

Certified October 2018



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General Information

| Site Name: | Newport Airbase Industrial Park Site #1 |
|-------------------------------------|---|
| Site Address: | Comet Street, Newport, AR 72112 |
| Owner Contact Name: | Newport-Jackson County Industrial Development Bond Board |
| Development Organization Contact | Jon Chadwell, CEcD Executive Director Newport Economic Development Commission 201 Hazel Street Newport, AR 72112 Office Phone: 870-523-1009 Office Fax: 870-523-1055 Cell Phone: 870-503-0793 Email: <u>director@newportaredc.org</u> |
| Site Size: | 76 acres |
| Site Control Document: | Site is under option by the Newport Economic Development Commission until May 13, 2023. |
| Aerial Site Location Map | See attachment G-1 for detail. |







Newport Airbase Industrial Site #1

Aerial

425 W Capital Ave Suite 2700 Little Rock, AR 72201

Phone: 1-888-301-5861

goentergy.com/ar



JACKSON COUNTY



VICINITY



LEGEND



NOTE

These drawings are provided merely to assist in economic development efforts. The Entergy Companies make no representations or warranties whatsoever regarding the accuracy or completeness of any information contained herein nor the condition or suitability of any properties. Users should direct inquiries about any property to the listing broker for that property.

SOURCE

Roads: Census/TIGER database, 2014

| | | | Created by: RPG Date: 8/2018 | N |
|-------|-----|-----|---------------------------------|---|
| 1:6,0 | 000 | | | |
| 0 | 250 | 500 | 1,000 | |
| | | | Feet | |
| 0 | 60 | 120 | 240 | |
| | | | Matara | |

Site Characteristics

| Acreage: | 76 acres | |
|--|--|--|
| Dimensions: | North Boundary: 4,299' East Boundary: 1,007' South Boundary: 4,497' West Boundary: 1,015' | |
| Previous Use: | Agricultural | |
| Fire Rating: | Class 3 | |
| Distance to Fire Station: | 2.5 miles | |
| | Interstate 555: 39 miles east/northeast Future I-57: 1 mile northwest | |
| Distance to Nearest 4- lane Hwy: | US Highway 67 (Future I-57): 1 mile northwest | |
| Access Points to Hwy/Interstate: | US Highway 67 Exits 85 and 87 | |
| | The current entrance to the site is via Comet Street. Comet Street is built for commercial truck traffic and is used by ASU- Newport's Commercial Driver Training Program. Arkansas Highway 18 would be directly accessible by constructing an entrance to the site. | |
| Distance to Nearest Rail: | Union Pacific: 2 miles west Abandoned City Rail spur 1,000 feet south | |
| Distance to Nearest Commercial Airport: | Jonesboro Regional Airport: 45 miles north/northeast Memphis International Airport: 90 miles southeast Bill and Hillary Clinton National Airport: 91 miles southwest | |
| Distance to Nearest Port Facility: | Port of Osceola: 75 miles northeast Port of Little Rock: 85 miles southwest Port of West Memphis: 85 miles southeast | |
| Distance from Retail or Central Business District: | Newport Business District: 2.5 miles | |



Site Type: Industrial Park

Site Survey: 2018 -- attached



LEGAL DESCRIPTION: PART OF SECTION 27, TOWNSHIP 12 NORTH, RANGE 2 WEST, JACKSON COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 27-T12N-R2W; THEN RUN N00°03'33"E, ALONG THE EAST LINE OF SAID SECTION 27, A DISTANCE OF 4169.60 FEET; THEN RUN N89°42'14"W, 627.15 FEET TO THE TRUE POINT OF BEGINNING; THEN RUN S08°28'18"E, 857.08 FEET; THEN RUN S00°03'33"W, ALONG A LINE WHICH IS PARALLEL WITH AND 500 FEET FROM THE CENTERLINE OF RUNWAY, A DISTANCE OF 150.00 FEET; THEN RUN N89°56'38"W, ALONG A LINE WHICH IS PARALLEL WITH AND 125 FEET FROM THE CENTERLINE OF RUNWAY, A DISTANCE OF 861.41 FEET; THEN RUN N44°56'49"W, ALONG A LINE WHICH IS PARALLEL WITH AND 250 FEET FROM THE CENTERLINE OF RUNWAY, A DISTANCE OF 685.43 FEET; THEN RUN S45°03'11"W, 500.00 FEET; THEN RUN S44°56'49"E, ALONG A LINE WHICH IS PARALLEL WITH AND 250 FEET FROM THE CENTERLINE OF RUNWAY, A DISTANCE OF 185.38 FEET; THEN RUN N89°56'38"W, ALONG A LINE WHICH IS PARALLEL WITH AND 125 FEET FROM THE CENTERLINE OF RUNWAY, A DISTANCE OF 2857.66 FEET; THEN RUN N00°02'45"E, 1015.65 FEET; THEN RUN S89°42'14"E, 4299.34 FEET TO THE POINT OF BEGINNING, CONTAINING 96.03 ACRES, MORE OR LESS, AND SUBJECT TO ALL EXISTING RIGHT-OF-WAYS AND EASEMENTS.



Cost Estimates and Timing

| Cost per Acre: | \$10,000 negotiable (price based on investment and jobs) | |
|-----------------------------------|---|--|
| Special Timing Considerations: | None | |
| Clearing Cost: | None (Site is entirely cleared) | |
| Grading Cost: | None (Site is flat with minimal slope) | |
| Cut/Fill Cost: | \$103,540 for 2' of fill material for a hypothetical 100,000 square foot building | |
| Utility Extension or | See attachment C-1 for detail. | |
| Upgrade Costs: | The City of Newport has agreed to extend water and wastewater infrastructure to the site at a reduced cost or at no cost, based on the amount of investment and the number of jobs created. | |
| | Entergy Arkansas may be able to reduce or waive the cost of extending electric utilities to the actual building site, based on the projected electrical use of the new customer. | |
| | CenterPoint Energy will base the cost of extending their gas line to the site on the amount of usage projected by the new customer. | |
| | The Newport Economic Development Commission has infrastructure funds available which can be used to cover any additional utility costs associated with the project. | |





510 THIRD STREET • POST OFFICE BOX 705 NEWPORT, ARKANSAS 72112 TELEPHONE (870) 523-6531 • FAX (870) 523-6533

January 17, 2006

Jon Chadwell Newport Economic Development Commission P.O. Box 766 Newport, AR 72112

Newport Economic Energy Site Selection M-N# 06-002

Dear Jon:

We have reviewed the utilities required to serve the proposed building site and herewith provide cost estimates for each. In our review we discussed the gas line extension with a Centerpoint Energy representative. He indicated that the company would not consider running gas service on a speculative basis. They would review the cost benefit issues if a building to be occupied were constructed. Depending on the planned consumption the gas company will absorb some of the installation expense.

As Keith mentioned we are proposing a new access road to the site from Highway 18. This will prevent intermingling plant traffic with the truck driving school traffic and eliminate using ASU-N's property to the access site. The proposed route will provide a more direct access to US Highway 67 4-lane. Should this idea be abandoned, the Commission would need an easement from ASU-N in order to be assumed that they could always use the old runway pavement for access.

We are also enclosing a map of the area depicting where the various improvements will be located. If we can be of further service, please let us know.

Sincerely,

Robert W. Chatman, P. É.

RWC/smd



NEWPORT, ARKANSAS





Newport Economic Development Newport Airbase Property (Tract B) Utility Development M – N #06-002 1-11-06

Note: The cost estimate herein considers developing utilities and access to the <u>approximate</u> western one-half of the available property. This should provide utilities for the initial proposed 100,000 S.F. building and potentially three (3) additional future site(s) depending upon building size and parking requirements. The utilities have been proposed in locations such that future property thus the initial cost is lowered. The utility development has been itemized into five categories including road access, sewer, gas, and water.

The estimates propose opening an access to the site from Highway 18 rather than current access roads/streets. The access to Highway will provide a more direct access to the new interchange on 4-lane Highway 67. In addition this allows closer access to the gas line along Highway 18. This will eliminate the need to commingle with the truck driving school and the use of school property for access.

201 Hazel Street P.O. Box 766 Newport, Arkansas 72112

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Phone 870-523-1009 Fax 870-523-1055 www.newportaredc.org



Probable Cost Estimate Newport Economic Development Airbase Property-Tract B M-N # 06-002 1-13-06

A) ROAD ACCESS (24' Paved to Building Only, No Parking)

| Item | Quantity/Unit Cost | Total Estimated Cost |
|--------------------------|------------------------|----------------------|
| 72" RCP @ HWY 18 | LS/\$15,000 | \$15,000 |
| 18" RCP (Field Crossing) | L.S./\$4,000 | \$4,000 |
| Base Gravel (10") | 1638 C.Y./\$40 | \$65,520 |
| Asphalt (4") | 910 tons/\$65 | \$59,150 |
| Signs/Striping | L.S./\$1,500 | \$1,500 |
| | Construction Sub-total | \$145,170 |
| | Contingency (10%) | \$14,517 |
| | Geotechnical/testing | \$10,000 |
| | Engineering | \$15,969 |
| | Inspection | \$10,000 |
| | ROW Acquisition | \$15,000 |
| | Total | \$210,656 |

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B) SANITARY SEWER SERVICE

| Item | Quantity/Unit Cost | Total Estimated Cost |
|----------------------------------|------------------------|----------------------|
| Pump Station | L.S./\$50,000 | \$50,000 |
| Manholes | 10 ea./\$1,300 | \$13,000 |
| 8" PVC Gravity Pipe w Bedding | 3350 L.F./\$8.50 | \$28,475 |
| 6" PVC Force Main | 4350 L.F./\$5.50 | \$23,925 |
| Trenching | 3350 L.F./\$8.00 | \$26,800 |
| Street Repair | L.S./\$3,500 | \$3,500 |
| Connect to Existing M.H. | L.S./\$1,500 | \$1,500 |
| Tracer Wire | 4500 L.F./0.15 | \$675 |
| | Construction Sub-total | \$147,875 |
| | Contingency | \$14,788 |
| | Engineering | \$16,192 |
| | Inspection | \$12,000 |
| | Health Dept. Fee | \$500 |
| | Total | \$191,355 |
| | | |

C) GAS SERVICE

| Item | Quantity/Unit Cost | Total Estimated Cost |
|-------------------|------------------------|----------------------|
| 4" Gas Line | 3400 L.F./\$24.00 | \$81,600 |
| HWY Bore (HWY 18) | L.S./\$5,000 | \$5,000 |
| | Construction Sub-total | \$86,600 |
| · _ = | Total | \$86,600 |

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201 Hazel Street P.O. Box 766 Newport, Arkansas 72112

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D) WATER FIRE PROTECTION

| Item | Quantity/Unit Cost | Total Estimated Cost |
|--------------------------------------|------------------------|----------------------|
| 8" PVC CL 200 Pipe | 4550 L.F./\$10 | \$45,500 |
| 6" Fire Hydrant w/ Gate Valve | 5 each/\$2,500 | \$12,500 |
| 10" Tapping Sleeve and Gate Valve | 1 each/\$5,000 | \$5,000 |
| Bore Railroad | L.S./\$7,500 | \$7,500 |
| Street Repair | L.S.%3,500 | \$3,500 |
| Tracer Wire | 5000 L.F./0.15 | \$750 |
| | Construction Sub-total | \$74,750 |
| | Contingency | \$7,710 |
| | Engineering | \$7,810 |
| | Inspection | \$4,500 |
| | Health Dept. Fee | \$500 |
| | Total | \$95,270 |
| | | |

Utility Summary

Total Estimated Cost

| Α. | Road Access | \$210,656 |
|----|--------------------------------|-----------|
| Β. | Sanitary Sewer Service | \$191,355 |
| C. | Gas Service | \$86,600 |
| D. | Water/Fire Protection | \$95,270 |
| E. | Fill at Building Site (2') | \$103,540 |
| | Total Utility/Site Development | |

| aı | Ounty/Site Development | |
|----|------------------------|-----------|
| | Estimated Cost | \$687,421 |

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Environmental

| Wetlands Screening: | See attachment E-1 for detail. |
|---|---|
| • | Site is located in Zone X which is outside of the 500 year floodplain. See attachment E-2 for detail. Also located behind Maps tab. |
| Historical Survey: | AHPP Tracking #101534 See attachment E-3 for detail. |
| Endangered Species Survey: | See attachment E-4 for detail. |
| Environmental Phase I (and Phase II if required): | See attachment E-5 for detail. |
| Stormwater Retention Plan: | Not Applicable. |





June 21, 2018

U.S. Army Corps of Engineers, Memphis District Attention: CEMVM-CO-R Clifford Davis Federal Building Room B-202 Memphis, TN 38103-1984

Dear Sirs:

The Newport Economic Development Commission is interest in developing a section of property for industrial usage and would like to have a Jurisdictional Determination in regard to a site specific delineation of regulated wetlands or other waters of the US.

The site is highlighted on the attached aerial photo and is part of Section 27, Township 12 North, Range 2 West, Sections 26 and 27 Jackson County, Arkansas. The section is further highlighted on the attached topographical map and location map.

Response to this request can be sent to the following address:

Newport Economic Development Commission Attn: Jon Chadwell, Executive Director 201 Hazel Street Newport, AR 72112

Thank you for the help with this project. If you need further information feel free to call me at (870)523-1009.

Sincere Chadwell **Executive Director**

201 Hazel Street P.O. Box 766 Newport, Arkansas 72112

Phone 870-523-1009 Fax 870-523-1055 www.newportaredc.org

Proud Past. Bright Future



DEPARTMENT OF THE ARMY MEMPHIS DISTRICT, CORPS OF ENGINEERS 167 NORTH MAIN STREET B-202 MEMPHIS, TENNESSEE 38103-1894

REPLY TO ATTENTION OF:

Regulatory Branch

March 21, 2006

Mr. Jon Chadwell Newport Economic Development Comission P.O. Box 766 Newport, Arkansas 72112

Dear Mr. Chandwell:

This is in response to your request regarding permit requirements to develop property for industrial use. The project site is located in Township 12 North, Range 2 West, Sections 26 and 27 on the Tuckerman Northwest Quad Map in Jackson County, Arkansas as shown on the enclosed map.

A preliminary jurisdictional determination was made on the project site. The areas where deposition will occur to complete your project are appear to be prior converted cropland by the Natural Resources Conservation Service. Therefore, no permit will be required from the Corps of Engineers to complete the work.

This determination is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date. If you wish to provide additional information, an approved jurisdictional determination may be requested.

Copies of this letter have been furnished to Wanda Boyd of EPA, (6WQ-EM) Region VI in Dallas Texas and the District Conservationist, Natural Resources Conservation Service in Newport, Arkansas.

If you have questions contact Judy O. DeLoach at (901) 544-0737, and refer to File No. MVM-2005-828(JOD).

Sincerely,

inoty Dan

Timothy Davis Lead Biologist Regulatory Branch

Enclosure



Newport Airbase Industrial Site #1 FEMA Flood Hazard Map

425 W Capital Ave Suite 2700 Little Rock, AR 72201

Phone: 1-888-301-5861

goentergy.com/ar





VICINITY



These drawings are provided merely to assist in economic development efforts. The Eintergy Companies make no representations or warranties whatsoever regarding the accuracy or completeness of any information contained herein not the condition or suitability of any properties. Users should direct inquines about any property to the tishing troker for that property.



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and higher than the elevation of the 0.2-percent-annual-chance flood (500 year).

ZONE X, AREA OF MINIMAL FLOOD HAZARD ZONE A ZONE 0.2 PCT ANNUAL CHANCE FLOOD 1:12,000 HAZARD The site is located in Zone X, Unshaded. Zone X, Unshaded is defined as the areas of minimal flood hazard, which are the areas outside the Special Flood Hazard Area

bing



Asa Hutchinson Governor

Stacy Hurst Director

Arkansas Arts Council

Arkansas Natural Heritage Commission

Arkansas State Archives

* Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars Cultural Center

Old State House Museum





1100 North Street Little Rock, AR 72201

(501) 324-9880 fax: (501) 324-9184 tdd: 711

e-mail: info@arkansaspreservation.org wabaits: www.arkansaspreservation.com

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June 26, 2018

Mr. Jon Chadwell Executive Director Newport Economic Development Commission 201 Hazel Street P.O. Box 766 Newport, Arkansas 72112

RE: Jackson – Newport Section 106 Review – EDA Proposed Undertaking – Developing Property for Industrial Project AHPP Tracking Number 101534

· Dear Mr. Chadwell:

This letter is in response to your inquiry regarding properties of archeological, historical, or architectural significance in the area of the proposed referenced project. The staff of the Arkansas Historic Preservation Program (AHPP) has reviewed records pertaining to the area in question.

Based on the submitted information, we find that the proposed undertaking will have no effect on historic properties and that no cultural resource surveys are required.

Tribes that have expressed an interest in the area include the Osage Nation (Dr. Andrea Hunter), the Quapaw Tribe of Oklahoma (Mr. Everett Bandy), and the Shawnee Tribe of Oklahoma (Ms. Kim Jumper). We recommend that they be consulted in accordance with 36 CFR § 800.2 (c) (2).

Thank you for the opportunity to review this undertaking. Please refer to the AHPP Tracking Number listed above in all correspondence. If you have any questions, please call Theresa Russell of my staff at 501-324-9357.

Sincerely,

Scott Kaufman

Director, AHPP

cc: Dr. Andrea Hunter, Osage Nation Dr. Ann Early, Arkansas Archeological Survey IPaC

Regulatory review / Endangered species / Species determinations

Species determinations

For listed species¹ not covered by determination keys, an impact analysis should be performed to reach a conclusion about how this project will impact the species. These conclusions will result in *determinations* for each species, which will be used in consultation with the U.S. Fish and Wildlife Service.

Mammals

| Indiana Bat Myotis sodalis | None |
|--|------|
| Northern Long-eared Bat Myotis septentrionalis | None |
| Clams | |
| Fat Pocketbook Potamilus capax | None |
| Pink Mucket (pearlymussel) Lampsilis abrupta | None |
| Rabbitsfoot Quadrula cylindrica cylindrica | None |
| Scaleshell Mussel Leptodea leptodon | None |
| Flowering Plants | |

Pondberry Lindera melissifolia

None

Critical habitats

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.

Regulatory review

The IPaC regulatory review process helps evaluate the potential impacts of your project on resources managed by the U.S. Fish and Wildlife Service. It walks through regulations covering each protected resource, and offers suggestions and assistance in designing your project.



Endangered species are protected under the Endangered Species Act^{1} .

<u>7 endangered species</u> are known to occur or may be affected by activities in this location.

- Request an official species list
 An <u>official species list</u> was generated about a minute ago (9/18/2018, 11:42:45 AM).
- Evaluate determination keys
 There was <u>one determination key</u> available for this project. You have skipped it.

3 Make effect determinations

For each listed species in the project area, a determination must be made regarding the potential effects of this project. Species that are not covered by determination keys must be evaluated manually.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{3} and the Bald and Golden Eagle Protection Act^{4} .

THERE ARE NO MIGRATORY BIRDS OF CONSERVATION CONCERN EXPECTED TO OCCUR AT THIS LOCATION.

Facilities

U.S. Fish and Wildlife Service facilities are protected under the National Wildlife Refuge System Administration Act⁸ and the National Fish Hatchery System⁹.

THERE ARE NO U.S. FISH AND WILDLIFE SERVICE REFUGES OR FISH HATCHERIES AT THIS LOCATION.



Wetlands

Wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act¹⁰, or other State/Federal statutes.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

- 1. The Endangered Species Act (ESA) of 1973.
- 2. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
- 3. The Migratory Birds Treaty Act of 1918.
- 4. The Bald and Golden Eagle Protection Act of 1940.
- 5. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.
- 6. The National Wildlife Refuge System Administration Act of 1966.
- 7. The National Fish Hatchery System.
- 8. Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands.



Asa Hutchinson Governor

> Stacy Hurst Director

Date: July 11, 2018 Subject: Elements of Special Concern Newport Industrial Development Jackson County, Arkansas ANHC No.: L-OTH.-18-005

Mr. Jon Chadwell Newport Economic Development Commission 201 Hazel Street Newport, AR 72112

Dear Mr. Chadwell:

Staff members of the Arkansas Natural Heritage Commission have reviewed our files for records indicating the occurrence of rare plants and animals, outstanding natural communities, natural or scenic rivers, or other elements of special concern within or near the following site:

| Project Name | County | Quad. Name | Location |
|--------------------|---------|----------------|-----------------|
| Industrial Project | Jackson | Tuckerman 7.5' | T12N/R2W/S26,27 |

We find no records at present time.

A Jackson County Element List is enclosed. Represented on this list are elements for which we have records in our database. The list has been annotated to indicate those elements known to occur within a one and a five mile radius of the project site. A legend is enclosed to help you interpret the codes used on this list.

Please keep in mind that the project area may contain important natural features of which we are unaware. Staff members of the Arkansas Natural Heritage Commission have not conducted a field survey of the study site. Our review is based on data available to the program at the time of the request. It should not be regarded as a final statement on the elements or areas under consideration. Because our files are updated constantly, you may want to check with us again at a later time.

Thank you for consulting us. It has been a pleasure to work with you on this study.

Sincerely,

Katie Shannon

Cindy Osborne Data Manager/Environmental Review Coordinator

Enclosures: Legend Jackson County Element List (annotated)

Arkansas Arts Council

Arkansas Historic Preservation Program

Arkansas State Archives

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars Cultural Center

Old State House Museum





1100 North Street Little Rock, AR 72201

(501) 324-9619 fax: (501) 324-9618 tdd: 711

e-mail: info@naturalheritage.com website: www.naturalheritage.com

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PHASE I

ENVIRONMENTAL ASSESSMENT

FOR

96 ACRE DEVELOPMENT SITE AT INDUSTRIAL PARK

NEWPORT ECONOMIC DEVELOPMENT COMMISSION

September 2018



Prepared by:

MILLER-NEWELL ENGINEERS, INC. P.O. Box 705 510 Third Street Newport, AR 72112 Miller-Newell Engineers, Inc. has been commissioned by the Newport Economic Development Commission to perform this Phase I Environmental Site Assessment on a tract of land at the Newport Industrial Park. The purpose for the assessment is to prepare the 100 acre site as a certified industrial site. The land is held in the name of Newport Jackson County Industrial Development Board. The property is rectangle in shape with the south line running 125' north of the centerline of the east west runway at the Newport Airbase.

SITE DESCRIPTION

A part of Section 27, Township 12 North, Range 2 West, in Newport, Jackson County, Arkansas.

The property is located in the Newport Industrial Park. The property is in the corporate limits. The property was originally a part of the Army Airbase established in the 1940's during World War II as a training facility. The War Surplus Act reverted the property back to the City of Newport and some fringe properties back to the original owners. The land has been in agricultural use or grasslands for the last fifty years. The land is level with relief being less than two feet. The property is bounded on its north side by agricultural fields. There is a small ditch running east to west and located at about the northern third of the property. The property lays 125' north of the centerline of the east-west runway which is the most prominent geographical feature in the area.

SITE HISTORY

The site history for the property is traceable by researching the deeds on the property. A list of property owners for the past fifty years is provided in Figure 1. In order to confirm the use of the property fifty years ago, the 1957 aerial photo was reviewed. AS can be seen in Figure 2, the photo indicates agricultural or grass land use. The land has been in the same use until present day. There have been no residences on the property in the past fifty years.

SITE LEGAL DESCRIPTION

Part of Section 27, Township 12 North, Range 2 west, Jackson County, Arkansas, being more particularly described as follows:

Commencing at the Southeast corner of said Section 27- T12N-R2W; then run N00°03'33"E, along the East line of said Section 27, a distance of 4169.60 feet; then run N89°42'14"W, 627.15 feet to the **TRUE POINT OF BEGINNING**; then run S08°28'18"E. 857.08 feet; then run S00°03'33"W, along a line which is parallel with and 500 feet from the centerline of runway, a distance of 150.00 feet; then run N89°56'38"W, along a line which is parallel with and 125 feet from the centerline of runway, a distance of 685.43 feet; then run S44°56'49"W, along a line which is parallel with and 250 feet from the centerline of runway, a distance of 685.43 feet; then run S45°03'11"W, 500.00 feet; then run S44°56'49"E, along a line which is parallel with and 250 feet from the centerline of runway, a distance of 185.38 feet; then run N89°56'38"W,

along a line which is parallel with and 125 feet from centerline of runway, a distance of 2857.66 feet; then run N00°02'45"E, 1015.65 feet; then run S89°42'14"E, 4299.34 feet to the point of beginning, containing 96.03 acres, more or less, and subject to all existing rights-of-way and easements as well as those rights-of-way and easements reserved within this instrument.

| Newport Jackson County Industrial Development Board | 2004 –Present |
|--|---------------|
| Arkansas Department of Corrections | 1996-2004 |
| City of Newport | 1946- 1996 |

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From the historical view in Figure 1 it can be seen that the early ownership was vested in the City of Newport. Through the War Surplus Act the land was reverted back to the City of Newport. The City sold the land to the Department of Corrections who later sold to the Newport-Jackson County Industrial Development Board.

<u>UTILITIES</u>

A 3-phase power line runs parallel with and approximately 900' north of the northern boundary of the property adjacent to Highway 18. To the west property a 3-phase power line runs parallel with the west property line from south to north and at approximately 1100' to the west along Highway 18 Spur. A gas line runs along Highway 18 Spur and the gas line is approximately 2". A sewer pump station is located at the midpoint of the north-south reach of Highway 18 Spur. The subject property will require an additional pump station. The pump station discharges into a force main that flows south along the east right-of-way line of Highway 18 Spur to the existing collection system.

The property has access to water supply from two sources. The City of Newport has a 6" water line on the west side of Highway 18 Spur approximately 1270' from the west property line. The City of Grubbs has a 4" water line on the north side of Highway 18. Best flow and pressure would be realized from the Newport main.

Telephone cables were noted along Highway 18 Spur and Highway 18.

Attachment 1 shows the utility locations.

REGULATORY AGENCY REVIEW

The Arkansas Department of Environmental Quality (ADEQ) is the state arm of EPA. ADEQ has the enforcement and regulatory responsibility for the state concerning hazardous materials, leaking underground storage tanks, hazardous material generators, and among other duties to protect the environment. The ADEQ website was reviewed and the results of that search are provided herein.

The following is a list of active Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites in Newport, Arkansas:

| Site Name |
|---|
| Arkwood, Inc. |
| Cedar Chemical Co. |
| Gurley Oil Pit |
| Industrial Waste Control |
| Jacksonville (Graham Road) Municipal Landfill |
| MacMillan Ring-Free Oil |
| Mid-South Wood Products |
| Monroe Auto Equipment Co. |
| Mountain Pine Pressure Treating |

Location Omaha Helena-West Helena Edmondson Jenny Lind Jacksonville Norphlet Mena Paragould Plainview

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<u>Site Name</u> Old Midland Products Quachita Nevada Wood Treater Popile, Inc. Rogers Road Municipal Landfill South 8th Street Landfill Vertac, Inc. Location Ola Reader El Dorado Jacksonville West Memphis Jacksonville

None were noted in Newport, Arkansas.

The following is a list of regulated underground storage tanks for the Newport Industrial Park Area:

| Site Name | Location |
|---|------------------------|
| Curtner Lumber Company, Inc. | 8502 Curtner Drive |
| Arkansas State University | 7648 Victory Boulevard |
| Newport Municipal Airport | 8502 Victory Boulevard |
| Grimes Arkansas Department of Corrections | 300 Corrections Drive |

None were noted to have leaked or to be leaking. These are located within 1 mile of the study site.

The following is a list of Resource Conservation & Recover Act of 1976 (RCRA) hazardous waste generators for the Newport Industrial Park Area:

| Location |
|-----------------------------|
| 7648 Victory Boulevard |
| 4010 North Operations Drive |
| 7301 Victory Boulevard |
| 7648 Victory Boulevard |
| 7900 Victory Boulevard |
| 3710 Highway 67 North |
| |

Our review indicates no regulatory action against any property within one-half mile of the site.

SITE OBSERVATION

(9.2.3) The site visit was held August 20, 2018. The site inspection included transversing all boundaries cris-crossing the property. This provided an excellent overview of vegetation and conditions on the property.

(9.2.4) Access to the property is via Highway 980 which leads to the Newport Industrial Park from US 4-lane Highway 67. From Highway 980, which turns into Victory Boulevard, turn left on to Comet Drive to the southwest corner of the study site. The property being studied lays 125' north of the centerline of the east-west runway of the

Newport Airbase Complex. The property begins with the west end of this runway and is approximately 1000 feet north and south and 4370 feet east and west. The south line does divert away from the 125' parallel to the east-west alignment when it intersects the Runway 13-31. At this point the south line excludes a portion of Runway 13-31; then continues parallel to Runway 9-27. See enclosed property map. While the access to the property crosses the ASUN Truck Driving School property, ASUN has granted an easement. The final 75' to the property is grassland. A street will need to be constructed for final ingress and egress from the site.

(9.4.1.1-9.4.1.2) The current use of the property is grassland and crop production. The primary two crops are rice and soy beans. From all research the land has been used for these two purposes for in excess of fifty years. No signs of distressed vegetation was noted.

(9.4.1.3 -9.4.1.4) The adjacent property has various uses. To the east the land is used as a municipal airport. To the west is an agricultural field. To the north, is cropland. To the south is the east-west runway now used as a truck driving range.

(9.4.1.5) The site is in the city limits of Newport with the north line of the property being part of the city limits boundary. The south line of the property lays 125' north of the centerline of the abandoned Runway 9-27. The runway now serves as a truck driving range. A part of Runway 13-31 also protrudes into the property. See site Utility Map for layout.

(9.4.1.6) The geographical makeup of the region is composed of soils with varying deposits clays and silts. The surface is underlain by the quaternary aquifer. The terrain is flat. Runoff from the area flows to Village Creek by various drainage ditches. A part of the property is drained through subsurface drains originally installed when the airbase was developed in the early 1940's.

(9.4.1.7) There are currently no residences or other structures on the site. Aerial photography from 1970 shows no buildings.

(9.4.1.8) The only public transportation access to the site is Comet Street which runs north from the Highway 980. From Highway 980 one can go north on Highway 18 Spur to Highway 18 then left on 18 to the access to US Highway 67 4-lane toward Jonesboro or St Louis. Highway 980 also runs west to intersect US Highway 67 4-lane to run south to Little Rock and Dallas.

(9.4.1.9) Water is not available at the site. The City of Newport has a 6" looped line located south of the site and south of the railroad spur at Comet Street. This is approximately 1400 feet south of the site. A 6" main runs along Highway18 Spur some 1270 feet west of the west property line. A 4" main runs along Highway18 which is parallel with the north line and 1100 feet north. No sewer exists at the site. A facility constructed on the south edge of Runway 9-27 is served by a grinder pump station that has a small force main running south to the City of Newport sewer.

(9.4.1.10) Sewer is also located on Highway 18 Spur. A pump station is located 1185 feet west of the southwest corner of the study property.

(9.4.2.1-9.4.2.3) The land has been in use for agricultural purposes since its clearing in the early 1900's. Prior to that time it was woodlands. For a short period the land was taken by the U.S. Government for use as an Army Air Field. This particular land was a grass area serving as a primary surface for Runway 9-27. The primary surface is a smooth safety area that is at or below the runway elevation.

(9.4.2.4) There are no storage tanks on the subject property. No evidence exists that there has been any storage tanks on the property.

(9.4.2.5) During the site visit no noxious odors were noted at the site.

(9.4.2.6) There were no pools of liquid nor sumps on the site.

(9.4.2.7-9.4.2.9) During the site visit, a search was made for abandoned containers of contaminants. None were found.

(9.4.2.10) There are no power lines on the site. Three phase power currently runs on the westside of the Highway 18 Spur and on the south side of Highway 18 and along the railroad spur located 1300 feet south of the property.

(9.4.3.1) There were no structures on the site and as a result no HVAC units on the site.

(9.4.3.2) There was no staining of the soil nor was corrosion noted.

(9.4.3.3) There was no interior stain and no sumps on the site that might indicate contamination.

(9.4.4.1) There were no pits, ponds, or lagoons noted. There are several drainage inlets serving the subsurface drainage system. The grates have been removed by vandals for scrap iron. The openings are significantly large enough for a man to fall in.

(9.4.4.2) No stains were noted.

(9.4.4.3) No stressed vegetation was found during the site visit.

(9.4.4.4) There were no solid waste disposal sites noted on the property.

(9.4.4.5) Being no structures on the site, there is no wastewater generated on the site. The sanitary sewer pump station to the west of the site presently handles wastewater from the residences on the west side of Highway 18 Spur.

(9.4.4.6) There are no wells on the site.

CONSLUSIONS AND RECOMMENDATIONS

Based upon review of the historical records, interviews and the site visit, it is clear that the property has been in use in agricultural land for in excess of fifty years. For a short period in the 1940's, it was in grassland and used as a safety zone around the airport while the airport was used for military purposes. As agricultural land one would expect the use of fertilizers, pesticides, and herbicides. The applications are regulated by the State Plant Board in order to prevent excessive buildup and surpassing the threshold levels to become contaminants. No evidence was found to indicate excessive concentrations. A review was made of the National Wetlands Inventory website (copy of printout attached). No wetlands were indicated for the property.

Based upon the ASTM Protocol for a Phase I Environmental Assessment no evidence of concern was found. The site is cleared of environmental issues.



U.S. Fish and Wildlife Service National Wetlands Inventory

Wetlands



August 20, 2018 Freshwater Emergent Wetland Image: Comparison of Co

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

> National Wetlands Inventory (NWI) This page was produced by the NVVI mapper

<u>1957 AERIAL PHOTO</u>

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FIGURE 2


Geotechnical

Soils Report: See attachment GT-1 for detail.

Water Table Depth: 19'

Seismic Rating: Seismic Zone 3



PRELIMINARY GEOTECHNICAL INVESTIGATION

FOR

PROPOSED INDUSTRIAL PARK

NEWPORT, ARKANSAS

* * * * *

NEWPORT INDUSTRIAL DEVELOPMENT COMMISSION

OWNERS

201 HAZEL STREET

NEWPORT, ARKANSAS 72112

* * * * *

APRIL 7, 2006

JOB NO. 243906



ANDERSON ENGINEERING CONSULTANTS, INC.

3217 NEIL CIRCLE - JONESBORO, ARKANSAS 72401 PHONE (870) 932-3700 FAX (870) 932-3769

> April 7, 2006 Job No. 243906

Mr. John Chadwell Newport Industrial Development Commission 201 Hazel Street Newport, Arkansas 72112

Re: Preliminary Geotechnical Investigation Proposed Industrial Park Newport, Arkansas

Dear Mr. Chadwell:

It is our pleasure to submit this preliminary report for the referenced property in Newport, Arkansas. The investigation consisted of field test borings, laboratory analyses, and general pavement and foundation recommendations.

The investigation indicated variable soil type with extensive areas of surficial expansive soils and poor to moderate near surface soil consistency. The site, however, will be suitable for development when proper design and construction techniques are employed. We recommend that our geotechnical services be continued when specific building and parking locations are determined for this is the most feasible means of assuring the owners, designers, and builders that the geotechnical design intent is being achieved. In the event other adverse geotechnical conditions are encountered in specific building locations, they can be identified and evaluated so that safe and economical structures may be designed.

We wish to express our appreciation for the opportunity of providing this preliminary soils investigation to you and your company. We are available for further assistance at any time during final design and construction and should you desire additional consultation please feel free to contact us.



AWG/BA/msk 243906.GEO Very truly yours,

ANDERSON ENGINEERING CONSULTANTS, INC.

Mixadn W.65

Alexandra W. "Alex" Gangluff, P.E. Geotechnical Engineer

Billy R. Alumbaugh, P.E. Senior Geotechnical Engineer



PRELIMINARY GEOTECHNICAL INVESTIGATION

FOR

PROPOSED INDUSTRIAL PARK

NEWPORT, ARKANSAS

* * * * *

NEWPORT INDUSTRIAL DEVELOPMENT COMMISSION

OWNERS

201 HAZEL STREET

NEWPORT, ARKANSAS 72112

* * * * *

BY

ANDERSON ENGINEERING CONSULTANTS, INC.

GEOTECHNICAL CONSULTANTS

3217 NEIL CIRCLE

JONESBORO, ARKANSAS 72403-1655

APRIL 7, 2006

JOB NO. 243906

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Important Information About Your Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

 the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk*.

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenviron-mental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared tor someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.



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PURPOSE

The primary purposes of this geotechnical investigation were:

 To determine the feasibility of construction at the proposed site with respect to physical and engineering properties of the soil within the proposed site.

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- b. To make general recommendations for the earthwork, pavements, and the type of foundation suited for the prevailing soil conditions within the overall site.
- c. To evaluate and recommend the general design procedures for various common soil, pavement, and foundation items in accordance with current engineering practices.

SCOPE

The scope of this geotechnical investigation includes the following:

- a. The geologic features of the site were found to consist essentially of alluvial deposits of clay, silt, and sand soils. A total of eleven auger borings were advanced to a maximum depth of 51.5 feet at general locations across the site.
- Field testing consisted of Standard Penetration test samples taken in all of the borings.
 Soils were visually classified by a senior geotechnical engineer.
- c. The soils analyses were based on N-values obtained from the Standard Penetration tests, Atterberg limits, mechanical grain size analyses, unconfined compression tests, swell tests, visual observations, and other routine inspection and classification methods. The soils were classified basically in accordance with the Unified Soil Classification System (ASTM D 2487); however, visual classifications are given on the logs.
- d. The foundation recommendations were based on standard foundation design procedures, including the Standard Penetration N-values obtained during drilling and the results of the laboratory testing program.

The flexible and rigid pavement recommendations given this report are related to the subgrade material characteristics of the near surface site soils.

AUTHORITY

e.

This geotechnical investigation was authorized on February 14, 2006, by Mr John Chadwell, the owner's representative for the project.

GEOTECHNICAL INVESTIGATION

On February 14 and 15, 2006, eleven geotechnical test borings were made at the proposed site east of the Newport, Arkansas. The site is located as shown on the Vicinity Map, Plate 1. The borings were placed on site as shown on the Plan of Borings, Plate 2. The logs of the borings are given on Plates 3 through 10. The Field Classification System for Soil Exploration and Key to the Soil Classifications and Symbols are given on Plates 11 and 12, respectively. These systems are provided to aid the reader in interpreting the various symbols used on the logs of borings. The Unified Soil Classification System is given on Plate 13. This system is used to determine the soil classification and to develop the terminology used on the logs of borings.

GENERAL SITE CONDITIONS

The proposed property consists of approximately 47.5 acres located south of Highway 18, east of Highway 18 Spur, and directly north of an abandoned runway at the Newport Municipal Airport located east of the City of Newport, Arkansas. At the time of the investigation, recent usage of the site had been limited to agricultural crop production. The site is relatively flat, however, exact grades were not provided. Overall site drainage is likely to ditches on the north and west property boundaries. However, water retention should be anticipated across the site during periods of wet or winter weather. A truck mounted drill rig was used to access the site.

GEOLOGY AND STRATIGRAPHY

The proposed site is located in the Mississippi Embayment Physiographic Region of northeastern Arkansas, and consists of terraced sediments deposited by the ancient Mississippi River and its tributaries during Quaternary times. These deposits generally consist of a complicated sequence of unconsolidated layers of gravels, sands, silts, and clays. The site soils were found to be consistent with the area geology. The site stratigraphy generally consists of 6.5 to 18.0 feet of soft to very stiff, fat clay (CH) and silty clay (CL) and loose to medium dense, clayey sand (SC). This strata is underlain by medium stiff to stiff, sandy silt (ML) and loose to dense, silty sand (SM) to depths of 35.0 to 44.5 feet. The basal stratum consisted of medium dense to very dense, sand (SP). It should be noted that the surficial soils are predominately fat clay (CH). However, in the vicinity of borings B3, B4, P3, P4, and to some extent B2, the near surface soils are a clayey sand (SC). This variation may be a result of natural processes or historic earthwork associated with the adjacent runway.

GROUNDWATER CONDITIONS

The groundwater was encountered at a depth of 27.5 to 29.5 feet during drilling and is consistent with previous experience in the Newport, Arkansas area. This water level, though, is seasonal in nature and will rise and fall with fluctuations in rainfall. Some perched water should also be expected in the near surface cohesive soils, especially during the winter or wet seasons of the year, and should be considered in design and construction of foundations, deep utilities, equipment pits or elevator shafts. This latent water condition is typically due to storage of recent rainfall or by a barrier to capillary evaporation and will be more prevalent in drainage swales, rubble fills, and in existing utility trenches. Perched water, if encountered, will most likely be brief in duration and

typically in low quantities. Where perched water is encountered it should be expected to excavate gravity drainage ditches to divert it away from the construction area. Additionally, soft, wet and pumpable soils can be expected that will require removal and replacement in structural areas.

SEISMICITY

Seismic analyses require the selection of appropriate site coefficients and other seismic values that can be established from subsurface conditions, guidelines set forth by local, state and federal codes, and historic seismic information. The structures and foundations should be designed using guidelines as set forth in either the 1999 Standard Building Code as required by **Arkansas Act 1100-1991** (and subsequent amendments) or the 2000 International Building Code.

The predominant soil types are interbedded sands, silts, and clays that vary from soft to very stiff and loose to very dense. Based upon the subsurface soil conditions and the seismic values for Arkansas published by the Arkansas State Building Services, the 1999 Standard Building Code and the 2000 International Building Code the following data are considered applicable to this project site:

| Site Class | C* |
|---|-------|
| Seismic Zone | 3 |
| Soil Profile Type | S_2 |
| Site Coefficient | 1.2 |
| Peak Acceleration Coefficient (A _a) | 0.20 |
| Effective Peak Velocity-Related | 0.20 |
| Acceleration Coefficient (A _v) | 0.20 |
| | |

*Not verified by 100-foot boring as per IBC Code. Performing a 100-foot boring may improve your IBC site classification, and therefore, may be an economical means of controlling foundation costs.

Geotechnical Engineering - Environmental Assessments - Quality Control Of Construction Materials

LIQUEFACTION ANALYSES

Liquefaction is the sudden loss of all shear strength in a soil as a result of excess pore water pressure which is induced by vibration or shock waves resulting from an earthquake, explosion, or machinery. When soils experience liquefaction they lose strength to resist load and temporarily exist in a near liquid state. Liquefaction is primarily associated with saturated, loose to medium dense cohesionless soils, i.e. sands at high moisture contents or below the water table. At this site, the relatively low water table and dense consistency of the basal sand (SP) strata minimize the potential for liquefaction. However, in borings B1 and B2 a medium stiff to stiff, non-plastic sandy silt (ML) strata exists below the water table at a depth of approximately 30.0 to 40.0 feet that has a potential for liquefaction. Therefore, additional investigation and analysis should be preformed on the site soils to delineate and quantify zones of potential liquefaction at the site.

LABORATORY TESTING

Laboratory testing was performed on select samples to determine their physical properties, classification and, strength characteristics. Laboratory testing included Atterberg limits, mechanical grain size analyses, unconfined compression tests and swell tests. The following sections describe the results of these tests. Individual test results are shown in Appendix B.

Atterberg Limits

Atterberg limit tests were performed on selected samples to aid in classification and to determine the potential volume change of the soils. The results indicated that over half the samples tested were non-plastic (NP) with the remainder moderately to highly plastic clay (CL) and fat clay (CH). The liquid limit (LL) of the cohesive soils ranged from 32 to 81 with the plasticity index (PI) ranging from 14 to 55. The cohesive soils were generally located in the top three samples, with corresponding depths of up to 6.5 feet.

Geotechnical Engineering - Environmental Assessments - Quality Control Of Construction Materials

Mechanical Grain Size Analysis

Mechanical grain size analyses were performed on variable soil types from the proposed site. The results indicated no more than 0.2% gravel sized material, between 12.8% and 89.8% sand, and between 10.2% and 87.2% passing the No. 200 sieve. Thus, the samples tested may be classified as fat clay (CH), sandy silt (ML), and silty sand (SM).

Unconfined Compression Tests

Unconfined compression tests were performed on selected cohesive samples at the specimens natural moisture content. The samples investigated resulted in low to moderate strengths ranging from 1.3 to 2.2 ksf. The moisture content for these samples may be considered moderate to high and were found to range from 25.2% to 48.6%. The dry unit weights are generally low, ranging from 70.8 pcf to 92.2 pcf, however, they may be considered normal for more plastic clay soils.

Shrinkage/Swell Tests

Visual inspection and laboratory plasticity tests performed on selected samples suggest that the in-situ clays may be of a critical nature with respect to shrinkage and swell potential, and thus, they could cause some detrimental effects upon any proposed structures. Representative samples were tested to determine the potential swell if the materials become saturated. Table I, shown on the following page, summarizes the results of these tests. The results indicate moderate swell pressures may be encountered, especially if the soils are allowed to dry to a moisture content below their plastic limit. Additional testing should verify that the potential vertical rise (PVR) of these soils should not have a significant detrimental effect upon future improvements at the proposed site.

TABLE I

SUMMARY OF PVC SWELL/LINEAR SHRINKAGE TESTS

| Sample Number | B1;P2 | B2;P3 | | |
|---------------------------------|-----------|-----------|--|--|
| Depth (feet) | 2.5 - 4.0 | 5.0 - 6.5 | | |
| Classification | СН | СН | | |
| Liquid Limit, Plastic Limit | 74, 26 | 77, 26 | | |
| Plasticity Index | 48 | 51 | | |
| Water at Beginning of Swell (%) | 19.0 | 36.1 | | |
| Water at End of Swell (%) | 28.1 | 40.2 | | |
| Swell Pressure (psf) | 2,495 | 1,040 | | |
| Linear Shrinkage (%) | 14.0 | 12.0 | | |

GENERAL EARTHWORK

The following sections are intended to provide the designer and contractor with guidelines for design and construction for future projects. They are not intended to be used as a specification for construction procedures or methods.

Site Preparation

Because the site has been in agricultural use the near surface soils have been tilled and processed. The organic layer of this material may be as deep as 12.0 inches across the site. Prior to cut and placement of any fill on the site, a minimum of 6.0 inches of topsoil and vegetation should be removed. After stripping, proof rolling with a loaded truck or scraper is recommended across the entire site to locate potential soft areas in the subgrade and/or natural ground before any fill is placed and in the cut areas after excavation to the planned elevation. Any soft areas in the natural ground detected by proof rolling should be removed and replaced with compacted stable soil. After stripping and any required undercut, the top 6.0 inches of exposed subgrade should be scarified and recompacted prior to fill placement.

<u>Fill Soils</u>

It is assumed that the on-site soils will be utilized to their fullest extent, however, the test data indicates that the upper surface cohesionless soils are not suitable for use as fill as they are predominately high plastic fat clay (CH). Thus, offsite fill will be required and consideration should also be given to the use of locally available select fills. Generally, select fill should be composed of granular, non-expansive soils such as clay gravel or clay sand. Modified compaction has been given primary consideration as optimum is typically 3.0% to 7.0% less than Standard. Modified is thus recommended as it will also yield higher CBR and allowable bearing capacities for conventional footing foundations.

Utilities

New utilities are anticipated for any proposed facilities. Utility excavations should be easily made with standard excavating equipment. All utility excavations can be backfilled with on-site materials and should be placed and compacted to ASTM D 1557. The on-site soils are considered as clayey and thus, some sloughing or caving can be expected. The contractor should strictly adhere to OSHA excavation standards in utility construction.

Landscaping

Due to the shallow fat clay (CH), care must be exercised to not dry out the subgrade soils after construction which will result in excessive settlement due to drying shrinkage of the more plastic soils. Large moisture demanding trees or vegetation should not be planted near or adjacent to buildings, as drying of the subgrade and foundation supporting soils could result in excessive settlements from soil shrinkage. When this occurs, severe distress can be noted in masonry walls and floor slabs.

The preferred landscaping method is to utilize planters having drainage systems that control and route water away for the building so that saturation of the foundation soils will not occur with swelling or loss of the allowable bearing capacity. As a general rule, the drip line of any existing or future full grown tree should not fall within the building area. Moisture control will also be aided by having sidewalks, paving, or sloping ground surfaces for at least 5.0 feet outside the structure. The sidewalks or paving must have a positive slope away from the building and all joints must be sealed to prevent water infiltration. Implementation of these points will reduce the changes in moisture content of any more plastic soils and movements of the foundation and slabs.

Site grading and earthwork operations will be more difficult in wet or winter weather. The on-site clayey soils will absorb significant quantities of water which will require significant aeration and working to dry during the winter or wet weather. As an alternate, the contractor may elect to dry the soils using lime or fly ash worked into the wet soils. The amount of drying can be required by maintaining the site in a well drained condition during construction including not allowing water to stand or pond on areas of the exposed earthwork. In addition, during wet weather the upper limit on the moisture content should be raised to five percentage points over optimum moisture content, provided the fill meets the specified compaction and is firm and stable.

FOUNDATIONS

Conventional shallow footings would be feasible for use with lightly loaded single and two story structures. The foundations should be made rigid in an effort to minimize potential differential movements resulting from non-uniform settlement due to consolidation of variable thickness of native and/or fill soils. Column and wall footings should be designed in accordance with the various applicable codes. Due to the relatively soft and potentially expansive nature of the near surface soil, conventional shallow footings should bear on 3.0 feet of select compacted fill. An allowable bearing capacity of 2000 psf may be used for footing bearing at a depth of 2.0 feet below the finished floor elevation on 3.0 feet of select fill. The finished floor elevation may be raised above the existing grade to minimize the undercut required. A corresponding settlement value should be with in normal settlement tolerances. The calculations and curves showing the bearing capacity analyses are provided on Plates 14 and 15. An explanation of the bearing capacity calculations is provided on Plates 16. For heavy loading conditions, auger cast piling bearing at an

intermediate depth may also prove economical.

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FLOOR SLABS

Differential movement of the floor slab may be caused by a difference in the allowable gross bearing capacity, differing heave conditions, and/or variable thicknesses of compressible soils below the floors. The stiffness effect of a well compacted select fill subgrade and/or engineered fill should greatly diminish the differential floor slab movements to tolerable limits. A conventional slab-on-grade may be utilized provided the slab bears on select compacted fill. The use of an impermeable vapor barrier underlain with free draining material is generally recommended beneath all floor slabs to provide an all-weather pad.

DRIVING AND PARKING AREAS

Either flexible or rigid pavement structures should serve adequately on the proposed property with the design based on numerous reasonable assumptions concerning the pavement use, site conditions, and maintenance. The site soils in their natural condition will likely require undercut and backfill replacement to properly support the required pavement sections. However, flexible pavements will probably require higher maintenance than a comparable rigid pavement structure.

Flexible Pavement

Flexible pavement typically consists of asphalt cement hot mix (ACHM) as specified by Section 407 of the Standard Specifications for Highway Construction (Edition of 2003) as published by the Arkansas State Highway and Transportation Department. The design requirements for ACHM surface course; 12.5 mm (Type II) and 9.5 mm (Type III) are provided in Tables 407-1 and 407-2, respectively. ACHM is most commonly used for light to moderate traffic areas including straight drives and parking areas for light vehicles. It should not be used in traffic

lanes where trucks turn, backup, or pick up trash dumpsters.

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<u>Rigid Pavement Non-Reinforced</u>

Rigid pavements or Portland Cement Concrete (PCC) pavements consists of concrete materials and construction procedures as specified by Section 501 of the Standard Specifications for Highway Construction (Edition of 2003) as published by the Arkansas State Highway and Transportation Department. The material type and design requirements including admixtures, reinforcing, dowels, jointing, curing, and finish are provided therein. Rigid (PCC) pavements are commonly used for both light and heavy duty traffic applications. Minimally, approach slabs, truck turning areas, docks, and dumpster pads should be PCC.

CONSTRUCTION QUALITY CONTROL

Quality control testing should be utilized in all phases of the construction. To verify that the proper performance of the proposed structure, all fill required should be compacted as required and verified by ASTM D 2922. The foundation excavations should be evaluated to verify that the recommended bearing capacity has not been reduced by disturbance to excavation or massive imperfections in the bearing strata. Our recommendations are based upon adequate quality control being utilized and further evaluations and reviews during the construction phase of the project.

CONCLUSIONS AND RECOMMENDATIONS

As a result of this preliminary geotechnical investigation, the following recommendations are offered for consideration:

- 1. Additional geotechnical investigation and recommendations should be sought upon determination of a specific building site on the property.
- The site can be made suitable for construction with proper design and/or construction techniques.

- 3. Soils and other geologic materials from both on and off the site can be satisfactorily used in the construction of the earthwork with proper handling, design, and construction techniques as previously discussed.
- 4. The investigation revealed the existence of soft and potentially expansive near surface soils. However, this condition should not have a significant detrimental effect upon future improvements at the proposed site. This is not to say that others do not exist, a complete determination in this regard is beyond the scope of this investigation as authorized by the owner's representative.
- 5. As previously discussed conventional footings founded on compacted fill should serve satisfactorily for future lightly loaded structures. It is concluded that this will be an economical type of foundation and should be designed in accordance with the necessary structural and/or architectural requirements determined by the designers with the developer's ultimate approval.
- Modified Proctor density as per ASTM D 1557 should be used in all earthwork including backfill of undercut areas and for building and pavement areas.
- 7. The use of flexible or rigid pavements should be a function of the anticipated traffic use as determined by the designer. As a minimum PCC pavements should be used for truck and bus lanes as well as dumpster pads.
- 8. As an additional measure, perimeter surface and subsurface drainage should be directed away from the exterior of the buildings. Other measures should be undertaken to intercept and drain surface runoff, roof drainage, condensate drip water, or seepage water from the near surface and foundation support soils. It would also be a prudent measure to slope backfill soils away from foundation walls.

- 9. Quality control testing should be utilized in the construction of the foundation, fill placement, and floor slab construction with adequate testing to verify that the design requirements have been achieved. Additionally, observation during initial earthwork is recommended to further evaluate the fill existing at the site.
- 10. Geotechnical engineering services by this firm are recommended during the foundation construction phase so that adequate compensation can be made for conditions that may occur which differ significantly from those assumed as a result of this investigation.
- 11. Other recommendations are given throughout the text of this report.

* * * * *

APPENDIX A PLATES

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PLATE 7







FIELD CLASSIFICATION SYSTEM

FOR SOIL EXPLORATION

NON COHESIVE SOILS

(Silt, Sand, Gravel and Combinations)

Density

Particle Size Identification

| Very Loose Loose Medium Dense Dense Very Dense | 0 - 4 blows/ft. 4 to 10 blows/ft. 10 to 30 blows/ft. 30 to 50 blows/ft. over 50 | Medium - 5 Fine - 5 | diameter 1 to 3-inch |
|--|---|------------------------------------|--|
| <u>Relative Propor</u> Descriptive Term Trace Little Some And | tions Percent 1 - 10 11 - 20 21 - 35 36 - 50 | Medium - (Fine - (Silt - (| (dia. of pencil lead) 0.2 mm to 0.6 mm (dia. of broom straw) 0.05 mm to 0.2 mm (dia. of human hair) 0.06 mm to 0.002 mm (Cannot see particles) |

COHESIVE SOILS

(Clay, Silt and Combinations)

Consistency

Plasticity

| Very Soft- <2 blows/ft. | Degree of PlasticityPlasticity IndexNone to slight0 - 4Slight5 - 7Medium8 - 22High to Very Highover 22 | |
|-------------------------|--|--|
|-------------------------|--|--|

NOTES

<u>Classification</u> on logs are made by visual inspection.

Standard Penetration Test - Driving a 2.0-inch O.D., 1%-inch I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140-pound hammer free falling a distance of 30.0 inches. It is customary for AECI to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6.0 inches of penetration on the drill log (Example: 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e., 8 + 9 = 17 blows/ft.).

Strata Changes - In the column "Soil Descriptions" on the drill log the horizontal lines represent strata changes. A solid line (-----) represents an actually observed change, a dashed line (- - -) represents an estimated change.

Groundwater observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

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KEY TO SOIL CLASSIFICATIONS AND SYMBOLS

| | UNIFIE | DSC | DIL C | LAS | SIF | CATI | ON SYSTEM(1) | | | | |
|---|-----------------------|--|----------|-------------------|---------|--|---|--|--|--|--|
| | | Letter | Symbol I | | | | Name | | TERMS CHARACTERIZING SOIL STRUCTURE(2 | | |
| | | GW | 0 | | RED | Well- | graded gravels or gravel-sa ares, little or no fines | Ind | SLICKENSIDED - having Inclined planes of weakne | | |
| | GRAVEL AND | GP | 0. 0 | 0. Q | RE | Poorty mixtu | y-graded gravels or gravel- res, little or no fines | sand | FISSURED - containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less | | |
| | GRAVELLY SOILS | GM | (0 | 4 | VELLOW | Silty g | ravels, gravel-sand-silt mix | dures | vertical. | | |
| COARSE GRAINED | | GC | A A | | YELL | Claye mixtur | y gravels, gravel-sand-clay res | | of varying color a | ED) - composed of thin layers d texture, usually grading from nottom to clay at the top. | |
| SOILS | | sw | | | RED | Well-g little o | eil-graded sands or gravelly sands, le or no fines | | CRUMBLY - cohesi blocks or crumbs | ve solls which break into small on drying. | |
| | SAND AND SANDY | SP | | | R | Poorty little of | /-graded sands or gravelly a r no fines | sands, | CALCAREOUS - co of calcium carbon | ontaining appreciable quantities ate, generally nodular. | |
| | SOILS | SM | | | YELLOW | Silty s | Silty sands, sand-silt mixtures | | WELL GRADED - having wide range in grain sizes and substantial amounts of all intermediate particle sizes. POORLY GRADED - predominantly of one grain size (uniformly graded) or having a range of sizes with | | |
| | | sc | | | Ц Д | | Clayey sands, sand-clay mixtures | | | | |
| SILTS AND CLAYS LL<50 FINE GRAINED | SILTS | ML | | | | Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity | | | some intermediate size missing (gap or skip graded). | | |
| | CLAYS | CL | | | GREEN | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays | | SYMBOLS FOR TEST DATA M/C = 15 - Natural moisture content in percent. γ = 95 - Dry unit weight in pounds/cubic foot. Qu = 1.23 - Unconfined compression strength in tons/square foot. Qc = 1.68 (21 psi) - Confined compression strength at indicated lateral pressure. 51-21-30 - Liquid limit, Plastic limit, and Plasticity index. 30% FINER - Percent finer than No. 200 | | | |
| | | OL | | | | Organic sitts and organic sitt-clays of low plasticity | | | | | |
| Soils | SILTS | мн | | | | Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts | | | | | |
| | AND CLAYS LL>50 | сн | | | BLUE | Inorganic clays of high plasticity, fat clays | | | | | |
| ОН | | | | | [| Organi plastici | clays of medium to high 7, organic silts | | 30% FINER - Percent finer than No. 200 mesh sieve. 30 B/F - Blows per foot, Standard Penetration test. ▼ - Hydrostatic water table. ∇ - Static water table. | | |
| HIGHLY ORGANIC Pt SOILS | | | | | ORANGE | Peat and other highly organic soils | | | | | |
| | | | | | TERM | IS DES | CRIBING CONSISTEN | ICY OF | SOILS(2) | | |
| | COARSE | | | | MARCEC | OT | | | FINE GRAINED SOIL | s | |
| DESCRIPTIVE TERM | | NO. BLOWS/FOOT STANDARD PEN. TEST | | | | DESCRIPTIVE TERM Very Soft | | BLOWS/FOOT | UNCONFINED COMPRESSION TONS PER SQ. FT. | | |
| Loose Firm (medium dense) Dense Very Dense | | 0 - 4 4 - 10 10 - 30 30 - 50 over 50 | | | | Soft Plastic (medium stiff) Stiff Very Stiff | | <2 2 - 4 4 - 8 8 - 15 15 - 30 | <0.25 0.25 - 0.50 0.50 - 1.00 1.00 - 2.00 2.00 - 4.00 | | |
| Field classifi (1) - From W | cation for "Con | eriment | Station | etermii n Tech | ned wit | lemoran | Hard -Inch diameter penetromete | er. | over 30 | 2.00 - 4.00 over 4.00 | |

UNIFIED SOIL CLASSIFICATION SYSTEM

(ASTM D 2487)



*Division of GM and SM groups into subdivisions of d and u are for roads and airfield only. Subdivision is based on Atterberg limits; suffix d used when L.L. is 28 or less and the P.I. Is 6 or less; u used when L.L. is greater than 24.

**Borderline classifications, used for soils possessing characteristics of two groups, are designated by combinations of group symbols. For example GW-GC, well-graded gravel-sand mixture with clay binder.

ANDERSON ENGINEERING CONSULTANTS, INC. 3217 NEIL CIRCLE, JONESBORO, ARKANSAS 72401

Design Calculations for Conventional Footings

| PROJECT: PROJECT NO.: BORING NO.: | | Proposed 243906 AVG N | Industrual | | BY: AECI | 혔 | DATE: 04/06/06 SAFETY FACTOR: 2.00 | | |
|---|-------|-----------------------------|------------|-----|----------|------|---------------------------------------|---------|-----|
| Df | Depth | - ft. | STRATA | N | Qu | Qu/2 | 1.25Qu | .125Df | Qa |
| ft | from | to | H - ft | B/F | KSF | KSF | KSF | KSF | KSF |
| 1.5 | 0.0 | 1.5 | 1.5 | 7 | 1.9 | 0.9 | 2.3 | 0.188 | 1.3 |
| 4.0 | 1.5 | 4.0 | 2.5 | 9 | 2.4 | 1.2 | 3.0 | 0.500 | 1.7 |
| 6.5 | 4.0 | 6.5 | 2.5 | 13 | 3.4 | 1.7 | 4.3 | 0.813 | 2.6 |
| 9.0 | 6.5 | 9.0 | 2.5 | 17 | 4.5 | 2.2 | 5.6 | 1.125 | 3.4 |
| 11.5 | 9.0 | 11.5 | 2.5 | 18 | 4.7 | 2.4 | 5.9 | 1.438 | 3.7 |
| 16.5 | 11.5 | 16.5 | 5.0 | 11 | 2.9 | 1.5 | 3.6 | 2.063 | 2.9 |
| 21.5 | 16.5 | 21.5 | 5.0 | 12 | 3.2 | 1.6 | 4.0 | 2.688 | 3.3 |
| 26.5 | 21.5 | 26.5 | 5.0 | 14 | 3.7 | 1.8 | 4.6 | 3.313 | 4.0 |
| 31.5 | 26.5 | 31.5 | 5.0 | 18 | 4.7 | 2.4 | 5.9 | 3.938 | 4.8 |
| 36.5 | 31.5 | 36.5 | 5.0 | 22 | 5.8 | 2.9 | 7.3 | 4.563 | 5.6 |
| 41.5 | 36.5 | 41.5 | 5.0 | 32 | 8.8 | 4.4 | 11.0 | 5.188 - | 7.7 |
| 46.5 | 41.5 | 46.5 | 5.0 | 39 | 11.2 | 5.6 | 14.0 | 5.813 | 9.3 |
| 51.5 | 46.5 | 51.5 | 5.0 | 33 | 9.1 | 4.6 | 11.4 | 6.438 | 8.2 |

WATER TABLE LEVEL: 27.5 ft.




Geotechnical Engineering - Environmental Assessments - Quality Control Of Construction Materials

APPENDIX B

SUPPORTING LABORATORY DATA

Geotechnical Engineering - Environmental Assessments - Quality Control Of Construction Materials

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ATTERBERG LIMIT DETERMINATION ASTM D 4318

| • | D INDUSTRIA Γ, ARKANSAS | | | | | ate: 02 | 2/22/06 13906 |
|----------------------|----------------------------|---------------|---------------|---------|---------------|---------------|------------------|
| | | LIQ | UID LIMIT | | | | |
| Sample Number | B1;P2 | B1;P3 | B1;P7 | B2;P3 | B3;P2 | B3;P5 | |
| Tare Number | 16 | 46 | | 81 | | | |
| Number of Blows | 25 | 24 | Ĕ | 24 | Ĕ | DLI | |
| Tare + Wet Soil (g) | 24.70 | 41.73 | AS | 25.94 | AS | AS | |
| Tare + Dry Soil (g) | 20.08 | 37.70 | NON - PLASTIC | 20.94 | NON - PLASTIC | NON - PLASTIC | |
| Tare (g) | 13.86 | 31.02 | 1 | 14.45 | | | |
| Water (g) | 4.62 | 4.03 | ð | 5.00 | ð | ð | |
| Dry Soil (g) | 6.22 | 6.68 | Z | 6.49 | Z | Z | |
| Water Content (%) | 74.28 | 60.33 | | 77.04 | | | |
| Liquid Limit | 74 | 60 | NP | 77 | NP | NP | |
| | | PLA | STIC LIMIT | | | | |
| Sample Number | B1;P2 | B1;P3 | B1;P7 | B2;P3 | B3;P2 | B3;P5 | |
| Tare Number | 9 | 28 | - | 4 | , | , | |
| Tare + Wet Soil (g) | 14.82 | 32.66 | 5) | 21.50 | 5) | () | |
| Tare + Dry Soil (g) | 14.55 | 32.45 | NON - PLASTIC | 21.26 | NON - PLASTIC | NON - PLASTIC | |
| Tare (g) | 13.53 | 31.62 | AS | 20.34 | AS | AS | |
| Water (g) | 0.27 | 0.21 | ΒΓ | 0.24 | PL | PL | |
| Dry Soil (g) | 1.02 | 0.83 | ' 7 | 0.92 | - | י ד | |
| Water Content (%) | 26.47 | 25.30 | Õ | 26.09 | õ | õ | |
| Plastic Limit | 26 | 25 | 2 | 26 | 2 | Z | |
| Plasticity Index | 48 | 35 | | 51 | | | |
| Classification (#40) | CH | CH | NP | СН | NP | NP | |
| | | LIQ | UID LIMIT | <u></u> | | | |
| Sample Number | B3;P10 | B4;P3 | B4;P6 | B5;P2 | B5;P3 | | |
| Tare Number | | | - | 11 | 37 | | |
| Number of Blows | DLI | Ŭ | Ĕ | 25 | 25 | | |
| Tare + Wet Soil (g) | AS | AS | AS | 41.39 | 45.51 | | |
| Tare + Dry Soil (g) | Ы | PL | ЪГ | 36.60 | 41.94 | | |
| Tare (g) | 1 7 | 1 | י ד | 30.69 | 30.90 | | |
| Water (g) | NON - PLASTIC | NON - PLASTIC | NON - PLASTIC | 4.79 | 3.57 | | |
| Dry Soil (g) | Z | 4 | 2 | 5.91 | 11.04 | | |
| Water Content (%) | | | | 81.05 | 32.34 | | |
| Liquid Limit | NP | NP | NP | 81 | 32 | | <u> </u> |
| | | PLA | STIC LIMIT | | | | |
| Sample Number | B3;P10 | B4;P3 | B4;P6 | B5;P2 | B5;P3 | | |
| Tare Number | | | | 45 | 31 | | |
| Tare + Wet Soil (g) | Ö | U | U | 32.56 | 33.03 | | |
| Tare + Dry Soil (g) | NON - PLASTIC | NON - PLASTIC | NON - PLASTIC | 32.20 | 32.74 | | |
| Tare (g) | AS. | AS. | 'AS | 30.81 | 31.14 | | |
| Water (g) | Id | Id | Id | 0.36 | 0.29 | | |
| Dry Soil (g) | ż | ż | Z | 1.39 | 1.60 | | |
| Water Content (%) | Q | 9 | [O] | 25.90 | 18.12 | | |
| Plastic Limit | 4 | 4 | 4 | 26 | 18 | | |
| Plasticity Index | | | | 55 | 14 | | |
| Classification (#40) | NP | NP | NP | CH | CL | | |
| | | | | | | | Ì |

Geotechnical Engineering – Environmental Assessments – Quality Control Of Construction Materials

MECHANICAL GRAIN SIZE ANALYSES ASTM D 422

| Project: Location: Sample No.: | PROPOSED IN NEWPORT, A B1;P7 | NDUSTRIAL PARK RKANSAS | Date: | ct No.: | 243906 02/23/06 |
|--|--|---|--|---|--|
| Soil Description: | SANDY SILT | | Samp | le Depth: | 20.0-21.5 |
| Sieve or Screen | Weight Retained (grams) | Cumulative Weight Retained (grams) | Percent Retained | | rcent ssing |
| 3" | 0.0 | 0.0 | 0.0 | 100 | 0.0 |
| 3/4" | 0.0 | 0.0 | 0.0 | 100 | |
| #4 | 0.0 | 0.0 | 0.0 | 100 | |
| #10 | 0.0 | 0.0 | 0.0 | 100 | |
| #40 | 0.1 | 0.1 | 0.0 | 100 | |
| #200 | 23.8 | 23.8 | 12.8 | | 7.2 |
| PAN | 162.2 | 186.0 | 100.0 | | 0.0 |
| Percent Sample G | ravel: 0.(| 0 | Samp | le Weight: | 186.0g |
| Percent Sample Sam | ilt/Clay: 87.2 | 2 | | ing Loss: | |
| Percent Sample S | | | | | |
| Percent Sample S | PROPOSED IN | JDUSTRIAL PARK | Projec | | 243906 |
| Percent Sample S Project: Location: | PROPOSED IN NEWPORT, A | JDUSTRIAL PARK | Projec Date: | et No.: | 02/23/06 |
| Percent Sample S Project: Location: Sample No.: | PROPOSED IN NEWPORT, A B3;P2 | JDUSTRIAL PARK | Projec Date: | | |
| Percent Sample S | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND | IDUSTRIAL PARK RKANSAS | Projec Date: Sampl | et No.: | 02/23/06 |
| Percent Sample S Project: Location: Sample No.: Soil Description: | PROPOSED IN NEWPORT, A B3;P2 | JDUSTRIAL PARK | Projec Date: Samp Percent | ct No.: le Depth: | 02/23/06 |
| Percent Sample S Project: Location: Sample No.: Soil Description: Sieve | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight | NDUSTRIAL PARK RKANSAS Cumulative Weight | Projec Date: Sampl | ct No.: le Depth: Per | 02/23/06 5.0-6.5 |
| Percent Sample S Project: Location: Sample No.: Soil Description: Sieve or | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained | Projec Date: Samp Percent Retained | ct No.: le Depth: Per Pas | 02/23/06 5.0-6.5 |
| Percent Sample S Project: Location: Sample No.: Soil Description: Sieve or Screen | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) | Projec Date: Samp Percent Retained 0.0 | ct No.: le Depth: Per Pas 100 | 02/23/06 5.0-6.5 cent ssing |
| Percent Sample S Project: Location: Sample No.: Soil Description: Sieve or Screen 3" | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) 0.0 | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) 0.0 | Projec Date: Samp Percent Retained 0.0 0.0 | et No.: le Depth: Per Pas 100 100 | 02/23/06 5.0-6.5 ccent ssing 0.0 0.0 |
| Percent Sample Si Project: Location: Sample No.: Soil Description: Sieve or Screen 3" 3/4" | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) 0.0 0.0 | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) 0.0 0.0 | Projec Date: Samp Percent Retained 0.0 0.0 0.0 0.0 | ct No.: le Depth: Per Pas 100 100 100 | 02/23/06 5.0-6.5 ccent sing 0.0 0.0 |
| Percent Sample Si Project: Location: Sample No.: Soil Description: Sieve or Screen 3" 3/4" #4 | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) 0.0 0.0 0.0 0.0 | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) 0.0 0.0 0.0 0.0 | Projec Date: Samp Percent Retained 0.0 0.0 0.0 0.0 0.0 0.0 | et No.: le Depth: Per Pas 100 100 100 | 02/23/06 5.0-6.5 ccent ssing 0.0 0.0 0.0 0.0 |
| Percent Sample Si Project: Location: Sample No.: Soil Description: Sieve or Screen 3" 3/4" #4 #10 | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 | Projec Date: Samp Percent Retained 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | et No.: le Depth: Per Pas 100 100 100 100 100 | 02/23/06 5.0-6.5 ccent ssing 0.0 0.0 0.0 0.0 0.0 |
| Percent Sample Si Project: Location: Sample No.: Soil Description: Sieve or Screen 3" 3/4" #4 #10 #40 | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 0.1 | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 | Projec Date: Samp Percent Retained 0.0 0.0 0.0 0.0 0.0 0.0 | et No.: le Depth: Per Pas 100 100 100 100 28 | 02/23/06 5.0-6.5 cent ssing 0.0 0.0 0.0 0.0 0.0 3.1 |
| Percent Sample Si Project: Location: Sample No.: Soil Description: Sieve or Screen 3" 3/4" #4 #10 #40 #200 | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 206.9 81.0 | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 207.0 288.0 | Projec Date: Samp Percent Retained 0.0 0.0 0.0 0.0 0.0 0.0 0.0 71.9 100.0 | et No.: le Depth: Per Pas 100 100 100 100 28 0 | 02/23/06 5.0-6.5 ccent ssing 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0. |
| Percent Sample S Project: Location: Sample No.: Soil Description: Sieve or Screen 3" 3/4" #4 #10 #40 #200 PAN | PROPOSED IN NEWPORT, A B3;P2 SILTY SAND Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0. | NDUSTRIAL PARK RKANSAS Cumulative Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.0 0.1 207.0 288.0 | Projec Date: Samp Percent Retained 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 71.9 100.0 Samp | et No.: le Depth: Per Pas 100 100 100 100 28 | 02/23/06 5.0-6.5 cent ssing 0.0 0.0 0.0 0.0 0.0 3.1 |

_ Geotechnical Engineering – Environmental Assessments – Quality Control Of Construction Materials _

MECHANICAL GRAIN SIZE ANALYSES ASTM D 422

| Project: Location: Sample No.: Soil Description: | Proposed Indus Newport, Arkar B3;P5 Silty Sand | | Projec Date: Sampl | et No.: le Depth: | 243906 02/23/06 10-11.5 ft. |
|---|--|---|---|---|--|
| Soil Description: Sieve | Silty Sand Weight | Cumulative Weight | ····· | | |
| or | Retained | Retained | Percent | | cent |
| Screen | (grams) | (grams) | Retained | Pas | ssing |
| 3" | 0.0 | 0.0 | 0.0 | 100 |).0 |
| ···· 3/4" | 0.0 | 0.0 | 0.0 | 100 | 0.0 |
| #4 | 0.4 | 0.4 | 0.2 | 99 | 9.8 |
| #10 | 0.4 | 0.8 | 0.4 | 99 | 9.6 |
| #40 | - 0.7 | 0.1 | 0.0 | 100 | 0.0 |
| #200 | 185.0 | 185.1 | 86.5 | 13 | 3.5 |
| PAN | 28.9 | 214.0 | 100.0 | (| 0.0 |
| Percent Sample G | Fravel: 0.2 | 2 | Samp | le Weight: | 214.0g |
| Percent Sample S | and: 86.3 | 3 | Washi | ing Loss: | 28.9g |
| Percent Sample S | ilt/Clay: 13.5 | 5 | | | |
| Project: Location: | Proposed Indus Newport, Arkar | | Projec Date: | et No.: | 243906 |
| Sample No.: | B4;P6 | 11545 | Date: | | |
| Soil Description: | DT,I U | | Some | la Donthi | 02/23/06 |
| | Silty Sand | | Samp | le Depth: | |
| Sieve | Silty Sand Weight | Cumulative Weight | | | 02/23/06 15-16.5 ft. |
| Sieve or | Silty Sand Weight Retained | Cumulative Weight Retained | Percent | Per | 02/23/06 15-16.5 ft. |
| Sieve or Screen | Weight | - | | Per | 02/23/06 15-16.5 ft. |
| or | Weight Retained | Retained | Percent | Per Pas | 02/23/06 15-16.5 ft. ccent ssing |
| or Screen | Weight Retained (grams) | Retained (grams) | Percent Retained | Per Pas | 02/23/06 15-16.5 ft. ccent ssing |
| or Screen 3" | Weight Retained (grams) 0.0 | Retained (grams) 0.0 | Percent Retained 0.0 | Per Pas | 02/23/06 15-16.5 ft. ccent ssing 0.0 0.0 |
| or Screen 3" 3/4" | Weight Retained (grams) 0.0 0.0 | Retained (grams) 0.0 0.0 | Percent Retained 0.0 0.0 | Per Pas 100 100 | 02/23/06 15-16.5 ft. ccent ssing 0.0 0.0 |
| or <u>Screen</u> 3" 3/4" #4 | Weight Retained (grams) 0.0 0.0 0.0 0.0 | Retained (grams) 0.0 0.0 0.0 | Percent Retained 0.0 0.0 0.0 0.0 | Per Pas 100 100 100 100 | 02/23/06 15-16.5 ft. ccent ssing 0.0 0.0 0.0 |
| or <u>Screen</u> 3" 3/4" #4 #10 | Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 | Retained (grams) 0.0 0.0 0.0 0.0 0.0 | Percent Retained 0.0 0.0 0.0 0.0 0.0 | Per Pas 100 100 100 99 | 02/23/06 15-16.5 ft. ccent ssing 0.0 0.0 0.0 0.0 0.0 |
| or Screen 3" 3/4" #4 #10 #40 | Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.2 | Retained (grams) 0.0 0.0 0.0 0.0 0.2 | Percent Retained 0.0 0.0 0.0 0.0 0.0 0.1 | Per Pas 100 100 100 100 100 99 | 02/23/06 15-16.5 ft. ccent ssing 0.0 0.0 0.0 0.0 0.0 0.0 9.9 |
| or Screen 3" 3/4" #4 #10 #40 #200 | Weight Retained (grams) 0.0 0.0 0.0 0.0 0.0 0.2 188.4 21.4 | Retained (grams) 0.0 0.0 0.0 0.0 0.2 188.6 210.0 | Percent Retained 0.0 0.0 0.0 0.0 0.1 89.8 100.0 | Per Pas 100 100 100 100 100 99 | 02/23/06 15-16.5 ft. ccent ssing 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0. |
| or Screen 3" 3/4" #4 #10 #40 #200 PAN | Weight Retained (grams) 0.0 0.0 0.0 0.0 0.2 188.4 21.4 Gravel: 0.4 | Retained (grams) 0.0 0.0 0.0 0.0 0.2 188.6 210.0 0 | Percent Retained 0.0 0.0 0.0 0.0 0.1 89.8 100.0 Samp | Per Pas 100 100 100 100 99 10 | 02/23/06 15-16.5 ft. ccent ssing 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0. |

Geotechnical Engineering - Environmental Assessments - Quality Control Of Construction Materials

MECHANICAL GRAIN SIZE ANALYSES ASTM D 422

| Project: Location: Sample No.: Soil Description: | NEWPORT, A B5;P2 | NDUSTRIAL PARK RKANSAS 'N FAT CLAY | Projec Date: Sampl | t No.: e Depth: | 243906 02/23/06 2.5-4.0 |
|--|---------------------|--|--------------------------|-----------------------|-------------------------------|
| Sieve | Weight Retained | Cumulative Weight | Percent | Per | cent |
| Screen | (grams) | Retained (grams) | Retained | | sing |
| 3" | 0.0 | 0.0 | 0.0 | 100 | 0 |
| 3/4" | 0.0 | 0.0 | 0.0 | 100 | |
| #4 | 0.0 | 0.0 | 0.0 | 100 | |
| #10 | 0.0 | 0.0 | 0.0 | 100 | |
| #40 | 0.4 | 0.4 | 0.2 | | .8 |
| #200 | 52.7 | 53.1 | 22.4 | | .6 .6 |
| PAN | 183.9 | 237.0 | 100.0 | | .0 |
| Percent Sample G Percent Sample Sa Percent Sample Si | and: 22. | 4 | Sample | e Weight: 1g Loss: | 237.0g 183.9g |

| ANDERSON ENGINE 3217 NEIL CIRCLE, JONE | ERING CONSULTANT ESBORO, ARKANSAS 72401 | rs, INC | | | |
|--|---|---|--|---|---|
| | | | D COMPRESSIO STM D 2166 | N TEST | |
| Project: Location: Sample No.: Soil Description: | PROPOSED INI NEWPORT, AR B1;P3 GRAY FAT CL | KANSAS | PARK | Project No.: Date: Sample Depth: K PRC: | 243906 02/14/06 5.0-6.5 FT 2.0 |
| Tare Number Tare + Wet Soil Tare + Dry Soil Tare Water Water Wet Soil Dry Soil Water Content | 156.1 123.2 31.2 32.9 124.9 91.9 | 5 g g g g | Height Avg. Diameter Gs (Estimated) Trimmed Sample Initial Area Void Ratio = (Vo- Saturation = GsW Dry Density = 62 Wet Density = 62 | Total Weight -Vs)/Vs o/Eo •4(Ws/Vo) | 2.800 in 1.400 in 2.67 124.91 g 9.931 sq.cm 1.051 91.1 % 81.2 pcf 110.4 pcf |
| Deflection Dial Reading (10 ⁻³ in) | Proving Ring Dial Reading (10 ⁻⁴ in) | Axial Load (lbs) | Axial Strain ∈ =∆H/Ho | $A_{corr} = Ao/(1 - \epsilon)$ (sq.cm) | Compressive Strength 0.93(P/A _{corr}) (ksf) |
| 20 30 40 50 60 70 80 90 100 110 120 | 1.0 1.0 1.5 2.0 2.5 3.0 4.0 5.0 6.0 7.0 8.0 | 2.0 2.0 3.0 4.0 5.0 6.0 8.0 10.0 12.0 14.0 16.0 | 0.0071 0.0107 0.0142 0.0178 0.0213 0.0249 0.0284 0.0320 0.0355 0.0390 0.0426 | 9.965 10.003 10.039 10.075 10.111 10.148 10.185 10.222 10.259 10.297 10.335 10.373 | 0.9 0.2 0.2 0.3 0.4 0.5 0.5 0.5 0.7 0.9 1.1 1.3 1.4 |
| 130 140 150 160 QuMax = 1.4 ksf at P.P.= 1.25 ksf | 8.0 8.0 7.5 7.5 t Strain = $4\% \pm$ | 16.0 16.0 15.0 15.0 | 0.0461 0.0497 0.0533 0.0569 Type of Failure: | 10.412 10.451 10.491 10.530 BULGE | 1.4 1.4 1.3 1.3 |



| | ESBORO, ARKANSAS 72401 | rs, INC | | | |
|--|--|------------------------|--|---|---|
| | UNC | | O COMPRESSIO STM D 2166 | N TEST | |
| Project: Location: Sample No.: Soil Description: | PROPOSED IN NEWPORT, AR B2;P2 GRAY FAT CL | KANSAS | - PARK | Project No.: Date: Sample Depth: K PRC: | 243906 02/14/06 2.5-4.0 FT 2.0 |
| Fare Number. Fare + Wet Soil Fare + Dry Soil Fare. Water. Water. Wet Soil. Dry Soil Water Content. | 149.7 110.8 30.8 30.8 118.9 80.0 | | Height Avg. Diameter Gs (Estimated) Trimmed Sample ⁷ Initial Area Void Ratio = (Vo- Saturation = GsWe Dry Density = 62. Wet Density = 62. | Fotal Weight Vs)/Vs p/Eo 4(Ws/Vo) | 2.800 in 1.400 in 2.72 119.08 g 9.931 sq.cr 1.398 94.6 % 70.8 pcf 105.2 pcf |
| Deflection Dial Reading (10 ⁻³ in) | Proving Ring Dial Reading (10 ⁻⁴ in) | Axial Load (lbs) | Axial Strain ∈ =ΔH/Ho | $A_{corr} = Ao/(1-\epsilon)$ (sq.cm) | Compressiv Strength 0.93(P/A _{con} (ksf) |
| 10 | 1.0 | 2.0 | 0.0035 | 9.967 | (KSI) 0.2 |
| 20 | 2.0 | 4.0 | 0.0071 | 10.002 | 0.4 |
| 30 | 3.0 | 6.0 | 0.0106 | 10.038 | 0.6 |
| 40 | 3.0 | 6.0 | 0.0142 | 10.074 | 0.6 |
| 50 | 4.0 | 8.0 | 0.0177 | 10.111 | 0.7 |
| 60 | 5.0 | 10.0 | 0.0213 | 10.147 | 0.9 |
| 70 | 5.0 | 10.0 | 0.0248 | 10.184 | 0.9 |
| 80 | 6.0 | 12.0 | 0.0284 | 10.221 | 1.1 |
| 90 100 | 6.0 | 12.0 | 0.0319 | 10.259 | 1.1 |
| 110 | 6.0 | 12.0 | 0.0355 | 10.297 | 1.1 |
| 120 | 7.0 | 14.0 | 0.0390 | 10.335 | 1.3 |
| 120 | 7.0 | 14.0 | 0.0426 | 10.373 | 1.3 |
| 130 | 7.0 | 14.0 | 0.0462 | 10.412 | 1.3 |
| | 7.0 | 14.0 | 0.0498 | 10.451 | 1.2 |
| 150 | 7.0 | 14.0 | 0.0533 | 10.491 | 1.2 |
| 150 160 | 6.5 | 13.0 | 0.0569 | 10.531 | 1.1 |

BULGE

_ Geotechnical Engineering – Environmental Assessments – Quality Control Of Construction Materials ____

PLATE B6

UNCONFINED COMPRESSION TEST ASTM D 2166

| Project: Location: Sample No.: Soil Description: | PROPOSED IN NEWPORT, AF B4;P2 GRAY SANDY | KANSAS | LPARK | Project No.: Date: Sample Depth: K PRC: | 243906 02/14/06 2.5-4.0 FT 2.0 |
|--|---|------------------------|---|---|---|
| Tare Number Tare + Wet Soil Tare + Dry Soil Tare Water Wet Soil Dry Soil Water Content | 165.2 138.3 | | Height Avg. Diameter Gs (Estimated) Trimmed Sample Initial Area Void Ratio = (Vo Saturation = GsW Dry Density = 62 Wet Density = 62 | Total Weight -Vs)/Vs /o/Eo . 4(Ws/Vo) | 2.870 in 1.400 in 2.68 133.91 g 9.931 sq.cm 0.815 83.0 % 92.2 pcf 115.4 pcf |
| Deflection Dial Reading (10 ⁻³ in) | Proving Ring Dial Reading (10 ⁻⁴ in) | Axial Load (lbs) | Axial Strain ∈ =∆H/Ho | $A_{corr} = Ao/(1 - \epsilon)$ (sq.cm) | Compressive Strength 0.93(P/A _{corr}) (ksf) |
| 10 | 1.5 | 3.0 | 0.0034 | 9.966 | 0.3 |
| 20 | 2.5 | 5.0 | 0.0069 | 10.000 | 0.5 |
| 30 | 4.0 | 8.0 | 0.0103 | 10.035 | 0.7 |
| 40 | 5.5 | 11.0 | 0.0137 | 10.070 | 1.0 |
| 50 | 8.0 | 16.0 | 0.0171 | 10.105 | 1.5 |
| 60 70 | 8.5 | 17.0 | 0.0206 | 10.140 | 1.6 |
| 70 80 | 9.5 | 19.0 | 0.0241 | 10.176 | 1.7 |
| | 10.0 | 20.0 | 0.0275 | 10.213 | 1.8 |
| 90 100 | 10.5 | 21.0 | 0.0310 | 10.249 | 1.9 |
| 110 | 11.0 | 22.0 | 0.0345 | 10.286 | 2.0 |
| 120 | 11.5 12.0 | 23.0 | 0.0379 | 10.323 | 2.1 |
| 130 | 12.0 | 24.0 24.0 | 0.0414 | 10.360 | 2.2 |
| QuMax = 2.2 ksf at | | 24.0 | 0.0449 Type of Failure: | 10.398 70 DEGREE SHE | 2.1 |
| P.P.= 2.00 ksf | | | , , , , , , , , , , , , , , , , , , , | | BAR |

_ Geotechnical Engineering – Environmental Assessments – Quality Control Of Construction Materials

UNCONFINED COMPRESSION TEST ASTM D 2166

| Location: Sample No.: Soil Description: | PROPOSED IN NEWPORT, AF B5;P3 SANDY CLAY | KANSAS | PARK | Project No.: Date: Sample Depth: K PRC: | 243906 02/14/06 5.0-6.5 FT 2.0 |
|---|---|------------------------|---|--|---|
| Tare Number Tare + Wet Soil Tare + Dry Soil Tare Water Wet Soil Dry Soil Water Content | 159.6 128.4 30.9 31.2 128.7 97.5 | g g g g | Height Avg. Diameter Gs (Estimated) Trimmed Sample ' Initial Area Void Ratio = (Vo- Saturation = GsW Dry Density = 62. Wet Density = 62 | Total Weight Vs)/Vs o/Eo 4 (Ws/Vo) | 2.800 in 1.400 in 2.67 128.96 g 9.931 sq.cm 0.930 91.9 % 86.3 pcf 113.9 pcf |
| Deflection Dial Reading (10 ⁻³ in) | Proving Ring Dial Reading (10 ⁻⁴ in) | Axial Load (lbs) | Axial Strain ∈ =ΔH/Ho | $A_{corr} = Ao/(1-\epsilon)$ (sq.cm) | Compressive Strength 0.93(P/A _{corr}) (ksf) |
| 10 | 2.5 | 5.0 | 0.0035 | 9.966 | 0.5 |
| 20 | 4.5 | 9.0 | 0.0070 | 10.001 | 0.8 |
| 30 | 8.0 | 16.0 | 0.0104 | 10.036 | 1.5 |
| 40 | 8.5 | 17.0 | 0.0140 | 10.072 | 1.6 |
| 50 | 10.0 | 20.0 | 0.0175 | 10.108 | 1.8 |
| 60 | 10.5 | 21.0 | 0.0211 | 10.145 | 1,9 |
| 70 | 11.0 | 22.0 | 0.0246 | 10.182 | 2.0 |
| 80 | 11.5 | 23.0 | 0.0282 | 10.219 | 2.1 |
| 90 | 12.0 | 24.0 | 0.0317 | 10.257 | 2.2 |
| | 12.0 | 24.0 | 0.0353 | 10.295 | 2.2 |
| 100 | | 24.0 | 0.0389 | 10.333 | 2.2 |
| 110 | 12.0 | 24.0 | 0.0507 | 10.333 | 2.2 |
| 110 120 | 12.0 12.0 | 24.0 24.0 | 0.0424 | 10.333 | 2.2 |
| 110 120 130 | | | | | |
| 110 120 130 140 | 12.0 | 24.0 | 0.0424 | 10.372 | 2.2 |
| 110 120 130 | 12.0 11.5 | 24.0 23.0 | 0.0424 0.0460 | 10.372 10.411 | 2.2 2.1 |



_ Geotechnical Engineering – Environmental Assessments – Quality Control Of Construction Materials _

| Project: Location: Sample No.: Soil Description: | Proposed Industrial Park Newport, Arkansas B1;P2 Dark Gray Fat Clay | Project No.: Date: Sample Dep K PRC: | | 243906 02/26/06 2.5-4.0 ft 2.0 |
|---|--|---|------------|---|
| Liquid Limit: | 74 | Est. Specific | c Gravity: | 2.67 |
| Plastic Limit: | 26 | No. of Laye | rs: | 4 |
| Plasticity Index: | 48 | No. Blows/L | ayer: | 7 |
| | WATE | ER CONTENT | | |
| | Before Test | | After | Fest |
| Tare Number | 47 | Tare Number | 38 | |
| Tare + Wet Soil | 40.7 g | Tare + Wet Soil | 174.0 | |
| Tare + Dry Soil | 39.2 g | Tare + Dry Soil | 147.3 | 0 |
| Tare | 31.4 g | Tare | 52.4 | 0 |
| Water Content | 19.0 % | Water Content | 28.1 | • |
| Saturation | 73.1 % | Saturation | 100.0 | % |
| Dry Density | 98.3 pcf | Dry Density | 97.8 | pcf |
| | VOID RATIO | DETERMINATION | | |
| Vo | 60.801 ccm | Vf | 60.976 | ccm |
| Wt of Soil + Ring | 356.7 g | Wt of Soil + Ring | 365.1 | g |
| Wt of Ring | 242.6 g | Wt of Ring | 242.6 | - |
| Moist Wt of Soil | 114.1 g | Moist Wt of Soil | 122.5 | g |
| Vs | 35.898 ccm | Vs | 35.898 | ccm |
| Eo | 0.6937 | Ef | 0.6986 | , |
| | SW | ELL DATA | <u></u> | |
| Time | Dial (* 0.0001) | Pressure | Void Rati | 0 |
| 16.00 | 0.00 | 0.0 | 0.6937 | , |
| 31.00 | 15.00 | 2079.0 | 0.6978 | 1 |
| 41.00 | 18.00 | 2494.8 | 0.6986 | ,) |
| Final Dial Reading | | Swell Pressure: 2 | ,495 PSF | |
| Heave = 0.288 % = | = 0.0346 inches/foot | | | |
| | SHRIN | IKAGE DATA | | |
| Linear Shrinkage (| | | | |
| | Linear Shrinkage: 1 | 4.0 % | | |
| | - | 6.4 % | | |

SHRINKAGE / SWELL INDEX TESTS

| Proposed Industrial Park Newport, Arkansas B2;P3 Light Gray Fat Clay | Project No Date: Sample Do K PRC: | | 243906 02/26/06 5.0-6.5 ft 2.0 |
|---|---|---|--|
| 77 26 51 | No. of Lay | vers: | 2.71 4 7 |
| | R CONTENT | | |
| | | After] | ſest |
| 8 | Tare Number | 1 | |
| ę | Tare + Wet Soil | 323.3 | g |
| • | Tare + Dry Soil | 292.1 | g |
| ę | Tare | 214.6 | g |
| | Water Content | 40.2 | % |
| | Saturation | 100.0 | % |
| 82.4 pcf | Dry Density | 81.3 | pcf |
| VOID RATIO | DETERMINATION | | |
| 60.801 ccm | Vf | 60.874 | ccm |
| 351.8 g | Wt of Soil + Ring | | |
| 242.5 g | Wt of Ring | | - |
| 109.3 g | Moist Wt of Soil | | • |
| 29.647 ccm | Vs | | • |
| 1.0509 | Ef | 1.0533 | |
| SWE | ULL DATA | <u> </u> | |
| Dial (* 0.0001) | Pressure | Void Ratio | C |
| 0.00 | 0.0 | | - |
| 4.00 | | | |
| 7.00 | 970.2 | | |
| 7.50 | 1039.5 | 1.0533 | |
| 7.50 0.0144 inches/foot | Swell Pressure: | 1,040 PSF | |
| SHRIM | | | |
| | NAUE DATA | | |
| - | 0% | | |
| | | | |
| | B2;P3 Light Gray Fat Clay 77 26 51 WATE Before Test 8 57.3 g 50.4 g 31.4 g 36.1 % 93.0 % 82.4 pcf VOID RATIO 60.801 ccm 351.8 g 242.5 g 109.3 g 29.647 ccm 1.0509 SWE Dial (* 0.0001) 0.00 4.00 7.50 0.0144 inches/foot SHRINI Bar Method): Linear Shrinkage: 12 | Newport, ArkansasDate:B2;P3Sample DuLight Gray Fat ClayK PRC:77Est. Specifi26No. of Lay51No. BlowsWATER CONTENTBefore Test88Tare Number57.3 gTare + Wet Soil50.4 gTare + Dry Soil31.4 gTare36.1 %Water Content93.0 %Saturation82.4 pcfDry DensityVOID RATIO DETERMINATION60.801 ccmVf351.8 gWt of Soil + Ring242.5 gWt of Soil + Ring109.3 gMoist Wt of Soil29.647 ccmVs1.0509EfSWELL DATADial (* 0.0001)Pressure0.000.04.00554.47.50Swell Pressure:0.0144 inches/footSHRINKAGE DATABar Method):Linear Shrinkage:12.0 % | Newport, ArkansasDate:B2;P3Sample Depth:Light Gray Fat ClayK PRC:77Est. Specific Gravity:26No. of Layers:51No. Blows/Layer:WATER CONTENTBefore TestAfter T8Tare Number11.4 gTare + Wet Soil30.4 gTare + Dry Soil31.4 gTare31.4 gTare30.9%Saturation30.9%Saturation100.082.4 pcfVOID RATIO DETERMINATION60.801 ccmVf60.801 ccmVf60.801 ccmVfSWELL DATADial (*0.0001)PressureVoid Ratio0.000.01.0509Ef1.0509Ef1.05091.05337.50Swell Pressure:7.50Swell Pressure:7.50Swell Pressure:7.50Swell Pressure:7.50Swell Pressure:7.50Swell Pressure:7.50Swell Pressure:7.50Linear Shrinkage:12.0 % |

SHRINKAGE / SWELL INDEX TESTS



Zoning/Permitting

| Copy of Restrictive Covenants: | There are no restrictive covenants at this time. |
|---|--|
| Current Classification and Proposed Zoning (if different) to Conform with Intended Use: | Current: Agricultural Proposed: Industrial |
| Copy of Zoning Ordinance: | See attachment Z-1 for detail. |
| Explanation of Process to Change Zoning: | Applicant presents a letter of the proposed zoning change to the Planning Commission. The public is notified about the upcoming public hearing. The Commission holds a public hearing 30 days after the letter is presented. The Planning Commission can approve the zoning change at the same meeting as the public hearing. The City Council approves the Planning Commission's recommendation at the following City Council meeting, typically around 14 days later. The new zoning classification is valid upon City Council approval. |



ZONING CODE

NEWPORT, ARKANSAS

William D. Young, Mayor Elwanda S. Templeton, City Clerk/Treasurer Henry H. Boyce, City Attorney Cloys Cameron, Code Enforcement Officer

City Council

Lynn Pinkett, Assistant Mayor John <u>Pennington</u> Robert Martin' , Harry Benish Jan Bratcher Larry Tolerson Scott Foushee Bill Connelly

Planning Commission

Penn Stafford, Chairman J.D.,Collier
DeWitt Haynes
Carlon James
Jessie Davis
Byrum Ahart
RonDelcase
Ginger Carlyle
Robbie Hindman

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SECTION I

Title

This Code shall be known, cited and referred to as:

The City of Newport Zoning Code

SECTION ill

DEFINITIONS

For the purpose of this Code, the definitions contained in this Section shall be observed and applied. Words herein not defined shall be interpreted in accordance with **definitions** contained in the Webster's Dictionary.

I. CLARITY OF INTERPRETATION

The following word use shall apply in order to provide clarity of interpretation:

- A. Words used in the present tense shall include the future and past, and words used in the singular number shall include the plural number, and the plural, the singular.
- B. The word "shall" is mandatory and not discretionary.
- C. The word "may" is permissive.
- D. The word "lot" shall include the words "lot" and "parcel". **The** word "building" includes all other structures of every kind regardless of similarity to buildings; and the phrase "used for" shall include the phrases "arranged for," "designed for," "intended for," "maintained for," and "occupied for".

II. DEFINITIONS

Accessory Structure. An "accessory structure" is one which:

- A. is subordinate to and serves a principal building or principal use;
- B. is **subordinate** in area, extent or purpose to the principal building or principal use served;
- C. contributes to the comfort, convenience or necessity of occupants of the **principal** building or principal use served; and
- D. is located on the same zoning lot as the principal **building** or prmcipal use served with the single exception of such accessory off-street parking facilities as are permitted to **be** located elsewhere than on the same zoning lot with the building or use served.

Alley. A public way, not in excess of 20 feet of right-of-way, used as a secondary means for vehicular access to the rear or side of properties otherwise abutting on a street and not intended for general traffic circulation.

Alteration. Any change, addition, or removal of or **affecting** the structural or supporting members of a building such as bearing walls, columns, beams, girders, and joists.

<u>Apartment.</u> A room or suite of rooms in a multiple-family dwelling, which is arranged, designed, used or intended to be used as a single housekeeping **unit**. Complete private kitchen and private bath facilities, permanently installed, must always be included for each apartment.

Area. The amount of land surface in a lot or parcel of land.

<u>Automobile Repair. Major.</u> Engine rebuilding or major reconditioning of worn or damaged motor vehicles or trailers; collision services, including body, frame or fender straightening or repair and **painting** of vehicles.,

Automobile Service Station. An establishment, the business of which is the operation of a motor fuel dispensing station, where repair work is limited to lubricating and washing of motor vehicles, changing and minor repairs of tires, and where no body work or major chassis or motor repairs are made, except incidental repairs, replacement of minor parts and motor service to automobiles, but not including and operation specified under "automobile repair, major."

Basement. A portion of a building or structure partly underground designed for human occupancy.

Billboard. See Sign.

<u>Block.</u> A tract of land bounded by streets or, in lieu or a street or streets, by public parks, cemeteries, **railroad rights-of-way**, bulkhead lines or shore lines of waterways or corporate. **boundary** lines of municipalities.

Boarding House. A building other than a hotel or restaurant where meals, a sleeping room and one off-street parking space per guest have been provided for compenSation to not more than three (3) guests who are not members of the keeper's family.

Building. Any structure having a roof supported by columns or **walls** for the sheltering or enclosure of persons, animals, chattelS or property of any kind. Any structure with interior areas not normally accessible for human **use**, such as gas holders, oil tanks, water tanks, grain elevators, coal **bunkers**, oil cracking towers and other similar strucnires are not considered as buildings.

<u>Country Club.</u> A chartered, non-profit membership **club catering** primarily to its membership, providing one or more of the following recreational and social activities: golf, <u>swimming</u>, riding, outdoor recreation, club house, locker room, pro shop.

"Drive-In" **Type** Uses. Sales or service uses which offer goods or services to customers waiting in parked vehicles, such as, but not limited to drive-in **restaurants**, drive-in banks and automated car washes. Such uses create numerous vehicular conflict points thereby increasing potential traffic hazards. This Code specifically defined such uses with the intent of limiting their location to areas with adequate road accessibility and with a <u>minimum</u> of traffic conflict.

Driveway. An accessway to a required off-street parking facility.

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<u>Dwelling</u>. A building or portions thereof designed or used exclusively **for** residential occupancy, including one-family dwelling units, two-family dwelling units and multiple-family units, which structures are approved under the adopted building codes of the City of Newport (but not including hotels, motels and boarding houses).

<u>Dwelling</u>. <u>Attached</u>. A dwelling which is joined to another dwelling **at** one or more sides by a - party wall or **walls**.

Dwelling. Detached. A dwelling which is entirely surrounded by open space on the same lot.

<u>Dwelling</u>. <u>Multiple-Family</u>. A building or portions thereof designed or altered to.provide dwelling units for occupancy by three (3) or more families living independently of-each other, each with its own kitchen and bath facilities.

<u>Dwelling</u>. <u>One-Family</u>. A dwelling unit designed exclusively for use and occupancy by one family.

<u>Dwelling</u>. <u>Townhouse</u>. Three or more dwelling units attached at the side or sides, each unit of which has a separate outdoor entrance, no unit is located over another unit, and each unit is separated from any other unit by one or more common fire resistant walls.

<u>Dwelling</u>. <u>Two-Family</u>. A building designed or altered to provide dwelling units for occupancy by two families living independently of each other, each with **its** own kitchen and bath **facilities**.

<u>Dwelling Unit.</u> One or more rooms which are arranged) **designed** or **used** as living quarters for one family only. Complete single kitchen facilities, bathroom facilities and sleeping facilities shall always be mcluded for each dwelling unit.

Easement. A grant by the property owner of the use by the public, a corporation or person(s)

<u>Junk Yard.</u> 'Any open space or area where motor vehicle (not in running condition), motor vehicle parts, paper, rage or similarly **used** but salvageable materials are bought, sold, exchanged, stored, baled, packed, disassembled or otherwise handled.

<u>Kennel.</u> Commercial. Any lot or premises or portion thereof, on which more than four (4) dogs, cats and other household domestic <u>animals</u>, over four (4) months of age, are kept, or on compensation or kept for sale.

Loading and Unloading Space or Berth. Off-Street. An obstructed; hard-surfaced area of land other than a street or a public way, the principal use of which is for the standing, loading and unloading of **motor** vehicles, tractors and trailers, to avoid undue interference with public **streets** and alleys. Such space shall not be less than ten (10) feet in width, thirty-five (35) feet in length and fourteen (14) feet in height, exclusive of access aisles and **maneuvering** space.

<u>Lodging House</u>. A building or premises other than a hotel, motel, inn or auto court, where lodging is provided for **compensation** for three (3) or more persons but not exceeding twenty (20) persons.

<u>Lodging Room.</u> A room rented as sleeping and living quarters, but without cooking facilities and **with** or without an individual **bathroom**. In a suite or **rooms** without cooking facilities, each room which provides sleeping accommodations shall be counted as a "lodging room."

<u>Lot.</u> A parcel of land occupied or intended to be occupied by a building and its accessory building or by a dwelling or group of dwellings and their accessory buildings, together with such **open** spaces as are required under the provisions of this Code.

Lot. Comer. A lot abutting upon two or more streets at their intersection.

Lot. Double Frontage or Through Lot. A lot which is an interior lot extending from one street to another and abutting a street on two ends.

Lot Lines. The lines bounding a lot as defined herein.

1. 18

Lot Line. Front. In the case of an interior lot, the line separating said lot from that street which is designated as the front street in the request for a building **permit**.

Lot <u>Line.</u> '<u>Rear.</u> The lot boundary opposite and most distant from the front lot line. 'In the case of a pointed or irregular lot, it shall be an imaginary line parallel to and farthest from the front lot.line. ;

Lot Line. Side. Any lot line other than a front or rear lot line as defined herein.

Lot Width. The width of a lot measured at the building setback line.

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<u>Open Sales Area.</u> Any open land or **area** used or occupied for the purpose of storing and selling new or second hand passenger cars or trucks, farm machinery, construction machinery, motor scooters or motorcycles, boats, trailers, aircraft and monuments and similar apparatus. No repair work is done in such an area except for minor incidental repair of items to be displayed and sold on the **premises**.

<u>Parking Lot.</u> An off-street facility including parking spaces and drives and aisles for maneuvering, and providing access and for entrance and exit, developed in a way to accommodate the parking of automobiles.

<u>Party Wall.</u> Acommon shared wall between two separate structures, buildings, or dwelling units.

<u>Principal Use.</u> The main use of land or builds as distinguished from a subordinate or **accessory** use.

<u>Professional Offices.</u> A professional office to be located in a residential district as herein permitted shall include doctor, dentist, lawyer, engineer, real estate and other professional offices.

<u>Public and Community Service Uses.</u> For the purpose of this Code the **term** "Public and Community Services Uses" shall include the following: police stations or sub-stations, fire stations or sub-stations; public utility stations or sub-stations, postal stations or sub-stations, sewage pumping **stations**, public library branch facilities and other similar uses.

<u>Public Open Space.</u> Any publicly-owned open area, including but not limited to the following: parks, playgrounds, forest preserves, beaches, waterways, parkways and streets..

<u>Public Utility.</u> Any persons, firm, corporation or municipal department, duly authorized to furnish under public regulation to the public, electricity, gas, steam, telephone, **communications**, transportation or water.

Recreational Vehicle. See travel trailer or mobile home.

<u>Rehabilitative Home.</u> Dwellings established for rehabilitative and/or **educational** purposes for temporary inhabitants.

<u>Restrictive Covenant.</u> A restriction on the use of land usually set **forth** in the dee(L The restrictive covenant usually runs with the land and is binding upon subsequent owners **of** the property.

<u>Retirement Home.</u> A group of dwelling units designed specifically for the elderly and operated as a nonprofit organization.

<u>Travel Trailer. Motor Home. or Recreational vehicle.</u> A vehicular, portable structure, built on a chassis, with or without complete kitchen, toilet, bath and shower facilities designed to be used for temporary human habitation for travel, recreational and vacation uses. A "travel trailer" used as a permanent dwelling unit is expressly prohibited by this Code.

Variance. Permission to depart from the literal requirements of the zoning code.

<u>Variance Hardship.</u> A departure from the provisions of the zoning code relating to setbacks, side yards, frontage requirements, and lot size, but not involving the actual use or structure.

<u>Warehousing</u>. The process of storing in structures merchandise, household goods and/or **agricultural** products.

<u>Wholesaling</u>. Those operations that are engaged in the business of selling to retailers or jobbers rather than customers.

<u>Yard or Setback.</u> An open space on the same zoning lot with a **principal** building or -group of buildings which is unoccupied and unobstructed from its lowest level upward, except as otherwise permitted in this Code, and which extends along a-lot line and at right **angles** thereto to a depth or width specified in the yard regulations for the district in which the zoning lot is located.

<u>Yard or Setback,-</u> Front.- Any yard adjoining a street shall be considered a front yard and shall meet all of the requirements for front yards in the respective districts throughout this Code, except as provided for in Section X11, VI.

<u>Yard or Setback.</u> <u>Rear.</u> **The** area extending along the full length of the rear lot line between the side lot lines. In all instances, including cover and irregular lots, the rear of the lot shall be that area opposite the front.

<u>Yard or Seiback. Side.</u> The area extending along a side lot line from the front yard to the rear yard.

Zero Lot Line. The location of a building on a lot in such a manner that one or more of the building sides rest directly on a lot line.

<u>Zoning Lot.</u> As used in the City of Newport Zoning Code, the term ."Zoning Lot" shall mean the same as a "lot of record," the definition of which is as follows: a parcel **of land shown as** a ... separate lot on a subdivision, the map 'Or plat of which has been recorded in the office of the-Recorder of Deeds of Jackson County, Arkansas, or a parcel of land, the deed to which has been recorded in the office of the **Recorder** or Deeds of Jackson County, Arkansas.

Zoning Map. The map incorporated into this Code as part hereof, designating zoning districts.

SECTION IV

GENERAL PROVISIONS

1. DISTRICTS

For the purpose and provisions of this Code, the City of Newport, **Arkansas** is hereby organized into the following districts:

A-1 Agricultural District

- R-1 Single-Family Residential District
- R-2 Family Residential District
- R-3 Multi-Family Residential
- M-1 Manufactured Housing District
- C-1 Central Business District
- C-2 Commercial Community District
- C-3. Commercial Neighborhood District
- 1-1 Light Industrial District
- 1-2 General Industrial District

II. ZONING MAP

The City is hereby divided into zoning districts as shown on the Official Zoning Map which, together with explanatory information thereon, is hereby adopted by reference and declared to be part of these regulations.

The Official Zoning Map shall be identified by the signature of the Mayor attested by the City Clerk, and bearing the seal of the City.

ill. DISTRICT BOUNDARIES

When uncertainty exists with respect to the boundaries of the various districts as shown on the Zoning Map, the following rules shall apply:

District boundary lines are either the center lines of railroads, highways, streets, alleys **or** easements or the boundary lines of sections, quarter sections, divisions of sections, tracts'or lots or such lines extended otherwise indicated.

In areas not subdivided into iots and blocks, wherever a district is indicated as a strip

the City Council, with reasons for such recommendations stated in writing.

5. The City Council, by majority vote, may by ordinance adopt the recommended amendment submitted by the Planning Commission or may return the proposed change in zoning classification to the Planning Commission for further study and report. After **resubmission** of the recommendation, the **City** Council may, by majority vote, accept, reject, or modify the recommendation pertaining to the proposed change in zoning classification.

V. COMPLETION OF EXISTING BUILDINGS

Nothing herein contained shall require any change in the plans, construction or designated use of a building actually under construction at the time of the adoption of these regulations.

Nothing herein contained shall require any change in the plans, construction or designated use of a building for which a building permit has been issued within thirty (30) days prior to the adoption of these regulations, provided construction is begun within ninety (90) days of such effective date of these regulations and diligently pursued to completion.

VI. AREAS NOT TO BE DIMINISHED

No part of a yard, or other open space or off-street parking or loading space required in connection with any building or use shall, by virtue of change of ownership, or for any other reason, be used to satisfy yard, court, other open space or <u>minimum</u> lot area requirements for any other building.'

VII. PRINCIPAL STRUCTURE ON LOT

- A. In residential districts only one principal structure and its customary accessory structures may hereafter be erected on any lot unless otherwise provided in this Code.
- B. The equipment of an accessory structure with sink, **cook** stove or other kitchen facilities for the independent occupancy thereof other than by servants or guests shall be considered evidence that such structure is not an accessory structure but a separate dwelling and must meet all <u>minimum</u> lot area and yard requirements of the district in which it is located.

VM. VISION CLEARANCE REQUIREMENTS

A. No lot facing an intersecting street (corner lot) shall be occupied by fences,

SECTION V

AGRICULTURAL DISTRICT

I. A-1 AGRICULTURAL DISTRICT

This district provides a location for the land situated within the,city limits and on the fringe of the area that is used for agricultural purposes, but willlikely be undergoing urbanization in the future. Most of these areas are in close'proximity to residential and commercial uses. Therefore, the agricultural activities conducted in this district should not be detrimental to urban land uses. The types of uses, land area, and intensity of use of land which are authorized in this district are designed to encourage and protect agricultural uses until urbanization is warranted and the appropriate **change** in district classification is made.

A. Permitted Uses

Unless otherwise provided in this Code, no building or land-shall be used and no building shall be erected, -converted, enlarged or structurally altered in the A-1 District except for one or more of the following uses:

- 1. Agricultural crops.
- 2. Detached **one-family** dwelling.

B. Conditional Uses

The following may be allowed by conditional use permit in accordance with the Provisions of Section XV.

- 1. Lodge hall, veteran's organization, service organization.
- 2. Airport or landing field.
- 3. Cemetery.
- 4. Kennel.
- 5. Radio and television station and transmission tower.
- 6. Stable, public.
- 7. **Child** care center, not part of a church.
- 9. **Churches,** including places of worship, religious, **education** buildings and meeting halls; day care center operated by churches permitted.
- 10. Public school **or** school offering general educational courses the same as ordinarily given in the public schools and having no rooms regularly used for housing or sleeping.

- 2. Side Yard.
 - a. For dwellings, the side yard on each side of the main building shall be not less than fifteen (15) feet.
 - b. For unattached accessory **buildings**, the side yard setback shall be ten feet.
 - c. Churches and main and accessory buildings other than dwellings and buildings accessory to dwellings shall set back from all exterior and interior side lot lines a distance of not less than thirty-five (35) feet.
- 3. Rear Yard. There shall be a rear yard for the main building of not less than twenty (20) feet or twenty percent (20%) of the depth of the **lot**, whichever is smaller. Unattached buildings of accessory use may be located-in the rear yard of a main building.
- 4. Lot Width. For dwellings, there shall be a <u>minimum</u> lot width of one hundred twenty (120) feet at the front building **line**, and such lot shall abut on a street for a distance of not less than one hundred (100) feet.
- 5. Intensity of Use.

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- a. For each dwelling and buildings accessory thereto there shall be a lot area of not less than three (3) acres.
- b. Where a lot has less area than herein required and all of the boundary lines of that lot touch lands under other ownership at the effective date on which the Zoning Code is adopted by <u>ordinance</u>, that lot may be used for one single-family dwelling unit or for the uses set **forth** in subsection B **above**, but not for the raising of <u>animals</u>.
- c. For churches and main and accessory buildings other than dwellings and buildings accessory to dwellings, the lot area shall be adequate to provide the yard areas required by this section and the **off-street** parking areas required in Section XIII.

SECTION XI

INDUSTRIAL DISTRICTS

I. 1-1 UGHT INDUSTRIAL DISTRICT

The 1-1 Light Industrial District is intended to accommodate light industrial, wholesale and research establishments including light manufacturing and machinery operations that are so conducted that noise, odor and flare of **each operation** is confmed completely **within** an enclosed structure. The industrial districts specifically exclude residential dwelling units on the theory that the mixture of residential uses and industrial uses is contrary to the purposes of these regulations.

A. **Required** Conditions

- 1. All production, processing, servicing, testing, repair or storage of materials, goods, equipment or products shall take place within completely enclosed buildings.
- 2. No **production** of toxic or hazardous materials.
- B. Permitted Uses

Unless otherwise provided in this Code, no buildings or land shall be used or no building shall be erected, converted, enlarged or structurally altered in the 1-1" Light Industrial District except for one or more of the following uses:

- 1. Any production, processing, servicing, testing, **repair** or storage of materials, **goods**, equipment or products and the sale of all such products assembled, manufactured or produced on **the** property but not including any of the uses listed as permitted **in** the 1-2 General Industrial District in Section XI, **n**, B, 2, 3.4, 5, 6 and 7.
- 2. Wholesaling and warehousing, local cartage and express facilities.
- 3. Agricultural crops.
- 4. Accessory uses, including off-street parking and loading as permitted or required in Section XIII.
- 5. Temporary buildings for construction purposes for a period not to exceed the duration of **such** construction.
- 6. Signs, as **regulated** by the City Ordinance of Newport, Arkansas.

II. 1-2 GENERAL INDUSTRIAL DISTRICT

The 1-2 General Industrial District is intended to accommodate those industrial uses which may not or cannot meet standards of the I-I District.

A. Required Conditions

All production, processing, servicing, testing, repair or storage of materials or goods, equipment or products shall take place within completely enclosed buildings. All outside storage shall be screened by a site obscuring fence or shrub.

B. Permitted Uses

Unless otherwise provided in this Code, no building or land may be used and no building may be erected, converted, enlarged or structurally altered in the 1-2 General Industrial District except for one or more of the following uses:

- . I. All uses permitted in the I-I Light Industrial District.
- 2. Salvage yard.
- 3. Bulk plants.
- 4. Feed mills.
- 5. Compressor stations.
- 6. Production of toxic or hazardous materials.
- 7. Agricultural crops.
- C. Lot Size

Every principal permitted use **hereafter** erected or located in the 1-2 General Industrial District shall have a lot area of not less than ten thousand (10,000) square feet, with a <u>minimum</u> width at the established building line of eighty (80) feet.

D. Yard Areas

No building shall be **erected** or enlarged unless the following yards are provided and maintained in **connection** with such **building**, structure or enlargement:

- Front Yard. Thirty (30) feet from the property line or fifty-five (55) feet from center line of existing right-of-way, whichever is greater. (Any yard adjoining a street shall be considered a front yard.)
- 2. Side Yard. A **side** yard on each side of the zoning lot of not less than ten (10) feet.

SECTIONXII

NONCONFORMING USES AND STRUCTURES

I. STATEMENT OF INTENT

Within the districts established by this Code, or amendments that may later be adopted, there exist lots, structures, uses of land and structures and characteristics of use which are lawful before the Code was passed or amended but which would be prohibited, regulated or restricted under the terms of this Code or future amendments. It is the intent of this Code to permit these nonconformities to continue until they are removed but not to encourage their survival.

To avoid hardship, nothing in this section shall be deemed to require a change in the plans, construction or designated use of any building on which actual construction was lawfully begun prior to the effective date of adoption or amendment of this Code and upon which actual building constl11ction has been carried on diligently.

II. CONTINUANCE OF USE

- A. Any lawfully established use of a structure or land, on the effective date of this Code, or of amendments hereto, that does not conform to the use regulations for the **district** in which it is located, shall be deemed to be a legal nonconforming use and may be **continued** except as otherwise provided herein.
- B. Any legal nonconforming **structure** may be continued in use, **provided** there is no physical change other than necessary **maintenance** and repair, except as otherwise permitted herein.
- C. All outdoor advertising stl11ctures, signs and **business** signs existing on or prior to the effective date of the adoption of this Code or amendments hereto, or the effective date of a change in land use classification which may occur **hereafter**, which does not conform to the provisions of this Code **relating** to the district in which such outdoor advertising stl11ctures, signs **and** business signs are located shall be considered non **conforming** and may be continued except as otherwise provided herein.
- D. Any **structure** for which a permit has been lawfully granted prior to the effective date of this Code, or of amendments hereto, may be completed in accordance with the approval plans; provided **construction** is started within sixty (60) days and diligently prosecuted to completion within two (2) years **from** the date of

more area than was in use on the effective date of this Code.

B. If said nonconforming use of any portion thereof is discontinued for a period of four (4) months, or changed, any future use of such-land, or change in use, shall be in conformity with the provisions of the district in which said land is located.

VI. NONCONFORMING LOTS

- A. Any single lot or parcel of land held in one ownership, which was on record at the time of adoption of this Code that does not meet the requirements of minimum lot width or area specified **for** the zoning **district** in which it is located may be utilized for a permitted use **if all** other requirements, such as yard setbacks, can be met.
- B. In a residential district, on a comer lot, the yard setbacks shall be:
 - 1. Front Yard. (Determined by owner) Thirty (30) feet from the front property line or fifty-five (55) feet from center line of existing right-of- 'way, whichever is greater.
 - 2. Side Yard. (Street side) Thirty (30) feet from property line.
 - 3. Side Yard. Seven'(7) feet (interior lot line) from property line.
 - 4. Rear Yard. Ten (10) feet from rear **property** line.

VII. DETERMINATION AS TO USES NOT LISTED

In order to **insure** that the, Zoning Code will permit all similar uses in each district, the Planning Commission, upon its own initiative or upon any written application shall determine whether a use not specifically listed as **a permitted** uSe or a **conditional** use in commercial, residential or industrial districts shall be deemed a permitted use or a conditional use in one or more districts on the basis of **similarity** to uses specifically listed.

- A. A request for determination that a specific use should be included as a permitted use or a conditional **use** in commercial, residential or industrial districts shall be made in writing to the Planning Commission and shall include a detailed description of the proposed use and such **information** as may be appropriate to assist the Commission **arrive** at a determination. Within sixty (60) days of **filing**, the application shall be scheduled for consideration by the Board at a public **meeting**.
- B. The Planning Commission shall make an investigation as deemed necessary to compare the nature and characteristics of the proposed use with those of the uses **specifically** listed in the Code and to make a determination of its classification.

. SECTION XV

ADMINISTRATION

I. BOARD OF ZONING ADJUSTMENT

- A. Organization
 - 1. The Board of Zoning Adjustment shall consist of the entire membership of the Newport Planning Commission with the Chairman of the <u>Planning</u> Commission as the Chairman of the Board of Zoning Adjustment.
- B. Meetings
 - 1. The **Board** of Zoning Adjustment shall establish regular meeting dates_t adopt rules for the conduct of its business, establish a quorum and procedures and keep a public record of all fIDdings and decisions. (Ark. Statutes 19-2829 par. b(2).)
 - 2. Each session of the Board shall be a public meeting with public notice of said meeting and business to be carried on published in a newspaper of general circulation in the City at least one (1) time seven (7) days prior to the meeting. (Ark. Statutes 19-2829 par. b(2).)
- C. Appeals from Decision of Enforcement Officer
 - The Board of Zoning Adjustment may hear appeals from the decisions of the <u>administrative</u> officer in respect to the enforcement and application of this Code; and **may** affirm or reverset in whole or partt said decision of the <u>administrative</u> officer. (Ark. Statues 19-2829 par. b(l).)
- D. Variances
 - 1. The Board of Zoning Adjustment may hear requests for variances from . the literal provisions of the Zoning Codet **in** instances where strict enforcement of **the** Zoning Code would cause undue hardship due **to** circumstances unique to the individual property under consideration.
 - 2. The Board may grant such variances only when it is demonstrated **that such** action will be in keeping with. the spirit and intent of the provisions of the Zoning Code.
 - 3. The Board shall not permit as a **variance** any use in a zone that is not

located near it.

- c. The **proposed** use is in compliance with the provisions of "Conditional Uses" as set out in **this** Code.
- d. The proposed use is in conformance with all applicable provisions stated in this Code for the **district** in which the use is to be located. The use shall facilitate public convenience at that location.
- e. The proposed Conditional Use is in conformance with all offstreet parking and loading requirements of this Code and ingress and egress and pedestrian ways are adequate.
- f. Safeguards limiting **noxious** or **offensive** emissions, including lighting, noise, glare, dust and odor have been addressed in the **proposed** use application.
- g. Landscaping and **screening** of the proposed use shall be in accordance with these Code regulations.
- h. Proposed use signs shall be in **accordance** with any provisions of this **Code**.
- i. Open space located on the proposed use **will** be maintained by the **owner/developer**.
- j. The size **and** shape of the site, **including** size, shape and **arrangement** of proposed structures is in keeping with the intent of this Code.
- k. Violation of any condition imposed shall constitute grounds for revocation by the Board of Zoning Adjustment of the Conditional Use Permit.
- k. All amendments or changes to a Conciitional Use. No building permit shall be issued except in conformance with provision of this Section.
- 7. Applications shall be accompanied by a **filing** fee of fifty dollars (\$50.00). The applicants shall be **required** to pay the costs of public notices.
- F. Appeals from Decisions of the Board of Zoning Adjustment
 - 1. Appeals from the decisions of the Board shall be to a court of record within thirty (30) days from the decision of the Board.
- 6. If the Planning Commission disapproves a proposed change in zoning classification, notice of disapproval with the reasons for such disapproval shall be given in writing to the **applicant** within fifteen (15) days from the date of the **decision**.
- 7. Following disapproval of a proposed change in zoning classification by the Planning CommissIon, the applicant may appeal such disapproval to the City Council, provided that the applicant states specifically in writing to the City Clerk why he considers the Planning Commission's findings and decisions to be in error. Such appeal shall be filed with the City clerk within fifteen (15) days of receipt of notice of the Planning Commission action.
- B. Resubmission of Application
 - 1. No application for changing of zoning for a given property may be resubmitted within twelve (12) months from date of action by the Planning Commission, unless the Planning Commission fmds that a substantial reason exists from waiving this limitation.
- C. Fee

Applications for a change in zoning shall be accompanied by a filing fee of fifty dollars (\$50.00) to assist in defraying general **expenses** in connection with the application.

M. AMENDMENT TO TEXT OF REGULATIONS

- A. The City Council may recommend to the Planning Commission amendments to
 the text of these regulations, or the Planning Commission may on its own motion initiate amendments.
- B. Proposed amendments to the text shall be advertised in a paper of general circulation at least fifteen (15) days in advance of a public hearing to be conducted by the <u>Planning</u> Commission. After the **public** hearing, the Planning Commission shall make a report and recommendation to the City Council pertaining to the proposed amendment to the text. The City Council action on the report and recommendation shall be final. If not approved, the City Council will submit in writing to the <u>Planning</u> Commission the reason(s) for such disapproval.

Utilities

| Electric Utility: | |
|-----------------------|--|
| Name of Utility: | Entergy Arkansas |
| Contact Person(s): | Joe Bailey or Chris Murphy |
| Address: | 425 West Capitol Ave., Suite 2700 |
| City, State, Zip: | Little Rock, AR 72201 |
| Phone: | 501-377-4089 or 501-377-4467 |
| Fax: | 501-377-4448 |
| Email: | jbail12@entergy.com or cmurph4@entergy.com |
| Service and Proximity | The site is served by a 13.8 kV distribution line and a 161 kV |
| to Site: | transmission line is located approximately 1 mile northeast of |
| | the site. The Newport Air Base Substation is located |
| | approximately 1.5 miles from the site. |
| | |
| Natural Gas Utility: | |
| Name of Utility: | CenterPoint |
| Contact Person(s): | Chauncey Taylor |
| | P.O. Box 751 |
| City, State, Zip: | Little Rock, AR 72203 |
| | 501-377-4557 |
| Fax: | 501-377-4630 |
| | |

| Email: | chauncey.taylor@centerpointenergy.com | |
|-----------------------|---|--|
| Service and Proximity | A 4-inch main with 42 psi is 1,600' from the site. A high | |
| to Site: | pressure 8-inch main is just over 3,000' from the site. | |

| Water Utility: | |
|-----------------------|--|
| Name of Utility: | Newport Municipal Water |
| Contact Person(s): | Wendale Comer |
| Address: | P.O. Box 519 |
| City, State, Zip: | Newport, AR 72112 |
| Phone: | 870-523-5847 |
| Fax: | 870-523-2117 |
| Email: | wendale.comer@gmail.com |
| Service and Proximity | A 6-inch main with 54 psi is 1,600' from the site. |
| to Site: | |



Utilities

| <u>Sewer</u> : Name of Utility: | Newport Municipal Wastewater |
|---|---|
| Contact Person(s): Address: City, State, Zip: Phone: | |
| Service and Proximity to Site: | An 8-inch main is 1,250' from the site. |
| City, State, Zip: Phone: Fax: Email: | |
| Fax: Email: | Aaron K. Brown 1212 Corporate Drive, Suite 300 |



| | Total Sales and Use Tax rate is 10.25% with 3.75% being local taxes and the remainder being state taxes. |
|---|--|
| Property Tax Rates (Real, Personal) and Methods of Assessment: | The market value of real property in the county is determined by an outside appraisal firm once every five years. The assessed for tax purposes is 20% of the market value. The assessed value is then multiplied by the millage rate to determine the tax. The millage rate for this site is 51 mills (.051). The calculation is the same for personal property, however, the value is calculated based on the book value of the personal property. |
| State Taxation Summary: | See attachment T-1 for detail. |





as of August 2018

State of Arkansas Taxation Summary

Corporate Income Tax

Taxable income is apportioned according to a three-factor formula (property (25%), payrolls (25%) and sales (50%) attributed to Arkansas with a double-weighted sales factor. Corporate income tax is levied statewide only; not on the local level.

| Taxable Income | Tax Rate |
|----------------|----------|
| First \$3,000 | 1% |
| Next \$3,000 | 2% |
| Next \$5,000 | 3% |
| Next \$14,000 | 5% |
| Next \$75,000 | 6% |
| Over \$100,000 | 6.5% |

Personal Income Tax

2018 (Personal income tax is levied statewide only; not on the local level)

For Incomes less than \$21,000 per year

| Taxable Income | Tax Rate |
|---------------------|----------|
| \$0 - \$4,299 | 0.9% |
| \$4,300 - \$8,399 | 2.4% |
| \$8,400 - \$ 12,599 | 3.4% |
| \$12,600 - \$20,999 | 4.4% |

For incomes between \$21,000 and \$75,000

| Taxable Income | Tax Rate |
|-------------------|----------|
| \$0 - \$4,299 | 0.9% |
| \$4,300 - \$8,399 | 2.5% |

| \$8,400 - \$12,599 | 3.5% |
|---------------------|------|
| \$12,600 - \$20,999 | 4.5% |
| \$21,000 - \$35,099 | 5.0% |
| \$35,100 - \$75,000 | 6.0% |

For incomes more than \$75,000

| Taxable Income | Tax Rate |
|---------------------|----------|
| \$0 - \$4,299 | 0.9% |
| \$4,300 - \$8,399 | 2.5% |
| \$8,400 - \$12,599 | 3.5% |
| \$12,600 - \$20,999 | 4.5% |
| \$21,000 - \$35,099 | 5.0% |
| \$35,100 - \$75,000 | 6.0% |
| \$35,100 and above | 6.9% |
| | |

Incomes between \$75,000 and \$80,000 shall reduce the amount of income tax due by deducting bracket adjustment as set forth below

| Taxable Income | Tax Rate |
|---------------------|----------|
| \$75,001 - \$76,000 | \$440 |
| \$76,001 - \$77,000 | \$340 |
| \$77,001 - \$78,000 | \$240 |
| \$78,001 - \$79,000 | \$140 |
| \$79,001 - \$80,000 | \$ 40 |
| \$80,001and above | \$ 0 |

Federal Insurance Contributions Act (FICA)

The Federal Insurance Contributions Act (FICA) tax includes two separate taxes. One is social security tax and the other is Medicare tax. Different rates apply for each of these taxes.

The current tax rate for social security is 6.2% for the employer and 6.2% for the employee, or 12.4% total. The current rate for Medicare is 1.45% for the employer and 1.45% for the employee, or 2.9% total.

Only the social security tax has a wage base limit. The wage base limit is the maximum wage that is subject to the tax for that year. For earnings in 2018, this base is \$128,400. There is no wage base limit for Medicare tax. All covered wages are subject to Medicare tax.

Additional Medicare Tax are applied to an individual's Medicare wages that exceed a threshold amount based on the taxpayer's filing status. Employers are responsible for withholding the 0.9% Additional Medicare Tax on an individual's wages paid in excess of \$200,000 in a calendar year, without regard to filing status. An employer is required to begin withholding Additional Medicare Tax in the pay period in which it pays wages in excess of \$200,000 to an employee and continue to withhold it each pay period until the end of the calendar year. There is no employer match for Additional Medicare Tax.

Corporate Franchise Tax

The chart below lists the franchise tax rates for various entities under Arkansas Code 26-54-104.

| Franchise Tax Type | Current Rate |
|--|--|
| Corporation/Bank with Stock | 0.3% of the outstanding capital stock; \$150 minimum |
| Corporation/Bank without Stock | \$300 |
| Limited Liability Company | \$150 |
| Insurance Corporation Legal Reserve Mutual, Assets Less Than \$100 million | \$300 |
| Insurance Corporation Legal Reserve Mutual, Assets Greater Than \$100 million | \$400 |
| Insurance Company Outstanding Capital Stock Less Than \$500,000 | \$300 |
| Insurance Company Outstanding Capital Stock Greater Than \$500,000 | \$400 |
| Mortgage Loan Corporation | 0.3% of the outstanding capital stock; \$300 minimum |
| Mutual Assessment Insurance Corporation | \$300 |

Sales Tax

The Arkansas sales tax is 6.5% of the gross receipts from the sales of tangible personal property and certain selected services. "Sale" includes the lease or rental of tangible personal property. In addition to the state sales and use tax, local sales and use taxes may be levied by each city or county. However, businesses may apply to the Arkansas Department of Finance and Administration for a refund of local taxes. "Single transaction" means any sale of tangible personal property or taxable service reflected in a single invoice, receipt or statement for which an aggregate sales or use tax amount has been reported or remitted to the state for a single, local taxing jurisdiction. These taxes are collected by the state and distributed to the cities and counties each month.

Sales Tax Exemptions – Sales Tax Savings

Exemptions from sales and use taxes for manufacturers are as follows:

- Property which becomes a recognizable, integral part of property manufactured, compounded, processed, or assembled for resale.
- Machinery and equipment used directly in manufacturing which are purchased for a new or expanding manufacturing facility or to replace existing machinery or equipment
- Machinery and equipment required by Arkansas law to be purchased for air or water pollution control

The value of this statutory exemption depends on the amount of eligible expenditures as determined by the Arkansas Department of Finance and Administration.

Sales and Use Tax Reduction on Electricity and Natural Gas

The State of Arkansas has a reduced 0.625% on electricity and natural gas used directly in the manufacturing process. For purposes of determining what utility usage is subject to this reduced rate, the manufacturing process includes processes beginning at the point where raw materials are first moved from raw material storage to the beginning of manufacturing or processing of those raw materials into items of tangible personal property and ends when the finished manufactured goods are packaged and ready for shipment or storage.

Sales and Use Tax Refund – Replacement and Repair

Effective July 1, 2014, state sales and use taxes relating to the partial replacement and repair of machinery and equipment used directly in manufacturing process may be refunded. Manufacturers may utilize one of two of the options presented below:

Option One:

• Provides a refund of one percent (1%) of the total sales and use taxes (5.875* percent) levied for the purchase and installation of machinery and equipment to modify, replace or repair, either in whole or part, existing machinery or equipment used directly in the manufacturing process.

| Effective Date | Option 1 Percentage |
|----------------|---|
| July 1, 2014 | 1% |
| July 1, 2018 | 2% |
| July 1, 2019 | 3% |
| July 1, 2020 | 4% |
| July 1, 2021 | 5% |
| July 1, 2022 | Full exemption of state sales and use taxes |

Option Two:

• Provides for an increased refund of the total sales and use taxes (5.875* percent) levied. It is discretionary and may be offered by the Executive Director of AEDC to those manufacturers who have a major maintenance and improvement project totaling at least \$3 million to purchase and install machinery or equipment used directly in the manufacturing process. The project is subject to approval and the Company must enter into a financial incentive agreement with AEDC for the project <u>prior to incurring project</u> <u>expenditures</u>.

*The excise tax of one-eighth of one percent (1/8 of 1%) levied in Arkansas Constitution, Amendment 75, and the temporary excise tax of one-half percent (0.5%) levied in Arkansas Constitution Amendment 91, are not subject to refund under this section.

Unemployment Insurance Tax

New Businesses

A business with no previous employment record in Arkansas is taxed at 3.2% on the first \$10,000 of each employee's earnings until an employment record is established, usually within three years.

Existing Arkansas Businesses

2018 Experience-Based Rate range between 0.4% - 14.3% and averages 3.1%. Each business' employment record is determined primarily by its taxable payroll and history of employee voluntary termination. The tax is determined by past experience and the amount of the reserve-ratio. The reserve-ratio is the excess of contributions paid over benefits charged as related to payroll. The higher the reserve-ratio, the lower the tax rate. Currently, the maximum weekly benefit in Arkansas is \$451.

Federal Unemployment Tax (FUTA)

Aside from state unemployment insurance taxes, employers pay a federal unemployment or FUTA tax. The FUTA tax rate is 6.0% with a taxable wage base of \$7,000. However, if states operate their unemployment insurance programs in compliance with federal law then the FUTA tax is reduced (credit) by 5.4% to 0.6%.

Property Tax

The State of Arkansas does not have a property tax; however, Arkansas cities and counties do collect a property tax, which is the principal source of revenue for funding local public schools.

The tax is calculated based on 20 percent of the true market value of real and to the usual selling price of personal property (vehicles, boats, etc.) and the average annual value of merchants' stocks and/or manufacturers' inventories based on millage rates in individual school districts. Business firms and individuals are subject to annual property tax on all real and personal property.

Local county tax assessors and collectors calculate and collect all personal and real property taxes. Revenue derived from personal property taxes supports your local government agencies. Personal property must be assessed each year before May 31. Any personal property taxes assessed after the deadline will include a monetary penalty determined by the respective county. These taxes are due on or before October 15 of the following year.

Real Property Option (Using Arkansas Average Millage Rate as an Example):

| Total Market Value | x | Assessment Level | = | Assessed Value |
|-----------------------|---|---------------------|---|----------------------------|
| \$4,000,000 | Х | 20% | = | \$800,000 |
| Assessed Value | x | Millage Rate | = | Annual Property Tax Due |
| \$800,000 | х | .04748 | = | \$37,984 |

Please note: Corporate personal property taxes (equipment, office furniture, etc.) follow a depreciation schedule for each type of property. The schedule below (with exceptions dependent on the area) is issued by each County Assessor's Office in Arkansas.

COMMERCIAL PERSONAL PROPERTY Depreciation Schedule

| Schedule | 9 | 8 | | | ining | | | 1 | - | 1 | Schedule |
|----------|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|----------|
| Age | 3 | 5 | 6 | 8 | 10 | 12 | 16 | 20 | 25 | 30 | Age |
| 1 | .55 | .73 | .78 | .87 | .89 | .91 | .93 | .94 | .96 | .96 | 1 |
| 2 | .30 | .53 | .60 | .71 | .82 | .85 | .88 | .88 | .91 | .93 | 2 |
| 3 | .10 | .39 | .48 | .59 | .75 | .79 | .84 | .85 | .87 | .89 | 3 |
| 4 | | .24 | .35 | .50 | .68 | .73 | .79 | .81 | .84 | .87 | 4 |
| 5 | | .10 | .23 | .42 | .61 | .67 | .75 | .78 | .81 | .84 | 5 |
| 6 | | | .10 | .33 | .53 | .61 | .70 | .74 | .79 | .82 | 6 |
| 7 | | | | .24 | .46 | .55 | .66 | .71 | .76 | .80 | 7 |
| 8 | | | | .15 | .39 | .49 | .61 | .67 | .73 | .77 | 8 |
| 9 | | | | | .32 | .43 | .57 | .64 | .70 | .75 | 9 |
| 10 | | | | | .25 | .37 | .52 | .60 | .67 | .73 | 10 |
| 11 | | | | | | .31 | .48 | .57 | .64 | .70 | 11 |
| 12 | | | | | | .25 | .43 | .53 | .62 | .68 | 12 |
| 13 | | 1 | | | | | .39 | .50 | .59 | .65 | 13 |
| 14 | | 1 | | 1 | | | .34 | .46 | .56 | .63 | 14 |
| 15 | 1 | | 1 | Î | | Î | .30 | .43 | .53 | .61 | 15 |
| 16 | | | | 1 | | | .25 | .39 | .50 | .58 | 16 |
| 17 | | | | 1 | | | | .36 | .48 | .56 | 17 |
| 18 | | | | | | | 2 | .32 | .45 | .53 | 18 |
| 19 | | | | | | | | .29 | .42 | .51 | 19 |
| 20 | | | | 1 | | | | .25 | .39 | .49 | 20 |
| 21 | | 1 | 1 | Ĩ. | | | | | .36 | .46 | 21 |
| 22 | | | | 9 | | | .e. | | .33 | .44 | 22 |
| 23 | | | · · | Ĩ. | | | | 0 | .31 | .42 | 23 |
| 24 | | | | Ĩ. | | | | | .28 | .39 | 24 |
| 25 | 19 | | | | | | | 8 | .25 | .37 | 25 |
| 26 | 16 | | | | | | | | 2 | .34 | 26 |
| 27 | 19 | | | | | | | | 2. | .32 | 27 |
| 28 | | | | | | | | | 2 | .30 | 28 |
| 29 | | | | | | | | | | .27 | 29 |
| 30 | 19 | | | | | | | - C | | .25 | 30 |

Remaining Life Percent

Industrial revenue bond financing is available to a company in Arkansas for land acquisition, building acquisition, construction and equipment. Bonds can be issued either taxable or tax exempt, depending on certain IRS qualifications and restrictions.

The Arkansas Economic Development Commission Bond Guaranty Program was created to provide long-term, tax exempt and taxable financing for businesses expanding or locating in Arkansas. Although the city or county may issue the revenue bond, the company is still responsible for paying the principal and interest.

Under this program, the Commission can guarantee timely payment of principal and interest, up to \$5,000,000 principal per bond issue, to the bondholders. This guaranty gives the bonds a better rating, thereby making the bond more attractive to investors and reducing the company's cost to borrow money.

An additional benefit of bond financing is:

Cities and counties are authorized to enter into a Payment in Lieu of Tax (PILOT) Agreement with industrial projects resulting in a reduction of property taxes that would otherwise be due. Industrial Revenue Bonds are issued by the city or county on behalf of the project. Under PILOT agreements, title to the property is held in name only by the public issuer for the term of the bond issue. At the end of the bond term, title will transfer to the company. The amount of the payment in lieu of taxes must not be not less than 35% of what normal taxes would have been. The PILOT Agreement may not last longer than the term of the bond.

Inventory Tax

All real estate and tangible personal property (inventory) shall be assessed for taxation in the taxing district in which the property is located and kept in use.

If destination of a company's tangible personal property (inventory) is within the state, taxes will be assessed at its prior year's value only in the county/city of its destination.

Freeport Law

If destination of a company's tangible personal property (inventory) is out of state, the following statement applies:

Arkansas' Freeport Law exempts from property tax those finished goods and raw materials in transit or awaiting shipment to out-of-state customers.

Workers' Compensation Rate for the Manufacturing Sector

| 2018 | |
|--------------------|------------------------|
| Type of Rate | Rate per \$100 payroll |
| Assigned Risk | \$2.06 |
| Advisory Loss Cost | \$1.02 |

Source: NCCI July 2018 Arkansas Manufacturing Rates

The assigned risk rate is based on the inability for companies to obtain their own insurance, while the loss cost is for companies which are self-insured.

Maps

The following maps are provided:

- Transportation, Regional
- Transportation, Immediate
- Aerial
- Topographic
- Elevation Contours
- FEMA Flood Hazard
- National Wetlands Inventory
- Pipeline Infrastructure
- Electrical Infrastructure
- Surrounding Uses
- Zoning





ARKANSAS

Newport, AR

Coordinates: -91.184536, 35.649087



425 W Capital Ave Suite 2700 Little Rock, AR 72201

Phone: 1-888-301-5861

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Contents

Transportation, Regional Transportation, Immediate Aerial **Topographic Map Elevation Contours** FEMA Flood Hazard National Wetlands Inventory Pipeline Infrastructure **Electrical Infrastructure** Surrounding Use Map





Transportation - Regional

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JACKSON COUNTY



VICINITY



LEGEND

- Site Location
- Airports
- Port

 \mathbf{X}

 \mathbf{A}

 \bigstar

- Railroads
- Interstate

NOTE

These drawings are provided merely to assist in economic development efforts. The Entergy Companies make no representations or warranties whatsoever regarding the accuracy or completeness of any information contained herein nor the condition or suitability of any properties. Users should direct inquiries about any property to the listing broker for that property.

SOURCE

Roads: Census/TIGER database, 2014 Railroads: Federal Railroad Administration, Bureau of Transportation Statistics, ESRI, 2014 ESRI Basemaps; ESRI Datamaps 10.2

Created by: RPG Date: 8/2018







Newport Airbase Industrial Site #1 Transportation - Immediate

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JACKSON COUNTY



VICINITY



LEGEND







= State recognized

NOTE

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SOURCE

Roads: Census/TIGER database, 2014 Railroads: Federal Railroad Administration, Bureau of Transportation Statistics, ESRI, 2014



Created by: RPG Date: 8/2018







Aerial

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JACKSON COUNTY



VICINITY



LEGEND



NOTE

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SOURCE

Roads: Census/TIGER database, 2014

| | | | Created by: RPG Date: 8/2018 | N |
|-------|-----|-----|---------------------------------|---|
| 1:6,0 | 00 | | | |
| 0 | 250 | 500 | 1,000 | |
| | | | Feet | |
| 0 | 60 | 120 | 240 | |
| | | | Matora | |



Topographic Map

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JACKSON COUNTY



VICINITY



LEGEND



NOTE

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SOURCE







Elevation Contours

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Newport Airbase Industrial Site #1 FEMA Flood Hazard Map

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JACKSON COUNTY



VICINITY



LEGEND



0.2% ANNUAL CHANCE



NOTE

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SOURCE

- FEMA, 2018, National Geospatial Center of Excellence.

| | | | Created by: RPG Date: 8/2018 | ł |
|------|------|-------|---------------------------------|---|
| 1:12 | ,000 | | | |
| 0 | 500 | 1,000 | 2,000 | |
| | | | Feet | |
| 0 | 120 | 240 | 480 | |
| | | | Motoro | |





Newport Airbase Industrial Site #1 National Wetlands Inventory

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JACKSON COUNTY



VICINITY



LEGEND



Wetlands

Freshwater Forested/Shrub Wetland

NOTE

These drawings are provided merely to assist in economic development efforts. The Entergy Companies make no representations or warranties whatsoever regarding the accuracy or completeness of any information contained herein nor the condition or suitability of any properties. Users should direct inquiries about any property to the listing broker for that property.

SOURCE

Ν

National Wetlands Inventory, U.S. Fish and Wildlife Service, 8/2018.

| | | | | Created by: RPG Date: 8/2018 | \bigwedge |
|---------|-------|-----|------|---------------------------------|-------------|
| :12,000 | | | | | |
| 500 |) 1,0 | 000 | | 2,000 | |
| | | | | Feet | |
| 120 | 240 | | 480 | | |
| | | | Mote | are | |





Pipeline Infrastructure

Phone: 1-888-301-5861

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JACKSON COUNTY



VICINITY



LEGEND



Pipeline Commodity

- LPG/NGL
- ---- Natural Gas
- Refined Products

NOTE

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SOURCE

Pennwell Map Pipeline Data: download date 10/2017

| | | | | Created by: RPG Date: 8/2018 | Ň |
|------|-------|-------|--------|---------------------------------|---|
| 1:48 | 3,000 | | | | |
| 0 | 2,000 | 4,000 | 8,0 | | |
| | | | | Feet | |
| 0 | 480 | 960 | 1,920 | | |
| | | | Motoro | | |



Newport Airbase Industrial Site #1 Entergy's Electrical Infrastructure

425 W Capital Ave Suite 2700 Little Rock, AR 72201

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DISTRIBUTION

TRANSMISSION







JACKSON COUNTY





Transmission

- Substations
- **-** 500 kV
- 161 kV

Distribution

- ----- Three Phase, 13.8 kV
- Two Phase, 13.8 kV
- Single Phase, 13.8 kV

NOTE

These drawings are provided merely to assist in economic development efforts. The Entergy Companies make no representations or warranties whatsoever regarding the accuracy or completeness of any information contained herein nor the condition or suitability of any properties. Users should direct inquiries about any property to the listing broker for that property.

SOURCE

Service Layer Credits: @ 2018 Microsoft Corporation @ 2018 DigitalGlobe @CNES (2018) Distribution Airbus DS

Source: Transmission-Entergy, Distribution-Entergy, 2018

Created by: RPG Date: 08/2018



Newport Airbase Industrial Site #1 Surrounding Use Map

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JACKSON COUNTY











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Recipients of these materials must perform their own investigation and due diligence concerning all aspects of the site and/or improvements, financial, tax, and business matters associated therewith so as to enable them to evaluate the merits and risks of the site and to make any informed decision with respect thereto.

