

**HIGH TECH CORRIDOR DEVELOPMENT, LLC
HARRISON COUNTY, WEST VIRGINIA**

WHITE OAKS PASE II A

ADDENDUM #3

NOVEMBER 2, 2022

THRASHER PROJECT #T30-11114

TO WHOM IT MAY CONCERN:

A Pre-Bid Conference was held on Wednesday, October 20, 2022, on the above-referenced project. The following are clarifications and responses to questions posed by contractors for the above reference project.

A. GENERAL

1. **THE BID FORM HAS BEEN REVISED. YOU MUST USE THE REVISED BID FORM WHEN PREPARING YOUR BID PACKAGE FOR THIS PROJECT.**
2. **THE BID OPENING WAS EXTENDED ON ADDENDUM #2 UNTIL 2:00 P.M. ON WEDNESDAY NOVEMBER 9, 2022.**
3. This Addendum includes core borings within the limits of Pad 1 and Pad 3. These borings were extended to the proposed pad elevation. These borings are to provide additional information as the expected soil conditions to be encountered during construction. These borings are for informational purposes only and Contractors shall interpret as seen fit.
4. The Work for Phase I will be substantially completed by February 14, 2023, and completed and ready for final payment by February 28, 2023. The Work for Phase II will be substantially completed by April 18, 2023, and completed and ready for final payment by May 2, 2023.
 - Phase I includes all work necessary to get Pad 1 to grade, seeded, utilities installed and functioning, and ready use by the Owner.
 - Phase II includes all other work included in the scope of the plans and specifications.

B. SPECIFICATIONS

1. Unit Prices Specification has been updated.

C. DRAWINGS

2. The following pages on the plans have been updated on this Addendum: Cover, 3, 6-9, and 61.

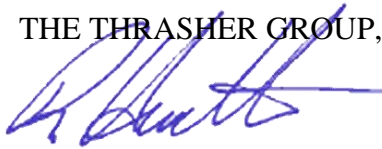
D. CLARIFICATIONS

1. The Compost Filter Sock Trap on Pad 2 has been removed from the plans as per WV DEP comments on the NPDES permit. The permit has since been issued based upon the plans shown in this Addendum.

If you have any questions or comments, please feel free to contact me at your earliest convenience. As a reminder, bids will be received **until 2:00 p.m. on Wednesday, November 9, 2022**, at The Thrasher Group, 600 White Oaks Blvd, Bridgeport, WV 26330. Good luck to everyone and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.



Richard Hovatter, PE
Senior Project Manager



BID FORM FOR CONSTRUCTION CONTRACT

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 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

*High Tech Corridor Development, LLC
P.O. Box 940
600 White Oaks Blvd.
Bridgeport, WV 26330*

1.02 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—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

A. Bid Opening Requirements

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

GENERAL

The Bidder shall take notice of and shall be responsible for any local or state taxes levied and applicable, and the cost for the same shall be included as part of the submitted Bid.

The total Bid cost stated includes a complete operating installation including furnishing and installation of any and all changes or additions in plans, piping, mechanical work, additional electrical work, accessories, controls, etc. necessary to accommodate alternative equipment systems or materials used in construction.

BID PROPOSAL

The Bidder agrees to perform all required Work described in the detailed Specifications and as shown on the Plans for the complete construction and placing in satisfactory operation the White Oaks Phase II A. The Project "Sequence of Construction" has been detailed in the Drawings and Specification Division 1, Project Summary, Section 011000. The Bidder agrees to perform all the Work proposed for the total of the following Bid prices.

3.01 *Lump Sum Bids*

A. Bidder will complete the Work in accordance with the Contract Documents for the lump sum (stipulated) price(s), together with any Unit Prices indicated in Paragraph 3.02 and shown in the bid schedule.

- B. Lump Sum Bids may be one of the following:
 - 1. Lump Sum Price (Single Lump Sum)
 - 2. Lump Sum Price (Base Bid and Alternates)
 - 3. Lump Sum Price (Sectional Lump Sum Bids)
- C. All specified cash allowance(s) are included in the price(s) set forth in the bid schedule, and have been computed in accordance with Paragraph 13.02 of the General Conditions.
- D. All specified contingency allowances are included in the price(s) set forth in the bid schedule, and have been computed in accordance with Paragraph 13.02 of the General Conditions.

3.02 *Unit Price Bids*

- A. Bidder will perform the following Work at the indicated unit prices as shown in the Bid Schedule.
- B. Bidder acknowledges that:
 - 1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
 - 2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3.03 *Total Bid Price (Lump Sum and Unit Prices)*

BID SCHEDULE

**PROPOSED
WHITE OAKS PHASE II A
FOR THE**

**HIGH TECH CORRIDOR DEVELOPMENT, LLC
HARRISON COUNTY, WEST VIRGINIA**

NOTE: Bid PRICE amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern. Bids shall include sales tax and all other applicable taxes and fees.

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
1	1	LS	SITE CLEARING			
2	1	LS	MOBILIZATION/DEMOBILIZATION			
3	1	LS	DEMOLITION AND TRAFFIC CONTROL			
4	352,000	CY	EARTH MOVING			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
5	1,000	LF	ROCK CORE DRAIN (5'X5') - ON SITE MATERIAL			
6	1,000	LF	ROCK CORE DRAIN (5'X5') - IMPORT MATERIAL			
7	780	LF	TOE-KEY BENCH			
8	4,500	CY	POND OVER EXCAVATION			
9	4,500	CY	POND BACKFILL ROCK - ON SITE MATERIAL			
10	4,500	CY	POND BACKFILL ROCK - IMPORT MATERIAL			
11	3	EA	STABILIZED CONSTRUCTION ENTRANCE			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
12	3,475	LF	PRIORITY 1 SILT FENCE			
13	100	LF	ORANGE SAFETY FENCE			
14	500	LF	COMPOST FILTER SOCK INLET PROTECTION			
15	2	EA	SEDIMENT TRAP			
16	1	LS	EXISTING POND DEWATERING			
17	10	EA	ROCK LINED SUMP (3'X3'X3')			
18	3,860	LF	VEGETATED PAD DITCH			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
19	5	EA	PIPE SLOPE DRAIN			
20	7	EA	RIP RAP ENERGY DISSIPATOR			
21	1	EA	STORMWATER BASIN			
22	31	AC	SEED AND MULCH			
23	3,540	SY	FABRIC FOR SEPARATION			
24	380	CY	SUBGRADE			
25	6,843	SF	MILLING OF EXISTING PAVEMENT			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
26	100	GAL	BITUMINOUS TACK COAT MATERIAL			
27	130	CY	AGGREGATE BASE COURSE, CLASS 1			
28	40	CY	AGGREGATE BASE COURSE, CLASS 10 (SHOULDER)			
29	620	CY	3" CRUSHER RUN			
30	380	TN	MARSHALL HOT-MIX ASPHALT SKID RESISTANT, TYPE I			
31	620	TN	MARSHALL HOT-MIX ASPHALT BASE COURSE, TYPE I			
32	190	TN	MARSHALL HOT-MIX ASPHALT BASE COURSE, TYPE II			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
33	100	LF	CONCRETE CURB AND GUTTER			
34	12	EA	CONCRETE MANHOLE (4' DIAMETER)			
35	10	EA	CONCRETE INLET (WVDOH TYPE G)			
36	100	LF	UNDERDRAINS			
37	70	LF	18" HDPE CULVERT			
38	2,110	LF	24" HDPE STORMWATER PIPE			
39	18	EA	CONCRETE STORMWATER PIPE ANCHORS			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
40	1	EA	LIGHT POLE RELOCATION			
41	650	LF	8" SDR 35 GRAVITY SEWER PIPE			
42	2	EA	SANITARY SEWER TIE-IN, COMPLETE			
43	18	EA	CONCRETE SEWER PIPE ANCHORS			
44	1	EA	E1 GRINDER LIFT STATION			
45	145	LF	3" ELECTRICAL CONDUIT			
46	700	LF	1 1/2" PVC SDR-9 FORCE MAIN PIPE			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
47	260	LF	ELECTRIC DUCT BANK			
48	3	EA	SWITCH GEAR MANHOLE BOX INSTALLATION			
49	2	EA	WATERLINE TIE-IN/HOT TAP, COMPLETE			
50	300	LF	8" PVC C-900 DR-14 WATERLINE			
51	2	EA	8" X 8" X 8" WATERLINE TEE W/ THRUST BLOCK			
52	2	EA	8" WATER GATE VALVE AND CAP			
53	2	EA	FIRE HYDRANT ASSEMBLY, COMPLETE			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
54	90	LF	6" STEEL CASING			
55	30	LF	16" STEEL CASING			

TOTAL BID: _____
 (Words)

_____ (\$ _____)
 (Words) (Figures)

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

3.04 *Method of Award*

If at the time this contract is to be awarded, the lowest total bid submitted by a qualified, responsive, responsible Bidder does not exceed the amount of funds then estimated by the Owner, as available to finance the contract, the construction contract will be awarded. If such bids exceeds such amount, the owner may reject all bids.

~~ARTICLE 4—BASIS OF BID—COST PLUS FEE~~

Deleted

~~ARTICLE 5—PRICE PLUS TIME BID~~

Deleted

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 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 **Deleted**

6.03 **Deleted**

6.04 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7—BIDDER’S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

7.01 *Bid Acceptance Period*

A. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

7.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

7.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 8—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

8.01 *Bidder’s Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.

2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; 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 Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. 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.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

8.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. 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.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.

4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. 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.
 - c. 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.
 - d. 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.

BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

Address for giving notices:

Bidder's Contact:

Name:

(typed or printed)

Title:

(typed or printed)

Phone:

Email:

Address:

Bidder's Contractor License No.: (if applicable)

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.

1.2 DEFINITIONS

- A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- C. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Site Clearing:

- 1. Description: Site Clearing according to Section 311000 "Site Clearing." This payment shall constitute full compensation for labor, materials, equipment, and other costs associated with this work.
 - 2. Unit of Measurement: Lump Sum

- B. Mobilization/Demobilization:

1. Description: the mobilization item shall be paid as follows:
 1. Mobilization 50%
 2. Demobilization 50%
2. Construction Stakeout
 1. The cost of this work shall be included in the lump sum bid item for Mobilization/Demobilization. This bid item shall include both on-and-off-site construction.
 2. Contractor shall provide all stakeout for on-site construction. Those items shall verify all storm and sewer structure elevations to assure that structures will be able to be installed at the correct elevations.
 1. Any other on-site items needing verified prior to the start of construction.
 2. All discrepancies discovered by the contractor shall be disclosed to the Engineer immediately.
3. Unit of Measurement: Lump Sum

C. Demolition and Traffic Control

1. Description: Demolition according to Section 024116 "Structure Demolition."
2. Demolition shall include the work necessary to remove and dispose of the existing structures indicated on the plans and any existing utilities that may be present at their location. Demolition shall also include the work necessary to remove and dispose of any asphalt, existing pond riser and discharge structure, sanitary sewer, or other items required to complete the work and any associated traffic control requirements to complete the work. Demolition shall be paid for by the lump sum unit bid price for Demolition and Traffic Control. This shall include all labor, materials, overhead, profit, inspection, etc. for the demolition of the structures indicated on the plans.
3. Unit of Measurement: Lump Sum

D. Earth Moving:

1. Description: Earth Moving according to Section 312000 "Earth Moving."
2. All earth moving in this contract is unclassified "No Rock Clause". Earth Moving includes all excavation of materials and borrowing of suitable materials as necessary to accommodate construction and shall be paid for under the unit bid price for Earth Moving, based on the cubic yard quantity.
3. Earth Moving for all construction shall be included in the bid prices requiring excavation or fill activity.
4. The cost for topsoil removal, handling, stockpiling, waste, and re-distribution shall be incidental to the unit bid price for Earth Moving.
5. The cost of earth moving associated with the construction of the pads shall be paid for by the Earth Moving unit bid price, based on the cubic yard quantity. This shall include all labor, materials, overhead, profit, etc. for the excavation, disposal of unsuitable material, rock fill required to: adjust rough grading underneath roadways to correct bottom of subgrade elevation prior to the placement of roadway subgrade courses.
6. Earthwork will be paid based on the 352,000 cubic yard bid quantity. If the Contractor has claims for additional payment for overrun of the Earth Moving quantity, the Contractor shall provide the appropriate pre and post construction survey data justifying such claim to the satisfaction of the Engineer.
7. Unit of Measurement: Cubic Yard

E. Rock Core Drains

1. Description: The Contractor shall be responsible for removing all organic material encountered along existing ditches before installing rock core drains before commencing filling activities. This material shall be wasted on site at a location approved by the Owner or mixed with cut material and incorporated into the fill if approved by the Engineer. This material is incidental to the Rock Core Drain unit bid price.
2. The Rock Core Drains shall be installed in a manner as to provide positive drainage into the pond backfill rock.
3. Rock core drains shall be constructed in all existing water channels onsite before fill operations begin as shown on the plans. The Contractor shall supply two bid prices for this work. One price shall be reflective of performing this work using onsite material and shall include all labor, fabric, overhead, profit, etc. for the placement of the onsite rock fill and fabric required to construct the rock core drains. No cost should be included for the rock material as it is paid for under the Earth Moving pay item. This item shall be paid for under the unit bid price per linear foot for Rock Core Drains Using Onsite Material. The second price shall be reflective of performing this work using imported material and shall include all labor, materials, delivery, overhead, profit, etc. for the placement of the imported rock fill and fabric required to construct the rock core drains. This item shall be paid for under the unit bid price per linear foot for Rock Core Drains Using Imported Material.
4. Unit of Measurement: Linear Foot

F. Toe Key Bench

1. Description: A toe-key bench shall be constructed in accordance with the recommendations of the geotech report provided.
2. The excavation and construction of the keyway shall be included in the unit bid price for Toe-Key Bench. This shall include all labor, materials, overhead, profit, etc. for the excavation, disposal of unsuitable material, bench drain and conveyance pipe, bonding benches, and other work necessary to construct the Toe-Key Benches.
3. Unit of Measurement: Linear Foot

G. Pond Over Excavation

1. Description: The existing stormwater pond is to be over excavated to a depth of 5 feet. The material removed from this excavation shall be dried, mixed, and incorporated into the fill as suitable material as approved by the Engineer.
2. Pond Over Excavation shall be paid for by the cubic yard unit bid price for Pond Over Excavation. This shall include all labor, materials, overhead, profit, excavation, mixing, etc. for the removal of the pond material.
3. Unit of Measurement: Cubic Yard

H. Pond Backfill Rock

1. Description: The over excavation of the existing pond shall expose the top of the existing core drain. The pond shall be backfilled with 6" to 24" stone in a manner as to provide positive drainage to the existing rock core drain.
2. The Contractor shall supply two bid prices for this work. One price shall be reflective of performing this work using onsite material and shall include all labor, fabric, overhead, profit, etc. for the placement of the onsite rock fill required to construct the pond backfill.

No cost should be include for the rock material as it is paid for under the Earth Moving pay item. This item shall be paid for under the unit bid price per cubic yard for Pond Backfill Rock Using Onsite Material. The second price shall be reflective of performing this work using imported material and shall include all labor, materials, delivery, overhead, profit, etc. for the placement of the imported rock fill required to construct the pond backfill. This item shall be paid for under the unit bid price per cubic yard for Pond Backfill Rock Using Imported Material.

3. Unit of Measurement: Cubic Yard

I. Erosion and Sediment Control:

1. Description: Erosion and Sediment Controls will be based upon the various unit bid prices which includes, but is not limited to: construction entrances, rock lined sump, inlet protection, rock ditch check dams, grass lined ditches, rock lined ditches, sediment basins, stormwater management ponds, swale sediment cells, silt fence, pad edge berms, and other measures necessary to carry out the erosion and sediment control plan throughout the duration of the project.
2. The contractor shall be required to adjust and maintain all erosion and sediment control devices and measures in accordance with the WVDEP BMP manual to prevent sediment from leaving the construction site until 70% vegetation has been established throughout the project site. No additional payment will be made for adjustments or maintenance of erosion and sediment controls in accordance with the approved plans.
3. If a notice of violation is given by the WVDEP, due to negligence of the Contractor to meet or comply with the approved plan, then the Contractor shall be responsible for paying all associated fines.
4. The Contractor is responsible for complying with the intent of the erosion and sediment control plan. No additional payment will be made for additional measures needed to control runoff based upon Contractors means, methods, or staging, etc.
5. Stabilized Construction Entrances shall be installed as shown on the plans. Construction Entrances shall be paid for by the Stabilized Construction Entrance unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the installation of the Construction Entrances.
6. Priority 1 Silt Fence shall be installed at the location shown on the plans. Priority 1 Silt Fence shall be paid for by the linear foot unit bid price for Priority 1 Silt Fence. This shall include all labor, materials, overhead, profit, etc. for the installation of the Priority 1 Silt Fence.
7. Orange Safety Fence shall be installed at the location shown on the plans. Orange Safety Fence shall be paid for by the linear foot unit bid price for Orange Safety Fence. This shall include all labor, materials, overhead, profit, etc. for the installation of the Orange Safety Fence.
8. Compost Filter Sock Inlet Protection shall be installed at each inlet as shown on the plans. Inlet Protection shall be paid for by the unit bid price by the linear foot for Compost Filter Sock Inlet Protection installed. This shall include all labor, materials, overhead, profit, etc. for the installation of the Compost Filter Sock Inlet Protection.
9. Sediment Trap shall be installed in the locations as shown on the plans. Sediment Trap shall be paid for by the Sediment Trap unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the installation of the Sediment Trap and outlet structure.
10. Existing Pond Dewatering shall be necessary to dewater the existing stormwater pond prior to the over excavation. Existing Pond Dewatering shall be paid for by the lump sum

- unit price for Existing Pond Dewatering. This shall include all labor, materials, overhead, profit, etc. for the pumping of the existing water through a sediment filter bag.
11. Vegetated Pad Ditch shall be installed at all ditch locations less than an 8% flow slope. Vegetated Pad Ditch shall be paid for by the linear foot unit bid price for Vegetated Pad Ditch. This shall include all labor, materials, overhead, profit, etc. for the installation of the Vegetated Pad Ditch.
 12. Pipe Slope Drains shall be installed at all locations shown on the plans. Pipe Slope Drains shall be paid for by the unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the installation of the Pipe Slope Drains.
 13. Rip Rap Energy Dissipators shall be installed at all locations shown on the plans. Rip Rap Energy Dissipators shall be paid for by the unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the installation of the Rip Rap Energy Dissipators.
 14. Rock Lined Sumps shall be installed at all locations shown on the plans. Rock Lined Sumps shall be paid for by the unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the installation of the Rock Lined Sumps.
 15. Pad Edge Berms shall be installed along the edges of the pads as shown on the plans. The cost for this work shall be incidental to the unit bid price for Earth Moving.

J. Stormwater Basin

1. Description: Once Pad 3 is to grade and the stormwater system is installed, Storm Basin 1 shall be installed. The basin shall be installed as shown in the plans.
2. Stormwater Basin shall be paid for by the bid unit price for each. This shall include all labor, materials, overhead, profit, etc. for the installation of Stormwater Basin. Inlet protection, riser, barrel, trash rack, and concrete base shall be incidental to this bid item.

K. Seeding and Mulching:

1. Description: Seeding and Mulching according to Section 329200 "Turf and Grasses."
2. Payment will be made on this item as reclamation on areas disturbed by the construction process and paid for by the acre unit bid price for Seed and Mulch activities.
3. Temporary seeding shall be provided during the construction in accordance with the WV BMP manual. No additional payment will be made for temporary seeding necessary to remain in compliance with the WVDEP BMP manual.
4. Permanent seeding and mulching will be provided for all disturbed areas and serve as the basis for payment of the Seed and Mulch unit bid price.

L. Asphalt Paving:

1. Description: Asphalt Paving according to Section 321216 "Asphalt Paving."
2. Traffic control shall be paid for under the Demolition lump sum unit bid price.
3. See Earth Moving for subgrade method of payment.
4. Fabric for separation shall be paid for by the unit bid price for each square yard placed.
5. Subgrade shall be paid for by the unit bid price for each cubic yard placed.
6. Milling of Existing Pavement shall be paid for by the unit bid price for each square foot milled.
7. Bituminous Tack Coat Material shall be paid for by the unit bid price for each gallon used.

8. Aggregate Base Course Class 1 and Class 10 shall be paid for by the unit price bid price for each cubic yard placed.
9. 3" Crusher Run stone shall be paid for by the unit price bid price for each cubic yard placed.
10. Hot-mix asphalt base course Type I and Type II shall be paid for by the unit bid price for each ton placed.
11. Hot-mix Skid Resistant asphalt wearing course Type I shall be paid for by the unit bid price for each ton placed.
12. No payment shall be made for unauthorized placement of asphalt.
13. No payment shall be made for temporary paving required during construction.
14. The labor, materials, and equipment for the saw cutting and removal of any existing material shall be incidental to the unit bid prices for subgrade, aggregate base course, and hot-mix asphalt base courses.

M. Concrete Paving:

1. Description: Concrete Paving according to Section 321313 "Concrete Paving."
2. Construction for concrete Curb & Gutter shall be paid for by the linear foot unit bid price. This cost shall include all materials, labor, and construction incidental to the construction of concrete curb and gutter, including any required grading and backfill of the curbs or any curb cuts at intersections with sidewalks.
3. Curb & Gutter installed along the White Oaks Boulevard shall be modified Type I, with a 6" curb height and 18" gutter pan width.

N. Drainage

1. Concrete Manhole shall be installed as shown on the plans. Concrete manholes shall be installed in both the storm network and the sewer network relocation. Concrete Manholes shall be 4' diameter paid for by the unit bid price per each manhole installed. This shall include all labor, materials, overhead, profit, etc. for the installation of the Concrete Manhole.
2. Concrete Inlets shall be installed as shown on the plans. Concrete inlets shall be WVDOH Type "G" inlets and shall be paid for by the unit bid price per each inlet installed. This shall include all labor, materials, overhead, profit, etc. for the installation of the Concrete Inlets.
3. Underdrains shall be installed in locations encountered during construction that are producing groundwater and that could be detrimental to the earth work operations. These areas shall be assessed in the field and drained appropriately. An assumed quantity is included in this bid to get a unit price for this work.
4. Stormwater Drainage Pipe shall be installed as shown on the plans. Stormwater Drainage Pipe shall be paid for by the linear foot unit bid price related to each diameter of pipe. This shall include all labor, trenching, backfill, delivery, materials, overhead, profit, etc. for the installation of the Stormwater Drainage Pipe. The inlet sumps shall be incidental to the unit bid price for the 18" HDPE Storm Pipes at entrances.
5. Concrete Stormwater Pipe Anchors shall be installed in accordance with the plans. Concrete Stormwater Pipe Anchors shall be paid for by the unit bid price for each. This shall include all labor, excavation, backfill, delivery, materials, overhead, profit, etc. for the installation of the Concrete Stormwater Pipe Anchors.

O. Light Pole Relocation

1. The existing light pole at the proposed entrance to Pad 3 shall be relocated to the location shown on the plans. The Contractor shall remove the pole and base, remove the wire from this pole to junction box before and after this pole, splice the conduit at the existing pole location, install a new pole base, reinstall the existing pole and head, rewire the system between the junction boxes. The price for wiring, base, and installation shall be included in this unit bid price. Light Pole Relocation shall be paid for by the unit bid price for each installed.
- P. 8" SDR 35 Gravity Sewer Pipe
1. 8" SDR 35 Gravity Sewer Pipe shall be installed in the locations and elevations shown in the plans. The price for 8" SDR 35 Gravity Sewer Pipe shall include excavation, bedding, and backfilling, marking tape, and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, testing, and incidentals necessary to complete the work.
 2. All fittings shall be incidental to the linear foot unit bid price for 8" SDR 35 Gravity Sewer Pipe.
 3. All testing of the gravity sewer shall be incidental to the linear foot unit bid price for 8" SDR 35 Gravity Sewer Pipe.
 4. The work done under this item shall be measured and paid for by the linear foot of pipe as specified on plans or as directed by the Engineer, and installed complete in place. The length shall be determined from measurement to the nearest foot. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured along the horizontal centerline of each pipe installed, measured centerline of tie-in to centerline of tie-in.
- Q. Sanitary Sewer Tie-In, Complete
1. Payment for Sanitary Sewer Tie-In shall be paid for by the unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the complete installation of each Sanitary Sewer Tie-In.
- R. E1 Grinder Lift Station
1. The E1 Grinder Lift Station shall be installed at the location shown in the plans. The price for the E1 Grinder Lift Station shall include the pump, well, manhole, controls, wiring, and other equipment necessary to install a complete functioning station as shown in the plans. E1 Grinder Lift Station shall be paid for by the bid unit price for each. This shall include all labor, materials, overhead, profit, etc. for the installation of the E1 Grinder Lift Station.
- S. 1 – ½" PVC SDR-9 Force Main Pipe
1. The force main sewers installed under this item shall be measured and paid for by the linear feet of pipe as specified on plans or as directed by the Engineer and installed complete in place. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed, measured centerline of tie-in to centerline of tie in.

2. The force main pipe will be paid for at the unit bid prices bid for the 1-1/2" PVC SDR-9 Force Main Pipe, which prices and payments shall be full compensation for excavation, bedding, and backfilling and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, testing, and incidentals necessary to complete the work.

T. Electric Duct Bank

1. Electric Duct Bank shall be installed at the locations and as shown in the plans. The price for Electric Duct Bank shall include excavation, conduits, bedding, backfilling, marking tape, turn-ups, nylon pull rope, reclamation, and incidentals necessary to complete the work.
2. The payment for Electric Duct Bank shall be by the linear foot unit bid price. This shall include all labor, materials, overhead, profit, etc. for the complete installation of the Electric Duct Bank.

U. 3" Electric Conduit

1. 3" Electric Conduit shall be installed at the locations and as shown in the plans. The price for 3" Electric Conduit shall include excavation, conduit, bedding, backfilling, marking tape, turn-ups, nylon pull rope, reclamation, and incidentals necessary to complete the work.
2. The payment for 3" Electric Conduit shall be by the linear foot unit bid price. This shall include all labor, materials, overhead, profit, etc. for the complete installation of the 3" Electric Conduit.

V. Switch Gear Manhole Box Installation

1. The Switch Gear Manhole Box installation shall be installed at the location and as shown in the plans. This shall include the installation of the Switch Gear Manhole Box as provided by Mon Power. The electric conduit shall be installed into the switch gear box as directed by Mon Power.
2. The payment for Electric Duct Bank shall be by the unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the complete installation of the Switch Gear Manhole Box.

W. Water Line Hot Tap Tie-In, Complete

1. Water Line Hot Tap Tie-In shall be installed at the locations and as shown in the plans. The price for Water Line Tie-In shall include the purchase and installation of all required material in order to perform the tie-in as shown. This Unit Bid Price shall include a gate valve sized the same as the new waterline, the required ductile iron mechanical joint fittings, and the necessary ductile iron solid sleeve(s) or dresser couplings.
2. The payment for Water Line Hot Tap Tie-In shall be by the unit bid price for each. This shall include all labor, materials, overhead, profit, etc. for the complete installation of the Water Line Hot Tap Tie-In.

X. 8" PVC C-900 DR-14 Waterline

1. 8" PVC C-900 DR-14 Waterline installed under this item shall be measured and paid for by the linear feet as specified on plans or as directed by the Engineer and installed complete in place. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed, measured centerline of tie-in to centerline of tie in.
2. 8" PVC C-900 DR-14 Waterline will be paid for at the unit bid prices bid for the 8" PVC C-900 DR-14 Waterline, which prices and payments shall be full compensation for excavation, bedding, marking tape, and backfilling and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, testing, and incidentals necessary to complete the work.

Y. 8" x 8" x 8" Water Line Tee with Thrust Block

1. 8" x 8" x 8" Water Line Tee shall be installed at the locations and as shown in the plans. The price for 8" x 8" x 8" Water Line Tee shall include the purchase and installation of all required material as shown. This Unit Bid Price shall include a tee and the concrete thrust block.
2. 8" x 8" x 8" Water Line Tee will be paid for at the unit bid prices bid for each, which prices and payments shall be full compensation for excavation, bedding, marking tape, and backfilling and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, testing, and incidentals necessary to complete the work.

Z. 8" Water Gate Valve and Cap

1. 8" Water Gate Valve and Cap shall include the purchase and installation of the valve including the riser box and water valve marker.
2. The payment for the 8" Water Gate Valve and Cap shall include all labor, tools, equipment, supplies, testing, and incidentals necessary to complete the work.

AA. Fire Hydrant Assembly, Complete

1. Fire Hydrant Assembly shall be installed at the locations and as shown in the plans. The price for Fire Hydrant Assembly shall include the purchase and installation of the fire hydrant, 6" gate valve, 6" hydrant tee, all thread rods, valve riser box, and all appurtenances as shown on the details of the plans.
2. Fire Hydrant Assembly will be paid for at the unit bid prices bid for each, which prices and payments shall be full compensation for excavation, bedding, and backfilling and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, testing, and incidentals necessary to complete the work.

BB. 6" Steel Casing

1. 6" Steel Casing shall be installed at the locations and as shown in the plans. The 6" Steel Casing shall be used to case the 3" gas line under roadways. The price for 6" Steel Casing shall include the purchase and installation of the steel casing.
2. 6" Steel Casing shall be paid for at the unit bid price per linear foot, which prices and payments shall be full compensation for excavation, bedding, and backfilling and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, and incidentals necessary to complete the work.

CC. 16" Steel Casing

1. 16" Steel Casing shall be installed at the locations and as shown in the plans. The 16" Steel Casing shall be used to case the 8" waterline under roadways. The price for 16" Steel Casing shall include the purchase and installation of the steel casing.
2. 16" Steel Casing shall be paid for at the unit bid price per linear foot, which prices and payments shall be full compensation for excavation, bedding, and backfilling and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, and incidentals necessary to complete the work.

END OF SECTION 012200



Project Name: **White Oaks Phase 2 Drilling
Harrison County, West Virginia**

Project Number: **W22174**

BORING NO.

B- 1-A

Elevation, feet	Depth, feet	Sample Type	Symbol / USCS	Location: Surface El.: 1150.8 ft.	Offset:	Recovery %	RQD	Blow Count (N-Value)	Moisture %	Liquid Limit	Plasticity Index	Silt and Clay %	Sand %
1150.5				TOPSOIL	0.3			1-3-5 (8)					
	5			Brown SILTY to SANDY CLAY , moist stiff to very stiff									
1140.8	10				10.0			7-10-14 (24)					
	15			Brown and red CLAYSTONE , extremely soft to very soft, highly weathered				29-50/6"					
1130.8	20				20.0			10-11-12 (23)					
	25			Gray SHALE , extremely soft to soft, weathered				18-33-50/4"					
	30			- brown, silty to sandy from 25.0 ft.				50/5"					

Completion Depth: **55.3 ft.**

Date Boring Started: **10/31/22**

Date Boring Completed: **10/31/22**

Engineer/Geologist: **CEM**

Driller: **NGE**

Remarks: **Water was noted at a a depth of 30.0 ft. during drilling operations and 36.5 ft. at boring completion.**

Depth to Water @ 24 hrs.: ---

NGE BASIC LOG - NO PENETROMETER LOG REPORTS.GPJ NGE_1.GDT 11/2/22

Novel Geo Environmental

The stratification lines represent approximate strata boundaries.
In situations, the transition may be gradual.























Project Name: **White Oaks Phase 2 Drilling
Harrison County, West Virginia**

BORING NO.

Project Number: **W22174**

B- 1-A

Elevation, feet	Depth, feet	Sample Type	Symbol / USCS	Location:	Offset:	Recovery %	RQD	Blow Count (N-Value)	Moisture %	Liquid Limit	Plasticity Index	Silt and Clay %	Sand %
				Surface El.: 1150.8 ft.									
				 Split Spoon	 Shelby Tube								
				 Rock Core	 Bag Sample								
MATERIAL DESCRIPTION													
				Brown SILTY to SANDY SHALE , extremely soft to soft, weathered					18-15-26 (41)				
	35								50/4"				
1110.8	40							40.0	50/3"				
				Gray LIMESTONE , medium hard									
1105.8	45							45.0	50/1"				
				Red and gray SHALE , soft to hard, weathered									
	50								50/4"				
1095.5	55							55.3	50/3"				
				Bottom of Test Boring @ 55.3 ft.									
	60												

Completion Depth: **55.3 ft.**

Date Boring Started: **10/31/22**

Date Boring Completed: **10/31/22**

Engineer/Geologist: **CEM**

Driller: **NGE**

Remarks: **Water was noted at a a depth of 30.0 ft. during drilling operations and 36.5 ft. at boring completion.**

Depth to Water @ 24 hrs.: ---

NGE BASIC LOG - NO PENETROMETER LOG REPORTS.GPJ NGE_1.GDT 11/2/22

Novel Geo Environmental

The stratification lines represent approximate strata boundaries.
In situations, the transition may be gradual.



Project Name: **White Oaks Phase 2 Drilling
Harrison County, West Virginia**

BORING NO.

Project Number: **W22174**

B- 2-A

Elevation, feet	Depth, feet	Sample Type	Symbol / USCS	Location: Surface El.: 1139.6 ft.	Offset:	Recovery %	RQD	Blow Count (N-Value)	Moisture %	Liquid Limit	Plasticity Index	Silt and Clay %	Sand %
1139.29				TOPSOIL	0.3			4-5-6 (11)					
	5			Red and brown SILTY CLAY with rock fragments, moist, stiff to very stiff									
	10							14-14-8 (22)					
	15			- POSSIBLE FILL -				4-7-9 (16)					
	20				20.0			8-5-9 (14)					
1119.59				Gray SHALE , soft to hard				50/5"					
	25			- no recovery (25.0 - 26.5 ft.)				50/1"					
1109.59	30				30.0								

Completion Depth: **40.3 ft.**

Date Boring Started: **10/31/22**

Date Boring Completed: **10/31/22**

Engineer/Geologist: **CEM**

Driller: **NGE**

Remarks: **Boring was noted to be dry during drilling operations and at boring completion.**

Depth to Water @ 24 hrs.: ---

NGE BASIC LOG - NO PENETROMETER LOG REPORTS.GPJ NGE_1.GDT 11/2/22

Novel Geo Environmental

The stratification lines represent approximate strata boundaries.
In situations, the transition may be gradual.















Project Name: **White Oaks Phase 2 Drilling
Harrison County, West Virginia**

BORING NO.

Project Number: **W22174**

B- 2-A

Elevation, feet	Depth, feet	Sample Type	Symbol / USCS	Location: Offset:		Recovery %	RQD	Blow Count (N-Value)	Moisture %	Liquid Limit	Plasticity Index	Silt and Clay %	Sand %
				Surface El.: 1139.6 ft.									
				 Split Spoon  Shelby Tube	 Rock Core  Bag Sample								
MATERIAL DESCRIPTION													
1104.59	35			Red and gray CLAYSTONE , very soft		35.0		41-26-50/5"					
								50/2"					
1099.29	40			Red and gray SHALE , soft to medium hard		40.3		50/4"					
								50/4"					
	45			Bottom of Test Boring @ 40.3 ft.									
	50												
	55												
	60												

Completion Depth: **40.3 ft.**
Date Boring Started: **10/31/22**
Date Boring Completed: **10/31/22**
Engineer/Geologist: **CEM**
Driller: **NGE**

Remarks: **Boring was noted to be dry during drilling operations and at boring completion.**

Depth to Water @ 24 hrs.: ---

NGE BASIC LOG - NO PENETROMETER LOG REPORTS.GPJ NGE_1.GDT 11/2/22

Novel Geo Environmental

The stratification lines represent approximate strata boundaries.
In situations, the transition may be gradual.







Project Name: **White Oaks Phase 2 Drilling
Harrison County, West Virginia**

BORING NO.

Project Number: **W22174**

B- 3-A

Elevation, feet	Depth, feet	Sample Type	Symbol / USCS	Location:	Offset:	Recovery %	RQD	Blow Count (N-Value)	Moisture %	Liquid Limit	Plasticity Index	Silt and Clay %	Sand %
				Surface El.: 1243.2 ft.									
				 Split Spoon	 Shelby Tube								
				 Rock Core	 Bag Sample								
MATERIAL DESCRIPTION													
				Brown SILTY to SANDY CLAY with rock fragments, moist, stiff to very stiff									
	5												
				- POSSIBLE FILL -									
1233.19	10			10.0									
				Brown and red SILTY CLAY , moist, stiff to hard									
	15												
				- w/residual shale from 15.0 ft.									
1222.19	20			21.0									
				Red and brown CLAYSTONE , very soft									
1218.19	25			25.0									
				Gray and brown SANDSTONE , medium hard to hard, weathered									
	30												

Completion Depth: **40.2 ft.**

Date Boring Started: **11/1/22**

Date Boring Completed: **11/1/22**

Engineer/Geologist: **CEM**

Driller: **NGE**

Remarks: **Boring was noted to be dry during drilling operations and at boring completion.**

Depth to Water @ 24 hrs.: ---

NGE BASIC LOG - NO PENETROMETER LOG REPORTS.GPJ NGE_1.GDT 11/2/22

Novel Geo Environmental

The stratification lines represent approximate strata boundaries.
In situations, the transition may be gradual.



THE THRASHER GROUP, INC.
600 WHITE OAKS BOULEVARD – BRIDGEPORT, WV 26330
PHONE (304) 624–4108 • FAX (304) 624–7831



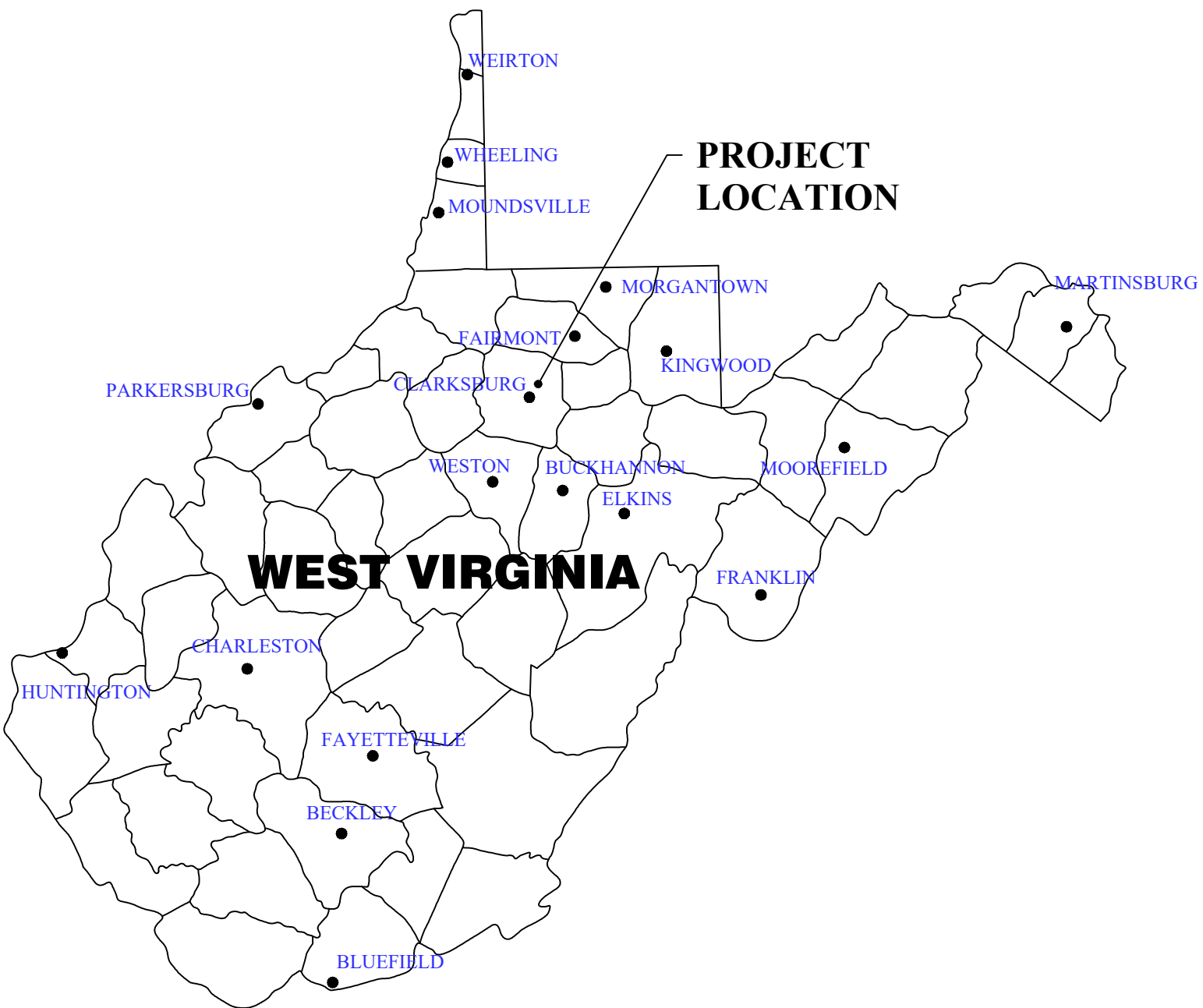
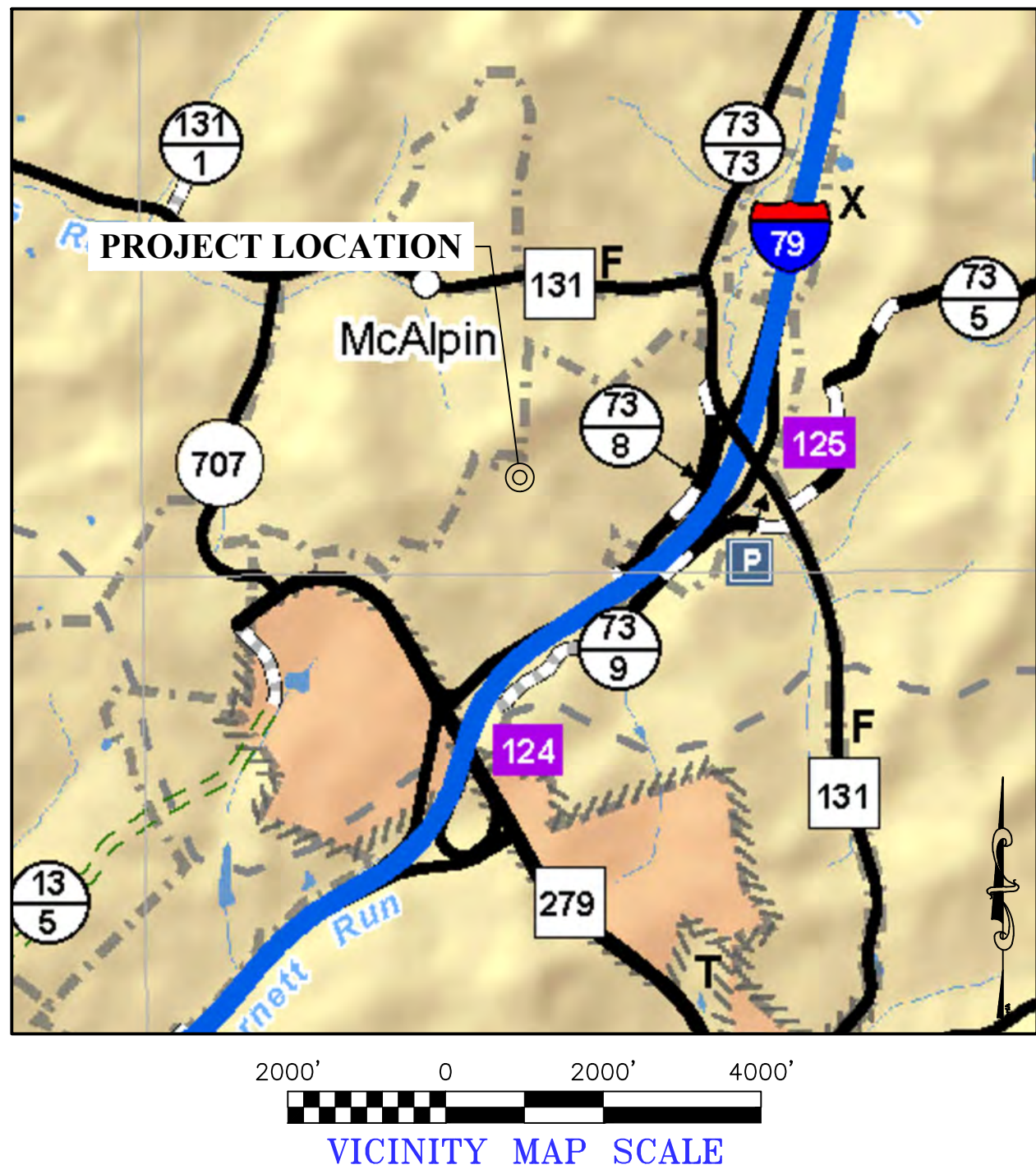
WHITE OAKS

ISSUED FOR BID PLANS FOR
WHITE OAKS BUSINESS PARK
PHASE II A
BRIDGEPORT, HARRISON COUNTY, WV
OCTOBER 2022

SHEET INDEX

SHEET	DESCRIPTION
1	COVER
2	TYPICAL SECTIONS
3	SUMMARY OF QUANTITIES
4	GENERAL NOTES
5	EXISTING CONDITIONS
6	ESC GRADING PLAN STAGE 1
7	ESC GRADING PLAN STAGE 2
8	ESC GRADING PLAN STAGE 3
9	ESC GRADING PLAN STAGE 4
10A-10B	SEDIMENT TRAP DETAILS
11	STORMWATER BASIN DETAILS
12	EARTHWORK PLAN
13	PAD BASELINES
14-19	BASELINE A PAD SECTIONS
20-29	BASELINE B PAD SECTIONS
30-33	WILDLIFE LANE PLAN & PROFILE
34-41	WILDLIFE LANE CROSS SECTION
42	PAD #2 ACCESS ROAD PLAN & PROFILE
44-46	INTERSECTION DETAILS
47	UTILITY PLAN
48	GRAVITY SEWER PLAN
49	GRAVITY SEWER PROFILE
50	FORCE MAIN PLAN AND PROFILE
51	STORMWATER PLAN
52-55	STORMWATER NETWORK PROFILES
56-68	DETAILS

2018 HARRISON COUNTY WVDOH COUNTY MAP



- ☐ APPROVED FOR PERMITS DATE: _____ BY: _____
- ☐ APPROVED FOR BIDS DATE: _____ BY: _____
- ☐ APPROVED FOR CONSTRUCTION DATE: _____ BY: _____

CONTACTS

ENGINEER
THE THRASHER GROUP
ATTN: RICHARD C. HOVATTER JR., PE
304-205-8809

ENGINEER
THE THRASHER GROUP
ATTN: AUSTIN THRASHER, EI
304-203-8579

ONE CALL UTILITY SYSTEM CONTACT INFO



CONTRACTOR SHALL NOTIFY THE ONE-CALL SYSTEM OF THE INTENDED EXCAVATION OR DEMOLITION NOT LESS THAN FORTY-EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL FEDERAL OR STATE HOLIDAYS, NOR MORE THAN TEN (10) WORK DAYS PRIOR TO THE BEGINNING OF SUCH WORK.

REVISION NUMBER	REVISED SHEETS	BY	DATE	DESCRIPTION
1	1–4,6–12,30,43,47,51,58,60,62,63,64,66,67	JCP	10/19/22	Sediment trap 1, Wildlife Lane pavement, stage 3 fill area, storm, grinder service.Details
2	1,3,5–9,10A,10B,11,13,15–18,29–33,42,45,47,50,51,56,61	JCP	10/26/22	revised stage 1&2 plans, added, sediment trap and CFS trap, SF revision, gas line by others, clay liner added to basin, sumps added, Revisions to quantities.
3	3,6–9,61	DJW	10/27/22	removed compost filter sock sediment trap, stabilized construction entrance note added, revisions to quantities.additional borings shown

LAYOUT TAB: 3 SUMMARY OF QUANTITIES
CAD FILE: R:\030\030-10341-00-White Oaks Phase II 2021-High Tech Corridor Development, LLC-\Drawing\0341-QUANTITIES.dwg
PLOT DATE/TIME: 11/2/2022 10:16 AM

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
1	SITE CLEARING	LS	1
2	MOBILIZATION/DEMOBILIZATION	LS	1
3	DEMOLITION AND TRAFFIC CONTROL	LS	1
4	EARTH MOVING	CY	352,000
5	ROCK CORE DRAIN (5'X5') - ON SITE MATERIAL	LF	1,000
6	ROCK CORE DRAIN (5'X5') - IMPORT MATERIAL	LF	1,000
7	TOE-KEY BENCH	LF	780
8	POND OVER EXCAVATION	CY	4,500
9	POND BACKFILL ROCK - ON SITE MATERIAL	CY	4,500
10	POND BACKFILL ROCK - IMPORT MATERIAL	CY	4,500
11	STABILIZED CONSTRUCTION ENTRANCE	EA	3
12	PRIORITY 1 SILT FENCE	LF	3,475
13	ORANGE SAFETY FENCE	LF	100
14	COMPOST FILTER SOCK INLET PROTECTION	LF	500
15	SEDIMENT TRAP	EA	2
16	EXISTING POND DEWATERING	LS	1
17	ROCK LINED SUMP (3'X3'X3')	EA	10
18	VEGETATED PAD DITCH	LF	3,860
19	PIPE SLOPE DRAIN	EA	5
20	RIP RAP ENERGY DISSIPATOR	EA	7
21	STORMWATER BASIN	EA	1
22	SEED AND MULCH	AC	31
23	FABRIC FOR SEPARATION	SY	3,540
24	SUBGRADE	CY	380
25	MILLING OF EXISTING PAVEMENT	SF	6,843
26	BITUMINOUS TACK COAT MATERIAL	GAL	100
27	AGGREGATE BASE COURSE, CLASS 1	CY	130
28	AGGREGATE BASE COURSE, CLASS 10 (SHOULDER)	CY	40
29	3" CRUSHER RUN	CY	620
30	MARSHALL HOT-MIX ASPHALT SKID RESISTANT, TYPE I	TN	380
31	MARSHALL HOT-MIX ASPHALT BASE COURSE, TYPE I	TN	620
32	MARSHALL HOT-MIX ASPHALT BASE COURSE, TYPE II	TN	190
33	CONCRETE CURB AND GUTTER	LF	100
34	CONCRETE MANHOLE (4' DIAMETER)	EA	12
35	CONCRETE INLET (WVDOH TYPE G)	EA	10
36	UNDERDRAINS	LF	100
37	18" HDPE CULVERT	LF	70
38	24" HDPE STORMWATER PIPE	LF	2,110
39	CONCRETE STORMWATER PIPE ANCHORS	EA	18
40	LIGHT POLE RELOCATION	EA	1
41	8" SDR 35 GRAVITY SEWER PIPE	LF	650
42	SANITARY SEWER TIE-IN, COMPLETE	EA	2
43	CONCRETE SEWER PIPE ANCHORS	EA	18
44	E1 GRINDER LIFT STATION	EA	1
45	3" ELECTRICAL CONDUIT	LF	145
46	1 1/2" PVC SDR-9 FORCE MAIN PIPE	LF	700
47	ELECTRIC DUCT BANK	LF	260
48	SWITCH GEAR MANHOLE BOX INSTALLATION	EA	3
49	WATERLINE TIE-IN/HOT TAP, COMPLETE	EA	2
50	8" PVC C-900 DR-14 WATERLINE	LF	300
51	8" X 8" X8" WATERLINE TEE W/ THRUST BLOCK	EA	2
52	8" WATER GATE VALVE AND CAP	EA	2
53	FIRE HYDRANT ASSEMBLY, COMPLETE	EA	2
54	6" STEEL CASING	LF	90
55	16" STEEL CASING	LF	30

12

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3	DJW	10/27/22	Removed CFS Sediment Trap, fixed item #'s & OSF Unit
2	JCP	10/26/22	Revised Quantities-3" gas removed, CFS trap & Sumps added
1	JCP	10/19/22	Revised quantities
NO.	BY	DATE	DESCRIPTION



SCALE: AS SHOWN
DRAWN: DATE:
CHECKED: DATE:
APPROVED: DATE:
SURVEY DATE:
SURVEY BY:
FIELD BOOK No.:



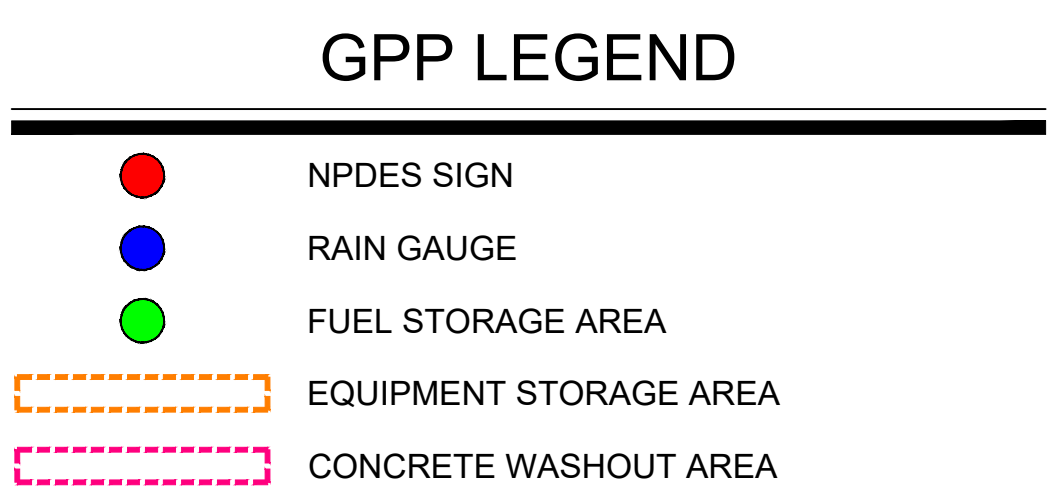
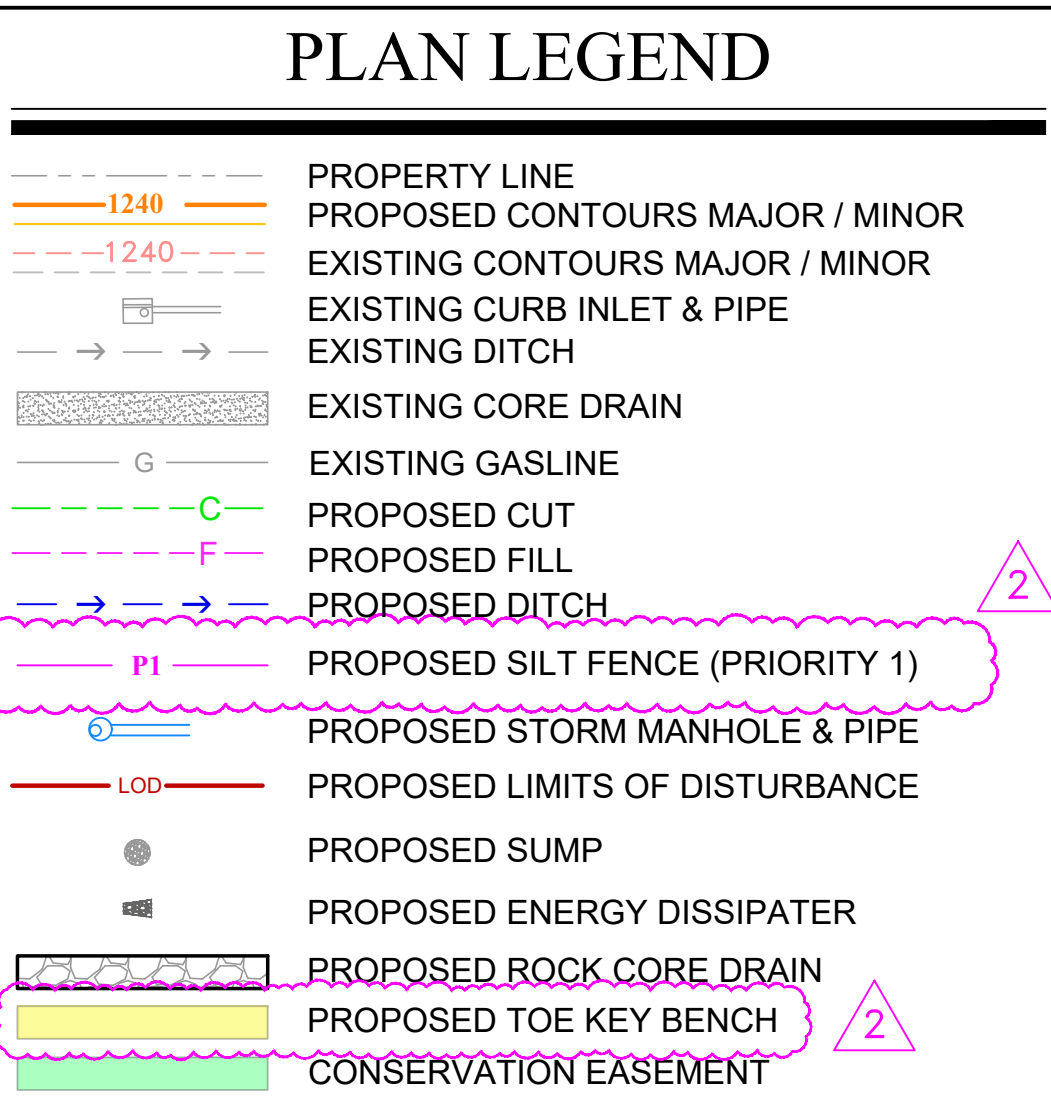
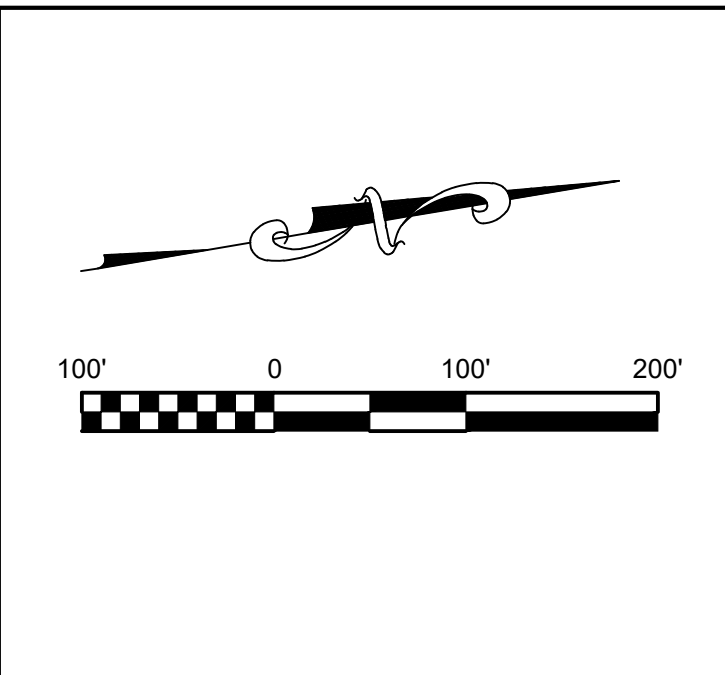
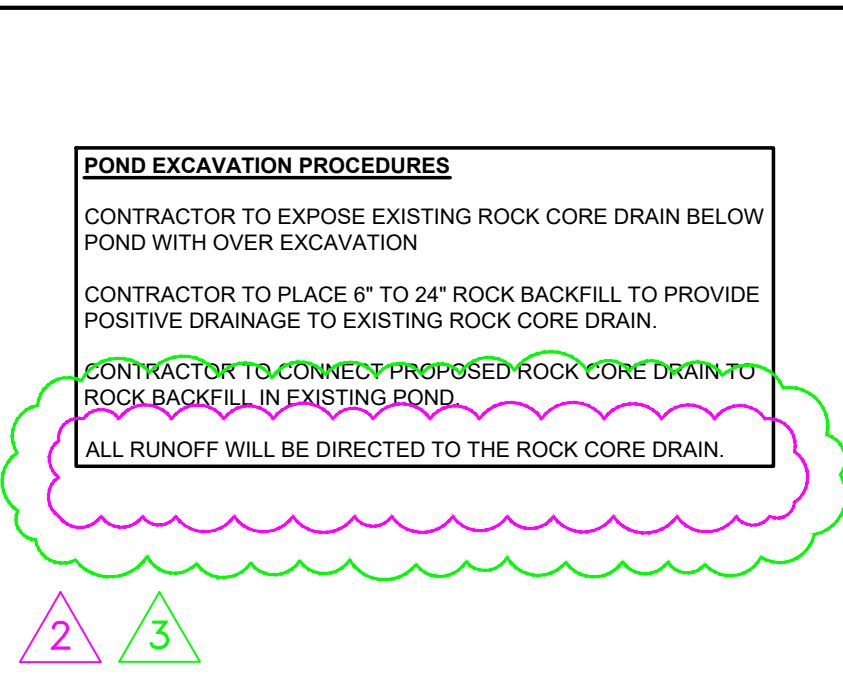
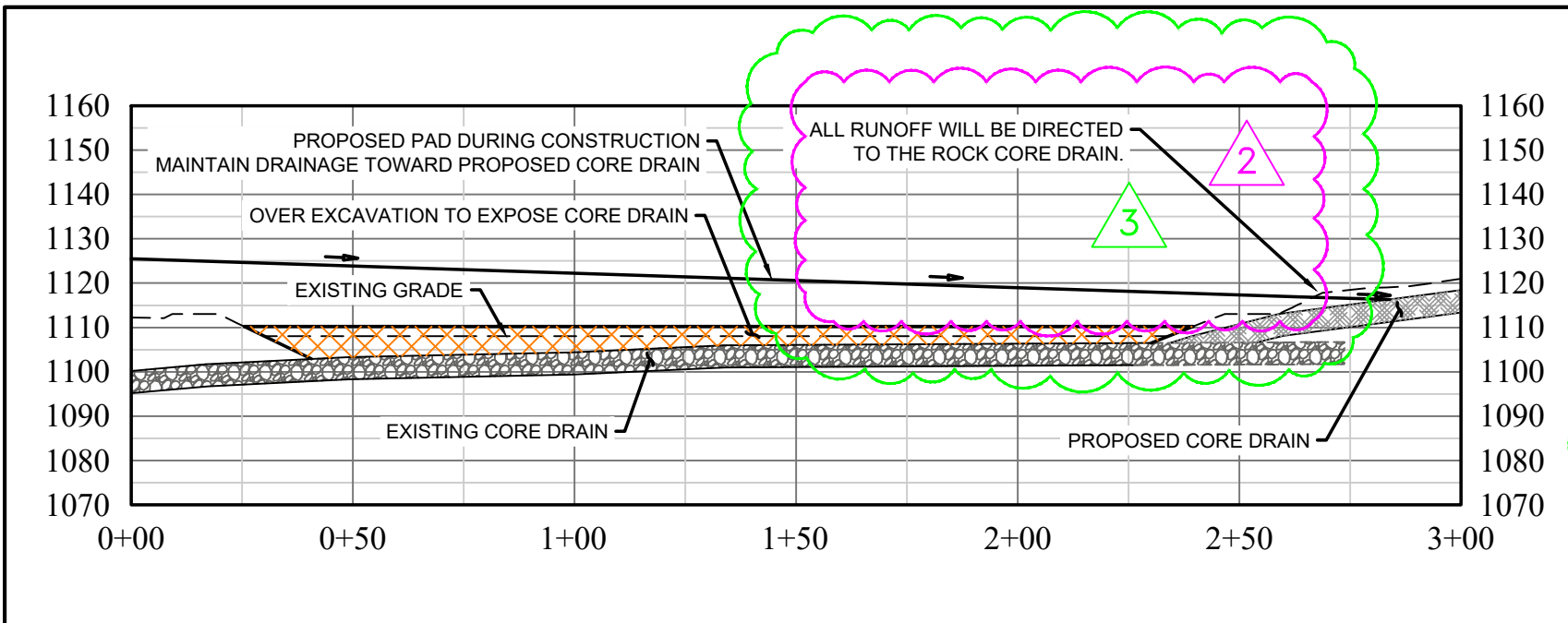
PHASE No.
CONTRACT No.
PROJECT No.
T30-11114

ISSUED FOR BID PLANS FOR
WHITE OAKS BUSINESS PARK
PHASE II A
BRIDGEPORT, WEST VIRGINIA
SUMMARY OF QUANTITIES

SHEET No.
3

PLOT DATE/TIME: 11/2/2022 3:55 PM

LAYOUT TAB: 6 ESC GRADING PLAN -- STAGE 1
CAD FILE: R:\030\030-10341-00-White Oaks Phase II 2021-High Tech Corridor Development, LLC-Drawing\0341-Phase I GRADING PLAN.dwg



LOCATIONS SHOWN FOR FACILITY LOCATIONS ARE THE ENGINEERS BEST ESTIMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF FACILITIES AND ENSURING RUNOFF WILL BE DIRECTED TO A BMP DURING CONSTRUCTION. IF LOCATIONS VARY, THIS PLAN WILL BE REDLINED DURING CONSTRUCTION.

APPROXIMATE STAGE 1 EARTHWORK QTY:

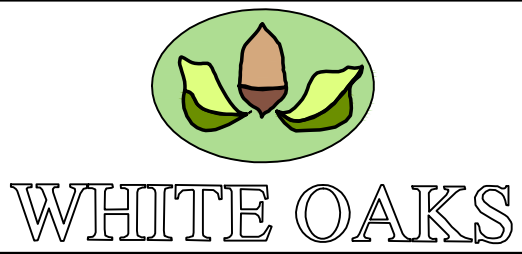
CUT = 7,390 CU YDS
FILL = 545 CU YDS
NET = 6,845 CU YDS (CUT)

STAGE 1 SEQUENCE OF CONSTRUCTION

- LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY WEST VIRGINIA 811 A MINIMUM OF (2) DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION.
- INSTALL BOTH STABILIZED CONSTRUCTION ENTRANCES LOCATED ON WHITE OAKS BLVD AND WILDLIFE LANE AS SHOWN.
- INSTALL PRIORITY 1 SILT FENCE TO MANUFACTURERS SPECIFICATIONS ALONG EDGE OF EXISTING PAD CONTAINING EQUIPMENT STORAGE AREA, FUEL STORAGE AREA, CONCRETE WASHOUT, ETC.
- INSTALL NPDES SIGN AND RAIN GAUGE IN LOCATION AS SHOWN.
- INSTALL TEMPORARY ACCESS ROAD AS SHOWN. THE TEMPORARY ACCESS ROAD WILL CONSIST OF CLEARING AND GRUBBING, INSTALLATION OF GEOTEXTILE AND INSTALLATION OF 3" THICKNES OF 1 1/2" CRUSHER RUN.
- INSTALL SUMPS ALONG WILDLIFE LANE.
- INSTALL PRIORITY 1 SILT FENCE TO MANUFACTURERS SPECIFICATIONS ALONG WILDLIFE LANE AND ALONG THE EXISTING CONSERVATION AREA.
- INSTALL TEMPORARY SEDIMENT TRAP 1
- INSTALL TEMPORARY COLLECTION DITCH 1
- DEWATER THE EXISTING POND THROUGH A WATER FILTER BAG. PLEASE SEE DETAIL SHEET FOR THE INSTALLATION OF THE WATER FILTER BAG. INSTALL SILT FENCE DOWNSLOPE OF DISCHARGE OF WATER FILTER BAG PRIOR TO PUMPING WATER FROM THIS STRUCTURE.
- THE CONTRACTOR IS TO REMOVE THE SATURATED SOILS FROM THE BOTTOM OF THE EXISTING POND. THIS MATERIAL CAN BE PLACED IN AN AREA THAT IS CONTROLLED BY DOWNSLOPE SILT FENCE AND MAY BE UTILIZED FOR BACKFILL FOLLOWING THE GUIDELINES OF THE ENGINEERING FILL PROCEDURES.
- THE CONTRACTOR IS TO EXPOSE EXISTING ROCK CORE DRAIN BELOW POND DURING OVER EXCAVATION PROCEDURES.
- THE CONTRACTOR IS TO PLACE 6" TO 24" ROCK BACKFILL TO PROVIDE POSITIVE DRAINAGE TO EXISTING ROCK CORE DRAIN.
- INSTALL TEMPORARY SEDIMENT TRAP 2
- INSTALL TEMPORARY OUTLET DITCH (ASSOCIATED WITH TRAP 2)
- PROCEED TO STAGE 2

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3	DJW	10/27/22	Remove Compost Filter Sock Trap, Stabilized Construction Entrance Note Added
2	DJW	11/24/22	Added Temporary Collection Ditch 2 and Temporary Sediment Trap 2
2	DJW	10/24/22	Revised Sump To Compost Filter Sock Sediment Trap
2	DJW	10/24/22	Revised Silt Fence To Priority 1 / Sumps Added Along Wildlife Lane
2	DJW	10/24/22	Revised Phase 1 To Represent Construction Of Erosion and Sediment Control Only
1	JCP	10/19/22	Removed silt fence and slope drain, removed sump
NO.	BY	DATE	DESCRIPTION



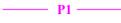
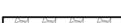
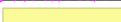
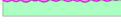
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PHONE (304) 624-4108 • FAX (304) 624-7831

PHASE No.	
CONTRACT No.	
PROJECT No.	
T30-11114	

ISSUED FOR BID PLANS FOR
WHITE OAKS BUSINESS PARK
PHASE II A
BRIDGEPORT, WEST VIRGINIA
ESC GRADING PLAN -- STAGE 1

SHEET No.
6

	PROPERTY LINE
	PROPOSED CONTOURS MAJOR / MINOR
	EXISTING CONTOURS MAJOR / MINOR
	EXISTING CURB INLET & PIPE
	EXISTING DITCH
	EXISTING CORE DRAIN
	EXISTING GASLINE
	PROPOSED CUT
	PROPOSED FILL
	PROPOSED DITCH
	PROPOSED SILT FENCE (PRIORITY 1)
	PROPOSED STORM MANHOLE & PIPE
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED SUMP
	PROPOSED ENERGY DISSIPATER
	PROPOSED ROCK CORE DRAIN
	PROPOSED TOE KEY BENCH
	CONSERVATION EASEMENT

	NPDES SIGN
	RAIN GAUGE
	FUEL STORAGE AREA
	EQUIPMENT STORAGE AREA
	CONCRETE WASHOUT AREA

LOCATIONS SHOWN FOR FACILITY LOCATIONS ARE THE ENGINEERS BEST ESTIMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF FACILITIES AND ENSURING RUNOFF WILL BE DIRECTED TO A BMP DURING CONSTRUCTION. IF LOCATIONS VARY, THIS PLAN WILL BE REDLINED DURING CONSTRUCTION.

CUT = 97,910 CU YDS
FILL = 102,400 CU YDS
NET = 4,490 CU YDS (FILL)

CUT = 90,520 CU YDS
FILL = 101,855 CU YDS
NET = 11,335 CU YDS (FILL)

1. DURING STAGE 1, ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOULD BE INSTALLED, WITH THE EXCEPTION OF TEMPORARY COLLECTION DITCH 2.

2. CLEAR AND GRUBBING PROCEDURES SHALL BEGIN.

3. EXCAVATION PROCEDURES MAY BEGIN.

DURING THE INITIAL EXCAVATION, MATERIAL WILL BE REMOVED FROM THE MATERIAL BORROW AREA AS SHOWN. ALL RUNOFF WITHIN THIS AREA WILL BE DIRECTED TO TEMPORARY SEDIMENT TRAP 1. THE FILL PLACEMENT WILL BE PLACED INSURING POSITIVE DRAINAGE TO THE EXPOSED ROCK CONE DRAIN.

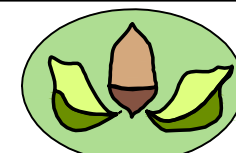
ONCE THE EXCAVATION REACHES THE CONSTRUCTION/EXCAVATION OF THE BENCH SITUATED AT AN APPROXIMATE ELEVATION OF 1140 ABOVE PROPOSED PAD 1, THEN ALL RUNOFF WILL BE DIRECTED ALONG THIS BENCH AND INTO TEMPORARY SEDIMENT TRAP 2 VIA TEMPORARY COLLECTION DITCH 2.

4. INSTALL TEMPORARY COLLECTION DITCH 2.

5. PROCEED TO STAGE 3



3	DJW	10/27/22	Remove Compost Filter Sock Trap, Stabilized Construction Entrance Note Added
2	DJW	10/24/22	Replaced Sump With Compost Filter Sock Sediment Trap
2	DJW	10/24/22	Revised Silt Fence To Priority 1, Added Energy Dissipaters
2	DJW	10/19/22	Added Sumps Within Wildlife Lane Ditchline
1	JCP	10/19/22	Adjusted Sed Trap 1, Revised Earthwork
NO.	BY	DATE	DESCRIPTION



WHITE OAKS

SCALE: AS SHOWN	
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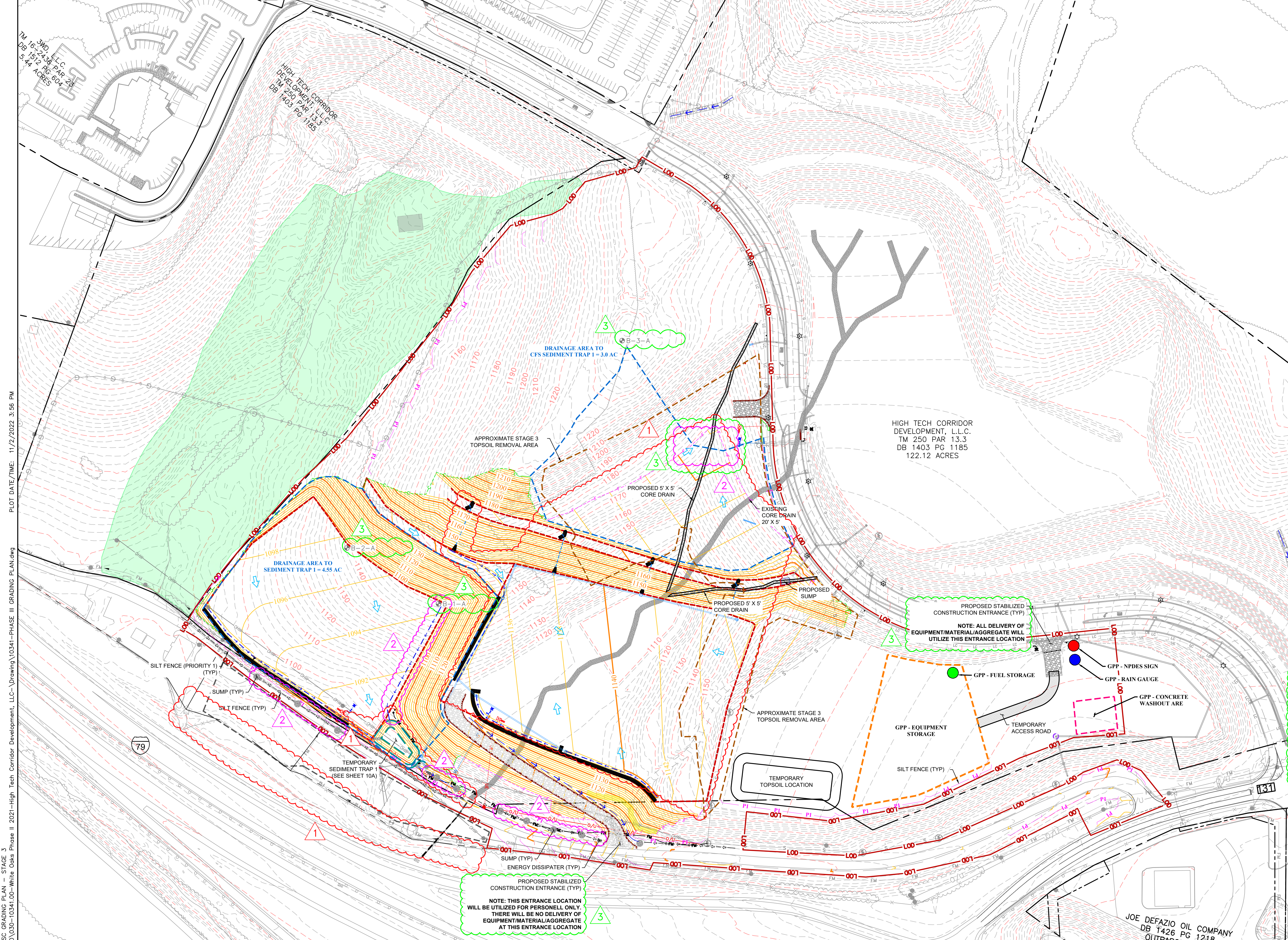
PROJECT No.

T30-11114

ISSUED FOR BID PLANS FOR
WHITE OAKS BUSINESS PARK
PHASE II A
BRIDGEPORT, WEST VIRGINIA
ESC GRADING PLAN - STAGE 2

SHEET No.

7



PLAN LEGEND

- PROPERTY LINE
- PROPOSED CONTOURS MAJOR / MINOR
- EXISTING CONTOURS MAJOR / MINOR
- EXISTING CURB INLET & PIPE
- EXISTING DITCH
- EXISTING CORE DRAIN
- EXISTING GASLINE
- PROPOSED CUT
- PROPOSED FILL
- PROPOSED DITCH
- PROPOSED SILT FENCE (PRIORITY 1)
- PROPOSED STORM MANHOLE & PIPE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED SUMP
- PROPOSED ENERGY DISSIPATER
- PROPOSED ROCK CORE DRAIN
- PROPOSED TOE KEY BENCH
- CONSERVATION EASEMENT

GPP LEGEND

- NPDES SIGN
- RAIN GAUGE
- FUEL STORAGE AREA
- EQUIPMENT STORAGE AREA
- CONCRETE WASHOUT AREA

LOCATIONS SHOWN FOR FACILITY LOCATIONS ARE THE ENGINEERS BEST ESTIMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF FACILITIES AND ENSURING RUNOFF WILL BE DIRECTED TO A BMP DURING CONSTRUCTION. IF LOCATIONS VARY, THIS PLAN WILL BE REDLINED DURING CONSTRUCTION.

APPROXIMATE TOTAL EARTHWORK QTY:

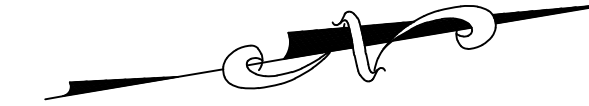
CUT = 215,250 CU YDS
FILL = 222,320 CU YDS
NET = 7,070 YDS (FILL)

APPROXIMATE STAGE 3 EARTHWORK QTY:

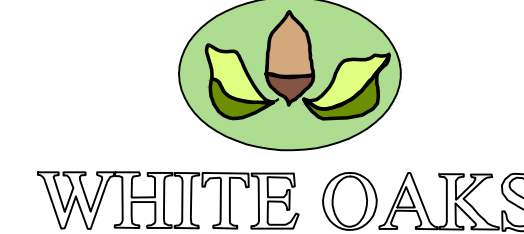
CUT = 117,340 CU YDS
FILL = 119,920 CU YDS
NET = 2,580 CU YDS (FILL)

STAGE 3 SEQUENCE OF CONSTRUCTION

- COMPLETE EXCAVATION/GRADING FOR PROPOSED PAD 1, ENSURING ALL RUNOFF WILL BE DIRECTED TO TEMPORARY SEDIMENT TRAP 1.
- THE PROPOSED PAD 2 WILL BE COMPLETED UTILIZING MATERIAL REMOVED FROM PAD 1. WILL BE PLACED ON PAD 2.
- INSTALL STORWATER STRUCTURES AS SHOWN ON PROPOSED PAD 2.
- COMPLETE GRADING ON PAD THREE. ALL RUNOFF WILL BE DIRECTED TO THE EXPOSED CORE DRAIN.
- PROCEED TO STAGE 4



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2	DJW	10/24/22	Sump Replaced With Temporary Compost Filter Sock Trap	
2	DJW	10/24/22	Added Ditch Along Pad 1, Added Rip Rap Entrance Channel	
2	DJW	10/24/22	Revised Silt Fence To Priority 1, Added Energy Dissipaters	
2	DJW	10/24/22	Added Sumps Within Wildlife Lane Ditchline	
1	JCP	10/19/22	Revised Sed Trap, Fill area, added storm structures, removed SF, Earthwork revised	
NO.	BY	DATE	DESCRIPTION	



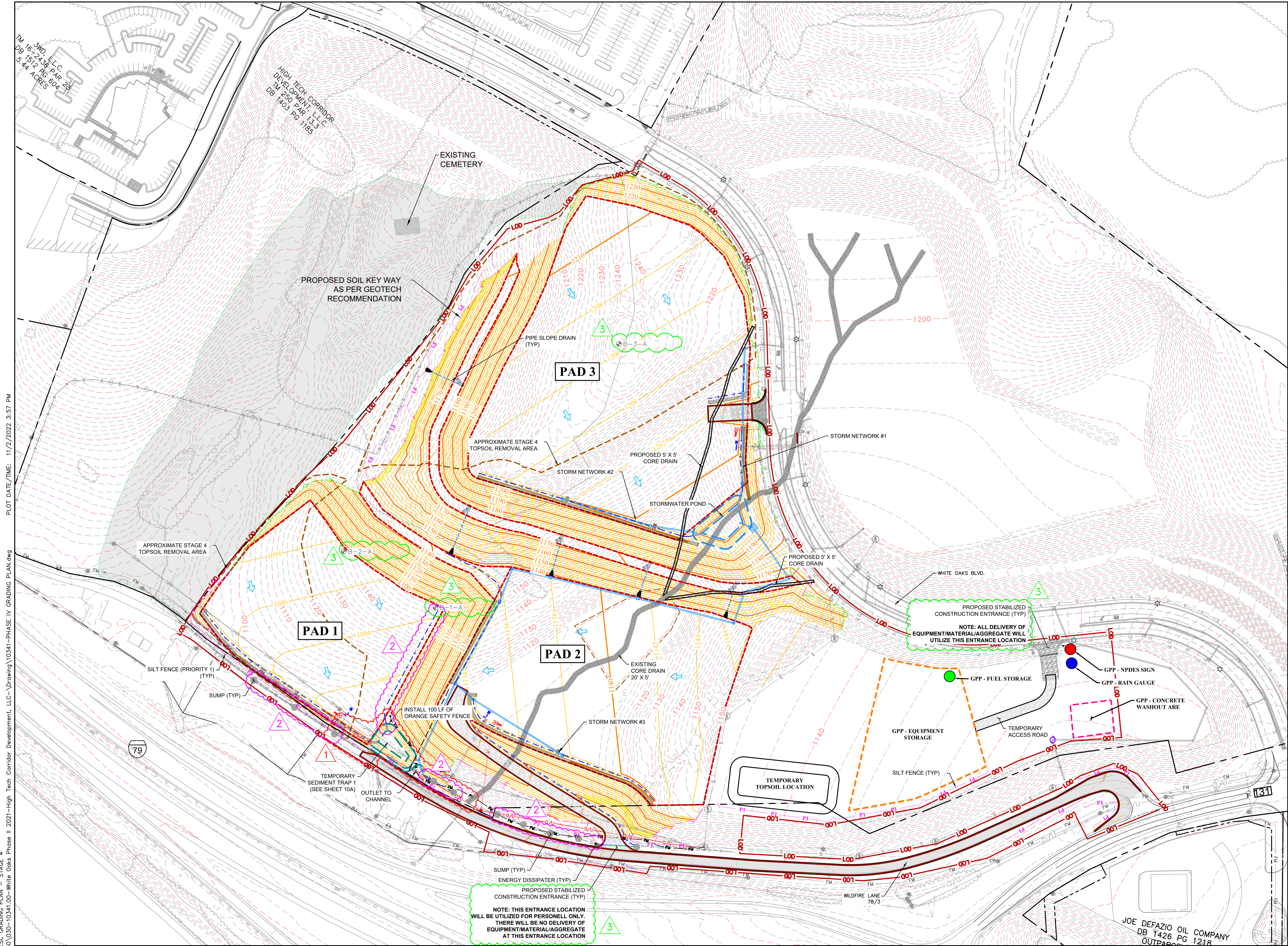
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SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	



PHASE No.
CONTRACT No.
PROJECT No.
T30-11114

ISSUED FOR BID PLANS FOR
WHITE OAKS BUSINESS PARK
PHASE II A
BRIDGEPORT, WEST VIRGINIA
ESC GRADING PLAN - STAGE 3

SHEET No.
8



PLAN LEGEND

- PROPERTY LINE
- PROPOSED CONTOURS MAJOR / MINOR
- EXISTING CONTOURS MAJOR / MINOR
- EXISTING CURB INLET & PIPE
- EXISTING DITCH
- EXISTING CORE DRAIN
- EXISTING GASLINE
- PROPOSED CUT
- PROPOSED FILL
- PROPOSED DITCH
- PROPOSED SILT FENCE (PRIORITY 1)
- PROPOSED STORM MANHOLE & PIPE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED SUMP
- PROPOSED ENERGY DISSIPATER
- PROPOSED ROCK CORE DRAIN
- PROPOSED TOE KEY BENCH
- CONSERVATION EASEMENT

GPP LEGEND

- NPDES SIGN
- RAIN GAUGE
- FUEL STORAGE AREA
- EQUIPMENT STORAGE AREA
- CONCRETE WASHOUT AREA

LOCATIONS SHOWN FOR FACILITY LOCATIONS ARE THE ENGINEERS BEST ESTIMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF FACILITIES AND ENSURING RUNOFF WILL BE DIRECTED TO A BMP DURING CONSTRUCTION. IF LOCATIONS VARY, THIS PLAN WILL BE REDLINED DURING CONSTRUCTION.

APPROXIMATE TOTAL EARTHWORK QTY:

CUT = 351,100 CU YDS
FILL = 345,340 CU YDS
NET = 5,760 CU YDS (CUT)

APPROXIMATE STAGE 4 EARTHWORK QTY:

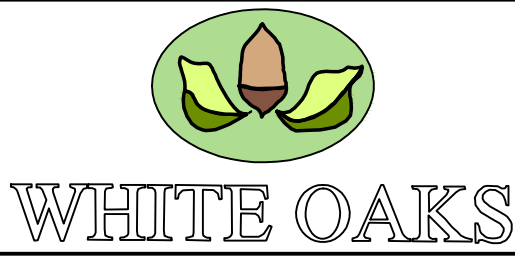
CUT = 135,850 CU YDS
FILL = 128,830 CU YDS
NET = 7,020 CU YDS (CUT)

STAGE 4 SEQUENCE OF CONSTRUCTION

- STAGE 4 REPRESENTS THE FINAL GRADES PROPOSED FOR THIS PROJECT.
- INSTALL ALL SLOPE PIPES.
- INSTALL PROPOSED STORMWATER AND SANITARY SEWER STRUCTURES.
- SEED MULCH AND STABILIZE ALL DISTURBED AREAS.
- TEMPORARY SEDIMENT TRAP 1 WILL REMAIN IN PLACE. PLEASE SEE ITEM 5.
- REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AFTER 70% GROWTH HAS BEEN ESTABLISHED OVER THE ENTIRE SITE.
- COMPLETE PROJECT CLEANUP

LAYOUT TAB: 9 ESC GRADING PLAN - STAGE 4
CAD FILE: R:\030\030-10341-00-White Oaks Phase II 2021-High Tech Corridor Development, LLC-Drawing\03041-Phase II GRADING PLAN.dwg
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3	DJW	10/27/22	Stabilized Construction Entrance Note Added	
2	DJW	10/24/22	Added Ditch Along Pad 1, Added Rip Rap Entrance Channel	
2	DJW	10/24/22	Revised Silt Fence To Priority 1, Added Energy Dissipaters	
2	DJW	10/24/22	Added Sumps Within Wildlife Lane Ditchline	
1	JCP	10/19/22	Revised Sed trap, Pad 1 entrance, Wildlife Ln Pavement. Earthwork	
NO.	BY	DATE	DESCRIPTION	



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SURVEY BY:	
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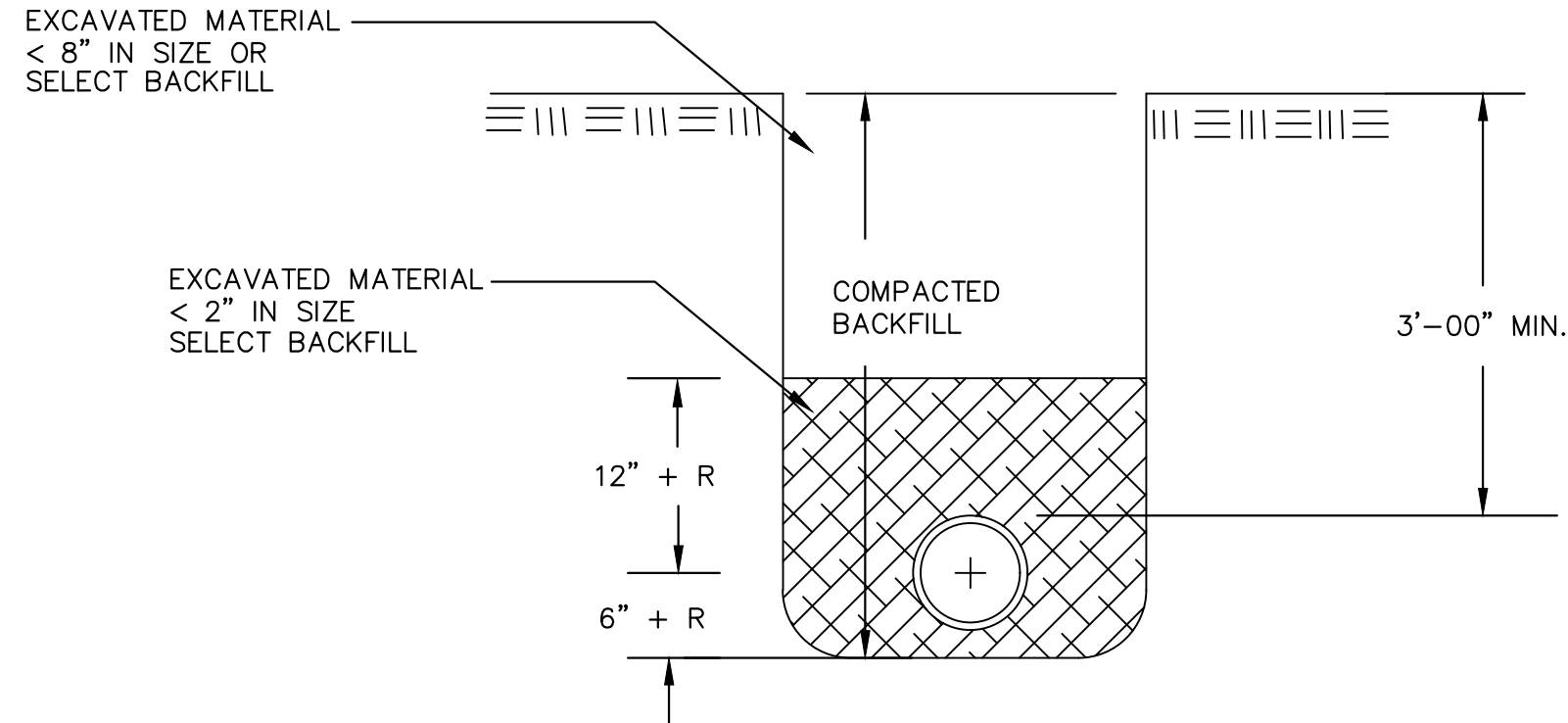
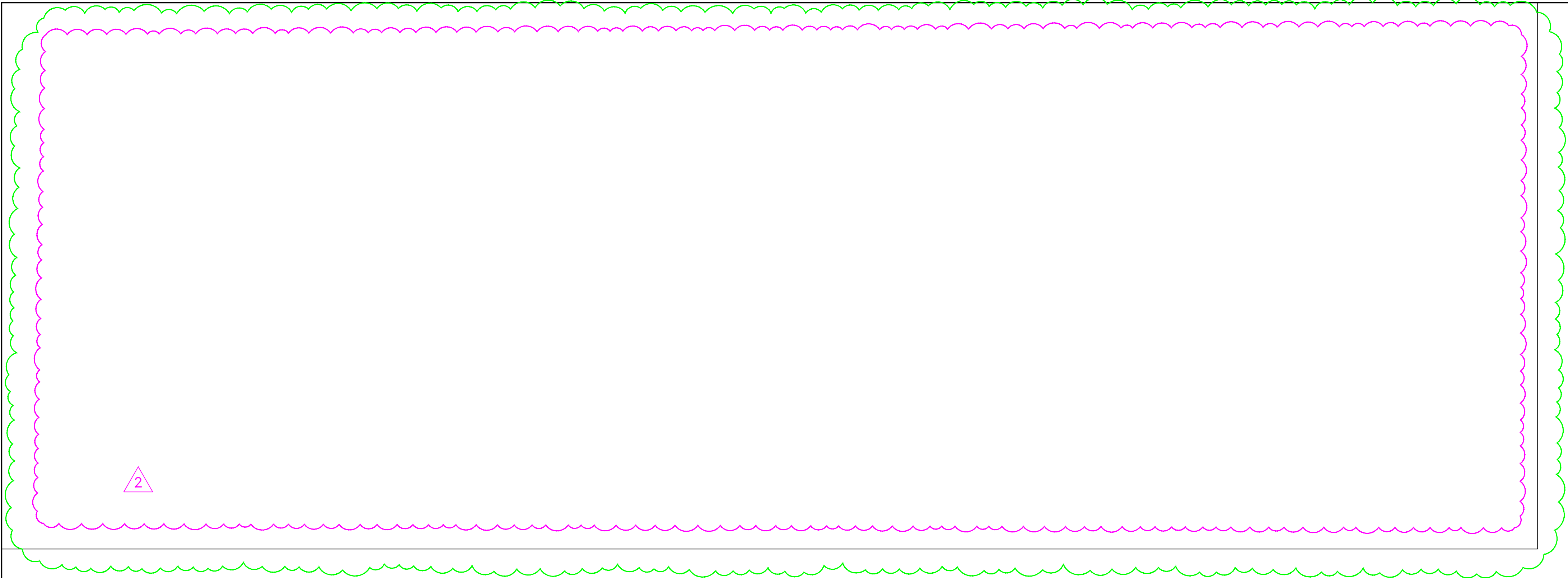
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PHASE No.
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PROJECT No.
T30-11114

ISSUED FOR BID PLANS FOR
WHITE OAKS BUSINESS PARK
PHASE II A
BRIDGEPORT, WEST VIRGINIA
ESC GRADING PLAN - STAGE 4

SHEET No.
9

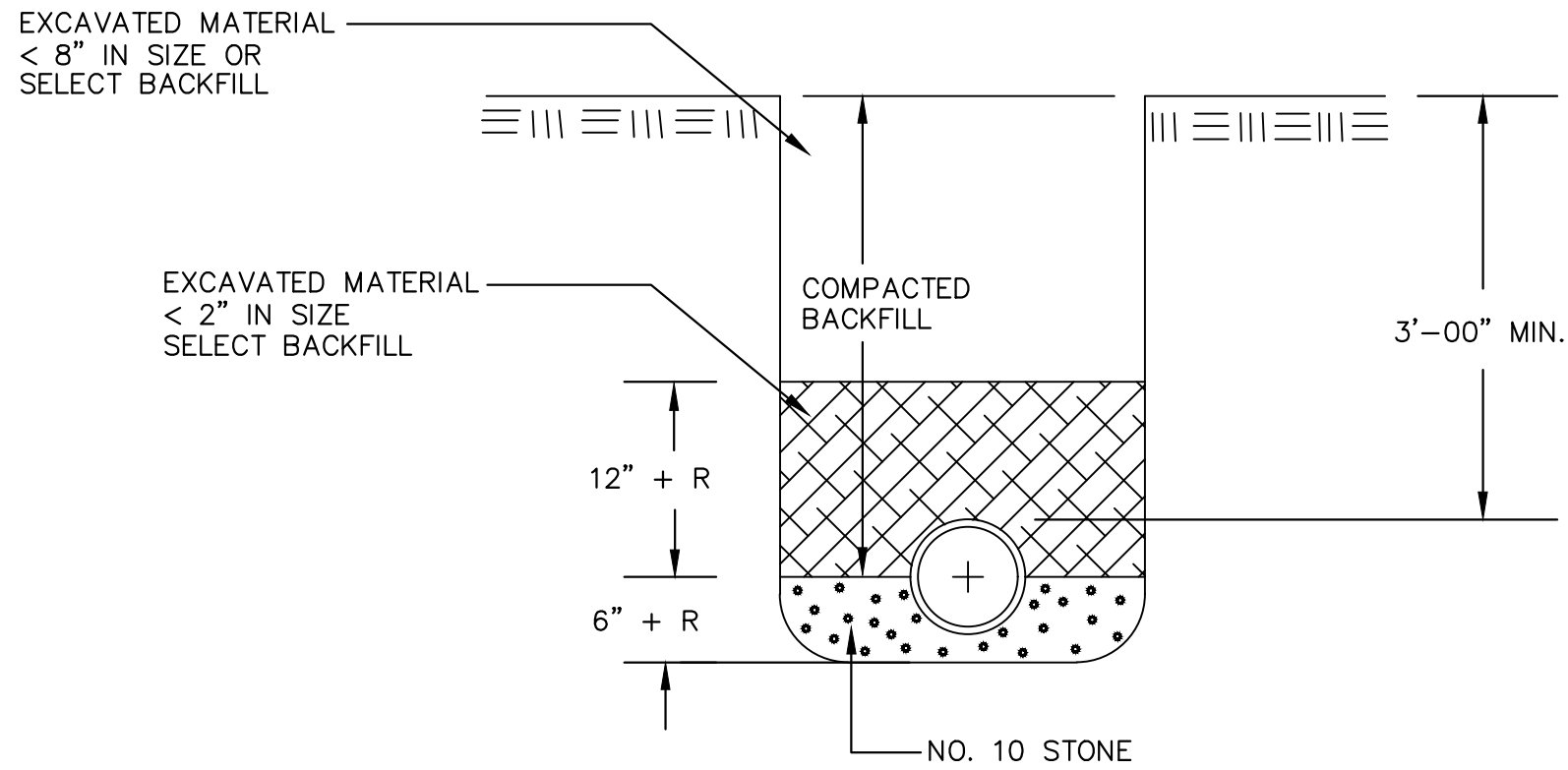
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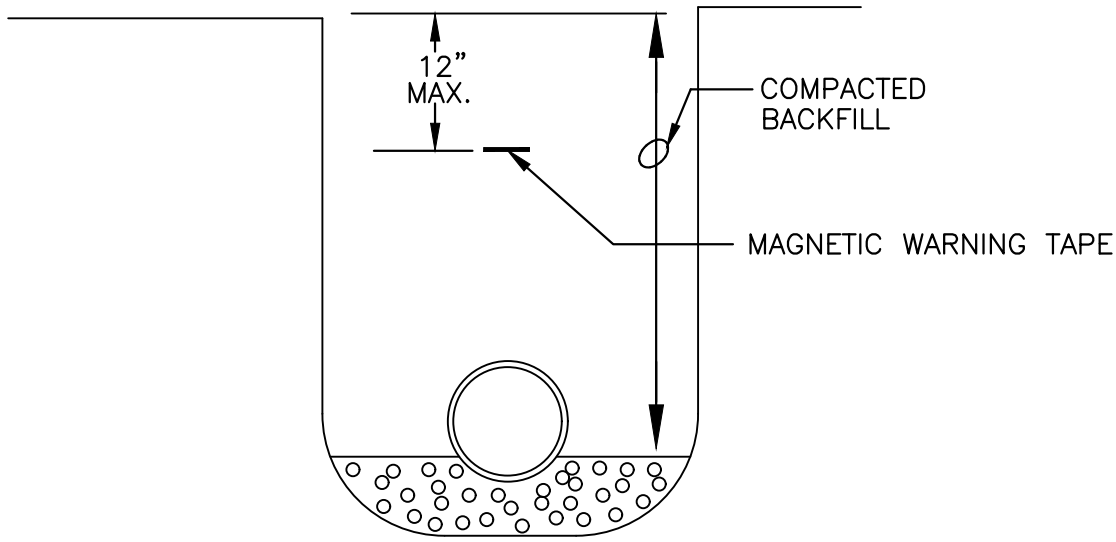
**BEDDING FOR
GAS SLEEVE**

RED	ELECTRIC
YELLOW	GAS - OIL
ORANGE	TELEPHONE
BLUE	WATER
GREEN	SEWER

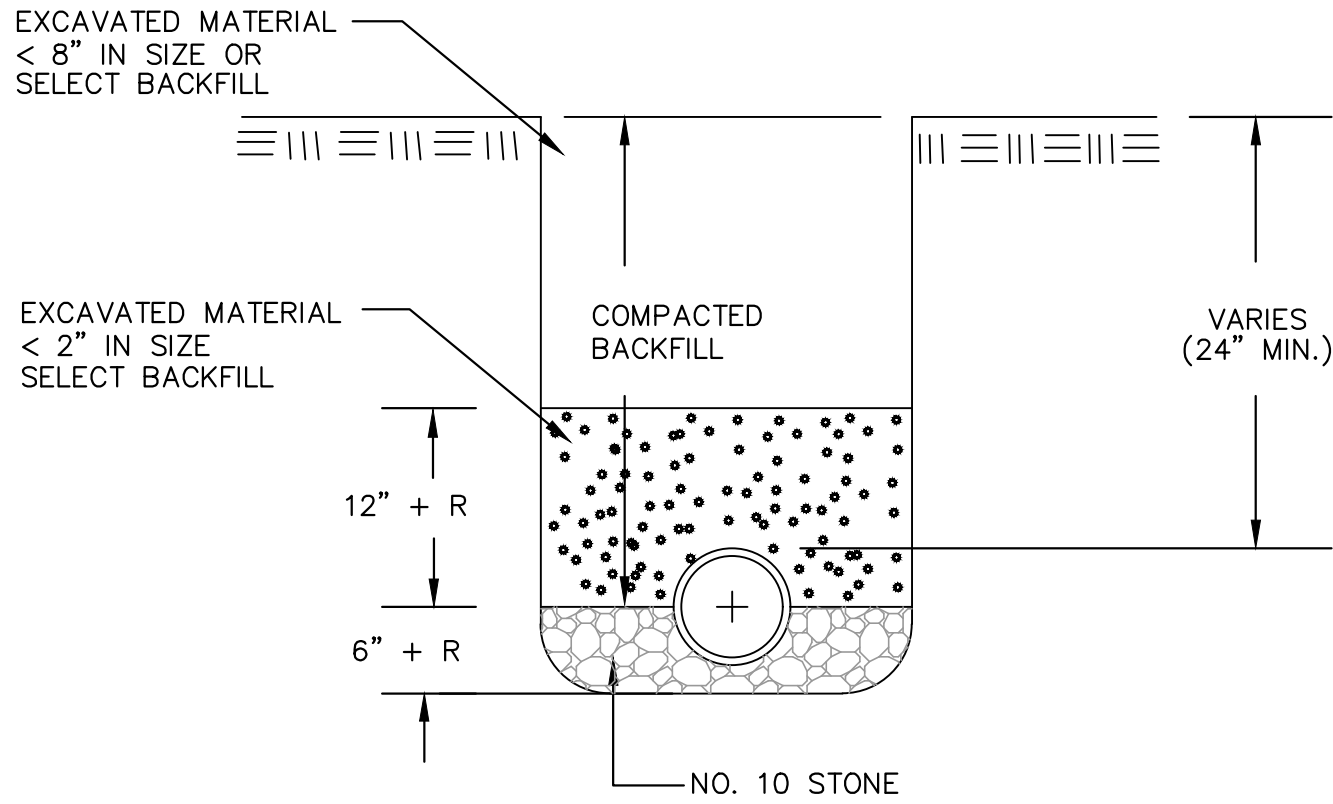
**COLOR CODES FOR UTILITY LOCATING MAGNETIC
WARNING TAPE**



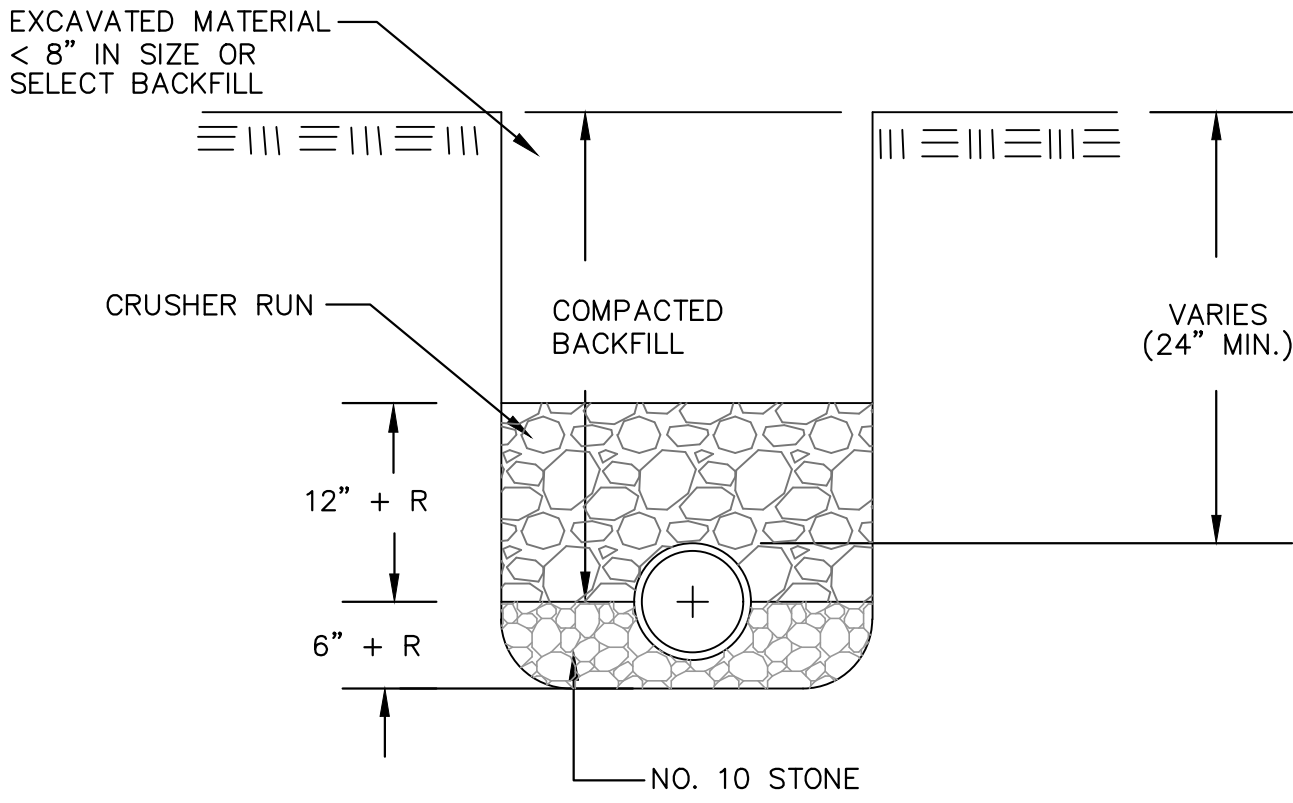
**BEDDING FOR
SEWER SLEEVE**



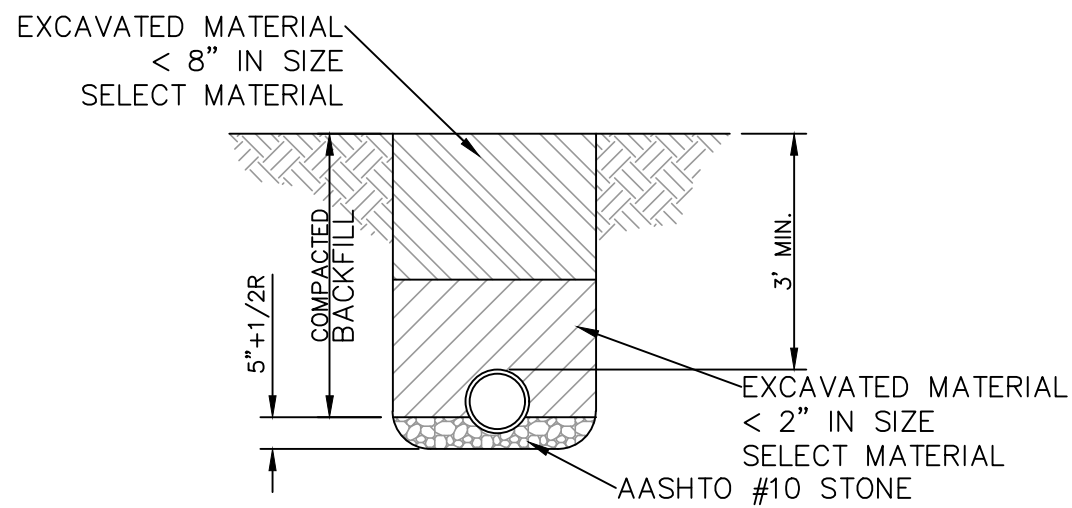
UTILITY MAGNETIC WARNING TAPE



**BEDDING FOR
TYPICAL STORM SEWER PIPE**

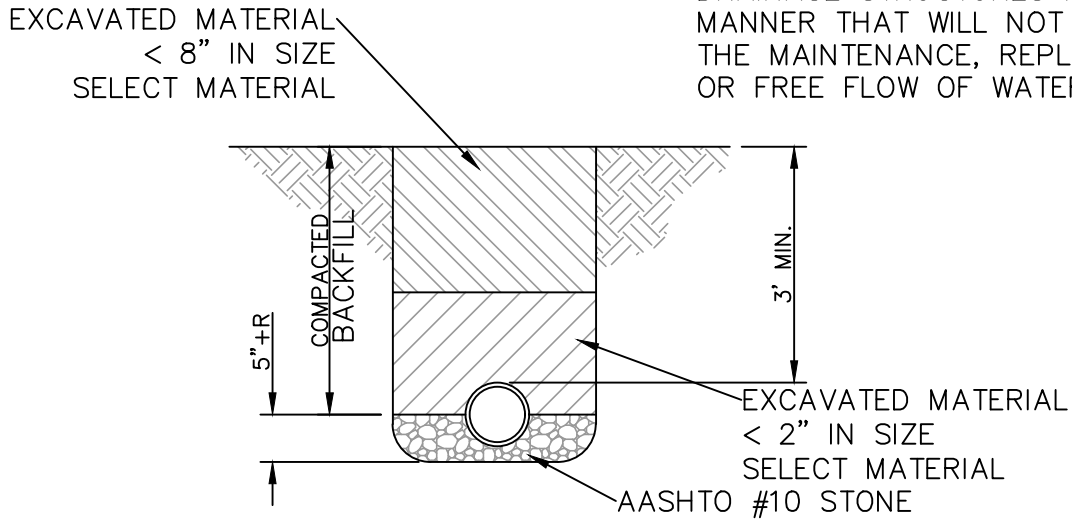


**BEDDING FOR
10FT DEEP STORM SEWER PIPE**



BEDDING FOR RIGID PIPE

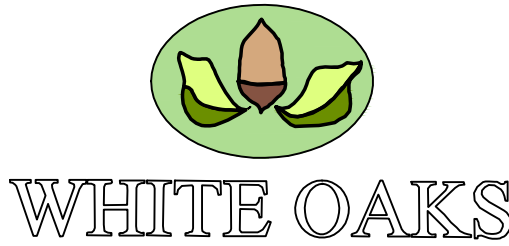
NOTE: ALL LINES AND/OR CASINGS SHALL BE INSTALLED UNDER OR AROUND DRAINAGE STRUCTURES IN A MANNER THAT WILL NOT OBSTRUCT THE MAINTENANCE, REPLACEMENT, OR FREE FLOW OF WATER.



BEDDING FOR NON-RIGID PIPE

**TYPICAL WATER PIPE CROSS SECTION OF TRENCHES
NOT TO SCALE**

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3	DJW	10/27/22	Compost Filter Sock Sediment Trap Detail Removed	
2	JCP	10/26/22	Added detail	
1	JCP	10/20/22	moved details	
NO.	BY	DATE	DESCRIPTION	



SCALE: AS SHOWN	
DRAWN:	DATE:
CHECKED:	DATE:
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	



PHASE No.
CONTRACT No.
PROJECT No.
T30-11114

ISSUED FOR BID PLANS FOR
WHITE OAKS BUSINESS PARK
PHASE II A
BRIDGEPORT, WEST VIRGINIA
DETAILS

SHEET No.
61