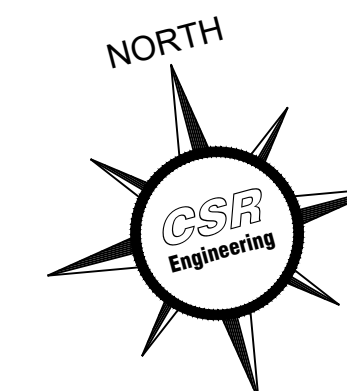
PROJECT 18-142

DATE 9-16-19

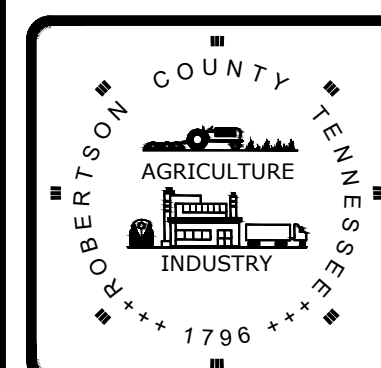
SHEET G-2



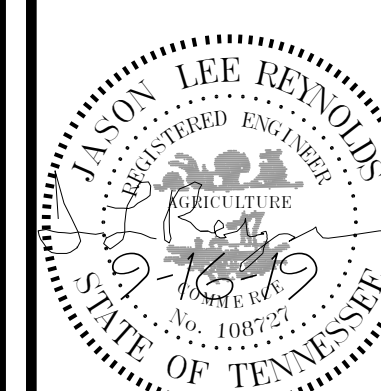
JOSHUA S. MILLIGAN
MAP 102
PARCEL 238.00
3.96 AC.
RECORD BOOK 1456, PAGE
412,
R.O.C.C.



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EXISTING SITE PLAN
OF
SOLID WASTE LOADING PIT
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
WEST COUNTY FARM RD.
SPRINGFIELD, TN 37172

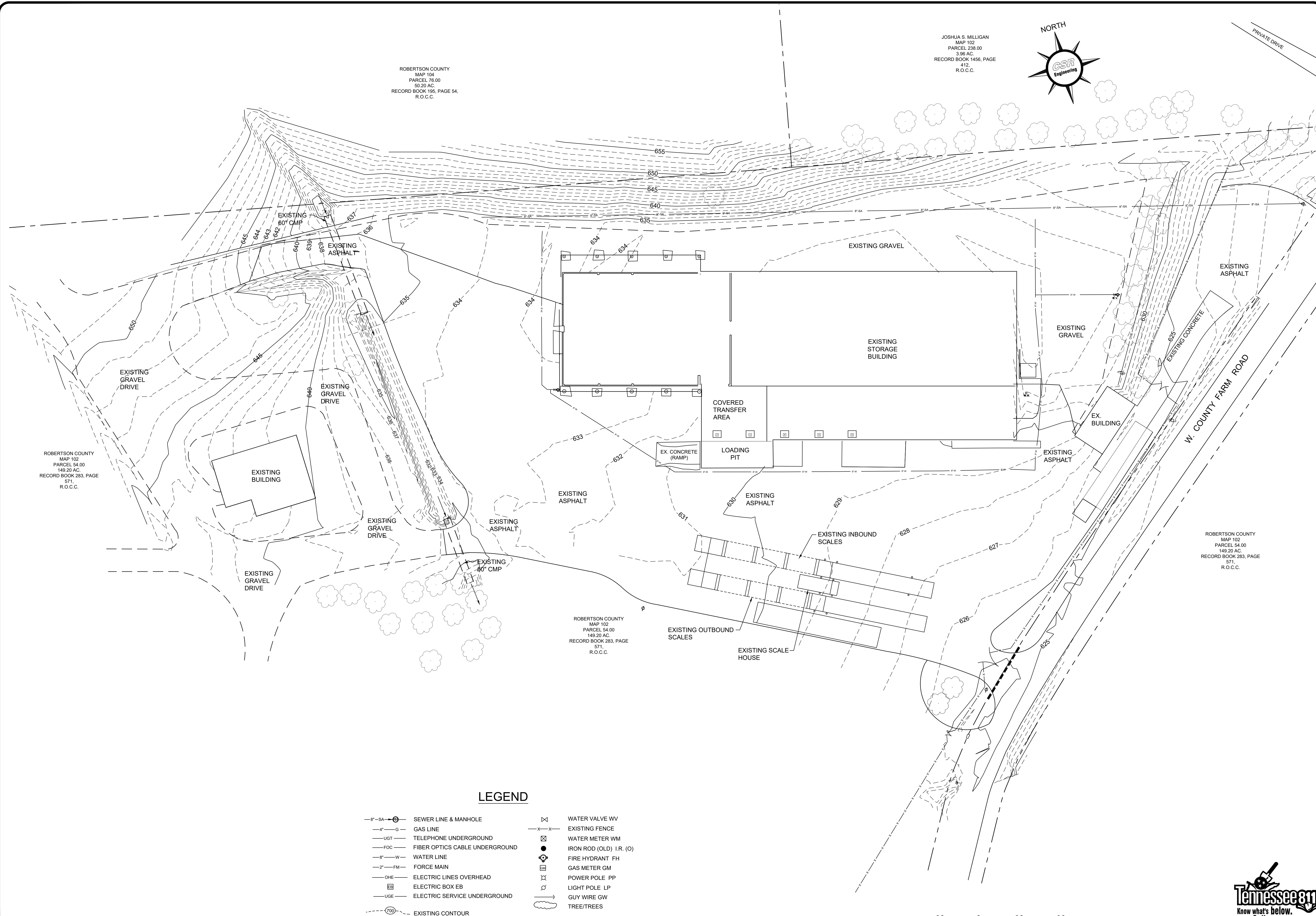
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DESIGNER	DKH
REVIEWER	JLR

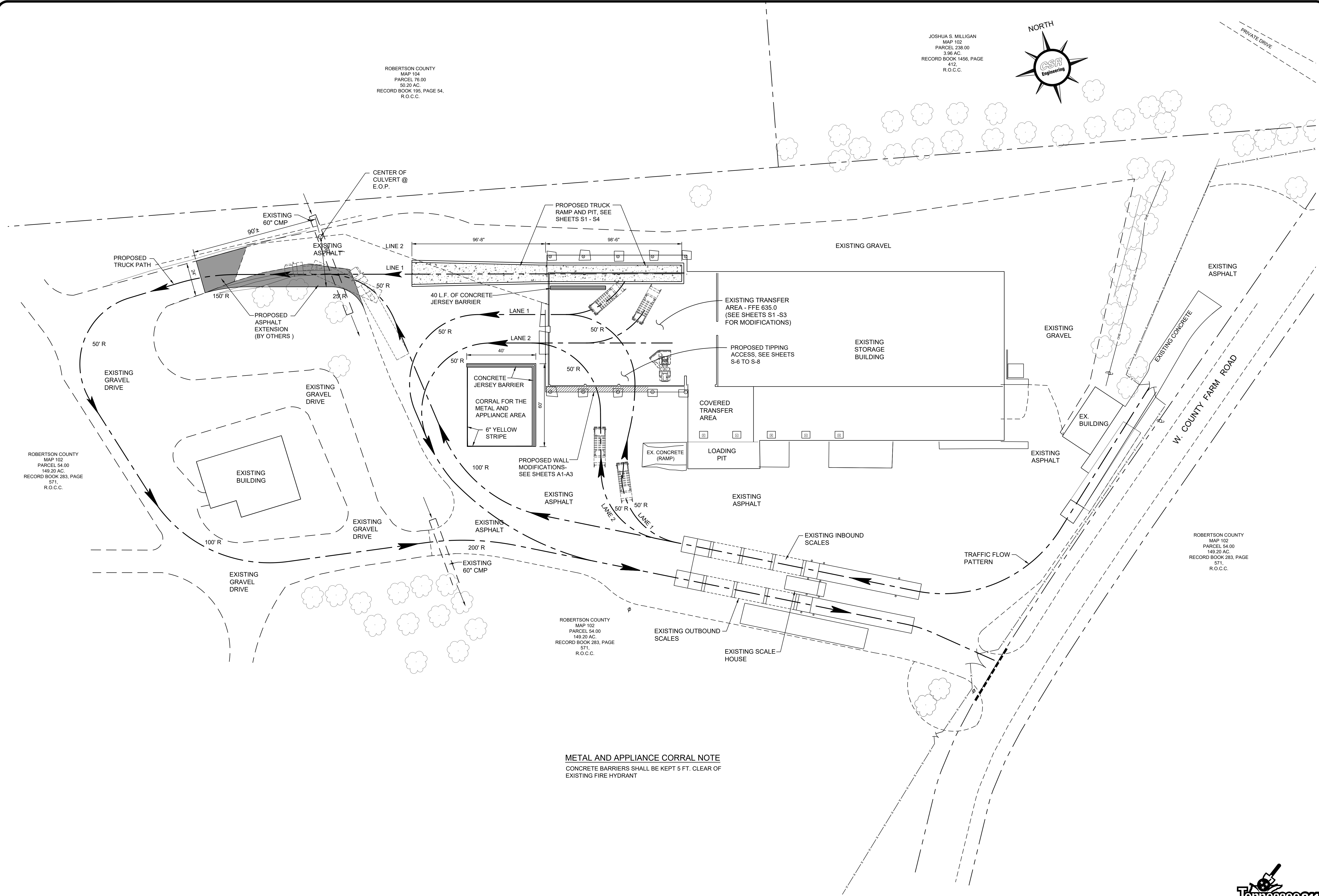
PROJECT 18-142

DATE 9-16-19

SHEET C-1

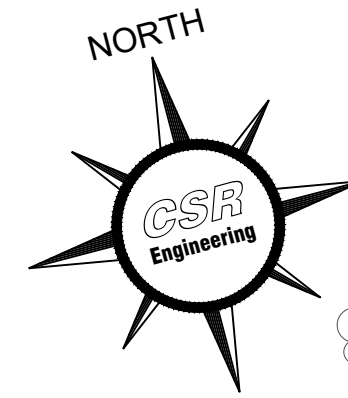


PURPOSE FOR ISSUE: PRELIMINARY SCALE : 1" = 30'



ROBERTSON COUNTY
MAP 104
PARCEL 76.00
50.20 AC.
RECORD BOOK 195, PAGE 54,
R.O.C.C.

JOSHUA S. MILLIGAN
MAP 102
PARCEL 238.00
3.95 AC.
RECORD BOOK 1456, PAGE
412,
R.O.C.C.



ROBERTSON COUNTY
MAP 102
PARCEL 54.00
149.20 AC.
RECORD BOOK 283, PAGE
571,
R.O.C.C.

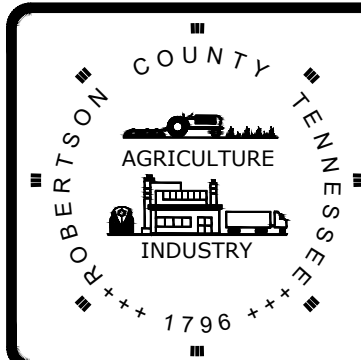
ROBERTSON COUNTY
MAP 102
PARCEL 54.00
149.20 AC.
RECORD BOOK 283, PAGE
571,
R.O.C.C.

ROBERTSON COUNTY
MAP 102
PARCEL 54.00
149.20 AC.
RECORD BOOK 283, PAGE
571,
R.O.C.C.

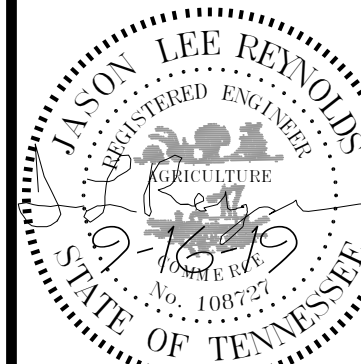
METAL AND APPLIANCE CORRAL NOTE
CONCRETE BARRIERS SHALL BE KEPT 5 FT. CLEAR OF
EXISTING FIRE HYDRANT

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SITE PLAN
OF
SOLID WASTE LOADING PIT
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
JASON LEE REYNOLDS
SPRINGFIELD, TN 37172
ROBERTSON COUNTY



REVISIONS		DESCRIPTION	
NO.	DATE	BY	DESCRIPTION

DESIGNER **DKH**
REVIEWER **JLR**

PROJECT **18-142**

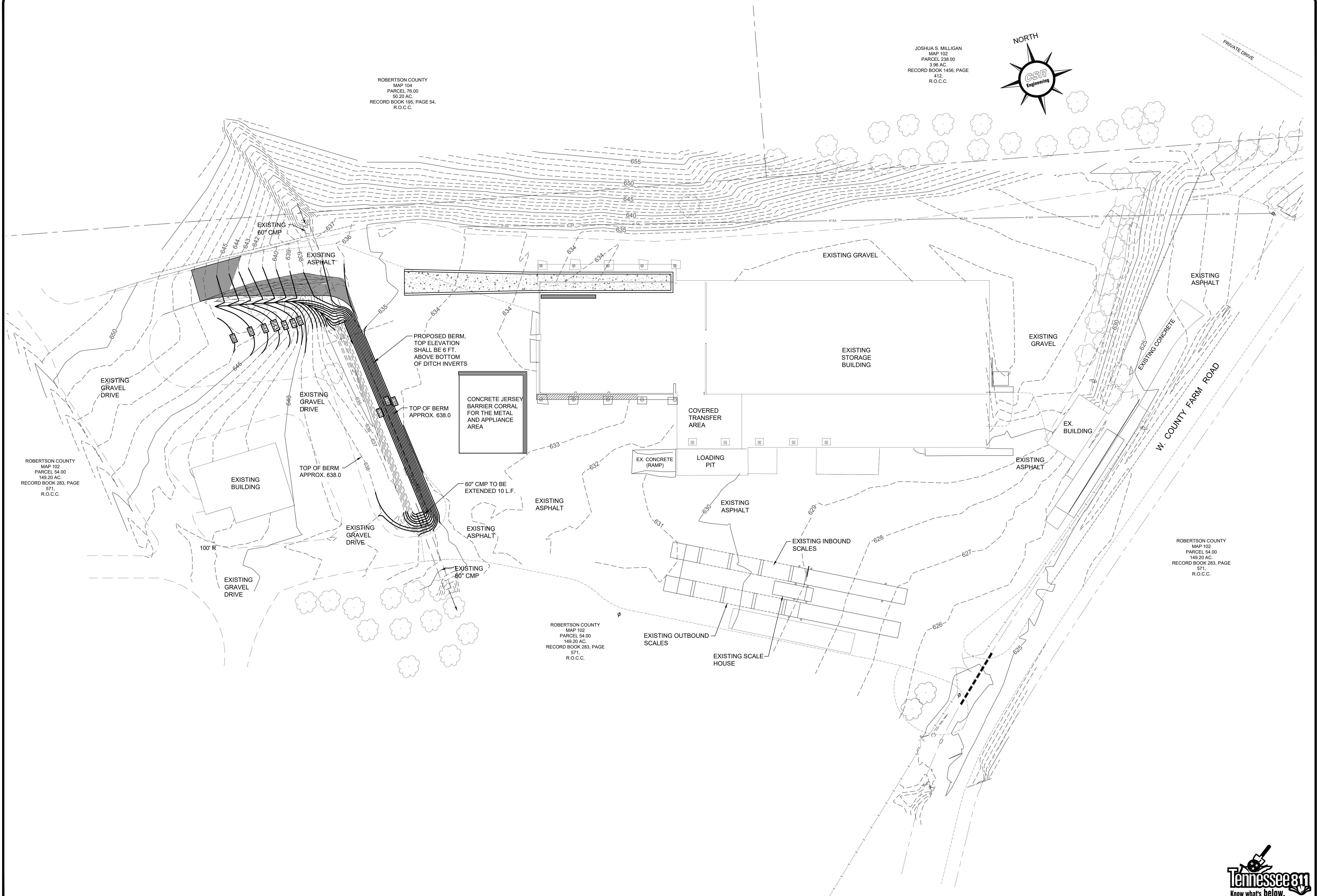
DATE **9-16-19**

SHEET **C-2**



[illegible]

DESIGNER	DKH
REVIEWER	JLR

PROJECT 18-142DATE 9-16-19C-3

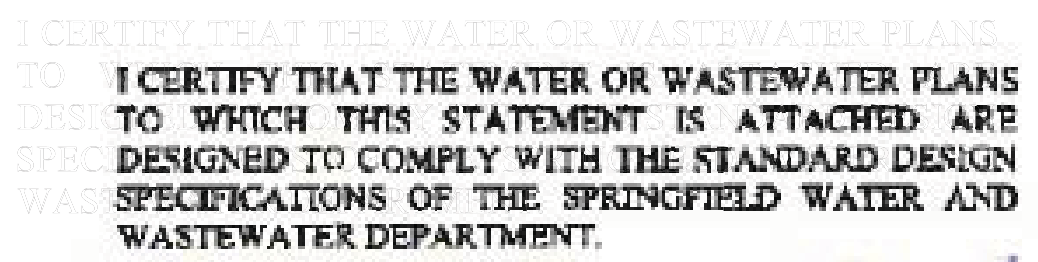
PURPOSE FOR ISSUE: PRELIMINARY



PROJECT 18-142

DATE 9-16-19

HEET C-4



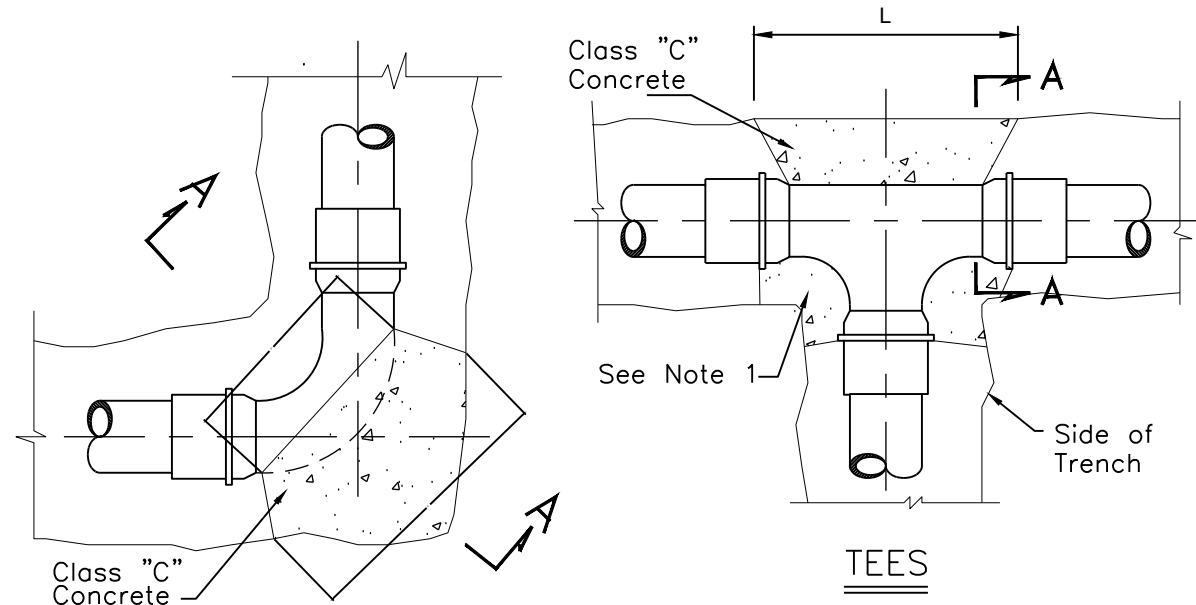
Terry Boora, P.E. Date 9/20/11
Director
Springfield Water and Wastewater Department



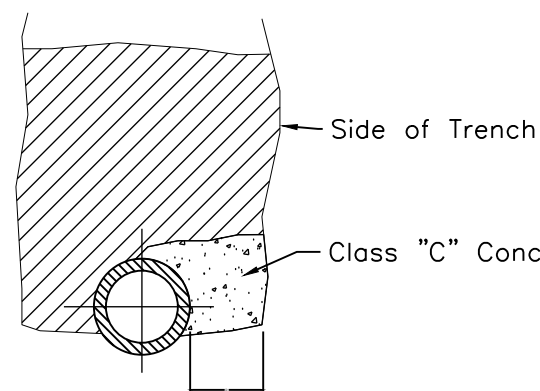
1. ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND STANDARD DETAILS OF SPRINGFIELD, TN, TDEC AND OSHA GUIDELINES.
2. PRIOR TO CONSTRUCTION, EXCAVATION, OR DISTURBANCE OF THE EXISTING GROUND ELEVATION, THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY AND EXPENSE OF CONTACTING THE LOCAL UTILITY OWNERS AND DEFINITELY ESTABLISHING THE EXISTENCE, EXACT LOCATIONS AND SIZES OF UNDERGROUND UTILITIES TO AVOID ANY HAZARD OR CONFLICT.
3. TENNESSEE LAW REQUIRES NO LESS THAN THREE NOR MORE THAN TEN WORKING DAYS NOTICE TO UNDERGROUND UTILITY OWNERS PRIOR TO INTENT TO EXCAVATE. A LIST OF THESE UTILITIES MAY BE OBTAINED FROM EACH COUNTY'S REGISTER OF DEEDS. THOSE UTILITIES THAT PARTICIPATE IN THE TN ONE-CALL SYSTEM CAN BE NOTIFIED AT 1-800-351-1111.
4. CONTRACTOR IS TO PROTECT UTILITIES THAT ARE TO REMAIN AND ALL EXISTING IMPROVEMENTS INCLUDING BUT NOT LIMITED TO STRUCTURES, PAVEMENT, RAMPS, TREES, SIDEWALKS, CULVERTS, ETC. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES TO REMAIN ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. CONTRACTOR IS TO COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY AUTHORITIES.

<p>UTILITY OWNERS</p> <p>NATURAL GAS UTILITY SERVICE</p> <p>SPRINGFIELD GAS DEPARTMENT 1311 R. W. GORDON DRIVE, SPRINGFIELD TN (615) 382-2200</p> <p>WATER SERVICE</p> <p>SPRINGFIELD WATER DEPARTMENT 824 CENTRAL AVE, SPRINGFIELD, TN (615) 382-1600</p> <p>SANITARY SEWER SERVICE</p> <p>SPRINGFIELD WASTEWATER DEPT 824 CENTRAL AVE, SPRINGFIELD, TN (615) 382-1600</p> <p>ELECTRIC SERVICE</p> <p>CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION 1201 5TH AVE NORTH, SPRINGFIELD, TN (615) 384-5566</p>

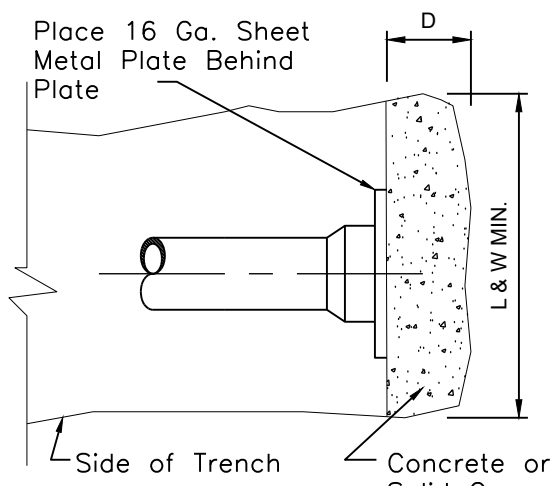
PURPOSE FOR ISSUE:	PRELIMINARY
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45° & 90° BENDS



SECTION A-A



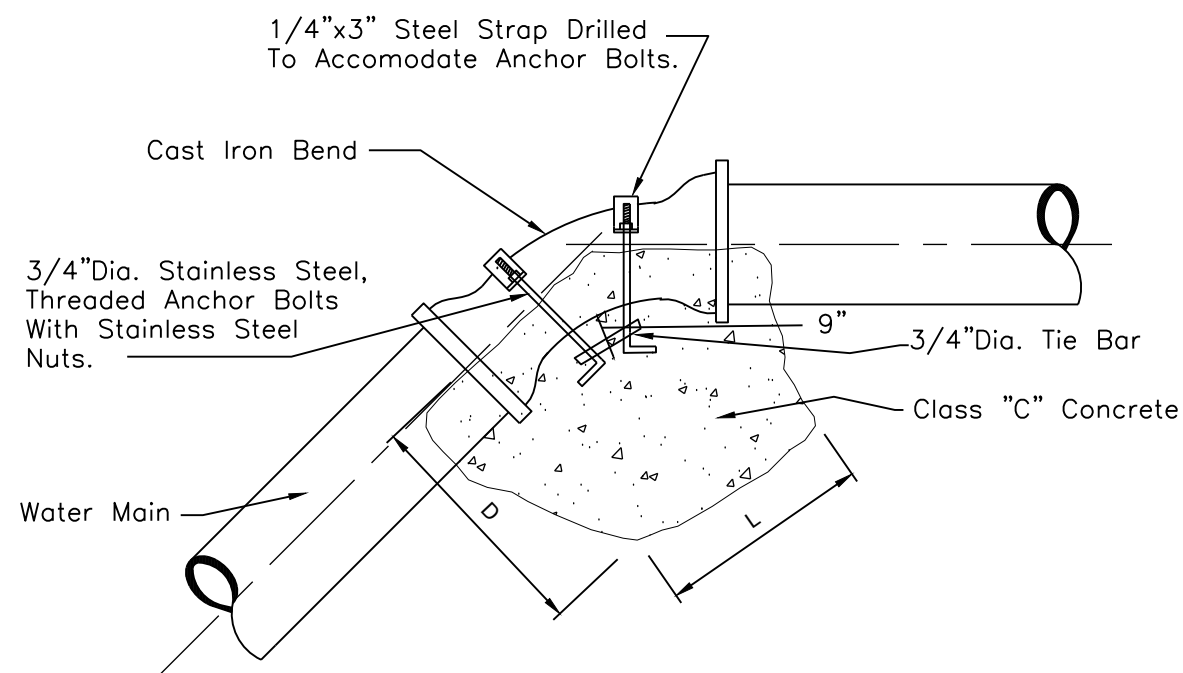
PLUGS

PLUGS & TEES							
SIZE	2"	3"	4"	6"	8"	10"	12"
D	6"	6"	6"	6"	6"	6"	6"
L&W	14"	16"	18"	20"	22"	24"	24"

(45°) EIGHTH BENDS							
SIZE	2"	3"	4"	6"	8"	10"	12"
D	6"	6"	6"	6"	6"	6"	6"
L	12"	14"	16"	18"	20"	22"	24"
T	10"	12"	14"	16"	16"	18"	18"

(90°) QUARTER BENDS							
SIZE	2"	3"	4"	6"	8"	10"	12"
D	6"	6"	6"	8"	10"	12"	12"
L	15"	18"	21"	24"	27"	30"	34"
T	10"	12"	14"	16"	18"	20"	22"

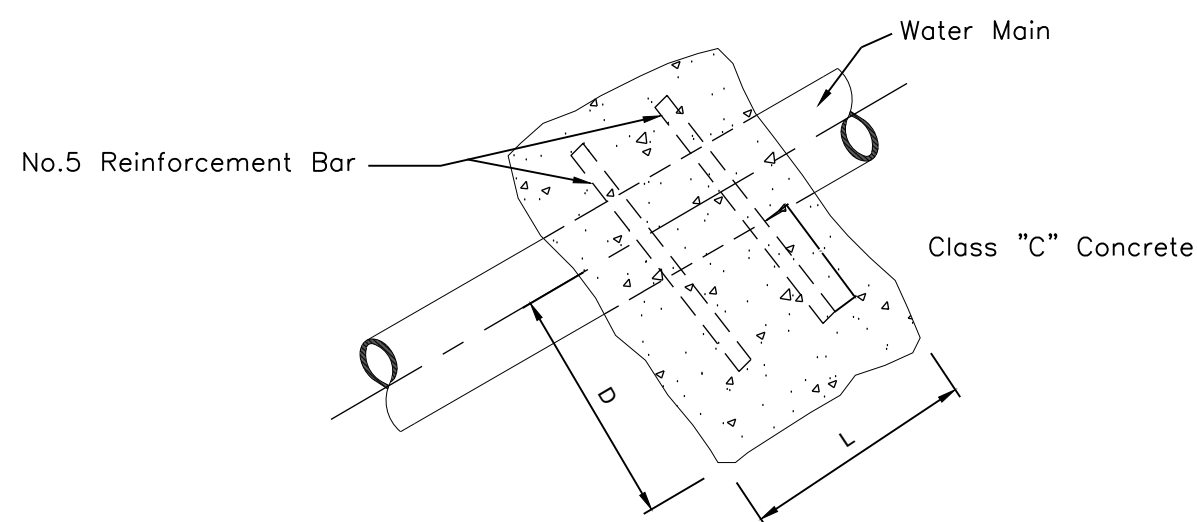
CONCRETE THRUST BLOCK



VERTICAL BENDS

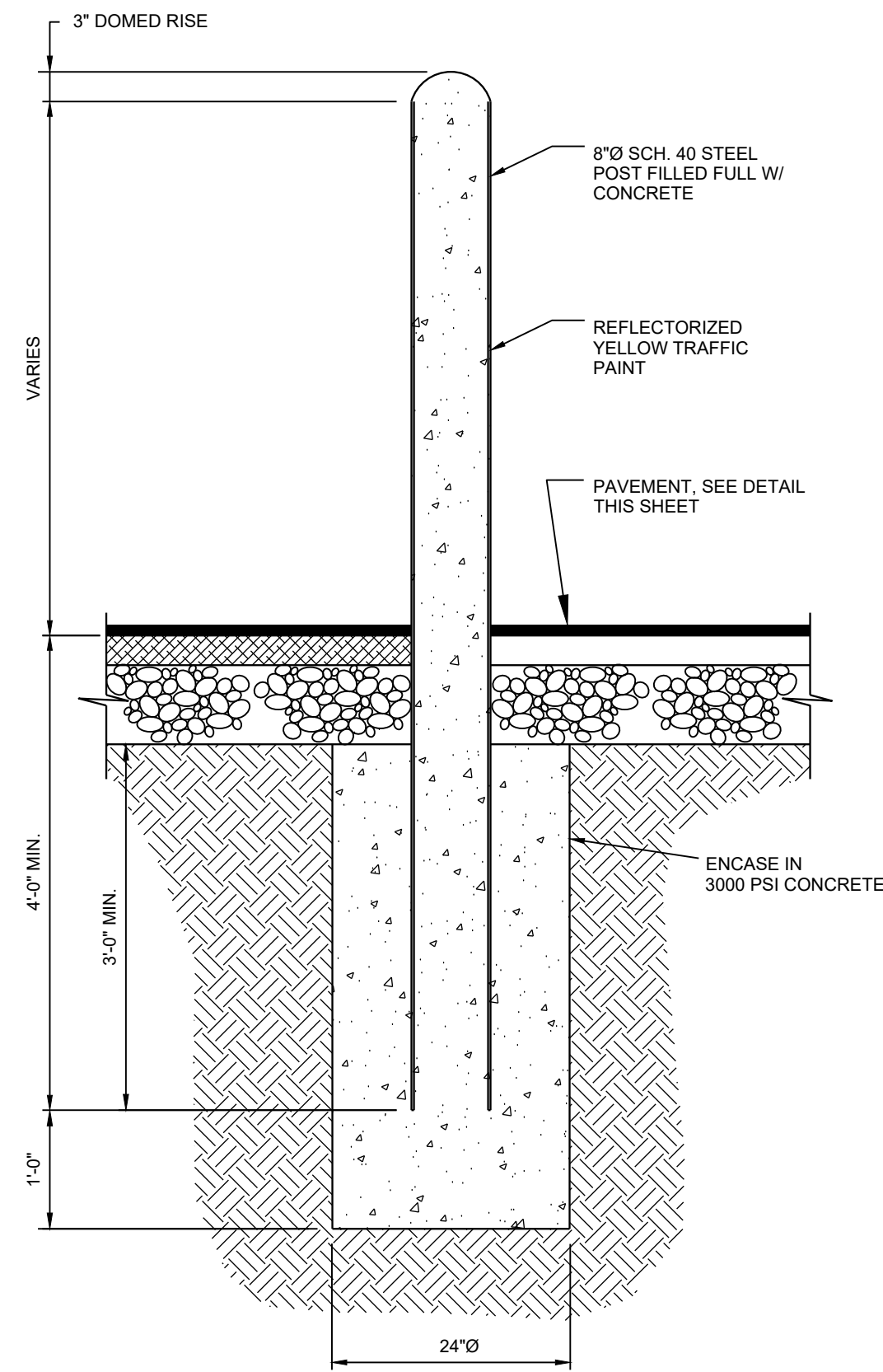
VERTICAL BEND & STRAIGHT PIPE							
SIZE	2"	3"	4"	6"	8"	10"	12"
"D"	10"	12"	12"	15"	15"	18"	18"
"L"	12"	18"	18"	24"	24"	30"	30"

NOTE: Anchors To Be Full Width Of Trench. Anchors Must Be Placed Against Undisturbed Earth.

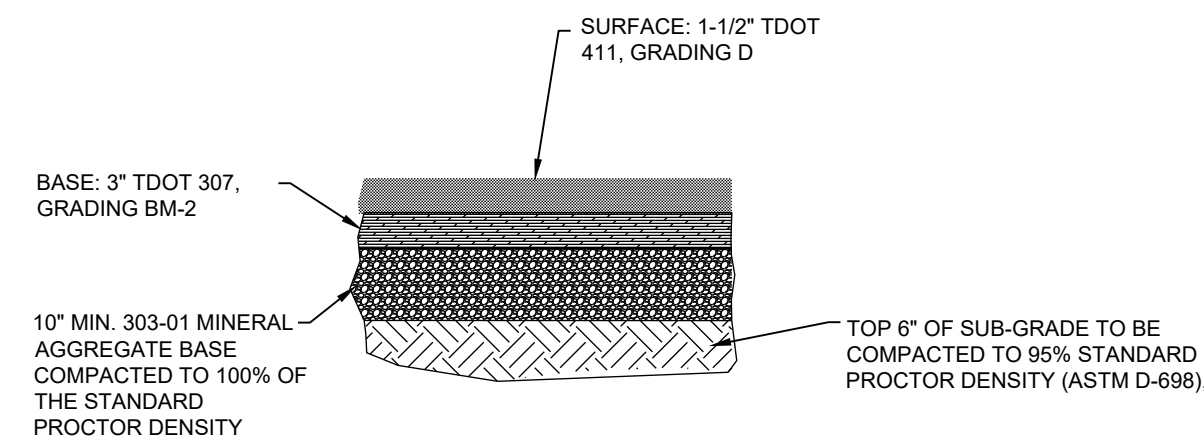


STRAIGHT PIPE

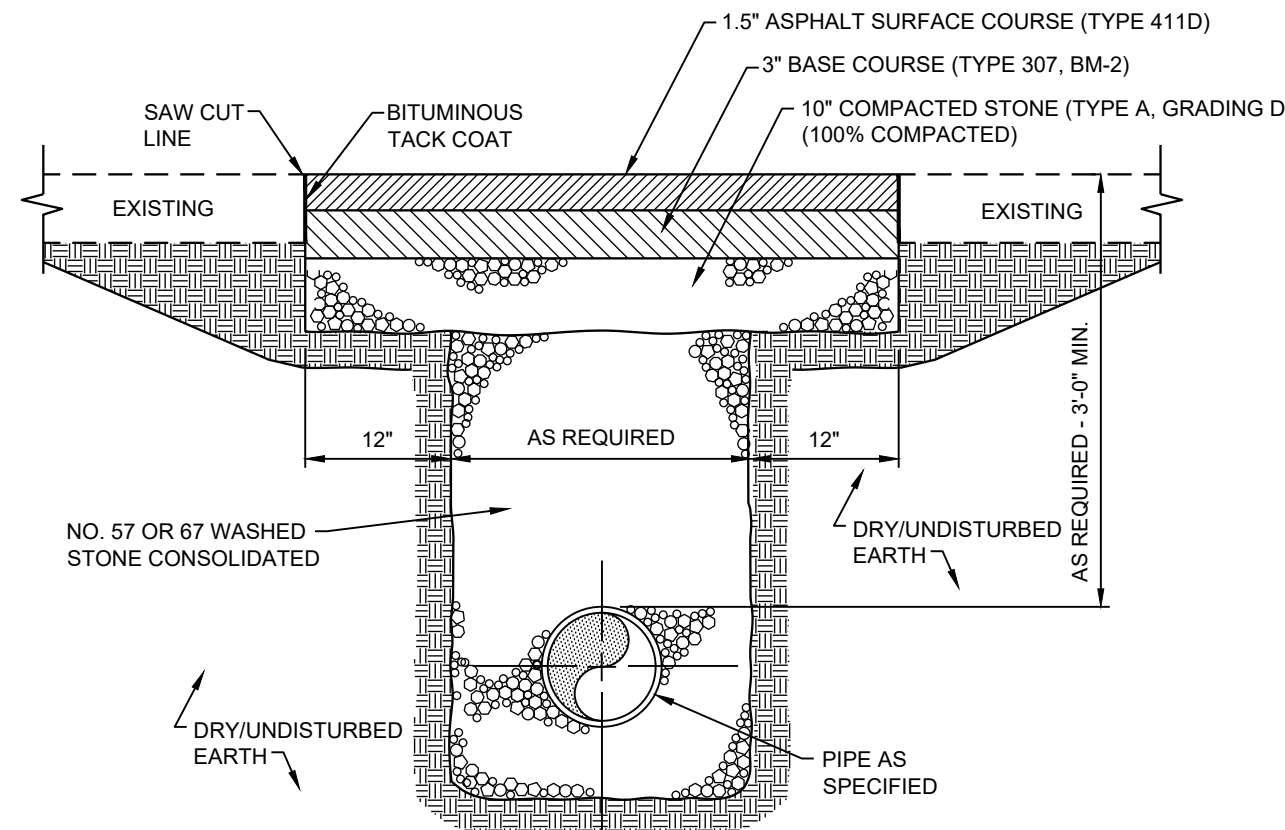
TYPICAL
CONCRETE ANCHOR BLOCKS



BOLLARD DETAIL
NOT TO SCALE



HEAVY DUTY ASPHALT DETAIL
NOT TO SCALE



NOTE:
1. SAWED EDGES SHALL BE NEAT AND SQUARE AND SAWN WITH A CONCRETE SAW. BROOMED CLEAN OF DUST PRIOR TO TACK COAT BEING APPLIED
2. CRS-I OR CRS-II TACK COAT SHALL BE APPLIED TO THE EDGES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT ON ANY PAVEMENT MARKINGS DISTURB OR COVERED BY OVERLAY. NO EXTRA PAYMENT WILL BE MADE.

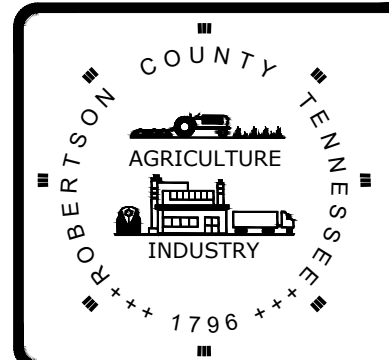
TYPICAL PAVEMENT REPAIRS - PATCH
NOT TO SCALE

CITY OF SPRINGFIELD WATER-WASTEWATER DEPARTMENT

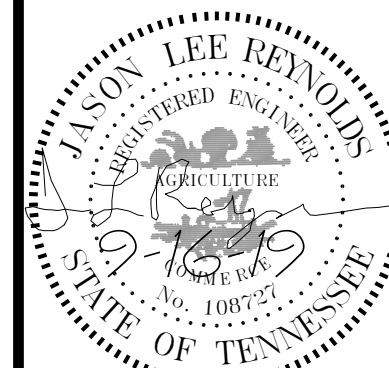
824 CENTRAL AVENUE
SPRINGFIELD, TENNESSEE 37172

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SITE DETAILS
OF
SOLID WASTE LOADING PIT
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
WASCOULAND, RD.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY



REVISIONS		DESCRIPTION	
NO.	DATE	BY	DESCRIPTION

DESIGNER **DKH**
REVIEWER **JLR**

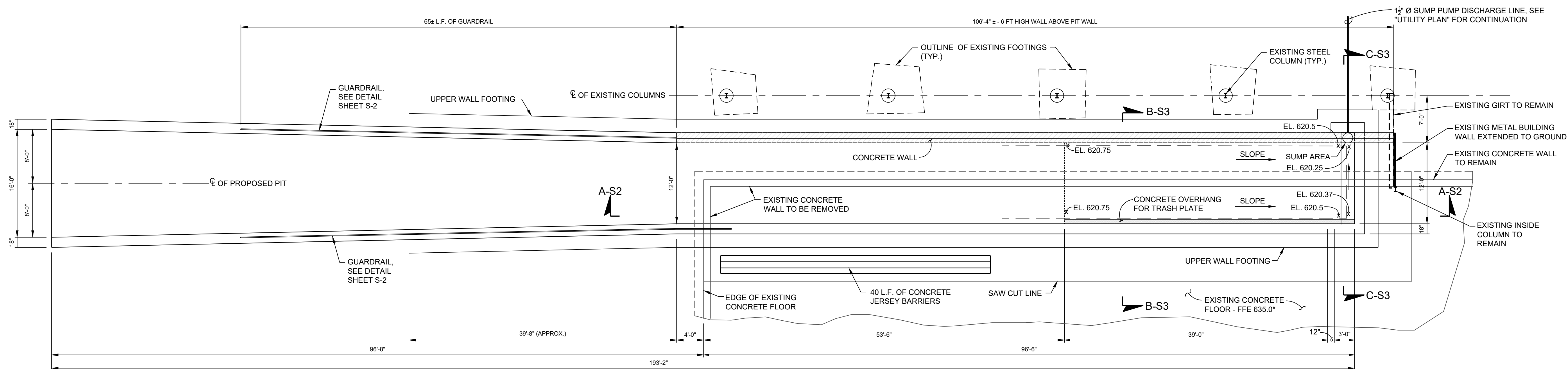
PROJECT **18-142**

DATE **9-16-19**

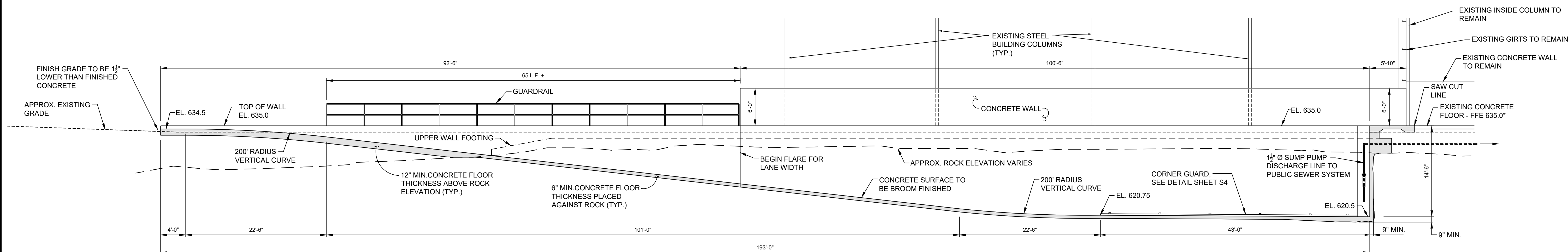
SHEET **C-5**



PURPOSE FOR ISSUE: PRELIMINARY



PLAN OF LOADING PIT



SECTION THRU LOADING PIT

REVISIONS		DESCRIPTION
NO.	DATE	BY

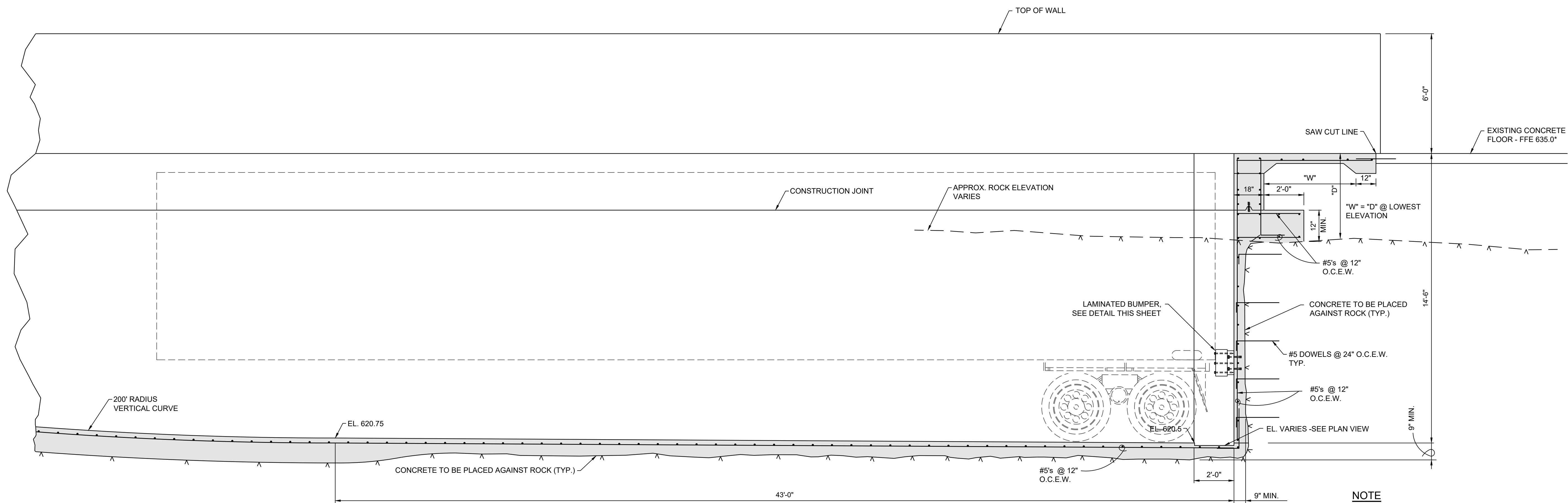
DESIGNER DKH
 REVIEWER JLR

PROJECT 18-142

DATE 9-16-19

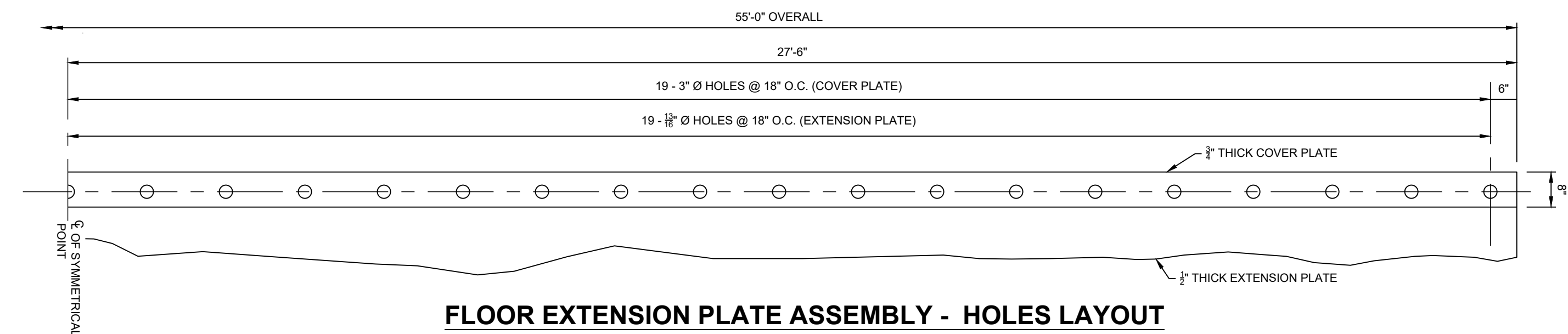
SHEET S-1



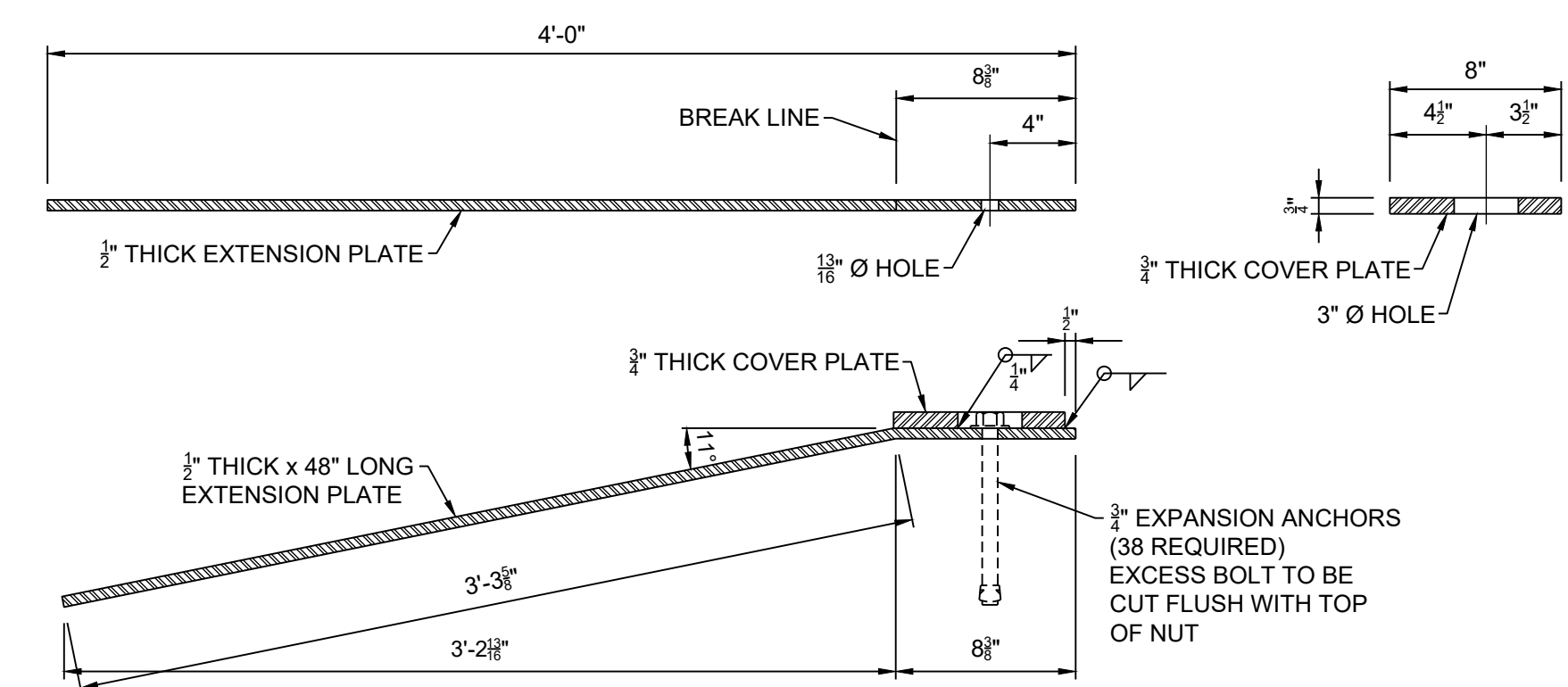


SECTION A-S2

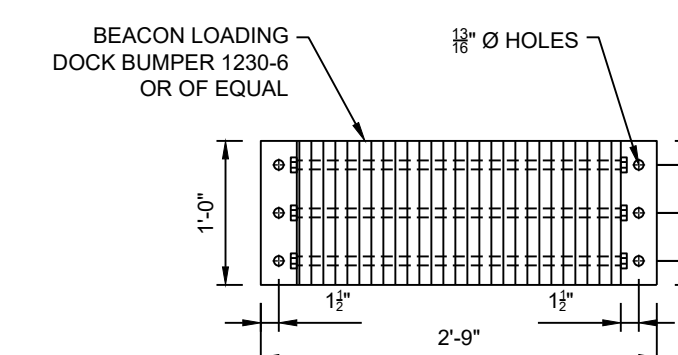
NOTE
EXISTING STRUCTURES OMITTED FOR
CLARITY OF NEW CONSTRUCTION



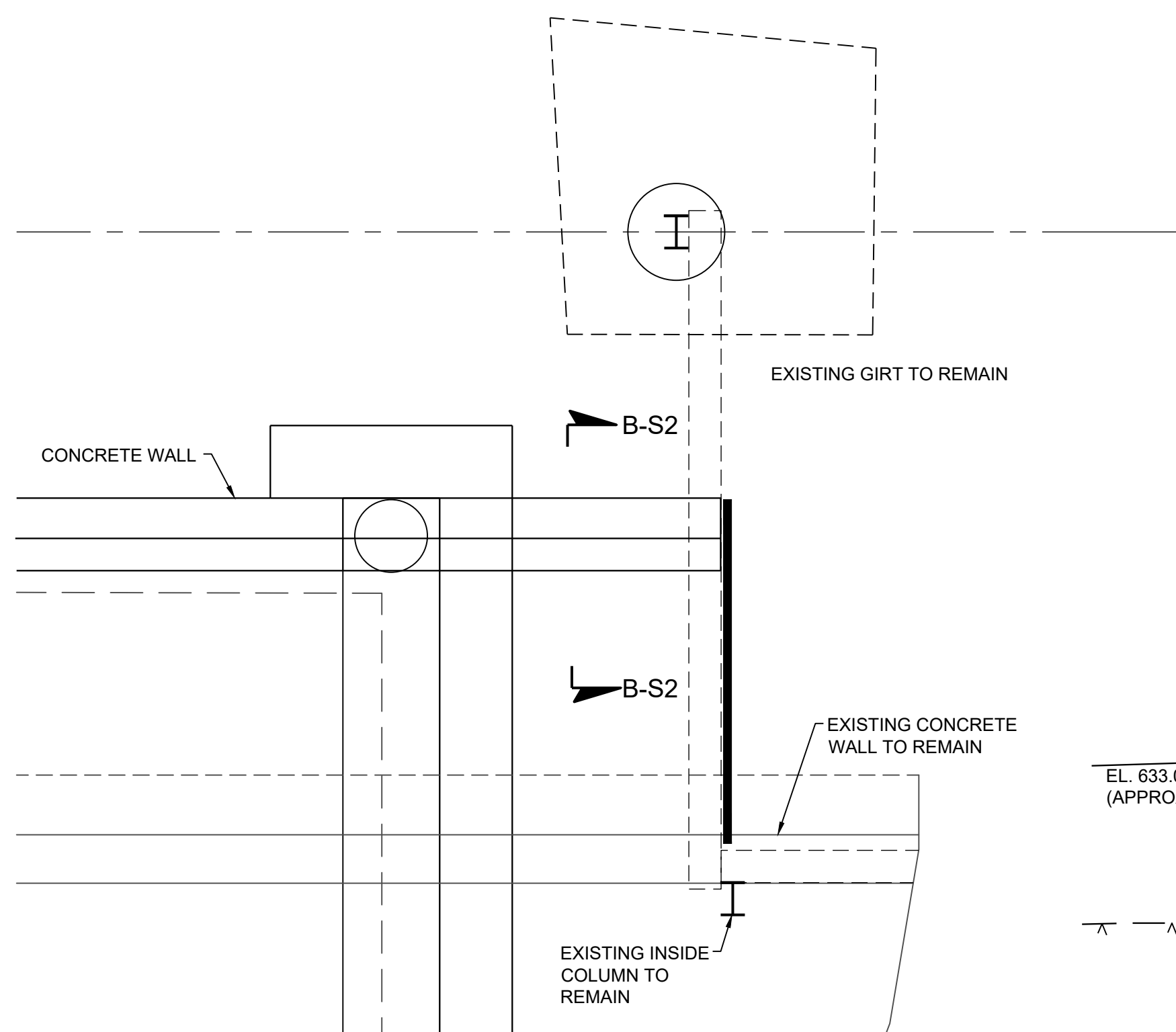
FLOOR EXTENSION PLATE ASSEMBLY - HOLES LAYOUT



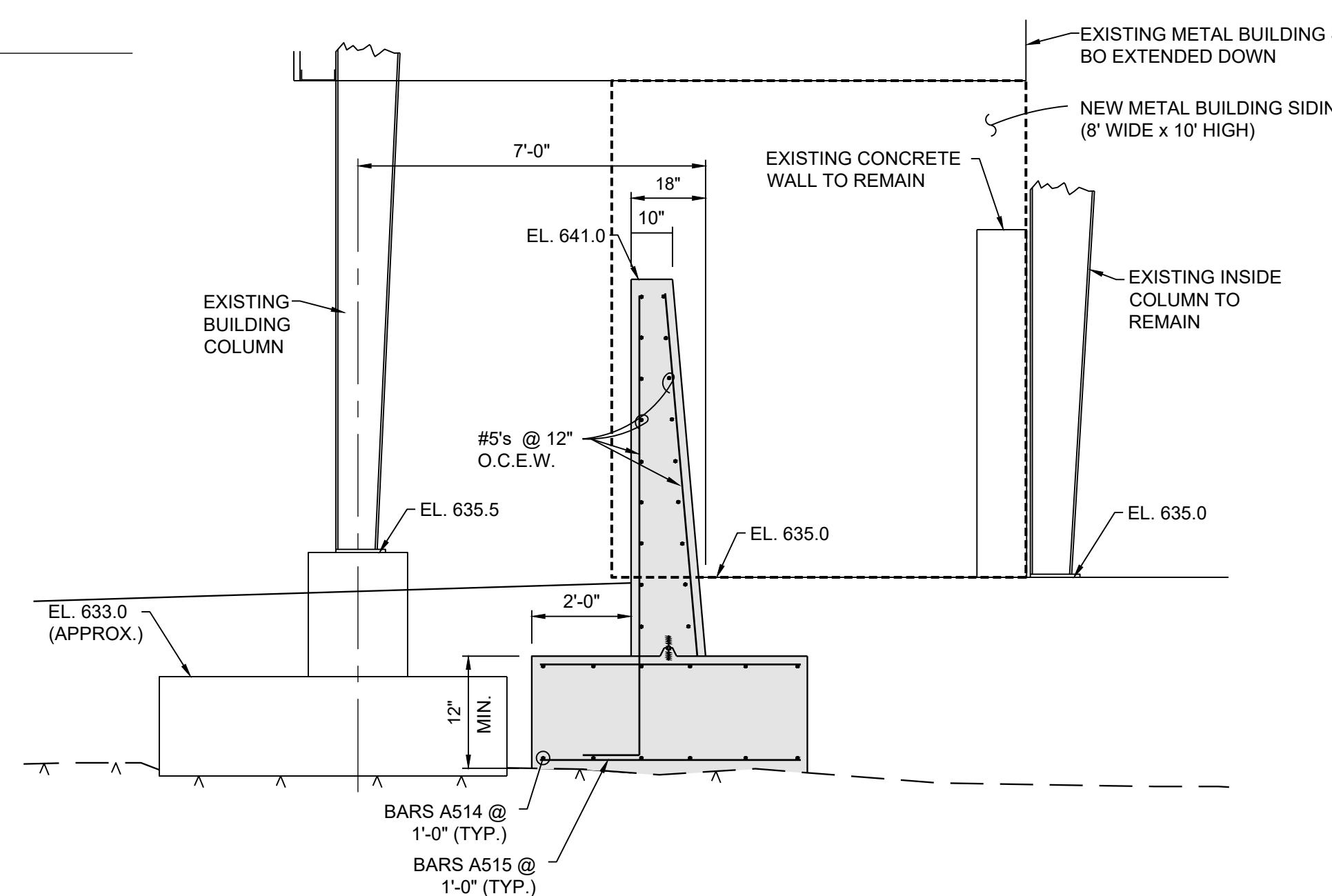
FLOOR EXTENSION PLATE ASSEMBLY



LAMINATE BUMPER



WALL PLAN OUTSIDE OF PIT



SECTION B-S2

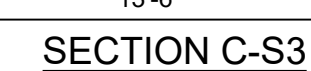
NO.	DATE	BY	DESCRIPTION

DESIGNER DKH
REVIEWER JLR

PROJECT 18-142

DATE 9-16-19

SHEET S-2



PURPOSE FOR ISSUE: PRELIMINARY



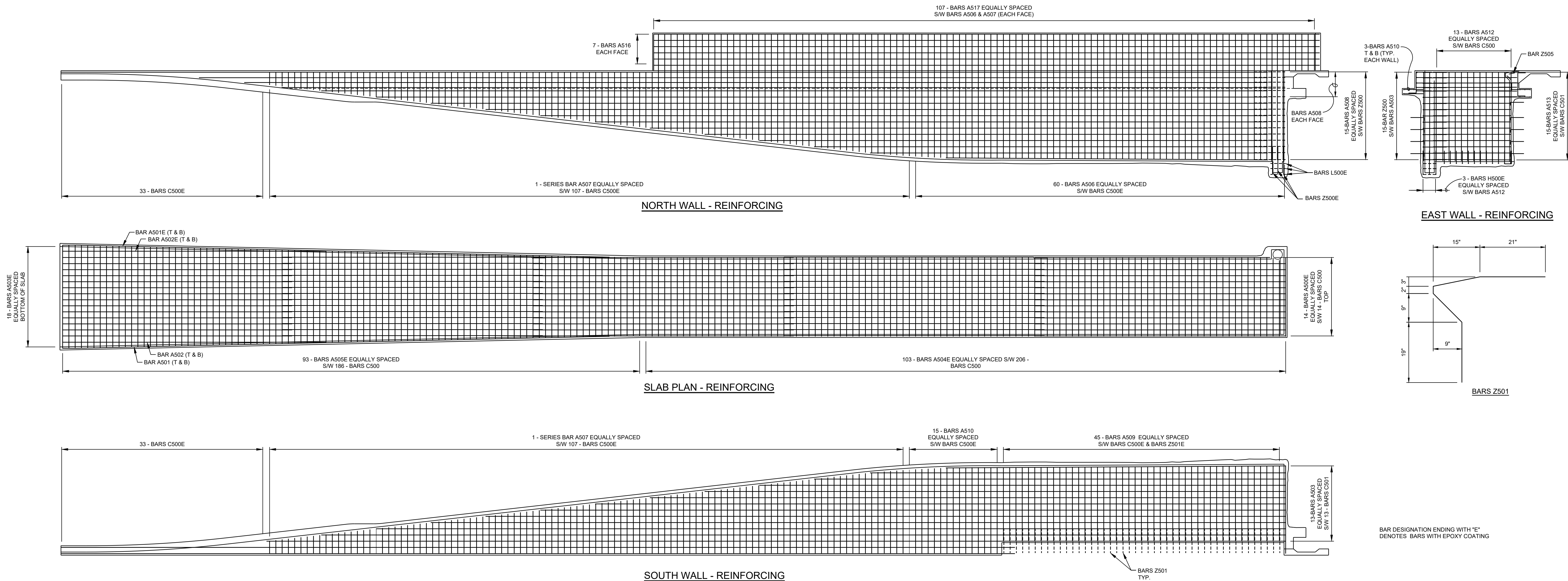
REVISIONS		NO.	DATE	BY	DESCRIPTION

DESIGNER DKH
REVIEWER JLR

PROJECT 18-142

DATE 9-16-19

SHEET S-4



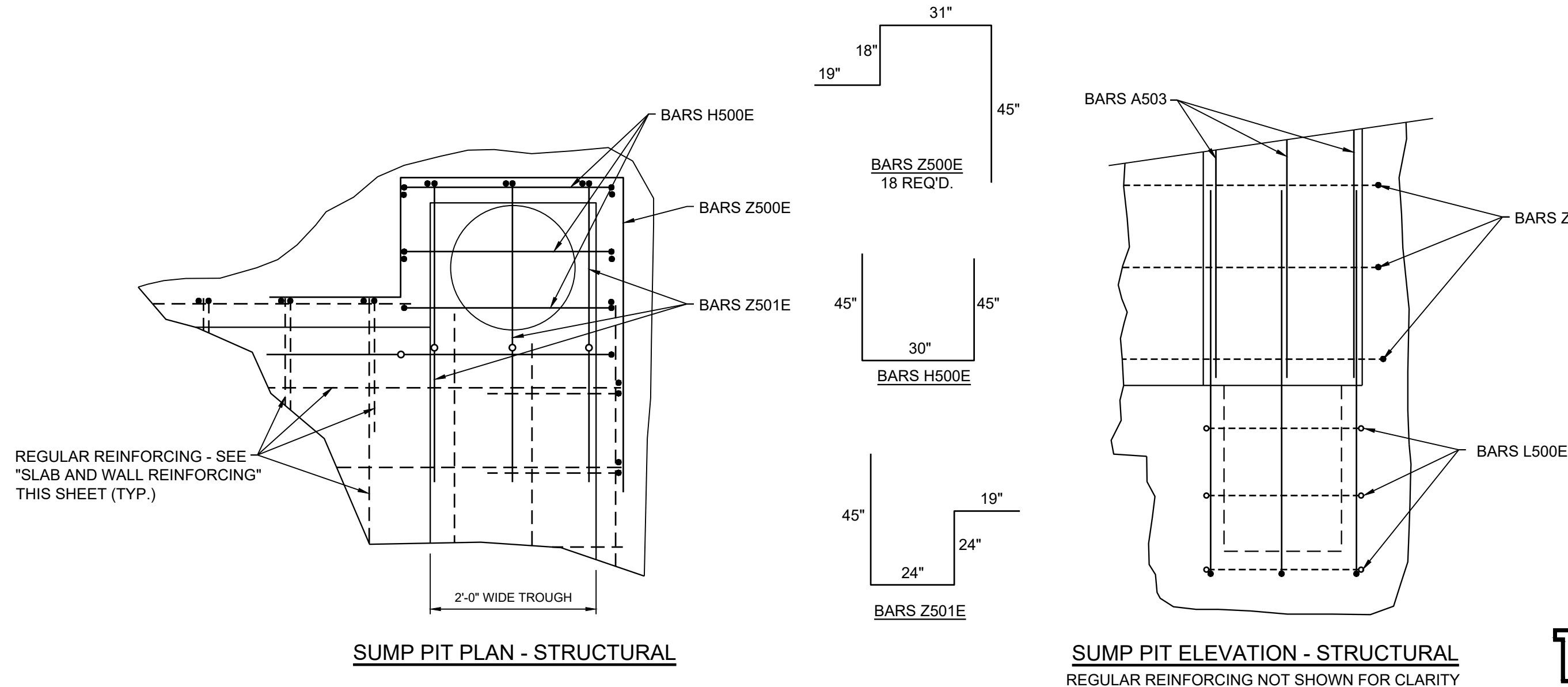
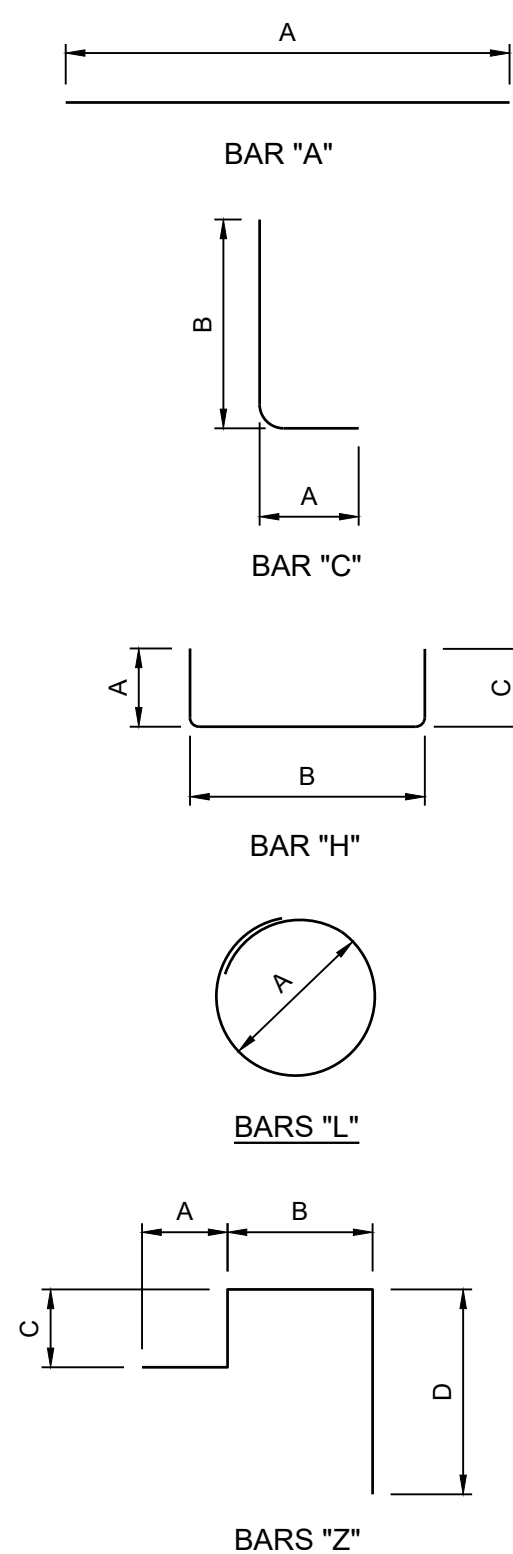
BAR DESIGNATION ENDING WITH "E"
DENOTES BARS WITH EPOXY COATING

WASTE PIT SLAB						
BAR	SIZE	NO REQD	BENDING DIMENSIONS			
			A	B	C	D
A500E	5	14	203'-0"			203'-0"
A501E	5	4	88'-6"			88'-6"
A502E	5	4	42'-0"			42'-0"
A503E	5	18	50'-0"			50'-0"
A504E	5	103	12'-6"			12'-6"
A505E	5	93	SERIES			SERIES
C500E	5	404	0'-10"	2'-3"		3'-1"
H500E	5	3	3'-9"	2'-6"	3'-9"	10'-0"
L500E	5	3	2'-0"			7'-8"
TOTAL WT.						8600 LBS

WASTE PIT NORTH WALL						
BAR	SIZE	NO REQD	BENDING DIMENSIONS			
			A	B	C	D
A506	5	56	13'-11"			13'-11"
A507	5	1	SERIES			834'-0"
A508	5	1	SERIES			2317'-0"
A514	5	6	146'-0"			146'-0"
A515	5	196	3'-2"			3'-2"
A516	5	12	106'-0"			106'-0"
A517	5	214	8'-0"			8'-0"
Z500E	5	15	1'-7"	2'-7"	1'-6"	3'-9"
TOTAL WT.						8915 LBS

WASTE PIT SOUTH WALL						
BAR	SIZE	NO REQD	BENDING DIMENSIONS			
			A	B	C	D
A400	4	6	146'-0"			146'-0"
A401	4	98	8'-6"			8'-6"
A509	5	46	12'-0"			12'-0"
A510	5	10	13'-9"			13'-9"
A507	5	1	SERIES			SERIES
A514	5	6	146'-0"			146'-0"
A515	5	196	3'-2"			3'-2"
Z501	5	45	SEE DRAWING			5'-10"
TOTAL WT.						4561 LBS

WASTE PIT EAST WALL						
BAR	SIZE	NO REQD	BENDING DIMENSIONS			
			A	B	C	D
A512	5	13	14'-2"			14'-2"
A513	5	15	12'-6"			12'-6"
C501	5	18	2'-0"	2'-0"		4'-0"
TOTAL WT.						463 LBS

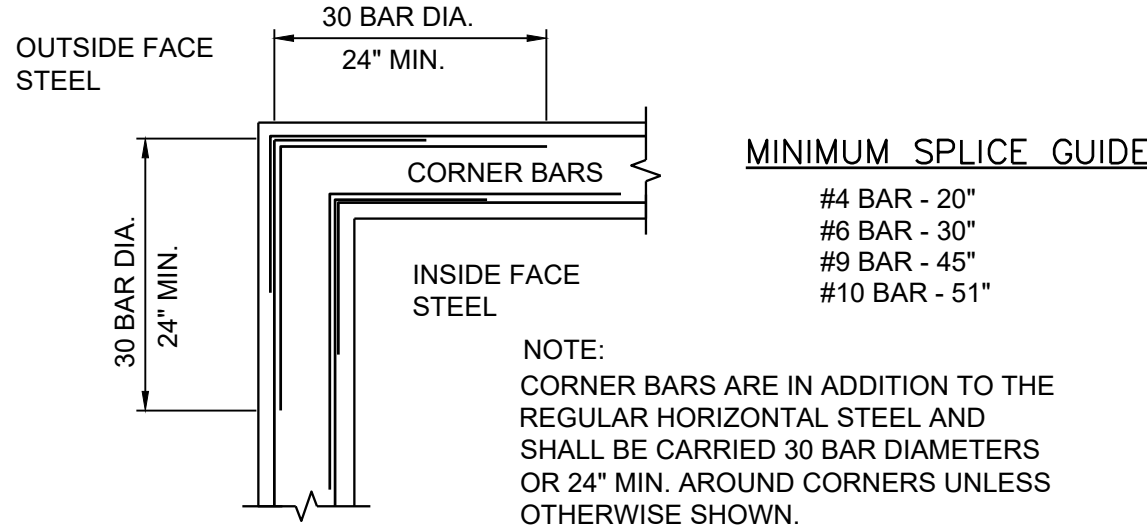


REINFORCED CONCRETE

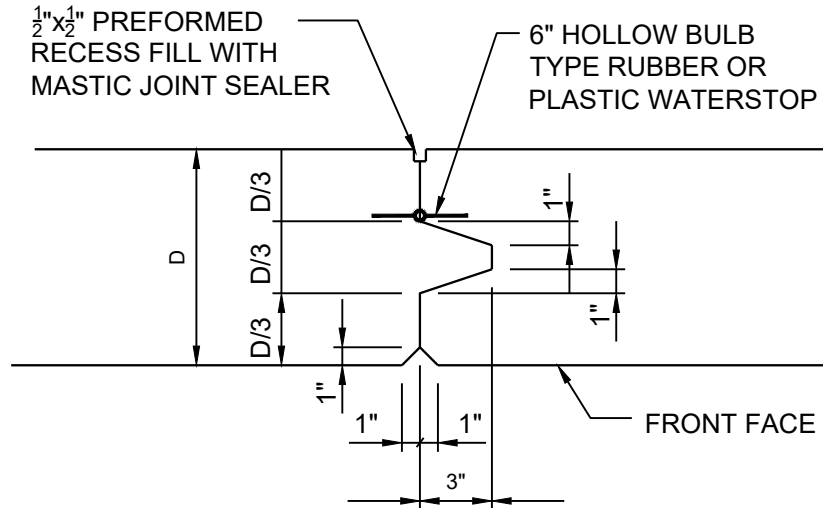
- 1) REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60
- 2) THE COMPRESSIVE STRENGTH AT 28 DAYS OF ALL CAST-IN-PLACE CONCRETE SHALL BE 5000 PSI.
- 3) ALL CONCRETE IS TO HAVE A MAXIMUM W/C RATIO OF 0.40 (INCLUDING POZZOLANS). AGGREGATE SIZE TO BE 3/4". ENTRAINED AIR CONTENT 6% (+-1 1/2%)
- 4) THE MAXIMUM PERCENTAGE OF POZZOLANS, INCLUDING FLY ASH AND SILICA FUME, AND SLAG CEMENT, SHALL BE IN ACCORDANCE WITH:
- 4)1) THE MAXIMUM PERCENTAGE LIMITS IN THE TABLE SHALL INCLUDE THE FLY ASH OR OTHER POZZOLAANS, SLAG CEMENT, AND SILICA FUME USED IN THE MANUFACTURE OF ASTM C595 ANS C1157 BLENDED CEMENTS.
- 4)2) THE INDIVIDUAL LIMITS IN THE TABLE SHALL APPLY REGARDLESS OF THE NUMBER OF CEMENTITIOUS MATERIALS IN A CONCRETE MIXTURE.
- 4)3)

CEMENTITIOUS MATERIAL	MAXIMUM PERCENT OF TOTAL CEMENTITIOUS MATERIALS BY MASS
FLY ASH OR OTHER POZZOLANS CONFORMING TO ASTM C618	25
SLAG CEMENT CONFORMING TO ASTM C989	50
SILICA FUME CONFORMING TO ASTM C1240	10
TOTAL OF FLY ASH OR OTHER POZZOLANS AND SILICA FUME	35
TOTAL OF FLY ASH OR OTHER POZZOLANS, SLAG CEMENT, AND SILICA FUME	50

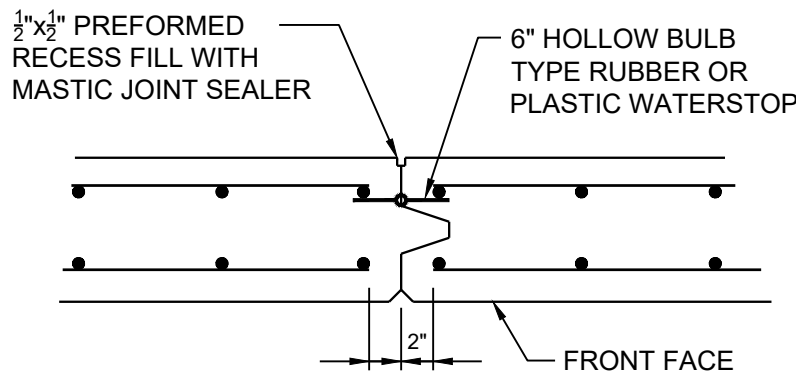
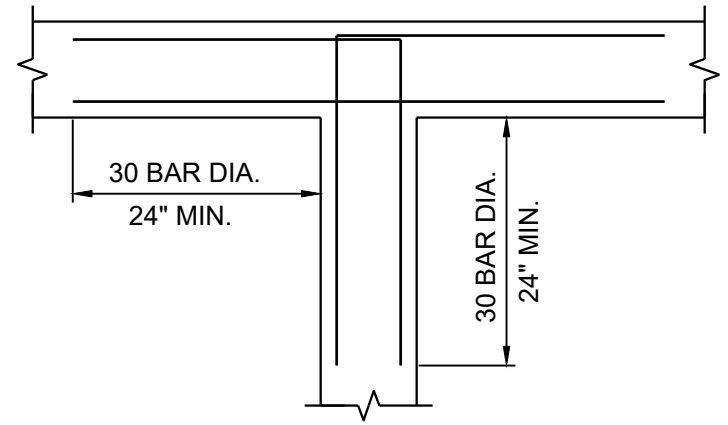
- 5) AGGREGATE SHALL CONFORM TO ASTM C33 AND SHALL BE NON-ALKALI-SILIKA REACTIVE. CEMENT SHALL BE PORTLAND, TYPE II, ASTM C150. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260. OTHER ADMIXTURES SHALL CONFORM TO ASTM C494. DO NOT USE ADMIXTURES CONTAINING CALCIUM CHLORIDE. MIXING WATER SHALL BE POTABLE. MIX SHALL BE TRANSIT MIX AS PER ASTM C94.
- 6) SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONCE A DAY, AND NOT LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE, AND NOT LESS THAN ONCE FOR EACH 5,000 SQUARE FEET OF SURFACE AREA FOR SLABS AND WALLS.
- 7) IF THE TOTAL VOLUME OF CONCRETE IS SUCH THAT THE FREQUENCY OF TESTING REQUIRED BY THE ABOVE PARAGRAPH WOULD PROVIDE LESS THAN FIVE STRENGTH TESTS FOR A GIVEN CLASS OF CONCRETE, TESTS SHALL BE MADE FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH OF FEWER THAN FIVE BATCHES ARE USED.
- 8) AN EVAPORATION CONTROL AGENT (CURING COMPOUND) SHALL BE APPLIED TO THE SURFACE OF THE NEWLY CAST SLABS AT THE RATE SPECIFIED BY THE MANUFACTURER. SAWCUT TYPE CONTROL JOINTS IN CONCRETE SLABS SHALL BE CUT AS SOON AS THE CONCRETE CAN BE SAWED WITHOUT CAUSING THE EDGES TO RAVEL AND IN NO CASE SHALL BE LATER THAN 12 HOURS AFTER THE SLAB IS PLACED.
- 9) LAP SPLICES FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318, UNLESS NOTED OTHERWISE.
- 10) ALL CONCRETE PLACED SHALL BE VIBRATED BY MECHANICAL VIBRATORS
- 11) CORNERS OF ALL EXPOSED WALLS SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE.
- 12) FINISHED CONCRETE SLAB SHALL HAVE A HARD TROWELED FINISH IN ACCORDANCE WITH ACI 117.
- 13) THE LONGITUDINAL REINFORCING STEEL IN WALLS AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS. SEE STRUCTURAL DETAILS.
- 14) REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE COVER:
- | | |
|---------------|---|
| WALLS | 3" CAST AGAINST EARTH
2" INTERIOR FACE |
| SLAB ON GRADE | 1" TOP STEEL
3" CAST AGAINST EARTH |
| FOOTINGS | 2" FORMED EDGES
3" CAST AGAINST EARTH |



CORNER BAR DETAILS



TYPICAL KEYWAY DETAIL
NO SCALE



NOTE: STOP KEYWAY 1'-0" BELOW TOP OF WALL

CONTRACTION JOINT
NO SCALE

CONCRETE NOTES AND DETAILS

OF
SOLID WASTE LOADING PIT
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
WASTE COLLECTION DEPT.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY

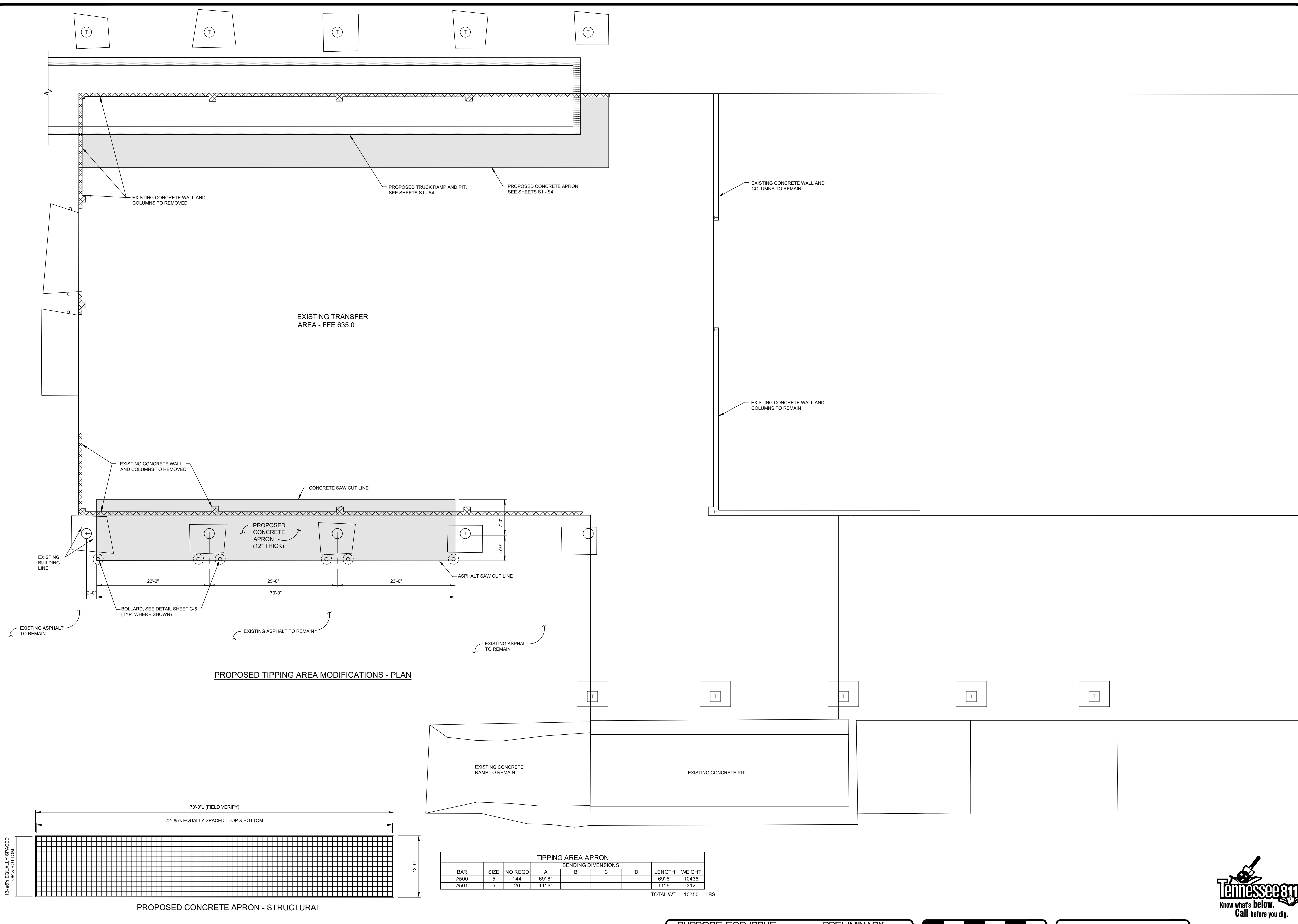
REVISIONS		DESCRIPTION	
NO.	DATE	BY	DESCRIPTION

DESIGNER DKH
REVIEWER JLR

PROJECT 18-142

DATE 9-16-19

SHEET S-5



CSR
Engineering

CSR Engineering, Inc.
1116 Main Street
Pleasant View, TN 37146
P: 615.212.2389
F: 615.246.3815
www.csrengineers.com

ROBERTSON COUNTY
TENNESSEE
1796

AGRICULTURE
INDUSTRY

TIPPING AREA BUILDING MODIFICATIONS

SOLID WASTE LOADING PIT
OF
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
WES COULD LAND RD.
SPRINGFIELD, TN 37172
ROBERTSON COUNTY

SEAL OF JASON LEE RENOLD
REGISTERED ENGINEER
AGRICULTURE
STATE OF TENNESSEE
NO. 10872

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNER DKH

REVIEWER JLR

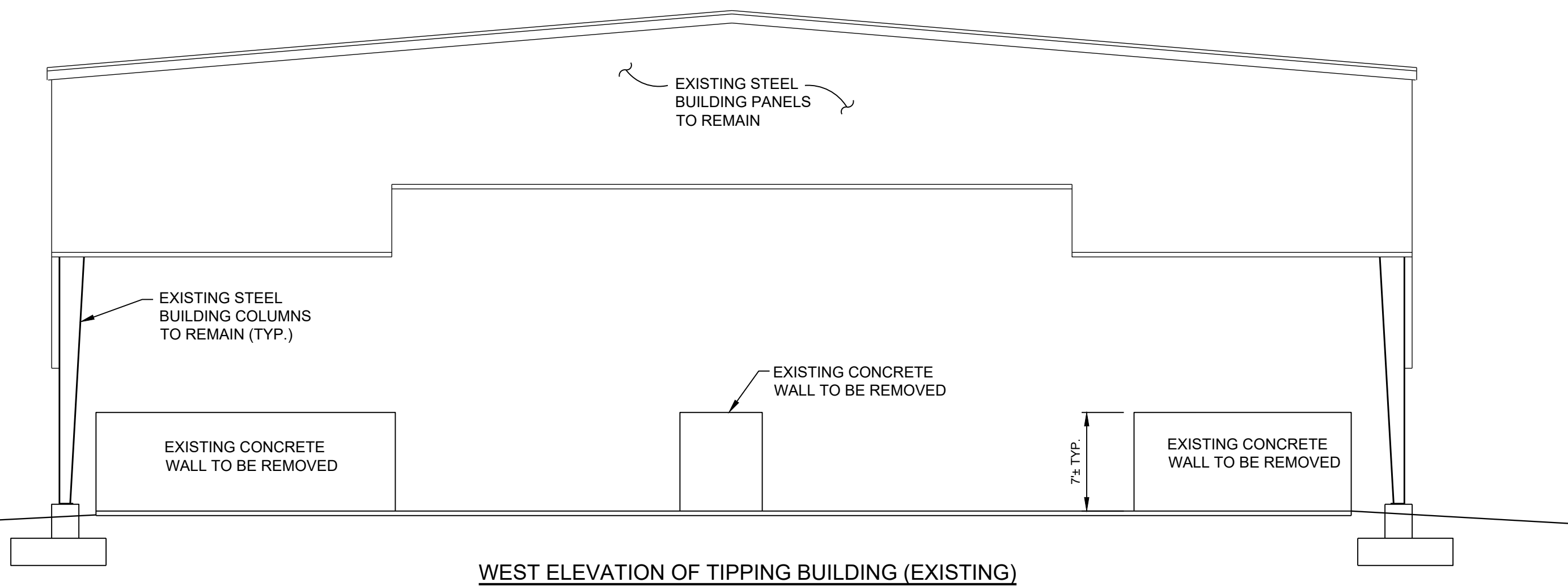
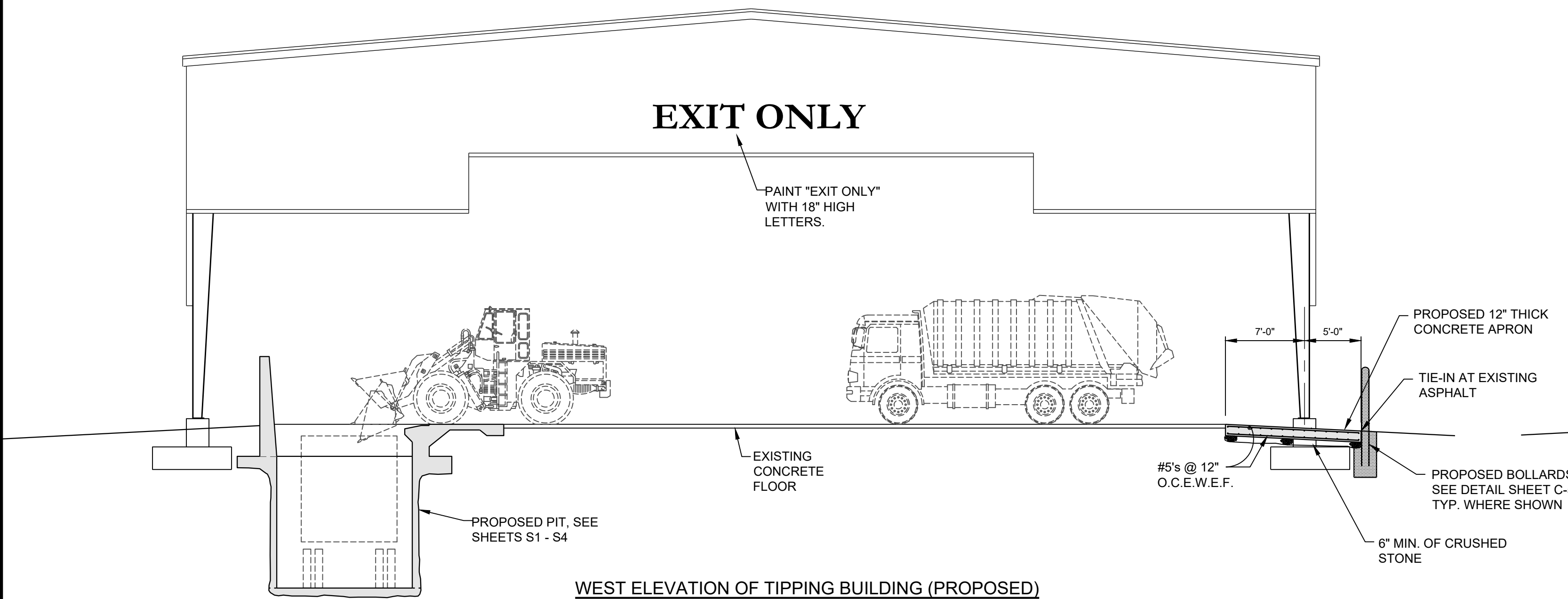
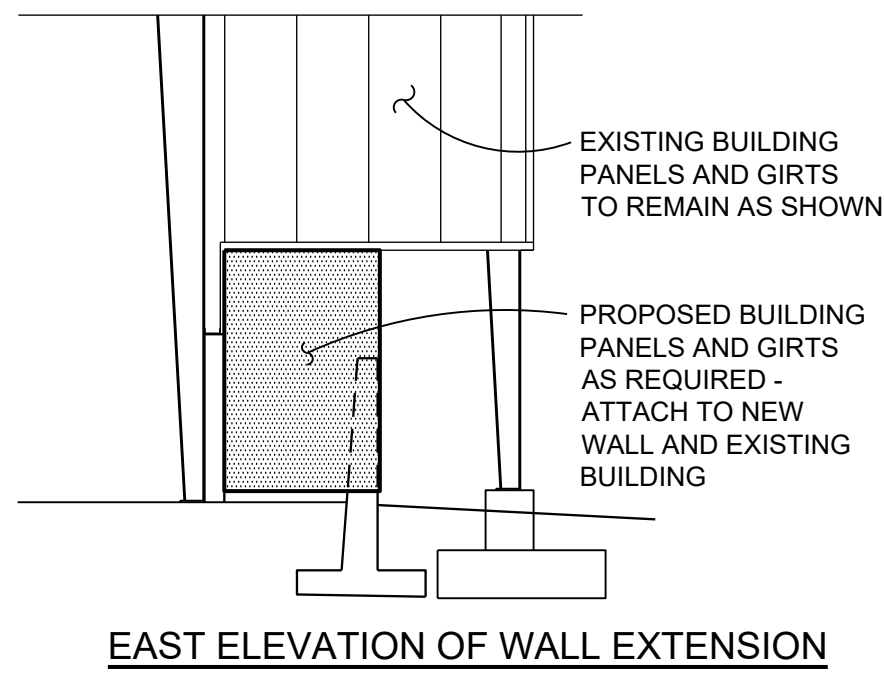
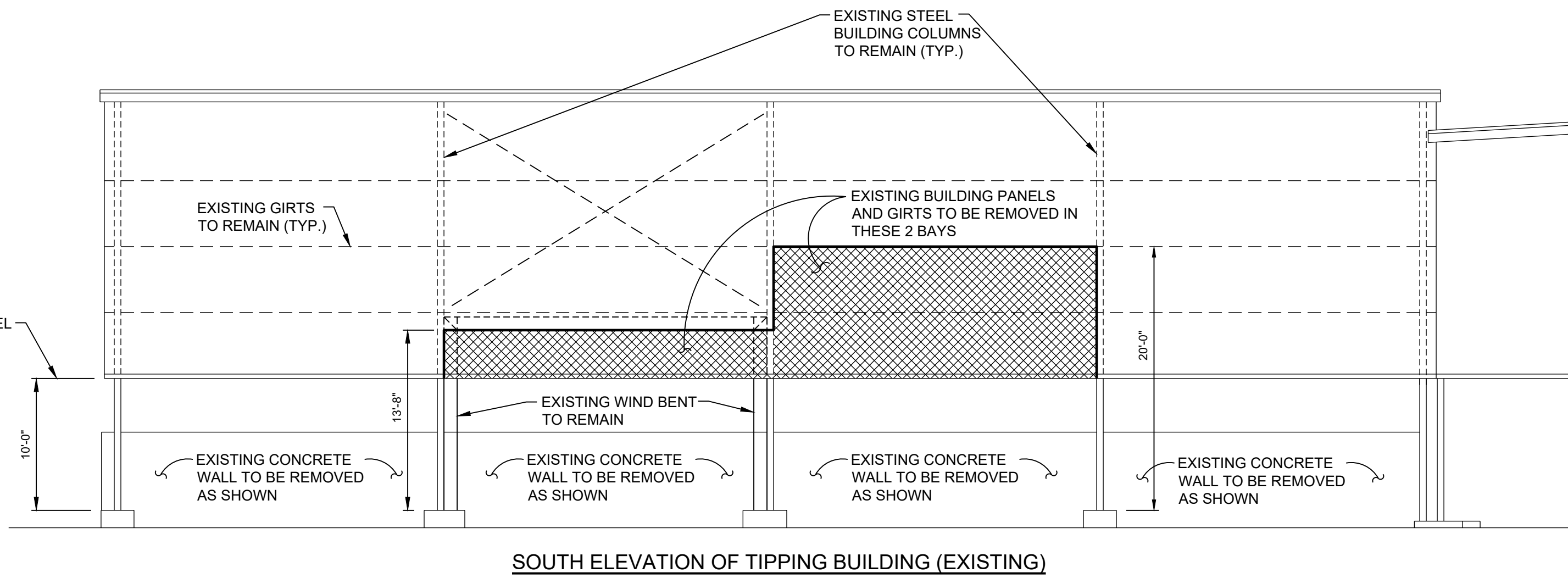
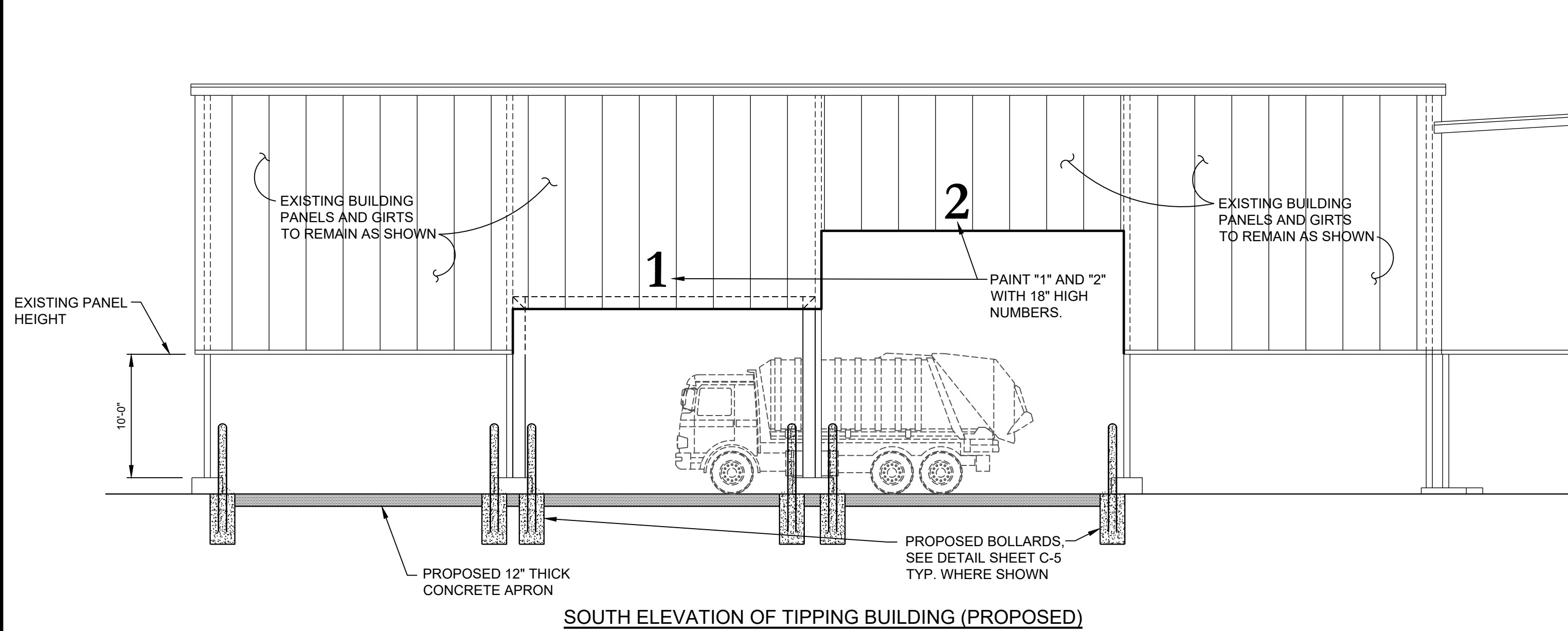
PROJECT 18-142

DATE 9-16-19

SHEET S-6

Know what's below.
Call before you dig.

PURPOSE FOR ISSUE: PRELIMINARY



NO.	DATE	BY	DESCRIPTION

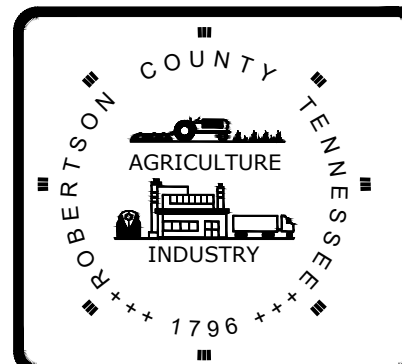
DESIGNER **DKH**
 REVIEWER **JLR**

PROJECT **18-142**

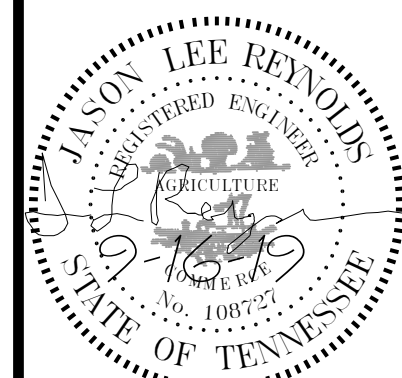
DATE **9-16-19**

SHEET **S-7**





**TIPPING AREA BUILDING
DEMO PLAN**
SOLID WASTE LOADING PIT
FOR
ROBERTSON COUNTY
SOLID WASTE & RECYCLING
WES COLEMAN, JR.,
SPRINGFIELD, TN 37172
ROBERTSON COUNTY



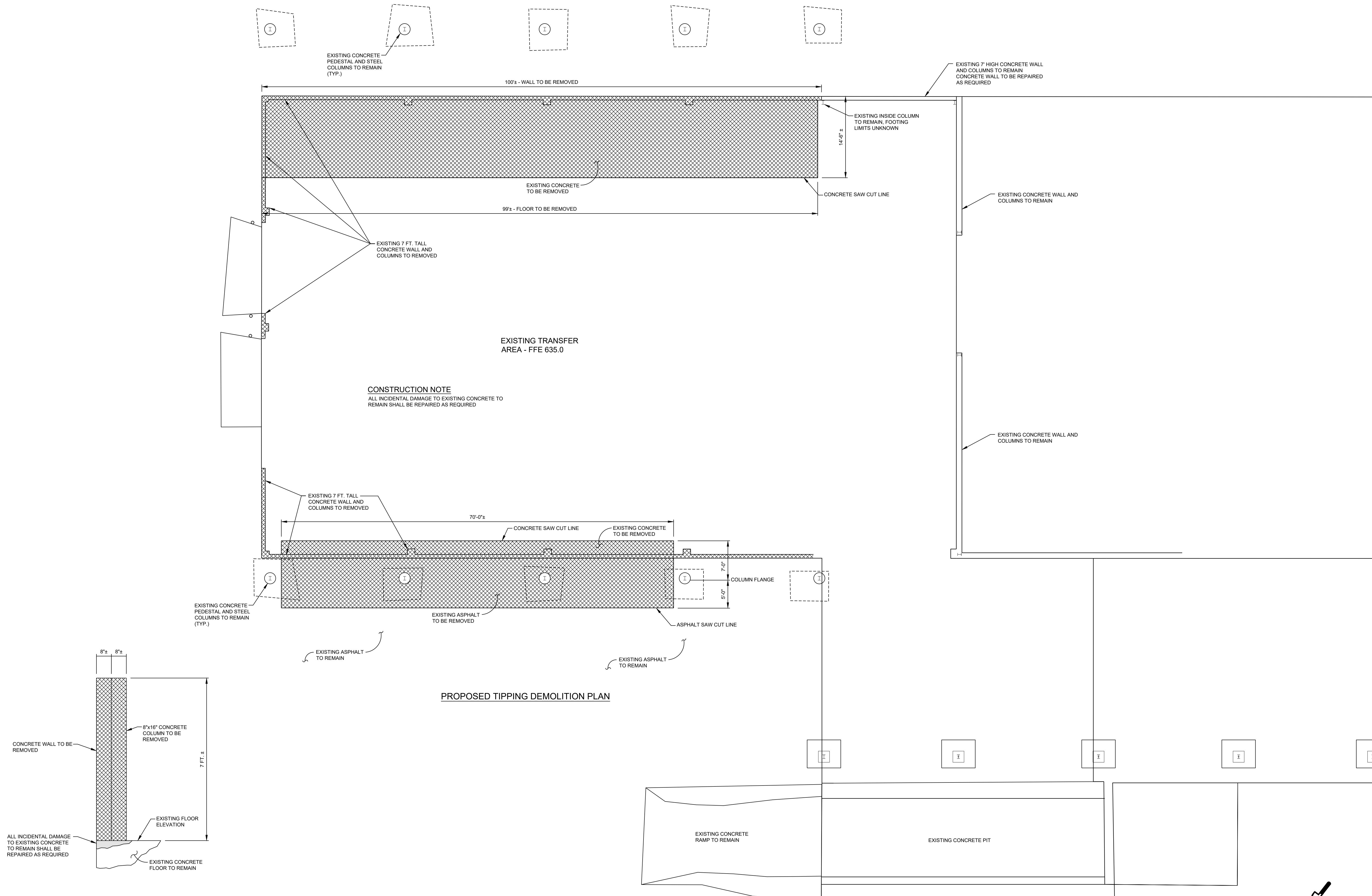
REVISIONS		NO.	DATE	BY	DESCRIPTION

DESIGNER **DKH**
REVIEWER **JLR**

PROJECT **18-142**

DATE **9-16-19**

SHEET **S-9**



WALL AND COLUMN REMOVAL DETAIL



