3LR

September 22, 2017 Letting

Notice to Bidders Specifications and Proposal

Illinois Department
of Transportation
Springfield, Illinois 62764

Illinois Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands Reclamation

Contract No. M1703
Project Name: Bell & Zoller No. 3 – Summit
County: Williamson
Project Number: AML-GWmE-1703

Illinois Department of
Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Director

NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. prevailing local time, **Friday, September 22, 2017**, at which time the bids will be publicly opened from the iCX SecureVault.

2. **DESCRIPTION OF WORK**. The proposed reclamation work is identified and advertised for bids in the Invitation for Bids as:

   3LR
   Bell & Zoller No. 3 - Summit Reclamation Project
   AML-GWmE-1703
   Williamson County

   Reclamation of the Bell & Zoller No. 3 – Summit abandoned mine site by the Department of Natural Resources using federal Abandoned Mined Lands Funds.

3. **INSTRUCTIONS TO BIDDERS**.

   (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

   (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

4. **AWARD CRITERIA AND REJECTION OF BIDS**.

   This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Illinois Department of Natural Resources, Office of Mines and Minerals, Division of Abandoned Mined Lands Reclamation in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed project, and to waive technicalities.

.

The award of this contract is also subject to administrative rule 30 CFR 874.16, which states:

To receive AML funds, every successful bidder for an AML contract must be eligible under 773.12, 773.13 and 773.14 of this Chapter at the time of contract award to receive a permit or provisionally issued permit to conduct surface coal mining operations.

If you are the successful low bidder on this project you will be required to complete a form entitled AML CONTRACTOR OWNERSHIP AND CONTROL INFORMATION form. The information from this form will be submitted through the automated Applicant/Violator System to determine if any surface coal mining and reclamation operation owned or controlled by either the contractor or by any person who owns or controls the contractor business is currently in violation of the Act, any Federal rule or regulation promulgated pursuant thereto, a State program, or any Federal or State law, rule, or regulation pertaining to air or water environmental protection.

5. **FEDERAL FUNDING**. Funding of this agreement is contingent upon award and continued availability of federal funding, and State appropriation of such funds.

By Order of the

Illinois Department of Natural Resources
Office of Mines and Minerals

Thomas A. Benner, Director

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795, 96-0920, and 97-0895 enacted substantial changes to the provisions of the Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors that entered into a contractual agreement with a total value of $50,000 or more with a person or entity who has a contract subject to the Code and approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Illinois Department of Transportation's CPO upon request within 15 calendar days after execution of the subcontract.

Financial disclosures required pursuant to Sec. 50-35 of the Code must be submitted for all applicable subcontractors. The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled State Required Ethical Standards Governing Subcontractors.

RETURN WITH SUBCONTRACT

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The CPO may terminate or void the contract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

Section 50-2 of the Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible CPO whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

A. Bribery

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50-5.

B. Felons

Section 50-10. Felons.

(a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

(b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

RETURN WITH SUBCONTRACT

C. Debt Delinquency

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the CPO may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

D. Prohibited Bidders, Contractors and Subcontractors

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

The undersigned, on behalf of the subcontracting company, has read and understands the above certifications and makes the certifications as required by law.

_____
Name of Subcontracting Company

_____ _____
Authorized Officer Date

RETURN WITH SUBCONTRACT

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

A. The disclosures hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed. The subcontractor further certifies that the Department has received the disclosure forms for each subcontract.

The CPO may void the bid, contract, or subcontract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Code. Furthermore, the CPO may void the contract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all subcontracts with a total value of $50,000 or more, from subcontractors identified in Section 20-120 of the Code, shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each individual making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.
The current annual salary of the Governor is $177,412.00.

In addition, all disclosures shall indicate any other current or pending contracts, subcontracts, proposals, leases, or other ongoing procurement relationships the subcontracting entity has with any other unit of state government and shall clearly identify the unit and the contract, subcontract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.**

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by an individualthat is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ___ NO___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ___ NO __

   (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO __

   (Note: Only one set of forms needs to be completed per individual per subcontract even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in the subcontracting entity or the subcontracting entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by an individual that is authorized to execute contracts for your organization. The individual signing can be, but does not have to be, the individual for which the form is being completed. The subcontractor is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT on page 2 of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

RETURN WITH SUBCONTRACT

Form B: Instructions for Identifying Other Contracts & Procurement Related Information

Disclosure Form B must be completed for each subcontract submitted by the subcontracting entity. *Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the subcontractor to ignore Form B. Form B must be completed, checked, and dated or the subcontract will not be approved.*

The Subcontractor shall identify, by checking Yes or No on Form B, whether it has any pending contracts, subcontracts, leases, bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the subcontractor only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the subcontractor must list all non-IDOT State of Illinois agency pending contracts, subcontracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts or subcontracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included.

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A
Subcontractor: Financial Information & Potential Conflicts of Interest Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of $50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

The current annual salary of the Governor is $177,412.00.

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the SUBCONTRACTOR (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 60% of the annual salary of the Governor. **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)

NAME: _____

ADDRESS _____

_____

Type of ownership/distributable income share:

stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet):

% or $ value of ownership/distributable income share: _____

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.

Yes ___ No __

If your answer is yes, please answer each of the following questions.

1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No __

2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary. _____

_____

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
   Yes ___No __

4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___No __

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.
   Yes ___No __

If your answer is yes, please answer each of the following questions.

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___No __

2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____
   _____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of of 100% of the annual salary of the Governor? Yes ___No __

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
   Yes ___No __

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___No __

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ___No __

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government.
   Yes ___No __

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No __

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

---

3 Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

_____

_____

_____

RETURN WITH SUBCONTRACT

4. Suspension or Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: suspension or debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): _____

Nature of disclosure: _____

_____

_____

_____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: ☐ _____ _____

Signature of Individual or Authorized Representative — Date

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

☐ _____ _____

Signature of Authorized Representative — Date

The bidder has a continuing obligation to supplement these disclosures under Sec. 50-35 of the Code.

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B
Subcontractor: Other Contracts & Financial Related Information Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of $50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No __
If "No" is checked, the subcontractor only needs to complete the signature box on this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

☐ _____ _____
Signature of Authorized Officer Date

OWNERSHIP CERTIFICATION

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership

Any remaining ownership interest is held by individuals receiving less than $106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

☐ Yes ☐ No ☐ N/A (Form A disclosure(s) established 100% ownership)

Illinois Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands Reclamation

SAFETY FACT SHEET

The purpose of this fact sheet is to alert contractors, consulting engineers, landowners and the general public to the safety hazards which abandoned mine sites pose. While not intended to be a comprehensive safety manual, this document will provide some general guidelines for working or living near abandoned mines.

Mine Openings

Open mine shafts or other portals to underground mines are a problem commonly found at abandoned sites. In addition to the obvious hazard that an open, vertical shaft presents, seemingly sound shafts may, in fact, contain unstable fill material or be covered by poorly-constructed, deteriorated caps or seals. Such seals can fail without notice and extreme care should be taken to avoid unnecessary ground disturbance around old shafts.

Horizontal shafts, often called drifts or adits, can provide easy access to underground mines and, because there is no vertical drop, may seem harmless. However, abandoned mines frequently contain heavy concentrations of harmful gases and may be severely deficient in oxygen. They may also contain other physical hazards such as flooded rooms or fractured and falling roofs, and may house a variety of vermin.

Mine Gas

Underground mine atmospheres frequently contain explosive or toxic gases such as methane and hydrogen sulfide. These gases can make their way to the surface either through shafts, fissures, or in the case of a very shallow mine, directly through the ground. A mere 5-15 percent concentration of methane escaping to the surface is highly combustible and explosive under certain conditions. Consequently, smoking or use of any open flame near a mine opening of any type must be avoided. While methane is both flammable and an asphyxiant, hydrogen sulfide is poisonous and quite deadly at significantly lower concentrations. For this reason alone, abandoned underground coal mines should never be entered.

Mine Refuse

"Gob" refers to the coarse refuse, usually deposited in large, steep piles, stemming from the coal sorting process. "Slurry" is defined as the fine, silty refuse which remains after the coal washing process is completed. Both types of refuse have the potential to ignite and burn slowly for long periods of time due to their coal content. While some burning refuse areas are easily identified by smoke, ash or burned coal particles, other areas may be burning below the surface and exhibit no visible signs. As a result, extreme caution should be exercised when walking or driving on or near gob piles or slurry impoundments.

Highwalls

Surface mining for coal often results in a final cut pit with steep, sheer walls surrounding a flooded impoundment. These walls pose a unique hazard because of their vertical height above the water level, and because of their erosive nature resulting from their unstable slopes. Drownings have occurred when individuals slipped into the pits and were unable to climb out. In some areas, final cuts do not fill with water, presenting a hazard due to the vertical drop.

Mine Buildings

Many abandoned mines include old machinery, buildings and equipment referred to collectively as the "tipple area". Abandoned mine structures are frequently quite deteriorated and subject to collapse. Coal hoppers, auger pits and underground steam ducts can also be found at most tipple sites and are sometimes obscured by vegetative growth or rubble accumulation, creating a trap-like situation.

Toxic Substances

Industrial chemicals and other harmful substances occasionally have been found at abandoned mine sites. Coal oil, abandoned transformers containing PCB's and asbestos insulation in tipple buildings are not uncommon. Abandoned mine sites also attract illegal dumping of other substances not related to the mining operation, but equally as dangerous. Workers should consider any unknown substance to be potentially harmful until determined to be otherwise.

Safety Precautions

As with any construction site, standard safety precautions required by the Occupational Safety and Health Administration (OSHA) should be strictly followed when performing reclamation work. These include, but are not limited to, wearing hard hats, safety glasses and steel-toed boots. Be aware of any electrical or other cables on site and always take the necessary water safety precautions when working around water impoundments. Always contact J.U.L.I.E. before excavating.

The reclamation of abandoned mines sometimes involves the use of chemicals such as alkali materials and chemical grouts. Always follow the directions provided in the Manufacturer's Safety Data Sheet when handling these and other materials.

Finally, abandoned mine reclamation generally requires the use of bulldozers, pan scrapers, large backhoes, heavy-duty trucks and other heavy equipment. Individual pieces must meet all OSHA standards and must never be operated in a negligent or reckless manner. Individuals on the construction site, whether on foot or in a road vehicle, should always give the heavy equipment operator the right-of-way since visibility is often quite limited.

SPECIAL PROVISIONS
TABLE OF CONTENTS

SPECIAL PROVISIONS FOR THE CONSTRUCTION OF:
Bell & Zoller No. 3 – Summit Reclamation Project
Williamson County, Illinois
AML-GWmE-1703

The "Standard Specifications for Road and Bridge Construction," adopted April 1, 2016 by the Illinois Department of Transportation; as amended and supplemented by the "Supplemental Specifications and Recurring Special Provisions," adopted January 1, 2017 (hereinafter referred to collectively as "Standard Specifications"), are incorporated by reference and made a part of this Contract for the Reclamation of the Bell & Zoller No. 3 – Summit Reclamation Project, Williamson County, AML-GWmE-1703. (The Standard Specifications can be purchased from the Illinois Department of Transportation.)

The following Special Provisions supplement the Standard Specifications, and govern the construction of the Bell & Zoller No. 3 – Summit Reclamation Project. In the event of conflict between the Special Provisions and the Standard Specifications, the Special Provisions shall take precedence and govern.

In the application of the Standard Specifications to this Contract, references to the Department of Transportation shall be interpreted to mean the Department of Natural Resources; Office of Mines and Minerals; Division of Abandoned Mined Lands Reclamation (Department).

The advertising for Bids, Pre-qualifications of Bidders, Issuance of Proposals, Proposal Guarantee, and Acceptance and Opening of Bids shall be in accordance with the policies and procedures of the Illinois Department of Natural Resources. Proposals, Schedule of Prices, Signature Sheet and other bidding or contract requirements as utilized by the Department of Natural Resources; Office of Mines and Minerals; Division of Abandoned Mined Lands Reclamation (Department) shall apply to this contract.

DESCRIPTION OF THE PROJECT

This reclamation project provides for the correction of hazardous mine conditions and for the correction of existing mine conditions which adversely affect the surrounding environment. This project consists of work items as described in detail herein, and within the Plans or Plan Documents.

LOCATION OF THE PROJECT

The proposed reclamation project is located 4.5 miles south of Zeigler, IL in Section 11, Township 8 South, Range 1 East in Williamson County.

ABILITY OF CONTRACTOR TO COMPLETE WORK

The Contractor shall be able to provide the necessary equipment and manpower to successfully complete all phases of the contract as described herein.

RESPONSIBILITY OF THE CONTRACTOR

It shall be the responsibility of the Contractor to visit the reclamation site in order to become fully acquainted with all the details pertaining to the project. The Contractor shall be responsible for ***obtaining*** any and all permits required ***by local ordinances, state and/or federal laws, and shall be required to become a party to the Department of Natural Resources; Office of Mines and Minerals; Division of Abandoned Mined Lands Reclamation (Department) Storm Water Pollution Prevention***

Plan, as mandated by the Illinois Environmental Protection Agency General Permit for Storm Water Discharges. Consents for Right of Entry from property owners, ***will be*** obtained by the Department.

Any fees required for the procurement of other permits which may be necessary shall be at the expense of the Contractor, not to be reimbursed by the State, but to be considered incidental to the contract.

During the performance of this construction contract, the Contractor shall not enter into any agreement to provide additional work for or at the direction of the owner(s) of the property where the reclamation shall take place, or with the owner(s) of adjacent or nearby property, without the prior written approval of the Department. The Contractor agrees that any additional work to be performed for such owners, after approval by the Department, will not be permitted to interfere with the scheduled operations or planned reclamation results specified for the reclamation project. The Contractor further agrees to indemnify and hold harmless the Department against any and all claims for personal injury or property damage arising out of or occasioned by the additional work.

STARTING DATE OF CONTRACT

Work on the project shall commence within 15 calendar days of the execution of the contract. The Contractor shall contact the Department within the 15 day period to schedule a preconstruction conference prior to the beginning of actual construction operations.

CONTRACT ENDING DATE

This Contract shall end on or before December 31, 2019 (see also interim progress date below).

PROGRESS AND LIQUIDATED DAMAGES

All work shall proceed in accordance with a Progress Schedule as provided in Article 108.02 of the Standard Specifications.

Establishing vegetation is critical to the success of reclamation projects. Seeding must be performed within specified times for optimum chances of success. Failure to complete all prerequisite earthwork, erosion control, ***permanent*** seeding (or temporary seeding, if approved by the Engineer) ***and mulching*** by September 30, 2018 shall be considered a material breach of the Contract and the Department may assess liquidated damages immediately upon such failure, and until said work is completed, as provided in Article 108.09 of the Standard Specifications.

All remaining work, including final clean-up, removal of equipment, final inspection, any alterations, repair, remedial or holdover work, reseeding, and submission of the final pay request shall be completed prior to the contract ending date.

EXISTING PAVEMENTS

Existing on-site roadways may be used for construction traffic. The Contractor shall provide temporary additional roads needed for required construction access, maintain existing roads throughout construction, and restore to original or better condition at completion of work.

BASE AND TOPPING MATERIALS

For temporary construction which will be removed when no longer needed for construction purposes, and all affected areas restored to original or better condition at the completion of work, the selection of these materials is at the Contractor's option, unless otherwise specified.

FIELD ENGINEERING

Requirements Included:

The Contractor shall provide and pay for all field engineering services required for the project, including:

1. Lay-out and field stake the project's construction limits, unless otherwise specified on the plans, to the satisfaction of the Engineer.

2. Survey work required in execution of the project.

3. Civil, structural or other professional engineering services specified, or required to execute the Contractor's construction methods.

Survey Reference Points:

Existing basic horizontal and vertical control points for the project are identified on the plans and will be identified by the Engineer for the Contractor's use. The Contractor shall locate and protect control points prior to starting site work, and preserve all permanent reference points during construction.

Project Survey Requirement:

The Contractor shall use established bench marks on-site as identified on the plans. The Contractor shall establish construction limits, lines and levels, locate and lay-out by instrumentation and similar appropriate means, all site improvements. From time to time, the Engineer shall verify layouts by same methods.

Initial, periodic and final cross-sectioning of borrow areas for payment will be performed by the Engineer.

Records:

The Contractor shall maintain complete, accurate records, computations and field books of all control and survey work as it progresses. These shall be kept on-site for use of and reference by the Engineer.

Submittal:

The Contractor shall submit name and address of surveyor or engineer to the Project Engineer.

OWNER OCCUPANCY

Owners will occupy premises during entire construction period for conduction of their normal

operations. The Contractor shall cooperate with Owners in scheduling operations to minimize conflict and to facilitate Owner's usage.

TEMPORARY CONTROLS

A. Dust and Mud Control:

The Contractor shall provide positive methods and apply dust control materials to minimize raising dust from construction operations, and provide positive means to prevent air-borne dust from dispersing into the atmosphere.

B. Debris Control:

The Contractor shall initiate and maintain a specific program to prevent accumulation of debris at the construction site, storage and parking areas, or along access roads and haul roads.

C. Pollution Control:

The Contractor shall provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of noxious substances and sediments from construction operations. ***All projects involving the disturbance of 1 or more acres are covered by NPDES General Permit Number ILR100000, issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities. The Contractor shall be required to comply with the provisions of the General Permit and must become a party to the Department of Natural Resources; Office of Mines and Minerals; Division of Abandoned Mined Lands Reclamation Storm Water Pollution Prevention Plan (See Sample Document following the Special Provisions)***.

The Contractor shall prevent harmful substances, such as acid water, from entering public or private waters. ***If treatment of acid water*** is determined necessary by the Engineer and it is not specified within these special provisions, any water treated will be paid for in accordance with Article 109.04 of the Standard Specifications. The Contractor is liable for restoration of water quality and aquatic life if adversely affected by his/her actions. The Contractor shall maintain all such systems throughout the duration of the project.

The Contractor shall provide systems for control of atmospheric pollutants to prevent toxic concentrations of chemicals; to prevent harmful dispersal of pollutants into the atmosphere; and to comply with all permit requirements that may apply.

The Contractor must notify the Engineer immediately if buried wastes, liquid waste vessels or other potentially harmful materials are encountered. Necessary precautions should be taken to safeguard the area and to protect workers and the public until further directions are provided by the Engineer.

End of SECTION 000

DIVISION 100 - GENERAL REQUIREMENTS AND COVENANTS

SECTION 101: DEFINITION OF TERMS - (revise and add the following articles as indicated)

Whenever in these specifications or in other contract documents the following terms or pronouns in place of them are used, the intent of meaning shall be interpreted as follows:

Article 101.03 Award - (revise as indicated)

The decision of the Department of Natural Resources; Office of Mines and Minerals; Division of Abandoned Mined Lands Reclamation to accept the proposal of the lowest responsible bidder for the work, subject to the execution and approval of a satisfactory contract therefore and bond to secure the performance thereof, and to such other conditions as may be specified or otherwise required by law.

Article 101.14 Department - (revise as indicated)

The Department of Natural Resources of the State of Illinois with its principal offices of business at Springfield.

Article 101.16 Engineer - (revise as indicated)

The Director of the Department of Natural Resources of the State of Illinois; or his authorized representative limited by the particular duties entrusted to him.

Article 101.35 Right of Way - (revise as indicated)

Right of way shall be replaced by construction limits, except when used in conjunction with right of way markers or highways.

Article 101.39 Roadway - (revise as indicated)

Roadway shall be replaced by site. Slope limits of embankments will be replaced by proposed lines and grades.

Article 101.47 Subgrade - (revise as indicated)

The top surface of the mine refuse upon which the cover soil is placed.

Add the following Articles 101.56, 101.57, and 101.58.

Article 101.56 Gob

Coarse textured mine waste material, generally acidic, from a coal cleaning process. This material is composed of rock, shale, pyritic material and varying amounts of coal. The material varies considerably in its moisture content, texture, stable angle of repose and bearing capacity.

Article 101.57 Mine Spoil

A mixture of various soil and rock material as a result of the removal of overburden to expose the coal in surface mining. The material varies considerably in its' moisture content, texture, stable angle of repose and bearing capacity.

Article 101.58 Slurry

A mixture of coal fines and fine coal waste material resulting from a coal cleaning process. This material is composed of water, silts, clays, pyritic material and coal. The material varies considerably in its' moisture content, stable angle of repose, shear strength and bearing capacity.

End of Revisions to SECTION 101: DEFINITION OF TERMS

SECTION 102: ADVERTISEMENT, BIDDING, AWARD, AND CONTRACT EXECUTION –
(revise the following article as indicated)

Article 102.01 - (add the following)

When the plans or Special Provisions include information pertaining to subsurface exploration, borings, test pits and other preliminary investigation, such information represents only the best knowledge of the Department of Natural Resources as to the location, character or quantity of the materials encountered and is only included for the convenience of the bidder. The Department of Natural Resources assumes no responsibility whatever in respect to the sufficiency or accuracy of the information, and there is no guaranty, either expressed or implied, that the conditions indicated are representative of those existing throughout the work, or that unanticipated developments may not occur. All soil information upon which the design was prepared is available for examination by all prospective bidders at the Department of Natural Resources' Springfield or Benton office.

The topographical land features of abandoned coal mine sites have typically been altered or impacted by the mining operations. When mine refuse covers those features, it may be difficult or impossible to discover or estimate the full extent of impacts to the ground surface. The depths and composition of mine refuse, as well as corresponding ground surface characteristics as represented in the Plans, are based upon available information and extrapolations from surrounding land features and deductive reasoning as to the probable techniques employed by the mining operation. The Plan lines that indicate existing conditions do not purport to fully represent minor variations in refuse depth or thickness, or small, hidden pockets of mine refuse. Such conditions encountered, shall not constitute a basis for unit price adjustment or extra compensation.

End of Revisions to SECTION 102

SECTION 107: LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC - (revise and add the following articles as indicated)

Article 107.11 Insurance Requirements for Railroad - Highway Crossing - (add the following)

When work is to be performed within the right-of-way of an active railroad, the Contractor shall provide the following insurance requirements.

Article 107.19 Unexpected Regulated Substances - (revise as indicated)

Delete references to the Response Action Contractor Indemnification Act found in Article 107.19, 6th paragraph. Said Act is not applicable to federally funded abandoned mine reclamation projects. All other provisions of Article 107.19 shall remain in full force and effect.

Article 107.20 Protection and Restoration of Property - (add the following)

If any damages are incurred from the Contractor's operations to any properties outside of the construction limits as shown on the plans, the Contractor shall be responsible for all repairs required to restore the damaged areas to their original condition regardless of the property involved. Any deviations from the limits of the construction area or requirements specified herein shall only be done with written approval of the Engineer pursuant to the following:

1. Written request from the Contractor, due to the limitations of the construction area as it affects his efficiency to complete the contract.

2. If the Engineer deems it necessary to deviate from the construction limits, as provided herein, to improve the work ability of the contract.

Article 107.22 Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas. (delete and replace with the following)

Proposed borrow areas are to be designated by the Contractor to the Engineer and approved prior to their use. A map showing the location and approximate size limits of the borrow area shall be submitted to the Engineer for approval. The Engineer will consult with the Department to determine if potentially significant cultural and /or biological resources may be present at the site. If the Department determines that potentially significant cultural and/or biological resources may be present, the Contractor shall have the option of choosing another site or paying for additional surveys and testing. Results of the additional surveying and testing will determine if the site may be used or if the Contractor must provide another site. The borrow area shall not be disturbed until the Department has given approval.

Article 107.27 Insurance - (delete and replace with the following)

The Contractor shall obtain and thereafter keep in force the following insurance coverage provided by insurance companies acceptable to the Department and authorized to transact business under the laws of the State of Illinois. The insurance companies providing coverage shall be rated in the Best's Key Rating Guide. The Department will accept companies with a rating not lower than B+ provided the financial size category is VII or larger. Companies rated A- or better shall have a financial size category of not less than VI. Coverage limits shall be written at not less than the minimum specified in this

Article. Higher minimum limits and additional coverage may be specified by a special provision elsewhere in the contract. Whether stated in this Article or elsewhere, the Department does not warrant the adequacy of the types of insurance coverage or the limits of liability specified.

(a) Workers Compensation and Employers Liability

(1) Workers compensation shall be provided in accordance with the provisions of the Illinois Worker's Compensation Act, as amended. Notwithstanding the rating and financial size categories stated in this Article, coverage may be provided by a group self-insurer authorized in Section 4(a) of the Act and approved pursuant to the rules of the Illinois Department of Insurance.

(2) Employers Liability

a.	Each Accident	$500,000
b.	Disease - policy limit	$500,000
c.	Disease - each employee	$500,000

(b) Commercial General Liability

Required liability insurance coverage shall be written in the occurrence form and shall provide coverage for operations of the Contractor; operations of Sub-Contractor=s (contingent or protective liability); completed operations; broad form property damage and hazards of explosion, collapse and underground; and contractual liability. The general aggregate limit shall be endorsed on a per project basis.

(1) General Aggregate Limit	$2,000,000
(2) Products - Completed Operation Aggregate Limit	$2,000,000
(3) Each Occurrence Limit	$1,000,000

The coverage shall provide by an endorsement in the appropriate manner and form, the Department, to its officers, agents and employees shall be named as additional insureds with respect to the policies and any umbrella excess liability coverage for occurrences arising in whole or in part out of the work and operations performed. The Department may accept a separate owner's protective liability policy in lieu of the Department, its officers, and employees being insured on the Contractor's policy.

(c) Owners and Contractor's Protective (OCP) Liability

The Contractor shall provide an OCP policy covering the property owner(s) of the site where the work is to be performed. In the case of multiple owners, all the landowners may be listed as additional insurers on the same policy.

This project will require OCP Policy coverage for four property owners.

If the Contractor chooses to put the Department on an OCP (in lieu of placing the Department as an additional insured on the Commercial General Liability - see (b) above), then the Department should be listed as the insured, with all landowners listed as additional insured(s). The amounts of insurance shall be as follows:

BODILY INJURY LIABILITY		PROPERTY DAMAGE LIABILITY	
Each Occurrence		Each Occurrence	Aggregate
$1,000,000		$500,000	$1,000,000

or

COMBINED SINGLE LIMIT	$1,000,000

The required OCP policy shall contain the following endorsement:

"Each named insured shall be provided full coverage under this policy without regard to the fact that such named insured is not in contractual privity with the Contractor. It is understood that the construction operations are performed for and on behalf of the Department, with the consent of the property owner(s)-insured(s). Coverage under this policy with respect to liability arising out of operations shall not be denied to any named-insured because of his passive relationship to the Contractor".

When any named insured is a corporation, insurance coverage under the OCP policy shall extend to the Corporation, its officers, agents, and employees.

(d) Commercial Automobile Liability

The policy shall cover owned, non-owned and hired vehicles.

Bodily Injury & Property Damage Liability Limit Each Occurrence	$1,000,000

(e) Umbrella Liability

Any policy shall provide excess limits over and above the other insurance limits stated in this Article. The Contractor may purchase insurance for the full limits required or by a combination of primary policies for lesser limits and remaining limits provided by the umbrella policy.

When work is to be performed within *railroad right-of-ways,* the requirements of Article 107.11 of the Standard Specifications will also apply.

All insurance shall remain in force during the period covering occurrences happening on or after the effective date and remaining in effect during performance of the work and at all times thereafter when the Contractor may be correcting, removing or replacing defective work until notification of the date of final inspection. Termination or refusal to renew shall not be made without 30 days prior written notice to the Department by the insured(s) and the policies shall be endorsed so as to remove any language restricting or limiting liability concerning this obligation.

Certified copies of the original policies or certificate(s) of insurance by the insurer(s) issuing the policies and endorsements setting forth the coverage, limits and endorsements shall be filed with the Department before the Department will execute the contract. A certificate of insurance shall include a statement that, "the coverage and limits conform to the minimums required by Article 107.27 of the Standard Specifications for the Road and Bridge Construction". Any exception or deviation shall be brought to the attention of the Department for a ruling of acceptability. In no event shall any failure of the Department to receive polices or certificates or to demand receipt be construed as a waiver of the Contractor's obligation to obtain and keep in force the required insurance.

All costs for insurance as specified herein will be considered as included in the cost of the contract. The Contractor shall, at its own expense and risk of delay, cease operations if the insurance required is terminated or reduced below the required amounts of coverage. Coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor from its obligation to indemnify in excess of the coverage in accordance with the contract.

Article 107.32 Furnishing Right-of-Way - (change to)

The Department shall secure and provide permission from the property owners for reclamation to be performed.

(Add the following section)
Article 107.42 Limitation on Mechanics Liens

The owners and tenants of private property involved in Abandoned Mined Land (AML) projects are not responsible to the Contractor, nor to any Sub-Contractor, material supplier, operator or laborer for any of the costs or expenses of the reclamation work. AML projects are undertaken pursuant to the Abandoned Mined Lands and Water Reclamation Act for the protection of the public health and safety and/or protection of the environment. Project design, contracting, and payment are the sole responsibility of the Department.

In the event of a contract dispute, the Contractor's remedies shall be limited to those provided in the Contract and to claims or actions to be brought against the Department in the Illinois Court of Claims, pursuant to the Court of Claims Act (Illinois. Rev. Stat 1991, ch. 37, par. 439.1 et. seq.). The Contractor shall not place any mechanics liens against any private property involved in the reclamation project.

Sub-Contractors, material suppliers, operators, and laborers remedies for non-payment include all legal actions against the Contractor, claims and actions brought against the Contractor's surety under the contract performance and payment bond, and claims for "Liens Against Public Funds" as provided in paragraph 23(c) of the Mechanics Lien Act. Sub-Contractors, material suppliers, operators, and laborers shall have no rights in regard to liens against private property.

The Contractor shall cause the terms of this Special Provision to be included in all subcontracts.

End of Revisions to SECTION 107: LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

SECTION 108: PROSECUTION AND PROGRESS - (revise the following articles as indicated)

Article 108.07 Suspension of Work - (add the following)

The Department hereby makes express provision for any suspensions which may result from disputes with property owners. The Engineer may suspend work for up to ten working days during the contract period without additional compensation to the Contractor, when such suspension is necessary to resolve disputes or problems with property owners. Multiple suspensions, less than ten working days each, shall not exceed ten working days total, without additional compensation.

End of Revisions to SECTION 108: PROSECUTION AND PROGRESS

SECTION 109: MEASUREMENT AND PAYMENT - (revise the following articles as indicated)

Article 109.07 Partial Payments (Add the following after the first paragraph of 109.07(a))

The State will deduct from the amount so determined for the first 50 percent of the completed work a sum of ten percent to be retained until after the completion of the entire work to the satisfaction of the Engineer. After 50 percent or more of the work is completed, the Engineer may, at his/her discretion, certify the remaining partial payments without any further retention, provided that satisfactory progress is being made, and provided that the amount retained is not less than five percent of the total adjusted contract price. When the principal items of the work have been satisfactorily completed, a semi-final estimate may be made with the consent of the surety. Payment to the Contractor under such an estimate shall not exceed 90 percent of the amount retained after making partial payments, but in no event shall the amount retained after making the semi-final payment be less than one percent of the adjusted contract price, nor less than $500.00.

At the request of the Contractor, with approval of the Department, the retainage of the contract set forth in this Article may be deposited under a trust agreement with an Illinois Financial Institution of the Contractor=s choice and subject to the approval of the Department. The Contractor shall receive any interest thereon. Pursuant to application by the Contractor, a trust agreement by an Illinois Financial Institution and the Department shall contain, as a minimum, the amount to be deposited subject to the trust, the terms and conditions of payment in case of default of the Contractor, and the termination of the trust agreement upon completion of the contract.

The Contractor shall be responsible for obtaining the written consent of an Illinois Financial Institution trustee and any costs or service fees shall be borne by the Contractor. The trust agreement may, at the discretion of the Department and upon request of the Contractor, become operative at the time of the first partial payment according to existing statutes and Department procedures.

As soon as possible after final inspection, the Department will submit final quantities to the Contractor, will request material certification information from the Contractor, and will act on any time extension requests. At the end of 21 days from such action, if the Contractor has not agreed to final quantities or liquidated damages, or submitted required documentation, the Department may withdraw retained funds from the financial institution. At the end of three months, the Department may proceed with final payment on the basis of measured quantities.

End of Revisions to SECTION 109: MEASUREMENT AND PAYMENT
End of Revisions to SECTION 100: GENERAL REQUIREMENTS AND COVENANTS

SECTION 200 - EARTHWORK, LANDSCAPING, AND EROSION CONTROL

SECTION 201: CLEARING, TREE REMOVAL AND PROTECTION, CARE AND REPAIR OF EXISTING PLANT MATERIAL - (revise and add the following as indicated)

Article 201.01 Description - (add the following)

(f) Trash and Debris Removal -- Trash and debris removal shall consist of the removal and disposal of all trash and debris that is within the area to be graded inside the construction limits to an approved landfill off-site.

Article 201.09 Disposal of Materials - (delete and replace with the following)

This work shall be done in accordance with Article 202.03 of these Special Provisions.

Article 201.10 Method of Measurement - (delete paragraphs (b) through (d) and replace with the following)

All Clearing, Tree Removal, Protection of Existing Plant Material, Care of Existing Plant Material and Trash and/or Debris Removal that is necessary to perform the grading work within the construction limits shall be classified as SPECIAL CLEARING and will not be measured for payment. Any of these items associated within the designated areas of Special Excavation shall not be considered here, but shall be covered under Section 214 - Special Excavation.

Any special areas of trees within the construction limits to be preserved will be specified in the plans and shall not be removed unless approved by the Engineer.

All trees outside the construction limits shall not be disturbed.

Article 201.11 Basis of Payment - (delete and replace with the following)

All Tree Removal, Protection of Existing Plant Material, Care of Existing Plant Material and Trash/Debris Removal within the construction limits shall be paid for at the contract lump sum price for SPECIAL CLEARING. No payment for any of the items associated within the limits of Special Excavation will be made. Payment for those shall be in accordance with Section 214 - SPECIAL EXCAVATION.

End of Revisions to SECTION 201: CLEARING, TREE REMOVAL AND PROTECTION, CARE AND REPAIR OF EXISTING PLANT MATERIAL

SECTION 202: EARTH AND ROCK EXCAVATION - (delete entire section and replace with the following)

SECTION 202: ABANDONED MINE SITE EXCAVATION

Article 202.01 Description

Abandoned mine site excavation shall consist of the excavation, removal and satisfactory disposal of materials taken from within the construction limits for the reshaping and disposal of mine refuse; the covering of mine refuse with soil; the construction of embankments, ditches, waterways, entrances, field roads and incidental work.

Construction Requirements

Article 202.02 Clearing, Tree Removal, Hedge Removal

Prior to starting excavation operations in any area, all clearing, tree removal, hedge removal and trash and debris removal in that area shall be performed according to Section 201 - Clearing, Tree Removal, and Protection, Care and Repair of Existing Plant Material.

Article 202.03 Removal and Disposal of Surplus, Unstable and Unsuitable Materials and Organic Waste

The Contractor, at his/her own expense, shall dispose of all surplus, unstable and unsuitable materials, including those which result from the work included in Section 201 and 501 of these Special Provisions, and Section 440 of the Standard Specifications in such a manner that public or private property will not be damaged or endangered.

Whenever possible, stones and boulders naturally occurring within the construction limits shall be placed in fills or embankments in layers and compacted, in accordance with Section 205 of these Special Provisions. Broken concrete without protruding metal bars, bricks, rock, stone, or uncontaminated dirt or sand generated from construction or demolition activities may be used in embankment or in fill. These materials shall be placed as approved by the Engineer; shall be compacted to the satisfaction of the Engineer; shall be buried under a minimum of 900 millimeters (3 feet) below finished grade unless specified otherwise in the plans (except when the materials include only uncontaminated dirt and sand); and shall not create an unsightly appearance or detract from the natural topographic features of an area. Broken concrete without protruding metals bars, bricks, rock, or stone may be used as riprap as approved by the Engineer. If the materials are used for fill in locations within the mine site but outside project construction limits the Contractor must specify to the Engineer, in writing, how the landscape restoration of the fill areas will be accomplished. Placement of fill in such areas shall not commence until the Contractor's landscape restoration plan is approved by the Engineer.

Aside from broken concrete without protruding metal bars, bricks, rock, stone, or uncontaminated dirt or sand used in embankment, for fill, or for riprap, as appropriate, all other construction and demolition debris or waste shall either be disposed of in a licensed landfill, or recycled, reused, or otherwise disposed of as allowed by State or federal solid waste disposal laws and regulations and solid waste determinations of the Illinois Environmental Protection Agency (IEPA).

A permit shall be obtained from IEPA and made available to the Engineer prior to open burning of organic waste (i.e., plant refuse resulting from pruning or removal of trees or shrubs) or other construction or demolition debris available to the Engineer. Organic waste originating within the construction limits may be left on-site for use by the landowner, stockpiled for use as wildlife habitat, as determined by the Engineer, in locations designated by the Engineer. When landscape plantings are included in the project, organic waste originating within the construction limits may be chipped or shredded and placed as mulch around landscape planting within the construction limits when approved by the Engineer. Chipped or shredded material to be placed as mulch shall not exceed a depth of 150 millimeters (6 inches).

When specified, surplus excavated material, including excavated stable and suitable material from special excavation, sewer trenches or other underground construction, shall be used to increase soil cover thickness, construct embankments, flatten slopes, or be disposed of otherwise within the project construction limits as approved by the Engineer. Surplus excavated material shall not be disposed of by the Contractor outside of the construction limits.

All unstable and unsuitable material, including excavated material from special excavation, sewer trenches, or other underground construction shall be excavated or removed and replaced with material acceptable to the Engineer. Unstable and unsuitable material shall not be used in

embankments. If unsuitable material is present at or below the finished grade, it shall be removed and replaced with suitable material, in accordance with Articles 205.04 and 205.05 of these Special Provisions. Unsuitable material shall be placed or disposed of by the Contractor at his/her own expense outside of the construction limits as specified herein.

Article 202.04 Grading the Site

The Contractor shall excavate earth materials to the lines, grade, cross-sections and elevations shown on the plans or designated by the Engineer. Mine Refuse shall be graded, hauled to, and/or incorporated into the configuration as shown on the plans. Cover material shall be graded, excavated, hauled, and/or placed to the configuration as shown on the plans. Cover material shall be uniformly spread in layers not to exceed nine inches individually to the total depth specified in the plans. All mine refuse, grading, and/or excavation shall be completed prior to applying cover material.

The mine refuse is to be excavated to the lines, grade, cross-sections and elevations shown on the plans or designated by the Engineer. If mine refuse remains below those lines, grade, cross-sections and elevations and was not specified for soil cover on the plans or by the Engineer, then after receiving written approval of the Engineer the Contractor shall excavate the remaining mine refuse to a depth of two feet below the adjacent proposed grade or to soil, whichever occurs first. The area affected by the additional mine refuse excavation shall be backfilled with soil to original plan proposed grade or to the lines, grades, elevations specified by the Engineer. All additional mine refuse excavation and earth excavation necessary due to encountering these conditions will be paid for at the contract unit price for Mine Refuse Excavation and Earth Excavation as described herein.

Article 202.05 Classification

Abandoned mine site excavation shall be classified as mine refuse excavation or earth excavation.

Mine Refuse Excavation - All excavation of mine refuse materials as defined by Articles 101.56 and 101.58 of these Special Provisions.

Earth Excavation - Excavation of any earth materials except mine refuse as defined in Articles 101.56 and 101.58 of these Special Provisions.

Article 202.06 Construction of Ditches and Waterways

Ditches and waterways shall be constructed and maintained to the lines, grades and cross-sections shown on the plans. Ditches and waterways so constructed shall be kept free from debris until acceptance. All suitable materials excavated from inlet, outlet and intercepting ditches, and waterways within the construction limits shall be used for cover soil as far as practicable. Roots, stumps and other objectionable material in the slopes or bottoms of ditches shall be removed and the holes backfilled with suitable material.

Article 202.07 Drainage

The site shall be maintained so that it will be well drained at all times. If, during the prosecution of the work, it is necessary to interrupt existing sewer or under drainage, temporary drainage facilities shall be provided until the permanent drainage work has been completed. Such temporary drainage facilities will be paid for in accordance with the Provisions of Article 109.04 of the Standard Specifications, unless otherwise provided for in the contract.

The Contractor shall be responsible for, and shall take all necessary precautions to preserve and protect all existing tile drains, sewers and other sub-surface drains or parts thereof which may be affected by his operations, and which may be continued in use without change. He shall repair, at his own expense, any and all damage to such drainage facilities resulting from negligence on his part.

Article 202.08 Method of Measurement

(a) Contract Quantities:

When the project is constructed essentially to the lines, grades or dimensions shown on the plans and the Contractor and the Engineer have agreed in writing that the plan quantities are accurate, no further measurement will be required and payment will be made for the quantities shown in the contract for the various items involved except that if errors are discovered after work has been started, appropriate adjustments will be made.

When the plans have been altered or when disagreement exists between the Contractor and the Engineer as to the accuracy of the plan quantities, either party shall, before any work is started which would affect the measurement, have the right to request in writing and thereby cause the quantities involved to be measured as hereinafter specified.

(b) Measured Quantities:

Mine Refuse Excavation and Earth Excavation will be measured in its original position, and the volume in cubic meters (cubic yards) computed by the method of average end areas. The volume of any unstable or unsuitable material removed, and the volume of the replacement material, will both be measured for payment in cubic meters (cubic yards).

Excavated material used for purposes other than designated in the Specifications, and material excavated beyond slope lines, will not be measured for payment.

Article 202.09 Basis of Payment

Mine site excavation will be paid for at the contract unit prices per cubic meters (cubic yards) for MINE REFUSE EXCAVATION, and EARTH EXCAVATION, measured as specified herein, which prices shall include payment for other items incidental to the work included under the general heading of Earthwork for which no payment item is included in the contract.

End of Revisions to SECTION 202: ABANDONED MINE SITE EXCAVATION

SECTION 205: EMBANKMENT - (delete entire section and replace with following)

SECTION 205: MINE SITE COMPACTION

Article 205.01 Description

This work shall consist of the compaction of earth fill area(s) or mine refuse disposal area(s) and cover soil by depositing, placing and compacting mine refuse and earth fill areas and all cover soil over mine refuse except the top 300 millimeters (12 inches) of cover soil.

Article 205.02 Equipment

Equipment shall meet the requirements of the following Articles of Section 1100 - Equipment:

	Item	Article
(a)	Disk Harrow	1101.02

(b) Tamping-Type Roller shall consist of one or more cylindrical sections having studs or feet projecting not less than 162.5 millimeters (six and one-half inches) from the surface of the drum. The number of tamping feet and the area of feet shall be such that the pressure on a single row of feet approximately parallel to the axis of the drum is not less than 1.38 kPa (200 p.s.i.) when supporting the full weight of the roller.

Article 205.03 Preparation of the Subgrade for Earth Cover

Before fill material is placed, all clearing, tree removal and hedge removal over the fill area shall be performed as provided in Section 201 of the Special Provisions, and the top 150 millimeter (six inches) of the existing ground surface shall be disked and then compacted to the satisfaction of the Engineer. If the fill areas are being constructed during the winter, snow and ice shall be removed from the areas to be covered by fill material. Fill material shall not be placed on frozen earth. When construction is resumed after any winter shutdown period, the top 200 millimeters (eight inches) of all partially completed fill areas shall be reprocessed and compacted to the minimum specified density prior to placing more fill material in the areas.

When earth fill area(s) are to be constructed on hillsides or slopes, the existing slopes shall be plowed deeply; or if additional precautions for binding the fill materials together are justified, steps shall be cut into the existing slopes before the construction of the fill area is started. If the existing surface is within 150 millimeters (six inches) of the elevation of the subgrade or the completed earth surface, it shall be plowed or otherwise broken up to a depth of not less than 150 millimeters (six inches).

When the mine refuse disposal area(s) has been graded to the subgrade shown in the plans, MINE REFUSE TREATMENT - LIMESTONE shall be performed on the subgrade in accordance with Section 255 of these Special Provisions. The subgrade shall then be compacted with a roller until the tamping feet of the roller penetrate not more than 50 millimeters (two inches) into the subgrade or to the satisfaction of the Engineer.

Article 205.04 Placing Earth Cover Material

Fill material shall be placed in accordance with the following requirements:

(a) General. Fill areas shall be constructed of materials that will compact and develop a stability satisfactory to the Engineer. No sod, frozen material or any material which, by decay or

otherwise, might cause settlement, shall be placed or allowed to remain in the fill areas. Fill areas shall be constructed to the height and width deemed necessary to provide for shrinkage during compaction. Upon completion, they shall conform to the lines, grades and cross sections shown on the plans, with proper provision for shrinkage. When mine refuse disposal areas are constructed of crushed material, broken concrete, stones, or rocks and earth, such materials shall be well distributed, and sufficient earth or other fine material shall be incorporated with them when they are deposited to fill the interstices and provide solid embankment. No rock, stones or broken concrete more than 150 millimeters (six inches) in largest dimension shall be permitted within a vertical distance of 300 millimeters (12 inches) below the surface of the subgrade.

Pieces of concrete, not exceeding two square feet for any area of surface, and large rocks and boulders may be placed in fills without being broken up, provided they are well embedded, and interstices filled with smaller pieces or smaller material in a manner to give a density satisfactory to the Engineer. The layers of the smaller pieces or smaller material shall not exceed 300 millimeters (12 inches) in depth.

So far as practicable, each layer of material shall extend the entire length and width of the mine refuse disposal area. The material shall be leveled by means of bulldozers, blade graders or other equipment approved by the Engineer. Each layer shall be not more than nine inches thick when in loose condition, shall be uniform in cross section, and shall be thoroughly compacted before the next layer is started.

The use of dragline excavators or similar equipment which excavate and deposit material in large unit masses will not be permitted, unless all materials excavated in this manner are spread as provided herein and compacted as required in Article 205.05 of these Special Provisions, or as directed by the Engineer.

Article 205.05 Compaction

Each layer of mine refuse or earth fill material shall be disked sufficiently to break down oversized clods, mix the different materials, secure a uniform moisture content, and ensure uniform density and compaction. Disking may be omitted if the fill consists of non-cohesive material.

All lifts of earth fill or mine refuse will be considered compacted when the tamping feet of the roller penetrates not more than three inches into a nine-inch lift or one-third of the depth of the layer being placed. If, after making four passes the required compaction is not yet achieved, the Engineer shall take necessary steps to analyze and test the soil conditions. If tests indicate that the material is above 115 percent or below 90 percent of the standard optimum moisture content then the material shall be dried or wetted as necessary to fall within this range. The layer shall then be recompacted until the desirable results are obtained or an additional four passes are made. If the material is determined to be within the specified optimum moisture content range and four passes have been made, no further compaction efforts are necessary.

All lifts of cover soil shall be compacted except the top 300 millimeters (12 inches). Compaction will not be required on the top 300 millimeters (12 inches) of cover soil.

The fill areas shall be sprinkled with water when it is necessary to increase the moisture content of the soil to permit the fill areas to be constructed to the densities indicated above.

Compacting equipment and compacting operations shall be coordinated with the rate of placing the earth materials so that the required density is obtained.

Article 205.06 Maintaining and Trimming Embankments

The Contractor shall replace, at his own expenses, any portions of the fill areas which have been damaged or displaced by reason of carelessness or negligence on his part. After the fill areas have been constructed as specified herein, their sides shall be trimmed to the proper slopes where required, and they shall be maintained by the Contractor to the proper elevation and cross-section until they have been accepted.

Article 205.07 Method of Measurement

Mechanical compaction will not be measured for payment.

Article 205.08 Basis of Payment

Compaction and any additive or water applied will not be paid for directly, but shall be considered as incidental to the various items of excavation, and the cost of their construction shall be included in the unit prices for these items.

End of Revisions to SECTION 205: MINE SITE COMPACTION

SECTION 215: SPECIAL EXCAVATION - (add this section)

Article 215.01 Description

Special Excavation shall consist of the removal and disposition of any and all materials encountered within the areas of the mine opening(s) as specified in the plans. Some of these materials include (but are not limited to): materials listed in Section 201 of the Special Provisions, existing foundation, mine related material such as cribbing, stairs, etc., mine refuse, spoil, and/or earth materials.

Construction Requirements

Article 215.02 Classification

Special excavation shall include all materials encountered within the mine opening(s) as specified in the plans, except water, to be removed prior to filling operations. Excavated material shall be classified by the Engineer prior to handling as:

(a) Unsuitable material to be removed from the site according to Section 201 of the Special Provisions. The cost of removal and disposal of all unsuitable material off-site shall be considered as incidental to the contract and the cost shall be included in the unit price bid per cubic yard for Special Excavation.

(b) Suitable fill material is to be used in refilling the special excavation(s) and/or disposed of as specified in the plans.

Article 215.03 Overhaul

No work is classified as overhaul.

Article 215.04 Excavation

(a) All materials shall be excavated from within the concrete lining (collar) or around the mine opening(s) to a configuration and depth as specified in the plans to attain a stable base. The Engineer will determine the configuration and depth of the Special Excavation to attain a stable base in the field.

(b) The concrete lining (collar) of shafts shall not be removed until after the special excavation of the shaft is filled. It shall then be removed or covered in-place so that it is at least 900 millimeters (three feet) below proposed grade.

(c) Any holes, voids, or open shafts created by these operations shall be secured by the Contractor to prevent entry upon completion of a day's work. No openings shall be allowed to remain unsecured overnight, weekends, holidays, or any other time when work is not in progress.

(d) If subsidence occurs or mine gas is detected, work shall cease immediately and the Engineer shall be notified.

(e) Any water encountered shall be treated if necessary to meet IEPA Mine Discharge Standards and pumped from the Special Excavation to assure maximum stability. Any cost for this shall be considered incidental and included in the unit price per cubic meter (cubic yard) for Special Excavation.

(f) Prior to shaft filling the base shall be compacted as determined by the Engineer to assure a stable base.

Article 215.05 Method of Measurement

(a) Contract Quantities:

When the project is constructed essentially to the lines, grades or dimensions shown on the plans and the Contractor and the Engineer have agreed in writing that the plan quantities are accurate, no further measurement will be required and payment will be made for the quantities shown in the contract for the various items involved except that if errors are discovered after work has been started, appropriate adjustments will be made.

When the plans have been altered or when disagreement exists between the Contractor and the Engineer as to the accuracy of the plan quantities, either party shall, before any work is started which would affect the measurement, have the right to request in writing and thereby cause the quantities involved to be measured as hereinafter specified.

(b) Measured Quantities:

Special Excavation will be measured in its original position, and the volume in cubic yards computed by the method of average end areas. The volume of any unstable or unsuitable material removed, and the volume of the replacement material, will both be measured for payment in cubic meters (cubic yards).

Excavated material used for purposes other than designated in the Specifications, and material excavated beyond slope lines, will not be measured for payment.

Article 215.06 Basis of Payment

Special Excavation will be paid for at the contract unit price per cubic meter (cubic yard) for SPECIAL EXCAVATION, measured as specified herein.

End of SECTION 215: SPECIAL EXCAVATION

SECTION 216: MINE OPENING FILLING AND SEALING (add this section)

Article 216.01 Description

This shall include furnishing all labor, materials, equipment, and services to properly fill the mine opening(s) as specified in the plans.

Article 216.02 Material

Material for filling and sealing the mine openings shall meet the following material requirements descriptions or Articles in the Standard Specifications:

	Item	Article
(a)	Portland Cement	1001
(b)	Fine Aggregates	1003.01
(c)	Coarse Aggregates, Class C	1004.01
(d)	Stone for Rockfill / Rockfill	1005.01
(e)	Class SI Concrete	1020
(f)	Polyvinyl Chloride (PVC) Pipe	1040.10
(g)	Filter Fabric Material	1080.03

(h) Cement Grout

Cement Grout shall be one part cement to three parts sand (no gravel) - 9 Sack Portland Cement mixture.

(i) Earth

This material shall be soil excavated on-site as specified in the plans and approved by the Engineer. If none is available on-site, the soil material may come from an off-site source and must be approved by the Engineer. This may include material excavated from the shaft that has been approved by the Engineer as suitable fill.

(j) Rubble

This material shall be defined as structure rubble or stone ranging in size from 24 to 36 in. (600 to 900 mm) in any direction. Structure rubble may consist of broken concrete, brick, or stone as designated in the plans and must be approved by the Engineer.

(k) Shot Rock

Shot rock shall be stone quarried from undisturbed, consolidated deposits of rock reasonably free of shale and shaly stone. The ledges shall be sufficiently thick to produce the desired dimensions. The stone shall be reasonably free of lamination, seams, cracks and other structural defects or imperfections tending to destroy its resistance to weather. Field stone or boulders will not be accepted.

(l) Gradation.

The stone shall have a maximum thickness of 30 in. (750 mm) measured in any direction. Fifty percent of the material shall weigh 60 lb (27.2 kg) or more per piece. Not more than ten percent shall weigh less than 3 lb (1.4 kg) per piece.

Article 216.03 Submittal and Notification

The Contractor shall notify the Engineer at least three days in advance of starting shaft filling operations. The Contractor shall provide the Engineer with all weight tickets, letters of installation of fill material.

Article 216.04 Construction Requirements

(a) Any water pumped or discharged from within the mine openings shall be tested and treated, if necessary, to meet Illinois Environmental Protection Agency (IEPA) Mine Pollution Discharge Standards. Filling into a flooded shaft shall be permitted provided it does not result in a discharge or release of polluted water.

(b) Open shafts, holes, or voids shall not remain unprotected overnight, weekends, holidays, or any other time when work is not in progress. It shall be the Contractor's responsibility to properly secure from entry any portion of the work remaining at the end of a work day.

(c) On shafts with an existing cap to be removed, the Contractor shall notify the Engineer three working days prior to removing the cap so that an inspector can be present to check for methane and to visually inspect the shafts interior.

(d) On shafts where Special Excavation is required, backfilling or plugging operations shall not commence until the Engineer has inspected the excavated shaft area and approved the satisfactory completion of the Special Excavation.

(e) On shafts where a concrete plug is specified, the placement of the concrete shall not exceed a maximum free fall of 4 ft (1200 mm). No fill materials may be placed on top of the concrete plug until it has been allowed to cure for a minimum of 48 hours. After the required curing period has elapsed the Contractor shall place the remaining fill materials in accordance with the plans and specifications.

(f) On shafts designated to be filled with stone and spanned with a concrete cap, the filling operations shall continue as un-interrupted as possible. Once the shaft has been filled to within 2 ft (600 mm) of the proposed grade, the Contractor shall secure the area with temporary fencing for a 30-day period to allow for settlement. If settlement occurs within that time, the Contractor shall backfill the void with additional aggregate fill material prior to the installation of the concrete cap. The concrete cap shall be constructed and installed in accordance with SECTION 425.

(g) Filling operations shall be a continuous procedure in accordance with the fill type materials as specified in the plans. Earth fill material shall be placed in lifts of 8 to 12 in. (200 to 300 mm), and shall be compacted to the Engineer's satisfaction.

(h) If cement grout is specified on the plans, it shall be evenly distributed over the fill, after the filling is complete at the location as shown on the plans the cement grout shall be allowed two days to cure before placing the remaining fill materials. During this time the Contractor shall secure the area with temporary fencing and direct all surface drainage away from the opening.

(i) If no cement grout is specified on the plans, once the shaft has been filled to the proposed grade, the Contractor shall monitor the site for a 30-day settlement period. If settlement occurs within that time the Contractor shall backfill the settled volume with additional fill material.

(j) If earth fill is specified on the plans, geotechnical filter fabric shall be installed over the coarse aggregate fill when no cement grout is required, in accordance with SECTION 282.

(k) The Engineer reserves the right to increase or decrease any or all quantities required for this project. If additional materials are needed, they will be paid for at the contract unit prices as specified, which cost shall include transportation and handling.

Article 216.05 Method of Measurement

Stone fill materials will be measured for payment in tons of Fine Aggregate, Coarse Aggregate, Rockfill, or Shot Rock, or as specified herein. Measurement shall be on weight tickets or receipts provided to the Engineer.

Cement grout will be measured for payment in tons of Cement Grout as specified herein. Measurement shall be on weight ticket or receipts provided to the Engineer.

Class SI Concrete plugs will be measured for payment in cubic yards.

Polyvinyl Chloride (PVC) Pipe will be measured for payment in lineal feet.

No measurement will be made for Earth fill or Rubble fill.

Filter Fabric Material will be measured for payment in square yards in accordance with Article 282.08.

No measurement will be made for any treatment and/or discharge of water from mine openings. This shall be considered incidental to filling mine openings but included in the contract unit prices for fill material.

Concrete caps will be measured for payment in cubic yards in accordance with Article 425.11.

Article 216.06 Basis of Payment

No separate payment will be made for any pumping and/or discharge of water from mine openings.

Stone fill materials will be paid for at the contract unit price per ton as specified herein for FA FILL, CA FILL, ROCKFILL, and SHOT ROCK FILL, and of the class (stone quality and gradation) specified.

Portland Cement concrete caps will be paid for at the contract unit price per cubic yard for PORTLAND CEMENT CONCRETE CAP in accordance with Article 425.12.

Filter Fabric Material will be paid for at the contract unit price per square yard for FILTER FABRIC FOR USE WITH FILL in accordance with Article 282.09.

Cement Grout will be paid for at the contract unit price per ton of CEMENT GROUT.

Rubble fill will not be paid for directly, but shall be considered as incidental to SECTION 501, and the cost of this work shall be included in the unit price for that item.

Earth fill will not be paid for directly, but shall be considered as incidental to SECTION 202 and SECTION 215, and the cost of this work shall be included in the unit price for those items.

Class SI Concrete plugs will be paid for at the contract unit price per cubic yard for CLASS SI CONCRETE PLUG.

Polyvinyl Chloride (PVC) Pipe will be paid for at the contract unit price per lineal foot for x" DIAMETER PVC PIPE.

End of SECTION 216: MINE OPENING FILLING AND SEALING

SECTION 250: SEEDING - (revise the following articles as indicated)

Article 250.02 Materials - (revise Article 1081.04 of the Standard Specifications as indicated)

(a) Sampling and Testing. Each lot of seed, or seed mixture, except Prairie Forbs, furnished shall be tested by a State Department of Agriculture (including other states), or by land grant college or university agricultural sections, or by a Registered Seed Technologist. The seed sample shall be sent directly from the dealer to the place of testing. The cost of this testing shall be included in the unit bid price.

All seeds shall comply with the requirements of the U.S. Department of Agriculture Consumer and Marketing Service, Rules and Regulations under the Federal Seed Act of August 9, 1939, issued March 1940, reprinted with amendments April 1968, or any current revisions.

Acceptance of seeds furnished under this Specification will be based on receipt and approval of a certification covering tests from each lot of seed. Certification shall consist of test reports showing the required test results of lots corresponding to the shipment and signed by the responsible personnel of a State seed laboratory or college or university seed testing section or a Registered Seed Technologist. A Registered Seed Technologist shall verify his/her signature with his/her Society of Commercial Technologists' seal.

The sample must be tested within 30 days of scheduled seeding. Test reports shall provide or include the following information at a minimum:

(1) Name of Seed Dealer	(2) Kind and Variety of Seed
(3) Date of Test	(4) Lab Number
(5) Weight Examined by Grams	(6) Lot Number
(7) Pure Seed Crop by Name	(8) Purity Percentage Analysis
(9) Germination Percentage Analysis	(10) Hard Seed Percentage Analysis
(11) Other Crop Names and Percentages	(12) Common Weed Names & Percentages
(13) Percentage of Total Inert Matter	(14) Noxious Weeds and Percentages (if any)

A ten percent (10%) tolerance will be allowed for each specified pure live seed species in the total seed mixture. If test results indicate insufficient pure live seed of any species, additional pure live seed of the same species shall be added prior to seeding, to correct deficiencies to within the ten percent tolerance allowable.

If test results indicate the presence of an Illinois noxious weed, or the seed mixture is found unacceptable by reason of any other defect that in the judgment of the Engineer cannot be corrected, the Contractor shall obtain a new supply of the specified seed mixture. Any areas seeded with an unacceptable seed mixture shall be destroyed, by preparing a new seed bed and reseeding. No additional compensation will be allowed for correcting deficiencies to within the allowable tolerance, for obtaining a new seed supply if required, or for reseeding.

Seeds may be sampled at destination on a random basis and tested for comparison with certification and compliance with the Specifications. If deviations are found, the results will be reviewed to determine whether the material is acceptable for use. Major deviations may result in a requirement that each lot of material from the source in question be sampled, tested and approved by the State Department of Agriculture before further use.

Article 250.03 Equipment - (revise as indicated)

(e) Broadcast Seeders - (change Article 1101.08 (e) of the Standard Specifications to)

When broadcast seeders are used, the individual seeds comprising the seeding mixture need not be sown separately. A spike-toothed or tine-toothed harrow, approved by the Engineer, must be either be pulled behind the spinning disk seeder by the same equipment in one operation, or pulled by other equipment over all seeded areas on the same day.

(i) Harrows - Spike Toothed and Tine Toothed - (add the following)

Spike and tine toothed harrows shall be commercially manufactured harrows designed for light tillage necessary to cover grass and legume seed after these seeds have been broadcast with spinning disk seeders, truck mounted air flow fertilizer/seeder spreaders, and aerial seeders.

(j) No-Till Seeder - (add the following)

These seeders shall be commercially manufactured no-till (zero-till) seeders specifically designed for no-till placement of grass and legume seed and shall be approved by the Engineer prior to use.

Article 250.04 Fertilizer and Agricultural Ground Limestone Application - (delete and replace with following)

(a) Prior to the application of fertilizer nutrients and agricultural ground limestone on the soil and/or coal refuse, the Contractor shall notify the Engineer so that the Engineer can sample soil and/or coal refuse, retest and, if necessary, revise the rates for fertilizer and limestone specified on the plans to accommodate actual field conditions.

(b) Immediately prior to seed bed preparation and seeding, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the specified rates over the areas designated. Specified rates of agricultural ground limestone and fertilizer nutrients are listed on the plans under Summary of Quantities or Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing. NOTE: Fertilizer quantities and application rates may be based on two or more applications. Potassium may be required to be applied in split applications.

(c) When Incorporation - Limestone and Mulch are to be used, as specified in the plans, agricultural ground limestone shall be applied in accordance with Section 256 of the Special Provisions. The fertilizer nutrients and seed mixture shall then be uniformly spread at the rates specified over the incorporated areas and tilled into the soil with the seed mixture by use of a spike toothed or tine toothed harrow as directed by the Engineer.

(d) No-till (zero-till) Seeding. No-Till (zero-till) seeding will not require seed bed preparation. Agricultural ground limestone shall be applied two weeks (14 days) prior to no-till (zero-till) seeding. Fertilizer nutrients shall be applied two weeks (14 days) after no-till (zero-till) seeding according to the Engineer's discretion. The no-till (zero-till) areas may or may not be mowed prior to or after no-till (zero-till) seeding according to the Engineer's discretion. If the Engineer determines mowing is necessary, it will be measured and paid for according to Articles 250.09 and 250.10, respectively. At no time will the seeder be used as a mulch stabilizer in conjunction with seeding or alone.

(e) Direct Vegetation. If seed bed preparation is required on direct vegetation areas, agricultural ground limestone and fertilizer nutrients shall be applied prior to seeding and according to these specifications. If seed bed preparation is not required or if the Engineer determines it is impractical, the agricultural ground limestone and fertilizer nutrients shall be applied according to the Engineer's discretion.

Article 250.05 Seed bed Preparation - (delete last paragraph and add the following)

Seed bed preparation cannot be performed sooner than 14 days prior to seeding. Seed bed preparation will not be required when no-till seeding or Incorporation - Limestone and Mulch is specified.

Article 250.06 Seeding Methods - (delete all but paragraphs 1 and 2 and add the following)

Harrows that meet the requirements of Article 250.03 (j) of this Special Provision shall be used for light tillage to cover grass and legume seeds, fertilizer and agricultural ground limestone with soil to the satisfaction of the Engineer on the same day the that the seed is sown. A minimum of two passes will be required, one parallel to the slope and one perpendicular to the slope to assure coverage.

Rolling will not be required.

Article 250.07 Seeding Mixtures - (change to)

Article 250.07 Seeding Mixtures, Requirements and Guarantee

(a) Seeding Dates and Seed Mixture for Permanent Seeding.

SOUTHERN ILLINOIS (South of U.S. Rt. 50)

Spring seeding dates shall be January 1 to March 15, and fall seeding dates shall be August 20 to September 30 for the following seeding mixes.

Seeding will not be allowed when the wind speed is ten miles per hour or greater. Seed bed preparation may be allowed by the Engineer prior to seeding dates at his discretion.

SEED	VARIETIES	PURE LIVE SEED LBS./ACRE
Switch Grass	-	2
Orchard Grass	-	10
Redtop	-	4
Smooth Brome Grass	-	24
Medium Red Clover	e.g. Kenstar	5
Alsike Clover or Ladino Clover or other White Clovers	-	10
Alfalfa	-	10
Annual Lespedeza	e.g. Kobe	5
Winter Wheat	-	40

Average purity and germination percentages (viable seed for legumes) are from 1948, Yearbook of Agricultural, Grass. Any other product from seed tag percentages of germination times purity, and/or viable seed, will cause the Contractor to adjust his total pounds per acre of seed to sow.

(b) Temporary Seeding. This provision is applicable in the event that the Contractor fails to perform permanent seeding within the dates specified. In that event, temporary seeding shall be required to provide a temporary vegetative cover until the next term of permanent seeding dates. Temporary seeding shall be performed by the Contractor at his own proper cost and expense, at no additional cost to the Department. Prior to temporary seeding, the Engineer shall submit in writing to the Contractor a proposed temporary seeding mixture, specifying the seed varieties and their respective rates on a pound per acre of pure live seed basis. Vegetation resulting from the temporary seeding shall be destroyed as part of the seed bed preparation for permanent seeding during the next term of permanent seeding dates.

(c) Reseeding Guarantee. The Contractor is required to guarantee the results of the permanent seeding for one year after the date of seeding. The Engineer will periodically inspect all seeded areas during that year to determine whether or not vegetation has been successfully established. Upon the Engineer's determination that vegetation has been successfully established, the Contractor shall be released from all further obligations. If the Engineer determines that vegetation on any area is unacceptable, the Contractor shall be required to reseed that area during the next term of permanent seeding dates, at the Contractor's own proper cost and expense, and at no additional cost to the Department.

(d) Unacceptability will be based on:

1. Seed test failure (Article 250.02).
2. Using unacceptable equipment in performing seeding.
3. Failure to perform seeding as specified; i.e., missing areas during seeding, improper seed bed preparation, etc.
4. Failure to perform mulching as specified; i.e., applying too much or too light application in some areas, using unacceptable mulch, etc.

(e) Subsequent Reseeding. Any area reseeded once by the Contractor will be inspected within six (6) months after reseeding to determine if germination has occurred. If subsequent reseedings are required of the same area(s), through no fault of the Contractor, the Contractor shall be compensated for such subsequent reseeding at unit bid prices, or as otherwise agreed upon by the Contractor and the Engineer.

Article 250.08 Selective Mowing Stakes - (delete entire article)

Article 250.09 Method of Measurement - (revise as indicated)

Substitute SEEDING for the various classes of seeding. Seed testing and any temporary seeding or reseeding will not be measured for payment.

Delete all reference to mowing and refer to Section 258 of the Special Provision, if mowing is specified on the plans.

Article 250.10 Basis of Payment - (revise as indicated)

Substitute SEEDING for the various classes of seeding and interseeding. The cost of seed testing and any temporary seeding or reseeding will not be paid for separately, but shall be considered incidental to the cost of SEEDING.

Delete all reference to mowing and refer to Section 258 of the Special Provision, if mowing is specified on the plans.

End of Revisions to SECTION 250: SEEDING

SECTION 255: MINE REFUSE TREATMENT - (add this section)

Article 255.01 Description

This work shall consist of furnishing, transporting and incorporating Agricultural Ground Limestone required in the treatment of mine refuse. Multiple applications of Agricultural Ground Lime shall be required, as specified herein and in the plans.

Article 255.02 Materials

Agricultural Ground Limestone used for treatment of mine refuse shall meet the requirements of Article 1081.07 of the Standard Specifications.

Article 255.03 Equipment

(a) Agricultural ground limestone/fertilizer spreaders shall be commercial spinning disk seeder/spreader either tractor mounted or truck mounted and be specifically designed for spreading agricultural ground limestone or fertilizer.

(b) Equipment used for incorporating Agricultural Ground Limestone into the upper surface of the mine refuse shall consist of a tractor drawn heavy duty industrial offset disk. Disks shall have the capability of cutting to a minimum depth of 250 millimeters (ten inches) up to a maximum depth of 600 millimeters (24 inches). The minimum diameter of the disks shall be 750 millimeters (30 inches). The offset disk shall consist of two rows, or gangs, of disks set at an angle to each other. Each gang shall have a separate frame and axle assembly. The gangs or rows of disk's angle shall be adjustable for varying conditions.

(c) Equipment used for incorporating Agricultural Ground Limestone and the 75 millimeters (three inches) of cover material specified in the plans into the mine refuse shall consist of a tractor drawn offset disk. The disk shall have the capability of cutting to the depth of 150 millimeters (six inches). The minimum diameter of the disks shall be 600 millimeters (24 inches). The offset disk shall consist of two rows, or gangs, of disks set at an angle to each other. Each gang shall have a separate frame and axle assembly. The angle shall be adjustable for varying conditions.

Article 255.04 Construction Requirements

(a) Immediately prior to incorporation into the upper surface of the mine refuse, the agricultural ground limestone shall be uniformly spread at two-thirds the rates shown on the plans. The agricultural ground limestone shall then be incorporated to a minimum depth of 250 millimeters (ten inches) of the mine refuse with the heavy duty industrial offset disk. Incorporation shall be to the satisfaction of the Engineer (a minimum of two passes required).

(b) Once the initial deep incorporation is completed, agricultural ground limestone will be uniformly spread over the regraded mine refuse area at one-third the rates of application as shown on the plans. Application(s) will be applied only to the areas receiving the cover material over buried mine refuse as specified in the plans. 75 millimeters (three inches) of earth cover material shall then be spread over the mine refuse treatment area. This 75 millimeters (three inches) of earth cover material shall be incorporated into the upper 75 millimeters (three inches) of the mine refuse surface with an offset disk. This blending of 150 millimeters (six inches) of soil, agricultural ground limestone, and mine refuse shall be completed to the satisfaction of the Engineer (minimum of two passes required) prior to the placement of the remaining cover material.

Article 255.05 Method of Measurement

Mine refuse treatment will be measured for payment in metric ton (tons) of Agricultural Ground Limestone incorporated as specified herein. Measurement shall be based on weight tickets or receipts provided to the Engineer. Agricultural Ground Limestone will be measured by weight in metric ton (tons) of Agricultural Ground Limestone having an effective neutralizing value of 67.5 (four-year based, a source correction factor of 1.0).

Pay quantity will be computed according to procedures established by the Department. Applied quantity shall be the plan quantity multiplied by the source correction factor. The pay quantity shall be corrected for variations in applied quantity. Payment will not be made for Agricultural Ground Limestone in excess of 108 percent of the amount specified by the Engineer.

Excavation for the 75 millimeter (three inch) layer of cover material to be incorporated into the mine refuse along with the Agricultural Ground Limestone will be measured for payment at the contract unit price per cubic meter (cubic yard) as noted in Article 202.08 of the special provisions.

Article 255.06 Basis of Payment

Mine refuse treatment will be paid for at the contract unit price per metric ton (tons) of MINE REFUSE TREATMENT - LIMESTONE.

The cover material will be paid for at the contract unit price per cubic meter (cubic yard) of EARTH EXCAVATION, as outlined in Article 202.09 of the special provisions.

End of SECTION 255: MINE REFUSE TREATMENT

SECTION 258: MOWING - (add this section)

Article 258.01 Description

This work shall consist of mowing areas designated by the Engineer and as indicated in the plans.

Article 258.02 Equipment

Mowing equipment shall be one of the following:

(a) Tractor drawn rotary mower(s)

(b)Tractor drawn sickle mower(s)

(c) Tractor drawn flail mower(s)

Article 258.03 Construction Requirements

At time and locations designated by the Engineer, the Contractor shall mow vegetation to a height of not more than 150 millimeters (six inches).

Mowing shall not be permitted when the ground is too wet to properly support the equipment used.

Article 258.04 Method of Measurement

Mowing shall be measured in hectare (acre) of surface area mowed.

Article 258.05 Basis of Payment

This work shall be paid for at the contract unit price per hectare (acre) for MOWING.

End of SECTION 258: MOWING

SECTION 280: TEMPORARY EROSION AND SEDIMENT CONTROL - (revise the following articles as indicated)

Article 280.03 Construction Requirements - (delete and replace with the following)

Erosion and sediment control measures as indicated in the Storm Water Pollution Prevention Plan, or as directed by the Engineer shall be installed on the project site prior to beginning any construction activities which will potentially create erodible conditions. Erosion and sediment control devices shall be in place and approved by the Engineer as to proper placement and installation prior to beginning other work. Erosion and sediment control protection for Contractor borrow pits, equipment storage sites, plant sites, haul roads, and other sites shall be installed by the Contractor and approved by the Engineer prior to beginning construction activities at each site.

The Engineer has the authority to limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations, and to direct the Contractor to provide immediate permanent or temporary erosion control measures upon finding an incidence of non-compliance with the Storm Water Pollution Prevention Plan. The Contractor shall incorporate all permanent erosion control features into the project at the earliest practicable time to minimize the need for temporary controls.

The Contractor is encouraged to carefully plan his/her operation so that final gradework is performed as close as possible to the seeding dates specified in the contract to minimize the chances of erosion from areas affected by construction.
Areas where construction activities have ceased for more than 14 consecutive days may require site stabilization practices which may include temporary seeding, mulching, or installation of excelsior blanket, straw bales, silt fence, diversion ditches, vegetative buffer strips and/or geotextiles. For purposes of this Section, the end of construction activities on affected land areas is defined as the time when seedbed preparation has been concluded. Site stabilization, if determined necessary by the Engineer, will not be paid for but will be considered incidental to the contract.

In case of repeated failure on the part of the Contractor to take steps prescribed by the Engineer to control erosion, the Engineer reserves the right to employ outside assistance or to use his/her own forces to provide the necessary corrective measures. Such incurred direct costs plus project engineering costs will be charged to the Contractor and deducted from any compensation due, or which may become due the Contractor under the contract.

Article 280.04 Temporary Erosion Control Systems - (delete paragraphs (e), (f) and (g) and replace with the following)

(f) Temporary Seeding and Mulch. This system consists of installing a temporary grass cover and/or mulch cover over designated areas of the right of way to prevent sheet erosion of areas that are to be altered during a later construction phase. The seeding shall conform to the requirements of Section 250 for Seeding, Class 7, and may be done with a hand seeder or other approved methods and covered with a drag or harrow. The temporary mulch cover shall conform to the requirements of Section 251 for Mulch, Method 1 or Mulch, Method 2. The method to be used will be as designated by the Engineer.

Article 280.08 Basis of Payment - (add the following)

(h) Maintenance. Maintenance of temporary erosion control systems including repair of the various systems, removal of entrapped sediment and cleaning of any silt filter fabric, will be considered incidental to the above pay items for temporary erosion control systems. The sediment shall be removed as directed by the Engineer during the contract period and disposed of on-site as directed by the Engineer.

End of Revisions to SECTION 280: TEMPORARY EROSION AND SEDIMENT CONTROL

SECTION 286: SPECIAL EXCELSIOR BLANKET - (add this section)

Article 286.01 Description

This shall include all labor, materials, equipment and services necessary for and reasonably incidental to installing special excelsior blanket as shown on the plans and specified herein.

Article 286.02 Materials

For special excelsior blanket reference Article 1081.10(a) of the Standard Specifications except as modified herein:

(a) Minimum width - 1200 millimeters (48 inches), plus or minus 25 millimeters (one inch).

(b) Minimum length of roll - approximately 54.9 millimeters (180 feet).

(c) Weight - 4.4 kg/m^2 (0.9 pounds per square yard), plus or minus ten percent.

(d) Fiber length - 80 percent shall be 150 millimeters (six inches) or longer.

(e) Fiber dimension - 0.5 millimeter (.021 inch) x 1 millimeter (.042 inch), plus or minus 25 percent.

(f) Both sides of each blanket shall be enclosed with a plastic netting, black or green in color, having an approximate minimum opening of 15.6 millimeters (5/8 inch) x 15.6 millimeters (5/8 inch) to an approximate maximum opening of 50 millimeters (2 inches) x 25 millimeter (1 inch).

(g) Blankets shall be smolder resistant and shall meet the test of no-flame or smolder for more than a distance of 300 millimeter (12 inches) from a spot where a lighted cigarette is placed on the blanket's surface.

(h) All material shall be new and unused and the length shall be marked on each roll.

(i) The manufacturer shall furnish a certification with each shipment of special excelsior blanket stating the number of rolls furnished and that the material complies with the requirements of the specifications.

(j) Reference Article 1081.10(d) of the Standard Specifications for requirements for staples and Article 1081.10(e) for requirements wood stakes to hold the blanket in place.

Article 286.03 Construction Requirements

The special excelsior blanket shall be placed at locations shown on the plans and in accordance with Article 251.04 of the Standard Specifications modified as follows:

(a) Equipment:

Equipment may require the use of hand tools to roll out the blanket and tack staples or wooden stakes through the blanket into the soil below.

(b) Preparation:

Areas to receive blanket will be staked by the Engineer once seeding work is completed. Installation of special excelsior blanket will follow within a 24-hour period.

(c) Installation:

(1) Special excelsior blanket shall be installed one layer thick and stapled or staked in accordance with Article 251.04 for excelsior blanket of the Standard Specifications, to comply with the varying widths indicated on the plans. The areas to receive special

excelsior blanket will not be mulched.

(2) This blanket shall be installed parallel to the direction of slope in neat, straight lines or with uniform curvature to the approval of the Engineer.

(d) Acceptance/Clean Up:

(1) Seeded/blanketed areas disturbed by the Contractor shall be repaired in accordance with the Standard Specifications and as specified herein, with no additional cost to the contract before the Contractor may request a final inspection of the placement of special excelsior blanket.

(2) Upon completion of the work, remove from the job site and legally dispose of all equipment, surplus materials, empty containers and all other debris resulting from these operations. Clean-up shall be completed prior to final payment.

Article 286.04 Method of Measurement

The area of the special excelsior blanket will be measured in-place in square meter (square yards) of actual surface area protected.

Article 286.05 Basis of Payment

This work will be paid for at the contract unit price per square meter (square yard) for SPECIAL EXCELSIOR BLANKET measured as specified herein.

End of SECTION 286: SPECIAL EXCELSIOR BLANKET

End of Revisions to SECTION 200: EARTHWORK, LANDSCAPING, AND EROSION CONTROL

SECTION 500 - STRUCTURES

SECTION 501: REMOVAL OF EXISTING STRUCTURES - (delete the entire section and replace with the following)

Article 501.01 Description

This work shall consist of the removal and satisfactory disposal of the existing mine structures and equipment, or portions thereof as shown in the plans and specified herein.

Construction Requirements

Article 501.02 General

(a) All concrete or masonry structures to be removed shall be removed to a minimum of 24 inches below finished grade unless specified otherwise in the plans. Structures shall be broken into pieces no larger than 900 millimeters (36 inches) in any dimension. This material shall then be used or disposed of in any of the following ways as specified in the plans:

1) Used as rubble fill to fill mine opening(s). All reinforcing steel or other such material protruding from the rubble shall be cut off.

2) Used as riprap for erosion control.

3) Buried on-site. All material being buried on the site shall be well embedded and the interstices filled with smaller pieces or smaller material in a manner to give density satisfactory to the Engineer.

(b) All metal structures and equipment to be removed shall be carefully removed in transportable sections and shall be either salvaged by the Contractor and removed from the site or disposed of on-site with any concrete and masonry structures as specified in Article 501.02(a)(3) of these Special Provisions.

(c) Any vessels, containers, transformers, etc. that are encountered by the Contractor during demolition, which appear to be associated with hazardous waste, shall be brought to the Engineer's attention immediately.

(d) All materials, other than those specified in Article 501.02 (a) (b) and (c) that are associated with the structures to be removed, shall be considered trash and debris and disposed of in accordance with Article 201.01(f) of these Special Provisions.

Article 501.03 Method of Measurement

Unless specified otherwise in the plans, all salvageable materials are to become the property of the Contractor and the salvage value of the materials will be understood to have been taken into consideration in the lump sum contract price for REMOVAL OF EXISTING STRUCTURES.

Costs for operations necessary for structural removal, re-use, and/or disposal shall be considered incidental to the contract and included in the contract unit price for REMOVAL OF EXISTING STRUCTURES.

Article 501.04 Basis of Payment

The cost of all structure removal and disposal will be paid for at the Lump Sum contract price for REMOVAL OF EXISTING STRUCTURES. The removal of any structures which are visible above ground and any appendages thereof, visible or not, will be considered as included.

End of Revisions to SECTION 501: REMOVAL OF EXISTING STRUCTURES

SECTION 595: REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL – (add this section)

Article 595.01 Description

This work shall consist of the removal and disposal of all asbestos containing material (ACM) as shown on the plans. All work shall be done in accordance with requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), The Illinois Department of Public Health (IDPH), the Occupational Safety and Health Administration (OSHA), and these Special Provisions as outlined herein.

Article 595.02 General Requirements

The work described herein shall be performed by a contractor certified by the Illinois Dept. of Public Health as a Licensed Asbestos Contractor. At least five days prior to commencing removal of any asbestos containing material (ACM) the Contractor shall notify the Engineer of the ACM removal starting date. IDNR shall provide a licensed Asbestos Inspection/Air Sampling Professional when removal work is being performed to ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 f/cc [8 hour time weighted average permissible exposure limit (PEL)] or 1.0 f/cc [30 minute Excursion limit (EL)].

If any of the air samples taken indicate an airborne asbestos fiber above 0.1 f/cc, the contractor shall stop work and clean the area by wet wiping. The ASP shall then retest the area taking a minimum of two air samples. After all samples fall below 0.1 f/cc, work may resume.

If the initial air monitoring reveals that employee exposure is below the permissible exposure limit and excursion limit, sampling will be discontinued. Air sampling shall resume any time there are changes in the method of removal, changes in the workforce or power equipment is used in the removal process.

Article 595.03 Notifications and Permits

Notification: At least ten (10) working days in advance of commencing the removal of asbestos containing materials the Contractor shall provide notification to the Illinois Environmental Protection Agency and the Illinois Department of Public health using the STATE OF ILLINOIS DEMOLITION/RENOVATION/ASBESTOS PROJECT NOTIFICATION form. The Contractor shall be responsible for payment of all applicable fees that are required along with the notification.

Proof of proper notification shall be provided to the IDNR project manager at least five (5) working days in advance of commencing the removal of asbestos containing material.

The required form may be obtained online at http://www.epa.state.il.us/air/asbestos/asbestos-form-combined.pdf or from:

IEPA Asbestos Unit
1021 North Grand Ave. East
PO Box 19276
Springfield, IL 62794-9276
(217) 524-0229

Or

IDPH Division of Environment Health
525 W. Jefferson St.
Springfield, IL 62761
(217) 782-4977

Permits: The Contractor shall comply with all applicable regulations required by Federal, State, or local agencies, and shall obtain any permits that may be required to perform the work. Copies of all applicable permits must be provided to the Engineer prior to commencement of the removal of asbestos containing material. The Contractor shall be responsible for all costs associated with

obtaining any required permits.

Article 595.04 Removal, Containment, Transport, and Disposal of Asbestos Containing Materials

The location of Asbestos Containing Material (ACM) is specified in the plans. Materials identified as asbestos containing materials are a pile of roofing materials.

Removal of all asbestos containing material shall be performed with as much care as possible in order to minimize breaking. All areas where asbestos is being removed shall be kept adequately wet while materials are being removed and until materials are packaged for transport.

Preparing ACM waste for transport: All asbestos containing materials must be kept wet until placed in an approved, tightly sealed, leak tight, non-returnable container from which fibers cannot escape. The Contractor shall cooperate with the Engineer in conducting air sampling. Acceptable containers may include plastic bags of at least 6 mil thickness, carton, drums, or cans that have been approved by the Engineer. Caution labels are required on each container or wrapping. Each label must be in conspicuous, legible lettering and spell out the following or equivalent warning:

CAUTION
Contains Asbestos
Avoid Opening or Breaking Container
Breathing Asbestos is Hazardous to your Health

Each container or wrapping must also have a label that identified the source of the Asbestos Containing Waste Material in conspicuous, legible lettering as:

Asbestos Containing Waste Material
Illinois DNR B&Z #3 Reclamation Project
Herrin, IL

The Contractor may place asbestos containing material into an enclosed truck dumpster, keeping it adequately wetted, that has been lined with two layers of six mil poly with appropriate signage.

Transport of Asbestos Containing Material: All ACM waste shall be transported to an IEPA permitted landfill. A record of shipment shall be prepared using the Illinois Uniform Hazardous Waste Manifest for each load of asbestos containing waste material removed from the site. Within thirty (30) days after the asbestos containing waste material has been removed from the site, the Contractor shall provide a copy of the completed manifest showing the waste has been received at an IEPA permitted landfill.

Article 595.05 Method of Measurement

This work shall not be measured for payment, but shall be considered complete when all of the asbestos containing waste material has been removed from the site and a copy of the fully executed waste manifest has been provided to the Engineer.

Article 595.065 Basis of Payment

This work will be paid for at the contract lump sum price for REMOVAL AND DISPOSAL OF ASBESTOS

CONTAINING MATERIAL.

End of Revisions to SECTION 595: REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL
End of Revisions to SECTION 500: STRUCTURES

SECTION 600 – INCIDENTAL CONSTRUCTION

SECTION 614: DEWATERING IMPOUNDMENTS - (add this section)

Article 614.01 Description

This work shall include furnishing all labor, material, equipment and services necessary for and reasonably incidental to the dewatering of the specified impoundment, and maintaining this dewatered condition as necessary during the life of the project, as necessary to execute excavation, filling, and other activities as required to meet the proposed site conditions.

Article 614.02 Conditions

Water volumes and quality fluctuate seasonally and may differ at the time of dewatering. Based on previous test data, water treatment is not anticipated. If conditions change and acid water treatment is necessary, the water treatment shall be paid for in accordance with Section 109.04 of the Standard Specifications. Furthermore, impoundments will refill during construction operations. No additional compensation will be allowed for the multiple pumping operations that are necessary.

Article 614.03 Construction Requirements

(a) The contractor shall submit a detailed plan for each impoundment to be dewatered to the Engineer a minimum of seven (7) days in advance of that work. The plan shall show clearly the dewatering systems to be used on each impoundment specified for dewatering. The plan shall contain a listing of all equipment, erosion controls, and chain of command for the operation. No dewatering can commence until the plan has been approved by the Engineer.

(b) All discharges from the site must meet the following Illinois Environmental Protection Agency's mine effluent discharge standards before being allowed to discharge from the construction limits.

Parameter	Standard
Total Acidity, mg/l CaCo3	Shall not exceed total alkalinity
pH	6.0 - 9.0
Total Iron	Shall not exceed 3.5 mg/l
Total Suspended Solids	Shall not exceed 35 mg/l

(c) Prior to the commencement of dewatering operations, the Contractor shall notify the Engineer so that water quality tests may be taken. A minimum of 72 hours will be required to obtain the results following the retrieval of the water samples. The Engineer shall provide the Contractor with these results. Commencement of discharge operations can only occur upon the approval of the Engineer.

(d) All water within the impoundment shall be dewatered by pumping down to the elevation necessary so that earth excavation/fill materials are not placed into water. Where the approved dewatering plan specifies phased dewatering of the pit to facilitate phased construction, earth excavation/fill materials may be placed in water with the Engineer's approval as necessary to construct earth berms to divide the pit.

(e) The impoundment shall be dewatered completely. Under no circumstances will breaching of any portion of existing containment embankment(s) be allowed as a method for dewatering an impoundment. All discharges from dewatering operations shall be directed to the existing drainageways adjacent to and downstream from the impoundment(s).

(f) The dewatering operation shall be performed at a controlled rate with will prevent: (1) downstream flooding; (2) erosion of the existing stream channels; (3) transportation of sediment outside the construction limits; and (4) damage to the aquatic life and its habitat.

(g) All dewatering activities during the duration of the project shall follow the previously listed requirements.

Article 614.04 Approval to Discharge Water

The Contractor shall not discharge water from any impoundment to be dewatered without the approval of the Engineer. The Engineer will give the Contractor approval to discharge only after the water to be discharged has been sampled by the Engineer and it meets the IEPA mine effluent discharge standards as stated herein.

The Engineer shall order the Contractor to terminate the discharge of water any time the quality of water fails to meet those standards or when the Contractor deviates from the approved dewatering plan.

Article 614.05 Method of Measurement

Dewatering the impoundments will not be measured for payment, but will be considered complete when it is completed as specified herein and to the satisfaction of the Engineer.

Article 614.06 Basis of Payment

This work shall be paid for at the lump sum price for DEWATERING IMPOUNDMENTS for each impoundment that is specified to be dewatered in the plans, which price shall include all labor, equipment and materials to perform the work specified herein.

Partial payment of the lump sum amount bid for Dewatering Impoundments will be made in accordance with the following schedule.

(a) Upon satisfactory completion of initial dewatering of the impoundment, 50 percent of the pay item will be paid.

(b) Upon satisfactory completion of all earthwork throughout the project, 40 percent of the pay item will be paid.

(c) Upon satisfactory completion of final seeding, the remaining 10 percent of the pay item will be paid.

Nothing herein shall be construed to limit or preclude partial payments for other items as provided for by the contract. Multiple pumping operations, as may be required to meet the specifications, will not be measured for payment, but considered included in the lump sum price for Dewatering Impoundments.

End of SECTION 614: DEWATERING IMPOUNDMENTS

SECTION 616: COFFERDAMS- (add this section)

Article 616.01 Description

This work shall consist of all work necessary to install, maintain, and remove a cofferdam(s) and of all work including: all diversions of water, construction of sumps, and pumping as required to maintain all construction areas free of water for prosecution of all contract work.

Article 616.02 Construction Requirements

The cofferdams shall be sufficient in size to allow construction of all items as proposed. The cofferdams shall be located, designed, constructed, and removed with the Engineer's approval. The contractor shall provide the detailed plan for the cofferdams to the Engineer prior to construction. Earthen materials may be used for cofferdam construction.

Water shall be removed from the work areas. Diversion of water and/or pumping may be required. The contractor shall supply and maintain the pump(s) as deemed necessary to complete the required construction.

Article 616.03 Method of Measurement

Temporary cofferdams will not be measured for payment, but will be considered complete when done as specified herein and to the satisfaction of the Engineer.

Pumping of impounded water from or around the cofferdams area will not be measured for payment but shall be considered incidental to the cofferdam contract price. Dewatering of the impoundment will not be measured for payment, but shall be considered incidental to the cofferdam contract price.

Article 616.04 Basis of Payment

This work shall be paid for at the lump sum unit price for COFFERDAMS. The size and details of the cofferdams shall meet the approval of the Engineer and no extra compensation will be allowed for a cofferdam of excessive size.

End of SECTION 616: COFFERDAMS

SECTION 666: RIGHT-OF-WAY MARKERS - (delete entire section and replace with the following)

SECTION 666: MINE OPENING MARKERS

Article 666.01 Description

This work shall consist of the proper installation of the concrete mine marker as shown on the plans and specified herein.

Article 666.02 Materials

(a) Concrete -- The concrete shall be Class SI Concrete and shall meet the requirements of Section 1020 of the Standard Specifications.

(b) A brass tablet for the concrete mine marker will be furnished by the Engineer prior to construction of the marker.

Article 666.03 Erection of Marker

(a) Location

The exact location of the concrete mine marker will be staked by the Engineer prior to the beginning of concrete marker work. The approximate location is shown on the plans.

(b) Tablet

During construction of the concrete marker (either pre-cast in the shop or cast-in-place in the field), the Contractor will be required to anchor the brass tablet in the "wet" concrete and properly finish the top face to securely bond the two materials together.

(c) Installation

The concrete mine marker shall be installed in compacted soil, the bottom of the holes shall be compacted to provide a stable foundation and it shall be set in a vertical position. The hole shall be backfilled with approved materials, in layers, thoroughly rammed in such a manner that the bottom of the marker will not be moved from their correct position.

Article 666.04 Basis of Payment

This work shall be paid for at the contract unit price each for MINE OPENING MARKER.

End of Revisions to SECTION 666: MINE OPENING MARKERS

SECTION 671: MOBILIZATION - (delete entire section and replace with the following)

Article 671.01 Description

This work shall consist of preparatory work and operations necessary for the movement of personnel,

equipment, supplies and incidentals to the project site; for establishment of offices, buildings and other facilities necessary for work on the project; and for all other work or operations which must be performed or costs incurred when beginning work on the project.

The amount which a Contractor will receive payment for, in accordance with the following schedule, will be limited to six percent of the total contract bid.

Article 671.02 Basis of Payment

Payment of the lump sum amount bid for this item, not exceeding six percent, will be made in entirety in the first partial payment.

Nothing herein shall be construed to limit or preclude partial payments for other items as provided for by the contract.

End of Revisions to SECTION 671: MOBILIZATION
End of Revisions to SECTION 600: INCIDENTAL CONSTRUCTION

SECTION 1000 MATERIALS

SECTION 1004: COURSE AGGREGATE - (revised the following articles as indicated)

Article 1004.05 Coarse Aggregate for Blotter, Embankment, Backfill, Trench Backfill, Bedding, and French Drains (revise as indicated)

(c) Gradation – add CA-1 as an option for Porous Granular Embankment.

End of Revisions to SECTION 1004: COURSE AGGREGATE
End of Revisions to SECTION 1000: MATERIALS

End of Revisions for BELL & ZOLLER NO. 3 – SUMMIT MINE RECLAMATION
AML-GWmE-1703
WILLIAMSON COUNTY

TEST BORING LOGS

The test boring logs that follow are provided for the Contractor's use in assessing subsurface conditions. These data were prepared for the exclusive use of the Department for use in the design of this project; no other warranty, expressed or implied, is made. It remains the Contractor's responsibility to thoroughly acquaint himself with the site's subsurface conditions as they relate to his work by whatever means he judges appropriate.

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-1D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 395.1
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				Brown Mottled Gray Silty CLAY (CL)
10				
15				
20				End of Boring @ −17.0'
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 2, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

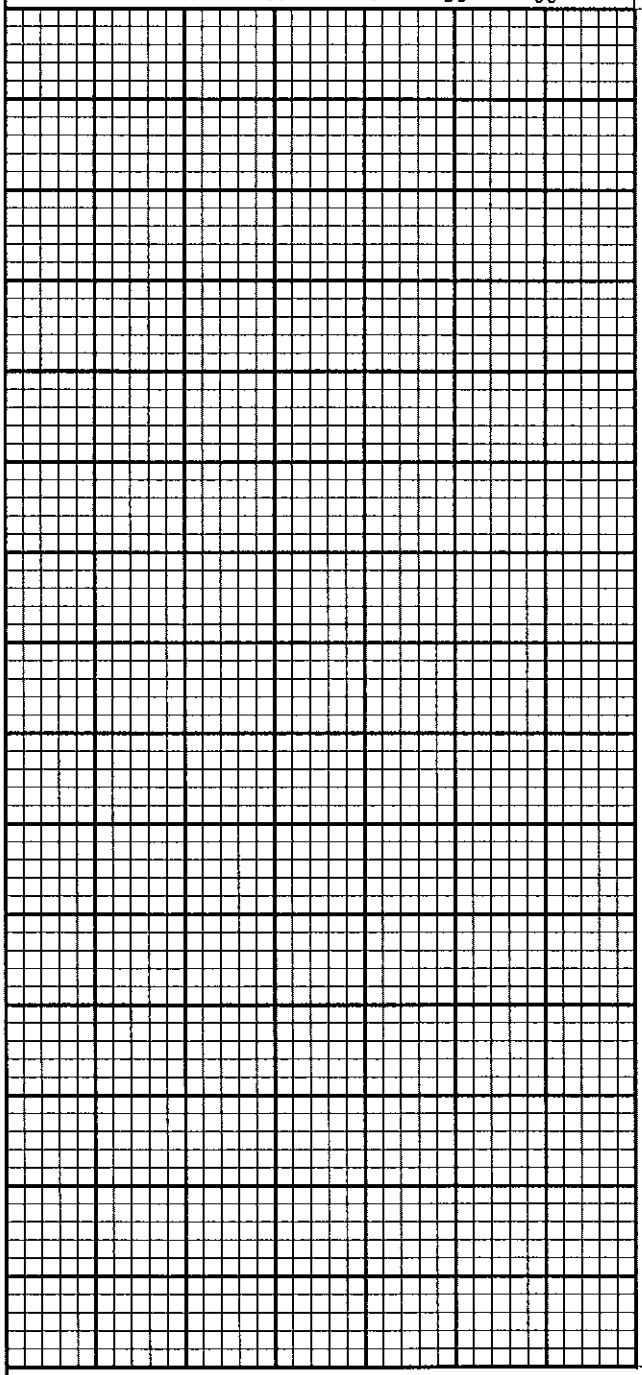
Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-2S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.6
				7" Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-3S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.4
				8" Mine Refuse
				Brown Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-4D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **392.9**
				5" Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				
10				
15				
				End of Boring @ −16.0'
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

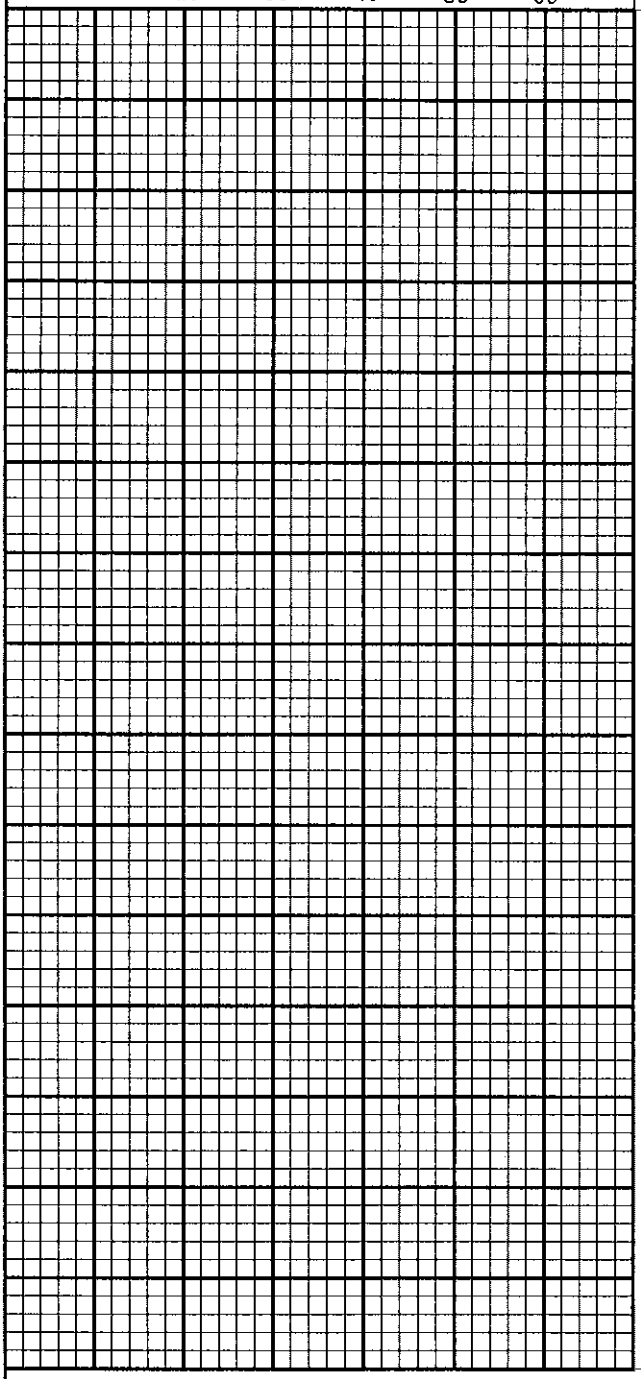
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-5S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 392.3
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

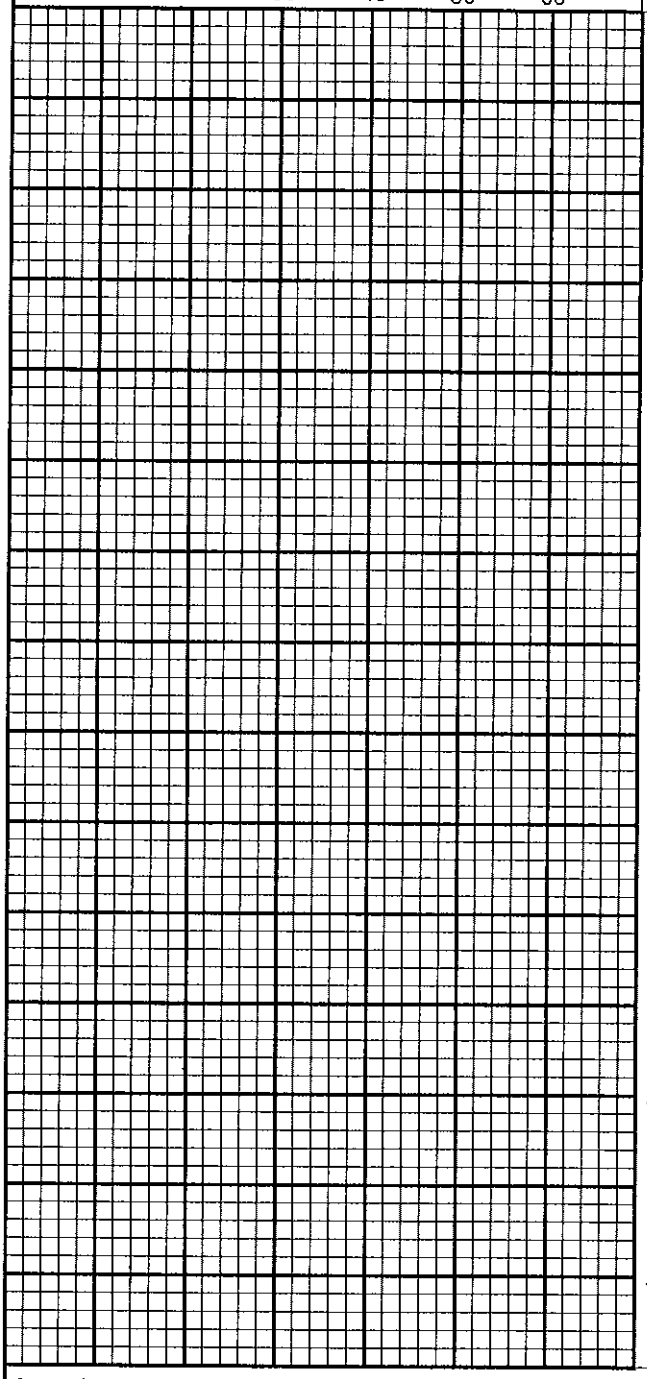
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-6S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 392.3
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-7S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **395.4**
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-8S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.8
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

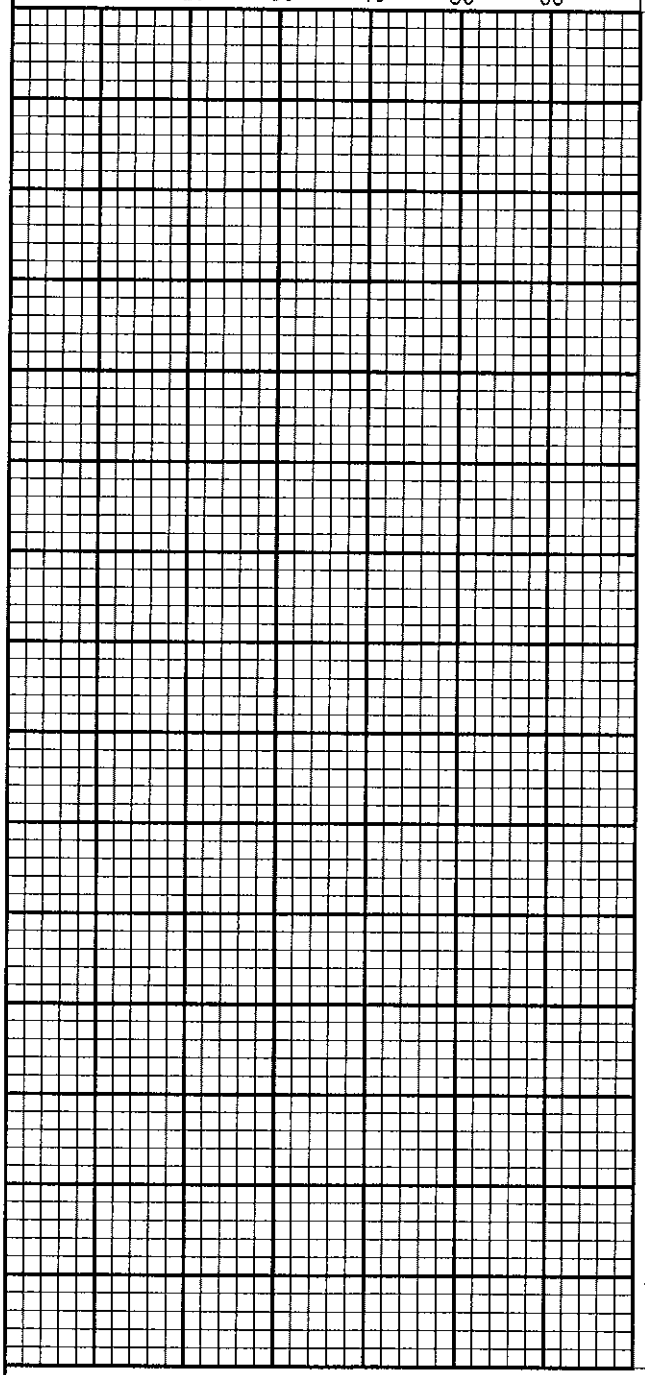
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-9S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.8
				Mine Refuse
				Brown Silty CLAY (CL)
5				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-10S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.6
				Brown Silty CLAY (CL)
5				
10				End of Boring @ -7.5'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 2, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-11S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **392.5**
				Brown Silty CLAY (CL)
5				Brown Mottled Gray Silty CLAY (CL)
10				End of Boring @ -7.5'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 2, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

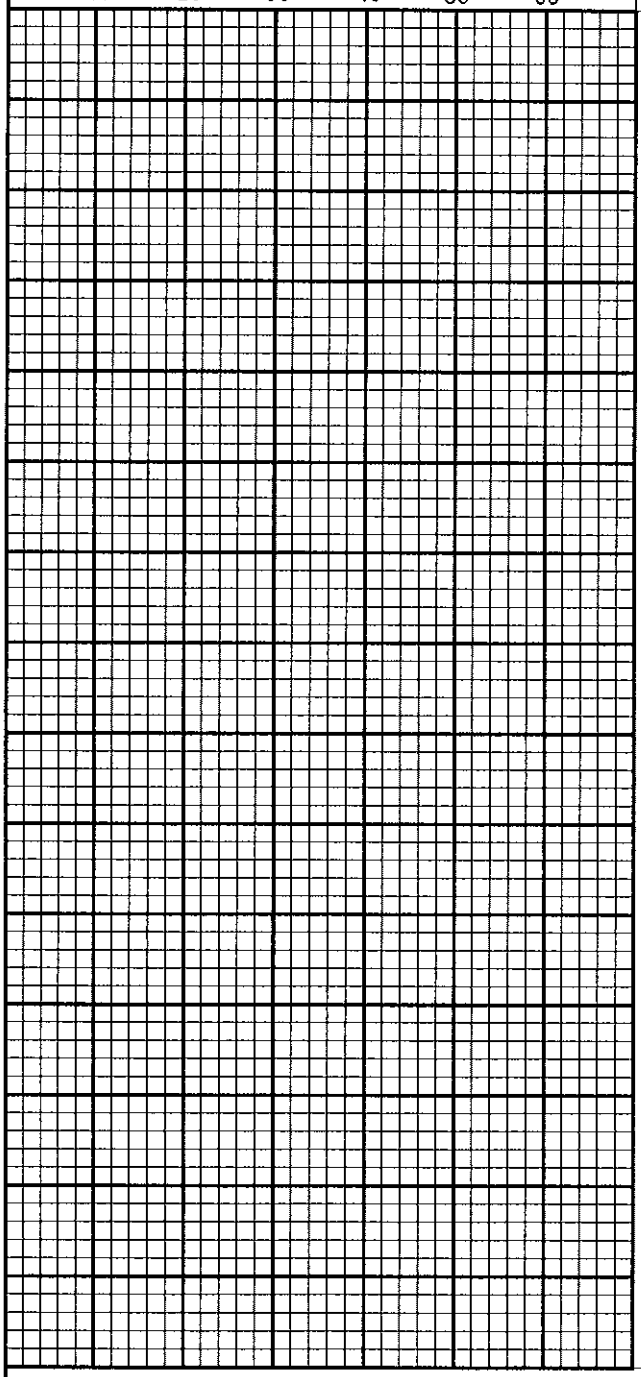
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-12D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 389.6
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
				End of Boring @ -19.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-13S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **391.0**
				Mine Refuse
				Brown Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-14S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 392.3
				Mine Refuse
				Brown Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-15D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.0
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				
10				
15				
				End of Boring @ -17.0'
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-16S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **394.4**
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-17S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 387.8
				Mine Refuse
5				Gray Mottled Brown Silty CLAY (CL)
				Brown Mottled Gray Silty CLAY (CL)
10				End of Boring @ -9.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-18S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 388.0
				Mine Refuse
5				Brown Silty CLAY (CL)
10				End of Boring @ -7.5'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 2, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-19S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **389.8**
				Mine Refuse
5				
				Brown Mottled Gray Silty CLAY (CL)
10				End of Boring @ -9.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-20S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 394.1
				Mine Refuse
5				Gray Silty CLAY (CL)
				End of Boring @ -7.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

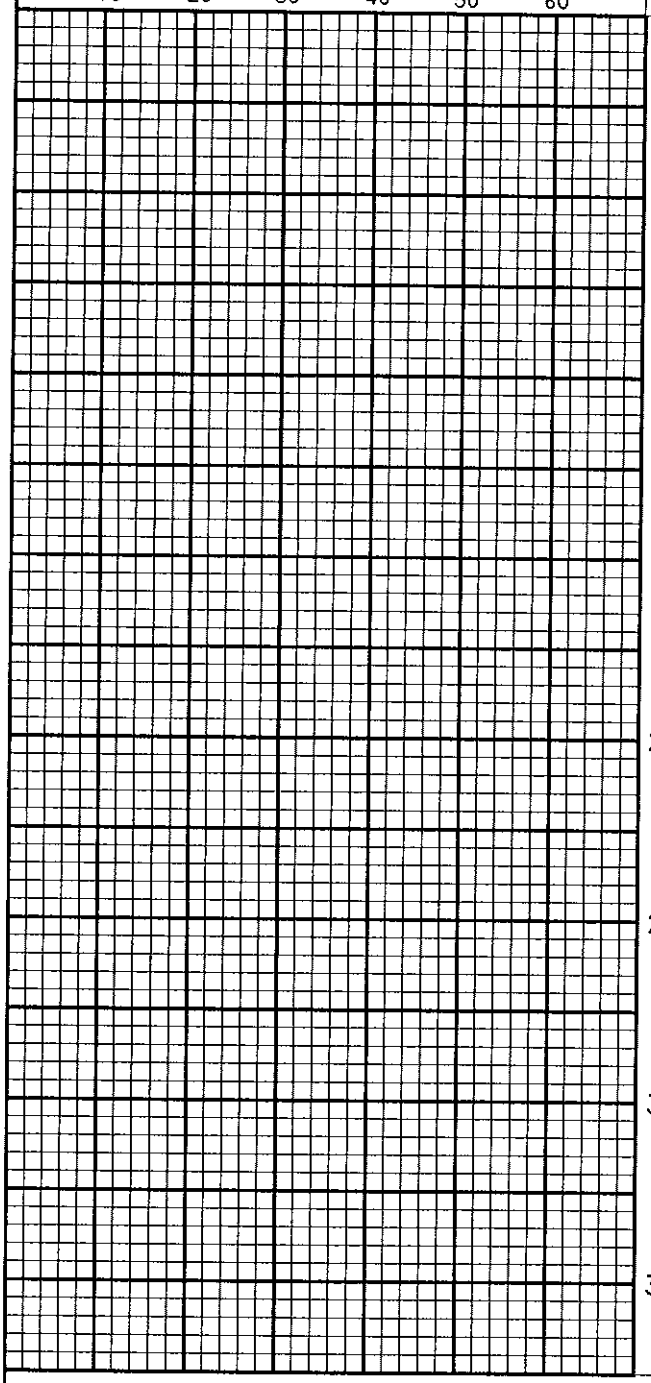
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-21S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.3
				Mine Refuse
5				
10				Gray Silty CLAY (CL)
				End of Boring @ -12.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-22S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 388.1
				Mine Refuse
5				
10				
15				Brown Mottled Gray Sandy CLAY(CL)
20				End of Boring @ −17.0'
25				
30				
35				

Ground Water Data
Water Encountered @ −8.5' During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

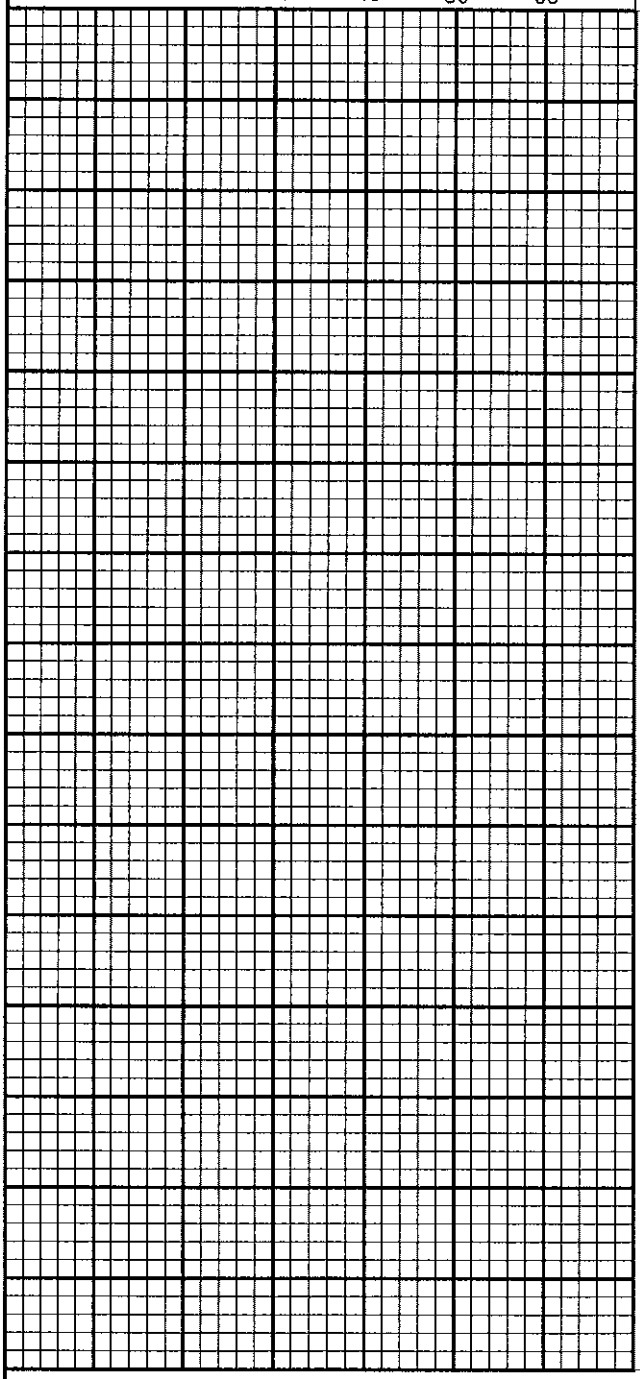
Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-23S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 385.7
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -10.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-24S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.6
				Mine Refuse
5				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -8.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

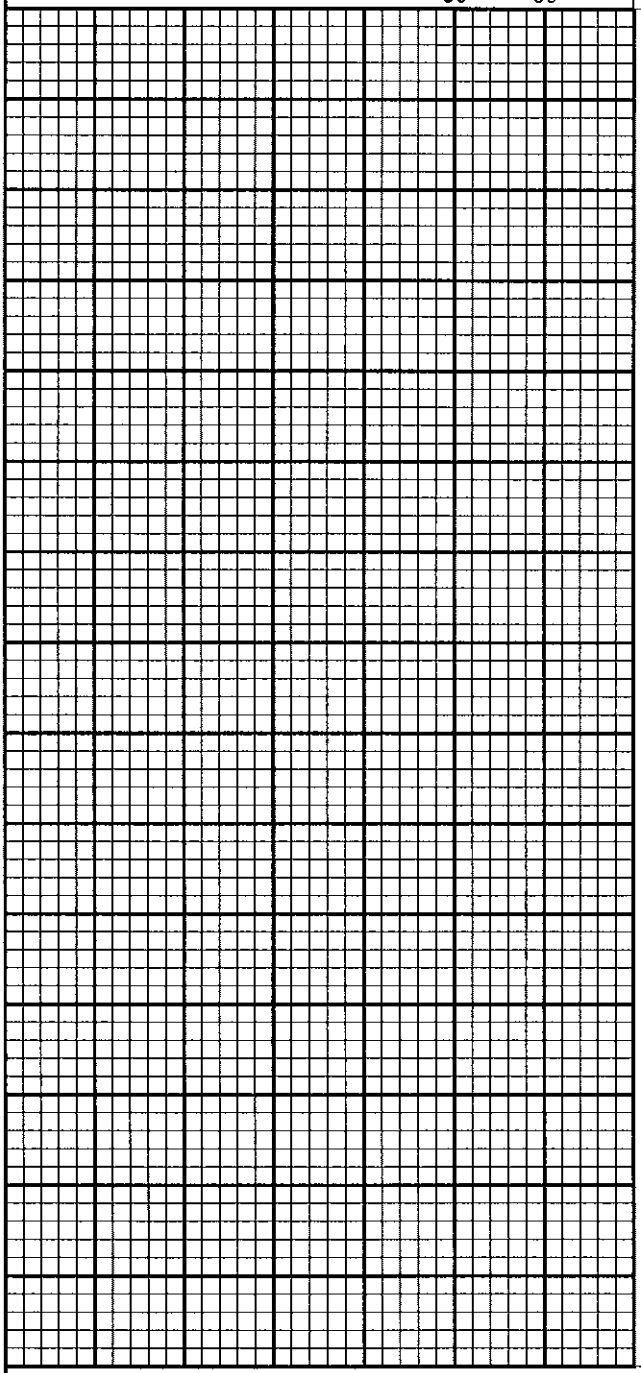
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-25S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 381.2
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -7.0'

Ground Water Data
Water Encountered @ -3.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

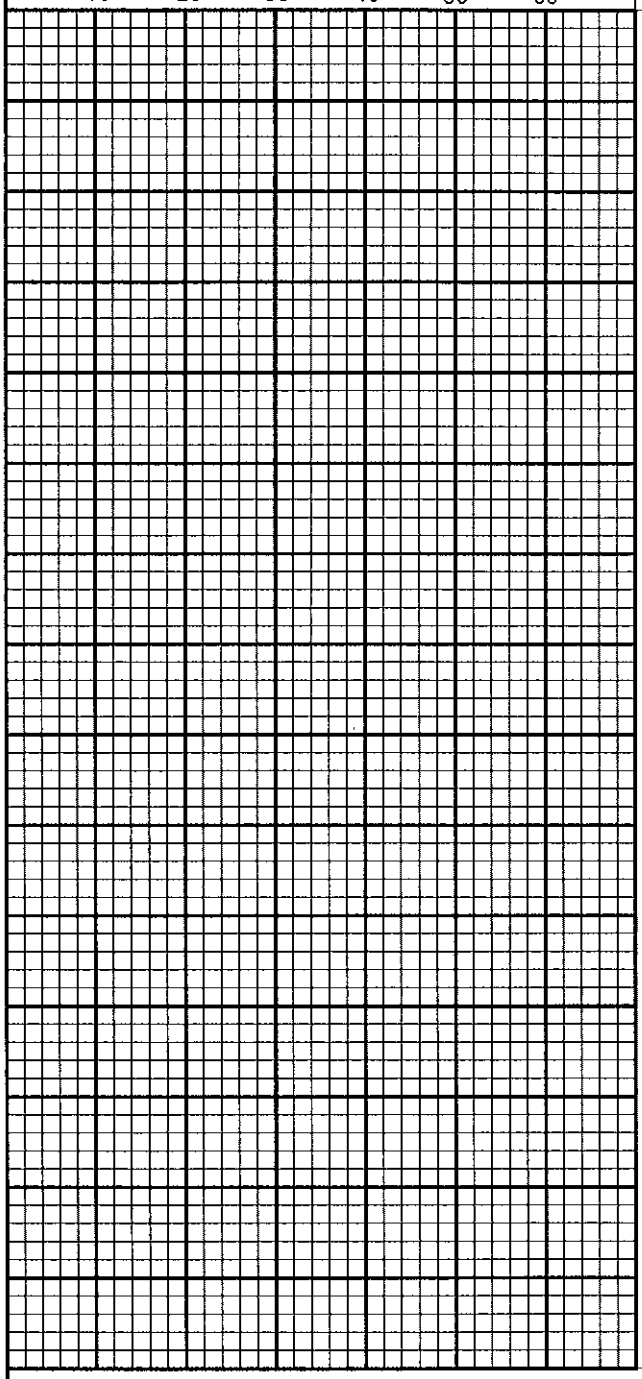
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-26S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.7
				Mine Refuse
5				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -8.0'

Ground Water Data
Water Encountered @ -3.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

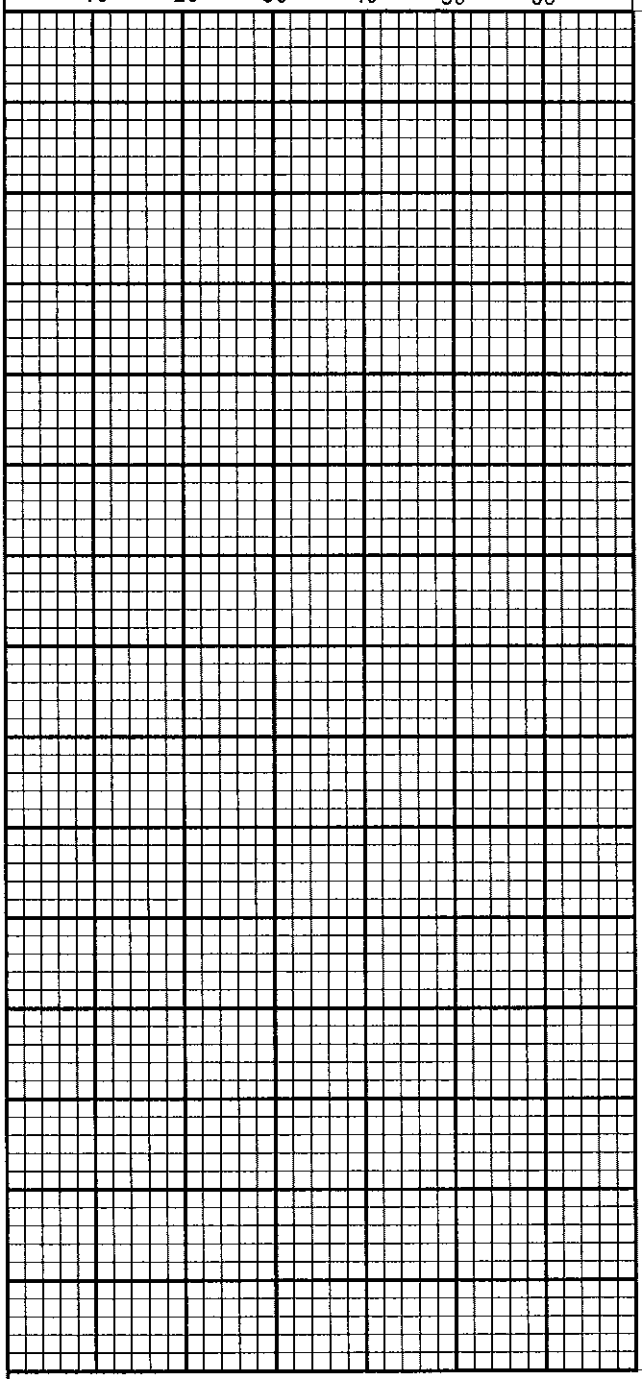
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-27S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.8
				Mine Refuse
				Gray Silty CLAY (CL)
				End of Boring @ -10.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-28D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 388.0
				Mine Refuse
5				
10				
				Brown Mottled Gray Silty CLAY (CL)
15				
20				
25				
				End of Boring @ -26.0'
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-29S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **389.8**
				Mine Refuse
5				
10				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -12.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-30S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 390.8
				Mine Refuse
5				
10				
15				Brown Mottled Gray Silty CLAY (CL)
20				End of Boring @ -17.0'
25				
30				
35				

Ground Water Data
Water Encountered @ -8.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

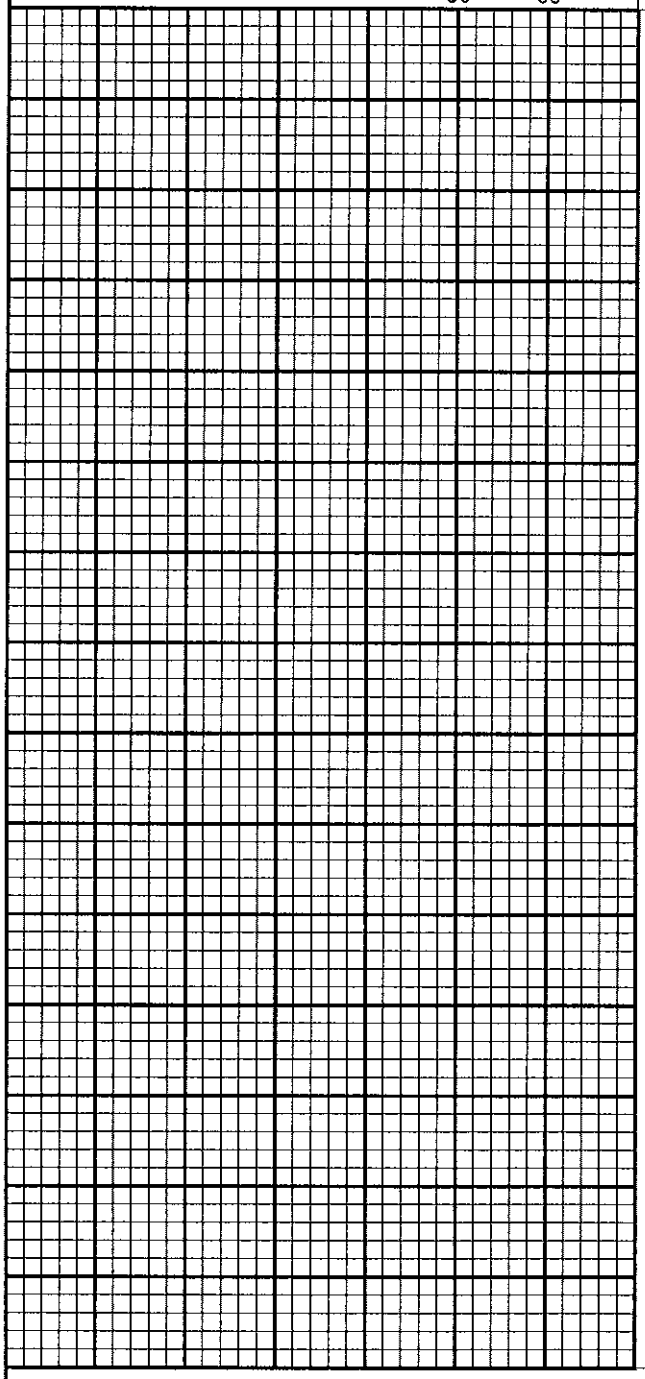
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-31D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 387.2
				Mine Refuse
				Gray Silty CLAY (CL)
				End of Boring @ -25.0'

Ground Water Data
Water Encountered @ -6.0' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-32S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 384.6
				Mine Refuse
5				
				Gray Silty CLAY (CL)
10				End of Boring @ -10.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

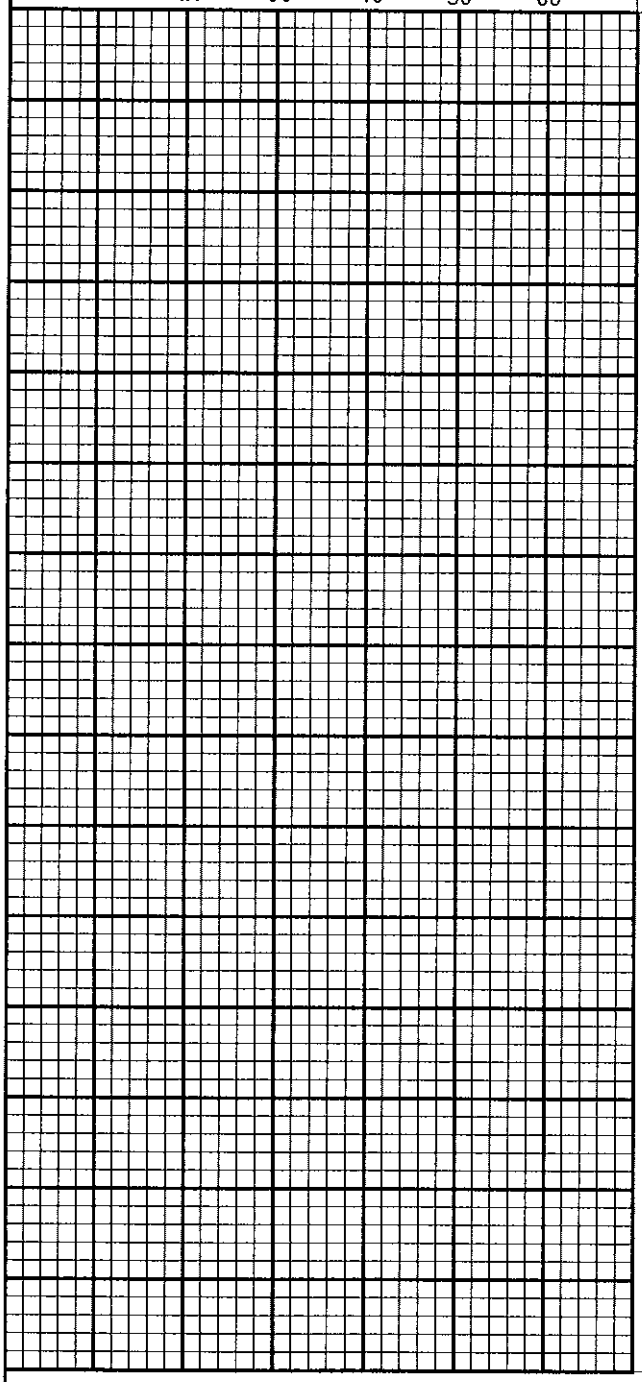
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-33S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **384.9**
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -12.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

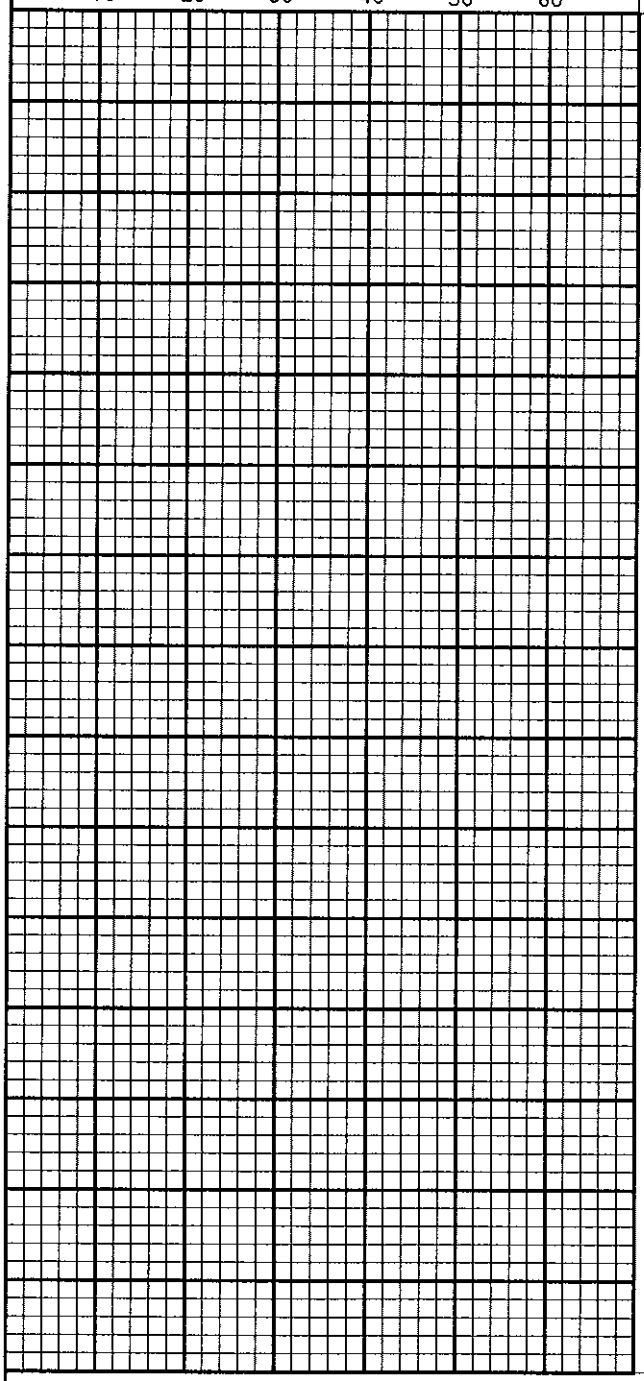
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-34S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 383.7
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -10.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-35S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.2
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				
				End of Boring @ -11.0'
15				
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -3.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-36S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 381.2
				Mine Refuse
5				
10				Gray Silty CLAY (CL)
				End of Boring @ -12.0'
15				
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -3.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-37S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.5
				Mine Refuse
				Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 4, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

PROJECT: Bell & Zoller No. 3 - Summit

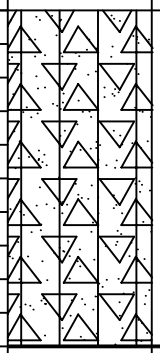
LOCATION: Herrin Quadrangle, WilliamsonCounty, T8S-R1E Section 11

SOIL BORING NO.

BZS - 38S

STARTED: 10/17/2014 COMPLETED: 10/17/2014
DRILLING EQUIPMENT: HAND AUGER
DRILLING METHOD: HAND AUGER
DRILLER: M. DUDAS/A. WHITE
SAMPLING METHOD: NONE
LOGGED BY: M. DUDAS

NORTHING: 429592 EASTING: 770482
G.S. ELEV.: 382.3
COORD. SYSTEM: IL STATE PLANE EAST ZONE 1201-IL
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88

DEPTH (feet)	GRAPHIC LOG	USCS	DETAILED SOIL AND ROCK DESCRIPTION	SAMPLE ID
1–5		GM	Mine Refuse - mixture of various soil and rock material.	No sample taken.
5			EOB @ 5'	
6–20				

▽ GROUNDWATER DEPTH WHILE DRILLING

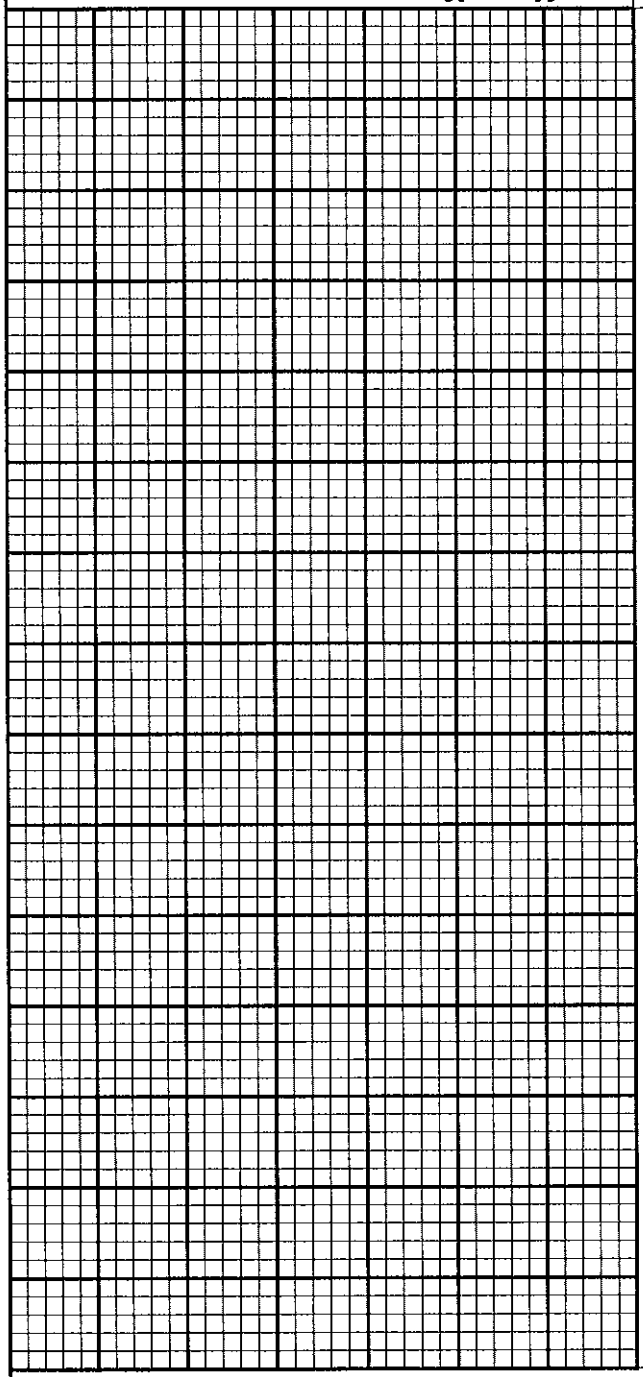
Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-39S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 388.8
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -12.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-40S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 387.7
				Mine Refuse
5				
10				
				Gray Silty CLAY (CL)
15				End of Boring @ −15.0'
20				
25				
30				
35				

Ground Water Data
Water Encountered @ −8.5' During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-41S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 383.4
				Mine Refuse
5				
10				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -12.0'
15				
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -6.0' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-42S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 388.0
				8" Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 5, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

PROJECT: Bell & Zoller No. 3 - Summit

LOCATION: Herrin Quadrangle, WilliamsonCounty, T8S-R1E Section 11

SOIL BORING NO.

BZS - 43S

STARTED: 10/17/2014 COMPLETED: 10/17/2014
DRILLING EQUIPMENT: HAND AUGER
DRILLING METHOD: HAND AUGER
DRILLER: M. DUDAS/A. WHITE
SAMPLING METHOD: NONE
LOGGED BY: M. DUDAS

NORTHING: 429522 EASTING: 770532
G.S. ELEV.: 379.6
COORD. SYSTEM: IL STATE PLANE EAST ZONE 1201-IL
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88

DEPTH (feet)	GRAPHIC LOG	USCS	DETAILED SOIL AND ROCK DESCRIPTION	SAMPLE ID
0		GM	▽ Mine Refuse - mixture of various soil and rock material.	
1				
2		ML-CL	Slurry - saturated black/gray clayey silt (coal fines and waste).	No sample taken.
3				
4				
5			EOB @ 5'	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

▽ GROUNDWATER DEPTH WHILE DRILLING

PROJECT: Bell & Zoller No. 3 - Summit

LOCATION: Herrin Quadrangle, WilliamsonCounty, T8S-R1E Section 11

SOIL BORING NO.

BZS - 44S

STARTED: 10/17/2014 COMPLETED: 10/17/2014
DRILLING EQUIPMENT: HAND AUGER
DRILLING METHOD: HAND AUGER
DRILLER: M. DUDAS/A. WHITE
SAMPLING METHOD: NONE
LOGGED BY: M. DUDAS

NORTHING: 4429522 EASTING: 770467
G.S. ELEV.: 379.7
COORD. SYSTEM: IL STATE PLANE EAST ZONE 1201-IL
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88

DEPTH (feet)	GRAPHIC LOG	USCS	DETAILED SOIL AND ROCK DESCRIPTION	SAMPLE ID
0		GM	▽ Mine Refuse - mixture of various soil and rock material.	
1				
2		ML-CL	Slurry - saturated black/gray clayey silt (coal fines and waste).	No sample taken.
3				
4				
5			EOB @ 5'	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

▽ GROUNDWATER DEPTH WHILE DRILLING

PROJECT: Bell & Zoller No. 3 - Summit

LOCATION: Herrin Quadrangle, WilliamsonCounty, T8S-R1E Section 11

SOIL BORING NO.

BZS - 45S

STARTED: 10/17/2014 COMPLETED: 10/17/2014
DRILLING EQUIPMENT: HAND AUGER
DRILLING METHOD: HAND AUGER
DRILLER: M. DUDAS/A. WHITE
SAMPLING METHOD: NONE
LOGGED BY: M. DUDAS

NORTHING: 429522 EASTING: 770382
G.S. ELEV.: 379.6
COORD. SYSTEM: IL STATE PLANE EAST ZONE 1201-IL
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88

DEPTH (feet)	GRAPHIC LOG	USCS	DETAILED SOIL AND ROCK DESCRIPTION	SAMPLE ID
0		GM	▽ Mine Refuse - mixture of various soil and rock material.	
1				
2		ML-CL	Slurry - saturated black/gray clayey silt(coal fines and waste).	No sample taken.
3				
4				
5			EOB @ 5'	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

▽ GROUNDWATER DEPTH WHILE DRILLING

PROJECT: Bell & Zoller No. 3 - Summit

LOCATION: Herrin Quadrangle, WilliamsonCounty, T8S-R1E Section 11

SOIL BORING NO.

BZS - 46S

STARTED: 10/17/2014 COMPLETED: 10/17/2014
DRILLING EQUIPMENT: HAND AUGER
DRILLING METHOD: HAND AUGER
DRILLER: M. DUDAS/A. WHITE
SAMPLING METHOD: NONE
LOGGED BY: M. DUDAS

NORTHING: 429457 EASTING: 770482
G.S. ELEV.: 379.6
COORD. SYSTEM: IL STATE PLANE EAST ZONE 1201-IL
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88

DEPTH (feet)	GRAPHIC LOG	USCS	DETAILED SOIL AND ROCK DESCRIPTION	SAMPLE ID
0		GM	▽ Mine Refuse - mixture of various soil and rock material.	
1				
2		ML-CL	Slurry - saturated black/gray clayey silt (coal fines and waste).	No sample taken.
3				
4				
5			EOB @ 5'	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

▽ GROUNDWATER DEPTH WHILE DRILLING

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-47S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.3
				Mine Refuse
5				
10				Gray Mottled Brown Silty CLAY (CL)
15				End of Boring @ -13.0'
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -6.0' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-48S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 384.6
				Mine Refuse
5				
10				
				Gray Mottled Brown Silty CLAY (CL)
15				End of Boring @ -15.0'
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -8.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-49D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 383.6
				Mine Refuse
5				
10				
15				Gray Mottled Brown Silty CLAY (CL)
20				
25				
30				End of Boring @ -29.0'
35				

Ground Water Data
Water Encountered @ -8.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-50S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.3
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				End of Boring @ -10.0'
15				
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -6.0' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-51S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 384.2
				Mine Refuse
5				
10				
15				
				Gray Silty CLAY (CL)
20				End of Boring @ −20.0'
25				
30				
35				

Ground Water Data
Water Encountered @ −8.5' During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

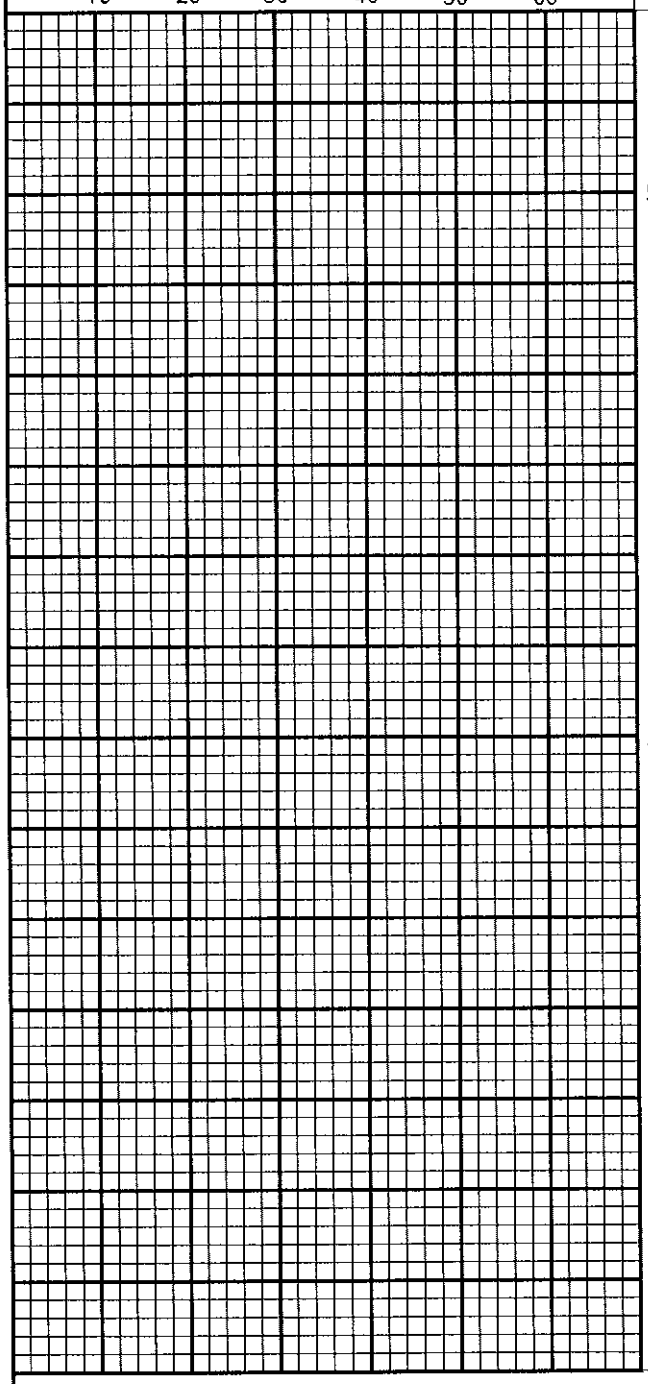
Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-52S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 383.1
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -20.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-53S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.9
				Mine Refuse
5				
10				
15				Gray Silty CLAY (CL)
20				End of Boring @ -17.0'
25				
30				
35				

Ground Water Data
Water Encountered @ -8.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-54S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 381.8
				Mine Refuse
5				
10				
15				Gray Mottled Brown Silty CLAY (CL)
20				End of Boring @ −18.0'
25				
30				
35				

Ground Water Data
Water Encountered @ −6.0' During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-55S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 376.7
				Mine Refuse
5				
10				
				Gray Silty CLAY (CL)
15				End of Boring @ -15.0'
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -4.0' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

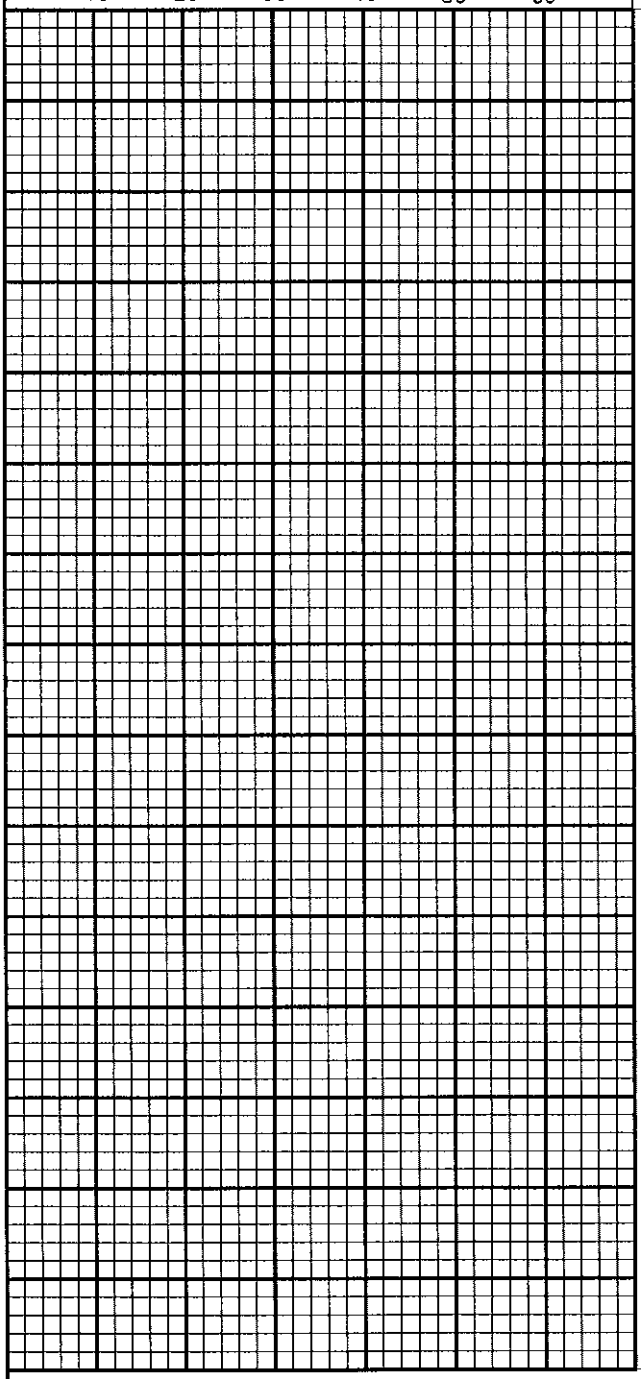
Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-56D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.9
				Mine Refuse
5				
10				
				Gray Mottled Brown Silty CLAY (CL)
15				
20				
25				
				End of Boring @ -27.0'
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-57S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.2
				Mine Refuse
5				
10				Gray Silty CLAY (CL)
				End of Boring @ -12.0'
15				
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -3.5' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-58S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 381.6
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-59S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.4
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				End of Boring @ −10.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-60S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 384.2
				Mine Refuse
5				
10				
				Gray Mottled Brown Silty CLAY (CL)
15				End of Boring @ -15.0'
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-61S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 379.0
				Mine Refuse
5				
10				
				Gray Mottled Brown Silty CLAY (CL)
15				End of Boring @ -14.0'
20				
25				
30				
35				

Ground Water Data
Water Encountered @ -9.0' During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-62S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 378.0
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				End of Boring @ -11.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-63D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 384.3
				Mine Refuse
5				
10				
				Gray Mottled Brown Silty CLAY (CL)
15				
20				
25				
				End of Boring @ -26.0'
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-64S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.6
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				End of Boring @ -10.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

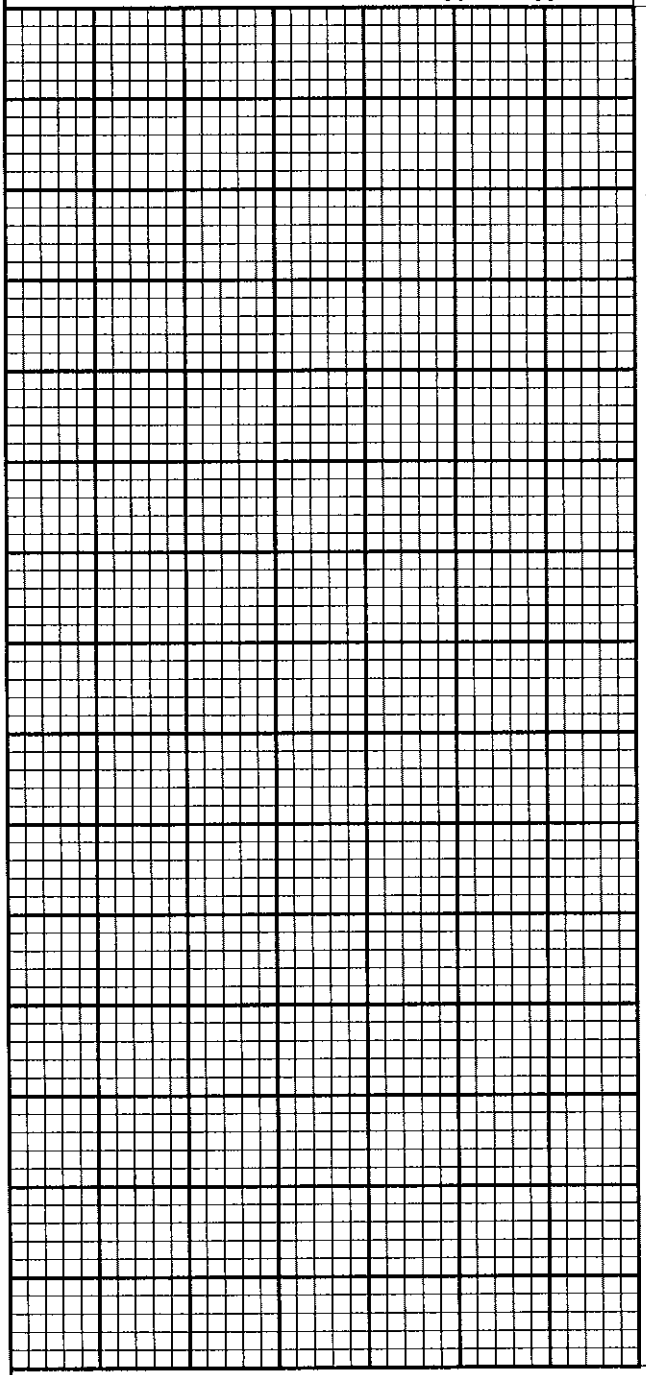
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-65S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.4
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ −10.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 10, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-66S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.8
				Mine Refuse
5				Gray Silty CLAY (CL)
10				End of Boring @ -8.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

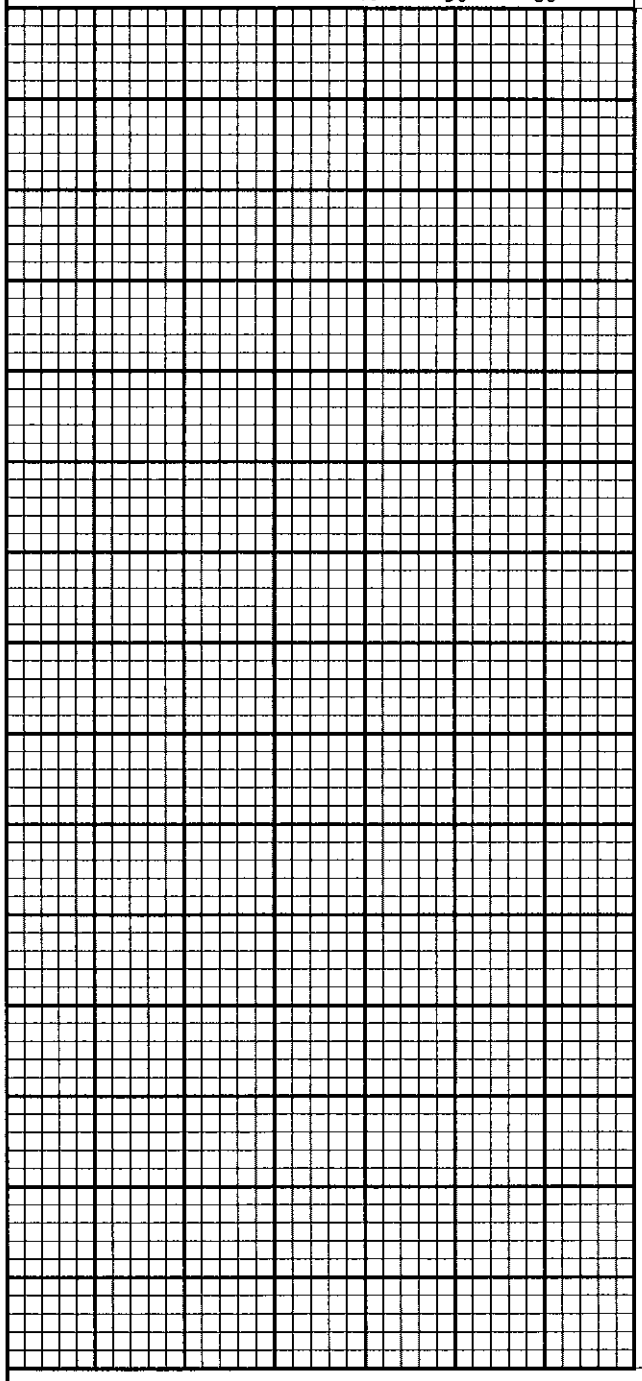
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-67S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.3
				Mine Refuse
5				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -8.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

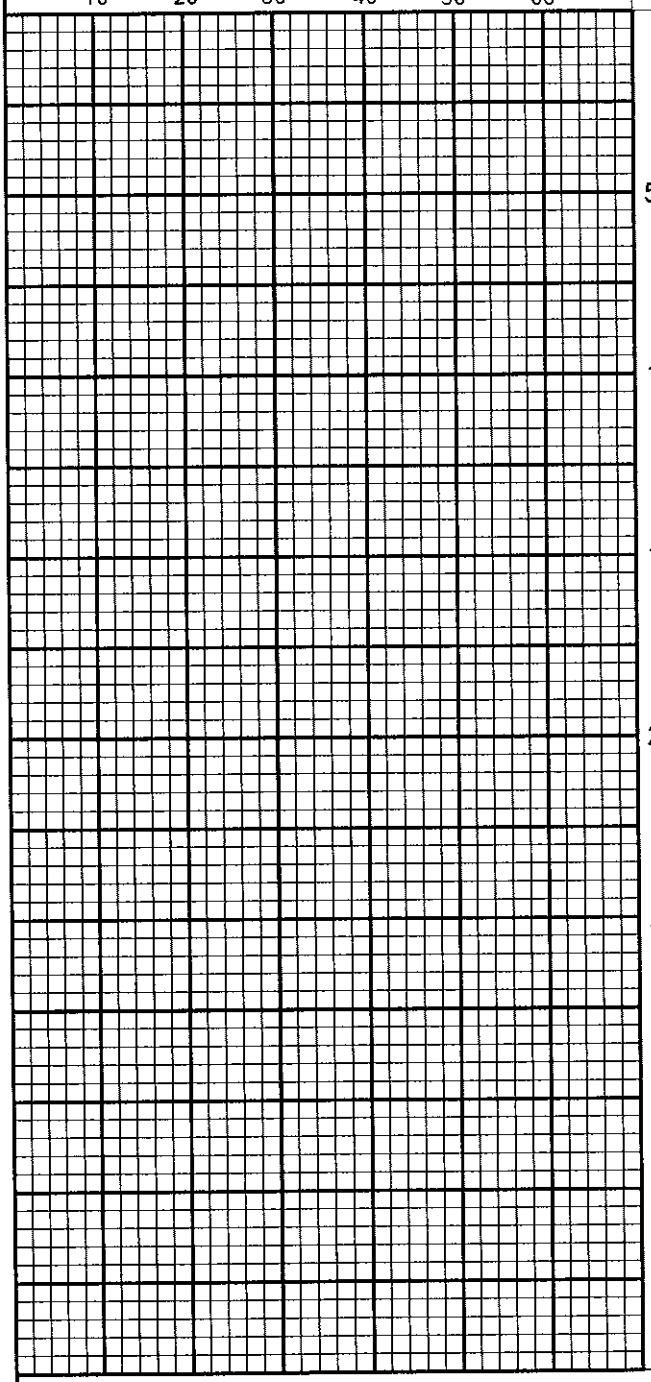
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-68S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 383.0
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -10.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

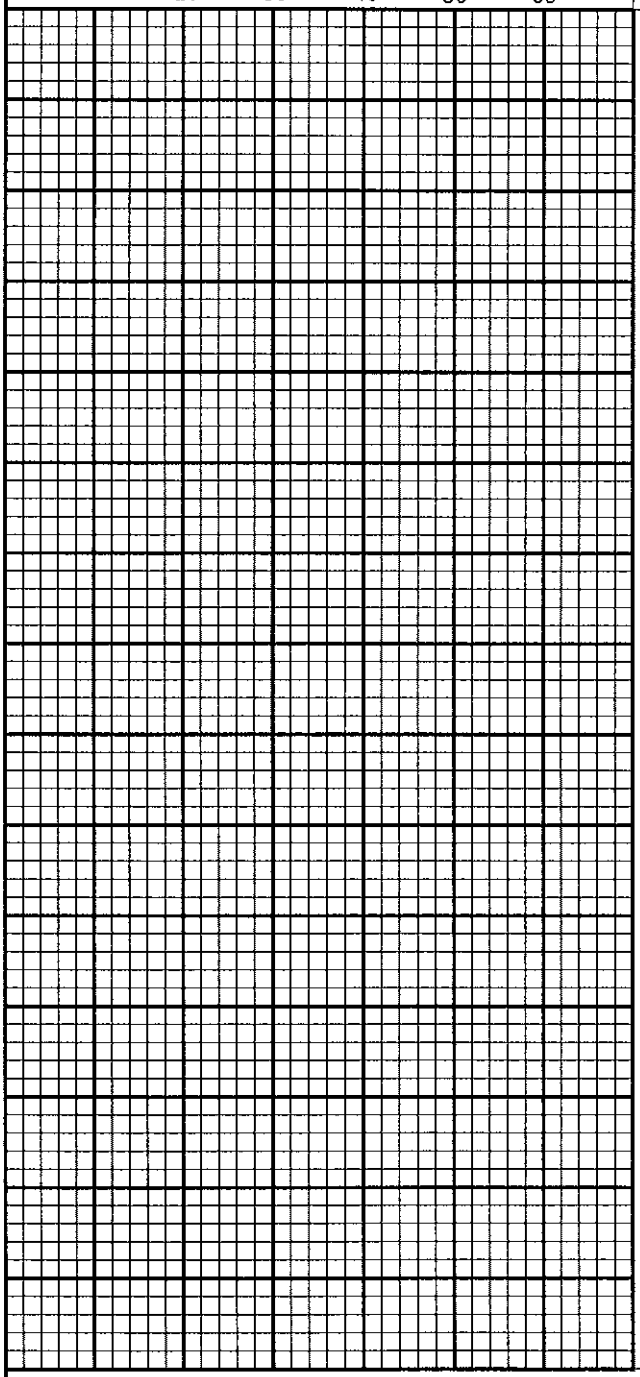
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-69S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 386.0
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-70S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 381.5
				Mine Refuse
5				Gray Silty CLAY (CL)
				End of Boring @ -8.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-71S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.1
				Mine Refuse
5				Gray Silty CLAY (CL)
				End of Boring @ -7.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-72S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 379.2
				Mine Refuse
				Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-73S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.0
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				End of Boring @ -10.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

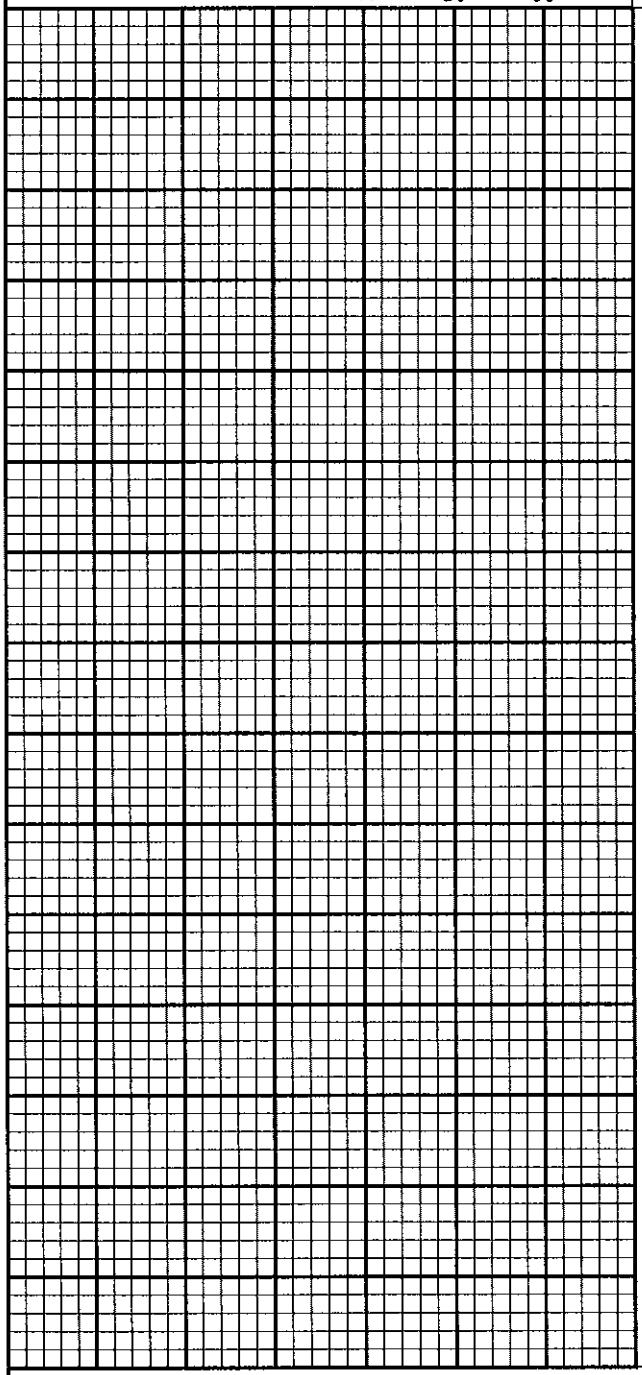
Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-74S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.4
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -10.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-75S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.9
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-76S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 375.4
				Mine Refuse
				Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

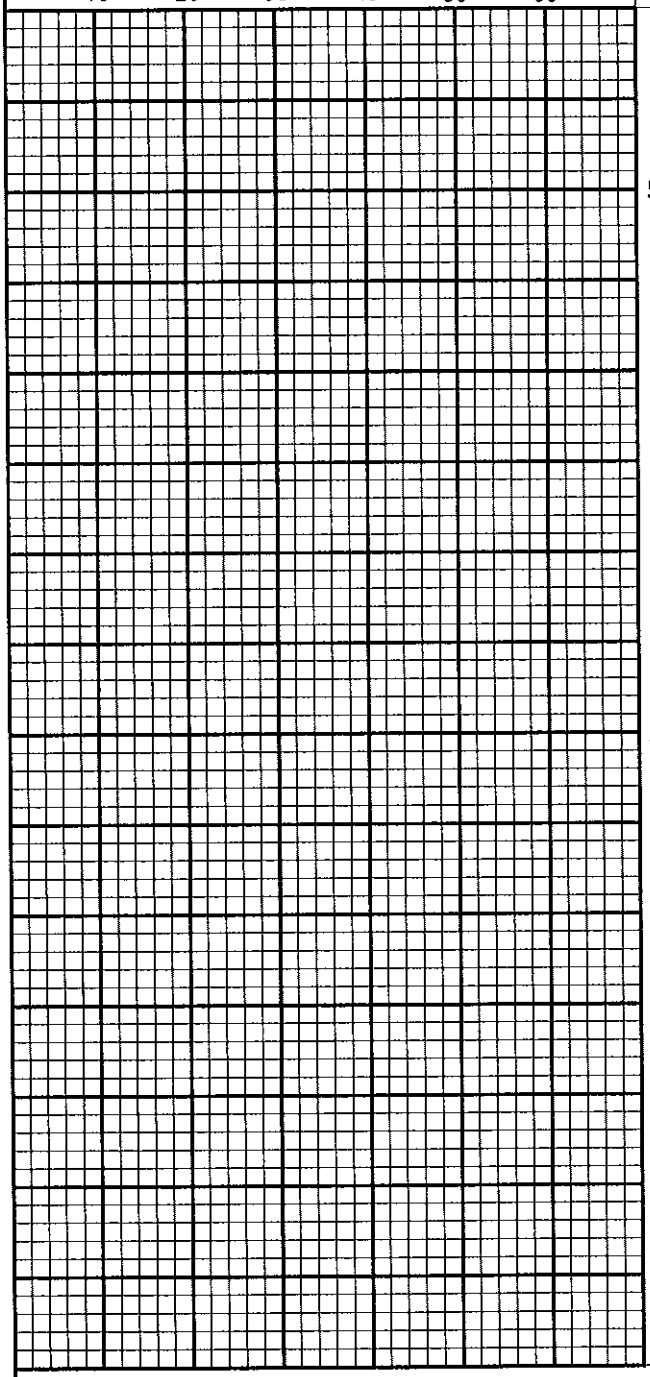
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-77S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 376.3
				Mine Refuse
5				Gray Silty CLAY (CL)
				End of Boring @ -6.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

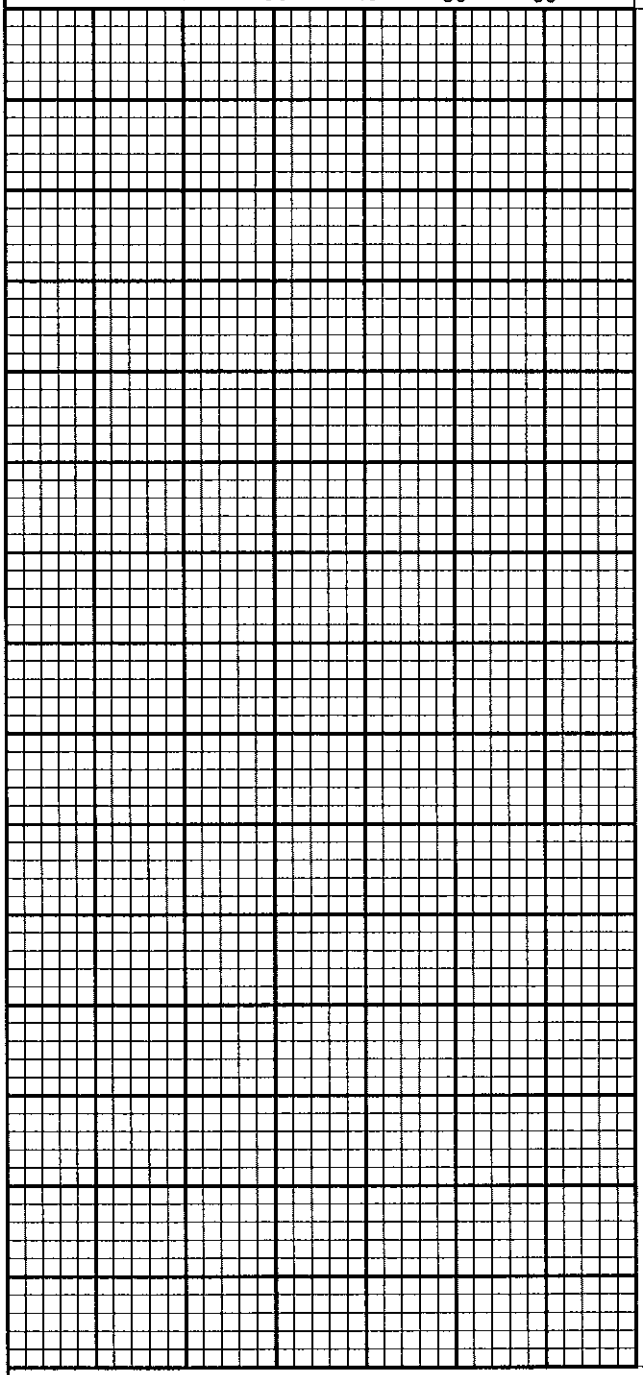
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-78S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 378.5
				Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-79S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 383.4
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				End of Boring @ −10.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

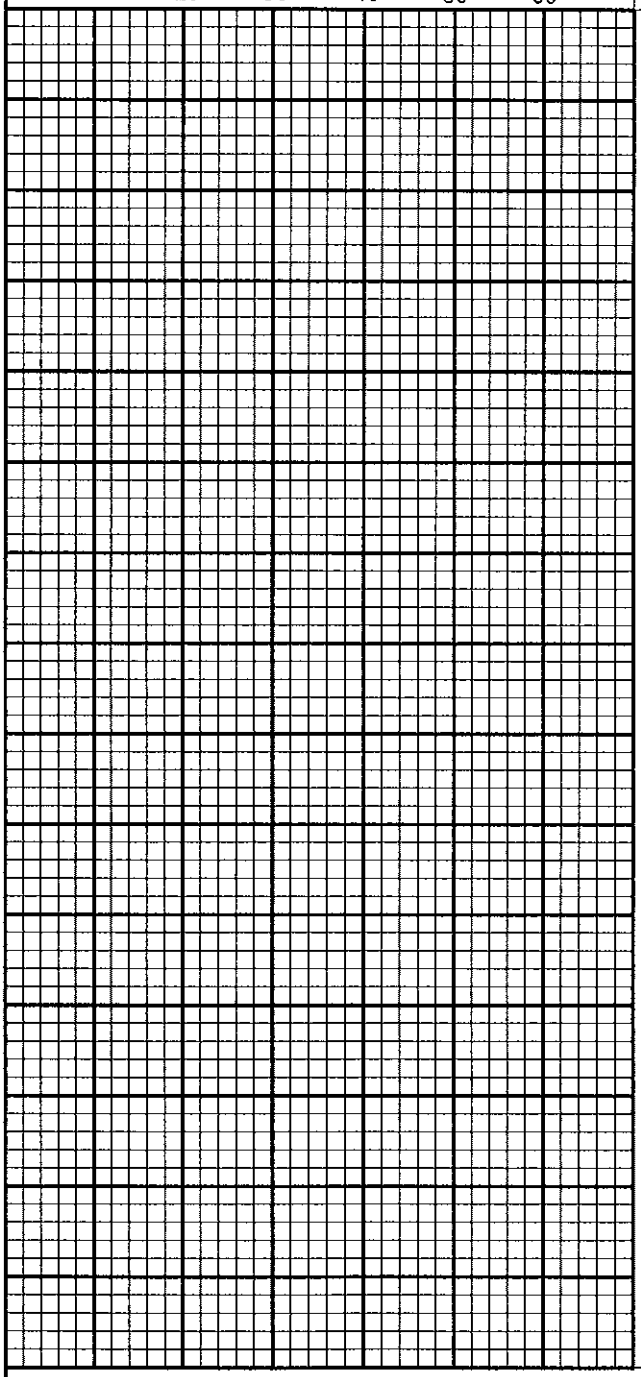
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-80S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 381.6
				Mine Refuse
5				Gray Mottled Brown Silty CLAY (CL)
				End of Boring @ -8.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-81S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.8
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-82S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 382.5
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

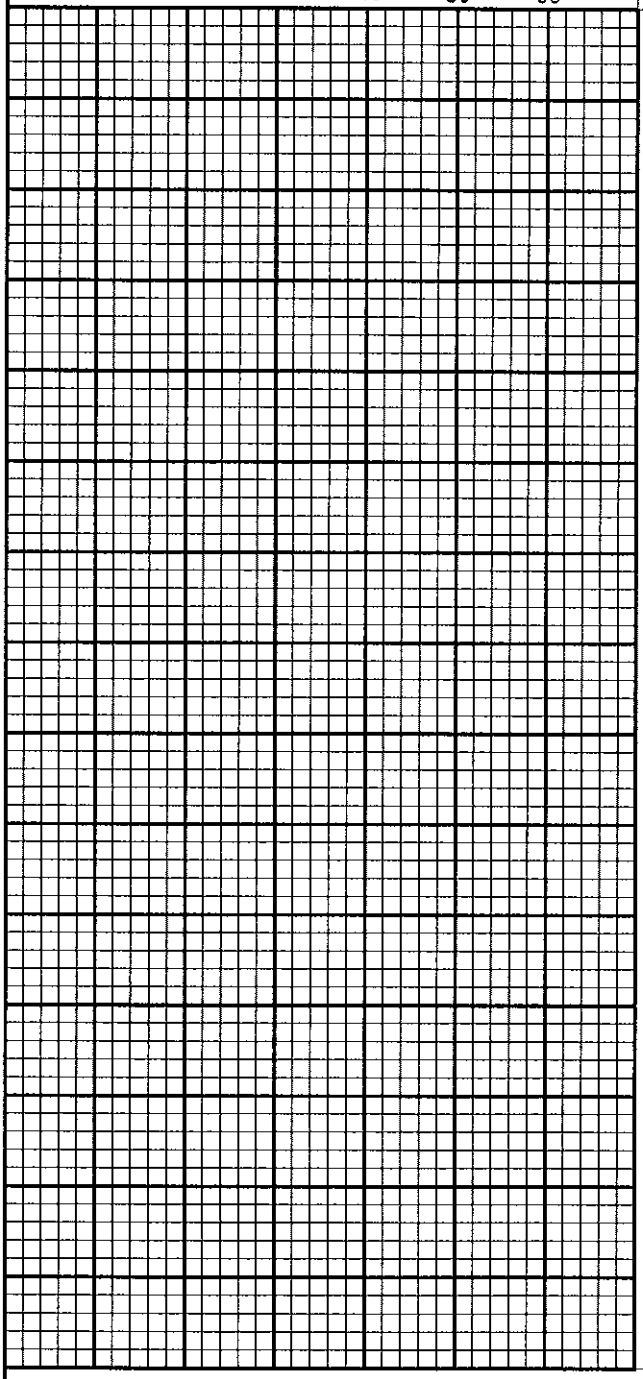
Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-83S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.5
				Mine Refuse
				Brown Mottled Gray Silty CLAY (CL)
				End of Boring @ -7.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-84S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 379.8
				Mine Refuse
5				Brown Mottled Gray Silty CLAY (CL)
10				End of Boring @ -9.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-85S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **385.4**
				Mine Refuse
5				
				Gray Silty CLAY (CL)
10				End of Boring @ −10.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-86S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 379.6
				9" Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				End of Boring @ -5.0'
10				
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

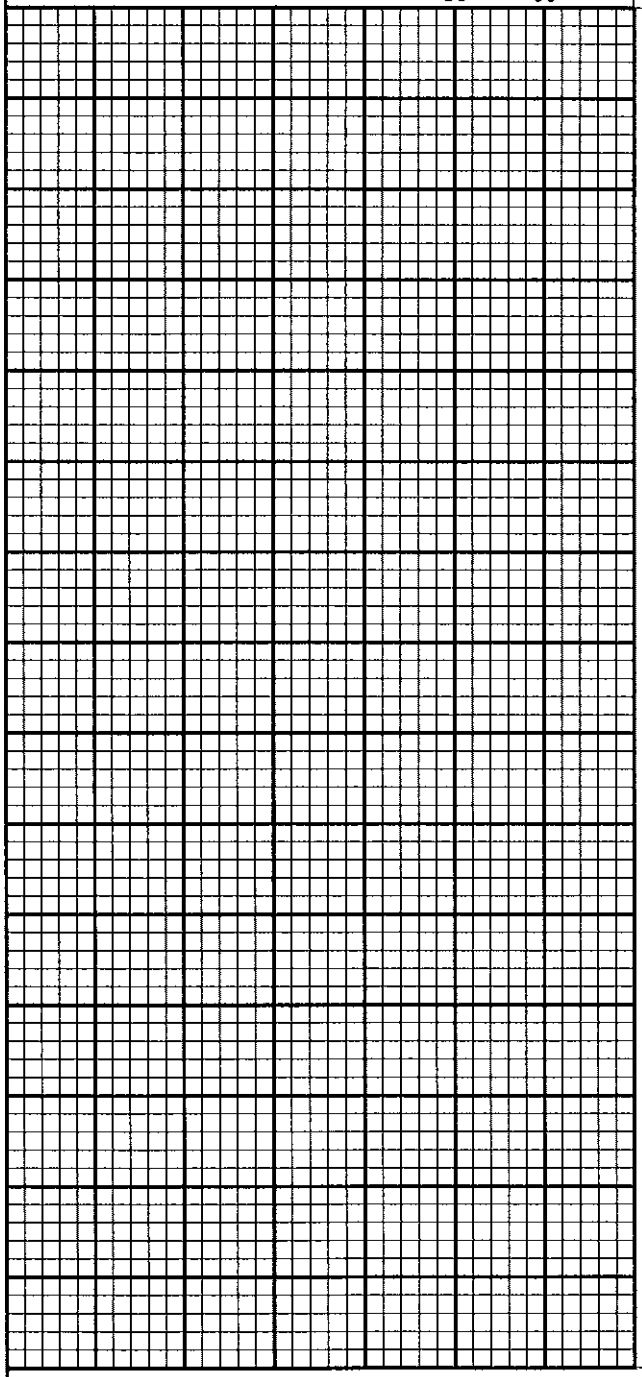
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-87S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 380.3
				Mine Refuse
				Gray Silty CLAY (CL)
5				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

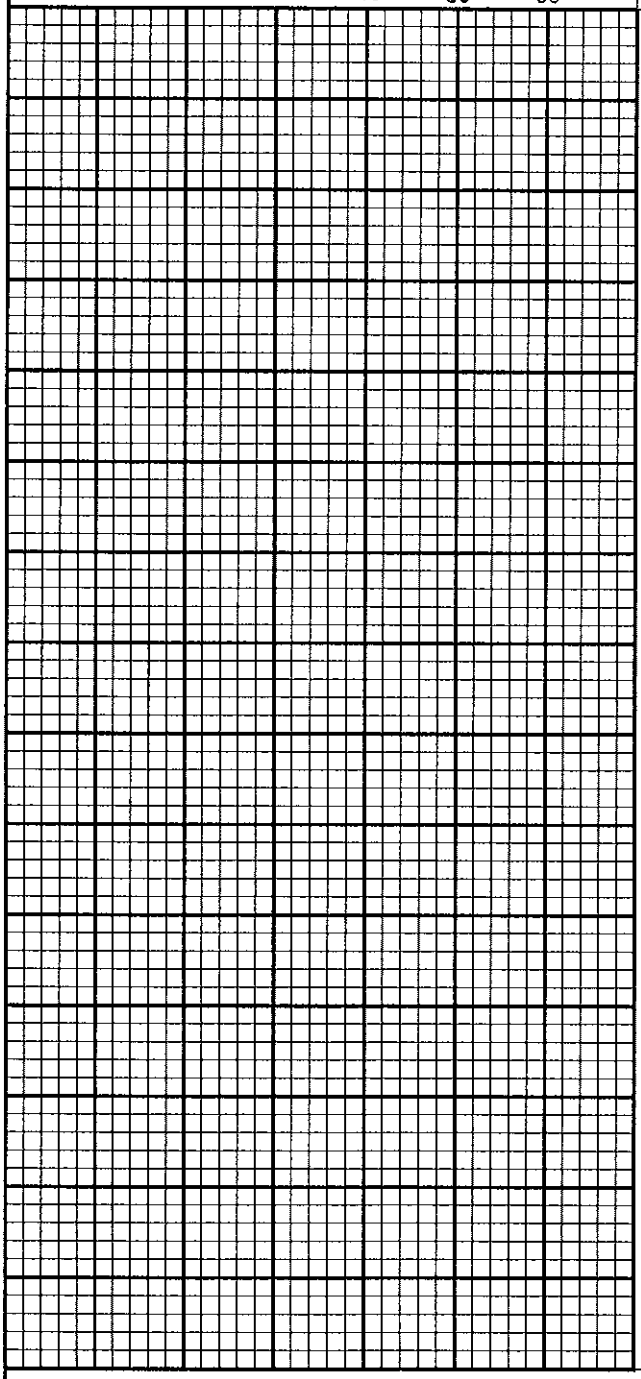
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-88S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 384.5
				Mine Refuse
5				
				Gray Mottled Brown Silty CLAY (CL)
10				End of Boring @ -10.0'
15				
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

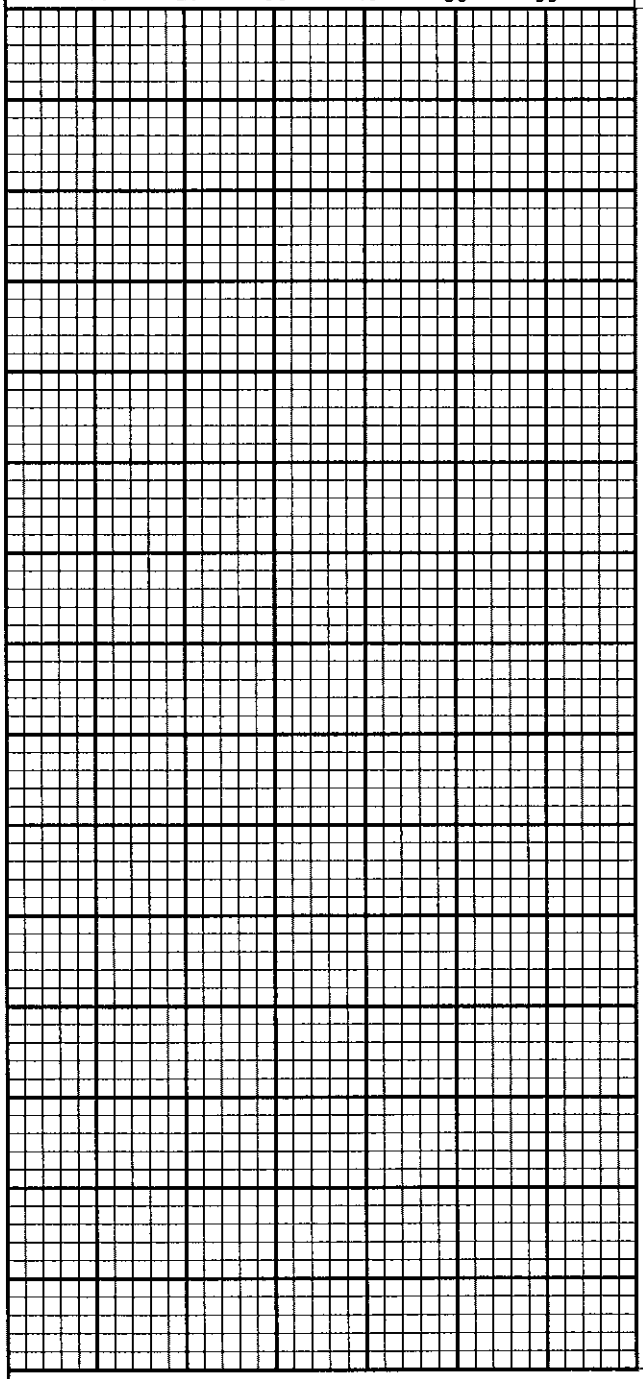
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-89S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 379.8
				7" Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				End of Boring @ -5.0'

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-90D

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 379.3
				3" Mine Refuse
				Gray Mottled Brown Silty CLAY (CL)
5				
10				
15				
				End of Boring @ -16.0'
20				
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 - Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 9, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING BZS-91S

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 383.7
				Mine Refuse
5				
10				
15				Gray Mottled Brown Silty CLAY (CL)
20				End of Boring @ −17.0'
25				
30				
35				

Ground Water Data
No Water Encountered During Drilling

Project: Bell & Zoller No. 3 – Summit AML-GSwE-1149
Herrin, Illinois

Date of Boring
September 8, 2014

Client: Brown and Roberts
Harrisburg, Illinois

Project No.
H-14205

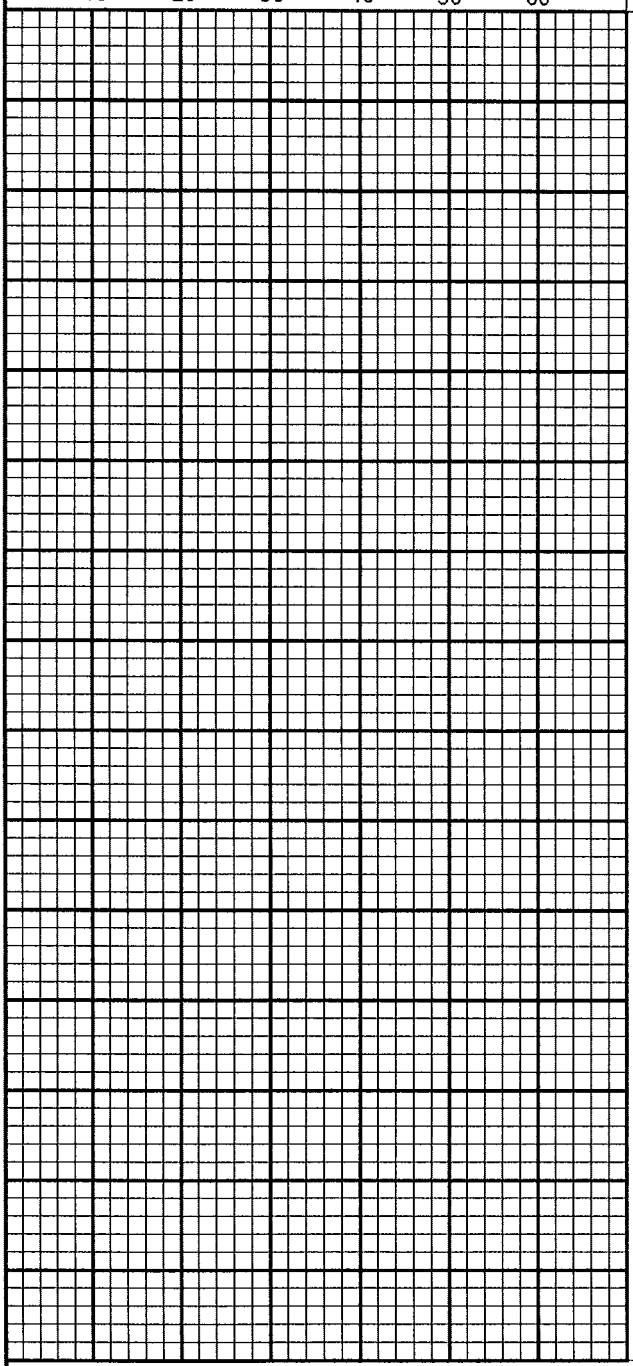
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 92

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 394.8
				Coal Refuse
5				Bown Silty CLAY (CL)
10		au		
15				
20				
				Brown Mottled Gray Silty CLAY (CL)
25				End of Boring @ −25.0'
30				
35				

Ground Water Data
No Ground Water Encountered During Drilling.

Project: **Bell & Zoller No. 3 AML-GSwE-1449**
Ziegler, Illinois

Date of Boring
August 31, 2015

Client: **Brown and Roberts, Inc.**
Harrisburg, Illinois

Project No.
H-15131

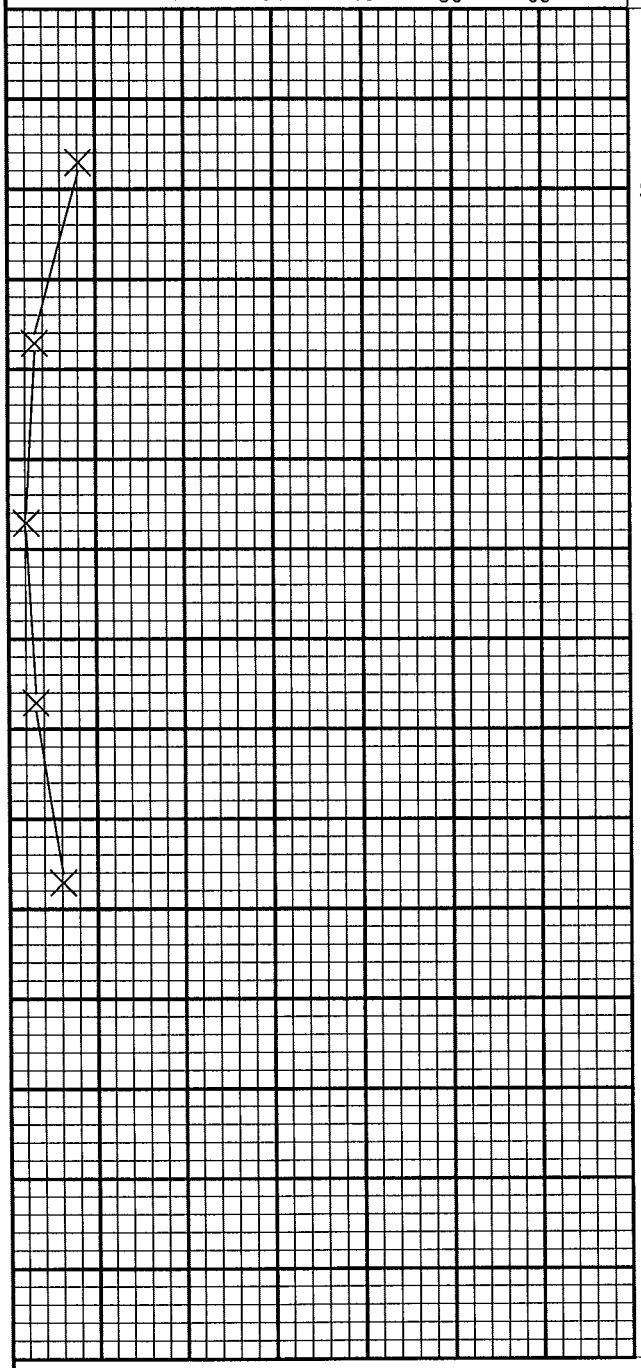
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 93

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.8
				Coal Refuse
5	1	ss		Brown Silty CLAY (CL)
10	2	ss		
15	3	ss		
20	4	ss		
25	5	ss		Brown Mottled Gray Silty CLAY (CL)
				End of Boring @ −25.0'
30				
35				

Ground Water Data
Ground Water Encountered @ −13.5' During Drilling.

Project: **Bell & Zoller No. 3 AML−GSwE−1449**
Ziegler, Illinois

Date of Boring
August 31, 2015

Client: **Brown and Roberts, Inc.**
Harrisburg, Illinois

Project No.
H−15131

Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 94

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60

Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 392.2
		au		Brown Silty CLAY (CL)
5				
10				
15				
20				
25				End of Boring @ -23.0'
30				
35				

Ground Water Data
No Ground Water Encountered During Drilling.

Project: Bell & Zoller No. 3 AML-GSwE-1449
Ziegler, Illinois

Date of Boring
August 31, 2015

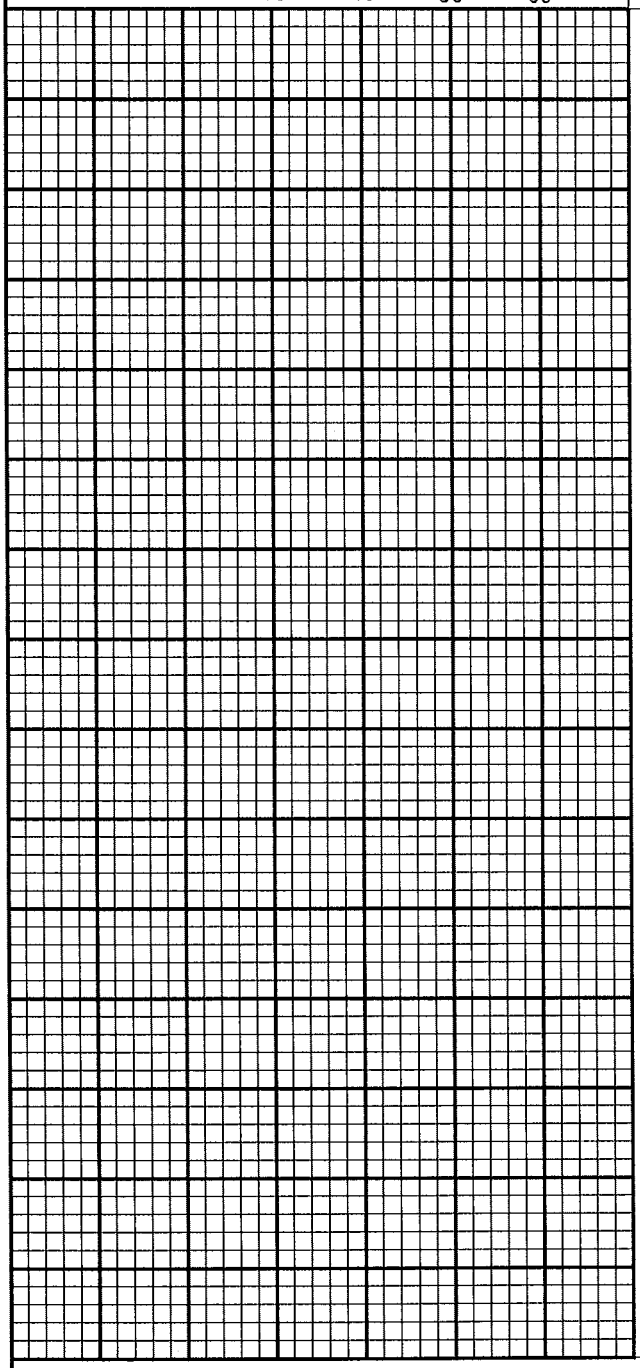
Client: Brown and Roberts, Inc.
Harrisburg, Illinois

Project No.
H-15131

Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 95

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6
Water Content (%)
Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **390.9**
				Coal Refuse
				Brown Silty CLAY (CL)
5				
10		au		
15				
20				
				End of Boring @ −21.0'
25				
30				
35				

Ground Water Data
Ground Water Encountered @ −20.0' During Drilling.

Project: **Bell & Zoller No. 3 AML-GSwE-1449**
Ziegler, Illinois

Date of Boring
August 31, 2015

Client: **Brown and Roberts, Inc.**
Harrisburg, Illinois

Project No.
H-15131

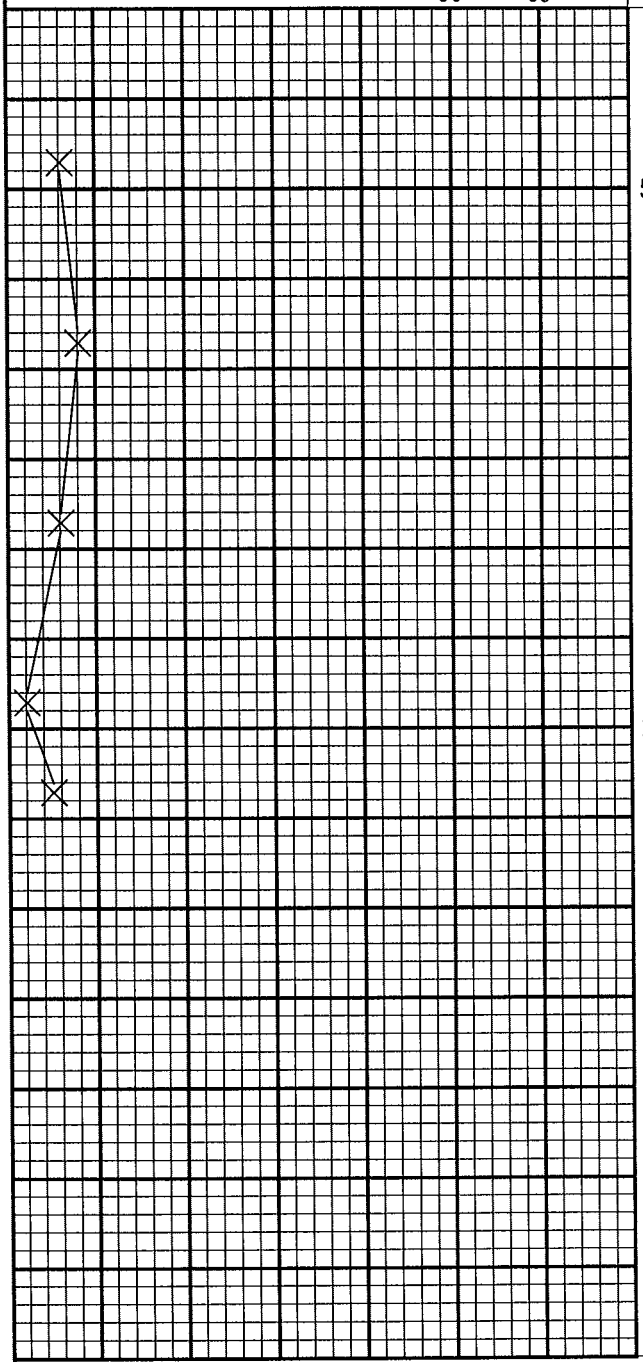
Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 96

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **392.4**
				Coal Refuse
5	1	ss		
				Gray Silty CLAY (CL)
	2	ss		Brown Silty CLAY (CL)
10				
	3	ss		
15				
	4	ss		
20				
	5	ss		Brown Mottled Gray Silty CLAY (CL)
				End of Boring @ −22.5'
25				
30				
35				

Ground Water Data
Ground Water Encountered @ −14.5' During Drilling.

Project: **Bell & Zoller No. 3 AML−GSwE−1449**
Ziegler, Illinois

Date of Boring
August 31, 2015

Client: **Brown and Roberts, Inc.**
Harrisburg, Illinois

Project No.
H−15131

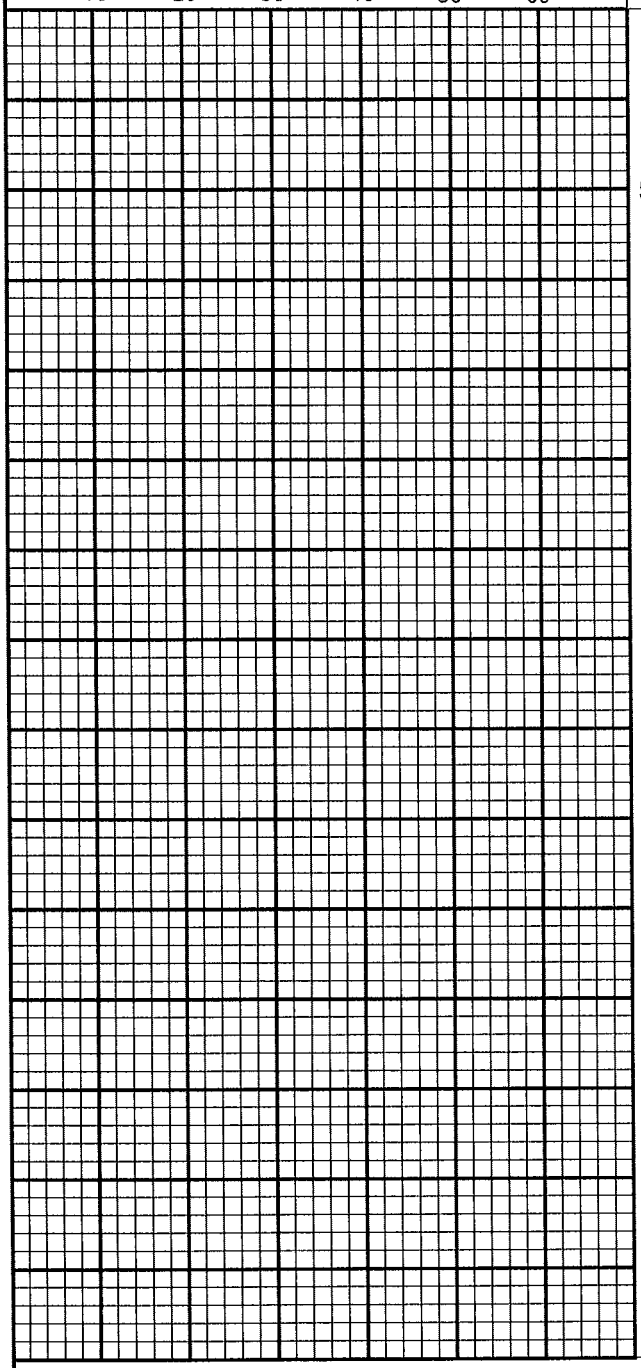
Holcomb Foundation
Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 97

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 395.3
				Coal Refuse with clay
5				Brown Silty CLAY (CL)
10		au		
15				
20				
25				End of Boring @ -25.0'
30				
35				

Ground Water Data
No Ground Water Encountered During Drilling.

Project: Bell & Zoller No. 3 AML-GSwE-1449
Ziegler, Illinois

Date of Boring
August 31, 2015

Client: Brown and Roberts, Inc.
Harrisburg, Illinois

Project No.
H-15131

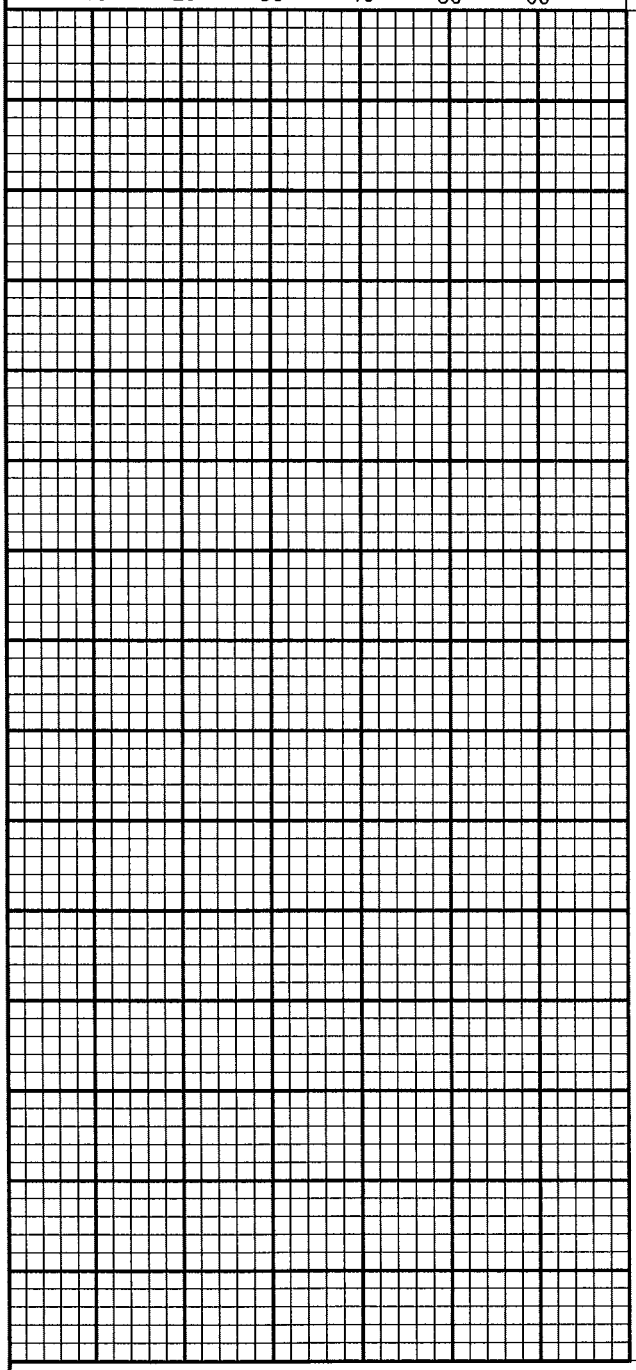
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 98

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation **390.6**
0				Coal Refuse
5				
				Gray Silty CLAY (CL)
10		au		Brown Silty CLAY (CL)
15				
20				
				End of Boring @ −21.0'
25				
30				
35				

Ground Water Data
No Ground Water Encountered During Drilling.

Project: **Bell & Zoller No. 3 AML-GSwE-1449**
Ziegler, Illinois

Date of Boring
August 31, 2015

Client: **Brown and Roberts, Inc.**
Harrisburg, Illinois

Project No.
H-15131

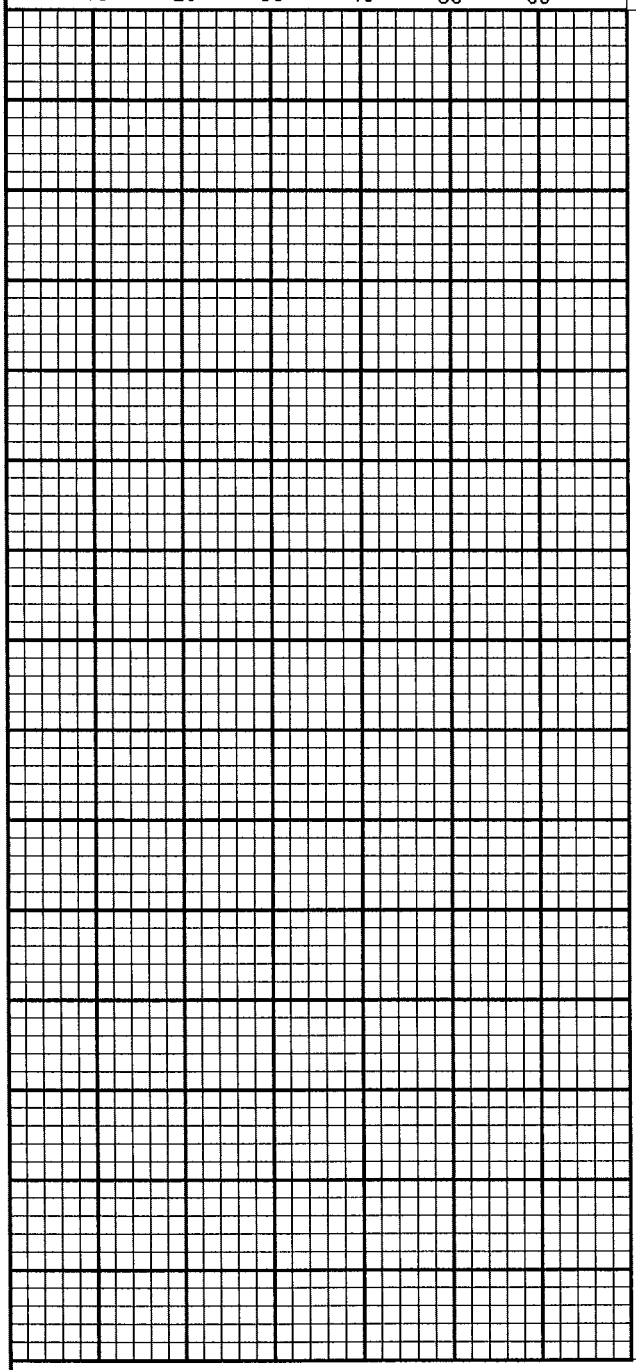
Holcomb Foundation Engineering Co.
PO Box 88 Carbondale, Illinois

LOG of BORING 99

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation 393.9
				Coal Refuse
5				
10		au		Gray Silty CLAY (CL)
15				
20				
25				End of Boring @ -25.0'
30				
35				

Ground Water Data
No Ground Water Encountered During Drilling.

Project: **Bell & Zoller No. 3 AML-GSwE-1449**
Ziegler, Illinois

Date of Boring
August 31, 2015

Client: **Brown and Roberts, Inc.**
Harrisburg, Illinois

Project No.
H-15131

"SAMPLE DOCUMENT"

ILLINOIS DEPARTMENT OF NATURAL RESOURCES
OFFICE OF MINES AND MINERALS
DIVISION OF ABANDONED MINED LANDS RECLAMATION (DNR)
STORM WATER POLLUTION PREVENTION PLAN CERTIFICATE

Project Name: _____

Project Number: _____ Construction Acreage: _____

County: _____ Section(s): _____ Twnshp: _____ Range: _____

The plans and specifications have been prepared to comply with the provisions of the NPDES Permit Number ILR100000, issued by the Illinois Environmental Protection Agency *(IEPA)* for storm water discharges from Construction Site Activities. **This General Permit is applicable to all reclamation sites resulting in the disturbance of one or more acres total land area.**

Background
This project is being conducted in order to either restore abandoned lands to productive use, to protect the health, safety and general welfare of the people, to correct and prevent soil erosion, stream pollution, water, air, and land pollution, and/or other injurious effects to persons, property, wildlife and natural resources. It is recognized that the DNR and the IEPA are committed to ensuring that abandoned mine reclamation activities in Illinois are conducted in such manner so as to minimize, to the fullest extent practicable, any further adverse impact to the public's health, safety and/or the environment. It is hereby recognized that this site may exist in a state of non-compliance with or in violation of, the provisions of the Environmental Protection Act and/or the Pollution Control Board's Rules and Regulations. It is further recognized and agreed that the DNR and its Contractor(s) do not assume the responsibilities for the pre-existing pollutional sources. It shall be the objective of all parties that offsite pollution shall be controlled to the maximum extent practicable, throughout the course of this reclamation project.

Controls
The plans and specifications for the above-mentioned project, together with all attachments and documents incorporated therein by reference, comprise the storm water pollution prevention plan as required by the General Permit. The following items highlight the critical components of the storm water pollution prevention plan developed for this construction site and covered by this permit:

1) The construction limits, grading plan, erosion and sediment controls and storm water management controls as shown in the Project Plans;

2) The prerequisite earthwork, erosion control, seeding and mulching date as specified under PROGRESS AND LIQUIDATED DAMAGES of the Special Provisions;

3) Article 108.02 Progress Schedule, of the Special Provisions which requires submittal of the progress schedule by the contractor prior to the preconstruction meeting;

4) The Acid Water Treatment and/or Dewatering Impoundments Sections *(when required)* as detailed in the Special Provisions;

5) The Seeding, Erosion and Sediment Control, Special Excelsior Blanket and Riprap Sections as detailed in the Special Provisions, including other sections which relate to the establishment of vegetation, erosion control, and storm water pollution prevention;
6) The TEMPORARY CONTROLS, described in the Special Provisions, especially paragraph C, Pollution Control,

which states that the Contractor shall provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of noxious substances and sediments from construction operations. This section incorporates the requirements of the General Permit for storm water discharges;

7) Controls shall be implemented to ensure that solid waste materials are not carried by storm water into the receiving streams; and

8) Site Inspections by the Engineer or Project Manager will be conducted to ensure that the proper storm water pollution controls are in place and operating correctly. The disturbed areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Should the inspection reveal inadequate or ineffective measures in preventing storm water pollutants entering the drainage system, the Project Manager will discuss these findings with the Contractor. The Contractor and the Project Manager shall establish the revised or additional control measures determined necessary and appropriate, and the timetable for implementation. The Project Manager shall document on the Inspection Report major observations relating to the implementation of this storm water pollution prevention plan, discussions with the Contractor with regard to this plan and any specific changes to the plan.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Project Manager or Resident Technician shall complete and file an "Incidence of Non-Compliance" *(ION)* report for the identified violation. The Project Manager or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of non-compliance, actions which were taken to prevent any further causes of non-compliance, and a statement detailing any environmental impact which may have resulted from the non-compliance. All reports of non-compliance shall be signed by the DNR Supervisor of Project Management. The report of non-compliance shall be mailed to the Illinois Environmental Protection Agency within 5 (five) days of the observance of the non-compliance.

NPDES PERMIT No. ILR100000
Storm Water Pollution Prevention Plan
Certifications

Project Name: _____

Project Number: _____

The Storm Water Pollution Prevention Plan was presented and discussed at the Preconstruction Meeting held on

_____. Project Manager: _____

I certify under penalty of law that the plans and specifications and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

“SAMPLE DOCUMENT”

Supervisor of Project Management — Date
Division of Abandoned Mined Lands Reclamation

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System *(NPDES)* permit *(ILR100000)* that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature *(Contractor or Subcontractor)* — Title — Date

Name of Firm — Street Address

City — State — Zip Code — Telephone Number

REQUIRED FEDERAL AID CONTRACT PROVISIONS

The Illinois Abandoned Mined Lands Reclamation program is federally funded through grants made to the State of Illinois, Abandoned Mined Lands Reclamation, by the U.S. Department of Interior, Office of Surface Mining Reclamation and Enforcement. The following Required Contract Provisions are applicable to the construction contract for this reclamation project.

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in the Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

II. NONDISCRIMINATION

(Applicable to Federal-aid construction contracts and related subcontracts and purchase orders exceeding $10,000.)

1. Selection of Labor: During the performance of this contract, the contractor shall not:

   a. discriminate against labor from any other State, possession, or territory of the United States, or
   b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

2. Employment Practices:

   a. The Equal Employment Opportunity Affirmative Action Notice set forth in 41 CFR 60-4.2 and the Equal Employment Opportunity Construction Contract Specifications set forth in 41 CFR 60-4.3 are incorporated by reference in this contract.

   b. Regulation 41 CFR 60-4.2 requires goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade on all construction work in the covered area. The goals for this contract are stated elsewhere in the bidding documents and in the construction contract.

   c. Regulation 41 CFR 60-4.3 provides specific affirmative action standards the contractor shall implement to ensure equal employment opportunity in achieving the minority and female participation goals set forth in paragraph 2b of this Section.

3. Equal Opportunity Clause: During the performance of this contract, the contractor agrees as follows:

   a. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoffs or termination; rates of pay or other forms of compensation; and, selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

   b. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

   c. The contractor will send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding a notice advising the said labor union or workers' representative of the contractor's commitments under this Section II, paragraph 3.

   d. The contractor will comply with all provisions of Executive Order 11246, Equal Employment Opportunity, dated September 24, 1965, and of the rules, regulations (41 CFR Part 60), and relevant orders of the Secretary of Labor.

   e. The contractor will furnish all information and reports required by Executive Order 11246 and by rules, regulations, and orders of the Secretary of Labor, pursuant thereto, and will permit access to its books, records, and accounts by the Abandoned Mined Lands Reclamation and the U.S. Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

   f. In the event of the contractor's noncompliance with the nondiscrimination clauses of this Section II, paragraph 3, or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part. The contractor may be declared ineligible for further Government contracts or federally-assisted construction contracts in accordance with procedures authorized in Executive Order 11246 and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.

   g. The contractor will include the provisions of this Section II, paragraph 3 in every subcontract or purchase order so that such provisions will be binding upon each subcontractor or vendor, unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246. The contractor will take such action with respect to any subcontract or purchase order as the Abandoned Mined Lands Reclamation (AMLRC) and the U.S. Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. In the event a contractor becomes a party to litigation by a subcontractor or vendor as a result of such direction, the contractor may request the AMLRC to enter into such litigation to protect the interest of the State. In addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

4. Selection of Subcontractors, Procurement of Materials, and Leasing of Equipment:

   a. The contractor shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. In all solicitations made by the contractor each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract relative to nondiscrimination on the grounds of race, color, sex, or national origin.

   b. In the event of the contractor's noncompliance with the nondiscrimination provisions of this Section II, paragraph 4, this contract may be subject to sanctions including but not limited to the withholding of payments to the contractor under the contract until the contractor complies and/or cancellation, termination, or suspension of the contract in whole or in part.

   c. The contractor shall include the provisions of this paragraph 4 in every subcontract, including procurement of materials and leases of equipment. The contractor shall take such action with respect to any subcontractor or procurement as the AMLRC or U.S. Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. In the event a contractor becomes involved in, or is threatened with, litigation by a subcontractor or supplier as a result of such direction, the contractor may request the AMLRC to enter into such litigation to protect the interests of the State. In addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

III. NONSEGREGATED FACILITIES

(Applicable to Federal-aid construction contracts and related subcontracts exceeding $10,000.)

1. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. The firm furthers certifies that no employee will be denied access to adequate facilities on the basis of sex.

2. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise.

3. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements exceeding $10,000 and that it will retain such certifications in its files.

IV. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to Federal-aid construction contracts and related subcontracts exceeding $100,000.)

By submission of this bid, or the execution of this contract or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR Part 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the AMLRC of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraphs 1 through 4 of this Section IV in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

V. COMPLIANCE WITH COPELAND "ANTI-KICKBACK" ACT

The contractor and any and all subcontractors shall comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR, Part 3), which prohibits contractors or subcontractors from inducing, by any means, any person employed in the construction, completion, or repair of a public work, to give up any part of the compensation to which he or she is entitled.

VI. INTERPRETATION OF FEDERAL AID PROPOSAL NOTICE

The Federal Aid Proposal Notice which is included in the bidding documents further illustrates the required federal-aid contract provisions. Whenever in said Notice the following terms or pronouns in place of them are used, they shall be interpreted as follows:

"U.S. Department of Transportation (DOT)" shall be interpreted to mean U.S. Department of the Interior.

"Federal Highway Administration (FHWA)" shall be interpreted to mean the Office of Surface Mining Reclamation and Enforcement.

"State highway agency (SHA)" shall be interpreted to mean the Abandoned Mined Lands Reclamation .

FEDERAL AID PROPOSAL NOTICE

NOTICE TO PROSPECTIVE FEDERAL-AID CONSTRUCTION CONTRACTORS

I . CERTIFICATION OF NONSEGREGATED FACILITIES

(a) A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order of the Secretary of Labor (32 F. R. 7439, May 19, 1967) on Elimination of Segregated Facilities (is included in the proposal and must be submitted prior to the award of a Federal-aid highway construction contract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause.)

(b) Bidders are cautioned as follows: By signing this bid, the bidder will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in this proposal. This certification provides that the bidder does not maintain or provide for his employees facilities which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the bidder will not maintain such segregated facilities.

(c) Bidders receiving Federal-aid highway construction contract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause, will be required to provide for the forwarding of the following notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed $10,000 and are not exempt from the provisions of the Equal Opportunity clause.

“NOTICE TO PROSPECTIVE SUBCONTRACTORS AND MATERIAL SUPPLIERS OF REQUIREMENT FOR CERTIFICATION OF NONSEGREGATED FACILITIES”

(a) A Certification of Nonsegregated Facilities as required by the May 9, 1967, Order of the Secretary of Labor (32 F. R. 7439, May 19, 1967) on Elimination of Segregated Facilities, which is included in the proposal, or attached hereto, must be submitted by each subcontractor and material supplier prior to the award of one subcontract or consummation of a material supply agreement if such subcontract or agreement exceeds $10,000 and is not exempt from the provisions of the Equal Opportunity clause.

(b) Subcontractors and material suppliers are cautioned as follows: By signing the subcontract or entering into a material supply agreement, the subcontractor or material supplier will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in the subcontract or material supply agreement. This certification provides that the subcontractor or material supplier does not maintain or provide for his employees facilities which are segregated on the basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. This certification also provides that the subcontractor or material supplier will not maintain such segregated facilities.

(c) Subcontractors or material suppliers receiving subcontract awards or material supply agreements exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed $10,000 and are not exempt from the provisions of the Equal Opportunity clause."

II . IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(a) By signing this bid, the bidder will be deemed to have stipulated as follows:

(1) That any facility to be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 C.F.R., Part 15), is not listed on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 C.F.R. 15.20.

(2) That the State highway department shall be promptly notified prior to contract award of the receipt by the bidder of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES

FEDERAL-AID CONTRACTS

1. General

   a. Equal Employment Opportunity Requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract Provisions (Form PR-1273 or 1316, as appropriate) and these Special Provisions which are imposed pursuant to Section 140 of Title 23, USC, as established by Section 22 of the Federal-Aid Highway Act of 1968. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.

   b. The contractor will work with the State highway departments and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the contract.

   c. The contractor, and all his/her subcontractors holding subcontracts (not including material suppliers) of $10,000 or more, will comply with the following minimum specific requirement activities of equal employment opportunity: (The equal employment opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway Program Manual, are applicable to material suppliers as well as contractors and subcontractors.) The contractor will include these requirements in every subcontract of $10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

2. Equal Employment Opportunity Policy

   The contractor will accept as his operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

   It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training.

3. Equal Employment Opportunity Officer

   The contractor will designate and make known to the State highway department contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

4. Dissemination of Policy

   a. All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

      (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

      (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the contractor.

      (3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the contractor's procedures for locating and hiring minority group employees.

   b. In order to make the contractor's equal employment opportunity policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the contractor will take the following actions:

      (1) Notices and posters setting forth the contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

      (2) The contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

5. Recruitment

a. When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be published in newspapers, or other publication, having a large circulation among minority groups in the area from which the project work force would normally be derived.

b. The contract will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the contractor will, through his EEO Officer, identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same; such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

6. Personnel Actions

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, or national origin. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

7. Training and Promotion

a. The contractor will assist in locating, qualifying and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event the Training Special Provision is provided under this contract, this subparagraph will be superseded as indicated in the Training Special Provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

8. Unions

If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use his best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use his best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race,color, religion, sex, or national origin.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the State highway department and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, or national origin, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held

that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the State highway department.

9. Subcontracting

a. The contractor will use his best efforts to solicit bids from and to utilize minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State highway department personnel.

b. The contractor will use his best efforts to ensure subcontractor compliance with their equal employment opportunity obligations.

10. Records and Reports

a. The contractor will keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate:

(1) the number of minority and nonminority group members and women employed in each work classification on the project.

(2) the progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force).

(3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees.

(4) the progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State highway department and the Federal Highway Administration.

c. The contractors will submit to the State highway department a monthly report every month for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by contract work and the number of hours worked. This information is to be reported on Form BC-956. If on-the-job training is being required by "Training Special Provision", the contractor will be required to furnish Form BC-1014 weekly and Form BC-1052 quarterly.

NOTICE: Prevailing Wage Rates

The Illinois Prevailing Wage Act (820 ILCS 130/) requires payment of prevailing wages on State of Illinois public works projects.

As required by this Act, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing abandoned mined lands reclamation work work under the Contract.

Post the scale of wages in a prominent and easily accessible place at the site of work. If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at http://www.state.il.us/agency/idol/ or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.

Abandoned mined lands reclamation projects are federally funded public works projects, therefore they are also subject to the provisions of the federal Davis-Bacon Act including its wage and benefit determinations. Please see the U.S. Department of Labor website at: http://www.dol.gov/whd/contracts/dbra.htm for assistance with compliance with this Act.