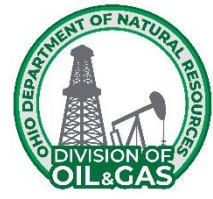




SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelias Township



PROJECT DESCRIPTION

FEDERAL FUNDED PROJECT:

Note: This project will be FEDERALLY FUNDED. Contractors/subcontractors shall comply with additional requirements related to this project being federally funded.

The Washington #23F project shall include the following wells:

Well Name	API Number	County	Township	<u>Ingress/Egress</u> <u>Latitude, Longitude</u>	<u>Wellhead Latitude,</u> <u>Longitude</u>
Blank	34167604830000	Washington	Aurelius	39.608237, -81.419846	39.605697, -81.420203
Dutton, Archibald #1D	34167666880000	Washington	Aurelius	39.607650, -81.420818	39.608710, -81.422731
Dutton, Archibald #3D	34167666920000	Washington	Aurelius	39.609636, -81.427120	39.607805, -81.426459
Dutton, Archibald #4D	34167666910000	Washington	Aurelius	39.609636, -81.427120	39.607144, -81.425891
Dutton, Archibald #5D	34167666900000	Washington	Aurelius	39.609636, -81.427120	39.605529, -81.425528
Dutton, Archibald #6D	34167219540000	Washington	Aurelius	39.609636, -81.427120	39.605111, -81.423430
Dutton, Archibald #7D	34167610010000	Washington	Aurelius	39.607990, -81.423066	39.605647, -81.421358
Kuntz #1	34167666970000	Washington	Aurelius	39.609636, -81.427120	39.605152, -81.426481
Mckendry, JE & C #4	34167605190000	Washington	Aurelius	39.605034, -81.443634	39.603014, -81.444170
Mckendry, JE& C #3	34167605180000	Washington	Aurelius	39.605034, -81.443634	39.602447, -81.444727
Mckendry, JE& C #5	34167605200000	Washington	Aurelius	39.605034, -81.443634	39.603735, -81.443788
Mckendry, JE& C #6	34167605220000	Washington	Aurelius	39.605034, -81.443634	39.604228, -81.443585
Spies #2	34167662570000	Washington	Aurelius	39.607990, -81.423066	39.608038, -81.424246
Spies #3	34167662560000	Washington	Aurelius	39.608237, -81.419846	39.608113, -81.420140
Stephens #4	34167665020000	Washington	Aurelius	39.609636, -81.427120	39.606641, -81.426444
Stephens, FA #3	34167604780000	Washington	Aurelius	39.607567, -81.420747	39.607500, -81.420727
Stephens, FA Heirs #1	34167659840000	Washington	Aurelius	39.608237, -81.419846	39.606642, -81.420570
Stephens, FA Heirs #2	34167604840000	Washington	Aurelius	39.608237, -81.419846	39.605989, -81.420715
Stephens, Francis #3D	34167666930000	Washington	Aurelius	39.609636, -81.427120	39.608122, -81.427208
Stephens, Francis A #1	34167604750000	Washington	Aurelius	39.607517, -81.421123	39.608177, -81.422255

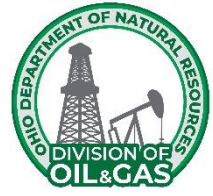
Stephens, Francis A #1	34167203760000	Washington	Aurelius	39.609636, -81.427120	39.605686, -81.425471
Stephens, Francis A #1	34167604320000	Washington	Aurelius	39.609636, -81.427120	39.604433, -81.423796
Stephens, Francis A #16	34167604800000	Washington	Aurelius	39.607567, -81.420747	39.606998, -81.421877
Stephens, Francis A #17	34167604370000	Washington	Aurelius	39.607990, -81.423066	39.605802, -81.422344
Stephens, Francis A #2	34167203960000	Washington	Aurelius	39.609636, -81.427120	39.607849, -81.425583
Stephens, Francis A #2	34167604760000	Washington	Aurelius	39.608457, -81.420874	39.608023, -81.420819
Stephens, Francis A #21	34167604310000	Washington	Aurelius	39.609636, -81.427120	39.604780, -81.424581
Stephens, Francis A #22	34167604790000	Washington	Aurelius	39.607650, -81.420818	39.608223, -81.421751
Stephens, Francis A #23	34167604380000	Washington	Aurelius	39.607990, -81.423066	39.606441, -81.423670
Stephens, Francis A #3	34167604820000	Washington	Aurelius	39.607567, -81.420747	39.607314, -81.421360
Stephens Francis A 4	34167604390000	Washington	Aurelius	39.607990, -81.423066	39.607856, -81.423338
Stephens, Francis A #4	34167204810000	Washington	Aurelius	39.609636, -81.427120	39.605726, -81.427545
Stephens, Francis A #5	34167604400000	Washington	Aurelius	39.608011, -81.423011	39.608453, -81.423741
Ward #13	34167662550000	Washington	Aurelius	39.608536, -81.421402	39.608554, -81.421484
Ward JF #12	34167202090000	Washington	Aurelius	39.608536, -81.421402	39.608742, -81.422168

PROJECT SCOPE OF WORK:

This project includes mobilization, access and well site development, drilling or cleaning out of and plugging of the above thirty-five Orphan Wells, storage and disposal of all materials generated during the plugging of the wells, decommissioning, removal, storage and disposal of all casing, tubing, well and production equipment and affiliated lines and restoration of all areas disturbed during this project.



SCOPE OF WORK
Washington 23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



GENERAL SCOPE OF WORK

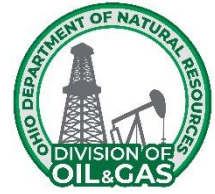
The Contractor, the Contractor's agents, representatives, and subcontractors shall perform this Plugging Project in accordance with Ohio Revised Code 1509, Ohio Administrative Code Chap. 1501:9-11 and 1501:9-12, the Agreement, and in accordance with the following documents that are attached hereto and made a part hereof:

1. Project Description;
2. General Scope of Work;
3. Davis-Bacon Wage Requirements;
4. General Conditions;
5. General Specifications;
6. Sequence of Work;
7. Well Description;
8. Plugging Plan;
9. Detailed Specifications;
10. Appendix I – Ohio One-Call;
11. Appendix II – Well Records;
12. Quantity Sheet;
13. & Drawing Plan Set;
14. Davis Bacon Wage Determination.

Subject to the Contractor's compliance with this Scope of Work, Contractor is solely responsible for and has control over all plugging and reclamation construction means, methods, manners, techniques, sequences, and procedures, for safety precautions and programs in connection with the Plugging Project, and for coordinating all portions of the Plugging Project.



SCOPE OF WORK
Washington 23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



GENERAL CONDITIONS

PART 1: OHIO DEPARTMENT OF TRANSPORTATION SPECIFICATIONS

This Washington 23F Project (Project) references the Ohio Department of Transportation (ODOT) Construction and Material Specifications (ODOT CMS). Any reference to these specifications is to ODOT's most current version of the specifications. The ODOT CMS can be found at:
<https://www.dot.state.oh.us/Divisions/ConstructionMgt/OnlineDocs/Pages/2023-Online-Spec-Book.aspx>

PART 2: PRE-SITE MEETING

The Contractor or a Contractor's representative must attend the pre-site meeting. A contractor representative may only be a representative for one DAS pre-qualified contractor on a project.

Failure to attend the pre-site meeting is grounds for the Division to reject the Contractor's Offer. A Contractor or Contractor's representative must be present for the entire pre-site meeting to be considered in attendance.

The Ohio Department of Natural Resources, Division of Oil & Gas Resources Management (Division) intends to begin the pre-site meeting on time. At the meeting, the Division will circulate and collect attendance sign-in forms to all contractors or contractors' representatives present. Only those contractors or contractors' representatives in attendance throughout the pre-site meeting, including the discussion of the Scope of Work, will be considered present for the pre-site meeting.

PART 3: MODIFICATIONS TO THE SCOPE OF WORK PRIOR TO AWARD

The Scope of Work may only be altered by written modification. The Division may issue an Amendment to the Scope of Work and will provide notification of the Amendment by email to all Department of Administrative Services (DAS) pre-qualified Contractors. Each Contractor is responsible for logging into OhioBuys and submitting an offer that is responsive to all Amendments issued. All offers submitted prior to an Amendment being issued shall become null/void and not be considered in the opening. All Amendments shall become part of the Scope of Work.

Any interpretation or clarification of the Scope of Work made by any person other than the Division, or in any manner other than a written Amendment, is not binding and the Contractor cannot rely upon any such interpretation or clarification.

The Contractor cannot, at any time after the award of the Scope of Work, be compensated for any issue with the Scope of Work, including alleging insufficient data, incomplete, ambiguous, conflicting, or erroneous language, or incorrectly assumed conditions regarding the nature or character of the work.

PART 4: PERMIT AND INSPECTION REQUIREMENTS

The Division will obtain and pay for all building and U.S. Army Corps of Engineers permits unless otherwise specified in the Detailed Specifications. However, the Contractor shall determine and include in the Contractor's Offer Sheet the costs required to obtain and pay for all other requirements by the applicable governmental agencies; including but not limited to, all certificates of inspection/operation, guarantees, licenses, etc. required to complete the work as described within this document. The contractor shall follow all applicable laws and permit requirements, the Division will not be held responsible for damages that result from violation of laws or permits.

PART 5: INSTRUCTIONS FOR PREPARING AN OFFER

A Contractor's offer must be submitted online through **OhioBuys**. (<https://procure.ohio.gov/bidders-and-suppliers>). **All offers submitted prior to an Amendment being issued shall automatically become null/void and not be considered in the opening.**

Offers shall include labor, equipment, and material cost plus a proportionate share of the Contractor's overhead costs, other indirect costs, and anticipated profit. The offer must be mathematically and materially balanced. A "mathematically unbalanced offer" is an offer containing lump sum or unit price items that do not include reasonable labor, equipment, and material costs plus a reasonable proportionate share of the Contractor's overhead costs, other indirect costs, and anticipated profit. A mathematically unbalanced offer typically contains token prices (i.e. \$1 prices), front loadings, or prices with large variations from the engineer's estimate. A "materially unbalanced offer" is a mathematically unbalanced offer that will not result in the lowest ultimate cost to the Division.

During the Division's initial review of offers, if the Division finds an offer may be mathematically unbalanced, the Contractor may be required to submit proof of the mathematically unbalanced line items' proposed cost within 24 hours after notification from the Division. At a minimum, a Contractor may be required to submit copies of all material/rental quotes, intended labor costs (hours/rates), and contract agreements with subcontractors to support their offer. If the Contractor fails to submit the required proof, the Contractor's offer shall be deemed withdrawn from consideration. The Division shall evaluate the documentation and may verify quotes with vendors. After a review of the documentation, the Division will reject any offer it determines is mathematically and materially unbalanced.

A DAS pre-qualified Contractor shall not submit offers on a project in which the contractor has committed as a subcontractor, who will perform more than 50 percent of the project as a subcontractor, to another DAS pre-qualified Contractor submitting an offer on the same project. Any DAS pre-qualified Contractor who submits an offer and will not self-perform more than 50 percent of the work shall self-report to the Project Engineer in writing prior to award the project's subcontractors and each subcontractor's percent award of the project. Any DAS pre-qualified Contractor who submits an offer shall supply upon request to the Project Engineer the project's subcontractors and each subcontractor's percent award of the project. Substitution of subcontractors after award shall be per the DAS contract. A DAS pre-qualified Contractor who will perform more than 50 percent of the work on a project as a subcontractor will have this project considered when reviewing whether the Contractor is behind schedule for awarding work. Additionally, when the Division is considering if a Contractor is behind schedule, all Orphan Well Program work and deadlines will be considered (Construction Manager at Risk subconsultant work and Landowner Pass-through Payment Program).

A Contractor shall maintain an up-to-date schedule on file with the Division that sets forth dates by which the Contractor will plug each well that the Division previously awarded to the Contractor. A Contractor

shall update their work schedule as often as necessary to maintain a current schedule with the Division. To be awarded new contracts, the Contractor must be able to complete all previously awarded work within the due dates set in each contract with the Division. Upon request, a Contractor shall provide an up-to-date schedule to the Division that reflects when all awarded work will be completed.

Please note that a Contractor's offer must be submitted online through OhioBuys.

1. Refer to the Scope of Work posted in OhioBuys with this solicitation.
2. **Only Contractors who are pre-qualified to offer this service on an existing State Contract beginning with CSP900-922 (DAS Index No. MAC110) may respond to this solicitation.** All CSP900922 Contract Terms & Conditions apply to this solicitation. No additional terms and conditions will be accepted. The Division will reject Offers from any Contractor that is not pre-qualified.
3. Completion of the grid is required and will be considered the response for evaluation. No outside or additional documentation will be considered.
4. Fixed prices will be automatically added to Contractor's proposals when shown. Contractors are not to enter pricing for fixed price items.
5. Confirm that your offer has been successfully imported into OhioBuys for all items before submitting. Incomplete offers and/or attachments will not be evaluated.
6. The most recent offer submitted in OhioBuys will be the offer that is evaluated, all prior offers submitted in the same solicitation will not be evaluated.
7. **The Contractor or Contractor's representative must attend the pre-site meeting.** Failure to attend the site meeting is grounds for the Division to reject the Contractor's Offer.

PART 6: DIVISION'S OFFER SELECTION

Except when the Division rejects an offer, the Division will select the lowest offer submitted to the Division. The Division may reject an offer if any one of the following applies to the Contractor's offer:

- Is not submitted online through **OhioBuys**;
- Fixed reference prices and/or any other imported information is incorrectly and/or not imported into **OhioBuys**;
- Is conditional;
- Is a mathematically unbalanced offer and a materially unbalanced offer;
- Is behind schedule on other projects with the Division;
- Is not able to schedule this project within the contract due dates.
- Is committed to perform more than 50 percent of the work on this project as a subcontractor to another DAS pre-qualified Contractor on the project;
- Is a prime Contractor who has more than 50 percent of the work committed by a subcontractor who also submitted an offer as prime Contractor; or
- Failed to identify prior to award project subcontractors and their percent award upon request.

PART 7: WITHDRAW OF OFFERS

At any time prior to the opening of the Offers, a Contractor may submit a written request to the Division, at the location where the Offers are received, to withdraw its Offer. The request to withdraw the Offer must be signed by the person who executed the Offer.

PART 8: EFFECTIVE DATE AND TERM

The effective date of this Project is the date of the Letter to Proceed that is sent to the Contractor. The Contractor must start work at the project site within three (3) months of the end of the contract and the Contractor shall continue diligently working toward the completion of the project once work has commenced. The Project must be completed **two (2) years after the effective date** or by June 30, 2028, whichever is sooner. If the Project terminates on June 30, 2028 and the Project is not completed, the Scope of Work may be renewed on the same terms if the Division sends written notice to the Contractor. Failure to complete work by the contract due dates may result in the suspension or termination of the contract and may result in the Division pursuing the Suspension and Termination and/or the Contract Remedies sections defined in the MAC 110 contract.

PART 9: TERMINATION AT WILL

The Division may terminate this Scope of Work without cause. Any payment due to the Contractor at the time of termination by the Division shall be paid to the Contractor on a pro rata basis.

PART 10: RELATIONSHIP BETWEEN COMPONENTS OF THE SCOPE OF WORK

This Scope of Work includes drawings that are duplicates of drawings on file with the Division. The Scope of Work documents are complementary. All sections of the Scope of Work are binding. The titles and headings in the Scope of Work are for reference and in no way affect the interpretation of the provisions of the Scope of Work. Further, if any part of this Scope of Work is found to be unenforceable, no such event will affect the enforceability or applicability of any other part of the Scope of Work.

If a conflict between the drawings and the specifications arises, the Contractor must notify the Division. In the event of a conflict of any provision in the Scope of Work the order of priority within the Scope of Work is as follows: Drawings, Detailed Specifications, General Specifications, Plugging Plan, and Sequence of Work.

PART 11: CONTRACTOR'S RESPONSIBILITY FOR SUBCONTRACTORS

The Contractor is responsible for the conduct of its subcontractors and for persons its subcontractors directly or indirectly employ.

PART 12: USE OF DOMESTIC STEEL AND BUY AMERICAN ACT (For Federally Funded Projects only)

For infrastructure projects that utilize federal funds, the contractor and subcontractors shall comply with Executive Order No. 14005 Ensuring the Future Is Made in All of America by All of America's Workers; the Code of Federal Regulations Title 2, Subtitle A, Chapter I, Part 184; U.S.C. 52.225-11 Buy American-Construction Materials under Trade Agreements (Nov 2023) clause; and Buy America Preferences for Infrastructure Projects and the Infrastructure and Jobs Act (Public Law 117-58) Division D, Title IX, Subtitle A, Part I, Buy America Sourcing Requirements. The Contractor and subcontractors are required by law to supply domestically produced iron or steel products, manufactured products, and construction materials such as non-ferrous metals (steel, iron, aluminum), plastics, PVC pipe, glass, fiber optic cable, optical fiber, engineered wood, and lumber products for infrastructure on all projects funded in whole or in part with federal funds. The Infrastructure, Investment, and Jobs Act (Public Law 117-58) Division D, Title IX, Subtitle A, Part I, Buy America Sourcing Requirements exempts cement, cementitious materials, aggregates such as stone, sand, gravel, or aggregate binding agents or additives from these requirements.

PART 13: STANDARDS

If the Division identifies a “standard” by reference to manufacturer and/or model number, all offers will be evaluated to ensure that the identified standard is used. The Division will not consider an offer in which a substitution for the standard is offered. After the Letter to Proceed is issued, the Contractor may submit a written proposal for a substitution of a standard.

PART 14: SUBSTITUTIONS DURING THE PROJECT

After the Letter to Proceed is issued, the Contractor may offer substitutions for the standards set forth in the Scope of Work. The decision to allow substitution is solely within the discretion of the Division, which will consider, among other factors, availability, time of delivery, the aesthetic value of the proposed substitution, general differences in the knowledge of the product, service history, quality, efficiency, performance, and architectural, engineering, inspection, testing and administrative expenses. Any changes to the Offer price and/or Scope of Work must be memorialized by a Field Order or Change Order, as applicable. The savings in cost in allowing any substitutions during the Project will be solely to the benefit of the Division.

PART 15: QUANTITIES OF WORK

15.1 Unit Price Items

For items in the Offer that require a unit price, the quantities listed on the Offer Sheet are an approximation and are to be used only for the comparison of offers. The scheduled quantities may be increased or decreased without invalidating or altering the Offer and will be considered within the Scope of Work.

Payments for unit price items will be made to the Contractor for actual quantities of work performed and materials furnished in accordance with the Scope of Work; however, the Contractor may not exceed the unit quantities shown on the Offer Sheet without prior written approval of the Division through a Field Order. Even if the Contractor determines that additional unit priced quantities (above and beyond the original Offer Sheet quantity) are required to meet plan and/or specification dimensions, the Contractor must not exceed the Offer Sheet quantities without prior written approval of the Division. The Division will not pay for quantities above and beyond the Offer Sheet quantity without prior written approval of the Division.

15.2 Lump Sum Items

For items in the Offer Sheet that require a lump sum price, the Division will not pay for work, materials, or equipment that exceeds the amount provided by the Contractor on the Offer Sheet. The lump sum price on the Offer Sheet must include all work, materials, and equipment necessary to properly complete the Project.

15.3 Additional/Contingency Items

The contingency items set forth in the Offer Sheet are not projected as necessary to complete the Project. Rather, the contingency items will first be used when unforeseen work arises, and the Division determines the contingency item is applicable. To be compensated for contingency items, the Contractor must have a written Field Order from the Division authorizing the contingency item in a specified quantity. Use of contingency items will not require the execution of a Change Order. The Contractor must be prepared to supply all items identified in the contingency specifications for use on this Project.

PART 16: OMISSIONS IN THE SCOPE OF WORK

If the Contractor notices an error or omission in the Scope of Work during performance of the Project, the Contractor shall immediately notify the Division of such omission or error and shall not proceed with the Project until directed by the Division. Any work performed by the Contractor prior to clarification by the Division may not be entitled to compensation.

PART 17: INTERPRETATIONS CONCERNING THE SCOPE OF WORK

During the Project, if a question arises on the Scope of Work, the labor or materials to be supplied, or costs potentially exceeding the Contractor's Offer, such questions must, prior to the work being performed, be submitted to the Division for a determination. A Division determination will be issued in writing and any work performed prior to such a determination will be performed at no cost to the Division. The Division will also begin executing a Change Order, when appropriate.

If the Division receives a written question concerning the Project, the Division will determine if the work must be performed by the Contractor at no increase in price to the Scope of Work. If so, the Division will issue a Field Order setting forth the Division's determination. Each Field Order issued must be signed by the Contractor acknowledging receipt. If the Contractor disagrees with the Division's interpretation in a Field Order, the Contractor may submit a protest by certified mail to the Chief within ten (10) days following the date of issuance of the protested Field Order. However, the Contractor must immediately proceed with the instructions given in the issued Field Order.

If, upon receipt of a written protest of a Field Order, the Division determines that the work referred to in the protest is outside the Scope of Work, the Division will not issue a Field Order and instead will issue a Change Order.

Field Orders, which are interpretations of the requirements of the Scope of Work, may be issued by the Division at any time during the performance of the work. The Contractor, at all times, is required to immediately execute the instructions of all issued Field Orders, which includes acknowledgment and signature of issued Field Order documents.

PART 18: CHANGES IN THE SCOPE OF WORK

18.1 The Division's Right to Require Change Orders

The Division may issue a Change Order directing the Contractor to immediately perform extra work that differs from the Scope of Work. The Contractor shall perform the work as directed. The changes in the work will consist of additions, deletions, or other revisions. When the Contractor performs the work, the Offer amount will be adjusted as described within this Scope of Work.

If the Contractor protests the issuance of the Change Order, any such protest has no bearing on any work requirements arising out of the Change Order in that the Contractor must immediately perform the work required in the Change Order so as not to delay the progress of the work at the Project.

18.2 Unauthorized Work

Only work performed under the Scope of Work or work authorized by a Field Order or a Change Order is eligible for compensation. If the Contractor performs any work or purchases any materials without an approved, applicable Field Order or Change Order, such work performed, and purchases made are within the Scope of Work at no additional cost to the Division.

18.3 Contractor's May Request Change Orders

If the Contractor determines that the Scope of Work does not address conditions at the Project, the Contractor may provide written notice to the Division of the conditions and request a Change Order. No oral communications will be acceptable as justification for a Change Order.

Fishing/milling tools and associated appurtenances submitted as Change Order items shall be at cost. No markup on these items will be accepted by the Division.

18.4 Determining Price of a Proposed Change Order

The following methods will be used to determine the price of a proposed Change Order:

- a. If a Change Order involves items not listed on the Offer Sheet, the Contractor must present the Division with labor and/or material price quotes for the proposed Change Order item(s). The Division may request these quotes either in unit prices or as lump sums; or
- b. If the work involved in the Change Order is not definable, the Division may request the work be performed on a time and material basis and include a maximum amount to be paid for the work. The method will be based on unit prices for both labor and materials agreed to by the Division prior to the Contractor commencing the work.

18.5 Disputes Regarding Change Order Prices

If the Contractor and the Division cannot agree on the cost of the work for a Change Order, using site-specific information including, but not limited to, Division historic public offer information, the Division will determine and set a fair price for the work and materials that are the subject of the Change Order.

PART 19: PAY ESTIMATES

19.1 General Information

Payments issued to the Contractor as the work progresses are not acceptance of any portion of the work not completed in accordance with the Scope of Work nor do such payments relieve the Contractor of liability with respect to any obligation or any expressed or implied warranties or responsibilities for faulty materials or workmanship.

19.2 Required Review by the Division

Prior to the submittal of each invoice, the Contractor and the Division must meet at the Project site to review the Project progress. The Contractor and the Division's Project Representative must mutually agree on quantity and percentage of work completed for all offer items prior to submittal of each invoice. No invoice will be approved for work that has not been approved by the Division's Project Representative. Field verification of all lump sum quantities and weight slips for all unit price quantities invoiced must be submitted to the Division's Project Representative for review during the meeting.

All Field Orders and/or Change Orders issued prior to an invoice must be signed/acknowledge by the Contractor for the Division to consider an invoice for approval.

The Contractor's payment must be submitted to the division via the Orphan Well Project Management Contractor Portal (<https://dnr-ow-prod.powerappsportals.us/>). The invoice must include back up documentation. The Division will confirm the invoice is accurate.

For Federally Funded Projects: The Contractor/Subcontractor shall submit payroll reports with each Invoice. Payroll reports shall be completed according to Part 3 of the **Davis-Bacon Requirements** included in the Scope of Work.

Invoices received by the Division containing errors or requesting amounts that cannot be approved will be returned to the Contractor. The Contractor may resubmit an invoice after correcting errors.

19.3 Documents to be Submitted for Payment

With each request for payment the Contractor certifies that:

- a. The request for payment is accurate as to materials and the work completed under the terms and conditions of the Scope of Work and any Change Order, as applicable, including full compliance with all labor provisions; and
- b. All subcontractors and material suppliers have been paid for the work or materials that are applicable to all previous invoices. As certification, each request for payment, at the Division's request, may need to be accompanied with a properly executed "Waiver of Liens" from all subcontractors and material suppliers to show that all previous payments made by the Division to the Contractor have been applied to fulfill, in full, all of the Contractor's obligations reflected in prior requests for payment.

19.4 Effect of Liens on Invoices

All work, materials, and equipment covered by any request for payment, whether incorporated in the Project or not, will pass to the Division at the time of payment free and clear of all liens, claims, security interests and encumbrances.

If there is evidence of any lien or claim that is chargeable to the Contractor, the Division will withhold all payments due to the Contractor to secure such lien or claim. If there are any previous liens or claims after payments are made to the Contractor, the Contractor may be required to refund to the Division a sum of money equal to the sum of all monies that the Division may be compelled to pay in discharging any lien or claim as a result of the Contractor's default.

PART 20: RETAINAGE FOR FINAL RESTORATION

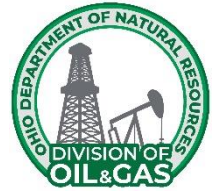
If the Scope of Work requires revegetation of disturbed area, the Division will retain five percent (5%) of the sum of (1) the Offer amount and (2) all approved Change Orders. The five percent (5%) amount retained shall be released once the Division completes a Final Restoration Inspection and determines that vegetation has reached final stabilization. "Final stabilization" means vegetation established in a uniform perennial vegetative cover and meets all requirements listed in the Detailed Specifications under "Site Restoration". "Final stabilization" also means that no large barren areas exist, and the vegetation is of an equal or better condition than before the project started. The Contractor must remove all temporary erosion and sediment controls once final stabilization is achieved.

PART 21: REDUCED GAS EMISSIONS CREDITS

No one may directly or indirectly use the reduced gas emissions from wells plugged with State of Ohio funds or Infrastructure, Investment and Jobs Act funds, in whole or in part, to monetize, generate, or collect credits to include but not be limited to carbon, methane, or fugitive emissions, or otherwise use the plugging of wells funded with State of Ohio funds or with Infrastructure, Investment and Jobs Act funds to generate income of any type by offsetting their own or another party's gas emissions.



SCOPE OF WORK
Washington 23F PROJECT
Multiple Orphan Wells
Washington County, Aurelius Township



DAVIS-BACON WAGE REQUIREMENTS

PART 1: PAYMENT OF PREVAILING WAGES

- 1.1 The Contractor/Subcontractor shall pay the prevailing wage rates of the Project locality, as determined by the U.S. Secretary of Labor, to laborers and mechanics performing Work on the Project.
- 1.2 The Contractor/Subcontractor shall comply with the provisions, duties, obligations, and is subject to the remedies and penalties of 40 U.S.C. parts 3141-3144, 3146 3147; 42 U.S.C. part 3212 The Davis- Bacon Act; and 40 U.S.C. parts 3701-3708 The Contract Work Hours and Safety Standards Act.
- 1.3 The Contractor/Subcontractor shall submit all payroll reports in compliance with the requirements of Section 1.2 for all employees.
- 1.4 By executing a Contract, the Contractor/Subcontractor certifies that it based its Bid upon the prevailing rates of wages as ascertained by the U.S. Secretary of Labor.
- 1.5 The Contractor/Subcontractor may access the U.S. Secretary of Labor at its website, **<https://sam.gov/content/wage-determinations>**, to obtain the current wage rates. A copy of the current wage rates is included herein.

PART 2: PAYROLL SCHEDULE

- 2.1 Within 10 days of the date of the Notice to Proceed, the Contractor/Subcontractor shall provide the Contracting Authority's Prevailing Wage Coordinator with a schedule of dates during the term of the Contract on which wages shall be paid to employees for the Project.

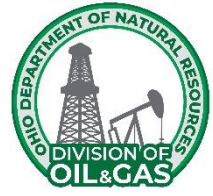
PART 3: PAYROLL REPORTS

- 3.1 The Contractor/Subcontractor shall submit payroll reports with each Payment Request, which reports shall be certified by the Contractor/Subcontractor that the payroll is correct and complete, and that the wage rates shown are not less than those required by the Contract.
 - 3.1.1 Each payroll report shall indicate the period covered and include a list containing the name, address, and last four digits of the social security number of each employee of the Contractor/Subcontractor paid for the Work.

- 3.1.2 Each payroll report shall list the number of hours each employee worked each day on the Project during the reporting period, the total hours each day on the Project per job classification, the total hours each week on the Project, the employee's hourly rate of pay, job classification, hourly rate of fringe benefits, all deductions from wages and net pay (actual wages paid).
 - 3.1.3 Each payroll report shall list each fringe benefit and state if it is paid as cash to the employee or to a named plan.
 - 3.1.4 The Contractor/Subcontractor shall submit apprenticeship agreements for all apprentices utilized on the Project.
- 3.2 The Contractor/Subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract.
- 3.3 The records to be maintained under this paragraph shall be made available by the Contractor/Sub-contractor for inspection, copying, or transcription by authorized representatives of the Contracting Authority and the U.S. Department of Labor, and the Contractor or Subcontractor will permit such representatives to interview employees during working hours on the job.
- 3.4 Certified payroll submittal shall be made via software designated by the Division.



SCOPE OF WORK
Washington 23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



GENERAL SPECIFICATIONS

Unless there is a specific pay item in the Detailed Specifications, the work defined in the General Specification shall be incorporated into other items of work.

PART 1: HOURS OF WORK

The Contractor, the Contractor's agents, representatives, and subcontractors shall perform plugging projects during the days of Monday through Friday. Work will not be conducted on weekends or state/national holidays except with Division approval or during emergency situations. A workday is defined as eight (8) hours. However, additional hours may be worked with Division approval or during emergency situations.

PART 2: EQUIPMENT

The Contractor equipment shall pass all safety requirements of local, state, and federal agencies. The Ohio Department of Natural Resources, Division of Oil and Gas Resources Management reserves the right to inspect the equipment prior to the Recommendation of Award.

Unless otherwise noted, all equipment and materials required to complete the work described shall be provided by the Contractor.

PART 3: NOTIFICATIONS

3.1 Seven Working Day Notice

The Contractor shall log into the Orphan Well Project Management System (OWPMS) no less than seven (7) working days prior to commencement of work. Notice will be sent using the system and may be sent for each well that work will be started on at that time. This notice will allow the appropriate Division staff time to mark the approved access route and any sensitive areas that need to be left undisturbed.

The Contractor, the Contractor's agents, representatives, and sub-contractors shall contact each utility company that has utilities that directly affect plugging activities at the well location(s).

3.2 Public 48 Hour Notice

Prior to initiating well plugging operations, the Contractor shall give a minimum of 48-hour notice to the local fire department. Confirmation of this notification shall also be made to the Inspector or the Division Regional Office.

3.3 Emergency Notification

When emergency conditions are encountered, such as a release of hydrogen sulfide gas (H₂S), natural gas, crude oil, condensate, or brine that threatens human health, safety or the environment, as

described in Ohio Administrative Code 1501:9-08-02, the Contractor shall notify the local fire department, the Local Emergency Planning Committee (LEPC) and call the 24/7 incident notification number: 1-844-OH-Call1 (1-844-642-2551) within 30 minutes of the occurrence.

3.4 Plugging Completion Notice

No sooner than three business days after emplacing the uppermost plug, the Division will review the well to determine if any additional plugging work shall be required at that time. If additional work is needed, a Field Order will be issued by the Division. The Field Order shall state what must be completed and what, if any, Change Orders shall be required. If additional work is not needed the contractor shall cut the casing as defined in the Plugging Plan and set the plugged well identification as outlined in these **General Specifications** and Ohio Administrative Code 1501-9-11-10.

PART 4: ACCESS AND PRESERVATION OF SITE

All costs for the adequate access to the well site for the plugging equipment shall be included in the Offer. Unless waived, placement of all tanks and equipment shall be subject to Division's approval. If requested by the Division, access roads will be chained or cabled to prevent unauthorized use.

Special attention shall be given to maintaining trees and other vegetation that have scenic value, provide shade, reduce erosion and runoff, or add to the aesthetics of the area. No trees three (3) inches or larger in diameter shall be removed without the Division's permission. Any alterations to the natural topography required to provide ingress and egress to the well site must be approved by the Division before work begins.

PART 5: DAMAGE CAUSED BY CONTRACTOR

All damage caused by the Contractor's negligence in carrying out of this scope of work to any public or private property of any nature whatsoever, including trees, shrubs, and crops, shall be corrected to Division's satisfaction at the expense of the Contractor. If crops are damaged and the Contractor, landowner, or tenant cannot reach a settlement, the County Cooperative Extension Service shall set a fair price for crop damages and the decision shall be final and binding upon all parties. All subsequent payments due the Contractor shall be withheld until the Contractor provides proof of payment of any such claim.

The Contractor shall be responsible for all costs of repairing or replacing any survey monument that is disturbed or destroyed by the Contractor. The Contractor shall utilize a professional surveyor who is licensed and registered by the State of Ohio to perform the re-establishment of said monuments according to the standards set forth by the governing body or law of said monument. For the purpose of this scope of work, the term survey monument shall apply to any property boundary marker, federal, state or county geodetic benchmark, state, or county right of way monument, FEMA benchmarks or flood elevation markers.

PART 6: SAFETY

6.1 Public Safety Coordination Meeting

The Contractor shall hold a safety meeting with the County EMA, local fire department, Division Emergency Operations staff and Inspector, and other applicable contracting staff prior to commencement of plugging activities. The meeting shall review 1) the safety of the public during operations, 2) the safety of workers during operations, 3) emergency notifications of events, 4) site set up and layout, 5) general overview of operations, 6) nearest hospital's address and directions.

This meeting shall be led by the Contractor and is intended to be well specific. At the discretion of

the Division, this requirement may be waived for the remaining wells should these wells be part of the same lease\property.

6.2 Daily Safety Meetings

The Contractor shall hold a daily safety meeting for all personnel on-site prior to the commencement of work. The Contractor shall provide and maintain a sign in/out sheet for all people on location. The Contractor shall immediately report any accidents and/or safety concerns to the Inspector.

6.3 Operational Standards

The Contractor shall follow the rules established by Occupational Safety and Health Administration (OSHA) Safety and Health Regulations for Construction 29 CFR 1926 and OSHA General Industry 29 CFR 1910 on all onsite project operations.

6.4 Excavation and Trenching Requirements

The Contractor shall follow the notification protocol as specified in Part 3 of the General Specifications before the start of any excavating activities. The Contractor will comply with OSHA Construction Standards for excavation and trenching under 29CFR 1926 Subpart P.

6.5 Hazardous Communications Requirements

The Contractor shall maintain Safety Data Sheets (SDS) for all chemicals stored and/or used. SDS sheets will be stored onsite with the Emergency Response Plan (ERP). A copy of SDS sheets and the ERP will be stored at the project entrance in a container labeled "ERP/SDS". A copy of all SDS will be supplied to the local Fire Department and/or to the Division when requested.

6.6 Site Security

The Contractor shall provide and install protective barriers/fencing around the work area to prevent unauthorized access. Ingress and Egress access must be maintained at all times.

6.7 Wind Direction Indicator

The Contractor shall install a windsock in an open area of the well location where it is visible to all onsite personnel. It shall be constructed of high visibility material and deployed no less than six (6) feet above grade during the plugging operations.

6.8 Muster and Smoking Areas

The Contractor shall mark and assign a primary and a secondary muster area daily upwind of the well location. These are to be determined based on prevailing wind direction, as indicated by the windsock. The Contractor will establish a safe location for a designated smoking area.

6.9 Ignition Sources and Parking Areas

The Contractor shall identify and mark all potential ignition sources within a 50-foot radius of the well. The Contractor shall mitigate or remove as many ignition sources as possible from the working area. The designated parking area will be outside the 50-foot radius from the well.

6.10 Air Monitoring and Worker Safety

The Contractor shall supply and place a 4-gas monitor at the wellhead. The gas monitor must be calibrated and maintained to monitor Methane (CH₄), Oxygen (O₂), Carbon Monoxide (CO) and Hydrogen Sulfide (H₂S).

Stop work must be followed when any of the levels listed below occur:

- Methane - 1000 parts per million (ppm)/2% Lower Explosive Limit (LEL),
- Oxygen - saturation below 19.5% or above 23%,
- Carbon Monoxide – 50 ppm,
- Hydrogen Sulfide – 10 ppm.

The levels stated above are directly from the Occupational Safety and Health Administration (OSHA) and The National Institute for Occupational Safety and Health (NIOSH) and are standard for air monitoring procedures for safety and work environments. If any of the above levels are alarmed, all personnel will shut down ignition sources and report to the muster area.

Division Emergency Operations personnel or the Inspector has the right to stop work if the actions are unsafe or the actions cause or are likely to cause danger to the workers, public, or the environment.

PART 7: MAINTENANCE OF TRAFFIC

The Contractor shall at all times install, maintain, and operate all traffic and traffic control devices in conformance with the requirements of the "Ohio Manual of Uniform Traffic Control Devices for Streets and Highways," hereinafter called The Ohio Manual.

The Contractor shall notify the appropriate public officials and the Division and shall obtain all required permits prior to any lane closure of a public road.

The Contractor shall maintain ingress/egress to all properties associated with the project at all times during the project unless agreed upon in writing by the Division and the landowner.

7.1 STREET CLEANING

The Contractor shall be required to provide street cleaning services in order to remove sediment/debris tracked from the construction site/access drive onto private or public roadways during all phases of the Project.

The Contractor shall work diligently to minimize the amount of sediment tracked onto roadway. The Contractor will conduct all construction and ingress/egress operations in conformance with Part 9: Erosion and Sediment Control of the General Specifications. Use of other erosion and sediment control measures to prevent sediment runoff during period of rains and non-working hours.

The Contractor will provide street cleaning, such as sweeping or vacuuming, at locations around the project ingress/egress where plugging operations has caused tracking of sediments onto roadways. Mechanical sweepers shall be vacuum-type or regenerative sweepers. Sweeping speed will not exceed 6 mph. A minimum of two passes shall be made. Streets must be cleaned daily before the end of the workday. If excess sediments have been tracked onto the streets or if rain is expected, the Division may direct the Contractor to clean the street as often as necessary to keep the street clean at all times.

The Contractor shall be required to remove and dispose of sediments properly. Removal of collected sediment deposits will be disposed on the project site. If sediment deposits cannot be disposed of on-site, an alternative location will be approved by the Division. No offsite disposal will be in or adjacent to a stream and/or floodplain. Sediments to be placed at the project site will be in conjunction with site restoration and should be spread, compacted, covered, and stabilized in accordance with the site restoration line item. **Sediment will not be allowed to flush into stream or drainage way and washing or flushing of sediments into adjacent drainage systems is prohibited.** If sediment has been contaminated, it will be disposed of in accordance with the contaminated material disposal line item.

The cost of this work shall be included in Contract bid prices for items of which this work is a component.

PART 8: PROTECTION OF EXISTING UTILITIES

Before construction begins, the Contractor, acting as an agent for the Division, shall locate all utilities in the vicinity of the work. The Contractor shall be responsible for complying with the regulations pertaining to utilities in the State of Ohio. The Contractor shall assume all risk for all utilities located in the vicinity of the work, whether above or below the surface of the ground. The Contractor shall also be responsible for all damages and assume all expense for direct or indirect injury, caused by his work, to any of the utilities, or any person or property by reason of injury to them, whether such utilities are or are not shown on the drawings, once they have been uncovered by the work. **In compliance with Ohio Revised Code 3781, two working days before digging the Contractor shall contact the Ohio Utility Protection Service (OUPS) and Oil and Gas Producers Underground Protection Service (OGPUPS) using the Ohio811 one call service by calling 811 or by using the i-dig login found on the internet at OHIO811.org. The Contractor shall maintain a current OUPS/OGPUPS call ticket during the entire project.**

PART 9: EROSION AND SEDIMENT CONTROL

Temporary erosion control measures are required during the course of this project. These measures may consist of the installation of straw bale dikes, silt fence, filter socks, inlet protection structures, erosion control blankets, energy dissipation, and temporary seeding and mulching.

Once construction begins, the Contractor shall be solely responsible for all construction related to the control of off-site sedimentation. This sediment shall be removed by the Contractor at the Division's direction.

9.1 Temporary Measures

Temporary erosion control structures shown on the Drawing Plan Set, identified with these specifications, or as directed by the Division shall be placed as soon as construction starts and must be maintained during the course of the project. At the direction of the Division, the Contractor shall remove the temporary controls when they are no longer needed or when required permanent control measures have been completed.

If sediment escapes the site, accumulations must be removed at a frequency to minimize further negative effects, and whenever feasible, prior to the next rain event.

The contractor shall be responsible for revegetation of all areas in which sediment escapes the site. These areas shall be included in the final stabilization of the project and shall be at the cost of the contractor.

9.2 Maximum Exposed Areas

Stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, must be initiated no more than seven (7) days after the construction activity in that portion of the site has temporarily or permanently ceased.

Where the initiation of stabilization measures by the seventh day after construction activity temporarily or permanently ceased is precluded by snow cover, or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within fourteen (14) days, temporary stabilization measures do not have to be initiated on that portion of site.

The Division may limit the area of excavation, borrow and embankment operations in progress commensurate with the Contractor's capability and progress in keeping the finished grading, re-soiling, mulching, seeding and other such permanent control measures current in accordance with the acceptable schedule.

9.3 Winterization

When an incomplete project will be left exposed throughout the winter season, the Contractor shall furnish the Division a plan indicating the control measures to be installed and maintained until the next construction season.

If the winter period falls within the anticipated construction period of the Scope of Work and as indicated in the original approved construction schedule, control structures will be paid for by the Division at the unit prices in the Offer.

If the project is not substantially completed prior to the winter season due to the failure of the Contractor to meet the completion date, these necessary control structures will be installed and maintained by the Contractor at his expense and these items will not be paid for under the terms of the Scope of Work, except those that are permanent facilities to be left in place in accordance with the Drawing Plans Set and Specifications.

9.4 Other Controls

Off-site vehicle tracking of sediments and the generation of dust must be minimized, and any waste must be properly disposed.

9.5 Inspections

The Division Inspector shall conduct inspections to ensure that the control practices are functional and to evaluate whether the erosion and sediment control measures are adequate and properly implemented.

9.6 Enforcement

The Division shall take appropriate steps to ensure that sedimentation does not leave the project site. The Division shall require the removal of off-site sediment by the Contractor if such sediment resulted from the Contractor's negligence to place and maintain sediment control structures in

accordance with the Drawing Plan Set and Specifications.

PART 10: SPILL PREVENTION AND REMEDIATION

The Contractor is expected to prevent and, if necessary, contain and remediate any spills that may occur at the site due to plugging activities. All stationary plugging equipment on well locations that are in tiled farm fields, residential neighborhoods, parks, or in/adjacent to areas determined by the Division to be environmentally sensitive, will be staged on an impermeable liner and berm. **The Contractor will have oil absorbent pads and booms available onsite during the plugging operations.**

PART 11: HYDROGEN SULFIDE

If the well that is being plugged is known to produce hydrogen sulfide (H₂S), the following considerations must be observed:

- A. The Contractor must provide the appropriate equipment, on-site, to properly detect and abate any H₂S emitted from the well. If the Contractor does not have the appropriate equipment to properly detect and abate any H₂S emitted from the well, they will utilize an appropriate party to provide these services.
- B. The Contractor will shut-in the well each night after the plugging operations have ceased, unless otherwise instructed by the Division. The Contractor will continue this process until the plugging operations are complete and there are no further signs of a gas release.

PART 12: CASING

The Division reserves the right to require the removal and or placement of any tubing, casing, or liners deemed necessary to properly plug and abandon the well. If a string of casing that would normally be pulled cannot be removed, the Contractor may be required to log the well and perforate the casing, in accordance with the Division's instructions, so that cement can be circulated behind the casing.

The Contractor shall run an operational string of casing when caving of the well prevents clean out to depth required in the scope of work.

PART 13: DEFINITIONS

13.1 Clean Out

The process in which the contractor would use a smaller diameter tubular to circulate out material from inside a larger diameter wellbore/tubular. This shall include removing mud-laden fluid, prepared clay, bridge plugs (e.g. brush and stone plugs, surface debris), and wellbore cave-in (e.g. swelling shales, red clays). Equipment needed includes, but is not limited to, tubing, a mud pump, a power swivel/power sub or a tubing swivel, a drill bit with the jets removed and/or a notched collar. *A positive displacement mud pump with the capacity of pumping at least 3 barrels per minute and able to overcome hydrostatic head is required for this process.*

13.2 Drill Out

The process in which the contractor would use a drill string, associated fittings, and a bit to remove an obstruction from inside of the wellbore or casing. This shall include removing cement, grout, wood plugs, or other materials in which a cleanout operation failed to remove. Equipment needed includes, but is not limited to, a mud pump, power swivel/power sub, drill string (including collars

and casing or tubing), cross over subs, bit sub, and drill bit. *A positive displacement mud pump with the capacity of pumping at least 3 barrels per minute and able to overcome hydrostatic head is required for this process.*

13.3 Wash Over

A process in which the contractor would use an intermediate size working string of casing, usually equipped with a carbide coated collar on the bottom joint, to run down over the smaller well tubular and clean out the annular space between the well tubulars. This process would include utilizing a power swivel or power sub to rotate the working string of casing and a mud pump to circulate fluid down between the working string and the outside of the smaller well tubular to wash out the material in the annular space between the well tubulars. This shall include removing mud-laden fluid, prepared clay, cement, grout, field packers, and surface debris. When needed, a wash over bit shall be attached on the bottom of the larger casing to act as a cutting edge for the material on the backside of the tubular being washed over. *A positive displacement mud pump with the capacity of pumping at least 3 barrels per minute and able to overcome hydrostatic head is required for this process.*

13.4 Milling

The process in which the contractor shall use a drill string and bit to remove a metal obstruction from inside of the wellbore or casing. Equipment needed includes, but is not limited to, a mud pump, power swivel/power sub, drill string (includes collars and casing or tubing), cross over subs, bit sub, and mill. The mill type would depend on the material encountered. *A positive displacement mud pump with the capacity of pumping at least 3 barrels per minute and able to overcome hydrostatic head is required for this process.*

13.5 Fishing

The process in which the contractor shall use a specialized tools or fishing tool to eliminate an obstruction from inside of the wellbore or casing. Equipment needed includes, but is not limited to, a fishing tool(s) and fishing string.

13.6 Bail & Grout

The process the contractor shall use when determined that the wellbore can be bailed of all fluid, and grouted. Equipment needed includes, but is not limited to, tubing, a bailer, and a grout pump. Grout shall be gravity feed to the bottom. This can be done in one application or in stages, depending on the well depth and condition. If the well cannot be bailed completely dry the contractor shall use a siphon string/tremie tube to remove the water from the well during grout application.

PART 14: WELL OBSTRUCTION ASSESSMENT

If an obstruction is encountered in the well bore that prevents the Contractor from reaching total depth, the Contractor will attempt to identify/assess the nature of the obstruction and attempt to remove any obstruction deemed an impediment to the plugging operation. **The Contractor will supply impression blocks as part of their normal rig equipment.**

PART 15: REMOVAL OF AN OBSTRUCTION

The removal of an unknown obstruction that is encountered during the cleanout of a well may require the use of milling and/or fishing tooling and equipment. The Contractor will include the costs for these services on the appropriate line items in the contingency section of this offer unless these costs are part of a planned procedure. The Division will approve a method for the Contractor to remove the well obstruction. The Division will first utilize contingency specifications and line items to define this work. **The Division will not be responsible for milling or fishing charges that are due to Contractor negligence or Contractor equipment failure.**

PART 16: PLUGGED WELL IDENTIFICATION

In compliance with Ohio Administrative Code 1501:9-11-10, a steel plate, a minimum of ¼-inch thick, shall be tack welded on top of all plugged wells. The well's permit number and "ODNR" shall be welded on the plate in numbers/letters as large as practical. Letters shall have a minimum relief of 1/8-inch.

PART 17: TOILET FACILITIES

Where there are no readily accessible public toilet facilities, the Contractor will provide a portable field toilet on the location during plugging operations.

PART 18: COMPLETION, GUARANTEES AND WARRANTIES

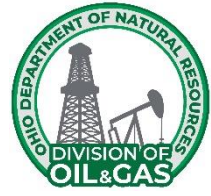
Upon completion of the work described in the Project SOW, the Contractor shall request a Final Restoration Inspection be performed by the Division. The Division shall inspect the Project site(s) for completeness and acceptance against the Project SOW, and if the Division determines necessary, develop a list of incomplete and unacceptable work and conditions to be corrected by the Contractor. The Division will reinspect the Project site(s) until the Division determines all work described in the Project SOW is complete and acceptable.

The Contractor warrants (represents) that their work will be conducted in accordance with the standards described in the Project SOW (i.e., the SOW Detailed Drawings and Specifications) and that the Contractor's work be free of defects. Contractor guarantees their work and materials for a Warranty Period of one year, unless otherwise stated as a special provision of the SOW Detailed Specifications. The one-year Warranty Period commences on the date of inspection on the Final Restoration Inspection form that accepted the work.

Should defects develop with the Contractor's work or materials within the Warranty Period, the Contractor shall, upon written notice of the Division, remedy the defects and any associated disturbance at their own expense. If the Contractor, after receiving the Division's notice, does not remedy the defects to the satisfaction of the Division, the Division may proceed against the Contractor as prescribed by the Department of Administrative Services (DAS), Index Number MAC110. All representations, warranties, and guarantees made in the DAS Index Number MAC110 contract and the Project SOW shall survive final payment and termination or completion of this Contract.



SCOPE OF WORK
Washington 23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



SEQUENCE OF WORK

General: Performance of all work shall be coordinated with the Division of Oil and Gas Resources Management (“Division”) Orphan Well Inspector (“Inspector”). The Sequence of Work shall be repeatable for all the project’s wells. **Work ahead of service rig mobilization shall be at the discretion of the Division.** Work shall not be initiated prior to fourteen (14) days ahead of rig mobilization, **unless approved in writing by the Division.**

The Sequence of Work for the Orphan Well Project shall be as follows:

Phase I:

- 1) Contact the Ohio Utility Protection Service and the Ohio Oil & Gas Producers Underground Protection Service.
- 2) Coordinate with the Orphan Well Inspector and the local authorities for the mobilization of equipment over the roads and bridges to the site as applicable.
- 3) Verify with the Orphan Well Inspector that the pre-construction staking (i.e. Construction Work Limits) has been completed by the Division. **The pre-construction staking must be completed prior to mobilization.**

Phase II:

- 1) Mobilize all necessary equipment to the site and develop the site access as shown on the **Drawing Plan Set.**
- 2) Implement site safety and secondary containment as described in the **Detailed Specifications.**
- 3) Install perimeter sediment controls as required by the Division.
- 4) Prepare the well for plugging as described in the **Detailed Specifications, “Well Head Control.”**
- 5) Upon successful installation and approval of the wellhead and establishment of well control, the Contractor shall begin to plug the well as described in the **Plugging Plan and Detailed Specifications, “Well Preparation & Plugging.”**
- 6) **No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut the casing as defined in the Plugging Plan.**
- 7) The Contractor shall set the plugged well identification as outlined in the **General Specifications**

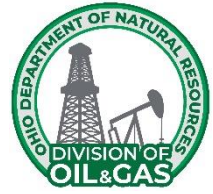
and Ohio Administrative Code 1501-9-11-10.

Phase III:

- 1) Within three (3) working days after Division has determined the plugging operations are completed, the Contractor shall remove all well and well plugging-related equipment, fluids, and cuttings from the site. The Contractor shall also excavate and remove all contaminated soils present onsite if present.
- 2) Within fourteen (14) days after the completion of the plugging operations, the Contractor shall reseed as applicable, final grade, disc, fertilize, seed, and mulch all disturbed areas. **If work cannot be complete due to the season or weather conditions, the site shall be winterized per the General Specifications, Part 9 Erosion and Sediment Control and the site restoration shall be scheduled for completion.**
- 3) All reclamation shall be finished to an equal or better condition than what existed prior to construction. The Division shall give the final approval for the restoration of the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Ward #12 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Ward #12, 34-167-2-0209-00-00, Washington County, Aurelius Township

Background: The Ward #12 is located on a 5.05-acre parcel (030007800000) owned by Jeffrey and Darla Haas, the address is 0 Dutton Hill Rd, Macksburg, Oh 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Ward #12 noted the well is equipped with highly corroded surface casing of an unknown diameter, 6-inch production casing, 2-inch tubing and rods, and a scissor style pumping unit. A steel 100 Bbl tank was also noted.

Completion records indicate the Ward #12 was drilled in September of 1942 to a depth of 390 feet and produced out of an unnamed sandstone. Conflicting plugging records also seem to indicate the Ward #12 was drilled to 1,508 to the Berea sand then plugged with clay in September of 1951.

Formation data for the Ward #12, 34-167-2-0209-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red rock	0	55	
Red rock	70	90	
Sand	90	130	
Cow Run sandstone	175	205	Dry Hole 205 ft
Lime	275	285	
Black slate	325	360	
Sand	360	390	
		390	Total Depth

Casing data for the Ward #12, 34-167-2-0209-00-00 shows the following:

- 8.25-inch surface casing set at 120 feet
- 6.25-inch intermediate casing set at 700 feet
- 4.88-inch production casing set at 1,200 feet

For the purposes of this scope of work, it is assumed that Ward #12 was drilled to a total depth of 1,508 feet and originally produced from the Berea sandstone. The well is equipped with approximately 120 feet of 8.25-inch surface casing, 700 feet of 6.25-inch production casing, and 2.38-inch rods and tubing set near the bottom.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal,

sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Ward #12 wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Ward #12 is located within 1,200 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

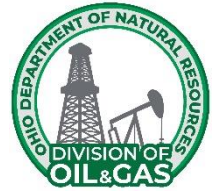
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Ward #12 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Ward #12, 34-167-2-0209-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Ward #12 was drilled to a total depth of 1,508 feet and originally produced from the Berea sandstone. The well is equipped with approximately 120 feet of 8.25-inch surface casing, 700 feet of 6.25-inch production casing, and 2.38-inch rods and tubing set near the bottom.

The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

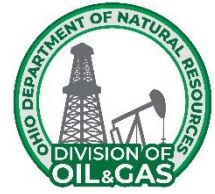
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor will remove the 2.38-inch outside diameter tubing and rods and stage them on a bermed liner for further evaluation. The Contractor shall provide an accurate measurement of the amount of tubing and rods retrieved from the wellbore.
- 6) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 162 barrels of freshwater on location for use as circulation fluid.
- 7) The Contractor shall load the well bore with fresh water and run Gamma Ray, CCL, and Bond logs to determine the free point, and bond behind the 6.25-inch diameter casing and to verify lithology.
- 8) All cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall**

be in a static condition prior to beginning any cementing activities. In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**

- 9) The Contractor will set a 450-foot bottom hole cement plug from 1,508 feet to 1,058 feet to cover the Berea sandstone. The Contractor will wait on cement for a minimum of eight (8) hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 10) The Contractor will set a 300-foot cement plug from 900 feet to 600 feet to cover the seat of the 6.63-inch casing. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 11) The Contractor will then sever the 6.63-inch diameter casing at the lowest free point, estimated to be at a depth of 500 feet and remove it from the wellbore. All casing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 12) The Contractor will set a 200-foot cement plug from 500 feet to 300 feet to isolate the severed casing.
- 13) The Contractor will set a cement plug from 300 feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 14) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis Stephens A#1, 34-167-6-0475-00-00, Washington County, Aurelius Township

Background: The Stephens #1 is located on a 18-acre parcel (030007820001) owned by Jeffrey E. and Darla L Haas. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #1 noted the well is equipped with open highly corroded 6-inch production casing, tubing and rods, and a scissor style pumping unit.

Records indicate the Stephens #1 was drilled in the early 1900's to Buell Run sandstone. There are no geological or casing records for the Stephens #1; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,000 feet to the Southwest was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #1 was drilled to a total depth of 460 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 415 feet of 6.63-inch production casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater

resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #1 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #1 is located within 1,300 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

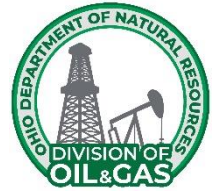
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis Stephens A#2, 34-167-2-0396-00-00, Washington County, Aurelius Township

Background: The Stephens #2 is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #2 noted the well appears to be equipped with open 8-inch casing and open 6-inch casing.

The Stephens #2 was drilled in April of 1945 and completed open hole in the Berea sandstone at a depth of 1,764 feet.

Formation data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	25	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8.25-inch surface casing set at 355 feet
- 6.63-inch intermediate casing set at 925 feet
- 5.19-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #2 was drilled to a total depth of 1,764 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 355 feet of 8.25-inch surface casing and 1,415 feet of 5.19-inch production casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #2 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #2 is not located in an active mine site but is within 700 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

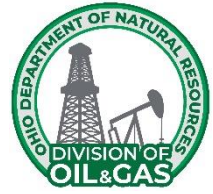
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #2 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #2, 34-167-2-0396-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #2 was drilled to a total depth of 1,764 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 355 feet of 8.25-inch surface casing and 1,415 feet of 5.19-inch production casing.

The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

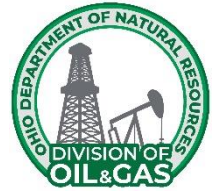
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 282 barrels of freshwater on location for use as circulation fluid.
- 6) All cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 7) The Contractor will set a 450-foot bottom hole cement plug from 1,764 feet to 1,314 feet to cover the Berea sandstone. The Contractor will wait on cement for a minimum of eight (8) hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is

determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.

- 8) The Contractor will then sever the 5.19-inch diameter casing at the lowest free point, estimated to be at a depth of 1,300 feet and remove it from the wellbore. All casing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 9) The contractor will set a 200-foot cement plug from 1,300 feet to 1,100 feet to isolate the parted 5.19-inch casing.
- 10) The Contractor will set a 300-foot bottom of the surface casing cement plug from 550 feet to 250 feet. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 11) The Contractor will set a cement plug from 250-feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 12) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Stephens FA Heirs #2, 34-167-6-0484-00-00, Washington County, Aurelius Township

Background: The Stephens #2 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #2 noted the well is equipped with 8-inch casing cut off and buried a few feet below grade.

Records indicate the Stephens #2, 34-167-6-0484-00-00 was plugged in the 1969. There are no geological or casing records for the Stephens #2, 34-167-6-0484-00-00; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,000 feet to the Northwest was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #2 was drilled to a total depth of 280 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 155 feet of 8.25-inch casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal,

sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #2 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #2 is located within 700 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

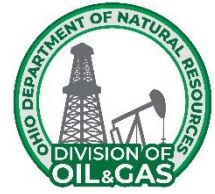
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #4, 34-167-6-0439-00-00, Washington County, Aurelius Township

Background: The Stephens #4 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Stephens #4 noted the well is equipped with 6.63-inch production casing with a wellhead and 2.38-inch tubing on a hanger.

Records indicate the Stephens #4 was drilled in the early 1900's to Buell Run sandstone. There are no geological or casing records for the Stephens #4; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 700 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #4 was drilled to a total depth of 405 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 275 feet of 6.63-inch production casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal,

sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #4 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #4 is located within 1,100 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

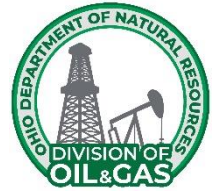
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #23 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #23, 34-167-6-0438-00-00, Washington County, Aurelius Township

Background: The Stephens #23 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Stephens #23 noted the well is equipped with 6.63-inch production casing and wellhead, 2-inch tubing, 1-inch gas escape tubing, and a pumping unit.

Records indicate the Stephens #23 was drilled in the early 1900's to Buell Run sandstone. There are no geological or casing records for the Stephens #23; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 700 feet to the Northeast was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #23 was drilled to a total depth of 360 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 235 feet of 6.63-inch production casing, 2.38-inch production tubing with rods set near the bottom of the well, and 1-inch tubing set on a gas escape packer near the bottom of the production casing at 235 feet.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater

resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #23 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #23 is located within 800 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

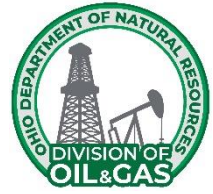
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #23 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #23, 34-167-6-0438-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #23 was drilled to a total depth of 360 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 235 feet of 6.63-inch production casing, 2.38-inch production tubing with rods set near the bottom of the well, and 1-inch tubing set on a gas escape packer near the bottom of the production casing at 235 feet.

The Contractor shall maintain a minimum of 50 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

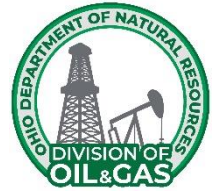
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall remove the sucker rods and 1-inch OD tubing from the well and stage them on a bermed liner for further evaluation. The Contractor will provide the Division with an accurate tally of the rods and tubing removed from the well.
- 6) Contractor will load the 2.38-inch tubing with fresh water and run CCL and Bond logs to determine the depth and placement of the packer and the bond behind the 2.38-inch diameter tubing.
- 7) Contractor shall shoot off the tubing anchor if present.
- 8) The bottom plug shall be set through a working string of one (1) inch diameter tubing using **an approved cement mixed at a lighter weight (14.5-15.0 pounds/gallon) to accommodate the narrow tubing annulus. Due to the narrow tubing annulus, the Contractor shall not run lost circulation**

material (LCM) prior to setting this cement plug. Circulation must be achieved, and all free crude oil shall be circulated from the wellbore with fresh water prior to setting any plug.

- 9) The Contractor will set a 150-foot cement bottom plug from total depth to the packer, estimated from 360 feet to 210 feet. Once this plug has been set, the Contractor will pull the working string of tubing to a maximum of 30 feet above the packer and circulate all residual cement out of both strings of tubing, and wait on cement for a minimum of eight (8) hours, after which the Contractor will run their tools into the well to verify the depth to the top of the plug. If it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 10) The Contractor will then sever the 2.38-inch diameter tubing at the lowest free point, estimated to be at a depth of 210 feet and remove it from the wellbore. All tubing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 11) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 50 barrels of freshwater on location for use as circulation fluid.
- 12) All remaining cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 13) The Contractor will set a cement plug from 210 feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 14) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #17 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #17, 34-167-6-0437-00-00, Washington County, Aurelius Township

Background: The Stephens #17 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Stephens #17 noted the well is equipped with 6.63-inch production casing and wellhead, 2-inch tubing, 1-inch gas escape tubing, and a pumping unit.

Records indicate the Stephens #17 was drilled in the early 1900's to a production zone in the Pennsylvanian. There are no geological or casing records for the Stephens #17; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,100 feet to the Northeast was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #17 was drilled to a total depth of 480 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 45 feet of 10-inch wooden conductor, 295 feet of 6.63-inch production casing, 2.38-inch production tubing with rods set near the bottom of the well, and 1-inch tubing set on a gas escape packer near the bottom of the production casing at 295 feet.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater

resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #17 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #17 is located within 800 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

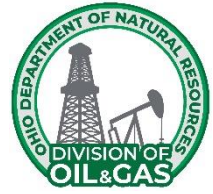
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #17 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #17, 34-167-6-0437-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #17 was drilled to a total depth of 480 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 45 feet of 10-inch wooden conductor, 295 feet of 6.63-inch production casing, 2.38-inch production tubing with rods set near the bottom of the well, and 1-inch tubing set on a gas escape packer near the bottom of the production casing at 295 feet.

The Contractor shall maintain a minimum of 50 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

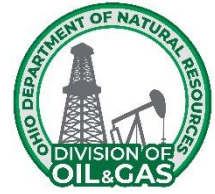
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall remove the sucker rods and 1-inch OD tubing from the well and stage them on a bermed liner for further evaluation. The Contractor will provide the Division with an accurate tally of the rods and tubing removed from the well.
- 6) Contractor will load the 2.38-inch tubing with fresh water and run CCL and Bond logs to determine the depth and placement of the packer and the bond behind the 2.38-inch diameter tubing.
- 7) Contractor shall shoot off the tubing anchor if present.
- 8) The bottom plug shall be set through a working string of one (1) inch diameter tubing using **an approved cement mixed at a lighter weight (14.5-15.0 pounds/gallon) to accommodate the narrow tubing annulus. Due to the narrow tubing annulus, the Contractor shall not run lost circulation**

material (LCM) prior to setting this cement plug. Circulation must be achieved, and all free crude oil shall be circulated from the wellbore with fresh water prior to setting any plug.

- 9) The Contractor will set a 200-foot cement bottom plug from total depth to the packer, estimated from 480 feet to 280 feet. Once this plug has been set, the Contractor will pull the working string of tubing to a maximum of 30 feet above the packer and circulate all residual cement out of both strings of tubing, and wait on cement for a minimum of eight (8) hours, after which the Contractor will run their tools into the well to verify the depth to the top of the plug. If it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 10) The Contractor will then sever the 2.38-inch diameter tubing at the lowest free point, estimated to be at a depth of 250 feet and remove it from the wellbore. All tubing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 11) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 90 barrels of freshwater on location for use as circulation fluid.
- 12) All remaining cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 13) The Contractor will set a cement plug from 250 feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 14) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Archibald Dutton #7D, 34-167-6-1001-00-00, Washington County, Aurelius Township

Background: The Dutton #7D is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Dutton #7D noted the well is equipped with 8-inch production casing equipped with a wellhead, 2.38-inch tubing and rods, and a scissor style pumping unit.

There are no geological or casing records for the Dutton #7D; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,400 feet to the Northwest was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Dutton #7D was drilled to a total depth of 340 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 215 feet of 8.25-inch production casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal,

sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Archibald Dutton #7D Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Archibald Dutton #7D is located within 800 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

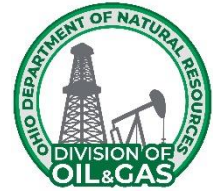
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

McKendry #3, 34-167-6-0518-00-00, Washington County, Aurelius Township

Background: The McKendry #3 is located on a 38.47-acre parcel (030007992000) owned by Carl Stack. The address is 2825 Buell's Run Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the McKendry #3 noted the well appears to be equipped with 7-inch production casing with a wellhead and 2.38-inch tubing and rods.

Records indicate the McKendry #3 was drilled in 1925 and originally produced from the Buell Run sandstone. There are no casing records for the McKendry #3; however, an offset well the Waller #28, 34-167-6-0544-00-00, located approximately 2,700 feet to the Northeast was issued a permit to drill in 1925, drilled to a depth of 400 feet and produced out of the Cow Run sandstone.

Formation data for the Waller #28, 34-127-6-0544-00-00 shows the following:

Formation	Top	Bottom	Remarks
1 st Cow Run sand		400	
		400	Total Depth

Casing data for the Waller #28, 34-127-6-0544-00-00 shows the following:

- 5.63-inch casing set at 50 feet
- 5.25-inch production casing set at 375 feet

For the purposes of this scope of work, it is assumed that McKendry #3 was drilled to a total depth of 400 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 375 feet of 7-inch production casing with rods and tubing set near the bottom.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquafer is undefined. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The McKendry #3 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the McKendry #3 is located within the boundary of an interim Surface mine. Mine permit ID: C-0553, B&N Coal.

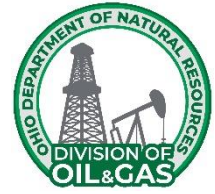
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Buell's Run Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

McKendry #4, 34-167-6-0519-00-00, Washington County, Aurelius Township

Background: The McKendry #4 is located on a 38.47-acre parcel (030007992000) owned by Carl Stack. The address is 2825 Buell's Run Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the McKendry #4 noted the well appears to be equipped with open 8.25-inch production casing.

Records indicate the McKendry #4 was drilled in 1925 and originally produced from the Buell Run sandstone. There are no casing records for the McKendry #4; however, an offset well the Waller #28, 34-167-6-0544-00-00, located approximately 2,200 feet to the Northeast was issued a permit to drill in 1925, drilled to a depth of 400 feet and produced out of the Cow Run sandstone.

Formation data for the Waller #28, 34-127-6-0544-00-00 shows the following:

Formation	Top	Bottom	Remarks
1 st Cow Run sand		400	
		400	Total Depth

Casing data for the Waller #28, 34-127-6-0544-00-00 shows the following:

- 5.63-inch casing set at 50 feet
- 5.25-inch production casing set at 375 feet

For the purposes of this scope of work, it is assumed that McKendry #4 was drilled to a total depth of 400 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 375 feet of 8.25-inch production casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The McKendry #4 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the McKendry #4 is located within the boundary of an interim Surface mine. Mine permit ID: C-0553, B&N Coal.

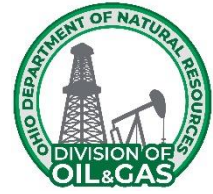
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Buell's Run Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

McKendry #6, 34-167-6-0522-00-00, Washington County, Aurelius Township

Background: The McKendry #6 is located on a 38.47-acre parcel (030007992000) owned by Carl Stack. The address is 2825 Buell's Run Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the McKendry #6 noted the well appears to be equipped with a damaged 6.63-inch production casing and 2.38-inch tubing.

Records indicate the McKendry #6 was drilled in 1925 and originally produced from the Buell Run sandstone. There are no casing records for the McKendry #6; however, an offset well the Waller #28, 34-167-6-0544-00-00, located approximately 2,700 feet to the Northeast was issued a permit to drill in 1925, drilled to a depth of 400 feet and produced out of the Cow Run sandstone.

Formation data for the Waller #28, 34-127-6-0544-00-00 shows the following:

Formation	Top	Bottom	Remarks
1 st Cow Run sand		400	
		400	Total Depth

Casing data for the Waller #28, 34-127-6-0544-00-00 shows the following:

- 5.63-inch casing set at 50 feet
- 5.25-inch production casing set at 375 feet

For the purposes of this scope of work, it is assumed that McKendry #6 was drilled to a total depth of 500 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 475 feet of 6.63-inch production casing and 2.38-inch tubing set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquafer is undefined. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The McKendry #6 Wellsite is listed by the Division as being located in an H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the McKendry #6 is located within 500 feet of the boundary of an interim Surface mine. Mine permit ID: C-0553, B&N Coal.

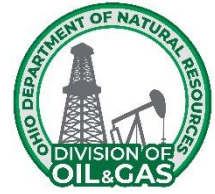
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Buell's Run Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Well Sites
Washington County, Aurelius Township



This Well Description is for:

Archibald Dutton #1D, 34-167-6-6688-00-00, Washington County, Aurelius Township

Background: The Dutton #1D is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Dutton #1D noted the presence of deformed 6-inch casing. A pumpjack was noted on site.

There are no geological or casing records for the Dutton #1D; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,000 feet to the Southwest was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
Total Depth		1,764	

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Dutton #1D was drilled to a total depth of 460 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 415 feet of 6.625-inch casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Dutton #1D Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Dutton #1D is within 1,100 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

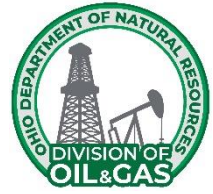
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Archibald Dutton #6D, 34-167-2-1954-00-00, Washington County, Aurelius Township

Background: The Dutton #6D is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Dutton #6D noted the presence of open 4-inch production casing. No other production equipment was noted.

The Dutton #6D was issued a permit to drill in August of 1954 but there are no completion records for the well; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 1,200 feet to the West was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Dutton #6D was drilled to a total depth of 410 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 388 feet of 4.5-inch casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Dutton #6D Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management, the Dutton #6D is within 200 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

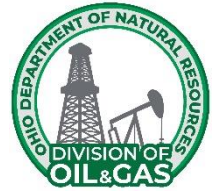
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #3D, 34-167-6-6693-00-00, Washington County, Aurelius Township

Background: The Stephens #3D is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #3D noted the presence of deformed 8-inch casing below grade that was obstructed with clay/soil.

There are no geological or casing records for the Stephens #3D; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 700 feet to the South was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Stephens #3D was drilled to a total depth of 410 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 368 feet of 8.25-inch surface.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Stephens #3D Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #3D is within a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

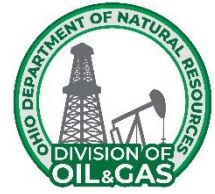
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Archibald Dutton #4D, 34-167-6-6691-00-00, Washington County, Aurelius Township

Background: The Dutton #4D is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Dutton #4D noted the presence of deformed 5-inch production casing. No other production equipment was noted.

There are no geological or casing records for the Dutton #4D; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 600 feet to the Southwest was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Dutton #4D was drilled to a total depth of 410 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 368 feet of 6.625-inch surface.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Dutton #4D Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Dutton #4D is within a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

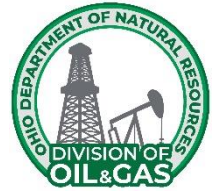
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #1 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Franis Stephens #1, 34-167-2-0376-00-00, Washington County, Aurelius Township

Background: The Stephens #1 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #1 noted the well appears to be equipped with 6-inch production casing and wellhead, 2-inch tubing, and a pumping unit.

The Stephens #1 was drilled in September of 1944 and completed open hole in the Berea sandstone at a depth of 1,748 feet.

Formation data for the Stephens #1, 34-167-2-0376-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	5	15	
Coal	100	105	
Red shale	150	180	
Red shale	280	380	
Buell Run sandstone	480	510	
Sand	1,235	1,465	
Berea sandstone	1,789	1,798	
		1,798	Total Depth

Casing data for the Stephens #1, 34-167-2-0376-00-00 shows the following:

- 6.63-inch intermediate casing set at 977 feet
- 5.19-inch production casing set at 1,495 feet

For the purposes of this scope of work, it is assumed that Stephens #1 was drilled to a total depth of 1,798 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 977 feet of 6.625-inch surface casing and 1,495 feet of 5.19-inch production casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #1 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #1 is not located in an active mine site but is within 200 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

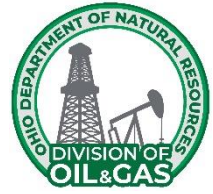
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #1 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #1, 34-167-2-0376-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #1 was drilled to a total depth of 1,798 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 977 feet of 6.625-inch surface casing and 1,495 feet of 5.19-inch production casing with tubing and rods set near the bottom of the well.

The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

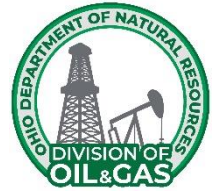
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor will remove the 2.38-inch outside diameter tubing and rods and stage them on a bermed liner for further evaluation. The Contractor shall provide an accurate measurement of the amount of tubing and rods retrieved from the wellbore.
- 6) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 272 barrels of freshwater on location for use as circulation fluid.
- 7) All cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A**

minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.

- 8) The Contractor will set a 450-foot bottom hole cement plug from 1,798 feet to 1,348 feet to cover the Berea sandstone. The Contractor will wait on cement for a minimum of eight (8) hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 9) The Contractor will then sever the 5.19-inch diameter casing at the lowest free point, estimated to be at a depth of 1,300 feet and remove it from the wellbore. All casing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 10) The contractor will set a 200-foot cement plug from 1,300 feet to 1,100 feet to isolate the parted 5.19-inch casing.
- 11) The Contractor will set a 300-foot bottom of the surface casing cement plug from 1,100 feet to 800 feet. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 12) The Contractor will set a 200-foot cement plug from 560 feet to 360 to cover the Buell run sandstone.
- 13) The Contractor will set a cement plug from 360-feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 14) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Archibald Dutton #5D, 34-167-6-6690-00-00, Washington County, Aurelius Township

Background: The Dutton #5D is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Dutton #5D noted the presence of 6-inch production casing, a wellhead, and a string of tubing. No other production equipment was noted.

There are no geological or casing records for the Dutton #5D; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 600 feet to the West was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Dutton #5D was drilled to a total depth of 410 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 368 feet of 6.625-inch casing with rods and tubing set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Dutton #5D Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Dutton #5D is within a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

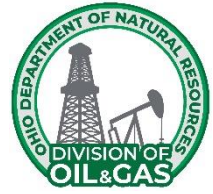
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #4 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #4, 34-167-2-0481-00-00, Washington County, Aurelius Township

Background: The Stephens #4 is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #4 noted the well appears to be equipped with 6-inch production casing and wellhead, 2-inch tubing, 1-inch gas escape tubing, and a pumping unit.

The Stephens #4 was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Stephens #4 was drilled to a total depth of 1,795 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 942 feet of 6.63-inch surface casing, 1,470 feet of 5.19-inch production casing, 2.38-inch production tubing set near the bottom of the well, and 1-inch tubing set on a gas escape packer near the bottom of the production casing at 1,470 feet.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #4 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #4 is located in a historic mine permitted area and is within 100 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

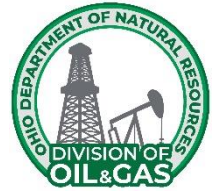
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #4 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #4, 34-167-2-0481-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #4 was drilled to a total depth of 1,795 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 942 feet of 6.63-inch surface casing, 1,470 feet of 5.19-inch production casing, 2.38-inch production tubing set near the bottom of the well, and 1-inch tubing set on a gas escape packer near the bottom of the production casing at 1,470 feet.

The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

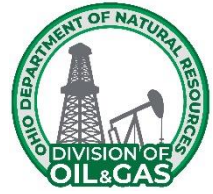
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall remove the sucker rods and 1-inch OD tubing from the well and stage them on a bermed liner for further evaluation. The Contractor will provide the Division with an accurate tally of the rods and tubing removed from the well.
- 6) Contractor will load the 2.38-inch tubing with fresh water and run CCL and Bond logs to determine the depth and placement of the packer and the bond behind the 2.38-inch diameter tubing.
- 7) Contractor shall shoot off the tubing anchor if present.
- 8) The bottom plug shall be set through a working string of one (1) inch diameter tubing using **an approved cement mixed at a lighter weight (14.5-15.0 pounds/gallon) to accommodate the narrow tubing annulus. Due to the narrow tubing annulus, the Contractor shall not run lost circulation**

material (LCM) prior to setting this cement plug. Circulation must be achieved, and all free crude oil shall be circulated from the wellbore with fresh water prior to setting any plug.

- 9) The Contractor will set a 325-foot cement bottom plug from total depth to the packer, estimated from 1,795 feet to 1,470 feet. Once this plug has been set, the Contractor will pull the working string of tubing to a maximum of 60 feet above the packer and circulate all residual cement out of both strings of tubing. and wait on cement for a minimum of eight (8) hours, after which the Contractor will run their tools into the well to verify the depth to the top of the plug. If it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 10) The Contractor will then sever the 2.38-inch diameter tubing at the lowest free point, estimated to be at a depth of 1,400 feet and remove it from the wellbore. All tubing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 11) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 268 barrels of freshwater on location for use as circulation fluid.
- 12) All remaining cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 13) The contractor will set a 200-foot cement plug at an estimated depth from 1,400 feet to 1,200 feet to isolate the parted 2.38-inch tubing.
- 14) The Contractor will then sever the 5.19-inch diameter casing at the lowest free point, estimated to be at a depth of 1,100 feet and remove it from the wellbore. All casing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 15) The Contractor will set a 300-foot bottom of the surface casing cement plug from 1,100 feet to 800 feet. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 16) The Contractor will set a 200-foot cement plug from 550 feet to 350 feet to cover the Buell run sandstone.
- 17) The Contractor will set a cement plug from 350 feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 18) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Archibald Dutton #3D Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Archibald Dutton #3D, 34-167-6-6692-00-00, Washington County, Aurelius Township

Background: The Dutton #3D is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Dutton #3D noted the presence of 8-inch production casing with a wellhead. No other production equipment was noted.

There are no geological or casing records for the Dutton #3D; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 700 feet to the Southwest was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Dutton #3D was drilled to a total depth of 520 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 348 feet of 8.25-inch casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Dutton #3D Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Dutton #3D is within a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

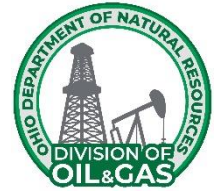
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #16, 34-167-6-0480-00-00, Washington County, Aurelius Township

Background: The Stephens #16 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #16 noted the well is equipped with 6-inch production casing, casing hangers and a puping unit were noted.

Records indicate the Stephens #16 was drilled in the early 1900's, but otherwise there are no geological or casing records for the Stephens #16, 34-167-6-0480-00-00; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,300 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #16 was drilled to a total depth of 280 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 155 feet of 5.19-inch production casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #16 Wellsite is listed by the Division as being located in an H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #16 is located within 1,200 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

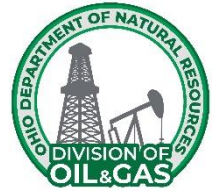
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #22 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis Stephens #22, 34-167-6-0479-00-00, Washington County, Aurelius Township

Background: The Stephens #22 is located on a 6-acre parcel (030007800000) owned by Jeffrey and Darla Haas. The property is located along Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #22 noted the well is equipped with 6-inch production casing and 2.38-inch tubing with rods.

The Stephens #22 was drilled to the Berea sandstone in the early 1900's to a depth of 1,585 feet. Plugging records from 1960 indicate the 1,200 feet of 4.86-inch production casing and 400 feet of 8.25-inch surface casing was removed from the well while 300 feet of prepared clay was placed from 1,585 to 1,385 feet and another 300 feet of clay was placed from 300 to surface. There are no geological records for the Stephens #22; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,200 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-6-0482-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #22, 34-167-2-0479-00-00 shows the following:

- 8.25-inch surface casing set at 500 feet, 400 feet pulled during plug job
- 4.87-inch production casing set at 1,200 feet, all pulled during plug job

For the purposes of this scope of work, it is assumed that Stephens #22 was drilled to a total depth of 1,585 feet and originally produced from the Berea sandstone. The well is equipped with an estimated 500 feet of 6.63-inch production casing, and 2.38-inch tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater

resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #22 Wellsite is listed by the Division as being located in an H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #22 is located within 1,500 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

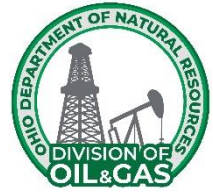
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #22 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #22, 34-167-6-0479-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #22 was drilled to a total depth of 1,585 feet and originally produced from the Berea sandstone. The well is equipped with an estimated 500 feet of 6.63-inch production casing, and 2.38-inch tubing and rods set near the bottom of the well.

The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

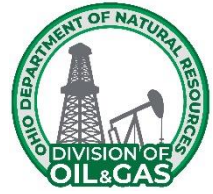
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor will remove the 2.38-inch outside diameter tubing and rods and stage them on a bermed liner for further evaluation. The Contractor shall provide an accurate measurement of the amount of tubing and rods retrieved from the wellbore.
- 6) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 176 barrels of freshwater on location for use as circulation fluid.
- 7) The Contractor shall load the well bore with fresh water and run Gamma Ray, CCL, and Bond logs to determine the depth of and bond behind the 6.63-inch diameter surface casing and to determine lithology.
- 8) All remaining cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon.

The well shall be in a static condition prior to beginning any cementing activities. In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**

- 9) The Contractor will set a 450-foot cement bottom plug from the estimated total depth of 1,585 feet to 1,135 feet. The contractor will wait on cement for a minimum of eight (8) hours, after which the Contractor will run their tools into the well to verify the depth to the top of the plug. If it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 10) The Contractor will set a 400-foot bottom of the surface casing cement plug from 700 feet to 300 feet. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 11) The Contractor will set a cement plug from 300 feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 12) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Spies #3 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Spies #3, 34-167-6-6256-00-00, Washington County, Aurelius Township

Background: The Spies #3 is located on a 6-acre parcel (030007800000) owned by Jeffrey & Darla Haas. The property is accessible from Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Spies #3 noted the well is equipped with 8.63-inch casing with a wellhead, 2.38-inch tubing just inside the wellhead and rods. No equipment was noted. An obstruction was noted 6 feet down.

There are no geological or casing records for the Spies #3, 34-167-6-6256-00-00; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,500 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Spies #3 was drilled to a total depth of 1,564 feet and originally produced from the Berea sandstone. The well is equipped with approximately 155 feet of 8.25-inch casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Spies #3 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Spies #3 is located within 1,400 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

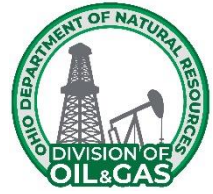
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Spies #3 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Spies #3, 34-167-6-6256-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Spies #3 was drilled to a total depth of 1,564 feet and originally produced from the Berea sandstone. The well is equipped with approximately 155 feet of 8.25-inch casing.

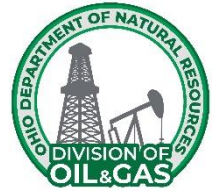
The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall clean out the material in the well bore to estimated total depth of 1,564 feet or another depth approved by the Division. The Contractor shall provide up to 256 barrels of freshwater on location for use as circulation fluid.
- 6) The Contractor shall load the well bore with fresh water and run Gamma Ray, CCL, and Bond logs to determine the depth of and bond behind the 8.25-inch diameter casing and to verify lithology.
- 7) All remaining cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**

- 8) The Contractor will set a 450-foot bottom hole cement plug from 1,564 feet to 1,114 feet. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 9) The Contractor will set a 200-foot cement plug from 1,114 feet to 914 feet to cover the Salt Sand formation. The Contractor will wait on cement for a minimum of 8 hours and top off with additional cement, if necessary. If the plug has dropped or it is determined that a competent plug has not been achieved, additional actions may be required at the discretion of the Division.
- 10) The Contractor will set a 300-foot cement plug from 400 to 100 feet to cover the bottom of the 8.25-inch casing. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 11) The Contractor will set a cement plug from 100-feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 12) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #4 Well Site
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis Stephens #4, 34-167-6-6502-00-00, Washington County, Aurelius Township

Background: The Stephens #4 is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #4 noted the presence of open 4-inch production casing, and a larger diameter surface casing. No equipment was noted.

There are no geological or casing records for the Stephens #4; however, an offset well the Stephens #1, 34-167-2-0376-00-00, located approximately 300 feet to the Southeast was drilled in 1944 to a depth of 1,798 feet and produced out of the Berea sandstone.

Formation data for the Stephens #1, 34-167-2-0376-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	5	15	
Coal	100	105	
Red shale	150	180	
Red shale	280	380	
Sand	480	510	
Sand	1,235	1,465	
Berea sandstone	1,789	1,798	
		1,798	Total Depth

Casing data for the Stephens #1, 34-167-2-0376-00-00 shows the following:

- 6.63-inch intermediate casing set at 977 feet
- 5.19-inch production casing set at 1,495 feet

For the purposes of this scope of work, it is assumed that Stephens #4 was drilled to a total depth of 1,798 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 977 feet of 6.625-inch surface casing and 1,495 feet of 5.19-inch production casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #4 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #4 is within 100 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

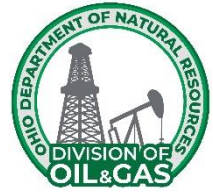
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #4 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #4, 34-167-6-6502-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #4 was drilled to a total depth of 1,798 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 977 feet of 6.625-inch surface casing and 1,495 feet of 5.19-inch production casing.

The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

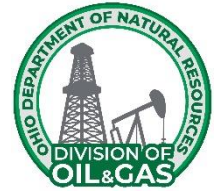
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 272 barrels of freshwater on location for use as circulation fluid.
- 6) All cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 7) The Contractor will set a 450-foot bottom hole cement plug from 1,798 feet to 1,348 feet to cover the Berea sandstone. The Contractor will wait on cement for a minimum of eight (8) hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is

determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.

- 8) The Contractor will then sever the 5.19-inch diameter casing at the lowest free point, estimated to be at a depth of 1,300 feet and remove it from the wellbore. All casing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 9) The contractor will set a 200-foot cement plug from 1,300 feet to 1,100 feet to isolate the parted 5.19-inch casing.
- 10) The Contractor will set a 300-foot bottom of the surface casing cement plug from 1,100 feet to 800 feet. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 11) The Contractor will set a 200-foot cement plug from 560 feet to 360 feet to cover the Buell run sandstone.
- 12) The Contractor will set a cement plug from 360 feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 13) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

McKendry #5, 34-167-6-0520-00-00, Washington County, Aurelius Township

Background: The McKendry #5 is located on a 38.47-acre parcel (030007992000) owned by Carl Stack. The address is 2825 Buell's Run Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the McKendry #5 noted the well appears to be equipped with 6.63-inch production casing with oilfield debris lodged inside an open wellhead.

Records indicate the McKendry #5 was drilled in 1925 and originally produced from the Buell Run sandstone. There are no casing records for the McKendry #5; however, an offset well the Waller #28, 34-167-6-0544-00-00, located approximately 2,200 feet to the Northeast was issued a permit to drill in 1925, drilled to a depth of 400 feet and produced out of the Cow Run sandstone.

Formation data for the Waller #28, 34-127-6-0544-00-00 shows the following:

Formation	Top	Bottom	Remarks
1 st Cow Run sand		400	
		400	Total Depth

Casing data for the Waller #28, 34-127-6-0544-00-00 shows the following:

- 5.63-inch casing set at 50 feet
- 5.25-inch production casing set at 375 feet

For the purposes of this scope of work, it is assumed that McKendry #5 was drilled to a total depth of 500 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 475 feet of 6.63-inch production casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer is undefined. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The McKendry #5 Wellsite is listed by the Division as being located in an H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the McKendry #5 is located within 200 feet of the boundary of an interim Surface mine. Mine permit ID: C-0553, B&N Coal.

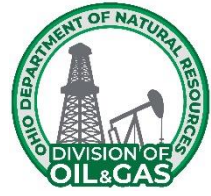
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Buell's Run Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Blank, 34-167-6-0483-00-00, Washington County, Aurelius Township

Background: The Blank is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Blank noted the well is equipped with 6-inch production casing and tubing and rods.

There are no geological or casing records for the Blank; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,600 feet to the Northwest was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Blank was drilled to a total depth of 340 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 215 feet of 6.63-inch casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Blank Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Blank is located within 600 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

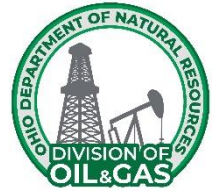
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #3, 34-167-6-0482-00-00, Washington County, Aurelius Township

Background: The Stephens #3 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #3 noted the well is equipped with 6-inch production casing that has been cut off and buried below grade.

The Stephens #3 was drilled to the Macksburg 500 sandstone in 1921 to a depth of 512 feet. Plugging records from 1943 indicate the well was filled from bottom to top with mud laden fluid and the casing was removed. There are no casing records for the Stephens #3, 34-167-6-0482-00-00; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,200 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #3, 34-167-6-0482-00-00 shows the following:

Formation	Top	Bottom	Remarks
Macksburg 500 sand	502	512	
		512	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #3 was drilled to a total depth of 512 feet and originally produced from the Macksburg 500 sandstone. The well is equipped with approximately 135 feet of 6-inch production casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #3 Wellsite is listed by the Division as being located in an H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #3 is located within 1,200 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

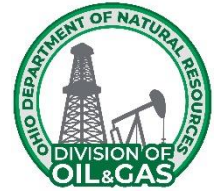
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #2, 34-167-6-0476-00-00, Washington County, Aurelius Township

Background: The Stephens #2 is located on a 5-acre parcel (030007800000) owned by Jeffrey E. and Darla L Haas. The address is Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Stephens #2 noted the well is equipped with 6-inch production casing with a wellhead, 2.38-inch production tubing, and rods. The wellhead appears to be leaning downhill.

Records indicate the Stephens #2 was drilled in the early 1900's to Buell Run sandstone. There are no geological or casing records for the **Stephens #2, 34-167-6-0476-00-00**; however, an offset well the **Stephens #2, 34-167-2-0396-00-00**, located approximately 1,400 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #2 was drilled to a total depth of 400 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 140 feet of 6.63-inch production casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal,

sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #2 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #2 is located within 1,200 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

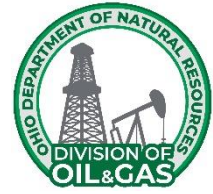
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #21, 34-167-6-0431-00-00, Washington County, Aurelius Township

Background: The Stephens #21 is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #21 noted the well appears to be equipped with 6-inch production casing and wellhead, 2-inch tubing, and a pumping unit.

Records indicate the Stephens #21 was drilled in the early 1900's to Buell Run. There are no geological or casing records for the Stephens #21; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 1,100 feet to the Northeast, was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Buel Run sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Stephens #21 was drilled to a total depth of 450 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 408 feet of 6.625-inch surface casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #21 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #21 is located within 200 feet of a surface mine site. Mine permit ID: D-183, B&N Coal.

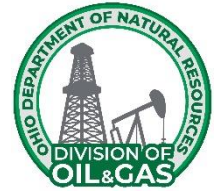
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Ward #13, 34-167-6-6255-00-00, Washington County, Aurelius Township

Background: The Ward #13 is located on a 6-acre parcel (030007800000) owned by Jeffrey & Darla Haas. The property is accessible from Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Ward #13 noted the well is equipped with 6-inch casing with a wellhead, 2.38-inch tubing and rods, and scissor style pumping unit.

There are no geological or casing records for the Ward #13, 34-167-6-6255-00-00; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,200 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Ward #13 was drilled to a total depth of 390 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 240 feet of 6.625-inch casing with rods and tubing set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Ward #13 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Ward #13 is located within 1,400 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

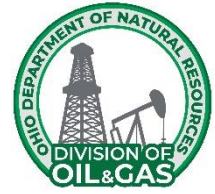
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Spies #2, 34-167-6-6257-00-00, Washington County, Aurelius Township

Background: The Spies #2 is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Spies #2 noted the well is equipped with 6.63-inch production casing equipped with a wellhead, 2.38-inch tubing that has parted just above the wellhead, and rods.

There are no geological or casing records for the Spies #2; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 400 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Spies #2 was drilled to a total depth of 420 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 295 feet of 6.63-inch production casing with rods and tubing set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Spies #2 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Spies #2 is located within 1800 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

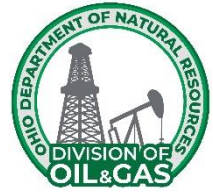
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Stephens FA Heirs #1, 34-167-6-5984-00-00, Washington County, Aurelius Township

Background: The Stephens #1 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Stephens #1 noted the well is equipped with 5.19-inch casing and tubing and rods.

There are no geological or casing records for the Stephens #1; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,600 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #1 was drilled to a total depth of 400 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 275 feet of 5.19-inch casing with tubing and rods set near the bottom of the well.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #1 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #1 is located within 1,000 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

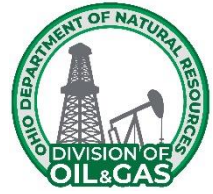
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #1, 34-167-6-0432-00-00, Washington County, Aurelius Township

Background: The Stephens #1 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #1 noted the well appears to be equipped with open 6-inch casing, production casing equipped with a wellhead, and a wooden conductor.

Records indicate the Stephens #1 was drilled in the early 1900's to an unknown formation. There are no geological or casing records for the Stephens #1; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 1,400 feet to the Northeast, was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Buel Run sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Stephens #1 was drilled to a total depth of 1,835 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 982 feet of 6.63-inch surface casing, 1,510 feet of 5.19-inch production casing, and a wooden conductor at the surface.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal,

sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #1 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #1 is not located within a surface mine site. Mine permit ID: D-183, B&N Coal.

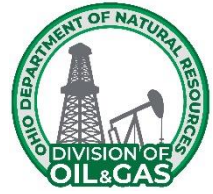
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Francis Stephens #1 Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

Francis Stephens #1, 34-167-6-0432-00-00, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that Stephens #1 was drilled to a total depth of 1,835 feet and originally produced from the Berea sandstone. It's assumed that the well is equipped with 982 feet of 6.63-inch surface casing, 1,510 feet of 5.19-inch production casing, and a wooden conductor at the surface.

The Contractor shall maintain a minimum of 100 barrels of 9.2-9.5 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid.

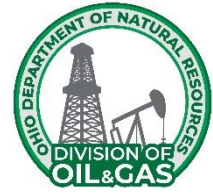
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 276 barrels of freshwater on location for use as circulation fluid.
- 6) All cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 7) The Contractor will set a 450-foot bottom hole cement plug from 1,832 feet to 1,385 feet to cover the Berea sandstone. The Contractor will wait on cement for a minimum of eight (8) hours and then run

their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.

- 8) The Contractor will then sever the 5.19-inch diameter casing at the lowest free point, estimated to be at a depth of 1,200 feet and remove it from the wellbore. All casing removed from the well will be staged on a bermed liner for further evaluation. The Contractor will provide accurate measurements for casing retrieved from the wellbore.
- 9) The contractor will set a 200-foot cement plug from 1,200 feet to 1,000 feet to isolate the parted 5.19-inch casing.
- 10) The Contractor will set a 300-foot bottom of the surface casing cement plug from 1,000 feet to 800 feet. The Contractor will wait on cement for a minimum of 8 hours and then run their tools into the well to verify the depth to the top of the plug. If the plug has dropped or it is determined that a competent plug has not been achieved, additional plugs may be required at the discretion of the Division.
- 11) The Contractor will set a 300-foot cement plug from 600 feet to 300 feet to cover the Buell run sandstone. The Contractor will wait on cement for a minimum of 8 hours and top off with additional cement, if necessary. If the plug has dropped or it is determined that a competent plug has not been achieved, additional actions may be required at the discretion of the Division.
- 12) The Contractor will set a cement plug from 300-feet to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 13) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Francis A Stephens #5, 34-167-6-0440-00-00, Washington County, Aurelius Township

Background: The Stephens #5 is located on a 144-acre parcel (030007820001) owned by Jeffrey E. Haas and Darla L Haas. The address is Dutton Hill Rd, Macksburg, OH 45746.

A contractor for the Division performed a drone survey and then ground confirmed the location of the well. Contractor inspection of the Stephens #5 noted the well is equipped with open 5.19-inch production casing buried a few feet below grade.

Records indicate the Stephens #5 was drilled in the early 1900's to Buell Run sandstone. There are no geological or casing records for the Stephens #5; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 600 feet to the Southwest was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #5 was drilled to a total depth of 460 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 275 feet of 5.19-inch production casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal,

sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #5 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #5 is located within 1,100 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

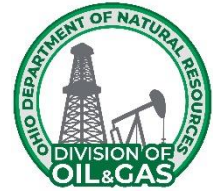
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Kuntz #1, 34-167-6-6697-00-00, Washington County, Aurelius Township

Background: The Kuntz #1 is located on a 76.77-acre parcel (030007820002) owned by David Kuhns. The address is Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Kuntz #1 noted the well appears to be equipped with 9.5-inch surface casing cut off below ground and filled with clay/soil. The smell of gas was noted.

There are no geological or casing records for the Kuntz #1; however, an offset well the Stephens #4, 34-167-2-0481-00-00, located approximately 400 feet to the Northwest was drilled in September of 1946 and completed open hole in the Berea sandstone at a depth of 1,795 feet.

Formation data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	5	
Coal	85	90	
Red shale	122	137	
Red shale	260	365	
Sandstone	465	500	
Salt sand	1,225	1,460	
Berea sandstone	1,777	1,784	Oil
		1,795	Total Depth

Casing data for the Stephens #4, 34-167-2-0481-00-00 shows the following:

- 8.25-inch casing set at 368 feet (pulled)
- 6.63-inch casing set at 942 feet
- 5.19-inch production casing set at 1,470 feet

For the purposes of this scope of work, it is assumed that Kuntz #1 was drilled to a total depth of 420 feet and originally produced from the Buell Run sandstone. It's assumed that the well is equipped with 328 feet of 9.5-inch surface casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary aquifer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Kuntz #1 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Kuntz #1 is located in a historic mine permitted area and is within 100 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

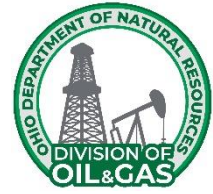
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



WELL DESCRIPTION

This Well Description is for:

Stephens FA #3, 34-167-6-0478-00-00, Washington County, Aurelius Township

Background: The Stephens #3 is located on a 144-acre parcel (030007820000) owned by David Kuhns. The address is 1570 Dutton Hill Rd, Macksburg, OH 45746.

Division inspection of the Stephens #3 noted the well is equipped with 5.19-inch production casing cut level with the surface obstructed by mud and debris.

Records indicate the Stephens #3 was plugged in August of 1969, but otherwise there are no geological or casing records for the Stephens #3, 34-167-6-0478-00-00; however, an offset well the Stephens #2, 34-167-2-0396-00-00, located approximately 1,300 feet to the West was drilled in 1944 to a depth of 1,764 feet and produced out of the Berea sandstone.

Formation data for the Stephens #2, 34-167-2-0369-00-00 shows the following:

Formation	Top	Bottom	Remarks
Red shale	0	20	
Coal	75	80	
Red shale	105	135	
Big Red shale	240	350	
Buel Run sandstone	460	480	
Salt sand	1,210	1,410	
Berea sandstone	1,751	1,759	
		1,764	Total Depth

Casing data for the Stephens #2, 34-167-2-0396-00-00 shows the following:

- 10-inch conductor set at 85 feet
- 8-inch surface casing set at 355 feet
- 6-inch intermediate casing set at 925 feet
- 5-inch production casing set at 1,415 feet

For the purposes of this scope of work, it is assumed that Stephens #3 was drilled to a total depth of 280 feet and originally produced from the Buell Run sandstone. The well is equipped with approximately 155 feet of 5.19-inch production casing.

The deepest underground source of drinking water (USDW) is not mapped in this area. Based on local water well data, offset oil and gas well records within the reviewed area, and published groundwater resources information for Washington County, the bedrock consists of shale, siltstone, limestone, coal, sandstones up to 350+ feet in thickness and in shades of gray, green, and infrequently red. The primary

aquafer can be found in layers of interbedded sedimentary rock. Water well depths vary wildly from 65-205 feet and produce between 1-45 gallons per minute.

The Francis Stephens #3 Wellsite is listed by the Division as being located in a H2S Township. Based on this information, the Contractor will follow the H2S protocol as defined in the Detailed Specifications.

According to the Division of Mineral Resources Management the Stephens #3 is located within 1,200 feet of a reclaimed surface coal mine. Mine permit ID: D-183, B&N Coal.

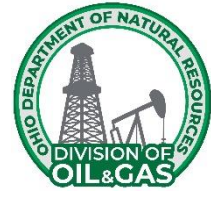
Scope of Work: This project includes the mobilization and access to the site, plugging the orphan well, as well as regrading of disturbed areas as described.

Designated Route: The contractor shall utilize Dutton Hill Rd to access the site during all phases of the plugging operations.

It is the Contractor's responsibility to contact all County, Township, State and Municipal Officials having jurisdiction over the roads that are intended to be utilized for this project. The Contractor shall provide written documentation to the Division, of all road use notifications/approvals prior to mobilizing equipment to the site.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

34-167-2-1954-00-00, Archibald Dutton #6D, Washington County, Aurelius Township
34-167-6-0440-00-00, Francis Stephens #5, Washington County, Aurelius Township
34-167-6-0478-00-00, Francis Stephens #3, Washington County, Aurelius Township
34-167-6-0482-00-00, Francis Stephens #3, Washington County, Aurelius Township
34-167-6-0484-00-00, Francis Stephens #2, Washington County, Aurelius Township
34-167-6-0519-00-00, McKendry #4, Washington County, Aurelius Township
34-167-6-0520-00-00, McKendry #5, Washington County, Aurelius Township
34-167-6-6688-00-00, Archibald Dutton #1D, Washington County, Aurelius Township
34-167-6-6691-00-00, Archibald Dutton #4D, Washington County, Aurelius Township
34-167-6-6692-00-00, Archibald Dutton #3D, Washington County, Aurelius Township
34-167-6-6693-00-00, Francis Stephens #3D, Washington County, Aurelius Township
34-167-6-6697-00-00, Kuntz #1, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that each of the above wells were drilled to a total depth ranging from 280-520 feet and originally produced from the Buell Run sandstone. The wells are each equipped with a single string of casing between 4.5-inches and 9.5-inches in diameter and all set at depths ranging from 155-415 feet.

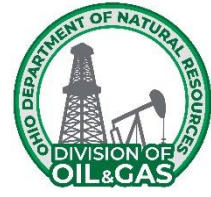
The Contractor shall maintain a minimum of 50 barrels of 9 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid. These minimum requirements may increase if any wells are found to produce from a significantly deeper formation.

- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**
- 5) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 120 barrels of freshwater on location for use as circulation fluid.

- 6) All cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 7) The Contractor will set a cement plug from total depth to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 8) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
WASHINGTON #23F PROJECT
Multiple Well Site
Washington County, Aurelius Township



PLUGGING PLAN

This Plugging Plan is for:

34-167-6-0431-00-00, Francis Stephens #21, Washington County, Aurelius Township
34-167-6-0439-00-00, Francis Stephens #4, Washington County, Aurelius Township
34-167-6-0475-00-00, Francis Stephens #1, Washington County, Aurelius Township
34-167-6-0476-00-00, Francis Stephens #2, Washington County, Aurelius Township
34-167-6-0480-00-00, Francis Stephens #16, Washington County, Aurelius Township
34-167-6-0483-00-00, Blank, Washington County, Aurelius Township
34-167-6-0518-00-00, McKendry #3, Washington County, Aurelius Township
34-167-6-0522-00-00, McKendry #6, Washington County, Aurelius Township
34-167-6-1001-00-00, Archibald Dutton #7D, Washington County, Aurelius Township
34-167-6-5984-00-00, Francis Stephens #1, Washington County, Aurelius Township
34-167-6-6255-00-00, Ward #13, Washington County, Aurelius Township
34-167-6-6257-00-00, Spies #2, Washington County, Aurelius Township
34-167-6-6690-00-00, Archibald Dutton #5D, Washington County, Aurelius Township

For the purposes of this scope of work, it is assumed that each of the above wells were drilled to a total depth ranging from 280-460 feet and originally produced from the Buell Run sandstone. The wells are each equipped with a single string of casing between 5.19-inches and 8.25-inches in diameter and all set at depths ranging from 140-415 feet.

The Contractor shall maintain a minimum of 50 barrels of 9 pound-per-gallon weighted brine on location throughout the entire plugging process for use as a well kill fluid. These minimum requirements may increase if any wells are found to produce from a significantly deeper formation.

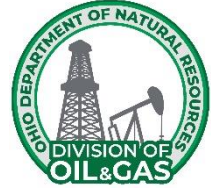
- 1) The Contractor will safely relieve any pressure that may be built up on this well prior to commencing plugging operations. The Contractor will give the property owner and local fire authorities a minimum of twenty-four (24) hour notice prior to blowing down the well.
- 2) The Contractor shall visually examine the existing casing(s), to evaluate their condition immediately below grade. If the casing(s) are found to be severely degraded, the Contractor will remove the incompetent section of casing and install enough new casing, of similar diameter, to bring the top of the existing casing(s) to a suitable working height.
- 3) The Contractor shall then install an appropriately sized and lined temporary cellar around the wellhead to capture any fluids generated during the plugging process.
- 4) The Contractor will remove the 2.38-inch outside diameter rods and/or tubing and stage it/them on a bermed liner for further evaluation. The Contractor shall provide an accurate measurement of the total footage of rods and/or tubing retrieved from the wellbore.
- 5) The Contractor shall then install an appropriate wellhead and an approved method of well control on the most appropriately sized casing string to insure there is control of any gas and/or fluids generated

from the well. **The Contractor shall establish and maintain well control throughout the entire plugging process.**

- 6) The Contractor shall clean out the material in the well bore to total depth or another depth approved by the Division. The Contractor shall provide up to 120 barrels of freshwater on location for use as circulation fluid.
- 7) All cement plugs shall be set through a working string of 1.5-inch minimum inside diameter (ID) tubing using an approved cement with 2% Calcium Chloride, mixed at 15.6 pounds per gallon. **The well shall be in a static condition prior to beginning any cementing activities.** In addition, circulation must be established, and all free crude oil shall be circulated from the wellbore prior to setting any plug. **A minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formations.**
- 8) The Contractor will set a cement plug from total depth to within thirty (30) inches of ground level, wait on cement for a minimum of eight (8) hours and top off with additional cement if necessary. Any open annular voids present at the surface shall be filled with cement.
- 9) No sooner than three (3) business days after placing the uppermost plug, the Division will inspect the well at surface to determine if any additional plugging work shall be required at that time. If additional work is not needed the Contractor shall cut to a depth of 30 inches below the surface and the Contractor shall set the plugged well identification as outlined in the General Specifications and Ohio Administrative Code 1501-9-11-10.



SCOPE OF WORK
Washington 23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



DETAILED SPECIFICATIONS

The Contractor is reminded to review the Scope of Work documents carefully. Coordination, permission, or direction of the Division may be required for use of individual Detailed Specification line items. The Division shall only pay for quantities of items that are correctly installed and completed in accordance with the Detailed Specifications and Drawing Plan Set. The Division shall not guarantee payment of any work completed without or prior to following the conditions described herein of each line item.

MOBILIZATION

- A. **Description:** This work shall consist of the development of access and the mobilization of the Contractor's forces and equipment necessary for performing the required work under the Scope of Work for the well site.

This item shall include the transportation of personnel, equipment, and supplies to and from each site as well as the maintenance of all onsite access roads.

As part of this line item, the Contractor shall also include any maintenance of traffic required within the road right-of-way per Part 7 of the General Specifications.

Also, the Contractor shall be responsible for cleaning mud and dirt associated with construction from all roadway surfaces (public and private) as per Part 7.1 of the General Specification for the duration of the Project and as directed by the Division.

- B. **Execution:** No additional compensation shall be made to the Contractor for remobilization after his equipment has been removed from the site. If applicable, this shall include remobilization of equipment if removed due to winterization of the project.

Any damage to the road, drives, and/or culverts caused by the mobilization shall be repaired by the Contractor at the Contractor's expense. All repairs shall be done equal to or better to that which existed prior to construction activities.

- C. **Measurement:** Measurement for payment will be considered and measured as a unit satisfactorily completed and accepted by the Division. **Mobilization of equipment between wells shall be considered incidental to this line item for wells using a common entrance.**

If any portion of the item is non-performed to the satisfaction of the Division (i.e., the mud and dirt are not cleaned from the roadway, the proper signage is not used as detailed) this is considered unsatisfactory and shall be cause for the rejection of payment of this item.

As part of the consideration to be satisfactorily completed, work shall be per the "Sequence of Work."

- D. Payment: The cost of this work shall be included in the lump sum price for **"Mobilization."**

DEMobilIZATION

- A. Description: This work shall consist of the demobilization of all personnel, plugging related equipment and materials as well as the cleanup of all areas upon completing all other work required under the scope of work for the well site.
- B. Execution: Any damage to the road, drives, and/or culverts caused by the demobilization shall be repaired by the Contractor at the Contractor's expense. All repairs shall be done equal to or better to that which existed prior to construction activities.

This item shall also include the continued and proper use of any maintenance of traffic required within the road right-of-way per Part 7 of the General Specifications.

Also, the Contractor shall be responsible for cleaning mud and dirt associated with construction from all roadway surfaces (public and private) as per Part 7.1 of the General Specification for the duration of the Project and as directed by the Division.

- C. Measurement: Measurement for payment will be considered and measured as a unit satisfactorily completed and accepted by the Division. **Demobilization of equipment between wells shall be considered incidental to this line item for wells using a common entrance.**

If any portion of the item is non-performed (i.e., the mud and dirt are not cleaned from the roadway, damaged items not restored to the satisfaction of the Division, etc.) this is considered unsatisfactory and shall be cause for the rejection of payment of this item.

- D. Payment: The cost of this work shall be included in the lump sum price for **"Demobilization."**

CLEARING & GRUBBING

- A. Description: This item covers the removal of the vegetation within the limits shown on the Drawing Plan Set to provide adequate space to maneuver equipment to complete the proposed work at each well.
- B. Execution: The Contractor shall only clear enough of the site within the limits shown on the Drawing Plan Set to provide adequate space to maneuver equipment to complete the proposed work. The Division shall exercise control over clearing and shall designate all

trees, plants, shrubs, abandoned material, trash, etc., to be removed or to remain. This work shall also include the preservation from injury or defacement of all trees designated to remain.

If the Contractor clears and/or grubs beyond the construction work limits, whether knowingly or accidentally, the Contractor shall replant and/or otherwise restore all areas outside of the limits to a condition equal to or better than what existed prior to beginning work. This shall be no at no additional expense to the Division.

All tree disturbance (trimming and/or removal) activities shall be coordinated with the Division as these trees may provide suitable roosting, foraging, or traveling habitat for Threatened & Endangered species. To prevent adverse impacts to Threatened & Endangered species, clearing of trees with a DBH (Diameter at Breast Height) greater than 3 inches, **shall not take place between April 1st and September 30th.**

All removed vegetation shall be placed in a stable manner. **Brush and debris shall be stacked to the down slope side of the work, outside of the work limits.** The Division shall make the final determination as to the stability and location of the constructed piles. The log pile(s) shall not exceed four (4) feet in height or eight (8) feet in width, and thirty (30) feet in length. The Contractor shall be responsible for the repair/reconstruction of the piles, at the discretion of the Division, up to the final acceptance of the project.

All marketable trees over ten (10) inches in diameter at 4.5 feet off the ground shall **be cut into firewood logs of twenty (20) inch lengths** and stacked for the landowner at a location on the project site as directed by the Division. The Contractor shall be responsible for the repair/reconstruction of the log piles, at the discretion of the Division, up to the final acceptance of the project.

As directed by the Division, Stumps shall be cut off flush with the existing ground surface prior to placement of material or grubbed, and holes graded to assure positive drainage. Approved resoil shall be used if the area can't be properly graded.

Burning of debris materials shall not be permitted on-site.

- C. Measurement: Measurement for payment will be considered and measured as a unit satisfactorily completed and accepted by the Division. This measurement shall be for the entire project as one unit.
- D. Payment: Payment shall be made at the contract lump sum price per "**Clearing & Grubbing.**"

SILT FENCE

- A. General: This item covers construction of silt fences and/or straw bale dikes. The Division shall designate utilization of silt fence, straw bale dikes or a combination of both at locations selected for placement.

The placement of silt fence and straw bale dikes within the limits of construction shall be at the discretion of the Division.

During the life of the project, the Contractor shall maintain these silt and erosion-control structures. Accumulated silt shall be removed when it, in the Division's opinion, may damage or reduce the effectiveness of the structure.

B. Straw Bale Dikes

1. Materials: Straw bale dikes shall be constructed with twine-bound square straw or hay bales, staked to remain in place.
2. Installation and Execution: The location of the dikes shall be as directed by the Division, at the time of construction. When the usefulness of the dikes has ended, they shall be removed and disposed of. Dikes may remain in place upon completion of the project only when permitted by the Division.

C. Silt Fence

1. Materials

- a. The silt fence fabric shall conform to the ODOT Item 712.09, Type C. The silt fence shall be installed in accordance with all manufacturers' instructions.

The fabric shall be free of any treatment that might significantly alter its physical properties. During shipment and storage, the fabric shall be wrapped in a heavy-duty protective covering to protect it from direct sunlight, dirt, and other debris.

The manufacturer shall submit certified test data to cover each shipment of material.

- b. The silt fence used shall be a prefabricated silt fence with fabric already attached to posts or shall be assembled in the field according to the following installation guidelines.

The fabric shall be a pervious sheet composed of a strong, rot-proof polymeric yard or fiber oriented into a stable network, which retains its relative structure during handling, placement, and long-term service. It shall have excellent resistance to deterioration from ambient temperatures, acid, and alkaline conditions, and shall be indestructible to microorganisms and insects. The material shall be resistant to deterioration by ultraviolet light and protected until placement as recommended by the manufacturer such that no deterioration occurs. During shipment and storage, the rolls of fabric shall be protected against deterioration from the sun, mud, dirt, dust, and other harmful conditions at all times until their use.

2. Installation Guidelines for Silt Fence: Silt fence shall be installed in the following manner.

- a. First, a small toe-in trench shall be dug along the line where the silt fence is to be

placed. The trench shall be a minimum of 6-inch deep and 6-inch wide. The excavated material shall be placed on the front or uphill side of the trench to facilitate backfilling later.

- b. Next, fence posts shall be driven into the back or downstream side of the trench. The posts shall be driven so that at least one-third (1/3) of the height of the post is in the ground. When installing a prefabricated silt fence with fabric attached to the posts, the posts shall be driven so that at least 6-inch of fabric shall be buried in the ground. Most prefabricated silt fences have posts spaced approximately 6 feet – 8 feet apart, which is usually adequate. If there is a low spot where most sediment tends to collect, the prefabricated silt fences can be backed up with bale backup. Posts shall be hardwood with sufficient strength to support a full load of deposited sediment.
 - c. Finally, the trench shall be backfilled with the excavated material and tamped so that at least 6-inches of the fabric is securely toed into the ground to prevent undermining.
 - d. The silt fences shall be maintained throughout construction. The Contractor shall conduct regular inspections and after all heavy rains. Damaged fences must be repaired immediately.
 - e. At the completion of construction and upon establishment of suitable vegetation as determined by the Division, all silt fence structures shall be removed. Areas disturbed by the removal operation including temporary access roads shall be revegetated. In general, this operation shall consist of regrading, re-fertilizing, reseeding, and mulching.
- D. Measurement: Measurement for payment for the above-described work shall be made by actual field measurements of quantities satisfactorily installed and completed. When using silt fence with bale backup the measurement shall be the length of the silt fence installed, plus the length of the straw bale dike installed.
- E. Payment for Silt Fence and Straw Bale Dikes: Payment for this item shall be made at the unit price per linear foot of "**Silt Fence.**" The Division shall only pay for quantities of items that are completed.

No. 4 STONE

- A. Description: This work covers the quality, material placement and requirements as a base course stone for project access as shown in the Drawing Plan Set.
- B. Materials: The materials shall consist of sound and durable rock, gravel or stone of the proper gradation meeting ODOT specifications. The material shall be free from cracks, seams, and other defects, which tend to increase deterioration from natural causes. It shall be highly resistant to weathering and disintegration under freezing and thawing and wetting and drying as evidenced by laboratory tests and/or service records. The Division at any

time during the project may reject any materials, at the source or job site, not meeting the requirements of these specifications.

Acceptability of material will be determined by laboratory tests, visual inspection and/or service records as required by the Division. Service records will include documentation to show the material has performed satisfactorily on similar structures.

- C. Installation: Upon delivery of the material to the site the Contractor shall install the material in place as directed by the Division. The Contractor shall not stockpile materials at the site.

The Contractor shall remove the topsoil prior to installation of any access road or work area stone. Topsoil shall be stockpiled adjacent to the location it is removed from. At the conclusion of the project, all topsoil will be replaced to its original location as part of the line item **"Site Restoration." Existing drives upgraded for the purpose of this work shall be restored to a condition better than prior to construction.**

- D. Measurement: The material shall be measured for payment by the ton (2,000 pounds) for material acceptably placed in the work area as determined by certified scale weight tickets.

All material wasted or used by the Contractor for other purposes and any material not placed in the work area in accordance with the requirements of the work order and these specifications and drawings shall be measured and not included for payment by weight. A conversion factor of 1.5 ton per cubic yard of No. 4 Stone shall be used if necessary.

- E. Payment: Payment of this work as specified above shall be made based on the unit price per ton for **"No. 4 Stone."**

No. 57 STONE

- A. Description: This work covers the quality, material placement and requirements as a top course stone for the access drives as shown in the Drawing Plan Set. This material shall be placed within the current limits of the landowner's drive.

- B. Materials: The materials shall consist of sound and durable rock, gravel or stone of the proper gradation meeting ODOT specifications. The material shall be free from cracks, seams, and other defects, which tend to increase deterioration from natural causes. It shall be highly resistant to weathering and disintegration under freezing and thawing and wetting and drying as evidenced by laboratory tests and/or service records. The Division at any time during the project may reject any materials, at the source or job site, not meeting the requirements of these specifications.

Acceptability of material will be determined by laboratory tests, visual inspection and/or service records as required by the Division. Service records will include documentation to show the material has performed satisfactorily on similar structures.

- C. Installation: Upon delivery of the material to the site the Contractor shall install the material

in place as shown on the Drawing Plan Set.

- D. Measurement: The material shall be measured for payment by the ton (2,000 pounds) for material acceptably placed in the work as determined by certified scale weight tickets.

All material wasted or used by the Contractor for other purposes and any material not placed in the work in accordance with the requirements of the work order and these specifications and drawings shall be measured and not included for payment by weight. A conversion factor of 1.5 ton per cubic yard of No. 57 Stone shall be used if necessary.

- E. Payment: Payment for this work as specified above shall be made based on the unit price per ton for "**No. 57 Stone.**"

TYPE "C" ROCK CHANNEL PROTECTION

- A. Description: This work covers the quality, material placement and requirements energy dissipation stone for the temporary stream crossing as directed by the Division at the time of construction and as shown on the Drawing Plan Set.
- B. Materials: The materials shall consist of sound and durable rock, gravel or stone of the proper gradation meeting ODOT specifications. The material shall be free from cracks, seams, and other defects, which tend to increase deterioration from natural causes. It shall be highly resistant to weathering and disintegration under freezing and thawing and wetting and drying as evidenced by laboratory tests and/or service records. The Division at any time during the project may reject any materials, at the source or job site, not meeting the requirements of these specifications.

The Type "C" Material shall consist of sizes such that at least 85 percent of the total material by weight shall be larger than a 6-inch but less than an 18-inch square opening. At least 50 percent of the total material by weight shall be larger than a 12-inch square opening. The material smaller than a 3-inch square opening shall consist predominantly of rock spalls and rock fines and shall be free of soil.

Acceptability of material shall be determined by laboratory tests, visual inspection and/or service records as required by the Chief. Service records shall include documentation to show the material has performed satisfactory on similar structures.

Elongation (the ratio of the least dimension to the greatest dimension) shall be equal to or greater than one-half (1/2) for Type "C" material.

- C. Installation:
1. The Contractor shall mark the areas for the placement of the stone and gain approval of the Chief prior to placement. The Contractor shall use special care during placement. Minor excavation rehandling and rearranging of stones may be required to ensure that all rock is placed in a stable manner.
 2. Material shall be placed in a manner that shall permit the smaller rocks to fill the voids between the bigger rocks. Material shall be placed and worked so as to attain maximum density. No large voids or concentrations of similar size rocks shall be permitted.

- D. Measurement: The material shall be measured for payment by the ton (2,000 pounds) for material acceptably placed in the work as determined by certified scale weight tickets.

All material wasted or used by the Contractor for other purposes and any material not placed in the work in accordance with the requirements of the work order and these specifications and drawings shall be measured and not included for payment by weight. A conversion factor of 1.5 ton per cubic yard of Rock Channel Protection shall be used if necessary.

- E. Payment: Payment this work as specified above shall be made based on the unit price per ton for "Type "C" Rock Channel Protection."

TYPE "D" RIP RAP

- A. Description: This work covers the quality, material placement and requirements as an aggregate for the project access as shown in the Drawing Plan Set.

- B. Materials: The materials shall consist of sound and durable rock, gravel or stone of the proper gradation meeting ODOT specifications. The material shall be free from cracks, seams, and other defects, which tend to increase deterioration from natural causes. It shall be highly resistant to weathering and disintegration under freezing and thawing and wetting and drying as evidenced by laboratory tests and/or service records. The Division at any time during the project may reject any materials, at the source or job site, not meeting the requirements of these specifications.

The Type "D" Material shall consist of sizes such that at least 85 percent of the total material by weight shall be larger than a 3-inch but less than a 12-inch square opening. At least 50 percent of the total material by weight shall be larger than a 6-inch square opening. The material smaller than a 3-inch square opening shall consist predominantly of rock spalls and rock fines and shall be free of soil.

Acceptability of material shall be determined by laboratory tests, visual inspection and/or service records as required by the Chief. Service records shall include documentation to show the material has performed satisfactory on similar structures.

Elongation (the ratio of the least dimension to the greatest dimension) shall be equal to or greater than one-half (1/2) for Type "D" material.

- C. Installation:

1. The Contractor shall mark the areas for the placement of the stone and gain approval of the Chief prior to placement. The Contractor shall use special care during placement. Minor excavation rehandling and rearranging of stones may be required to ensure that all rock is placed in a stable manner.
2. Material shall be placed in a manner that shall permit the smaller rocks to fill the voids between the bigger rocks. Material shall be placed and worked so as to attain maximum density. No large voids or concentrations of similar size rocks shall be permitted.

- D. Measurement: The material shall be measured for payment by the ton (2,000 pounds) for material acceptably placed in the work as determined by certified scale weight tickets.

All material wasted or used by the Contractor for other purposes and any material not placed in the work in accordance with the requirements of the work order and these specifications and drawings shall be measured and not included for payment by weight. A conversion factor of 1.5 ton per cubic yard of Rock Channel Protection shall be used if necessary.

- E. Payment: Payment this work as specified above shall be made based on the unit price per ton for **"Type 'D' Rip Rap."**

No. 304 AGGREGATE BASE

- A. Description: This work covers the quality, material placement and requirements as an aggregate for the project access as shown in the Drawing Plan Set.
- B. Materials: The materials shall consist of sound and durable rock, gravel or stone of the proper gradation meeting ODOT specifications. The material shall be free from cracks, seams, and other defects, which tend to increase deterioration from natural causes. It shall be highly resistant to weathering and disintegration under freezing and thawing and wetting and drying as evidenced by laboratory tests and/or service records. The Division at any time during the project may reject any materials, at the source or job site, not meeting the requirements of these specifications.

Acceptability of material will be determined by laboratory tests, visual inspection and/or service records as required by the Division. Service records will include documentation to show the material has performed satisfactorily on similar structures.

- C. Installation: Upon delivery of the material to the site the Contractor shall install the material in place as shown on the Drawing Plan Set.
- D. Measurement: The material shall be measured for payment by the ton (2,000 pounds) for material acceptably placed in the work as determined by certified scale weight tickets.

All material wasted or used by the Contractor for other purposes and any material not placed in the work in accordance with the requirements of the work order and these specifications and drawings shall be measured and not included for payment by weight. A conversion factor of 1.5 ton per cubic yard of No. 304 aggregate base shall be used if necessary.

- E. Payment: Payment of this work as specified above shall be made based on the unit price per ton for **"No. 304 Aggregate Base."**

12" PE/PVC CULVERT

- A. Description: This item covers the quality, material placement and requirements for the installation of the culvert. This item shall also include the removal of the pipe which shall become the property of the Contractor.
- B. Materials:

1. Culvert Pipe: The culvert pipe shall be 12" corrugated N-12 HDPE smooth interior pipe or approved equal and shall meet the AASHTO M294 specification, except the average elongation shall not exceed 7.5 percent when tested as described in that specification. Manufacturer's certification shall be furnished to the Division.
 2. Backfill: Backfill material shall be placed around the pipe as shown on the Drawing Plan Set. Backfill material shall be included in the unit price for "**No. 304 Aggregate Base**".
- C. Installation: The Division shall verify locations prior to commencing installation. Installation shall follow all manufacturers' specifications and requirements.
- The temporary culvert shall be removed at the completion of the project. **The culvert shall become the property of the Contractor at the completion of the project and shall be removed and reused or disposed of at the Contractor's expense.**
- D. Measurement: Measurement of 12" PE/PVC Culvert shall be by actual linear feet of pipe installed as measured in the field.
- E. Payment: The cost for work under this item, including HDPE pipe and installation, shall be at the unit price per linear foot for "**12" PE/PVC Culvert**".

ROAD MATS (COMPOSITE)

- A. Description: This item shall consist of the transportation, delivery, installation, and removal of road mats as described. The placement of road mats within the limits of construction shall be at the discretion of the Division. This item shall be utilized to protect the existing subgrade, existing utilities, driveways, roadway, curbs, sidewalks, and lawn space that will be traversed within the construction work limits.
- B. Material: Road matting shall be non-permeable, composite mats. Non-permeable, composite mats shall be a minimum of four (4) inches thick with a minimum surface dimension of seven (7) feet wide and thirteen (13) feet long. Non-permeable, composite mats and associated components (i.e. ramps, berms, and fittings) shall be installed per the manufacturer's recommendations.
- All materials delivered to the site must be in a shape to be able to cover the area properly and still have the strength and integrity to complete the required work. The Division may reject any mats determined to be damaged beyond useful life or remove square footage as measured from each individual mat.**
- C. Execution: Mats shall be kept clean throughout the project. If it is determined by the Division, the mats do not meet this requirement the Contractor shall have any sediment or mud removed immediately.
- D. Measurement: Measurement for payment for the road mats shall be made by actual field

measurements of quantities satisfactorily installed at the site. Each road mat shall be measured for a square foot installed.

Road mats shall be utilized for the duration required to plug the well at each site. Only one measurement and payment shall be made for "Road Mats" upon completion of the well site.

- E. Payment: The cost of this work shall be included in the unit price per square foot for "**Road Mats (Composite).**"

TIMBER MATS

- A. Description: This item shall consist of the transportation, delivery, installation, and removal of road mats as described. The placement of road mats within the limits of construction shall be at the discretion of the Division and/or as shown on the Drawing Plan Set in order to enhance the subgrade conditions and/or for overtop utility crossings.
- B. Material: Timber matting shall be composed of dense hardwood, shall be a minimum of six (6) inches thick, four (4) feet wide, and sixteen (16) feet long, and shall have a minimum of 1-1/4-inch diameter lift bolts installed at each end and through the width of the mat. The size required will vary depending on the use, see details on the drawing plan sets for variations on these sizes. **The size required will vary depending on the use (airbridge), see details on the Drawing Plan Set for variations on these sizes.**

All materials delivered to the site must be in a shape to be able to cover the area properly and still have the strength and integrity to complete the required work. The Division may reject any mats determined to be damaged beyond useful life. The following grade descriptions for used mats shall be used by the Division to determine if the materials are acceptable.

1. **GRADE A** - Visually, Grade A mats look like new mats. The timbers are still square and in excellent condition and all the mat bolts are in place and fully intact. Mats must have all bolts and timbers fully intact. Mats are less than 9 months old. Very minimal wear, no chunks out of timbers missing.
2. **GRADE B** - Essentially, Grade B mats are less pretty versions of Grade A mats. They have no structural faults; they just look a bit worn. Edges of timbers are still square, and timbers are also sound and free of rot. If one or two of the bolts are bent, they qualify as Grade B mats. These mats might also be stained, but the discoloration is not enough to affect the durability of the mat. Typically, 10-18 months of age/usage makes the mat fall into a B grade. **(All mats used to bridge over anything shall be Grade B or better and shall be as detailed on the Drawing Plan Set.)**
3. **GRADE C** - Grade C mats are not quite up to the challenges that Grade A and B mats can handle, but they still have life left in them. Grade C Mats can have a missing or pulled rod on one end of the mat. The mat still has structural integrity inside 2' from each end though. Timbers may be broken within 2' of either end but no timbers are

broken inside of the 2' of each end. No hanging timbers allowed in C grade mats. As you can imagine, these are not going to be the picture-perfect image of timber mats. They might be missing numerous bolts, incurred excessive repairs, or be slightly varied in shape. Grade C mats are less expensive, but they also have a shorter life expectancy. **Any mat meeting the Grade C rating shall be measured for square footage of acceptable usable area.**

- C. Measurement: Measurement for payment for the road mats shall be made by actual field measurements of quantities satisfactorily installed at the site. Each road mat shall be measured for a square foot installed.
- D. Payment: **The Contractor should note timber mats used for air bridges as part of the transmission line crossing require unique lengths and widths. Additional costs associated with these unique dimensions shall be incorporated into the unit price of this line item.** The cost of this work shall be included in the unit price per square foot for "Timber Mats"

PORTABLE BRIDGE

- A. Description: This item shall consist of the procurement, transportation, delivery, installation, maintenance and removal of a portable bridge w/abutments (portable bridge) as described. The placement of a portable bridge within the limits of construction shall be at the discretion of the Division. This item shall be utilized to protect the existing stream that will be traversed within the construction work limits. This item shall include all work that is required for the portable bridge as shown on the Drawing Plan Set.
- B. Materials: The portable bridge shall utilize a bridge type crossing that allows for access without affecting the stream below the ordinary high-water mark and is of sufficient capacity to facilitate the work. The portable bridge shall be sized to span the stream, wide enough to safely pass the intended equipment and allow adequate length to rest on abutments. The portable bridge shall carry a max load rating established by an engineer. The contractor shall not exceed the max load rating when using the portable bridge. Placing culverts or stone below the ordinary high-water mark shall not be allowed.
- C. Execution: The contractor shall **submit a written portable bridge plan to the Division** prior to execution. The portable bridge plan shall describe the following elements:
 - a. Type of portable bridge, include manufacturer, model and dimensions
 - b. Abutment material and dimensions
 - c. Method for transportation and installation
 - d. Configuration
 - e. Necessary grading requirements, if any
 - f. Method for restoring effected areas

Upon receiving approval from the Division, the contractor shall install the portable bridge at the location indicated by the Division and maintain the portable bridge during the life of the project. Installation shall include any miscellaneous grading that may be necessary.

All work up to an including site restoration opposite the ingress/egress side of the stream must be

completed before removing the bridge. Reinstallation will be at the Contractor's own cost if the bridge is removed prior to the work being completed and accepted by the Division.

Upon completion of the work the portable bridge shall be removed. The affected areas shall be restored to the original grade and all disturbed areas shall be revegetated according to the Site Restoration Specification.

- D. Measurement: Measurement for the portable bridge, which includes procurement, transportation, delivery, installation, maintenance and removal, will be considered and measured as a unit satisfactorily completed and accepted by the Division. Portable bridge shall not be considered complete until the portable bridge has been removed from the site. The following milestones will be used to measure progress for payment:
- a. 20% - mobilization
 - b. 80% - installation
 - c. 100% - removal / restoration
- E. Payment: The cost of this work shall include all material, labor, and equipment necessary to complete the work and be made at the lump sum price for "**Portable Bridge.**"

AIRBRIDGE W/ ABUTMENTS

- A. Description: This item shall consist of the transportation, delivery, installation, and removal of airbridge w/ abutments as described. The placement of airbridge w/ abutments within the limits of construction shall be at the discretion of the Division. This item shall be utilized to protect the existing stream that will be traversed within the construction work limits. This item shall include all work that require airbridge w/ abutments as shown on the Drawing Plan Set.
- B. Material: Air bridge and abutments shall be composed of dense hardwood, shall be a minimum of eight (8) inches thick, four (4) feet wide, and sixteen (16) feet long, (see site plans for required lengths) and shall have a minimum of 1-1/4-inch diameter lift bolts installed at each end and through the width of the mat. Strapping material shall be a minimum of 1/4" thick x 2" wide hot rolled steel per ASTM A36 and lag bolts shall be minimum of 1/2" x 5" long.

All materials delivered to the site must be in a shape to be able to cover the area properly and still have the strength and integrity to complete the required work. The Division may reject any mats determined to be damaged beyond useful life. The following grade descriptions for used mats shall be used by the Division to determine if the materials are acceptable.

1. **GRADE A** - Visually, Grade A mats look like new mats. The timbers are still square and in excellent condition and all the mat bolts are in place and fully intact. Mats must have all bolts and timbers fully intact. Mats are less than 9 months old. Very minimal wear, no chunks out of timbers missing.
2. **GRADE B** - Essentially, Grade B mats are less pretty versions of Grade A mats. They have no structural faults; they just look a bit worn. Edges of timbers are still square, and timbers are also sound and free of rot. If one or two of the bolts are bent, they qualify as Grade B mats. These mats might also be stained, but the discoloration is not enough to affect the durability of the mat. Typically, 10-18 months of age/usage makes the mat fall into a B grade. **(All mats used to bridge over anything shall be Grade B or better.)**

3. **GRADE C** - Grade C mats are not quite up to the challenges that Grade A and B mats can handle, but they still have life left in them. Grade C Mats can have a missing or pulled rod on one end of the mat. The mat still has structural integrity inside 2' from each end though. Timbers may be broken within 2' of either end but no timbers are broken inside of the 2' of each end. No hanging timbers allowed in C grade mats. As you can imagine, these are not going to be the picture-perfect image of timber mats. They might be missing numerous bolts, incurred excessive repairs, or be slightly varied in shape. Grade C mats are less expensive, but they also have a shorter life expectancy. **Any mat meeting the Grade C rating shall be measured for square footage of acceptable usable area.**
- C. **Execution:** Air bridge shall be kept clean throughout the project. If it is determined by the Division the bridge surface does not meet this requirement the Contractor shall have any sediment or mud removed immediately. Contractor shall take care not to deposit sediment or mud in the existing stream.
- D. **Measurement:** Measurement for the air bridge w/ abutments, which includes all materials, labor, and equipment necessary to provide the required air bridge w/ abutments will be considered and measured as a unit satisfactorily completed and accepted by the Division. Air bridge w/ abutments shall not be considered complete until the airbridge and abutments have been removed from the site at the completion of the project.
- E. **Payment:** The cost of this work shall include all material, labor, and equipment necessary to complete the work and be made at the lump sum price for "**Airbridge w/ Abutments.**"

EARTHWORK

- A. **Description:** This work consists of all work required to excavate, transport, and redeposit material to the lines and grades in the areas indicated on the Drawing Plan Set. This line item shall include, but not be limited to, the excavation for development of access, work areas channels, drainage ditches, culverts, test pits, blending excess materials, general grading for sediment controls and final grading.
- B. **Definitions:**
- General Soils:** Considered to be an unclassified soils unit. It is anticipated that the majority of the material to be removed will consist of a mixture of loose, unconsolidated soil, vegetative debris, and rock. Also, large seams of shale and/or boulders not designated for rock excavation may exist within the proposed excavation areas.
- Rock:** Rock shall be defined as material that cannot be removed by normal excavation methods and must be removed by means such as blasting, ripping, hoe ram or other methods used in the construction industry that are generally accepted practices.
- C. **Execution:**
1. General:

At no point shall earthwork material be placed on or within the boundaries of the flowage easement and/or ordinary high-water mark as shown on the Drawing

Plan Set.

Perform the required clearing and grubbing before starting the earthwork operations. Coordinate the amount of and limit the areas of the project that are cleared and grubbed with the quantity of erosion controls that are placed according to the Drawing Plan set and/or as advised by the Division.

Profiles, cross sections, and grading plans provided on the Drawing Plan Set are only approximate and are to be used as a guide during construction. Fixed elevations shall not be held to; however, the grades shall not be steeper than three to one (3:1) or **those shown on the Drawing Plan Set** or no less than one percent (1%) grade unless approved by the Division.

At the end of each day's work and throughout the earthwork operations, the work areas shall be graded to drain, and be compacted or re-compacted to a uniform cross-section. All ruts and low spots that could potentially hold water shall be removed.

Positive drainage shall be provided (greater than one percent (1%) grade) for all areas during and after construction unless approved by the Division. No water shall be impounded during or after construction.

Areas not designated for sheet runoff shall be graded to drain into existing or proposed swale areas. This shall include the use of diversion swales and other measures to direct runoff into storm-water collection features. The Division must approve all additional drainage swales and ditches prior to revegetation.

Slope erosion shall be repaired up to the final acceptance of the project.

All areas that settle below final plan elevation or impound water before completion of the Project shall be filled in, regarded, and reseeded.

If earthwork operations encounter any abnormal material such as, but not limited to, drums, tanks, or stained earth or any unusual odors during operations, temporarily discontinue the work in this area, leave the equipment in place, cordon off the area, and notify the Division.

- a. Follow the requirements of the Ohio EPA when handling any contaminated material.
- b. Excavate the contaminated soil to a depth to be determined by the Division. Material hauled away under the item shall be paid separately and **is not to be included** in this item.

If damage occurs to the project site caused by improper excavation or embankment (fill) methods, the Division shall not pay for removing breakages beyond the limits of the planned finished work.

If the damage was caused by the lack of implementing erosion controls, the Division

will not pay for reshaping shoulders, slopes and ditches damaged by erosion during construction.

With the approval of the Division either bury or break up existing boulders, not designated for rock excavation, lying within the reclamation area. A boulder shall be defined as any stone larger than 24-inches in diameter. The Contractor shall place the boulders in a stable manner so it will not move or cause future harm.

2. Excavation (Cut):

All “cut” areas shall be reclaimed to original contour upon completion of the project per line item “Approved Resoil”.

Utilize material removal techniques that are generally considered conducive to retaining stability. This includes, but is not limited to, working slopes from the top to the bottom in a manner as to preclude undermining and maintain the work areas in a fashion that will not induce instability.

All excess cut material shall be stockpiled and “tracked in” in the locations shown on the Drawing Plan Set. All cut shall be stockpiled on site and saved for use as designated by the Division

3. Approved Resoil:

Any encountered resoil shall be stockpiled on site and saved for use as designated by the Division.

Approved Resoil shall not be buried or used for general embankment.

4. Exploratory Excavation (Test Pits):

This shall consist of exploratory excavation to determine subsurface features and materials. The location, type, and size of the excavation shall be as directed by the Division.

Excess material, which is unsuitable for backfill, shall be disposed of onsite as directed by the Division.

5. Embankment (Fill):

General Embankment (Fill) material shall be placed in uniform lifts not exceeding eighteen (18) inches in thickness and tracked-in using on-site excavation equipment not less than four (4) passes per lift.

The Division shall be notified a minimum of three (3) business days prior to commencement of embankment construction. The Contractor shall receive approval of the prepared sub grade prior to placing any embankment or fill.

All areas of embankment shall be keyed into the existing ground. Placement of embankment shall only be made on scarified, moist surfaces. No embankment shall be placed on frozen soil, unstable soil, or soil where water is ponded.

No areas of the embankment shall be more than three (3) feet higher or lower than any other adjacent embankment areas during placement.

Rocks larger than six (6) inch diameter shall not be concentrated in any areas of the fill.

If precipitation saturates the embankment construction area, the Contractor shall stay off the embankment construction area until the embankment dries or stabilizes. Embankment construction may be expedited by removing the saturated embankment or drying the embankment by scarifying, plowing, disking, and re-compacting the embankment.

No side dumping of material on slopes shall be permitted. Dumped material in piles or windrows shall be moved and spread into uniformed lifts as described in these specifications or as detailed on the Drawing Plan Set.

Successive loads of material shall be dumped to the best distribution. The distribution throughout the areas of fill shall be such that the fill will be free from voids, pockets, and bridging of materials.

D. Measurement:

1. The approximate amount of earthwork has been listed on the drawings as a total cubic yardage of "cut". However, this figure shall only be used for estimating purposes. There shall be no final measurement.

E. Payment: Payment for this work, which includes excavation and re-depositing material to the grades as indicated on the Drawing Plan Set, placement, construction of swales and ditches, construction of temporary erosion control measures, test pits, burial, disposal of boulders, segregation, stockpiling of resoil material and offsite disposal shall be made at the contract lump sum price for "**Earthwork**".

SITE SAFETY

A. Description: The work will include the installation and implementation of safety procedures/requirements for each well site as described herein.

B. Definitions & Installation: It is the Contractor's responsibility to properly maintain all of the latter mentioned throughout the duration of the project. Any damages shall be repaired or replaced at no additional cost to the Division. Site safety measures shall be removed prior to the demobilization of the Contractor's workforce.

Any release of materials into or onto the ground or surface waters outside of the primary and/or secondary containment shall follow the Ohio One-Call System as described in Appendix I, "One Call". The Ohio One-Call System shall be contacted

at 1-844-OHCALL1 within 30 minutes of becoming aware of the occurrence.

1. Hydrogen Sulfide (H₂S): The Contractor must provide the appropriate equipment, on-site, to properly detect and abate any H₂S emitted from the well. All personnel on location must have and wear H₂S monitor and/or 4-gas monitor. **Per 29 CFR 1910.1000, Air Contaminants, Table Z-2 the permissible exposure limits (PEL) ceiling standard for H₂S is 20 ppm.** The wells are located in a H₂S Township. If permissible exposure limits (PEL) are exceeded during plugging operations, the Contractor shall immediately cease operations and follow the H₂S measures as described in the Emergency Response Plan. The H₂S safety team shall be immediately called and remain on site until the geological zone of interest is covered with cement and no further H₂S issues are at surface. The H₂S safety team may be released at this point, but personal monitors and the rig monitor are still required. The H₂S safety team will be paid for on a per date rate per contingency line item **H₂S Safety Team**. The H₂S safety team shall be qualified employees of the Contractor or subcontractors.

Once detection of permissible exposure limits (PEL) are exceeded, the Contractor will not continue plugging operations until the safety team has developed and implemented a plan that is compliant with Occupational Safety and Health Administration (OSHA) regulations. The plan shall be approved by the Division prior to implementation.

A H₂S release of 20 ppm for 10 minutes or more in working areas OR a release resulting in injury or death of a person is a REPORTABLE INCIDENT. Call 1-844-OHCALL1 (1-844-642-2551) within 30 minutes after becoming aware of the occurrence.

2. Temporary Construction Fence & Posts: The temporary construction fencing shall be composite, orange mesh with a minimum overall height of four (4) feet. Fence posts are to be steel five (5) feet t-posts. Fence materials shall meet the ODOT Construction and Materials Specifications (CMS) Item 710.11.

The posts shall be driven or set in holes to a minimum depth of one (1) foot and at intervals not to exceed ten (10) feet. The fence shall be stretched and securely fastened to each post using metal or plastic ties.

For estimating purposes, fencing shall be placed around the entire work area. The Contractor shall work in conjunction with the Division for placement/layout of the temporary fence. All fence shall be removed at the completion of the project.

3. Air Movers (Industrial Fans): The Contractor will also be required to have onsite industrial fans or air movers **at all times** in the event natural gas is detected and found to be settling at ground level and not properly dissipating from the site (unless otherwise approved in writing from the Division).
4. FEMA 100-year Floodplain Requirements: These wells are located within the FEMA 100-year floodplain limits. In the event that the site begins to flood, the Contractor will be required to immediately shut in the well and remove all onsite equipment and chemicals that could potentially cause pollution and/or contamination. **To avoid**

potential flood conditions if the weather has been rainy or timing is during the spring thaw work shall not take place. The Contractor shall work in conjunction with the Division prior to mobilizing equipment to the project site. Approval shall be based upon the time of year as well as projected weather conditions. If any freshwater mussels are encountered during construction, all work must immediately stop, and the Division of Wildlife (1-800-945-3543) and U.S. Army Corps of Engineers (419-898-3491) must be contacted within 24 hours.

5. Absorbent Boom: In addition to the requirements of Part 10 of the General Specifications, the Contractor shall supply and install an absorbent boom as shown on the Drawing Plan Set. The Contractor shall work in conjunction with the Division for the placement of the boom. The boom shall be in place for the entire duration of the Project and shall be flipped or replaced as needed in order to continually absorb any oil/hydrocarbon materials. Any pooled oil/hydrocarbon material shall be removed prior to removal of the boom. **Absorbent booms shall only be required at the Mckendry JE&C #4, Stephens Francis A16 well sites.**
6. Temporary Shut-In: The Contractor will shut-in the well each night after the plugging operations have ceased, unless otherwise instructed by the Division. The Contractor will continue this process until the plugging operations are complete and there are no further signs of a gas release.
7. Power/Utility Lines Safety:
Utility lines cross over the access route which will require warning signs to insure awareness.
8. Emergency Response Plan: The Contractor will assemble an Emergency Response Plan (ERP) with all contact information, emergency preventative measures, and **contingency plans for Hydrogen Sulfide (H₂S) release** and for any well-related issues that may occur. ERPs shall be submitted to the Division via email to DOGRM.EMNOTIFY@dnr.ohio.gov for approval prior to beginning work.

The Contractor will be responsible for maintaining this ERP on site during the plugging operations. A copy of the ERP along with the SDS sheets will be stored at the project entrance in a container labeled "ERP/SDS". Ingress/Egress for evacuation and/or public safety will be discussed in the safety meeting to be held on location by the Contractor with local responders and Division personnel. These routes will be listed in the ERP. The Division will review with the Contractor prior to the start of plugging operations.

Well Name	Safety Measures Required
Mckendry JE&C #4, Stephens Francis A16	Absorbent Boom
Ward JF #12 Spies #3	FEMA 100-year Floodplain Requirements;

- C. Measurement: Measurement for payment will be considered and measured as a unit satisfactorily completed and accepted by the Division.

- D. Payment: Payment for this work, including labor, installation, materials and removal shall be made at the lump sum price for "**Site Safety.**"

SECONDARY CONTAINMENT

- A. Description: This item shall include all labor and materials required for the installation, maintenance, and deconstruction of the secondary containment. Onsite materials and equipment required to be stored within the secondary containment shall be as follows: containers that store liquid brine, oilfield waste, and/or fuels as well as any required pumps. In determining the method, design, and capacity for secondary containment, the Contractor shall address the typical failure mode, and the most likely quantity of brine or other oil field waste substance that would be discharged.
- B. Materials: The Contractor shall supply catchment basins or diversion structures to intercept and contain discharges of brine or other oilfield waste substances during the project. Materials shall consist of impermeable containers or liners made of a material that is compatible with the waste stored or used within the containment. Containment materials shall be impervious and have supporting documentation of the permeability, chemical compatibility, and other applicable QA/QC standards, is acceptable. **Use of a liner shall at a minimum be a 20-mil thickness.**

Materials shall be durable enough to support the weight of heavy equipment used for the plugging operations. Materials shall have sufficient strength and thickness to maintain the integrity of the container or liner. The container or liner shall be designed, constructed, and maintained so that the physical and chemical characteristics of the container or liner are not adversely affected by the waste and the container or liner is resistant to physical, chemical and other failure during transportation, handling, installation and use.

Liner walls shall consist of metal, wood, concrete, plastic, or approved equal. Wall materials shall be designed, constructed, and maintained to withstand the overtopping and sliding forces of secondary containment filled to capacity.

The Division shall determine the merit of the proposed materials compatibility, impermeability, integrity, and durability in determining if the material is sufficient for the project.

- C. Installation: Secondary containment shall be installed prior to any drilling or liquid storage at the project site. **Secondary containment shall extend at least one foot horizontally beyond the primary containment and provide at least one foot in depth capacity or provide a minimum volume equal to 25% of the primary storage capacity.**

Upon request of the Division, the Contractor shall provide calculations in tabular format of the containment providing both the secondary containment capacity and the on-site material storage. The Division can require sections of secondary containment to be removed for inspection and sampling if a spill occurs during the project.

Installation of the containers or liners, including seams and pipe penetrations, shall be in accordance with the manufacturer's recommendations. All seams and non-seam area of the container or liner shall be inspected by the Division for defects, holes, and blisters.

Care shall be taken when operating equipment on or near the container or liner to prevent any damage to the secondary containment. If damage occurs, it shall be repaired by the Contractor at his/her expense prior to continuing the project.

The Contractor shall retain all ownership and responsibility for the secondary containment. All secondary containment shall be removed from the site and retained by the Contractor at the conclusion of the project.

- D. Measurement: Secondary containment, which includes all materials, labor, and equipment necessary to provide the required secondary containment, will be considered and measured as a unit satisfactorily completed and accepted by the Division. Secondary containment shall not be considered complete until all secondary containment has been removed from the site at the completion of the project.
- E. Payment: Payment for this work shall include all material, labor, and equipment necessary to complete the work and be made at the lump sum price for **"Secondary Containment."**

WELL HEAD CONTROL

- A. Description: This work consists of all labor, equipment, and material necessary to excavate and evaluate existing casing(s) and to establish control of the well. This item shall include the installation of a wellhead control device/flow diverter on the most appropriate well casing as described in the plugging plans.

In the event Division UPC work has been completed on the well, resulting in surface equipment (swages, fittings, valves, gauges, etc.) being installed, the Contractor shall coordinate with the inspector in returning this equipment to the Division for future use. At no point shall the Contractor assume ownership of any surface equipment associated with the well.

- B. Execution: The Contractor is responsible for installing, according to best management practices, a wellhead control device/flow diverter on the well casing. Excavation of the existing casing(s) shall be the responsibility of the Contractor. A four (4) foot minimum excavation/evaluation of the existing casing(s) shall be completed. Casing(s) requiring excavation depths exceeding four (4) feet shall be discussed with the Division prior to starting work. All excavations shall be in accordance with OSHA Construction Standards for excavation and trenching under 29CFR 1926 Subpart P.

The casing shall be free from any damage or defects. If required, the casing shall be cut and cleaned of any dirt, oil, and debris prior to welding extensions and/or installation of the diverter.

The Contractor shall supply a cellar with a cement base around the wellhead. This

cellar shall be set around the well and extended up to working elevation, as the depressed area around the well head will be modified to establish workable base. This cellar shall be made of steel, concrete, or polyethylene pipe. **The cellar shall be a minimum of 48 inches in diameter. This work shall include a six (6) inch minimum of Approved Cement as specified or Portland Cement in the cellar base with a three (3) inch minimum port near the well. The port shall extend up to within three (3) inches of the well at working height and be used to monitor and contain any gas/oil escaping around the back side of the casing.**

Once a well head control device is installed, all fluids, gases and solids generated by the plugging process shall be diverted into a tank. This tank shall be set a minimum of twenty (20) feet from the well. The Contractor shall also maintain an adequate supply of well kill fluid at the well for possible well control emergencies, which shall be paid under the line item **"Well Kill Fluid."** The injection point for the kill line will be a minimum of twenty (20) feet from the well.

For the duration of this project the following wellhead control will be utilized. The wellhead control device/flow diverter assembly will have two, 2-inch minimum diameter discharge ports. The diverter lines running from both of the discharge ports on the wellhead assembly to the above ground steel tank will consist of two (2) – 2-inch minimum diameter steel lines that will extend a minimum of 20 feet from the wellhead. Each diverter line will have two valves (rated minimum 1,000 psi) at the end of the steel line for the control of flow. The lines from the last valve to the steel tank can either be a flexible line or a rigid line. These lines will be a fixed connection (i.e. hammer union, flanges, cam & groove) to the steel pit with equipment that is capable of withstanding the possible pressures encountered. All flexible line connections will have appropriately sized and rated whip checks install at the connections. All flexible lines will be secured to the ground in manner that will allow them to be maintained in place during operations. Lines will discharge into the tank at a downward angle or at an angle that will reduce fluids from splashing or spraying out of the tank if a sustained blow is encountered. One of the steel diverter lines will be equipped with a 2-inch diameter port and valve that will serve as the kill line access. This port and valve will be installed between the wellhead and the inline valve. All lines will need to be able to withstand the possible pressures encountered from sustained flow event from the well. (Remove if high pressure verbiage is used.)

No well operations shall begin until an inspection of the prepared well has been completed by the Division.

- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division.
- D. Payment: Payment for the above-described work, which includes all labor, materials, equipment necessary for the well head control shall be made at the cost proposal lump sum price for **"Well Head Control."**

WELL KILL FLUID

- A. Description: The work covered by this section shall consist of furnishing all labor, equipment, and material necessary to provide and use weighted brine as a “kill” fluid for the drilling and plugging process of the well.
- B. Requirements: The Contractor shall provide a weighted brine of sufficient density to kill the well and regain well control in the event of a sustained and/or uncontrolled wellbore kick (a rapid influx of formation fluids and/or gases into the wellbore).

Sufficient density shall be defined as dense enough to exert hydrostatic pressure greater than the anticipated formation pressure but less than the anticipated formation fracture gradient.

The Division will require a minimum of 50-100 barrels of 9.0-9.5pound-per-gallon weighted brine kill fluid be maintained at each well site throughout the plugging project for the sole purpose of killing the well to regain well control when required.

A mud pump of sufficient size/capacity shall be required to be onsite at all times during plugging operations as means to pump well kill fluid when required.

- C. Measurement: Measurement for payment for the above-described work shall be made by the actual quantity of barrels (bbls) of weighted brine used as a kill fluid for the orphan well as approved by the Division. The Division will at a minimum pay for the quantity required to be maintained on site.
- D. Payment: Payment for the above work shall be made at the unit price per barrel (bbls) for "Well Kill Fluid."

WELL PREPARATION & PLUGGING

- A. Description: This work consists of all labor, equipment, and material necessary to prepare the well for plugging and completing all required plugs. This shall include cleanout, drillout, and washover of the well bore to the total depth of the well based on the well description(s) and plugging plan(s), circulating the well bore prior to each plug, setting all required plugs, and verification of each plug depth.
- B. Execution: The Contractor shall supply all equipment needed to complete the well preparation in an efficient manner that will be approved by the Division. This shall include but not be limited to the rig, drill pipe, collars, mud pump (See General Specifications, Part 13 for minimum requirements), circulating fluid, cementing equipment, mix water, and associated equipment.

Cable tool/spudding rigs shall not be permitted for use unless otherwise authorized by the Division as described under the General Conditions, Part 13 “Substitution During the Project”.

Once well head control has been established, the Contractor will cleanout, drillout and/or washover and then circulate the well bore prior to setting any casing or well plugs. The Contractor shall be responsible for having a minimum of two (2) hole volumes of fluid

available for circulation.

The Contractor shall identify the diameter of the well bore below the surface casing and cleanout or drillout with a full-size bit to total depth. **In addition to the full-sized bit, the Contractor shall also supply a bore brush and/or casing scraper at the appropriate size to fully clean out any casing remaining per the plugging plan.** In any case where an obstruction is encountered and total depth cannot be achieved, the Contractor shall immediately notify the Division. The Contractor shall propose a plan to assess the nature of the obstruction that shall be approved by the Division. Additional work associated with removal of the obstruction shall be described and paid for under the Contingency Specifications and as listed on the Quantity Sheet and agreed upon by the Division.

The Contractor shall trip out or up into the nearest competent cased string and secure all tools at the end of each workday or when work shall be paused for an extended time. Any tools left in the hole during such paused work shall be at the Contractor's own risk. Any tools or tubing that are lost due to the Contractor's failure to complete the task of tripping out during paused work times shall be at their own expense as well as any work required to then prepare the hole to continue the plugging process (this shall include but not be limited to shooting, fishing, over drilling, lost or damaged tools, etc.). The tripping out of the tools during paused work times shall be incidental to this line item.

Formations within the well bore known to be producing H₂S gas will not be circulated prior to setting a plug.

Prior to setting any plugs the Contractor shall remove all free crude oil by **circulating the wellbore two-hole volumes or until the well is static; a minimum of ten (10) barrels of gel is required to be run ahead of each cement plug that may come into contact with open hole formation at the discretion of the Division.** A minimum of four (4) sacks of bentonite gel per ten (10) barrels of freshwater shall be required if requested. This work shall be considered incidental to this line item. No additional payment shall be made for circumstances where the Contractor does not have the appropriate material on location.

Lost Circulation Material (LCM) may be used to aid in obtaining circulation, as approved by the Division. **Lost Circulation Material (LCM) shall NOT be used when tubing smaller than 1.5 inch inside diameter will be utilized. Circulation must be established prior to conducting cementing procedures.** LCM shall be available at the site during the completion of this line item **"Well Preparation & Plugging."** The Contractor shall provide up to five (5) sacks of LCM per well for use (e.g. cotton seed hulls, bentonite gel/polymer, cellophane flake) incidental to this line item). Additional need for use of LCM shall be per the **"Lost Circulation Material"** specification included in the Contingency Specification.

The well shall be in a static condition prior to beginning any cementing activities.

The Contractor shall set all plugs as described in the **Plugging Plan** to the depths described with the materials described. This shall include setting the bottom plug, intermediate plugs, and the surface plug. All plugs shall be allowed to set for the periods described in the **Plugging Plan.**

The Contractor shall be required to tag all cement tops unless otherwise approved by the Division. Tagging with a sinker bar and depth meter is recommended. Confirmation of cement tops shall be considered incidental to this line item.

If a plug has dropped or is determined to not be a competent plug, then drill out of the plug or additional staged plugs may be required at the discretion of the Division as a part of this line item. The Division reserves the right to adjust the Plugging Plan during the plugging process based on site conditions.

- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division.
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary for the well preparation and plugging, shall be made at the lump sum price for **"Well Preparation & Plugging."**

LOGGING

- A. Description: This work consists of all labor, equipment, and material necessary to determine the total depth of the well and the casing, if a packer is present (along with its depth and thickness), determine bond quality behind the casing and the free point of the casing. The Log should also confirm zones of gas production and formation tops for cementing purposes. All cement plug depth and thicknesses will be based on log data of the first well plugged on the site.

Logs shall ONLY be ran at the discretion of the Division based on the conditions encountered regardless of the direction given in the Plugging Plan.

- B. Execution: The Contractor shall complete the logging of the well bore, casing, tubing, packer, and/or cement to the depth of the existing well bore, casing, tubing, packer, and/or cement. The methods of logging to be used shall be as indicated on the individual plugging plan and may include but not be limited to **gamma ray (GR), casing collar locator (CCL), temperature, bond, and caliper log**. Prior to use, the Contractor shall propose the method of logging and shall be approved by the Division.
- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **A copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, equipment necessary for the investigation of the well shall be included at the per unit price per each for **"Logging."**

SHOOTING

- A. Description: This work consists of all labor, equipment, and material necessary to sever/shoot a casing or tubing at a determined depth for the purpose of removing the casing or tubing string by the means of shooting.
- B. Execution: The Contractor shall complete the shooting of the casing or tubing at a depth approved by the Division. This work shall include logging the well with a standard logging suite at the discretion of the Division to locate free point of casing or tubing in the well.

The Contractor shall propose the material and method for shooting of the casing or tubing, which shall be approved by the Division.
- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **A copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, equipment necessary for the shooting the casing or tubing made at the unit price per each for "Shooting".

SEVERING

- A. Description: This work consists of all labor, equipment, and material necessary to sever a casing at a determined depth for the purpose of removing the casing string from the wellbore.
- B. Execution: The Contractor shall complete the severing of the casing at a depth approved by the Division. The Contractor shall propose the material and method for severing of the casing, which shall be approved by the Division. This includes, but is not limited to, locating free point, ripping, shooting, or cutting.
- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **If applicable, a copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary for the severing the casing made at the unit price per each for "Severing".

TUBING

- A. Description: This item covers all labor, equipment, and material required to supply tubing at the site for the purposes of placement of cement and spacers.
- B. Materials: The Contractor shall supply a 1.5-inch inside diameter (ID) or larger tubing in a condition that will allow for the pumping of cement for the purposes of plugging the well. A mud anchor and/or perforations on the bottom joint of the tubing is recommended. Any

issues caused due to running tubing open ended shall be the Contractor's responsibility.

For this project the Contractor shall supply up to 1,835 feet of 1.5-inch ID or larger tubing to all the project wells.

- C. Installation: The Contractor will install and remove the tubing as necessary in order to complete the **Plugging Plan**. The Contractor shall maintain ownership at the conclusion of the project of all tubing that was brought to the site for these purposes.
- D. Measurement: Measurement for payment of the above-described work shall be made by actual field measurements per linear foot of tubing delivered to the site.

Tubing shall be measured as one use for the duration of the project.

- E. Payment: Payment for this item shall be made at the lump sum price for "**Tubing.**"

APPROVED CEMENT

- A. Description: This item shall cover all labor, materials, and equipment necessary to plug the well as specified in the **Plugging Plan**.
- B. Materials: Cement materials shall be approved prior to placement. The cement must conform to the following options:
 - a. API Class "A"
 - b. API Class "L"
 - c. ASTM C150 Type 1
 - d. ASTM C595 Type 1L

(Note: These are the only material options that will be approved, any other materials may be submitted to the Division for review but will **not** be approved for this project)

The cement shall contain 2% Calcium Chloride, properly blended, **only if directed** by the Division in advance of placing the cement. **Coordinate with the Division prior to ordering cement.**

The cement shall not contain bentonite or extenders which delay set time or decrease the overall compressive strength unless otherwise noted.

Additives (e.g. cotton seed hulls, cellophane flake, etc.) used for the purposes of lost circulation zones shall be considered incidental to this line item.

Water used for cementing shall be free of any impurities that will adversely affect set time and compressive strength.

- C. Installation: **The Contractor shall notify the Division at least 24 hours in advance of placing the cement, including notification of the type of cement being used for**

approval.

Additional wait times may be required for the type of cement used. This wait time shall be incidental to this line item. Upon approval of the type of cement the Division shall inform the Contractor of the required wait times for each staged plug.

Preparation of the well bore, including the running of gel flush ahead, shall be completed per line item **“Well Preparation & Plugging”** prior to placement of the cement.

The cement slurry shall be mixed at the API recommendation, between 15.4 and 15.8 pounds per gallon. **For the Francis #17, Francis #23, Francis A4, well, the bottom plug cement slurry shall be mixed between 14.5 and 15.0 pounds per gallon.**

The Cement shall be placed to the depths and intervals described in **Plugging Plan**.

It is the Contractor’s responsibility to provide a mud scale for weighing the cement slurry.

When using API Class “L” cement or ASTM C595 Type 1L cement, all the following conditions apply:

- Mill test information must be provided to the applicable Division inspector prior to utilization of API Class L cement or ASTM C595 Type 1L cement. The mill test information must be a representative sample of the mixture of cement proposed to be used to plug the well. A person is not required to provide the mill test information if the Division already has the mill test information of the mixture of cement for a batch.
- Performance data shall be provided in compliance with Ohio Administrative Code 1501:9-11-07 prior to usage. To determine if Ohio Administrative Code 1501:9-11-07 is met, test results shall include at a minimum slurry density, composition, compressive strength, free fluids, thickening time, curing pressure, and curing temperature. The data also shall include percent limestone and percent pozzolan material.
- For blended cement containing limestone and pozzolanic material, the combination of the materials shall not exceed fifty per cent by volume.
- A sample of at least 20lbs representative of the of cement mixture proposed to be used in a well must be provided to the Division at the request of the Division.
- A person using API Class L cement or ASTM C595 Type 1L cement shall leave the plugged well in a manner that will allow for further inspection past the contract requirement of three days after the completion of the uppermost plug unless the applicable Division inspector determines that the contract requirement of three days is sufficient.

- D. Setting: Setting times shall be completed as described in the **Plugging Plan**. For the surface plug any void space between the top of the cement and the top of the casing shall be filled to

achieve a level cement line with the top of the casing. This shall be done at no additional cost to the Division.

The cement must develop a minimum compressive strength of 500 PSI after 24 hours at well bore temperatures. The Division reserves the right to collect test cylinders throughout the duration of the cementing process.

- E. Measurement: Measurement for payment shall be based on the actual quantity of sacks of cement acceptably placed and shall be verified with delivery tickets. A sack shall be considered 94 pounds prior to mixing.
- F. Payment: The above-described work shall be paid for at the unit price per sack for "**Approved Cement.**"

CEMENT MIXING & PUMPING

- A. Description: This item shall cover all labor, materials, and equipment necessary to mix and pump cement as specified in the **Plugging Plan**.
- B. Execution: Cementing equipment required on site to mix and pump casing cement and cement plugs shall be provided until each individual casing cementing or plug cementing is completed. This shall include but not be limited to pump truck, mud pump, and associated equipment.
- C. Measurement: Measurement for payment shall be for each trip to the project site in order to complete the plug(s) as described in the **Plugging Plan**. Payment for staged plugs shall be measured as one unit.
- D. Payment: Payment for the above-described work, which includes all labor, materials, equipment necessary for the mixing & pumping of cement into the well shall be made at the unit price per each for "**Cement Mixing & Pumping.**"

SITE RESTORATION

- A. Description: This work shall cover all operations incidental to the establishment of grasses within the areas disturbed by the Contractor, including the furnishing and sowing of seed; and furnishing and applying of mulch materials, all in accordance with these specifications. Additionally, this work shall include, but not be limited to, repair of grounds and vegetation, including landscaping amenities, ornamental shrubs and trees damaged in any manner during the work operations. All areas shall be properly graded to a smooth final grade with topsoil and blended into adjoining areas at the most moderate slope possible. Seedbed preparation through the use of scarifying equipment is also required. All site restoration work is to be completed within **fourteen (14) days** of the completion of the construction activities. The Contractor may request in writing to the Division an extension for site restoration. Requests shall only be granted based on season or weather conditions.

B. Materials: The materials to be used for restoration shall conform to the applicable requirements of these specifications.

1. Lime: Pelletized lime shall be applied at a maximum rate of 400 pounds per acre. Rates may be adjusted by the Division at the time of application.
2. Fertilizer: Fertilizer shall be commercial grade (19-19-19) and shall be applied at a rate up to a maximum of 20-lbs/1000 sq. ft. Rates may be adjusted by the Division at the time of application.
3. Seed: The varieties of grass seed to be furnished to the project shall bear a tag on each bag of each species showing the lot number, grower's name, percent of purity, percent of germination, and weed content. Tags shall be provided to the Division.

All seeds shall be free from noxious weeds and under no condition shall the total weed content of any lot of seed or seed mixture exceed one-half of one percent by weight.

No seed shall be utilized which has a mix date older than one year. The Division reserves the right to test, reject, or approve all seed after delivery to the project.

Species Composition:

The following seed mix shall be sown at the indicated rate . This mixture is listed by recommended planting season and for existing site conditions, and/or intended use. Further information may be found in the Agronomy Guide, Bulletin 472, Cooperative Extension Service, The Ohio State University.

<u>GENERAL SEED MIX</u>	<u>lbs/acre</u>
Orchardgrass (<i>Dactylis glomerata</i>)	15.0
98/85 Kentucky Bluegrass	12.0
Timothy (<i>Phleum pratense</i>)	12.0
Birdsfoot Trefoil (<i>Lotus sp.</i>)	9.0
Red Clover (<i>Trifolium pratense</i>)	8.0
White Clover (<i>Trifolium repens</i>)	7.0
Annual Ryegrass (<i>Lolium multiflorum</i>)	8.5
<u>Perennial Ryegrass (<i>Lolium perenne</i>)</u>	<u>3.5</u>
Total lbs/acre	75

Other types of seed may be substituted if requested by the property owner(s). If such substitutions are made, they are to be made at no additional cost to the Division.

4. Mulching Material: All mulch material shall be free from mature seed-bearing stalks or roots or prohibited or noxious weeds. Any type of hay is not acceptable. Mulch shall include baled wheat straw or oat straw. It shall be dry and reasonably free of weeds, stalks, or other foreign material.

For all required materials listed above, the Division reserves the right to request receipts, material specifications and/or weight tickets for verification.

C. Installation:

1. Start of Work: Site restoration work shall begin as soon as possible after the completion of construction. Final site restoration operations shall be completed within fourteen (14) working days of the final construction activities. The Contractor may request in writing to the Division an extension for site restoration. Requests shall only be granted based on **season or weather conditions**.
2. Area Preparation of Soil: Spread and grade available topsoil uniformly over all disturbed areas. All areas to be seeded shall be loosened by discing, harrowing, or other approved methods immediately prior to seeding. The soil shall be loosened to a depth of approximately three inches.

Hand raking shall be required in all areas where machines do not obtain the results desired by the Division.

Following tilling of the soil, the seedbed shall be allowed to firm up.

All final prepared surface(s) shall have a smooth final grade and be appropriate for a residential yard, free from rocks, large dirt clumps and any other foreign debris.

Immediately following area preparation for seeding, materials shall be applied in the following order:

- Lime, as applicable
- Fertilizer, as applicable
- Seed, after broadcasting or otherwise applying the seed, the surface of the seedbed shall be loosely disturbed by hand raking, dragging, and/or cultipacking.

Lime, fertilizer and/or seed shall be sown by approved methods that provide for uniform distribution of the mixes as specified above.

3. Mulching: Apply the equivalent of 100 pounds per 1,000 square feet of clean straw mulch.

Apply mulch to the sown area within 24 hours of seeding at the rate per square feet as specified above and spread to a uniform depth.

The straw shall be placed in a moist condition or shall be moistened immediately after placement.

4. Maintenance and Repairs: The Contractor shall, during construction and prior to acceptance, properly care for all areas mulched and perform all mulching operations

necessary to provide protection and establish growth of the seeded areas. Mulch that becomes displaced shall be reapplied at once, together with any necessary reseeding, all at no expense to the Division.

No additional payment shall be made for acts of God, i.e. fire, flood, drought, etc.

D. Maintenance Period: The permanent planting of trees, shrubs, perennials, annuals, grasses and legumes, etc. shall be deemed to be acceptable if the species that were planted in accordance with the approved plans are established and maintained for one (1) “growing season” as defined below and meeting the following standards:

1. Growing Season: All landscaping shall be guaranteed for a period of one (1) summer growing season after planting. Planting material installed in the Fall shall be in full count and thrifty condition on the next succeeding September 15 at which time replacement shall be determined and scheduled for installation during the planting period of October 15 - December 1 of that same season. Planting material installed in the Spring shall be in full count and thrifty condition on the next succeeding May 15 at which time replacements shall be determined and scheduled for installation prior to June 1 of the same season. All plants installed in the summer shall be guaranteed for one (1) full summer and shall be in full count and thrifty condition the next succeeding September 15.
2. Acceptable Lawn/Turf Areas: A series of four (4) random line transects are to be laid out within the project boundaries. A string one hundred (100) feet long having one (1) foot graduation, shall be placed along the transect line. The person conducting the transect will then walk along the line counting only the markers which are in actual contact with the vegetation. The number of count points are to be recorded as subtotals. When the four transects are completed, the average of the four transects subtotals is then equal to the percent of vegetative cover for the project.
 - a) Residential Lawns: At least one hundred percent (100%) of the land affected shall be judged to be of good quality, and “good” is defined as an area that has at least ninety percent (90%) cover.
 - i. All land affected and having less than ninety percent (90%) cover shall be judged poor and deemed unacceptable; and
 - ii. All areas judged to be good must have species diversity requirements of those recommended for planting.
 - b) Farm & Field Turf: At least ninety percent (90%) of the land affected shall be judged to be of good quality, and “good” is defined as an area that has at least seventy-five percent (75%) cover.
 - i. The remaining ten percent (10%) of the land affected shall be judged to be of fair quality, and “fair” is defined as an area that has at least fifty percent (50%) cover but less than seventy-five percent (75%) cover;

- ii. All land affected and having less than fifty percent (50%) cover shall be judged poor and deemed unacceptable; and
 - iii. All areas judged to be good or fair must have species diversity requirements of those recommended for planting.
- c) Severe Decline of a Tree or Shrub: Shall be defined as the death of a major leader or 50 percent of the crown of a tree or shrub or dieback of a plant to the ground, even if that plant is still alive.
- E. Measurement: Measurement for payment of site restoration, which includes seedbed preparation, lime, fertilizer as applicable, seeding, mulching, and replacement of landscape amenities (i.e. shrubs, trees, etc.) shall be considered and measured as a unit satisfactorily completed and accepted by the Division.
- F. Payment: Payment for this work, which includes seedbed preparation, liming, fertilizing, seeding, mulching, required replacement of all shrubs, trees and landscaping amenities, etc., and general cleanup shall be made at the lump sum price for **"Site Restoration."**

APPROVED RESOIL

- A. Description: This work shall consist of furnishing all labor, material, and equipment necessary for the hauling, spreading, and grading of the resoil material for the replacement of the removed contaminated soils. This work shall also include shaping for positive drainage and matching the surrounding contours.
- B. Material: Material shall be a good quality resoil and **not** include rocks, stones, and objectionable material over three (3) inches in any one dimension. All resoil that will compose the top eighteen (18) inches of resoil at the ground surface shall be topsoil. Topsoil shall be defined as during excavation having a brown matrix color, less than 50% clay content, and enough organic materials to be generally suitable for vegetative growth.
- C. Installation: Care shall be taken to keep heavy equipment off the surface material after it has been spread. If the resoiling material becomes compacted, the Contractor shall disc the material to a depth of four (4) inches at the Contractor's expense.
- D. Measurement: The material shall be measured for payment by the ton (2,000 pounds) for material acceptably placed in the work as determined by certified scale weight tickets.

All material wasted or used by the Contractor for other purposes and any material not placed in the work in accordance with the requirements of the work order and these specifications and drawings shall be measured and not included for payment by weight. A conversion factor of 1.3 tons per cubic yard of resoil shall be used if necessary.

- E. Payment: Payment for this work shall be made at the unit price per ton for **"Approved Resoil."**

TUBING (1")

- A. Description: This item covers all labor, equipment, and material required to supply tubing at the site for the purposes of placement of cement and spacers.
- B. Materials: The Contractor shall supply a one (1) inch inside diameter (ID) tubing in a condition that will allow for the pumping of cement for the purpose of plugging the well. When using 1" tubing the **cement slurry shall be mixed between 14.5 and 15.0 pounds per gallon.**

The Contractor shall supply up to 1795 feet of one (1) inch ID tubing as described in the plugging plan . The Contractor shall not deliver this item until its need is confirmed during the plugging process. This may be a deducted line item.

- C. Installation: The Contractor will install and remove the tubing as necessary in order to complete the **Plugging Plan**. The Contractor shall maintain ownership at the conclusion of the project of all tubing that was brought to the site for these purposes.
- D. Measurement: Measurement for payment of the above-described work shall be made by actual field measurements per linear foot of tubing delivered to the site.

Tubing shall be measured as one use for the duration of the project.

- E. Payment: Payment for this item shall be made at the lump sum price for "**Tubing (1").**"

CONTAMINATED MATERIAL DISPOSAL

- A. Description: This item shall consist of removing contaminated soil and cuttings from the site for off-site disposal. Soil and cuttings to be removed shall be at the discretion of the Division and shall be disposed of at an approved EPA licensed landfill as provided by the Contractor prior to removal from the site.

- B. Material:

Contaminated Soils/Cuttings/Drill Fluids: Contaminated soils, cuttings and drill fluids are defined as soils, cuttings and materials in which oil, gas, condensate, brine, plugging products, or oil field waste substances have been released in or on the land and/or materials generated by the Contractor while working on the well.

Contaminated Soils: The Contractor will excavate and properly dispose of all soils from the location that are visibly impacted with oilfield contaminants. Areas to be excavated shall be at the discretion of the Division and/or as shown on the Drawing Plan Set.

Contaminated soils shall be loaded and hauled away as they are excavated.

Cuttings/Drill Fluids: Cuttings and drill fluids generated as part of the plugging process

shall be temporarily stored onsite. The Division reserves the right to require removal of these materials at any time. The Contractor shall be aware at all times of capacity limitations. Should removal of materials be required, the Contractor shall be responsible for properly cleaning onsite tanks. Any downtime associated with the removal shall be done so at no additional expense to the Division.

The Contractor shall solidify any residual fluid associated with these materials with Portland Cement or by other means approved by the Division, prior to removal as a part of this line item. Prior to solidification of contaminated materials, the Contractor shall use due diligence to remove fluids from the contaminated materials. Fluids removed from the contaminated materials shall be disposed of per line item "**Fluid Disposal.**"

Soils/material deemed "contaminated" as a result of Contractor negligence during the plugging process will be removed and disposed of at the Contractor's expense. Disposal procedures will conform to all requirements stated within this line item.

- C. Off-Site Disposal: Material designated as "contaminated" shall be hauled to an appropriate licensed landfill. Copies of truck weight tickets from the landfills shall be furnished within 3 days of acceptance to the Division.

No additional compensation shall be made for onsite contaminated material storage. If materials remain onsite, proper containment shall be established meeting all requirements as described in line item "**Secondary Containment**" at no additional cost to the Division. Onsite storage time shall not exceed 72 hours after plugging activities have been completed.

- D. Measurement: Measurement for payment shall be verified based on quantities disposed of at the approved EPA licensed landfill. Documentation required shall include driver's haul tickets, certified scale tickets and a copy of the paid invoice from the landfill/waste facility (dollar amounts may be redacted from the invoice copy).
- E. Payment: Payment shall be made at the unit price per ton for "**Contaminated Material Disposal.**"

SALVAGE MATERIAL DISPOSAL

- A. Description: This item shall consist of preparing, removing, and salvaging all materials from the site that have a salvage value as shown on the Drawing Plan Set or as required by the Division. All items to be salvaged shall include all surface equipment, well casing, and production equipment. Salvage items shall also include any hydrocarbon materials (oil, condensate, etc.) that have a marketable value. Salvage items shall be stored onsite within the construction project limits until removed for salvage.
- B. Off-Site Disposal: Prior to removal from the site the Contractor shall supply in writing to the Division an inventory of all materials to be salvaged. On behalf of the Division, the Contractor shall salvage materials inventoried. Once materials have been salvaged the Contractor shall reimburse the Division for the salvage value per line item "**Salvage**

Material Reimbursement."

At the request of the Division, surface equipment deemed as reusable shall be forfeited directly to the Division's onsite representative. This shall include but not be limited to swages, wellheads, fittings, appurtenances, etc. At no time shall salvageable material become property of the Contractor.

Prior to disposal of any salvage materials from the project site, **the Division will complete a radiological assessment** of salvage materials that have been provided on an inventory to the Division.

The Division shall be given a minimum of two (2) working days notice to complete the assessment. Salvage materials staged on the project site shall be staged on a pipe rack where determined applicable by the Division. Salvage materials shall be on an impervious liner that will collect any residual fluids or scale.

Any materials which exceed 50 micro- Roentgen per hour ($\mu\text{R/hr}$) or deemed by Division staff to be radioactive shall not be considered for "Salvage Material Disposal"; instead this material shall be considered "Radioactive Material Disposal" and be disposed of per ton at a negotiated change order rate agreed upon by the Division or at a rate originally agreed upon on the Offer Sheet.

Prior to disposal of any salvage materials the Contractor shall prepare, including cleaning, the salvage materials for lawful salvage.

All salvageable material shall be cleaned onsite. The final product shall be non-hazardous and, in a condition, to not cause offsite pollution/contamination during transport and/or disposal. Any downtime associated with proper decommissioning shall be considered incidental to this line item.

- C. Execution: The Contractor shall include in this line item any expense incurred with the removal and the salvaging.
- D. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division.
- E. Payment: Payment shall be made at the lump sum price for "**Salvage Material Disposal.**"

FLUID DISPOSAL

- A. Description: This item shall consist of removing and disposing of the fluid generated from the well plugging process. Fluids to be removed shall be at the discretion of the Division and shall be injected at an approved Class II disposal well as provided by the Contractor prior to removal from the site.
- B. Material: Materials will be defined below as described for the purposes of this scope of work.

Contaminated Fluids: Contaminated fluid will be considered as all fluids used in the circulation of the well bore, fluids utilized as a “kill” substance and/or fluids generated from the well. The Division reserves the right to deem a fluid “contaminated” at its discretion.

Contaminated fluids are further defined as water that contains quantifiable concentrations of oil, natural gas(es), condensate, brine, plugging products, or other oil field waste substances.

Freshwater: Water that has not been classified as contaminated fluid and has been stored in an uncontaminated container shall be visually inspected for oil sheen, and field tested for pH and chlorides. The chloride concentration shall be less than 250 mg/L and the pH shall be within a range of 6.5-8.5 standard units (SU). If water is deemed as freshwater based on these inspections and tests, the Contractor may discharge freshwater into or onto the land in an appropriate manner. Freshwater disposal shall not be paid for under this line item **"Fluid Disposal."**

- C. Off-Site Disposal: Fluids designated as “contaminated” shall be hauled to an appropriate Class II disposal well. Proof of disposal from the disposal well shall be furnished within three (3) days of acceptance to the Division.

No additional compensation shall be made for onsite fluid storage. If contaminated fluids remain onsite, proper containment shall be established meeting all requirements as described in line item **"Secondary Containment"** at no additional cost to the Division. Onsite storage time shall not exceed 72 hours after plugging activities have been completed.

- D. Measurement: Measurement for payment shall be verified based on documentation proof of a quantity of disposal from the disposal well utilized. Documentation required shall include driver's haul tickets, fluid disposal tickets and a copy of the invoice paid from the Class II disposal well (dollar amounts may be redacted from the invoice copy).
- E. Payment: Payment shall be made at the unit price per barrel for **"Fluid Disposal."**

DEBRIS REMOVAL & DISPOSAL

- A. Description: This item shall consist of removing debris and trash from the site for off-site disposal. Items to be removed shall be at the discretion of the Division and shall be disposed of at an approved EPA licensed landfill.
- B. Off-Site Disposal: Debris and trash shall be hauled to an appropriate licensed landfill. Copies of truck weight tickets from the landfills shall be furnished daily to the Division.
- C. Salvage: Items or materials on the project site the property owner wishes salvaged shall be set aside in an orderly manner. Salvaged items shall not be placed in an area that prevents adequate completion of the project according to the Drawing Plan Set. Salvage items do

not include material and/or equipment associated with the well.

- D. Measurement: Measurement for payment shall be verified based on weight tickets of quantities disposed of at the approved EPA licensed landfill.
- E. Payment: Payment shall be made at the unit price per ton for **"Debris Removal and Disposal"**.

DETAILED SPECIFICATIONS

FIXED PRICE ITEMS

(Values set by the Division.)

SALVAGE MATERIAL REIMBURSEMENT

- A. Description: This item shall consist of reimbursing the Division for all materials removed from the site for salvage including all surface equipment, well casing, tubing, production equipment, and marketable hydrocarbons.
- B. Reimbursement: The Contractor shall supply salvage receipts to the Division for materials inventoried and removed from the site for salvage. The Division shall use these receipts as deduction of payment that will be represented on the Offer for this line item for this project.
- C. Measurement: Measurement shall be made by salvage receipts amounts.
- D. Payment: Deduction shall be entered as an amount for **"Salvage Material Reimbursement."**

CONTINGENCY SPECIFICATIONS

CONTINGENCY SPECIFICATIONS WILL ONLY BE DIRECTED VIA A FIELD ORDER FROM THE DIVISION. THE FIELD ORDER WILL DEFINE THE QUANTITY APPROVED. CONTINGENCY SPECIFICATION USE WILL BE DETERMINED BASED ON-SITE CONDITIONS THAT ARE DETERMINED BY THE DIVISION.

ADDITIONAL CIRCULATION FLUID

- A. Description: This work shall consist of furnishing all labor, equipment, and material necessary to provide additional circulation fluid for the drilling and plugging process for the well.

- B. Requirements: The Contractor shall receive prior approval from the Division before bringing additional circulation fluid onsite. The fluid type shall be as listed below and based on the requirements of the original plugging plan.

Freshwater: Freshwater brought to location shall be free of oil sheen, and field tested for pH and chlorides. The chloride concentration shall be less than 250 mg/L and the pH shall be within a range of 6.5-8.5 standard units (SU).

Brine: A mixture composed of water and dissolved salts at a required density defined in the Plugging plan. Prior to supplying additional brine to location for use as a circulation fluid, the Contractor shall confirm the required density.

Fluid type, characteristics and quantities shall be confirmed with the Division prior to bringing onsite.

- C. Measurement: Measurement for payment for the above-described work shall be made by the actual quantity of barrels (bbls) used to successfully plug and/or drill the orphan as approved by the Division.
- D. Payment: Payment for the above work shall be made at the unit price per barrel (bbls) for **“Additional Circulation Fluid (Freshwater)”**

PERFORATING

- A. Description: This work consists of all labor, equipment, and material necessary to perforate a casing or tubing at a determined depth for the purpose of squeezing cement outside the casing or tubing string.
- B. Execution: The Contractor shall complete the perforating of the casing or tubing at a depth approved by the Division. This work shall include logging the well with a standard logging suite at the discretion of the Division to identify perforation interval(s).

The Contractor shall propose the material and method for perforating the casing or tubing and shall be approved by the Division. **Each unit for perforating shall include two (2) shots with ten (10) perforations per shot, for a total of 20 perforations.**

- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **A copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary for the perforating the casing or tubing made at the unit price per each for **"Perforating."**

DOWNHOLE VIDEOGRAPHY

- A. Description: This work consists of all labor, equipment, and material necessary to video record the well bore to assess the well bore obstruction.
- B. Execution: The Contractor shall supply all equipment needed and complete the videography recording of the well bore to the depth of the current obstruction. The Contractor shall supply the Division with an electronic copy of the videography recorded in a format viewable in readily available current software.

The Division is not obligated to provide camera services to the Contractor. At no point shall the Division be responsible for delays associated with availability of camera runs.

- C. Measurement: Measurement for payment shall be made by the delivery of an acceptable video and photos to the Division of the current obstruction. Measurement shall be per obstruction, not per video or photo.
- D. Payment: Payment for the above-described work, which includes all labor, materials, equipment necessary for the video recording of the current obstruction made at the per unit price per each for **"Downhole Videography"**.

FISHING

- A. Description: This work consists of all labor, equipment, and material necessary to remove and/or clear the well bore as needed to reach total depth by the means of fishing the obstruction in the well bore.
- B. Execution: The Contractor shall supply the equipment needed to complete the fishing in an efficient manner that will be approved by the Division. This shall include but not be limited to the rig, impression blocks, and associated equipment. **This shall not include the fishing tools required to complete this work. The Division will develop a negotiated change order to deliver and use the appropriate fishing tools required based on the unforeseen conditions.** Appropriate fishing tools shall be provided for the circumstances encountered.
- C. Measurement: Measurement for payment shall be made by field inspection of the actual quantity of hours in which the drilling rig and other fishing equipment were diligently operating in a manner to remove the obstruction.
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary for the obstruction removal, shall be made at the unit price per hour for **"Fishing"**.

MILLING/DRILLOUT

- A. Description: This work consists of all labor, equipment, and material necessary to remove an obstruction from inside the wellbore or casing as needed to reach a required depth by means of milling/drilling.

This work may include removing metal, cement, grout, wood plugs, failed cement plugs and/or other materials in which typical cleanout operations failed to remove.

- B. Execution: The Contractor shall supply the equipment needed to complete the work in an efficient manner that will be approved by the Division. This shall include but not be limited to the rig, a mud pump, power swivel/power sub, drill string (including collars and casing or tubing) and associated equipment.

This shall not include the bits required to complete this work. The Division will develop a negotiated change order to deliver and use the appropriate bit(s) required based on the unforeseen conditions. Bit types shall be based on the type of material encountered. Bits shall be factory made unless otherwise approved in writing by the Division.

- C. Measurement: Measurement for payment shall be made by field inspection of the actual quantity of hours in which the drilling rig and equipment were diligently operating in a manner to remove the obstruction.
- D. Payment: Payment for the above-described work, which includes all labor, materials, equipment necessary for the obstruction removal shall be made at the unit price per hour for "**Milling/Drillout**".

MAGNET

- A. Description: This work consists of all labor, equipment, and material necessary to supply a magnet and the required subs as the fishing tool.
- B. Execution: The Contractor shall supply all equipment needed for a magnet fishing tool to be used for fishing out the well bore to the depth of the current obstruction and extracting it. This shall include but not be limited to the rig, subs, and associated equipment. Appropriate tools shall be provided for the circumstances encountered. The work to complete the fishing shall be per line item "**Fishing**".
- C. Measurement: Measurement for payment shall be made by the delivery of the magnet to extract the obstruction as satisfactorily completed and accepted by the Division.
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary to supply the magnet to extract the obstruction, shall be made at the per unit price per each for "**Magnet**".

LOGGING

- A. Description: This work consists of all labor, equipment, and material necessary to determine the total depth of the well and the casing, if a packer is present (along with its depth and thickness), determine bond quality behind the casing and the free point of the

casing. The Log should also confirm zones of gas production and formation tops for cementing purposes. All cement plug depth and thicknesses will be based on log data of the first well plugged on the site.

- B. Execution: The Contractor shall complete the logging of the well bore, casing, tubing, packer, and/or cement to the depth of the existing well bore, casing, tubing, packer, and/or cement. The methods of logging to be used shall be as indicated on the individual plugging plan and may (remove if all will use the same) include but not be limited to **gamma ray (GR), casing collar locator (CCL), temperature, bond, and caliper log**. Prior to use, the Contractor shall propose the method of logging and shall be approved by the Division.
- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **A copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary for the investigation of the well, shall be included at the per unit price per each for **"Logging."**

SHOOTING

- A. Description: This work consists of all labor, equipment, and material necessary to sever/shoot a casing or tubing at a determined depth for the purpose of removing the casing or tubing string by the means of shooting.
- B. Execution: The Contractor shall complete the shooting of the casing or tubing at a depth approved by the Division. This work shall include logging the well with a standard logging suite at the discretion of the Division to locate free point of casing or tubing in the well.

The Contractor shall propose the material and method for shooting of the casing or tubing, which shall be approved by the Division.

- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **A copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, equipment necessary for the shooting the casing or tubing made at the unit price per each for **"Shooting"**.

PERFORATING

- A. Description: This work consists of all labor, equipment, and material necessary to perforate a casing or tubing at a determined depth for the purpose of squeezing cement outside the casing or tubing string.

- B. Execution: The Contractor shall complete the perforating of the casing or tubing at a depth approved by the Division. This work shall include logging the well with a standard logging suite at the discretion of the Division to identify perforation interval(s).

The Contractor shall propose the material and method for perforating the casing or tubing and shall be approved by the Division. **Each unit for perforating shall include two (2) shots with ten (10) perforations per shot, for a total of 20 perforations.**

- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **A copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary for the perforating the casing or tubing made at the unit price per each for "**Perforating.**"

SEVERING

- A. Description: This work consists of all labor, equipment, and material necessary to sever a casing at a determined depth for the purpose of removing the casing string from the wellbore.
- B. Execution: The Contractor shall complete the severing of the casing at a depth approved by the Division. The Contractor shall propose the material and method for severing of the casing, which shall be approved by the Division. This includes, but is not limited to, locating free point, ripping, shooting, or cutting.
- C. Measurement: Measurement for payment shall be made by field inspection of units satisfactorily completed and accepted by the Division. **If applicable, a copy of the log shall be provided with the invoice as backup documentation.**
- D. Payment: Payment for the above-described work, which includes all labor, materials, and equipment necessary for the severing the casing made at the unit price per each for "**Severing.**"

NINE SACK GROUT

- A. Description: This work shall include furnishing all labor, materials, equipment, and supplies necessary to plug the well as specified in the **Plugging Plan.**
- B. Materials: Nine Sack Grout shall consist of the following materials and requirements:

Constituent	SSD Weight (lbs.)	Volume (ft.³)
Cement Type I-II	846.00	4.30
Sand	2550.00	15.54
Water	417.00	6.68

(SSD means saturated surface dry)

1. Cement Type I-II: Cement shall conform to ODOT CMS Item 701.02 and 701.04.
2. Sand: Sand shall be in accordance with ASTM C150.
3. Water: Water shall be in accordance with ASTM C1602.
The grout shall contain a maximum of 1% entrapped air.

Grout shall have a water to cement ratio (W/C) equal to 0.50 and an overall unit weight of 142.30 pounds per cubic foot.

Slump tests may be done at the discretion of the Division. Slump requirements shall be determined in the field at the time of construction.

The Division has accounted for excess materials due to loss in the wellbore in the quantities on the **Quantity Sheet**.

- C. Installation: **The Contractor shall notify the Division at least 24 hours in advance of placing grout.** The surface plug shall be grouted to the depth described in the **Plugging Plan**.

Well preparation and circulation shall be achieved as detailed in the "**Well Preparation & Plugging**" line item and the **Plugging Plan**.

- D. Setting: Setting times shall be completed as described in the **Plugging Plan**. For the casing any void space between the top of the grout and the top of the casing shall be filled to achieve a level grout line with the top of the casing. This shall be done at no additional cost to the Division.
- E. Measurement: Measurement for payment for the above-described work shall be based upon material quantities satisfactorily installed as well as delivery tickets furnished to the Division.
- F. Payment: Payment for all the above-described work shall be made at the unit price per cubic yard for "**Nine Sack Grout**."

LOST CIRCULATION MATERIALS

- A. Description: This work shall include furnishing all labor, materials, equipment, and supplies necessary to expose portions of the well bore to lost circulation materials (LCM) as determined necessary. Lost circulation materials shall be implemented to aid in obtaining well bore circulation prior to any cementing operations.
- B. Materials: Lost circulation materials shall be selected by the Contractor based on site conditions encountered and proposed to the Division for approval.
- C. Measurement: Measurement for payment shall be based on the actual quantity of sacks of lost

circulation materials satisfactorily placed and shall be verified with delivery tickets. For estimating purposes, it has been assumed that one (1) sack is equal to fifty (50) pounds.

- D. Payment: Payment for all the above-described work shall be made at the unit price per sack for "**Lost Circulation Materials**".

DRILLING MUD

- A. Description: The work covered by this section shall consist of furnishing all labor, equipment, and material necessary to provide and use a water-based drilling mud for the drilling and plugging process of the well.
- B. Materials: Based on the onsite conditions the Contractor shall propose a water-based drilling mud for approval from the Division. Once a material is approved, the Division will require a minimum quantity be maintained at the site during the plugging project based on circumstances encountered.
- C. Measurement: Measurement for payment for the above-described work shall be made by the actual quantity of sacks (50 lbs) of additives for the water-based drilling mud used to successfully plug the orphan well.
- D. Payment: Payment for the above work shall be made at the unit price per sack for "Drilling Mud."

HYDROGEN SULFIDE SCAVENGER

- A. Description: The work covered by this section shall consist of furnishing all labor, equipment, and material necessary to provide and use a hydrogen sulfide scavenger for the drilling and plugging process of the well.
- B. Materials: The Contractor shall provide Sulfa-Clear or an approved equal. The Sulfa-Clear shall be applied at a rate to eliminate the presence of Hydrogen Sulfide (H₂S) at the surface and shall not be less than seven (7) percent concentration with the applicable well bore fluid.
- C. Execution: The Contractor shall be prepared to apply the hydrogen sulfide scavenger at any time during the drilling and plugging operation. When Hydrogen Sulfide (H₂S) is encountered the Contractor shall apply the hydrogen sulfide scavenger. If the hydrogen sulfide scavenger is applied during drilling operations the Contractor shall continue to monitor the presence of H₂S and apply additional hydrogen sulfide scavenger as needed in order to complete the plugging.

Once total depth has been reached an additional batch of hydrogen sulfide scavenger will be applied to the total depth of the well bore prior to setting of any plugs. Once this total depth application has been applied the Contractor shall wait a minimum of 24 hours to commence work on the well bore.

- D. Measurement: Measurement for payment for the above-described work shall be made by the actual quantity of gallons of hydrogen sulfide scavenger used to successfully plug and/or drill the orphan well.
- E. Payment: Payment for the above work shall be made at the unit price per gallon for "**Hydrogen Sulfide Scavenger**".

H2S SAFETY TEAM

- A. Description: The work will include the installation and implementation of safety procedures for the plugging of the orphan well as described herein that that wells in the area have been known to produce bacterial H₂S. **Per 29 CFR 1910.1000, Air Contaminants, Table Z-2 the permissible exposure limits (PEL) ceiling standard for H₂S is 20 ppm.** This shall also include any labor, equipment, materials, and time needed to implement these safety procedures. The H₂S safety team shall be qualified employees of the Contractor or subcontractors including no less than two employees available for 24/7 coverage of the monitoring equipment. The personnel shall be available for no more than 12-hour shifts (Shifts include active and on-call service) and shall be on site while work is being completed.
- B. Execution: The Contractor must provide the appropriate equipment, on-site, to properly detect and abate any H₂S emitted from the well. All personnel on location must have and wear H₂S monitor and/or 4-gas monitor. If permissible exposure limits (PEL) are exceeded, the Contractor will be required to have an H₂S safety team on site until the geological zone of interest is covered with cement and no further H₂S issues are at the surface while the well is vented for a minimum of 8 hours. The H₂S safety team may be released at this point, but personal monitors and the rig monitor are still required. The safety team shall be called back as needed.

Once the Contractor is on site and well is ready to be opened or detection of permissible exposure limits (PEL) are exceeded, the Contractor will not continue plugging operations until the safety team has developed and implemented a H₂S safety plan that is compliant with Occupational Safety and Health Administration (OSHA) and The National Institute for Occupational Safety and Health (NIOSH) regulations. The plan shall be approved by the Division.

Along with any other measures required to be compliant with regulations and to implement the approved H₂S safety plan, the Safety Team at minimum shall supply, train, and utilize the following:

1. Supply & use exhaust and ventilation systems,
2. Train and educate workers about hazards and controls,
3. Test (monitor) the air 24/7 with the ability to receive real-time notifications of site conditions through email, website, and phone/text alerts to receive real-time alerting of events and alarms,
4. Establish, train, and use proper rescue and first aid procedures,
5. Supply, train, and use respiratory and other personal protective equipment, &

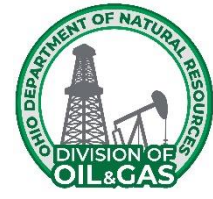
6. Establish, train, and implement an H₂S Emergency Response Plan for the site including Emergency Medical Technicians (EMTs) ready to respond to the 24/7 monitoring unless otherwise contacted by the Safety Team.

For days that the site is idle for weekends, holidays, or any other day that the Division agrees work cannot take place, the H₂S Safety Team shall be on standby, and the cost associated with those days shall be paid at the unit price per day for **“H₂S Safety Team Standby”**. Any days that work could have been completed and was not due to the Contractor shall be at the Contractor’s expense.

- C. Measurement: Measurement for payment will be considered and measured as a unit satisfactorily completed and accepted by the Division.
- D. Payment: Payment for this work, including labor, equipment, materials, and time shall be made at the unit price per day for **"H₂S Safety Team" or “H₂S Safety Team Standby”**.



SCOPE OF WORK
Washington 23F PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



APPENDIX I – OHIO ONE-CALL

THE FOLLOWING ARE REPORTABLE INCIDENTS: (OAC 1501:9-8-02)

TYPE OF INCIDENT (All Incident types associated with production operation or other activity regulated under Chapter 1509)	QUANTITY (GAL, BBL,PPM) NOTE: 1 Barrel = 42 US Gallons	ADDITIONAL FACTORS
Release of Gas	<u>Any</u> amount	Resulting from a Blow out; OR
		Uncontrolled Pop-off Valve (in Urban Area); OR
		Any gas release that is a threat to public safety
Release of Hydrogen Sulfide(H₂S) Gas (within the Working Area)	Exceeding 20 ppm (Sustained airborne concentration); For duration > 10 min	OR any H ₂ S release resulting in injury or death of person
Fire / Explosion	N/A	In which a reporting person has called an emergency responder (9-1-1 or Fire Dept)
Release of Oil, Condensate, or Materials Saturated with Oil or Condensate	> 210 US gallons in any 24-hr period (Estimated)	AND the release is OUTSIDE secondary containment & into the environment
Release of Oil, Condensate, or Materials Saturated with Oil or Condensate	> 25 US gallons in any 24-hr period (Estimated); AND the release is outside secondary containment and into the environment	In an urban area; OR
		In an Emergency Management Zone of a surface water public drinking supply; OR
		In a 5-year time of travel with a groundwater-based public drinking supply; OR
		In a 100-year flood hazard area as delineated on the federal emergency management agency's (FEMA) national flood insurance rate map
Release of Refined Oil Products (EX: oil-based drilling fluid, petroleum distillate, spent or unused paraffin solvent, gasoline, fuel oil, diesel fuel, or lubricants)	> 25 US gallons in any 24-hr period	AND the release is OUTSIDE secondary containment & into the environment
Release of Oil, Condensate, or Materials Saturated with Oil or Condensate; <u>OR</u> Refined Oil Products	<u>Any</u> amount	That enters waters of the state in an amount that causes a film or sheen on the surface of the water
Release of Brine or Semi-Solid Waste (EX: drilling mud, sludge, or tank bottom sediments)	> 42 US gallons in any 24-hr period	AND the release is OUTSIDE secondary containment & into the environment
Release of Brine from a Vehicle, Vessel, Railcar, or Container	> 42 US gallons	AND is operated by a person to whom a registration certificate has been issued (ORC 1509.222), or to whom a resolution has been issued (ORC 1509.226)
		AND enters the environment

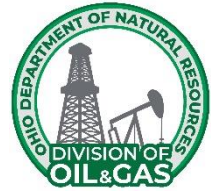
Release of Hazardous Substance (HS)/ Extremely Hazardous Substance (EHS); OR Mixture or Solution including a HS or EHS	An amount Equal to or > than applicable reportable quantities listed in 40CFR tables; in any 24-hr period If the amount of one or more HS or EHS released is in an unknown mixture or solution, notify when the total amount of the mixture or solution released is <u>equal to or > than</u> the reportable quantity for the HS or EHS with the lowest reportable quantity	List available at: http://oilandgas.ohiodnr.gov/portals/oilgas/pdf/emergency/list_of_lists.pdf <i>Code of Federal Regulations (C.F.R.) References:</i> HS- Appendix A 40 CFR Part 302.4 EHS- Appendix A 40 CFR Part 355
---	---	---

THE FOLLOWING ARE NOT REPORTABLE INCIDENTS:
(OAC 1501:9-8-02 (A)(7))

- Controlled flaring or controlled burns authorized under Chapter 1509. of the Revised Code or under 1501:9 of the Administrative Code or authorized by the terms and conditions of a permit issued under Chapter 1509. of the Revised Code;
 - Properly functioning emission control devices authorized pursuant to Revised Code Section 3704.03;
 - Subsurface detonation of perforation-guns;
 - Seismic shots;
 - Controlled blasting for well site construction
- Date Last Edited & Printed: 9/27/2018



SCOPE OF WORK
WASHINGTON #23 PROJECT
Multiple Orphan Well Sites
Washington County, Aurelius Township



**APPENDIX II: Photos
& Well Records**

Ward, JF #12
34-167-2-0209-00-00
Washington County, Aurelius Township



8151

20209 209

GEOLOGICAL SURVEY OF OHIO OIL AND GAS WELL LOG

State Ohio
County Washington Township Aurelius Quadrangle _____
Lot _____ Quarter _____ Tract _____ Section 21 NW NE SW
Measured 300 Feet From W Line And 45 Feet From S Line Of NE 1/4
Land Owner J. F. Ward Well No. 12 Date Started Sept. 24, 1941
Operator J. F. Ward Well No. _____ Date Completed Oct. 1, 1941
Elevation Bar S. L. Total Depth 390' Plugged Back _____
Formation Drilled To _____ Producing Form _____ Init. Prod. Nat. oil - 2 bbl.
Shot or Acid Record _____ Prod. A. S. or Acid _____
Init. Rock Press. _____ Abandoned 9-24-51*
Casing Record _____

Formation	Top	Bottom	Thickness	Remarks	Formation	Top	Bottom	Remarks
Red rock			55		T. D.		390	2 bbl. well
White slate			15					
Red rock			20					
Sand			40					
Black slate			15					
White slate			30					
Cowrun sand			30-dry H-205'					
Red rock			30					
White slate			40					
Lime			10					
White slate			40					
Black slate			35					
Sand			30					

*(The aband. report shows this info. -)
Date drilled - Dec. 26, 1929; Casing 4 7/8" -
1200': 6 1/4" - 700': 8 1/4" - 120': T. D. - 1508':
Berea sand 1500 1508 Prod. - oil

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

[illegible]

Stephens, Francis A #4
34-167-2-0481-00-00
Washington County, Aurelias Township



8151

GEOLOGICAL SURVEY OF OHIO

20481

481

OIL AND GAS WELL LOG

State Ohio
 County Washington Township Aurelius Quadrangle
 Lot 10 Quarter 10 Tract 21 Section 21 NW NE SW
 Measured 10 Feet From 12 Line And 12 Feet From 12 Line Of 5
 Land Owner Francis A. Stephens Well No. 4 Date Started
 Operator D. R. Greenless et al Well No. Date Completed ?
 Elevation Bar 928 S. L. Total Depth 1795' Plugged Back
 Formation Drilled To Producing Form Init. Prod. Nat. oil
 Shot or Acid Record Prod. A. S. or Acid
 Init. Rock Press. Abandoned
 Casing Record 8 1/4"-3682'; 6 5/8"-9422'; 5 3/16"-1470'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil				
Slate		1795					

Dutton, Archibald #6D
34-167-2-1954-00-00
Washington County, Aurelius Township



8151 20481 481

GEOLOGICAL SURVEY OF OHIO **OIL AND GAS WELL LOG**

State Ohio County Washington Township Aurelius Quadrangle

Lot Quarter Tract Section 21 NW NE SW

Measured 1046 Feet From E Line And 123.0 Feet From N Line Of 50' 14"

Land Owner Francis A. Stephens Well No. 4 Date Started

Operator D. R. Greenlees et al Well No. Date Completed ?

Elevation Bar 998 S. L. Total Depth 1795' Plugged Back

Formation Drilled To Producing Form Init. Prod. Nat. oil

Shot or Acid Record Prod. A. S. or Acid

Init. Rock Press. Abandoned

Casing Record 8 1/4"-368 1/2' : 6 5/8"-942 1/2' : 5 3/16"-1470'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil 1777				
Slate		1795					

Stephens, Francis A #21
34-167-6-0431-00-00
Washington County, Aurelias Township



8151

GEOLOGICAL SURVEY OF OHIO

20481

481

OIL AND GAS WELL LOG

State Ohio
 County Washington Township Aurelias Quadrangle
 Lot 1040 Quarter E Tract 21 Section NW NE SW
 Measured 1040 Feet From E Line And 1230 Feet From N Line Of SW 1/4
 Land Owner Francis A. Stephens Well No. 4 Date Started
 Operator D. R. Greenlees et al Well No. Date Completed ?
 Elevation Bar 228 S. L. Total Depth 1795' Plugged Back
 Formation Drilled To Producing Form Init. Prod. Nat. oil
 Shot or Acid Record Prod. A. S. or Acid
 Init. Rock Press. Abandoned
 Casing Record 8 1/2"-368 1/2' : 6 5/8"-942 1/2' : 5 3/16"-1470'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil 1777				
Slate		1795					

Stephens, Francis A #1
34-167-6-0432-00-00
Washington County, Aurelias Township



8151	GEOLOGICAL SURVEY OF OHIO	20481	481	OIL AND GAS WELL LOG			
State <u>Ohio</u> County <u>Washington</u> Township <u>Aurelius</u> Quadrangle _____ Lot _____ Quarter _____ Tract _____ Section <u>21</u> NW NE SW Measured <u>1240</u> Feet From _____ Line And <u>1230</u> Feet From _____ Line Of <u>5614</u> Land Owner <u>Francis A. Stephens</u> Well No. <u>4</u> Date Started _____ Operator <u>D. R. Greenless et al</u> Well No. _____ Date Completed <u>?</u> Elevation Bar <u>928</u> S. L. Total Depth <u>1795'</u> Plugged Back _____ Formation Drilled To _____ Producing Form _____ Init. Prod. Nat. <u>oil</u> Shot or Acid Record _____ Prod. A. S. or Acid _____ Init. Rock Press _____ Abandoned _____ Casing Record <u>8 1/4"-368 1/2' : 6 5/8"-942 1/2' : 5 3/16"-1470'</u>							
Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil 1777				
Slate		1795					

GEOLOGICAL SURVEY OF OHIO

20396 396

OIL AND GAS WELL LOG

State Ohio
 County Washington Township Aurelius Quadrangle Macksburg
 Lot Quarter Tract Section 21 NW NE SW 4
 Measured 240 Feet From E Line And 440 Feet From N Line Of Acres

Land Owner Francis A. Stephens Well No. 2 Date Started Dec. 1944
 Operator D. R. Greenlees et al. Well No. Date Completed 4-21-45
 Elevation Bar S. L. Total Depth 1764 1/2 Plugged Back
 Formation Drilled To Producing Form. Init. Prod. Nat. dry
 Shot or Acid Record Prod. A. S. or Acid
 Init. Rock Pressure Abandoned 5-21-45

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dark sh.		1175					
blk. ls.		1210					
Salt t. sd.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
blk. sh.		1751 1/2					
Bea-rea sd.		1759 1/2					
sh.		1764 1/2					

Casing Record 10" 85 8" 355 6" 925 5" 1415

Stephens, Francis A #23
34-167-6-0438-00-00
Washington County, Aurelias Township



C-0036-1-25

GEOLOGICAL SURVEY OF OHIO 20396 396

OIL AND GAS WELL LOG

State Ohio
 County Washington Township Aurelius Quadrangle Macksburg
 Lot Quarter Tract Section 21 NW NE SW 4
 Measured 340 Feet From 5 Line And 440 Feet From N Line Of Survey

Land Owner Francis A. Stephens Well No. 2 Date Started Dec. 1944
 Operator D. R. Greenlees et al Well No. Date Completed 4-21-45
 Elevation Base S. L. Total Depth 1764 1/2' Plugged Back
 Formation Drilled To Producing Form Init. Prod. Nat. dry
 Shot or Acid Record Prod. A. S. or Acid
 Init. Rock Process Abandoned 5-21-45

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
Mt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dark sh.		1175					
blk. ls.		1210					
Salt sd.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
blk. sh.		1751 1/2					
Beaesa sd.		1759 1/2					
sh.		1764 1/2					

Casing Record 10" 85 8" 355 6" 925 5" 1415

A close-up photograph of a red flag attached to a metal ring, which is placed on the ground next to a hole. The ground is covered with dry leaves and patches of snow.

[illegible]

A photograph of a snowy forest scene. A large, dark tree trunk is in the foreground, heavily covered in snow. Several thin, bare branches are visible, some also covered in snow. The ground is covered in a thick layer of snow.

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
Mt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks
dar-k sh.		1175	
blic. ls.		1210	
Salt sd.		1410	
sh.		1415	
ls.		1435	
sh.		1520	
ls.		1530	
sh.		1715	
blic. sh.		1751 ²	
Berea sd.		1759 ³	
sh.		1764 ²	
Casing Record	10" 85	8" 355 6" 925	5" 1415

A black, flexible, high-pressure hose is connected to a metal fitting, lying on the forest floor covered in fallen leaves and moss. The hose is positioned diagonally across the frame, with the fitting end pointing towards the upper right. The background shows a dense forest with thin tree trunks and a ground covered in brown, fallen leaves and patches of green moss.

Formation	Top	Bottom	Remarks
dar-k sh.		1175	
bll<. ls.		1210	
Sall t sd.		1410	
sh		1415	
ls		1435	
sh		1520	
ls		1530	
sh		1715	
bll<. sh.		1751 ²	
Berea sd.		1759 ²	
sh		1764 ²	
Casing Record	10" 85'	8" 355' 6" 925'	5" 1415'

A close-up photograph of a pink flag with the letters 'UAV' written on it in black marker. The flag is stuck into the ground, which is covered with a thick layer of dry, brown pine needles and some scattered brown leaves. A small patch of dark, bare soil is visible around the base of the flag. The flag is attached to a thin, light-colored stick or wire that extends diagonally across the frame.

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
Mt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks
dark sh.		1175	
blk. ls.		1210	
Salt ed.		1410	
sh.		1415	
ls.		1435	
sh.		1520	
ls.		1530	
sh.		1715	
blk. sh.		1751 $\frac{1}{2}$	
Berea sd.		1759 $\frac{1}{2}$	
sh.		1764 $\frac{1}{2}$	
Casing Record	10" 85	8" 355	6" 925
			5" 1415

Stephens, Francis A #22
34-167-6-0479-00-00
Washington County, Aurelias Township



4-22 Date May 6, 1960
Owner or operator of well E. A. Stephens
P. O. Address Elba, Ohio Gas Oil *
No. of well 22 Section 21 Dry Other
Township Aurelias County Washington
On farm known as Archibald Dutton for
E. A. Stephens
Date of permit to drill
When drilled old well
Total depth 1585' Top of sand no record

	Top	Bottom
Fresh water strata	<u>no record</u>	
Depth of coal	<u>no record</u>	
" " "		
" " "		
First brown sand		
Cowbridge lign		
Rockburg 500 sand		
Second brown sand		
Salt sand		
Nexton sand		
Big line of W. Va.		
Ketcher sand		
Big Injun sand		
Green sand		
Green sand	<u>no record</u>	<u>1585'</u>

CERTIFICATE OF NOTIFICATION

This is to certify that I, the undersigned, did give written notice to the land owner or owners on which well or wells are located, the owners or agents of the adjoining lands and the adjoining well owners or agents of my intention to plug and abandon well or wells as provided by Section 4159.13 of the Revised Code of Ohio.

Such well or wells are located on the
Archibald Dutton & E. A. Stephens Farm
21st Sec. Aurelias Twp.
Washington County.

Manner in which well was plugged. Give description in detail. Well filled from bottom 1585' up to 1325' with DRAPADA SAND
bridge 300' filled to surface with prep. clay.

CASING RECORD

<u>4 7/8"</u>	<u>est 1200'</u>	<u>all pulled</u>
<u>6 1/2"</u>	<u>est 500'</u>	<u>400' pulled</u>

Date of abandonment May 6, 1960
E. A. Stephens
Signature of Inspector

247

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
Mt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

[illegible]

Formation	Top	Bottom	Remarks
dark sh.		1175	
blk. ls.		1210	
Salt sd.		1410	
sh.		1415	
ls.		1435	
sh.		1520	
ls.		1590	
sh.		1715	
blk. sh.		1751 $\frac{1}{2}$	
Berea sd.		1759 $\frac{1}{2}$	
sh.		1764 $\frac{1}{2}$	
Casing Record	10" 85'	8" 355' 6" 925'	5" 1415'

34-167-6-0483-00-00

A photograph of a rusted metal object, possibly a shell casing, lying in the snow. A small white label with the number '2054' is placed next to it for identification.

C-0036-1-25

GEOLOGICAL SURVEY OF OHIO

20396

396

OIL AND GAS WELL LOG

State Ohio

County Washington Township Aurelius Quadrangle Macksburg

Lot Quarter Tract Section 21 NW NE SW 1/4

Measured 540 Feet From 6 Line And 440 Feet From N Line Of survey

Land Owner Francis A. Stephens Well No. 2 Date Started Dec. 1944

Operator D. R. Greenlee et al Well No. Date Completed 4-21-45

Elevation Base S. L. Total Depth 1764.5' Plugged Back

Formation Drilled To Producing Form Init. Prod. Nat. dry

Shot or Acid Record Prod. A. S. or Acid

Init. Rock Pressure Abandoned 5-21-45

Formations	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dak sh.		1175					
bllc. ls.		1210					
Salt sd.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
bllc. sh.		1751 $\frac{1}{2}$					
Berea sd.		1759 $\frac{1}{2}$					
sh.		1764 $\frac{1}{2}$					
Casing Record	10" 85'	8" 355'	6" 925'	5" 1415'			

[illegible]

McKendry, JE&C #3
34-167-6-0518-00-00
Washington County, Aurelias Township



8151

GEOLOGICAL SURVEY OF OHIO

60544

108-A-28

OIL AND GAS WELL LOG

State Ohio
County Washington Township Aurelius Quadrangle
Lot Quarter Tract Section 20 NW NE SW
Measured 645 Feet From E Line And 1420 Feet From N Line Of
Land Owner Lewis Waller Well No. 28 Date Started
Operator Lloyd P. Miller Well No. Date Completed
Elevation Bar. S. L. Total Depth 400' Plugged Back oil
Formation Drilled To Producing Form Init. Prod. Nat. oil
Shot or Acid Record Prod. A. S. or Acid 11-13-50
Init. Rock Press. Abandoned
Casing Record 4 1/2"-375': 5 5/8"-50'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
1st cowrun sand		400					
T. D.		400					

McKendry, JE&C #4
34-167-6-0519-00-00
Washington County, Aurelias Township



8151

GEOLOGICAL SURVEY OF OHIO

60544

108-A-28

OIL AND GAS WELL LOG

State Ohio
County Washington Township Aurelius Quadrangle
Lot Quarter Tract Section 20 NW NE SW
Measured 645 Feet From E Line And 1420 Feet From N Line Of
Land Owner Lewis Waller Well No. 28 Date Started
Operator Lloyd P. Miller Well No. Date Completed
Elevation Bar. S. L. Total Depth 400' Plugged Back oil
Formation Drilled To Producing Form Init. Prod. Nat. oil
Shot or Acid Record Prod. A. S. or Acid 11-13-50
Init. Rock Press. Abandoned
Casing Record 4 1/2"-375': 5 5/8"-50'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
1st cowrun sand		400					
T. D.		400					

McKendry, JE&C #5
34-167-6-0520-00-00
Washington County, Aurelias Township



8151

GEOLOGICAL SURVEY OF OHIO

60544

106-A-28

OIL AND GAS WELL LOG

State Ohio
County Washington Township Aurelius Quadrangle
Lot Quarter Tract Section 20 NW NE SW
Measured 645 Feet From E Line And 1420 Feet From N Line Of
Land Owner Lewis Waller Well No. 28 Date Started
Operator Lloyd P. Miller Well No. Date Completed
Elevation Bar S. L. Total Depth 400' Plugged Back oil
Formation Drilled To Producing Form Init. Prod. Nat. oil
Shot or Acid Record Prod. A. S. or Acid 11-13-50
Init. Rock Press Abandoned
Casing Record 4 1/2"-375': 5 5/8"-50'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
1st cowrun sand		400					
T. D.		400					

McKendry, JE&C #6
34-167-6-0522-00-00
Washington County, Aurelias Township



8151

GEOLOGICAL SURVEY OF OHIO

60544

108-A-28

OIL AND GAS WELL LOG

State Ohio
County Washington Township Aurelius Quadrangle
Lot Quarter Tract Section 20 NW NE SW
Measured 645 Feet From E Line And 1420 Feet From N Line Of
Land Owner Lewis Waller Well No. 28 Date Started
Operator Lloyd P. Miller Well No. Date Completed
Elevation Bar. S. L. Total Depth 400' Plugged Back oil
Formation Drilled To Producing Form Init. Prod. Nat. oil
Shot or Acid Record Prod. A. S. or Acid 11-13-50
Init. Rock Press. Abandoned
Casing Record 4 1/2"-375': 5 5/8"-50'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
1st cowrun sand		400					
T. D.		400					

A photograph showing a snow-covered forest floor. In the center, there is a wooden structure, possibly a trap or a small shelter, made of vertical poles and horizontal beams. The ground is covered in a thick layer of snow, with some bare tree branches and fallen logs visible. A small white tag with the number '2056' is placed on the snow in the foreground.

GEOLOGICAL SURVEY OF OHIO

20396 396

OIL AND GAS WELL LOG

State Ohio

County Washington Township Aurelius Quadrangle Hacksburg

Lot Quarter Tract Section 21 NW NE SW 4

Measured 240 Feet From E Line And 440 Feet From N Line Of Survey

Land Owner Francis A. Stephens Well No. 2 Date Started Dec. 1944

Operator D. R. Greenlees et al Well No. Date Completed 4-21-45

Elevation Bar S. L. Total Depth 1764 1/2 Plugged Back

Formation Drilled To Producing Form Init. Prod. Nat. dry

Shot or Acid Record Prod. A. S. or Acid

Init. Rock Pressure Abandoned 5-21-45

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dark sh.		1175					
blk. ls.		1210					
Salt sd.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
blk. sh.		1751 1/2					
Bea sea sd.		1759 1/2					
sh.		1764 1/2					

Casing Record 10" 85 8" 355 6" 925 5" 1415

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

[illegible]

A close-up photograph of a tree trunk in a forest. A bright orange ribbon is tied around the trunk, and a small pink tag is attached to it. The ground is covered in dry, brown leaves and moss.

C-0036-1-25

20396 396

GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State Ohio

County Washington Township Aurelius Quadrangle Macksburg

Lot Quarter Tract Section 21 NW NE SW 4

Measured 340 Feet From E Line And 440 Feet From N Line Of sec 4

Land Owner Francis A. Stephens Well No. 2 Date Started Dec. 1944

Operator D. R. Greenless et al Well No. Date Completed 4-21-45

Elevation Box S. L. Total Depth 1764.5 Plugged Back

Formation Drilled To Producing Form Init. Prod. Nat. dry

Shot or Acid Record Prod. A. S. or Acid

Init. Rock Press Abandoned 5-21-45

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sq.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dark sh.		1175					
blk. ls.		1210					
Salt ad.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
blk. sh.		1751.2					
Berea sd.		1759.2					
sh.		1764.2					

Casing Record 10" 85 8" 355 6" 925 5" 1415

C-0036-4-25

GEOLOGICAL SURVEY OF OHIO

20396 396

OIL AND GAS WELL LOG

State Ohio

County Washington Township Aurelius Quadrangle Macksburg

Lot Quarter Tract Section 21 NW NE SW 4

Measured 540 Feet From Line And 440 Feet From Line Of

Land Owner Francis A. Stephens Well No. 2 Date Started Dec. 1944

Operator D. R. Greenlees et al Well No. Date Completed 4-21-45

Elevation Bar S. L. Total Depth 1764 1/2 Plugged Back

Formation Drilled To Producing Form Init. Prod. Nat. dry

Shot or Acid Record Prod. A. S. or Acid

Init. Rock Press Abandoned 5-21-45

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dark sh.		1175					
blk. ls.		1210					
Salt sd.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
blk. sh.		1751 1/2					
Bevea sd.		1759 1/2					
sh.		1764 1/2					

Casing Record 10" 85 8" 355 6" 925 5" 1415

A close-up photograph of a heavily rusted, cylindrical metal object, likely a remnant of a munition, standing upright in a field of dry grass and twigs. The object has a flared top section with a small hole on the side and a hollow interior.

C-0036-14-25

GEOLOGICAL SURVEY OF OHIO

20396 396

OIL AND GAS WELL LOG

State Ohio

County Washington Township Aurelius Quadrangle Macksburg

Lot Quarter Tract Section 21 NW NE SW 4

Measured 340 Feet From 6 Line And 440 Feet From N Line Of east

Land Owner Francis A. Stephens Well No. 2 Date Started Dec. 1944

Operator D. R. Greenlees et al Well No. Date Completed 4-21-45

Elevation Base S. L. Total Depth 1764 1/2 Plugged Back

Formation Drilled To Producing Form Init. Prod. Nat. dry

Shot or Acid Record Prod. A. S. or Acid

Init. Rock Pressure Abandoned 5-21-45

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.		480	
lt. sd.		75		red sh.		505	
coal		80		blue sh.		625	
blue sh.		105		sd.		725	
red sh.		135		sh.		770	
sd.		155		sd.		820	
blue sh.		185		sh.		890	
red sh.		215		sd.		920	
blue sh.		235		sd. sh.		1000	
ls.		240		sd.		1025	
Big Red sh.		350		sh.		1055	
blue sh.		365		sd.		1080	
red sh.		385		sh.		1120	
blue sh.		460		sd.		1145	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dark sh.		1175					
blk. ls.		1210					
salt sd.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
blk. sh.		1751 1/2					
Beaesa sd.		1759 1/2					
sh.		1764 1/2					

Casing Record 10" 85 8" 355 6" 925 5" 1415

Spies #4
34-167-6-6257-00-00
Washington County, Aurelias Township



C-0036-4-25 20396 396

GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State, Ohio _____ Township, Aurelius _____ Quadrangle, Macksburg _____
County Washington _____ Tract, Section 21 NW NE SW 4
Lot _____ Quarter _____ Feet From _____ Line And 440 Feet From _____ Line Of _____
Measured _____ Feet From _____ Line And _____ Feet From _____ Line Of _____

Land Owner, Francis A. Stephens _____ Well No., 2 Date Started, Dec. 1944
Operator, D. R. Greenlees et al _____ Well No. _____ Date Completed, 4-21-45
Elevation Base, S. L. _____ Total Depth, 1764.2' Plugged Back _____
Formation Drilled To _____ Producing Form _____ Init. Prod. Nat., dry
Shot or Acid Record _____ Prod. A. S. or Acid _____
Init. Rock Press _____ Abandoned, 5-21-45

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
red sh.	0	20		Buel Run sd.	480		
Mt. sd.		75		red sh.	505		
coal		80		blue sh.	625		
blue sh.		105		sd.	725		
red sh.		135		sh.	770		
sd.		155		sd.	820		
blue sh.		185		sh.	890		
red sh.		215		sd.	920		
blue sh.		235		sd. sh.	1000		
ls.		240		sd.	1025		
Big Red sh.		350		sh.	1055		
blue sh.		365		sd.	1080		
red sh.		385		sh.	1120		
blue sh.		460		sd.	1145		

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
dark sh.		1175					
blk. ls.		1210					
Salt sd.		1410					
sh.		1415					
ls.		1435					
sh.		1520					
ls.		1530					
sh.		1715					
blk. sh.		1751					
Bea-rea sd.		1759					
sh.		1764					

Casing Record 10" 85 8" 355 6" 925 5" 1415

A photograph of a metal pipe, likely a well casing, standing in a snowy field. A pink flag is attached to the pipe, and a white label with the number '2071' is placed on the snow next to it. The background shows dry grass and snow.

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
ls.		755					
light sh.		810					
sd.		825					
light sh.		850					
sd.		875					
light sh.		915					
stray sd.		960					
sd. sh.		1045					
sd.		1060					
blk. sh.		1090					
sd.		1110					
sd. sh.		1170					
sd.		1190					
blk. sh.		1235					
sd.		1465					
shells & sh.		1545					
light sh.		1560					
ls.		1575					
light sh.		1745	- 8 29				
blk. sh.		1789 ¹ / ₂					
Berea sd.		1798 ¹ / ₂	small oil well				
Casing Record	5" 977	5" 1495					

Formation	Top	Bottom	Remarks
dark sh.		1175	
blk. ls.		1210	
Salt sd.		1410	
sh.		1415	
ls.		1435	
sh.		1520	
ls.		1530	
sh.		1715	
blk. sh.		1751 $\frac{1}{2}$	
Bea sea sd.		1759 $\frac{1}{2}$	
sh.		1764 $\frac{1}{2}$	
Casing Record	10" 85	8" 355	6" 925
			5" 1415

Dutton, Archibald #5D
34-167-6-6690-00-00
Washington County, Aurelius Township



8151 20481 481

GEOLOGICAL SURVEY OF OHIO **OIL AND GAS WELL LOG**

State Ohio County Washington Township Aurelius Quadrangle _____

Lot _____ Quarter _____ Tract _____ Section 21 NW NE SW _____

Measured 104.2 Feet From _____ Line And 12.2.0 Feet From N Line Of SW 1/4

Land Owner Francis A. Stephens Well No. 4 Date Started _____

Operator D. R. Greenlees et al Well No. _____ Date Completed ?

Elevation Bar 92.8 S. L. _____ Total Depth 1795' Plugged Back _____

Formation Drilled To _____ Producing Form _____ Init. Prod. Nat. oil

Shot or Acid Record _____ Prod. A. S. or Acid _____

Init. Rock Press. _____ Abandoned _____

Casing Record 8 1/4"-368 1/2' : 6 5/8"-942 1/2' : 5 3/16"-1470'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil				
Slate		1795					

Dutton, Archibald #4D
34-167-6-6691-00-00
Washington County, Aurelias Township



8151 20481 481

GEOLOGICAL SURVEY OF OHIO **OIL AND GAS WELL LOG**

State Ohio County Washington Township Aurelius Quadrangle _____

Lot _____ Quarter _____ Tract _____ Section 21 NW NE SW

Measured 1040 Feet From _____ Line And 1230 Feet From N Line Of 560' 0"

Land Owner Francis A. Stephens Well No. 4 Date Started _____

Operator D. R. Greenless et al Well No. _____ Date Completed ?

Elevation Bar 928 S. L. Total Depth 1795' Plugged Back _____

Formation Drilled To _____ Producing Form _____ Init. Prod. Nat. oil

Shot or Acid Record _____ Prod. A. S. or Acid _____

Init. Rock Press _____ Abandoned _____

Casing Record 8 1/4"-368 1/2' : 6 5/8"-942 1/2' : 5 3/16"-1470'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil 1777				
Slate		1795					

Dutton, Archibald #3D
34-167-6-6692-00-00
Washington County, Aurelias Township



8151 20481 481

GEOLOGICAL SURVEY OF OHIO **OIL AND GAS WELL LOG**

State Ohio
 County Washington Township Aurelius Quadrangle _____
 Lot _____ Quarter _____ Tract _____ Section 21 NW _____ NE _____ SW _____
 Measured 1040 Feet From _____ Line And 1230 Feet From N Line Of 560' 1/4
 Land Owner Francis A. Stephens Well No. 4 Date Started _____
 Operator D. R. Greenless et al Well No. _____ Date Completed ?
 Elevation Bar 228 S. L. _____ Total Depth 1795' Plugged Back _____
 Formation Drilled To _____ Producing Form _____ Init. Prod. Nat. oil
 Shot or Acid Record _____ Prod. A. S. or Acid _____
 Init. Rock Press. _____ Abandoned _____
 Casing Record 8 1/4"-368 1/2' : 6 5/8"-942 1/2' : 5 3/16"-1470'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil ???				
Slate		1795					

Stephens, Francis A #3D
34-167-6-6693-00-00
Washington County, Aurelius Township



8151	GEOLOGICAL SURVEY OF OHIO	20481	481	OIL AND GAS WELL LOG
State <u>Ohio</u> County <u>Washington</u> Township <u>Aurelius</u> Quadrangle <u> </u>				
Lot <u> </u> Quarter <u> </u> Tract <u> </u> Section <u>21</u> NW NE SW				
Measured <u>1046</u> Feet From <u>E</u> Line And <u>1230</u> Feet From <u>N</u> Line Of <u>56'4"</u>				
Land Owner <u>Francis A. Stephens</u> Well No. <u>4</u> Date Started <u> </u>				
Operator <u>D. R. Greenleaf et al</u> Well No. <u> </u> Date Completed <u>?</u>				
Elevation Bar <u>928</u> S. L. <u> </u> Total Depth <u>1795'</u> Plugged Back <u> </u>				
Formation Drilled To <u> </u> Producing Form <u> </u> Init. Prod. Nat. <u>oil</u>				
Shot or Acid Record <u> </u> Prod. A. S. or Acid <u> </u>				
Init. Rock Press <u> </u> Abandoned <u> </u>				
Casing Record <u>8 1/4"-3682' : 6 5/8"-942 1/2' : 5 3/16"-1470'</u>				

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil 1777				
Slate		1795					

Kuntz#1
34-167-6-6697-00-00
Washington County, Aurelias Township



8151 20481 481

GEOLOGICAL SURVEY OF OHIO **OIL AND GAS WELL LOG**

State Ohio
County Washington Township Aurelius Quadrangle _____
Lot _____ Quarter _____ Tract _____ Section 21 NW _____ NE _____ SW _____
Measured 184.9 Feet From _____ Line And 123.0 Feet From N Line Of 50' 00"
Land Owner Francis A. Stephens Well No. 4 Date Started _____
Operator D. R. Greenless et al Well No. _____ Date Completed ?
Elevation Bar 99.8 S. L. Total Depth 1795' Plugged Back _____
Formation Drilled To _____ Producing Form _____ Init. Prod. Nat. oil
Shot or Acid Record _____ Prod. A. S. or Acid _____
Init. Rock Press. _____ Abandoned _____
Casing Record 8 1/2"-368' : 6 5/8"-942' : 5 3/16"-1470'

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Red shale	0	5		Blue shale		260	
Sand		10		Red shale		365	
Red shale		30		Blue shale		400	
Sand		75		Sand		410	
Shale		85		Blue shale		465	
Coal		90		Sand		500	
Blue shale		120		Shale		645	
Lime		122		Sand		735	
Red shale		137		Shale		755	
Blue shale		170		Sand		795	
Sand		190		Shale		825	
Blue shale		200		Sand		850	
Red shale		210		Shale		880	

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Sand		935					
Shale		1015					
Sand		1080					
Shale		1115					
Sand		1160					
Shale		1225					
Sand		1460					
Shale & shells		1580					
Blue shale		1740					
Black shale		1777					
Sand Berea		1784	Oil				
Slate		1795					

EDIT DATE: 8/28/2026 2:02 PM EDIT BY: 10157999 DRAWING FILE: W:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

SHEET INDEX	
TITLE SHEET	1
DUTTON SITE SCHEMATIC PLAN	2
DUTTON HILL SITE PLAN	3-6
MCKENDRY SITE PLAN	7-8
DETAILS	9-10
PROFILES	11-15

CONTACT INFORMATION	
DIVISION OF OIL & GAS RESOURCES MANAGEMENT OHIO DEPARTMENT OF NATURAL RESOURCES 2207 REISER AVE. SE NEW PHILADELPHIA, OHIO 44663 PH: (330) 308-0007 FAX: (330) 308-0011	
REGIONAL PLUGGING MANAGER JAKE GLASCOCK PH: (740) 586-3274	
ORPHAN WELL INSPECTOR CHRISTIAN TAIT PH: (740) 919-9715	
PROJECT ENGINEER PETER G. MORAN, P.E. PH: (614) 949-0168	

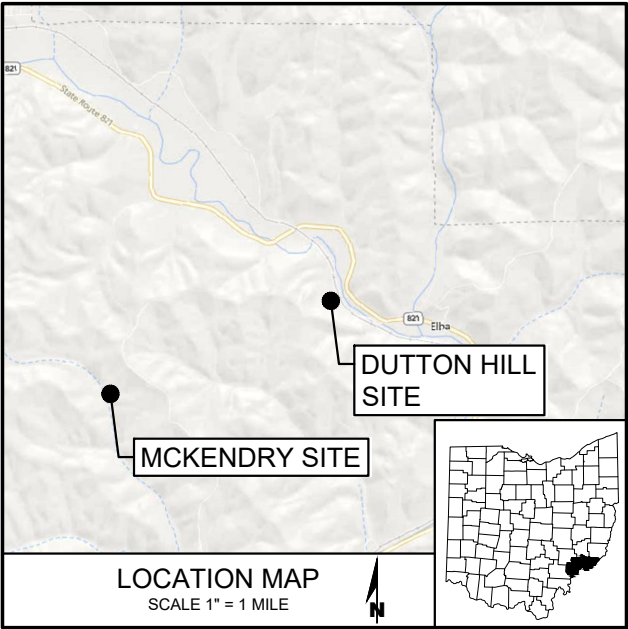
 <i>Call Before You Dig</i> CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY)	THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN APPROXIMATELY, BASED EITHER ON REPORTING BY RESPECTIVE OWNERS AND/OR BY FIELD LOCATION. HOWEVER, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ALL DAMAGES THAT MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAINTAIN A CURRENT 10 DAY OUPS/OGUPS TICKET DURING THE ENTIRE PROJECT BY CONTACTING OUPS EVERY 10 DAYS. BOTH OUPS AND OGUPS CAN BE COMPLETED USING THE OHIO 811 ONE CALL SERVICE BY PHONE OR ON THE WEB.
--	---

LEGEND	
PROPOSED WORK LIMITS	 CWL
PROPOSED STONE	
PROPOSED MATTING	
PROPOSED SILT FENCE	 SF
PROPOSED VENT LINE	 G
EXISTING GUTTER LINE	
EXISTING CURB	
EXISTING EDGE OF PVMT	
EXISTING EDGE OF DRIVE	
EXISTING BUILDING	
EXISTING PROPERTY LINE	 P
EXISTING TOP OF BANK	
EXISTING TOE OF SLOPE	
EXISTING 1' CONTOUR	
EXISTING 5' CONTOUR	
EXISTING BURIED ELECTRIC	 E
EXISTING OVERHEAD ELEC.	 OHP
EXISTING STORM	 ST
EXISTING SANITARY	 SAN
EXISTING GAS	 G

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS RESOURCES MANAGEMENT

WASHINGTON #23F MULTIPLE ORPHAN WELL SITES

ORPHAN WELL INFORMATION					
WELL NAME	API NUMBER	COUNTY	TOWNSHIP	LATITUDE	LONGITUDE
WARD JF 12	34-167-2-0209-00-00	WASHINGTON	AURELIUS	39.608742°	-81.422168°
STEPHENS FRANCIS A1	34-167-2-0376-00-00	WASHINGTON	AURELIUS	39.605686°	-81.425471°
STEPHENS FRANCIS A2	34-167-2-0396-00-00	WASHINGTON	AURELIUS	39.607849°	-81.425583°
STEPHENS FRANCIS A4	34-167-2-0481-00-00	WASHINGTON	AURELIUS	39.605726°	-81.427545°
DUTTON ARCHIBOLD 6D	34-167-2-1954-00-00	WASHINGTON	AURELIUS	39.605111°	-81.423430°
STEPHENS FRANCIS A21	34-167-6-0431-00-00	WASHINGTON	AURELIUS	39.604780°	-81.424581°
STEPHENS FRANCIS A4	34-167-6-0439-00-00	WASHINGTON	AURELIUS	39.607856°	-81.423338°
STEPHENS FRANCIS A5	34-167-6-0440-00-00	WASHINGTON	AURELIUS	39.608453°	-81.423741°
STEPHENS FRANCIS A1	34-167-6-0475-00-00	WASHINGTON	AURELIUS	39.608177°	-81.422255°
STEPHENS FRANCIS A2	34-167-6-0476-00-00	WASHINGTON	AURELIUS	39.608023°	-81.420819°
STEPHENS FRANCIS A1	34-167-6-0432-00-00	WASHINGTON	AURELIUS	39.604433°	-81.423796°
STEPHENS FRANCIS A16	34-167-6-0480-00-00	WASHINGTON	AURELIUS	39.606998°	-81.421877°
STEPHENS FRANCIS A17	34-167-6-0437-00-00	WASHINGTON	AURELIUS	39.605802°	-81.422344°
STEPHENS FRANCIS A22	34-167-6-0479-00-00	WASHINGTON	AURELIUS	39.608223°	-81.421751°
STEPHENS FRANCIS A23	34-167-6-0438-00-00	WASHINGTON	AURELIUS	39.606441°	-81.423670°
STEPHENS FRANCIS A3	34-167-6-0482-00-00	WASHINGTON	AURELIUS	39.607314°	-81.421360°
STEPHENS FRANCIS A3D	34-167-6-6693-00-00	WASHINGTON	AURELIUS	39.608122°	-81.427208°
STEPHENS FA HEIRS 1	34-167-6-5984-00-00	WASHINGTON	AURELIUS	39.606642°	-81.420570°
STEPHENS FA HEIRS 2	34-167-6-0484-00-00	WASHINGTON	AURELIUS	39.605989°	-81.420715°
STEPHENS FA 3	34-167-6-0478-00-00	WASHINGTON	AURELIUS	39.607500°	-81.420727°
STEPHENS 4	34-167-6-6502-00-00	WASHINGTON	AURELIUS	39.606641°	-81.426444°
WARD 13	34-167-6-6255-00-00	WASHINGTON	AURELIUS	39.608554°	-81.421484°
DUTTON ARCHIBOLD 1D	34-167-6-6688-00-00	WASHINGTON	AURELIUS	39.608710°	-81.422731°
DUTTON ARCHIBOLD 3D	34-167-6-6692-00-00	WASHINGTON	AURELIUS	39.607805°	-81.426459°
DUTTON ARCHIBOLD 4D	34-167-6-6691-00-00	WASHINGTON	AURELIUS	39.607144°	-81.425891°
DUTTON ARCHIBOLD 5D	34-167-6-6690-00-00	WASHINGTON	AURELIUS	39.605529°	-81.425528°
DUTTON ARCHIBOLD 7D	34-167-6-1001-00-00	WASHINGTON	AURELIUS	39.605647°	-81.421358°
NO NAME	34-167-6-0483-00-00	WASHINGTON	AURELIUS	39.605697°	-81.420203°
KUNTZ 1	34-167-6-6697-00-00	WASHINGTON	AURELIUS	39.605152°	-81.426481°
SPIES 2	34-167-6-6257-00-00	WASHINGTON	AURELIUS	39.608038°	-81.424246°
SPIES 3	34-167-6-6256-00-00	WASHINGTON	AURELIUS	39.608113°	-81.420140°
MCKENDRY JE&C 4	34-167-6-0519-00-00	WASHINGTON	AURELIUS	39.603014°	-81.444170°
MCKENDRY JE&C 3	34-167-6-0518-00-00	WASHINGTON	AURELIUS	39.602447°	-81.444727°
MCKENDRY JE&C 5	34-167-6-0520-00-00	WASHINGTON	AURELIUS	39.603735°	-81.443788°
MCKENDRY JE&C 6	34-167-6-0522-00-00	WASHINGTON	AURELIUS	39.604228°	-81.443585°



LEGEND	
PROPOSED VAULT	
EXISTING ORPHAN WELL	
EXISTING POWER POLE	
EXISTING HYDRANT	
EXISTING WATER VALVE	
EXISTING GAS VALVE	
EXISTING MONUMENT BOX	
EXISTING CURB INLET	
EXISTING ELECTRIC METER	
EXISTING LIGHT POLE	
EXISTING IRON PIN FOUND	
EXISTING SANITARY MANHOLE	
FLOW DIRECTION ARROW	
ABSORBENT BOOM	

THIS DOCUMENT WAS ORIGINALLY
ISSUED BY PETER G. MORAN, P.E.
THIS DOCUMENT IS NOT CONSIDERED A
SEALED DOCUMENT & IS FOR
OFFER SUBMITTAL PURPOSES ONLY

PETER G. MORAN, PE
OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS RESOURCES MGMT

74661
NO. DATE



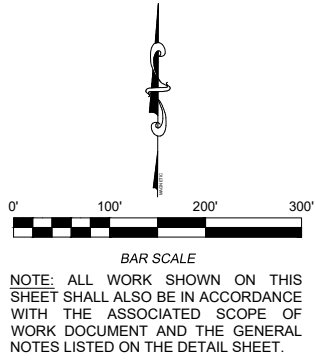
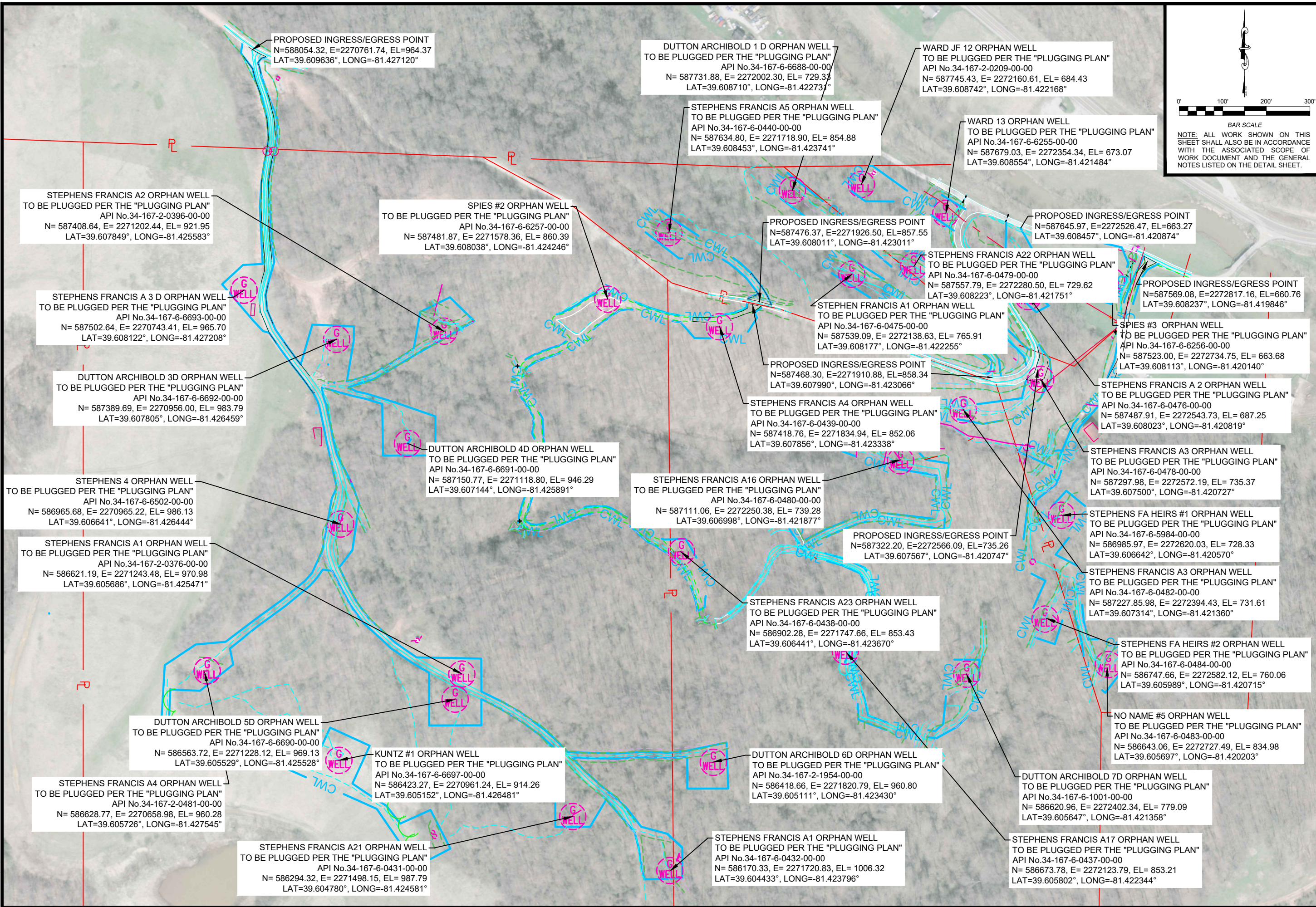
DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>

TITLE SHEET

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	1 OF 15

EDIT DATE: 6/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON WASHINGTON 23.DWG



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



DUTTON HILL RD.
SCHEMATIC
PLAN

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION

DESIGN UNIT

O&G ENGINEERING

DRAWN BY: A.D.K.

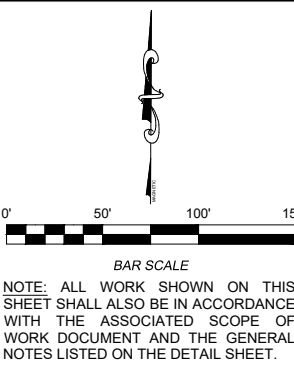
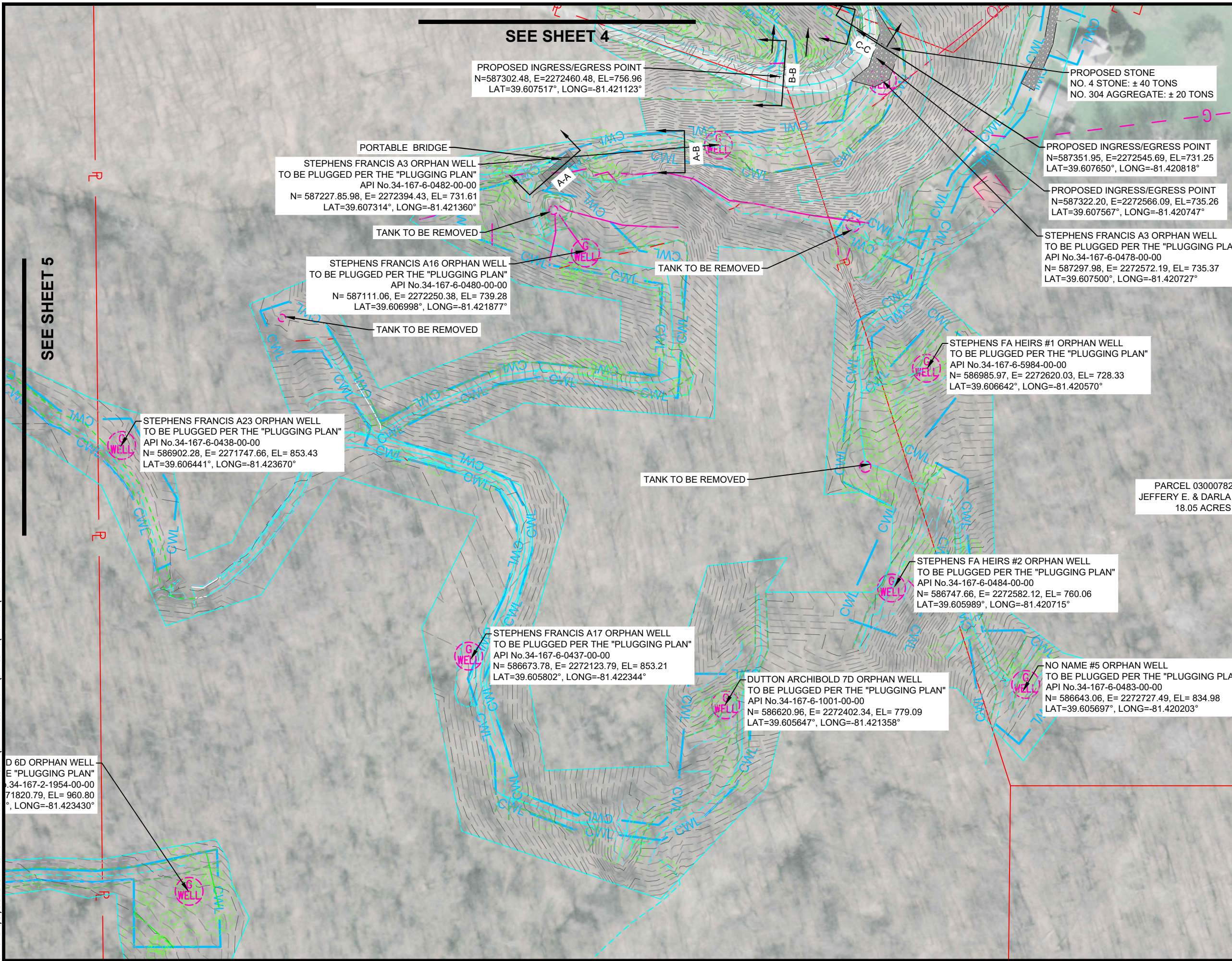
CHECKED BY: P.G.M.

DATE: 08/28/2026

SHEET NO.

2 OF 15

EDIT DATE: 6/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG





DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

SITE PLAN

REVISION	

DESIGN UNIT
O&G ENGINEERING

DRAWN BY: A.D.K.

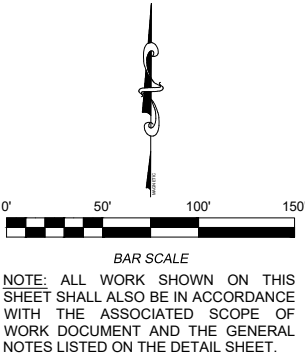
CHECKED BY: P.G.M.

DATE: 08/28/2026

SHEET NO.
3 OF 15

EDIT DATE: 6/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON WASHINGTON 23.DWG

CONTRACTOR SHALL INSTALL SILT FENCE AT EACH DUTTON HILL WELL SITE TO THE SATISFACTION OF THE DIVISION.
SILT FENCE: ± 1,600 LF



BAR SCALE
NOTE: ALL WORK SHOWN ON THIS SHEET SHALL ALSO BE IN ACCORDANCE WITH THE ASSOCIATED SCOPE OF WORK DOCUMENT AND THE GENERAL NOTES LISTED ON THE DETAIL SHEET.

SEE SHEET 5

DUTTON ARCHIBOLD 1 D ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-6688-00-00
N= 587731.88, E= 2272002.30, EL= 729.33
LAT=39.608710°, LONG=-81.422731°

STEPHENS FRANCIS A5 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-0440-00-00
N= 587634.80, E= 2271718.90, EL= 854.88
LAT=39.608453°, LONG=-81.423741°

WARD JF 12 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-2-0209-00-00
N= 587745.43, E= 2272160.61, EL= 684.43
LAT=39.608742°, LONG=-81.422168°

PROPOSED AIRBRIDGE: 1 EACH

WARD 13 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-6255-00-00
N= 587679.03, E= 2272354.34, EL= 673.07
LAT=39.608554°, LONG=-81.421484°

PROPOSED INGRESS/EGRESS POINT
N=587645.97, E=2272526.47, EL=663.27
LAT=39.608457°, LONG=-81.420874°

SPIES #3 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-6256-00-00
N= 587523.00, E= 2272734.75, EL= 663.68
LAT=39.608113°, LONG=-81.420140°

PROPOSED STONE APRON.
NO. 4 STONE: ± 40 TONS
NO. 304 AGGREGATE: ± 20 TONS
TEMPORARY N-12 CULVERT PIPE: 60 LF

PROPOSED STONE APRON.
NO. 4 STONE: ± 40 TONS
NO. 304 AGGREGATE: ± 20 TONS

PROPOSED INGRESS/EGRESS POINT
N=587476.37, E=2271926.50, EL=857.55
LAT=39.608011°, LONG=-81.423011°

PROPOSED INGRESS/EGRESS POINT
N=587468.30, E=2271910.88, EL=858.34
LAT=39.607990°, LONG=-81.423066°

STEPHENS FRANCIS A4 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-0439-00-00
N= 587418.76, E= 2271834.94, EL= 852.06
LAT=39.607856°, LONG=-81.423338°

STEPHENS FRANCIS A22 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-0479-00-00
N= 587557.79, E= 2272280.50, EL= 729.62
LAT=39.608223°, LONG=-81.421751°

STEPHEN FRANCIS A1 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-0475-00-00
N= 587539.09, E= 2272138.63, EL= 765.91
LAT=39.608177°, LONG=-81.422255°

PROPOSED INGRESS/EGRESS POINT
N=587302.48, E=2272460.48, EL=756.96
LAT=39.607517°, LONG=-81.421123°

PARCEL 030007800000
JEFFERY E. & DARLA L. HAAS
5.05 ACRES

PROPOSED INGRESS/EGRESS POINT
N=587569.08, E=2272817.16, EL=660.76
LAT=39.608237°, LONG=-81.419846°

PROPOSED STONE OVERLAY.
NO. 57 STONE: ± 30 TONS
NO. 4 STONE: ± 40 TONS

PROPOSED STONE
NO. 4 STONE: ± 40 TONS
NO. 304 AGGREGATE: ± 20 TONS

SEE SHEET 3



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



SITE PLAN

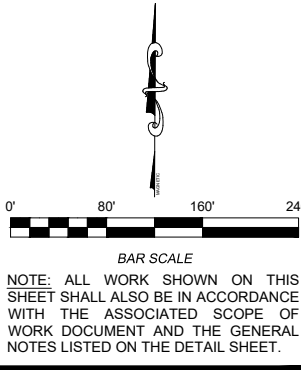
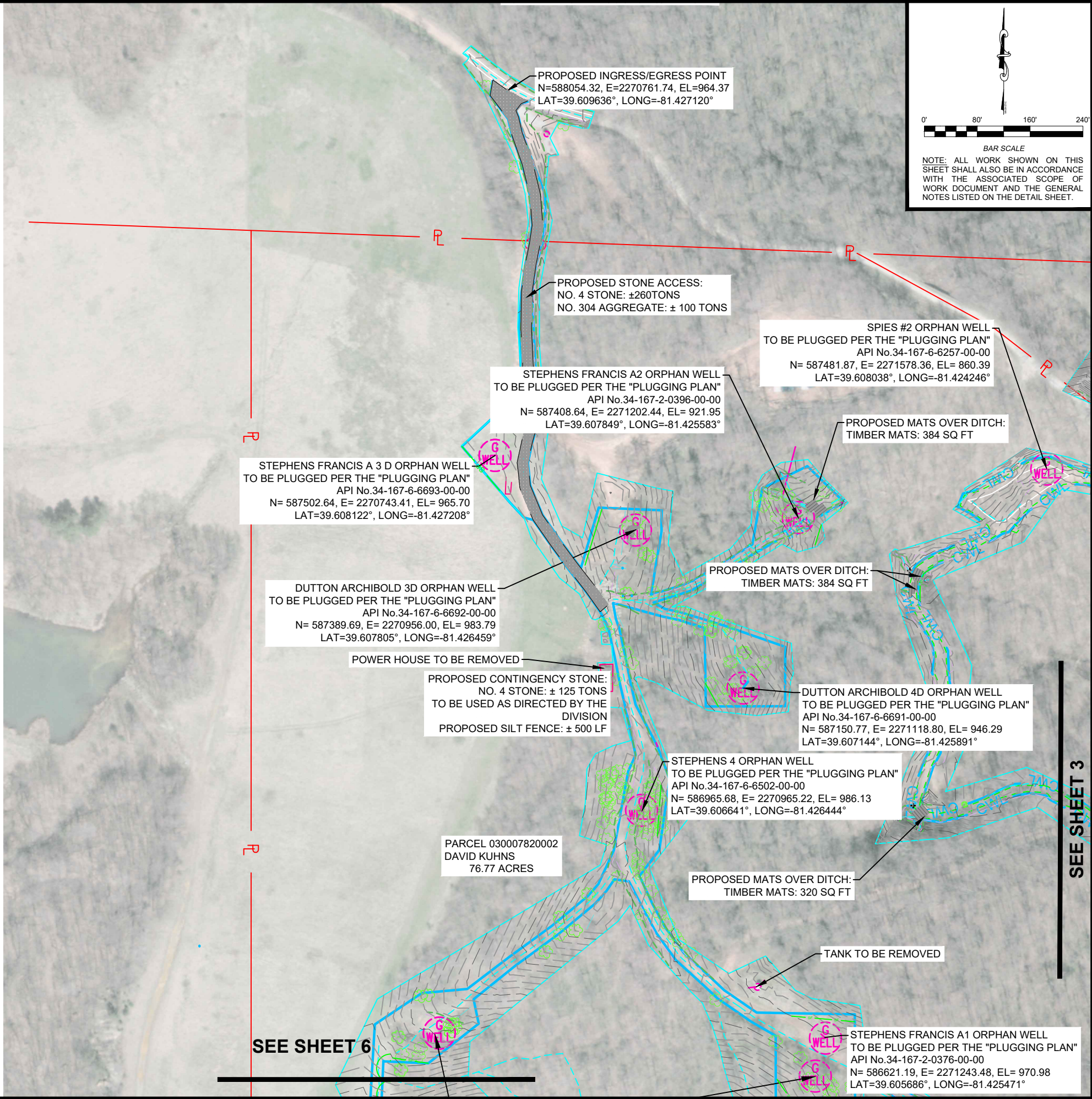
WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	4 OF 15

EDIT DATE: 4/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON WASHINGTON 23.DWG

DUTTON HILL ROAD SITE ALL CARRIED BELOW

ESTIMATED SITE RESTORATION QUANTITIES		
COMPONENT	RATE	QUANTITY
FERTILIZER	20 LBS/1000 S.F.	8580 LBS
SEED	75 LBS/1 ACRE	735 LBS
MULCH	100 LBS/1000 S.F.	858 BALES
PELLETIZED LIME	400 LBS/ACRE	3920 LBS



NOTE: ALL WORK SHOWN ON THIS SHEET SHALL ALSO BE IN ACCORDANCE WITH THE ASSOCIATED SCOPE OF WORK DOCUMENT AND THE GENERAL NOTES LISTED ON THE DETAIL SHEET.



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



SITE PLAN

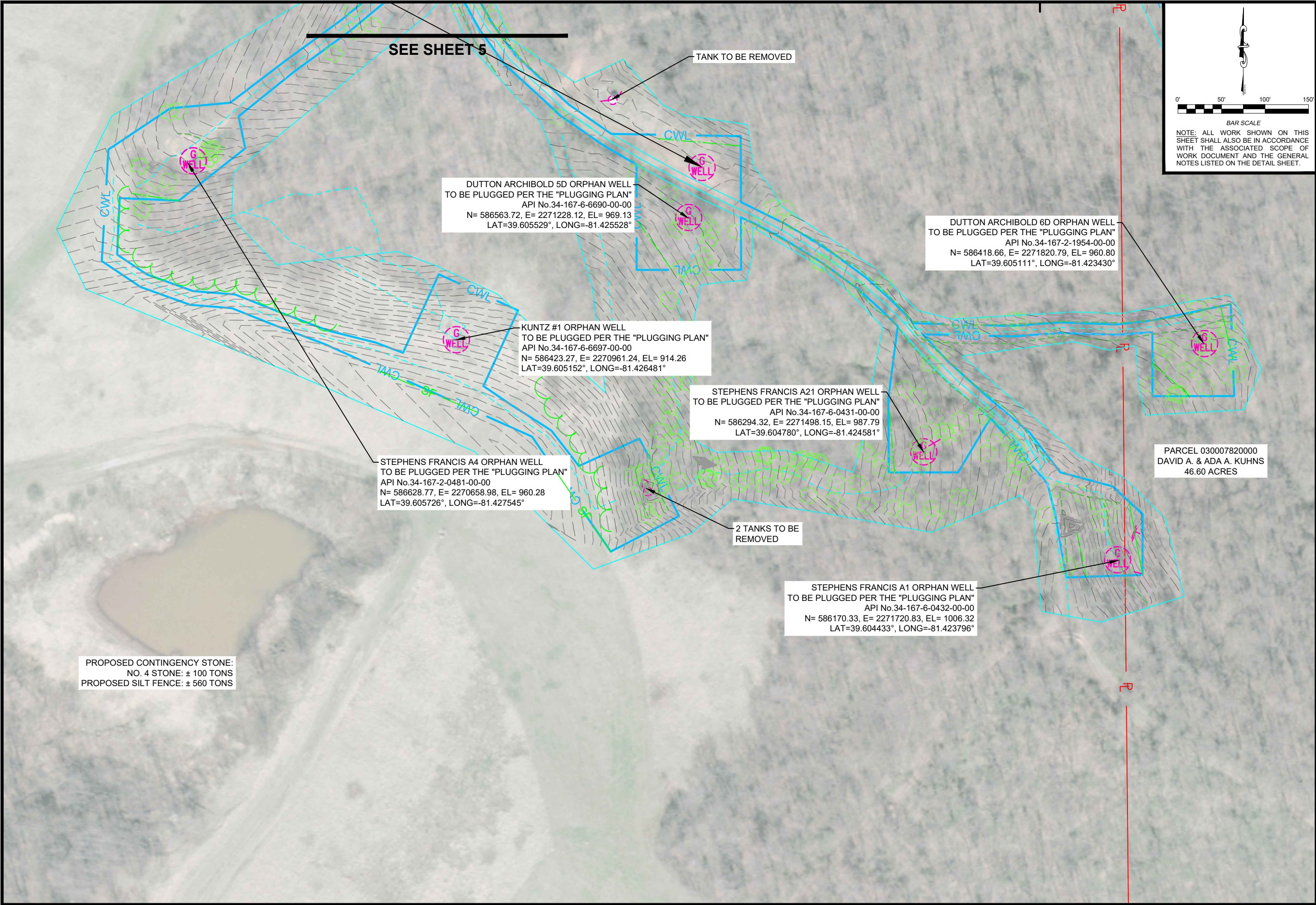
WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

SEE SHEET 3

SEE SHEET 6

REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	5 OF 15

EDIT DATE: 6/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON WASHINGTON 23.DWG



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>

SITE PLAN

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	

DESIGN UNIT
O&G ENGINEERING

DRAWN BY: A.D.K.

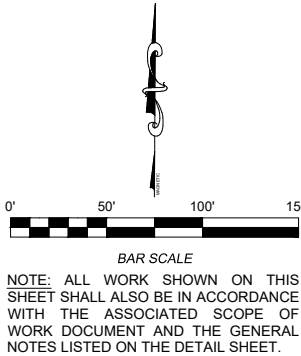
CHECKED BY: P.G.M.

DATE: 08/28/2026

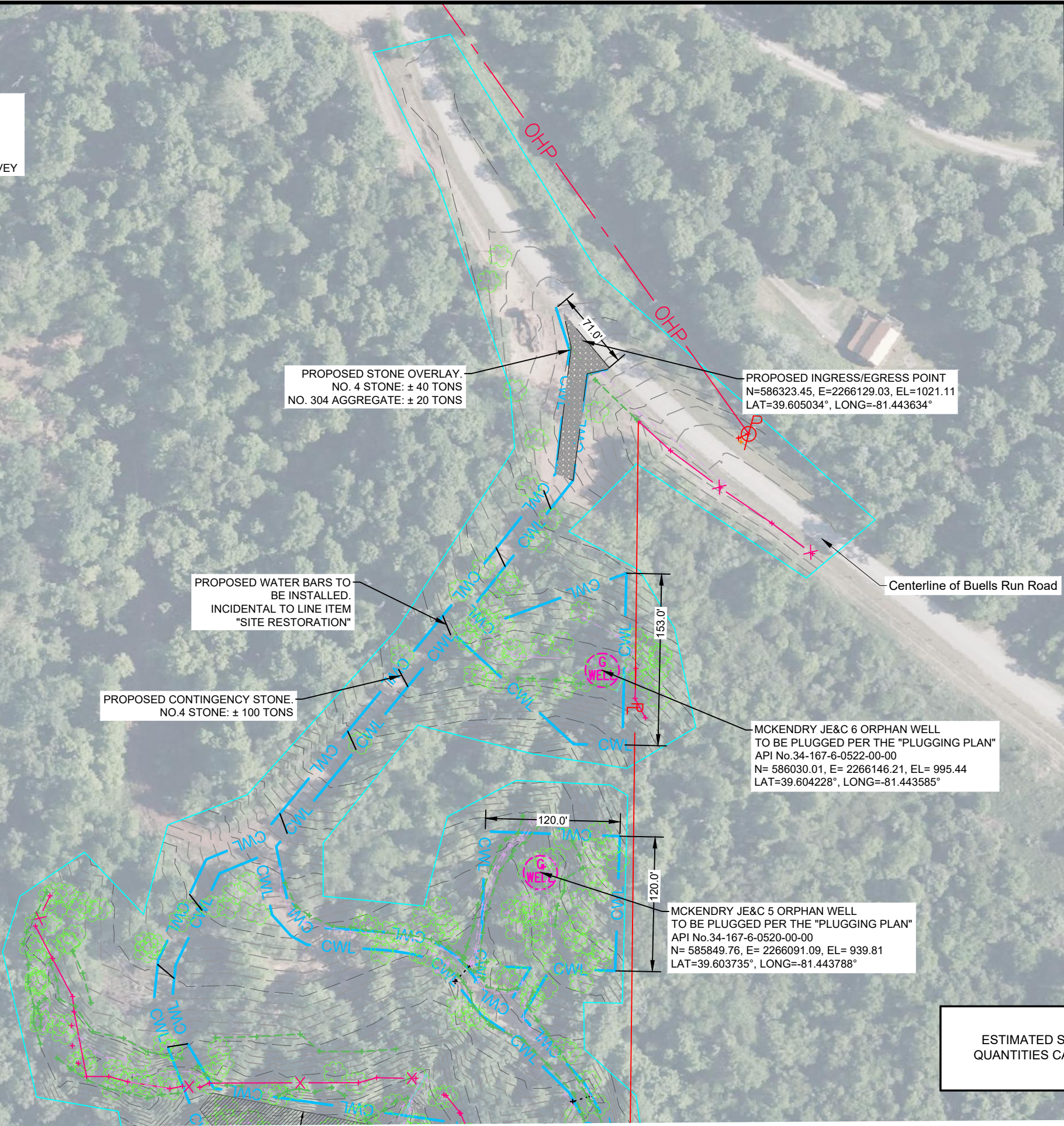
SHEET NO.
6 OF 15

EDIT DATE: 4/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

NOTES:
FIELD SURVEY ON 9/30/2025 to 10/9/2025
HORIZONTAL DATUM: NAD83(2011) OHIO STATE PLANE SOUTH
VERTICAL DATUM: NAVD88 GEOID 12B CORS DERIVED
UTILITIES SHOWN ARE FOR REFERENCE ONLY
PROPERTY LINES SHOWN ARE SUBJECT TO A BOUNDARY SURVEY



BAR SCALE
NOTE: ALL WORK SHOWN ON THIS SHEET SHALL ALSO BE IN ACCORDANCE WITH THE ASSOCIATED SCOPE OF WORK DOCUMENT AND THE GENERAL NOTES LISTED ON THE DETAIL SHEET.



SEE SHEET 8

ESTIMATED SITE RESTORATION
QUANTITIES CARRIED ON SHEET 8



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>

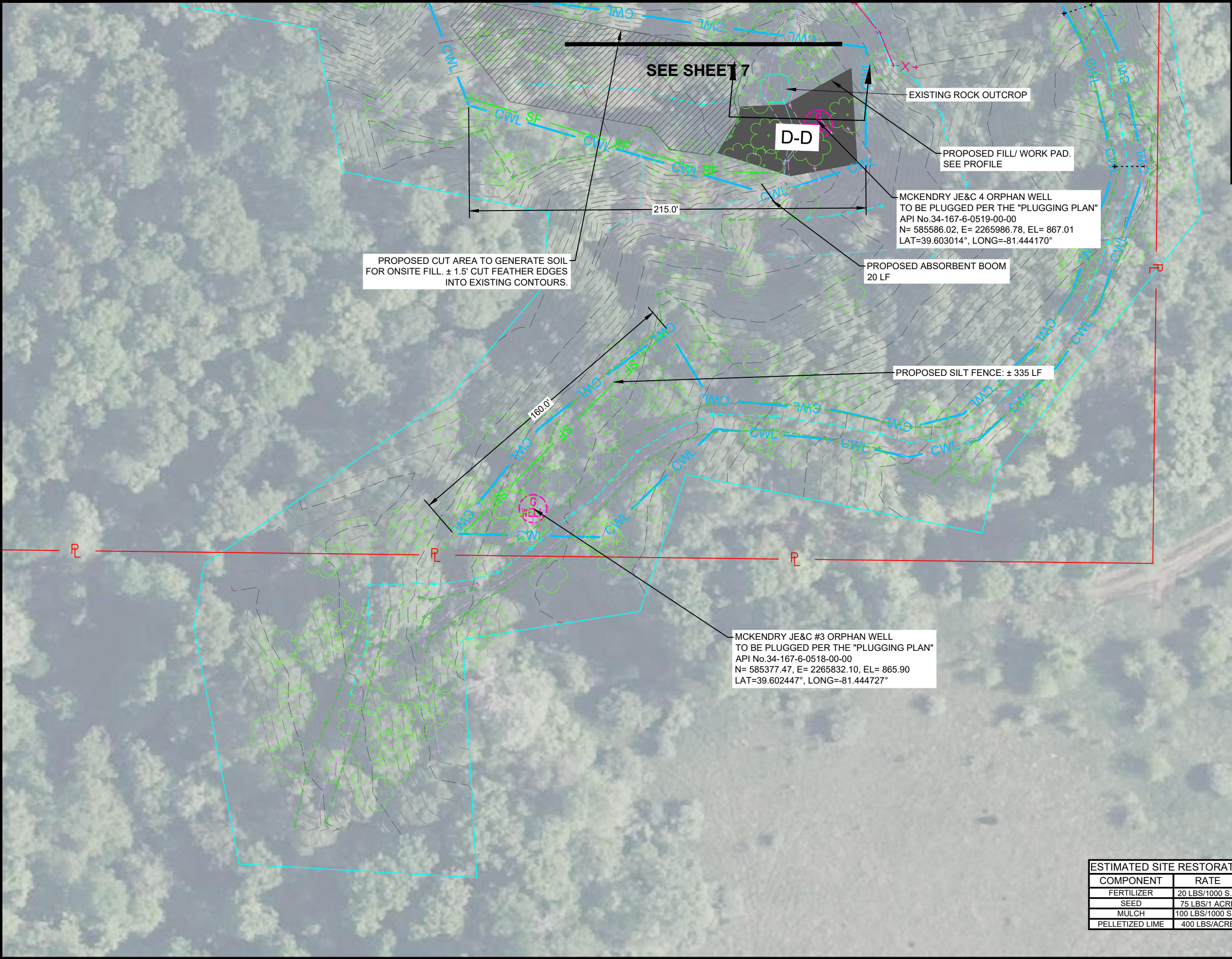


MCKENDRY
SITE PLAN

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	7 OF 15

EDIT DATE: 6/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON WASHINGTON 23.DWG




0' 25' 50' 75'

BAR SCALE

NOTE: ALL WORK SHOWN ON THIS SHEET SHALL ALSO BE IN ACCORDANCE WITH THE ASSOCIATED SCOPE OF WORK DOCUMENT AND THE GENERAL NOTES LISTED ON THE DETAIL SHEET.

SEE SHEET 7

D-D

EXISTING ROCK OUTCROP

PROPOSED FILL/ WORK PAD.
SEE PROFILE

MCKENDRY JE&C 4 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-0519-00-00
N= 585586.02, E= 2265986.78, EL= 867.01
LAT=39.603014°, LONG=-81.444170°

PROPOSED ABSORBENT BOOM
20 LF

PROPOSED SILT FENCE: ± 335 LF

PROPOSED CUT AREA TO GENERATE SOIL
FOR ONSITE FILL. ± 1.5' CUT FEATHER EDGES
INTO EXISTING CONTOURS.

MCKENDRY JE&C #3 ORPHAN WELL
TO BE PLUGGED PER THE "PLUGGING PLAN"
API No.34-167-6-0518-00-00
N= 585377.47, E= 2265832.10, EL= 865.90
LAT=39.602447°, LONG=-81.444727°

ESTIMATED SITE RESTORATION QUANTITIES		
COMPONENT	RATE	QUANTITY
FERTILIZER	20 LBS/1000 S.F.	1601 LBS
SEED	75 LBS/1 ACRE	138 LBS
MULCH	100 LBS/1000 S.F.	160 BALES
PELLETIZED LIME	400 LBS/ACRE	736 LBS



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



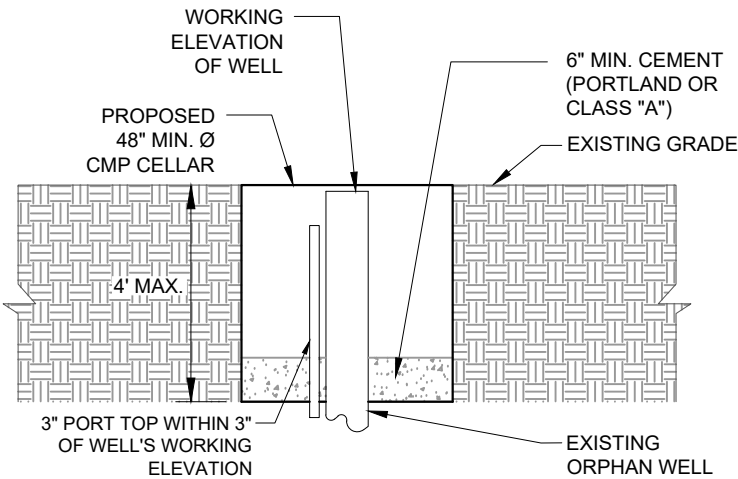
MCKENDRY
SITE PLAN

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	8 OF 15

EDIT DATE: 8/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

- GENERAL NOTES:
- UTILITY LINES AND APPURTENANCES ARE SHOWN AS LOCATED IN THE FIELD AND/OR AS REPORTED BY THE RESPECTIVE OWNERS. NEITHER THE NUMBER, TYPE, SIZE, OR LOCATION CAN BE GUARANTEED, AND IT IS THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY PROTECTING THE EXISTING BURIED UTILITIES AND CURB & GUTTER DURING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO LINE ITEM "MOBILIZATION".**
 - THE HORIZONTAL DATUM IS BASED ON NAD83 (2011) OHIO STATE PLANE SOUTH 3402, AND THE VERTICAL DATUM IS BASED ON NAVD88 GEOID 12A CORS DERIVED.
 - PHOTO IMAGE DATE OBTAINED FROM OHIO GEOGRAPHICALLY REFERENCED INFORMATION PROGRAM (OGrip) FROM THE OHIO STATEWIDE IMAGERY PROGRAM (OSIP III).
 - THE CONTRACTOR SHALL WORK WITHIN THE WORK LIMITS AT ALL TIMES DURING CONSTRUCTION.
 - TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS FOR "TRAFFIC MAINTENANCE".
 - A FLAGGER IN EACH DIRECTION SHALL BE USED WHEN MATERIALS ARE BEING UNLOADED WITHIN THE ROAD RIGHT OF WAY.
 - TREE AND OVERHANGING LIMB REMOVAL SHALL BE AS DESIGNATED BY THE DIVISION. REMOVALS SHALL PROVIDE THE CONTRACTOR WITH ADEQUATE SPACE REQUIRED TO COMPLETE THE PROJECT. TRIMMING OF TREES SHALL BE CONSIDERED INCIDENTAL TO LINE ITEMS AS SPECIFIED.
 - THE DIVISION MUST BE PRESENT DURING ALL CLEARING OPERATIONS. NO TREES ARE TO BE REMOVED UNLESS DESIGNATED BY THE DIVISION.
 - ANY REMOVED TREES AND VEGETATION SHALL BE PLACED INTO BRUSH PILES AT THE DISCRETION OF THE DIVISION.
 - THE PROPOSED GRADES SHOWN ARE TEMPORARY; UPON PLUGGING THE WELL, THE CONTRACTOR SHALL REESTABLISH EXISTING CONTOUR PER LINE ITEM "EARTHWORK" USING ONSITE MATERIALS.
 - ALL STONE PLACED USING SIX (6) INCH MAXIMUM LIFTS, SHALL BE COMPACTED WITH A MINIMUM OF THREE (3) PASSES PER LIFT USING ONSITE EQUIPMENT.
 - AT THE DISCRETION OF THE DIVISION, ALL STONE, FABRIC AND/OR GEOGRID SHOWN ON THE SITE PLAN SHEET(S) AS TEMPORARY SHALL BE REMOVED UPON COMPLETION OF THE PROJECT AND RESTORED PER LINE ITEM "SITE RESTORATION".
 - TIMBER MATS SHALL BE USED FOR TEMPORARY CONSTRUCTION ACCESS TO TRAVERSE WET AREAS AND/OR DRAINAGE COURSES.
 - ALL COMPOSITE MATTING INSTALLED SHALL BE INTERLOCKED PER THE MANUFACTURER'S REQUIREMENTS. IN AREAS WHERE POOR SUBGRADE IS ENCOUNTERED MATS CAN BE STACKED OVER TOP OF ONE ANOTHER AT THE DISCRETION OF THE DIVISION.
 - THE WORK LIMITS AND CORRESPONDING SEDIMENT CONTROLS ALONG THE CREEK WILL BE DETERMINED IN THE FIELD BY THE DIVISION THROUGHOUT CONSTRUCTION.
 - SEDIMENT CONTROLS SHALL BE PLACED AT THE DISCRETION OF THE DIVISION.



- NOTES:
- ALL WORK & MATERIAL ASSOCIATED WITH THE INSTALLATION & REMOVAL OF THE CELLAR SHALL BE CONSIDERED INCIDENTAL TO LINE ITEM "WELL HEAD CONTROL".

TEMPORARY CELLAR
NOT TO SCALE



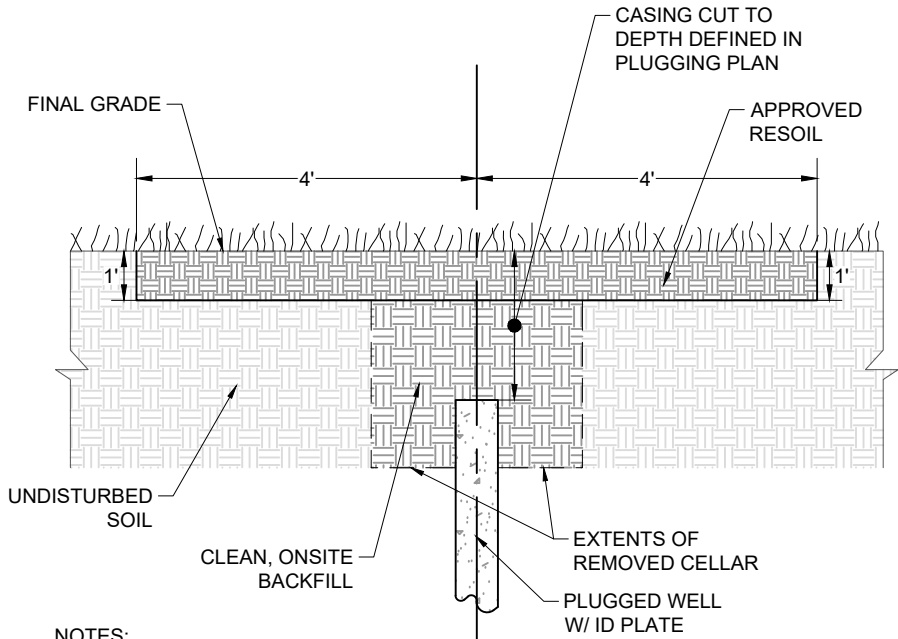
W21-1
(500' FROM W20-7,
BOTH SIDES OF THE
ENTRANCE)



W20-7
COVER OR TURN DURING EVENINGS
OR WHEN BOTH LANES ARE OPEN
(500' FROM FLAGGER, BOTH SIDES OF
ENTRANCE)

- NOTES:
- THIS WORK SHALL BE PER THE GENERAL SPECIFICATIONS, PART 7: MAINTENANCE OF TRAFFIC AND SHALL BE INCIDENTAL TO LINE ITEM "MOBILIZATION" FOR EACH SITE, UNLESS OTHERWISE NOTED. **THIS WORK SHALL INCLUDE ALL REQUIRED PERMITS FROM THE LOCAL ROAD AUTHORITIES.**
 - ALL SIGNS MAY BE MOUNTED PORTABLE MOUNTS.
 - CONTRACTOR SHALL FOLLOW THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 6H-1, IN BOTH DIRECTIONS ALONG THE ROADWAY. W21-1 SHALL BE IN PLACE AS SOON AS THE CONTRACTOR ARRIVES TO THE SITE EACH DAY.
 - CONTRACTOR SHALL FOLLOW THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 6H-13, LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS (TA-13).
 - FLAGGERS SHALL HAVE PROPER COMMUNICATION DEVICES AND SHALL BE POSITIONED 20' FROM EACH EDGE OF THE CONSTRUCTION WORK LIMITS. ANY VARIATION MUST BE APPROVED PER LOCATION. **TEMPORARY CLOSURES SHALL NOT BE COMPLETED WITHOUT A FLAGGER.**
 - TEMPORARY CLOSURES SHALL BE MINIMIZED TO LESS THAN 20 MINUTES AND THEN THE ROAD SHALL BE FULLY REOPENED TO TRAFFIC.
 - ANY WORK IN THE ROADWAY THAT IS REQUIRING MORE THAN 20 MINUTES SHALL BE COMPLETED PER GENERAL SPECIFICATIONS, PART 7: MAINTENANCE OF TRAFFIC WITH THE PROPER PERMITS FROM THE LOCAL ROAD AUTHORITIES AND APPROVAL FROM THE DIVISION.

FLAGGER & CONSTRUCTION SIGNAGE NOTES
NOT TO SCALE



- NOTES:
- ANY REMOVED MATERIAL FROM AROUND THE WELL HEAD SHALL BE SEGREGATED TO PREVENT ADDITIONAL CONTAMINATION.
 - ONCE THE WELL IS CUT BELOW GRADE, AN EIGHT (8) FOOT BY EIGHT (8) FOOT AREA, ONE (1) FOOT DEEP SHALL BE EXCAVATED AROUND THE WELL HEAD & REPLACED WITH "APPROVED RESOIL".
 - REMOVED MATERIAL SHALL BE DISPOSED OF PER LINE ITEM "CONTAMINATED MATERIAL DISPOSAL".
 - PRIOR TO DELIVERY TO THE SITE OF "APPROVED RESOIL", ON SITE TOPSOIL MAY BE UTILIZED AT THE APPROVAL OF THE DIVISION
 - ALL WORK NOT INCLUDED IN "APPROVED RESOIL" OF "CONTAMINATED MATERIAL DISPOSAL" SHALL BE INCIDENTAL TO LINE ITEM 'SITE RESTORATION'.

WELL RESTORATION SECTION
NOT TO SCALE



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



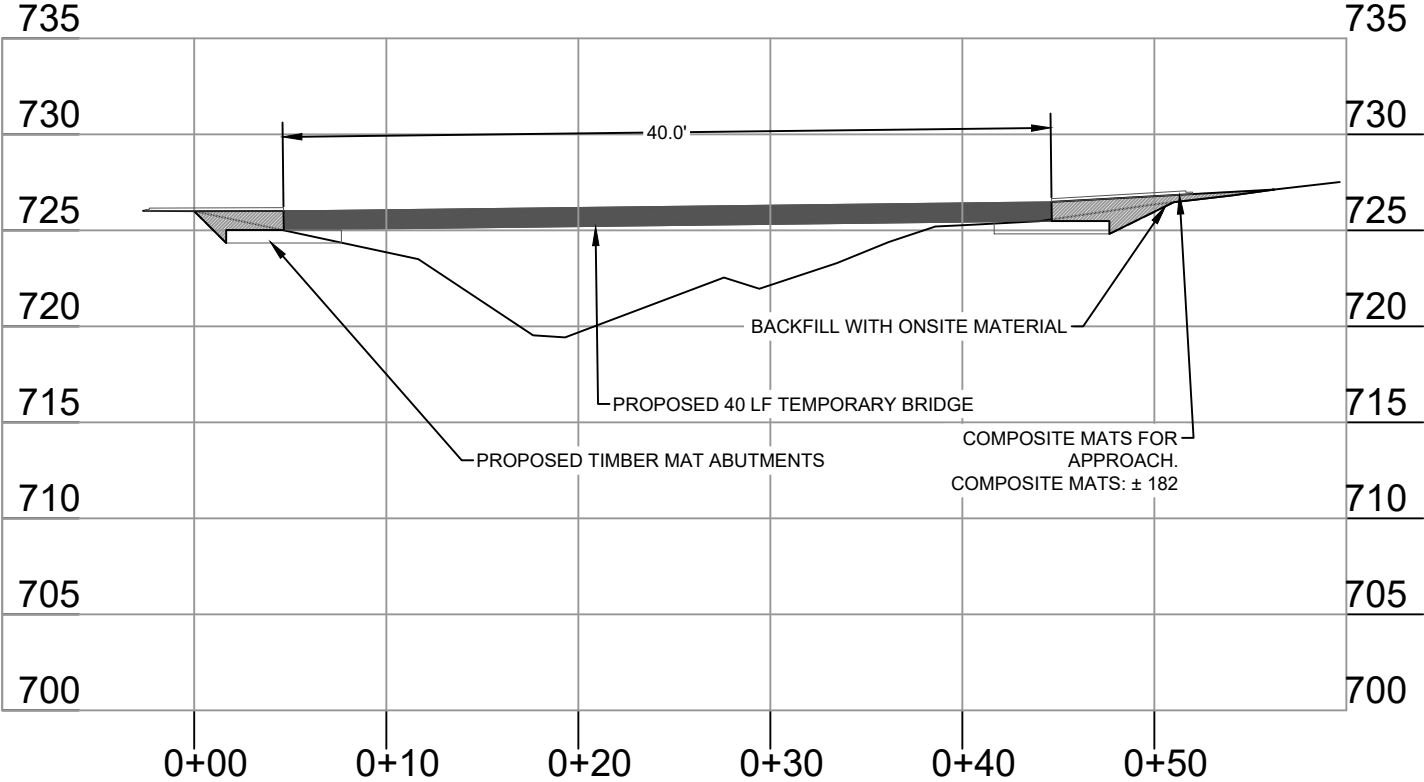
DETAILS

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	9 OF 15

EDIT DATE: 8/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

PROFILE A-A



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



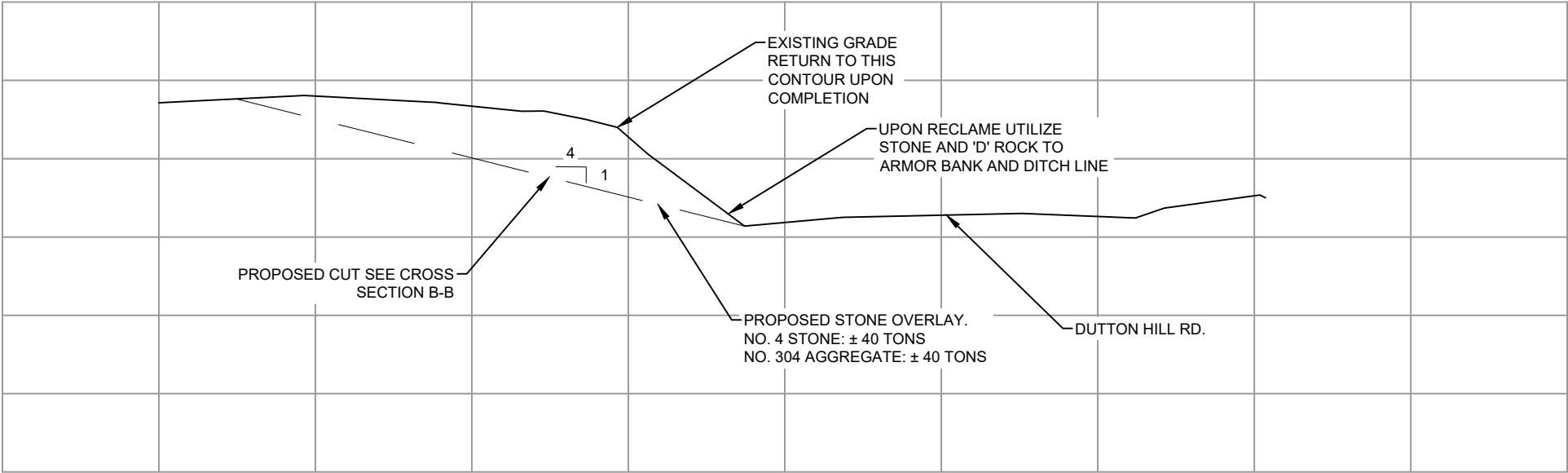
PROFILES

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

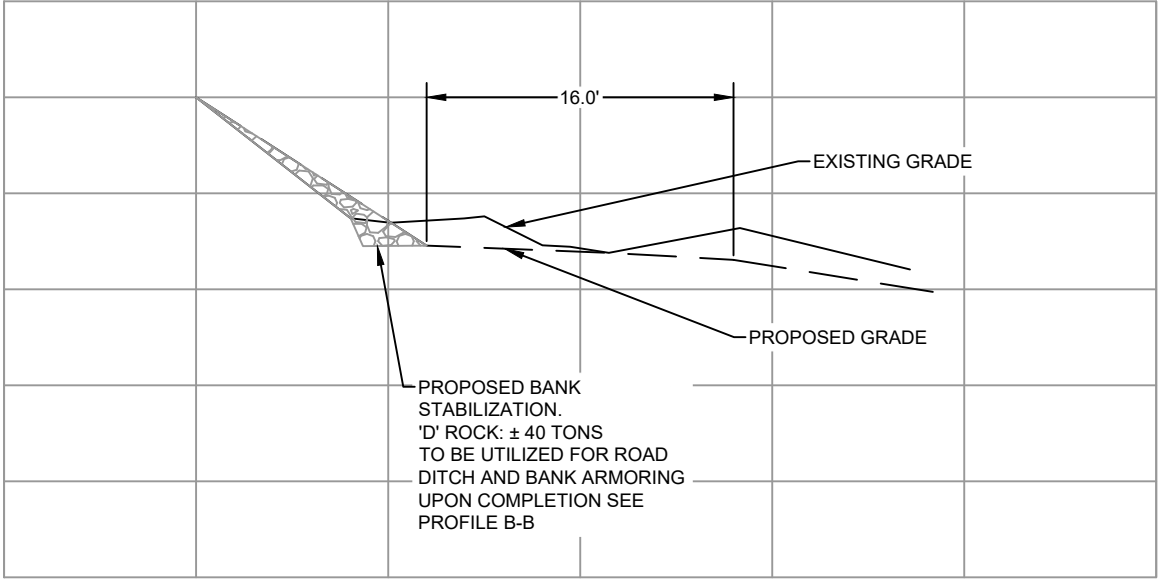
REVISION	
DESIGN UNIT	
O&G ENGINEERING	
DRAWN BY: A.D.K.	
CHECKED BY: P.G.M.	
DATE: 08/28/2026	
SHEET NO.	
11 OF 15	

EDIT DATE: 8/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

ACCESS RAMP B-B PROFILE



CROSS SECTION B-B



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



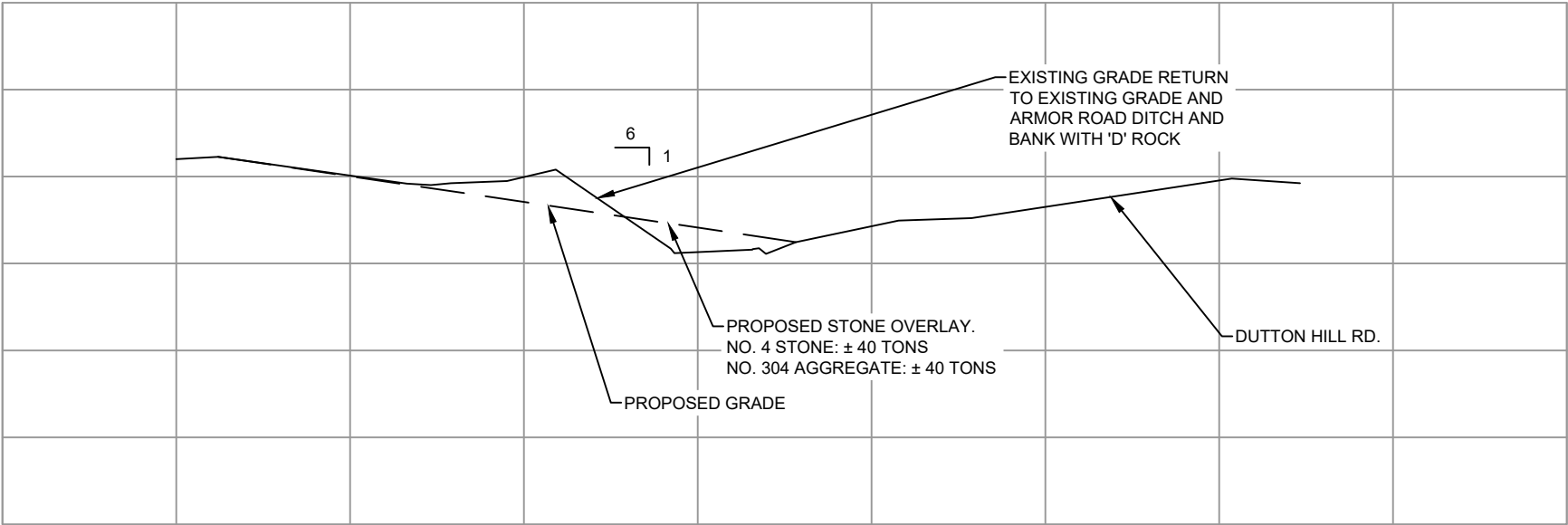
PROFILES

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

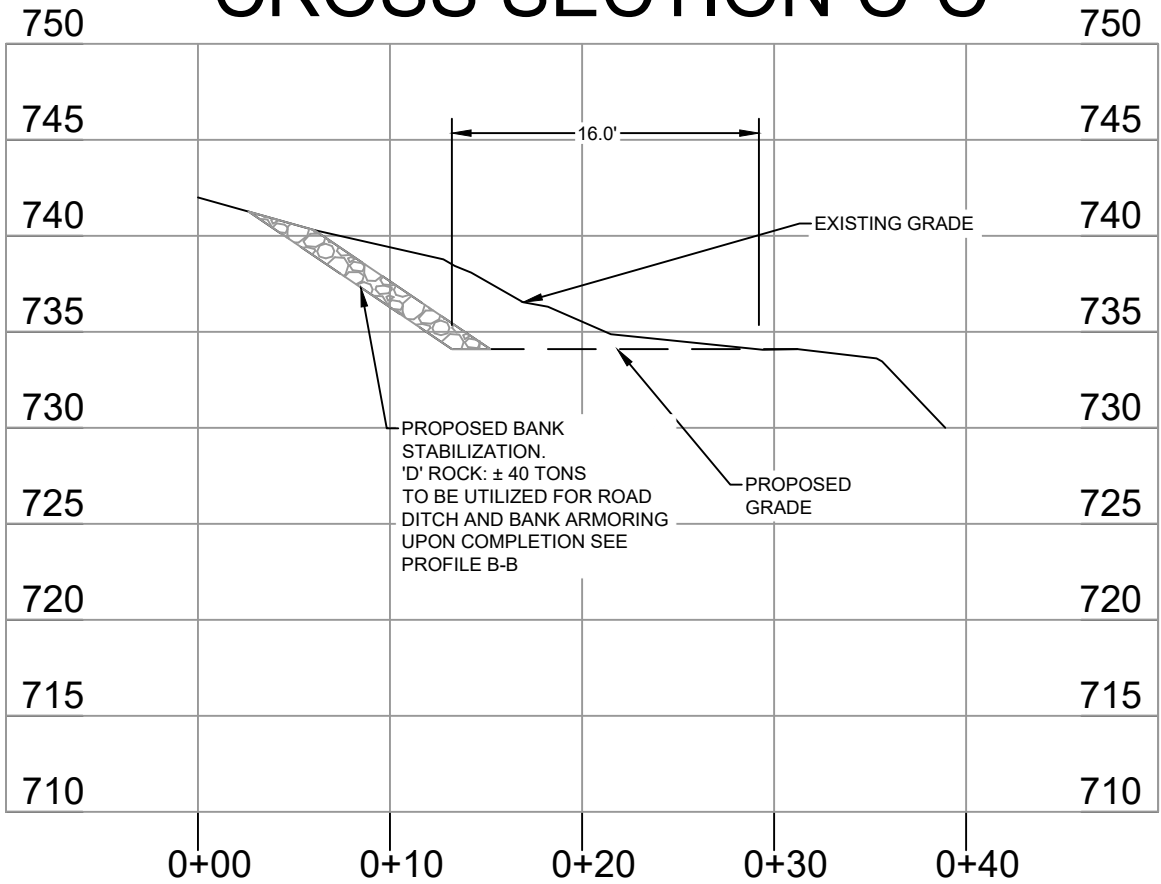
REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	12 OF 15

EDIT DATE: 8/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

ACCESS RAMP C-C PROFILE



CROSS SECTION C-C



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



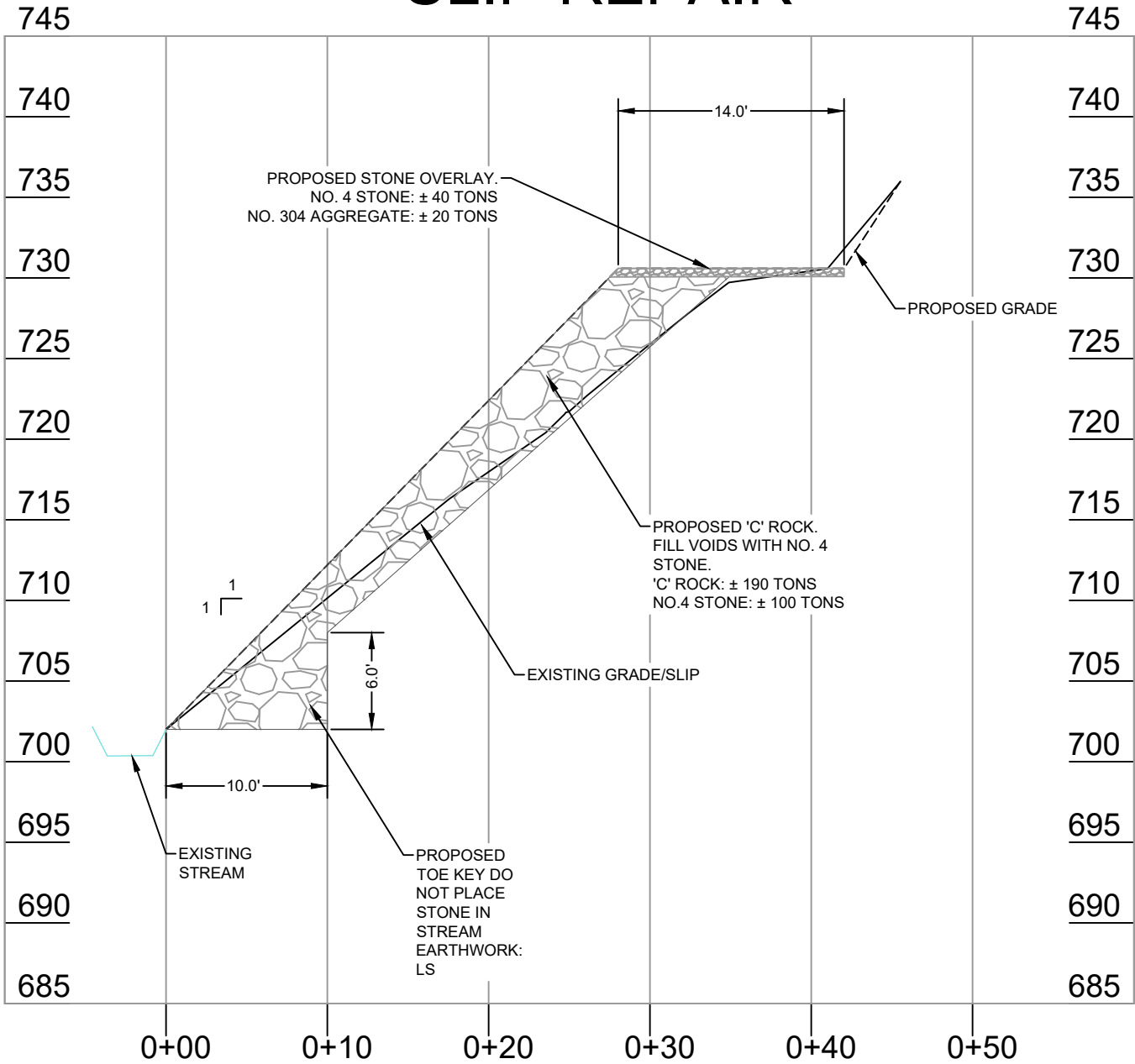
PROFILES

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	
DESIGN UNIT	O&G ENGINEERING
DRAWN BY:	A.D.K.
CHECKED BY:	P.G.M.
DATE:	08/28/2026
SHEET NO.	13 OF 15

EDIT DATE: 8/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

CROSS SECTION A-B SLIP REPAIR



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



PROFILES

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION

DESIGN UNIT

O&G ENGINEERING

DRAWN BY: A.D.K.

CHECKED BY: P.G.M.

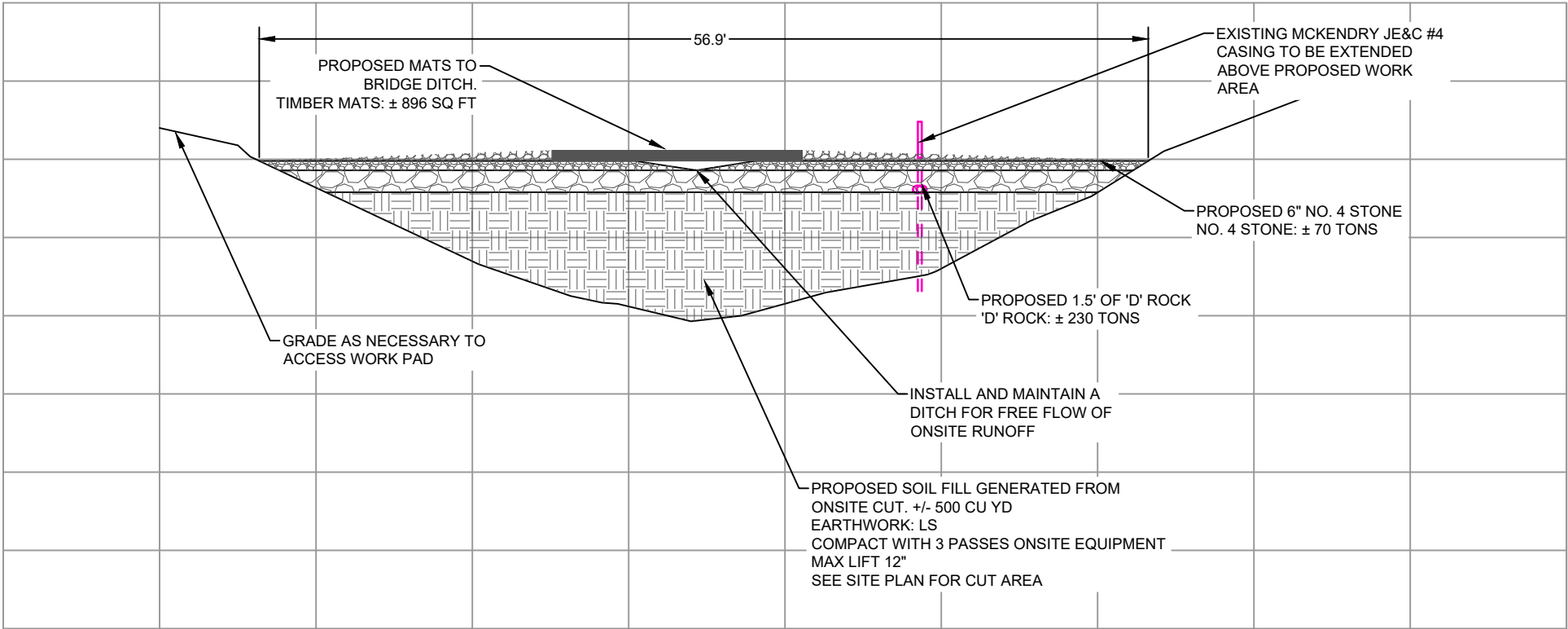
DATE: 08/28/2026

SHEET NO.

14 OF 15

EDIT DATE: 8/28/2026 2:02 PM EDIT BY: 10167999 DRAWING FILE: M:\ORPHAN WELL PROGRAM\ENGINEERING\WASHINGTON\WASHINGTON 23.DWG

PROFILE D-D



DIVISION OF OIL & GAS
RESOURCES MANAGEMENT
IDLE & ORPHAN WELL PROGRAM
<http://oilandgas.ohiodnr.gov>



PROFILES

WASHINGTON #23F
MULTIPLE
ORPHAN WELL SITES

REVISION	
DESIGN UNIT O&G ENGINEERING	
DRAWN BY: A.D.K.	
CHECKED BY: P.G.M.	
DATE: 08/28/2026	
SHEET NO.	
15 OF 15	



SCOPE OF WORK
Quantity Sheet
Washington 23F Project



Well Names
 APIs

Washington County, Aurelius Township
 Multiple Wells - See SOW Project Description Page

Line	Item	Description	Unit	Type	Cost	Qty	Estimate Total
Phase 1: Mobilization and Access							
1	1100	Mobilization	Each	Material		1.00	
2	1100	Mobilization	Each	Material		1.00	
3	1110	Demobilization	Each	Material		1.00	
4	1110	Demobilization	Each	Material		1.00	
5	1140	Clearing & Grubbing (Dutton Hill Site) (EA -Lump Sum)	Each	Material		1.00	
6	1140	Clearing & Grubbing (Mckendry Site) (EA -Lump Sum)	Each	Material		1.00	
7	1160	Silt Fence	Linear Ft.	Material		1500.00	
8	1230	No. 4 Stone	Ton	Material		670.00	
9	1250	No. 57 Stone	Ton	Material		30.00	
10	1260	No. 304 Aggregate Base	Ton	Material		300.00	
11	1290	Type "D" Rip Rap	Ton	Material		80.00	
12	1300	Type "C" Rock Channel Protection	Ton	Material		190.00	
13	1410	12" PE/PVC Culvert	Linear Ft.	Material		60.00	
14	1510	Road Mats	Sq. Ft.	Material		182.00	
15	1570	Timber Mats	Sq. Ft.	Material		1944.00	
16	1600	Airbridge	Sq. Ft.	Material		1.00	
17	1640	Portable Bridge 40 LF	Each	Material		1.00	
18	1650	Earthwork	Each	Material		1.00	
Phase 2: Well Site Safety							
19	2100	Site Safety	Each	Material		35.00	
20	2130	Secondary Containment	Each	Material		35.00	
21	2160	Well Head Control	Each	Material		35.00	
22	2171	Well Kill Fluid	BBL	Material		2150.00	
Phase 3: Plugging							
23	3100	Well Preparation & Plugging (Ward #12) (EA -Lump Sum)	Each	Material		1.00	
24	3100	Well Preparation & Plugging (Francis A2) (EA -Lump Sum)	Each	Material		1.00	
25	3100	Well Preparation & Plugging (Francis 23) (EA -Lump Sum)	Each	Material		1.00	
26	3100	Well Preparation & Plugging (Francis 17) (EA -Lump Sum)	Each	Material		1.00	
27	3100	Well Preparation & Plugging (Francis A1) (EA -Lump Sum)	Each	Material		1.00	
28	3100	Well Preparation & Plugging (Francis A4) (EA -Lump Sum)	Each	Material		1.00	
29	3100	Well Preparation & Plugging (Francis A22) (EA -Lump Sum)	Each	Material		1.00	
30	3100	Well Preparation & Plugging (Spies 3) (EA -Lump Sum)	Each	Material		1.00	
31	3100	Well Preparation & Plugging (Stephens 4) (EA -Lump Sum)	Each	Material		1.00	
32	3100	Well Preparation & Plugging (Francis A1) (EA -Lump Sum)	Each	Material		1.00	
33	3100	Well Preparation & Plugging (Dutton Archibold 6D) (EA -Lump Sum)	Each	Material		1.00	
34	3100	Well Preparation & Plugging (Stephens Francis A21) (EA -Lump Sum)	Each	Material		1.00	
35	3100	Well Preparation & Plugging (Stephens Francis A1) (EA -Lump Sum)	Each	Material		1.00	
36	3100	Well Preparation & Plugging (Stephens Francis A4) (EA -Lump Sum)	Each	Material		1.00	
37	3100	Well Preparation & Plugging (Stephens Francis A5) (EA -Lump Sum)	Each	Material		1.00	
38	3100	Well Preparation & Plugging (Stephens Francis A2) (EA -Lump Sum)	Each	Material		1.00	
39	3100	Well Preparation & Plugging (Stephens Fa 3) (EA -Lump Sum)	Each	Material		1.00	
40	3100	Well Preparation & Plugging (Stephens Francis A16) (EA -Lump Sum)	Each	Material		1.00	
41	3100	Well Preparation & Plugging (Stephens Francis A3) (EA -Lump Sum)	Each	Material		1.00	
42	3100	Well Preparation & Plugging (No Name) (EA -Lump Sum)	Each	Material		1.00	
43	3100	Well Preparation & Plugging (Stephens FA Heirs 2) (EA -Lump Sum)	Each	Material		1.00	
44	3100	Well Preparation & Plugging (Mckendry JE&C 3) (EA -Lump Sum)	Each	Material		1.00	
45	3100	Well Preparation & Plugging (Mckendry JE&C 4) (EA -Lump Sum)	Each	Material		1.00	
46	3100	Well Preparation & Plugging (Mckendry JE&C 5) (EA -Lump Sum)	Each	Material		1.00	
47	3100	Well Preparation & Plugging (Mckendry JE&C 6) (EA -Lump Sum)	Each	Material		1.00	
48	3100	Well Preparation & Plugging (Dutton Archibold 7D) (EA -Lump Sum)	Each	Material		1.00	
49	3100	Well Preparation & Plugging (Stephens FA Heirs 1) (EA -Lump Sum)	Each	Material		1.00	
50	3100	Well Preparation & Plugging (Ward 13) (EA -Lump Sum)	Each	Material		1.00	
51	3100	Well Preparation & Plugging (Spies 2) (EA -Lump Sum)	Each	Material		1.00	
52	3100	Well Preparation & Plugging (Dutton Archibold 1D) (EA -Lump Sum)	Each	Material		1.00	
53	3100	Well Preparation & Plugging (Dutton Archibold 5D) (EA -Lump Sum)	Each	Material		1.00	
54	3100	Well Preparation & Plugging (Dutton Archibold 4D) (EA -Lump Sum)	Each	Material		1.00	
55	3100	Well Preparation & Plugging (Dutton Archibold 3D) (EA -Lump Sum)	Each	Material		1.00	
56	3100	Well Preparation & Plugging (Stephens Francis A3D) (EA -Lump Sum)	Each	Material		1.00	
57	3100	Well Preparation & Plugging (Kuntz #1) (EA -Lump Sum)	Each	Material		1.00	
58	3240	Logging (GR/CCL/Temp/Bond/Caliper)	Each	Material		6.00	
59	3250	Shooting	Each	Material		2.00	
60	3290	Severing	Each	Material		9.00	
61	3310	Tubing	Each	Material		1.00	
62	3310	Tubing-1 inch	Each	Material		1.00	
63	3340	Approved Cement (Sack)	Each	Material		3925.00	
64	3350	Cement Mixing & Pumping	Each	Material		62.00	
Phase 4: Site Clean-up and Restoration							
65	4100	Site Restoration Dutton Hill Site	Each	Material		1.00	
66	4100	Site Restoration Mckendry Site	Each	Material		1.00	
67	4160	Approved Resoil	Ton	Material		100.00	
68	4420	Contaminated Material Disposal	Ton	Material		30.00	
69	4440	Salvage Material Disposal	Each	Material		1.00	
70	4460	Fluid Disposal	BBL	Material		5064.00	
71	4470	Debris Removal and Disposal	Ton	Material		100.00	
Fixed Costs							
72	0800	Salvage Material Reimbursement	Each	Material	\$1,000.00	1.00	\$1,000.00
Contingency							
73	1230	No. 4 Stone	Ton	Material		325.00	
74	1510	Road Mats	Sq. Ft.	Material		4550.00	
75	2140	H2S Safety Team	Day	Material		5.00	
76	2150	H2S Safety Team Standby	Day	Material		5.00	
77	2181	Additional Circulation Fluid (Freshwater)	BBL	Material		2064.00	
78	2360	Downhole Videography	Each	Material		2.00	
79	3140	Fishing	Hour	Material		24.00	
80	3160	Milling/Drillout	Hour	Material		24.00	
81	3170	Magnet	Each	Material		4.00	
82	3240	Logging (GR/CCL/Temp/Bond/Caliper)	Each	Material		4.00	
83	3250	Shooting	Each	Material		2.00	
84	3260	Perforating (First Run)	Each	Material		2.00	
85	3290	Severing	Each	Material		2.00	
86	3380	Nine Sack Grout	Cubic Yd.	Material		20.00	
87	3450	Lost Circulation Materials (Sack)	Each	Material		50.00	
88	3460	Drilling Mud (Sack)	Each	Material		200.00	
89	3480	Hydrogen Sulfide Scavenger	Gallons	Material		25.00	

Note: This quantity sheet is provided for reference only. The Contractor's Offer must be submitted online through OhioBuys (<https://procure.ohio.gov/bidders-and-suppliers>). Quantities are only an estimate. Payment shall be based on quantities satisfactorily completed.

Each contractor is responsible for logging into OhioBuys and submitting an offer that is responsive to all amendments issued. All offers submitted prior to an amendment being issued shall become null and void and not considered in the award. All amendments shall become part of the Scope of Work.

null/void and not considered in the opening. All amendments shall become part of the scope of work.

Offers must be fully submitted online through OhioBuys (<https://procure.ohio.gov/bidders-and-suppliers>).

"General Decision Number: OH20260001 07/30/2026

State: Ohio

Construction Types: Heavy and Highway

Counties: Ohio Counties of
Adams, Allen, Ashland, Ashtabula,
Athens, Auglaize, Belmont, Brown,
Butler, Carroll, Champaign, Clark,
Clermont, Clinton, Columbiana,
Coshocton, Crawford, Cuyahoga, Darke,
Defiance, Delaware, Erie, Fairfield,
Fayette, Franklin, Fulton, Gallia,
Geauga, Greene, Guernsey, Hamilton,
Hancock, Hardin, Harrison, Henry,
Highland, Hocking, Holmes, Huron,
Jackson, Jefferson, Knox, Lake,
Lawrence, Licking, Logan, Lorain, Lucas,
Madison, Mahoning, Marion, Medina,
Meigs, Mercer, Miami, Monroe,
Montgomery, Morgan, Morrow, Muskingum,
Noble, Ottawa, Paulding, Perry,
Pickaway, Pike, Portage, Preble, Putnam,
Richland, Ross, Sandusky, Scioto,
Seneca, Shelby, Stark, Summit, Trumbull,
Tuscarawas, Union, Van Wert, Vinton,
Warren, Washington, Wayne, Williams,
Wood and Wyandot

Heavy Construction

Highway Construction

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026
2	05/20/2026
3	06/25/2026
4	07/30/2026

BROH0001-001 06/01/2024

	Rates	Fringes
BRICKLAYER, STONEMASON (DEFIANCE, FULTON (EXCLUDING FULTON, AMBOY & SWAN CREEK TOWNSHIPS), HENRY (EXCLUDING MONROE, BARTLOW, LIBERTY, WASHINGTON, RICHFIELD, MARION, DAMASCUS & TOWNSHIPS & THAT PART OF HARRISON TOWNSHIP OUTSIDE CORPORATE LIMITS OF CITY OF NAPOLEON), PAULDING, PUTNAM AND WILLIAMS COUNTIES).....	\$ 33.39	20.06

BROH0001-004 06/01/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER.....	\$ 32.40	19.30

BROH0003-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (FULTON (TOWNSHIPS OF AMBOY,
SWAN CREEK & FULTON), HENRY (TOWNSHIPS OF
WASHINGTON, DAMASCUS, RICHFIELD, BARTLOW, LIBERTY,
HARRISON, MONROE, & MARION), LUCAS AND WOOD
(TOWNSHIPS OF PERRYSBURG, ROSS, LAKE, TROY,
FREEDOM, MONTGOMERY, WEBSTER, CENTER, PORTAGE,
MIDDLETON, PLAIN, LIBERTY, HENRY, WASHINGTON,
WESTON, MILTON, JACKSON & GRAND RAPIDS) COUNTIES)...\$ 33.39

20.06

BROH0005-003 06/01/2020

Rates

Fringes

BRICKLAYER: SWING SCAFFOLDS (CUYAHOGA, LORAIN &
MEDINA (HINCKLEY, GRANGER, BRUNSWICK, LIVERPOOL,
MONTVILLE, YORK, HOMER, HARRISVILLE, CHATHAM,
LITCHFIELD & SPENCER TOWNSHIPS AND THE CITY OF
MEDINA)).....\$ 37.14

17.13

BRICKLAYER: SEWER BRICKLAYERS & STACK BUILDERS
(CUYAHOGA, LORAIN & MEDINA (HINCKLEY, GRANGER,
BRUNSWICK, LIVERPOOL, MONTVILLE, YORK, HOMER,
HARRISVILLE, CHATHAM, LITCHFIELD & SPENCER
TOWNSHIPS AND THE CITY OF MEDINA)).....\$ 36.64

17.13

BRICKLAYER: SANDBLASTERS (CUYAHOGA, LORAIN & MEDINA
(HINCKLEY, GRANGER, BRUNSWICK, LIVERPOOL,
MONTVILLE, YORK, HOMER, HARRISVILLE, CHATHAM,
LITCHFIELD & SPENCER TOWNSHIPS AND THE CITY OF
MEDINA)).....\$ 36.39

17.13

BRICKLAYER: BRICKLAYERS; CAULKERS; CLEANERS;
POINTERS; & STONEMASONS (CUYAHOGA, LORAIN & MEDINA
(HINCKLEY, GRANGER, BRUNSWICK, LIVERPOOL,
MONTVILLE, YORK, HOMER, HARRISVILLE, CHATHAM,
LITCHFIELD & SPENCER TOWNSHIPS AND THE CITY OF
MEDINA)).....\$ 36.64

17.13

BROH0006-005 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (CARROLL, COLUMBIANA (KNOX,
BUTLER, WEST & HANOVER TOWNSHIPS), STARK &
TUSCARAWAS).....\$ 33.39

20.06

BROH0007-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (LAWRENCE).....\$ 33.39

20.06

BROH0007-005 06/01/2023

Rates

Fringes

BRICKLAYER (PORTAGE & SUMMIT).....\$ 32.40

19.30

BROH0007-010 06/01/2024

Rates

Fringes

MASON - STONE (PORTAGE & SUMMIT).....\$ 33.39

20.06

BROH0008-001 06/01/2024

Rates

Fringes

BRICKLAYER (COLUMBIANA (SALEM, PERRY, FAIRFIELD,
CENTER, ELK RUN, MIDDLETON, & UNITY TOWNSHIPS AND
THE CITY OF NEW WATERFORD), MAHONING & TRUMBULL)....\$ 33.39

20.06

BROH0009-002 06/01/2016

Rates

Fringes

REFRACTORY (BELMONT & MONROE COUNTIES AND THE
TOWNSHIPS OF WARREN & MT. PLEASANT AND THE VILLAGE
OF DILLONVALE IN JEFFERSON COUNTY).....\$ 31.45

19.01

BROH0009-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (BELMONT & MONROE COUNTIES
AND THE TOWNSHIPS OF WARREN & MT. PLEASANT AND THE
VILLAGE OF DILLONVALE IN JEFFERSON COUNTY).....\$ 33.39

20.06

BROH0010-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (COLUMBIANA (ST. CLAIR,
MADISON, WAYNE, FRANKLIN, WASHINGTON, YELLOW CREEK
& LIVERPOOL TOWNSHIPS) & JEFFERSON (BRUSH CREEK &
SALINE TOWNSHIPS)).....\$ 33.39

20.06

BROH0014-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (HARRISON & JEFFERSON
(EXCEPT MT. PLEASANT, WARREN, BRUSH CREEK, SALINE &
SALINEVILLE TOWNSHIPS & THE VILLAGE OF DILLONVALE)).\$ 33.39

20.06

BROH0016-002 06/01/2023

Rates

Fringes

BRICKLAYER, STONEMASON (ASHTABULA, GEAUGA, AND LAKE
COUNTIES).....\$ 32.40

19.30

BROH0018-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (BROWN, BUTLER, CLERMONT,
HAMILTON, PREBLE (GASPER, DIXON, ISRAEL, LANIER,
SOMERS & GRATIS TOWNSHIPS) & WARREN COUNTIES:).\$ 33.39

20.06

BROH0022-004 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (CHAMPAIGN, CLARK, CLINTON,
DARKE, GREENE, HIGHLAND, LOGAN, MIAMI, MONTGOMERY,
PREBLE (JACKSON, MONROE, HARRISON, TWIN, JEFFERSON
& WASHINGTON TOWNSHIPS) AND SHELBY COUNTIES).....\$ 33.39

20.06

BROH0032-001 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (GALLIA & MEIGS).....\$ 33.39

20.06

BROH0035-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (ALLEN, AUGLAIZE, MERCER AND
VAN WERT COUNTIES).....\$ 33.39

20.06

BROH0039-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (ADAMS & SCIOTO).....\$ 33.39 20.06

BROH0040-003 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (ASHLAND, CRAWFORD, HARDIN,
HOLMES, MARION, MORROW, RICHLAND, WAYNE AND WYANDOT
(EXCEPT CRAWFORD, RIDGE, RICHLAND & TYMOCHTEE
TOWNSHIPS) COUNTIES) FOOTNOTE: LAYOUT MAN AND
SAWMAN RATE: \$1.00 PER HOUR ABOVE JOURNEYMAN RATE.
FREE STANDING STACK WORK GROUND LEVEL TO TOP OF
STACK; SANDBLASTING AND LAYING OF CARBON MASONRY
MATERIAL IN SWING STAGE AND/OR SCAFFOLD; RAMMING
AND SPADING OF PLASTICS AND GUNNITING: \$1.50 PER
HOUR ABOVE JOURNEYMAN RATE. ""HOT"" WORK: \$2.50
ABOVE JOURNEYMAN RATE.....\$ 33.39

20.06

BROH0044-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (COSHOCOTON, FAIRFIELD,
GUERNSEY, HOCKING, KNOX, KICKING, MORGAN,
MUSKINGUM, NOBLE (BEAVER, BUFFALO, SENECA & WAYNE
TOWNSHIPS) & PERRY COUNTIES:.....\$ 33.39

20.06

BROH0045-002 06/01/2023

Rates

Fringes

BRICKLAYER, STONEMASON (FAYETTE, JACKSON, PIKE,
ROSS AND VINTON COUNTIES).....\$ 35.39

17.47

BROH0046-002 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (ERIE, HANCOCK, HURON,
OTTAWA, SANDUSKY, SENECA, WOOD (PERRY & BLOOM
TOWNSHIPS) AND WYANDOT (TYMOCHTEE, CRAWFORD, RIDGE
& RICHLAND TOWNSHIPS) COUNTIES & THE ISLANDS OF
LAKE ERIE NORTH OF SANDUSKY) FOOTNOTE: LAYOUT MAN
AND SAWMAN RATE: \$1.00 PER HOUR ABOVE JOURNEYMAN
RATE. FREE STANDING STACK WORK GROUND LEVEL TO TOP
OF STACK; SANDBLASTING AND LAYING OF CARBON MASONRY
MATERIAL IN SWING STAGE AND/OR SCAFFOLD; RAMMING
AND SPADING OF PLASTICS AND GUNNITING: \$1.50 PER
HOUR ABOVE JOURNEYMAN RATE. ""HOT"" WORK: \$2.50
ABOVE JOURNEYMAN RATE.....\$ 33.39

20.06

BROH0052-001 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (ATHENS COUNTY).....\$ 33.39

20.06

BROH0052-003 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (NOBLE (BROOKFIELD, NOBLE,
CENTER, SHARON, OLIVE, ENOCH, STOCK, JACKSON,
JEFFERSON & ELK TOWNSHIPS) AND WASHINGTON
COUNTIES).....\$ 33.39

20.06

BROH0055-003 06/01/2024

Rates

Fringes

BRICKLAYER, STONEMASON (DELAWARE, FRANKLIN,
MADISON, PICKAWAY AND UNION COUNTIES).....\$ 33.39

20.06

CARP0002-024 05/01/2009

Rates

Fringes

DIVER (BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT,
CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI,
MONTGOMERY, PREBLE, SHELBY & WARREN).....\$ 40.589.69

CARP0002-024 05/01/2025

Rates

Fringes

CARPENTER & PILEDRIVERMEN (BROWN, BUTLER,
CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE,
HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY
& WARREN).....\$ 35.9423.59

CARP0171-001 05/01/2025

Rates

Fringes

CARPENTER (MAHONING & TRUMBULL).....\$ 33.19

25.02

CARP0171-002 05/01/2025

Rates

Fringes

CARPENTER (BELMONT, COLUMBIANA, HARRISON, JEFFERSON
& MONROE).....\$ 32.5026.19

CARP0200-002 05/01/2009

Rates

Fringes

DIVER (ADAMS, ATHENS, DELAWARE, FAIRFIELD, FAYETTE,
FRANKLIN, GALLIA, GUERNSEY, HIGHLAND, HOCKING,
JACKSON, LAWRENCE, LICKING, MADISON, MARION,
MEIGS, MORGAN, MUSKINGUM, NOBLE, PERRY, PICKAWAY,
PIKE, ROSS, SCIOTO, UNION, VINTON AND WASHINGTON
COUNTIES).....\$ 39.4110.40

CARP0200-002 05/01/2025

Rates

Fringes

PILEDRIVERMAN (ADAMS, ATHENS, DELAWARE, FAIRFIELD,
FAYETTE, FRANKLIN, GALLIA, GUERNSEY, HIGHLAND,
HOCKING, JACKSON, LAWRENCE, LICKING, MADISON,
MARION, MEIGS, MORGAN, MUSKINGUM, NOBLE, PERRY,
PICKAWAY, PIKE, ROSS, SCIOTO, UNION, VINTON AND
WASHINGTON COUNTIES).....\$ 35.94

23.59

CARPENTER (ADAMS, ATHENS, DELAWARE, FAIRFIELD,
FAYETTE, FRANKLIN, GALLIA, GUERNSEY, HIGHLAND,
HOCKING, JACKSON, LAWRENCE, LICKING, MADISON,
MARION, MEIGS, MORGAN, MUSKINGUM, NOBLE, PERRY,
PICKAWAY, PIKE, ROSS, SCIOTO, UNION, VINTON AND
WASHINGTON COUNTIES).....\$ 35.9423.59

CARP0285-001 05/01/2025

Rates

Fringes

CARPENTER (CARROLL, STARK, TUSCARAWAS AND WAYNE)....\$ 34.07

24.28

CARP0285-002 05/01/2025

Rates

Fringes

CARPENTER (COSHOCKTON, HOLMES, KNOX & MORROW).....\$ 33.38

24.69

CARP0285-008 05/01/2025

	Rates	Fringes
CARPENTER (MEDINA, PORTAGE & SUMMIT).....	\$ 37.18	25.07

CARP0351-005 05/01/2025		
	Rates	Fringes
CARPENTER (LUCAS & WOOD).....	\$ 35.44	27.56

CARP0351-006 05/01/2025		
	Rates	Fringes
CARPENTER (DEFIANCE, FULTON, HANCOCK, HENRY, PAULDING & WILLIAMS COUNTIES).....	\$ 32.05	26.13

CARP0372-002 05/01/2025		
	Rates	Fringes
CARPENTER (ALLEN, AUGLAIZE, HARDIN, MERCER, PUTNAM & VAN WERT).....	\$ 31.80	26.33

CARP0435-005 05/01/2025		
	Rates	Fringes
CARPENTER (ASHTABULA, CUYAHOGA, GEAUGA & LAKE).....	\$ 38.57	24.64

CARP0735-001 05/01/2025		
	Rates	Fringes
CARPENTER (ASHLAND, HURON & RICHLAND).....	\$ 34.67	23.57

CARP0735-002 05/01/2025		
	Rates	Fringes
CARPENTER (LORAIN).....	\$ 38.42	24.01

CARP0735-004 05/01/2025		
	Rates	Fringes
CARPENTER (ERIE).....	\$ 36.71	24.14

CARP0744-001 05/01/2025		
	Rates	Fringes
CARPENTER (CRAWFORD, OTTAWA, SANDUSKY, SENECA & WYANDOT).....	\$ 33.74	27.05

CARP1090-002 05/01/2025		
	Rates	Fringes
PILEDRIWMEN & DIVER'S TENDER (ALLEN, AUGLAIZE, HARDIN, MERCER, PUTNAM, VAN WERT & WYANDOT) DIVERS - \$250.00 PER DAY.....	\$ 35.94	28.39

CARP1090-003 05/01/2025		
	Rates	Fringes
PILEDRIWMEN; DIVER, DRY (BELMONT, HARRISON, & MONROE).....	\$ 39.01	24.91
DIVER, WET (BELMONT, HARRISON, & MONROE).....	\$ 58.52	24.91

CARP1090-004 05/01/2025		
	Rates	Fringes
PILEDRIWMEN; DIVER, DRY (CARROLL, STARK, TUSCARAWAS & WAYNE).....	\$ 33.21	25.40

DIVER, WET (CARROLL, STARK, TUSCARAWAS & WAYNE).....\$ 49.82	25.40

CARP1090-005 05/01/2025	
	Rates Fringes
PILEDRIVMEN; DIVER, DRY (ASHLAND, ASHTABULA, CUYAHOGA, ERIE, GEAUGA, HURON, LAKE, LORAIN, MEDINA, PORTAGE, RICHLAND & SUMMIT).....\$ 36.34	27.50
DIVER, WET (ASHLAND, ASHTABULA, CUYAHOGA, ERIE, GEAUGA, HURON, LAKE, LORAIN, MEDINA, PORTAGE, RICHLAND & SUMMIT).....\$ 54.51	27.50

CARP1090-006 05/01/2025	
	Rates Fringes
PILEDRIVMEN; DIVER, DRY (COSHOCOTON, HOLMES, KNOX & MORROW).....\$ 36.24	22.54
DIVER, WET (COSHOCOTON, HOLMES, KNOX & MORROW).....\$ 54.36	22.54

CARP1090-007 05/01/2025	
	Rates Fringes
PILEDRIVMEN; DIVER, DRY (MAHONING & TRUMBULL).....\$ 33.90	24.82
DIVER, WET (MAHONING & TRUMBULL).....\$ 50.85	24.82

CARP1090-008 05/01/2025	
	Rates Fringes
PILEDRIVMAN (COLUMBIANA & JEFFERSON).....\$ 39.01	24.91

CARP1090-009 05/01/2025	
	Rates Fringes
PILEDRIVMEN & DIVER'S TENDER (CRAWFORD, DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, SANDUSKY, SENECA, WILLIAMS & WOOD) DIVERS - \$250.00 PER DAY.....\$ 37.98	28.63

ELEC0008-002 05/25/2020	
	Rates Fringes
CABLE SPLICER (DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD).....\$ 38.98	18.96

ELEC0008-002 05/27/2024	
	Rates Fringes
ELECTRICIAN (DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD).....\$ 48.40	25.24

ELEC0032-003 06/01/2025	
	Rates Fringes
ELECTRICIAN (ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, SHELBY, VAN WERT & WYANDOT (CRAWFORD, JACKSON, MARSEILLES, MIFFLIN, RIDGELAND, RIDGE & SALEM TOWNSHIPS)).....\$ 39.17	23.60

ELEC0038-002 04/28/2025	
	Rates Fringes
ELECTRICIAN, EXCLUDING SOUND & COMMUNICATIONS WORK. FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S	

DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY;
 THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO
 WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE
 THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR
 THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 46.63 24.92

ELEC0038-008 04/28/2025

Rates

Fringes

SOUND & COMMUNICATION TECHNICIAN: INSTALLER
 TECHNICIAN (CUYAHOGA, GEAUGA (BAINBRIDGE, CHESTER &
 RUSSELL TOWNSHIPS) & LORAIN (COLUMBIA TOWNSHIP))
 FOOTNOTES; A. 6 PAID HOLIDAYS: NEW YEAR'S DAY;
 MEMORIAL DAY; JULY 4TH; LABOR DAY; THANKSGIVING
 DAY; & CHRISTMAS DAY B. 1 WEEK'S PAID VACATION
 FOR 1 YEAR'S SERVICE; 2 WEEKS' PAID VACATION FOR 2
 OR MORE YEARS' SERVICE.....\$ 33.05 14.91

SOUND & COMMUNICATION TECHNICIAN: COMMUNICATIONS
 TECHNICIAN (CUYAHOGA, GEAUGA (BAINBRIDGE, CHESTER &
 RUSSELL TOWNSHIPS) & LORAIN (COLUMBIA TOWNSHIP))
 FOOTNOTES; A. 6 PAID HOLIDAYS: NEW YEAR'S DAY;
 MEMORIAL DAY; JULY 4TH; LABOR DAY; THANKSGIVING
 DAY; & CHRISTMAS DAY B. 1 WEEK'S PAID VACATION
 FOR 1 YEAR'S SERVICE; 2 WEEKS' PAID VACATION FOR 2
 OR MORE YEARS' SERVICE.....\$ 34.30 14.95

ELEC0064-003 11/30/2025

Rates

Fringes

ELECTRICIAN (COLUMBIANA (BUTLER, FAIRFIELD, PERRY,
 SALEM & UNITY TOWNSHIPS) MAHONING (AUSTINTOWN,
 BEAVER, BERLIN, BOARDMAN, CANFIELD, ELLSWORTH,
 COITSVILLE, GOSHEN, GREEN, JACKSON, POLAND,
 SPRINGFIELD & YOUNGSTOWN TOWNSHIPS), & TRUMBULL
 (HUBBARD & LIBERTY TOWNSHIPS)).....\$ 41.49 21.81

ELEC0071-005 01/06/2025

Rates

Fringes

LINE CONSTRUCTION: LINEMEN/CABLE SPLICER:
 MUNICIPAL POWER/TRANSIT PROJECTS (ASHTABULA,
 CUYAHOGA, GEAUGA, LAKE & LORAIN).....\$ 54.96 23.09

LINE CONSTRUCTION: LINEMEN/CABLE SPLICER:
 DOT/TRAFFIC SIGNAL & HIGHWAY LIGHTING PROJECTS
 (ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN).....\$ 43.89 19.85

LINE CONSTRUCTION: GROUNDMAN: MUNICIPAL
 POWER/TRANSIT PROJECTS (ASHTABULA, CUYAHOGA,
 GEAUGA, LAKE & LORAIN).....\$ 38.47 18.64

LINE CONSTRUCTION: GROUNDMAN: DOT/TRAFFIC SIGNAL &
 HIGHWAY LIGHTING PROJECTS (ASHTABULA, CUYAHOGA,
 GEAUGA, LAKE & LORAIN).....\$ 31.10 16.40

LINE CONSTRUCTION: EQUIPMENT OPERATOR: MUNICIPAL
 POWER/TRANSIT PROJECTS (ASHTABULA, CUYAHOGA,
 GEAUGA, LAKE & LORAIN).....\$ 49.46 21.60

LINE CONSTRUCTION: EQUIPMENT OPERATOR: DOT/TRAFFIC
 SIGNAL & HIGHWAY LIGHTING PROJECTS (ASHTABULA,
 CUYAHOGA, GEAUGA, LAKE & LORAIN).....\$ 39.97 18.79

ELEC0071-010 01/06/2025

Rates

Fringes

LINE CONSTRUCTION: LINEMAN & CABLE SPLICERS
 (STATEWIDE).....\$ 46.02 19.04

LINE CONSTRUCTION: GROUNDMAN (STATEWIDE).....\$ 29.07 14.97

LINE CONSTRUCTION: EQUIPMENT OPERATOR (STATEWIDE)...\$ 40.44 17.71

ELEC0082-002 12/02/2024

Rates

Fringes

ELECTRICIAN (CLINTON, DARKE, GREENE, MIAMI,
MONTGOMERY, PREBLE & WARREN (WAYNE, CLEAR CREEK &
FRANKLIN TOWNSHIPS)).....\$ 38.0022.49

ELEC0082-006 11/25/2024

Rates

Fringes

SOUND & COMMUNICATION TECHNICIAN:
INSTALLER/TECHNICIAN (CLINTON, DARKE, GREENE,
MIAMI, MONTGOMERY, PREBLE & WARREN (WAYNE, CLEAR
CREEK & FRANKLIN TOWNSHIPS)).....\$ 27.70
SOUND & COMMUNICATION TECHNICIAN: CABLE PULLER
(CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE
& WARREN (WAYNE, CLEAR CREEK & FRANKLIN TOWNSHIPS)).\$ 13.85

15.71

5.30

ELEC0129-003 02/24/2025

Rates

Fringes

ELECTRICIAN (LORAIN (EXCEPT COLUMBIA TOWNSHIP) &
MEDINA (LITCHFIELD & LIVERPOOL TOWNSHIPS)).....\$ 42.9518.81

ELEC0129-004 02/24/2025

Rates

Fringes

ELECTRICIAN (ERIE & HURON (LYME, RIDGEFIELD,
NORWALK, TOWNSEND, WAKEMAN, SHERMAN, PERU, BRONSON,
HARTLAND, CLARKSFIELD, NORWICH, GREENFIELD,
FAIRFIELD, FITCHVILLE & NEW LONDON TOWNSHIPS)).....\$ 42.9518.81

ELEC0141-003 06/02/2024

Rates

Fringes

CABLE SPLICER (BELMONT COUNTY).....\$ 42.94

27.74

ELEC0141-003 06/02/2025

Rates

Fringes

ELECTRICIAN (BELMONT COUNTY).....\$ 39.25

31.23

ELEC0212-003 11/26/2018

Rates

Fringes

SOUND & COMMUNICATION TECHNICIAN (BROWN, CLERMONT &
HAMILTON).....\$ 24.3510.99

ELEC0212-005 06/02/2025

Rates

Fringes

ELECTRICIAN (BROWN, CLERMONT, AND HAMILTON
COUNTIES).....\$ 38.0522.97

ELEC0245-001 08/26/2024

Rates

Fringes

LINE CONSTRUCTION: LINEMAN (ALLEN, HARDIN, VAN WERT
& WYANDOT (CRAWFORD, JACKSON, MARSEILLES, MIFFLIN,
RICHLAND, RIDGE & SALEM TOWNSHIPS)) FOOTNOTE: A.
HALF DAY'S PAID HOLIDAY: THE LAST 4 HOURS OF THE
WORKDAY PRIOR TO CHRISTMAS OR NEW YEAR'S DAY.....\$ 47.07
LINE CONSTRUCTION: GROUNDMAN TRUCK DRIVER (ALLEN,
HARDIN, VAN WERT & WYANDOT (CRAWFORD, JACKSON,

21.03

MARSEILLES, MIFFLIN, RICHLAND, RIDGE & SALEM TOWNSHIPS)): FOOTNOTE: A. HALF DAY'S PAID HOLIDAY: THE LAST 4 HOURS OF THE WORKDAY PRIOR TO CHRISTMAS OR NEW YEAR'S DAY.....\$ 20.59 13.62

LINE CONSTRUCTION: EQUIPMENT OPERATOR (ALLEN, HARDIN, VAN WERT & WYANDOT (CRAWFORD, JACKSON, MARSEILLES, MIFFLIN, RICHLAND, RIDGE & SALEM TOWNSHIPS)) FOOTNOTE: A. HALF DAY'S PAID HOLIDAY: THE LAST 4 HOURS OF THE WORKDAY PRIOR TO CHRISTMAS OR NEW YEAR'S DAY.....\$ 32.95 17.08

ELEC0245-003 01/01/2025

Rates

Fringes

LINE CONSTRUCTION: TRAFFIC SIGNAL & LIGHTING TECHNICIAN (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 42.18 19.91

LINE CONSTRUCTION: OPERATOR - CLASS 2 (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 32.81 17.29

LINE CONSTRUCTION: OPERATOR - CLASS 1 (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 37.50 18.60

LINE CONSTRUCTION: LINEMAN (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 46.87 21.22

LINE CONSTRUCTION: HELI-ARC WELDING (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 47.17 21.31

LINE CONSTRUCTION: GROUNDMAN/TRUCK DRIVER (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS,

OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA,
 WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6
 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY;
 INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; &
 CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY
 SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE
 CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK
 PERFORMED ON SUCH HOLIDAY.....\$ 20.51 13.84
 LINE CONSTRUCTION: CABLE SPLICER (DEFIANCE, FULTON,
 HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING,
 PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD
 COUNTIES) : FOOTNOTE: A. 6 OBSERVED HOLIDAYS:
 NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY;
 LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY.
 EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A
 RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED
 STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH
 HOLIDAY.....\$ 53.90 23.19

ELEC0245-004 01/01/2025

Rates

Fringes

LINE CONSTRUCTION: OPERATOR - CLASS 2 (ERIE COUNTY)
 FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S
 DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY;
 THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO
 WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE
 THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR
 THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 32.81 17.29
 LINE CONSTRUCTION: OPERATOR - CLASS 1 (ERIE COUNTY)
 FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY;
 MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY;
 THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO
 WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE
 THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR
 THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 37.50 18.60
 LINE CONSTRUCTION: LINEMAN (ERIE COUNTY)
 FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY;
 MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY;
 THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO
 WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE
 THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR
 THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 46.87 21.22
 LINE CONSTRUCTION: GROUNDMAN/TRUCK DRIVER (ERIE
 COUNTY) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW
 YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR
 DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES
 WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF
 DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME
 RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 20.51 13.84
 LINE CONSTRUCTION: CABLE SPLICER (ERIE COUNTY)
 FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY;
 MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY;
 THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO
 WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE
 THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR
 THE WORK PERFORMED ON SUCH HOLIDAY.....\$ 53.90 23.19

ELEC0246-001 10/28/2024

Rates

Fringes

ELECTRICIAN (CARROLL, COLUMBIANA, HARRISON AND
 JEFFERSON COUNTIES IN OHIO; BROOKE AND HANCOCK
 COUNTIES IN WEST VIRGINIA.) FOOTNOTE: A. 1 1/2
 PAID HOLIDAYS: THE LAST SCHEDULED WORKDAY PRIOR TO

CHRISTMAS & 4 HOURS ON GOOD FRIDAY.....\$ 44.00 37.68

ELEC0306-005 05/27/2024

Rates

Fringes

ELECTRICIAN (MEDINA (BRUNSWICK, CHATHAM, GRANGER, GUILFORD, HARRISVILLE, HINCKLEY, HOMER, LAFAYETTE, MEDINA, MONTVILLE, SHARON, SPENCER, WADSWORTH, WESTFIELD & YORK TOWNSHIPS), PORTAGE (ATWATER, AURORA, BRIMFIELD, DEERFIELD, FRANKLIN, MANTUA, RANDOLPH, RAVENNA, ROOTSTOWN, SHALERSVILLE, STREETSBORO & SUFFIELD TOWNSHIPS), SUMMIT & WAYNE (BAUGHMAN, CANAAN, CHESTER, CHIPPEWA, CONGRESS, GREEN, MILTON, & WAYNE TOWNSHIPS)).....\$ 42.55

20.95

CABLE SPLICER (MEDINA (BRUNSWICK, CHATHAM, GRANGER, GUILFORD, HARRISVILLE, HINCKLEY, HOMER, LAFAYETTE, MEDINA, MONTVILLE, SHARON, SPENCER, WADSWORTH, WESTFIELD & YORK TOWNSHIPS), PORTAGE (ATWATER, AURORA, BRIMFIELD, DEERFIELD, FRANKLIN, MANTUA, RANDOLPH, RAVENNA, ROOTSTOWN, SHALERSVILLE, STREETSBORO & SUFFIELD TOWNSHIPS), SUMMIT & WAYNE (BAUGHMAN, CANAAN, CHESTER, CHIPPEWA, CONGRESS, GREEN, MILTON, & WAYNE TOWNSHIPS)).....\$ 46.81

20.95

ELEC0317-002 06/01/2009

Rates

Fringes

CABLE SPLICER (GALLIA & LAWRENCE).....\$ 32.68

18.13

ELEC0317-002 06/02/2025

Rates

Fringes

ELECTRICIAN (GALLIA & LAWRENCE).....\$ 41.15

29.35

ELEC0540-005 06/30/2025

Rates

Fringes

ELECTRICIAN (CARROLL (NORTHERN HALF, INCLUDING FOX, HARRISON, ROSE & WASHINGTON TOWNSHIPS), COLUMBIANA (KNOX TOWNSHIP), HOLMES, MAHONING (SMITH TOWNSHIP), STARK, TUSCARAWAS (NORTH OF AUBURN, CLAY, RUSH & YORK TOWNSHIPS), AND WAYNE (SOUTH OF BAUGHMAN, CHESTER, GREEN & WAYNE TOWNSHIPS) COUNTIES).....\$ 39.86

29.19

ELEC0573-003 06/01/2025

Rates

Fringes

ELECTRICIAN (ASHTABULA (COLEBROOK, WAYNE, WILLIAMSFIELD, ORWELL & WINDSOR TOWNSHIPS), GEauga (AUBURN, MIDDLEFIELD, PARKMAN & TROY TOWNSHIPS), MAHONING (MILTON TOWNSHIP), PORTAGE (CHARLESTOWN, EDINBURG, FREEDOM, HIRAM, NELSON, PALMYRA, PARIS & WINDHAM TOWNSHIPS), AND TRUMBULL (EXCEPT LIBERTY & HUBBARD TOWNSHIPS)).....\$ 42.20

23.37

ELEC0575-001 05/29/2023

Rates

Fringes

ELECTRICIAN (ADAMS, FAYETTE, HIGHLAND, HOCKING, JACKSON (BLOOMFIELD, FRANKLIN, HAMILTON, JEFFERSON, LICK, MADISON, SCIOTO, COAL, JACKSON, LIBERTY, MILTON & WASHINGTON TOWNSHIPS), PICKAWAY (DEER CREEK, PERRY, PICKAWAY, SALT CREEK & WAYNE TOWNSHIPS), PIKE (BEAVER, BENTON, JACKSON, MIFFLIN,

PEBBLE, PEEPEE, PERRY, SEAL, CAMP CREEK, NEWTON,
 SCIOTO, SUNFISH, UNION & MARION TOWNSHIPS), ROSS,
 SCIOTO & VINTON (CLINTON, EAGLE, ELK, HARRISON,
 JACKSON, RICHLAND & SWAN TOWNSHIPS)).....\$ 37.00 22.26

ELEC0648-001 03/05/2018

Rates

Fringes

CABLE SPLICER (BUTLER AND WARREN COUNTIES
 (DEERFIELD, HAMILTON, HARLAN, MASSIE, SALEM, TURTLE
 CREEK, UNION & WASHINGTON TOWNSHIPS)).....\$ 30.50 18.23

ELEC0648-001 09/01/2025

Rates

Fringes

ELECTRICIAN (BUTLER AND WARREN COUNTIES (DEERFIELD,
 HAMILTON, HARLAN, MASSIE, SALEM, TURTLE CREEK,
 UNION & WASHINGTON TOWNSHIPS)).....\$ 38.00 24.16

ELEC0673-004 02/01/2020

Rates

Fringes

CABLE SPLICER (ASHTABULA (EXCLUDING ORWELL,
 COLEBROOK, WILLIAMSFIELD, WAYNE & WINDSOR
 TOWNSHIPS), GEAUGA (BURTON, CHARDON, CLARIDON,
 HAMBDEN, HUNTSBURG, MONTVILLE, MUNSON, NEWBURY &
 THOMPSON TOWNSHIPS) AND LAKE COUNTIES)).....\$ 33.81 21.47

ELEC0673-004 05/26/2025

Rates

Fringes

ELECTRICIAN (ASHTABULA (EXCLUDING ORWELL,
 COLEBROOK, WILLIAMSFIELD, WAYNE & WINDSOR
 TOWNSHIPS), GEAUGA (BURTON, CHARDON, CLARIDON,
 HAMBDEN, HUNTSBURG, MONTVILLE, MUNSON, NEWBURY &
 THOMPSON TOWNSHIPS) AND LAKE COUNTIES)).....\$ 41.17 24.58

ELEC0683-002 06/02/2025

Rates

Fringes

ELECTRICIAN (CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD,
 FRANKLIN, MADISON, PICKAWAY (CIRCLEVILLE, DARBY,
 HARRISON, JACKSON, MADISON, MONROE, MUHLENBERG,
 SCIOTO, WALNUT & WASHINGTON TOWNSHIPS), AND UNION
 COUNTIES)).....\$ 43.00 26.37
 CABLE SPLICER (CHAMPAIGN, CLARK, DELAWARE,
 FAIRFIELD, FRANKLIN, MADISON, PICKAWAY
 (CIRCLEVILLE, DARBY, HARRISON, JACKSON, MADISON,
 MONROE, MUHLENBERG, SCIOTO, WALNUT & WASHINGTON
 TOWNSHIPS), AND UNION COUNTIES)).....\$ 44.00 26.40

ELEC0688-003 05/30/2022

Rates

Fringes

ELECTRICIAN (ASHLAND, CRAWFORD, HURON (RICHMOND,
 NEW HAVEN, RIPLEY & GREENWICH TOWNSHIPS), KNOX
 (LIBERTY, CLINTON, UNION, HOWARD, MONROE,
 MIDDLEBERRY, MORRIS, WAYNE, BERLIN, PIKE, BROWN &
 JEFFERSON TOWNSHIPS), MARION, MORROW, RICHLAND AND
 WYANDOT (SYCAMORE, CRANE, EDEN, PITT, ANTRIM &
 TYMOCHTEE TOWNSHIPS) COUNTIES)).....\$ 32.30 21.83

ELEC0972-002 06/01/2024

Rates

Fringes

ELECTRICIAN (ATHENS, MEIGS, MONROE, MORGAN, NOBLE, VINTON (BROWN, KNOX, MADISON, VINTON & WILKESVILLE TOWNSHIPS), AND WASHINGTON COUNTIES).....\$ 40.00	33.32
CABLE SPLICER (ATHENS, MEIGS, MONROE, MORGAN, NOBLE, VINTON (BROWN, KNOX, MADISON, VINTON & WILKESVILLE TOWNSHIPS), AND WASHINGTON COUNTIES)...\$ 40.25	33.33

ELEC1105-001 05/27/2024

Rates

Fringes

ELECTRICIAN (COSHOCOTON, GUERNSEY, KNOX (JACKSON, CLAY, MORGAN, MILLER, MILFORD, HILLIAR, BUTLER, HARRISON, PLEASANT & COLLEGE TOWNSHIPS), LICKING, MUSKINGUM, PERRY, AND TUSCARAWAS (AUBURN, YORK, CLAY, JEFFERSON, RUSH, OXFORD, WASHINGTON, SALEM, PERRY & BUCKS TOWNSHIPS) COUNTIES).....\$ 39.60	24.41
--	-------

ENGI0018-003 05/01/2024

Rates

Fringes

POWER EQUIPMENT OPERATOR GROUP 7 BOOM FROM 180 AND OVER. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 46.63	16.41
POWER EQUIPMENT OPERATOR GROUP 6 MASTER MECHANIC & BOOM FROM 150 TO 180. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 46.63	16.41
POWER EQUIPMENT OPERATOR GROUP 5 COMPRESSOR (PORTABLE, SEWER, HEAVY & HIGHWAY); DRUM FIREPERSON (ASPHALT PLANT); GENERATOR; MASONRY FORK LIFT; INBOARD-OUTBOARD MOTOR BOAT LAUNCH; OIL HEATER (ASPHALT PLANT); OILER/HELPER; POWER DRIVEN HEATER; POWER SWEEPER & SCRUBBER; PUMP (UNDER 4"") DISCHARGE); SIGNALPERSON; TIRE REPAIRPERSON; VAC/ALLS; CRANES - COMPACT, TRACK OR RUBBER UNDER 4,000 POUND CAPACITY; FUELING AND GREASING; AND CHAINMEN. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).\$ 37.98	16.41
POWER EQUIPMENT OPERATOR GROUP 4 BACKFILLER; BALLAST RE-LOCATOR; BARS, JOINT & MESH INSTALLING MACHINE; BATCH PLANT; BORING MACHINE OPERATOR (48"") OR LESS); BULL FLOATS; BURLAP & CURING MACHINE; CONCRETE PLANT (CAPACITY 4 YD. & UNDER); CONCRETE SAW (MULTIPLE); CONVEYOR (HIGHWAY); CRUSHER; DECKHAND; FARM-TYPE TRACTOR WITH ATTACHMENTS (HIGHWAY); FINISHING MACHINE; FIREPERSON, FLOATING EQUIPMENT (ALL TYPES); FORKLIFT; FORM TRENCHER; HYDRO HAMMER EXPECT MASONARY; HYDRO SEEDER; PAVEMENT BREAKER; PLANT MIXER; POST DRIVER; POST HOLE DIGGER (POWER AUGER); POWER BRUSH BURNER; POWER FORM HANDLING EQUIPMENT; ROAD WIDENING TRENCHER; ROLLER (BRICK, GRADE & MACADAM); SELF-PROPELLED POWER SPREADER; SELF-PROPELLED POWER SUBGRADER; STEAM FIREPERSON; TRACTOR (PULLING SHEEPFOOT, ROLLER OR GRADER); AND VIBRATORY COMPACTOR WITH INTEGRAL POWER. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 43.27	16.41
POWER EQUIPMENT OPERATOR GROUP 3 A-FRAME; AIR COMPRESSOR ON TUNNEL WORK (LOW PRESSURE); ASPHALT PLANT ENGINEER (PORTAGE AND SUMMIT COUNTIES ONLY); BOBCAT-TYPE AND/OR SKID STEER LOADER WITH OR WITHOUT ATTACHMENTS; HIGHWAY DRILLS (ALL TYPES); LOCOMOTIVE (NARROW GAUGE); MATERIAL HOIST/ELEVATOR; MIXER, CONCRETE (MORE THAN ONE BAG CAPACITY);	

MIXER, ONE BAG CAPACITY (SIDE LOADER); POWER BOILER (OVER 15 LBS. PRESSURE) PUMP OPERATOR INSTALLING & OPERATING WELL POINTS; PUMP (4" & OVER DISCHARGE); ROLLER, ASPHALT; ROTOVATOR (LIME SOIL STABILIZER); SWITCH & TIE TAMPERS (WITHOUT LIFTING & ALIGNING DEVICE); UTILITY OPERATOR (SMALL EQUIPMENT); WELDING MACHINES; AND RAILROAD TIE INSERTER/REMOVER; ARTICULATING/STRAIGHT BED END DUMPS IF ASSIGNED (MINUS \$4.00 PER HOUR. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 44.49 16.41

POWER EQUIPMENT OPERATOR GROUP 2 ASPHALT PAVER; AUTOMATIC SUBGRADER MACHINE, SELF-PROPELLED (CMI TYPE); BOBCAT TYPE AND/OR SKID STEER LOADER WITH HOE ATTACHMENT GREATER THAN 7,000 LBS.; BORING MACHINE MORE THAN 48"; BULLDOZER; ENDLOADER; HORIZONTAL DIRECTIONAL DRILL (OVER 50,000 FT LBS THRUST); HYDRO MILLING MACHINE; KOLMAN-TYPE LOADER (PRODUCTION TYPE-DIRT); LEAD GREASEMAN; LIGHTING & TRAFFIC SIGNAL INSTALLATION EQUIPMENT (INCLUDES ALL GROUPS OR CLASSIFICATIONS); MATERIAL TRANSFER EQUIPMENT (SHUTTLE BUGGY) ASPHALT; PETTIBONE-RAIL EQUIPMENT; POWER GRADER; POWER SCRAPER; PUSH CAT; ROTOMILL (ALL), GRINDERS & PLANERS OF ALL TYPES; TRENCH MACHINE (24" WIDE & UNDER); VERMEER TYPE CONCRETE SAW; AND MAINTENANCE OPERATORS (PORTAGE AND SUMMIT COUNTIES ONLY). (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 45.53 16.41

POWER EQUIPMENT OPERATOR GROUP 1 AIR COMPRESSOR ON STEEL ERECTION; BARRIER MOVING MACHINE; BOILER OPERATOR ON COMPRESSOR OR GENERATOR WHEN MOUNTED ON A RIG; CABLEWAY; COMBINATION CONCRETE MIXER & TOWER; CONCRETE PLANT (OVER 4 YD. CAPACITY); CONCRETE PUMP; CRANE (ALL TYPES, INCLUDING BOOM TRUCK, CHERRY PICKER); CRANE-COMPACT, TRACK OR RUBBER OVER 4,000 LBS. CAPACITY; CRANES-SELF ERECTING, STATIONARY, TRACK OR TRUCK (ALL CONFIGURATIONS); DERRICK; DRAGLINE; DREDGE (DIPPER, CLAM OR SUCTION); ELEVATING GRADER OR EUCLID LOADER; FLOATING EQUIPMENT (ALL TYPES); GRADALL; HELICOPTER CREW (OPERATOR-HOIST OR WINCH); HOE (ALL TYPES); HOISTING ENGINE ON SHAFT OR TUNNEL WORK; HYDRAULIC GANTRY (LIFTING SYSTEM); INDUSTRIAL-TYPE TRACTOR; JET ENGINE DRYER (D8 OR D9) DIESEL TRACTOR; LOCOMOTIVE (STANDARD GAUGE); MAINTENANCE OPERATOR CLASS A; MIXER, PAVING (SINGLE OR DOUBLE DRUM); MUCKING MACHINE; MULTIPLE SCRAPER; PILEDRIVING MACHINE (ALL TYPES); POWER SHOVEL; PRENTICE LOADER; QUAD 9 (DOUBLE PUSHER); RAIL TAMPER (WITH AUTO LIFTING & ALIGNING DEVICE); REFRIGERATING MACHINE (FREEZER OPERATION); ROTARY DRILL, ON CAISSON WORK; ROUGH TERRAIN FORK LIFT WITH WINCH/HOIST; SIDE-BOOM; SLIP-FORM PAVER; TOWER DERRICK; TREE SHREDDER; TRENCH MACHINE (OVER 24" WIDE); TRUCK MOUNTED CONCRETE PUMP; TUG BOAT; TUNNEL MACHINE AND/OR MINING MACHINE; WHEEL EXCAVATOR; AND ASPHALT PLANT ENGINEER (CLEVELAND DISTRICT ONLY). (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 45.63 16.41

POWER EQUIPMENT OPERATOR GROUP 7 (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PA.....\$ 45.14	16.41
POWER EQUIPMENT OPERATOR GROUP 6 (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PA.....\$ 45.14	16.41
POWER EQUIPMENT OPERATOR GROUP 5 (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PA.....\$ 36.34	16.41
POWER EQUIPMENT OPERATOR GROUP 4 (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PA.....\$ 41.80	16.41
POWER EQUIPMENT OPERATOR GROUP 3 (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PA.....\$ 42.98	16.41
POWER EQUIPMENT OPERATOR GROUP 2 (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM,	

NOBLE, OTTAWA, PA.....	\$ 44.02	16.41
POWER EQUIPMENT OPERATOR GROUP 1 (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PA.....		
	\$ 44.14	16.41

ENGI0066-023 06/01/2023

Rates

Fringes

POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 5 - C & D - BRAKEPERSON; FIREPERSON; & OILER. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 28.53	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 4 - C & D - AIR CURTAIN DESTRUCTOR & SIMILAR TYPE; BATCH PLANT-JOB RELATED; BOILER OPERATOR; COMPRESSOR; CONVEYOR; CURB BUILDER, SELF-PROPELLED; DRILL WAGON; GENERATOR SET; GENERATOR-STEAM; HEATER-PORTABLE POWER; HYDRAULIC MANIUPULATOR CRANE; JACK-HYDRAULIC POWER DRIVEN; JACK-HYDRAULIC (RAILROAD); LADAVATOR; MINOR MACHINE OPERATOR; MIXER-CONCRETE; MULCHING MACHINE; PIN PULLER; POWER BROOM; PULVERIZER; PUMP; ROAD FINISHING MACHINE (PULL TYPE); SAW-CONCRETE-SELF-PROPELLED (HIGHWAY WORK); SIGNAL PERSON; SPRAY CURE MACHINE-MOTOR POWERED; STUMP CUTTER; TRACTOR; TRENCHER FORM; WATER BLASTER; STEAM JENNY; SYPHON; VIBRATOR-GASOLINE; & WELDING MACHINE. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 31.65	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 3 - C & D - ASPHALT PLANT; BENDING MACHINE (PIPELINE OR TYPE); BORING MACHINE, MOTOR DRIVEN; CHIP HARVESTER WITHOUT BOOM; CLEANING MACHINE, PIPELINE TYPE; COATING MACHINE, PIPELINE TYPE; COMPACTOR; CONCRETE BELT PLACER; CONCRETE FINISHER; CONCRETE PLANER OR ASPHALT; CONCRETE SPREADER; ELEVATOR; FORK LIFT (HOME BUILDING ONLY); FORK LIFT & LULLS; FORK LIFT WALK BEHIND (HOISTING OVER 1 BUCK HIGH); FORM LINE MACHINE; GREASE TRUCK OPERATOR; GROUT PUMP; GUNNITE MACHINE; HORIZONTAL DIRECTIONAL DRILL LOCATOR; SINGLE DRUM HOIST WITH OR WITHOUT TOWER; HUCK BOLTING MACHINE; HYDRAULIC SCAFFOLD (HOISTING BUILDING MATERIALS); PAVING BREAKER (SELF-PROPELLED OR RIDDEN); PIPE DREAM; POT FIREPERSON (POWER AGITATED); REFRIGERATION PLANT; ROAD WIDENER; ROLLER; SASGEN DERRICK; SEEDING MACHINE; SOIL STABILIZER (PUMP TYPE); SPRAY CURE MACHINE, SELF-PROPELLED; STRAW BLOWER MACHINE; SUB-GRADER; TUBE FINISHER OR BROOM C.M.I. OR SIMILAR TYPE; & TUGGER HOIST(COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 35.27	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 2 - C & D - ASPHALT HEATER PLANER; BACKFILLER WITH DRAG ATTACHMENT; BACKHOE; BACKHOE WITH SHEAR ATTACHED; BACKHOE-REAR PIVOTAL SWING; BATCH PLANT-CENTRAL MIX CONCRETE; BATCH PLANT, PORTABLE CONCRETE; BERM BUILDER-AUTOMATIC; BOAT		

DERRICK; BOAT-TUG; BORING MACHINE ATTACHED TO
 TRACTOR; BULLCLAM; VULLDOZER; C.M.I. ROAD BUILDER &
 SIMILAR TYPE; CABLE PLACER & LATYER;
 CARRIER-STRADDLE; CARRYALL-SCRAPER OR SCOPP;
 CHICAGO BOOM; COMPACTOR WITH BLAD ATTACHED;
 CONCRETE SAW (VERMEER OR SIMILAR TYPE); CONCRETE
 SPREADER FINISHER; COMBINATION, BIDWELL MACHINE;
 CRANE; CRANE-ELECTRIC OVERHEAD; CRANE-ROUGH
 TERRAIN; CRANE-SIDE BOOM; CRANE-TRUCK; CRANE-TOWER;
 DERRICK-BOOM; DERRICK-CAR; DIGGER -WHEEL (NOT
 TRENCHER OR ROAD WIDENER); DOUBLE NINE; DRAG LINE;
 DREDGE; DRILL-KENNY OR SIMILAR TYPE; EASY POUR
 MEDIAN BARRIER MACHINE (OR SIMILAR TYPE);
 ELECTROMATIC; FRANKIE PILE; GRADALL; GRADER; GURRY;
 SELF-PROPELLED; HEAVY EQUIPMENT ROBOTICS
 OPERATOR/MECHANIC; HOIST-MONORAIL; HOIST-STATIONARY
 & MOBILE TRACTOR; HOIST, 2 OR 3 DRUM; HORIZONTAL
 DIRECTIONAL DRILL OPERATOR; JACKALL; JUMBO MACHINE;
 KOCAL & KUHLMAN; LAND-SEAGOING VEHICLE; LOADER,
 ELEVATING; LOADER, FRONT END; LOADER, SKID STEER;
 LOCOMOTIVE; MECHANIC/WELDER; METRO CHIP HARVESTER
 WITH BOO; MUCKING MACHINE; PAVER-ASPHALT FINISHING
 MACHINE; PAVER-ROAD CONCRETE; PAVER-SLIP FORM
 (C.M.I. OR SIMILAR); PLACE CRETE MACHINE WITH BOOM;
 POST DRIVER (CARRIER MOUNTED); POWER DRIVEN
 HYDRAULIC PUMP & JACK (WHEN USED IN SLIP FORM OR
 LIFT SLAB CONSTRUCTION); PUMP CRETE MACHINE;
 REGULATOR-BALLAST; HYRAULIC POWER UNIT NOT ATTACHED
 TO RIG FOR PILE DRILLINGS; RIGS-DRILLING; ROTO MILL
 OR SIMILAR FULL LANE (8' WIDE & OVER); ROTO MILL OR
 SIMILAR TYPE (UNDER 8'); SHOVEL; SLIP FORM CURB
 MACHINE; SPEEDWING; SPIKEMASTER; STONECRUSHER; TIE
 PULLER & LOADER; TIE TAMPER; TRACTOR-DOUBLE BOOM;
 TRACTOR WITH ATTACHMENTS; TRUCK-BOOM; TRUCK-TIRE;
 TRENCH MACHINE; TUNNEL MACHINE (MARK 21 JAVA OR
 SIMILAR) & WHIRLEY (OR SIMILAR TYPE) (COLUMBIANA,
 MAHONING & TRUMBULL COUNTIES).....\$ 40.61 24.30
 POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE
 PROJECTS GROUP 1 - C & D - RIG, PILE DRIVER OR
 CAISSON TYPE; & RIG, PILE HYDRAULIC UNIT ATTACHED.
 (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....\$ 40.91 24.30
 POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC
 WASTE PROJECTS GROUP 5 - A & B - BRAKEPERSON;
 FIREPERSON; & OILER. (COLUMBIANA, MAHONING &
 TRUMBULL COUNTIES).....\$ 31.13 24.30
 POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC
 WASTE PROJECTS GROUP 4 - A & B - AIR CURTAIN
 DESTRUCTOR & SIMILAR TYPE; BATCH PLANT-JOB RELATED;
 BOILER OPERATOR; COMPRESSOR; CONVEYOR; CURB
 BUILDER, SELF-PROPELLED; DRILL WAGON; GENERATOR
 SET; GENERATOR-STEAM; HEATER-PORTABLE POWER;
 HYDRAULIC MANIUPLATOR CRANE; JACK-HYDRAULIC POWER
 DRIVEN; JACK-HYARAULIC (RAILROAD); LADAVATOR; MINOR
 MACHINE OPERATOR; MIXER-CONCRETE; MULCHING MACHINE;
 PIN PULLER; POWER BROOM; PULVERIZER; PUMP; ROAD
 FINISHING MAHINC (PULL TYPE);
 SAW-CONCRETE-SELF-PROPELLED (HIGHWAY WORK); SIGNAL
 PERSON; SPRAY CURE MACHINE-MOTOR POWERED; STUMP
 CUTTER; TRACTOR; TRENCHER FORM; WATER BLASTER;
 STEAM JENNY; SYPHON; VIBRATOR-GASOLINE; & WELDING
 MACHINE. (COLUMBIANA, MAHONING & TRUMBULL
 COUNTIES).....\$ 34.52 24.30
 POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC
 WASTE PROJECTS GROUP 3 - A & B - ASPHALT PLANT;
 BENDING MACHINE (PIPELINE OR TYPE); BORING MACHINE,

MOTOR DRIVEN; CHIP HARVESTER WITHOUT BOOM; CLEANING
 MACHINE, PIPELINE TYPE; COATING MACHINE, PIPELINE
 TYPE; COMPACTOR; CONCRETE BELT PLACER; CONCRETE
 FINISHER; CONCRETE PLANER OR ASPHALT; CONCRETE
 SPREADER; ELEVATOR; FORK LIFT (HOME BUILDING ONLY);
 FORK LIFT & LULLS; FORK LIFT WALK BEHIND (HOISTING
 OVER 1 BUCK HIGH); FORM LINE MACHINE; GREASE TRUCK
 OPERATOR; GROUT PUMP; GUNNITE MACHINE; HORIZONTAL
 DIRECTIONAL DRILL LOCATOR; SINGLE DRUM HOIST WITH
 OR WITHOUT TOWER; HUCK BOLTING MACHINE; HYDRAULIC
 SCAFFOLD (HOISTING BUILDING MATERIALS); PAVING
 BREAKER (SELF=PROPELLED OR RIDDEN); PIPE DREAM; POT
 FIREPERSON (POWER AGITATED); REFRIGERATION PLANT;
 ROAD WIDENER; ROLLER; SASGEN DERRICK; SEEDING
 MACHINE; SOIL STABILIZER (PUMP TYPE); SPRAY CURE
 MACHINE, SELF-PROPELLED; STRAW BLOWER MACHINE;
 SUB-GRADER; TUBE FINISHER OR BROOM C.M.I. OR
 SIMILAR TYPE; & TUGGER HOIST(COLUMBIANA, MAHONING
 & TRUMBULL COUNTIES).....\$ 38.47 24.30
 POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC
 WASTE PROJECTS GROUP 2 - A & B - ASPHALT HEATER
 PLANER; BACKFILLER WITH DRAG ATTACHMENT; BACKHOE;
 BACKHOE WITH SHEAR ATTACHED; BACKHOE-REAR PIVOTAL
 SWING; BATCH PLANT-CENTRAL MIX CONCRETE; BATCH
 PLANT, PORTABLE CONCRETE; BERM BUILDER-AUTOMATIC;
 BOAT DERRICK; BOAT-TUG; BORING MACHINE ATTACHED TO
 TRACTOR; BULLCLAM; VULLDOZER; C.M.I. ROAD BUILDER &
 SIMILAR TYPE; CABLE PLACER & LATYER;
 CARRIER-STRADDLE; CARRYALL-SCRAPER OR SCOPP;
 CHICAGO BOOM; COMPACTOR WITH BLAD ATTACHED;
 CONCRETE SAW (VERMEER OR SIMILAR TYPE); CONCRETE
 SPREADER FINISHER; COMBINATION, BIDWELL MACHINE;
 CRANE; CRANE-ELECTRIC OVERHEAD; CRANE-ROUGH
 TERRAIN; CRANE-SIDE BOOM; CRANE-TRUCK; CRANE-TOWER;
 DERRICK-BOOM; DERRICK-CAR; DIGGER -WHEEL (NOT
 TRENCHER OR ROAD WIDENER); DOUBLE NINE; DRAG LINE;
 DREDGE; DRILL-KENNY OR SIMILAR TYPE; EASY POUR
 MEDIAN BARRIER MACHINE (OR SIMILAR TYPE);
 ELECTROMATIC; FRANKIE PILE; GRADALL; GRADER; GURRY;
 SELF-PROPELLED; HEAVY EQUIPMENT ROBOTICS
 OPERATOR/MECHANIC; HOIST-MONORAIL; HOIST-STATIONARY
 & MOBILE TRACTOR; HOIST, 2 OR 3 DRUM; HORIZONTAL
 DIRECTIONAL DRILL OPERATOR; JACKALL; JUMBO MACHINE;
 KOCAL & KUHLMAN; LAND-SEAGOING VEHICLE; LOADER,
 ELEVATING; LOADER, FRONT END; LOADER, SKID STEER;
 LOCOMOTIVE; MECHANIC/WELDER; METRO CHIP HARVESTER
 WITH BOO; MUCKING MACHINE; PAVER-ASPHALT FINISHING
 MACHINE; PAVER-ROAD CONCRETE; PAVER-SLIP FORM
 (C.M.I. OR SIMILAR); PLACE CRETE MACHINE WITH BOOM;
 POST DRIVER (CARRIER MOUNTED); POWER DRIVEN
 HYDRAULIC PUMP & JACK (WHEN USED IN SLIP FORM OR
 LIFT SLAB CONSTRUCTION); PUMP CRETE MACHINE;
 REGULATOR-BALLAST; HYRAULIC POWER UNIT NOT ATTACHED
 TO RIG FOR PILE DRILLINGS; RIGS-DRILLING; ROTO MILL
 OR SIMILAR FULL LANE (8' WIDE & OVER); ROTO MILL OR
 SIMILAR TYPE (UNDER 8'); SHOVEL; SLIP FORM CURB
 MACHINE; SPEEDWING; SPIKEMASTER; STONECRUSHER; TIE
 PULLER & LOADER; TIE TAMPER; TRACTOR-DOUBLE BOOM;
 TRACTOR WITH ATTACHMENTS; TRUCK-BOOM; TRUCK-TIRE;
 TRENCH MACHINE; TUNNEL MACHINE (MARK 21 JAVA OR
 SIMILAR) & WHIRLEY (OR SIMILAR TYPE) (COLUMBIANA,
 MAHONING & TRUMBULL COUNTIES).....\$ 44.30 24.30
 POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC
 WASTE PROJECTS GROUP 1 - A & B- RIG, PILE DRIVER
 OR CAISSON TYPE; & RIG, PILE HYDRAULIC UNIT

ATTACHED. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 44.63	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 5 - BRAKEPERSON; FIREPERSON; & OILER. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....		
	\$ 25.94	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 4 - AIR CURTAIN DESTRUCTOR & SIMILAR TYPE; BATCH PLANT-JOB RELATED; BOILER OPERATOR; COMPRESSOR; CONVEYOR; CURB BUILDER, SELF-PROPELLED; DRILL WAGON; GENERATOR SET; GENERATOR-STEAM; HEATER-PORTABLE POWER; HYDRAULIC MANIUPLATOR CRANE; JACK-HYDRAULIC POWER DRIVEN; JACK-HYARAULIC (RAILROAD); LADAVATOR; MINOR MACHINE OPERATOR; MIXER-CONCRETE; MULCHING MACHINE; PIN PULLER; POWER BROOM; PULVERIZER; PUMP; ROAD FINISHING MAHINC (PULL TYPE); SAW-CONCRETE-SELF-PROPELLED (HIGHWAY WORK); SIGNAL PERSON; SPRAY CURE MACHINE-MOTOR POWERED; STUMP CUTTER; TRACTOR; TRENCHER FORM; WATER BLASTER; STEAM JENNY; SYPHON; VIBRATOR-GASOLINE; & WELDING MACHINE. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....		
	\$ 28.77	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 3 - ASPHALT PLANT; BENDING MACHINE (PIPELINE OR TYPE); BORING MACHINE, MOTOR DRIVEN; CHIP HARVESTER WITHOUT BOOM; CLEANING MACHINE, PIPELINE TYPE; COATING MACHINE, PIPELINE TYPE; COMPACTOR; CONCRETE BELT PLACER; CONCRETE FINISHER; CONCRETE PLANER OR ASPHALT; CONCRETE SPREADER; ELEVATOR; FORK LIFT (HOME BUILDING ONLY); FORK LIFT & LULLS; FORK LIFT WALK BEHIND (HOISTING OVER 1 BUCK HIGH); FORM LINE MACHINE; GREASE TRUCK OPERATOR; GROUT PUMP; GUNNITE MACHINE; HORIZONTAL DIRECTIONAL DRILL LOCATOR; SINGLE DRUM HOIST WITH OR WITHOUT TOWER; HUCK BOLTING MACHINE; HYDRAULIC SCAFFOLD (HOISTING BUILDING MATERIALS); PAVING BREAKER (SELF=PROPELLED OR RIDDEN); PIPE DREAM; POT FIREPERSON (POWER AGITATED); REFRIGERATION PLANT; ROAD WIDENER; ROLLER; SASGEN DERRICK; SEEDING MACHINE; SOIL STABILIZER (PUMP TYPE); SPRAY CURE MACHINE, SELF-PROPELLED; STRAW BLOWER MACHINE; SUB-GRADER; TUBE FINISHER OR BROOM C.M.I. OR SIMILAR TYPE; & TUGGER HOIST. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....		
	\$ 32.06	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 2 - ASPHALT HEATER PLANER; BACKFILLER WITH DRAG ATTACHMENT; BACKHOE; BACKHOE WITH SHEAR ATTACHED; BACKHOE-REAR PIVOTAL SWING; BATCH PLANT-CENTRAL MIX CONCRETE; BATCH PLANT, PORTABLE CONCRETE; BERM BUILDER-AUTOMATIC; BOAT DERRICK; BOAT-TUG; BORING MACHINE ATTACHED TO TRACTOR; BULLCLAM; VULLDOZER; C.M.I. ROAD BUILDER & SIMILAR TYPE; CABLE PLACER &LATYER; CARRIER-STRADDLE; CARRYALL-SCRAPER OR SCOPP; CHICAGO BOOM; COMPACTOR WITH BLAD ATTACHED; CONCRETE SAW (VERMEER OR SIMILAR TYPE); CONCRETE SPREADER FINISHER; COMBINATION, BIDWELL MACHINE; CRANE; CRANE-ELECTRIC OVERHEAD; CRANE-ROUGH TERRAIN; CRANE-SIDE BOOM; CRANE-TRUCK; CRANE-TOWER; DERRICK-BOOM; DERRICK-CAR; DIGGER -WHEEL (NOT TRENCHER OR ROAD WIDENER); DOUBLE NINE; DRAG LINE; DREDGE; DRILL-KENNY OR SIMILAR TYPE; EASY POUR MEDIAN BARRIER MACHINE (OR SIMILAR TYPE); ELECTROMATIC; FRANKIE PILE; GRADALL; GRADER; GURRY; SELF-PROPELLED; HEAVY EQUIPMENT ROBOTICS OPERATOR/MECHANIC; HOIST-MONORAIL; HOIST-STATIONARY & MOBILE TRACTOR; HOIST, 2 OR 3 DRUM; HORIZONTAL		

DIRECTIONAL DRILL OPERATOR; JACKALL; JUMBO MACHINE;
 KOCAL & KUHLMAN; LAND-SEAGOING VEHICLE; LOADER,
 ELEVATING; LOADER, FRONT END; LOADER, SKID STEER;
 LOCOMOTIVE; MECHANIC/WELDER; METRO CHIP HARVESTER
 WITH BOO; MUCKING MACHINE; PAVER-ASPHALT FINISHING
 MACHINE; PAVER-ROAD CONCRETE; PAVER-SLIP FORM
 (C.M.I. OR SIMILAR); PLACE CRETE MACHINE WITH BOOM;
 POST DRIVER (CARRIER MOUNTED); POWER DRIVEN
 HYDRAULIC PUMP & JACK (WHEN USED IN SLIP FORM OR
 LIFT SLAB CONSTRUCTION); PUMP CRETE MACHINE;
 REGULATOR-BALLAST; HYRAULIC POWER UNIT NOT ATTACHED
 TO RIG FOR PILE DRILLINGS; RIGS-DRILLING; ROTO MILL
 OR SIMILAR FULL LANE (8' WIDE & OVER); ROTO MILL OR
 SIMILAR TYPE (UNDER 8'); SHOVEL; SLIP FORM CURB
 MACHINE; SPEEDWING; SPIKEMASTER; STONECRUSHER; TIE
 PULLER & LOADER; TIE TAMPER; TRACTOR-DOUBLE BOOM;
 TRACTOR WITH ATTACHMENTS; TRUCK-BOOM; TRUCK-TIRE;
 TRENCH MACHINE; TUNNEL MACHINE (MARK 21 JAVA OR
 SIMILAR) & WHIRLEY (OR SIMILAR TYPE) (COLUMBIANA,
 MAHONING & TRUMBULL COUNTIES).....\$ 36.92 24.30
 POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 1-
 RIG, PILE DRIVER OR CAISSON TYPE; & RIG, PILE
 HYDRAULIC UNIT ATTACHED. (COLUMBIANA, MAHONING &
 TRUMBULL COUNTIES).....\$ 37.19 24.30

IRON0017-002 05/01/2024

Rates

Fringes

IRONWORKER: ORNAMENTAL, REINFORCING, & STRUCTURAL
 (ASHTABULA (NORTH OF ROUTE 6, STARTING AT THE
 GEAUGA COUNTY LINE, PROCEEDING EAST TO STATE ROUTE
 45), CUYAHOGA, ERIE (EASTERN 2/3), GEAUGA, HURON
 (EAST OF A LINE DRAWN FROM THE NORTH BORDER THROUGH
 MONROEVILLE & WILLARD), LAKE, LORAIN, MEDINA (NORTH
 OF OLD RTE. #224), PORTAGE (WEST OF A LINE FROM
 MIDDLEFIELD TO SHALERSVILLE TO DEERFIELD), AND
 SUMMIT (NORTH OF OLD RTE. #224, INCLUDING CITY
 LIMITS OF BARBERTON) COUNTIES).....\$ 36.83 29.01

IRON0017-010 05/01/2024

Rates

Fringes

IRONWORKER: STRUCTURAL, INCLUDING METAL BUILDING
 ERECTION & REINFORCING (ASHTABULA (EASTERN PART
 FROM LAKE ERIE ON THE NORTH TO ROUTE #322 ON THE
 SOUTH TO INCLUDE CONNEAUT, KINGSVILLE, SHEFFIELD,
 DENMARK, DORSET, CHERRY VALLEY, WAYNE, MONROE,
 PIERPONT, RICHMOND, ANDOVER & WILLIAMSFIELD
 TOWNSHIPS)).....\$ 36.83 29.01

IRON0044-001 06/01/2025

Rates

Fringes

IRONWORKER, REINFORCING (ADAMS (WESTERN PART),
 BROWN, BUTLER (SOUTHERN PART), CLERMONT, CLINTON
 (SOUTH OF A LINE DRAWN FROM BLANCHESTER TO
 LYNCHBURG), HAMILTON, HIGHLAND (EXCLUDING EASTERN
 ONE-FIFTH & PORTION OF COUNTY INSIDE LINES DRAWN
 FROM MARSHALL TO LYNCHBURG FROM THE NORTHERN COUNTY
 LINE THROUGH E. MONROE TO MARSHALL) AND WARREN
 (SOUTH OF A LINE DRAWN FROM BLANCHESTER THROUGH
 MORROW TO THE WEST COUNTY LINE) COUNTIES).....\$ 38.27 23.90

IRON0044-002 06/01/2025

Rates

Fringes

IRONWORKER: ORNAMENTAL; STRUCTURAL (CLINTON (SOUTH OF A LINE DRAWN FROM BLANCHESTER TO LYNCHBURG), HAMILTON, HIGHLAND (EXCLUDING EASTERN ONE-FIFTH & PORTION OF COUNTY INSIDE LINES DRAWN FROM MARSHALL TO LYNCHBURG FROM THE NORTHERN COUNTY LINE THROUGH E. MONROE TO MARSHALL) & WARREN (SOUTH OF A LINE DRAWN FROM BLANCHESTER THROUGH MORROW TO THE WEST COUNTY LINE)).....\$ 37.77 23.90

IRONWORKER: FENCE ERECTOR (CLINTON (SOUTH OF A LINE DRAWN FROM BLANCHESTER TO LYNCHBURG), HAMILTON, HIGHLAND (EXCLUDING EASTERN ONE-FIFTH & PORTION OF COUNTY INSIDE LINES DRAWN FROM MARSHALL TO LYNCHBURG FROM THE NORTHERN COUNTY LINE THROUGH E. MONROE TO MARSHALL) & WARREN (SOUTH OF A LINE DRAWN FROM BLANCHESTER THROUGH MORROW TO THE WEST COUNTY LINE)).....\$ 35.88 23.90

IRON0055-003 07/01/2024

Rates

Fringes

IRONWORKER: FENCE ERECTOR (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....\$ 29.77 21.30

IRONWORKER: ALL OTHER WORK (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....\$ 29.77 21.30

IRONWORKER: FLAT ROAD MESH (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....\$ 26.40 24.62

IRONWORKER: TUNNES & CAISSONS UNDER PRESSURE (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....\$ 35.50 29.20

IRON0147-002 06/01/2025

Rates

Fringes

IRONWORKER (ALLEN (NORTHERN HALF), DEFIANCE
(NORTHERN PART, EXCLUDING SOUTH OF A LINE DRAWN
FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH
INDEPENDENCE TO THE EASTERN COUNTY BORDER), MERCER
(NORTHERN HALF), PAULDING, PUTNAM (WESTERN PART,
EXCLUDING EAST OF A LINE DRAWN FROM THE NORTHERN
BORDER DOWN THROUGH MILLER CITY TO WHERE #696 MEETS
THE SOUTHERN BORDER), VAN WERT, AND WILLIAMS
(WESTERN PART, EXCLUDING EAST OF A LINE DRAWN FROM
PIONEER THROUGH STRYKER TO THE SOUTHERN BORDER)
COUNTIES).....\$ 38.00

26.39

IRON0172-002 06/01/2025

Rates

Fringes

IRONWORKER (CHAMPAIGN (EASTERN ONE-THIRD), CLARK
(EASTERN ONE-FOURTH), COSHOCTON (WEST OF A LINE
BEGINNING AT THE NORTHWESTERN COUNTY LINE GOING
THROUGH WALHONDING & TUNNEL HILL TO THE
SOUTHERN COUNTY LINE), CRAWFORD (SOUTH OF RTE.
#30), DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN,
HARDIN (EXCLUDING A LINE DRAWN FROM ROUNDHEAD TO
MAYSVILLE), HIGHLAND (EASTERN ONE-FIFTH), HOCKING,
JACKSON (NORTHERN HALF), KNOX, LICKING, LOGAN
(EASTERN ONE-THIRD), MADISON, MARION, MORROW,
MUSKINGUM (WEST OF A LINE.....\$ 40.87

23.15

IRON0207-004 06/01/2025

Rates

Fringes

IRONWORKER: ORNAMENTAL; REINFORCING; STRUCTURAL
(ASHTABULA (SOUTHERN PART STARTING AT THE GEAUGA
COUNTY LINE), COLUMBIANA (E. OF A LINE FROM
DAMASCUS TO HIGHLANDTOWN), MAHONING (N. OF OLD
ROUTE #224), PORTAGE (E. OF A LINE FROM MIDDLEFIELD
TO SHALERSVILLE TO DEERFIELD) & TRUMBULL).....\$ 36.26
IRONWORKER: LAYOUT; SHEETER (ASHTABULA (SOUTHERN
PART STARTING AT THE GEAUGA COUNTY LINE),
COLUMBIANA (E. OF A LINE FROM DAMASCUS TO
HIGHLANDTOWN), MAHONING (N. OF OLD ROUTE #224),
PORTAGE (E. OF A LINE FROM MIDDLEFIELD TO
SHALERSVILLE TO DEERFIELD) & TRUMBULL).....\$ 37.26

28.16

28.16

IRON0290-002 06/01/2025

Rates

Fringes

IRONWORKER (ALLEN (SOUTHERN HALF), AUGLAIZE, BUTLER
(NORTH OF A LINE DRAWN FROM EAST TO THE WEST
COUNTY LINE GOING THROUGH OXFORD, DARRTOWN &
WOODSDALE), CHAMPAIGN (EXCLUDING EAST OF A LINE
DRAWN FROM CATAWLA TO THE POINT WHERE #68
INTERSECTS THE NORTHERN COUNTY LINE), CLARK
(WESTERN TWO-THIRDS), CLINTON (EXCLUDING SOUTH OF
A LINE DRAWN FROM BLANCHESTER TO LYNCHBURG), DARKE,
GREENE, HIGHLAND (INSIDE LINES DRAWN FROM MARSHALL
TO LYNCHBURG & FROM THE NORTHERN COUNTY LINE
THROUGH EA.....\$ 37.39

25.35

IRON0549-003 12/01/2022

Rates

Fringes

IRONWORKER (BELMONT, GUERNSEY, HARRISON, JEFFERSON, MONROE & MUSKINGUM (EXCLUDING PORTION WEST OF A LINE STARTING AT ADAMS MILL GOING TO ADAMSVILLE AND GOING FROM ADAMSVILLE THROUGH BLUE ROCK TO THE SOUTH BORDER)).....\$ 35.19 25.66

IRON0550-004 05/01/2024

Rates

Fringes

IRONWORKERS: STRUCTURAL, ORNAMENTAL AND REINFORCING (ASHLAND, CARROLL, COLUMBIANA (W. OF A LINE FROM DAMASCUS TO HIGHLANDTOWN), COSHOCTON (E. OF A LINE BEGINNING AT NW CO. LINE GOING THROUGH WALHONDING & TUNNEL HILL TO THE SOUTH CO. LINE), HOLMES, HURON (S. OF OLD RTE. #224), MAHONING (S. OF OLD RTE. #224), MEDINA (S. OF OLD RTE. #224), PORTAGE (S. OF OLD RTE. #224), RICHLAND, STARK, SUMMIT (S. OF OLD RTE. #224, EXCLUDING CITY LIMITS OF BARBERTON), TUSCARAWAS, & WAYNE).....\$ 34.70 22.88

IRON0769-004 06/01/2025

Rates

Fringes

IRONWORKER (ADAMS (EASTERN HALF), GALLIA, JACKSON (SOUTHERN HALF), LAWRENCE & SCIOTO).....\$ 39.70 29.59

IRON0787-003 06/01/2025

Rates

Fringes

IRONWORKER (ATHENS, MEIGS, MORGAN, NOBLE, AND WASHINGTON COUNTIES).....\$ 36.10 24.65

LAB00265-008 05/01/2024

Rates

Fringes

LABORER GROUP 4- MINER (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); & GUNITE NOZZLE PERSON. TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (REMAINING COUNTIES OF OHIO) ..\$ 36.47 14.45

LABORER GROUP 4- MINER (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); & GUNITE NOZZLE PERSON. TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (CUYAHOGA, GEAUGA & LAKE COUNTIES).....\$ 38.13 14.45

LABORER GROUP 4- MINER (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); & GUNITE NOZZLE PERSON. TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES) ..\$ 36.90 14.45

LABORER GROUP 3- BLASTER; MUCKER; POWDER PERSON; TOP LANDER; WRENCHER (MECHANICAL JOINTS & UTILITY PIPELINE); YARNER; HAZARDOUS WASTE (LEVEL A); CONCRETE SPECIALIST; CONCRETE CREW IN TUNNELS (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); CURB SETTER & CUTTER; GRADE CHECKER; UTILITY PIPELINE TAPPER; WATERLINE; AND CAULKER. TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID

THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (REMAINING COUNTIES OF OHIO)\$ 36.02	14.45
LABORER GROUP 3- BLASTER; MUCKER; POWDER PERSON; TOP LANDER; WRENCHER (MECHANICAL JOINTS & UTILITY PIPELINE); YARNER; HAZARDOUS WASTE (LEVEL A); CONCRETE SPECIALIST; CONCRETE CREW IN TUNNELS (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); CURB SETTER & CUTTER; GRADE CHECKER; UTILITY PIPELINE TAPPER; WATERLINE; AND CAULKER. TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (CUYAHOGA, GEAUGA & LAKE COUNTIES)\$ 37.68	
LABORER GROUP 3- BLASTER; MUCKER; POWDER PERSON; TOP LANDER; WRENCHER (MECHANICAL JOINTS & UTILITY PIPELINE); YARNER; HAZARDOUS WASTE (LEVEL A); CONCRETE SPECIALIST; CONCRETE CREW IN TUNNELS (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); CURB SETTER & CUTTER; GRADE CHECKER; UTILITY PIPELINE TAPPER; WATERLINE; AND CAULKER. TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES).....\$ 36.45	14.45
LABORER GROUP 2- ASPHALT RAKER; CONCRETE PUDDLER; KETTLE MAN PIPELINE); MACHINE DRIVEN TOOLS (GAS, ELECTRIC, AIR); MASON TENDER; BRICK PAVER; MORTAR MIXER; POWER BUGGY OR POWER WHEELBARROW; PAINT STRIPER; SHEETING & SHORING MAN; SURFACE GRINDER MAN; PLASTIC FUSING MACHINE OPERATOR; PUG MILL OPERATOR; & VACUUM DEVICES (WET OR DRY); RODDING MACHINE OPERATOR; DIVER; SCREWMAN OR PAVER; SCREED PERSON; WATER BLAST, HAND HELD WAND; PUMPS 4'" & UNDER (GAS, AIR OR ELECTRIC) & HAZARDOUS WASTE (LEVEL C); AIR TRACK AND WAGON DRILL; BOTTOM PERSON; COFFERDAM (BELOW 25 FT. DEEP); CONCRETE SAW PERSON; CUTTING WITH BURNING TORCH; FORM SETTER; HAND SPIKER (RAILROAD); PIPELAYER; TUNNEL LABORER (WITHOUT AIR) & CAISSON; UNDERGROUND PERSON (WORKING IN SEWER AND WATERLINE, CLEANING, REPAIRING & RECONDITIONING); SANDBLASTER NOZZLE PERSON; & HAZARDOUS WASTE (LEVEL B). TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (REMAINING COUNTIES OF OHIO)..\$ 35.69	
LABORER GROUP 2- ASPHALT RAKER; CONCRETE PUDDLER; KETTLE MAN PIPELINE); MACHINE DRIVEN TOOLS (GAS, ELECTRIC, AIR); MASON TENDER; BRICK PAVER; MORTAR MIXER; POWER BUGGY OR POWER WHEELBARROW; PAINT STRIPER; SHEETING & SHORING MAN; SURFACE GRINDER MAN; PLASTIC FUSING MACHINE OPERATOR; PUG MILL OPERATOR; & VACUUM DEVICES (WET OR DRY); RODDING MACHINE OPERATOR; DIVER; SCREWMAN OR PAVER; SCREED PERSON; WATER BLAST, HAND HELD WAND; PUMPS 4'" & UNDER (GAS, AIR OR ELECTRIC) & HAZARDOUS WASTE (LEVEL C); AIR TRACK AND WAGON DRILL; BOTTOM PERSON; COFFERDAM (BELOW 25 FT. DEEP); CONCRETE SAW PERSON; CUTTING WITH BURNING TORCH; FORM SETTER; HAND SPIKER (RAILROAD); PIPELAYER; TUNNEL LABORER (WITHOUT AIR) & CAISSON; UNDERGROUND PERSON (WORKING IN SEWER AND WATERLINE, CLEANING, REPAIRING & RECONDITIONING); SANDBLASTER NOZZLE	14.45

PERSON; & HAZARDOUS WASTE (LEVEL B). TUNNEL
LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE
SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE
RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE
OR SHE IS SIGNALING. (CUYAHOGA, GEAUGA & LAKE
COUNTIES).....\$ 37.35 14.45

LABORER GROUP 2- ASPHALT RAKER; CONCRETE PUDDLER;
KETTLE MAN PIPELINE); MACHINE DRIVEN TOOLS (GAS,
ELECTRIC, AIR); MASON TENDER; BRICK PAVER; MORTAR
MIXER; POWER BUGGY OR POWER WHEELBARROW; PAINT
STRIPER; SHEETING & SHORING MAN; SURFACE GRINDER
MAN; PLASTIC FUSING MACHINE OPERATOR; PUG MILL
OPERATOR; & VACUUM DEVICES (WET OR DRY); RODDING
MACHINE OPERATOR; DIVER; SCREWMAN OR PAVER; SCREED
PERSON; WATER BLAST, HAND HELD WAND; PUMPS 4" &
UNDER (GAS, AIR OR ELECTRIC) & HAZARDOUS WASTE
(LEVEL C); AIR TRACK AND WAGON DRILL; BOTTOM
PERSON; COFFERDAM (BELOW 25 FT. DEEP); CONCRETE SAW
PERSON; CUTTING WITH BURNING TORCH; FORM SETTER;
HAND SPIKER (RAILROAD); PIPELAYER; TUNNEL LABORER
(WITHOUT AIR) & CAISSON; UNDERGROUND PERSON
(WORKING IN SEWER AND WATERLINE, CLEANING,
REPAIRING & RECONDITIONING); SANDBLASTER NOZZLE
PERSON; & HAZARDOUS WASTE (LEVEL B). TUNNEL
LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE
SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE
RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE
OR SHE IS SIGNALING. (ASHTABULA, ERIE, HURON,
LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE,
SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES)..\$ 36.12 14.45

LABORER GROUP 1- ASPHALT LABORER; CARPENTER TENDER;
CONCRETE CURING APPLICATOR; DUMP MAN (BATCH TRUCK);
GUARDRAIL AND FENCE INSTALLER; JOINT SETTER;
LABORER (CONSTRUCTION); LANDSCAPE LABORER; MESH
HANDLERS & PLACER; RIGHT-OF-WAY LABORER; RIPRAP
LABORER & GROUTER; SCAFFOLD ERECTOR; SEAL COATING;
SURFACE TREATMENT OR ROAD MIX LABORER; SIGN
INSTALLER; SLURRY SEAL; UTILITY MAN; BRIDGE MAN;
HANDYMAN; WATERPROOFING LABORER; FLAGPERSON;
HAZARDOUS WASTE (LEVEL D); DIVER TENDER; ZONE
PERSON & TRAFFIC CONTROL. TUNNEL LABORER WITH
AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL
PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID
THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS
SIGNALING. (REMAINING COUNTIES OF OHIO).....\$ 35.52 14.45

LABORER GROUP 1- ASPHALT LABORER; CARPENTER TENDER;
CONCRETE CURING APPLICATOR; DUMP MAN (BATCH TRUCK);
GUARDRAIL AND FENCE INSTALLER; JOINT SETTER;
LABORER (CONSTRUCTION); LANDSCAPE LABORER; MESH
HANDLERS & PLACER; RIGHT-OF-WAY LABORER; RIPRAP
LABORER & GROUTER; SCAFFOLD ERECTOR; SEAL COATING;
SURFACE TREATMENT OR ROAD MIX LABORER; SIGN
INSTALLER; SLURRY SEAL; UTILITY MAN; BRIDGE MAN;
HANDYMAN; WATERPROOFING LABORER; FLAGPERSON;
HAZARDOUS WASTE (LEVEL D); DIVER TENDER; ZONE
PERSON & TRAFFIC CONTROL. TUNNEL LABORER WITH
AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL
PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID
THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS
SIGNALING. (CUYAHOGA, GEAUGA & LAKE COUNTIES).....\$ 37.18 14.45

LABORER GROUP 1- ASPHALT LABORER; CARPENTER TENDER;
CONCRETE CURING APPLICATOR; DUMP MAN (BATCH TRUCK);
GUARDRAIL AND FENCE INSTALLER; JOINT SETTER;
LABORER (CONSTRUCTION); LANDSCAPE LABORER; MESH
HANDLERS & PLACER; RIGHT-OF-WAY LABORER; RIPRAP

LABORER & GROUTER; SCAFFOLD ERECTOR; SEAL COATING; SURFACE TREATMENT OR ROAD MIX LABORER; SIGN INSTALLER; SLURRY SEAL; UTILITY MAN; BRIDGE MAN; HANDYMAN; WATERPROOFING LABORER; FLAGPERSON; HAZARDOUS WASTE (LEVEL D); DIVER TENDER; ZONE PERSON & TRAFFIC CONTROL. TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING. (ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES).....	\$ 35.95	14.45
LABORER: SEWAGE PLANTS, WASTE PLANTS, WATER TREATMENT FACILITIES, PUMPING STATIONS, & ETHANOL PLANTS CONSTRUCTION. (CUYAHOGA AND GEAUGA COUNTIES ONLY).....	\$ 38.56	14.45

PAIN0006-002 05/01/2023

	Rates	Fringes
PAINTER COMMERCIAL REPAINT GROUP 3- SPRAY PAINTING..	\$ 29.95	18.95
PAINTER COMMERCIAL REPAINT GROUP 2- SANDBLASTING & BUFFING (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 29.65	18.95
PAINTER COMMERCIAL REPAINT GROUP 1- BRUSH; & ROLLER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 29.25	18.95
PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 4- BRIDGE BLASTER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE))	\$ 37.01	18.95
PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 3- SPRAY PAINTING; CLOSED STEEL ABOVE 55 FEET; BRIDGES & OPEN STRUCTURAL STEEL; TANKS - WATER TOWERS; BRIDGE PAINTERS; BRIDGE RIGGERS; CONTAINMENT BUILDERS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 31.45	18.95
PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 2- SANDBLASTING & BUFFING (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 31.15	18.95
PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 1- BRUSH; & ROLLER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 30.75	18.95

PAIN0007-002 07/01/2025

	Rates	Fringes
PAINTER: NEW COMMERCIAL WORK: GROUP 9- EPOXY SPRAY (EXCLUDING WATER BASED) (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 8- TOWERS; TANKS; BRIDGES; STACKS OVER 30 FEET (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO,		

CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 7- SPRAY SOLVENT BASED MATERIAL; SAND & ABRASIVE BLASTING (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 6- SOLVENT-BASED CATALIZED EPOXY MATERIALS OF 2 OR MORE COMPONENT MATERIALS, TO INCLUDE SOLVENT-BASED CONVERSION VARNISH (EXCLUDING WATER BASED) (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 5- ALL METHODS OF SPRAY (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 4- LEAD ABATEMENT (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 3- SWING STAGE & CHAIR (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 2- REFINERIES & REFINERY TANKS; SURFACES 30 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER NEW COMMERCIAL WORK GROUP 1- BRUSH; SPRAY & SANDBLASTING POT TENDER. REPAINT IS 90% OF GROUP RATE.....	\$ 33.66	23.88

PAIN0012-008 05/01/2019

Rates

Fringes

PAINTER: GROUP 5- ELEVATED TANKS; STEEPLEJACK WORK; BRIDGE; & LEAD ABATEMENT (BUTLER COUNTY).....	\$ 26.30	10.20
PAINTER: GROUP 4- SANDBLASTING; & WATERBLASTING (BUTLER COUNTY).....	\$ 26.05	10.20
PAINTER: GROUP 3- SPRAY (BUTLER COUNTY).....	\$ 25.80	10.20
PAINTER: GROUP 2- BRUSH & ROLLER (BUTLER COUNTY)....	\$ 25.30	10.20
PAINTER: GROUP 1- BRIDGE EQUIPMENT TENDER; BRIDGE/CONTAINMENT BUILDER (BUTLER COUNTY).....	\$ 21.95	10.20

PAIN0012-010 05/01/2019

Rates

Fringes

PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING SPRAY (BROWN, CLERMONT, HAMILTON & WARREN).....	\$ 25.80	10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING SANDBLASTING & HOPPER TENDER; WATER BLASTING (BROWN, CLERMONT, HAMILTON & WARREN).....	\$ 26.05	10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING BRUSH & ROLLER (BROWN, CLERMONT, HAMILTON & WARREN).....	\$ 25.30	10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING BRIDGES WHEN HIGHEST POINT OF CLEARANCE IS 60 FEET OR MORE; & LEAD ABATEMENT PROJECTS (BROWN, CLERMONT, HAMILTON & WARREN).....	\$ 26.30	10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING BRIDGE EQUIPMENT TENDER AND CONTAINMENT BUILDER (BROWN, CLERMONT, HAMILTON & WARREN).....	\$ 21.95	10.20

PAIN0093-001 12/01/2024

Rates

Fringes

PAINTER: POWER GENERATING FACILITIES (ATHENS, GUERNSEY, HOCKING, MONROE, MORGAN, NOBLE AND WASHINGTON COUNTIES).....	\$ 33.29	24.46
PAINTER: BRIDGES; LOCKS; DAMS; TENSION TOWERS; & ENERGIZED SUBSTATIONS (ATHENS, GUERNSEY, HOCKING, MONROE, MORGAN, NOBLE AND WASHINGTON COUNTIES).....	\$ 36.44	24.46

PAIN0249-002 05/01/2025

Rates

Fringes

PAINTER: GROUP 8: BRIDGE BLASTER, RIGGER (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE)...	\$ 40.86	13.97
PAINTER: GROUP 7: TANKS, STACKS & TOWERS (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE)...	\$ 33.86	13.97
PAINTER: GROUP 6: BRIDGE EQUIPMENT TENDER & OR CONTAINMENT BUILDER (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 37.86	13.97
PAINTER: GROUP 5: COAL TAR (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 30.65	13.97
PAINTER: GROUP 4: STEEPLEJACK WORK (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 30.10	13.97
PAINTER: GROUP 3: SPRAY; SANDBLAST; STEAMCLEAN; LEAD ABATEMENT (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 29.90	13.97
PAINTER: GROUP 2: SWING, SCAFFOLD BRIDGES; STRUCTURAL STEEL; OPEN ACID TANK; HIGH TENSION ELECTRICAL EQUIPMENT; & HOT PIPES (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 33.09	13.97
PAINTER: GROUP 1: BRUSH & ROLLER (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 29.15	13.97

PAIN0356-002 09/01/2009

Rates

Fringes

PAINTER: TANKS; STACKS; AND TOWERS (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 28.63	7.25
PAINTER: STRUCTURAL STEEL AND SWING STAGE (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 25.42	7.25
PAINTER: SPRAY (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 21.40	7.25
PAINTER: SANDBLASTING; STEAM CLEANING;		

WATERBLASTING; AND HAZARDOUS WORK (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 25.82	7.25
PAINTER: BRUSH AND ROLLER (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 20.93	7.25
PAINTER: BRIDGES; BLASTERS; AND RIGGERS (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 34.60	7.25
PAINTER: BRIDGE EQUIPMENT TENDERS AND CONTAINMENT BUILDERS (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 27.93	7.25

PAIN0438-002 12/01/2023

Rates

Fringes

PAINTER: POWER GENERATING FACILITIES (BELMONT, HARRISON AND JEFFERSON COUNTIES).....	\$ 32.94	19.49
PAINTER: BRIDGES, LOCKS, DAMS, TENSION TOWERS & ENERGIZED SUBSTATIONS (BELMONT, HARRISON AND JEFFERSON COUNTIES).....	\$ 36.09	19.49

PAIN0476-001 06/01/2025

Rates

Fringes

PAINTER: GROUP 7- TOWERS; STACKS (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 32.64	18.36
PAINTER: GROUP 6- TANKS; SANDBLASTING (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 35.27	18.36
PAINTER: GROUP 5- EPOXY/MASTIC; SPRAY- BAR JOIST/DECK; WORKING ABOVE 50 FEET; AND SWINGSTAGES (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 31.29	18.36
PAINTER: GROUP 4- SPRAY, EXCEPT BAR JOIST/DECK (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 31.14	18.36
PAINTER: GROUP 3- STRUCTURAL STEEL (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 40.27	18.36
PAINTER: GROUP 2- BRIDGES (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 40.27	18.36
PAINTER: GROUP 1- PAINTERS, BRUSH & ROLLER (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 30.64	18.36

PAIN0555-002 01/01/2025

Rates

Fringes

PAINTER: GROUP 4- STACKS; BRIDGES (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO).....	\$ 40.03	21.54
PAINTER: GROUP 3- SAND BLASTING; SPRAY; STEAM CLEANING; PRESSURE WASHING; EPOXY & TWO COMPONENT MATERIALS; LEAD ABATEMENT; HAZARDOUS WASTE; TOXIC MATERIALS; BULK & STORAGE TANKS OF 25,000 GALLON CAPACITY OR MORE; ELEVATED TANKS (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO).....	\$ 36.72	21.54
PAINTER: GROUP 2- BRUSH; ROLLER; POWER TOOLS, UNDER 40 FEET (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO)...	\$ 35.02	21.54
PAINTER: GROUP 1- CONTAINMENT BUILDER (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO).....	\$ 33.32	21.54

PAIN0639-001 05/01/2011

Rates

Fringes

SIGN PAINTER & ERECTOR FOOTNOTES: A. 7 PAID HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; JULY 4TH; LABOR DAY; THANKSGIVING DAY; CHRISTMAS DAY & 1 FLOATING DAY B. VACATION PAY: AFTER 1 YEAR'S SERVICE - 5 DAYS' PAID VACATION; AFTER 2, BUT LESS THAN 10 YEARS' SERVICE - 10 DAYS' PAID VACATION; AFTER 10, BUT LESS THAN 20 YEARS' SERVICE - 15 DAYS' PAID VACATION; AFTER 20 YEARS' SERVICE - 20 DAYS' PAID VACATION C. FUNERAL LEAVE UP TO 3 DAYS

MAXIMUM PAID LEAVE FOR DEATH OF MOTHER, FATHER,
BROTHER, SISTER, SPOUSE, CHILD, MOTHER-IN-LAW,
FATHER-IN-LAW, GRANDPARENT AND INLAW PROVIDED
EMPLOYEE ATTENDS FUNERAL.....\$ 20.61 3.50

PAIN0788-002 06/01/2024

Rates

Fringes

PAINTER: STRUCTURAL STEEL (ASHLAND, CRAWFORD, ERIE,
HANCOCK, HURON, MARION, MORROW, OTTAWA (ALLEN, BAY,
BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE,
DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE,
FISHBACK, GEM BEACH & GENOA), RICHLAND, SANDUSKY,
SENECA & WYANDOT) WINTER REPAINT: BETWEEN
DECEMBER 1 TO MARCH 31 - 90%JR \$.50 PER HOUR
SHALL BE ADDED TO THE RATE OF PAY FOR THE
CLASSIFICATION OF WORK: WHILE WORKING
SWINGSTAGE, BOATSWAIN CHAIR, NEEDLE BEAM AND
HORIZONTAL CABLE. WHILE OPERATING SPRAYGUNS,
SANDBLASTING, COBBLASTING AND HIGH PRESSURE
WATERBLASTING (4000PSI). \$1.00 PER HOUR SHALL
BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION
OF WORK: FOR THE APPLICATION OF CATALIZED
EPOXY, INCLUDING LATEX EPOXY THAT IS DEEMED
HAZARDOUS, LEAD ABATEMENT, OR FOR WORK OR MATERIAL
WHERE SPECIAL PRECAUTIONS BEYOND NORMAL WORK DUTIES
MUST BE TAKEN. FOR WORKING ON STACKS, TANKS, AND
TOWERS OVER 40 FEET IN HEIGHT.....\$ 30.73 17.52

PAINTER: BRUSH & ROLLER (ASHLAND, CRAWFORD, ERIE,
HANCOCK, HURON, MARION, MORROW, OTTAWA (ALLEN, BAY,
BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE,
DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE,
FISHBACK, GEM BEACH & GENOA), RICHLAND, SANDUSKY,
SENECA & WYANDOT) WINTER REPAINT: BETWEEN
DECEMBER 1 TO MARCH 31 - 90%JR \$.50 PER HOUR
SHALL BE ADDED TO THE RATE OF PAY FOR THE
CLASSIFICATION OF WORK: WHILE WORKING
SWINGSTAGE, BOATSWAIN CHAIR, NEEDLE BEAM AND
HORIZONTAL CABLE. WHILE OPERATING SPRAYGUNS,
SANDBLASTING, COBBLASTING AND HIGH PRESSURE
WATERBLASTING (4000PSI). \$1.00 PER HOUR SHALL
BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION
OF WORK: FOR THE APPLICATION OF CATALIZED
EPOXY, INCLUDING LATEX EPOXY THAT IS DEEMED
HAZARDOUS, LEAD ABATEMENT, OR FOR WORK OR MATERIAL
WHERE SPECIAL PRECAUTIONS BEYOND NORMAL WORK DUTIES
MUST BE TAKEN. FOR WORKING ON STACKS, TANKS, AND
TOWERS OVER 40 FEET IN HEIGHT.....\$ 29.13 17.52

PAIN0813-005 12/01/2008

Rates

Fringes

PAINTER: BRIDGES, LOCKS, DAMS & TENSION TOWERS
(GALLIA, LAWRENCE, MEIGS & VINTON).....\$ 27.83 10.00

PAINTER: BASE RATE (GALLIA, LAWRENCE, MEIGS &
VINTON).....\$ 24.83 10.00

PAIN0841-001 07/01/2025

Rates

Fringes

PAINTERS: GROUP 7- SYNTHETIC EXTERIOR, DRYWALL
FINISHER AND/OR TAPER, DRYWALL FINISHER AND
FOLLOW-UP MAN USING AUTOMATIC TOOLS (MEDINA,
PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND
SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE)

COUNTIES).....\$ 33.18	18.15
PAINTERS: GROUP 6- PUBLIC & COMMERCE TRANSPORTATION, STEEL OR GALVANIZED, BRIDGES, TUNNELS & RELATED SUPPORT ITEMS (CONCRETE) (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....\$ 38.60	18.15
PAINTERS: GROUP 5- SANDBLAST, PAINTING OF STANDPIPES, ETC. FROM SCAFFOLDS, BRIDGE WORK AND/OR OPEN STRUCTURAL STEEL, STANDPIPES AND/OR WATER TOWERS (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....\$ 33.18	18.15
PAINTERS: GROUP 4- SPRAY GUN OPERATOR OF ANY & ALL COATINGS (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....\$ 32.78	18.15
PAINTERS: GROUP 3- SWING SCAFFOLD, BOSUM CHAIR, & WINDOW JACK (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....\$ 32.68	18.15
PAINTERS: GROUP 2- EPOXY APPLICATION (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....\$ 32.58	18.15
PAINTERS: GROUP 1- BRUSH, ROLLER & PAPERHANGER (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....\$ 31.93	18.15

PAIN0841-002 07/01/2025

Rates

Fringes

PAINTER: SPRAY; TANK INTERIOR & EXTERIOR (CARROLL, COSHOCKTON, HOLMES, STARK, TUSCARAWAS & WAYNE).....\$ 32.78	18.15
PAINTER: BRUSH & ROLLER (CARROLL, COSHOCTON, HOLMES, STARK, TUSCARAWAS & WAYNE).....\$ 31.93	18.15
PAINTER: BRIDGES; TOWERS, POLES & STACKS; SANDBLASTING STEEL; STRUCTURAL STEEL & METALIZING (CARROLL, COSHOCTON, HOLMES, STARK, TUSCARAWAS & WAYNE).....\$ 33.18	18.15

PAIN1020-002 07/01/2025

Rates

Fringes

PAINTER: WALLCOVERINGS (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$.50 PREMIUM APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 28.34	18.54
PAINTER: SWING STAGE, CHAIR, SPIDERS, & CHERRY PICKERS (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$.50 PREMIUM APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 27.84	18.54
PAINTER: SPRAY, SANDBLASTING PRESSURE CLEANING, & REFINERY (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR	

PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$.50 PREMIUM APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....	\$ 28.34	18.54
PAINTER: LEAD ABATEMENT (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$.50 PREMIUM APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....		
	\$ 29.34	18.54
PAINTER: DRYWALL FINISHING & TAPING (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES): LL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$.50 PREMIUM APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....		
	\$ 28.34	18.54
PAINTER: BRUSH & ROLLER (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$.50 PREMIUM APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....		
	\$ 27.59	18.54

PAIN1275-002 05/01/2025

Rates

Fringes

PAINTER: STRUCTURAL STEEL & SWING STAGE (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....	\$ 30.50	15.16
PAINTER: STACKS; TANKS; & TOWERS (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....	\$ 34.46	15.16
PAINTER: SPRAY (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....	\$ 32.15	15.16
PAINTER: SANDBLASTING; STEAMCLEANING; WATERBLASTING (3500 PSI OR OVER)& HAZARDOUS WORK (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....	\$ 32.35	15.16
PAINTER: BRUSH; ROLLER (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....	\$ 30.20	15.16
PAINTER: BRIDGES (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....	\$ 37.26	15.16

PLAS0109-001 06/01/2025

Rates

Fringes

PLASTERER (MEDINA, PORTAGE, STARK, AND SUMMIT COUNTIES).....	\$ 33.00	23.83
---	----------	-------

PLAS0109-003 06/01/2025

Rates

Fringes

PLASTERER (CARROLL, HOLMES, TUSCARAWAS, AND WAYNE COUNTIES).....	\$ 33.00	23.83
---	----------	-------

PLAS0132-002 07/01/2025

Rates

Fringes

PLASTERER (BROWN, BUTLER, CLERMONT, HAMILTON,

HIGHLAND, WARREN COUNTIES).....	\$ 31.35	17.65

PLAS0404-002 05/01/2018		
	Rates	Fringes
PLASTERER (ASHTABULA, CUYAHOGA, GEAUGA, AND LAKE COUNTIES).....	\$ 29.63	17.11

PLAS0404-003 05/01/2018		
	Rates	Fringes
PLASTERER (LORAIN COUNTY).....	\$ 28.86	17.11

PLAS0526-022 05/01/2018		
	Rates	Fringes
PLASTERER (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 28.86	17.11

PLAS0526-023 05/01/2018		
	Rates	Fringes
PLASTERER (BELMONT, HARRISON, AND JEFFERSON COUNTIES).....	\$ 28.21	17.11

PLAS0886-001 07/01/2025		
	Rates	Fringes
PLASTERER (FULTON, HANCOCK, HENRY, LUCAS, PUTNAM, AND WOOD COUNTIES).....	\$ 36.65	25.60

PLAS0886-003 07/01/2025		
	Rates	Fringes
PLASTERER (DEFIANCE, ERIE, HURON, OTTAWA, PAULDING, SANDUSKY, AND SENECA).....	\$ 36.65	25.60

PLAS0886-004 07/01/2025		
	Rates	Fringes
PLASTERER (ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, AND VAN WERT).....	\$ 35.29	23.07

PLUM0042-002 07/01/2025		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (ASHLAND, CRAWFORD, ERIE, HURON, KNOX, LORAIN, MORROW, RICHLAND & WYANDOT).....	\$ 43.02	26.45

PLUM0050-002 06/30/2025		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD).....	\$ 51.00	32.56

PLUM0055-003 05/05/2025		
	Rates	Fringes
PLUMBER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, MEDINA (N. OF RTE. #18 & SMITH ROAD) & SUMMIT (N. OF RTE. #303, INCLUDING THE CORPORATE LIMITS OF THE CITY OF HUDSON)).....	\$ 44.86	30.03

PLUM0083-001 07/01/2023		
	Rates	Fringes
PLUMBER AND STEAMFITTER (BELMONT & MONROE (NORTH OF RTE. #78)).....	\$ 35.94	37.35

PLUM0094-002 05/01/2025		
	Rates	Fringes
PLUMBER/PIPEFITTER (CARROLL (NORTHERN HALF), STARK, AND WAYNE COUNTIES).....	\$ 47.48	27.14

PLUM0120-002 05/01/2025		
	Rates	Fringes
PIPEFITTER (ASHTABULA, CUYAHOGA, GEauga, LAKE, LORAIN (THE C.E.I. POWER HOUSE IN AVON LAKE), MEDINA (N. OF RTE. #18) & SUMMIT (N. OF #303)).....	\$ 49.17	28.55

PLUM0162-002 06/01/2024		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (CHAMPAIGN, CLARK, CLINTON, DARKE, FAYETTE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 43.05	27.18

PLUM0168-002 06/01/2025		
	Rates	Fringes
PLUMBER/PIPEFITTER (MEIGS, MONROE (SOUTH OF RTE. #78), MORGAN (SOUTH OF RTE. #78) & WASHINGTON).....	\$ 40.92	37.20

PLUM0189-002 06/01/2025		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (DELAWARE, FAIRFIELD, FRANKLIN, HOCKING, LICKING, MADISON, MARION, PERRY, PICKAWAY, ROSS & UNION).....	\$ 53.00	27.59

PLUM0219-002 06/01/2025		
	Rates	Fringes
PLUMBER AND STEAMFITTER (MEDINA (RTE. #18 FROM EASTERN EDGE OF MEDINA CO., WEST TO EASTERN CORPORATE LIMITS OF THE CITY OF MEDINA, & ON THE COUNTY ROAD FROM THE WEST CORPORATE LIMITS OF MEDINA RUNNING DUE WEST TO AND THROUGH COMMUNITY OF RISLEY TO THE WESTERN EDGE OF MEDINA COUNTY - ALL TERRITORY SOUTH OF THIS LINE), PORTAGE, AND SUMMIT (S. OF RTE. #303) COUNTIES).....	\$ 46.87	28.39

PLUM0392-002 06/01/2025		
	Rates	Fringes
PLUMBER/PIPEFITTER (BROWN, BUTLER, CLERMONT, HAMILTON & WARREN).....	\$ 43.30	27.40

PLUM0396-001 06/01/2025		
	Rates	Fringes
PLUMBER/PIPEFITTER (COLUMBIANA (EXCLUDING WASHINGTON & YELLOW CREEK TOWNSHIPS & LIVERPOOL TWP. - SECS. 35 & 36 - WEST OF COUNTY ROAD #427), MAHONING AND TRUMBULL COUNTIES).....	\$ 40.55	29.25

PLUM0495-002 06/01/2025

Rates

Fringes

PLUMBER, PIPEFITTER, STEAMFITTER (CARROLL (ROSE,
MONROE, UNION, LEE, ORANGE, PERRY & LOUDON
TOWNSHIPS), COLUMBIANA (WASHINGTON & YELLOW CREEK
TOWNSHIPS & LIVERPOOL TOWNSHIP, SECS. 35 & 36, WEST
OF COUNTY RD. #427), COSHOCTON, GUERNSEY, HARRISON,
HOLMES, JEFFERSON, MORGAN (SOUTH TO STATE RTE. #78
& FROM MCCONNELSVILLE WEST ON STATE RTE. #37 TO THE
PERRY COUNTY LINE), MUSKINGUM, NOBLE, AND
TUSCARAWAS COUNTIES).....\$ 39.32

37.60

PLUM0577-002 06/01/2025

Rates

Fringes

PLUMBER, PIPEFITTER, STEAMFITTER (ADAMS, ATHENS,
GALLIA, HIGHLAND, JACKSON, LAWRENCE, PIKE, SCIOTO &
VINTON).....\$ 42.65

28.56

PLUM0776-002 07/01/2025

Rates

Fringes

PLUMBER, PIPEFITTER, STEAMFITTER (ALLEN, AUGLAIZE,
HARDIN, LOGAN, MERCER, SHELBY AND VAN WERT
COUNTIES).....\$ 42.76

30.81

TEAM0377-003 05/01/2025

Rates

Fringes

TRUCK DRIVER: GROUP 2- TRACTOR-TRAILER COMBINATION:
FUEL; POLE TRAILER; READY MIX; SEMI-TRACTOR; &
ASPHALT OIL SPRAYBAR MAN WHEN OPERATED FROM CAB; 5
AXLES & OVER; BELLY DUMP; END DUMP; ARTICULATED
DUMP; HEAVY DUTY EQUIPMENT; LOW BOY; & TRUCK
MECHANIC (STATEWIDE, EXCEPT CUYAHOGA, GEAUGA &
LAKE).....\$ 35.26
TRUCK DRIVER: GROUP 1- ASPHALT DISTRIBUTOR; BATCH;
4- WHEEL SERVICE; 4-WHEEL DUMP; OIL DISTRIBUTOR &
TANDEM (STATEWIDE, EXCEPT CUYAHOGA, GEAUGA &
LAKE).....\$ 34.26

18.85

18.85

TEAM0436-002 05/01/2025

Rates

Fringes

TRUCK DRIVER: GROUP 2- SEMI FUEL, SEMI TRACTOR,
EUCLIDS, DARTS, TANK, ASPHALT SPREADERS, LOW BOYS,
CARRY-ALL, TOURNA-ROCKERS, HI-LIFTS, EXTRA LONG
TRAILERS, SEMI-POLE TRAILERS, DOUBLE HOOK-UP
TRACTOR TRAILERS INCLUDING TEAM TRACK & RAILROAD
SIDING, SEMI-TRACTOR & TRI-AXLE TRAILER, TANDEM
TRACTOR & TANDEM TRAILER, TAG ALONG TRAILER,
EXPANDABLE TRAILER OR TOWING REQUIRING ROAD
PERMITS, READY-MIX (AGITATOR OR NON-AGITATOR), BULK
CONCRETE DRIVER, DRY BATCH TRUCK, ARTICULATED END
DUMP (CUYAHOGA, GEAUGA & LAKE).....\$ 35.73
TRUCK DRIVER: GROUP 1- STRAIGHT & DUMP, STRAIGHT
FUEL (CUYAHOGA, GEAUGA & LAKE).....\$ 34.92

19.30

19.30

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>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

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) (iii)).

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

Union Rate Identifiers

A four-letter identifier beginning with characters other than SU, UAVG, SA, or SC denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE:

UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The SU identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

SU wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The SA identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the SA identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

=====

END OF GENERAL DECISION"