

**Arkansas Department of Environmental Quality**  
**NPDES PERMIT APPLICATION**  
**FORM 1**

**INSTRUCTIONS:**

1. This form should be **typed or printed in ink**. If insufficient space is available to address any item please continue on an attached sheet of paper.
2. Please complete the following Section(s). If a Section is not required, please check the Not Applicable (N/A) box at the top of the Section.

Sections	A	B	C	D	E	F	G	H	I
POTW	X	X	X	X					X
Industrial User	X	X	X	X	X	X	X		X
Construction Permit Only	X	X	*	X				X	X
Modification	X	X	X	X	X	*	*	X	X
All Other Applicants	X	X	X	X	X				X

\* As necessary

3. If you need help on SIC or NAICS go to [www.osha.gov/oshstats/sicser.html](http://www.osha.gov/oshstats/sicser.html)
4. If you have any questions about this form you may call NPDES Section at 501-682-0622 or go to [www.adeq.state.ar.us/water](http://www.adeq.state.ar.us/water). You may also contact :

Department  
Arkansas Department of Health

Information in Regard to  
Water Supply

Telephone #  
501-661-2623

5. The following EPA Forms in addition to Form 1 is required for processing your application:
  - Form 2A** - Municipal Dischargers
  - Form 2B** - Concentrated Animal Feeding Operations
  - Form 2C** - Existing Manufacturing, Commercial, Mining, and Silvicultural Operations
  - Form 2D** - New Sources and New Dischargers Application for Permit to Discharge Process Wastewater
  - Form 2E** - Facilities Which Do Not Discharge Process Wastewater (i.e. Domestic, Non contact cooling water)
  - Form 2F** - Application for Permit to Discharge Storm Water Discharges Associated With Industrial Activity

6. Where to Submit

Return the completed form by mail to:

Arkansas Department of Environmental Quality  
 Permits Branch, Water Division  
 5301 Northshore Drive  
 North Little Rock, AR 72118

Or by email to:

[Water.Permit.Application@adeq.state.ar.us](mailto:Water.Permit.Application@adeq.state.ar.us)

NPDES PERMIT APPLICATION  
**FORM 1**

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER DIVISION  
5301 Northshore Drive  
North Little Rock, AR 72118-5317  
[www.adeq.state.ar.us/water](http://www.adeq.state.ar.us/water)

**PURPOSE OF THIS APPLICATION**

- INITIAL PERMIT APPLICATION FOR NEW FACILITY  
 INITIAL PERMIT APPLICATION FOR EXISTING FACILITY  
 MODIFICATION OF EXISTING PERMIT  
 REISSUANCE (RENEWAL) OF EXISTING PERMIT  
 MODIFICATION AND CONSTRUCTION OF EXISTING PERMIT  
 CONSTRUCTION PERMIT

**SECTION A- GENERAL INFORMATION**

1. Legal Applicant Name (who has ultimate decision making responsibility over the operation of a facility or activity):

ADC- North Central Unit

Note: The legal name of the applicant must be identical to the name listed with the Arkansas Secretary of State.

2. Operator Type: Private  State  Federal  Partnership  Corporation  Other

State of Incorporation: \_\_\_\_\_

3. Facility Name: ADC- North Central Unit

4. Is the legal applicant identified in number 1 above, the owner of the facility?  Yes  No

5. NPDES Permit Number (If Applicable): AR0044016

6. NPDES General Permit Number (If Applicable): ARG

7. NPDES General Storm Water Permit Number (If Applicable): \_\_\_\_\_

8. Permit Numbers and/or names of any permits issued by ADEQ or EPA for an activity located in Arkansas that is presently held by the applicant or its parent or subsidiary corporation which are not listed above:

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held by</u>
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See Attached Sheet of Permits

9. Give driving directions to the wastewater treatment plant with respect to known landmarks:

North on AR HWY 5- 2.25 miles from Calico Rock, Northeast on Route 843- 2.0 miles to Prison Entrance

10. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)

Street: Route 5 HWY 5 North

City: Calico Rock County: Izard State: AR Zip: 72519

11. Facility Mailing Address for permit, DMR, and Invoice (Street or Post Office Box):

Name: Arkansas Department of Correction Title: \_\_\_\_\_

Street: \_\_\_\_\_ P.O. Box 8707

City: Pine Bluff State: AR Zip: 71611

E-mail address\*: gail.mainard@arkansas.gov Fax: 870-267-6617

\* Is emailing all documents (permit, letters, DMRs, invoices, etc.) acceptable to the applicant?  Yes  No

12. Neighboring States Within 20 Miles of the permitted facility (Check all that apply):

Oklahoma  Missouri  Tennessee  Louisiana  Texas  Mississippi

13. Indicate applicable Standard Industrial Classification (SIC) Codes and NAICS codes for primary processes

\_\_\_\_\_ SIC Facility Activity under this SIC or NAICS:  
1623 NAICS \_\_\_\_\_

14. Design Flow: 0.09 MGD Highest Monthly Average of the last two years Flow: 0.111 MGD

15. Is Outfall equipped with a diffuser?  Yes  No

16. Responsible Official (as described on the last page of this application):

Name: Gail Mainard Title: Assistant Director

Address: PO Box 8707 Phone Number: 870-267-6625

E-mail Address: gail.mainard@arkansas.gov

City: Pine Bluff State: AR Zip: 71611

17. Cognizant Official (Duly Authorized Representative of responsible official as describe on the last page of this application):

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

18. Name, address and telephone number of active consulting engineer firm (If none, so state):

Contact Name: Dan Beranek

Company Name: McClelland Consulting Engineers

Address: PO Box 34037 Phone Number: 501-371-0272

E-mail Address: dberanek@mcclelland-engrs.com

City: Little Rock State: AR Zip: 72203

19. Wastewater Operator Information

Wastewater Operator Name: Danny Blankenship License number: 9627

Class of municipal wastewater operator: I  II  III  IV

Class of industrial wastewater operator: Basic  Advanced

**SECTION B: FACILITY AND OUTFALL INFORMATION**

1. Facility Location (All information must be based on front door (Gate) location of the facility):

Lat: 36 ° 10 ' 11 " Long: 92 ° 09 ' 24 " County: Izard Nearest Town: Calico Rock

2. Outfall Location (The location of the end of the pipe Discharge point.):

Outfall No. 001:

Latitude: 36 ° 10 ' 11 " Longitude: 92 ° 09 ' 24 "

Where is the collection point? After the UV disinfection

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

Unnamed tributary of Moccasin Creek thence into the White River

Outfall No. \_\_\_\_:

Latitude: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " Longitude: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "

Where is the collection point? \_\_\_\_\_

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

3. Monitoring Location (If the monitoring is conducted at a location different than the above Outfall location):

Outfall No. \_\_\_\_:

Lat: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " Long: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "

Outfall No. \_\_\_\_:

Lat: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " Long: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "

Outfall No. \_\_\_\_:

Lat: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " Long: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "

4. Type of Treatment system (Included all components of treatment system and Attach the process flow diagram):

Manually operated bar screen, flowmeter, oxidation ditch, 2 clarifiers, sludge, drying beds, tertiary filter, UV disinfection, outfall

5. Do you have, or plan to have, **AUTOMATIC** sampling equipment or **CONTINUOUS** wastewater flow metering equipment at this facility?

Current:	Flow Metering	<input checked="" type="checkbox"/>	Yes	Type: <u>Siemens</u>	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Sampling Equipment	<input type="checkbox"/>	Yes	Type: _____	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Planned:	Flow Metering	<input type="checkbox"/>	Yes	Type: _____	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Sampling Equipment	<input type="checkbox"/>	Yes	Type: _____	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>

If **YES**, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

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If **NO**, please describe the method and location of flow measurement below:

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6. Is the proposed or existing facility located above the 100-year flood level?  Yes  No

NOTE: FEMA Map must be included with this application. Maps can be ordered at [www.fema.gov](http://www.fema.gov).

If "No", what measures are (or will be) used to protect the facility? \_\_\_\_\_

7. Population for Municipal and Domestic Sewer Systems: 925

8. Backup Power Generation for Treatment Plants

Are there any permanent backup generators? Yes  No

If Yes, How many? 1 Total Horespower (hp)? 150 kVA

If No, Please explain? \_\_\_\_\_

**SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION**

1. Sludge Disposal Method (Check as many as are applicable):

**Landfill**

Landfill Site Name \_\_\_\_\_ ADEQ Solid Waste Permit No. \_\_\_\_\_

**Land Application:** ADEQ State Permit No. 5124-WR1

**Septic tank** Arkansas Department of Health Permit No.: \_\_\_\_\_

**Distribution and Marketing:** Facility receiving sludge:

Name: \_\_\_\_\_ Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_  
Rail:  \_\_\_\_\_ Pipe:  \_\_\_\_\_ Other: \_\_\_\_\_

**Subsurface Disposal (Lagooning):**

Location of lagoon \_\_\_\_\_ How old is the lagoon? \_\_\_\_\_

Surface area of lagoon: \_\_\_\_\_ Acre Depth: \_\_\_\_\_ ft Does lagoon have a liner?  Yes  No

**Incineration:** Location of incinerator \_\_\_\_\_

**Remains in Treatment Lagoon(s):**

How old is the lagoon(s)? \_\_\_\_\_ Has sludge depth been measured?  Yes  No

If Yes, Date measured? \_\_\_\_\_ Sludge Depth? \_\_\_\_\_ ft If No, When will it be measured? \_\_\_\_\_

Has sludge ever been removed? Yes  No  If Yes, When was it removed? \_\_\_\_\_

**Other (Provide complete description):** \_\_\_\_\_

## SECTION D - WATER SUPPLY

Water Sources (check as many as are applicable):

**Private Well** - Distance from Discharge point:  Within 5 miles     Within 50 miles

**Municipal Water Utility** (Specify City): \_\_\_\_\_

Distance from Discharge point:  Within 5 miles     Within 50 miles

**Surface Water**- Name of Surface Water Source: \_\_\_\_\_

Distance from Discharge point:    Within 5 miles     Within 50 miles

Lat: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "    Long: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "

**Other** (Specify): \_\_\_\_\_

Distance from Discharge point:    Within 5 miles     Within 50 miles

**SECTION E: FINANCIAL ASSURANCE AND DISCLOSURE STATEMENT**

1. Arkansas Code Annotated § 8-4-203 provides for financial assurance requirements for permitting non-municipal domestic sewage treatment systems. Arkansas Code 8-4-203 (b)(1)(A)(i) – “The department shall not issue, modify, or renew a National Pollutant Discharge Elimination System permit or state permit for a non-municipal domestic sewage treatment works without the permit applicant first demonstrating to the department its financial ability to cover the estimated costs of operating and maintaining the non-municipal domestic sewage treatment works for a minimum period of five (5) years.”

The applicant must provide a detailed estimate of the operation and maintenance (O&M) costs for the facility for a five year period. Once the O&M estimate is approved, the applicant must provide **financial assurance** in order to show that the facility is able to cover the costs of operating and maintaining the treatment system for the next five years.

The minimal financial assurance may be demonstrated to the department by using the following as outlined in Arkansas Code 8-4-203(b)(2):

- A. Obtaining insurance that specifically covers operation and maintenance costs
  - B. Obtaining a letter of credit;
  - C. Obtaining a surety/performance bond;
  - D. Obtaining a trust fund or an escrow account; or
  - E. Using a combination of insurance, letter of credit, surety bond, trust fund, or escrow account.
2. Disclosure Statement:

Arkansas Code Annotated Section 8-1-106 requires that all applicants for any type of permit or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a Disclosure Statement with their application. The filing of a Disclosure Statement is mandatory. No application can be considered administratively complete without a completed Disclosure Statement. The form may be obtained from the ADEQ web site at:

[http://www.adeg.state.ar.us/disclosure\\_stmt.pdf](http://www.adeg.state.ar.us/disclosure_stmt.pdf)



NOT APPLICABLE (N/A):

**SECTION F – INDUSTRIAL ACTIVITY**

1. Does an effluent guideline limitation promulgated by EPA ([Link to a Listing of the 40 CFR Effluent Limit Guidelines](#)) under Section 304 of the Clean Water Act (CWA) apply to your facility?

YES  (Answer questions 2 and 3)      NO

2. What Part of 40 CFR? \_\_\_\_\_

3. What Subpart(s)? \_\_\_\_\_

4. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Production: (projected for new facilities)

Product(s) Manufactured (Brand name)	Last 12 Months		Highest Production Year of Last 5 Years	
	lbs/day*		lbs/day*	
	Highest Month	Days of Operation	Monthly Average	Days of Operation

\* These units could be off-lbs, lbs quenched, lbs cleaned/etched/rinsed, lbs poured, lbs extruded, etc.

**SECTION G - WASTEWATER DISCHARGE INFORMATION**

Facilities that checked "Yes" in question 1 of Section F are considered Categorical Industrial Users and should skip to question 2.

1. **For Non-Categorical Users Only:** List average wastewater discharge, maximum discharge, and type of discharge (batch, continuous, or both), for each plant process. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [New facilities should provide estimates for each discharge.]

No.	Process Description	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: \_\_\_\_\_ per day            Average discharge per batch: \_\_\_\_\_ (GPD)

Time of batch discharges \_\_\_\_\_ at \_\_\_\_\_  
(days of week)    (hours of day)

Flow rate: \_\_\_\_\_ gallons/minute            Percent of total discharge: \_\_\_\_\_

Answer questions 2, 3, 4, and 5 only if you are subject to Categorical Standards.

2. For Categorical Users: Provide the wastewater discharge flows for each of your processes or proposed processes. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [Note: 1) New facilities should provide estimates for each discharge and 2) Facilities should denote whether the flow was measured or estimated.]

No.	Regulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

No.	Unregulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

No.	Dilution (e.g., Cooling Water)	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: \_\_\_\_\_ per day      Average discharge per batch:      (GPD)

Time of batch discharges \_\_\_\_\_ at \_\_\_\_\_  
   (days of week)                               (hours of day)

Flow rate: \_\_\_\_\_ gallons/minute      Percent of total discharge: \_\_\_\_\_

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current:	Flow Metering	<input type="checkbox"/>	Yes	Type: _____	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Sampling Equipment	<input type="checkbox"/>	Yes	Type: _____	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Planned:	Flow Metering	<input type="checkbox"/>	Yes	Type: _____	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Sampling Equipment	<input type="checkbox"/>	Yes	Type: _____	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>

If yes, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

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4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics?

Yes       No      (If no, skip Question 5)

5. Briefly describe these changes and their effects on the wastewater volume and characteristics:

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**SECTION H - TECHNICAL INFORMATION**

Technical information to support this application shall be furnished in appropriate detail to understand the project. Information in this Part is required for obtaining a **construction permit** or for **modification** of the treatment system.

1. Describe the treatment system. Include the types of control equipment to be installed along with their methods of operation and control efficiency.

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2. One set of construction plans and specifications, approved (Signed and stamped) by a **Professional Engineer (PE)** registered in **Arkansas**, must be submitted as follows:
  - a. The plans must show flow rates in addition to pertinent dimensions so that detention times, overflow rates, and loadings per acre, etc. can be calculated.
  - b. Specifications and complete design calculations.
  - c. All treated wastewater discharges should have a flow measuring device such as a weir or Parshall flume installed. Where there is a significant difference between the flow rates of the raw and treated wastewater, a flow measuring device should be provided both before and after treatment.
3. If this application includes a construction permit disturbing five or more acres, a storm water construction permit must be obtained by submitting a notice of intent (NOI) to ADEQ.

## SECTION I: SIGNATORY REQUIREMENTS

### Cognizant Official (Duly Authorized Representative)

40 CFR 122.22(b) states that all reports required by the permit, or other information requested by the Director, shall be signed by the applicant (or person authorized by the applicant) or by a duly authorized representative of that person. A person is duly authorized representative only if:

- (1) the authorization is made in writing by the applicant (or person authorized by the applicant);
- (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity responsibility, or an individual or position having overall responsibility for environmental matters for the company.

The applicant hereby designates the following person as a Cognizant Official, or duly authorized representative, for signing reports, etc., including Discharge Monitoring Reports (DMR) required by the permit, and other information requested by the Director:

Signature of Cognizant Official: Gail Mainard Date: 7/31/15  
Printed name of Cognizant Official: Gail Mainard  
Official title of Cognizant Official: Assistant Director Telephone Number: 870-267-6625

### Responsible Official

The information contained in this form must be certified by a **responsible official** as defined in the "signatory requirements for permit applications" (40 CFR 122.22).

Responsible official is defined as follows:

**Corporation**, a principal officer of at least the level of vice president

**Partnership**, a general partner

**Sole proprietorship**: the proprietor

**Municipal, state, federal, or other public facility**: principal executive officer, or ranking elected official.

GEM (Initial) "I certify that the cognizant official designated above is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b)." NOTE: If no duly authorized representative is designated in this section, the Department considers the applicant to be the responsible official for the facility and only reports, etc., signed by the applicant will be accepted by the Department.

\_\_\_\_ (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of State in Arkansas. Please provide the full name of the corporation if different than that listed in Section A above."

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I further certify under penalty of law that all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested."

Signature of Responsible Official: Gail Mainard Date: 7/31/15  
Printed name of Responsible Official: Gail Mainard  
Official title of Responsible Official: Assistant Director Telephone Number: 870-267-6625

Permit Application Form1  
Section A- General Information

8. Permit Numbers

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held By</u>
AR Department of Corrections	AR0040827	Cummins Unit
AR Department of Corrections	AR0045578	East AR Unit
AR Department of Corrections (AFIN: 39-00018)	5226-W	East AR Unit
AR Department of Corrections (AFIN: 33-00036)	5124-WR-1	North Central Unit
AR Department of Corrections	AR0035980	Tucker Unit



ADC North Central Unit

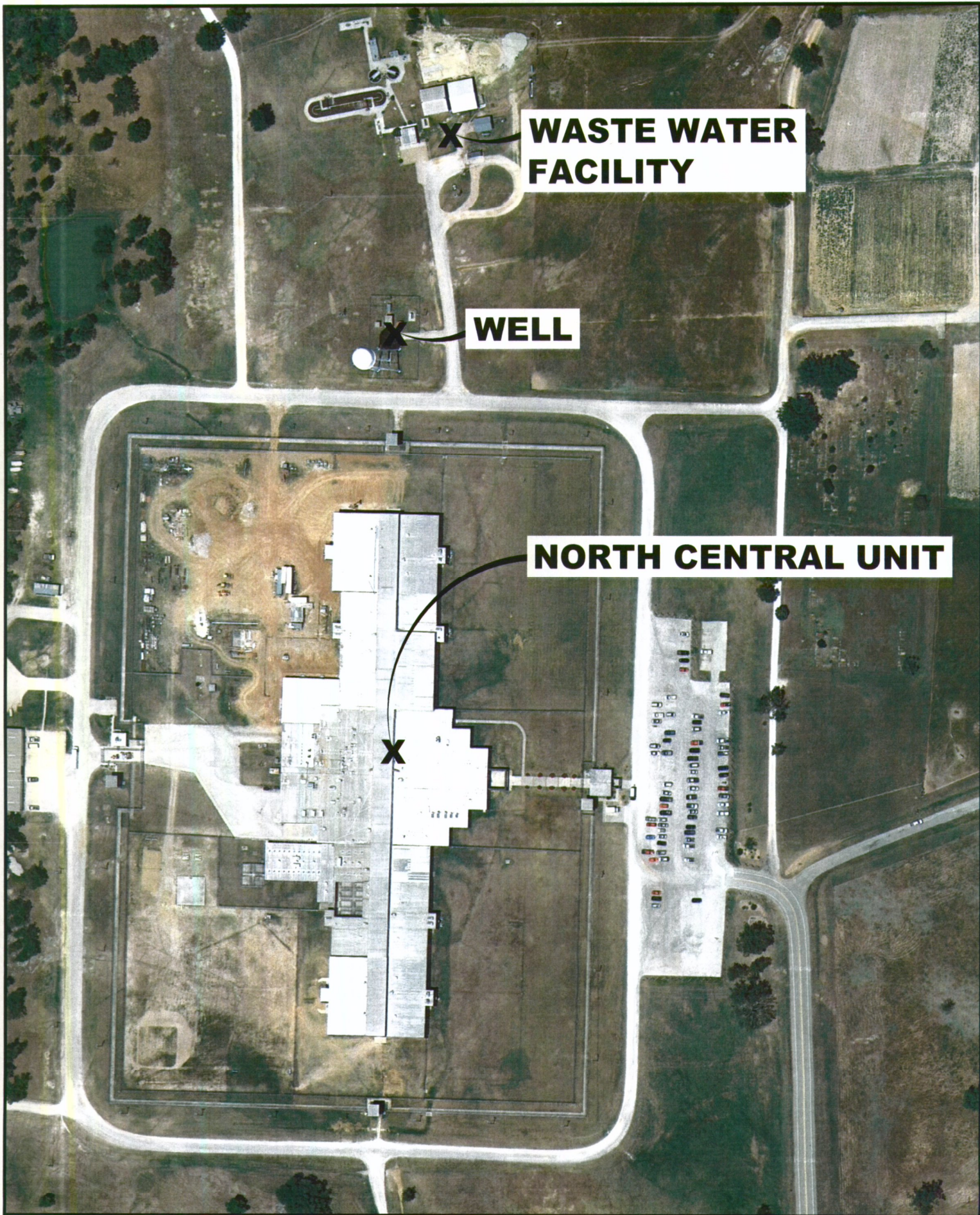
© 2014 Google

Google earth

Google earth

feet  
meters





**WASTE WATER FACILITY**

**WELL**

**NORTH CENTRAL UNIT**

PROJECT ENGR: SAM GATES	DRAWN BY : BRINSR
DATE JUNE 04, 2014	
SCALE 1-1000	JOB NUMBER LR14-5741
1	

SITE LOCATION

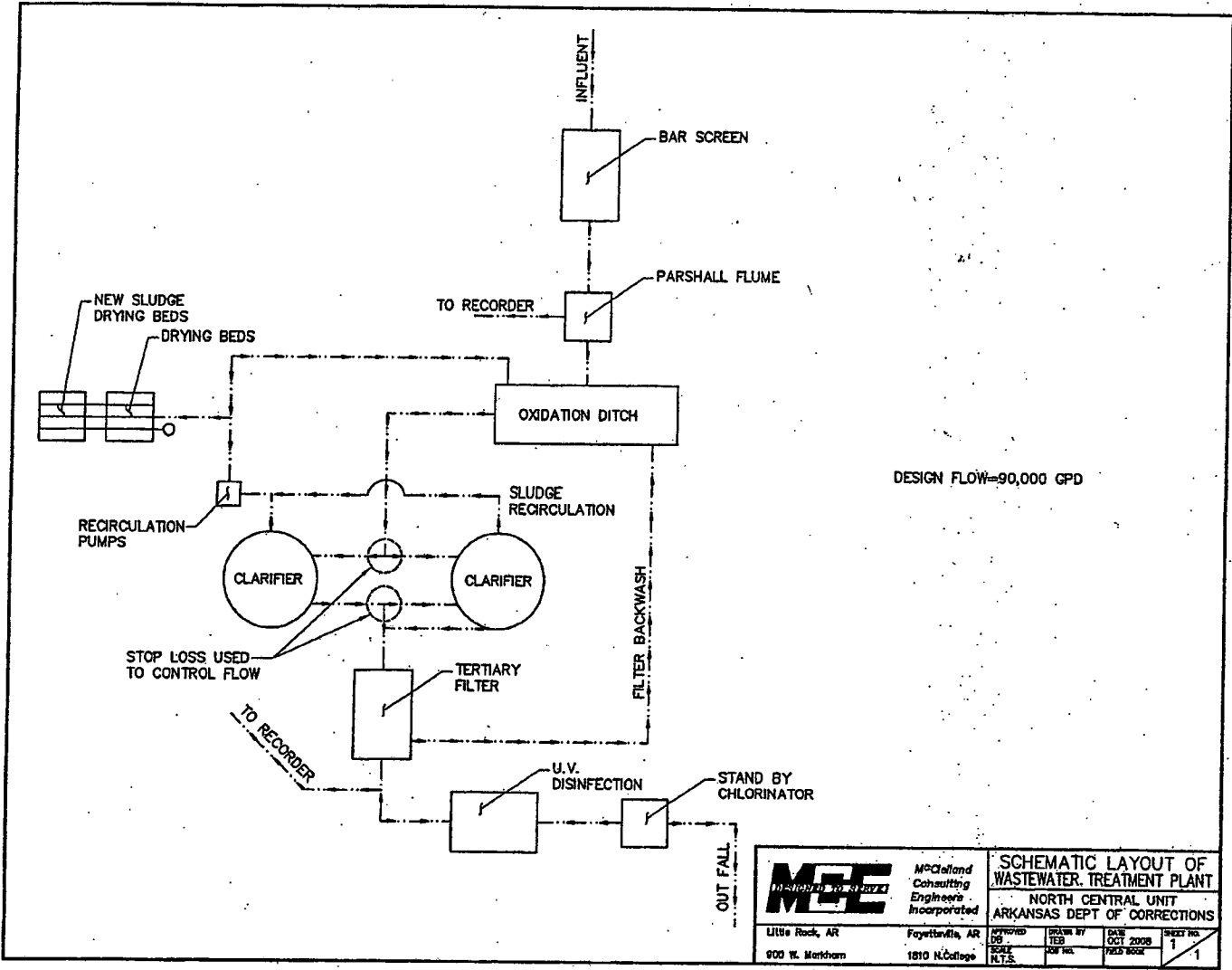
ADOC NORTH UNIT

**MCE** McCLELLAND  
CONSULTING  
ENGINEERS, INC.

900 West Markham Little Rock, Arkansas 72201  
 1810 N. College Fayetteville, Arkansas 72702

PH# 501.371.0272 PH# 479.443.2377  
 Fax # 501.371.5932 Fax # 479.443.9241  
[HTTP://WWW.MCCLELLAND-ENGRS.COM](http://www.mcclelland-engrs.com)





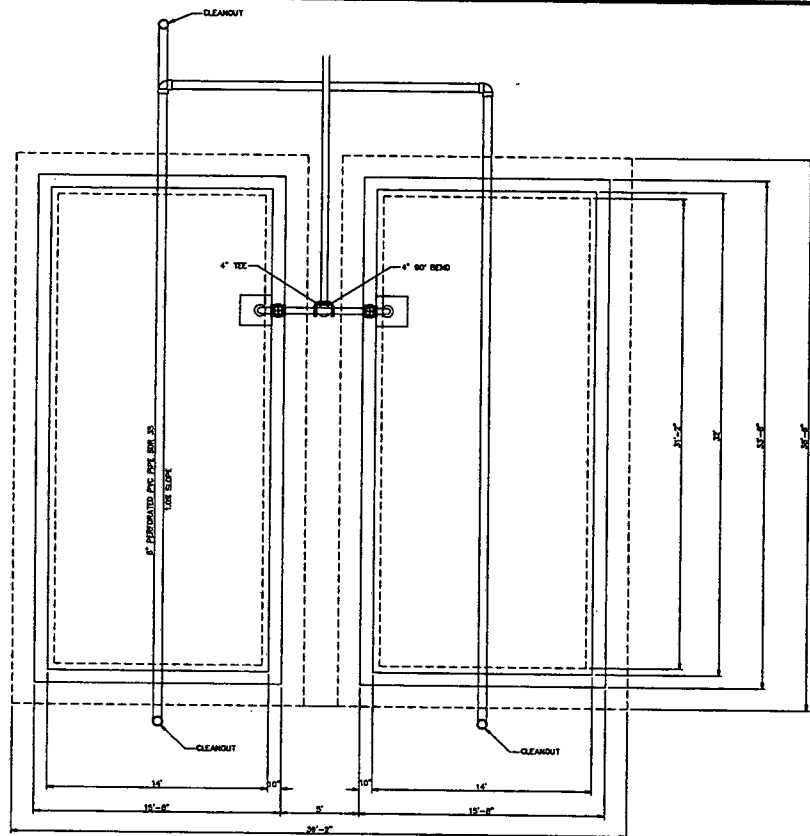
DESIGN FLOW=90,000 GPD

**MCE** *McClalland Consulting Engineers Incorporated*  
 Little Rock, AR 900 W. Mainham  
 Fayetteville, AR 1810 N. College

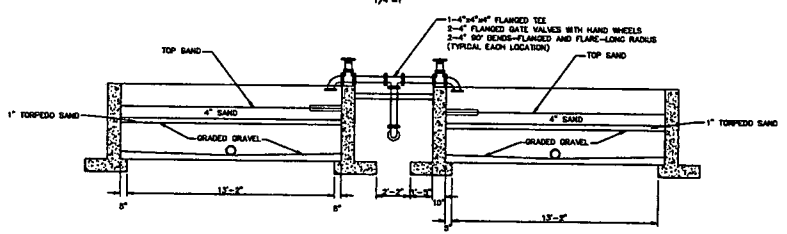
<b>SCHEMATIC LAYOUT OF WASTEWATER TREATMENT PLANT</b>			
NORTH CENTRAL UNIT ARKANSAS DEPT OF CORRECTIONS			
APPROVED D.B. S.C.R. N.T.S.	DRAWN BY T.E.B.	DATE OCT 2008	SHEET NO. 1 / 1

v. www.mce.com

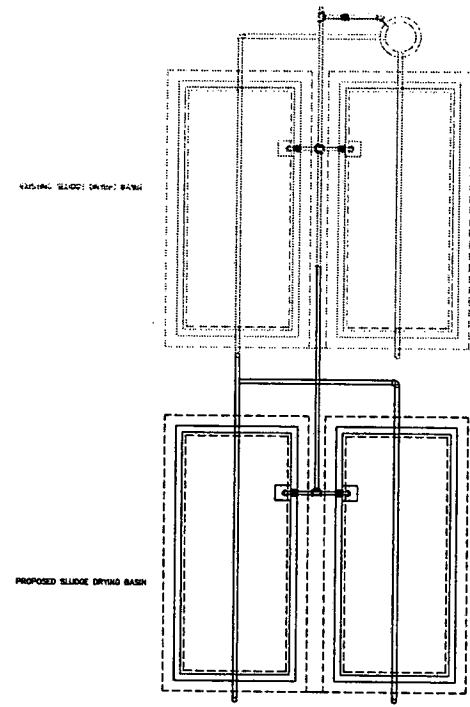




PROPOSED SLUDGE DRYING BEDS  
PLAN VIEW  
1/4"=1'



PROPOSED SLUDGE DRYING BEDS  
ELEVATION VIEW  
1/4"=1'



**MCE**  
MCCLELLAN AND  
CONSULTING  
ENGINEERS, INC.  
600 West Johnson  
Little Rock, Arkansas 72201  
PH: (501) 771-8221  
FAX: (501) 771-8822  
1218 N. Colburn  
Fayetteville, Arkansas 72703  
PH: (501) 483-2277  
FAX: (501) 483-2241



PERSONAL SIGNATURE ON FILE

**PROPOSED SLUDGE DRYING  
BEDS EXPANSION  
ADC NORTH CENTRAL UNIT  
CALICO ROCK, ARKANSAS**

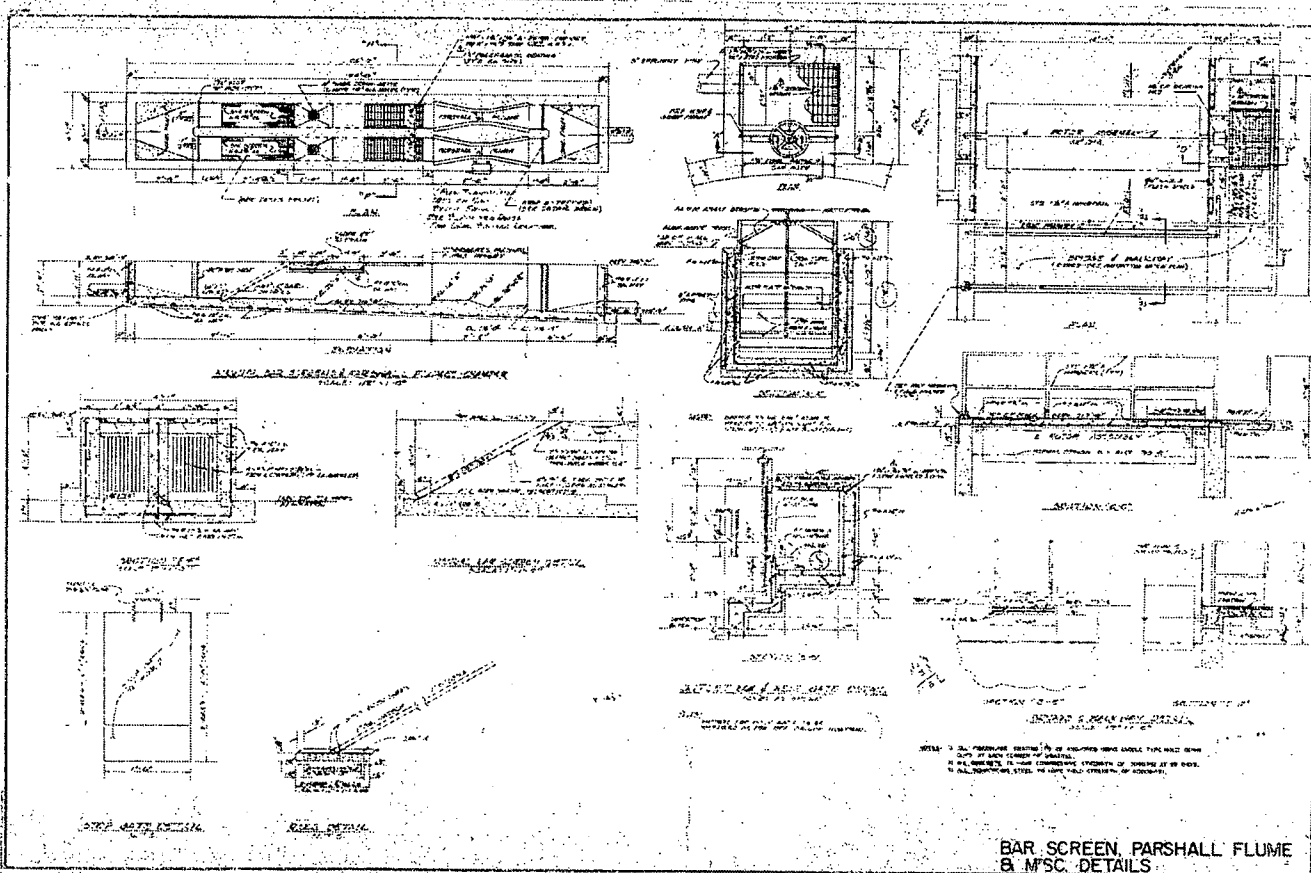
PROJECT ENGINEER  
DGB  
DRAWN BY  
TEB  
DATE  
12/1/08  
SCALE  
AS SHOWN IROB-5784

1/1

5784-BE.DWG







BAR SCREEN PARSHALL FLUME  
& M.S.C. DETAILS

BROOKS JACKSON ARCHITECTS, INC.  
228 Commercial - Little Rock, Arkansas 72201 - (501) 764-9700  
David Johnson, P.E., C.S.  
Brooks Jackson, P.E., C.S.

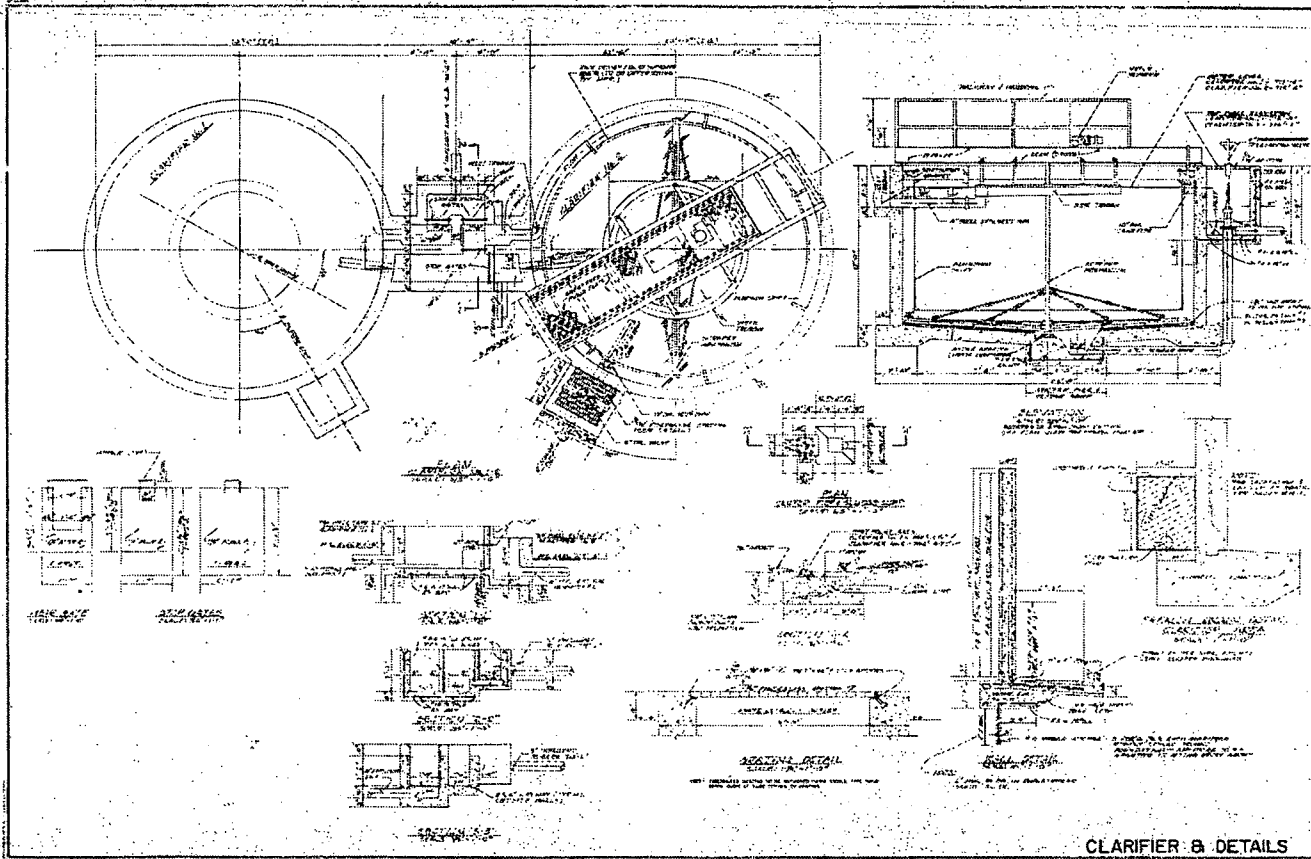
Hard County Correctional Facility  
Arkansas Department of Correction  
Five Bluff, Arkansas



DATE  
BY  
REVISION

SHEET NO.  
W W  
3





CLARIFIER B DETAILS

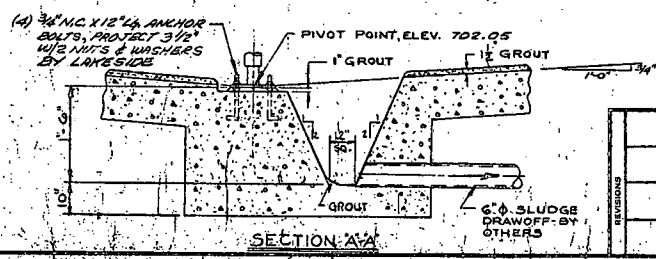
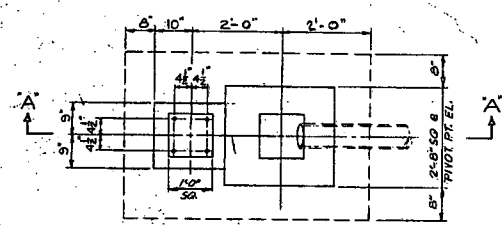
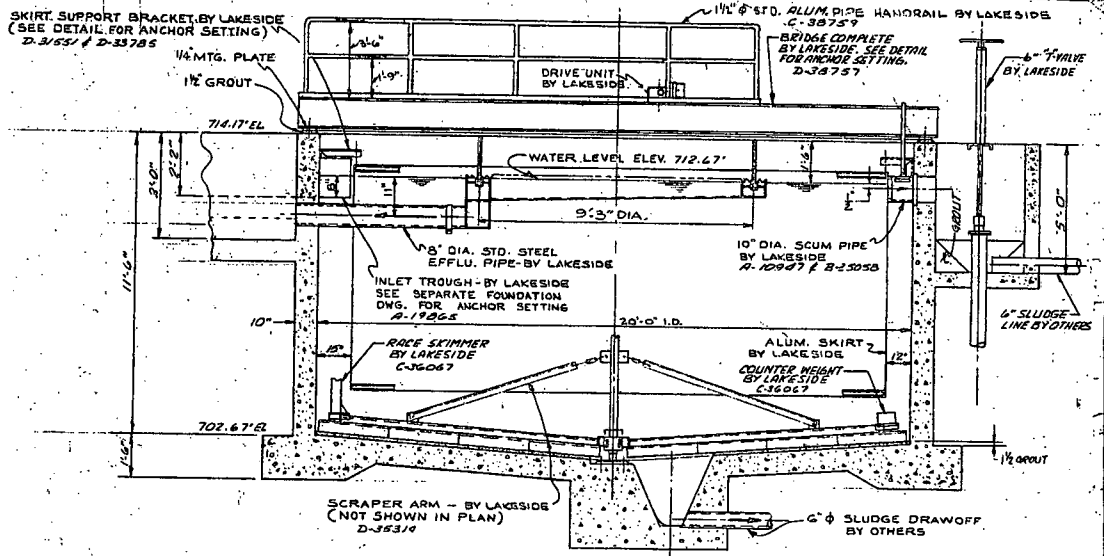
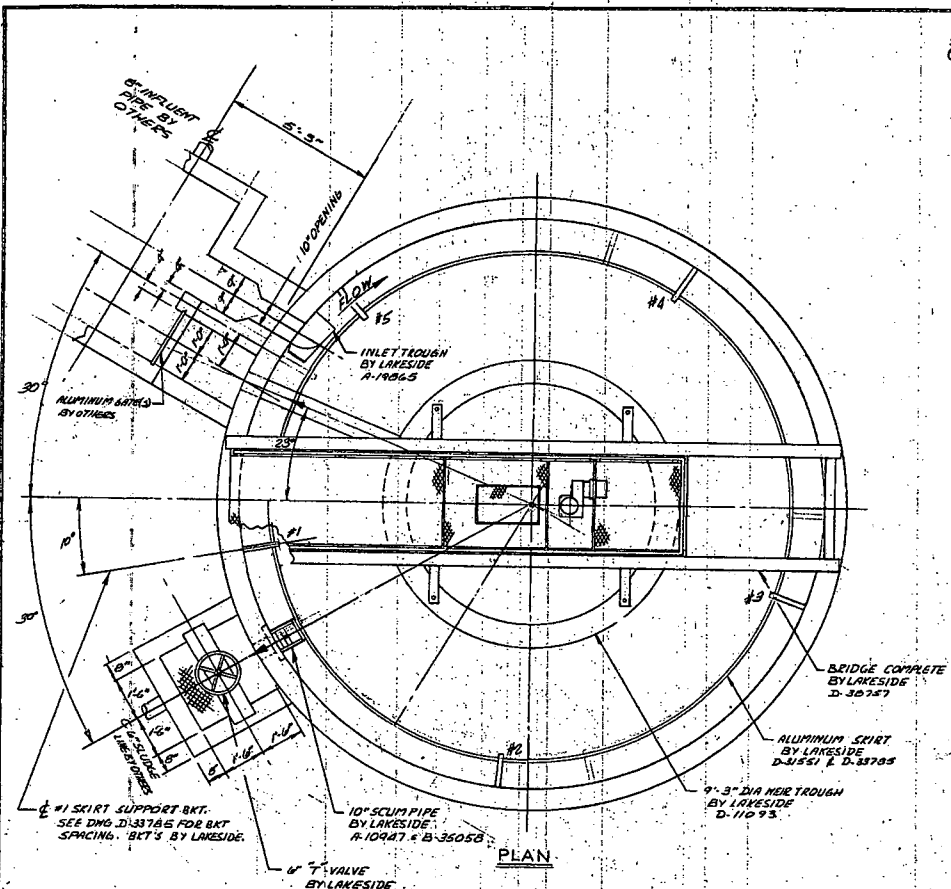
**BROOKS JACSON ARCHITECTS, INC.**  
 2725 CONCORDIA DRIVE • LINCOLN, ARIZONA 85022 • (505) 344-3200  
 Brook Jackson, AIA, CSI

Iredell County Correctional Facility  
 for the  
 Arizona Department of Correction  
 Pine Bluff, Arkansas



SHEET NO.  
**W.W.**  
**5**



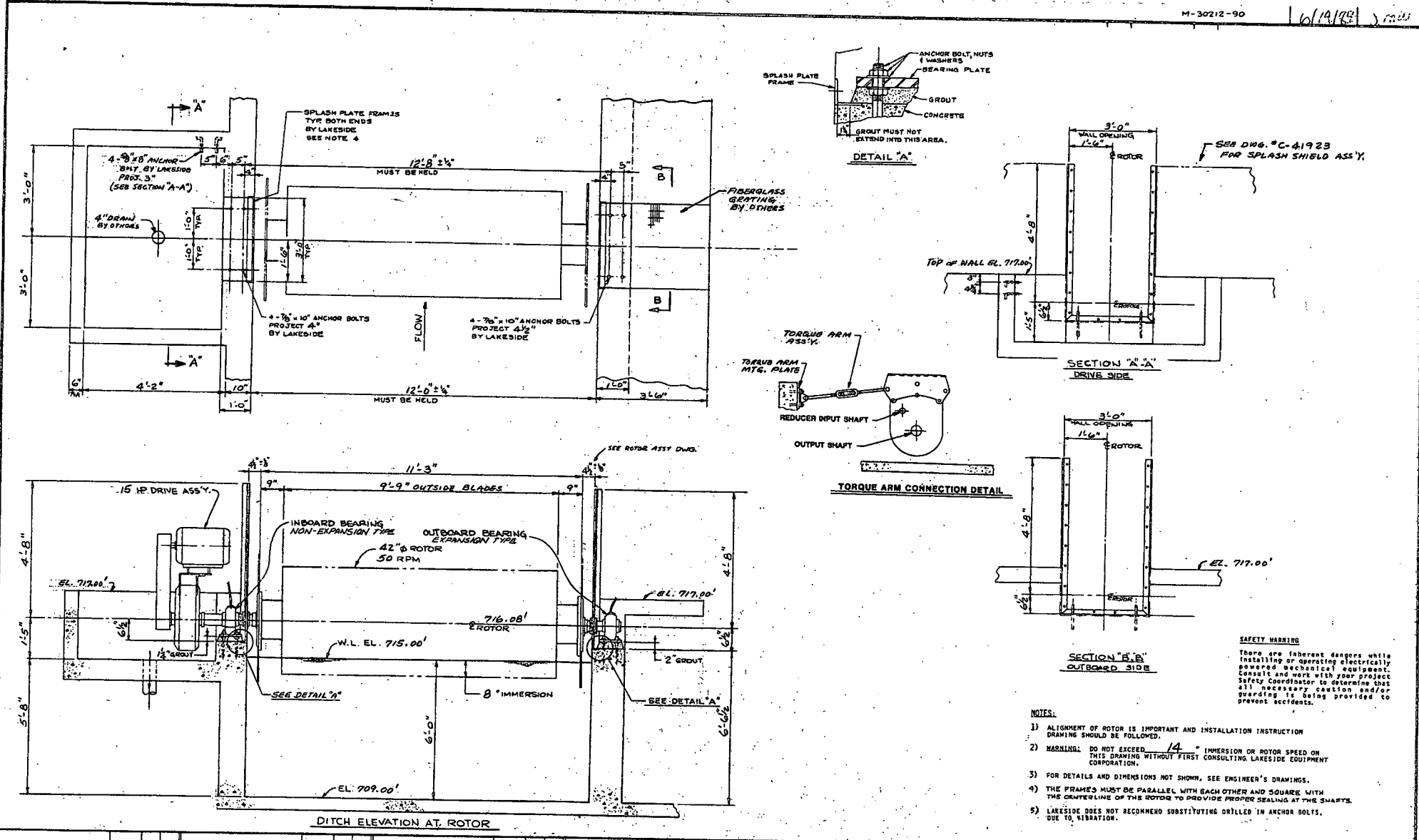


- NOTES:**
- 1.) CONCRETE SHOWN FOR IDENTIFICATION PURPOSES ONLY, REFER TO ENGR'S DRAWINGS FOR DETAILS & DIM'S. NOT SHOWN.
  - 2.) FOR ANCHOR SETTING & EQUIPMENT DETAILS NOT SHOWN SEE LAKESIDE SPECS. & DETAIL DWG.

**TANK # 2**

INSTALLATION DRAWING		20'-0" DIA. SPIRAFLO	
CALICO ROCK, ARKANSAS			
LAKESIDE EQUIPMENT CORP. BURLINGTON			
DR. RJS	DATE 4-17-86	DRAWN BY	FILE NO. 722
CHKD BY	DATE	APP. BY	DATE 04/909

10/19/94 J.M.W.



**SAFETY WARNING**  
 There are inherent dangers while installing or operating electrically powered mechanical equipment. Consult and work with your project safety coordinator to determine that all necessary caution and/or guarding is being provided to prevent accidents.

- NOTES:**
- 1) ALIGNMENT OF ROTOR IS IMPORTANT AND INSTALLATION INSTRUCTION DRAWING SHOULD BE FOLLOWED.
  - 2) WARNING: DO NOT EXCEED 14° IMMERSION OR ROTOR SPEED ON THIS DRAWING WITHOUT FIRST CONSULTING LAKESIDE EQUIPMENT CORPORATION.
  - 3) FOR DETAILS AND DIMENSIONS NOT SHOWN, SEE ENGINEER'S DRAWINGS.
  - 4) THE FRAMES MUST BE PARALLEL WITH EACH OTHER AND SQUARE WITH THE CENTERLINE OF THE ROTOR TO PROVIDE PROPER SEALING AT THE SHAFTS.
  - 5) LAKESIDE DOES NOT RECOMMEND SUBSTITUTING DRILLED IN ANCHOR BOLTS, DUE TO VIBRATION.

M-30212-90

REVISIONS	DATE	DR.	CHKD.	REVISIONS	DATE	DR.	CHKD.	REVISIONS	DATE	DR.	CHKD.	REVISIONS	DATE	DR.	CHKD.

**LAKESIDE** DR. Y.C. DATE 4-21-91  
 EQUIPMENT CORPORATION DR. R.W. FILE NO. 94  
**11'-0" TYPE 'D' MASNA ROTOR INSTALLATION**  
 CALICO ROCK, ARKANSAS D-41921



PROJECT ENGR: SAM GATES	DRAWN BY: BRINSR
DATE JUNE 04, 2014	
SCALE 1-1000	JOB NUMBER LR14-5741
1	

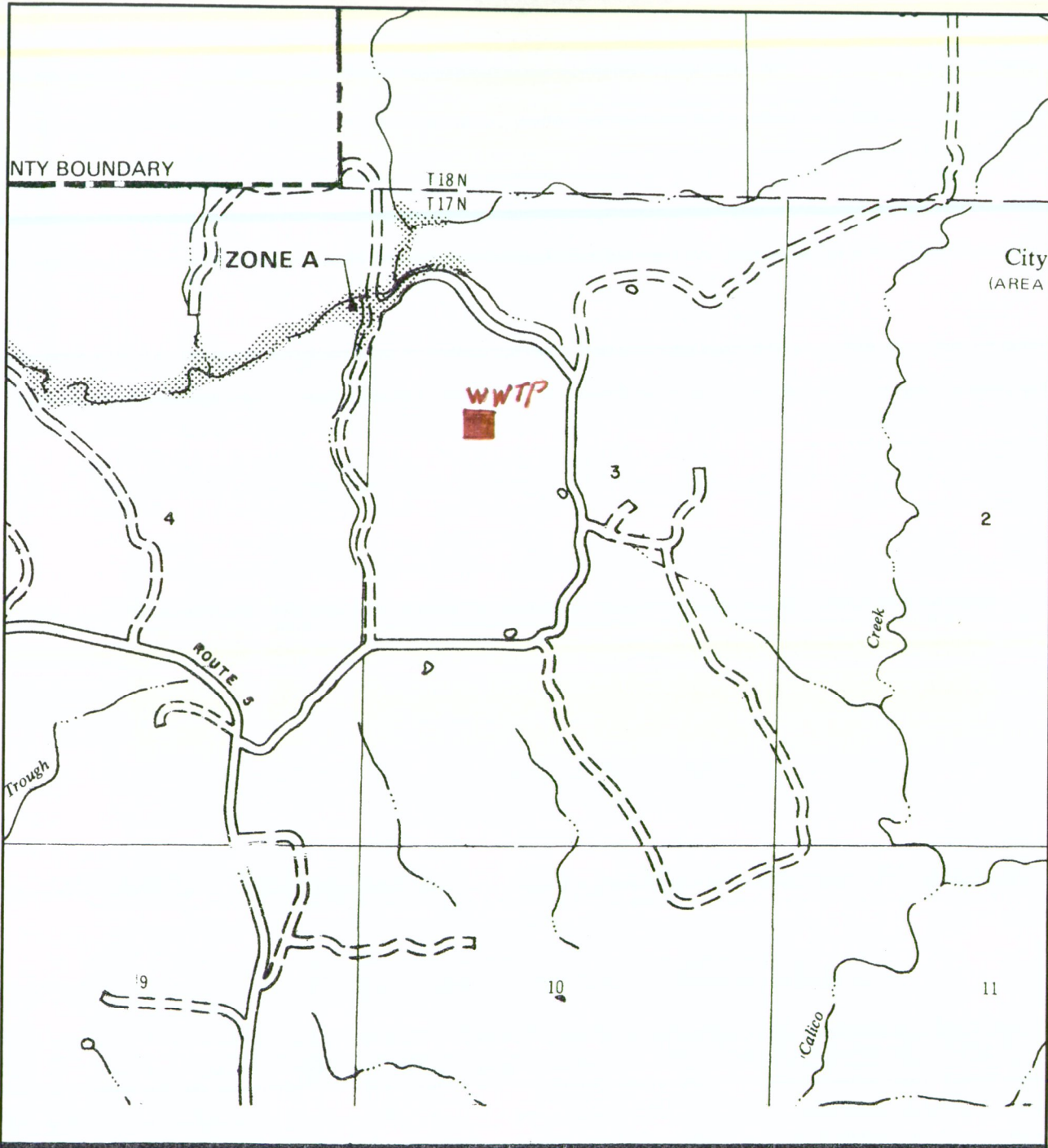
**SITE LOCATION**

**ADOC NORTH UNIT**

**MCE McCLELLAND CONSULTING ENGINEERS, INC.**

900 West Markham Little Rock, Arkansas 72201  
 501.371.0272  
 501.371.9932  
[HTTP://WWW.MCCLELLAND-ENGRS.COM](http://www.mcclelland-engrs.com)

1810 N. College Fayetteville, Arkansas 72702  
 479.643.2377  
 479.441.9241



**FLOOD HAZARD BOUNDARY MAP**

**IZARD COUNTY,  
ARKANSAS**  
UNINCORPORATED AREA  
PAGE 1 OF 8  
(SEE MAP INDEX FOR PAGES NOT PRINTED)

**EFFECTIVE DATE:**  
JULY 12, 1977

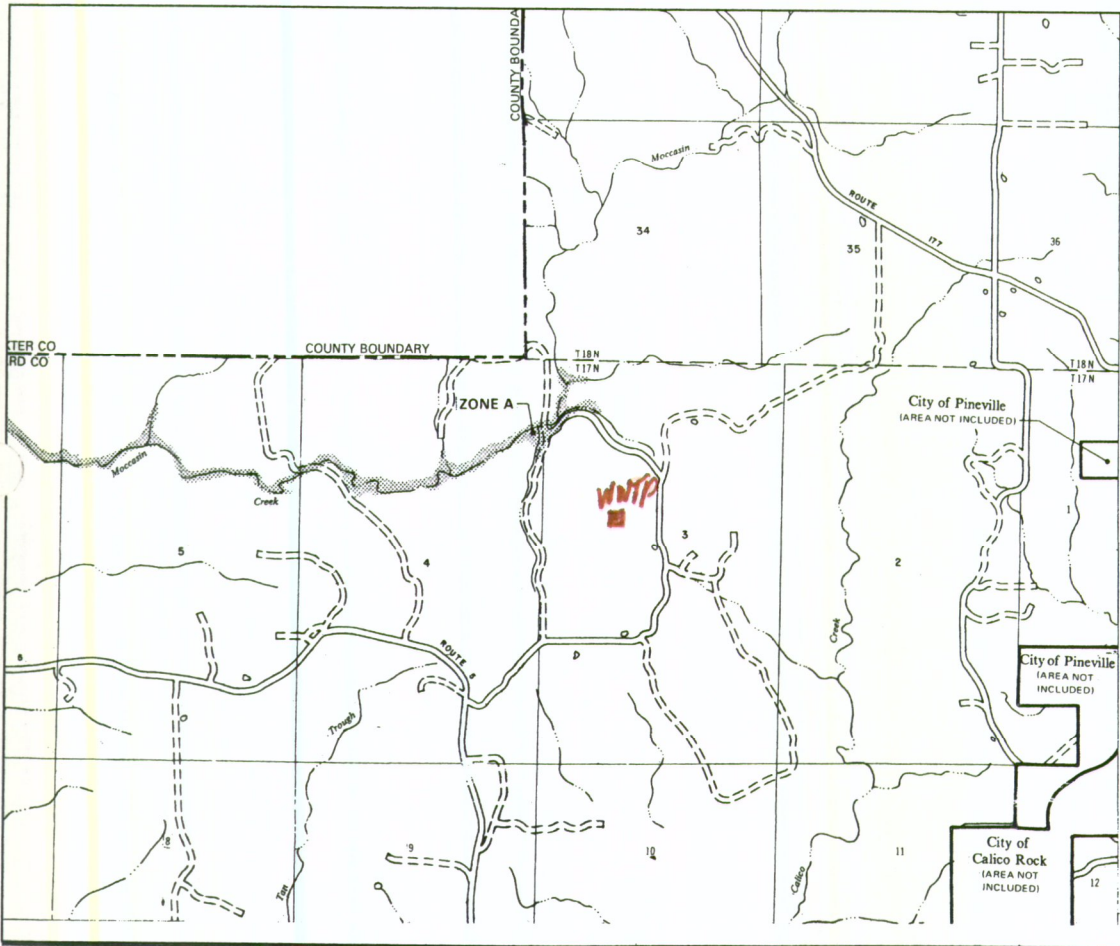
CONVERTED BY LETTER  
EFFECTIVE 12/1/2007

**COMMUNITY-PANEL NO.**  
050439 0001 A



**U.S. DEPARTMENT OF HOUSING  
AND URBAN DEVELOPMENT**  
FEDERAL INSURANCE ADMINISTRATION

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



**FLOOD HAZARD BOUNDARY MAP**

**IZARD COUNTY,  
ARKANSAS**

**UNINCORPORATED AREA**  
PAGE 1 OF 8  
(SEE MAP INDEX FOR PAGES NOT PRINTED)

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# LEGEND

 **SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

 **FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

 **OTHER FLOOD AREAS**

- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.








 **OTHER AREAS**

- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.





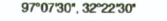


 **COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

 **OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

-  Floodplain boundary
-  Floodway boundary
-  Zone D boundary
-  CBRS and OPA boundary
-  Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
-  Base Flood Elevation line and value; elevation in feet\*
-  Base Flood Elevation value where uniform within zone; elevation in feet\*

\* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

-  Cross section line
-  Transect line
-  Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
-  1000-meter Universal Transverse Mercator grid ticks, zone 15
-  5000-foot grid ticks: Arkansas State Plane coordinate system, south zone (FIPZONE 0302), Lambert Conformal Conic
-  Bench mark (see explanation in Notes to Users section of this FIRM panel)
-  River Mile

MAP REPOSITORIES  
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE  
FLOOD INSURANCE RATE MAP  
March 16, 2009  
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



Google earth

miles  
km



1

3



FORM  
**2E**  
NPDES

 **Facilities Which Do Not Discharge Process Wastewater**

**I. RECEIVING WATERS**

For this outfall, list the latitude and longitude, and name of the receiving water(s).

Outfall Number (list)	Latitude			Longitude			Receiving Water (name)
	Deg	Min	Sec	Deg	Min	Sec	
001	36.00	10.00	11.00	92.00	9.00	24.00	Unnamed tributary of Moccasin Creek thence into the White River

**II. DISCHARGE DATE** (If a new discharger, the date you expect to begin discharging)

**III. TYPE OF WASTE**

A. Check the box(es) indicating the general type(s) of wastes discharged.

- Sanitary Wastes     
  Restaurant or Cafeteria Wastes     
  Noncontact Cooling Water     
  Other Nonprocess Wastewater (Identify)

B. If any cooling water additives are used, list them here. Briefly describe their composition if this information is available.


**IV. EFFLUENT CHARACTERISTICS**

- A. Existing Sources** — Provide measurements for the parameters listed in the left-hand column below, unless waived by the permitting authority (see instructions).
- B. New Dischargers** — Provide estimates for the parameters listed in the left-hand column below, unless waived by the permitting authority. Instead of the number of measurements taken, provide the source of estimated values (see instructions).

Pollutant or Parameter	(1) Maximum Daily Value (include units)		(2) Average Daily Value (last year) (include units)		(3)	(or)	(4)
	Mass	Concentration	Mass	Concentration	Number of Measurements Taken (last year)	Source of Estimate (if new discharger)	
	Biochemical Oxygen Demand (BOD)	20.2 lb/d	22.0 mg/l	3.45 lb/d			
Total Suspended Solids (TSS)	32.3 lb/d	25.0 mg/l	5.84 lb/d	10.33 mg/l	12.00		
Fecal Coliform (if believed present or if sanitary waste is discharged)		1263 per 100		227 per 100	12.00		
Total Residual Chlorine (if chlorine is used)							
Oil and Grease							
*Chemical oxygen demand (COD)							
*Total organic carbon (TOC)							
Ammonia (as N)	4.2 lb/d	4.6 mg/l	1.0 lb/d	1.95 mg/l	12.00		
Discharge Flow	Value 0.155 MGD		0.064 MGD		12.00		
pH (give range)	Value 7.28-8.00 su		7.58-7.58 su		12.00		
Temperature (Winter)		°C		°C			
Temperature (Summer)		°C		°C			

\*If noncontact cooling water is discharged



<b>V. Except for leaks or spills, will the discharge described in this form be intermittent or seasonal?</b> If yes, briefly describe the frequency of flow and duration.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>VI. TREATMENT SYSTEM (Describe briefly any treatment system(s) used or to be used)</b>	
Grease trap, Manually operated bar screen, flowmeter, oxidation ditch, 2 clarifiers, sludge drying beds, tertiary filter, UV disinfection, outfall	
<b>VII. OTHER INFORMATION (Optional)</b>	
Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations. Attach additional sheets, if necessary.	
<p>Note, Average Plant temperature readings 2005, Winter 8.0 degrees C, Summer 25 degrees C. Number samples 10. Note, BOD results are CBOD results.</p> <p>There are no Oil &amp; Grease results for submittal review. The MCE Laboratory will start testing and will submit the O&amp;G results as they become available. Please note that a grease trap is installed in the sewer collection line from the NCU to the treatment plant process and has been added to the treatment system.</p>	
<b>VIII. CERTIFICATION</b>	
<i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
A. Name & Official Title Gail Mainard, ADC Assistant Director of Maint./Const	B. Phone No. (area code & no.) 870/267-6625
C. Signature 	D. Date Signed 8/18/15

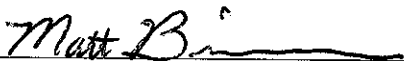
Client: ADOC-Izard Co Sample Number: 43391-01  
 Sample Description: NPDES Monitoring Date Reported: 8/12/2015  
 Sample Location: WWTP Effluent  
 Permit Number: AR0044016  
 References: 40 CFR Part 136 Approved Methods, Containers, Preservation, Holding Times  
 Standard Methods for the Examination of Water and Wastewater: EPA-600/4-79-020  
 Quality Control: Blank, duplication, known addition, quarterly analysis of external references samples  
 QA Frequency: Minimum of 10% Spikes and Duplicates

Date/Time	Grab	Sampler	Date/Time	Composite	Sampler	Date/Time Received:
8/5/2015 12:03:00 PM		Jessica Brown				08/05/15 15:50

Parameter	Reference	Test Date/Time	Analyst	Result
<b>Basic WW</b>				
Ammonia, NH3-N	4500-NH3 B,C	8/6/2015 11:30:00 AM	EF	0.67 mg/l
CBOD	5210 B	8/7/2015 8:25:00 AM	EF	<2.0 mg/l
DO	4500-O c or g	8/5/2015 12:07:00 PM	JB	7.85 mg/l
Fecal Coliforms	9222 D	8/5/2015 3:15:00 PM	JB	35 Col/100 mls
pH	4500-H+ B	8/5/2015 12:07:00 PM	JB	7.92 pH Units
Temperature	2550 B	8/5/2015 12:07:00 PM	JB	28.3 degrees C
TSS	2540 D	8/10/2015 3:00:00 PM	JB	3.0 mg/l
<b>Nitrite+Nitrate as N</b>				
NO2+NO3	EPA 300.0	8/10/2015 11:58:00 PM	AI	1.0 mg/l

\*Quality assurance performed on other samples

Chain of custody, equipment calibration and maintenance records, and QA/QC information are on file at the laboratory.

  
 Matt Bienvenu, Assistant Laboratory Manager

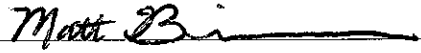
Client: ADOC-Izard Co Sample Number: 43391-02  
Sample Description: NPDES Monitoring Date Reported: 8/12/2015  
Sample Location: WWTP Influent  
Permit Number: AR0044016  
References: 40 CFR Part 136 Approved Methods, Containers, Preservation, Holding Times  
Standard Methods for the Examination of Water and Wastewater: EPA-600/4-79-020  
Quality Control: Blank, duplication, known addition, quarterly analysis of external references samples  
QA Frequency: Minimum of 10% Spikes and Duplicates

	Grab		Composite		Date/Time Received:
Date/Time	Sampler	Date/Time	Sampler		08/05/15 15:50
8/5/2015 12:11:00 PM	Jessica Brown				

Parameter	Reference	Test Date/Time	Analyst	Result
<b>Basic WW</b>				
Ammonia, NH3-N	4500-NH3 B,C	8/6/2015 11:30:00 AM	EF	9.45 mg/l
CBOD	5210 B	8/7/2015 8:25:00 AM	EF	115.45 mg/l
DO	4500-O c or g	8/5/2015 12:14:00 PM	JB	4.2 mg/l
pH	4500-H+ B	8/5/2015 12:12:00 PM	JB	8.7 pH Units
Temperature	2550 B	8/5/2015 12:13:00 PM	JB	31.8 degrees C
TSS	2540 D	8/10/2015 3:00:00 PM	JB	170.0 mg/l
<b>Nitrate Nitrogen</b>				
Nitrate+Nitrite	EPA 300.0	8/11/2015 12:23:00 AM	AI	<0.5 mg/l

\*Quality assurance performed on other samples

Chain of custody, equipment calibration and maintenance records, and QA/QC information are on file at the laboratory.

  
Matt Bienvenu, Assistant Laboratory Manager

ADOC- Izzard County North Central Unit  
NPDES Permit Number AR0044016  
MCE Project Number LR15-5756  
MCE Sampling Date August 5<sup>th</sup>, 2014  
MCE Report Date August 12, 2015

**PERCENT REMOVAL TESTING**

<b>Parameter</b>	<b>Influent Testing</b>	<b>Effluent Testing</b>	<b>Percent Removal</b>
Ammonia, NH3-N	9.45 mg/l	0.67 mg/l	92.91 %
CBOD	115.45 mg/l	<2.0 mg/l	98.26 %
TSS	170.0 mg/l	3.0 mg/l	98.23 %