CONTRACT AND SPECIFICATIONS

For

Avon Stormwater Improvements South Lebanon Township, Lebanon County

Contract C-5-22-SLT

MAY, 2022

REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON 137 W Penn Avenue Cleona, Pennsylvania

Community Development Block Grant Small Communities Program

Administered Through:

The Redevelopment Authority of the County of Lebanon Karen Raugh, Executive Director 137 W Penn Avenue Cleona, PA 17042 717 273-9326

STOP

EXTREMELY IMPORTANT

Before proceeding further you MUST complete this form and return it via e-mail to the Redevelopment Authority at the address listed below. ALL vendors who obtain these plans $\underline{\text{MUST}}$ register with the Redevelopment Authority.

<u>IF YOU DO NOT COMPLETE THIS FORM AND RETURN IT TO THE REDEVELOPMENT AUTHORITY YOUR BID WILL NOT BE CONSIDERED.</u>

Company Name:	
Company Address:	
Contact Name:	
Contact Telephone:Contact Fax:	
Contact Email:	
Project Name: <u>C-5-22-SLT</u>	
RETURN THIS FORM BY E-MAIL TO: dlyons@lebanoncountyredevelopment.com	
Once this form is received by the Redevelopment Authority you will be added to the list of fi received the RFP and who are authorized to submit a bid for this solicitation. You will receive from the Redevelopment Authority acknowledging receipt of you registration.	
If you have any questions please contact the Redevelopment Authority staff member reference solicitation.	ced in the
FOR AUTHORITY USE ONLY	
The Redevelopment Authority hereby acknowledges receipt of your registration for the above solicitation.	e referenced
Received by:	
Date Received:	

Contract Documents for Site Preparation

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INVITATION FOR BIDS

The Redevelopment Authority of the County of Lebanon will receive bids for Stormwater Improvements in Avon, South Lebanon Township and Street Improvements on East Blackberry Street in Jonestown Borough, Lebanon County, Construction Contract Numbers C-5-22-SLT and C-5-22-JB, respectively, until 2:00 p.m. prevailing time, on the 31st day of May, 2022, at the offices of the Authority at 137 W Penn Avenue, Cleona, PA 17042. All bids will be publicly opened and read aloud at that time.

Bids are invited for Contract Numbers:

C-5-22-SLT Avon Stormwater Improvements, South Lebanon Township
C-5-22-JB Street Reconstruction, East Blackberry Street, Jonestown Borough

All contracts will be bid and awarded independently; bidders may bid on one or both of the contracts as they choose.

A pre-bid conference will be held for the Avon Stormwater Improvements project on Thursday, May 19, 2022 at 8am at the South Lebanon Township building at 1800 S 5th Avenue, Lebanon, PA 17042.

Contract documents, including Drawings and Technical Specifications, are available free of charge online at www.lebanoncountyredevelopment.com.

When downloading online specifications, prospective bidders will be required to register with the Authority by e-mail per the instructions with the bid specifications. Addenda, if any, will be issued only to those persons whose name and address are on record with the owner as having obtained the Contract Documents.

A Bid Bond, in the form provided in the documents, in an amount equal to ten percent (10%) of the bid shall be submitted with each bid.

Attention of the bidders is called to the fact that the Contract Documents contain information pertaining to: Davis Bacon Federal Prevailing Wage Rates, Non Discrimination Requirements, Equal Opportunity goals, and MBE/WBE requirements.

The owner reserves the right to reject any or all bids or to waive any informality in the bidding.

Bids may be held by the owner for a period not to exceed sixty (60) days from the date of opening for the purpose of reviewing the bids and investigating the qualifications of bidders prior to awarding the contract.

Karen Raugh Executive Director

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INSTRUCTION TO BIDDERS

1. USE OF SEPARATE BID FORMS

These Contract Documents include a complete set of bidding and Contract forms which are for the convenience of bidders and are not to be detached from the Contract Documents, filled out, or executed. Separate copies of Bid Forms are furnished for that purpose – see "Bid Submission Packet" at the end of this document.

2. INTERPRETATIONS OR ADDENDA

No oral interpretation will be made to any Bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to the Local Public Agency. Any inquiry received seven or more days prior to the date fixed for opening of Bids will be given consideration. Every interpretation made to a Bidder will be in the form of an Addendum to the Contract Documents and, when issued, will be on file in the office of the Local Public Agency and the office of the Engineer at least five days before Bids are opened. In addition, all Addenda will be mailed to each person holding Contract Documents, but it shall be the Bidder's responsibility to make inquiry as to the Addenda issued. All such Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda, whether or not received by the Bidders.

3. Inspection of Site

Each Bidder should visit the site of the proposed work and fully acquaint himself with the existing conditions there relating to construction and labor, and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The Bidder should thoroughly examine and familiarize himself with the Drawings, Technical Specifications, and all other Contract Documents. The Contractor by the execution of the Contract shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal instrument or to visit the site and acquaint himself with the conditions there existing, and the Local Public Agency will be justified in rejecting any claim based on facts regarding which he should have been on notice as a result thereof.

4. ALTERNATIVE BIDS

No alternative bids will be considered unless alternative bids are specifically requested.

5. BIDS

- a. All Bids must be submitted on forms supplied by the Local Public Agency and shall be subject to all requirements of the Contract Documents, including the Drawings, and these INSTRUCTIONS TO BIDDERS. All Bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Bid Form by the Bidder.
- b. Bid Documents including the Bid, the Bid Guaranty, the Non Collusion Affidavit, the Statement of Bidder's Qualifications (if requested) and all addenda, if any, shall be enclosed in an envelope. The envelope should be such to provide adequate security for the bidding documents. It shall be sealed and clearly labeled with the words ("Site Preparation Bid Documents"), project number, name of Bidder, and date and time of bid opening in order to guard against premature opening of the bid.
- c. The Local Public Agency may consider irregular any Bid on which there is an alteration of or departure from the Bid Form hereto attached and at its option may reject the same.

d. When the Contract is awarded, it will be awarded by the Local Public Agency to a responsible Bidder on the basis of the lowest Bid and the selected Alternative Bid items, if any. The Contract will require the completion of the work according to the Contract Documents.

6. BID GUARANTY

- a. The bid must be accompanied by a Bid Guaranty which shall not be less than 10 percent (10%) of the amount of the Bid. At the option of the Bidder, the Guaranty may be a certified check, bank draft, negotiable U.S. Government Bonds (at par value), or a Bid bond in the form attached. The Bid bond shall be secured by a Guaranty or a surety company listed in the latest issue of U.S. Treasury Circular 570. The amount of such Bid bond shall be within the maximum amount specified for such Company in said Circular 570. No Bid will be considered unless it is accompanied by the required Guaranty. Certified check or bank draft must be made payable to the order of the Redevelopment Authority of the County of Lebanon. Cash deposits will not be accepted. The Bid Guaranty shall ensure the execution of the Agreement and the furnishing of the surety bond or bonds by the successful Bidder, all as required by the Contract Documents.
- b. Revised Bids submitted before the opening of Bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original Bid, must have the Bid Guaranty adjusted accordingly; otherwise the Bid will not be considered.
- c. Certified checks or bank drafts, or the amount thereof, Bid bonds, and negotiable U.S. Government bonds of unsuccessful Bidders will be returned as soon as practical after the opening of the Bids.

7. COLLUSIVE AGREEMENTS

- a. Each Bidder submitting a Bid to the Local Public Agency for any portion of the work contemplated by the documents on which bidding is based shall execute and attach thereto, an affidavit substantially in the form herein provided, to the effect that he has not colluded with any other person, firm, or corporation in regard to any Bid submitted.
- b. Before executing any subcontract the successful Bidder shall submit the name of any proposed subcontractor for prior approval and an affidavit substantially in the form provided in Section 103, SUBCONTRACTS UNDER GENERAL CONDITIONS, PART I.

8. STATEMENT OF BIDDER'S QUALIFICATIONS

Each Bidder shall submit on the form furnished for that purpose (a copy of which is included in the Contract Documents), a statement of the Bidder's qualifications, his experience record in constructing the type of Improvements embraced in the Site Preparation, and his organization and equipment available for the work contemplated; and, when specifically requested by the Local Public Agency, a detailed financial statement. The Local Public Agency shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract, and the Bidder shall furnish the Local Public Agency all such information and data for this purpose as it may request. The right is reserved to reject any Bid where an investigation of the available evidence or information does not satisfy the Local Public Agency that the Bidder is qualified to carry out properly the terms of the Contract.

9. UNIT PRICES

The unit price for each of the several items in the proposal of each Bidder shall include its prorata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price Bid represents the Total Bid. Any Bid not conforming to this requirement may be rejected as informal. The special attention of all Bidders is called to this provision, for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor extra compensation allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items of work (i.e., difference in cost) shall not increase or decrease the original contract price by more than twenty-five (25) percent, except for work not covered in the Drawings and Technical Specifications as provided for in the Section - CHANGES IN THE WORK UNDER GENERAL CONDITIONS, PART I.

10. CORRECTIONS

Erasures or other changes in the Bids must be explained or noted over the signature of the Bidder, and initialed.

11. TIME FOR RECEIVING BIDS

- a. Bids received prior to the advertised hour of opening will be securely kept, sealed. The officer whose duty it is to open them will decide when the specified time has arrived, and no Bid received thereafter will be considered; except that when a Bid arrives by mail after the time fixed for opening, but before the reading of all other Bids is completed, and it is shown to the satisfaction of the Local Public Agency that the non-arrival on time was due solely to delay in the mails for which the Bidder was not responsible, such Bid will be received and considered.
- b. Bidders are cautioned that, while telegraphic modifications of Bids may be received as provided above, such modifications, if not explicit and if in any sense subject to misinterpretation, shall make the Bid so modified or amended, subject to rejection.

12. OPENING OF BIDS

At the time and place fixed for the opening of Bids, the Local Public Agency will cause to be opened and publicly read aloud every Bid received within the time set for receiving Bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by representative.

13. WITHDRAWAL OF BIDS

Bids may be withdrawn on written or telegraphic request dispatched by the Bidder in time for delivery in the normal course of business to the time fixed for opening; provided, that written confirmation of any telegraphic withdrawal over the signature of the Bidder is placed in the mail and postmarked prior to the time set for Bid opening. The Bid Guaranty of any Bidder withdrawing his Bid in accordance with the foregoing conditions will be returned promptly.

14. AWARD OF CONTRACT: REJECTION OF BIDS

a. The Contract will be awarded to the responsible Bidder submitting the lowest bid complying with the conditions of the Invitation for Bids. The Bidder to whom the award is made will be notified at the earliest possible date. The Local Public Agency, however, reserves the right to reject any and all Bids and to waive any informality in Bids received whenever such rejection or waiver is in its interest.

b. The Local Public Agency reserves the right to consider as unqualified to do the work of general construction any Bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the Improvements embraced in this Site Preparation Contract.

15. EXECUTION OF AGREEMENT: PERFORMANCE AND PAYMENT BOND

- a. Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the Local Public Agency an Agreement in the form included in the Contract Documents in such number of copies as the Local Public Agency may require. The Owner retains the right to issue extensions to the said ten (10) day filing time as it deems to be in its best interest. When extensions are granted to the time allotted to the Contractor for return of executed Contract Documents, the contract time for completion, as indicated *Special Conditions for Site Preparation Part III*, shall commence no later than 30 days following issuance of the Notice of Award.
- b. Having satisfied all conditions of award as set forth elsewhere in these documents, the successful Bidder shall, within the period specified in paragraph "a" above, furnish a surety bond in a penal sum not less than the amount of the Contract as awarded, as security for the faithful performance of the Contract, and for the payment of all persons, firms or corporations to whom the contractor may become legally indebted for labor, materials, tools, equipment, or services of any nature including utility and transportation services, employed or used by him in performing the work. Such bond shall be in the same form as that included in the Contract Documents and shall bear the same date as, or a date subsequent to, that of the Agreement. The current power of attorney for the person who signs for any surety company shall be attached to such bond. This bond shall be signed by a Guaranty or surety company listed in the latest issue of the U.S. Treasury Circular 570 and the penal sum shall be within the maximum specified for such company in said Circular 570.
- b.1 If any of the work of this contract is to be performed within the right-of-way of the Pennsylvania Department of Transportation, an additional performance bond will be required to obtain the necessary Highway Occupancy Permit. Such performance bond shall be provided by the Contractor on the form provided for that purpose, as shown on pages 23-a. and 23-b. following, and shall bind the Contractor and the relevant Permittee collectively as "Principal" to the Commonwealth of Pennsylvania as "Obligee" in an amount determined by the Pennsylvania Department of Transportation. Such amount is based upon the number of lineal feet of contract work located within the State right-of-way which is in the paved road-way (\$20.00 per l.f.), in a paved or improved shoulder (\$15.00 per l.f.) and off of any paved or improved surface (\$10.00 per l.f.).
- c. The failure of the successful Bidder to execute such Agreement and to supply the required bond or bonds within ten days after the prescribed forms are presented for signature, or within such extended period as the Local Public Agency may grant, based upon reasons determined sufficient by the Local Public Agency, shall constitute a default, and the Local Public Agency may either award the Contract to the next lowest responsible Bidder or re-advertise for Bids, and may charge against the Bidder the difference between the amount of the Bid and the amount for which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the Bid bond. If a more favorable Bid is received by re-advertising, the defaulting Bidder shall have no claim against the Local Public Agency for a refund.

16. WAGES AND SALARIES

a. Attention of Bidders is particularly called to the requirement concerning the payment of not less than the prevailing wage and salary rates specified in the Contract Documents and the conditions of

- employment with respect to certain categories and classifications of employees. (See GENERAL CONDITIONS, PART II.)
- b. The rates of pay set forth under GENERAL CONDITIONS, PART II, are the minima to be paid during the life of the Contract. It is therefore the responsibility of Bidders to inform themselves as to local labor conditions, such as the length of work day and work week, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustments of rates

17. EQUAL EMPLOYMENT OPPORTUNITY

Attention of Bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, creed, color, or national origin. A goal for participation in each trade in all Federal and Federally-assisted construction contracts of 6.9% for females has been set nationally and of 4.8% for minorities has been set for the county. (See GENERAL CONDITIONS, PART III, SECTION 301 and 308.)

18. EMPLOYMENT OF LOWER INCOME RESIDENTS AND BUSINESS UTILIZATION [NOT APPLICABLE TO THIS PROJECT]

- a. Attention of Bidders is called to the special requirements of the "Section 3 Clause" of 24 CFR 135.20, which require that to the greatest extent feasible opportunities for training and employment be given lower income residents of the covered area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned, in substantial part, by persons residing in the covered area. (See GENERAL CONDITIONS, PART III, SECTION 306.)
- b. Contractors must utilize, to the greatest extent possible, minority business concerns located within the locality. (See GENERAL CONDITIONS, PART III, SECTION 307.)

19. MINORITY AND WOMEN'S BUSINESS ENTERPRISES

To the greatest extent feasible, contractors shall utilize minority and women's business enterprises when subcontracting and obtaining materials and supplies.

A. PARTICIPATION LEVEL

- (1) The Local Public Agency has established minimum participation levels (MPLs) at 5% for minority business enterprises (MBE) and 3% for women's business enterprises (WBE) for this project, to be used solely as a threshold in determining Bidder responsibility. A Bidder will not be rejected as not responsible solely because it fails to reach the MPLs. To determine the participation level which has been reached, a Bidder may divide the total dollar amount of the commitments by the total dollar amount of the Bidder's bid.
- (2) MBE/WBE subcontracts and manufacturers will be credited toward the minimum level at 100%. Stocking suppliers are credited at 100%. Non-stocking suppliers which are commonly and ordinarily the custom in the industry and a part of the industry's trade practices are credited at 100%; non-stocking suppliers which are not commonly and ordinarily the custom in the industry nor a part of the industry's trade practice are not credited. A firm which is both an MBE and WBE will only receive credit toward MPLs as either an MBE or WBE, but not both. Bidders must indicate on Form DCED-CCD-286, MBE/WBE Contact/Solicitation and Commitment Statement whether the firm is being listed as either an MBE or a WBE.

- (3) An MBE/WBE firm who is the prime Bidder on a project will receive no MPL credit for its own work effort for services provided. MBEs/WBEs bidding as prime proposer must solicit other certified MBE/WBE participation for materials and/or supplies.
- (4) MBE/WBE subcontractors must perform at least seventy-five percent (75%) of the cost of the subcontract, not including the cost of materials, with its own employees.

B. RESPONSIVENESS

MBE/WBE BIDDING REQUIREMENTS -

ONLY RESPONSIVE BIDS WILL BE CONSIDERED. TO BE RESPONSIVE:

- 1. You the bidder **must** submit a Form DCED-CCD-286, completed according to the instructions that are provided with it.
- 2. You **must** make a good faith effort to give MBE and WBE firms an opportunity to participate in the work of this contract. To the extent such firms offer to provide materials or services needed for the work, at prices which are advantageous to you, you must make (and keep) a commitment to obtain those materials/services. Failure to make a good faith effort will result in a determination that your bid is not responsive. (Failure to make and keep such commitments will be considered evidence of discriminatory practices.)
- 3. At a minimum, you **must** contact the firms identified in the listing provided as a part of these contract documents for quotes on the items or services you will need.
 - a. If you receive a satisfactory quote from a listed supplier and commit to it, you do not need to contact other suppliers for the same items/services.
 - b. If you get a quote that is higher than you must pay from some other source, you do not need to accept the higher quote, but you must document that the quote is higher by showing the quote and showing the source and price you will use. Include the date and time of contact in your documentation.
 - c. In documenting quotes you commit to, and those you reject as being too high, you must show unit prices, multiplied by your best estimate of the quantities of goods and/or services you expect to use. This information is essential to a determination that Minimum Levels of Participation have been achieved, and is needed for verification during construction that commitments made are being kept. It is expected that there may be variations in the quantity estimates you use for some goods/services from final actual quantities. Minor variations will not be questioned. Significant changes, however, will require documentation that this difference resulted from changes in the work of the contract--not motivated by an intent to reduce the committed amount of MBE/WBE participation.
 - d. If you make contact with a listed supplier but do not receive a quote, document this by date and time of contract.
 - e. If you attempt to make a contact without response -- for example, "phone disconnected"; "out of business"; "moved, no forwarding address" -- document the attempt, again using date and time. It is important that the Redevelopment Authority be made aware of any non-response of this type so that the lists provided to us by the State can be kept up to date.

- 4. If you have obtained satisfactory quotes from one or more of the listed firms and made commitments to them, **and**, if the total of those commitments equal or exceed the "Minimum Levels of Participation" (5% MBE and 3% WBE), your bid will be deemed responsive.
- 5. You may seek to achieve the minimum levels of participation using firms other than those in the list provided. If so, you must also document that the firm you use is a currently certified MBE or WBE. If that certification is not by the Commonwealth Minority and Women Business Enterprise Office, such firms may be considered but you (and they) must identify who has certified them. Acceptance of certification by other than the Commonwealth Minority and Women Business Enterprise Office will be at the discretion of the Authority.
- 6. If you have made a good faith effort (and properly documented that effort in your DCED-CCD-286 with such supplemental documentation as needed) failure to achieve the Minimum Level of Participation will not result in a determination of non-responsiveness.
- 7. If you have evidence that a quote given you by a MBE/WBE is not a bona fide attempt to compete for your business, but merely a means for you to have commitments which achieve the Minimum Level of Participation, you should report this information to the Authority. Examples of this circumstance include situations where the MBE/WBE is acting in the manner of a broker in a trade where this is not the common practice. A quote which simply adds a margin to a price from a non-MBE/WBE is not competitive and need not be accepted. To do so simply to achieve the Minimum Level of Participation is contrary to the goals of the MBE/WBE Program.
- 8. Final decisions regarding responsive bids and compliance with requirements will be solely at the discretion of the Redevelopment Authority.

C. <u>RESPONSIBILITY</u>

- (1) The submittals of each bidder are subject to review to determine whether the bidder has discriminated in the selection of manufacturers, subcontractors and suppliers. If a bidder has met the MPLs for MBE/WBE participation, the bidder will be presumed not to have discriminated in their selections. Where the MPLs are not met, the Local Public Agency will determine whether discrimination has occurred. If, after investigation including a review of Form DCED-CCD-286, it is found that discrimination has occurred, the reviewed bidder shall thereby be deemed to be not responsible and the bid will be rejected.
- (2) Commitments to MBE and WBE firms made at the time of bidding must be maintained throughout the term of the contract, unless a change in commitment to these firms is preapproved by the Local Public Agency or the administering agency performing the evaluation of the Bid.

D. ACCESS TO INFORMATION

That Local Public Agency may obtain documents and information from any Bidder, contractor, subcontractor, supplier, or manufacturer that may be required in order to ascertain Bidder or contractor responsibility. Failure to provide requested information may result in the contractor being declared not responsible.

SPECIAL NOTICE REGARDING MINORITY AND WOMEN'S BUSINESS ENTERPRISES:

The Local Public Agency will provide a list of MBE/WBE firms within the trade area to be contacted to provide subcontracted services, materials and supplies which may be needed for this project. The bidder may contact these firms, and any other certified MBE/WBE firms known to the bidder, to achieve the minimum participation level (MPL).

Contacts and commitments must be recorded on Form DCED-CCD-286 (contained in the bidding documents) in accordance with the instructions on the form. The completed Form DCED-CCD-286 **must** be submitted with the bid, or the bid will be rejected as nonresponsive.

If the Form DCED-CCD-286 submitted with the bid show commitments resulting from contacts with certified MBE/WBE firms achieving at least the minimum participation level of 5% for MBE firms and 3% for WBE firms, the bid will be considered responsive, and in this regard, the bidder will be presumed to be responsible. If the MPLs are not achieved by such contact/commitments, the bidder must report why the MPLs were not achieved. Information regarding this report is contained instructions that follow.

If this is the first bid submitted to the Local Public Agency under this MBE/WBE plan, the bidder is urged to contact the Agency at least 2 days prior to the bid opening to review preparation of the Form DCED-CCD-286. Phone Daniel Lyons at 717-273-9326 x133.

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Contractor's Name)• •	
Address:		
Telephone No.:		
Fax No.:		
Federal I.D. No.:		
E-Mail:		
SAM.GOV UEI#:		

PROPOSAL REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON CONTRACT C-5-22-SLT MAY, 2022

Redevelopment Authority of The County of Lebanon 137 W Penn Ave. Cleona, PA 17042

Gentlemen:

Pursuant to and in compliance with your request inviting Proposals for the general construction of the above project and having carefully examined the contract documents, comprising the drawings, specifications and all other documents bound therewith; together with all addenda or bulletins thereto; and being familiar with the site and various conditions affecting the work; the undersigned hereby offers to furnish all plans, labor, supervision, materials, supplies, equipment and other facilities and things necessary or incidental to the work as required by and in strict accordance with the applicable provisions of the plans and specifications, contract documents, and of all addenda or bulletins issued by the Owner for the following prices:

			1 1					specifications,	(
docui	ments, and of	all adde	nda or bulle	etins issued	by the O	wner for th	ne follo	owing prices:	
Lump	sum price: \$	5							
\$								00/10	0

In submitting this Bid, the Bidder understands that the right is reserved by the Redevelopment Authority of the County of Lebanon to reject any and all Bids. If written notice of the acceptance of this Bid is mailed, telegraphed or delivered to the undersigned within thirty (30) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver an agreement in the prescribed form and furnish the required bonds within ten (10) days after the agreement is presented to him for signature.

1.	Security in the sum of	
	Security in the sum of) in the form of is submitted herewith in accordance with the INSTF	f
	is submitted herewith in accordance with the INSTF	RUCTIONS TO BIDDERS.
2.		ndersigned has not entered into a collusive agreement mitting of Bids for the contract for which this Bid is
3. The Bidder certifies that he does not maintain or provide for his employees any segregated facilities of his establishments, and that he does not permit his employees to perform their services at any loc under his control, where segregated facilities are maintained. The Bidder certifies further that he we maintain or provide for his employees any segregated facilities at any of his establishments, and the will not permit his employees to perform their services at any location under his control where segregacilities are maintained. The Bidder agrees that a breach of this certification will be a violation of Equal Opportunity clause in any contract resulting from acceptance of this Bid. As used in certification, the term "segregated facilities" means any waiting rooms, work areas, rest room washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dreareas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and he facilities provided for employees which are segregated by explicit directive or are in fact segregated basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The Eagrees that (except where he has obtained identical certification from proposed subcontractors for sp time periods) he will obtain identical certification from proposed subcontractors prior to the awas subcontractors exceeding \$10,000 which are not exempt from the provisions of the Equal Oppor clause, and that he will retain such certifications in his files.		nis employees to perform their services at any location, taintained. The Bidder certifies further that he will not ated facilities at any of his establishments, and that he ices at any location under his control where segregated a breach of this certification will be a violation of the ing from acceptance of this Bid. As used in this ans any waiting rooms, work areas, rest rooms and he clocks, locker rooms and other storage or dressing a or entertainment areas, transportation, and housing ted by explicit directive or are in fact segregated on the cause of habit, local custom, or otherwise. The Bidder certification from proposed subcontractors for specifical from proposed subcontractors prior to the award of exempt from the provisions of the Equal Opportunity
4.	The Bidder also agrees to conform to the Pennsy bidding documents.	Vania Non-Discrimination Clause contained in these
	Date:	
		Bidder
	Official Address:	
		By:
		Title:

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

County of) ss.)
	, being first duly sworn, deposes and
says that:	
(1)	He/she is of, the Bidder that has submitted the attached Bid:
	He/she is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
(3)	Such Bid is genuine and is not a collusive or sham Bid;
(4)	Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element for the Bid prices or the Bid price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Redevelopment Authority of the County of Lebanon or any person interested in the proposed Contract; and
(5)	The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.
	(Signed)
	and sworn to before me this day of, 20
	(Title)
My commis	sion expires

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned,

as PRINCIPAL, and	
as SURETY, are held as	nd firmly bound unto Redevelopment Authority of the County of Lebanon, hereinafter
called the "Local Public	Agency", in the penal sum of
Dollars (\$) lawful money of the United States, for the payment of which sum well and
truly to be made, we bin	nd ourselves, our heirs, executors, administrators, successors, and assigns, jointly and
severally, firmly by thes	e presents.
THE CONDITION OF	F THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the
accompanying Bid, date	ed, 20, for

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Local Public Agency in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Local Public Agency the difference between the amount specified in said Bid and the amount for which the Local Public Agency may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

			inded parties have executed this instru	
			_, the name and corporate seal of eac	
	these preser	its signed by its	undersigned representative, pursuant	to authority of its governing
body.		INDIVIDITA	I OD DADTNEDCHID DDINGIDAL	
		INDIVIDUA	LL OR PARTNERSHIP PRINCIPALS	<u> </u>
				(SEAL)
				(SEAL)
In the prese	ence of:			(SEAL)
•				(SEAL)
		<u>C</u>	CORPORATE PRINCIPAL	
ATTEST:				
			By:	(SEAL)
			SURETY	
ATTEST:			<u>SURLIT</u>	
				(SEAL)
Countersign	ned:			
_				
-				
Attorney-in				
State of				
		CERTIFICA	ΓΕ AS TO CORPORATE PRINCIPA	L
I,			, certify that I am the	
, Se	ecretary of the	e Corporation nan	ned as Principal in the within bond; the	at
	;	, who signed the s	aid bond on behalf of the Principal wa	as then of
said Corpor	ration; that I l	know his signatur	e, and his signature thereto is genuine	e; and that said bond was duly
signed, seal	led and atteste	ed to for and in be	half of said Corporation by authority	of this governing body.
			Title:	
				CORPORATE SEAL)

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1.	Name of Bidder.
2.	Permanent main office address.
3.	When organized.
4.	If a corporation, where incorporated.
5.	How many years have you been engaged in the contracting business under your present firm or trade name?
6.	Contracts on hand: (Schedule these, showing amount of each contract and the appropriate anticipated dates of completion.)
7.	General character or work performed by your company.
8.	Have you ever failed to complete any work awarded to you? If so, where and why? (Submit attachment.)
9.	Have you ever defaulted on a contract? If so, where and why? (Submit attachment.)
10.	List the more important projects recently completed by your company, stating the approximate cost for each, and the month and year completed. (Submit attachment.)

11. List your major equipment available for this contract.

12. Experience in constr	uction work similar in	importance to this pro	gect.	
3. Background and expe		members of your orga	,	
14. Credit available: \$_				
5. Give bank reference				
comprising this Sta	Redevelopment Auth tement of Bidder's Qua	nority of the County of	of Lebanon in v	verification of the recit
			Name of Bidde	r)
		By		
		Title		
State of)		
County of)		
and that the answers to t		s and all statements the		
Subscribed and	sworn to before me thi	is day of		, 20
		-	Notary Pul	blic
My commission expires			, 20	

Exhibit 1

MBE/WBE SECTION 3 CONTRACT SOLICITATION AND COMMITMENT STATEMENT

O I I I I E I I I I I							
(1) Name of Bidder					(2) IFB Numb	er	
					C-1-20-SLT	-ARRP-2	
Address					Bid Opening	Date	
Telephone Number					Contact Pers	son	
(8) NOTE: List those certified minority/women owner Subcontractors and suppliers should be at least five of			cited quotes o	or which contacted you and gave you quotes in	n regard to th	is invitation for bid. Bidder's	contract with
*(2)	(4)	(4)	(4)	(5)		(C)	4 (7)
*(3) COMPANY NAME	MBE	WBE	Sec. 3	(5) TYPE OF CONSTRUCTION, EQU	IDMENIT	(6) TOTAL	* (7) TOTAL
EIN/SSN	(X)		(X)	SERVICES AND/OR SUPPLIES	IPIVIENI,	DOLLAR AMOUNT	COMMITMENT
TELEPHONE NUMBER	(^)	(X)	(^)	PROVIDED TO THE PROJE		OF	DOLLAR AMOUNT
TELEPHONE NOWBER				PROVIDED TO THE PROJECT		QUOTE RECEIVED	DOLLAR AMOUNT
(9) NOTE Minimum Levels (MPL): MBE-5%, WBE-3 A presumption of responsibility may be made if the	% e dollar commitment	of MBE/WBE	reflects this n	ninimum participation level.			
(10) Prepared By:		,		· ·	1	Telephone Number/E-mail Ad	dress:
(-, -, -, -, -, -, -, -, -, -, -, -, -,							

INSTRUCTIONS FOR COMPLETION OF THE MBE/WBE SUBCONTRACTOR AND SUPPLIER SOLICITATION AND COMMITMENT FORM (DCED-CCD-286)

The purpose of this form is to determine whether the bidder has discriminated in the selection of subcontractors and suppliers.

INSTRUCTIONS FOR BLOCKS 1 AND 2

- 1. Provide your company name, address, telephone number, fax number, e-mail address and contact person.
- 2. Provide the contract number, bid opening date, and total amount of the bid. If more than one base bid is submitted, provide the total bid amount for Base Bid #1.

INSTRUCTIONS FOR BLOCKS 3 - 7

- 3. Enter the official subcontractor or supplier's company name exactly as it appears on the Department of General Services (DGS) list of certified MBEs/WBEs at the DGS website (http://www.dgs.state.pa.us) or Department of Transportation (PennDOT) website (www.dgs.state.pa.us). Do not use D/B/A (Doing Business As) name. List the address, zip code, telephone number with area code, and contact person's name.
- 4. Indicate whether the firm is a DGS certified MBE or WBE. Place a (x) in the appropriate column. If the firm is both a DGS certified MBE and a DGS certified WBE, the bidder will receive credit for the firm as either an MBE or a WBE.
- 5. Briefly describe the specific type of work to be performed and/or materials to be supplied by the listed DGS certified MBE or WBE. In order to count towards reaching the MPLs, bidders must solicit DGS certified MBEs/WBEs in the areas in which they are certified. For example, if an MBE/WBE is certified for electrical supplies and the bidder lists plumbing supplies, the bidder will not receive credit. Geographical location may not be used as a reason for limiting solicitation.
- 6. Enter the total dollar (\$) amount of the quote received. If the quote was received in the form of unit prices or hourly rates, a total dollar amount must still be provided. If the subcontractor did not respond to the bidder, the bidder must indicate "No Response." Copies of all MBE/WBE quotes must be submitted with the bid.
- 7. Enter the total dollar (\$) amount of the contractual commitment made to the listed MBE/WBE. If the bidder does not use the total quote from a MBE/WBE because a lower priced quote was received, the bidder must submit a copy of the lower priced quote with its bid. On partial commitments, the bidder must explain why only a partial commitment was made and must submit a copy of the lower priced quote.

INSTRUCTIONS FOR SUBMISSION OF FORM DCED-CCD-286 AND OTHER DOCUMENTATION

- 8. The bidder must complete and submit Form DCED-CCD-286 with its bid.
- 9. The bidder must include with the Form DCED-CCD-286 all solicited and unsolicited quotes received by the bidder from MBEs and WBEs as long as the quotes are within the scope of work.

FURTHER INSTRUCTIONS

10. The bidder's contact with MBE/WBE subcontractors and suppliers should be a minimum of (10) days prior to bid opening date. This will ensure that MBE/WBEs have sufficient time to prepare a quote. Ten days is a guide. However, adequate time must be provided to all subcontractors and suppliers to respond.

If the minimum participation levels (MPLs) for this project are not achieved, you must provide a written explanation explaining the failure to achieve the MPLs for MBEs and/orWBEs. Failure to do so will result in rejection of the bid.

If there are any questions/comments concerning this form, please contact the issuing agency contracting officer. If additional forms are needed, you are permitted to photocopy form.

AGREEMENT FOR SITE PREPARATION

THIS AGREEMENT, made this	day of	, 20, by and between
	(a	a corporation organized and existing
under the laws of the State of		
); (an individual
trading as), hereinafter called the
"Contractor," and the REDEVELOPMEN		
PENNSYLVANIA, hereinafter called the "Le	ocal Public Agency."	
WITNESSETH, that the Contractor	r and the Local Public	Agency for the considerations stated
herein mutually agree as follows:		
ARTICLE 1. STATEMENT OF W	ORK. The Contractor	shall furnish all supervision, technical
personnel, labor, materials, machinery, tools	s, equipment and servic	es, including utility and transportation
services, and perform and complete all work	required for the constru	ction of the Improvements embraced in
the Site Preparation, namely:		
Contract C-5-22-SLT, South Lebanon	Township, Lebanon Cou	nty, Pennsylvania, Avon Stormwater
Improvements.		
and required supplemental work for the		
contract		
all in strict accordance with the Contract D	Occuments for Site Prepa	aration, including all Addenda thereto,
numbered, dated	,	all as prepared by acting and in these Contract
Documents for Site Preparation, referred to a		aving and in those Contract

ARTICLE 2. THE CONTRACT PRICE. The Local Public Agency will pay the Contractor for the performance of the Contract in current funds, for the total quantities of work performed at the unit prices stipulated in the Bid for the several respective items of work completed subject to additions and deductions as provided in Section 109 hereof.

ARTICLE 3. CONTRACT. The executed contract documents shall consist of the following:

- a. This Agreement
- b. Addenda (if any)
- c. Invitation for Bids
- d. Instructions to Bidders
- e. Signed copy of Bid and Resolution Awarding Contract
- f. General Conditions (Part I, Part II and Part III)
- g. Special Conditions (Part IV)
- h. Technical Specifications
- i. Drawings (as listed in the Schedule of Drawings)

This Agreement, together with other documents enumerated in this ARTICLE 3, which said other documents are as fully a part of the contract as if hereto attached or herein repeated, forms the contract between the parties hereto. In the event that any provision in any component part of this contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this ARTICLE 3 shall govern, except as otherwise specifically stated.

ARTICLE 4. STIPULATION AGAINST LIENS. The Contractor agrees to execute and record a Stipulation Against Liens in the form provided herewith prior to commencement of any work required thereby, or the acquisition of any materials therefor.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in three original copies on the day and year first above written.

Attest:			
	(Contractor)		
	By:		
	Title:		
	Address:		
Attest:	REDEVELOPMENT AUTHORITY OF THE		
	COUNTY OF LEBANON, PENNSYLVANIA		
	By		
Secretary/Assistant Secretary	Chairman/Vice Chairman		

CORPORATE CERTIFICATION

Ι,	, certify that I am the	of the
Corporation named as Contractor herein; that		who signed this
Agreement on behalf of the Contractor, was the	of said	Corporation; that said
Agreement was duly signed for and in behalf of said C	Corporation by authority of it	s governing body, and is
within the scope of its corporate powers.		
Signed		
Title	(0, 1)	
	(Corporate Seal)	

STIPULATION AGAINST LIENS

REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON, PENNSYLVANIA, Owner) IN THE COURT OF COMMON PLEAS OF) LEBANON COUNTY, PENNSYLVANIA)
VS.)))
Contractor) MECHANICS LIEN DOCKET NO
	ority of the County of Lebanon, Pennsylvania, a body, Commonwealth of Pennsylvania, is about to execute
for	
Redevelopment Authority of the County of Leba work on the said project or purchase materials a contract with the said Contractor and for the fur Contractor by the said Redevelopment Authorit that no mechanic's claims or other liens shall appurtenant thereto by the said Contractor nor workmen or any person for any materials or lab	act and before any authority has been given by the said anon, Pennsylvania, to the said Contractor to commence for the same, in consideration of the making of the said ther consideration of One (\$1.00) Dollar paid to the said ty of the County of Lebanon, Pennsylvania, it is agreed ll be filed against the building and/or lot of ground any Subcontractor, nor by any of the material men or por or extra materials or labor purchased or furnished in oject or any part thereof, the right to file such claims or erewith.
(SEAL) ATTEST:	REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON, PENNSYLVANIA
	ByExecutive Director
(SEAL) ATTEST:	(Contractor)
	By
	Title

INSTRUCTIONS FOR PREPARATION OF PERFORMANCE BOND, LABOR AND MATERIALMEN'S BONDS, AND, IF REQUIRED, HIGHWAY OCCUPANCY PERFORMANCE BOND

- 1. Individual sureties, partnerships, or corporations not in the surety business will not be acceptable.
- 2. The name of the Principal shall be shown exactly as it appears in the Contract.
- 3. The penal sum shall be not less than that required by the Specifications.
- 4. If the Principals are partners, or joint venturers, each member shall execute the bond as an individual, with his place of residence shown.
- 5. If the Principal is a corporation, the bond shall be executed under its corporate seal, the fact shall be stated, in which case a scroll or adhesive seal shall be affixed following the corporate name.
- 6. The official character and authority of the person(s) executing the bond for the Principal, if a corporation, shall be certified by the secretary thereof under the corporate seal, OR there may be attached copies of so much of the records of the corporation as will evidence the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.
- 7. The current Power of Attorney of the person signing for the surety company must be attached to the bond.
- 8. The date of the bond must NOT be prior to the date of the Contract.
- 9. The following information must be placed on the bond by the surety company:
 - a. The rate of premium in dollars per thousand; and
 - b. The total dollar amount premium charged.
- 10. The signature of a witness shall appear in the appropriate place, attesting to the signature of each party to the bond.
- 11. Type or print the name underneath EACH SIGNATURE appearing on the bond.
- 12. An executive copy of the bond must be attached to each copy of the Contract (original counterpart) intended for signing.

INSTRUCTIONS FOR PREPARATION OF HIGHWAY OCCUPANCY PERFORMANCE BOND, IF REQUIRED

The foregoing requirements shall also apply to preparation of the Highway Occupancy Performance Bond, where such bond is required, except as described here:

- 1. The Principal shall be identified as the Contractor and the Permittee collectively. The Permittee will be identified by the Local Public Agency.
- 2. The full and just sum shall be an amount determined by the Pennsylvania Department of Transportation as described in Paragraph 15. b.1. of the Instructions to Bidders (page 6 of these documents).

In lieu of a Highway Occupancy Performance Bond, the Pennsylvania Department of Transportation will accept an Irrevocable Letter of Credit. This letter must meet their requirements for said letter.

PERFORMANCE BOND

as Principal, th	reinafter called Contractor, and
• •	nafter called Surety, are held and firmly bound unto Redevelopment Authority of the on as Obligee, hereinafter called Owner, in the bid amount of
and truly to be	Dollars, lawful money of the United States, for the payment of which sum we hade, we, the Contractor and Surety, bind ourselves, our heirs, administrators, executors ssigns, jointly and severally, firmly by these presents.
into a certain machinery, als	AS, said Contractor has by written agreement dated, 20, entered contract with said Owner for furnishing and delivering all materials, equipment and the furnishing of all labor and complete construction in accordance with the plans and der Contract for
which Contrac	and all of the Contract Documents therein referred to for said work shall be deemed a par

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that, if the Contractor shall promptly and faithfully perform the Contract, or any amendments or extension of, or additions to said Contract on his part within the time and in the manner therein provided and satisfy all claims and demands incurred in or for the same, or growing out of the same, or for injury, or damage to persons or property in the performance thereof, and shall fully indemnify and save harmless the said Owner from any and all cost and damage which the said Owner may suffer by reasons of failure so to do, and shall fully reimburse and repay the said Owner any and all outlay and expense which it may incur by reason of such default, then this obligation shall be null and void; otherwise it shall remain in full force and virtue.

thereof as fully as if set out herein.

ALSO, that if the above Principal shall remedy without cost to the Owner any defects which may develop during a period of one (1) year from the date of the issuance of the final certificate of completion of the work performed under said Contract then this part of the obligation shall be null and void; otherwise it shall remain in full force and effect.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- 1. Complete the Contract in accordance with its terms and conditions; or
- 2. Obtain a bid or bids for submission to Owner for completing the Contract in accordance with its terms and conditions, and upon determination by Owner and Surety of the lowest responsible bidder arrange for a Contract between such bidder and Owner and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract price" as used in the paragraph, means the total amount payable by Owner to Contractor under the

Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder of the specifications accompanying the same shall in any wise affect its obligations 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 of the specifications.

Signed, sealed and delivered in the sealed and delivered i	hree (3) counterparts this day of	
INDIVIDUA	AL OR PARTNERSHIP PRINCIPALS	
		(SEAL)
		(SEAL)
in the presence of:		(SEAL)
		(SEAL)
(****** CORPORATE PRINCIPAL	
ATTEST:		
	Ву:	(SEAL)
	Title	
	SURETY	
ATTEST:		
	By:	(SEAL)
Countersigned:		
By:Attorney-in-Fact, State of		

<u>CERTIFICA</u>	TE AS TO CORPORATE PRINCIPAL	
I,	, certify that I am the	of the
said bond on behalf of the Principal was corporation; that I know his signature,	thin bond; that then and his signature thereto is genuine; and that behalf of said corporation by authority of this genuine.	of said t said bond was duly
	(Corporate Seal)	
	Title:	

LABOR AND MATERIALMEN'S BOND

KNOW ALL MEN BY THESE PRESENTS, That we,
hereinafter called "Principal" and
, hereinafter called "Surety", are held and firmly bou
unto Redevelopment Authority of the County of Lebanon, hereinafter called "Owner", in the bid amount
(\$) Dollars, in lawful money of the United States, for the payment which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successo jointly and severally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into certain Contract with the Owner, dated the day of, 20, a copy of whi is hereto attached and made a part hereof for

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, coal and coke, 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, alteration 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, 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 Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

Signed, sealed and delivered in through the sealed and delivered in the sealed and del	ee (3) counterparts this day of	
INDIVIDUA	L OR PARTNERSHIP PRINCIPALS	
		(SEAL)
		(SEAL)
in the presence of:		(SEAL)
		(SEAL)
CO	****** ORPORATE PRINCIPAL	
ATTEST:		
	Ву:	(SEAL)
	Title ***** SURETY	
ATTEST:		
	By:	(SEAL)
Countersigned: By: Attorney-in-Fact, State of	<u> </u>	· ,

<u>CERTIFICAT</u>	E AS TO CORPORATE PRINCIPAL	
I, Corporation named as Principal in the with the said bond on behalf of the Principal was	, certify that I am the in bond; that s then	of the who signed of said corporation
that I know his signature, and his signature attested to for and in behalf of said corpora	thereto is genuine; and that said bond was duly	
	(Corporate Seal) Title:	

HIGHWAY OCCUPANCY PERFORMANCE BOND

KNOW ALL ME	N BY THESE PRESE	ENTS, that w	e,		
					, of
				, and _	
				_, of	
as PRINCIPAL, collective	ely identified as PRIN	CIPAL, for t	he purpose of this B	ond only, and	
, as SURETY, are the full and just sum of					OBLIGEE, ir
(\$) Commonwealth of Penns ourselves, our heirs, execupresents.	sylvania, or its assign	ns, to which	payment well and	d truly to be m	ade, we bind
the Commonwealth of P Chapter 459 to perform w	ork on the PRINCIPA	nent of Trans AL'S facilitie	sportation, under the slocated over, under	ne provisions of er and/or on Leg	67 Pa. Code
(Application), in		,	County; an	d d	
	PRINCIPAL is require	ed to furnish	a Bond pursuant to		apter 459.5(b)

NOW, THEREFORE, the condition of this obligation is such that, if the above bounden PRINCIPAL shall in all respects comply with and faithfully perform the terms and conditions of the Permit and all applicable provisions of 67 Pa. Code Chapter 459, and shall save and keep harmless the OBLIGEE from any damages or losses from any cause growing out of work performed on the portion of State Highway, then this obligation is to be void; but otherwise is to be and remain in full force and effect.

IT IS further provided that any alterations which may be made in the terms of the Permit or in the payment of costs due under it, or the giving by the OBLIGEE of any extension of time for the performance of the work or any other forbearance on the part of either the OBLIGEE or the PRINCIPAL to the other, shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors and assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension or forbearance being hereby waived.

IT IS further provided that the duration of the obligation under this Bond shall be for the period during which work is performed and for one year after the satisfactory completion of all permitted work.

PROVIDED, FURTHER, that in case of default of the PRINCIPAL, in any respect, action on this Bond may be begun forthwith, and the PRINCIPAL and SURETY, jointly and severally do hereby authorize and empower any attorney of any Court of record in Pennsylvania or elsewhere, to appear for and to enter judgment against them, jointly and severally, for the aforementioned sum, with or without defalcation, with costs of suit, release of errors, without stay of execution and with 10% attorney's fees added for collection; and waiving inquisition on any real estate and exemption of any property whatsoever, authorizing condemnation of same and immediate issuance of a Writ of Execution, and releasing and waiving relief from any and all appraisement, stay of execution, or exemption laws of any state, now in force or hereinafter to be passed.

Time limitations set forth in this Bond shall not be deemed to relieve the PRINCIPAL of liability for items exceeding the time limitations set forth in 67 Pa. Code Chapter 459.

IN WITNESS WHEREOF, the PRINCE day of, 20		s Bond under seal this
	PRINCIPAL (Permit Applicant)	(SEAL)
ATTEST:	By_	(SEAL)
	By	(SEAL)
	SURETY COMPANY	
ATTEST:	By	
APPROVED AS TO FORM AND LEGALITY	Title	
ByChief Counsel		
By Deputy Attorney General		
Dated:		

THE MINORITY BUSINESS ENTERPRISE PROGRAM IN CONNECTION WITH SCP PROJECTS IN COMPLIANCE WITH EXECUTIVE ORDER 11625 AFFIRMATIVE ACTION PLAN FOR UTILIZATION OF MINORITY BUSINESS

Project Name		Project No.	
Redevelopment Authority of the Cou Developer	unty of Lebanon	General Contractor	
CONTRACTING			
Prior to the signing of contracts bet General Contractor, the General Con Lebanon a preliminary statement of information shall be supplied prior subcontractor(s).	ntractor shall provide f Minority Business U	to the Redevelopment Authority of Jtilization where known; where not	the County of known, such
UTILIZATION OF BUSINESSES			
Each General Contractor undertakin contracts for work to be performed in			
The General Contractor shall, to procurement (materials, supplies, ser General Contractor projects a Utilizat	rvices) to be performe	d in connection with this project. T	
CATEGORY	Amount Available in Dollars	GOAL ALLOCATIO Amount Projected in Dollars	ON
A. Minority Contractors	\$	\$	
B. Minority Procurement	\$	\$	

GOOD FAITH EFFORT

The following minority business referral agence	cies will be contacted: S	SBA, State OMBE, and other	hers: (List)
This is to certify that			
will abide by and initiate in all our contracts, Order 11625.	to the greatest extent fe	easible, the requirements o	f Executive
	Sig	nature	
	Title	Date	

GENERAL SPECIFICATIONS

GENERAL CONDITIONS PART I

101. DEFINITIONS

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

- a. The term "Contract" means the Contract executed by the Local Public Agency and the Contractor, of which these GENERAL CONDITIONS, PARTS I, II, and III form a part.
- b. The term "Local Public Agency" means the Redevelopment Authority of the County of Lebanon which is authorized to undertake this Contract.
- c. The term "Contractor" means the person, firm or corporation entering into the Contract with the Local Public Agency to construct and install the improvements embraced in this Site Preparation Contract.
- d. The term "Project Area" means the site within which are the specified Contract limits of the improvements contemplated to be constructed in whole or in part under this Contract.
- e. The term "Engineer" means Engineer in charge, serving the Local Public Agency with architectural or engineering services, his successor, or any person or persons employed by said Local Agency for the purpose of directing or having in charge the work of Site Preparation embraced on this Contract, the said Engineer acting directly or indirectly through any Assistant Engineer having general charge of the work or through any assistant having immediate charge of a portion thereof limited by the particular duties entrusted to him.
 - f. The term "Local Government" means the municipality in which the Project Area is situated.
- g. The term "Contract Documents" means and shall include the following: Executed Agreement; Addenda (if any); Invitation for Bids; Instructions to Bidders; Signed Copy of Bid; General Conditions, Parts I, II, and III; Special Conditions; Technical Specifications; and Drawings (as listed in the Schedule of Drawings).
 - h. The term "Drawings" means the drawings listed in the Schedule of Drawings.
- i. The term "Technical Specifications" means that part of the Contract Documents which describes outlines and stipulates: the quality of the materials to be furnished; the quality of workmanship required and the methods to be used in carrying out the construction work to be performed under this Contract.
- j. The term "Addendum" or "Addenda" means any changes, revisions or clarifications of the Contract Documents which have been duly issued by the Local Public Agency to prospective Bidders prior to the time of receiving Bids.

102. SUPERINTENDENCE BY CONTRACTOR

a. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the Local Public Agency and the

Engineer, or the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.

b. The Contractor shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

103. SUBCONTRACTS

- a. The Contractor shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this Contract until he has submitted a noncollusive affidavit from the subcontractor in substantially the form shown below and has received written approval of such subcontractor from the Local Public Agency.
- b. No proposed subcontractor shall be disapproved by the Local Public Agency except for cause.
- c. The Contractor shall be as fully responsible to the Local Public Agency 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.
- d. The Contractor shall cause appropriate provision to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of the Contract for the Improvements embraced in the State Preparation.
- e. Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Local Public Agency.

NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR

Commonwealth of Pennsylvania)			
County of Lebanon) ss.	,		
County of Ecoanon)			
		, being first duly s	worn, deposes and
says that:		, ,	•
(1) II / 1 ·			
(1) He/she is(owner	r nortner officer rer	resentative or agent)	of
(Owner	, parmer, officer, rep	resentative of agent)	, hereinafter
referred to as the "subcontractor";			, neremarcer
(2) He/she is fully informed resubmitted by the subcontractor to, the Contractor for certain work		ation and contents of the subco	_
, the Contractor for certain work	Contract n	ertaining to the Project in	
:	Contract p	ertaining to the Project in	
(4) Neither the subcontractor employees or parties in interest, inclusing agreed, directly or indirectly, with any connection with such Contract or to result in any manner, directly or indirectly firm or person to fix the price or prices element of the price in said subcontract or unlawful agreement any advantage as person interested in the proposed Contract.	or nor any of its of ading this affiant, had other bidder, firm or frain from submitting y, sought by unlawfully, sought by unlawfully in said subcontractor or Proposal, or to against the Redevelopact; and in the subcontractor ce or unlawful agrees	as in any way colluded, conspired person to submit a collusive of a Proposal in connection with all agreement or connivance with the Proposal, or to fix any overlasecure through collusion, consponent Authority of the County of the Proposal are fair and proper a ment on the part of the bidder of	is, representatives, pired, connived, or r sham Proposal in a such Contract, or h any other Bidder nead, profit or cost piracy, connivance of Lebanon or any and are not tainted
	(Signed)		
Subscribed and sworn to before me		(Title)	
thisday of	, 20		
(Title)			
My commission expires	20		

104. OTHER CONTRACTS

The Local Public Agency may award, or may have awarded other Contracts for additional work, and the Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the Local Public Agency. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor as scheduled.

105. FITTING AND COORDINATION OF THE WORK

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or material men engaged upon this Contract. He shall be prepared to guarantee to each of his subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work.

106. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts or neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Local Public Agency on account of any damage alleged to have been so sustained, the Local Public Agency will notify this Contractor, who shall defend at his own expense any suit based upon such claim, and, if any judgment or claims against the Local Public Agency shall be allowed, the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith.

107. PROGRESS SCHEDULE

a. The Contractor shall submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and completing each of the various sections of the work, the anticipated monthly payments to become due the Contractor, and the accumulated percent of progress each month.

108. PAYMENTS TO CONTRACTOR

1. Partial Payments

a. The Contractor shall prepare his requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Engineer for his approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting 10% of the amount due the Contractor until 50% of the Contract is complete and 5% of the amount due the Contractor on the remaining work. When the Contract is substantially completed, the Contractor shall be paid in full, less one and one-half times the amount as is required to complete any then remaining, uncompleted minor items, which amount shall be certified by the Engineer. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit prices contained in the Agreement. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection of the Engineer.

b. Monthly or partial payments made by the Local Public Agency to the Contractor are moneys advanced for the purpose of assisting the Contractor to expedite the work of construction. All material and completed work covered by such monthly or partial payments shall remain the property of the Contractor and he shall be responsible for the care and protection of all materials and work upon which payments have been made. Such payments shall not constitute a waiver of the rights of the Local Public Agency to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Local Public Agency in all details.

2. Final Payment

- a. After final inspection and acceptance by the Local Pubic Agency of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments. Final payment to the Contractor shall be made subject to his furnishing the Local Public Agency with a release in satisfactory form of all claims against the Local Public Agency arising under and by virtue of his Contract, other than such claims, if any, as may be specifically excepted by the Contractor from the operation of the release as provided under the section entitled DISPUTES under GENERAL CONDITIONS, PART I.
- b. The Local Public Agency, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Local Public Agency deems the same necessary in order to protect its interest. The Local Public Agency, however, may, if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in no wise impair the obligations of any surety or sureties furnished under this Contract.
- c. Withholding of any amount due the Local Public Agency under the section entitled "Liquidated Damages" under SPECIAL CONDITIONS, shall be deducted from the final payment due the Contractor.

3. Withholding Payments

The Local Public Agency may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Local Public Agency and, if so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Local Public Agency and will not require the Local Public Agency to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the Local Public Agency elects to do so. The failure or refusal of the Local Public Agency to withhold any moneys from the Contractor shall in no wise impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

4. Payments Subject to Submission of Certificates

Each payment to the Contractor by the Local Public Agency shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors by the section entitled CONTRACTOR'S CERTIFICATES under GENERAL CONDITIONS.

109. CHANGES IN THE WORK

- a. The Local Public Agency may make changes in the scope of the work required to be performed by the Contractor under the Contract or making additions thereto, or by omitting work therefrom, without invalidating the Contract, and without relieving or releasing the Contractor from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise.
- b. Except for the purpose of affording protection against any emergency endangering life or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Local Public Agency authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.
- c. If applicable unit prices <u>are</u> contained in the Agreement (established as a result of either a unit price bid or a Supplemental Schedule of Unit Prices) the Local Public Agency may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase or decrease the original total amount shown in the Agreement by more than twenty-five percent (25%) in accordance with the section entitled UNIT PRICES under INSTRUCTIONS TO BIDDERS.
- d. If applicable unit prices <u>are not</u> contained in the Agreement or if the total net change increases or decreases the total Contract Price more than twenty-five percent (25%) the Local Public Agency shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from him covering the work involved in the change after which the procedure shall be as follows:
 - 1. If the proposal <u>is acceptable</u> the Local Public Agency will prepare the change order in accordance therewith for acceptance by the Contractor and
 - 2. If the proposal <u>is not acceptable</u> and prompt agreement between the two parties cannot be reached, the Local Public Agency may order the Contractor to proceed with the work on a cost-plus-limited basis. A cost-plus-limited basis is defined as the net cost of the Contractor's labor, materials and insurance plus fifteen percent (15%) of said net cost to cover overhead and profit, the total cost not to exceed a specified limit.
- e. Each change order shall include in its final form:
 - 1. A detailed description of the change in the work.
 - 2. The Contractor's proposal (if any) or a conformed copy thereof.

- 3. A definite statement as to the resulting change in the contract price and/or time.
- 4. The statement that all work involved in the change shall be performed in accordance with Contract requirements except as modified by the change order.

110. CLAIMS FOR EXTRA COST

- a. If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the Local Public Agency, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.
- b. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonable estimated from the Drawings and map issued.
- c. Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall at once be reported to the Local Public Agency and work shall not proceed except at the Contractor's risk, until written instructions have been received by him from the Local Public Agency.
- d. If, on the basis of the available evidence, the Local Public Agency determines that an adjustment of the Contract Price and/or Time is justifiable, the procedure shall be as provided in Section CHANGE IN THE WORK under GENERAL CONDITIONS, PART I.

111. TERMINATION – DELAYS – LIQUIDATED DAMAGES

- a. Termination of Contract. If the Contractor refuses or fails to prosecute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified as provided in these Contract Documents, the Local Public Agency, by written notice to the Contractor, may terminate the Contractor's right to proceed with the work. Upon such termination, the Local Public Agency may take over the work and prosecute the same to completion, by contract or otherwise, and the Contractor and his sureties shall be liable to the Local Public Agency for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is so terminated, the Local Public Agency may take possession of and utilize in completing the work such materials, tools, equipment, and plans as may be on the site of the work and necessary therefor.
- b. <u>Liquidated Damages for Delays</u>. If the work be not completed within the time stipulated in Section 402 TIME FOR COMPLETION under SPECIAL CONDITIONS, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Local Public Agency as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in Section 403 LIQUIDATED DAMAGES under SPECIAL CONDITIONS and the Contractor and his sureties shall be liable to the Local Public Agency for the amount thereof.
- c. <u>Excusable Delays</u>. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due:

- 1. To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;
- 2. To any acts of the Local Public Agency;
- 3. To causes not reasonably foreseeable by the parties to the Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or the public enemy, acts of another Contractor in the performance of some other contract with the Local Public Agency, fires, floods, epidemics, guarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions; and
- 4. To any delay of any subContractor occasioned by any of the causes specified in subparagraphs 1., 2., and 3. of this paragraph "c".

Provided, however, that the Contractor promptly notify the Local Public Agency within ten (10) days in writing of the cause of the delay. Upon receipt of such notification the Local Public Agency shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this Contract, the delay is properly excusable, the Local Public Agency shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

112. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this contract without the written consent of the Local Public Agency; provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the Local Public Agency. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

113. DISPUTES

- a. All disputes arising under this Contract or its interpretation except those disputes covered by FEDERAL LABOR STANDARDS PROVISIONS under GENERAL CONDITIONS, PART II, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to the Local Public Agency for decision. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding in the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt by the Local Public Agency of notice thereof.
- b. The Contractor shall submit in detail his claim and his proof thereof. Each decision by the governing body of the Local Public Agency will be in writing and will be mailed to the Contractor by registered mail, return receipt requested.

c. If the Contractor does not agree with any decision of the Local Public Agency, he shall in no case allow the dispute to delay the work but shall notify the Local Public Agency promptly that he is proceeding with the work under protest and he may then except the matter in question from the final release.

114. TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the Local Public Agency, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

115. SHOP DRAWINGS

- a. All required shop Drawings, machinery details, layout Drawings, etc., shall be submitted to the Engineer in two copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at his own risk, with manufacture or installation of any equipment or work covered by said shop Drawings, etc., until they are approved and no claim, by the Contractor, for extension of the contract time will be granted by reason of his failure in this respect.
- b. Any Drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any Drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of Contract price and/or time otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the Drawings have been approved.
- c. If a shop Drawing is in accord with the contract or involves only a minor adjustment in the interest of the Local Public Agency not involving a change in contract price or time, the Engineer may approve the Drawing. The approval shall be general, shall not relieve the Contractor from his responsibility for adherence to the contract or for any error in the Drawings and shall contain in substance the following:

"The modification shown on the attached Drawing is approved in the interest of the Local Public Agency to effect an improvement for the Project and is ordered with the understanding that it does not involve any change in the Contract Price or time; that it is subject generally to all Contract stipulation and covenants; and that it is without prejudice to any and all rights of the Local Public Agency under the Contract and surety bond or bonds."

116. REQUESTS FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the Contractor to make timely requests of the Local Public Agency for any additional information not already in his possession which should be furnished by the Local Public Agency under the terms of this contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so

as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

117. MATERIALS AND WORKMANSHIP

- a. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.
- b. The Contractor shall furnish to the Local Public Agency for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval as required full information concerning all other materials or articles which he proposes to incorporate in the work. (See Section SAMPLES, CERTIFICATES AND TESTS under GENERAL CONDITIONS, PART I.)
- c. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- d. Materials specified by reference to the number or symbol of a specific standard, such as an A.S.T.M. Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in such reference. The standards referred to, except as modified in the Technical Specifications shall have full force and effect as though printed therein.
- e. The Local Public Agency may require the Contractor to dismiss from the work such employee or employees as the Local Public Agency or the Engineer may deem incompetent, or careless, to insubordinate.

118. SAMPLES, CERTIFICATES, AND TESTS

a. The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the Engineer, promptly after award of the contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.

Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Engineer in passing upon the acceptability of the sample promptly. It shall also include the statement that all materials or

equipment furnished for use in the project will comply with the samples and/or certified statements.

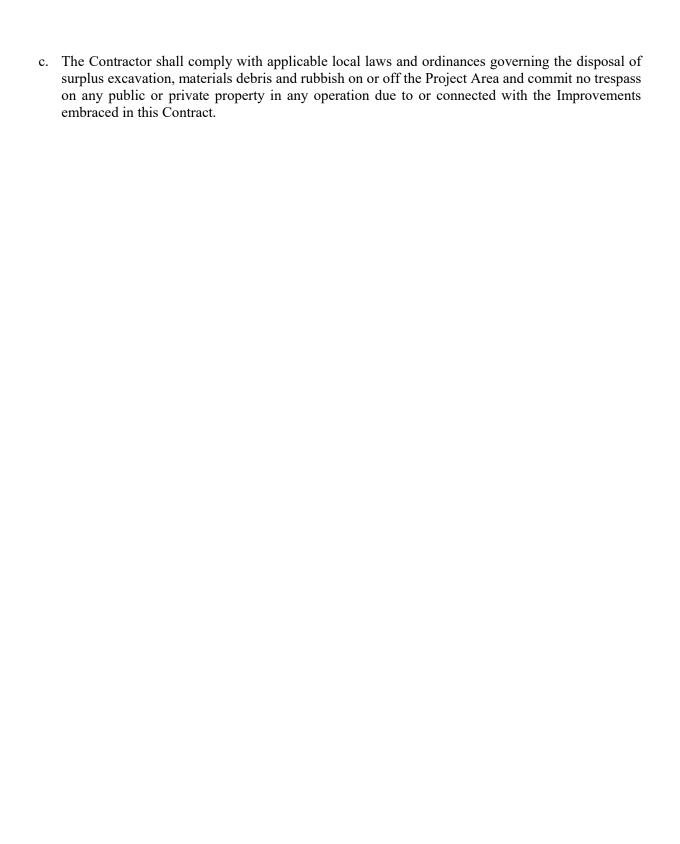
- b. Approval of any materials shall be general only and shall not constitute a waiver of the Local Public Agency's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.
- c. Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:
 - (1) The Contractor shall furnish without extra cost, including packing and deliver charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
 - (2) The Contractor shall assume all costs of re-testing materials which fail to meet Contract requirements;
 - (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient; and
 - (4) The Local Public Agency will pay all other expenses.

119. PERMITS AND CODES

a. The Contractor shall give all notices required by and comply with all applicable laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the Drawings and Technical Specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the Local Public Agency. Where the requirements of the Drawings and Technical Specifications fail to comply with such applicable ordinances or codes, the Local Public Agency will adjust the Contract by Change Order to conform to such ordinance or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract price or stipulated unit prices.

Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the Drawings and Technical Specifications), the Contractor shall remove such work without cost to the Local Public Agency, but a Change Order will be issued to cover only the excess cost the Contractor would have been entitled to receive if the change had been made before the Contractor commenced work on the items involved.

b. The Contractor shall at his own expense, secure and pay to the appropriate department of the Local Government the fees or charges for all permits for street pavement, sidewalks, sheds, removal of abandoned water taps, sealing of house connection drains, pavements cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.



120. CARE OF WORK

- a. The Contractor shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Local Public Agency.
- b. The Contractor shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays and holidays, from the time the work is commenced until final completion and acceptance.
- c. In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Local Public Agency, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Local Public Agency. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Local Public Agency as provided in the Section CHANGES IN THE WORK under GENERAL CONDITIONS, PART I.
- d. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.
- e. The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the Improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Local Public Agency from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Local Public Agency may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

121. ACCIDENT PREVENTION

- a. The Contractor shall excise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Local Public Agency may determine to be reasonably necessary. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.
- b. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Local Public Agency with reports concerning these matters.

c. The Contractor shall indemnify and save harmless the Local Public Agency from any claims for damages resulting from personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this Contract.

122. SANITARY FACILITIES

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

123. USE OF PREMISES

- a. The Contractor shall confine his equipment, storage of materials, and construction operations to the Contract limits as shown on the Drawings and as prescribed by ordinances or permits, or as may be desired by the Local Public Agency, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.
- b. The Contractor shall comply with all reasonable instructions of the Local Public Agency and the ordinances and codes of the Local Government, regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

124. REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for the work, and put the whole site of the work and public rights of way in a neat and clean condition. Trash burning on the site of the work will be subject to prior approval of the Local Public Agency and existing State and Local regulations.

125. INSPECTION

- a. All materials and workmanship shall be subject to inspection, examination, or test by the Local Public Agency and the Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction is carried on. The Local Public Agency shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge therefore. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Local Public Agency may contract or otherwise have the defects remedied, or rejected materials removed from the Project Area and charge the cost of the same against any moneys which may be due the Contractor, without prejudice to any other rights or remedies of the Local Public Agency.
- b. The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. (See Section SAMPLES, CERTIFICATES AND TESTS, under the GENERAL CONDITIONS, PART I.) All tests by the Local Public Agency will be performed in such manner as not to delay the work unnecessarily and shall be made in the Technical Specifications.

c. The Contractor shall notify the Local Public Agency sufficiently in advance of backfilling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Local Public Agency, the Contractor shall uncover for inspection and recover such facilities all at his own expense, when so requested by the Local Public Agency.

Should it be necessary or advisable by the Local Public Agency at any time before final acceptance of the entire work to make an examination of work already completed, by uncovering the same, the Contractor shall, on request, promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his subcontractors shall defray all the expenses of such examination and of satisfactory re-construction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus 15 percent of such costs to cover superintendence, general expenses and profit, shall be allowed the Contractor and he shall, in addition of completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

d. Inspection of materials and appurtenances to be incorporated in the Improvements embraced in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud.

Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

- e. Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Local Public Agency or its agents shall relieve the Contractor or his sureties of full responsibility for material furnished or work performed not in strict accordance with the Contract.
- f. Any work performed within the right-of-way of any Pennsylvania Department of Transportation highway, roadway or travel way shall be subject to inspection by a representative of the Pennsylvania Department of Transportation. It shall be the responsibility of the Local Government to reimburse the Pennsylvania Department of Transportation for any and all such inspection services.

126. REVIEW BY LOCAL PUBLIC AGENCY

The Local Public Agency, its authorized representatives and agents and the HUD Representative for the Administrator (as defined under GENERAL CONDITIONS, PART II) shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Local Public Agency through its authorized representatives or agents.

127. FINAL INSPECTION

a. When the Improvements embraced in this Contract are substantially completed, the Contractor shall notify the Local Public Agency, in writing, that the work will be ready for final inspection on a definite date which shall be stated in the notice. The notice will be given at least ten (10) days prior to the date stated for final inspection, and bear the signed concurrence of the representative of the Local Public Agency having charge of inspection. If the Local Public Agency determines that the status of the Improvements is as represented, it will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable. The inspection party will also include the HUD Representative and representatives of each department of the Local Government having in charge improvements of like character when such Improvements are later to be accepted by the Local Government.

128. DEDUCTION FOR UNCORRECTED WORK

If the Local Public Agency deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the Local Public Agency and subject to settlement, in case of dispute, as herein provided.

129. INSURANCE

- a. The Contractor shall carry or require that there be carried Workmen's Compensation Insurance for all his employees and those of his subcontractors engaged in work at the site, in accordance with State or Territorial Workmen's Compensation Laws.
- b. The Contractor shall carry or require that there be carried Manufacturer's and Contractor's Public Liability Insurance with limits of \$500,000 bodily injury each person \$500,000 each occurrence to protect the Contractor and his subcontractors against claims for injury to or death of one, or more than one, person, because of accidents which may occur or result from operations under the Contract; such insurance shall cover the use of all equipment, including but not limited to excavating machinery, trenching machines, cranes, hoists, rollers, concrete mixers, and motor vehicles, in the construction of the Improvements embraced in this Contract.
- c. The Contractor shall carry, during the life of the Contract, Property Damage Insurance in an amount not less than \$500,000 to protect him and his subcontractors from claims for property damage which might arise from operations under the Contract.
- d. Before commencing work, the Contractor shall submit evidence of the coverage required above to the Local Public Agency for review and approval. The policies shall be scheduled on a form approved by the Local Public Agency. The Local Public Agency will, in writing, identify the policies and indicate its approval or disapproval. New policies from other companies shall be provided in place of those disapproved. Such insurance shall be carried with financially responsible insurance companies, licensed in the State and approved by the Local Public Agency, and shall be kept in force until the Contractor's work is accepted by the Local Public Agency. Contracts of insurance (covering all operations under this Contract) which expire before the Contractor's work is accepted by the Local Public Agency shall be renewed and evidence submitted to the Local Public Agency for its approval.

130. PATENTS

The Contractor shall hold and save the Local Public Agency, its officers, and employees, harmless from liability of any nature or kind, including costs and expenses for or on account of, any patented or unpatented invention, process, article, of appliance manufactured or used in the performance of the Contract, including its use by the Local Public Agency, unless otherwise specifically stipulated in the Technical Specifications.

131. WARRANTY OF TITLE

No material, supplies, or equipment for the work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Local Public Agency free from any claims, liens, or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Local Public Agency. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

132. GENERAL GUARANTY

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the Improvements embraced in this Contract by the Local Public Agency or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve months from the date of final acceptance of the work. The Local Public Agency will give notice of defective materials and work with reasonable promptness.

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GENERAL CONDITIONS PART II FEDERAL REQUIREMENTS

All bidders must comply with the following Federal requirements:

I. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 (P.L. 88-352) AS STATED IN 24 CFR 570.496.

"No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this Title."

II. EXECUTIVE ORDER 11063, AS AMENDED.

"No person in the United States shall on the basis of race, color, religion, sex, or national origin, be discriminated against in housing (and related facilities) provided with Federal assistance and in lending practices with respect to residential property when such practices are connected with loans insured or guaranteed by the Federal Government."

III. EXECUTIVE ORDER 11246.

A. If the contract amount is less than \$10,000 the following conditions shall apply:

During the performance of this contract the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such actions shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Local Public Agency setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitation or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this contract so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.
- B. If the contract amount exceeds \$10,000 the following conditions shall apply:
 - (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or worker's representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965; and the rules, regulations and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Contracting Agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The Contractor will include the portion of the sentence immediately preceding paragraph (B-1) and the provisions of paragraphs (B-1) through (B-7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Contracting Agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Contracting Agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals and Timetables Goals and Timetables for Female

for Minority ParticipationParticipation infor Each TradeEach Trade

6.3% - Until further notice 6.9% - Until further notice

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontractor; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- 4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any).

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

- 1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, and the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO Clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization, the Contractor should reasonably be able to achieve in each construction trade in

which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of names, addresses and telephone numbers of each minority and female offstreet applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or referred, not employed by the Contractor, this shall be documented in the file with the reason thereafter, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligation.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and in disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment sources, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women, and where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc. such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitation of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including, suspension, termination and cancellation of existing Subcontracts as may be imposed or ordered pursuant to Executive Order 11246 as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4-8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application or requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Small Communities Program).

IV. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. 327 ET SEQ.)

The Contractor, if the contract is in excess of \$2,000, and any of his subcontractors, shall comply with Section 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor Regulations contained in 29 CFR Part 5.

Specific provisions of these sections are more fully described in Section 5, Federal Labor Standards Provisions, Subsection 3, Contract Work Hours and Safety Standards Act, below.

V. FEDERAL LABOR STANDARDS PROVISIONS

Pennsylvania Department of Community and Economic Development Program

1. **Applicability**

The Project or Program to which the work covered by this Contract pertains is being assisted by the Pennsylvania Small Communities Program and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

2. Minimum Wage Rates for Laborers and Mechanics

A. Minimum Wages.

All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act [29 CFR Part 3]), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in

each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. DCED shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and DCED or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate) a report of the action taken shall be sent by DCED or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise DCED or its designee within the 30-day period that additional time is necessary.

In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and DCED or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), DCED or its designee shall refer the questions, including the views of all interested parties and the recommendations of DCED or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise DCED or its designee within the 30-day period that additional time is necessary.

The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 4 and 5 of this Section (**Minimum Wages**), shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a

plan or program, provided that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

B. Withholding

DCED or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, DCED or its designee may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. DCED or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.

C. Payrolls and Basic Records

Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to DCED or its designee if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to DCED or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part

5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5(a)(3)(i) and that such information is correct and complete;
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

The weekly submission of properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph A.3(ii)(b) of this section.

The falsification of any of the above certification may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

The Contractor or subcontractor shall make the records required under paragraph A.3(i) of this section available for inspection, copying, or transcription by authorized representatives of DCED or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, DCED or its designee may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

D. Apprentices and Trainees.

Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by

the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the Apprentices shall be paid fringe benefits in applicable wage determination. accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and

Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

- E. **Compliance with Copeland Act requirements**. The Contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in the contract.
- F. **Subcontracts.** The Contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as DCED or its designee may by appropriate instruction require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all contract clauses in 29 CFR Part 5.5.
- G. **Contract termination; debarment**. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- H. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
- I. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and DCED or its designee, the U.S. Department of Labor, or the employees or their representatives.

J. Certification of Eligibility.

- (1) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transaction," provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration . . . makes, utters or publishes any statement, knowing

the same to be false . . . shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

- K. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.
- 3. **Contract Work Hours and Safety Standards Act**. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
 - A. **Overtime requirements.** No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any work week in which he or she is employed on such work to work in excess of forty hours in such work week unless such laborer or mechanic received compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such work week.
 - B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (A) "Overtime requirements," the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (A) "Overtime requirements," in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (A) "Overtime requirements."
 - C. Withholding for unpaid wages and liquidated damages. DCED or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (B) "Violation; liability for unpaid wages; liquidated damages."
 - D. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (A) through (D) of Section 3 "Contract Work Hours and Safety Standards Act" and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (A) through (D) of Section 3 "Contract Work Hours and Safety Standards Act."

4. Health and Safety

- A. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.
- B. The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).
- C. The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of the Department of Community and Economic Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

[SECTION VI RELATED TO SECTION 3 REQUIREMENTS WAS REMOVED – NOT APPLICABLE TO THIS PROJECT]

VII. LEAD BASED PAINT REQUIREMENTS.

Title IV of the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4831) prohibits the use of lead-based paint in residential structures constructed or rehabilitated with Federal assistance in any form.

VIII. CLEAN AIR AND CLEAN WATER ACTS.

This Agreement is subject to the requirements of the Clean Air Act, as amended, 42 U.S.C. 1857 et. seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time.

The Contractor and any of its subcontractors for work funded under the Agreement which is excess of \$100,000 agree to the following requirements:

- (1) A stipulation by the Contractor or subcontractors that any facility to be utilized in the performance of any non-exempt contract or subcontract is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
- (2) Agreement by the Contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended (42 U.S.C. 1857c-8) and Section 308 of the Federal Water Pollution Control Act, as amended. (33 U.S.C. 1318) relating to the inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations, and guidelines issued thereunder.
- (3) A stipulation that as a condition for the award of the contract prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

(4) Agreement by the Contractor that he will include or cause to be included the criteria and requirements in paragraph (1) through (4) of this section in every nonexempt subcontract and requiring that the Contractor will take such action as the Government may direct as a means of enforcing such provision.

IX. ENERGY CONSERVATION PROVISIONS.

Contractors must recognize mandatory standards and policies relating to energy efficiency contained in the Cost Effective Energy Conservation Measures.

X. SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974.

"No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this Title."

XI. EXECUTIVE ORDER 11625 - MINORITY BUSINESS ENTERPRISE, AND EXECUTIVE ORDER 12138 -- WOMEN'S BUSINESS ENTERPRISE.

- A. It is the policy of the Local Public Agency to take positive steps to maximize the utilization of minority business enterprises and women's business enterprises in all contract activity administered by the Local Public Agency.
- B. The Contractor will use his best efforts to carry out this policy in the award of his subcontracts and in obtaining materials and supplies to the fullest extent consistent with the efficient performance of this contract.
- C. Commitments to MBE and WBE firms made at the time of bidding must be maintained throughout the term of the contract, unless a change in commitment to these firms is preapproved by the Local Public Agency or the administering agency performing the evaluation of the bid.
- D. The prime Contractor must provide the Local Public Agency with a report of MBE/WBE subcontracting activity on a quarterly or a per project basis, whichever is sooner. The report shall reflect the names of and the total dollar amount paid to all MBE/WBE subcontractors (including suppliers) utilized under this contract.
- E. MBE/WBE subcontractors and suppliers must provide the Local Public Agency with a report reflecting the prime contractors who have purchased their services and/or supplies on a quarterly or per project basis. The report shall reflect the name of the prime contractor and the total dollar amount invoiced and total dollar amount received for payment.
- F. The Local Public Agency may obtain documents and information from any bidder, contractor, subcontractor supplier or manufacturer that may be required in order to ascertain bidder or contractor responsibility. Failure to provide requested information may result in the contractor being declared not responsible.

XII. AGE DISCRIMINATION ACT OF 1975.

No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance.

XIII. SECTION 504 HANDICAPPED (IF \$2,500 OR OVER).

Affirmative Action for Handicapped Workers

- A. The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: Employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- B. The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.
- C. In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.
- D. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.
- E. The Contractor will notify each labor union or representative or workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.
- F. The Contractor will include the provisions of this clause in every subcontract or purchase order of \$2,500 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for non-compliance.

STATE REQUIREMENTS

All Bidders must also comply with the following State requirements:

XIV. PENNSYLVANIA STEEL PRODUCTS PROCUREMENT ACT (No. 178-3).

If any steel products are to be used or supplied in the performance of the Contract, only steel products produced in the United States shall be used or supplied in the performance of the Contract or any subcontracts thereunder. This provision shall not apply in any case where the head of the public agency, in writing, determines that the type of steel products necessary to the performance of the Contract are not produced in the United States in sufficient quantities to meet the requirements of the Contract.

XV. PENNSYLVANIA HUMAN RELATIONS ACT, AS AMENDED.

NONDISCRIMINATION CLAUSE

During the term of this contract, Contractor agrees as follows:

1. Contractor shall not discriminate against any employee, applicant for employment independent contractor, or any other person because of race, color, religious creed, ancestry, national origin, age, or sex.

Contractor shall take affirmative action to ensure that applicants are employed, and that employees or agents are treated during employment, without regard to their race, color, religious creed, handicaps, ancestry, national origin, age, or sex. Such affirmative action shall include, but is not limited to: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training.

Contractor shall post in conspicuous places available to employees, agents, applicants for employment, and other persons, a notice to be provided by the contracting agency setting forth the provisions of this nondiscrimination clause.

- 2. Contractor shall, in advertisements of requests for employment placed by it or on its behalf, state that all qualified applicants will receive consideration for employment without regard to race, color, religious creed, handicap, ancestry, national origin, age, or sex.
- 3. Contractor shall send each labor union or workers' representative with which it has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representative of its commitment to this nondiscrimination clause. Similar notice shall be sent to every other source of recruitment regularly utilized by Contractor.
- 4. It shall be no defense to a finding of noncompliance with this nondiscrimination clause that Contractor has delegated some of its employment practices to any union, training program, or other source of recruitment that prevents it from meeting its obligations. However, it the evidence indicates that the Contractor was not on notice of the third-party discrimination or made a good faith effort to correct it, such factor shall be considered in mitigation in determining appropriate sanctions.

- 5. Where the practices of a union or any training program or other source of recruitment will result in the exclusion of minority group persons, so that Contractor will be unable to meet its obligations under this nondiscrimination clause, Contractor shall then employ and fill vacancies through other nondiscriminatory employment procedures.
- 6. Contractor shall comply with all state and federal laws prohibiting discrimination in hiring or employment opportunities. In the event of Contractor's noncompliance with the nondiscrimination clause of this contract or with any such laws, this contract may be terminated or suspended, in whole or in part, and Contractor may be declared temporarily ineligible for further Commonwealth contracts, and other sanctions may be imposed and remedies invoked.
- 7. Contractor shall furnish all necessary employment documents and records to, and permit access to its books, records, and accounts by the contracting agency for purposes of investigation to ascertain compliance with the provisions of this clause. If Contractor does not possess documents or records reflecting the necessary information requested, it shall furnish such information on reporting forms supplied by the contracting agency.
- 8. Contractor shall actively recruit minority and women subcontractors or subcontractors with substantial minority representation among their employees.
- 9. Contractor shall include the provisions of this nondiscrimination clause in every subcontract, so that such provisions will be binding upon each Subcontractor.
- 10. Contractor obligations under this clause are limited to the Contractor's facilities within Pennsylvania or, where the contract is for purchase of goods manufactured outside of Pennsylvania, the facilities at which such goods are actually produced.

XVI. Pennsylvania Act 187 of 1966 – Call before you dig!

- 1. It is the responsibility of the Contractor to comply with the Pennsylvania Underground Utility Line Protection Law. PA Act 187 of 1966 and Act 287 of 1974 as amended by Act 199 of 2004 and any other subsequent amendments.
- 2. The Contractor shall be responsible for notifying all utility companies at least seventy two (72) Hours before any work is commenced.
- 3. Exact location, depth and size of all existing utilities in the project area shall be verified in the field by the Contractor with a representative from the appropriate utility company.
- 4. Pennsylvania One Call, 1-800-242-1776, Call before you dig!

NONDISCRIMINATION/SEXUAL HARASSMENT CLAUSE

During the term of this contract, the contractor agrees as follows:

- 1. In the hiring of any employee(s) for the manufacture of supplies, performance of work, or any other activity required under the contract or any subcontract, the contractor, subcontractor, or any person acting on behalf of the contractor or subcontractor shall not, by reason of gender, race, creed, or color, discriminate against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.
- 2. Neither the contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate against or intimidate any employee involved in the manufacture of supplies, the performance of work, or any other activity required under the contract on account of gender, race, creed, or color.
- 3. Contractors and subcontractors shall establish and maintain a written sexual harassment policy and shall inform their employees of the policy. The policy must contain a notice that sexual harassment will not be tolerated and employees who practice it will be disciplined.
- 4. Contractors shall not discriminate by reason of gender, race, creed, or color against any subcontractor or supplier who is qualified to perform the work to which the contracts relates.
- 5. The contractor and each subcontractor shall furnish all necessary employment documents and records to and permit access to their books, records, and accounts by the contracting agency and the Bureau of Contract Administration and Business Development, for purposes of investigation, to ascertain compliance with provisions of this Nondiscrimination/Sexual Harassment Clause. If the contractor or any subcontractor does not possess documents or records reflecting the necessary information requested, the contractor or subcontractor shall furnish such information on reporting forms supplied by the contracting agency or the Bureau of Contract Administration and Business Development.
- 6. The contractor shall include the provisions of this Nondiscrimination/Sexual Harassment Clause in every subcontract so that such provisions will be binding upon each subcontractor.
- 7. The Commonwealth may cancel or terminate the contract and all money due or to become due under the contract may be forfeited for a violation of the terms and conditions of this Nondiscrimination/Sexual Harassment Clause. In addition, the agency may proceed with debarment or suspension and may place the contractor in the Contractor Responsibility File.

GENERAL SPECIFICATIONS

SPECIAL CONDITIONS FOR SITE PREPARATION PART III

301. PROJECT SITE

The Project Area of this Site Preparation Contract consists of the following general area: King Street in the vicinity of S 13th Avenue as well as the alleyways between King Street and East Old Cumberland Street in Avon, South Lebanon Township, Lebanon County, Pennsylvania, all as shown on the Construction Drawings designated as Sheets 1-7.

302. TIME FOR COMPLETION

a. The work which the Contractor is required to perform under this Contract shall be commenced at the time stipulated by the Local Public Agency in the Notice to Proceed to the Contractor and shall be fully completed within 120 days.

303. LIQUIDATED DAMAGES

As actual damages for any delay in completion of the work which the Contractor is required to perform under this contract are impossible for determination, the Contractor and his Sureties shall be liable for and shall pay to the Local Public Agency the sum of \$200.00 as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated for completion, or as modified in accordance with Section 109 - CHANGES IN THE WORK under GENERAL CONDITIONS - PART I, until such work is satisfactorily completed and accepted.

304. RESPONSIBILITIES OF CONTRACTOR

Except as otherwise specifically stated in the Contract Documents and Technical Specifications, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fee or other expenses and all other services and facilities of every nature whatsoever necessary for the performance of the Contract and to deliver all improvements embraced in this Contract for Site Preparation complete in every respect within the specified time.

305. COMMUNICATIONS

- a. All Notices, demands, requests, instructions, approvals, proposals and claims must be in writing.
- b. Any notice to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Agreement (or at such other office as the Contractor may from time to time designate in writing to the Local Public Agency), or if deposited in the United States mail in a sealed, postage prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.

- c. All papers required to be delivered to the Local Public Agency shall, unless otherwise specified in writing to the Contractor, be delivered, or if deposited in the United States mail in a sealed, postage prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Local Public Agency at such address, or to such other representatives of the Local Public Agency or to such other address as the Local Public Agency may subsequently specify in writing to the Contractor for such purpose.
- d. Any such notice shall be deemed to have been given as of the time of actual delivery or (in the case of mailing) when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt, as the case may be.

306. SIGNS

- a. The Contractor shall erect one (1) sign provided by the Local Public Agency, containing the following information: short name of site preparation activity, identification of the Local Public Agency and the legislative act under which funds are provided. Sign shall be placed at the direction of the Engineer.
- b. The Contractor shall maintain this Project Sign in good condition satisfactory to the Local Public Agency during the period of his performance of this Contract and upon completion of the Contract work, or when directed, shall return it to the Local Public Agency cleaned, (freshly painted and lettered, if required), and in acceptable condition.
- c. Subject to prior approval of the Local Public Agency as to size, design, type and location and to local regulations, the Contractor and his subcontractors may erect temporary signs for purposes of identification and controlling traffic. The Contractor shall furnish, erect and maintain such other signs as may be required by Safety Regulations or as necessary to safeguard life and property.

307. JOB OFFICES

- a. The Contractor and his subcontractors may maintain such office and storage facilities on the Site as are necessary for the proper conduct of the work. These shall be located so as to cause no interference to any work to be performed on the Site. The Local Public Agency shall be consulted with regard to locations.
- b. If no office is maintained, a suitable place for posting required notices, with adequate protection from the weather, shall be provided.
- c. Upon completion of the Improvements, or as directed by the Local Public Agency the Contractor shall remove all such temporary structures and facilities from the Site, same to become his property, and leave the Site of the work in the condition required by the Contract.

308. PARTIAL USE OF SITE IMPROVEMENTS

The Local Public Agency, at its election, may give notice to the Contractor and place in use those sections of the Improvements which have been completed, inspected and can be accepted as complying with the Technical Specifications, and if in its opinion each such section is reasonably safe, fit and convenient for the use and accommodation for which it was intended, provided:

- a. The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.
- b. The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.
- c. The use of such sections shall in no way relieve the Contractor of his liability due to having used defective materials or to poor workmanship.
- d. The period of guarantee stipulated in the Section 132 GENERAL GUARANTY under GENERAL CONDITIONS, PART I, shall not begin to run until the date of the final acceptance of all work which the Contractor is required to construct under this Contract.

309. Wo	ORK BY	OTHERS
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None		

310. CONTRACT DOCUMENTS AND DRAWINGS

The Local Public Agency will furnish the Contractor without charge three (3) copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

311. OTHER SPECIAL CONDITIONS

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CONTRACT CHANGE ORDER

REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON, PENNSYLVANIA

		Project Name		
		Date		
To: (C	Contractor)			
You ar	e hereby requested to comply wi	ith the following changes from the C	ontract Plans and S	pecifications:
Item No.		anges - Quantities, Units on Schedule, Etc.	Decrease in Contract Price	Increase in Contract Price
	Change in contract price due to Total Decrease Total Increase Difference Net (increase) (decrease)	o this Change Order:	\$ \$ \$	\$ \$ \$
The tir	ne provided for completion in t This document shall become a	the Contract is unchanged (increase an amendment to the Contract and a	d, decreased by	
Accept	ted by:(Con	ntractor)		(Date)
Recom	mended by:			
	(Eng	gineer)		(Date)
Approv	ved by:(O	wner)		(Date)

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CHANGE ORDER - TIME ONLY INVOLVED

REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON, PA

	(Name of Contractor)		(Date)	
	(Number and Street)	(Name of Project)		
	(City)		(State and Zip Code)	
	CHANGE OR	RDER NO		
Gentlem	en:			
In conne	ction with Contract No, date	ed	, for	
located i	n	,]	Pennsylvania.	
1 The o	(Number and Street) (City) (City) (State and Zip Code) CHANGE ORDER NO emen: nection with Contract No, dated, for di in, Pennsylvania. the completion of the work has been delayed by reason of: and the Local Public Agency has duly determined that: (a) The delay was due to unforeseeable causes beyond your control and without your fault or negligence; (b) Notice of the cause of the delay was given within the time and in the manner prescribed by the contract; and 2) The causes of delay justify and require an extension of the time as herein provided as a matter of legal right without the assertion of a claim by the owner for (actual) (liquidated) damages because of the contractor's failure to complete the work within the number of days specified by the contract. ct to conditions hereinafter set forth, an equitable adjustment of the contract time is established, as			
2. The I	Local Public Agency has duly determined	that:		
(a)	•	es beyond your c	ontrol and	
(b)		en within the tim	e and in the	
c)	provided as a matter of legal right withou (actual) (liquidated) damages because of	out the assertion of the contractor's	of a claim by the owner for	
Subject t follows:	to conditions hereinafter set forth, an equi-	table adjustment	of the contract time is established, as	
	THE CONTRACT TIME IS EXT	ENDED () CALENDAR DAYS	

The conditions last above referred to are as follows:

- A. The aforementioned adjustment of contract time is subject to all contract stipulations and covenants;
- B. The rights of the Local Public Agency are not prejudiced; and
- C. All claims against the Local Public Agency which are incidental to or as a consequence of the aforementioned delay are satisfied.

Accepted(Contractor)	REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON, PENNSYLVANIA
By	By
Title	Title
Date	Date

CONTRACTOR'S CERTIFICATE AND RELEASE

From:	
(Name of Contra	actor)
To: REDEVELOPMENT AUTHORITY OF THE COUNT	Y OF LEBANON
Reference Contract No entered into the 20, between the REDEVELOPMENT AUTHORITY 0	
(Name of Contra	actor)
of	
(City)	(State)
for the	
(Name of Opera	tions)
part of the	
(Name of Proj	ect)
located in	, PENNSYLVANIA.
KNOW ALL MEN BY THESE PRESENTS:	
The undersigned hereby certifies that there is due the Contractor under the contract and duly approved Changes	
2. The undersigned further certifies that in addition outstanding and unsettled the following items which has Redevelopment Authority of the County of Lebanon to the Count	ne claims are just and due and owing by the
3. The undersigned further certifies that all work re under Change Orders numbered ha thereof, and that there are no unpaid claims for materials, s mechanics for unpaid wages arising out of the performance the Contractor and all subContractors were in conformity rates.	as been performed in accordance with the terms supplies or equipment and no claims of laborers or e of this contract, and that the wage rates paid by

4. Except for the amounts stated under paragraphs 1 and 2 hereof, the undersigned has received from the Redevelopment Authority of the County of Lebanon all sums of money payable to the undersigned under or pursuant to the above mentioned contract or any modification or change thereof.

5. That in consideration of the payment of the amount stated in paragraph 1 hereof the undersigned does hereby release the Redevelopment Authority of the County of Lebanon from any and all claims arising under or by virtue of this contract, except the amount listed in paragraph 2 hereof; provided, however, that if for any reason the Redevelopment Authority of the County of Lebanon does not pay in full the amount stated in paragraph 1 hereof, said deduction shall not affect the validity of this release, but the amount so deducted shall be automatically included under paragraph 2 as an amount which the Contractor has not released but will release upon payment thereof. The Contractor further certifies that upon the payment of the amount listed in paragraph 2 hereof, and of any amount which may be deducted from paragraph 1 hereof, he will release the Redevelopment Authority of the County of Lebanon from any and all claims of any nature whatsoever arising out of said contract or modification thereof, and will execute such further releases or assurances as the Redevelopment Authority of the County of Lebanon may request.

day of, 20	•
	(SEAL)
	(Signature and Title of Officer)
	, being first duly sworn on oath, deposes and says,
(Affiant) Tirst, that he is the	
of the	(Name of Company)
(Title) second, that he has read the foregoing certificate	(Name of Company) by him subscribed as
of the	
(Title)	(Name of Company)
Affiant further states that the matters an belief, true.	nd things stated therein are, to the best of his knowledge a
	(Affiant)
Subscribed and sworn to before me this _	day of20
My commission expires	.
	(Notary)

AVON STORMWATER IMPROVEMENTS

CONSTRUCTION DRAWINGS

LEBANON COUNTY REDEVELOPMENT AUTHORITY **LOCATED IN**

SOUTH LEBANON TOWNSHIP, LEBANON COUNTY, PENNSYLVANIA

MARCH 24, 2022



LOCATION MAP SCALE: 1" = 250'

OWNER

LEBANON COUNTY REDEVELOPMENT AUTHORITY 39 N. 12th STREET IFRANON PA 17046 PHONE: 717-273-9326

LIST OF DRAWINGS

COVER SHEET	1 OF 7
EXISTING CONDITIONS/DEMOLITION PLAN	2 OF 7
OVERALL LAYOUT PLÁN	3 OF 7
DRAINAGE IMPROVEMENTS PLAN	4 OF 7
PROFILES/DETAILS	5 OF 7
E&S PLAŃ	6 OF 7
E&S NARRATIVE/DETAILS	7 OF 7

SUPPLEMENTAL DRAWINGS

APPROVED HIGHWAY OCCUPANCY PERMIT	DRAWINGS
COVER	1 OF :
EXISTING CONDITIONS/DEMOLITION PLAN	2 OF
OVERALL LAYOUT PLAN	3 OF
DRAINAGE IMPROVEMENTS PLAN	4 OF
PROFILES, CROSS SECTION, AND DETAILS	5 OF



IS WORK CONSISTS OF THE MAINTENANCE AND PROTECTION OF TRAFFIC AND THE PROTECTION

APPROACHING AND DEPARTING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION. FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES. MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES CONSISTENT WITH THE METHODS INDICATED ON THESE DRAWINGS AND THE FOLLOWING. PENNDOT PUBLICATION 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15)

PENNDOT PUBLICATION 46, TRAFFIC ENGINEERING MANUAL PENNDOT PUBLICATION 72M, STANDARDS FOR ROADWAY CONSTRUCTION

6. PENNDOT PUBLICATION 213. TEMPORARY TRAFFIC CONTROL GUIDELINES

7. PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS

REMOVE THESE DEVICES IMMEDIATELY UPON COMPLETION OF THE WORK. PENNDOT WILL REMOVE ANY TRAFFIC CONTROL DEVICES ERECTED BY DEPARTMENT FORCES.

PERMITTEE MUST ARRANGE FOR INSPECTION OF ALL TRAFFIC CONTROL DEVICES PRIOR TO START OF WORK. COVER OR REMOVE ALL CONFLICTING SIGNS AND ERADICATE ALL CONFLICTING PAVEMENT MARKINGS.

ALL SIGNS AND DEVICES TO BE MAINTAINED IN NEW OR LIKE NEW CONDITION. DRIVEWAYS WILL BE KEPT ACCESSIBLE AT ALL TIMES. LOCATE ALL SIGNS SO THAT SIGHT DISTANCES WILL NOT BE

CHANNELIZING DEVICES, BARRICADES, AND SIGNS SHALL HAVE TYPE III OR BETTER PRISMATIC RETROREFLECTIVE SHEETING

SHEETING SHALL BE APPROVED AND LISTED IN PENNDOT PUBLICATION 35 (BULLETIN 15). NO TRAFFIC RESTRICTIONS OR LANE CLOSURES ARE PERMITTED BETWEEN 6:00 AM AND 9:00 AM AND BETWEEN 3:00 PM AND 6:00 PM MONDAYS THROUGH FRIDAYS OR ON LEGAL HOLIDAYS AND WEEKENDS ASSOCIATED WITH LEGAL HOLIDAYS. ALL

RESTRICTIONS AND CLOSURES ARE TO BE REMOVED BY NOON ON THE DAY PRIOR TO THE LEGAL HOLIDAY. PERMITTEE SHALL NOTIFY LOCAL EMERGENCY AUTHORITIES (E.G., POLICE, FIRE, MEDICAL), AFFECTED BUSINESS, SCHOOL DISTRICT(S), THE GENERAL PUBLIC, THE DISTRICT PERMIT MANAGER AND THE DISTRICT APRAS COORDINATOR AT LEAST FOURTEEN DAYS PRIOR TO ANY SIGNIFICANT TRAFFIC IMPACTS (E.G., LATERAL WIDTH RESTRICTIONS LESS THAN 16 FEET,

12. MAINTENÁNCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE PATA DRAWINGS 106, 109B, 109H, 202-A, AND 203 IN THE CURRENT PENNDOT PUBLICATION 213, "TEMPORARY TRAFFIC CONTROL

14. REMOVE ALL SHORT-TERM WORK ZONE TRAFFIC CONTROL SIGNING UPON COMPLETION OF THAT DAY'S WORK PERIOD. 15. RESTRICTING TRAFFIC FLOW WITHIN THE WORK AREA SHALL BE MINIMIZED TO PREVENT TRAFFIC CONGESTION AND UNSAFE

16. NOTIFY THE LOCAL MUNICIPALITY WHERE SIGNALIZED INTERSECTIONS FALL WITHIN THE WORK ZONE. DO NOT FLAG A SIGNALIZED INTERSECTION WITHOUT THE MUNICIPALITY PLACING THE SIGNAL ON FLASH.

THE CONTRACTOR SHALL COMPLY WITH ACT 229 OF DECEMBER 2002 DURING CONSTRUCTION ACTIVITIES WITHIN PENNDOTS

SIGNING, PAVEMENT MARKINGS, AND DELINEATION NOTES

PAVEMENT MARKINGS, AND DELINEATION IN ACCORDANCE WITH THE MOST CURRENT PENNDOT PUBLICATION 111 TRAFFIC CONTROL, TC-8600 AND TC-8700 SERIES, PENNDOT PUBLICATION 46, THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PUB. 212, OFFICIAL TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE PENNDOT DISTRICT 8-0 REPRESENTATIVE.

2. DETAILS OTHER THAN THOSE INDICATED ARE ON THE FOLLOWING STANDARD DRAWINGS: A. TC-8600 11 SHEETS JUNE 13, 2013

TC-8702B 9 SHEETS JUNE 13, 2013

3. ANY LEGAL OR PRIVATE SIGN THAT IS TO BE REMOVED FOR CONSTRUCTION THAT IS WITHIN THE PROJECT LIMITS BUT IS NOT INCLUDED IN THE PROJECTS SIGN TABULATIONS SHALL BE REINSTALLED AT OR NEAREST ITS ORIGINAL LOCATION. IF SIGN IS DETERMINED UNNECESSARY, IT SHALL BE RETURNED TO ITS OWNER.

4. ANY SIGN THAT IS TO REMAIN OR BE REINSTALLED, THAT BECOMES DAMAGED IN ANY WAY DURING CONSTRUCTION OR DURING REMOVAL, STORAGE, OR REINSTALLATION, SHALL BE REPLACED IN KIND WITH A NEW SIGN AT NO ADDITIONAL COST TO THE

5. PLACE ALL SIGNS ENTIRELY WITHIN THE LEGAL RIGHT—OF WAY.

5. FOR FABRICATION OF ALL STANDARD SIGNS, REFER TO PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 236M. ALL TYPE B POST MOUNTED SIGNS ARE TO BE INSTALLED USING SQUARE CHANNEL POSTS AND ANCHORS OF THE APPROPRIATE SIZE. ANCHORS SHALL NOT EXTEND MORE THAN 1 INCH ABOVE THE GROUND LINE. 8. DO NOT REMOVE EXISTING SIGNS UNTIL THE NEW SIGNS ARE INSTALLED. IF EXISTING SIGNS CONFLICT WITH CONSTRUCTION

INSTALL TEMPORARY SIGNS AS DIRECTED BY A PENNDOT DISTRICT 8-0 REPRESENTATIVE. DO NOT REMOVE THE TEMPORARY SIGNS UNTIL THE NEW SIGNS ARE INSTALLED. 9. APPLY AN INSTALLATION DATE PERMANENTLY TO THE BACK SIDE OF EACH SIGN INSTALLED WITHIN THE PROJECTS LIMITS OF

10. CONTRACTOR SHALL CALL PA ONE CALL SYSTEM, INC AT 1-800-242-1776 PRIOR TO DIGGING FOR ALL SIGNS.

11. APPLY PAVEMENT MARKINGS AT THE WIDTH INDICATED. 12. USE WATERBORNE PAINT FOR ALL LONGITUDINAL LINES. ON THE FINAL BITUMINOUS WEARING COURSE OR CONCRETE SURFACE, APPLY TWO APPLICATIONS OF PAINT, APPLY THE SECOND APPLICATION AFTER THE FIRST IS DRY, WITHIN 24 HOURS

13. FOR ALL TRANSVERSE APPLICATIONS, USE EPOXY (ON CONCRETE) AND HOT THERMOPLASTIC (ON ASPHALT). 14. APPLY ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

15. THE CONTRACTOR SHALL REAPPLY ANY PAVEMENT MARKING THAT IS DAMAGED BEYOND THE START/STOP OF WORK DUE TO

CONSTRUCTION ACTIVITY AT NO ADDITIONAL COST TO THE DEPARTMENT. 16. MATCH EXISTING PAVEMENT MARKINGS AT THE LIMITS OF WORK.



PENNSYLVANIA ACT 287 OF 1974, AS AMENDED REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.

DATE: 02/07/2020 BY: RCS SERIAL NO: 20200381810 NOTES: UNDERGROUND UTILITY LINE PROTECTION ACT

IN COMPLIANCE WITH AND PURSUANT TO THE PROVISIONS OF 73 P.S. §176, AS AMENDED BY ACT 287 OF 1974, AS AMENDED ECKBECK ENGINEERING & SURVEYING INC. HAS PERFORMED THE FOLLOWING REQUIREMENTS IN PREPARING THES DRAWINGS THAT INCLUDE EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION AND/OR LAND DEVELOPMENT SHOWN ON THE DRAWINGS HEREIN:

1. PURSUANT TO 73 P.S. §176(2), STECKBECK ENGINEERING & SURVEYING INC HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM NOT LESS THAN TEN (10) NOR MORE THAN NINETY (90) BUSINESS DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED. IF SUCH INFORMATION WAS OBTAINED MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, STECKBECK ENGINEERING & SURVEY INC HAS STATED IN THE REQUEST THAT THE WORK IS 2. PURSUANT TO 73 P.S. §176(3), STECKBECK ENGINEERING & SURVEYING INC. HAS SHOWN, UPON REQUEST THESE DRAWINGS, THE POSITION AND TYPE OF EACH FACILITY OWNER'S LINE, AS DERIVES PURSUANT TO THE REQUEST MADE AS REQUIRED BY 73 P.S. §176(2), THE NAME OF THE FACILITY OWNER AND THE FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

3. PURSUANT TO 73 P.S. §176(5), STECKBECK ENGINEERING & SURVEYING INC. HAS CALLED THE ONE CALL SYSTEM AND SHOWN AS PROOF, THE SERIAL NUMBER OF THE ONE CALL NOTICE AND THE TOLL FREE NUMBER OF THE ONE CALL SYSTEM ON THE DRAWINGS NEAR THE SERIAL NUMBER.

4. IF, PURSUANT TO 73 P.S. §176(2), STECKBECK ENGINEERING & SURVEYING INC. HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, STECKBECK ENGINEERING & SURVEYING INC. HAS INDICATED THAT THE REQUEST IS PRELIMINARY AND THE SERIAL NUMBER OF SAID REQUEST IS SHOWN ON THE DRAWINGS HEREIN. STECKBECK ENGINEERING & SURVEYING INC. DOES NOT REPRESENT, WARRANT, ASSURE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO THE ONE CALL SYSTEM REQUEST AND AS REFLECTED ON THESE DRAWINGS IS ACCURATE OR CORRECT. FURTHERMORE, STECKBECK ENGINEERING & SURVEYING INC. INCLUDES THE INFORMATION ONLY PURSUANT TO THE REQUIREMENTS OF THE UNDERGROUND UTILITY LINE PROTECTION ACT, AS AMENDED BY ACT 287 OF 1974, AS AMENDED.

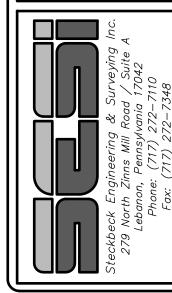
IT IS THE CONTRACTIORS RESPONSIBILITY TO FILED VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION BY CALLING THE PENNSYLVANIA ONE CALL SYSTEM 1-800-242-176 A MINIMUM OF THREE (3) DAYS PRIOR TO EXCAVATING OR WITH CAREFUL EXPLORATORY WORK, AT THE CONTRACTOR'S RISK, PRIOR TO CONSTRUCTION FOR THOSE PRIVATE LINES WHICH ARE NOT ABLE TO BE LOCATED THROUGH THE ONE CALL PROCESS. IT MAY BECOME NECESSARY IN THE FIELD TO ADJUST THE PROPOSED UTILITY LOCATION TO RESOLVE AND UTILITY CROSSING CONFLICTS WHICH MAY OCCUR. STECKBECK ENGINEERING & SURVEYING INC. SHALL BE NOTIFIED IMMEDIATELY OF ANY SUCH CONFLICTS ARE ENCOUNTERED. THE INFORMATION CONTAINED IN THIS SECTION AS IT RELATES TO THE DUTIES OF CONTRACTORS DOES NOT CONSTITUTE LEGAL ADVICE AND IN NO WAY REPRESENTS THE EXTENT OF THE CONTRACTOR'S DUTIES PURSUANT TO THE UNDERGROUND UTILITY LINE PROTECTION ACT. CONTRACTORS WITH QUESTIONS REGARDING THE UNDERGROUND UTILITY LINE PROTECTION ACT. CONTRACTORS WITH QUESTIONS REGARDING THE UNDERGROUND UTILITY LINE PROTECTION.

CITY OF LEBANON AUTHORITY 311 RIDGEVIEW ROAD LEBANON, PA 17042 CONTACT - BOB SENTZ BSENTZ@LEBANONAUTHORITY.ORG METROPOLITAN EDISON CO/FIRSTENERGY 2800 POTTSVILLE PIKE CONTACT - AMANDA HOUSTON ahouston@firstenergycorp.com CENTURY LINK 1025 FLDORADO BLVD BROOMFIELD, CO 8002

CONTACT - CENTURY LINK OPERATOR PERSONEL nationalrelo@centurylink.com VERIZON PENNSYI VANIA I I C 1026 HAY STREET PITTSBURGH, PA 15221

CONTACT - DEBORAH BARUM deborah.d.delia@verizon.com SOUTH LEBANON TOWNSHIP 1800 S 5TH AVENUE LEBANON, PA 17042 CONTACT - RON JOHNSON ron.slt@comcast.net UGI UTILITIES INC MIDDLETOWN, PA 17057-5987 CONTACT - STEPHEN BATEMAN ENGINEER PE057447

ВУ			
DATE			
REVISION			



FIELD	CREW	: DY/	′TB
BASE	MAP:	D,	Ý
DRAW	N:	EJ	G
DESIG	N:	EJ	G
CHECK	KED:	SA	ιS
DATE:		3/24/	2022
SCALE	Ī:	NO S	CALE
PROJE	ECT #	005–18	3-004
		_	
		1	

OF 7 SHEETS

SURVEY NOTES:

BENCHMARK: MAG NAIL 27'± NORTH OF UTILITY POLE #37975-37175 ON THE NORTH SIDE OF KING STRFFT ELEVATION: 480.82

COMPANY OR AUTHORITY, AT THE CONTRACTOR'S EXPENSE.

ANY REVISIONS TO THIS PLAN AFTER THE DATE OF PLAN PREPARATION OR LATEST REVISION SHALL NOT BE THE RESPONSIBILITY OF STECKBECK ENGINEERING & SURVEYING, INC. SUBSTITUTIONS FOR ANY MATERIAL NOTED ON THESE

COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH

ALL WEARING COURSE PAVING CAN ONLY BE INSTALLED BETWEEN THE DATES APRIL 15 TO OCTOBER 15 UNLESS

PLAN LOCATION AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER

DURING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS, NO ALTERATION FROM THE PLAN MAY BE MADE WITHOUT TOWNSHIP APPROVAL. CHANGES TO THE APPROVED PLAN SHALL ONLY BE AUTHORIZED BY WRITTEN APPROVAL OF THE

STATE ROADWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT PENNDOT STANDARDS AND AS SPECIFIED IN

ACCORDANCE WITH THE SPECIFICATIONS OF SOUTH LEBANON TOWNSHIP. IN THE ABSENCE OF A TOWNSHIP STANDARD, THE

THE INFORMATION SHOWN ON THIS DRAWING MAY HAVE ALSO BEEN PROVIDED IN A DIGITAL DRAWING FORMAT. ONCE A

DRAWING IS RELEASED FROM STECKBECK ENGINEERING & SURVEYING, INC. IN A DIGITAL FORMAT, WE HAVE NO CONTROL OVER MANIPULATION OR MISUSE OF THE DATA CONTAINED IN THAT FILE. THE VIEWER IS THEREFORE CAUTIONED TO

COMPARE ANY SUBSEQUENT REPRODUCTIONS OR MANIPULATIONS OF THIS DATA WITH THE ORIGINAL HARD COPY SEALED

PLAN PROVIDED BY STECKBECK ENGINEERING & SURVEYING, INC. THE USER IS ALSO CAUTIONED THAT ANY USE OF THE

DATA CONTAINED IN THE DIGITAL FILE THAT IS NOT SHOWN ON THE HARD COPY DRAWING, MUST BE AT THE RISK OF THE

ON VARIOUS USER DRAWINGS. TO THE BEST OF OUR KNOWLEDGE THE LOCATIONS AND TYPES ARE CORRECT AND ACCURATE, BUT STECKBECK ENGINEERING & SURVEYING, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY

ASSURANCE, OR GUARANTEE THE INFORMATION RECEIVED AND REFLECTED ON THESE DRAWINGS IS CORRECT OR ACCURATE. PURSUANT TO SECTION 5 CLAUSE (1) OF ACT 172 AMENDING ACT 287 IT SHALL BE THE RESPONSIBILITY OF

THE CONTRACTOR TO ASCERTAIN THE LOCATION AND TYPE OF USERS LINES AT THE CONSTRUCTION SITE, EITHER BY INSPECTION OF THE DESIGNER'S DRAWING OR IF THERE BE NO SUCH DRAWINGS, THEN BY THE SAME MANNER AS THA PRESCRIBED FOR A DESIGNER IN CLAUSE (1) AND (2) OF SECTION 4. PURSUANT TO SECTION 5 CLAUSE (2) IT WILL BE

THE CONTRACTORS RESPONSIBILITY NOT LESS THAN THREE NOR MORE THAN TEN WORKING DAYS PRIOR TO THE DAY OF

BEGINNING SUCH WORK, TO NOTIFY EACH USER OF THE CONTRACTOR'S INTENT TO PERFORM SUCH WORK AT ITS SITE OR

SITES AND REQUEST THE INFORMATION PRESCRIBED BY [SUBCLAUSES II AND III] OR CLAUSE (5) OF SECTION 2, FROM

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS ON SITE PRIOR TO THE START OF CONSTRUCTION

UNDERGROUND UTILITIES HAVE BEEN SHOWN ACCORDING TO INFORMATION PROVIDED BY OTHERS AND MUST BE FIELD

BEEN FIELD VERIFIED AND THE LOCATIONS ARE APPROXIMATE. STECKBECK ENGINEERING & SURVEYING, INC. (SESI) DOES

NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE UNDERGROUND UTILITY LOCATION

INFORMATION PROVIDED BY OTHERS AND REFLECTED ON THESE DRAWINGS IS CORRECT AND ACCURATE. SESI ASSUMES NO LIABILITY FOR ANY DAMAGE INCURRED AS A RESULT OF UNDERGROUND UTILITIES OMITTED OR INACCURATELY SHOWN.

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. DAMAGE TO ANY UTILITY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER, UTILITY

THE CONTRACTOR IS RESPONSIBLE FOR ALL TESTING AND RECORD DRAWINGS AS MAY BE REQUIRED BY THE MUNICIPALITY

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS THE NEED ARISES. ALL TRAFFIC CONTROL

IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE GRADING PLAN IS IMPLEMENTED CORRECTLY, THAT A MINIMUM COVER IS MAINTAINED OVER ALL UTILITY PIPES, AND THAT PROPER DRAINAGE IS PROVIDED DURING

THESE PLANS, PREPARED BY SESI, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE

SEAL OF STECKBECK ENGINEERING & SURVEYING, INC. (SESI) REGISTERED PROFESSIONAL HEREON DOES NOT EXTEND TO

ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THESE PLANS. THE CONSTRUCTION

CARTWAYS OF DEDICATED AND UNDEDICATED STREETS UNLESS EXPRESS PERMISSION IS GRANTED BY SOUTH LEBANON

CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY OSHA

7. CONTRACTORS SHALL NOT STORE CONSTRUCTION MATERIALS OR LOCATE TRASH RECEPTACLES (DUMPSTERS) ON PAVED

8. ALL MUD FROM CONSTRUCTION ACTIVITIES THAT GETS TRACKED ONTO STREETS, EITHER DEDICATED OR UNDEDICATED,

9. THE CONTRACTOR SHALL SUBMIT AND OBTAIN APPROVAL OF SHOP DRAWINGS FROM THE TOWNSHIP ENGINEER FOR ALL MATERIALS. MATERIALS ORDERED PRIOR TO SHOP DRAWING APPROVAL ARE ORDERED AT THE CONTRACTOR'S RISK OF NOT

10. DIGGING TEST PITS: IN LOCATIONS WHERE NEW UNDERGROUND UTILITIES ARE TO BE CONNECTED TO EXISTING UNDERGROUND UTILITIES, THE CONTRACTOR WILL NOT BE PERMITTED TO PROCEED WITH THE NEW CONSTRUCTION UNTIL HE HAS DUG TEST PITS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF THE EXISTING UNDERGROUND UTILITIES.

11. MATERIALS AND DETAILS SPECIFIED ON THE APPROVED PLAN SHALL NOT BE ALTERED DURING CONSTRUCTION WITHOUT

13. ALL OPEN TRENCHES SHALL BE BACKFILLED COMPLETELY AT THE END OF EACH WORK DAY. STEEL PLATES MAY BE

12. CONTRACTOR IS RESPONSIBLE FOR REPAIRING/RESTORING ANY PROPERTY DAMAGED DURING CONSTRUCTION.

THE CONTRACTOR IS ADVISED THAT NO EXCAVATION IS PERMITTED IN THE UNDERGROUND UTILITY LOCATION WITHOUT THE PRESENCE OR WRITTEN APPROVAL OF AN AUTHORIZED REPRESENTATIVE OF THE OWNER OF THE SUBSURFACE UTILITY. DIG

SUCH TEST PITS AT THE LOCATIONS AGREED TO BY THE OWNER OF THE SUBSURFACE UTILITY AND THE ENGINEER, AS

EACH USER'S OFFICE DESIGNATED ON THE DESIGNERS DRAWINGS OR ON THE LIST OF USERS OBTAINED PURSUANT TO

14. STECKBECK ENGINEERING & SURVEYING, INC. HAS NOT PERFORMED ANY ARCHAEOLOGICAL STUDIES OR INVESTIGATIONS OF THIS SITE AND WE MAKE NO REPRESENTATION NOR WARRANTY THAT HISTORICAL OR ARCHAEOLOGICAL RESOURCES DO NOT EXIST ON THIS SITE. SUCH STUDIES ARE NOT A MUNICIPAL REQUIREMENT NOR ARE THEY NORMAL OR CUSTOMAR' ENGINEERING TASKS PERFORMED FOR THE CONSTRUCTION SHOWN ON THESE PLANS. STECKBECK ENGINEERING & SURVEYING, INC. SHALL NOT BE RESPONSIBLE NOR LIABLE FOR THE IMPACTS OR COSTS TO THIS PROJECT IN THE EVENT THAT ANY ARCHAEOLOGICAL OR HISTORICAL RESOURCES ARE DISCOVERED DURING THE COURSE OF DEVELOPMENT OR

15. A COPY OF THE APPROVED HIGHWAY OCCUPANCY PERMIT (HOP) PLAN SHALL BE KEPT ON SITE AT ALL TIMES.

AND/OR THE VARIOUS AUTHORITIES RELATIVE TO THE CONSTRUCTION SHOWN ON THESE PLANS.

SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 213, LATEST EDITION.

SHALL BE CLEANED BY THE BUILDER/CONTRACTOR AT THE END OF EACH WORKDAY.

11. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, COUNTY, AND CITY STANDARDS AND

13. UTILITY TYPE AND LOCATION NOTICE: ALL EXISTING UTILITIES ARE SHOWN AS FOUND IN THE FIELD AND/OR ILLUSTRATED

THE APPROVED HIGHWAY OCCUPANCY PERMIT (HOP) PLANS. ALL OTHER ROADWAYS SHALL BE CONSTRUCTED IN

PLANS REQUIRES PRIOR WRITTEN APPROVAL OF STECKBECK ENGINEERING & SURVEYING, INC.

PRIOR TO CONSTRUCTION, CONTRACTOR MUST VERIFY ALL ELEVATIONS SHOWN THROUGH THE ENGINEER.

NO ONE SHALL SCALE FROM THESE PLANS FOR CONSTRUCTION PURPOSES.

CURRENT PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION SHALL BE UTILIZED.

CONTRACTOR IS RESPONSIBLE FOR SUB-GRADE PREPARATION.

ALTERNATE DATE IS APPROVED BY THE CITY ENGINEER.

PUBLICATION 408, SECTIONS 105.06 AND 107.12.

VERTICAL DATUM: NAVD 88 HORIZONTAL DATUM: NAD83 - PA SOUTH ZONE

SHOWN ON THE UTILITY PLAN SHEETS.

WRITTEN APPROVAL BY THE TOWNSHIP

ALLOWED IF APPROVED BY THE ENGINEER.

UNDERGROUND UTILITIES ARE SHOWN ACCORDING TO INFORMATION PROVIDED BY OTHERS AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION, EXCAVATION OR BLASTING. THE ACTUAL LOCATIONS OF THESE UTILITIES HAVE NOT BEEN FIELD VERIFIED AND THE LOCATIONS ARE APPROXIMATE. STECKBECK ENGINEERING & SURVEYING, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE, OR GUARANTEE THAT THE UNDERGROUND UTILITY LOCATION PROVIDED BY OTHERS AND REFLECTED ON THESE DRAWINGS ARE CORRECT AND ACCURATE. STECKBECK ENGINEERING & SURVEYING, INC. ASSUMES NO RESPONSIBILITY FOR ANY DAMAGES

INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. ALL ROAD RIGHTS-OF-WAY ARE SHOWN IN ACCORDANCE WITH CITY OF LEBANON

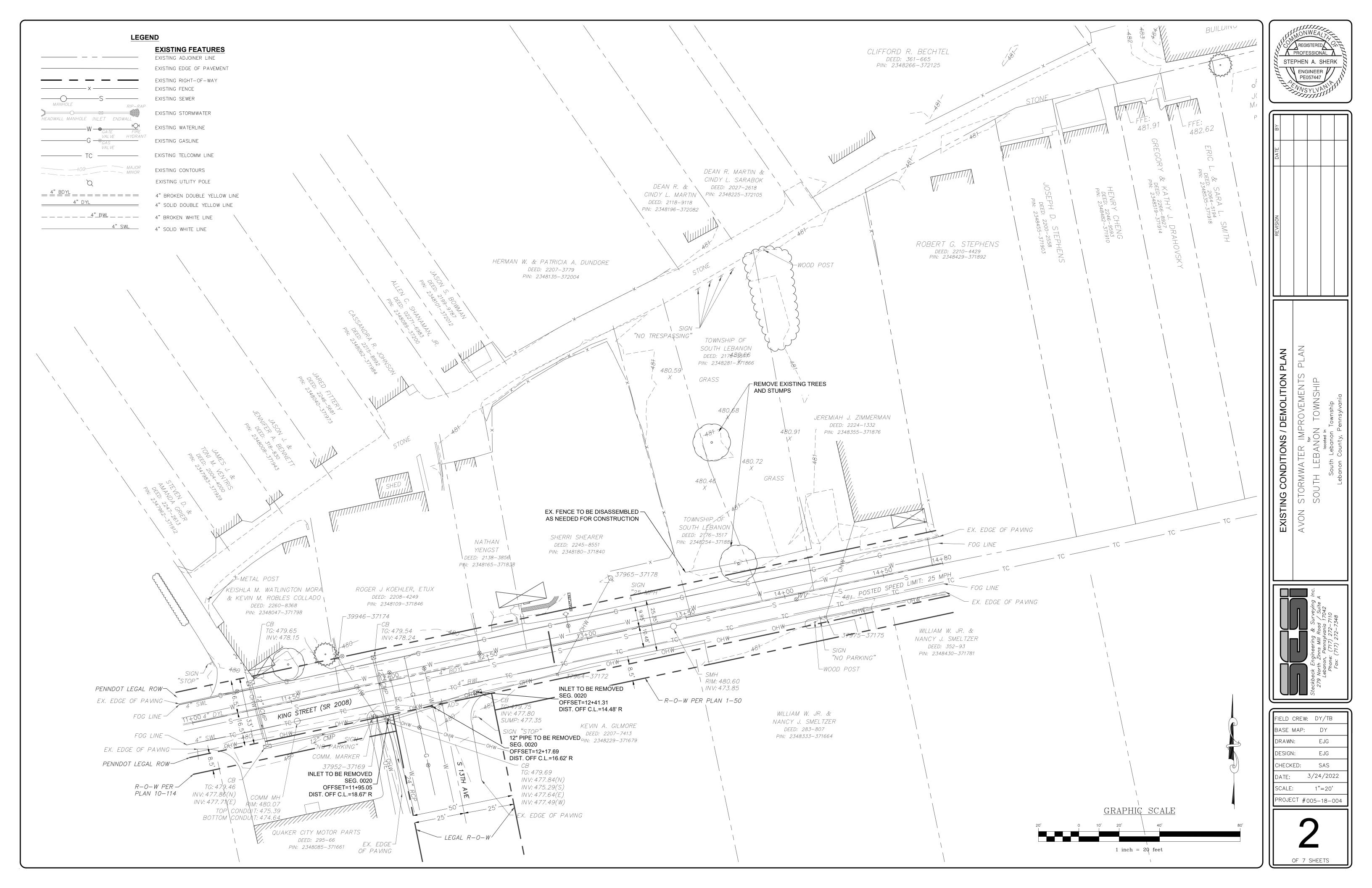
3. IN ACCORDANCE WITH THE FLOOD INSURANCE RATE MAP FOR LEBANON COUNTY, PENNSYLVANIA (ALL JURISDICTIONS), PANEL 257 OF 380, MAP NUMBER

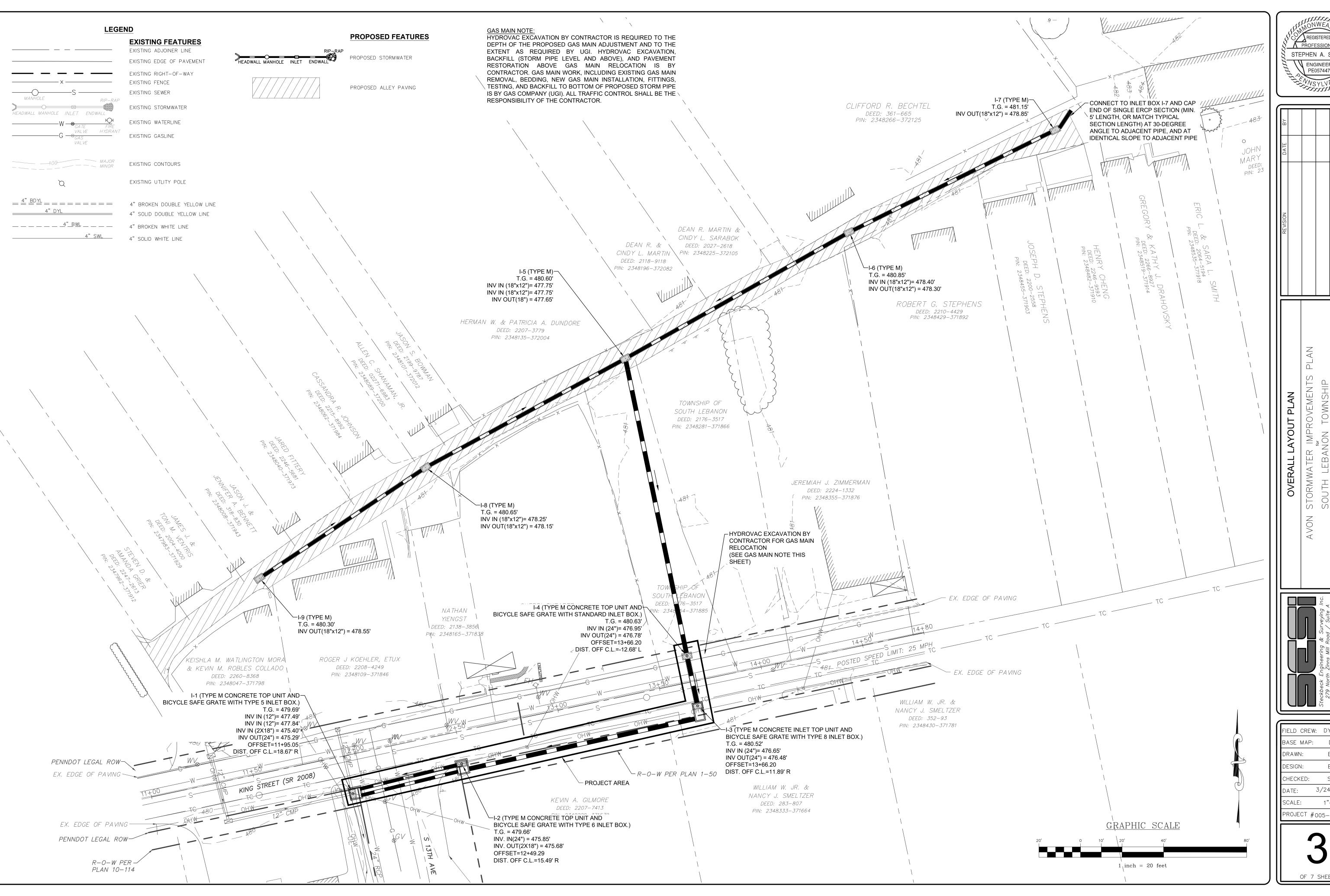
EFFECTIVE DATE JULY 8, 2020. WITH THE EXCEPTION, THERE NO FLOOD PLAINS ON THE SUBJECT PREMISES. 4. IN ACCORDANCE WITH THE U.S. FISH AND WILDLIFE SERVICE NATIONAL WETLANDS

INVENTORY, THERE ARE NO WETLANDS ON THE SUBJECT PREMISES. 5. PROPERTY LINES SHOWN IN ACCORDANCE WITH COUNTY GIS DATA. 6. FOR DETAIL REGARDING RIGHT-OF-WAY WIDTHS, SEE LEGAL RIGHT-OF-WAY

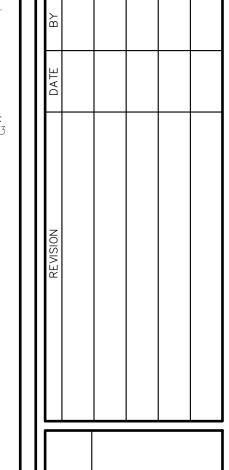
REFERENCE NOTES THIS SHEET.



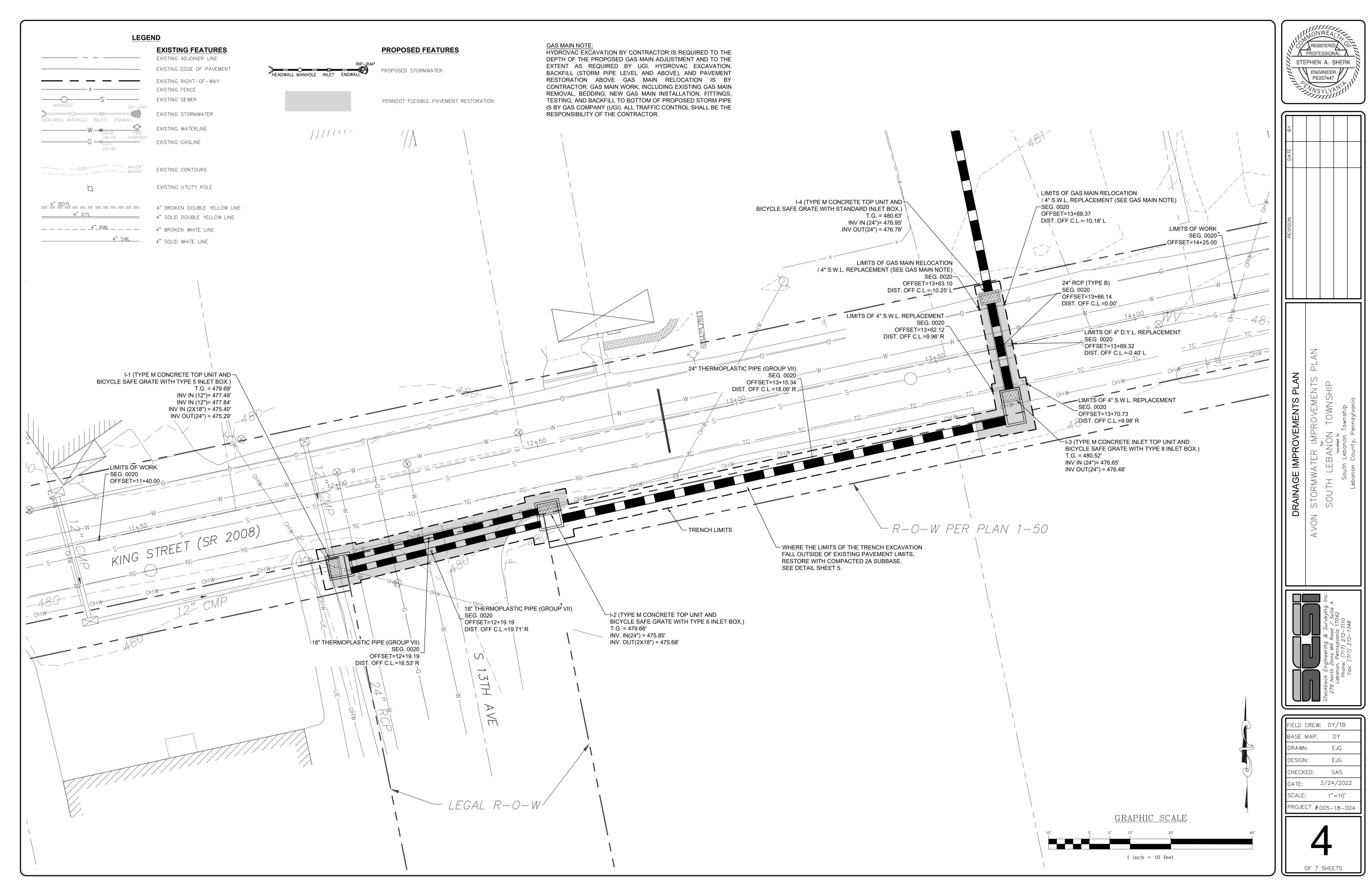








FIELD CREW: DY/TB EJG EJG SAS 3/24/2022 1"=20' PROJECT #005-18-004



GAS MAIN NOTE: HYDROVAC EXCAVATION BY CONTRACTOR IS REQUIRED TO THE DEPTH OF THE PROPOSED GAS MAIN ADJUSTMENT AND TO THE EXTENT AS REQUIRED BY UGI. HYDROVAC EXCAVATION, BACKFILL (STORM PIPE LEVEL AND ABOVE), AND PAVEMENT RESTORATION ABOVE GAS MAIN RELOCATION IS BY CONTRACTOR. GAS MAIN WORK, INCLUDING EXISTING GAS MAIN REMOVAL, BEDDING, NEW GAS MAIN INSTALLATION, FITTINGS, TESTING, AND BACKFILL TO BOTTOM OF PROPOSED STORM PIPE IS BY GAS COMPANY (UGI). ALL TRAFFIC CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

FILL HEIGHT TABLE					
PIPE RUN PIPE SIZE & TYPE MINIMUM FILL HEIGHT MAXIMUM FILL HEIGHT ACTUAL FILL HEIGH					
I-4 TO I-3	24" RCP (TYPE B)	1.5 FT	10 FT	1.6 - 1.8 FT	
I-3 TO I-2	24" TP (GROUP VII)	2.0 FT	12 FT	2.0 - 2.2 FT	
I-2 TO I-1	18"(2) TP (GROUP VII)	2.0 FT	12 FT	2.7 - 3.1 FT	

PROPOSED DEPTH TO -

- APPROXIMATE LOCATION OF EXISTING

TO ORDERING PRE-CAST MATERIALS)

(CONTRACTOR SHALL VERIFY DEPTH PRIOR

VERIZON CONDUIT

ESTIMATED TOP = 475.96'

└-25' OF 24" RCP (TYPE B) @ 0.53% SLOPE

SUBGRADE BELOW -COMPACTED 2A

112' OF 24" THERMOPLASTIC PIPE (GROUP VII)

@ 0.56% SLOPE

PROPOSED DEPTH TO -RESTORATION SUBGRADE

EX. 2" GAS MAIN TO BE RELOCATED

144' OF 24" THERMOPLASTIC PIPE

@ 0.49% SLOPE

TOP OF PIPE = 477.81'

EX. 2" GAS MAIN TO BE -

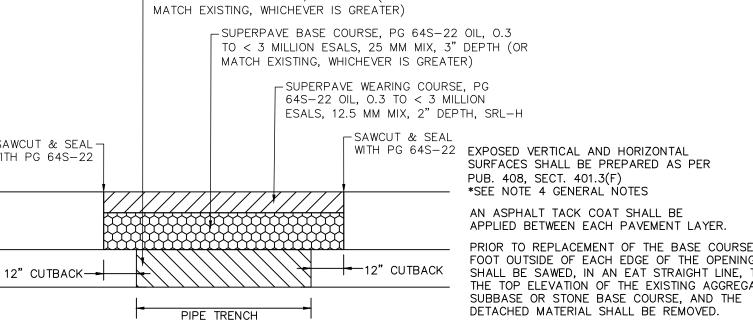
(SEE NOTE THIS SHEET)

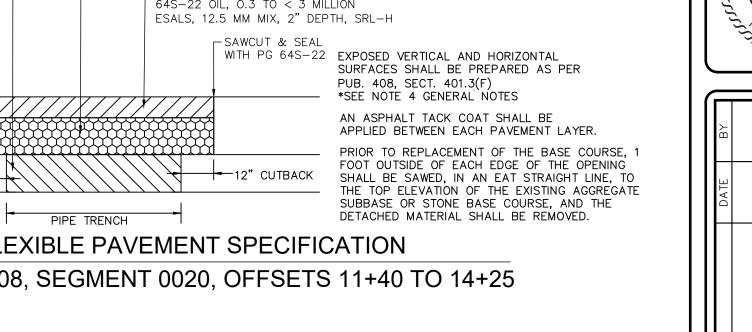
LOWERED MIN. 24"

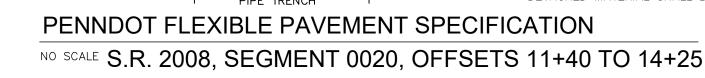
EX. 12" WATER MAIN-

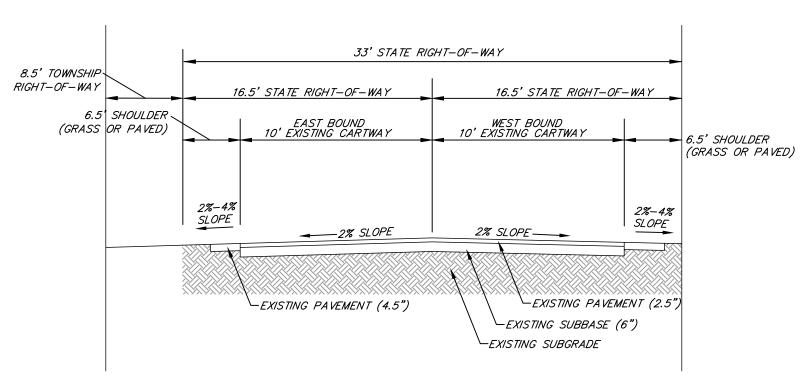
TOP OF PIPE = 475.94



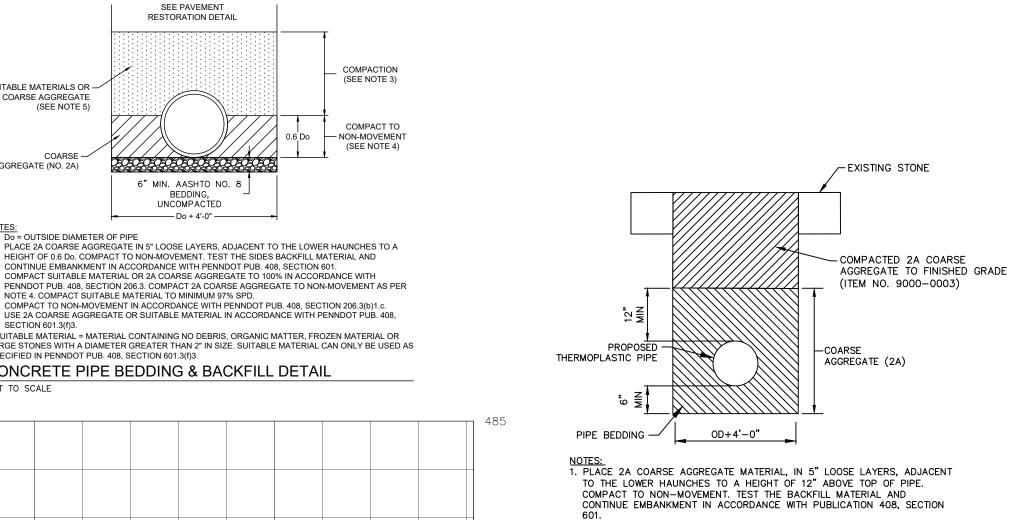


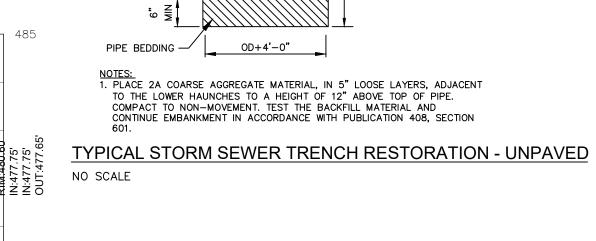


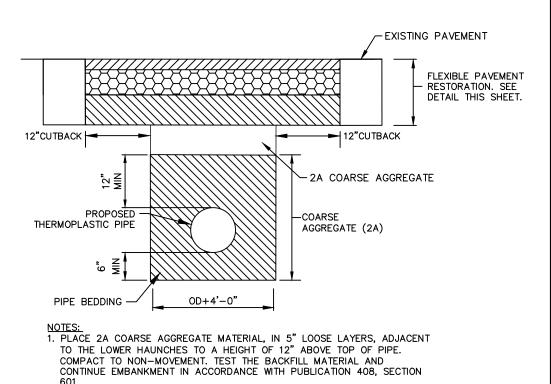


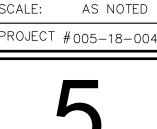


TYPICAL SECTION - S.R. 2008 (KING STREET) SEG. 0020/STA. 11+40.00 TO SEG. 0020/STA. 14+25.00 NOT TO SCALE









FIELD CREW: DY/TB

EJG

EJG

SAS

3/24/2022

BASE MAP:

DRAWN:

CHECKED:

STEPHEN A. SHERK

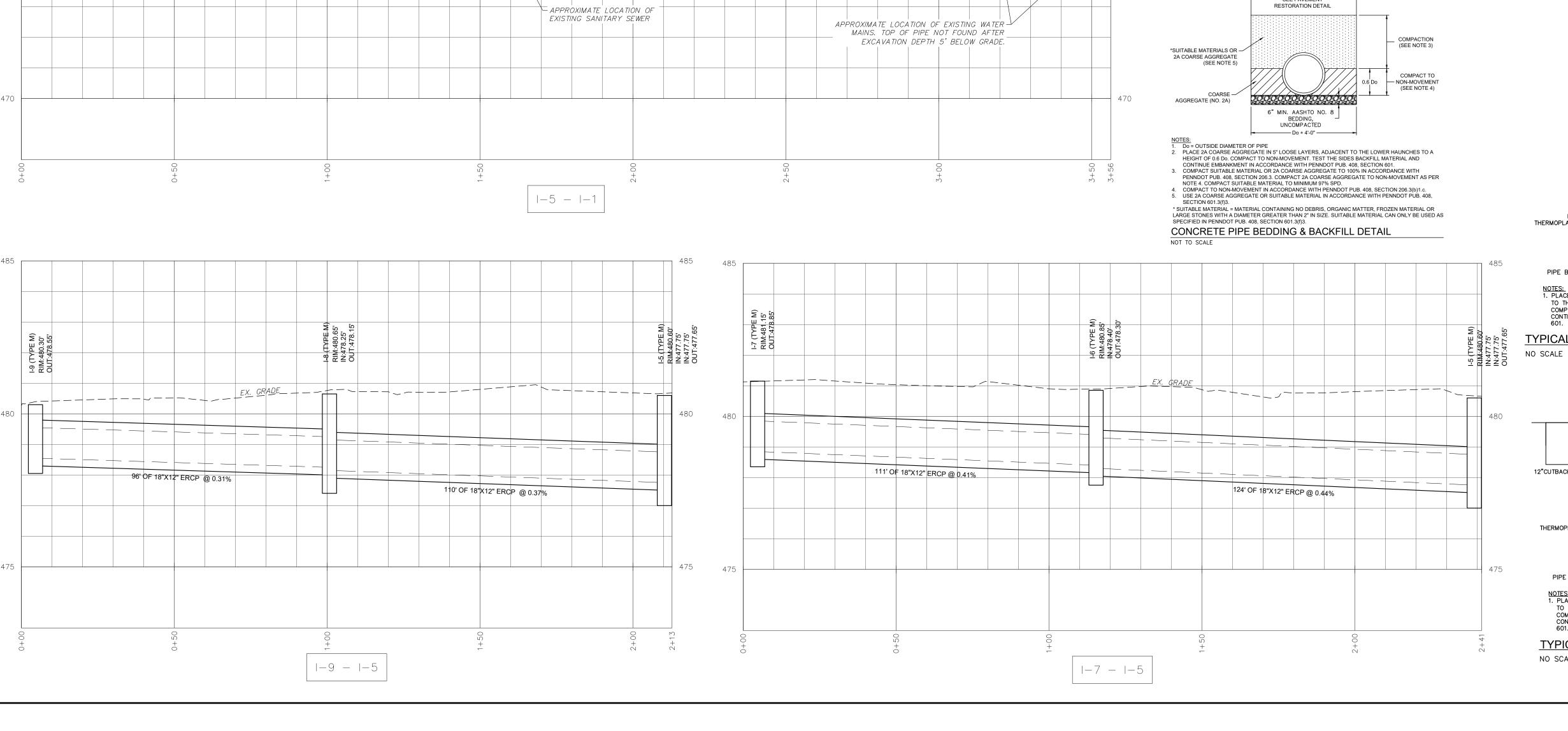
N ENGINEER

CROSS SECTION, AND DETAILS

LES,

PROFI

PE057447



NO SCALE

PROPOSED DEPTH TO -RESTORATION SUBGRADE

EX. 2" GAS MAIN -

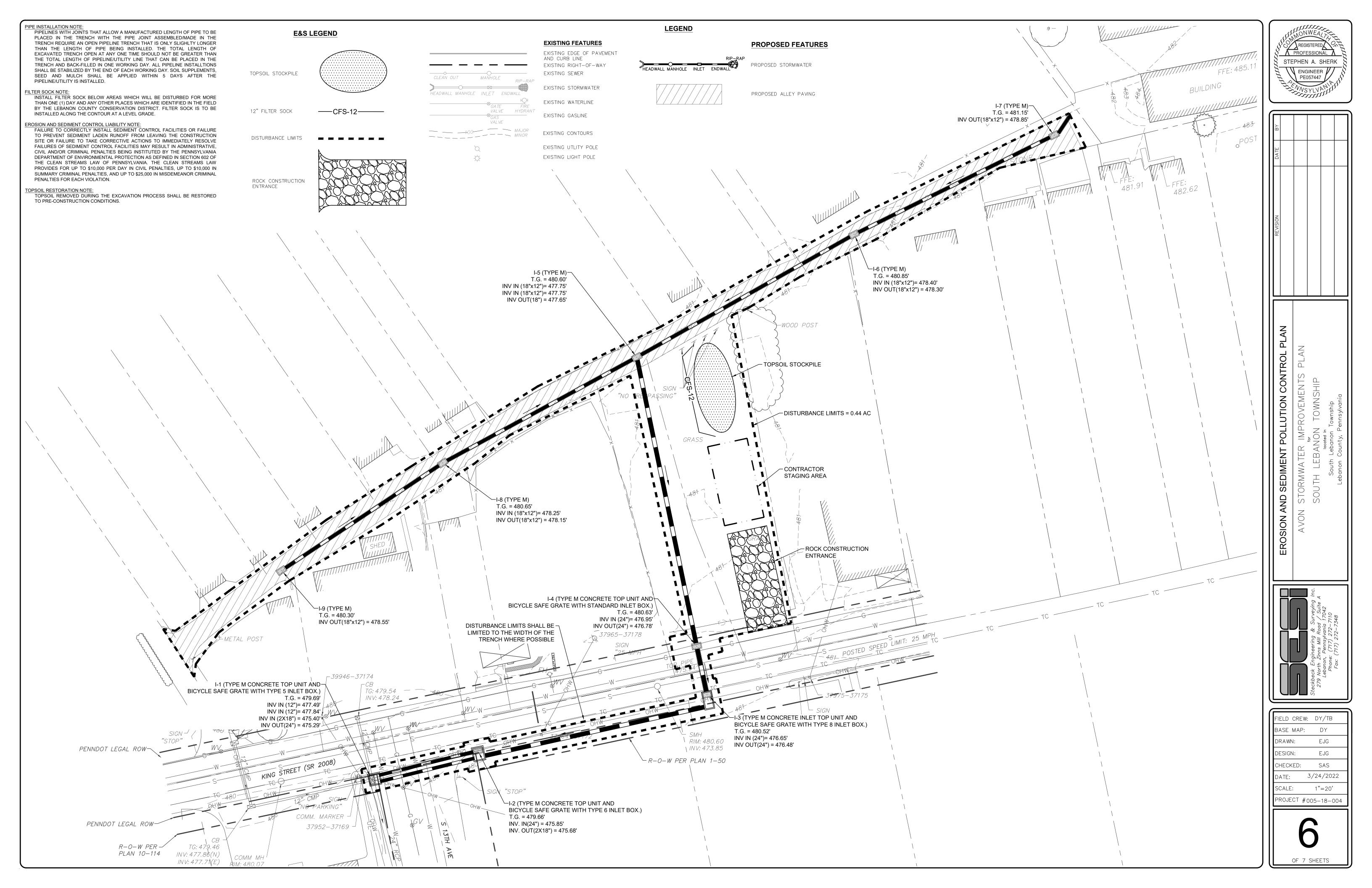
48' OF (2) 18"

(GROUP VII)

@ 0.58% SLOPE

THERMOPLASTIC PIPE

TOP OF PIPE = 477.70'



ONSERVATION DISTRICT GENERAL E&S NOTES A COPY OF THE APPROVED FROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL

TIMES. THE COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE DISTRICT MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE

THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION AND NOTIFY THE COUNTY CONSERVATION

- ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE EARTH DISTURBANCE ACTIVITY, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN
- SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER ALL MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OF
- DISCHARGED AT THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED AND FULLY IMPLEMENTED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS
- THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED
- ANY PLACEMENT OF CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING
- ENVIRONMENTAL DUE DILIGENCE MUST BE PERFORMED TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES INCLUDING, BUT NOT LIMITED TO; VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF CLEAN FILL".

TEMPORARY CONTROL MEASURES -INSTALLATION AND MAINTENANCE

TOPSOIL STOCKPILE

- a. A STOCKPILE SHALL BE USED TO CONTAIN ALL STRIPPED TOPSOIL IN A LIMITED AREA IN ORDER TO KEEP DISTURBANCE b. STOCKPILES SHALL BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATION CONTAINED HEREON c. STOCKPILE HEIGHTS MUST NOT EXCEED 35'IN HEIGHT. SIDE SLOPES SHALL BE 2:1 OR FLATTER.
- a. SILT SOCK SHALL BE USED TO INTERCEPT SEDIMENT-LADEN RUNOFF FROM SMALL WATERSHEDS. b. SILT SOCK MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF THE SILT SOCK SHALL EXTEND UP-SLOPE AT A
- 45-DEGREE ANGLE TO THE MAIN SOCK ALIGNMENT C SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF SOCK.
- d. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. e. ALL AREAS OF CONCENTRATED FLOW AND AT ALL AREAS WHERE THE SILT SOCK HAS COLLAPSED OR UNDERCUT DUE TO EXCESSIVE FLOWS, ROCK FILTERS SHALL BE INSTALLED (SEE TEMPORARY CONTROL MEASURES, ITEM 3)
- f. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. a. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- h. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT
- ROCK FILTER OUTLET WITH COMPOST (SILT SOCK LOCATIONS) a. A GRAVEL BERM SHALL BE PROVIDED WHERE FAILURES IN THE SILT SOCK OCCUR DUE TO EXCESSIVE SEDIMENTATION OR b. ROCK FILTERS SHALL BE CONSTRUCTED OF AASHTO #57 AND R-3 STONE IN ACCORDANCE WITH THE SPECIFIED
- DIMENSIONS IN THE DETAIL c. A 6" LAYER OF COMPOST SHALL BE ADDED AND ANCHORED ON THE TOP OF THE UPSLOPE SIDE OF THE STONE. d. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.
- e. ROCK FILTERS WILL BE REMOVED WHEN CLOGGED WITH SEDIMENT. THE STONE SHALL BE WASHED FREE OF ALL SEDIMENT OR NEW STONE SHALL BE USED TO REBUILD THE FILTER. INTERIM STABILIZATION
- a. TEMPORARY SEEDING AND MULCHING SHALL BE APPLIED WHERE INDICATED TO PROVIDE INTERIM STABILIZATION TO EXPOSED AREAS. b. TEMPORARY SEEDING/MULCHING SHALL BE AS APPLIED AS SPECIFIED ON THE SEEDING SCHEDULE CONTAINED ON THE
- a. A STABILIZED PAD OF CRUSHED STONE (AASHTO #1) SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC WILL BE ENTERING AND LEAVING THE SITE. THE ROCK CONSTRUCTION ENTRANCE IS USED TO ELIMINATE THE TRACKING OR FLOWING
- b. ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS ADDING ROCK, A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

PERMANENT CONTROL MEASURES -INSTALLATION AND MAINTENANCE

OF SEDIMENT ONTO THE EXISTING ROADWAY.

- . PERMANENT GRASS / LEGUME COVER e. ALL DISTURBED AREAS THAT ARE NOT PAVED SHALL BE PERMANENTLY STABILIZED WITH GRASS TO MINIMIZE EROSION ALL SWALES SHALL BE PERMANENTLY SEEDED AS REQUIRED IN ACCORDANCE WITH THE SEEDING SPECIFICATION SHOWN
- ON THE ATTACHED E&SPC PLAN. f. PERMANENT GRASS COVER SHALL BE APPLIED AS SPECIFIED IN ACCORDANCE WITH THE SEEDING SCHEDULE AND NOTES CONTAINED ON THE ATTACHED E&SPC PLAN.

- a. SOD SHALL BE INSTALLED IN AREAS WHERE PERMANENT STABILIZATION WITH SEED ALONE IS DIFFICULT. b. SOD MATERIALS AND INSTALLATION SHALL MEET THE APPROVAL OF THE COUNTY CONSERVATION DISTRICT.
- C. ALL PERMANENT AND TEMPORARY SPILLWAYS ARE TO BE SODDED TO PROVIDE IMMEDIATE FROSION PROTECTION. SOD SHALL EXTEND FROM THE SPILLWAY TO THE TOP OF THE SLOPE OF THE TRAP EMBANKMENT.

STABILIZATION SPECIFICATIONS

- UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN DRAWINGS IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. TOPSOIL STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SIDE SLOPES MUST BE 2:1 OR FLATTER.
- AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES -6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUT-SLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF
- LIME AND FERTILIZER SHOULD BE APPLIED IN ACCORDANCE WITH SOIL TEST RECOMMENDATIONS. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY AT LEAST 6 TONS OF AGRICULTURAL GRADE LIMESTONE AND 1000 POUNDS OF 10-20-20 FERTILIZER PER ACRE.
- APPLY SEED AT REQUIRED RATES. IF LEGUMES ARE PLANTED, BE SURE TO INOCULATE THE SEED WITH THE CORRECT LEGUME INOCULANT. SEED MAY BE BROADCAST ON THE SURFACE AND A LAYER OF MULCH APPLIED AT THE NECESSARY RATES. HYDROSEEDING IS ANOTHER METHOD OF SEEDING, WHERE THE SEED, FERTILIZER, AND MULCH ARE MIXED WITH WATER TO FORM AN EMULSION. THIS METHOD SHOULD ONLY BE DONE WITH THE CORRECT EQUIPMENT OR BY
- TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHENEVER POSSIBLE
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE THE DISTURBED AREAS. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- . AN EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL DISTURBED SLOPES STEEPER THAN 3:1, ALL AREAS OF CONCENTRATED FLOWS, AND DISTURBED AREAS WITHIN 50'OF A SURFACE WATER.

MAINTENANCE

- . THE APPLICANT/OR HIS DESIGNEE SHALL BE RESPONSIBLE FOR MAINTAINING ALL FACILITATES SHOWN ON THIS PLAN.
- . DIVERSIONS, CHANNELS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
- ANY PERMANENTLY SEEDED AREA THAT BECOMES ERODED OR DISTURBED SHALL HAVE THE TOPSOIL REPLACED, THE GRASS RE-SOWN AND MULCH REAPPLIED OR, AT THE DISCRETION OF THE OWNER, SOD INSTALLED.

- EXTEND AT LEAST 8 FEET UP-SLOPE AT 45-DEGREE ANGLES TO THE MAIN ALIGNMENT. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH ½ THE ABOVE GROUND HEIGHT OF THE SILT SOCK.
- 5. ANY SILT SOCK SECTION THAT HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET. SEE ROCK FILTER OUTLET WITH COMPOST DETAIL.

4. SILT SOCK MUST BE INSTALLED AT LEVEL GRADE ALONG THE CONTOURS. BOTH ENDS OF EACH SILT SOCK SECTION MUST

- 6. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- . ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE (1) YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING
- 8. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS), TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY
- 9. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 10. ANY SEDIMENT REMOVED FROM BMPS DURING CONSTRUCTION WILL BE RETURNED TO UPLAND AREAS ON SITE AND INCORPORATED INTO THE SITE GRADING IN A MANNER THAT WILL NOT CAUSE EROSION OR SEDIMENTATION. ALL AREAS DISTURBED DURING THIS PROCESS WILL BE MULCHED AND PERMANENTLY STABILIZED WITH SEED.
- 11. E&S BMPS SHALL BE INSPECTED FOLLOWING EACH MEASURABLE RAINFALL THROUGH THE DURATION OF THE PROJECT. INSPECTIONS SHALL BE LOGGED ON DEP FORM 3800-FM-BCW0271D (DATED 5/2018) AND SHALL SHOW THE DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THAT THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO THE COUNTY CONSERVATION DISTRICT OR OTHER REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

CONTRACTOR NOTES

- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 2. UPON THE INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO—PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.
- 3. IF SOIL IT IS TAKEN TO OR BORROWED FROM ANOTHER CONSTRUCTION SITE, SAID SITE MUST HAVE AN APPROVED E&SPC PLAN. SEE THE "SOIL LIMITATIONS AND RESOLUTIONS" SECTION OF THIS E&S PLAN FOR FURTHER INFORMATION.
- 4. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHICH NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- . ALL AREAS DISTURBED DURING THIS PROCESS SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING. THE COUNTY CONSERVATION DISTRICT SHOULD BE CONTACTED PRIOR TO CONVERSION OR REMOVAL OF PRIMARY E&S BMPS AND MAY REQUIRE A SITE INSPECTION. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER. WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS).
- 6. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 E SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES ON OR OFF THE SITE. THESE BUILDING WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED.

CONSTRUCTION OF THE SITE IMPROVEMENTS IS EXPECTED TO BEGIN IN THE EARLY SUMMER OF 2020. CONSTRUCTION WILL PROCEED IN A TIMELY MANNER IN ORDER TO LIMIT THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION. IF TH CONTROLS SHOWN ON THE PLAN ARE INCAPABLE OF ADDRESSING THE EROSION AND SEDIMENT CONTROL PROBLEMS ON TH , THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR ADAPTING ADEQUATE ALTERNATIVE MEASURES. THE CONSTRUCTION SEQUENCE FOR DEVELOPMENT OF THE PROJECT SHALL BE AS FOLLOWS:

- AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE CONTRACTOR SHALL INVITE ALL PARTIES INVOLVED IN THOSE ACTIVITES, THE LAND OWNER, THE EROSION AND SEDIMENT CONTROL PLAN DESIGNER, AND A REPRESENTATIVE OF THE LEBANON COUNTY CONSERVATION DISTRICT (717-277-5275) TO AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS NVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AS IDENTIFIED ON THE PLAN. THE BASE COURSE SHALL BE AASHTO #1 NSTALLED AT A MINIMUM OF 20-FT WIDE AND 50-FT LONG.
- 3. INSTALL FILTER SOCK BELOW ALL TOPSOIL STOCKPILES, BELOW AREAS WHICH WILL BE DISTURBED FOR MORE THAN ONE (1) DAY, AND ANY OTHER PLACES WHICH ARE IDENTIFIED IN THE FIELD BY THE LEBANON COUNTY CONSERVATION DISTRICT. FILTER SOCK IS TO BE INSTALLED ALONG THE CONTOUR AT LEVEL GRADE.
- 4. EXCAVATE AS REQUIRED TO INSTALL STORM SEWER AND APPURTENANCES. MATERIAL EXCAVATED FROM TRENCHES SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH TO BE USED AS BACKFILL IF APPLICABLE OR LOADED ONTO TRUCKS AND REMOVED FROM THE PROJECT SITE. IF SOIL IS TAKEN TO ANOTHER CONSTRUCTION SITE, SAID SITE MUST HAVE AN APPROVED E&SPC PLAN. PROOF OF SAID APPROVAL MUST BE PROVIDED TO A REPRESENTATIVE OF THE LEBANON COUNTY CONSERVATION DISTRICT. PRIOR TO INSTALLING THE PIPE RUN FROM I-3 TO I-4, RELOCATE EXISTING GAS MAIN AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- 5. EXCAVATE NO MORE UTILITY TRENCH THAN NECESSARY FOR THE AMOUNT OF PIPE WHICH CAN BE INSTALLED DURING A SINGLE DAY, TRENCHES SHALL BE BACKFILLED WITH APPROVED MATERIAL AS INDICATED ON THE TRENCH RESTORATION. DETAIL. IMMEDIATELY AFTER UTILITY TRENCHES HAVE BEEN BACKFILLED, FINE-GRADE DISTURBED STREETS AND LAWN AREAS. DURING AND FOLLOWING STORM EVENTS PROVIDE A MEANS TO DEWATER PITS AND UTILITY TRENCHES. WATER PUMPED FROM PITS AND TRENCHES SHALL BE FITLERED BY MEANS OF A FILTER BAG.
- 6. FINE GRADE ANY REMAINING AREAS AS SHOWN ON THE GRADING PLAN. SPREAD 4-IN OF TOPSOIL ON FRESHLY GRADED AREAS. FINAL PASSES DURING FINE GRADING SHALL BE MADE AT RIGHT ANGLES TO THE SLOPES. PREPARE TH REMAINDER OF THE DISTURBED AREA FOR PERMANENT STABILIZATION. SEEDBED SHALL BE PREPARED IN ACCORDANCE WITH ACCEPTED PRACTICES. SEED MIXTURE SHALL BE APPLIED IN ACCORDANCE WITH THE SEEDING SPECIFICATION AND IN ACCORDANCE WITH THE MANUDACTURER'S RATES AND INSTRUCTIONS.
- 7. MULCH ALL DISTURBED AREAS AND SEEDED AREAS WITH HAY OR STRAW AT A MINIMUM RATE OF THREE (3) TONS PER ACRE (OR MULCH AS PART OF HYDROSEEDING).
- 8. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETLEY STABILIZED (DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION IN ALL AREAS TRIBUTARY TO THE CONTROLS). ALL AREAS DISTURBED DURING THIS PROCESS SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING.
- 9. INSTALL THE PAVING IN THE ALLEY AND THE PAVEMENT RESTORATION ALONG KING STREET (SR 2008).
- 10. THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 E SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES ON OR OFF THE SITE.

TOPSOIL APPLICATION

GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.

TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM - 2 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF

TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION. WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

CUBIC YARDS OF TOPSOIL REQUIRED FOR APPLICATION TO VARIOUS DEPTHS

DEPTH (IN.)	PER 1,000 SQUARE FEET	PER ACRE
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806
7	21.7	940
8	24.8	1,074

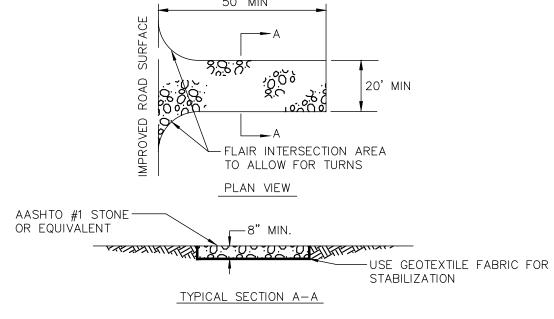
APPLICATION	SPECIES	%	APPLICATION RATE	FINAL SEEDING DATE
TEMPORARY	ANNUAL RYE	98%	40 LBS/AC	OCT. 15
PERMANENT	ANNUAL RYE		P.L.S. IN LBS/AC	
	GRASS		10	MARCH 15
	PLUS TALL FESCUE		30	AND OCT. 15

FERTILIZER	RATE	
10-10-10 AC	1 TON/AC AG GRADE	
10-10-20 N-P205-K20 /ACRE	6 TON/AC AG GRADE*	

- FERTILIZER AND LIME SHALL BE APPLIED IN ACCORDANCE WITH SOIL TESTS. ALL SEEDED AREAS SHALL BE MULCHED WITH HAY OR STRAW APPLIED AT A RATE OF 3 TONS/ACRE.
- MULCH TO BE ANCHORED WITH WOOD CELLULOSE FIBER @ 750 LBS/AC. 3. ALL DIVERSIONS, CHANNELS, SED TRAPS AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.

SEEDING SCHEDULE & NOTES

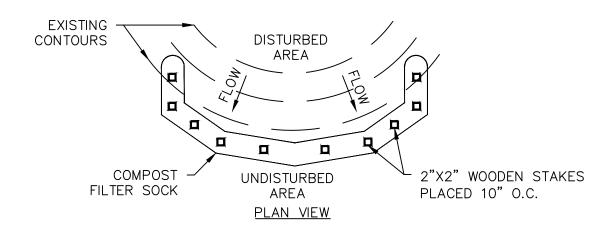
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MAINTENANCE: THE STRUCTURES THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK WILL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS WILL BE REMOVED AND RETURNED TO THE SITE. WASHING OF THE ROADWAY IS NOT PERMITTED.

STABILIZED CONSTRUCTION ENTRANCE

2" X 2" WOODEN STAKE-COMPOST FILTER SOCK-UNDISTURBED AREA BLOWN/PLACED FILTER MEDIA -DISTURBED AREA



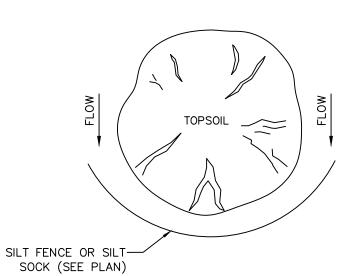
SECTION VIEW

1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.

- 2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWN SLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- 3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS THE FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED OF IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- 5. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- 6. BIODEGRADABLE FILTER SOCKS SHALL BE PLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURE'S RECOMMENDATIONS.
- 7. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

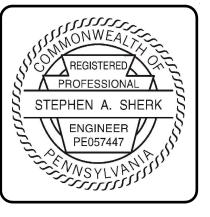
FILTREXX SILTSOXX DETAIL

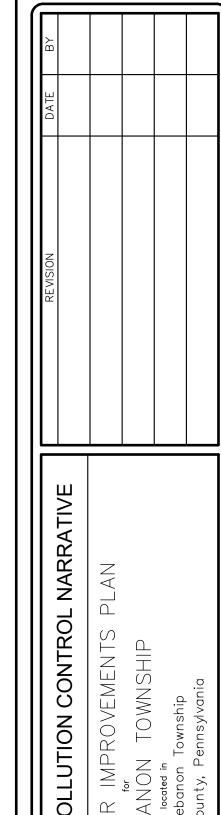
NO SCALE



- A STOCKPILE SHALL BE USED TO CONTAIN ALL STRIPPED TOPSOIL IN A
- LIMITED AREA IN ORDER TO KEEP DISTURBANCE TO A MINIMUM. STOCKPILES ARE TO BE STABILIZED IMMEDIATELY.
- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- STOCKPILES SHALL BE LOCATED SO THAT ALL SWALES CAN FUNCTION AS DESIGNED.

TOPSOIL STOCKPILE DETAIL





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FIELD CREW: DY/TB BASE MAP: DRAWN: EJG EJG CHECKED: SAS 3/24/2022 SCALE: NO SCALE ROJECT #005-18-004

OF 7 SHEETS

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Site Location.
- B. Project Description of Improvements.
- C. Field Engineering.
- D. Contractor Use of Site and Premises.

1.02 SITE LOCATION

A. The project is located along King Street and an adjacent alley in the unincorporated community of Avon to the east of the City of Lebanon, Lebanon County, Pennsylvania. The site coordinates are 40°20'45"N, 76°23'16"W.

1.03 PROJECT DESCRIPTION OF IMPROVEMENTS

A. Without intending to limit or restrict the extent of Work, the project is summarized as follows:

The project includes, but is not limited to, installation of a storm sewer network along King Street, through Township property and along the alley to the north of King Street, coordination with utility companies in utility relocation, pavement and lawn restoration, pavement markings, and other associated work as more fully described on the Construction Drawings.

The existing stone alley to the north of King Street will be re-profiled and paved after installation of the proposed storm sewer network, in addition to standard paving restoration along King Street.

Regarding utility coordination, the gas main relocation near inlet I-4 shown on the bid plans is not part of the contracted bid work; the relocation will be undertaken by UGI, however, contractor will be responsible for initial vacuum excavation to uncover the main, as well as traffic control during UGI relocation work.

1.04 FIELD ENGINEERING

A. The means for establishing the reference and control points necessary to complete construction is as specified in Section 00700 General Conditions, Article 4.05.

1.05 CONTRACTOR'S USE OF SITE AND PREMISES

A. Confine construction equipment, the storage of materials, and operations of the

workmen to within the subject property and permanent and temporary rights of way. This does not preclude CONTRACTOR from procuring lease rights to private property, however, OWNER shall have access to all stored materials for which payment has been rendered.

- B. Materials may be stored appropriately along the route of Work provided such stored materials do not unduly restrict public use or infringe on private property.
- C. Assume full responsibility for material stored on site including materials for which the OWNER has made payment.
- D. Transport materials remaining at the completion of the Project for which the OWNER has made payment to a storage area designated by OWNER.
- E. CONTRACTOR shall limit his uses of premises to the Work indicated, so as to allow for Owner occupancy and use by the public.
 - 1. Keep existing driveways and entrances serving adjacent premises clear and available to the property owners at all times. Do not use these areas for parking or storage of materials.
 - 2. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas designated by the OWNER. If additional storage is necessary, obtain and pay for such storage off site at no additional cost to the OWNER.

PART 2 – PRODUCTS

2.01 As specified on Contract Drawings.

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Submittal procedures and actions
- B. Construction progress schedules.
- C. Proposed products list.
- D. Shop drawings.
- E. Product data.
- F. Samples.
- G. Manufacturers' instructions.
- H. Manufacturers' certificates.
- I. Steel Products Certification
- J. Shop Drawing Work

1.02 SUBMITTAL PROCEDURES

- A. Submit three (3) copies or digital copy (PDF) of complete schedule of all anticipated submittal dates to ENGINEER within 14 days of Notice to Proceed. Update schedule at time of submission of each Application for Payment.
- B. Transmit each submittal to ENGINEER in accordance with schedule.
- C. Sequentially number the transmittals. Resubmittals shall have original number with an alphabetic suffix.
- D. Identify Project, CONTRACTOR, Contract No., subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.
- E. Apply CONTRACTOR's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents. Submittals not containing CONTRACTOR's stamp shall be

returned.

- F. Schedule submittals to expedite the Project, and deliver to ENGINEER at business address. Coordinate submission of related items.
- G. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- H. Provide space for CONTRACTOR and ENGINEER review stamps.
- I. Revise and resubmit submittals as required, clearly identify all changes made since previous submittal.
- J. ENGINEER shall review submittal and first revision without charge to CONTRACTOR. For all subsequent resubmissions, CONTRACTOR may be charged, by OWNER, for the time and expenses of ENGINEER at ENGINEER's normal charges. Such charge shall be deducted from CONTRACTOR's subsequent payment application.
- K. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

1.03 ACTION ON SUBMITTALS

- A. ENGINEER's Action: Where action and return are required or requested, ENGINEER will review each submittal, mark with the action taken, and return within a reasonable time period. Where submittal must be held for coordination, CONTRACTOR will be so advised by ENGINEER.
- B. Submittals returned with "APPROVED" action indicate that the information submitted was found to be in conformance with the design concept and in compliance with the requirements of the Contract Documents. CONTRACTOR may proceed with performance of the work covered by the submittal.
- C. Submittals returned with "APPROVED AS CORRECTED" action indicate that the information submitted was found to be in conformance with the design concept and in compliance with the requirements of the Contract Documents, provided the noted clarifications or corrections are completed. Submission of a corrected submittal indicating the changes noted by ENGINEER is not required. CONTRACTOR may proceed with performance of the work covered by the submittal.
- D. Submittals returned with "REVISE AND RESUBMIT" action indicate that: (1) information submitted is at least partially not in conformance with the design concept, (2) information submitted is at least partially not in compliance with the requirements of the Contract Documents, (3) submittal is incomplete and does not include all items required by the individual specification Sections, or (4)

certifications or computations required by the individual specification Sections have not been included in the submittal. Submittal will be returned to CONTRACTOR noting the reasons for noncompliance. CONTRACTOR shall not proceed with the performance of the work covered by submittal until corrected information is submitted and approved.

E. Submittals returned with "NOT APPROVED" action indicate that the ENGINEER interprets the information submitted to be not in conformance with the design concept or not in compliance with the Contract Documents. Performance of the work shall not proceed until submittal is revised, resubmitted and approved.

1 04 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit three copies of initial progress schedule to ENGINEER for review and comments within 15 days after date Notice to Proceed.
- B. Revise and resubmit as required based on ENGINEER's review.
- C. Submit revised schedule with each Application for Payment, identifying changes since previous version.
- D. Submit a horizontal bar chart with separate line for each major section of Work or operation, identifying first work day of each week. Chart shall indicate anticipated starting and completion date, as well as the actual starting and completion date for each activity.
- E. Indicate estimated percentage of completion for each item of Work at each submission.
- F. Indicate submittal dates required for shop drawings, Product data, samples, and Product delivery dates.

1.05 PROPOSED PRODUCTS LIST

- A. Within 15 days after date of Notice to Proceed, submit complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product. Submit number of copies CONTRACTOR requires plus three (3) copies to be retained by ENGINEER.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.06 SHOP DRAWINGS

A. Submit the number of opaque reproductions which CONTRACTOR requires, plus three copies which will be retained by ENGINEER.

B. Each submission of shop drawings must be accompanied by a letter of transmittal listing the items in the submission. Each shop drawing must be marked with the name of the project, the name of the Contractor, and numbered consecutively.

1.07 PRODUCT DATA

- A. Submit the number of copies which the CONTRACTOR requires, plus three (3) copies or a digital copy (PDF) which will be retained by the ENGINEER.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.
- C. After review, distribute in accordance with Submittal Procedures, above.

1.08 SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- B. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for ENGINEER's selection.
- C. Include identification on each sample, with full Project information.
- D. Submit the number or samples specified in individual specification Sections; two of which will be retained by ENGINEER.
- E. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

1.09 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
- B. Identify conflicts between manufacturers' instructions and Contract Documents.

1.10 MANUFACTURER'S CERTIFICATES

A. When specified in individual specification Sections, submit manufacturers' certificate to ENGINEER for review, in quantities specified for Product Data.

- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to ENGINEER.

1.11 PENNSYLVANIA STEEL PRODUCTS ACT CERTIFICATION

A. Use form attached to this Section.

1.12 SHOP DRAWING WORK

- A. All work which is related to shop drawing approval shall not be initiated until approved shop drawings have been received from ENGINEER.
- B. All work initiated by CONTRACTOR prior to receipt of approved shop drawings shall be at the sole risk of CONTRACTOR. Any and all rework, modifications, reinstallations, etc. necessitated by changes in the Work due to changes required by subsequently approved shop drawings will be done by CONTRACTOR at no increase in Contract Price.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

STEEL PRODUCTS PROCUREMENT CERTIFICATION: Contractors

This form must be executed by the Contractor and delivered to the Engineer before any item containing steel may be incorporated into any public works project in the Commonwealth of Pennsylvania. Execute and present this form for each type of steel product to be incorporated as provided above.

A.	<u>TO B</u>	E COMPLETED BY ALL CONTI	RACTORS:				
	Name of Contractor's firm:			2. Date Submitted:			
	3. Fi	3. Firm's address:		4. Phone Number: ()			
	5. Co	5. Contract No 6. Contract title:					
	7. St	7. Steel Product:					
	8. Na	ame and address of supplier:					
B.	TYPE	TYPE OF STEEL PRODUCT (check and complete applicable category)					
	1.	Identifiable steel product: 100° States.	% of the steel in a product is	identifiably marked as manufactured in the United			
		a. Other documentation requi	red: NONE				
		b. Manner in which steel prod	luct is identifiable				
	2.	Non-identifiable structural steel: Less than 100% of the steel contained in the product is identifiable as provided above. Structural steel is defined as steel products used as a basic structural element of a project (i.e. steel beams, columns, decking, stairways, reinforcing bars, structural lintels, pipes, etc.)					
			red: Bills of lading, invoices a or manufactured in the United	nd mill certificates that certify that the steel contained States.			
	3.	3. Non-identifiable non-structural steel: all other steel products including door and window frames, machines equipment, etc.					
		a. Other documentation requi	red: i.e. certification from sup	pplier/fabricator.			
C.	steel amen that the Produ	product listed above complies with ded). I understand that by signing the his document is subject to the provisuous Procurement Act, which pro-	the provisions of the Steel P his document I certify that the ions of the Unsworn Falsificate yide penalties including, but	rm, do certify that, to the best of my knowledge, the roducts Procurement Act (73 P.S., 1881 et seq, as facts contained herein are true. I further understand ion to Authorities Act (18 P.S. 4904) and the Steel not limited to, debarment from bidding on any five years.			
	Witne	ess:					
				(SEAL)			
	Secre	tary or Treasurer	Preside	nt or Vice President			
	((Corporate Seal)					
			END OF SECTION				
	South	h Lebanon Township	01300 – 6	Avon Stormwater Improvements			

SECTION 01410 - QUALITY CONTROL

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Quality assurance and control of installation.
- B. References.
- C. Inspection and testing laboratory services.
- D. Manufacturers' field services and reports.

1.02 QUALITY ASSURANCE AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from ENGINEER before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
 - 1. Perform work by persons qualified to produce workmanship of specified quality.
 - 2. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.03 REFERENCES

- A. Conform to reference standards by date of issue current on date for receiving bids.
- B. Should specified reference standards conflict with Contract Documents, request clarification from ENGINEER before proceeding.
- C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 INSPECTION AND TESTING LABORATORY SERVICES

- A. The CONTRACTOR shall employ and pay for an independent firm which will perform inspections, tests, and other services specified in individual Specifications sections and as required by the ENGINEER.
- B. Reports will be submitted by the independent firm to ENGINEER, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents. CONTRACTOR shall be responsible to ensure reports are submitted to ENGINEER within three days of completion of the test procedures.
- C. Cooperate with independent firm; furnish samples of materials, equipment, tools, storage, and assistance as requested.
 - 1. Notify ENGINEER and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for CONTRACTOR's use.
- D. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the ENGINEER. Payment for retesting will be responsibility of the CONTRACTOR.

1.05 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual Specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, startup of equipment, testing, adjusting, and balancing of equipment as applicable, and to initiate instructions when necessary or required by the individual Specification section. Such individual shall provide a written statement indicating that the equipment or product has been installed within the manufacturer's instructions and recommendations and is functioning properly.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- C. Submit report in duplicate within 14 days of observation to ENGINEER for review.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01500 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Project Construction Facilities
- B. Temporary Control
- C. Project Identifications
- D. Field Offices

1.02 REGULATORY REQUIREMENTS

- A. Comply with all applicable laws and regulations of authorities having jurisdiction, including, but not limited to, building codes, health and safety regulations, utility company regulations, and environmental protection regulations.
- B. Provide electrical equipment that is UL listed.

1.03 CONTRACTOR RESPONSIBILITIES

- A. Although not mandatory CONTRACTOR may furnish, install, and pay for his own field office(s), facilities within his own field office(s), and storage facilities, and shall be responsible for removing these facilities upon completion of the Work.
- B. Project construction facilities shall include, but not be limited to, barriers, parking, security, pedestrian control, and maintenance and protection of traffic.
- C. Temporary controls shall include dust control, sediment and erosion control, stormwater control, flood prevention, wastewater, traffic control, temporary fencing/security, and progress cleaning.

D. Storm Water Control

- 1. CONTRACTOR shall be responsible for the Sediment and Erosion Control measures and procedures described in the Contract Documents.
- 2. Maintain flow of site stormwater. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping facility.

- 3. Protect site from standing or running water. CONTRACTOR shall be responsible for flood damages to the Work. All flood damages shall be repaired to the satisfaction of ENGINEER.
- 4. CONTRACTOR assumes responsibility for damages to property caused by flooding due to blocking or restriction of storm water passages, natural waterways, and wastewater facilities.

1.04 PROJECT IDENTIFICATION

- A. A project sign identifying the project is optional.
- B. No other signs are allowed without OWNER's permission except those required by law.

1.05 ENGINEER'S FIELD OFFICE

A. A field office for the ENGINEER is not required for this project.

1.06 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary above-grade or buried utilities, equipment, facilities, materials, prior to Final Application for Payment inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.07 SITE ACCESS

- A. The CONTRACTOR is responsible for establishing access to the site of his work. The property and the right-of-way shown on the construction drawings are being provided by the OWNER. Any requirements for additional land required during construction for storage of material, locating trailers, or other temporary facilities, shall be provided by the CONTRACTOR at his cost. The CONTRACTOR shall obtain and provide for all necessary access to the property and rights-of-way shown on the plans. This may include the acquisition of temporary rights-of-way, as well as the construction of roadways, which are useable by the RPR and the ENGINEER's staff. CONTRACTOR shall be responsible for acquiring, constructing, maintaining, and the restoration of any temporary access facilities required for construction.
- B. In the event that the designated site access is also to be utilized for the construction access, the CONTRACTOR shall be responsible for providing the temporary access, including earthwork, surface and groundwater control, and

erosion and sediment requirements, including stabilized entrance. Near the completion of construction, the CONTRACTOR will be responsible for grading or excavation as may be necessary, and the construction of the permanent finished access roadway as provided for in the plans and project manual. In the event that it becomes necessary to utilize completed roadways or partially completed roadways for the delivery of construction material, such as aggregate fill or concrete, the CONTRACTOR shall be responsible for the degradation or damage that may result from this use.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01540 - SECURITY

PART 1 - GENERAL

1.01 PROTECTION OF WORK AND PROPERTY

- A. The CONTRACTOR shall take positive measures at all times to prevent entry onto the site of work and storage areas by children, animals, and unauthorized adults.
 - 1. The CONTRACTOR shall furnish and construct temporary fencing as required to fence off excavation, storage, and operating areas.
 - 2. Except as otherwise provided in the Contract Documents, the CONTRACTOR is authorized to refuse admission to the project site to any person whose admission is not specifically authorized in writing by the OWNER.
 - 3. The CONTRACTOR shall provide night security, if problems arise at the construction site relating to public safety, etc. Vandalism connected with the construction of the project shall be sufficient grounds for requiring such security.
 - 4. All costs related to security and vandalism shall be considered incidental to the Contract and included under the appropriate bid price by the CONTRACTOR.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not used.

SECTION 01570 - TRAFFIC CONTROL

PART I – GENERAL

1.01 SECTION INCLUDES

A. Guidelines for traffic control while work is being performed within State Roads and Municipal rights-of-way.

1.02 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies
 - 1. State Highways:
 - a. Provide traffic control in compliance with the rules and regulations of the Pennsylvania Department of Transportation (PADOT), including but not necessarily limited to the following:
 - 1) PA Code Title 67, Transportation: Chapter 212, Subchapter E. Temporary Traffic Control.
 - 2) PA Code Title 67, Transportation: Chapter 459. Occupancy of Highways by Utilities.
 - 3) Commonwealth of Pennsylvania, Department of Transportation, Publication 408/2020, Specifications, as amended. Section 901 "Maintenance and Protection of Traffic During Construction."
 - 4) Commonwealth of Pennsylvania, Department of Transportation, Bureau of Maintenance and Operations, Temporary Traffic Control Guidelines, Publication 213 (3-21), as amended.
 - 2. Municipal Streets: Same requirements as those specified for State Highways above.

PART 2 – PRODUCTS

2.01 MATERIALS

A. All traffic control materials and devices shall conform to the requirements of Commonwealth of Pennsylvania, Department of Transportation, Publication

408/2020, Specifications, as amended. Section 901 "Maintenance and Protection of Traffic During Construction."

PART 3 – EXECUTION

3.01 PROTECTION

- A. Maintenance and Protection of traffic shall be in strict accordance with the requirements of regulatory agencies cited in Part 1.02.A.1 above.
- B. The CONTRACTOR shall modify sign locations and other traffic control daily in order to protect that section of street to be disturbed during the same day.
- C. The CONTRACTOR shall provide reasonable access to all property owners throughout the project construction period. Prior to closure of access to driveways and/or properties, individual property owners shall be given advanced written notice identifying the time period of actual restricted access.
- D. The CONTRACTOR will be permitted to close the roadway. A detour plan shall be provided to the ENGINEER and OWNER for approval prior to construction. A PennDOT agreement or formal PennDOT approval may be necessary depending on the proposed detour route.

SECTION 01610 - DELIVERY, STORAGE AND HANDLING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Products
- B. Transportation and handling
- C. Storage and protection

1.02 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer, for similar components.

1.03 TRANSPORTATION AND HANDLING

- A. Transport and handle Products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that Products comply with requirements, quantities are correct, and Products are undamaged.
- C. Provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

1.04 STORAGE AND PROTECTION

- A. Store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive Products in weathertight, climate-controlled enclosures.
- B. For exterior storage of fabricated Products, place on sloped supports, above ground.
- C. Provide offsite storage and protection when site does not permit onsite storage or protection.

- D. Cover Products subject to deterioration when site does not permit onsite storage or protection.
- E. Store loose granular materials on solid flat surfaces in a well drained area. Prevent mixing with foreign matter.
- F. Provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of Products to permit access for inspection. Periodically inspect to assure Products are undamaged and are maintained under specified conditions.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not used.

SECTION 01700 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Final cleaning.
- B. Adjusting.
- C. Project Record Documents.
- D. Warranties.
- E. Spare parts and Maintenance Materials.
- F. Certificate of Substantial Completion and Notice of Acceptability.
- G. Closeout Documents

1.02 FINAL CLEANING

- A. Complete final cleaning prior to final inspection.
- B. Clean site, sweep paved areas, rake clean landscaped surfaces.
- C. Remove waste and surplus materials, rubbish, and construction facilities from the site.
- D. Remove debris from limited-access spaces including manholes, valve pits, roofs, plenums, shafts, and equipment vaults.

1.03 ADJUSTING

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

1.04 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following Record Documents. Record revisions to the Work:
 - 1. Drawings
 - 2. Project Manuals

- 3. Addenda.
- 4. Change Orders, Work Change Directives, Written Amendments, and Field Orders.
- 5. Reviewed Shop Drawings, Product Data, and Samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and Change Orders.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations of buildings and tankage in relation to plant datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to plant datum.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Drawings.
- F. Cross out ENGINEER's title block and seal from all documents and stamp all sheets "Record Document by <u>NAME</u> Contractor.
- G. Submit documents to ENGINEER with request for final inspection. Final inspection request will not be considered until Project Record Documents acceptable to ENGINEER are received.

1.05 WARRANTIES

- A. Provide duplicate copies for each set of submissions.
- B. Execute and assemble documents from subcontractors, suppliers, and manufacturers.
- C. Provide Table of Contents and assemble in three (3) ring binder with durable plastic cover.
- D. Submit prior to Final Application for Payment.
- E. No warranty shall start earlier than the date of Substantial Completion, unless approved by the OWNER.
- F. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

1.06 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance, and extra materials in quantities specified in individual Specification sections.
- B. Deliver to Project site and place in location as directed; obtain receipt prior to Final Application for Payment.

1.07 CERTIFICATE OF SUBSTANTIAL COMPLETION AND NOTICE OF ACCEPTABILITY

A. Enclosed at the end of this section is the Certificate of Substantial Completion form which will be used by the ENGINEER for preparing both the Tentative and Definitive Certificates of Substantial Completion, and the Notice of Acceptability form which ENGINEER will use to give written notice to OWNER and CONTRACTOR.

1.08 CLOSEOUT DOCUMENTS

- A. Submit the following documents with final Application for Payment. Statement of Surety Company and Contractor's Affidavit forms are located at end of this Section.
 - 1. Statement of Surety Company:
 - a. Completed by Surety and submitted by CONTRACTOR.
 - 2. Contractor's Affidavit:

- a. Completed and submitted by CONTRACTOR.
- 3. Evidence of Completed Operations Insurance:
 - a. Completed by Insurer on Insurer's form and submitted by CONTRACTOR.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

CERTIFICATE OF SUBSTANTIAL COMPLETION			
OWNERs Project No. N/A ENGINEER's Project No. 005-18-004			
PROJECT: Avon Stormwater Improvements			
CONTRACT NUMBER: No. 1			
CONTRACTOR:			
CONTRACT DATE:			
This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:			
To: Redevelopment Authority of the County of Lebanon OWNER			
And to:CONTRACTOR			
The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on			
DATE OF SUBSTANTIAL COMPLETION			
A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within 30 days of the above date of substantial completion.			

Certificate of Substantial Completion (Continued)

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heautilities, insurance and warranties shall be as follows:	ıt,
RESPONSIBILITIES:	
OWNER:	_
CONTRACTOR:	_
The following documents are attached hereto and made a part of this Certificate:	
1.	
This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Document CONTRACTOR shall have a continuing obligation under paragraph 13.07 of the General Conditions, satisfactorily correct or remove and replace any defective work within a period of one year after the date. Substantial Completion or as may be required by specific provisions of the Contract Documents.	ts. to
	_
Executed by ENGINEER ON	
STECKBECK ENGINEERING & SURVEYING, INC. ENGINEER	
By:	

STATEMENT OF SURETY COMPANY

In accord	dance with the Provisions of Contract No. 1, Avon Stormwater Improvements	
	(Name of Contract)	
For the _	Redevelopment Authority of the County of Lebanon dated (Name of Owner)	_ between
the Red	levelopment Authority of the County of Lebanon (Owner's Name)	
and	(Contractor's Name and Address)	
and	(Surety's Name and Address)	
as surety	y on the bond of after a careful examination of the books an (Contractor's Name)	nd records
	Contractor or after receipt of an affidavit from the said Contractor, which examination or ety Company that all claims for labor, materials, and equipment have been satisfactor.	
payment	payment to the said and by these presents with to the Contractor of the final construction cost invoices shall not relieve the Surety Compons to the Redevelopment Authority of the County of Lebanon as set forth in the said (Owner's Name)	pany of any of its
	NESS WHEREOF the said Surety Company has hereunto set its hand and seal this <u>day</u> of, 20	
Attested	!:	
(SEAL)		
	By:	
	Title:	
NOTE:	This statement, if executed by any person other than the President or Vice President Company, must be accompanied by a certificate of even date showing authority conferred so signing to execute such instruments on behalf of the Surety Company represented.	

CONTRACTOR'S AFFIDAVIT

ractor)
Il labor, material, and equipment and ormance of the contract between the
0
(Contractor)
, Pennsylvania for the
•
_

NOTICE OF ACCEPTABILITY OF WORK

PROJECT: AVON STORMWATER IMPROVEMENTS

OWNER: REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON

CONTRACT NUMBER AND NAME: No. 1

CONTRACTOR:

CONSTRUCTION CONTRACT DATE:

ENGINEER: STECKBECK ENGINEERING & SURVEYING, INC.

The undersigned hereby gives notice to the above OWNER and CONTRACTOR that the completed Work furnished and performed by CONTRACTOR under the above Contract is acceptable, expressly subject to the provisions of the related Contract Documents and the terms and conditions stated below.

By:		
Title:	Dated:	

CONDITIONS OF NOTICE OF ACCEPTABILITY OF WORK

The Notice of Acceptability of Work ('Notice') above is expressly made subject to the following terms and conditions to which all persons who receive said Notice and rely thereon agree:

- 1. Said Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
- 2. Said Notice reflects and is an expression of the professional judgment of ENGINEER.
- 3. Said Notice is given as to the best of ENGINEER's knowledge, information, and belief as of the date hereof.
- 4. Said Notice is based entirely on and expressly limited by the scope of services. ENGINEER has been employed by OWNER to perform or furnish during construction of the Project (including observation of the CONTRACTOR's work) under ENGINEER's Agreement with OWNER and under the Contract referenced above, and applies only to facts that are within ENGINEER's knowledge or could reasonably have been ascertained by ENGINEER as a result of carrying out the responsibilities specifically assigned to ENGINEER under ENGINEER's Agreement with OWNER and the Contract referenced above.
- Said Notice is not a guarantee or warranty of CONTRACTOR's performance under the Contract nor an
 assumption of responsibility for any failure of CONTRACTOR to furnish and perform the Work thereunder
 in accordance with the Contract Documents.

SECTION 01710 – PROJECT CLEANUP

PART 1 - GENERAL

1.01 GENERAL

A. Before the work will be considered as having been completed, the CONTRACTOR shall clean the site and remove all evidence of construction activities and restabilize and restore all disturbed areas.

1.02 CLEANUP

- A. Construction site cleanup shall consist of the removal of all mud, oil, grease, dust, trash, scrap, debris, and surplus excavated material.
- B. No items shall be left or discarded elsewhere on the site or on adjoining private property. Items that are to be discarded shall be removed to authorized/permitted public disposal areas.

1.03 RESTORATION AND RESTABILIZATION

- A. All areas disturbed by the CONTRACTOR's operations, including storage and stockpiling areas, access roads, stream crossing sites, and areas within acquired right-of-way shall be restored and restabilized as specified herein.
- B. Final restoration and restabilization including fine grading, landscaping, seeding, and paving shall proceed immediately after construction activity is completed in a given area (when the season permits). The CONTRACTOR shall dismantle and remove all temporary construction facilities and leave the site in a neat and orderly condition.
- C. Preserve and maintain in their original condition all public and private signs, markers, guard rails, and fences. If authorized to do so, remove such conflicting facilities, preserve, store, and protect them and reerect upon completion of the construction. Replace damaged items at no cost to the OWNER.
- D. Protect and guard trees, repair damaged trees or replace trees damaged beyond repair as specified elsewhere in these Specifications.
- E. Reseed damaged lawn areas and seed areas temporarily used for access roads, parking and storage as specified elsewhere in these Specifications.
- F. Restore gravel surfaces and shoulders to original condition. If existing gravel is contaminated by foreign material, remove and replace the gravel. Materials and methods of construction shall be in accordance with jurisdictional requirements and applicable permits issued for the work. Areas adjacent to shoulders, if left unstable by construction,

shall be stabilized with gravel.

G. Pavement, curbs, and other paved areas shall be restored in accordance with the requirements of these Specifications.

1.04 DISPOSAL OF WASTE ITEMS

- A. Construction waste material shall be disposed of in authorized disposal areas, including municipal facilities if available.
- B. Waste material disposed of in an unauthorized area shall be removed by the CONTRACTOR and the area restored to its original condition, at no cost to the OWNER.

1.05 REMOVAL OF CONDEMNED MATERIAL

- A. Material brought upon the site which has been determined by the ENGINEER to be unsuitable or not in conformance with the Specifications shall be promptly removed from the site by the CONTRACTOR.
- B. If the CONTRACTOR fails to remove the condemned material from the site within 72 hours after receipt of notice from the ENGINEER or OWNER, the OWNER may cause the condemned material to be removed and the cost of such removal charged to the CONTRACTOR.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not used.

SECTION 02050 - BASIC SITE MATERIALS AND METHODS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Soil materials used for site construction including on-site excavated or in-place material and imported soil materials.
- B. Aggregate materials used for site construction, drainage, and pavement base course.
- C. Portland cement concrete materials used for construction of site pavements, slabs on grade, sidewalks, curbing, and other concrete site structures.
- D. Geosynthethics used in site construction for layer separation, slope and embankment reinforcement, subsurface drainage, and erosion and sedimentation control.

1.2 RELATED DOCUMENTS

Not Used

1.3 REFERENCES

A. SOIL MATERIALS

- 1. AASHTO T180 Moisture-Density Relations of Soils Using a 10-lb. Rammer and 18-inch Drop.
- 2. ASTM D689 Test Methods for Moisture-Density Relations of Soil-Aggregate Mixtures, Using a 5.5 –lb. Rammer and a 12-inch Drop.
- 3. ASTM D1556 Test Method for Density of Soil in Place by the Sand Cone Method.
- 4. ASTM D1557 Test Method for Moisture-Density Relations of Soil-Aggregate Mixtures Using a 10-lb. Rammer and an 18-inch Drop.
- 5. ASTM D2167 Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
- 6. ASTM D2487 Classification of Soils for Engineering Purposes.
- 7. ASTM D2922 Test Methods for Density of Soil and SOIL Aggregate in Place by Nuclear Methods (Shallow Depth)
- 8. ASTM D3017 Test Method for Moisture Content of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth)
- 9. ASTM C136 Sieve Analysis of Fine and Coarse Aggregates.

10. ASTM D422 – Particle Size Analysis of Soils.

B. AGGREGATE MATERIALS

- 1. AASHTO M147 Materials for Aggregate and Soil-Aggregate.
- 2. AASHTO T180 Moisture-Density Relations of Soils Using a 10-lb. Rammer and 18-inch Drop.
- 3. ASTM C136 Method for Sieve Analysis of Fine and Coarse Aggregates.
- 4. ASTM D698 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using a 5.5-lb. Rammer and a 12-inch Drop.
- 5. ASTM D1557 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using a 10-lb. Rammer and 18-inch Drop.
- 6. ASTM D2167 Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
- 7. ASTM D2487 Classification of Soils for Engineering Purposes.
- 8. ASTM D 2922 Test Methods for Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth).
- 9. ASTM D3017 Test Method for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- 10. ASTM 4318 Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- 11. Pennsylvania Department of Transportation (PADOT) Specifications Publication 408, latest edition.

C. BITUMINOUS CONCRETE AND BITUMINOUS MATERIAL

1. Pennsylvania Department of Transportation (PADOT) Specifications Publication 408, latest edition.

D. PORTLAND CEMENT CONCRETE MATERIAL

1. Pennsylvania Department of Transportation (PADOT) Specifications Publication 408, latest edition.

E. GEOSYNTHETIC MATERIAL

- 1. ASTM D751 Standard Test Method for Coated Fabrics.
- 2. ASTM D4491 Standard Test Methods for Water Permeability of Geotextiles by

Permittivity.

- 3. ASTM D4595 Tensile Properties of Geotextiles by the Wide-Width Strip Method.
- 4. ASTM D4632 Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.

F. JOINT MATERIALS AND JOINT SEALANTS

- 1. ASTM C920 Standard Specification for Elastomeric Joint Sealants.
- 2. ASTM D1751 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)
- 3. ASTM D1752 Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction, Sections 5.1 through 5.4 with the compression requirement modified to 10 psi minimum and 25 psi maximum.

1.5 SUBMITTALS FOR REVIEW

- A. Section 01330 Submittals: Review Procedures for Submittals.
- B. Geosynthetic Material Submittals:
 - 1. Where the Contractor proposes to substitute geosynthetic materials different from those shown on plans, the contractor shall submit representative samples of all geosynthetic proposed for use, including manufacturer's name, designation, and installation instructions
 - 2. Submit detailed drawings, as prepared by the manufacturer, or Contractor, indicating the method of overlapping, joining, and anchoring of geosynthetic materials for each application.

1.6 SOURCE QUALITY CONTROL

- A. The Contractor shall notify the Engineer prior to delivery of off-site borrow materials for use in site construction. The Engineer may require testing of the off-site soil material. If requested, the testing laboratory shall furnish both the Engineer and Contractor required copies of the test reports. The reports will be considered as sufficient information to accept or reject the proposed imported soil materials.
- B. If the indicated materials do not meet specified requirements, change material and retest.
- C. Provide soil and aggregate materials of each designation from same source throughout the Work.
- D. Provide aggregate from PADOT approved source based upon latest PADOT Bulletin.

E. Moisture content for any soil or aggregate material to be used for compacted fill in structural or non-structural areas shall not exceed a range of plus or minus 3.0 percent of optimum moisture content for that particular material. If the moisture contents fall outside of this range appropriate aeration or moisture conditioning measures shall be performed by the Contractor to maintain soil moisture contents within the specified range

PART 2 PRODUCTS

2.1 SOIL MATERIALS

A. Definitions:

- 1. Structural Fill Zone: Any area scheduled for building construction, slabs on grade, rigid pavement, flexible pavements, retaining walls, detention basin berms and buffer zones. Structural backfill areas include wall backfill, foundation backfill, and retaining wall backfill zones. All utility trench backfill is considered as a structural fill zone.
- 2. Nonstructural Fill Zone: Any landscape area that is not included within Structural Fill Zone or the buffer area of the Structural Fill Zone.
- 3. Buffer Area: Area extending 10-feet beyond the perimeter of any building foundation line, including any areas of future expansion indicated on the Drawings, and 10-feet beyond the perimeter of all other Structural Fill Zones.
- 4. Soils: Earth or aggregate material.
- B. General Fill: Inorganic on-site soils that do not contain rock fragments that can pass a six-inch mesh screen and are of suitable moisture content. To the extent that on-site material meets the requirements, such material may be used for General Fill. Provide Imported Fill material required to complete the Work due to insufficient quantity of existing on-site material or unsuitability of existing on-site material.
- C. Structural Fill: Inorganic on-site soils with a maximum particle size of four inches. To the extent that on-site material meets the requirements, such material may be used for soil material. Provide Imported Fill material required to complete the Work due to insufficient quantity of existing on-site material or unsuitability of existing on-site material.
- D. Imported Fill: Inorganic well-graded materials with 100-percent of the soil material passing a four-inch mesh screen, at least 25-percent passing a two-inch mesh sieve, and 10 to 49-percent passing a 200 mesh sieve. Liquid limit shall not exceed 40 with a maximum plasticity index of 20. Soil material shall classify as SC, SM, SW, GC, GM, or GW according to ASTM D2487. Clean, friable, and highly weathered shall may be utilized only when approved by the Engineer. Use of slag is not permitted.
- E. Rock Fill: On-site excavated and shot rock fragments not exceeding 24-inches may be used in zones designated by the Engineer. Rock fill is not permitted within the structural fill zone, storm water detention or retention basins, or within six-feet of finished grade. Rock fill and placement shall be in accordance with the recommendations of the Engineer.

- F. Select Trench Earth Fill: Material used as structural backfill for utility and storm sewer trenches shall be on-site or imported, clean earth meeting the requirements of Class II or III material, GW, GP, SW, SP, GM, GC, SM or SC in accordance with ASTM D2487. Materials shall have a maximum Plasticity Index of 15 in accordance with ASTM D4318, and shall contain no greater than 20% by weight passing a No. 200 U.S. Standard Sieve. Material shall not contain organic matter and shall be free of frozen materials, rock or gravel larger than 2-inches in any dimension.
- G. Clay: Material used in constructing low-permeability clay bedding layers or low permeability embankment cores shall be on-site, or imported, clean material classifying as MH, ML, CH or CL in accordance with ASTM D2487. Clay material shall not contain objectionable quantities of debris, roots, and organic matter and shall be free of frozen materials, rock, gravel or coarse fragments larger than 3/8-inch. No less than 70% of the material by weight shall pass the No. 200 U.S. Standard Sieve, at least 25% of the material shall be less than 0.005 mm particle size, and at least 10 percent of the material shall be less than 0.002 mm particle size. Clay material shall have a Liquid Limit (LL) between 30 and 80 and a Plasticity Index (PI) between 15 and 50, as per ASTM 4318. The clay shall be able to be compacted to the required density specified herein with an associated permeability of 1x10⁻⁷ cm/sec or less according to ASTM D5084.
- H. Topsoil: Friable loamy soil (as classified by the U.S. Department of Agriculture Handbook No. 18, Soil Survey Manual); free of subsoil, roots, grass, weeds, stone, and foreign matter; acidity range (pH) of 5.5 to 7.5; containing a minimum of 3 percent and a maximum of 10 percent organic matter. No more than 15 percent by weight shall be larger than a No. 10 U.S. Standard Sieve.
 - a. To the extent that on-site material meets the requirements, such material may be used for soil material. Provide imported topsoil material required to complete the Work due to insufficient quantity of existing on-site material or unsuitability of existing on-site material.
- I. All imported soil materials must be recovered from approved borrow sources.

2.2 AGGREGATE MATERIALS

- A. Aggregate material used in site construction shall meet the requirements of PADOT Publication 408, latest edition, Section 703.2, Table C.
- B. Aggregate backfill and base material shall be a dense-graded mixture of natural or crushed gravel or crushed stone and drainage aggregate material shall be a open-graded mixture of crushed gravel, crushed stone, or crushed slag meeting the following requirements:

Designation	Primary Use	AASHTO or
		PADOT Number
A-1	Flexible Pavement Base Course	PA DOT 2A
A-2	Stone Paving	PA DOT 2A
A-3	Pipe Bedding (<21")	No. 57 or No. 8
	Pipe Bedding (>21")	No. 8

A-4	Initial Trench Backfill (<21")	No. 57 or No. 8
	Initial Trench Backfill (>21")	No. 57 or No. 8
A-5	Open Graded Aggregate (Drainage Backfill)	No. 57

2.3 BITUMINOUS CONCRETE AND BITUMINOUS MATERIAL

A. Bituminous concrete and bituminous materials shall meet the requirements of PADOT Publication 408, latest edition.

B. Bituminous Materials:

- 1. Asphaltic Cement: Class PG64S-22, conforming to PADOT Publication 408, 702.1.
- 2. Bituminous Tack Coat: Emulsified Asphalt conforming to PADOT Publication 408, 460.2.
- 3. Bituminous Prime Coat: Emulsified Asphalt conforming to PADOT Publication 408, Section 461.2.

2.4 PORTLAND CEMENT AND CONCRETE MATERIALS

A. Performance Requirements: Unless otherwise specified on Contract Drawings, concrete material for cast-in-place and poured in-place site construction shall meet or exceed the following requirements for cement concrete as specified in PADOT Publication 408, latest edition, Section 704(a) and (b). Provide classes of concrete as follows:

PADOT	Site Use	28 Day Structural
Class		Design Compressive
		Strength (psi)
AA	Vertical, Slant, and Depressed Curb	3,500
AA	Concrete Sidewalk	3,500
AA	Concrete Steps	3,500
AA	Concrete Walls and Footers	3,500
AA	Concrete Slabs	3,500
A	Anti-Seep Collars and Pipe Anchors	3,000
A	Fence, Sign Post, Play Equipment Footers	3,000

B. Concrete Sealants: As specified in Section 02750.

2.5 GEOSYNTHETIC MATERIAL

A. Geotextiles:

1. Erosion Control: Geotextile fabrics for erosion control shall be a machine fabric mat of straw, coconut fibers, synthetic or other suitable materials sewn together with polypropylene netting. Specification includes both photodegradable thread and UV treated threads for permanent/semi-permanent erosion control blankets. Manufacturer and product specified on the plan drawings shall be considered the minimum standard for materials proposed as substitutions or equals.

2. Separation Fabric: Geotextile fabrics used in site construction to separate subgrade from aggregate or soil fill courses and for subgrade stabilization shall be PennDOT Class 4A, spunbound, non-woven, geotextile fabric. The geotextile physical requirements from Table A, Section 735 of PennDOT Publication 408 shall be considered the minimum standard for materials proposed as substitutions or equals.

Type	Manufacturer/Product	Tensile	Puncture	Permittivity
		Strength	Strength	
S-1	Geotex 1071	270 lbs	725 lbs	1.2 sec-1
S-2	Mirafi 1100NPA	1,202 lbs	690 lbs	0.8 sec-1
S-3	Geotex 1201	305	825 lbs	1.0 sec-1

Tensile Strength per ASTM D4632 Puncture Strength per ASTM D4833 Permittivity per ASTM D4491

3. Stabilization Fabric: Geotextile fabrics used in site construction to separate subgrade from aggregate or soil fill courses and for subgrade stabilization shall be PennDOT Class 4B, woven, geotextile fabric. The geotextile physical requirements from Table A, Section 735 of PennDOT Publication 408 shall be considered the minimum standard for materials proposed as substitutions or equals.

Type	Manufacturer/Product	Tensile	Puncture	Permittivity
		Strength	Strength	
S-1	Mirafi 830X	400 lbs	1,500 lbs	0.2 sec-1
S-2	Geotex 4x4	600x500 lbs	2,200 lbs	0.15 sec-1
S-3	GTF 500	600 lbs	1,400 lbs	0.136 sec-1

Tensile Strength per ASTM D4632 Puncture Strength per ASTM D4833 Permittivity per ASTM D4491

4. Drainage Fabric: Geotextile fabric used in site construction as part of subdrainage systems shall be PennDOT Class 1, spunbound, non-woven, geotextile fabric. The geotextile physical requirements from Table A, Section 735 of PennDOT Publication 408 shall be considered the minimum standard for materials proposed as substitutions or equals.

Type	Manufacturer/Product	Tensile	Puncture	Permittivity
		Strength	Strength	
D-1	Typar 3501	160 lbs.	56 lbs.	0.5 sec-1
D-2	Mirafi 160N	160 lbs	410 lbs	1.5 sec-1
D-3	Geotex 601	160 lbs	410 lbs	1.3 sec-1

Tensile Strength per ASTM D4632 Puncture Strength per ASTM D4833 Permittivity per ASTM D4491

5. Landscaping/Separation: Geotextile fabric used in site construction as part of landscaping, underlayment of mulch areas and stone or riprap, and separation of

mulch or wood fiber surfacing from underlying subgrade or aggregate base courses shall be a non-woven geotextile fabric. Specified manufacturer and product shall be considered the minimum standard for alternate materials.

Type	Manufacturer/Product	Tensile	Puncture	Permittivity
		Strength	Strength	
L-1	Typar 3341	120 lbs.	34 lbs.	$0.7^{\text{sec-1}}$
L-2	Typar 3301	120 lbs.	25 lbs.	0.8 ^{sec-1}
L-3	Typar 3201	60 lbs.	18 lbs.	1.0 ^{sec-1}

Tensile Strength per ASTM D4632 Puncture Strength per ASTM D4833 Permittivity per ASTM D4491

- B. Geocomposite Edge Drains: Not Used.
- C. Geocomposite In-Place Wall Drains: Not Used.
- D. Geogrids: Where specified on plans use Tensar TriAx TX140 geogrid or approved equal.

2.6 JOINT MATERIAL

A. Joint materials used in site construction includes premolded expansion joint filler material, isolation joint filler material, joint backing material, and joint sealing material for expansion/contraction joints in rigid concrete paving and curbing.

B. Joint Filler Material:

1. Non-Sealed Joints:

- a. Asphalt: Self-sealing blend of asphalts, fibers, and mineral fillers formed between asphalt-saturated liners meeting the requirements of ASTM D994, Sealtight Asphalt Expansion Joint Filler as supplied by W.R. Meadows, Inc. (800-342-5976), or approved equal.
- b. Fiber: Non-extruding cellular fibers uniformly saturated with asphalt meeting the requirements of ASTM D1751, Sealtight Fibre Expansion Joint as supplied by W.R. Meadows, Inc. or approved equal.

2. Sealed Joints:

a. Non-bituminous material of rubber, cork, or foam conforming to ASTM D1752, Sealtight Ceramar Flexible Foam Expansion Joint Filler as supplied by W.R. Meadows, Inc., or approved equal.

C. Joint Sealant Material:

1. Concrete Curb Expansion Joint Sealant: Cold applied rubberized, gun grade, single component sealing compound meeting the requirements of ASTM D 1850 as supplied by W.R. Meadows, Inc., or approved equal.

- 2. Concrete Sidewalk, Slab, and Curb Expansion Joint Sealant: Two-component, premium grade, polyurethane-based, elastomeric, self-leveling sealing compound meeting the requirements of ASTM C920, Type M, Grade P, Class 25. Pouthane, as supplied by W.R. Meadows, Inc., Sikaflex-2c, as supplied by Sika Corporation (610-437-5096), or approved equal. Provide standard manufacturer's color chart for selection by Engineer. Provide custom colors to match tinted and stained concrete paving as selected by Engineer. Color selection shall be equal to Sika Corporation Standard and Designer color selection chart.
- 3. Exterior Vertical Concrete Expansion Joint Sealant: Two-component, premium grade, polyurethane-based, non-sag sealing compound meeting the requirements of ASTM C920, Type M, Grade NS, Class 25, Use NT, as supplied by W.R. Meadows, Inc., Sikaflex-2c, as supplied by Sika Corporation, or approved equal. Provide standard manufacturer's color chart for selection by Engineer. Provide custom colors to match tinted and stained concrete surfaces as selected by Engineer. Color selection shall be equal to Sika Corporation Standard and Designer color selection chart.
- 4. Concrete Sidewalk, Slab, and Curb Control Joint Sealant: Not Used.

D. Accessories:

- 1. Joint Cleaner: Non-corrosive and non-staining compatible with joint filler material as recommended by manufacturer.
- 2. Primer: Non-staining as recommended by manufacturer.
- 3. Joint Backing: Round, closed cell polyethylene foam rod, oversized 30 to 50 percent of joint width, meeting the requirements of ASTM D1056.
- 4. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer.

PART 3 EXECUTION

- A. Install products and materials in accordance with manufacturer's instructions and as directed by Division 2 Specification Sections utilizing materials specified in this Section.
- B. Stockpile soil and aggregate materials on site at locations approved by the Owner.
 - 1. Stockpile material in sufficient quantities to meet the Project schedule and requirements of the Work.
 - 2. Separate differing materials with dividers or stockpile apart to prevent mixing.
 - 3. Direct surface water away from stockpile to prevent erosion. Stabilize stockpiles in accordance with Erosion and Sediment Control Plan or as directed by County Conservation District.

- 4. Spoil piles shall be ramped and rolled with a vibratory roller and covered with plastic to prevent soils from becoming saturated. No consideration will be given to unsuitable moisture content of soils not protected from weather conditions.
- 5. Remove surplus stockpiled material from site and restore to original or design condition. Final grade to prevent free standing surface water.

SECTION 02070 – SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work included: Carefully demolish and remove from the site all items scheduled to be so demolished and removed.

B. Related work:

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 1 of these Specifications.

1.2 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the method needed for proper performance of the work of this Section.

PART 2 – PRODUCTS

(No products are required in this Section).

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. By careful study of the Contract Documents, determine the locations and extent of selective demolition to be performed. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.
- B. In company of the ENGINEER, visit the site and verify the extent and location of selective demolition required.
 - 1. Carefully identify limits of selective demolition.
 - 2. Mark interface surfaces as required to enable workmen also to identify items to be removed and items to be left in place intact.
- C. Prepare and follow an organized plan for demolition and removal of items.

- 1. Shut off, cap, and otherwise protect existing public utility lines in accordance with the requirements of the public agency or utility having jurisdiction.
- 2. Completely remove items scheduled to be so demolished and removed, leaving surfaces clean, solid, and ready to receive new materials specified elsewhere.
- 3. In all activities, comply with pertinent regulations of governmental agencies having jurisdiction.
- D. Demolished material shall be considered to be property of the CONTRACTOR, unless stated otherwise on the drawings as being reused/relocated elsewhere in the on the site, and shall be completely removed from the job site.
- E. Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.

3.2 PERFORMANCE

- A. General Requirements: The means and methods of performing demolition and removal operations are the sole responsibility of the CONTRACTOR. However, equipment used, and methods of demolition and removal will be subject to approval of the ENGINEER.
- B. Equipment and Material Items Salvage: The OWNER shall have the right to claim as salvage any equipment and material items to be removed under the work of this Section. Should such right of salvage be exercised by the OWNER, move and neatly store removed items on the Site in a location agreeable to the OWNER, in a manner approved by the ENGINEER.
- C. Removed Equipment and Material Items: Existing equipment and material items involved in the demolition work, which are not claimed as salvage by the OWNER, shall become the property of the CONTRACTOR, and may not be disposed of on the Site but removed and disposed of in a lawful manner, off site.
- D. Debris Removal: Dispose of demolition debris off Site in a lawful manner. Containerize or otherwise store debris as work is in progress.

3.3 REPLACEMENTS

A. In the event of demolition of items not so scheduled to be demolished, promptly replace such items to the approval of the ENGINEER and at no additional cost to the OWNER.

SECTION 02200 – SITE PREPARATION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Clearing and grubbing, selective clearing, and selective tree removal and trimming.
- B. Stripping and stockpiling of topsoil.
- C. Construction associated with CONTRACTOR staging, storage, and field office areas.

1.2 REGULATORY REQUIREMENTS

- A. Conform to local regulations and codes for disposal of debris. Hazardous materials, as defined by Federal and State regulations, shall only be disposed at permitted sites.
- B. Verify that OWNER has obtained NPDES Permit (where applicable) prior to initiating any earthmoving activities as defined by PADEP Chapter 102. Complete Co-permittee application prior to commencing with any earth disturbance activities.
- C. Burn brush, trees, and other materials on site only when permitted by local Ordinance. Do not burn any materials that will result in noxious smoke or odors, within 200 feet of any occupied buildings, or when thick smoke will affect adjoining properties.
- D. Conduct Work to ensure minimum interference with roads, streets, walks, and other structures or facilities. Do not close or obstruct streets, walks, or other occupied facilities without permission from authorities having jurisdiction. Employ traffic on site in accordance with OWNER's requirements. Employ traffic control measures when working on or along public roadway corridors in accordance with PADOT, Title 67, Chapter 203, when applicable.
- E. Conform to OSHA CFR, Part 26, Subpart B Construction Standards for excavation for all excavations.

1.4 SUBMITTALS FOR REVIEW

- A. If requested by ENGINEER, submit plan indicating location of test pits, underground utilities uncovered, type of utility, utility materials, size of pipe or conduit, and elevations of inverts based on project datum.
- B. If applicable and requested by ENGINEER, submit plan showing location and approximate size of CONTRACTOR staging, parking, and field office area. Indicate materials to be used to stabilize temporary parking, staging and field office areas where stabilization will be required.
 - 1. Where an area has been designated on the Drawings, submit plan showing any proposed modifications to staging, parking, and storage area to meet conditions required by the Work.
- C. Where shoring, bracing, or other structural support of existing buildings or structures is required, submit plan prepared and sealed by a professional ENGINEER registered in the Commonwealth of Pennsylvania.

1.5 PRE-CLEARING MEETING

- A. Field mark all individual trees outside of clearing and grubbing limits designated on Drawings to be removed a minimum of two-weeks prior to initiating clearing operations.
- B. Field mark limit of clearing and grubbing for all wooded areas to be cleared a minimum of two-weeks prior to initiating clearing operations.
- C. Notify OWNER after individual trees have been marked and limited of clearing field identified.
- D. Arrange meeting with OWNER, or OWNER's representative, to review clearing and tree removal prior to initiating clearing operations. Explain procedures used to remove trees, disposal methods, and locations of on-site burning areas (when permitted).

1.6 SHORING, BRACING, AND UNDERPINNING

- A. Protect all existing utilities, structures, and Work during project, including foundation grouting, sheet piling, shoring, bracing, slabjacking, soil stabilization, and underpinning when working adjacent to existing utilities or structures.
- B. Perform shoring and bracing in accordance with OSHA requirements when excavating.
- C. Review all shoring, bracing, and structure protection operations with ENGINEER prior to beginning the Work.

- D. Repair damage, slumping, or collapse due to removal of supporting soils, aggregates, existing in-place retaining or support structures due to failure to provide appropriate protection of existing structures and facilities.
- E. Assign design, supervision, and maintenance of all structure protection devices to qualified construction specialist.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Temporary Construction Fence:
 - 1. Wood Picket Snow Fence: Undamaged, four feet high, with steel uchannel stakes or commercially available weather resistant fencing. Use only orange or yellow construction fencing when barricading open excavations.
- B. Backfill Materials: As specified in Section 02050.
- C. Herbicide: Commercially available as required to inhibit stump growth, compatible with final seeding and landscaping, and non-damaging to existing vegetation or landscaping to remain.
- D. Temporary Stone Paving: Aggregate Type A2 as specified in Section 02050.

PART 3 EXECUTION

3.1 PROTECTION

- A. Protect improvements on adjoining properties and OWNER's property designated to remain. Provide temporary fencing when required for protection and as required to define or control site access and separate construction activities for OWNER's use of site.
- B. Immediately repair or replace temporary construction fencing where damaged and the area of protection cannot be secured due to the damage.
- C. Identify and protect above ground and below ground utilities to remain from damage. Provide protective measures necessary and as required by public utility companies to maintain uninterrupted service.
- D. Protect trees, shrubs and plant growth to remain as final landscaping. Erect temporary construction fencing around specimen trees to remain and perimeter of wooded areas to remain.

- 1. Critical Root Zone (CRZ): CONTRACTOR shall exercise care to avoid compacting, excavating, or damaging the Critical Root Zone of all existing trees to remain. The Critical Root Zone is equal to one foot of radius for each one inch of tree caliper. Individual specimen trees shall have a Critical Root Zone of 1.5 feet for each one inch of tree caliper. The CONTRACTOR shall be responsible for damages caused by all unauthorized operations within the Critical Root Zone and shall be responsible for replacing any existing tree damaged by operations with same species tree with caliper equal to 1/3 of the caliper of the damaged tree.
- E. Delineate and protect wetland areas where delineated on Drawings to prevent accidental encroachment or fills.
- F. Protect site benchmarks and existing site structures designated to remain.
- G. Replace existing trees, shrubs, plants and replace or repair site structures designated to remain that are damaged by the Work. Restore damaged structures to their original or better condition as acceptable to parties having jurisdiction.

3.2 COORDINATION

- A. Coordinate clearing and demolition Work to avoid interference with OWNER's occupation of site and other work.
- B. Coordinate demolition Work on utility services with installation of temporary utilities, services, and pipelines. Do not remove required utilities until temporary utilities, or new Work, has been installed to provide uninterrupted service.

3.2 PREPARATION

- A. Field identify limits of clearing. Notify ENGINEER two weeks prior to beginning clearing operations to permit field review of clearing limits and tagging of trees to remain along clearing perimeter.
- B. Verify that existing plant life to remain is tagged and identified.
- C. Identify a waste area and salvage area for placing removed materials.
- D. Identify and field delineate limits of pavement removal and partial removal of other site structures and paving.
- E. Verify that all underground utilities have been located in the area of the Work and that all utility companies having jurisdiction have been properly notified in advance of any excavation Work.

3.3 TEST PITS

A. Not used.

3.4 CLEARING

- A. Clearing and Grubbing: Clearing and Grubbing includes the complete removal of all trees, shrubs, brush, existing ground cover and grubbing root systems and ground surface to the limits indicated on the Drawings. Unless indicated on Drawings, all clearing shall be considered as Clearing and Grubbing unless specifically designated as Selective Clearing or Selective Tree Removal and Trimming.
 - 1. The method of Clearing and Grubbing shall be performed subject to regulations pertaining to tree removal and erosion and sedimentation control.
 - 2. Trees at the perimeter of the Clearing and Grubbing limit shall be cut or felled in a manner that does not damage the canopy or root systems of existing trees along the clearing perimeter.
- B. Selective Clearing: Selective Clearing, when indicated on Drawings, includes the removal of all trees 18-inches in caliper and less as measured five feet above grade, trees greater than 18-inches in caliper as designated by the OWNER and marked in the field prior to bid, all understory growth, and vegetative ground cover. All remaining trees shall be limbed to a height of ten feet above grade. Where evergreen trees exist in the Selective Clearing area, all existing evergreen trees 5-feet tall and greater shall remain.
 - 1. Selective Clearing shall be performed in a manner that does not damage existing trees or designated plant growth to remain.
 - 2. Treat all exposed cuts of trees limbed as part of Selective Clearing operations to prevent disease and insect damage.
 - 3. Completely grub all areas to permit seeding of Selective Clearing area in accordance with Section 02920 for all areas designated to be seeded on the Drawings. The CONTRACTOR will not be responsible for grubbing areas not designated to be seeded on the Drawings. When seeding the Selective Clearing area is not required, CONTRACTOR shall apply herbicide to control weed and other innocuous growth.
- C. Selective Tree Removal and Trimming: Selective Tree Removal and Trimming, when indicated on Drawings, includes the removal of all trees six-inch caliper and less as measured 5 feet above grade and trees greater than six-inches as

designated by the OWNER and marked in the field prior to bid. All remaining trees shall be limbed to a height of ten feet above grade. Where evergreen trees exist in the Select Clearing area, all existing evergreen trees shall remain.

- 1. Selective Tree Removal and Trimming shall be performed in a manner that does not damage existing trees or designated plant growth to remain.
- 2. Treat all exposed cuts of trees limbed as part of Selective Tree Removal and Trimming operations to prevent disease and insect damage.
- D. Transplanting: Transplant all designated trees, shrubs, and other plant material in accordance with Section 02930.

E. Stump Removal:

- 1. Athletic Field Areas: Completely remove all stumps and root systems to a minimum of 18-inches below finished grade to the limit of the field playing area and any sideline area. Where subdrainage systems are required as part of the Work, remove all stumps and root systems to a depth of at least six inches below the invert of the drainage trench or aggregate drainage material. In no case shall the depth of removal be less than 18-inches below finished grade.
- 2. General Lawn Areas: Completely remove all stumps and root systems to a minimum depth of 6-inches below finished grade.
- 3. Select Clearing Areas: Cut stumps as close as possible to finish grade. If stumps cannot be cut to within 6-inches of finish grade, completely remove stump or grind to finish grade elevation.
- 4. Roadway, Paved, and Structural Areas: Completely remove all stumps and root systems.
- 5. Where existing stumps, portions of stumps, or root systems are permitted to remain, apply herbicide to inhibit future growth.
- F. Disposal of Trees, Shrubs, and Brush: Remove all trees, shrubs, brush, and vegetated material waste resulting from clearing Work from Site. Where burning is permitted by local ordinance, CONTRACTOR may burn materials on-site.
- G. Prior to burning materials on-site, review location of burn pit with ENGINEER and burning procedures. The burning pit shall not be located within five hundred feet of any occupied buildings or facilities, or greater distances as may be dictated by local ordinance, or within areas that will be paved or subject to backfill compaction required to support other site structures, building pads, or foundations.

3.5 SELECTIVE SITE DEMOLITION

A. See Section 02070.

3.6 TOPSOIL STRIPPING AND STOCKPILING

- A. Topsoil stripping includes removal of the existing topsoil to a maximum depth of six inches from areas to be further excavated or regraded. Additional topsoil shall be removed from areas to receive fills as specified in Section 02300.
 - 1. CONTRACTOR is permitted to strip topsoil deeper than six inches where greater depths are encountered and if such removal is needed to provide the required site topsoil volume. CONTRACTOR is responsible for providing any additional subsoil materials that may be required due to the removal of additional topsoil.
- B. Do not mix in foreign materials or subsoil when excavating topsoil. Do not excavate wet topsoil.
- C. Stockpile topsoil on-site and protect from erosion in accordance with the Erosion and Sediment Control Plan.
- D. Remove excess soil not intended for reuse from the site.

3.7 CONTRACTOR PARKING, STAGING, STORAGE, AND FIELD OFFICES

- A. Locate staging, storage and field offices as to avoid conflict with other operations. Locate as required to facilitate construction staging. Review location with ENGINEER prior to construction.
- B. Locate staging, storage, and field office area to minimize interference with OWNER's use of site, existing site vehicular traffic, and pedestrian traffic.
- C. Provide stabilized temporary base of aggregate paving as scheduled for CONTRACTOR parking, staging areas, and field offices to minimize site disturbance when these areas are not located on existing paved or otherwise stabilized areas.
- D. Provide CONTRACTOR parking, staging, storage and field office area where indicated on the Drawings or as approved by the OWNER. Size of staging area is approximate and may be modified subject to conditions of the Work. Site area occupied by the CONTRACTOR shall not be utilized for any purpose unless specifically authorized by the OWNER.

E. Access: Access to construction parking, staging and storage areas shall only be at approved locations. Approved locations include those where access has been approved through a Highway Occupancy Permit approved by the Pennsylvania Department of Transportation or by the ENGINEER, and where a stabilized construction entrance has been indicated on the approved Erosion and Sediment Control Plan. CONTRACTOR shall coordinate access points and approvals prior to starting work.

SECTION 02300 – EARTHWORK

PART I GENERAL

1.1 SECTION INCLUDES

- A. Protection of existing site structures, utilities, and property.
- B. General filling and backfilling, including moisture control, compaction, testing and field quality control.
- C. General excavating, including dewatering and rock removal.
- D. Trench excavation for storm sewers for piped utilities.
- E. Rough grading, placement of topsoil, and finished grading.

1.2 RELATED DOCUMENTS

Not Applicable.

1.3 COMPLIANCE WITH AUTHORITIES HAVING JURISDICTION

- A. Pennsylvania Department of Transportation (PennDOT): The CONTRACTOR shall request copies of all permits issued by the Pennsylvania Department of Transportation from the OWNER prior to commencing with the Work. CONTRACTOR shall comply, and where required become a Co-Permittee, with the permit and any permit conditions as part of the Work.
 - 1. Highway Occupancy Permit No. 08108294

1.4 REFERENCES

- A. ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort.
- B. ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort.
- C. ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method
- D. ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass.
- E. ASTM D2487 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- F. ASTM D6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

- G. ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- H. OSHA 29 CFR, Part 26, Subpart B Construction Standards for Excavation.

1.5 PROTECTION AND RESTORATION OF PROPERTY AND UTILITIES

- A. Existing walks, fences, roads, buildings, structures, and other site features in or adjacent to the Work shall be protected during by placing barricades, fencing, or other appropriate methods.
- B. Operate all excavation equipment and other machinery to prevent damage to existing structures designated to remain and new construction.
- C. Do not operate excavated equipment on existing or newly paved surfaces if the equipment will damage the pavement surface in anyway.
- D. Protect from damage new pavement surfaces and existing pavement surfaces to remain as part of the Work during staging, storage, and material stockpiling operations.
- E. Restore all lawns, paved surfaces, curbing, sidewalks, and other structures that are damaged by the CONTRACTOR's operations to a condition equal to or better than that they were prior to the beginning of the Work. Restoration work shall be completed immediately following observation of any damage or destruction unless further operations will result in additional damage.
- F. Notify all utility companies, pipeline companies, and the OWNER to assist in determining the location and protection procedures for utility services and pipelines prior to construction.
 - 1. Obtain and implement protection requirements for existing utilities as may be required by the utility company.
 - 2. Underground utilities are located on the Drawings based upon field survey of surface appurtenances, OWNER's drawings, and in accordance with Act 187 of 1996, Pa One Call Design Serial Numbers as noted on the Project Drawings.
 - 3. Utility information shown on the Drawings shall be considered approximate. As excavation approaches pipes, conduits, or other underground utilities, manual methods of excavating may be necessary. Notify ENGINEER where materials cannot be removed by manual or other methods.
- G. Repair, replace, and pay all fines, fees, or penalties, for damage to any existing charted utility service. Utility services include phone, CATV, electric, gas, water, sanitary sewer, petroleum, process lines, storm sewers, and all other public and private utilities.

1. Definitions:

a. Charted Utility: All existing utility lines, either above ground or below ground, visible through surface appurtenances, shown on the Drawings, field delineated by the utility company, shown on existing utility company maps, or shown on existing drawings provided by the OWNER.

- b. Uncharted Utility: Any existing utility lines not meeting the above requirements and discovered during excavation.
- 2. Immediately notify the ENGINEER and the utility company when uncharted, or incorrectly charted, piping, conduit, ducts, or utilities are encountered during excavation.
- 3. Cooperate with the OWNER and the utility company as required to maintain existing services and facilities in operation.
- 4. Upon discovery of an uncharted utility, the utility from that time forward shall be considered as a charted utility.
- H. Immediately begin to make emergency repairs and notify the proper authorities if any existing piping, conduits, ducts, or utilities are damaged during the process of the excavation. Repair damaged utilities to the satisfaction of the utility OWNER and ENGINEER. Note and properly report all damage.
- I. Excavate test pits to accurately determine the elevation and alignment of existing utility lines where Work will require crossing, excavation over, or connection to the utility line. Provide information to the ENGINEER a minimum of three days prior to commencing with the affected portion of the Work.

1.6 SUBSURFACE CONDITIONS

- A. Perform Work regardless of the nature of subsurface materials encountered. Immediately notify the ENGINEER upon discovery of unnatural subsurface conditions, underground storage tanks, contaminated soils, organic soils, springs, or seeps, buried debris, stumps, or rubbish.
- B. <u>Unclassified Excavation</u>: No consideration will be given to the nature of materials encountered during excavation. The base bid shall incorporate the removal and handling of all subsurface materials, including rock. Rock is defined as limestone, sandstone, granite or similar rocks in solid beds or masses in original or stratified position that cannot be dislodged by a D-8 Caterpillar tractor, or equivalent, equipped with a hydraulically operated power ripper (or by a CAT 235 hydraulic backhoe or equivalent) without the use of drilling and blasting, or pneumatic breaking using a 6 inch or larger ram attached to adequately sized equipment. Boulders or masses of rock exceeding one-half cubic yard in volume shall also be considered rock excavation.

1.7 SURVEY LINES AND MARKERS

- A. Establish all baselines and survey control required for the Work. All existing property line markers, monuments, and control points shall be protected or replaced if dislodged. A professional licensed surveyor shall reset all disturbed or dislodged boundary markers. All known survey points, control points, benchmarks, and vertical control datum is indicated on the Drawings.
- B. Verify that the survey benchmark and intended elevations for the Work are as indicated. Set additional horizontal and vertical control points as required for the Work.

1.8 COORDINATION

A. Coordinate all Work under the provisions of Section 01010 as to avoid conflict with other operations and OWNER's use of site.

1.9 PROJECT RECORD DOCUMENTS

- A. Submit record documents under the provisions of Section 01700.
- B. Accurately record actual locations of all utilities, including storm sewers, water lines, sanitary sewer lines, conduits, electric lines, phone lines, CATV lines, and transmission lines by horizontal location and elevation of inverts at all structures for storm sewer and sanitary sewer lines.

1.10 EXCAVATION CONDITION

- A. Condition and results of excavation are solely the responsibility of CONTRACTOR. Remove slides and cave-ins at whatever time and circumstances such conditions occur. Excavation shall conform to the lines, grades, dimensions, and elevations indicated on the Drawings, and shall be in accordance with all applicable OSHA regulations. Repair any damage to site structures and improvements caused during excavation. Maintain the stability of excavated faces, including prevention of sloughing of material from excavated faces.
- B. Protect site excavations from caving and soil movement. Wherever shoring and bracing is required, locate the system to clear permanent construction and permit forming and finishing of concrete surfaces or other construction. Assign supervision of shoring and bracing work to a qualified construction specialist.
- C. Shoring systems retaining earth on which the support or stability of existing structures or new structures is dependent must be left in place at completion of Work. No additional consideration will be given for sheeting, shoring, and bracing left in place for the proper execution of the Work, or for the convenience of the CONTRACTOR.

1.11 PROPERTY OF MATERIALS AND EARTHWORK BALANCE

- A. Excess Materials: No right of property in materials is granted for excavated materials prior to backfilling. Excess material shall be stockpiled at a location on the project site and stabilized in accordance with Erosion and Sediment Control Plan until such material is necessary to complete the Work. Excess or unsuitable soil material shall be immediately removed from the site.
 - 1. Stockpile excess topsoil and subsoil in separate piles.
 - 2. Soil materials stockpiled shall not include any large boulders or deleterious materials.
 - 3. Boulders and deleterious material shall be segregated and stockpiled separately for disposition at the discretion of the OWNER.
- B. Off-site Materials: Any imported soil material required to complete Work shall be furnished in accordance with Section 02050.

C. Earthwork Balance: During the Bid Phase grade adjustments in non-building and non-paved areas of the site will be considered to assist in attaining an on-site earthwork balance.

PART 2 PRODUCTS

2.1 SOIL MATERIALS

- A. General Fill Materials: As specified in Section 02050.
- B. Select Clean Earth Fill: As specified in Section 02050.
- C. Clay: As specified in Section 02050.
- D. Topsoil: As specified in Section 02050.
- E. Imported Soil Materials: As specified in Section 02050.
- F. Engineered Backfill Materials: As specified on Contract Drawings

2.2 AGGREAGATE BACKFILL

- A. First Class Bedding: Aggregate Type A-3 as specified in Section 02050.
- B. Initial Backfill: Aggregate Type A-4 as specified in Section 02050.

2.3 GEOSYNTHETIC MATERIALS

- A. Geotextiles: As specified in Section 02050.
- B. Geogrids: As specified in Section 02050.

2.4 COMPACTION EQUIPMENT

- A. Provide suitable compaction equipment as required to perform the Work.
 - 1. Bulk Structural Fill: Smooth-drum vibratory roller with a static weight of at least 24,000 pounds and a centrifugal force of at least 50,000 pounds and minimum 84-inch drum with, equal to a Hyster Hypac C850B or Ingersoll-Rand SD-100.
 - a. Structural Backfill and Trench Fill: Vibratory plate tampers such as a Wacker DPU 6055 or walk behind roller such as a Bomag BW-75AD roller. The use of Hydra-Hammer for compacting backfill in trenches, or other equipment that may dislodge pipe joints, is prohibited.
 - b. The use of puddling or jetting for compacting structural backfill or trench backfill prohibited.

2.5 WATER FOR COMPACTION

A. Provide water as required to adjust soil moisture content. On-site water facilities are not available for use construction purposes.

PART 3 EXECUTION

3.1 GENERAL

A. Geotechnical Report: Not applicable.

3.2 PREPARATION

- A. Verify structural ability of unsupported walls to support imposed loads of the fill. Verify subdrainage and foundation drainage systems are in place.
- B. Identify required lines, levels, contours, datum locations, and benchmarks. Establish horizontal location and vertical grade control.
- C. Stake and flag locations of known utilities. Maintain staking and flagging throughout construction.
- D. Locate, identify, and protect utilities to remain from damage. Protect the existing utilities and structures, both above and below grade, from construction activity and vibration from heavy equipment.
 - 1. Limit and control access across existing and newly installed utilities.
 - 2. Designate selected cross-over areas.
 - 3. Utilize hand operated equipment to compact fill areas over utilities. Compaction equipment should only be operated in the static mode.
- E. Protect plant life, lawns, and other features designated to remain as a portion of final landscaping.
- F. Protect benchmarks, survey control points, fences, sidewalks, paving, and curbs from excavation equipment and construction traffic.

3.3 GENERAL PROCEDURES

- A. Erosion and sediment pollution controls shall be installed to intercept upslope runoff from areas to be disturbed prior to initiating earthmoving activities.
 - 1. Install erosion and sediment controls in accordance with the Erosion and Sediment Control Plan. A copy of the approved plan shall be available on-site at all times.
 - 2. Maintain erosion and sedimentation controls until the upslope contributing drainage area is stabilized.
- B. Materials excavated from borrow areas or general excavation shall be stockpiled at on-site area as directed by ENGINEER if it cannot be immediately placed. When stockpiling is necessary, stockpiles shall be kept in a neat and well-drained condition and shall be stabilized in accordance with the Erosion and Sediment Control Plan.

C. Fugitive dust emissions shall be controlled by CONTRACTOR using commercially available dust inhibitors or by wetting down dry soil or aggregate surfaces. When using water as a dust control, verify that excess moisture will not alter or inhibit attaining required compaction densities.

3.4 FILLING AND BACKFILLING

- A. Prior to filling and backfilling operations, prepare the subgrade to receive new fills.
 - 1. The subgrade to receive compacted fill or aggregate base course shall be stripped of all topsoil prior to backfilling.
 - 2. Proofroll all subgrade areas, at grade areas, and subgrades in cut areas prior to fill placement.
 - a. Perform proofrolling under the observation of the ENGINEER.
 - b. Proofroll using a loaded triaxel dump truck having a gross vehicle weight of at least 60,000 pounds as well as a vibratory roller.
 - c. Buffer Zone: 10-feet beyond the structure footprint area and 5-feet beyond the edges of all parking areas, access drives, paved play areas, or structural slabs.
 - d. Conduct proofrolling at the last practical moment before subbase is placed on exposed subgrades and again at the subbase level before slabs, pavements, or finished surfaces are placed.
 - 3. Repair soft or unstable areas disclosed by proofrolling prior to placing new fills or pavement subbase.
 - a. Over-excavate soft or unstable areas of subgrade until a stable base is reached.
 - b. Remove unsuitable from site or place at non-structural fill locations approved by ENGINEER.
 - c. Backfill excavation with AASHTO No. 57 coarse aggregate and compact to the required density.
 - d. Backfill excavation with AASHTO No. 1 coarse aggregate where a perched water table exists or if a stable bearing area is not reached within three-feet of the required subgrade level.
 - e. On-site excavated rock material may be used where approved by a geotechnical engineer.
 - 4. Seal exposed finished subgrade surfaces through compacting with a vibratory roller where subbase materials will not be immediately installed.
- B. Filling:

- 1. Subgrade fill materials shall be placed in layers by a bulldozer or other method as determined by the CONTRACTOR. The entire surface of the work shall be maintained free of ruts and in a condition that will permit free drainage and travel of construction equipment.
- 2. All roots, debris, and stones exceeding the maximum particle size shall be removed from the fill areas that may create voids, result in poor compaction, or cause irregularities in the final surface.
- 3. Place fill material in 8-inch loose horizontal lifts.
- 4. Scarify the compacted surface of each lift prior to the placement of each successive lift.
- 5. Do not place frozen materials, fills in freezing temperatures, or when the ground is frozen.
- 6. Do not place fills on areas of ponded water, on wet ground where ponding is present, or during wet periods of inclement weather.
- 7. Fill Slope Construction: Slopes greater than or equal to a ratio of 3-feet horizontal to 1-foot vertical shall be constructed by excavating benches in the existing slope face.
 - a. Locate and size benches to permit compaction of successive fills in uniform horizontal layers. Compaction along the face of the slope is not permitted.

8. Structural Backfilling Procedures:

- a. Do not place backfill material prior to seven days after completion of structural walls. Backfill against structural walls with Clean Earth Backfill only.
- b. Do not operate heavy equipment closer to walls than a distance equal to the height of backfill material above the top of the structure footing. Use only hand operated compaction equipment within ten feet of walls.
- c. Do not place backfill against exterior walls until supporting floors, other reinforcing members, or slabs at top of walls are in place. Provide Clean Earth Fill material and free draining Aggregate Backfill as scheduled on Structural Drawings against exterior building walls.
- d. Backfill to be compacted with hand-operated equipment shall not exceed four inches in loose, horizontal layers. Compact backfill around inlet boxes, manholes, and other storm sewer, sanitary sewer, or utility structures using hand operated equipment.
- e. The excavation shall be free of trash and debris prior to backfilling. Backfilling with frozen materials, during freezing temperatures, or when water is present or ponded in the excavation is not permitted.
- f. Employ methods to prevent damage to walls, foundation drainage, utilities, conduits, or piping during backfilling. Backfill by hand when required.

C. Moisture Control:

- 1. All fill and backfill materials shall be placed at a moisture content that is no more than 3-percentage points above or 3 percentage points below the optimum moisture content established for the material by ASTM D1557.
- 2. Aerate the fill and backfill materials to acceptable moisture content if the fill determined to be excessively wet. The drying process shall be assisted by harrowing where necessary.
- 3. Provide water with sprinkler tanks, water trucks, or other sprinkling devices to provide uniform distribution over the materials to be treated when additional moisture content is required.

4. Naturally Wet On-Site Soils:

- a. April 1 October 31: Air-dry wet soil material scheduled for fill or backfill that possess natural water contents a maximum of 8-percentage points above the material's optimum moisture content as specified by ASTM D1557 to within 3-percentage points of the optimum moisture content. Waste any soil material that exceeds 8-percentage points above the soil's optimum moisture content at non-structural fill locations or offsite and replace with suitable soil material.
- b. November 1 March 31: Remove soil material or place at non-structural fill areas where the natural water content is above 3-percentage points above the soil's optimum moisture content as determined by ASTM D1557. Replace with other suitable onsite material or import fill material required to meet the Work.
- c. Protect stockpiled soil material in spoil piles from wet weather conditions. Soil materials that are unusable due to improper protection will not be considered as naturally wet on-site soils.

D. Compaction:

- 1. Soil placement and compaction shall conform to the lines, elevations, and contours on the Drawings.
- 2. Compact each lift using of vibratory rollers or vibratory plate compactors. Utilize overlapping passes when performing compaction with rollers. Recompact areas that are determined to be unstable or to have a non-uniform density.
- 3. Structural Fill: Compact to not less than 95 percent of the maximum dry density as determined by ASTM D1557, Modified Proctor. Moisture content of the compacted soil shall be within the range of (-3) to (+3) percent of optimum moisture in accordance with ASTM D1557.
- 4. Non-Structural Fill: Compact to not less than 90 percent of the maximum dry density as determined by ASTM D1557, Modified Proctor. Moisture content of the compacted soil shall be within the range of (-3) to (+3) percent of optimum moisture in accordance with ASTM D1557.

- 5. Areas inaccessible to vibratory roller compaction equipment shall be compacted with suitable vibratory plate tampers or walk behind vibratory rollers. Where hand-operated compaction equipment is used, uncompacted lift thickness shall not exceed 4-inches.
- 6. Previously placed or new materials shall be moistened by sprinkling, when required, to achieve proper bond and compaction. No compaction shall be done when materials are excessively wet.
- 7. ENGINEER or OWNER may halt filling operations and require additional compaction tests beyond the testing schedule. Areas found deficient based on testing results shall be recompacted.
- 8. OWNER's geotechnical engineering technician shall monitor all construction and placement of fills and materials for pavements and storm water detention structures.

E. Tests and Field Quality Control:

- 1. Section 01410 Quality Control Testing is required as directed by the ENGINEER.
- 2. Testing: Test reports shall include field density, optimum moisture content, field observation conditions, actual unconfined compressive strength and or bearing tests according to methods referenced.
 - a. Testing laboratory shall furnish both ENGINEER and CONTRACTOR with required copies of test reports. Same reports will be considered as sufficient evidence of acceptance or rejection of Work.
- 3. The optimum moisture content and the maximum density of each type of material used for compacted fill shall be determined by ASTM D1557, Modified Proctor Compaction Test.
- 4. Nuclear density testing devices shall be checked and calibrated regularly as per the manufacturer's recommendations, and the results will be checked and verified with ASTM D6938 at least once for every twenty nuclear densometer tests.
- 5. The minimum number of tests to be performed in each lift of fill or backfill shall be as scheduled.
 - a. Structural Areas: One test for each 5,000 square feet of fraction thereof of bulk structural fill.
 - b. Non-Structural Areas: One test for each 7,500 square feet or fraction thereof.
 - c. Utility Trench or Wall Backfill: One test per each 50 lineal feet of trench backfill.
- 6. The ENGINEER will select test locations on a random basis.
- 7. When test results indicate that compaction density or moisture content is not as specified, the material shall be reworked and recompacted or removed, or replaced and

recompacted by to meet specified requirements. All areas requiring recompaction shall be retested to ensure conformance with the specification requirements.

3.5 EXCAVATION

A. Excavating Procedures:

- 1. Prepare and protect of existing structures as part of excavation.
- 2. Underpin adjacent structures that may be damaged by excavating Work.
- 3. Proofroll subgrade of excavated areas to receive subbase for finish pavements or slabs on grade are finished subgrade elevation is approached to identify soft spots or unsuitable bearing materials. Remove unstable bearing materials disclosed as part of proofrolling.
- 4. Do not interfere with 45-degree bearing spay of foundations.
- 5. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- 6. Hand trim excavations. Remove loose matter.
- 7. Remove lumped subsoil, boulders, and rock up to 1/3 cubic yard measured by volume.
- 8. Notify ENGINEER of unexpected subsurface conditions and discontinue affected Work in area until authorized to continue.
- 9. Correct areas over excavated.

B. Protection:

- 1. Prevent displacement or loose soil from falling into excavation and maintain soil stability.
- 2. Provide fences and barricades around open excavations.
- 3. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing. All frozen material must be removed from the compacted fill or subgrade surface prior to placement of any new soil fill or aggregate base course.
- C. Field Quality Control: Provide for visual inspection of all bearing surfaces. OWNERs representative shall perform field-testing and inspection for all structural areas of subgrade, established through excavating, filling, or through combination.

D. Dewatering:

1. Provide and maintain at all times during the Work, ample means and devices with which to remove promptly, and properly dispose of, all water entering trenches and other excavations, or water that may flow along or across work site.

- a. Water shall be removed in a manner to minimize the transportation of sediments. Excavations shall be pumped dry prior to placement or construction of materials or structures within the excavation.
- b. Remove temporary means of redirecting surface drainage only after the excavation has been backfilled.
- 2. All storm water pumped or drained from the Work area shall be directed to an erosion and sediment control trapping device, or an inlet that is directed to a sediment basin or sediment trap. Pumped water shall not be discharged directly to pavements, newly graded or seeded areas, swales, or off-site areas.

E. Rock Removal:

- 1. Rock is defined as limestone, sandstone, granite or similar rocks in solid beds or masses in original or stratified position that cannot be dislodged by a D-8 Caterpillar tractor, or equivalent, equipped with a hydraulically operated power ripper (or by a CAT 235 hydraulic backhoe or equivalent) without the use of drilling and blasting, or pneumatic breaking using a 6 inch or larger ram attached to adequately sized equipment. Boulders or masses of rock exceeding one-half cubic yard in volume shall also be considered rock excavation.
- 2. Material which can be loosened with a pick, frozen materials, soft laminated shale and hardpan, which for convenience or economy is loosened by drilling, blasting, wedging, or the use of pneumatic tools, removal of concrete pavement and retaining walls shall not be classified as rock removal.
- 3. Rock removal is defined as any rock, as defined above, that is dislodged and moved from its original or stratified position.
- 4. No consideration shall be given to the nature of materials encountered in excavation operations. All excavation is considered unclassified.
- 5. When rock is uncovered requiring explosive for removal, notify the ENGINEER. Removal of rock by explosives is permitted only when approved by authorities having jurisdiction and the ENGINEER. Removal by use of explosive methods will be considered only after all other methods have failed. CONTRACTOR shall be responsible for conforming to all codes, regulations, and obtaining all permits required for blasting.
- 6. Prior to removing rock by explosive means, the CONTRACTOR shall document existing conditions of nearby structures. CONTRACTOR shall be responsible for all damages to existing on-site or off-site structures, pavements, site features, and Work in progress.
- 7. Rock shall be removed to a depth and configuration to permit scheduled backfill for utility trenches and other excavation. Cut away rock at bottom of excavations to form level bearing surface. Removed shaled layers to provide a sound unshattered base where required for footings and foundations.
- 8. In areas to receive topsoil, remove rock a minimum of 18-inches below finished grade to permit placement of earth fill and topsoil over rock layer.

9. Fill over excavated areas, cavities, and voids at subgrade elevation in rock excavation with lean concrete or other material approved by the ENGINEER.

3.6 TRENCHING

- A. General Trench Excavation: Perform excavation and backfilling using machinery. Hand excavation and backfilling may be required to protect existing structures, utilities, and other structures or when hand excavation or backfilling is specified. General trench excavation procedures include:
 - 1. Begin excavation in trenches at the control point having the lower invert and proceed upgrade.
 - 2. Remove soil and surface materials over the line of trenches and properly separate and store removed materials as suitable for use in backfilling or other purposes.
 - 3. Remove subsurface materials to the subgrade elevation and separate and store removed materials as suitable for use in backfilling or other purposes.
 - 4. Remove rock to subgrade at least 25 feet in advance of pipe laying.
 - 5. Remove rock below subgrade if shattered due to rock removal operations. Restore subgrade of trench where over-blasting or excavation occurs.
 - 6. Remove and dispose of unsuitable backfill materials.

B. Trenching:

1. From subgrade elevation to at least twelve-inches above the top of the outside barrel of the pipe, excavate trench banks to vertical lines not less than the minimum nor more than the maximum widths indicated in Trench Width Table (A). Where sheeting is required, the dimensions in the Table shall apply to the inside face of sheeting.

Trench Width Table (A)

Pipe Diameter	Minimum ¹	Maximum ¹
4" – 24"	12"	16"
27" – 36"	20"	24"
42" – 72"	26"	30"
>72"	30"	36"

¹Trench widths are outside diameter of pipe plus dimension in table.

2. From a point twelve-inches above the top of the outside barrel of the pipe, keep banks vertical for trenches made in paved or unpaved roadways. In no case, shall the trench width at the top exceed the dimensions in Trench Width Table (B). When the excavation limits of Table (B) cannot be held, install temporary shoring, sheeting, and bracing.

Trench Width Table (B)

Pipe Diameter	Maximum ¹
4" – 24"	40"
27" – 36"	42"
42" – 72"	48"
>72"	60"

¹Trench width is to outside diameter of pipe plus dimension in table.

- 3. Where utility trenches are excavated in rights-of-way or easements through open lands, the maximum top of trench width indicated in Trench Width Table (B) may be exceeded only if the Work can be completed without damaging or utilizing the adjoining property in execution of the Work. The angle of excavation for the trench wall may vary, but in no case shall the angle of excavation be steeper than one-half foot horizontal to one-foot vertical.
- 4. The dimensions indicated in Trench Width Table (B) may be waived by the ENGINEER for all trench excavations on OWNER's property. No consideration is given for additional backfilling or excavation as a result of over-excavated trenches or laying back trenches for convenience in not supplying shoring, sheeting, and bracing.
- 5. All trenching shall conform to OSHA excavation standards, 29 CFR, Part 1926, Subpart B.
- 6. Length of Open Trench: ENGINEER shall have the right to limit the amount of trench opened in advance of pipe laying and the amount of pipe laid in advance of backfilling. In no case, shall these lengths exceed 300 feet and 100 feet respectively. Complete trench excavation at least twenty-five feet in advance of pipe laying and keep trenches free of obstructions. At the end of each workday, or discontinuing the Work, the pipe laying may be completed to within five feet of the end of the open trench. Additional open trench limitations are as follows:
 - a. ENGINEER may require trench backfilling over completed utility lines or excavations in advance of the lengths to facilitate OWNER's use of property or other reasons.
 - b. If trench excavation is stopped, except as required by ENGINEER, and the excavation left open, ENGINEER may require trench to be backfilled.

C. Trench Backfilling:

- 1. Storm Sewers: Perform trench backfilling in accordance with Section 02213.
- 2. Compaction and Field Quality Control: During the course of trench backfilling and compaction, ENGINEER may, at various locations or depths of trenches, have density tests performed to verify compaction. Compact trench backfill as specified in the Sections pertaining to utility pipe installation and storm sewer installation.

3.7 ROUGH GRADING

- A. Establish subgrades and final grades as shown on the Drawings. Where subgrade or final grade cannot be prepared to the elevations indicated on the Drawings, and through no fault of CONTRACTOR or due to the nature of materials encountered that are included as classified excavation, a modification of grade will be permitted where it does not affect the overall design concept or void any approvals received for the Plan. Grade modifications will only be approved upon review of a Revised Grading Plan prepared by the CONTRACTOR and only after authorization by the OWNER.
- B. Perform rough grading operations in a manner that maintains positive drainage, directs sediment laden flows to sediment trapping facilities, and does not create concentrated flows or discharges to adjoining properties.
- C. Rough grading shall be done by mechanized equipment, such as a bulldozer, or other means as determined by the CONTRACTOR to form the desired line, shape, contour, and grade of the Drawings. Areas adjacent to structures and areas inaccessible to heavy grading equipment shall be graded using smaller excavation equipment, such as a skid loader, or graded by manual methods.
- D. Slope grades away from building and open excavations at all times. Maintain positive drainage where indicated. Keep areas free of ruts and troughs that will trap and pond surface drainage.
- E. Maintain erosion and sediment controls at all times and conform to approved Erosion and Sediment Control Plan and NPDES Permit requirements. Install additional controls when directed by the County Conservation District or when deemed necessary due to unanticipated site or weather conditions. Pay all fines or penalties levied by the DEP or Conservation District for failure to take corrective action on erosion and sedimentation pollution control deficiencies.
- F. Make all grade changes gradual. Blend slopes into level areas.
- G. Construct surface drainage channels and swales to meet minimum cross-sectional and slope requirements as scheduled on Drawings. Blend channels with adjacent grades. Grade channel invert, excluding "V" shaped channels, to convey flows evenly through channel cross-section. Install velocity checks, stone berms, and other means as necessary to prevent excessive erosion of channel. Provide additional controls beyond those shown on the Erosion and Sediment Control Plan when deemed necessary.
- H. Tolerance: Finished subgrade within two-tenths of a foot (0.20' or 2-1/2") of required design subgrade elevation for non-structural areas and one-tenth of a foot (0.10') for structural areas.

3.8 LANDSCAPE/FINISH GRADING

A. Substrate Preparation: Eliminate low spots and uneven areas. Remove all stones, roots, brush, wire, stakes, and other debris greater than ½-inch in size. Remove all soil in subgrade contaminated with hydraulic fluids, chemicals, oils, or other material that could inhibit plant growth. Where the subgrade soil has developed volunteer weed growth, remove all weeds prior to topsoil placement using methods that will not affect fertility of the topsoil.

- B. Lightly scarify subgrade surface for all areas to receive four inches or more of topsoil.
- C. Scarify or till subgrade surface to a minimum depth of three-inches for all areas to receive less than four-inches of topsoil.
- D. Placing Topsoil: Subject to the requirements of Section 02050, topsoil stripped from site shall be acceptable for placement and finish grading. Amend topsoil in accordance with soil test recommendations as part of spreading and tilling operations. Place topsoil as follows:
 - 1. General Lawn Areas: Place topsoil to a minimum depth of 4-inches after light rolling.
- E. Place topsoil during dry weather. Do not place or spread frozen or wet topsoil. Permit topsoil to dry when excessively wet prior to spreading and fine grading.
- F. Incorporating Amendments: Incorporate amendments as required by soil test results and as specified in Section 02920 by tilling into topsoil. Thoroughly and uniformly distribute amendments in the upper three inches of the topsoil.
- G. Fine grade topsoil to eliminate rough or low areas. Maintain profile and contour of subgrade. Place topsoil to within ½-inch of finished surface of sidewalks, slabs, paved areas, and top of curb unless otherwise indicated on Drawings. Remove rocks, weeds, and foreign materials when spreading topsoil.
- H. General lawn areas shall be raked to remove all stones and debris greater than ¾-inch in any dimension. Conservation seeded areas shall be raked to remove all stones and debris greater than 1-inch in any dimension and that will otherwise interfere with seeding operations.
- I. Manually spread topsoil close to plant materials, buildings, site structures, exposed subdrainage systems, areas backfilled with infield mix or similar materials to prevent damage and mixing of topsoil with other materials.
- J. Lightly compact placed topsoil.
- K. Tolerances: Finished grade of topsoil shall be within ½-inch of finished design grade.
- L. Leave stockpile area clean and raked, ready to receive final landscaping. If excess topsoil was stockpiles, grade topsoil pile to form regular, even side slopes and stabilize as part of final seeding.
- M. Do not permit construction traffic on newly placed topsoil to prevent unnecessary compaction. Use only rubber-tired agricultural style equipment for fine grading and finished spreading of topsoil.

END OF SECTION

SECTION 02740 – FLEXIBLE PAVEMENT

PART 1 GENERAL

1.1 Section Includes

- A. Bituminous paving for site roadways, parking areas, and service areas.
- B. Bituminous pavement joint sealant.
- C. Pavement repair.

1.2 References

A. The PennDOT Sections noted herein refer to sections contained in the Commonwealth of Pennsylvania Department of Transportation Specifications Publication 408, latest edition. The referenced pertain only to materials, construction equipment, methods and labor. The payment provisions do not apply to work performed under this Contract.

1.3 Submittals

- A. Certificates: Furnish certification from bituminous and aggregate producer attesting that materials conform to PennDOT Specifications.
- B. Material Slips: Furnish certification of the amount of materials utilized from the producer according to PennDOT Specifications.

1.4 Quality Assurance

- A. Perform Work in accordance with PennDOT Publication 408, latest revision.
- B. Mixing Plant: Approved by latest PennDOT bulletin for bituminous materials.
- C. Obtain materials from same source throughout.

1.5 Environmental Requirements

- A. Do not place asphalt when ambient air temperature or base surface temperature is less than 40 degrees or surface is wet or frozen.
- B. Place bitum mixture when temperature is not more than 15 degrees below bitumen supplier's bill of lading and not more than the maximum specified temperature.

1.6 Coordination

A. Not used.

PART 2 PRODUCTS

2.1 Materials

- A. Aggregate Base Course
 - 1. Coarse Dense Graded Aggregate: Aggregate Type A-1 as specified in Section 329100.
- B. Bituminous concrete and bituminous materials shall meet the requirements of PennDOT Publication 408, latest revision.
 - 1. Asphaltic cement: PG64S-22, conforming to PennDOT Publication 408, latest revision.
 - 2. Bituminous Concrete Base Course: Superpave Asphalt Mixture Design, Base Course, PG64S-22, 25.0 mm mix, ESAL's and installation depth as specified on Contract Drawings.
 - 3. Bituminous Concrete Binder Course: Superpave Asphalt Mixture Design, Binder Course, PG64S-22, 19.0 mm mix, ESAL's and installation depth as specified on Contract Drawings.
 - 4. Bituminous Concrete Binder Course: Superpave Asphalt Mixture Design, Binder Course, PG64S-22, 25.0 mm mix, ESAL's and installation depth as specified on Contract Drawings.
 - 5. Bituminous Concrete Wearing Course: Superpave Asphalt Mixture Design, Wearing Course, PG64E-22 or PG64S-22, 9.5 mm mix, ESAL's and installation depth as specified on Contract Drawings, SRL-Any.
 - 6. Bituminous Concrete Wearing Course: Superpave Asphalt Mixture Design, Wearing Course, PG64E-22 or PG64S-22, 12.5 mm mix, ESAL's and installation depth as specified on Contract Drawings, SRL-Any.
 - 7. Bituminous Concrete Wearing Course: Superpave Asphalt Mixture Design, Wearing Course, PG64E-22 or PG64S-22, 19.0 mm mix, ESAL's and installation depth as specified on Contract Drawings, SRL-Any.
 - 8. Leveling/Scratch Course: Superpave Asphalt Mixture Design, Wearing Course, PG64E-22 or PG64S-22, 9.5 mm mix, Varying Depth ½" average, SRL-Any, ESAL's as specified on Contract Drawings.

- 9. Asphalt tack coat: Emulsified asphalt, conforming to PennDOT Publication 408, Section 460.2.
- 10. Asphalt prime coat: Emulsified asphalt, conforming to PennDOT Publication 408, Section 461.2.

C. Bituminous Pavement Joint Sealant.

- 1. Pavement cracks/joints greater than ¼ inch: Single component, hot-pour asphalt based pavement crack and joint sealant meeting ASTM D6690, and AASHTO M324, Roadsaver 221, as manufactured by Crafco, Inc. (1-800-528-8242) or approved equal.
- 2. Curb joints: Emulsified asphalt, PG64S-22, conforming to PennDOT Publication 408. Do not seal curb joints prior to painting curb, where indicated.

D. Sealer

- 1. If specified on Contract Drawings, provide a sealer consisting of suitable fibrated chemical type asphalt base binders and fillers having a container consistency suitable for troweling after thorough stirring, and containing no clay or other deleterious substance.
- 2. Where conflicts arise between this specification and the requirements in the latest version of the PennDOT Specifications, Publication 408, latest revision, the State Specifications shall control.
- E. Pavement Markings: PennDOT Publication 408, Sections 960 to 966.

2.2 PAVEMENT MIXES

- A. Composition of Mixtures: Base, binder and wearing course mixture composition shall conform to requirements of PennDOT Publication 408, Sections 313 and 400.
 - 1. Establish a job-mix formula prior to beginning work, which shall not be changed during the progress of work without the ENGINEER's approval. Job mixing tolerances shall not be presumed to permit acceptance of materials whose gradations fall outside the master ranges set in the specified PennDOT sections.
 - 2. The approved job-mix formula shall lie within the specification limits and be suitable for the layer thickness and other conditions prevailing. It shall not be changed after work has started without the approval of ENGINEER.

PART 3 EXECUTION

3.1 Examination

- A. Verify that compacted subgrade is dry and ready to support paving and imposed loads.
- B. Verify gradients and elevations of subgrade are correct.
- 3.2 Aggregate Base Course
 - A. As specified in Section 321215.
- 3.3 Preparation Prime Coat
 - A. Apply prime coat in accordance with PennDOT Publication 408, 461.3.
- 3.4 Preparation Tack Coat
 - A. Apply tack coat over existing surface in accordance with PennDOT Publication 408. Section 460.3.

3.5 Placing Pavement

- A. Place base course in accordance with PennDOT Publication 408, Section 313. Place bituminous binder and wearing courses in accordance with PennDOT Publication 408, Section 400. Do not place final wearing course until directed by ENGINEER. Place preceding pavement courses as early as possible in the phasing schedule to provide temporary paving during construction.
- B. Place pavement to the compacted thickness indicated.
- C. Seal all joints at all curbs and storm water structures where the final wearing course will not be installed for more than 45 days.
- D. Neatly sawcut at all edges between new pavement and existing pavement to remain.

3.6 Pavement Markings

- A. All pavement markings, locations, symbols, colors and sizes shall conform to PennDOT publication 408 and PA Code 67 standards. All parking stalls and painted islands shall located as indicated on the Drawings.
- B. All markings and striping shall be of the material specified. Apply paint material

- in accordance with the manufacturer's specifications, including pavement surface cleaning and preparation.
- C. Protect all pavement markings until material has completely cured. Damaged markings must be completely removed and reapplied.

3.7 Bituminous Pavement Repair

A. Seal all isolated joints with pavement joint and crack sealant as specified. Sawcut and remove pavement and subbase at areas of reflective cracking caused by construction traffic or deficient Work that will not support required final loading. Recompact the subgrade to the specified density. Proofroll subgrade and remove any soft spots in accordance with Section 312000. Place and compact subbase aggregate and bituminous pavement materials as specified. Reflective cracking may be addressed prior to the placement of overlay paving with heavy duty membranes in accordance with PennDOT Publication 408, Section 467 when approved by the ENGINEER after review with the geotechnical consultant.

3.8 Application of Seal Coat

- A. Prepare the surfaces, mix the seal coat material, and apply in accordance with the manufacturer's recommendations as approved by the ENGINEER.
- B. Apply one coat of the specified sealer.
- C. Achieve a finished surface seal which, when dry and thoroughly set, is smooth, tough, resilient, of uniform black color, and free from coarse textured areas, lap marks, ridges, and other surface irregularities.

3.9 Field Quality Control

A. Pavement Coring (As deemed necessary by ENGINEER): For each pavement section specified at each area on the Drawings, provide one (1) core sample to verify pavement thickness. Backfill, compact and seal test holes after the measurements have been performed. Pavement more than ¼ inch deficient in depth and cannot be satisfactorily corrected will be considered defective. When defective pavement is encountered, additional core holes will be required to determine the extent of the deficient area. All defective pavement shall be replaced to conform to the required cross-section.

3.10 Tolerances

- A. Flatness: Maximum variation of ¼ inch measured with a 10 foot straight edge in any direction.
- B. Scheduled compacted thickness: Within ¼ inch.

C. Variation from finished grade: Within ½ inch.

3.11 Schedule

A. All pavement cross-sections and limits of paving are scheduled on the Contract Drawings.

END OF SECTION

SECTION 02760 – PAVING SPECIALTIES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Liquid traffic paint materials.
- B. Methyl methacrylate markings.
- C. Hot thermoplastic markings.

1.2 RELATED SECTIONS

- A. Section 02740 Flexible Pavement
- B. Section 02750 Rigid Pavement (not applicable to this project)

1.3 REFERENCES

- A. Commonwealth of Pennsylvania, Department of Transportation, Publication 408, as amended.
 - 1. Section 901, Maintenance and Protection of Traffic During Construction.
 - 2. Section 962, Painting Traffic Lines and Markings.
 - 3. Section 963, Pavement Marking Removal.
 - 4. Section 1103, Traffic Signing and Marking.
- B. Commonwealth of Pennsylvania, Department of Transportation, Publication 35, Approved Construction Materials (Bulletin 15), as amended.
- C. Commonwealth of Pennsylvania, Department of Transportation, Publication 68, Regulations Traffic Signs, Signals and Markings, as amended.
- D. Commonwealth of Pennsylvania Code, Title 67, Department of Transportation, Chapter 213, Work Zone Traffic Control.
- E. American Society for Testing and Materials:
 - 1. ASTM D711-89(1998) Standard Test Method for No-Pick-Up Time of Traffic Paint.
 - 2. ASTM D868-85(1998) Standard Test Method for Evaluating Degree of Bleeding of Traffic Paint.

- 3. ASTM D969-85(1998) Standard Test Method for Laboratory Determination of Degree of Bleeding of Traffic Paint
- 4. ASTM D1309-93(1998) Standard Test Method for Settling Properties of Traffic Paints During Storage.
- F. Federal Standard 595B Colors, 1989, as amended.
- G. Institute of Transportation Engineers, Equipment and Material Standards of the Institute of Transportation Engineers, "A Model Performance Specification for the Purchase of Pavement Marking Paints and Powders", 2001, as amended.
- H. Environmental Protection Agency, Code of Federal Regulations 40, Section 261.24.

1.4 SUBMITTALS

- A. Section 01300 Submittal Procedures
- B. Product Data
 - 1. Glass beads.
 - 2. Liquid traffic paint.
 - 3. Methyl methacrylate (MMA) markings.
 - 4. Hot thermoplastic markings.
 - 5. Primer for hot thermoplastic markings.

C. Certificates

- 1. Manufacturer's pavement marking material certification that the material meets or exceeds:
 - a) PennDOT Publication 408, Section 1103 Traffic Signing and Marking.
 - b) Institute of Transportation Engineers, Equipment and Material Standards of the Institute of Transportation Engineers, "A Model Performance Specification for the Purchase of pavement marking Paints and Powders".

D. Manufacturer's Instructions

- 1. Application method, mixing instructions and surface preparation for:
 - a) Glass beads.
 - b) Liquid Traffic Paint.

- c) Methyl methacrylate (MMA) markings.
- d) Hot thermoplastic markings.

E. Qualification Statements

1. Qualified as a PennDOT Prime Contractor.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver pavement marking materials to job site in their original, sealed containers or packages with intact and legible labels at time of use.
 - 1. Store paint containers lid-down.
 - 2. If the paint is used within two months after being received, no rotation prior to use is required. If the paint is on hand for more than two months, rotate paint several days before use.
- B. Store approved materials at the job site in a suitable and designated area restricted to storage of pavement marking materials and related equipment.
- C. Ensure safe storage of pavement marking materials and the prompt and safe disposal of waste. Store all products protected from weather when such products may be affected by freezing or high temperatures.
- D. Glass beads: units of 50 lbs. and packed in moisture-proof bags. Store in a cool dry place.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements:
 - 1. Adhere to manufacturer's data on air and surface temperature limits and relative humidity during application and curing of pavement markings.
 - 2. Schedule work to avoid dust and airborne contaminants.

B. Protection:

- 1. Protect pavement marking materials before, during, and after application.
- 2. Remove pavement marking material from curbs, sidewalks, or other improvements due to overspay, spills, or other reasons.

1.7 WARRANTY

- A. For a period of one year from the Date of Substantial Completion, replace any pavement marker, portion of the pavement marker, or legend material that has proven defective.
- B. For a period of 180 days from the Date of Substantial Completion, replace all defective liquid traffic paint markings demonstrating a loss of reflectivity, wear, or poor adhesion resulting from defective materials or workmanship.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Liquid traffic paint markings: Ready-mixed pigmented binder in a single package system suitable for application to traffic bearing surfaces such as Portland cement concrete, asphalt concrete pavements and plain or vitrified brick surfaces of streets, highways, bridges, tunnels, and parking lots.
 - 1. PennDOT Publication 408, Section 1103: Type 1 and Type 2.
 - 2. Institute of Transportation Engineers, Equipment and Material Standards of the Institute of Transportation Engineers, "A Model Performance Specification for the Purchase of Pavement Marking Paints and Powders".
 - 3. ASTM D 868.
 - 4. ASTM D 1309.
 - 5. Consist of either an alkyd resin type or a combination of alkyd resin type modified with chlorinated rubber ready-mixed white and yellow traffic paints, for use on asphalt concrete and Portland cement concrete pavements. Retroreflectorized for night visibility by adding glass beads before the paint dries or sets using pressurized methods.
 - a) Pigments:
 - 1) White: Provide combination of pigments to meet requirements specified herein. Provide sufficient suspending and dispersing agents to prevent excessive settling.
 - 2) Yellow: Provide organic yellow pigment to meet requirements specified. Do not use metals listed in Environmental Protection Agency (EPA) Code of Federal Regulations 40, Section 261.24, Table 1. Provide sufficient suspending and dispersing agents to prevent excessive settling.
 - a. Color No. 33538 of Federal Standard 595B.
 - b) Binder: Provide combination of ingredients, except oil resins, to meet requirements specified. Provide sufficient amounts of anti-skinning agents

prevent skinning as specified herein. Provide resin solids, compatible thinners and driers, to meet requirements of Schedule 1.

B. Glass beads: PennDOT Publication 408, Section 1103.

2.2 METHYL METHACRYLATE (MMA) MARKINGS

- A. Paint: 2 component methyl methacrylate.
 - 1. PennDOT Publication 35 (Bulletin 15).
 - 2. Lead free, and cure to a minimum of 99% solids when reacted as per the manufacturer's instructions.
 - 3. Composed of resins in reactive monomers, pigment, plasticizer, fillers, and/or glass beads, and is to be reacted just prior to application with a benzoyl-peroxide catalyst in the proportions and form prescribed by the manufacturer.
 - 4. Minimum weight per gallon of all types and colors: 13 pounds (base part only).
 - 5. Mixed material: Cure to a no track condition within 15 minutes when applied at a minimum of 40 mils wet at 77 F.
 - 6. Material types:
 - a) Spray with intermixed glass beads
 - b) Spray without intermixed glass beads
 - c) Extrude (contains intermixed glass)

2.3 DROP ON GLASS

- A. Depending on the material type used and the applicator device, choice of glass beads for drop on are:
 - 1. AASHTO M-247, Type I, standard gradation:
 - a) With adhesion coating for MMA.
 - b) With floatation coating.
 - 2. 80% AASHTO M-247, Type I plus 20% TTB-1235, Type III (1.9 glass):
 - a) With adhesion coating for MMA.
 - b) With floatation coating.
 - 3. AASHTO M-247

a) With adhesion coating for MMA of gradation in Schedule 2.

2.4 HOT THERMOPLASTIC MARKINGS

- A. PennDOT Publication 35 (Bulletin 15).
- B. Use hydrocarbon or alkyd based hot thermoplastic markings:
 - 1. Turn arrows, stop bars, crosswalks, gore areas: use alkyd hot thermoplastic markings.
- C. Lead free and cure to a minimum of 99% solids when reacted as per the manufacturer's instructions.
- D. Mixed material: Cure to a no track condition within 15 minutes when applied at a minimum of 40 mils wet at 77 F.
- E. Markings shall not deteriorate due to exposure to sunlight, water, oil, gasoline, pavement oil content, salt and adverse weather conditions.
- F. Capable of conforming to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures.

PART 3 EXECUTION

3.1 PREPARATION

- A. Maintenance and protection of traffic: PA Code Title 67, Chapter 213 Work Zone Traffic Control.
- B. Removal of pavement markings: PennDOT Publication 408, Section 963.
- C. Old asphalt and concrete road surfaces:
 - 1. All surfaces must be clean, dry, and free of surface contaminants such as oil, laitance, and curing compounds.
 - 2. Existing lines must be in good condition and adhering well to the roadway. Mechanically remove oil, laitance, curing compounds, and loose, chipping, flaking lines prior to pavement marking application.
 - 3. Methyl methacrylate pavement markings: Place on top of existing MMA pavement markings.
 - 4. Existing pavement markings not consisting of MMA shall be mechanically removed prior to placement of the new MMA pavement marking.

- 5. Apply hot thermoplastic manufacturer's recommended primer:
 - a) On Portland cement concrete.
 - b) On asphalt concrete surfaces more than 2 years old, oxidized or having aggregate exposed.
- 6. Do not apply hot thermoplastic markings over existing tape markings.
- D. Allow new concrete to cure 7 days prior to marking, or until the moisture content is below 4%. Mechanically remove laitance and curing compounds prior to applying the pavement markings.
- E. Surfaces: Dry and blown or swept clean just before application.
- F. Surface temperature range for application: 30-110 F.
 - 1. Temperature range for hot thermoplastic markings: 50 to 100 F.

3.2 APPLICATION

- A. Application of pavement markings:
 - 1. PennDOT Publication 408, Section 963.
 - 2. PennDOT Publication 68.
- B. Line painting machine shall not impede the traffic flow in adjacent lanes while painting of centerlines. Maintain one lane open to traffic while painting edgelines.
- C. Liquid traffic paint marking:
 - 1. Equipment:
 - a) Capable of simultaneous application of two parallel lines in either a solid or broken pattern in forming the centerline and be capable of automatic dispensing of glass beads onto the painted surface at the required application rate, by the pressurized glass-gun method.
 - b) Equipped with a measuring device that automatically and continuously measures the length of each line type placed to the nearest foot.

2. Centerline:

- a) Where existing centerlines are visible and properly located, the new centerlines shall be applied directly over the existing pattern.
- 3. Application:

- a) Paint: Dispensed in a wet film thickness of 15 mils. At the direction of the ENGINEER, apply paint on bituminous surface treatment roads 25% greater than 15 mils.
- b) Glass beads: Applied at a rate of six-pounds per gallon of paint.
- c) Apply when the air temperature is greater than 40 F.

D. Methyl Methacrylate Marking:

- 1. Hand spray: for lane arrows, text, crosswalks, stop bars.
 - a) Use spray applicator that proportions and mixes the MMA and catalyst in the required amounts just prior to exiting the spray nozzle.
 - b) Apply MMA within the confines of a stencil, tape, or some other forming device, top-dressed with beads, and then the stencil is removed before the MMA sets up.
 - c) Recommended film thickness for transverse markings and symbols is 90 mils.
 - d) Spray with intermixed glass beads: Apply glass beads at a rate of 12 pounds per 100 square feet, using either type Ib, IIb, or III glass.
 - e) Spray without intermixed glass beads requires a double drop of beads.
 - 1) First drop: 10 pounds per gallon of type Ia or III.
 - 2) Second drop: Type Ib or IIb.
- 2. Truck spray application: for application of longitudinal lines.
 - a) Use applicator that proportions and mixes MMA and catalyst in required amounts just prior to spraying onto the road surface.
 - b) Paint and bead guns: adjustable to paint any desired line width between 4 to 12 inches.
 - c) Film thickness: 40 mils, with a double drop of beads.
 - 1) First drop: 10 pounds per gallon type Ia or III glass
 - 2) Second drop: 6 pounds per gallon type Ia or IIb glass.

E. Hot thermoplastic markings:

1. Apply primer at manufacturer's recommended rate.

- 2. Apply at temperature between 400 to 440 F.
- 3. Thickness:
 - a) New application: 90 mils.
 - b) Over existing markings: 30 mils.
- 4. Drop on glass beads:
 - a) Application rate: 8 to 10 lbs per 100 square feet.
 - b) Apply evenly to a depth of 50 to 60 percent.
- 5. Maximum holding time: 6 hours.
- 6. Maximum temperature: 450 F.
- 7. Maximum reheats:
 - a) Granular material: 3.
 - b) Block material: 2.
- F. Tolerances:
 - 1. Width: 0.25-inches.
 - 2. Lateral: 3-inches over 10-foot length.
 - 3. Film thickness: 1 mil.
- G. Repair any marking deemed to be defective by the ENGINEER for not being within the limits or tolerances specified prior to project final acceptance.

3.3 PROTECTION PAVEMENT MARKINGS

- A. Provide protection of markings from vehicular traffic in accordance with manufacturers recommendations.
- B. Traffic is to be kept off MMA until it has dried sufficiently to prevent dirt pick-up or tracking.

3.4 SCHEDULES

Schedule 1 – Requirements of Mixed Paints

Characteristic	Value
Pigment, percent by weight	55 to 60
Nonvolatile vehicle, percent by weight of vehicle	40 minimum
Uncombined water, percent by weight of paint	1.0 maximum
Coarse particles and skins (retained on No. 325 sieve,	1.0 maximum
I/Percent by weight of pigment)	
Consistency: Kreb units	65 to 75 (Type 1)
	70 to 110 (Type 2)
Weight per gallon, lbs.: White	11.7 minimum
Yellow	12.0 minimum
Fineness of grind, Hegman	2.0 minimum
Contract ratio, dry	0.96 minimum
Directional reflectance.: White	84 minimum
Yellow	50 minimum
Drying time, No pick-up, minutes (lab) – ASTM D-	30 maximum
711	
Flexibility	No cracking or flaking
Bleeding Test – ASTM D-868 and ASTM D-969	5 minimum
Skinning (48 hours)	None
Storage Stability – ASTM D-1309	6 minimum

Schedule 2 – Glass Bead Gradation

Benedule 2 Glass Bead Gladation	
Sieve	Percent Retained
12	5 to 20
14	40 to 80
16	10 to 40
20	0 to 10

END OF SECTION



Highway Occupancy Permit

Name and Address of Permittee:	County: Lebanon	Issue Date: 3/18/2022
South Lebanon Township 1800 S. 5th Avenue	County Contact No.: (717) 272-6637	Expiration Date: 3/18/2023
Lebanon, PA 17042	Issuing District Office: 8-0	Application No.: 249005
, , , , , , , , , , , , , , , , , , , ,	District Contact No.: (717) 705-0925	Account No.:
	Municipalities: South Lebanon Township	Permit Fee: \$ 0.00

Permit No.: 08108294

Immediately upon completion of the work Permittee shall notify the permit office where application was made. Subject to all the conditions, agreements, restrictions, and regulations prescribed by the Pennsylvania Department of Transportation, (see in particular 67 Pa. Code, Chapter 212, 441 and 459 and State Highway Law, 36 P.S. Section 670 - 411, 420 and 421) and subject to the plans, special conditions, or restrictions herein set forth or attached hereto. This permit shall be located at the work site and shall be available for inspection by any police officer or Department representative.

Location and Description of Work			Permit No.: 08108294	
1 of 1	State Route #: Segment(s):	2008 From 0020 To 0020	686: Install Storm Water drainage facility	Facility connected to department
	Offset(s):	From 1190 To 1375		

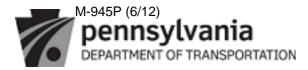
Permit	Conditions	Permit No.: 08108294
1 of 35	NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) AT 717-265-7600 TWO DAYS IN ADVANCE OF ANY PROPOSED LANE OR SHOULDER RESTRICTIONS AND 15 (FIFTEEN) MINUTES PRIOR TO THE ACTUAL RESTRICTIONS AND PROVIDE THIS PERMIT NUMBER TO THE TMC OPERATOR PRIOR TO SETTING UP ANY LANE CLOSURES OR RESTRICTIONS, AND CALL AGAIN WHEN THE CLOSURE/RESTRICTION IS REMOVED AND THE ROAD IS RESTORED TO NORMAL OPERATION. NO LANE RESTRICTION WILL BE PERMITTED FROM 7.00 AM TO 5.00 PM ON ALL FREEWAYS INCLUDING ON AND OFF RAMPS.	
2 of 35	PERMITTEE'S CONTRACTOR MUST PROVIDE PROPOSED V BEFORE START OF WORK. ALSO, PROVIDE AN EMERGEN TO THE DEPARTMENT.	
3 of 35	CONTACT COUNTY PERMIT INSPECTOR AT LEAST 3 WOR WORK BY PHONE OR EMAIL AT 717 272-6637 EXT. 315; JBU	
4 of 35	CONTACT COUNTY PERMIT INSPECTOR AT LEAST 3 WOR PERFORMING FINAL RESTORATION AT 717 272-6637 EXT.	
5 of 35	BLASTING IS NOT PERMITTED IN THE DEPARTMENTS RICEXPECTS THAT BLASTING IS TO OCCUR, THEN A COMPLICUMENTED TO THE DEPARTMENT FOR REVIEW, AND APPRIOR TO THE BLASTING. NO BLASTING MAY BE PERFOR INSURANCE IS PROVIDED TO THE DEPARTMENT IN ACCUSECTION 459.7(12).	ETE BLASTING PLAN MUST BE PROVAL, AT LEAST 15 DAYS RMED UNTIL PROOF OF
6 of 35	A CERTIFICATE OF INSURANCE SHALL BE SUBMITTED TO OR ITS CONTRACTOR 30 DAYS PRIOR TO START OF WORL	
7 of 35	THE MUNICIPALITY WILL OBTAIN SECURITY ADEQUATE THE PERMITTED WORK PRIOR TO THE START OF WORK I CONSISTENT WITH 36 P.S. §670-420 AND 67 PA. CODE §441	N DEPARTMENT RIGHT OF WAY



Highway Occupancy Permit

Permit Conditions		Permit No.: 08108294
8 of 35	A FULL-TIME INSPECTOR MAY BE ASSIGNED WHEN WOR DEPARTMENT RIGHT OF WAY (ROW) AND OR WORK ASSOTRAFFIC CONTROL (WZTC) PLAN. PERMITTEE WILL BE CLOSTS INCLUDING HOURS WORKED, MILEAGE, CELL PHOBILLED TO THE DEPARTMENT AS PER THE CONSULTANT EPS BUSINESS PARTNER ID WILL BE REQUIRED PRIOR TO ELECTRONIC INVOICING THROUGH EPS. PERMITTEE SHA AUTHORIZED TO SIGN THE DAILY TIME SHEET OF INSPECT THE HOURS WORKED AND MILEAGE ON JOB SITE. DEPAR REVOKE THE PERMIT IF PERMITTEE FAILS TO PAY ALL IN PERMITTEE IS NOT IN CONFORMANCE WITH THE APPROXIMATED.	OCIATED WITH WORK ZONE HARGED FOR ALL INSPECTION ONE, BOARDING AND LODGING INSPECTION AGREEMENT. AN OTHE START OF WORK FOR LL ASSIGN A PERSON CTOR CLEARLY INDICATING OTHER WORK / NVOICES ON TIME OR IF
9 of 35	INSPECTION OF FABRICATED PRODUCTS WILL BE REQUIRED PERMITTEE WILL BE CHARGED ALL INSPECTION COSTS IN DEPARTMENT. PRIOR TO FABRICATION, PERMITTEE SHARD OFFICE A COMPLETED CS-430 FORM (NOTIFICATION OF IN	NCURRED BY THE LL PROVIDE TO THE DISTRICT
10 of 35	FACILITY MAY BE PLACED IN PAVEMENT OR SHOULDER BASE AND WEARING COURSES ARE OPENED BY SAW CU	
11 of 35	THIS PERMIT AUTHORIZES WORK ONLY IN DEPARTMENT	HIGHWAY RIGHT OF WAY.
12 of 35	FULL LANE OVERLAY IS REQUIRED, AS PER REGULATION	N 459.8.
13 of 35	DEPARTMENT MUST BE NOTIFIED IN WRITING UPON COM	APLETION OF WORK.
14 of 35	TEMPORARY PAVEMENT RESTORATION AUTHORIZED CO 459.8(K), FOR NO MORE THAN 30 DAYS.	ONSISTENT WITH SECTION
15 of 35	COMPLETE PERMANENT PAVEMENT RESTORATION IN AC 459.8. EACH PATCH MUST BE PAINTED IN ACCORDANCE V	
16 of 35	THE PERMITTEE IS REQUIRED TO USE HOT MIX OR WARN TEMPORARY RESTORATION. COLD MIX WILL BE PERMIT THE DEPARTMENT. PERMITTEE MUST MAINTAIN A SMOOSUITABLE FOR DRIVING FOR THE DURATION OF THE TEM	TED AT THE DISCRETION OF OTH PAVEMENT SURFACE
17 of 35	BACKFILL COMPACTION TESTING IS REQUIRED A MINIM FOR OPENINGS LESS THAN OR EQUAL TO 500 TOTAL FEE' SIDEWALK, THE PERMITTEE MAY CHOOSE THE COMPAC' THE TEST METHOD IS PERFORMED CONSISTENT WITH DE AND ON THE CONDITION THAT THE PERMITTEE PROVIDE INSTALLATION INSPECTION FORM) AND ACCOMPANYING FORMS WITHIN TWO WEEKS OF THE COMPLETION OF THE FORM. PENNDOT WILL NOT CLOSE-OUT THE PERMIT PRICEOMPLETED FORMS.	T IN PAVEMENT, SHOULDER OR FION TEST METHOD, PROVIDED EPARTMENT PUBLICATIONS, E THE COMPLETED CS-6 (PIPE G TR-478 AND/OR TR-4276 E WORK REPRESENTED ON THE
18 of 35	SHOULDERS MUST BE RESTORED IN ACCORDANCE WITH PUB. 408 AND ROADWAY CONSTRUCTION STANDARDS R	
19 of 35	ACCESS SIGNING AND PAVEMENT MARKINGS DISTURBE MUST BE REPLACED IN KIND.	D BY THE PERMITTED WORK
20 of 35	IT IS THE PERMITTEES RESPONSIBILITY TO IDENTIFY AND OWNED/OPERATED FACILITIES WITHIN THE LIMITS OF PIBY THE PERMITTED WORK, IT IS PERMITTEES RESPONSIBED DEPARTMENT IMMEDIATELY AND RESTORE THE FACILITY OR AS DIRECTED BY THE DEPARTMENT.	ERMITTED WORK. IF DAMAGED BILITY TO CONTACT THE

Permit No.: 08108294



Highway Occupancy Permit

Permit	Conditions	Permit No.: 08108294
21 of 35	ALL DISTURBED AREAS OUTSIDE THE PAVEMENT OR SHOTO A CONDITION AT LEAST EQUAL TO THAT WHICH EXISWORK.	
22 of 35	MINIMUM WORK ZONE TRAFFIC CONTROL TO BE IN ACC PUB 212 FOR ADDITIONAL DETAILS.	ORDANCE WITH PUB. 213. SEE
23 of 35	NO LANES MAY BE RESTRICTED BETWEEN THE HOURS O BETWEEN THE HOURS OF 3:00 PM TO 6:00 PM UNLESS DIR DEPARTMENT REPRESENTATIVE.	
24 of 35	WORK WITHIN THE STATE RIGHT OF WAY WILL NOT BE IT AND NATIONAL HOLIDAYS. CONTRACTORS ARE REQUIRED BY NOON ON THE BUSINESS DAY PRIOR TO THE HOLIDAY MATERIALS ARE NOT PERMITTED WITHIN THE DEPARTM CLEAR ZONE DURING THIS TIME. WORK MAY RESUME A WORKING HOURS) UNLESS DIRECTED DIFFERENTLY BY REPRESENTATIVE. CONTRACTOR MUST PROVIDE A WORK SCHDULE TO THE CHARGE FOR ANY WORK DONE BETWEEN THANKSGIVIN APPROVAL.	ED TO BE OFF THE ROADWAY Y. EQUIPMENT AND/OR IENT RIGHT OF WAY OR THE FTER THE HOLIDAY (NORMAL A DEPARTMENT E COUNTY INSPECTOR IN
25 of 35	DRAINAGE INSTALLED BY THIS PERMIT IS THE RESPONSICONTINUALLY MAINTAIN OR REPLACE.	IBILITY OF THE PERMITTEE TO
26 of 35	PERMITTEE IS RESPONSIBLE FOR ENSURING THAT MUD, REMOVED FROM VEHICLES AND TIRES (BY POWER WASHONTO THE HIGHWAY.	
27 of 35	IT IS THE PERMITTEE'S RESPONSIBILITY TO PROVIDE NEC TESTING OF MATERIALS DELIVERED ONSITE INCLUDING	CESSARY EQUIPMENT FOR CERTIFIED TECHNICIANS.
28 of 35	PERMITTEE IS RESPONSIBLE TO HAVE APPROVED FLAGGENSURE SAFETY WHEN CONSTRUCTION EQUIPMENT AND EXITING THE CONSTRUCTION ENTRANCE. PROPER PLEASE CHECK WITH COUNTY SUPERVISOR.	O VEHICLES ARE ENTERING
29 of 35	PERMITTEE MUST INFORM SOUTH LEBANON TOWNSHIP I THE START OF PERMITTED WORK.	FIVE WORKING DAYS PRIOR TO
30 of 35	IT IS PERMITTEE'S RESPONSIBILITY TO MAINTAIN/REPLA	CE PERMITTED WORK(S).
31 of 35	PERMITTEE WILL BE RESPONSIBLE FOR COORDINATING FACILITY CONFLICTS WHICH ARE A RESULT OF ACTIVITY PERMIT. ALL UTILITY FACILITY COORDINATION AND REPACCORDANCE WITH 67 PA. CODE CHAPTER 459, OCCUPANTILITIES.	IES CONDUCTED UNDER THIS LOCATION MUST BE IN
32 of 35	ALL WORK WITHIN DEPARTMENT RIGHT OF WAY MUST OF EDITIONS OF THE DEPARTMENT'S PUBLICATION 408 (SPECTUM (STANDARDS FOR ROADWAY CONSTRUCTION), PUBLICATION - PAVEMENT MARKINGS AND SIGNING STANDATE (TEMPORARY TRAFFIC CONTROL GUIDELINES).	CIFICATIONS), PUBLICATION LICATION 111 (TRAFFIC
33 of 35	SUBMIT FORM M-937R (ROUTE/BRIDGE RESTRICTION), TO INSPECTOR AT LEAST 15 DAYS IN ADVANCE FOR ANY LA CLOSURES OR APPROVED DETOURS. THE INSPECTOR WILL REQUEST TO THE DISTRICT HAULING UNIT FOR APPROVE	NE RESTRICTIONS, LANE LL REVIEW AND FORWARD THE

Permit No.: 08108294



By:

Highway Occupancy Permit

Permit Conditions			Permit No.: 08108294
34 of 35 35 of 35	OBLIGATIONS OF THE TERMITTEE HEREUNDER ARE NOT INTENDED TO LESSENTHE OBLIGATIONS OF PERMITTEE UNDER 67 PA CODE, CHAPTER 441. THE TERMS AND CONDITIONS HEREIN SHALL COMMENCE UPON THE DATE OF EXECUTION HEREOF AND SHALL CONTINUE IN FULL FORCE UNTIL THE SUBJECT FOR WHICH THE PERMIT HAS BEEN ISSUED HAS BEEN REMOVED, CLOSED OR OTHERWISE EXTINGUISHED IN ACCORDANCE WITH THE EXISTING REGULATIONS OF THE COMMONWEALTH.		
Acknowledgement of Completion Permit work has been completed:			ramian, P.E. Γransportation
Date:		Christopher .	J. Kufro, P.E.

Acting District Executive

Permit No.: 08108294

MBE/WBE DIRECTIONS

Contact Dan Lyons at 717-273-9326 or dlyons@lebanoncountyredevelopment.com for the list of minority and women business entities who *must* be contacted during preparation of your bid to demonstrate compliance and responsiveness.

"General Decision Number: PA20220006 03/11/2022

Superseded General Decision Number: PA20210006

State: Pennsylvania

Construction Types: Heavy and Highway

Counties: Adams, Berks, Bradford, Carbon, Columbia, Cumberland, Dauphin, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, Monroe, Montour, Northampton, Northumberland, Perry, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming and York Counties in Pennsylvania.

HEAVY AND HIGHWAY CONSTRUCTION PROJECTS (Excluding Sewer Grouting Projects and Excluding Sewage and Water Treatment Plant Projects)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- |. Executive Order 14026 generally applies to the contract.
- all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.

If the contract was awarded on . Executive Order 13658 or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- generally applies to the contract.
- The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a

conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at https://www.dol.gov/agencies/whd/government-contracts.

Modification Number	Publication Date
0	01/07/2022
1	01/28/2022
2	02/11/2022
3	02/25/2022
4	03/11/2022

BOIL0013-003 01/01/2022

	Rates	Fringes	
BOILERMAKER	\$ 50.17	34.96	
CARP0167-006 05/01/2019			

BERKS, CARBON and LANCASTER

	Rates	Fringes
CARPENTER	\$ 32.07	15.49
CARP0167-007 05/01/2021		

LEHIGH and NORTHAMPTON COUNTIES

	Rates	Fringes
CARPENTER	.\$ 36.02	26.96
CARP0219-007 05/01/2021		

CARBON (Townships: East Penn, Lower Towamensing, Mahoning, Franklin, Towamensing, Penn Forest. Everything south of Route 903 and east to the Kidder Township Line. Boroughs: Hauto, Nesquehoning, Lansford, Summit Hill, Jim Thorpe, Weissport, Bownmanstown, Palmerton, Lehighton, and Parryville), LEHIGH AND NORTHAMPTON COUNTIES

	Rates	Fringes
MILLWRIGHT	\$ 45.09	31.94
CARP0441-005 05/01/2021		

BERKS, CARBON, LANCASTER, LEHIGH and NORTHAMPTON COUNTIES

	Rates	Fringes	
PILEDRIVERMAN	\$ 43.73	37.99	
CARP0443-002 05/01/2021			

ADAMS, BRADFORD, CARBON (Banks, Lausanne, Lehigh, Packer, Kidder Twps., and part of Penn Forest Township north of Route

903) COLUMBIA, CUMBERLAND, DAUPHIN, JUNIATA, LEBANON, LUZERNE (lower part of) MONROE, MONTOUR, NORTHUMBERLAND, PERRY, PIKE, SCHUYLKILL, SNYDER, SULLIVAN, SUSQUEHANNA, TIOGA, UNION, WAYNE, WYOMING, YORK (New Cumberland Army Depot and Harrisburg State Airport) COUNTIES

	Rates	Fringes	
MILLWRIGHT	\$ 36.08	53.41%+.86	
CARP0443-010 05/01/2021			
BERKS and LANCASTER COUNTIES			
	Rates	Fringes	
MILLWRIGHT	\$ 40.00	21.72	
CARP2274-003 05/01/2021			

Adams, Bradford, Columbia, Cumberland, Dauphin, Juniata, Lackawanna, Lebanon, Luzerne, Lycoming, Monroe, Montour, Northumberland, Perry, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming and York

	Rates	Fringes	
CARPENTER	-	17.74 17.74	
	р 33.12		
ELEC0126-001 05/31/2021			

ADAMS, BERKS, CUMBERLAND, DAUPHIN, JUNIATA, LANCASTER, LEBANON, LEHIGH, NORTHAMPTON, PERRY AND YORK COUNTIES

Rates Fringes

Line Construction:
 Cable Splicer.......\$ 49.22 32.25%+11.00
 Groundman...........\$ 29.53 32.25%+11.00
 Lineman.............\$ 49.22 32.25%+11.00
 Truck Driver..........\$ 31.99 32.25%+11.00
 Winch Truck Operator.....\$ 34.45 32.25%+11.00

ELEC1319-001 01/01/2022

BRADFORD, CARBON, COLUMBIA, LACKAWANNA, LUZERNE, LYCOMING, MONROE, MONTOUR, NORTHUMBERLAND, PIKE, SCHUYLKILL, SNYDER, SULLIVAN, SUSQUEHANNA, TIOGA, UNION, WAYNE, AND WYOMING COUNTIES

	Rates	Fringes	
Line Construction:			
Equipment Operator	\$ 60.72	21.91	
Groundmen	\$ 37.65	13.23	
Linemen	\$ 60.72	26.41	
Truck Driver	\$ 39.47	13.36	
			-

* ENGI0542-004 05/01/2021

	Rates	Fringes
Power equipment operators: (HIGHWAY CONSTRUCTION AND WATER LINES CONSTRUCTION (OFF PLANT SITE))		
GROUP 1	\$ 39.10	24.70
GROUP 1a	•	25.38
GROUP 2	\$ 37.93	24.35
GROUP 3	\$ 37.23	24.15
GROUP 4	\$ 36.77	24.03
GROUP 5	\$ 36.26	23.88
GROUP 6	\$ 39.33	24.77
GROUP 6a	\$ 41.58	25.43

BOOM LENGTH PAY:

On all machines with booms, jibs, masts and leads 100 ft. and over, twenty five cents (\$0.25) per hour additional will be paid for each increment of 25 ft. over 100 ft. On machines with booms (including jibs, masts and leads, etc.), 200 ft. and over, two (2) Operating Engineers shall be required.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 - Pile drivers, all types of cranes, all types of backhoes, draglines, keystones, all types of shovels, derricks, trench shovels, trenching machines, paver (blacktop and concrete), gradalls, all front end loaders, tandem scrapers, pippin types backhoes, boat captains, batch plant with mixer, drill self contained (drill-master type), CMI Autograde, milling machine, vemeer saw, conveyor loader (euclid type) scraper and tournapulls, bulldozers and tractors, concrete pumps, motor patrols, mechanic welders, log skidder, side boom, bobcat type (with attachments), boring machines including directional boring machines, chipper with boom, hydro ax, machines similar to the above including remote control equipment.

GROUP 1a: Crawler backhoes and Crawler gradalls over one cubic yard factory rating; Hydraulic backhoes over one cubic yard factory rating; All types of cranes 15 ton and over factory rating; Single person operation truck cranes 15 ton and over factory rating; Cherry picker type machinery and equipment 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 2 - Spreaders, asphalt plant engineers, rollers (high grade finishing), machine similar to above, including remote control equipment, and forklifts 20ft and over.

GROUP 3 - Welding machine, well points, compressors, pump heaters, farm tractors, form line graders, ditch witch type trencher, road finishing machines, concrete breaking machines, rollers, miscellaneous equipment operator, seaman pulverizing mixer, power broom, seeding spreader, tireman - (for power equipment) conveyors, loaders other than EUC type, conveyors, driller second class, machines similar to

the above including remote control equipment, and forklift under 20 ft.

GROUP 4 - Fireman and grease truck

GROUP 5 - Oilers and deck hands

GROUP 6 - All machines with booms (including jibs, masts, leads, etc.) 100 ft. and over.

GROUP 6a: All machines with Booms (including Jibs, Masts, Leads, etc.) 100 feet 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

TOXIC/HAZXARDOUS WAST REMOVAL

Add 20 per cent to basic hourly rate for all classifications

^{*} ENGI0542-022 05/01/2021

1	Rates	Fringes
Power equipment operators: (HEAVY CONSTRUCTION:)		
GROUP 1\$	38.44	27.52+A
GROUP 1a\$	40.69	28.18+A
GROUP 2\$	38.16	27.43+A
GROUP 2a\$	40.41	28.10+A
GROUP 3\$	35.24	26.57+A
GROUP 4\$	34.10	26.24+A
GROUP 5\$	33.65	26.11+A
GROUP 6\$ HEAVY CONSTRUCTION:	32.77	25.85+A

FOOTNOTE:

A: PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, the employee works the day before and the day after the holiday.

BOOM LENGTH PAY:

On all machines with booms, jibs, masts and leads 100 ft. from ground up, fifty (\$0.50) per hour additional will be paid for each increment of 25 ft. over 100 ft. On cranes with booms (including jibs, masts and leads, etc.) 200 ft. and over, two (2) operators shall be required, no Oilers will be required, with seventy five (\$0.75) in increments of 25 ft.

TOXIC/HAZXARDOUS WASTE REMOVAL

Add 20 per cent to basic hourly rate for all classifications

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Machines doing hook work, any machine handling machinery, cable spinning machines, helicopters, machines similar to the above, including remote control equipment,

all types of cranes, cableways, and draglines.

GROUP 1a: Machines doing hook work; Machines handling machinery; All types of cranes 15 ton and over factory rating; Cable ways; Draglines 15 ton and over factory rating; High Rail/Burro Crane 15 ton and over factory rating; Rail Loader (Winch Boom Type) 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 2: Backhoes, keystones, shovels, derricks, trench shovels, trenching machines, hoist with two towers, pavers 21E and over, overhead cranes, building hoists (double drum) gradalls, mucking machines in tunnels, front end loaders, tandem scrapers, pippin type backhoes, boat captains, batch plant operators concrete drills, self-contained rotary drills, fork lifts, 20ft, lift and over, scrapers, tournapulls, spreaders, bulldozers and tractors, rollers (high grade finishing), mechanic-welder, motor patrols, concrete pumps, grease truck, bob cat type (all attachments), boring machines including directional boring machines, hydro ax, side boom, vermeer saw, chipper with boom, machines similar to the above including remote control equipment

GROUP 2a: Crawler backhoes and crawler gradalls over one cubic yard factory rating; Hydraulic backhoes over one cubic yard factory rating; Equipment 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 3: Conveyors, building hoist (single drum), high or low pressure boilers, drill operators, well drillers, asphalt plant engineers, ditch witch type trencher, second class driller, forklift truck under 20ft. lift, stump grinder, tireman (for power equipment), machines similar to above including remote control equipment.

GROUP 4: Welding machines, well points, compressors, pumps, heaters, farm tractors, form line graders, road finishing machines, concrete breaking machines, rollers, seaman pulverzing mixer, power boom, seeding spreader, chipper without boom, machines similar to the above including remote control equipment.

GROUP 5: Fireman.

GROUP 6: Oilers and deck hands (personnel boats).

IRON0404-006 07/01/2021

ADAMS, BERKS, CUMBERLAND, DAUPHIN, JUANITA, LANCASTER, LEBANON, LEHIGH, LYCOMING, MONTOUR, NORTHAMPTON, NORTHUMBERLAND, PERRY, SCHUYLKILL, SNYDER, UNION and YORK COUNTIES

Rates Fringes

Ironworkers:.....\$ 34.01 31.13

TROUGHOU 04T 07 /04 /0004

IRON0404-017 07/01/2021

BRADFORD, CARBON, COLUMBIA, LACKAWANNA, LUZERNE, MONROE, PIKE, SULLIVAN, TIOGA, SUSQUEHANNA, WAYNE and WYOMING COUNTIES

	Rates	Fringes
IRONWORKER	\$ 34.01	31.13
LABO0150 001 05 /01 /2021		

LAB00158-001 05/01/2021

	R	ates	Fringes
Laborers:			
GROUP	1\$	23.21	18.09
GROUP	2\$	29.83	18.09
GROUP	3\$	26.82	18.09
GROUP	4\$	27.17	18.09
GROUP	5\$	27.84	18.09
GROUP	6\$	27.26	18.09
GROUP	7\$	27.55	18.09
GROUP	8\$	28.03	18.09

LABORERS CLASSIFICATIONS

GROUP 1: Flag person

GROUP 2: Hazardous/Toxic/Asbestos Waste Handler, Lead Paint Handler

GROUP 3: Asphalt tamper, concrete pitman, puddlers, highway guide rail right of way and property fence slab reinforcement placers, Laborers, landscaper, seeders, planters, magazine tenders, laser beam men for pipe laying and paving machines,, railroad trackman, signalman, asphalt rakers, lute or screed man, pneumatic and electric tool operators, jackmammers, paving breakers, concrete saws, whacker vibrator, chainsaw, highway concrete block layers, sheet hammer, pipe layers, Walk Behind Rollers, Walk Behind Trencher

GROUP 4: Caisson-open air below 8 feet, cofferdam open air below 8 feet where excavations for circular caissons and cofferdams 8 ft and below level of natural grade adjacent to starting point, form setters (road) wagon drill diamond point drill, gunite nozzle operators, walk behind rollers and concrete rubbers, blaster.

GROUP 5: Form Setter, Reinforced Steel Placer, Bonding Aligning and Securing and Burning and welding in Conjunction wth Rebar, and Concrete Surfacer.

FREE AIR TUNNELS AND ROCK SHAFTS

GROUP 6: Outside labers in conjuction with tunnels and rock shafts

GROUP 7: Chuck tenders, muckers, nippers, miners, inside laborers

GROUP 8: Miners, drillers, blasters, pneumatic shield operators, lining, spotting and timber workmen, rebar steel placer, bonding and securing, welders, and concrete surfacers

DATHOOM 005 05 (04 (0004

PAIN0021-026 05/01/2021

ADAMS, CUMBERLAND, DAUPHIN, LANCASTER, PERRY, AND YORK COUNTIES

	Rates	Fringes
Painters:		
Bridge	\$ 33.72	16.30
Brush	\$ 25.84	16.30
Spray, Sandblast	\$ 27.97	16.30

PAIN0057-021 06/01/2021

JUNIATA COUNTY

F	Rates	Fringes
Painters:		
Bridge, Towers\$	36.25	21.61
Commercial Brush & Roller\$	29.15	21.61
<pre>Industrial Brush & Roller\$</pre>	34.00	21.61
Spray\$	29.15	21.61

PAIN1021-001 05/01/2012

BERKS, CARBON, LEBANON, LEHIGH, NORTHAMPTON, AND MONROE COUNTIES

	Rates	Fringes	
Painters:			
Bridge; Brush, Roller	\$ 30.85	14.80	
Bridge; Spray	\$ 31.85	14.80	
Brush and Roller	\$ 26.55	14.80	
Spray and Sandblast	\$ 27.55	14.80	

PAIN1021-002 05/01/2009

BRADFORD, COLUMBIA, LACKWANNA, LUZERNE, LYCOMING, MONTOUR, NORTHUMBERLAND, PIKE, SCHUYLKILL, SNYDER, SULLIVAN, SUSQUEHANNA, TIOGA, UNION, WAYNE, WYOMING COUNTIES

	Rates	Fringes
Painters:		
Bridge; Brush, Roller	.\$ 25.60	12.05
Bridge; Spray	.\$ 26.60	12.05
Brush and roller	.\$ 22.75	12.05
Spray, Sandblast	.\$ 23.75	12.05

PLAS0592-004 06/01/2021

MONROE COUNTY; (EXCEPT TOBYHANNA DEPOT)

Rates Fringes

CEMENT MASON/CONCRETE FINISHER	.\$ 35.88	13.30
PLAS0592-005 06/01/2021		
COLUMBIA COUNTY		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	.\$ 35.88	13.30
PLAS0592-017 05/01/2021		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER BERKS (Northeastern part lying North of a line starting from the Southern boundary line of Lehigh County continuing through Huffs Church, Fredericksville, Dryville, Lyon Station, Kutztown, Krumsville, and Stoney Run in Berks County to the Lehigh County line), CARBON, LEHIGH, NORTHAMPTON (Northwest part including the towns of Walnutport, Bath, and Northampton) COUNTIES	.\$ 32.65	
PLAS0592-018 05/01/2021		
	Rates	Fringes
Cement Mason/Concrete Finisher Adams, Lancaster and York Counties PLASTERER Adams, Berks (Portions of), Lancaster, and Lebanon Counties		21.50 20.90
PLAS9592-002 06/01/2021		
MONROE COUNTY (TOBYHANNA ARMY DE	POT)	
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	.\$ 35.88	13.30
* TEAM0229-003 05/01/2021		
	Rates	Fringes
TRUCK DRIVER (ADAMS, BERKS, CARBON, COLUMBIA, CUMBERLAND, DAUPHIN, JUNIATA, LACKAWANA, LANCASTER, LEBANON, LEHIGH, LUZERNE, LYCOMING, MONROE, MONTOUR, NORTHAMPTON,		

NORTHUMBERLAND, PERRY, PIKE, SCHUYKILL, SNYDER, SULLIVAN, SUSQUEHANNA, UNION, WAYNE, WYOMING, AND YORK COUNTIES)	
· · · · · · · · · · · · · · · · · · ·	
GROUP 1\$ 37.72	0.00
GROUP 2\$ 37.79	0.00
GROUP 3\$ 38.28	0.00
Truck drivers: (BRADFORD AND	
TIOGA COUNTIES)	
GROUP 1\$ 22.66	13.46
GROUP 2\$ 22.73	13.46
GROUP 3\$ 23.22	13.46

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Flat Bed Truck (Single-Axle), Dump Trucks (Under 10 Yds Single Axle), Stake Body Trck (Single Axle), Dumpster (Single Axle)

GROUP 2: Dump Truck (Over 10 Yds), Asphalt Distributors, Transit Mix (Under 5 Yds), Transit Mix (Over 5 Yds.), Flat or Stake Body (Tandem), Fuel Truck A-Frame/Winch Trucks, Dry Batch Truck, Truck Mounted Sweeper and Vac Trucks, Buses, Dumpster (Tandem)

GROUP 3: Euclid-Type, Off Highway Equipment-Back or Double Bottom Dump Trucks (Over 20 Tons), Straddle Trucks, Pusher, Articulate Dumped Trucks, Low Boy Trailers, Semi Trailers

Water Tank, Sprinkler Trucks, Winch Trucks and Fuel Trucks shall be governed by the appropriate classification as listed above.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses

(29CFR 5.5 (a) (1) (ii)).

.....

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union

average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISIO"

Bid Submission Packet

This information <u>must</u> be included for your bid to be considered.

Contractor's Name)• •	
Address:		
Telephone No.:		
Fax No.:		
Federal I.D. No.:		
E-Mail:		
SAM.GOV UEI#:		

PROPOSAL REDEVELOPMENT AUTHORITY OF THE COUNTY OF LEBANON CONTRACT C-5-22-SLT MAY, 2022

Redevelopment Authority of The County of Lebanon 137 W Penn Ave. Cleona, PA 17042

Gentlemen:

Pursuant to and in compliance with your request inviting Proposals for the general construction of the above project and having carefully examined the contract documents, comprising the drawings, specifications and all other documents bound therewith; together with all addenda or bulletins thereto; and being familiar with the site and various conditions affecting the work; the undersigned hereby offers to furnish all plans, labor, supervision, materials, supplies, equipment and other facilities and things necessary or incidental to the work as required by and in strict accordance with the applicable provisions of the plans and specifications, contract documents, and of all addenda or bulletins issued by the Owner for the following prices:

			1 1					specifications,	(
docui	ments, and of	all adde	nda or bulle	etins issued	by the O	wner for th	ne follo	owing prices:	
Lump	sum price: \$	5							
\$								00/10	0

In submitting this Bid, the Bidder understands that the right is reserved by the Redevelopment Authority of the County of Lebanon to reject any and all Bids. If written notice of the acceptance of this Bid is mailed, telegraphed or delivered to the undersigned within thirty (30) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver an agreement in the prescribed form and furnish the required bonds within ten (10) days after the agreement is presented to him for signature.

1.	Security in the sum of	
	Security in the sum of) in the form of is submitted herewith in accordance with the INSTF	f
	is submitted herewith in accordance with the INSTF	RUCTIONS TO BIDDERS.
2.		ndersigned has not entered into a collusive agreement mitting of Bids for the contract for which this Bid is
3. The Bidder certifies that he does not maintain or provide for his employees any segregated facilities of his establishments, and that he does not permit his employees to perform their services at any le under his control, where segregated facilities are maintained. The Bidder certifies further that he maintain or provide for his employees any segregated facilities at any of his establishments, and will not permit his employees to perform their services at any location under his control where seg facilities are maintained. The Bidder agrees that a breach of this certification will be a violation Equal Opportunity clause in any contract resulting from acceptance of this Bid. As used certification, the term "segregated facilities" means any waiting rooms, work areas, rest room washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or careas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and I facilities provided for employees which are segregated by explicit directive or are in fact segregated basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The agrees that (except where he has obtained identical certification from proposed subcontractors for time periods) he will obtain identical certification from proposed subcontractors prior to the as subcontractors exceeding \$10,000 which are not exempt from the provisions of the Equal Oppor clause, and that he will retain such certifications in his files.		nis employees to perform their services at any location, taintained. The Bidder certifies further that he will not ated facilities at any of his establishments, and that he ices at any location under his control where segregated a breach of this certification will be a violation of the ing from acceptance of this Bid. As used in this ans any waiting rooms, work areas, rest rooms and he clocks, locker rooms and other storage or dressing a or entertainment areas, transportation, and housing ted by explicit directive or are in fact segregated on the cause of habit, local custom, or otherwise. The Bidder certification from proposed subcontractors for specifical from proposed subcontractors prior to the award of exempt from the provisions of the Equal Opportunity
4.	The Bidder also agrees to conform to the Pennsy bidding documents.	Vania Non-Discrimination Clause contained in these
	Date:	
		Bidder
	Official Address:	
		By:
		Title:

SECTION 00300 – BID FORM

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Lebanon County Redevelopment Authority 137 W. Penn Ave. P.O. Box 2005 Cleona, PA 17042

1.02 For the following project:

Avon Stormwater Improvements

1.03 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts that this Bid shall remain subject to acceptance for 60 days after the bid opening date as provided by the Act of May 15, 1998 (P.L. 358, No. 57). Bidder will sign the Agreement and submit documents required by the Contract Documents within 15 days after the date of Owner's Notice of Intent to Award.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or

subsurface structures at the Site (except Underground Facilities) that have been identified in SC-4.02 as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as containing reliable "technical data."

- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value

likely to influence the action of a public official in the bidding process;

- 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
- 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
- 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder (undersigned), having read and fully examined the Contract Documents for the above referenced project and having visited the site and examined the conditions affecting the Work, hereby proposes and agrees to furnish all labor, materials, equipment and appliances, and to perform operations necessary to complete the Work as required by said proposed Contract Documents for the following price(s):

5.02 Unit Price Bid

- A. Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions.
- B. Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.
 - EA = Each. Measured by the number of individual items of work completed.
 - CY = Cubic Yard. Measured by a three-dimensional volume method.
 - LB = Pound. Measured by actual item net weight.
 - LF = Linear Feet. Measured parallel to the longitudinal base or foundation upon which items are placed, or along the longitudinal surface of the item.
 - LS = Lump Sum. Not measured. Indicates complete construction of the item of work, as specified.
 - SET = Set. Measured as an item unit set, consisting of two or more parts together, as specified.
 - SF = Square Foot. Measured by a two-dimensional area method on the surface of the item.
 - SY = Square Yard. Measured by a two-dimensional area method on the surface of the item.

BID FORM*

ltem No.	Item Description	Estimated Quantity	Unit	Bid Unit Price	Bid Price
0201-0001	Clearing and Grubbing	1	LS		
0202-0001	Demolition	1	LS		
0203-0001	Class 1 Excavation	185	CY		
0313-0420	Superpave Asphalt Mixture Design, Base Course, PG 64S-22, 0.3 TO < 3 Million ESALs, 25.0 MM Mix, 3" Depth restoration	90	SY		
0350-0120	Subbase (No. 2A) - alley paving subbase	115	CY		
0413-0230	Superpave Asphalt Mixture Design, Wearing Course, PG 64S-22, 0.3 TO < 3 Million ESALS, 12.5 MM Mix, 2" Depth, SRL-H - restoration	90	SY		
0413-6036	Superpave Asphalt Mixture Design, Binder Course, PG 64S-22, < 0.3 Million ESALS, 19.0 MM Mix, 3" Depth – alley paving	680	SY		
0469-0022	Asphalt Joint and Crack Sealing for Asphalt Surfaces - restoration	250	LF		
0601-0315*	24" Thermoplastic Pipe, Group I, 15'-1.5' Fill	144	LF		
0601-0550*	18" Thermoplastic Pipe, Group VII, 12'-2' Fill, 100 Year Design Life	96	LF		
0601-0551*	24" Thermoplastic Pipe, Group VII, 12'-2' Fill, 100 Year Design Life	112	LF		
0601-8331*	24" Reinforced Concrete Pipe, Type B, < 1.5' Fill	25	LF		
0605-2731	Type M Concrete Top Unit and Bicycle Safe Grate	9	EA		
0605-2850	Standard Inlet Box, Height < /= 10'	6	EA		
0605-2858	Type 5 Inlet Box, Height < /= 10'	1	EA		
0605-2862	Type 6 Inlet Box, Height < /= 10'	1	EA		
0605-2870	Type 8 Inlet Box, Height < /= 10'	1	EA		
0608-0001	Mobilization	1	LS		
0804-0001	Seeding and Soil Supplements - Formula B, Including Mulch	100	SY		
0849-0010	Rock Construction Entrance	1	EA		
0867-0012	Compost Filter Sock, 12" Diameter	55	LF		
0901-0001	Maintenance and Protection of Traffic During Construction	1	LS		
0962-1000	4" White Waterborne Pavement Markings	16	LF		
0962-1005	4" Double Yellow Waterborne Pavement Markings	8	LF		
9000-0001*	18" X 12" Elliptical Reinforced Concrete Pipe	441	LF		
9000-0002	Hydrovac Excavation for Gas Main	1	LS		
9000-0003	Compacted 2A Coarse Aggregate	28	CY		

^{*}For pipe items, the unit price includes the excavation, the bedding material, the pipe, connecting bands/gaskets, and the backfill. Furnishing personnel and equipment for dewatering operations, inspection of pipes, and all remedial measures are incidental to the pipe items.

<u>Note</u>: PennDOT Publication 408 shall be referenced to determine any work or materials incidental to the items listed above.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 - ATTACHMENTS TO THIS BID

- 6.03 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required 10% Bid security in the form of a certified check, bank money order, or bid bond;
 - B. Bidder Qualifications Questionnaire
 - C. Non-Collusion Affidavit
 - D. Act 127 Verification Form

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

An Individual

This Bid is submitted by:

9.01

Name (typed or printed): _	
\ `` I	

(Individual's signature)

Doing business as:

A Partnership

Partnership Name:			
•			_

By: ______(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed):

A Corporation

Corporation Name:	(SEAL)
State of Incorporation:	
Type (General Business, Professional, Service, Limited Liability):	
By:(Signature attach evidence of authority to sign)	
(Signature attach evidence of authority to sign)	
Name (typed or printed):	
Title:	
(CORPORATE SEAL)	
Attest	
Date of Qualification to do business in is _	//
A Joint Venture	
Name of Joint Venture:	
First Joint Venturer Name:	(SEAL)
By:	
By:(Signature of first joint venture partner attach evidence of auth	ority to sign)
Name (typed or printed):	
Title:	
Second Joint Venturer Name:	(SEAL)
D.	
By:(Signature of second joint venture partner attach evidence of a	uthority to sign
Name (typed or printed):	

E-mail _____ _____

State Contractor License No. ______. [If applicable]

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

County of) ss.)
	, being first duly sworn, deposes and
says that:	
(1)	He/she is of, the Bidder that has submitted the attached Bid:
	He/she is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
(3)	Such Bid is genuine and is not a collusive or sham Bid;
(4)	Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element for the Bid prices or the Bid price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Redevelopment Authority of the County of Lebanon or any person interested in the proposed Contract; and
(5)	The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.
	(Signed)
	and sworn to before me this day of, 20
	(Title)
My commis	sion expires

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned,

as PRINCIPAL, and	
as SURETY, are held as	nd firmly bound unto Redevelopment Authority of the County of Lebanon, hereinafter
called the "Local Public	Agency", in the penal sum of
Dollars (\$) lawful money of the United States, for the payment of which sum well and
truly to be made, we bin	nd ourselves, our heirs, executors, administrators, successors, and assigns, jointly and
severally, firmly by thes	e presents.
THE CONDITION OF	F THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the
accompanying Bid, date	ed, 20, for

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Local Public Agency in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Local Public Agency the difference between the amount specified in said Bid and the amount for which the Local Public Agency may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

			inded parties have executed this instru	
			_, the name and corporate seal of eac	
	these preser	its signed by its	undersigned representative, pursuant	to authority of its governing
body.		INDIVIDITA	I OD DADTNEDCHID DDINGIDAL	
		INDIVIDUA	LL OR PARTNERSHIP PRINCIPALS	<u> </u>
				(SEAL)
				(SEAL)
In the presence of:				(SEAL)
•				(SEAL)
		<u>C</u>	CORPORATE PRINCIPAL	
ATTEST:				
			By:	(SEAL)
			SURETY	
ATTEST:			<u>SURETT</u>	
				(SEAL)
Countersign	ned:			
_				
-				
Attorney-in				
State of				
		CERTIFICA	ΓΕ AS TO CORPORATE PRINCIPA	L
I,			, certify that I am the	
, Se	ecretary of the	e Corporation nan	ned as Principal in the within bond; the	at
	;	, who signed the s	aid bond on behalf of the Principal wa	as then of
said Corpor	ration; that I l	know his signatur	e, and his signature thereto is genuine	e; and that said bond was duly
signed, seal	led and atteste	ed to for and in be	half of said Corporation by authority	of this governing body.
			Title:	
				CORPORATE SEAL)

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1.	Name of Bidder.
2.	Permanent main office address.
3.	When organized.
4.	If a corporation, where incorporated.
5.	How many years have you been engaged in the contracting business under your present firm or trade name?
6.	Contracts on hand: (Schedule these, showing amount of each contract and the appropriate anticipated dates of completion.)
7.	General character or work performed by your company.
8.	Have you ever failed to complete any work awarded to you? If so, where and why? (Submit attachment.)
9.	Have you ever defaulted on a contract? If so, where and why? (Submit attachment.)
10.	List the more important projects recently completed by your company, stating the approximate cost for each, and the month and year completed. (Submit attachment.)

11. List your major equipment available for this contract.

12. Experience in constr	uction work similar in	importance to this pro	gect.	
3. Background and expe		members of your orga	,	
14. Credit available: \$_				
5. Give bank reference				
comprising this Sta	Redevelopment Auth tement of Bidder's Qua	nority of the County of	of Lebanon in v	verification of the recit
			Name of Bidde	r)
		By		
		Title		
State of)		
County of)		
and that the answers to t		s and all statements the		
Subscribed and	sworn to before me thi	is day of		, 20
		-	Notary Pul	blic
My commission expires			, 20	

Exhibit 1

MBE/WBE SECTION 3 CONTRACT SOLICITATION AND COMMITMENT STATEMENT

Ø ITTI ETTET (I							
(1) Name of Bidder					(2) IFB Numb	er	
					C-1-20-SLT	-ARRP-2	
Address					Bid Opening	Date	
Telephone Number					Contact Pers	son	
(8) NOTE: List those certified minority/women owner Subcontractors and suppliers should be at least five or				or which contacted you and gave you quotes in	n regard to th	is invitation for bid. Bidder's	contract with
4 (2)	(4)	(4)	(4)	(5)		(0)	4 (7)
*(3) COMPANY NAME	MBE	WBE	Sec. 3	(5) TYPE OF CONSTRUCTION, EQU	IDMENIT	(6) TOTAL	* (7) TOTAL
EIN/SSN	(X)	(X)	(X)	SEDVICES AND OD SUDDITES	TO RE	DOLLAR AMOUNT	COMMITMENT
TELEPHONE NUMBER	(//)	(//)	(//)	SERVICES AND/OR SUPPLIES TO BE PROVIDED TO THE PROJECT		OF	DOLLAR AMOUNT
TELET HONE HOMBER						QUOTE RECEIVED	BOLD II () III OO I I I
(9) NOTE Minimum Levels (MPL): MBE-5%, WBE-3 A presumption of responsibility may be made if the	% e dollar commitment	of MBE/WBE	reflects this n	ninimum participation level.			
(10) Prepared By:		,]]	Telephone Number/E-mail Ad	dress:
(==,							

INSTRUCTIONS FOR COMPLETION OF THE MBE/WBE SUBCONTRACTOR AND SUPPLIER SOLICITATION AND COMMITMENT FORM (DCED-CCD-286)

The purpose of this form is to determine whether the bidder has discriminated in the selection of subcontractors and suppliers.

INSTRUCTIONS FOR BLOCKS 1 AND 2

- 1. Provide your company name, address, telephone number, fax number, e-mail address and contact person.
- 2. Provide the contract number, bid opening date, and total amount of the bid. If more than one base bid is submitted, provide the total bid amount for Base Bid #1.

INSTRUCTIONS FOR BLOCKS 3 - 7

- 3. Enter the official subcontractor or supplier's company name exactly as it appears on the Department of General Services (DGS) list of certified MBEs/WBEs at the DGS website (http://www.dgs.state.pa.us) or Department of Transportation (PennDOT) website (www.dot.state.pa.us). Do not use D/B/A (Doing Business As) name. List the address, zip code, telephone number with area code, and contact person's name.
- 4. Indicate whether the firm is a DGS certified MBE or WBE. Place a (x) in the appropriate column. If the firm is both a DGS certified MBE and a DGS certified WBE, the bidder will receive credit for the firm as either an MBE or a WBE.
- 5. Briefly describe the specific type of work to be performed and/or materials to be supplied by the listed DGS certified MBE or WBE. In order to count towards reaching the MPLs, bidders must solicit DGS certified MBEs/WBEs in the areas in which they are certified. For example, if an MBE/WBE is certified for electrical supplies and the bidder lists plumbing supplies, the bidder will not receive credit. Geographical location may not be used as a reason for limiting solicitation.
- 6. Enter the total dollar (\$) amount of the quote received. If the quote was received in the form of unit prices or hourly rates, a total dollar amount must still be provided. If the subcontractor did not respond to the bidder, the bidder must indicate "No Response." Copies of all MBE/WBE quotes must be submitted with the bid.
- 7. Enter the total dollar (\$) amount of the contractual commitment made to the listed MBE/WBE. If the bidder does not use the total quote from a MBE/WBE because a lower priced quote was received, the bidder must submit a copy of the lower priced quote with its bid. On partial commitments, the bidder must explain why only a partial commitment was made and must submit a copy of the lower priced quote.

INSTRUCTIONS FOR SUBMISSION OF FORM DCED-CCD-286 AND OTHER DOCUMENTATION

- 8. The bidder must complete and submit Form DCED-CCD-286 with its bid.
- 9. The bidder must include with the Form DCED-CCD-286 all solicited and unsolicited quotes received by the bidder from MBEs and WBEs as long as the quotes are within the scope of work.

FURTHER INSTRUCTIONS

10. The bidder's contact with MBE/WBE subcontractors and suppliers should be a minimum of (10) days prior to bid opening date. This will ensure that MBE/WBEs have sufficient time to prepare a quote. Ten days is a guide. However, adequate time must be provided to all subcontractors and suppliers to respond.

If the minimum participation levels (MPLs) for this project are not achieved, you must provide a written explanation explaining the failure to achieve the MPLs for MBEs and/orWBEs. Failure to do so will result in rejection of the bid.

If there are any questions/comments concerning this form, please contact the issuing agency contracting officer. If additional forms are needed, you are permitted to photocopy form.

THE MINORITY BUSINESS ENTERPRISE PROGRAM IN CONNECTION WITH SCP PROJECTS IN COMPLIANCE WITH EXECUTIVE ORDER 11625 AFFIRMATIVE ACTION PLAN FOR UTILIZATION OF MINORITY BUSINESS

Project Name		Project No.
Redevelopment Authority of the Cor Developer	unty of Lebanon	General Contractor
CONTRACTING		
General Contractor, the General Con Lebanon a preliminary statement of	ntractor shall provide to the Minority Business Utiliz	Authority of the County of Lebanon and the Redevelopment Authority of the County of th
UTILIZATION OF BUSINESSES		
		all assure that, to the greatest extent feasible ct are awarded to minority business concerns.
	rvices) to be performed in	ible, utilize minority business concerns fo connection with this project. To this end the (5%).
CATEGORY	Amount Available in Dollars	GOAL ALLOCATION Amount Projected in Dollars
A. Minority Contractors	\$	\$
B. Minority Procurement	\$	\$

GOOD FAITH EFFORT

The following minority business referral agence	cies will be contacted: S	SBA, State OMBE, and others: (List
This is to certify that	to the questost extent for	assible the requirements of Eventive
will abide by and initiate in all our contracts, Order 11625.	to the greatest extent re	easible, the requirements of executive
	Sig	nature
	Title	Date