



Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

Date: March 30, 2023 - **Time:** 9:00 AM

Call to Order

Old Business

New Business

1. 3113 Whispering Oak - CUP for Duplex

Kelley Tucker - Requesting Recommendation for Approval of Conditional Use Permit for a Duplex in R-M

- [0672-NOT-01.pdf](#)
- [0672-APP-01.pdf](#)

2. 507 Boone Road - New Office Addition

Jeremy McMillian - Requesting Approval for New Addition to Office Building

- [0698-APP-01.pdf](#)

3. Home2 Outparcel - Span Way - Replat

Charlie Best - Requesting Recommendation for Approval of Replat

- [0699-RPLT-01.pdf](#)

4. Butler Center - 1109 N Reynolds Road - Site Plan

GarNat Engineering - Requesting Approval for Site Plan and Recommendation for Approval of Variance

- [0685-MTP-01.pdf](#)
- [0685-PLN-02.pdf](#)
- [0685-RSP-01.pdf](#)
- [0685-SWB-01.pdf](#)
- [0685-SWP-01.pdf](#)
- [0692-SignPicture.pdf](#)

5. Elite Volleyball Academy - Vernia Park Subdivision - Site Plan

GarNat Engineering - Requesting Recommendation for Site Plan and Variance Approval

- [0693-PLN-02.pdf](#)
- [0693-SMP-01.pdf](#)
- [0693-SWP-01.pdf](#)
- [0693-RSP-01.pdf](#)
- [0695-SignPicture.pdf](#)
- [0695-LTR-01.pdf](#)

6. 25300 I-30 N - Conditional Use Permit

Hope Consulting - Requesting Recommendation for Approval of Conditional Use Permit for a Storage Facility

- [0687-RSP-01.pdf](#)
- [0687-PLN-02.pdf](#)

7. Jacob's Corner Subdivision - Final Plat

Hope Consulting - Requesting Recommendation for Approval of Final Plat

- [0688-LTR-02.pdf](#)
- [0688-PLT-02.pdf](#)

8. Midland Road Estates Subdivision - Preliminary Plat

Hope Consulting - Requesting Recommendation for Approval of Preliminary Plat

- [0691-DRN-01.pdf](#)
- [0691-PLN-01.pdf](#)

9. Coral Ridge Subdivision - Variances - Lots 1, 7, 11, 15, 16, 24, 28

Hope Consulting - Requesting Recommendation for Approval of Variances

- [LOT 28 VAR-PACKET CORAL RIDGE.pdf](#)
- [LOT 24 VAR- PACKET CORAL RIDGE.pdf](#)
- [LOT 16 VAR-PACKET CORAL RIDGE.pdf](#)
- [LOT 15 VAR-PACKET CORAL RIDGE.pdf](#)
- [LOT 11 VAR-PACKET CORAL RIDGE.pdf](#)
- [LOT 7 VAR-PACKET CORAL RIDGE.pdf](#)
- [LOT 1 VAR-PACKET CORAL RIDGE.pdf](#)

Staff Approved

10. Elysian Event - 2102 Brandon RD - Sign Permit

Arkansas Sign and Neon - Requesting Sign Permit Approval - STAFF APPROVED

11. Auto Glass Now - 1814 N Reynolds - Sign Permit

Action Signs - Requesting Sign Permit Approval - STAFF APPROVED

Permit Report

Adjournments

NOTICE OF PUBLIC HEARING

A public hearing will be held on Monday, 4/10/2023 at 6:00 P.M. at the Bryant City Complex, 210 Southwest 3 Street. City of Bryant. Saline County, for the purpose of public comment on a conditional use request at the site of 3113 Whispering Oak Bryant, AR 72022. A legal description of the property can be obtained by contacting the Bryant Department of Community Development.

Rick Johnson

Chairman Board of Zoning Adjustment
City of Bryant



City of Bryant, Arkansas
Community Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

Conditional Use Permit Application

Applicants are advised to read the Conditional Use Permit section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at www.cityofbryant.com under the Planning and Community Development tab.

Date: 12/6/2022

Applicant or Designee:

Name Kelly Tucker
Address 9020 Chicot Road
Phone (501) 912-7964
Email Address: kellytucker50@gmail.com

Property Owner (If different from Applicant):

Name Kelly Tucker
Phone (501) 912-7964
Address 9020 Chicot Road, Little Rock, AR 72209
Email Address kellytucker50@gmail.com

Project Location:

Property Address 3113 Whispering Oak Street
Bryant, AR 72022
Parcel Number 840-08686-000
Zoning Classification _____

Additional Information:

Legal Description (Attach description if necessary)

Lot 17, Block 3, Sherwood Estates in the City of Bryant

Description of Conditional Use Request (Attach any necessary drawings or images)

Duplex

Proposed/Current Use of Property Vacant lot

Application Checklist

Requirements for Submission

- ☐ Letter stating request of Conditional Use and reasoning for request
- ☐ Completed Conditional Use Permit Application
- ☐ Submit Conditional Use Permit Application Fee (\$125)
- ☐ Submit Copy of completed Public Notice
- ☐ Publication: Public Notice shall be published at least one (1) time fifteen (15) days prior to the public hearing at which the variance will be heard. Once published please provide a proof of publication to the Community Development office.
- ☐ Posting of Property: The city shall provide a sign to post on the property involved for the fifteen (15) consecutive days leading up to Public hearing. One (1) sign is required for every two hundred (200) feet of street frontage.
- ☐ Submit eight (8) Copies of the Development Plan (Site Plan) showing:
 - Location, size, and use of buildings/signs/land or improvements
 - Location, size, and arrangement of driveways and parking. Ingress/Egress
 - Existing topography and proposed grading
 - Proposed and existing lighting
 - Proposed landscaping and screening
 - Use of adjacent properties
 - Scale, North Arrow, Vicinity Map
 - Additional information that may be requested by the administrative official due to unique conditions of the site.

Once the application is received, the material will be reviewed to make sure all the required information is provided. The applicant will be notified if additional information is required. The application will then go before the Development and Review Committee (DRC) for a recommendation to the Planning Commission. A public hearing will be held at this meeting for comments on the Conditional Use. After the public hearing, the Planning Commission will make a decision on the use.

Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.

READ CAREFULLY BEFORE SIGNING

I Kelly Tucker do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes and that it is my responsibility to obtain all necessary permits required.

Kelly Tucker
9020 Chicot Road
Little Rock, AR 72209

To: Bryant Development and Review Committee

We are requesting a Conditional Use Permit at the Property located at 3113 Whispering Oak Drive in Bryant Arkansas. We are going to build a 3 bedroom 2 bath duplex at that location. If you need any other information, please call me at 501-912-7964.

Sincerely,

7/11/12

Kelly Tucker
Kellytucker50@gmail.com

NOTICE OF PUBLIC HEARING

A public hearing will be held on Monday, 3/13/2023 at 6:00 P.M. at the Bryant City Complex, 210 Southwest 3 Street. City of Bryant, Saline County, for the purpose of public comment on a conditional use request at the site of 3113 Whispering Oak Bryant, AR 72022. A legal description of the property can be obtained by contacting the Bryant Department of Community Development.

Rick Johnson

Chairman Board of Zoning Adjustment
City of Bryant

NOTE:
Finished floor of building should be 2' above existing grade.
Slope away from building at 10%. FILE: DesignCAD 2D 2021 64-bit [kellytp:main]



City of Bryant, Arkansas
Community Development
210 SW 3rd Street Bryant, AR 72022
501-943-0488, Comdev@cityofbryant.com

General – Permit Application

Please complete both pages of this application and submit to the City of Bryant Permitting office, located at the address above.

Completed applications can also be scanned and emailed to Comdev@cityofbryant.com.

Date: 3-20-23

Permit Type:

☒ Electrical Permit ☒ Remodel Permit/Addition ☐ Burn Permit
☐ Plumbing Permit ☐ Demolition Permit ☐ Site Clearance Permit
☐ Mechanical Permit ☐ Accessory Building Permit ☐ Mobile Home Permit

Other if not listed above I want to Add An Addition onto my Existing Office

Contractor Information:

Contractor/Owner Kt Mac Enterprises LLC
Physical Address of Business 507 Boone Rd
City, State, Zip code Bryant AR 72022
Mailing Address (If different from Above) _____
City, State, Zip code _____
Email Address Kt-mac@ktmacenterprises.com
Business Phone 501-766-7777 Cell Phone 501-366-0841 Fax _____

Project Information:

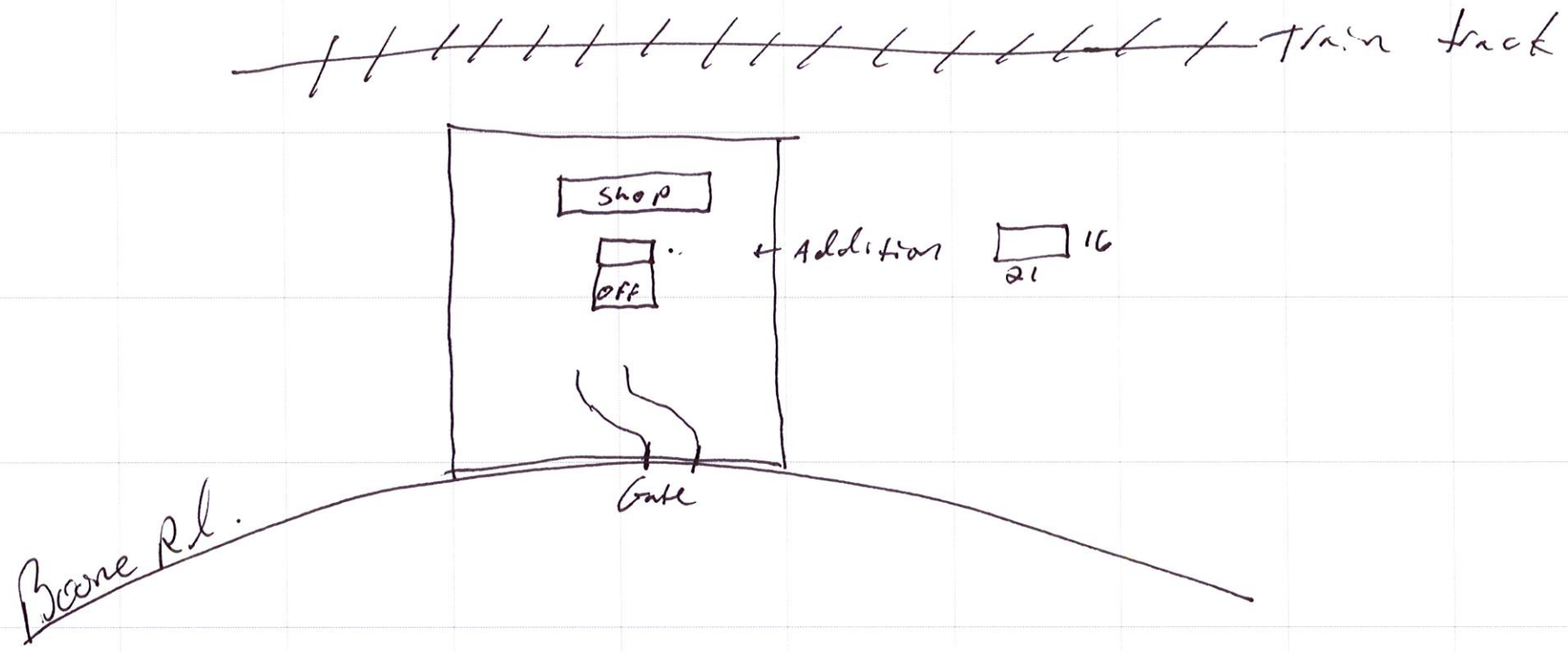
Project Address/Location 507 Boone Rd Bryant AR 72022
Project Cost \$14,500 Commercial or Residential? Comm
Square footage (If Applicable) 336




If new addition, will foam insulation be used? No ☒ Yes ☐ If "Yes", provide technical evaluation report on foam insulation type, and a copy of installer's certification. (Attach to application when submitted)

Additional Project Information Install Sub Floor Structure to South Side of Office
21'x16 Create New Walls & Roof to match Existing Structure
Brick New Addition to match, Paint Brick to match, new windows

D
C
B
A

1 2 3 4 5 6 7 8



APPROVED BY:			DESIGNED BY:	REV	DESCRIPTION	BY	DATE	NORTH:	SCALE:	NAME: <i>Kt Mc</i>		STRUCTURE TYPE: <i>Office</i>	SUBMITTAL DATE:	
TITLE			DRAWN BY:					 INDICATE NORTH ABOVE	 GRAPHIC SCALE	ADDRESS: <i>507 Boone Rd</i>		SQUARE FT: <i>336</i>	WORK ORDER NO.:	
TITLE										STREET: <i>Bryant</i>		LOT SIZE: <i>4 acres</i>		
TITLE										PHONE: <i>501-366-0841</i>				SHEET NO.: OF
TITLE				CHECKED BY:						BRYANT, ARKANSAS 72022				
TITLE														

XXXXXX.DWG

**New Facility For:
Butler Center
1109 N Reynolds Road
Bryant, AR 72022**

STORM WATER MAINTENANCE PLAN

The Butler Center owner will be responsible for the inspection and maintenance of the stormwater detention pond located on its.

Inspections are to be scheduled as directed in this document. All documentation on scheduled inspections, dates of inspections, and maintenance completed shall be retained by the Butler Center owner for a period of three years.

DETENTION PIPES

Annual Maintenance (as applicable):

- ☐ Check pipes for sediment in-fill, clean when necessary
- ☐ Check outlets for clogging with trash or dead vegetation, clean when necessary


Michael Butler
Butler Wealth Capital, LLC

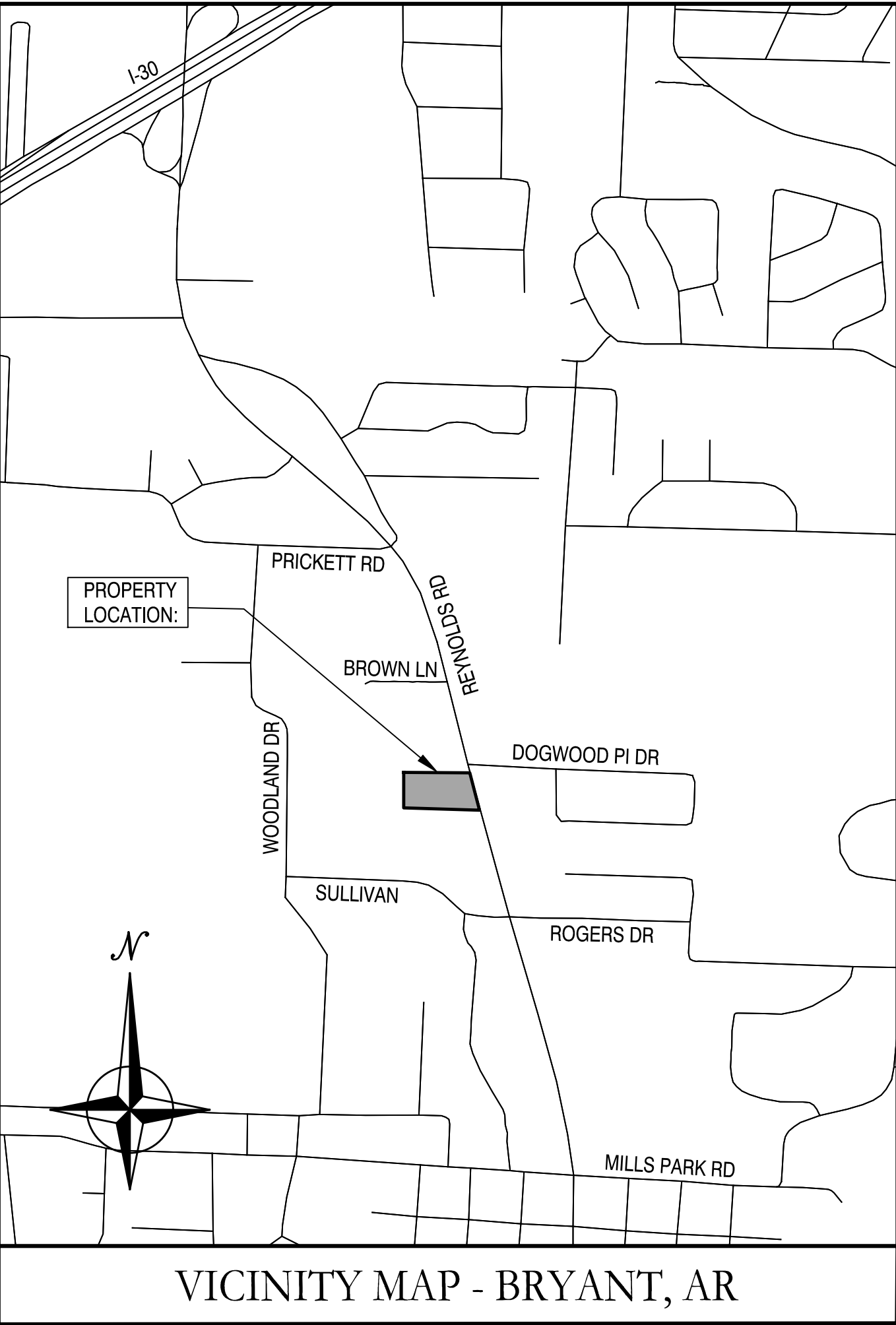
3-107-23
date

BUTLER CENTER

[illegible][illegible]

COMMENT:

NEW FACILITY FOR: BUTLER CENTER CITY OF BRYANT, AR



VICINITY MAP - BRYANT, AR

Prepared by:
GarNat Engineering, LLC
Designing our client's success
www.garnatengineering.com

P.O. Box 116
Benton, AR 72018
Ph (501) 408-4650

3825 Mt Carmel Road
Bryant, AR 72022
Fx (888) 900-3068



ARKANSAS



03-06-2023


DRAWING INDEX:

G1.0	GENERAL NOTES
V1.0	BUTLER CENTER SUBDIVISION - FINAL PLAT
D1.0	SITE DEMO PLAN
C1.0	SITE PLAN
C1.1	SITE DETAILS
C2.0	UTILITY PLAN
C3.0	GRADING & DRAINAGE PLAN
C3.1	DRAINAGE PROFILE & OUTLET STRUCTURE DETAILS
C3.2	OFFSITE DRAINAGE AND BMP
C4.0	EROSION CONTROL PLAN
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPING NOTES & DETAILS

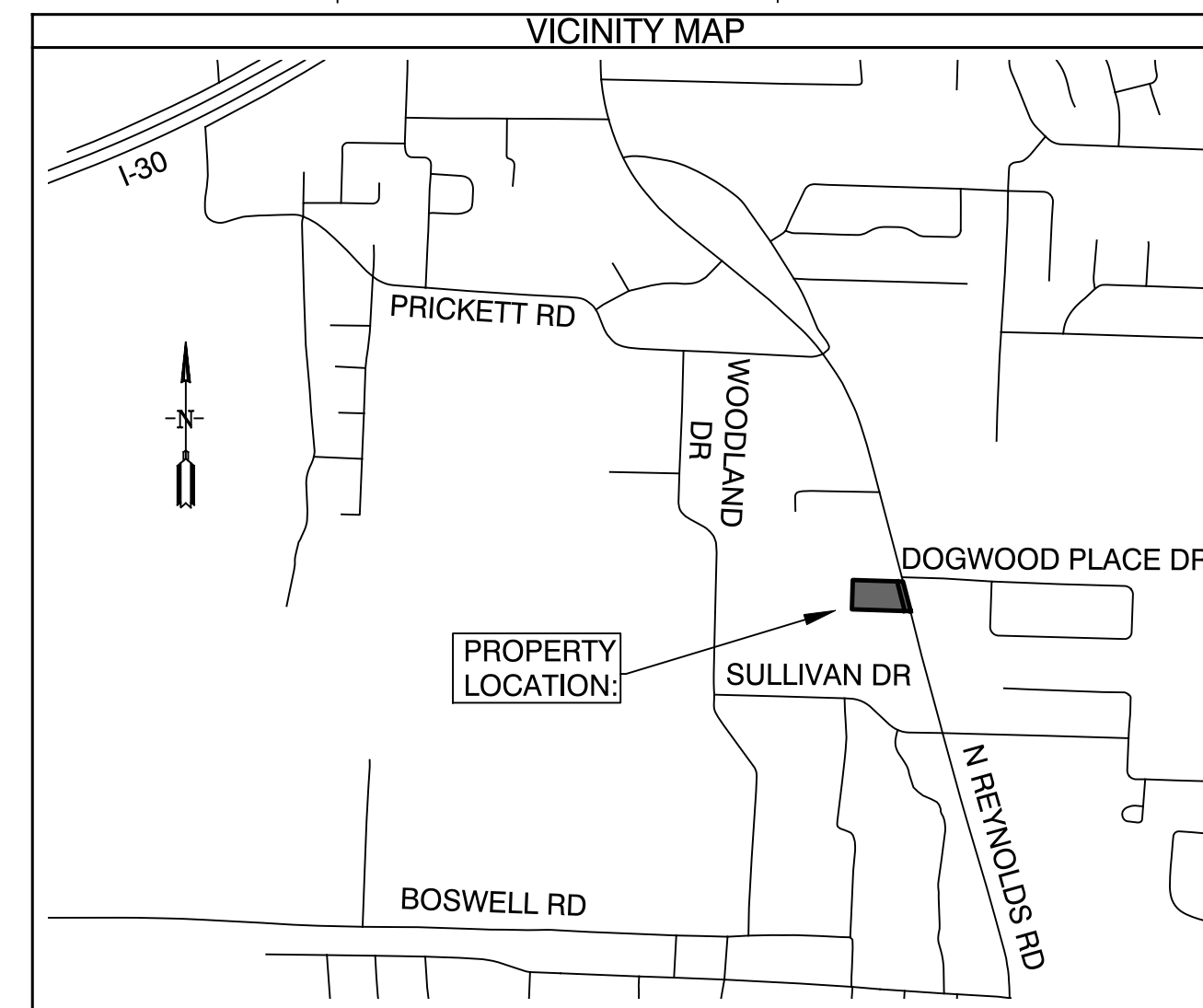
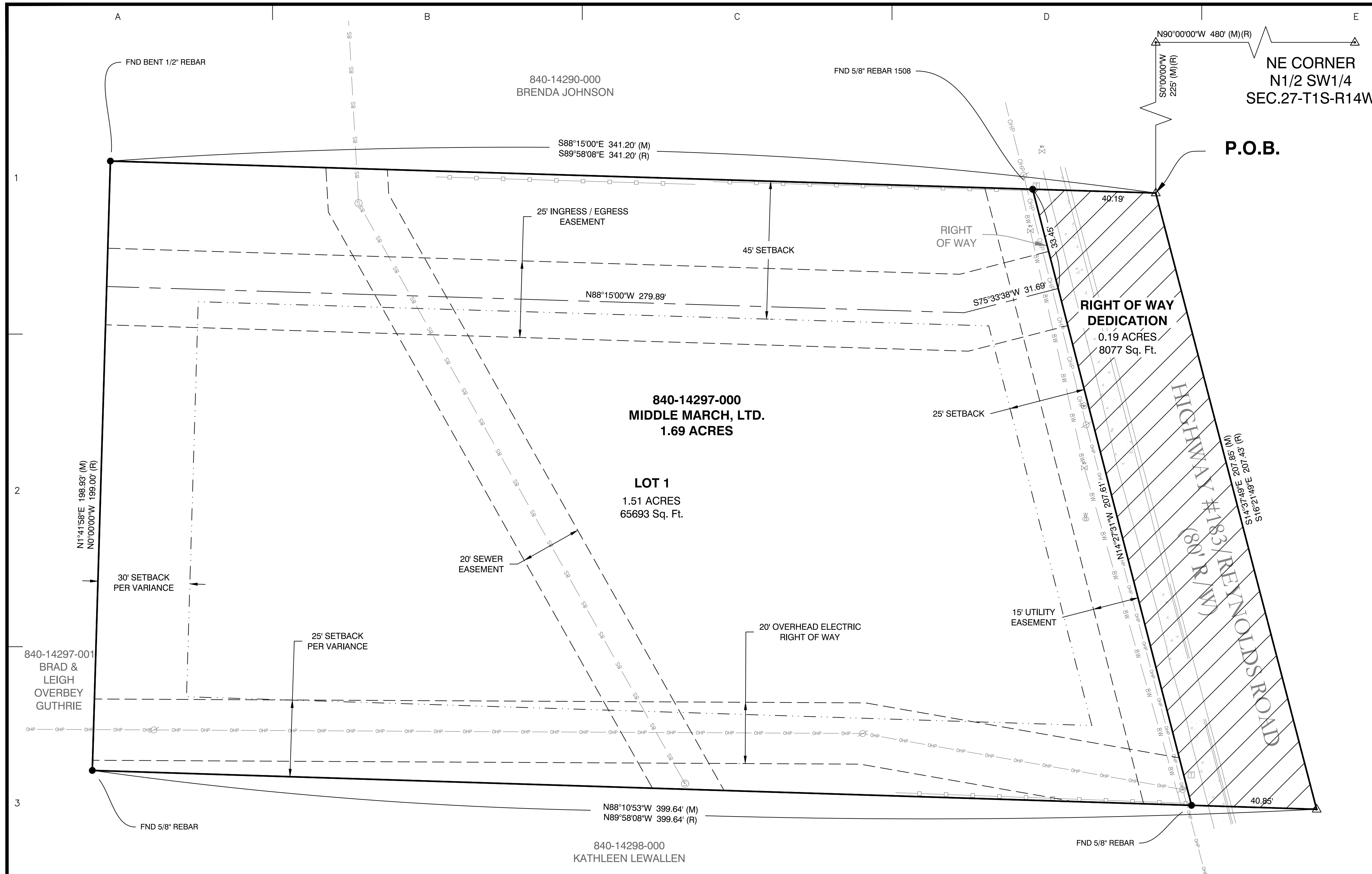
ARDOT STANDARD DRAWINGS:

CG-1	CURBING DETAILS
DR-1	DETAILS OF DRIVEWAYS & ISLANDS
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES
FPC-9E	DETAILS OF DROP INLETS (TYPE C)
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING
PCP-1	PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)
TEC-1	TEMPORARY EROSION CONTROL DEVICES
TEC-4	TEMPORARY EROSION CONTROL DEVICES
WR-2	WHEELCHAIR RAMPS ALTERATIONS ONLY

A		B		C		D		E		F	
1	1.	SAFETY		TO INVERT OUT.				12.1.		THE CONTRACTOR IS TO MEET ALL ENVIRONMENTAL REQUIREMENTS OF THE OWNER AND ANY REGULATORY AGENCY HAVING AUTHORITY OVER THIS SITE.	
	1.1.	JOBSITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE GENERAL CONTRACTOR.		7.2.		BEDDING FOR STORM STRUCTURES SHALL CONSIST OF A MINIMUM OF 6-INCHES OF COMPACTED #57 STONE ON TOP OF COMPACTED SUBGRADE.		12.2.		THE CONTRACTOR IS TO UTILIZE BEST MANAGEMENT PRACTICES (BMP'S) FOR CONTROL OF EROSION DURING ALL CONSTRUCTION PHASES OF THIS PROJECT.	
	1.2.	THIS RESPONSIBILITY COVERS THEIR OWN WORK FORCE, ALL SUBCONTRACTORS, VISITING PERSONNEL, OFFICIALS, AND THE GENERAL PUBLIC WHICH MAY HAVE ACCESS TO THE JOBSITE.		7.3.		AREAS EXPOSED BY EXCAVATION OR STRIPPING AND ON WHICH SUBGRADE PREPARATIONS ARE TO BE PERFORMED SHALL BE SCARIFIED TO MINIMUM DEPTH OF 0'-8" AND COMPACTED TO MINIMUM OF 95% OPTIMUM DENSITY. ANY AREAS THAT FAIL COMPACTION ARE TO BE STABILIZED AS DIRECTED BY THE ENGINEER.		12.3.		MINIMUM BMP'S REQUIRED FOR THE PROJECT ARE LISTED ON SHEET THESE PLANS. CONTRACTOR SHALL PROVIDE THESE BMP'S AND ANY OTHERS REQUIRED FOR THE PROJECT.	
	1.3.	THE CONTRACTOR SHALL EXERCISE COMPLETE CONTROL OVER WHO HAS ACCESS TO THE JOBSITE TO ENSURE JOBSITE SAFETY.		8.		PRIOR TO PLACING FILL IN LOW AREAS, SUCH AS PREVIOUSLY EXISTING CREEKS, PONDS, OR LAKES, PERFORM FOLLOWING PROCEDURES:		12.4.		CONTRACTOR SHALL KEEP WORK AREA CLEAN AND FREE OF ACCUMULATED TRASH AND DEBRIS. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING MEASURES TO AVOID TRACKING OF MUD, DIRT, ROCKS, AND DEBRIS ONTO AREAS OUTSIDE THE PROJECT AREA. CONTRACTOR SHALL CLEAN PAVEMENTS WHEN NECESSARY OR AS OTHERWISE DIRECTED, AND SHALL CONTROL DUST BY SWEEPING AND WATERING AS NEEDED. DE-TRACKING MAY BE REQUIRED AT ALL ENTRANCES.	
	1.4.	THE CONTRACTOR SHALL CONFORM TO ALL SECURITY AND SAFETY REQUIREMENTS OF THE OWNER.		8.1.		DRAIN WATER OUT BY GRAVITY WITH DITCH HAVING FLOW LINE LOWER THAN LOWEST ELEVATION IN LOW AREA. IF DRAINAGE CANNOT BE PERFORMED BY GRAVITY DITCH, USE ADEQUATE PUMP TO OBTAIN THE SAME RESULTS.		13.		FINAL SITE CONDITIONS	
2	2.	PERMITS		8.2.		AFTER DRAINAGE OF LOW AREA IS COMPLETE, REMOVE MULCH, MUD DEBRIS, AND OTHER UNSUITABLE MATERIAL BY USING ACCEPTABLE EQUIPMENT AND METHODS THAT WILL KEEP NATURAL SOILS UNDERLYING LOW AREA DRY AND UNDISTURBED.		13.1.		ALL DISTURBED AREAS NOT RECEIVING PAVEMENT OR LANDSCAPING SHALL HAVE VEGETATION ESTABLISHED AT TIME OF FINAL INSPECTION.	
	2.1.	CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS AS REQUIRED BY REGULATING AUTHORITIES OR BY THE OWNER. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE TERMS AND CONDITIONS ASSOCIATED WITH EACH REQUIRED PERMIT, AS WELL AS ADHERING TO THE RULES AND REGULATIONS OF EACH REGULATING AUTHORITY		9.		UTILITIES		13.2.		ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPE 2H:1V OR STEEPER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.	
	3.	CONTRACT DOCUMENTS		9.1.		AN ATTEMPT HAS BEEN MADE TO APPROXIMATELY LOCATE UTILITIES ON THE DRAWINGS.		13.3.		ALL CUT OR FILL SLOPES SHALL BE 3H:1V OR FLATTER UNLESS OTHERWISE NOTED.	
	3.1.	ALL WORK SHALL CONFORM TO THE PLANS, THESE NOTES, AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.		9.2.		UTILITIES SHOWN ON THE DRAWINGS WERE LOCATED BY VISUAL OBSERVATION, AND BY TRANSCRIBING FROM RECORD MAPS AND PLANS.		13.4.		CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS	
	4.	INDEMNITY		9.3.		NO EXCAVATIONS WERE MADE TO CONFIRM SUB-SURFACE UTILITIES. NEITHER THE SURVEYOR NOR PROJECT ENGINEER GUARANTEES THAT ALL UTILITIES HAVE BEEN SHOWN, OR THAT THOSE SHOWN ARE FULLY ACCURATE.		13.5.		UPON PARTIAL OR FINAL COMPLETION OF GRADING WORK, SPREAD TOPSOIL, SEED, FERTILIZER, AND MULCH IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE STORM WATER POLLUTION PREVENTION PLAN.	
3	4.1.	BY ACCEPTING THE CONTRACT FOR THIS WORK, THE CONTRACTOR, AT THEIR OWN EXPENSE AND RISK, HEREBY RELEASES AND AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, GARNAT ENGINEERING, THEIR OFFICERS, AGENTS, EMPLOYEES, CONSULTANTS, AND REPRESENTATIVES FOR DAMAGE TO THE PROPERTY OR INJURY TO, OR DEATH, OF ANY PERSONS, FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS OF ANY KIND WHATSOEVER ARISING OUT OF AND IN CONNECTION WITH THE AGREEMENT OR PROSECUTION OF WORK UNDER IT, WHETHER SUCH CLAIMS, DEMANDS, ACTIONS, OR LIABILITY ARE CAUSED BY THE CONTRACTOR, IT'S AGENTS, EMPLOYEES, SUBCONTRACTORS, PRODUCTS INSTALLED ON THE PROJECT OR CAUSED BY ANY OTHER PARTY.		9.4.		CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADJUSTMENTS AND/OR RELOCATION OF EXISTING UTILITIES THAT ARE DAMAGED AS A RESULT OF WORK OF THIS PROJECT.		14.		TRAFFIC CONTROL	
	5.	CONSTRUCTION PROCEDURES, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING STANDARDS UNLESS OTHERWISE MODIFIED ON THE DRAWINGS OR IN THESE NOTES OR SPECIFICATIONS.		9.5.		CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROPERLY DISCONNECTING, ABANDONING, RELOCATING, AND/OR ADJUSTING ALL AFFECTED UTILITIES WITHIN THE PROJECT AREA.		14.1.		CONTRACTOR SHALL ENGAGE A SUBCONSULTANT WHO SPECIALIZES IN MAINTENANCE OF TRAFFIC PLANS. SUBCONSULTANT SHALL PREPARE A MAINTENANCE OF TRAFFIC PLAN FOR THE PROJECT THAT COMPLIES WITH THE REQUIREMENTS OF MUTCD AND ALL APPLICABLE AUTHORITIES HAVING JURISDICTION OVER ROAD RIGHT-OF-WAY. CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLAN TO ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK.	
	5.1.	STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT		9.6.		ALL UTILITY WORK SHALL BE COORDINATED AND EXECUTED IN ACCORDANCE WITH THE OWNER AND/OR GOVERNING UTILITY COMPANY CODES, SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.					
	5.2.	INTERNATIONAL BUILDING CODE		9.7.		DESIGN AND ALIGNMENT OF UNDERGROUND TELEPHONE, TV CABLE, GAS AND ELECTRIC SERVICES SHALL BE PROVIDED BY THE INDIVIDUAL UTILITIES AND ARE NOT NECESSARILY SHOWN WITH THESE PLANS. CONTRACTOR SHALL PROVIDE CONDUITS SIZED TO ACCOMMODATE UTILITY ROUTING WITH PULL STRINGS WHERE NECESSARY.					
	5.3.	ACI 315 MANUAL OF STANDARD PRACTICES FOR DETAILING REINFORCED CONCRETE STRUCTURES		9.8.		CONTRACTOR TO PROVIDE ALL NECESSARY APPURTENANCES NECESSARY FOR COMPLETE UTILITY SERVICES WHICH ARE NOT PROVIDED BY THE UTILITY COMPANY.					
4	5.4.	CRSI RECOMMENDED PRACTICE FOR PLACING REINFORCING STEEL.		9.9.		WATER AND SEWER RELOCATIONS SHOWN SHALL COMPLY WITH THE CITY OF BRYANT'S STANDARD WATER AND SEWER SPECIFICATIONS AND DETAILS. SERVICE LINE WORK SHALL BE COMPLETED BY A LICENSED PLUMBER AND COMPLY WITH ARKANSAS PLUMBING CODE.					
	5.5.	CITY OF BRYANT STANDARD SPECIFICATIONS.		10.		DISPOSAL OF DEBRIS, WASTE OR SPOIL					
	5.6.	LATEST EDITIONS OF AWWA, ASTM, ADH, AND TEN STATES STANDARDS.		10.1.		BURNING OF DEBRIS AND WASTE IS NOT ALLOWED. CONTRACTOR MAY BE REQUIRED TO PROPERLY HAUL AWAY AND DISPOSE OF ANY WASTE MATERIAL REMOVED FROM THE SITE.					
	6.	SITE		10.2.		ANY WASTE OR SPOIL MATERIAL WHICH IS EXCAVATED FROM THE JOB SITE IS TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER OR OWNER.					
	6.1.	CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS.		10.3.		REMOVAL AND DISPOSAL OF EXCAVATED WASTE MATERIAL IS CONSIDERED SUBSIDIARY TO ALL OTHER ITEMS IN THE PROJECT, AND WILL NOT BE PAID FOR SEPARATELY.					
	6.2.	CONTRACTOR IS NOT TO PERFORM WORK BEYOND THE DESIGNATED WORK LIMITS WITHOUT FIRST OBTAINING WRITTEN AUTHORIZATION FROM THE PROJECT ENGINEER OR OWNER.		10.4.		CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE AND FEDERAL REGULATIONS IN DISPOSING OF DEMOLISHED MATERIAL REMOVED FROM THIS SITE.					
	6.3.	CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO: DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN EXISTING CONDITIONS.		10.5.		CONTRACTOR SHALL REMOVE FROM SITE AND DISPOSE OF MATERIAL ENCOUNTERED IN GRADING OPERATIONS THAT, IN OPINION OF THE ENGINEER, IS UNSUITABLE OR UNDESIRABLE FOR BACKFILLING OR SUBGRADE PURPOSES. DISPOSE OF IN A MANNER SATISFACTORY TO ENGINEER. BACKFILL UNDERCUT AREAS WITH LAYERS OF SUITABLE MATERIAL AND COMPACT AS SPECIFIED HEREIN.					
	6.4.	CONTRACTOR TO REMOVE OR RELOCATE, WHEN APPLICABLE, ALL ITEMS, SHOWN TO BE REMOVED OR RELOCATED AND NOT SHOWN WITHIN CONSTRUCTION LIMITS AND WHERE REQUIRED TO ALLOW FOR NEW CONSTRUCTION AS SHOWN.		11.		SUBSTITUTIONS					
	6.5.	CONTRACTOR TO ADJUST ALL EXISTING AND PROPOSED MANHOLES, VALVE BOXES, ETC. TO FINISH GRADE, WHERE REQUIRED.		11.1.		SUBSTITUTIONS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL FROM THE PROJECT ENGINEER.					
	7.	STRUCTURES		12.		ENVIRONMENTAL					
	7.1.	ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT IN									
A		B		C		D		E		F	

BY							
REVISION							
DATE							
Designing our client's success		GarNat Engineering, LLC 3825 Mt Carmel Rd Bryant, AR 72022 garnatengineering@gmail.com					
NEW FACILITY FOR: BUTLER CENTER CITY OF BRYANT, AR							
							
03-06-2023							
CONTENTS:							
GENERAL NOTES							
PROJECT NO: 22203							
DATE: FEB 2023							
SHEET NO:							
G1.0							

\\Project\2023 Project\2203 Butler Center 1108 North Reynolds Road, Bryant, Arkansas 72022 - 0306-04



DESCRIPTIONS:

OVERALL PROPERTY DESCRIPTION:
PART OF THE NORTH HALF OF THE SOUTHWEST QUARTER (N1/2 SW1/4) OF SECTION 27, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS: **BEGINNING** AT A COMPUTED POINT IN THE CENTERLINE OF HIGHWAY #183 (NORTH REYNOLDS ROAD), WHICH IS 480 WEST AND 225 FEET SOUTH OF THE NORTHEAST CORNER OF THE SAID N1/2 SW1/4; THENCE S14°37'49"E - 207.85 FEET ALONG SAID CENTERLINE OF HIGHWAY #183 TO A COMPUTED POINT; THENCE LEAVING SAID CENTERLINE OF HIGHWAY #183, N88°10'53"W - 399.64 FEET TO A FOUND S5°8" E/REAR; THENCE N41°58'E - 198.93 FEET TO A FOUND BEAT 1/2" REAR; THENCE S88°15'00"E - 341.20 FEET TO THE **POINT OF BEGINNING**, CONTAINING 1.69 ACRES, MORE OR LESS, SUBJECT TO A RIGHT OF WAY FOR (HIGHWAY #183) REYNOLDS ROAD AND UTILITY EASEMENT ALONG EAST LINE.

RIGHT OF WAY DEDICATION:
 PART OF THE NORTH HALF OF THE SOUTHWEST QUARTER (N1/2 SW1/4) OF SECTION 27, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS: **BEGINNING** AT A COMPUTED POINT IN THE CENTERLINE OF HIGHWAY #183 (NORTH REYNOLDS ROAD), WHICH IS 480 WEST AND 225 FEET SOUTH OF THE NORTHEAST CORNER OF THE SAID N1/2 SW1/4; THENCE S14°37'49"E - 207.85 FEET ALONG SAID CENTERLINE OF HIGHWAY #183 TO A COMPUTED POINT; THENCE LEAVING SAID CENTERLINE OF HIGHWAY #183, N88°10'53"W - 40.85 FEET TO A FOUND 5/8" REBAR; THENCE N14°27'31"W - 207.61 FEET TO A FOUND 5/8" REBAR WITH CAP #1508; THENCE S88°15'00"E - 40.19 FEET TO THE POINT OF **BEGINNING**, CONTAINING 0.19 ACRES. MORE OR LESS.

DOCUMENTS USED:

- PREVIOUS SURVEY BY HOPE CONSULTING DATED 10/24/95
- DEED BOOK 1996 PAGE 17127

BASIS OF BEARINGS:

BENCHMARK(S) PROVIDED ARE REBAR AND COORDINATES ON BENCHMARKS ARE NORTH AMERICAN DATUM 1983, ARKANSAS NORTH ZONE, US SURVEY FEET, GRID COORDINATES AND ELEVATIONS ARE NAVD 1988. COORDINATES AND ELEVATIONS WERE ESTABLISHED USING GPS AND WERE PROCESSED UNDER THE NATIONAL GEODETIC SURVEYS' 'ONLINE POSITIONING USER SERVICE' (OPUS).

CERTIFICATIONS:

BY AFFIXING MY SEAL AND SIGNATURE, I GEORGE P. WOODEN, PS NO.1573, HEREBY
CERTIFY THAT THIS DRAWING CORRECTLY DEPICTS A SURVEY COMPILED UNDER MY
SUPERVISION ON DECEMBER 2, 2022.

THIS SURVEY WAS BASED ON LEGAL DESCRIPTIONS AND TITLE WORK FURNISHED BY OTHERS AND DOES NOT REPRESENT A TITLE SEARCH.

THIS PROPERTY IS NOT LOCATED IN THE 100 YEAR FLOOD PLAIN. THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN ZONE "X" OF THE F.E.M.A. MAP PANEL 05125C0380E EFFECTIVE DATE JUNE 05, 2020.

PLAT CERTIFICATES			
OWNER:		DEVELOPER:	
Name: _____ Middle March, LTD.		Name: _____ Middle March, LTD.	
Address: _____ P.O. Box 864 Bryant, AR 72089-0864		Address: _____ P.O. Box 864 Bryant, AR 72089-0864	
<u>CERTIFICATE OF OWNER:</u> We, the undersigned, owners of the real estate shown and described herein do hereby certify that we have laid off, platted and subdivided, and do hereby lay off, plat and subdivide said real estate in accordance with the within plat.			
Date: _____		Signed: _____ Kenny Whitfield Middle March, LTD.	
Source of Title: <u>SALINE COUNTY, ARKANSAS</u> Saline County Document# <u>1996 - 17127</u>			
<u>CERTIFICATE OF ENGINEERING ACCURACY:</u> I, Vernon J. Williams, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision, that all monuments shown hereon actually exist and their locations, size, type, and material are correctly shown; and that all requirements of the City of Bryant Subdivision Rules and Regulations have been fully complied with.			
Date: _____		Signed: _____ Vernon J. Williams Registered Professional Engineer No. 9551, Arkansas	
<u>CERTIFICATE OF RECORDING:</u>			
<u>CERTIFICATE OF SURVEYING ACCURACY:</u> I, George P. Wooden, hereby certify that this plat correctly represents a boundary survey made by me or under my supervision; that the boundary lines shown hereon correspond with the description in the deeds cited in the above Source of Title; and that all monuments which were found or placed on the property are correctly described and located.			
Date: _____		Signed: _____ George P. Wooden Registered Land Surveyor No. 1573, Arkansas	
<u>CERTIFICATE OF FINAL PLAT APPROVAL:</u> Pursuant to the City of Bryant Subdivision Rules and Regulations, this document was given approval by the Bryant Planning Commission. All of the document is hereby accepted, and this certificate executed under the authority of said rules and regulations.			
Date: _____		Signed: _____ Rick Johnson, Chairman Bryant Planning Commission	

PROPERTY SPECIFICATIONS:

ZONING CLASSIFICATION: C2

SOURCE OF WATER: CITY OF BRYANT
SOURCE OF SEWER: CITY OF BRYANT

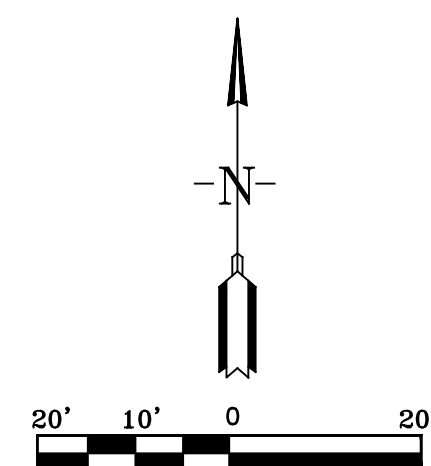
BUILDING SETBACKS (SB):
FRONT - 25' (MIN. 15')
REAR - 30'
INTERIOR (SIDE) - AS SHOWN

LOT CORNERS: SET #4 REBAR WITH CAP

SURVEY LEGEND

- ▲ - Computed point
 ● - Found monument
 ⊙ - Set #4 RB/Plas. Cap
 (M)-Measured
 (R)-Record
 (P)-Platted

BUTLER CENTER
SUBDIVISION
FINAL PLAT



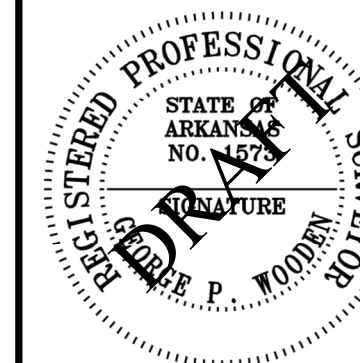
SURVEY PLAT CODE:
500-01S-14W-0-27-300-62-1573

[illegible]

GNE
Designing our client's success

GarNat Engineering, LLC
3825 Mt Carmel Rd
Bryant, AR 72022
garnatengineering@gmail.com

BUTLER CENTER
SUBDIVISION
BRYANT, ARKANSAS



CONTENTS:

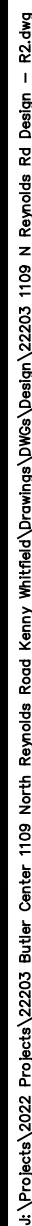
FINAL
PLAT

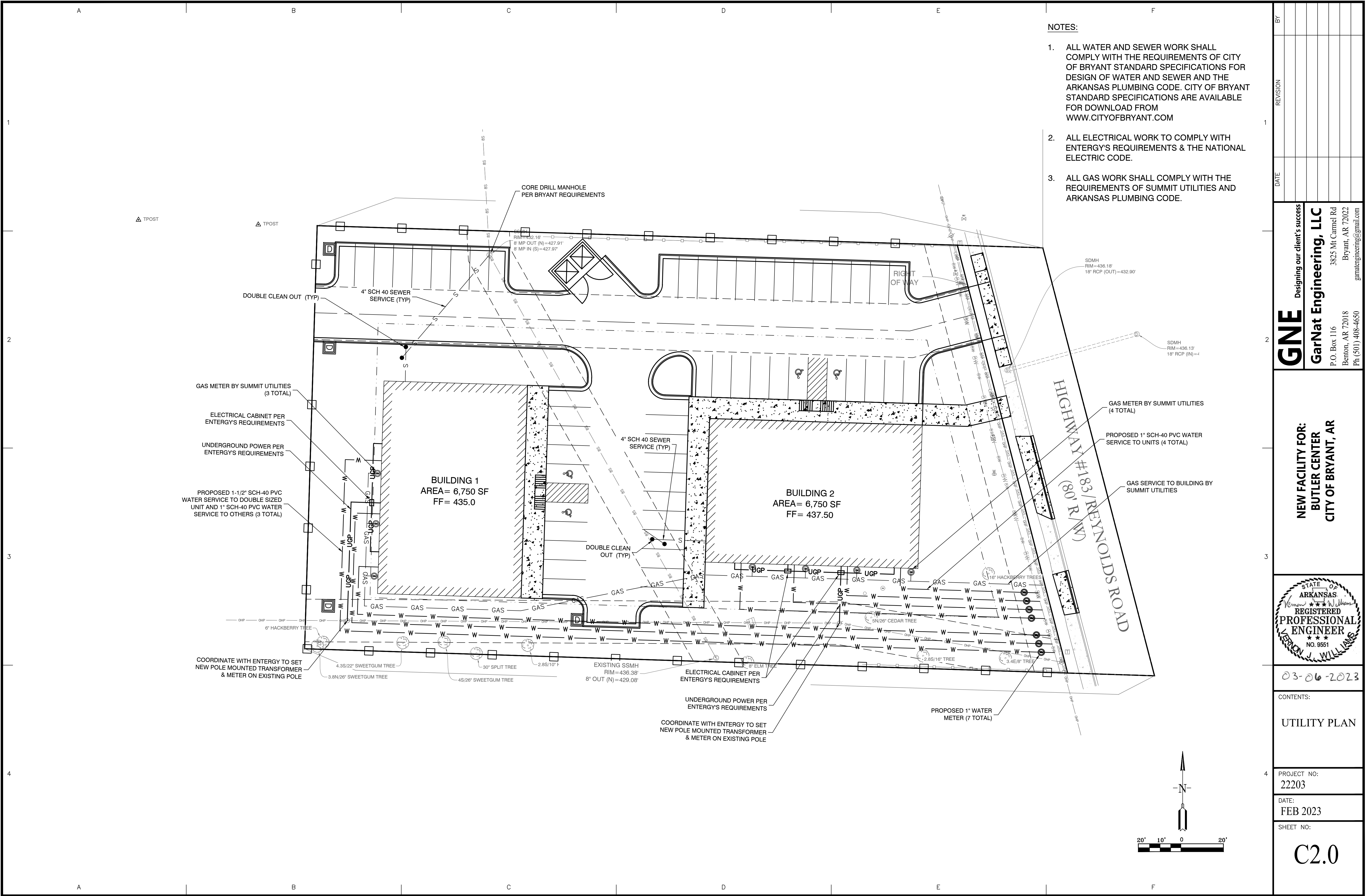
PROJECT NO:

DATE:
MAR. 21, 2023

SHEET NO:

V1.0





- NOTES:
1. ALL WATER AND SEWER WORK SHALL COMPLY WITH THE REQUIREMENTS OF CITY OF BRYANT STANDARD SPECIFICATIONS FOR DESIGN OF WATER AND SEWER AND THE ARKANSAS PLUMBING CODE. CITY OF BRYANT STANDARD SPECIFICATIONS ARE AVAILABLE FOR DOWNLOAD FROM WWW.CITYOFBRYANT.COM
 2. ALL ELECTRICAL WORK TO COMPLY WITH ENTERGY'S REQUIREMENTS & THE NATIONAL ELECTRIC CODE.
 3. ALL GAS WORK SHALL COMPLY WITH THE REQUIREMENTS OF SUMMIT UTILITIES AND ARKANSAS PLUMBING CODE.

Designing our client's success

GarNat Engineering, LLC

P.O. Box 116
Benton, AR 72018
Ph (501) 408-4650

3825 Mt Carmel Rd
Bryant, AR 72022
gamateengineering@gmail.com

**NEW FACILITY FOR:
BUTLER CENTER
CITY OF BRYANT, AR**



03-06-2023

CONTENTS:

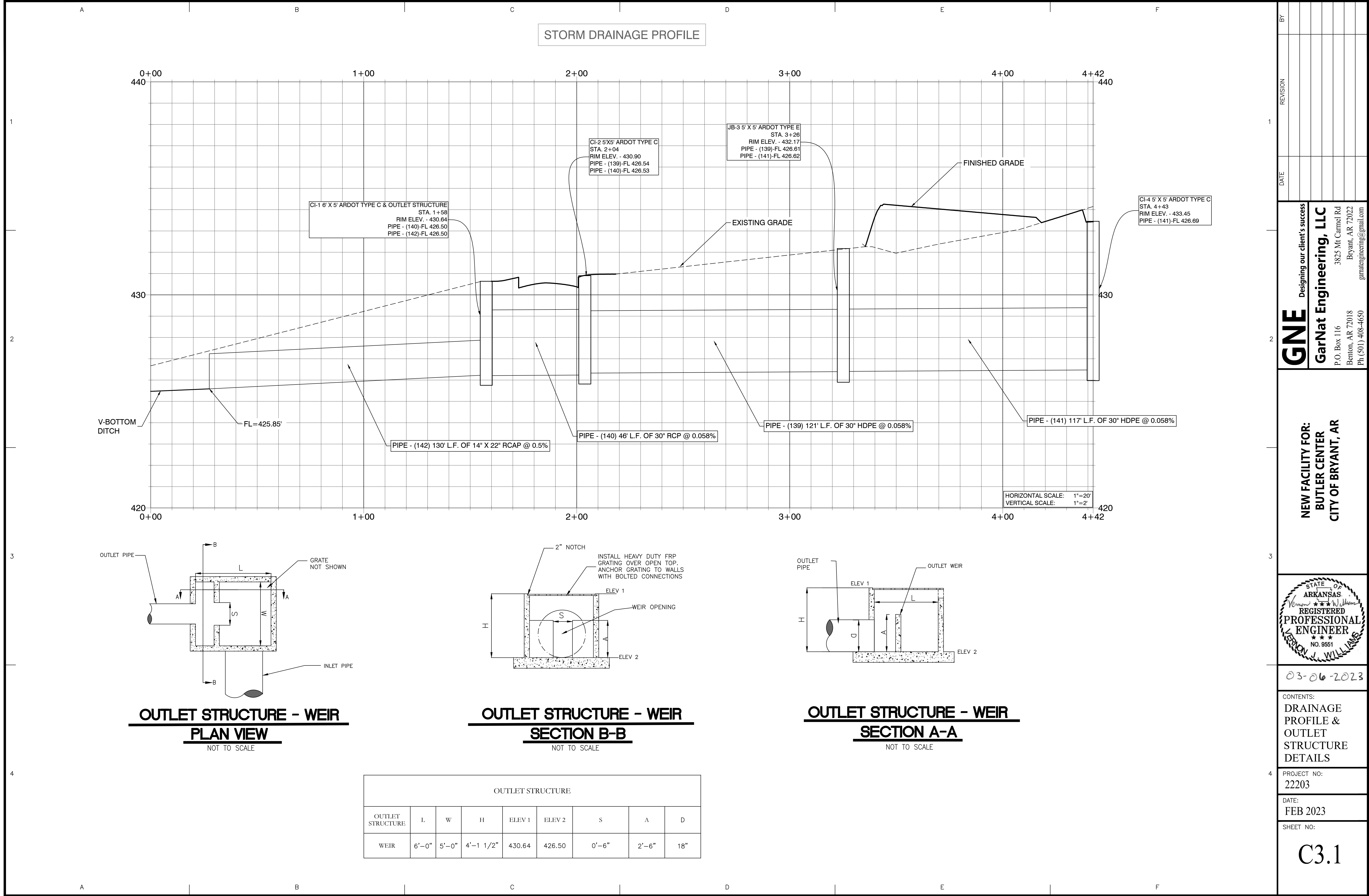
UTILITY PLAN

PROJECT NO:
22203

DATE:
FEB 2023

SHEET NO:

C2.0

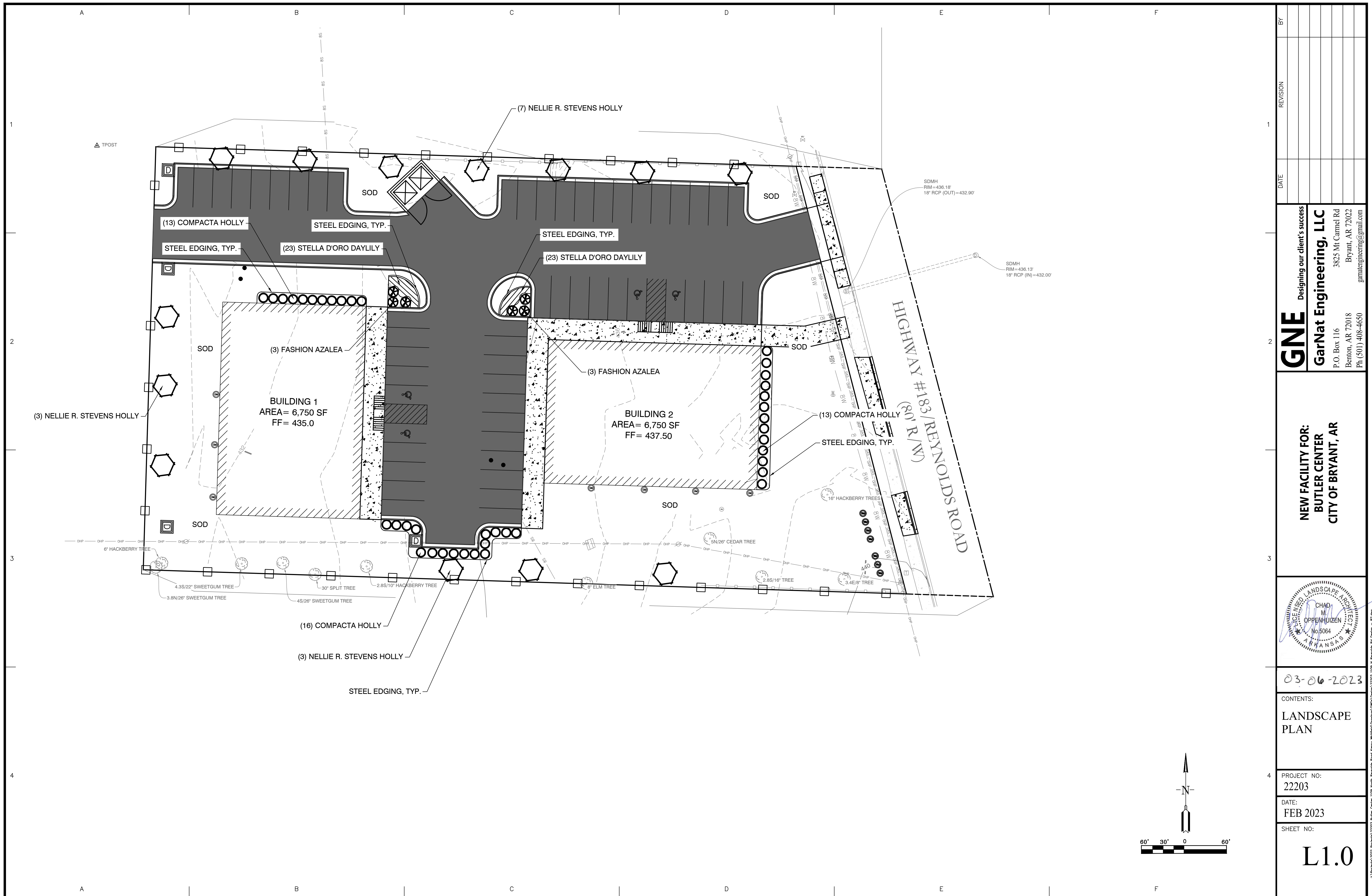




30' 15' 0 30

C4.0

C4.0



LANDSCAPING NOTES:

1. REPORT ANY DISCREPANCIES FOUND IN THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADVISE THE DESIGNER OF ANY CONDITION FOUND ON THE SITE WHICH PROHIBITS INSTALLATION AS SHOWN ON THESE DRAWINGS.

2. THE NUMBER OF PLANTS OR INTENDED COVERAGE AREAS SHOWN SHALL SUPERSEDE NOTED QUANTITIES. TREE LOCATIONS ARE DIAGRAMMATIC.

3. ALL PLANT MATERIALS MUST BE APPROVED PRIOR TO INSTALLATION. SUBSTITUTIONS OF SIZE OR TYPE OF MATERIAL ARE NOT PERMITTED WITHOUT WRITTEN APPROVAL PRIOR TO DELIVERY OR INSTALLATION.

4. ALL PLANT MATERIALS SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION. REPLACE ANY DAMAGED, DESTROYED, OR REMOVED PLANT MATERIALS WITH THE SAME VARIETY AND SIZE PRIOR TO FINAL ACCEPTANCE.

5. PLANT STORAGE TO BE LOCATED OUT OF VEHICULAR USE AREAS AND NEAR A WATERING SYSTEM TO OPTIMIZE SURVIVAL.

6. ALL PLANTING BEDS SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.

7. ALL PLANTING BEDS SHALL BE MULCHED WITH 3-INCHES SHREDDED HARDWOOD OR CYPRESS MUCH.

8. ALL SHRUBS AND TREES SHALL RECEIVE PLANTING BACKFILL OF 2/3 TOPSOIL AND 1/3 COMPOST BY VOLUME AND 2 POUNDS OF 14-14-14 TIMED-RELEASE FERTILIZER PER CUBIC YARD OF BACKFILL.

9. ALL BEDS INSIDE LAWN AREAS TO BE EDGED WITH 4" PAINTED STEEL EDGING.

10. ALL TREES AND SHRUBS SHALL BE THOROUGHLY WATERED IMMEDIATELY AFTER PLANTING.

11. TREES SHALL NOT BE TOPPED AT ANY TIME. PROPER TREE PRUNING TECHNIQUES AS ESTABLISHED BY THE LATEST EDITION OF ANSI A300 STANDARDS FOR TREE CARE SHALL BE UTILIZED FOR MAINTENANCE PURPOSES.

12. COORDINATE ALL INSTALLATION ACTIVITIES WITH IRRIGATION WORK AND IMMEDIATELY REPAIR DAMAGES TO FINISH GRADES, SOD, AND PLANT MATERIALS UNTIL FINAL ACCEPTANCE.

13. SEE GRADING AND DRAINAGE PLAN FOR PROPOSED SLOPES, SWALES, BERMS, AND WATER FEATURES. MAINTAIN PROPER FINISH GRADES IN ALL AREAS AS INDICATED.

14. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING, REMOVAL OF MISCELLANEOUS DEBRIS AND ANY ADDITIONAL FILL REQUIRED TO PROVIDE MINIMUM TOPSOIL DEPTHS AND CREATE A SMOOTH CONDITION PRIOR TO PLANTING IN ALL AREAS.

15. TOPSOIL SHALL BE FREE OF STONES, ROOTS, CLODS, AND ANY OTHER FOREIGN MATERIAL THAT IS NOT BENEFICIAL FROM PLANT GROWTH.

16. LANDSCAPE AND OPEN AREAS SHALL BE KEPT FREE OF TRASH, LITTER, AND WEEDS AT ALL TIMES DURING CONSTRUCTION.

17. IDENTIFICATION LABELS MUST BE ATTACHED TO ALL PLANT MATERIALS AND SHALL REMAIN INTACT UNTIL FINAL ACCEPTANCE OF THE WORK. REMOVE ALL TAGS AND LABELS FOLLOWING FINAL ACCEPTANCE.

18. CALIPER OF TREES TO BE MEASURED 6-INCHES ABOVE GROUND LEVEL FOR TREES UP TO 4-INCH CALIPER SIZE.

19. GENERAL CONTRACTOR SHALL PROVIDE 6-INCH DIAMETER MINIMUM SCHEDULE 40 PVC SLEEVING FOR IRRIGATION TO ALL CURB ISLANDS AND UNDER ALL DRIVE ISLE CROSSINGS.

20. CONTRACTOR TO REFER TO THE UTILITY PLAN SHEET FOR RECENT FIRE FLOW INFORMATION.

LEGEND:

PLAN QUANTITIES:

	Quantity	Common Name/Botanical Name	Size	Remarks
	13	Nellie R. Stevens Holly Ilex x 'Nellie R. Stevens'	10/15 gallon, 3-4' tall	Specimen with positive upright form and symmetrical. Well branched canopies.
	40	Compacta Holly Ilex crenata 'Compacta'	3 gallon	Full well branched shrub with uniform shape.
	6	Fashion Azalea Rhododendron 'Fashion'	3 gallon	Full well branched shrub with uniform shape.
	46	Stella D'Oro Daylily Hemerocallis x Stella D'oro	1 gallon	Plant 18" o.c.
	Contractor to measure	Bermuda Tifway 419 Cynodon Dactylon var. Tifway 419	Sod	Solid sod, all areas indicated with close knit joints

NOTE: PLANTS SHALL BE SET SLIGHTLY HIGHER THAN GRADE TO ALLOW FOR SETTLING & POSITIVE DRAINAGE.

PLACE TIES ABOVE LOWEST SCAFFOLD BRANCHES

NO. 10 GALV. WIRE THRU 1/2" RUBBER HOSE, TWIST OR ANCHOR WIRE TO STAKE, MIN. 2 PER STAKE

6'-0" GREEN STEEL PREPAINTED T-POST WITH 6' FLUORESCENT WHITE/SILVER TOP TREE STAKE, MIN. 3 REQUIRED AT 120 DEGREES AROUND TREE

6" SURVEYORS TAPE ON ALL GUY WIRES (TYP.)

COMMERCIAL TREE WRAP. NEATLY WRAP SPIRALLY FROM BOTTOM. TIE WITH SUITABLE CORD. PROVIDE WHEN SPECIFIED.

MULCH MIN. 3" PULL MULCH BACK 2" FROM BASE OF TRUNK

REMOVE BURLAP FROM TOP OF ROOTBALL AND REMOVE ALL TIES. FOLD BACK BURLAP AT TOP OF BALL. WHEN PRESENT, REMOVE ALL SYNTHETIC BURLAP.

WATER RETENTION SAUCER (TEMPORARY)

AGRIFORM TABLET AS PER SPECIFICATIONS MAX. 6" BELOW SURFACE

COMPACTED SUBGRADE

PREPARED BACKFILL PROVIDE HOMOGENOUS MIXTURE AS SPECIFIED OF 3:1:1 RATIO OF TOPSOIL, PEATMOSS AND SAND OR OTHER APPROVED SOIL AMENDMENTS.

SLASH BURLAP THREE TIMES

12" COMPACTED BACKFILL

LAYER OF MIXED SUBSOIL WITH PLANTING MEDIUM

BREAK SUBSOIL WITH PICK AX

NOTE: PLACE ALL PVC LATERALS OUTSIDE OF ROOTBALL

NOTE: PROVIDE FERTILOME FOOD STIMULATOR IN EACH TREE PIT.

1

LI

TREE PLANTING DETAIL

No Scale

SODDING OF DISTURBED AREAS

AREAS AND LIMITS OF SODDING ARE INDICATED BASED ON ANTICIPATED DISTURBANCE BY GRADING OPERATIONS. CONTRACTOR TO PROVIDE ADDITIONAL SODDING IN ANY OTHER AREAS DISTURBED BY WORK UNDER THIS CONTRACT. EXCAVATE AND REMOVE ANY REMAINING TURF AND SOIL TO A 4-INCH MINIMUM DEPTH WITHIN NEW SOD AREAS. HAND EXCAVATION REQUIRED WITHIN DRIP LINES OF TREE AREAS TO AVOID DAMAGE TO EXISTING ROOTS. CONTRACTOR TO INSTALL MINIMUM OF 3" OF TOPSOIL TO ALL AREAS TO BE SODDED OR SEEDED. FINE GRADE THE TOPSOIL TO ENSURE POSITIVE DRAINAGE AND A SMOOTH SURFACE FOR SOD INSTALLATION.

MAINTENANCE AND WARRANTY

CONTRACTOR TO PROVIDE FULL MAINTENANCE OF INSTALLED LANDSCAPE AND IRRIGATION UNTIL DATE OF FINAL ACCEPTANCE. ADDITIONALLY, CONTRACTOR TO PROVIDE ONE YEAR WARRANTY FOR ALL LANDSCAPE AND IRRIGATION WORK FROM THE DATE OF FINAL ACCEPTANCE.

IRRIGATION SYSTEM

CONTRACTOR TO PROVIDE AUTOMATIC IRRIGATION SYSTEM FOR ALL NEW LANDSCAPE AND TURF AREAS SHOWN ON THE PLANS. SYSTEM WILL REQUIRE PROVIDING BACKFLOW PREVENTER, PERMITTING, POWER CONNECTION, CONTROLLER, AND ALL OTHER WORK REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM THAT PROVIDES 100% COVERAGE. COORDINATE LOCATION OF CONTROLLER WITH OWNER, GENERAL CONTRACTOR, AND ELECTRICAL CONTRACTOR. COORDINATE LOCATION OF IRRIGATION SLEEVES WITH GENERAL CONTRACTOR PRIOR TO FULLY MOBILIZING TO SITE. CONTRACTOR TO REFER TO THE UTILITY PLAN SHEET FOR CURRENT FIRE FLOW INFORMATION.

SHRUB PLANTING DETAIL

1 8" MIN. FOR PLANTS UP TO 4'-0" HIGH

GROUND LINE TO BE SAME AS AT THE NURSERY

PROVIDE MIN. 2" DEPTH OF HARDWOOD MULCH AND AS REQUIRED BY ORDINANCE.

WHEN PRESENT, REMOVE BURLAP FROM TOP 1/3 OF ROOTBALL AND REMOVE TIES

BREAK SUBSOIL WITH PICK AX

6" MIN. FOR PLANTS UP TO 4'-0" HIGH

1 8" MIN.

SHRUB HEIGHT MIN.

6" MIN.

6" MIN.

6" MIN.

6" MIN.

NOTES:

1. PROVIDE WEED CONTROL AND/OR FERTILIZER AS SPECIFIED BELOW.

2. WEED CONTROL AND FERTILIZER MAY BE APPLIED AT A LATER DATE TO COMPLY WITH SEASONAL CONDITIONS AND THE GROWING PERIOD.

3. PROVIDE AGRIFORM TABLETS AS PER MANUFACTURERS RECOMMENDATIONS.

4. PROVIDE HOMOGENOUS BACKFILL PLANTING MIXTURE OF 3:1 RATIO TOPSOIL TO PEATMOSS AND/OR OTHER APPROVED SOIL AMENDMENTS.

5. PROVIDE FERTILOME ROOT STIMULATOR OR APPROVED EQUAL IN PITS.

6. APPLY BALAN PREEMERGENT WEED CONTROL OR APPROVED EQUAL TREATMENT ON ALL SHRUB AND GROUND COVER BEDS.

2

LI

SHRUB PLANTING DETAIL

No Scale

NEW FACILITY FOR:
BUTLER CENTER
CITY OF BRYANT, AR

03-06-2023

LANDSCAPING
NOTES &
DETAILS

PROJECT NO:
22203

DATE:
FEB 2023

SHEET NO:

BY

REVISION

DATE

1

2

3

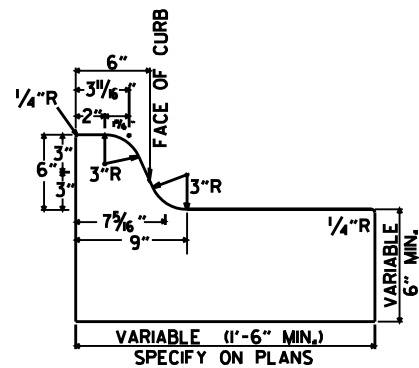
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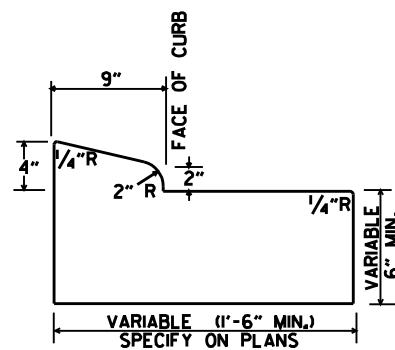
GarNat Engineering, LLC

3825 Mt Carmel Rd
Bryant, AR 72022
gamateengineering@gmail.com

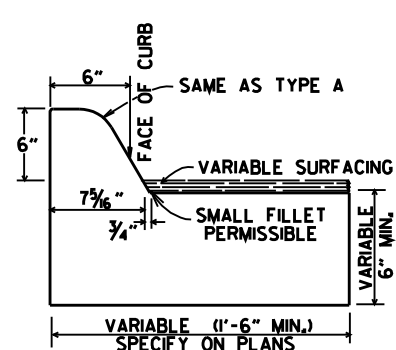
P.O. Box 116
Benton, AR 72018
Ph (501) 408-4650



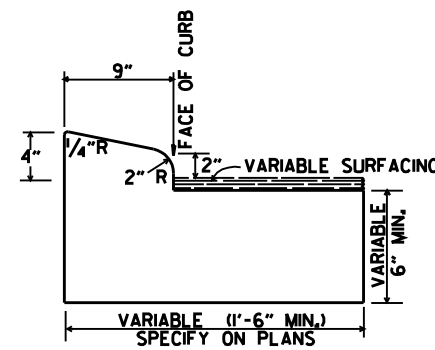
TYPE A



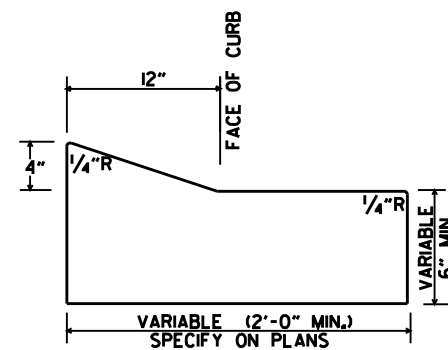
TYPE B-1



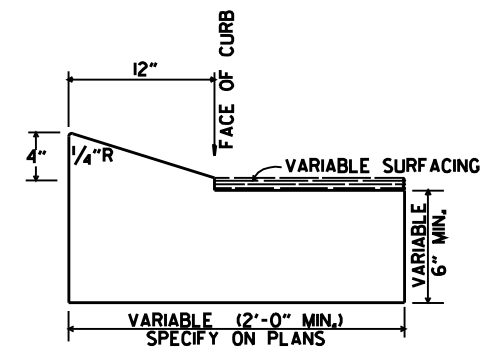
TYPE C



TYPE B-2

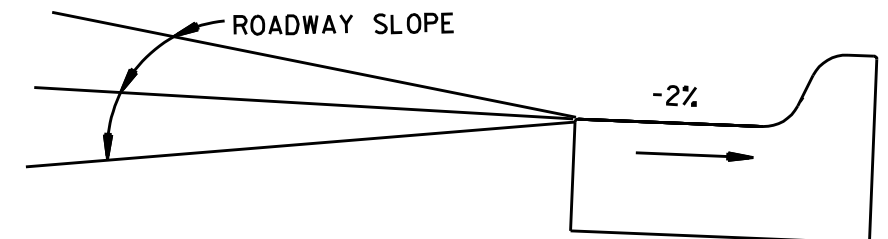


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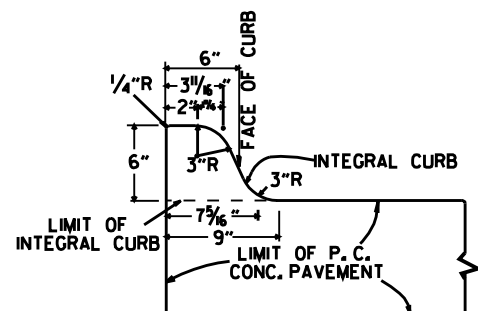


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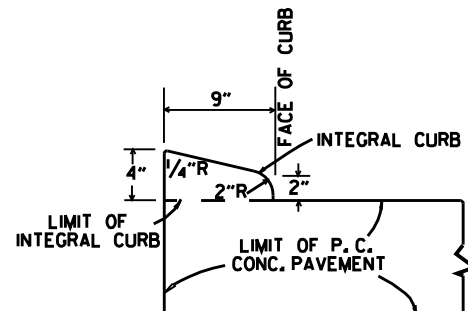
CONCRETE COMBINATION CURB AND GUTTER



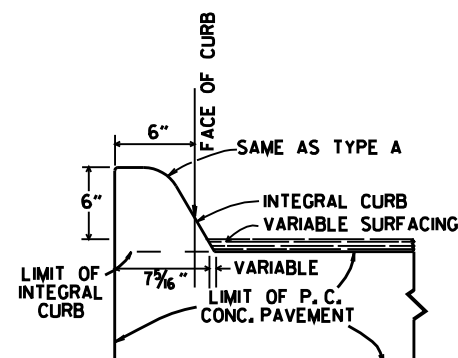
DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

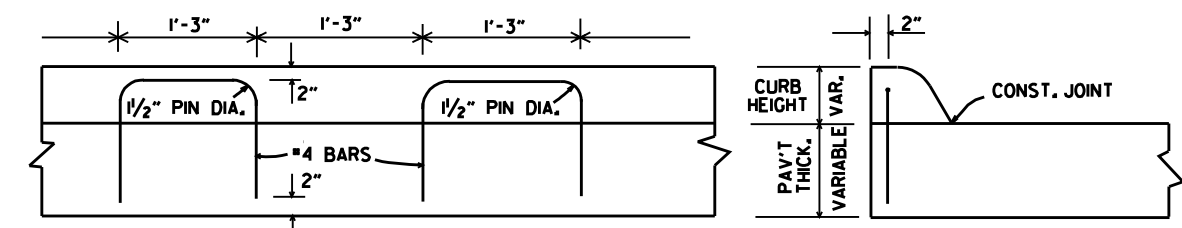


TYPE B



TYPE C

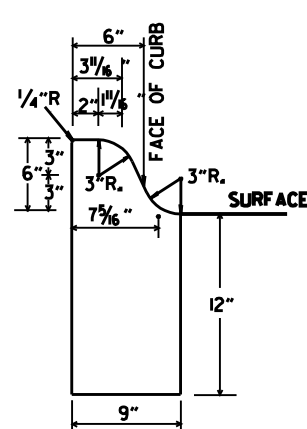
INTEGRAL CURB



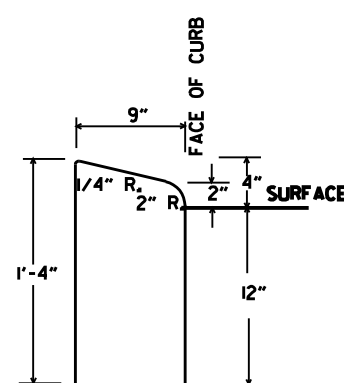
LONGITUDINAL SECTION

ELEVATION

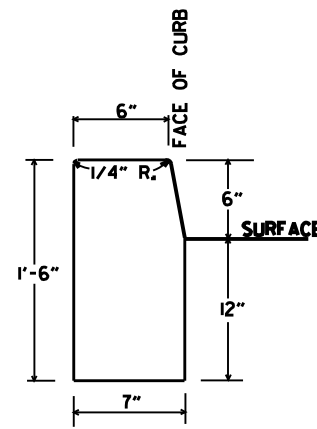
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



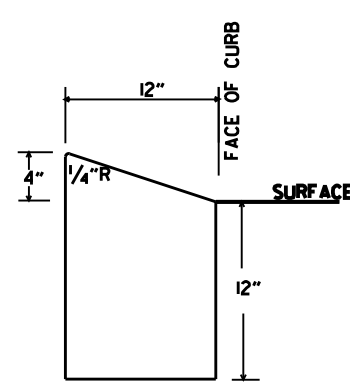
TYPE A



TYPE B

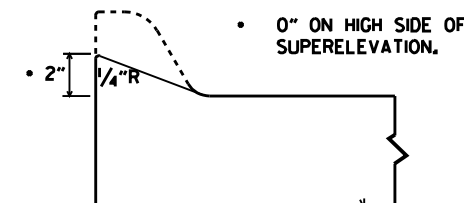


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1.
COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

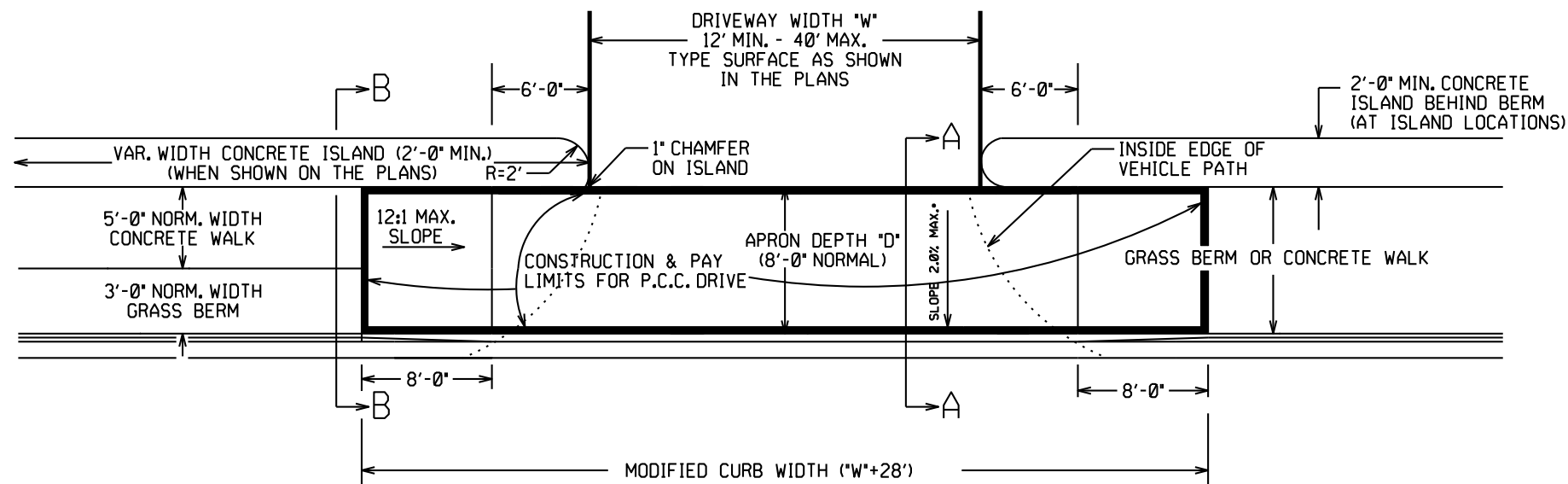
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIABLE DEPTH TYPE A & B 1	11-30-89
7-16-88	REVISED MODIFIED CURB	630-7-16-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

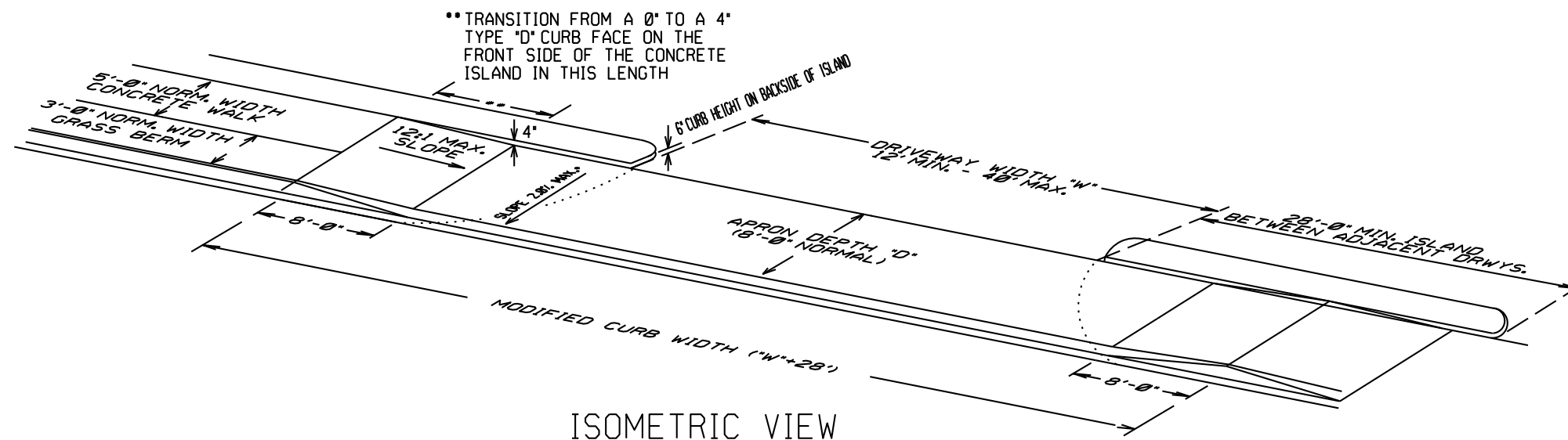
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

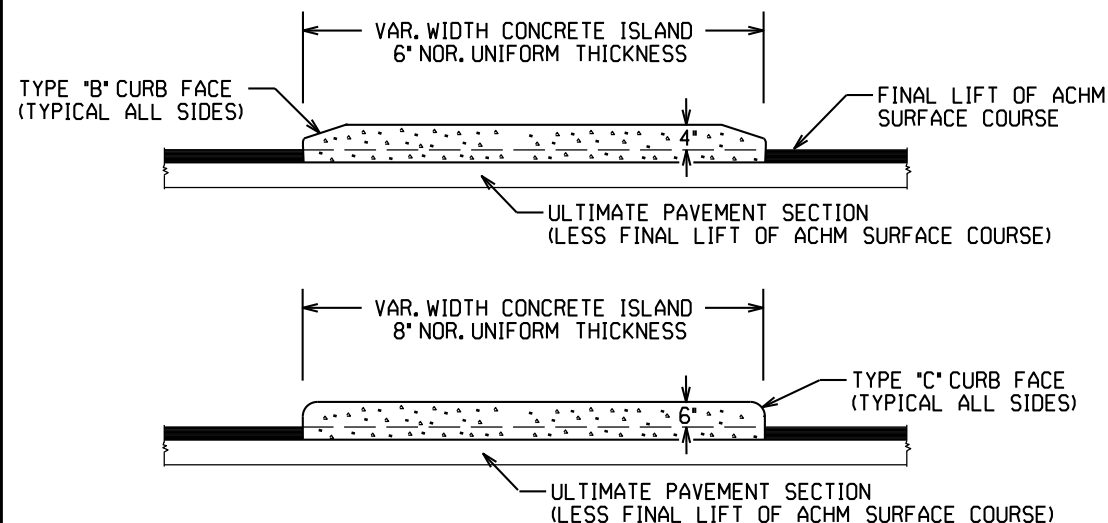
STANDARD DRAWING CG-1



PLAN VIEW



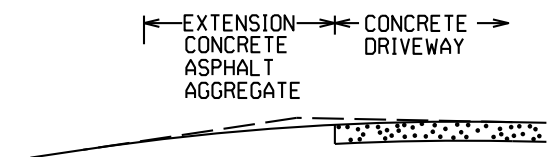
ISOMETRIC VIEW



CURBED ISLANDS FOR CHANNELIZATION

CONCRETE ISLAND NOTES:

1. REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".
2. TRANSVERSE EXPANSION JOINTS, NOT LESS THAN 1/2" WIDE, SHALL BE PLACED AT MINIMUM INTERVAL OF 45'. TRANSVERSE JOINT SHALL BE CONSTRUCTED USING A JOINT FILLER COMPLYING WITH AASHTO M213.

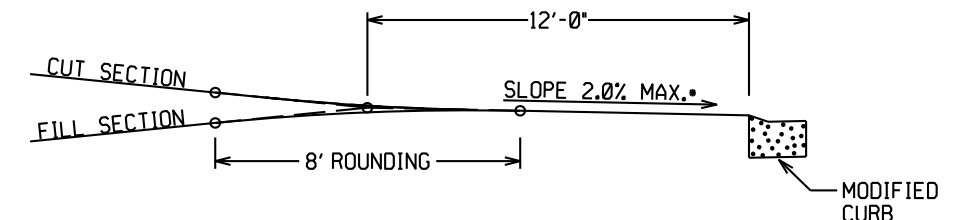


EXTENSION TYPICAL SECTIONS

- 1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY
- 2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1") OR
4" ACHM BASE COURSE (1-1/2")
- 3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE
- 4: AGGREGATE - 6" AGGREGATE BASE COURSE

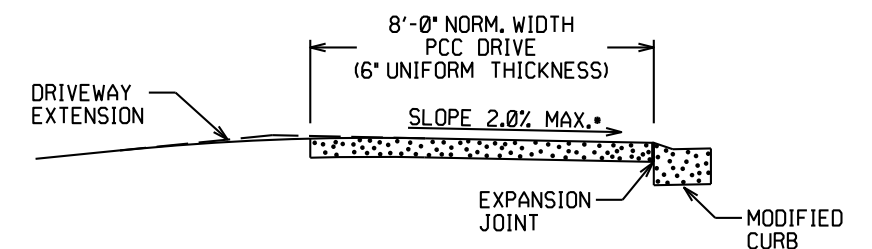
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

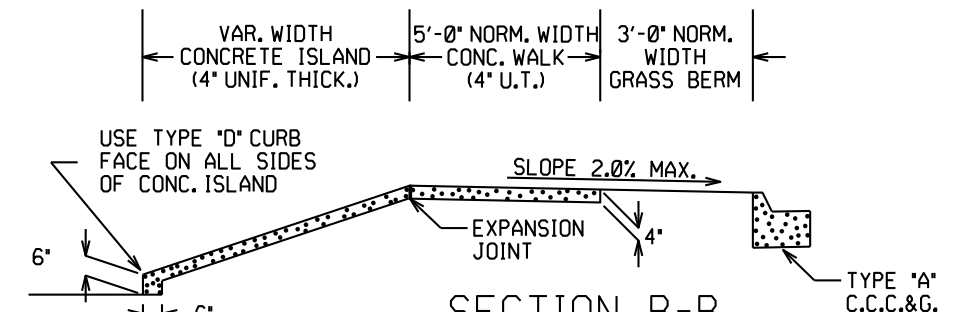


DRIVEWAY VERTICAL ALIGNMENT DETAILS

- NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



SECTION B-B
CURBED ISLAND BEHIND WALK

DATE	REV	DATE FILMED	DESCRIPTION
5-19-22			REVISED ISLAND NOTES
11-07-19			REVISED WALK DETAILS
2-27-14			REVISED PLAN & ISOMETRIC VIEW
11-29-07			ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05			REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02			ADDED ISLAND DETAILS & NOTES
3-30-00			REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98			REVISED NOTES
11-18-98			REDRAWN AND REISSUED

ARKANSAS STATE HIGHWAY COMMISSION
DETAILS OF DRIVEWAYS & ISLANDS
STANDARD DRAWING DR-1

3'-6"
(SQUARE OR ROUND
CONCRETE COLLAR)

4"

18"

12"

20 1/2"

17 1/2"

20 1/2"

14 1/2"

USE NEENAH R-5501-C
OR EQUIVALENT
BICYCLE SAFE FRAME AND GRATE

NOTE: CONCRETE COLLAR TO BE CAST IN PLACE.
12" PIPE CULVERTS TO BE MEASURED
AND PAID FOR AS 12" SIDE DRAIN.

DETAIL OF YARD DRAIN	
11-16-01	ADDED NOTE 10
1-12-00	REVISED HEAVY DUTY RING & COVER
7-02-98	CHANGED GRATE DETAIL, DELETED D(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)
6-26-97	ADDED DIMENSION TO TYPE IV-A
10-18-96	ADDED DETAIL OF YARD DRAIN
8-15-91	DELETE TYPE IV GRATE
7-15-88	REVISED STEP DETAIL
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)
2-4-83	ADDED GENERAL NOTE NO. 4
3-2-81	ADDED TYPE IV-A GRATE
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)
10-2-72	REVISED AND REDRAWN
DATE REV	REVISION
DATE FILED	

GENERAL NOTES:

1. ALL EXPOSED CORNERS SHALL BE $\frac{3}{4}$ " CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE $\frac{3}{4}$ " PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B & AASHTO M 306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER, REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS
& JUNCTION BOXES

STANDARD DRAWING FPC-9

REINFORCED CONCRETE
ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDOT NOMINAL	AASHTO M 206	ARDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43¾	44	26¾	27
42	51½	51	31¾	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87½	87
120	154	154	96¾	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE
HORIZONTAL ELLIPTICAL
PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(F)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

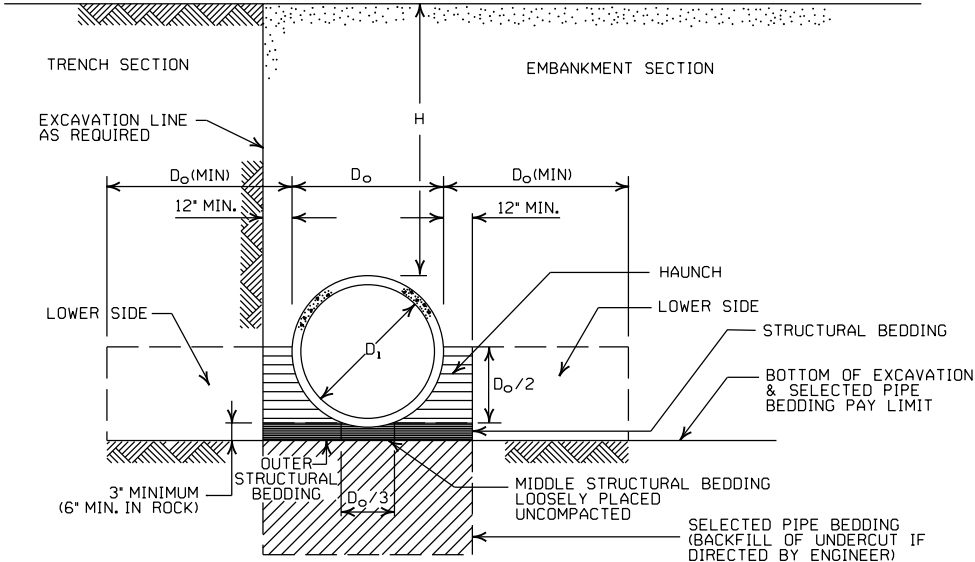
- LEGEND -

D_i = NORMAL INSIDE DIAMETER OF PIPE
D_o = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
= UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS
OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170. R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H"
OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE			
	CLASS III		CLASS IV	CLASS V
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MINIMUM HEIGHT OF FILL "H"
OVER R.C. ARCH & HORIZONTAL
ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF
FILL "H" OVER CIRCULAR
R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MAXIMUM HEIGHT OF FILL "H"
OVER R.C. ARCH & HORIZONTAL
ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT
FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1



INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

- AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.
 - SM3 WILL NOT BE ALLOWED.
 - STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1/2 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.
- STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF HDPE PIPE.

MINIMUM TRENCH WIDTH
BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" ≥ 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"

①NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)

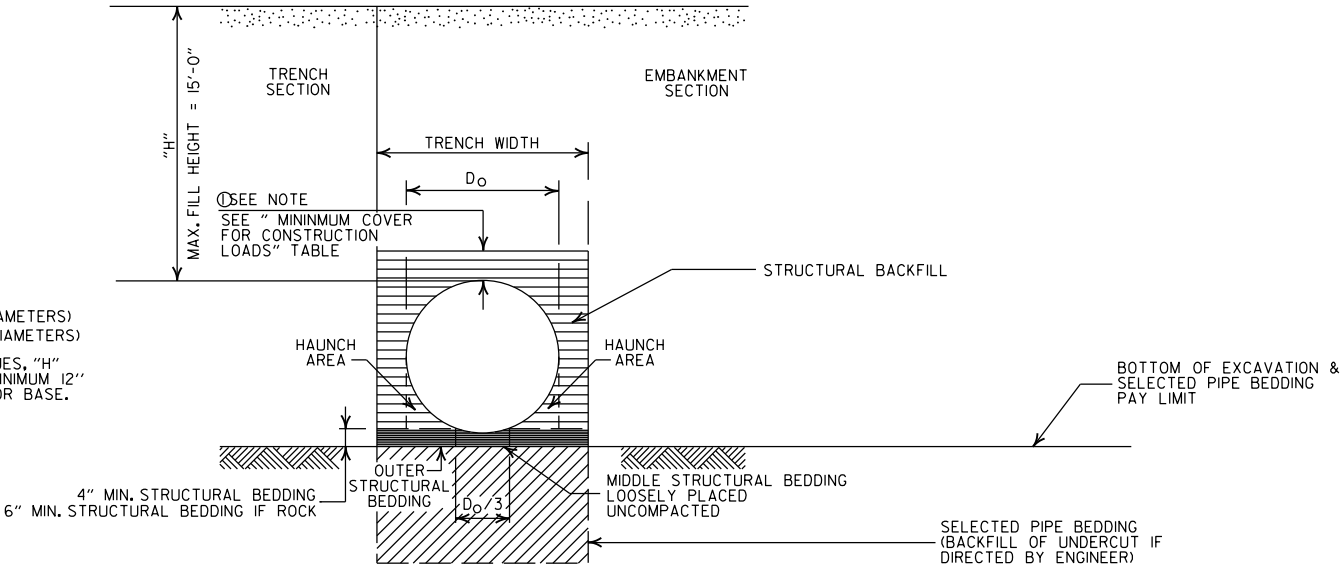
MINIMUM COVER VALUES, "H"
SHALL INCLUDE A MINIMUM 12"
OF PAVEMENT AND/OR BASE.

MULTIPLE INSTALLATION OF
HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

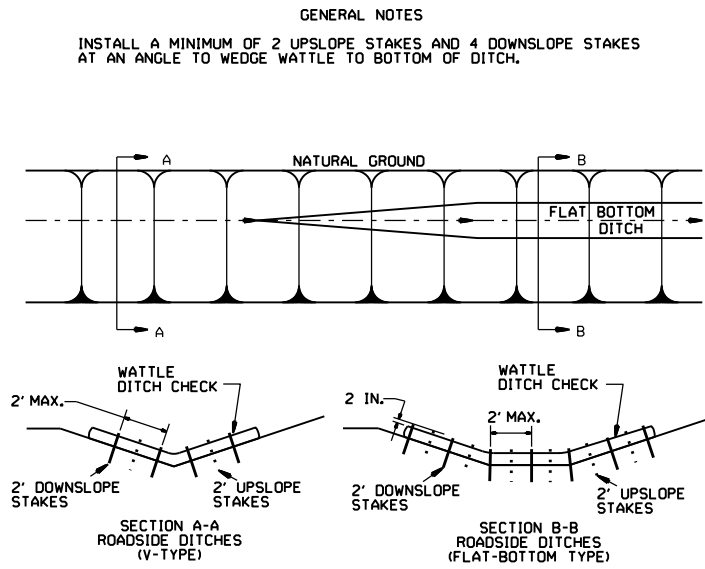
- LEGEND -

- H = FILL HEIGHT (FT.)
Ø = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM
- ===== = STRUCTURAL BACKFILL MATERIAL
===== = UNDISTURBED SOIL

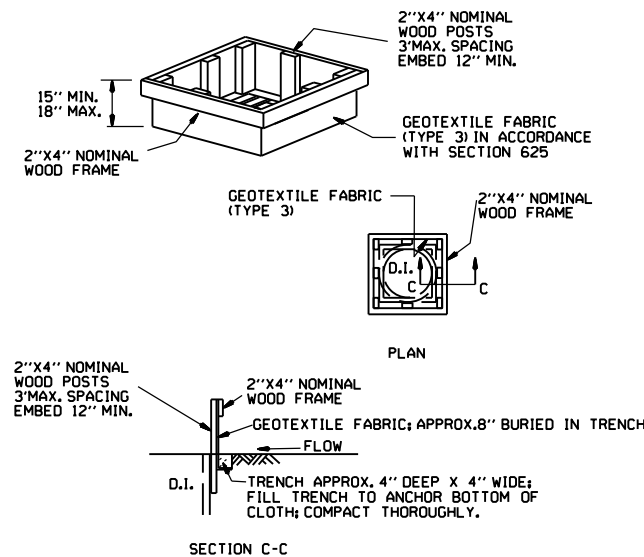
GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

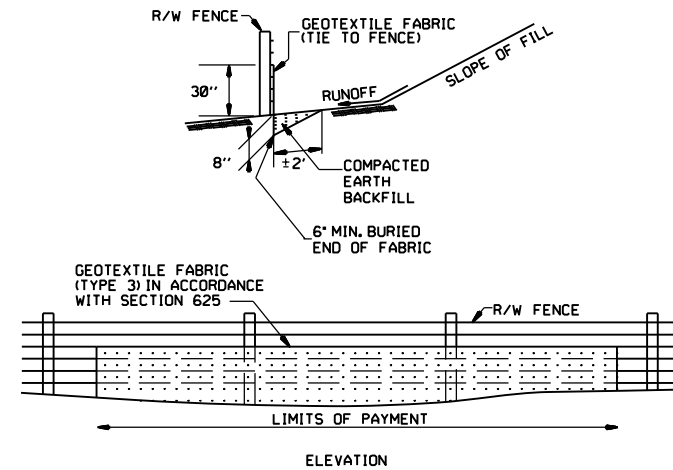
			ARKANSAS STATE HIGHWAY COMMISSION
			PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)
			STANDARD DRAWING PCP-1
2-27-14	REVISED GENERAL NOTE 1.		
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE		
11-17-10	ISSUED		
DATE	REVISION	DATE FILMED	



WATTLE DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)

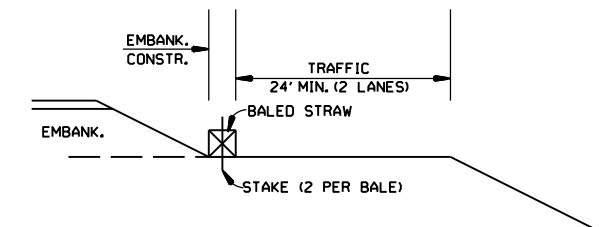


SILT FENCE ON R/W FENCE (E-4)

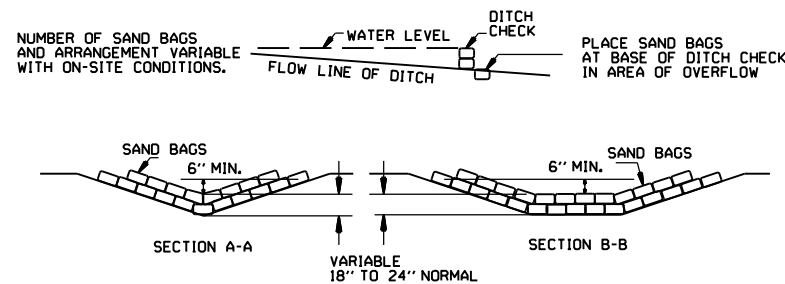
GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

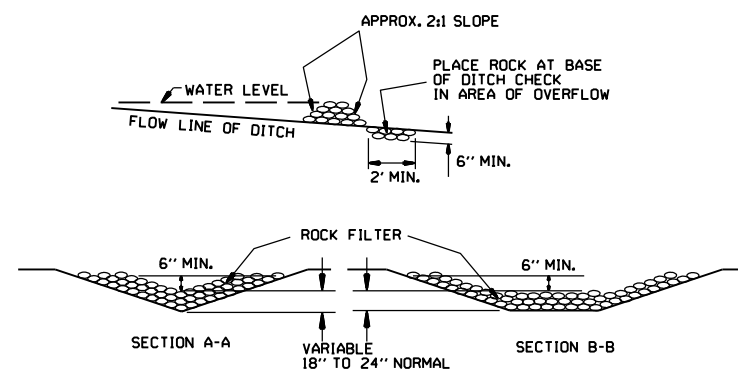
- GENERAL NOTES
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
 2. NO GAPS SHALL BE LEFT BETWEEN BALES.
 3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



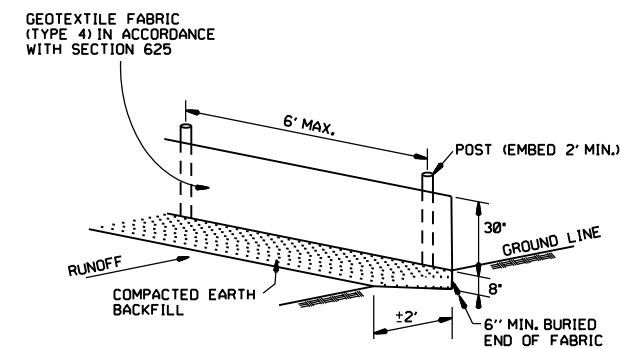
BALED STRAW
FILTER BARRIER
(E-2)



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



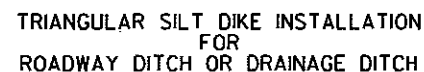
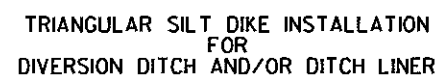
SILT FENCE (E-11)

GENERAL NOTES

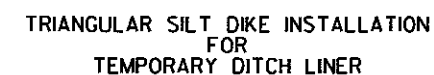
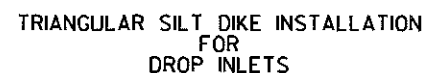
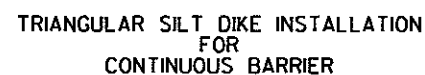
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

PER CITY OF
BRYANT
REQUIREMENTS,
REQUIRES
WIRED BACK
FENCE.

12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK		ARKANSAS STATE HIGHWAY COMMISSION
11-18-98	ADDED NOTES		
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95	
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC		
6-2-94	REVISED E-1, 4, 7 & 11; DELETED E-2 & 3	6-2-94	
4-1-93	REDRAWN		
10-1-92	REDRAWN		
8-2-76	ISSUED R.D.M.	298-7-28-76	
DATE	REVISION	FILMED	STANDARD DRAWING TEC-1



- POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



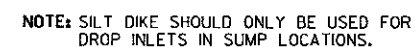
1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.
2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE THINNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE ALDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.

THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.

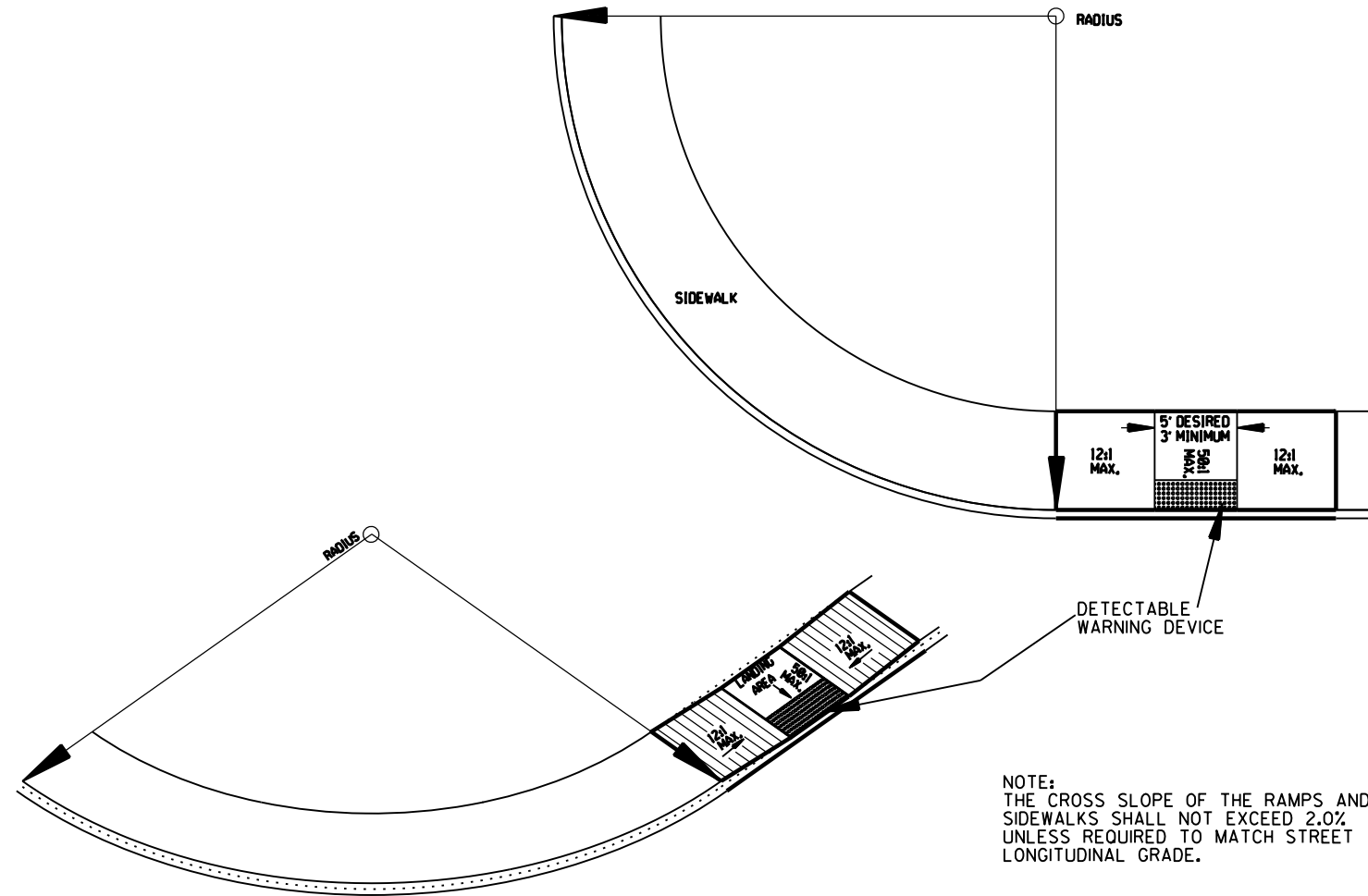
3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

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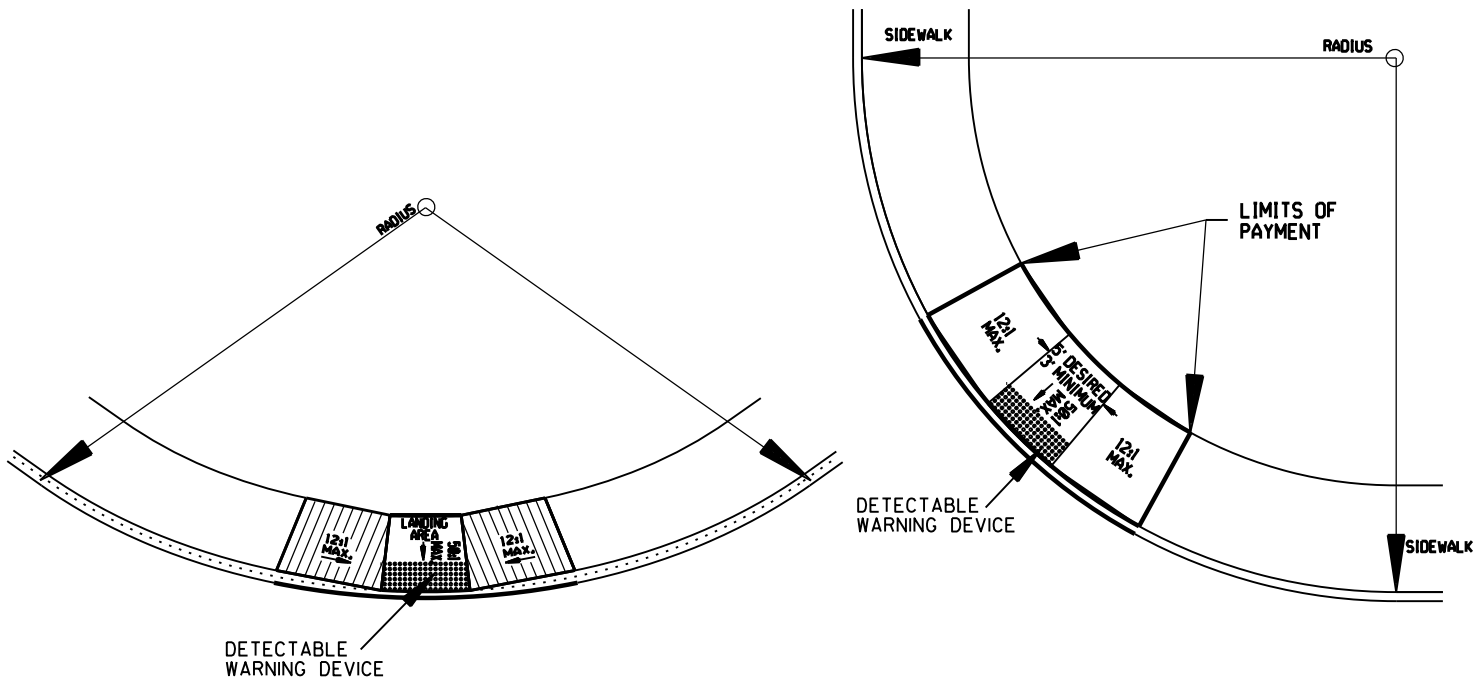
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			ARKANSAS STATE HIGHWAY COMMISSION
			TEMPORARY EROSION CONTROL DEVICES
7-26-12	REVISED GENERAL NOTE 2.		STANDARD DRAWING TEC-4
12-15-11	ISSUED		
DATE	REVISION	FILED	



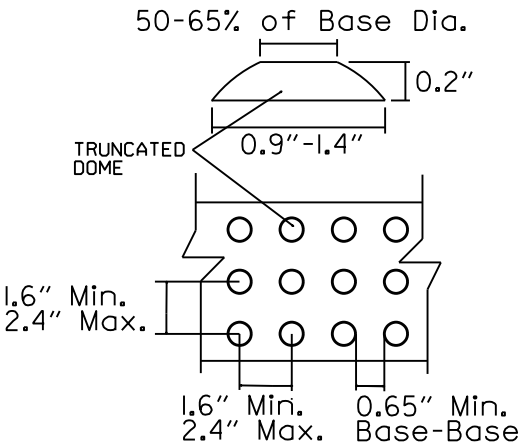
TYPE 5 RAMP



TYPE 6 RAMP

GENERAL NOTES FOR DETECTABLE WARNING DEVICES

THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB. TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. DETECTABLE WARNING DEVICE SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



DETECTABLE WARNING DEVICE DETAIL

GENERAL NOTES:

IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS. THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19. THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4". THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE EXISTING WALK WIDTH OR 36", WHICHEVER IS GREATER. MINOR MODIFICATIONS OF THESE DETAILS, AS APPROVED BY THE ENGINEER, MAY BE MADE TO ADJUST TO LOCAL CONDITIONS.

RAMP SELECTION CRITERIA

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.

AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

ARKANSAS STATE HIGHWAY COMMISSION		
WHEELCHAIR RAMPS ALTERATIONS ONLY		
STANDARD DRAWING WR-2		
10-9-03	REVISED GENERAL NOTES & ADDED NOTE.	
4-10-03	REVISED DETECTABLE WARNING DEVICE DETAIL	
8-22-02	ADDED DETECTABLE WARNING DEVICES DETAILS	
11-18-98	REV. FOURTH CHOICE NOTE	
8-12-98	REVISED TEXTURE	
7-02-98	ISSUED	
DATE	REVISION	DATE FILED



George Wooden <georgewooden98@gmail.com>

Fwd: DRC Staff Comments 3/16/2023

1 message

Tariq Morshed <tariqgarnat@gmail.com>
To: George Wooden <GEORGEWOODEN98@gmail.com>

Wed, Mar 22, 2023 at 1:57 PM

----- Forwarded message -----

From: **Vernon Williams** <garnatengineering@gmail.com>
Date: Thu, Mar 16, 2023 at 8:57 AM
Subject: Fwd: DRC Staff Comments 3/16/2023
To: Tariq Morshed <tariqgarnat@gmail.com>

Vernon J. Williams, P.E.
GarNat Engineering, LLC
Mailing Address: Physical Address:
P.O. Box 116 3825 Mt Carmel Road
Benton, AR 72018 Bryant, AR 72022
Ph: (501) 408-4650 Cell: (501) 425-2771
Fax: (888) 900-3068 www.garnatengineering.com

----- Forwarded message -----

From: **Colton Leonard** <cleonard@cityofbryant.com>
Date: Thu, Mar 16, 2023 at 8:46 AM
Subject: DRC Staff Comments 3/16/2023
To: Vernon Williams <Garnatengineering@gmail.com>

Vernon,

Here are the comments for this morning's meeting.

Best,

Colton

1. Butler Center - Site Plan/Rezoning/Variance

Public Works

1. Site will require a ADEQ Small Scale Development Permit. [Will comply.](#)
2. Developer will be required to submit signed and notarized Stormwater Infrastructure Warranty Bond SOP per Ordinance 2019-32. [Will comply.](#)
3. Plans show that only top banks and slopes of v-bottom ditch shall be stabilized to with solid sod stabilization, this shall be updated to show bottom of ditch being solid sod stabilization as well. [A v-bottom ditch has no bottom.](#)
4. Erosion control plan does not show specific specs for silt fencing and installation. (detail needs to be shown on plans) [Plans revised.](#)

Engineering

Water:

1. Site plan only indicates 7 water meters however request is for 8. [One bay deleted.](#)
2. Bryant W/WW Specification 1100-1.22 B Fire hydrants for apartments, commercial and industrial sites shall exceed 400 feet spacing. Confirm with Bryant Fire Marshal Fire Hydrant Placement. [There is an existing fire hydrant less than 400 feet.](#)
3. Discuss provision of extended water main to adjoining property to the west. [Meter relocated with project.](#)

Wastewater:

4. Bryant W/WW Specification 3100-312 E Connection to existing manhole shall be Cored and Booted. Indicate on Utility Drawings. See Manholes 4578. [Plans revised.](#)
5. Provide documentation as to use of structure for Sanitary Sewer needs. Food preparation may be subject to an appropriate grease trap installation. [No food prep anticipated.](#)

Stormwater:

6. Discuss discharge off site onto adjacent property and downstream choke points .
7. Discuss the use of Storage Facility Personnel to maintain the onsite Drainage detention system. [Typo fixed.](#)

Streets:

8. A Designed driveway will be required in accordance with ArDOT.

Planning

1. Provide building Elevations showing facades/materials.
2. One lot commercial subdivision Plat? [Added to plans.](#)
3. Building setbacks not shown on plans. For C-2: 15ft Front Min, 15ft Side, 25ft Rear. 3X Multiplier for commercial abutting residential zoned lot. [Added to plans.](#)
4. Cross-access agreement in place for property owners to the West? Should probably be shown on plat. [Shown on added plat.](#)
5. Pedestrian access from building sidewalks to Reynolds Road sidewalk. [Added to plans.](#)

Fire

1. None

1. Elite Volleyball Academy**Public Works**

1. Site will require ADEQ Small Scale Development permit.
2. Site will require a Stormwater Detention Maintenance Plan.
3. Developer will be required to submit signed and notarized Stormwater Infrastructure Warranty Bond SOP per Ordinance 2019-32.
4. Erosion control plan will be required to be updated to show use of wire-backed silt fencing.

Engineering

1. Fire line shall be 8" Ductile Iron per section 1100-2-1.05-B.
2. Show 15' easement on water main extension 1100-4-1.11-A, water main easements on Plat.
3. Discuss water main extension to extend to the east property line.

4. Existing gravity sewer running north and south must have dedicated easement of 20'.
Show on Plat
5. Provide stormwater calculations. **PROVIDED - UNDER REVIEW**
6. Discuss extension of Water line to edge of development.

Planning

1. Elevations - Commercial Design Standards
2. Sidewalk Access to building
3. Discuss building setbacks as it relates to variance requests. Can electrical/mechanical equipment be placed in the Building setback area?
4. Provide landscape plan

Fire

1. Building shall be sprinkled with 5" Storz FDC connection
2. Knox Box required for facility
3. Fire hydrant shall be within 100' of FDC.



Colton Leonard

City Planner

501-943-0301

cleonard@cityofbryant.com

www.cityofbryant.com

[210 SW 3rd St, Bryant, AR 72022](#)

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*M M Tariq Morshed, E. I.
GarNat Engineering, LLC*

Mailing Address:

P.O. Box 116

[Benton, AR 72018](#)

Ph: (501) 408-4650

Fax: (888) 900-3068

Physical Address:

[3825 Mt Carmel Road](#)

[Bryant, AR 72022](#)

Cell: (870) 273-9256

www.garnatengineering.com



City of Bryant Stormwater Department

1019 SW 2nd St.

Bryant, Arkansas 72022

Office (501) 943-0453; Fax (501) 943-0851

WARRANTY BOND PROCEDURES

For Stormwater Infrastructure Public & Private

These procedures are applicable to Stormwater Infrastructure that is to be dedicated to the public and maintained by the City of Bryant and for Private Stormwater Infrastructure that will be connected to overall City of Bryant Stormwater Infrastructure.

In accordance with Ordinance No. 2019-32 Article V., The City of Bryant Stormwater Department will require a Maintenance Warranty Bond as part of the process for approving Stormwater Infrastructure. The purpose of the bond is to cover the cost of correcting deficiencies not addressed by the developer during the warranty period and to insure no adverse effects will occur to the overall function of the City of Bryant Stormwater Infrastructure.

ORDINANCE 2019-32 ARTICLE V. STORMWATER INFRASTRUCTURE WARRANTY BOND.

- 1. Stormwater Infrastructure Warranty Bond.** A one year maintenance bond against defects in workmanship shall be required by the Administrative Authority for any portion of the stormwater management facilities privately owned or stormwater management improvements dedicated to the city, said maintenance bond is to be provide by cashier's check, irrevocable letter of credit or acceptable surety authorized to do business in the State of Arkansas. All forms of maintenance bonds shall be subject to approval by the Administrative Authority. The value of the bond shall be an amount equal to 100% of the value of the privately owned stormwater management facilities or stormwater system improvements being privately owned or dedicated to the city. A cost list must be provide to prove and verify the amount of the maintenance bond. The cost list shall include cost of stormwater infrastructure construction and components (piping, weirs, spillway structures, junction boxes, trickle channels, inlets, grates, riprap and site stabilization).
- 2. Procedurals.** These procedures are applicable to Stormwater Infrastructure that is to be dedicated to the public and maintained by the City of Bryant and for Private Stormwater Infrastructure that will be connected to overall City of Bryant Stormwater Infrastructure.

In accordance with Ordinance No. 2019-32 Article V., City of Bryant Stormwater Department will require a Maintenance Warranty Bond as part of the process for approving Stormwater Infrastructure. The bond will be equal to 100% of the cost of construction of the Stormwater Infrastructure System at the time of completion of the Stormwater Infrastructure System. The purpose of the bond is to cover the cost of correcting deficiencies not addressed by the developer during the warranty period and to insure no adverse effects will occur to the overall function of the City of Bryant Stormwater Infrastructure.

- 3. Determining the Maintenance Warranty Bond Amount.** During the final inspection process, the City of Bryant Stormwater Department will verify and approve the Warranty Bond estimate for all Stormwater Infrastructure within the proposed unit using:

- (a) The Warranty Bond cost list estimate shall be presented to the City of Bryant Stormwater Department by formal letter. The formal letter shall include project name, developer contact information and "Cost List for Construction of Stormwater Infrastructure Components" including but not limited to piping, weirs, spillway structures, junction boxes, trickle channels, riprap, inlets, grates, weirs and site stabilization;
 - (b) The Bond amount will need to be re-evaluated if more than 18 months have passed from the time of the estimate review to the time of providing the bond to the City of Bryant Stormwater Department;
- 4. **Submitting the bond to the city.** After requesting a final inspection of the Stormwater Infrastructure and approval of completion by the City of Bryant Stormwater Department, the developer must provide the City of Bryant Stormwater Department with a bond equal to amount determined in Article V. Section 3. of this document. The Bond must be for a period of 12 months and be a financial guarantee in the form of a bond, letter of credit, or trust agreement executed by a surety company authorized to do business in the State of Arkansas. The Bond must be payable to the City of Bryant Public Works Department, conditioned that the developer will maintain the Stormwater Infrastructure in accordance with the Stormwater Management Manual Ordinance No. 2019-31 and the Stormwater Management Ordinance No. 2019-32.
- 5. **Warranty period.** After the Stormwater Infrastructure construction passes the final inspection and the one year warranty bond is received, the one year maintenance warranty period will begin. The one-year warranty period will start on the date the Maintenance Warranty Bond is received and accepted. There shall be no separate warranty period start dates for Stormwater Infrastructure within a single unit.
- 6. **Follow-up inspection.** The City of Bryant Stormwater Department will conduct a follow-up inspection within the tenth month of the warranty period but in no event any later than two months prior to the bond expiring. The City of Bryant Stormwater Department will issue a punch list of deficiencies that will be sent to the developer or contractor for the unit. If no deficiencies are found and camera video passes inspection, release of the bond will proceed as set out and as listed in Article V. Section 10 of this document.
- 7. **Correcting Deficiencies and Camera Video.** The developer must contact the City of Bryant Stormwater Department at least 24 hours before correcting any deficiencies or performing camera video. The developer shall also camera all stormwater infrastructure to ensure that there is no sediment laden infrastructure. Upon notification by the developer that all deficiencies have been corrected and camera video has been completed, the City of Bryant Stormwater Department will re-inspect to verify compliance with correction of deficiencies and reviewing the camera video to assure the stormwater infrastructure is not sediment laden or defective.
- 8. **Calling in the bond.** If the developer does not contact the City of Bryant Stormwater Department, deficiencies have not been corrected and the stormwater infrastructures has not been camera videoed by the end of the 11th month or one (1) month prior to the expiration of the Bond, the City of Bryant Stormwater Department will prepare an estimate and list of work to be done to bring the stormwater infrastructure into compliance. The City of Bryant Stormwater Department will contact the bonding agency to submit the cost estimates for correcting the deficiencies.
- 9. **Requesting Acceptance.** Once all deficiencies have been corrected, the City of Bryant Stormwater Department will prepare the paperwork for the Stormwater Infrastructure within the unit accepted for maintenance by the City of Bryant 'if dedicated', or paperwork will be prepared to release the bond if infrastructure is a private unit.

10. **Bond Release.** The Bond will be released once the City of Bryant has accepted the Stormwater Infrastructure for maintenance 'if dedicated', and an acceptance letter has been written by the City of Bryant Public Works. If all compliance has been met with a private Stormwater Infrastructure Unit(s) then the City of Bryant Stormwater Department shall contact the developer by formal letter and release the bond. No partial release of the Bond will be allowed at any time.

**ATTENTION: DO NOT FILL OUT INFORMATION BELOW UNTIL YOU ARE PRESENT WITH A NOTARY PUBLIC.
(THIS DOCUMENT MUST BE NOTARIZED)**

By filling out the information below, signing and dating, you are hereby acknowledging that you have read, understand and agree to adhere to the Stormwater Infrastructure Warranty Bond Procedures and Processes listed in this document. You the applicant are hereby responsible for upholding, without limitation, the Stormwater Infrastructure Warranty Bond Procedures.

Butler Center

Name of Project Site/Addition

Michael Butler

Applicant Name
(Print)

[Signature]

Applicant Name
(Signature)

Butler Wealth Capital, LLC

Applicant Business Name

6, CreeKwood Court, Little Rock, AR 72223

Applicant Mailing Address

Notarization

State of ARKANSAS

County of SALINE

Subscribed and sworn before me, a Notary Public, on this 17TH day of MARCH, 2023.

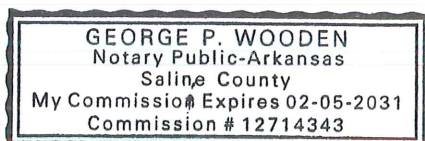
[Signature]

Signature of Notary

02-05-2031

My commission expires:

Notary Seal Stamp Here:



SITE WITH AUTOMATIC COVERAGE (LESS THAN 5 ACRES) CONSTRUCTION SITE NOTICE

FOR THE
Arkansas Department of Environmental Quality (ADEQ)
Storm Water Program
NPDES GENERAL PERMIT NO. ARR150000

The following information is posted in compliance with **Part I.B.8.A** of the ADEQ General Permit Number **ARR150000** for discharges of stormwater runoff from sites with automatic coverage. Additional information regarding the ADEQ stormwater program may be found on the internet at:

www.adeq.state.ar.us/water/branch_npdes/stormwater

Permit Number	ARR150000
Contact Name:	Michael Butler
Phone Number:	870-703-3807
Project Description (Name, Location, etc.):	New Facility for Butler Center, Bryant, AR
Start Date:	
End Date:	
Total Acres:	1.69
Location of Stormwater Pollution Prevention Plan:	Mailbox on Site

For Construction Sites Authorized under **Part I.B.6.A** (Automatic Coverage) the following certification must be completed:

I _____ (Typed or Printed Name of Person Completing this Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part I.B.2. of the ADEQ General Permit Number ARR150000. A stormwater pollution prevention plan has been developed and implemented according to the requirements contained in Part II.A.2.B & D of the permit. I am aware there are significant penalties for providing false information or for conducted unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title

Date

Stormwater Pollution Prevention Plan (SWPPP) for Construction Activity
for Small Construction Sites

National Pollutant Discharge Elimination System (NPDES)
General Permit # ARR150000

Prepared for:
New Facility For
Butler Center

Date:
03/17/2023

Prepared by:
GarNat Engineering, LLC

Table of Contents
New Facility for: Butler Center
Bryant, Arkansas

SWPPP for Construction Activity for Small Construction Sites

Appendix A- ARR150000 Inspection Form

SWPPP Figures

New Facility for: Butler Center Erosion Control Plan

AHTD Standard Drawings:

TEC-1 – Temporary Erosion Control Devices

TEC-4 – Temporary Erosion Control Devices

NPDES ARR150000

Project Name and Location: New Facility for Butler Center, 1109 N Reynolds Rd,
Bryant, AR.

Property Parcel Number (Optional): 840-14297-000

Operator Name and Address: _____

A. Site Description

- a. Project description, intended use after NOI is filed: Commercial development of a
Chiropractic Clinic and parking lot.
- b. Sequence of major activities which disturb soils: clearing & grubbing,
earthwork, drainage structure, utilities
- c. Total Area: 1.69 Ac. Disturbed Area: 1.51 Ac.

B. Responsible Parties

Be sure to assign all SWPPP related activities to an individual or position; even if the specific individual is not yet known (i.e. contractor has not been chosen).

Individual/Company	Phone Number	Service Provided for SWPPP (i.e., Inspector, SWPPP revisions, Stabilization Activities, BMP Maintenance, etc.)
<u>Michael Butler</u>	<u>870-703-3807</u>	

C. Receiving Waters

- a. The following waterbody (or waterbodies) receives stormwater from this construction site: Unnamed tributaries of Hurricane Creek
- b. Is the project located within the jurisdiction of an MS4? ☒ Yes ☐ No
- i. If yes, Name of MS4: Bryant
- c. Ultimate Receiving Water:
- | | |
|--|--|
| <input type="checkbox"/> Red River | <input type="checkbox"/> White River |
| <input type="checkbox"/> Ouachita River | <input type="checkbox"/> St. Francis River |
| <input checked="" type="checkbox"/> Arkansas River | <input type="checkbox"/> Mississippi River |

D. Site Map Requirements (Attach Site Map):

- a. Pre-construction topographic view;

- b. Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
- c. Delineate on the site map areas of soil disturbance and areas that will not be disturbed under the coverage of this permit;
- d. Location of major structural and nonstructural controls identified in the plan;
- e. Location of main construction entrance and exit;
- f. Location where stabilization practices are expected to occur;
- g. Locations of off-site materials, waste, borrow area, or equipment storage area;
- h. Location of areas used for concrete wash-out;
- i. Location of all surface water bodies (including wetlands) with associated natural buffer boundary lines. Identify floodplain and floodway boundaries, if available;
- j. Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system if applicable,
- k. Locations where stormwater is discharged off-site (should be continuously updated);
- l. Areas where final stabilization has been accomplished and no further construction phase permit requirements apply;
- m. A legend that identifies any erosion and sediment control measure symbols/labels used in the site map and/or detail sheet; and
- n. Locations of any storm drain inlets on the site and in the immediate vicinity of the site.

E. Stormwater Controls

- a. Initial Site Stabilization, Erosion and Sediment Controls, and Best Management Practices:

- i. Initial Site Stabilization: Prior to starting clearing activities, the BMP's shown on the Erosion Control Plan will be installed.
- ii. Erosion and Sediment Controls: Erosion and sediment controls are shown on the erosion control plan. They will be constructed per AHJD standard details
- iii. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the operator will replace or modify the control for site situations: ☒ Yes ☐ No
If No, explain: _____
- iv. Off-site accumulations of sediment will be removed at a frequency sufficient to minimize off-site impacts: ☒ Yes ☐ No

If No, explain: _____

- v. Sediment will be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%: ☒ Yes ☐ No

If No, explain: _____

- vi. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges: ☒ Yes ☐ No

If No, explain: _____

- vii. Off-site material storage areas used solely by the permitted project are being covered by this SWPPP: ☐ Yes ☒ No (there are no such sites)

If Yes, explain additional BMPs implemented at off-site material storage area: _____

b. Stabilization Practices

- i. Description and Schedule: As soon as practical, the contractor will spread topsoil and seed the disturbed area with a perennial vegetation. Vegetation will be reseeded or required to establish the 80% coverage of perennial vegetation.

- ii. Are buffer areas required? ☐ Yes ☒ No

If Yes, are buffer areas being used? ☐ Yes ☐ No

If No, explain why not: _____

If Yes, describe natural buffer areas: _____

- iii. A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included with the plan.

☒ Yes ☐ No

If No, explain: _____

- iv. Deadlines for stabilization:

1. Stabilization procedures will be initiated 14 days after construction activity temporarily ceases on a portion of the site.
2. Stabilization procedures will be initiated immediately in portions of the site where construction activities have permanently ceased.

c. Structural Practices

- i. Describe any structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site: BMPs shown on the erosion control plan will be used to limit sediment from leaving the site

- ii. Describe Velocity Dissipation Devices: _____

iii. Sediment Basins:

Are 10 or more acres draining to a common point? ☐ Yes ☒ No

Is a sediment basin included in the project? ☐ Yes ☒ No

If Yes, what is the designed capacity for the storage?

☐ 3600 cubic feet per acre = : _____

or

☐ 10 year, 24 hour storm = : _____

☐ Other criteria were used to design basin: _____

If No, explain why no sedimentation basin was included and describe required natural buffer areas and other controls implemented instead: Not appropriate for this project.

F. Other Controls

- a. Solid materials, including building materials, shall be prevented from being discharged to Waters of the State: ☒ Yes ☐ No

- b. Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of:

☒ A stabilized construction entrance and exit

☐ Vehicle tire washing

☒ Other controls, describe: * see below

- c. Temporary Sanitary Facilities: A portable toilet will be provided. The location is shown on the Erosion control Plan.

* The road adjacent to the property will be swept to remove offside vehicle tracks. Disturbed areas will be watered during construction.

d. Concrete Waste Area Provided:

☒ Yes

☐ No. Concrete is used on the site, but no concrete washout is provided.

Explain why: _____

☐ N/A, no concrete will be used with this project

e. Fuel Storage Areas, Hazardous Waste Storage, and Truck Wash Areas: _____

G. Non-Stormwater Discharges

a. The following allowable non-stormwater discharges comingled with stormwater are present or anticipated at the site:

☒ Fire-fighting activities;

☒ Fire hydrant flushings;

☒ Water used to wash vehicles (where detergents or other chemicals are not used) or control dust in accordance with Part II.A.4.H.2;

☒ Potable water sources including uncontaminated waterline flushings;

☒ Landscape Irrigation;

☒ Routine external building wash down which does not use detergents or other chemicals;

☒ Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents or other chemicals are not used;

☒ Uncontaminated air conditioning, compressor condensate (See Part I.B.12.C of the permit);,

☒ Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.13.C of the permit);

☒ Foundation or footing drains where flows are not contaminated with process materials such as solvents (See Part I.B.13.C of the permit);

b. Describe any controls associated with non-stormwater discharges present at the site: BMP's shown on the Erosion Control plan will also be

utilized to prevent sedimentation from leaving site during
construction.

H. Applicable State or Local Programs: The SWPPP will be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls implemented at the site. ☒ Yes ☐ No

I. Inspections

a. Inspection frequency:

☒ Every 7 calendar days

or

☐ At least once every 14 calendar days and within 24 hours of the end of a storm even 0.25 inches or greater (a rain gauge must be maintained on-site)

b. Inspections:

Completed inspection forms will be kept with the SWPPP.

☒ ADEQ's inspection form will be used (See Appendix B)

or

☐ A form other than ADEQ's inspection form will be used and is attached
(See inspection form requirements Part II.A.4.L.2)

c. Inspection records will be retained as part of the SWPPP for at least 3 years from the date of termination.

d. It is understood that the following sections describe waivers of site inspection requirements. All applicable documentation requirements will be followed in accordance with the referenced sections.

i. Winter Conditions (Part II.A.4.L.4)

ii. Adverse Weather Conditions (Part II.A.4.L.5)

J. Maintenance:

The following procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition will be followed: see below*

Any necessary repairs will be completed, when practicable, before the next storm event, but not to exceed a period of 3 business days of discovery, or as otherwise directed by state or local officials.

K. Employee Training:

The following is a description of the training plan for personnel (including contractors and subcontractors) on this project: Operator will submit proof of training to engineer. Engineer will provide additional training as required to ensure that SWPPP is properly implemented.

****Note, Formal training classes given by Universities or other third-party organizations are not required, but recommended for qualified trainers; the permittee is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.**

* Built up sediment will be removed from silt fencing when it has reached $\frac{1}{3}$ of the height of the fence. Silt fences will be inspected for the depth of sediment, tears, fabric attachment to the fence posts, and to see that the fence posts are firmly in the ground. Temporary and permanent seeding will be inspected for bare spots, washouts, and healthy growth. Entrance will be inspected for sediment tracked on roads.

Revised date: 10/20/2016

Certification

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure 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."

Signature of Responsible or Cognizant Official: _____

Title: _____

Date: _____

ARR150000 Inspection Form

Appendix A

Inspector Name: _____

Date of Inspection: _____

Inspector Title: _____

Date of Rainfall: _____

Duration of Rainfall: _____

Days Since Last Rain Event: _____ days

Rainfall Since Last Rain Event: _____ inches

Description of any Discharges During Inspection: _____

Location of Discharges of Sediment/Other Pollutant (specify pollutant & location): _____

Locations in Need of Additional BMPs: _____

Information on Location of Construction Activities

Location	Activity Begin Date	Activity Occuring Now (y/n)?	Activity Ceased Date	Stabilization Initiated Date	Stabilization Complete Date

Information on BMPs in Need of Maintenance

Location	In Working Order?	Maintenance Scheduled Date	Maintenance Completed Date	Maintenance to be Performed By

Changes required to the SWPPP: _____

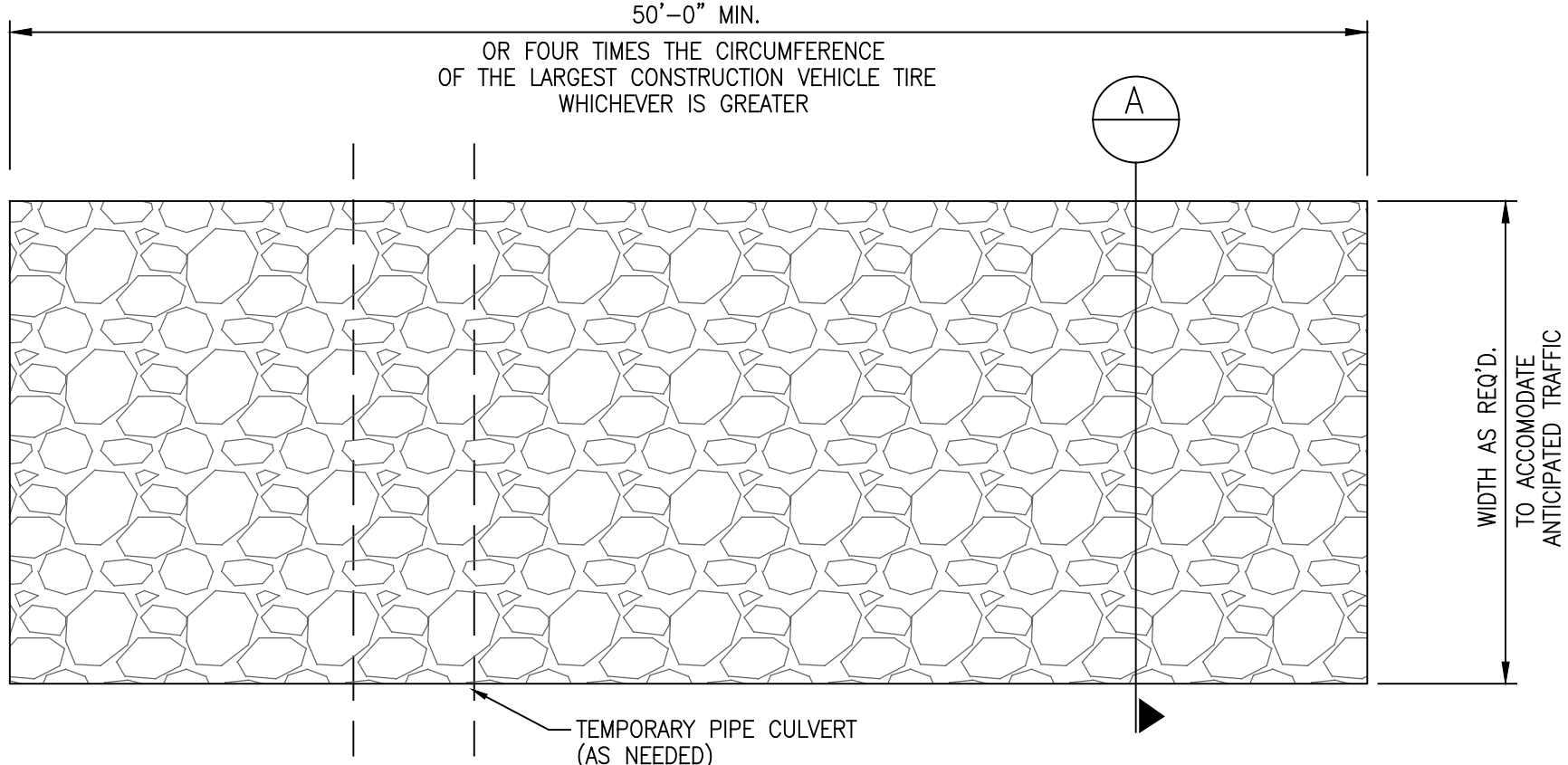
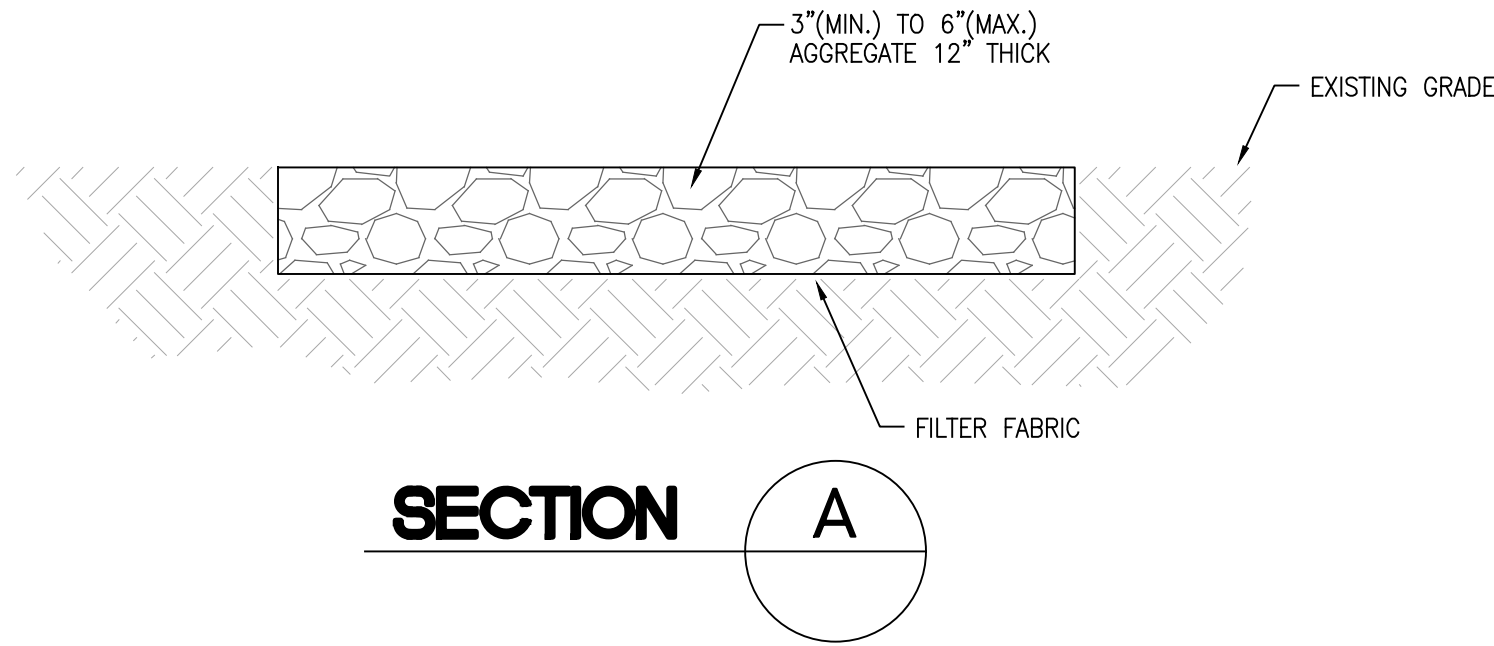
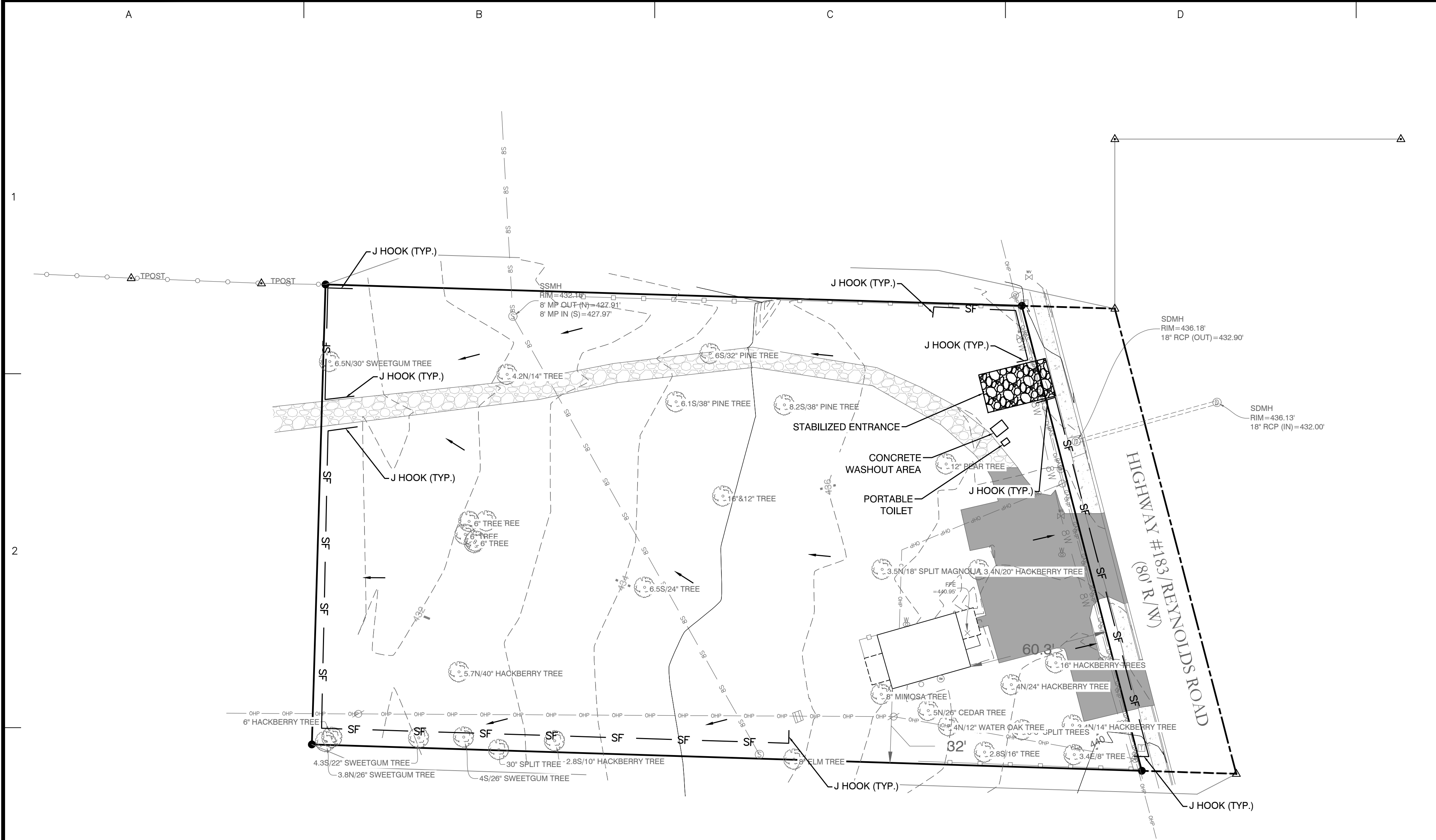
Reasons for changes: _____

SWPPP changes completed (date): _____

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure 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."

Signature of Responsible or Cognizant Official: _____ Date: _____

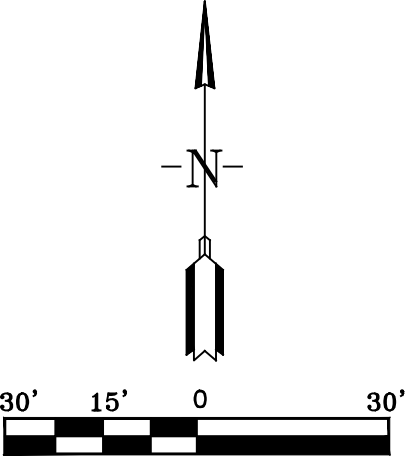
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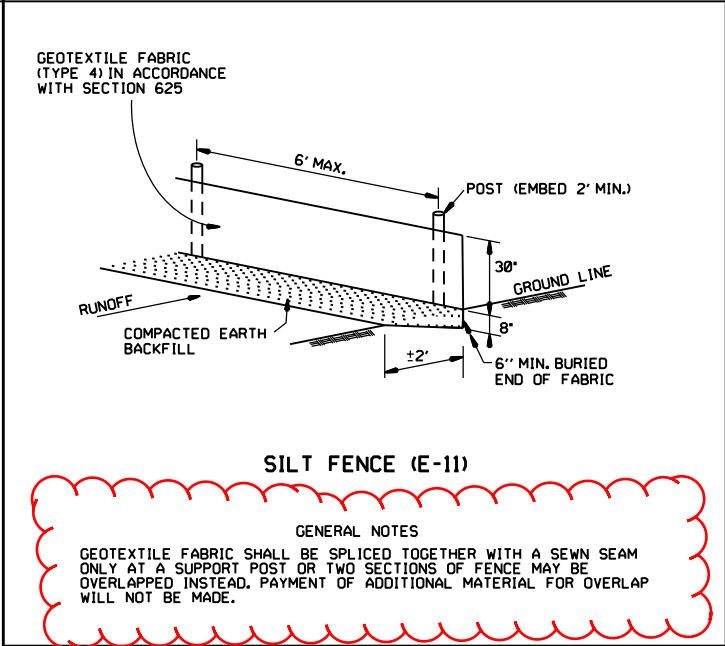
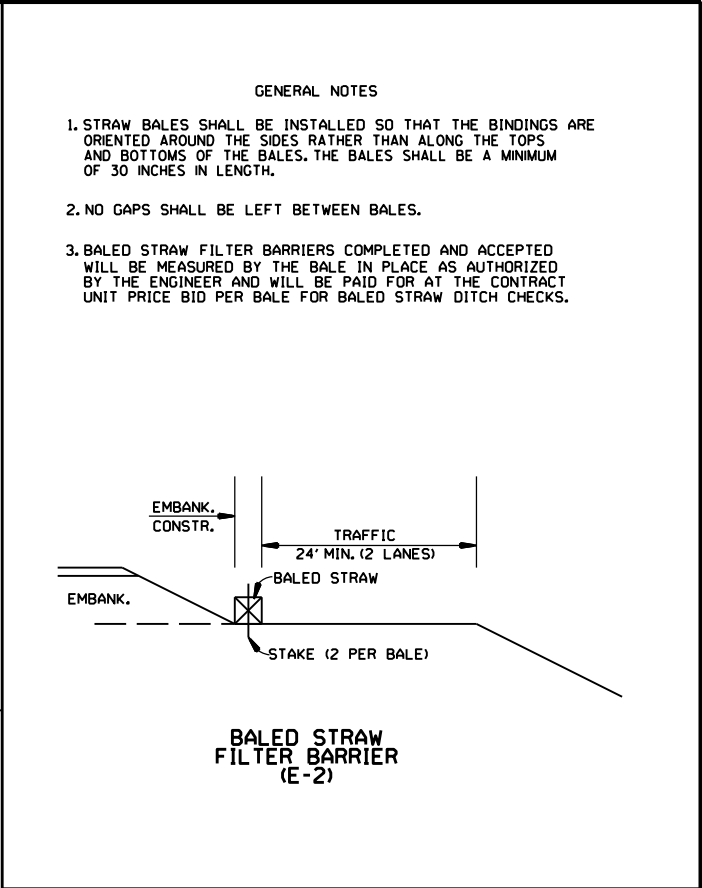
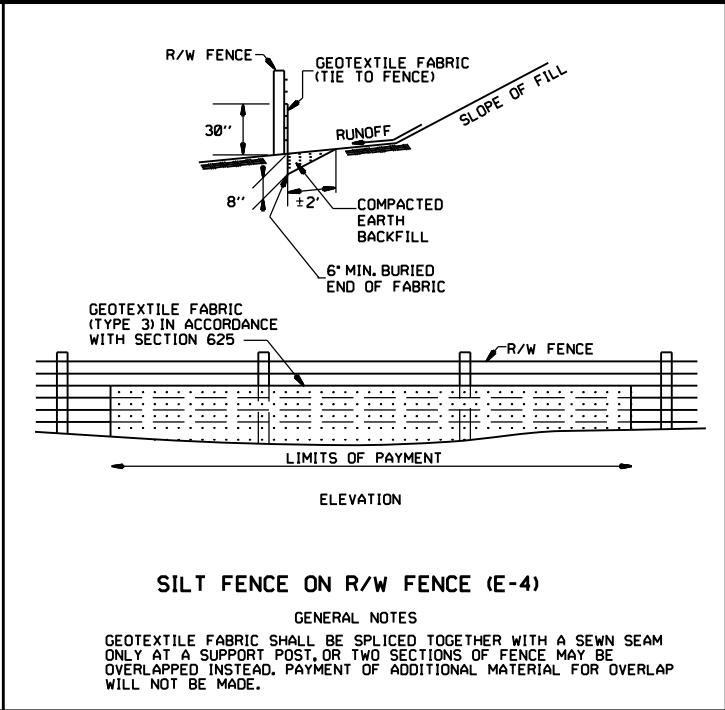
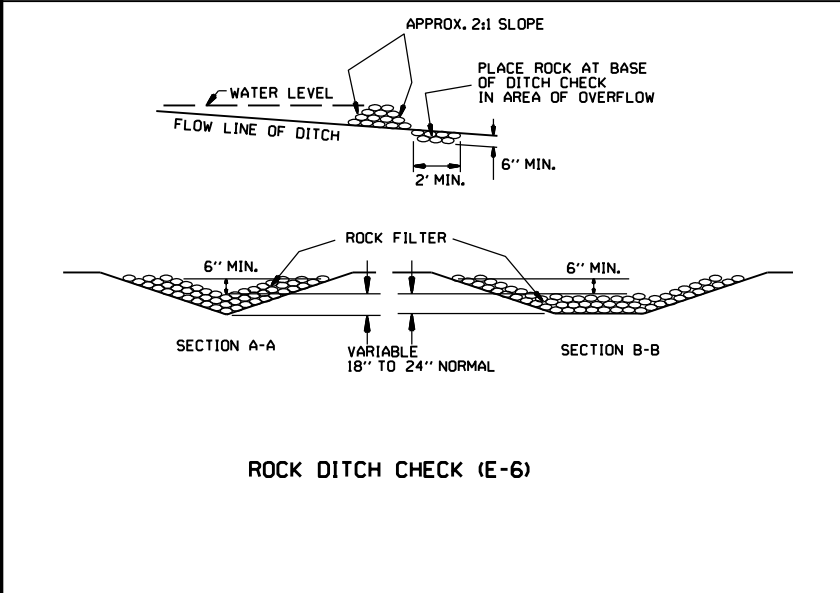
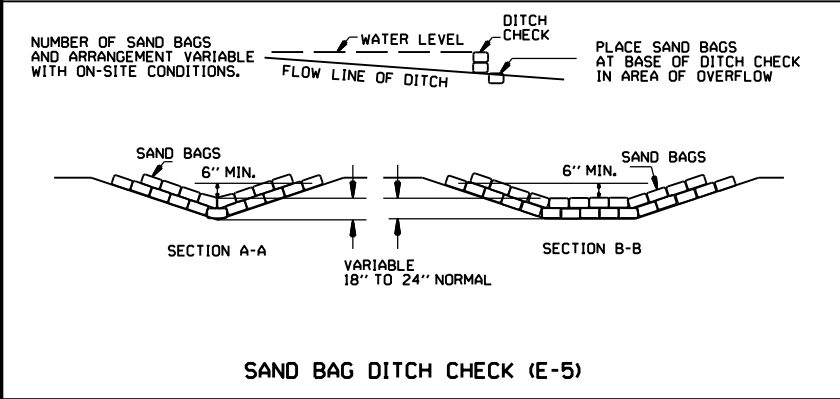
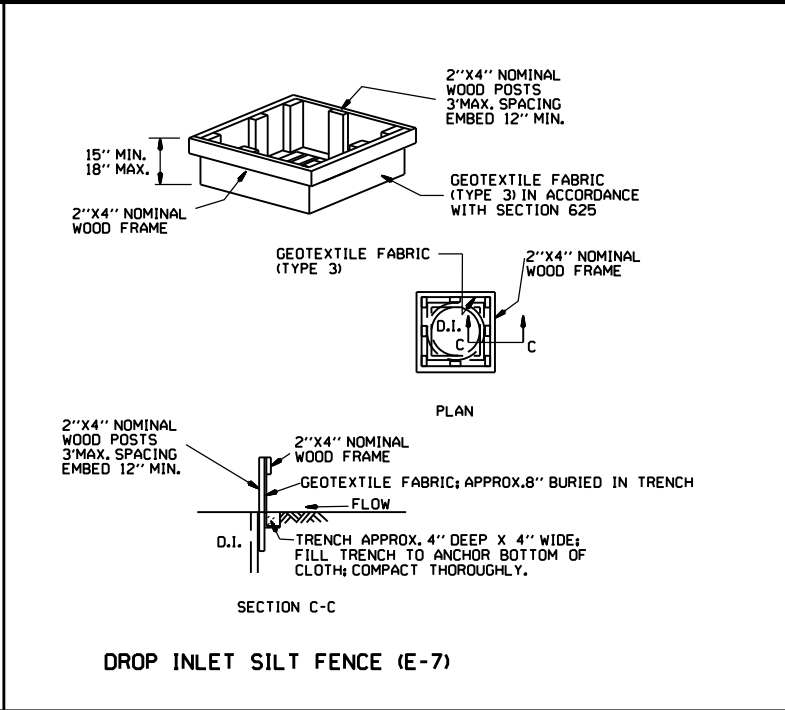
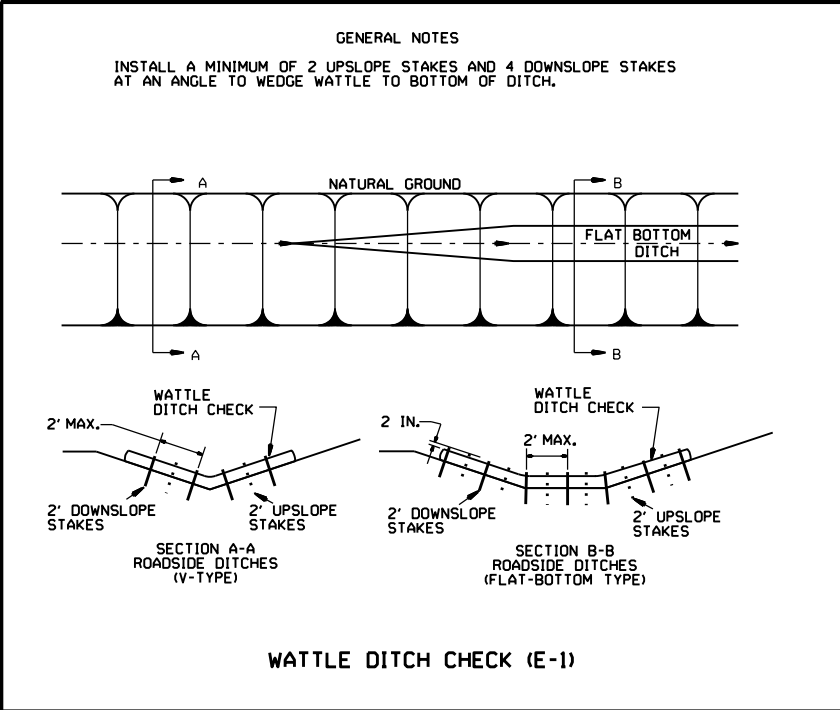
- BMP NOTES:**
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
 - DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
 - RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIAL SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
 - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
 - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
 - IF THE ACTION OF VEHICLES TRAVELING OVER THE SITE IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF OF THE SITE.
 - ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
 - CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
 - ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
 - ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

TOTAL SITE: 1.69 ACRES (INCLUDES R-O-W)
TOTAL DISTURBED AREA: 1.51 ACRES (INCLUDES R-O-W)

- LEGEND:**
- 500 — EXISTING CONTOURS
 - DIRECTION OF OVERLAND FLOW
 - SF — SILT FENCING

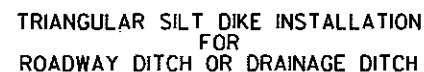
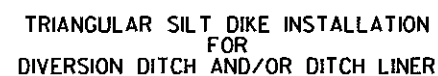


BY									
REVISION									
DATE									
<div>Designing our client's success</div> <div><div>GarNat Engineering, LLC</div><div>P.O. Box 116 Benton, AR 72018 Ph (501) 408-4650 gamateengineering@gmail.com</div><div>3825 Mt Carmel Rd Bryant, AR 72022</div></div>									
<div>NEW FACILITY FOR:</div> <div>BUTLER CENTER</div> <div>CITY OF BRYANT, AR</div>									
<div>STATE OF ARKANSAS</div> <div>REGISTERED PROFESSIONAL ENGINEER</div> <div>NO. 9551</div> <div>LEMON J. WILLIAMS</div>									
03-06-2023									
CONTENTS:									
EROSION CONTROL PLAN									
PROJECT NO: 22203									
DATE: FEB 2023									
SHEET NO: C4.0									

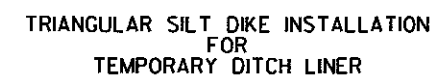
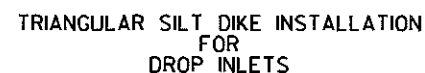
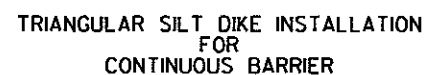


PER CITY OF BRYANT REQUIREMENTS, REQUIRES WIRED BACK FENCE.

12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK		ARKANSAS STATE HIGHWAY COMMISSION
11-18-98	ADDED NOTES		
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95	
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC		
6-2-94	REVISED E-1, 4, 7 & 11; DELETED E-2 & 3	6-2-94	
4-1-93	REDRAWN		
10-1-92	REDRAWN		
8-2-76	ISSUED R.D.M.	298-7-28-76	
DATE	REVISION	FILMED	STANDARD DRAWING TEC-1



- POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.

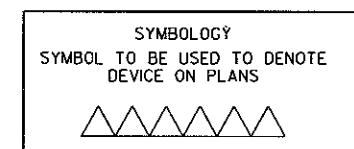


GENERAL NOTES

1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.
 2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE THINNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE ALDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.
- THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.
3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.

3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.



NOTE: SILT DIKE SHOULD ONLY BE USED FOR
DROP INLETS IN SUMP LOCATIONS.

			ARKANSAS STATE HIGHWAY COMMISSION
			TEMPORARY EROSION CONTROL DEVICES
7-26-12	REVISED GENERAL NOTE 2.		STANDARD DRAWING TEC-4
12-15-11	ISSUED		
DATE	REVISION	FILED	

**AUTHORIZATION TO DISCHARGE STORMWATER UNDER
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE
ARKANSAS WATER AND AIR POLLUTION CONTROL ACT**

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.), an

Operator of Facilities with Stormwater Discharges Associated with Construction Activity

is authorized to discharge to all receiving waters except as stated in Part I.B.11 (Exclusions).

For large construction sites that are eligible for coverage under this General Permit (GP), the Arkansas Department of Energy and Environment - Division of Environmental Quality (DEQ), Office of Water Quality will provide a Notice of Coverage (NOC) with tracking permit number which starts with ARR15 and a copy of the permit to the facility. The cover letter includes the DEQ's determination that a facility is covered under the GP and may specify alternate requirements outlined in the permit.

Small construction sites that are eligible for coverage under this GP will be considered to have automatic coverage under this GP and must follow the permit requirements outlined in Condition 6 of Part I.

Effective Date: November 1, 2021

Expiration Date: October 31, 2026



Digitally signed by Alan J. York
DN: cn=Alan J. York, o, ou,
email=alan.york@adeq.state.ar.us,
c=US
Date: 2021.05.04 09:13:53 -05'00'

Alan J. York
Associate Director, Office of Water Quality
Division of Environmental Quality

05/04/2021

Issue Date

PART I

PERMIT REQUIREMENTS

Information in **Part I** is organized as follows:

Section A: Definitions with Included Commentary

Section B: Coverage Under this Permit:

1. Permitted Area
2. Eligibility
3. Responsibilities of the Operator
4. Where to Submit
5. Requirements for Qualifying Local Program (QLP)
6. Requirements for Coverage
7. Notice of Intent (NOI) Requirements
8. Posting Notice of Coverage (NOC)
9. Applicable Federal, State or Local Requirements
10. Allowable Non-Stormwater Discharges
11. Limitations on Coverage (Exclusions)
12. Short Term Activity Authorization (STAA)
13. Effluent Limitation Guidelines (ELG)
14. Natural Buffer Zones
15. Waivers from Permit Coverage
16. Notice of Termination (NOT)
17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision
18. Change in Operator
19. Late Notifications
20. Failure to Notify
21. Maintenance
22. Releases in Excess of Reportable Quantities
23. Attainment of Water Quality Standards
24. Requiring an Individual Permit

SECTION A: DEFINITIONS WITH INCLUDED COMMENTARY

1. **"Arkansas Pollution Control and Ecology Commission"** shall be referred to as APC&EC throughout this permit.
2. **"Automatic Coverage"** is a term used to define the method of coverage for a small construction site.
3. **"Best Management Practices (BMPs)"** schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. According to the EPA BMP manual, the use of hay-bales in concentrated flow areas is not recommended as a BMP.
4. **"Cognizant Official"** is a duly authorized representative, as defined in Part II.B.9.B.
5. **"Commencement of Construction"** is the initial disturbance of soils (or breaking ground) associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material; placement of raw materials at the site).
6. **"Contaminated"** is a substance the entry of which into the MS4, waters of the State, or Waters of the United States may cause or contribute to a violation of Arkansas water quality standards.
7. **"Control Measure"** as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.
8. **"Construction Activity"** earth-disturbing activities, such as the clearing, grading, and excavation of land, and other construction-related activities (e.g., stockpiling of fill material; placement of raw materials at the site) that could lead to the generation of pollutants.
9. **"Construction Site"** is an area upon which one or more land disturbing construction activities occur that in total will disturb one acre or more of land, including areas that are part of a larger common plan of development or sale that may be less than one acre where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan such that the total disturbed area is one acre or more.
10. **"Construction Support Activity"** a construction-related activity that specifically supports the construction activity and involves earth disturbance of pollutant-generating activities of its own, and can include, but not limited to, activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and burrow areas.
11. **"CWA"** is the Clean Water Act or the Federal Water Pollution Control Act.
12. **"Department"** is referencing the Department of Energy and Environment.
13. **"DEQ"** or **"Division"** is referencing the Division of Environmental Quality. The Division is the governing authority for the National Pollutant Discharge Elimination System program in the state of Arkansas.

14. "**Detention Basin**" is an area where excess stormwater is stored or held temporarily and then slowly drains when water levels in the receiving channel recede. In essence, the water in a detention basin is temporarily detained until additional room becomes available in the receiving channel.
15. "**Director**" is the Director of the Division of Environmental Quality, or a designated representative.
16. "**Discharge**" is when used without qualification means the "discharge of a pollutant".
17. "**Disturbed area**" is the total area of the site where any construction activity is expected to disturb the ground surface. This includes any activity that could increase the rate of erosion, including, but not limited to, clearing, grubbing, grading, excavation, demolition activities, haul roads, and areas used for staging. Also included are stockpiles of topsoil, fill material and any other stockpiles with a potential to create additional runoff.
18. "**Drainageway**" is an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.
19. "**Duly Authorized Representative**" is a representative of the Responsible Official meeting the requirements specified in Part II.B.9.B.
20. "**Eligible**" refers to being qualified for authorization to discharge stormwater under this general permit.
21. "**Erosion**" is the process by which the land's surface is worn away by the action of wind, water, ice or gravity.
22. "**ERW**" Extraordinary Resource Water, in accordance with Rule 2.
23. "**ESW**" Ecologically Sensitive Waterbodies, in accordance with Rule 2.
24. "**Facility**" or "**Activity**" is any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.
25. "**Final Stabilization**":
- A. All soil disturbing activities at the site have been completed and either of the two following criteria are met:
 - 1) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% or more of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
 - 2) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
 - B. When background native vegetation will cover less than 100% of the ground (e.g., arid areas, beaches), the 80% coverage criteria is adjusted as follows: if the native vegetation covers 50% of the ground, 80% of 50% ($0.80 \times 0.50 = 0.40$) would require 40% total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.
 - C. For individual lots in residential construction, final stabilization means that either:
 - 1) The homebuilder has completed final stabilization as specified above, or

- 2) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

D. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to “waters of the State”, and areas which are not being returned to their pre-construction agricultural use shall meet the final stabilization criteria in A, B, or C above.

26. **"Grading Activities"** as used in this permit are those actions that disturb the surface layer of the ground to change the contouring, surface drainage pattern, or any other slope characteristics of the land without significantly adding or removing on-site rock, soil, and other materials. This can include demolition, excavation, and filling.

27. **"Impaired Water"** is a waterbody listed in the current, approved Arkansas 303(d) list.

28. **"Infrastructure"** refers to streets, drainage, curbs, utilities, etc.

29. **"Landscaping"** is improving the natural beauty of a piece of land (i.e. entrance of subdivision) through plantings or altering the contours of the ground.

30. **"Large Construction Site"** is a construction site in which construction activity including clearing, grading and excavation. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or greater. (Please see Part I.B.15 for partial waivers.)

31. **"Larger Common Plan of Development or Sale"** is a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g. a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development). All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a “Common Plan of Development or Sale.” The “plan” in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. The applicant shall still meet the definition of operator in order to be required to get permit coverage, regardless of the acreage that is personally disturbed.

If a smaller project (i.e., less than 1 acre) is part of a larger common plan of development or sale (e.g., you are building a residential home on a ½ acre lot in a 40 acre subdivision or are putting in a fast food restaurant on a ¾ acre pad that is part of a 20 acre retail center), permit coverage is required.

32. **"Losing Stream Segment"** a stream segment which, beginning at the point of existing or proposed discharge and extending two (2) miles downstream, contribute thirty percent (30%) or more of its flow at a 7Q10 flow or one (1) cfs, whichever is greater, through natural processes such as permeable subsoil or cavernous bedrock into an aquifer.

33. **"Natural Buffer"** for purposes of this permit, an area of undisturbed natural cover surrounding waters of the State. Natural cover includes vegetation, exposed rock, or barren ground that exists prior to commencement of construction activities

at the site.

- 34. "**NOC**" Notice of Coverage.
- 35. "**NOI**" Notice of Intent to be covered by this permit.
- 36. "**NOT**" Notice of Termination.
- 37. "**NSW**" Natural and Scenic Waterways, in accordance with Rule 2.

38. "**Operator**"/"**Permittee**" for the purpose of this permit and in the context of stormwater associated with construction activity, means any person(s), an individual, association, partnership, corporation, municipality, state or federal agency, associated with a construction project that has financial and operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; additionally, the Division may require any person(s), an individual, association, partnership, corporation, municipality, state or federal agency, associated with a construction project that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions can be named as a co-permittee.

In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline or a landowner who allows a mining company to remove dirt, shale, clay, sand, gravel, etc. from a portion of his property). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

- 39. "**Outfall**" a point source where stormwater leaves the construction site.
- 40. "**Owner**" refers to the owner or operator of any "facility or activity" subject to regulation under the NPDES program. In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g. having a house built by a residential homebuilder).
- 41. "**Physically Interconnected**" means that one municipal separate storm sewer system is connected to a second municipal separate storm sewer system in such a way that it allows for direct discharges into the second system.
- 42. "**Point Source**" is any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.
- 43. "**Qualified Local Program**" is a municipal program for stormwater discharges associated with construction sites that has been formally approved by DEQ.
- 44. "**Qualified personnel**" a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the

construction activity.

45. "**Regulated Small Municipal Separate Storm Sewer System**" are all municipal separate storm sewer systems that are either:

- A. Located within the boundaries of an "urbanized area" with a population of 50,000 or more as determined by the latest Decennial Census by the Bureau of Census; or
- B. Owned or operated by a municipality other than those described in paragraph A and that serve a jurisdiction with a population of at least 10,000 and a population density of at least 1,000 people per square mile; or
- C. Owned or operated by a municipality other than those described in paragraphs A and B and that contributes substantially to the pollutant loadings of a "physically interconnected" municipal separate storm sewer system.

46. "**Responsible Official**" is the authorized representative, as defined in Part II.B.9.A.

47. "**Retention Basin**" a basin that is designed to hold the stormwater from a rain event and allow the water to infiltrate through the bottom of the basin. A retention basin also stores stormwater, but the storage of the stormwater would be on a more permanent basis. In fact, water often remains in a retention basin indefinitely, with the exception of the volume lost to evaporation and the volume absorbed into the soils. This differs greatly from a detention basin, which typically drains after the peak of the storm flow has passed, sometimes while it is still raining.

48. "**Runoff Coefficient**" is the fraction of total rainfall that will appear at the conveyance as runoff.

49. "**Sediment**" is material that settles to the bottom of a liquid.

50. "**Sediment Basin**" is a basin that is designed to maintain a 10 year-24 hour storm event for a minimum of 24-hours in order to allow sediment to settle out of the water.

51. "**Small Construction Site**" is a construction site in which construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

52. "**Stormwater**" is stormwater runoff from rainfall, snow melt runoff, and surface runoff and drainage.

53. "**Stormwater Discharge Associated with Construction Activity**" refers to the discharge of runoff from any conveyance which is used for collecting and conveying stormwater and which is directly related to construction activity.

54. "**Stormwater Pollution Prevention Plan (SWPPP or SWP3)**" is a plan that includes site map(s), an identification of construction/contractor, activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants.

55. "**Temporary Sediment Controls**" are controls that are installed to control sediment runoff from the site during construction activity. These could be silt fencing, rock check dams, etc.

56. "**Total Maximum Daily Load**" or "**TMDL**" is the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources and natural background. If the receiving water has only one point

source discharger, the TMDL is the sum of that point source WLA plus the LAs for any non-point sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measure.

57. "Uncontaminated" means that the water will not exceed the water quality standards as set forth in APC&EC Rule 2; also not containing a harmful quantity of any substance.

58. "Urbanized Area" means the areas of urban population density delineated by the Bureau of the Census for statistical purposes and generally consisting of the land area comprising one or more central place(s) and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census.

59. "Waters of the State" waters of the State means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.

SECTION B: COVERAGE UNDER THIS PERMIT

Introduction

This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre or less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This permit also authorizes stormwater discharges from any other construction activity designated by DEQ where DEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the State. This permit replaces the permit issued in 2016. The goal of this permit is to minimize the discharge of stormwater pollutants from construction activity into waters of the State. The operator shall read and understand the conditions of the permit. A copy of the CGP is available on the DEQ web site at <https://www.adeg.state.ar.us/water/permits/npdes/stormwater/>. A hard copy may be obtained by contacting the DEQ's General Permits Section at (501) 682-0623.

1. **Permitted Area.** If a large or small construction activity is located within the State of Arkansas, the operator may be eligible to obtain coverage under this permit.
2. **Eligibility.** Permit eligibility is limited to discharges from “large” and “small” construction activity, or as otherwise designated by DEQ. This general permit contains eligibility restrictions, as well as permit conditions and requirements. Operators shall meet the requirements of Part I.B.6.A or Part I.B.6.B to be eligible for coverage under this permit. In such cases, operators shall continue to satisfy those eligibility provisions to maintain permit authorization. If operators do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if operators are eligible for coverage under this permit and do not comply with the requirements of the general permit, they may be in violation of the general permit for otherwise eligible discharges.
 - A. This general permit authorizes discharges from construction activities as defined in 40 C.F.R. §122.26(a), 40 C.F.R. §122.26(b)(14)(x), 40 C.F.R. §122.26(b)(15)(i)-(ii) and 40 C.F.R. §450.
 - B. This permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, concrete truck washout, fueling, equipment staging yards, materials storage areas, excavated material disposal areas, stockpiles of top soil, borrow areas) provided:
 - 1) The support activity is directly related to a specific construction site that is required to have NPDES permit coverage for discharges of stormwater associated with the construction activity;
 - 2) The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects; and does not continue to operate beyond the completion of the construction activity at the project it supports;
 - 3) Pollutant discharges from support activity areas are minimized in compliance with conditions of this permit; and
 - 4) Discharges from the support activity areas shall be identified in a Stormwater Pollution Prevention Plan (SWPPP) stating appropriate controls and measures for the areas off the construction site.
 - C. Other activities may be considered for this permit at the discretion of the Director as defined in 40 C.F.R. §122.26(b)(15)(ii).

3. **Responsibilities of the Operator.** Permittees with operational control are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on the construction site including construction support activities off site, including protection of endangered species and implementation of BMPs and other controls required by the SWPPP. Receipt of this general permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.
4. **Where to Submit.** The operator shall submit a complete and signed Notice of Intent (NOI) and SWPPP to DEQ through ePortal, unless the operator receives a waiver from DEQ, which can be found on the following website:

<https://eportal.adeq.state.ar.us/>

- A. The operator shall submit the application fee to DEQ through ePortal (when available), submit an email requesting an invoice to be created to pay online, or mail in invoice from ePortal with a check (listing the invoice number on the check) to the follow address:

Division of Environmental Quality
ATTN: Fiscal
5301 Northshore Drive
North Little Rock, AR 72118-5317

NOTE: Notice of Coverage (NOC) will **NOT** be issued until payment has been received by DEQ.

- B. Waivers from electronic reporting may be granted based on one of the following conditions:

- 1) If the operational headquarters is physically located in a geographic area (i.e. Zip code or census tract) that is identified as under-served for broadcast internet access in the most recent report from the Federal Communications Commission;
- 2) If available computer access or computer capability is limited; or
- 3) If the operator is a religious community that choose not to use certain modern technologies pursuant to 40 C.F.R. §127.15(c)(1).

- C. In order to apply for a waiver from the electronic reporting, the operator must submit the required information outlined in 40 C.F.R. §127.15(b)(2).

- D. If DEQ grants a waiver approval to use a paper NOI, and operator elects to use it, the operator **must** use the approved form developed by DEQ.

5. **Requirements for Qualifying Local Program (QLP).** DEQ reviews and approves the QLPs to ensure that they meet or supersede both state and federal requirements outlined in this permit and 40 C.F.R. §122.44(s). DEQ will review the QLP at least every 5 years for recertification. If DEQ approves a QLP, then the QLP requirements shall at the minimum meet the DEQ's requirements. This includes all templates and forms. This permit may be modified to add new QLPs or modify existing QLPs at DEQ's discretion. All public notice and other applicable costs incurred by the modification of the permit for the addition or modification of a QLP will be paid by the QLP.

If a small construction site is within the jurisdiction of a QLP, the operator of the small construction site is authorized to discharge stormwater associated with construction activity under QLP permit requirements only.

At the time of issuance of this permit, only the City of Hot Springs is meeting the DEQ minimum requirements.

6. Requirements for Coverage.

A. Small Construction Sites. An operator of a small construction site will be considered to have automatic coverage under this general permit and may discharge without submitting a NOI, SWPPP or fee if the following conditions are met:

- 1) A completed Notice of Coverage (NOC) must be posted at the site prior to commencing construction and remain posted until final stabilization is completed;
- 2) A Stormwater Pollution Prevention Plan must be prepared in accordance with good engineering practice as described in Rule 6.203(B), completed prior to posting the NOC, implemented upon commencement of construction activities, and the latest copy must be maintained at the construction site;
- 3) All permit conditions set forth in this general permit must be followed; and
- 4) The operator is responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting DEQ or reviewing the DEQ website:

<https://www.adeg.state.ar.us/water/permits/npdes/stormwater/>

B. Large Construction Sites. An operator of a large construction site discharging under this general permit shall submit the following items at least ten (10) business days prior to the commencement of construction activities:

- 1) A complete NOI in accordance with the requirements of Part I.B.7 of this permit.
- 2) A complete SWPPP in accordance with the requirements of Part II.A of this permit.
- 3) An initial permit fee shall accompany the NOI under the provisions of APC&EC Rule 9. Subsequent annual fees will be billed by DEQ until the operator has requested a termination of coverage by submitting a Notice of Termination (NOT). Failure to remit the required initial permit fee shall be grounds for the Director to deny coverage under this general permit. Failure to remit the required annual fees shall be grounds for the Director to revoke coverage under this permit.

C. Modification of Permit Coverage to Include Additional Acreage. Any request to increase the total acreage of a construction site shall be accompanied by a \$200 permit modification fee and an updated SWPPP. Any request to only increase the disturbed acreage without changing the total acreage shall be accompanied by an updated SWPPP. A \$200 permit modification fee is not required with an increase in disturbed acreage. The operator shall submit a complete and signed Additional Acreage Request Form to DEQ through ePortal, which can be found on the following website:

<https://eportal.adeg.state.ar.us/>

7. Notice of Intent (NOI) Requirements.

A. NOI Form. Large construction site operators who intend to seek coverage for a stormwater discharge under this general permit shall submit a complete and accurate DEQ NOI form through the ePortal system (at <https://eportal.adeg.state.ar.us/>) at least ten (10) business days prior to the date coverage under this permit is desired, unless granted a waiver in accordance with Part I.B.4.D. The NOI form completed **must** be the current version obtained from ePortal.

If the NOI is deemed incomplete, DEQ will notify the applicant with regard to the deficiencies by a letter, email, or phone within ten (10) business days of the receipt of the NOI. If the operator does not receive a notification of deficiencies from DEQ's receipt of the NOI, the NOI is deemed complete. If the applicant does not provide DEQ with the requested deficiencies within the deadline set by DEQ, then DEQ will return the NOI, fee and SWPPP back to the

applicant.

B. Contents of the NOI. The NOI form contains, at a minimum, the following information:

- 1) Operator (Permittee) information (name, mailing address, telephone, and E-mail address)
- 2) Whether the operator is a federal, state, private, public, corporation, or other entity
- 3) Invoice mailing information (name, address, and telephone and fax numbers)
- 4) Project Construction site information (name, county, address, contact person, directions to the site, latitude and longitude for the entrance of the site or the endpoints for linear project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, the total project acreage and the acreage to be disturbed by the operator submitting the NOI, type of the project (subdivision, school, etc), whether the project is part of a larger common plan of development or sale.)
- 5) Discharge information (name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
- 6) List of current permits
- 7) The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APC&EC Rule 6
- 8) The certification of the facility corporation
- 9) Other information (location of the SWPPP)
- 10) And the SIC Code.

C. Notice of Coverage (NOC). Unless notified by the Director to the contrary, operators who submit a complete NOI and SWPPP in accordance with the requirements of this permit are authorized to discharge stormwater from the construction sites under the terms and conditions of this permit ten (10) business days after the date the NOI is deemed complete (which may not be the original submission date if revisions or additions were necessary) by DEQ. If the NOC has not been received by the permittee ten (10) business days after the date the NOI is deemed complete by DEQ, the NOI may be posted until the NOC is received. Upon review of the NOI and other available information, the Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

8. Posting Notice of Coverage (NOC).

A. Automatic Coverage Sites. The NOC for small sites, as defined in Part I.A.51, shall be obtained from the DEQ's Stormwater website:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/> .

The NOC must be posted at the site prior to commencing construction. In addition, a copy of the latest signed and certified SWPPP must be available at the construction site in accordance with Part II.A.2.B and D prior to commencing construction.

B. Large Sites: NOC Posting for Large Construction Sites. The posting for large construction sites shall be obtained from DEQ only after the permittee has submitted the required NOI, permit fee and complete SWPPP to DEQ for the coverage.

C. Linear Projects. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice shall be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

Please note, this permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that the permittee allow members of the public access to a construction site.

9. **Applicable Federal, State or Local Requirements.** The operator shall ensure that the stormwater controls implemented at the site are consistent with all applicable federal, state, or local requirements. Additionally, an operator who is operating under approved local erosion and sediment plans, grading plans, local stormwater permits, or stormwater management plans shall submit signed copies of the NOI to the local agency (or authority) upon the local agency's request.

10. **Allowable Non-Stormwater Discharges.**

- A. The following non-stormwater discharges as part of the construction activity may be authorized by this permit through appropriate controls. Non-stormwater discharges shall be addressed in the stormwater pollution prevention plan and measures to minimize or eliminate non-stormwater discharge should be taken if reasonably possible.
- 1) Fire-fighting activities;
 - 2) Fire hydrant flushings;
 - 3) Water used to wash vehicles and equipment (where detergents, soaps, solvents or other chemicals are not used) or to control dust in accordance with Part II.A.4.J.2;
 - 4) Potable water sources including uncontaminated waterline flushings;
 - 5) Uncontaminated landscape irrigation;
 - 6) Uncontaminated routine external building wash down which does not use detergents, soaps, solvents or other chemicals;
 - 7) Uncontaminated pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents, soaps, solvents or other chemicals are not used);
 - 8) Uncontaminated air conditioning compressor condensate (See Part I.B.13.C of this permit);
 - 9) Uncontaminated springs, excavation dewatering and uncontaminated groundwater (See Part I.B.13.C of this permit);
 - 10) Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater (See Part I.B.13.C of this permit).

11. **Limitations on Coverage (Exclusions).** The following stormwater discharges associated with construction activity are not covered by this permit:

- A. **Post Construction Discharge.** Stormwater discharges associated with construction activities that originate from the site, as well as construction support activities located off site, after construction activities have been completed, the site has undergone final stabilization, and the permit has been terminated.
- B. **Discharges Mixed with Non-Stormwater.** Stormwater discharges that are mixed with sources of non-stormwater other than those identified in Part I.B.10.
- C. **Discharges Covered by another Permit.** Stormwater discharges associated with construction activity that are covered under an individual or an alternative general permit may be authorized by this permit after an existing permit expires, provided the expired permit did not establish numeric effluent limitations for such discharges.
- D. **Discharges into Receiving Waters with an Approved TMDL.** Discharges from a site into receiving waters for which there is an established total maximum daily load (TMDL) allocation (<https://www.adeg.state.ar.us/water/planning/integrated/tmdl/>) are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that is consistent with the assumptions and requirements in the EPA approved TMDL. To be eligible for coverage under this general permit, operators shall incorporate into their SWPPP all conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within the timeframes established in the TMDL. If a specific numeric allocation has been established that

applies to the project's discharges, the operator shall incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation. If a numeric limit has been assigned to the facility, quarterly monitoring shall be submitted to DEQ demonstrating compliance with the assigned Waste Load Allocation established in the TMDL. Please note that DEQ will be reviewing this information. If it is determined that the project will discharge into a receiving stream with a TMDL, then DEQ may require additional BMPs.

- E. Discharges into Impaired Receiving Waters (303(d) List). If stormwater discharges from a construction site enters the receiving water listed as impaired under Section 303(d) of the Clean Water Act (<https://www.adeq.state.ar.us/water/planning/integrated/>), the permittee shall incorporate into the SWPPP the additional BMPs needed to sufficiently protect water quality. Please note that DEQ will be reviewing this information. If it is determined that the project will discharge to an impaired water body, then DEQ may require additional BMPs.
- F. Discharges into an Extraordinary Resource Water (ERW), Natural and Scenic Waterway (NSW), or Ecologically Sensitive Waterbody (ESW). Discharges from a construction site located within the watershed of any water body or waterway designated as an Outstanding Resource Water as defined in the APC&EC Rule 2.203, including ERWs, NSWs, or ESWs are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that includes additional BMPs needed to prevent to the maximum extent possible exposure to precipitation and to stormwater of pollutants that could potentially impact water quality. For the purposes of this permit, the watershed of an Outstanding Resource Water will be identified by the United States Geological Survey's twelve (12) digit Hydrological Unit Code (HUC). Please note that DEQ will be reviewing this information. If the site will discharge to an ERW, NSW, or ESW, then DEQ may determine that additional requirements are necessary.
- G. Discharges into an area of the state which includes potential losing stream and/or sensitive aquatic species native to these areas. Discharges from a construction site located within the watershed of any potential losing stream and/or sensitive aquatic species native to the area are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that includes additional BMPs needed to prevent to the maximum extent possible exposure to precipitation and to stormwater of pollutants that could potentially impact water quality. In accordance with Part I.B.3, it is the responsibility of the permittee to prevent activity which may take or otherwise risk harm to endangered species. Please note that DEQ will be reviewing this information. If the site will discharge to an area of the state which includes potential losing stream and/or sensitive aquatic species native to these areas, then DEQ may determine that additional requirements are necessary.

- 12. Short Term Activity Authorization (STAA).** Any work being conducted in waters of the State will require a STAA from DEQ in accordance with Rule 2.305. An STAA is necessary for any in-stream activity that has the potential to exceed the water quality standards, including, but not limited to: gravel removal, bridge or crossing repair/maintenance, bank stabilization, debris removal, culvert replacement, flood control projects, and stream relocation. Any work being conducted in Waters of the United States may require a Section 404 permit from the U.S. Army Corps of Engineers. This permit does not authorize any activity under an STAA, Individual 401 Certification, or Section 404 permit. The necessary forms to apply for coverage under an STAA or Individual 401 Certification can be found on the following website:

<https://www.adeq.state.ar.us/water/planning/instream/>

The SWPPP shall be updated to include a copy of the STAA letter (and Individual 401 Certification if needed) upon receipt. Re-submittal of the SWPPP is not required unless specifically requested by DEQ.

- 13. Effluent Limitation Guidelines (ELG).** All permittees shall comply with the following effluent limits:

- A. Erosion and Sediment Controls. Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls shall be designed, installed and maintained to:

- 1) Control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges;
 - 2) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
 - 3) Minimize the amount of soil exposed during construction activity;
 - 4) Minimize the disturbance of steep slopes;
 - 5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls shall address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - 6) Provide and maintain natural buffers around waters of the State, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
 - 7) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
 - 8) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.
- B. Soil Stabilization. Stabilization of disturbed areas must, at a minimum, be initiated immediately (unless weather conditions do not allow immediate initiation) whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority. Stabilization must be completed within fourteen (14) calendar days. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.
- C. Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. There shall be no turbid discharges to waters of the State resulting from dewatering activities. If trench or ground waters contain sediment, it shall pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag, or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care shall be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.
- D. Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures shall be designed, installed, implemented and maintained to:
- 1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters shall be treated in a sediment basin or BMP control that provides equivalent or better treatment prior to discharge;
 - 2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
 - 3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

E. Prohibited discharges. The following discharges are prohibited:

- 1) Wastewater from washout of concrete, unless managed by an appropriate control;
- 2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
- 3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- 4) Soaps, solvents, or detergents used in vehicle, equipment washing, or external building washdown.
- 5) Toxic or hazardous substances from a spill or release.

F. Surface Outlets. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

14. Natural Buffer Zones. A natural buffer zone as stated below shall be maintained at all times and direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law.

- A. For construction projects where construction activities or construction support activities occur, the SWPPP shall provide at least twenty-five (25) feet of natural buffer zone, as measured horizontally from the top of the bank to the disturbed area, from any waters of the State.
- B. DEQ will require at least fifty (50) feet of natural buffer zone, as measured horizontally from the top of the bank to the disturbed area, from established TMDL water bodies, streams listed on the 303(d) list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), or any other uses at the discretion of the Director.
- C. Linear projects will be evaluated individually by DEQ to determine natural buffer zone setbacks.

15. Waivers from Permit Coverage. The Director may waive the otherwise applicable requirements of this general permit for stormwater discharges from construction activities under the terms and conditions described in this section.

- A. Waiver Applicability and Coverage. Based upon 40 C.F.R. §122.26.b.15.i.A, operators of small construction activities may apply for and receive a waiver from the requirements to obtain this permit.
- B. No Stormwater Leaving the Site. If all of the stormwater from the construction activity is captured on-site under any size storm event and allowed to evaporate, soak into the ground on-site, or is used for irrigation, a permit is not needed.
- C. TMDL Waivers. This waiver is available for sites with automatic coverage if the DEQ has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the Director that construction activity will take place, and storm water discharges will occur within the drainage area addressed by the TMDL or equivalent analysis. Information on approved TMDLs is available on DEQ's website:

<https://www.adeq.state.ar.us/water/planning/integrated/tmdl/>.

16. Notice of Termination (NOT). When all construction activities that disturbed soil are complete, the site has reached final stabilization (100% stabilization with 80% density or greater, or as defined in Part I.A.25.B for sites where background native vegetation will cover less than 100% of the ground), all stormwater discharges from construction activities authorized by this permit are eliminated and all temporary sediment controls are removed and properly disposed, the operator of the facility may submit a complete Notice of Termination (NOT) to the Director. Along with the NOT, pictures that represent the entire site shall be submitted for review. Final stabilization is not required if the land is returned to its pre-construction agriculture use. Operators of small construction sites are not required to submit NOTs for their construction sites. However, final stabilization is required on all sites. If a NOT is not submitted when the project is completed, the operator will be responsible for annual fees.

17. Responsibilities of the Operator of a Larger Common Plan of Development or Sale.

- A. The operator is ultimately responsible for the runoff from the perimeter of the entire development. Regardless of the reason for the runoff, the operator is responsible for ensuring sufficient overall controls of the development.
- B. The operator shall not terminate the permit coverage until the following conditions have been met:
 - 1) After all construction activities including landscaping and lot development has been completed; and
 - 2) All lots are sold and developed.

The following exceptions to this requirement may apply:

- a. Less than 100% sold and developed at the discretion of the Director, or
 - b. Separation of the larger common plan if twenty-four (24) months have passed with no construction activity, or
 - c. All lots are developed and there are no temporary common controls for subdivision outfalls, i.e. sediment basins, large sediment traps, check dams, etc.
- 3) If lots are sold and then re-sold to a third party, permit coverage shall be obtained by each of the operators while they have ownership of the lots. The second owner is responsible for obtaining the same certification from the third owner (i.e. the certification shall pass from owner to owner).
- C. The operator shall not terminate permit coverage until the operators of all of the individual lots within the larger common plan of development or sale are notified of their permitting requirements under this general permit. In this case, the signed certification statements from each operator of individual lots shall be maintained in the stormwater pollution prevention plan for the larger common plan of development or sale. A copy of the signed certifications shall be submitted to DEQ with the NOT. The certification shall be as follows:

“I, _____, operator of an individual lot #_____, block #_____ of _____ subdivision, certify under penalty of law that I was notified by the operator of the larger common plan of the stormwater permitting requirements for my construction site(s). I understand prior to commencement of any construction activity I have to prepare and comply with a SWPPP and post the Construction Site Notice . I understand that prior to the sale of this lot to another party; I must notify the new owner of DEQ requirements and obtain this certification from the new owner.”

Signature _____

- D. The following examples are provided as clarification:

- 1) If a small portion of the original common plan of development remains undeveloped and there has been a period of time (i.e., more than 24 months) where there are no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), operators may re-evaluate the original project based on the acreage remaining from the original “larger common plan of development or sale.” If less than five (5) but more than one (1) acre remains to build out the original “common plan”, coverage under the large permit may not be required. However, operators will need to comply with the terms and conditions for Small Construction Sites in the Construction General Permit. If less than one acre remains of the original common plan, the individual project may be treated as a part of a less than one acre development and no permit would be required.
- 2) If operators have a long-range master plan of development or sale where some portions of the master plan are conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time (i.e., more than 24 months), operators may consider the “conceptual” phases of development to be separate “common plans” provided the periods of construction for the physically interconnected phases will not overlap.
- 3) Where discrete construction projects within a larger common plan of development or sale are located ¼ mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed. For example, if an interconnecting access road or pipeline were under construction at the same time, they would generally be considered as a part of a single “common plan” for permitting purposes.
- 4) If the operator sells all the lots in the subdivision to one or more multi-lot homebuilder(s), provisions shall be made to obtain stormwater permit coverage by one of the following options:
 - a. The permit may be transferred from the first “operator” to the new/second “operator”.
 - b. A new, separate permit coverage may be obtained by the second “operator”.NOTE: If a new permit coverage is to be obtained, then it shall be obtained before the first/original permit is terminated.
- 5) If the operator retains ownership of any lots in the subdivision, the operator shall maintain permit coverage for those lots under the original permit coverage. The operator shall modify the SWPPP by stating which lots are owned and marking the lots on the site map. If there are one (1) or two (2) lots remaining and the total acreage is less than five (5) acres, the original permit coverage could be terminated and those lots could be covered as a small site.

18. Change in Operator. For stormwater discharges from large construction sites where the operator changes, including instances where an operator is added after the initial NOI has been submitted, the new operator shall ensure that a permit transfer form is received by DEQ at least two (2) weeks prior to the new operator beginning work at the site.

19. Late Notifications. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Part I.B.7 of this permit. In such instances, the Director may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of stormwater associated with construction activity that have occurred on or after the dates specified in this permit.

20. Failure to Notify. The operator of a construction site who fails to notify the Director of their intent to be covered under this permit, and who potentially discharges pollutants (sediment, debris, etc.) to waters of the State without an NPDES permit, is in violation of the Arkansas Water and Air Pollution Control Act.

21. Maintenance. Determination of the acreage of disturbance does not typically include disturbance for routine maintenance activities on existing roads where the original line and grade, hydraulic capacity, or original purpose of the road is not being altered, nor does it include the paving of existing roads. Maintenance activities (returning to original conditions) are not

regulated under this permit unless one or more acres of underlying or surrounding soil are cleared, graded, or excavated as part of the operation.

22. Releases in Excess of Reportable Quantities.

A. The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the operator of the reporting requirements of 40 C.F.R. §110, §117 and §302. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under either 40 C.F.R. §110, 40 C.F.R. §117, or 40 C.F.R. §302, occurs during a twenty-four (24) hour period, the following action shall be taken:

- 1) Any person in charge of the facility is required to notify the National Response Center (NRC) (800-424-8802) in accordance with the requirements of 40 C.F.R. §110, 40 C.F.R. §117, or 40 C.F.R. §302 as soon as he/she has knowledge of the discharge;
- 2) The operator shall submit within five (5) calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, and the circumstances leading to the release, and steps to be taken in accordance with Part II.B.17 of this permit to the DEQ.
- 3) The SWPPP described in Part II.A of this permit shall be modified within fourteen (14) calendar days of knowledge of the release to:
 - a. Provide a description of the release and the circumstances leading to the release; and
 - b. The date of the release;
- 4) Additionally, the SWPPP shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan shall be modified where appropriate.

B. Spills. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

23. Attainment of Water Quality Standards.

The operator shall select, install, implement, and maintain control measures at the construction site and construction support activities off site that minimize the discharge of pollutants for which a stream is impaired at the discretion of the Director as necessary to protect water quality. In general, except in situations explained below, the stormwater controls developed, implemented, and updated to be considered stringent enough to ensure that discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

At any time after authorization, DEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, DEQ will require the permittee to:

- A. Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
- B. Cease discharges of pollutants from construction activity and submit an individual permit application.

All written responses required under this part shall include a signed certification consistent with Part II.B.9.

24. Requiring an Individual Permit

The Director may require any person eligible for coverage under the general permit to apply for and obtain an individual permit. In addition, any interested person(s) may submit an application for an individual permit. The Director may consider the issuance of individual permits according to the criteria in 40 C.F.R. §122.28(b)(3).

Coverage of the facility under this general permit is may be terminated by DEQ if the operator fails to submit or respond to the permitting process or requests for information in a timely manner.

Any operator covered under this general permit may request to be excluded from the coverage of this permit by applying for an APC&EC Rule 6 individual permit. The operator shall submit an application for an individual permit with the reasons supporting the application to DEQ. If a final, individual NPDES permit is issued to an operator otherwise subject to this general permit, the operator is required to submit a NOT. Coverage under this general permit will then be terminated no earlier than the effective date of the individual NPDES permit. Otherwise, the applicability of this general permit to the facility remains in full force and effect.

PART II

STANDARD CONDITIONS

Information in **Part II** is organized as follows:

Section A: Stormwater Pollution Prevention Plans (SWPPP):

1. Deadlines for Plan Preparation and Compliance
2. Signature, SWPPP, Inspection Reports, and Notice of Coverage (NOC)
3. Keeping SWPPP Current
4. Contents of the Stormwater Pollution Prevention Plan
5. Plan Certification

Section B: Standard Permit Conditions:

1. Retention of Records
2. Duty to Comply
3. Penalties for Violations of Permit Conditions
4. Continuance of the General Permit
5. Need to Halt or Reduce Activity Not a Defense
6. Duty to Mitigate
7. Duty to Provide Information
8. Other Information
9. Signatory Requirements
10. Certification
11. Penalties for Falsification of Reports
12. Penalties for Tampering
13. Oil and Hazardous Substance Liability
14. Property Rights
15. Severability
16. Transfers
17. Proper Operation and Maintenance
18. Inspection and Entry
19. Permit Actions
20. Re-Opener Clause
21. Local Requirements
22. Applicable Federal, State Requirements

SECTION A: STORMWATER POLLUTION PREVENTION PLANS (SWPPP)

The operator shall prepare a SWPPP before permit coverage. The SWPPP shall follow the order outlined in Part II.A.4 & 5 below. This basic DEQ format is available through DEQ's website <https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>. Other formats may be used at the discretion of the Director if the format has been approved by DEQ prior to use. The operator shall implement the SWPPP as written from initial commencement of construction activity until final stabilization is complete, with changes being made as deemed necessary by the permittee, local, state or federal officials. The plan shall be prepared in accordance with good engineering practices, by qualified personnel and shall:

- Identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction site and construction support activities off site;
- Identify, describe and ensure the implementation of BMPs, with emphasis on initial site stabilization, which are to be used to reduce pollutants in stormwater discharges from the construction site and construction support activities off site;
- Be site specific to what is taking place on a particular construction site;
- Ensure compliance with the terms and conditions of this permit; and
- Identify the responsible party for on-site SWPPP implementation.

1. Deadlines for Plan Preparation and Compliance.

A. Automatic Coverage Sites.

The plan shall be completed prior to obtaining permit coverage and commencement of construction activities and updated as appropriate. Submittal of the NOI, permit fee and SWPPP is not required. All conditions set forth in Part II.A must be followed, and the NOC must be posted at the site prior to commencing construction activities. In addition, a copy of the SWPPP must be available at the construction site in accordance with Part II.A.2.B and D prior to commencing construction.

B. Large Construction Sites.

The plan shall be completed and submitted for review, along with an NOI and initial permit fee ten (10) business days prior to the commencement of construction activities. Submittals of updates to the plan during the construction process are required in accordance with Part I.B.6.C or if requested by the Director.

C. Existing Permittees.

Existing permittees that were permitted prior to the issuance of this renewal permit are required to update their plan as appropriate to come into compliance with the requirements contained in Part II.A.4 by the effective date of this permit.

2. Signature, SWPPP, Inspection Reports and Notice of Coverage (NOC).

- A. The SWPPP and inspection reports shall be signed by the operator (or cognizant official) in accordance with Part II.B.9 and be retained at the construction site during normal business hours (8:00 A.M. – 5:00 P.M.). The inspections frequency shall be conducted in accordance with Part II.A.4.N.1.
- B. The operator shall make SWPPP and inspection reports available, upon request, to the Director, the EPA, or a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or, in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.

- C. The Director, or authorized representative, may notify the operator at any time that the plan does not meet one or more of the minimum requirements of this Part. Within seven (7) business days of such notification from the Director (or as otherwise provided by the Director) or authorized representative, the operator shall make the required changes to the plan and submit to the Director a written certification that the requested changes have been made. DEQ may request re-submittal of the SWPPP to confirm that all deficiencies have been adequately addressed. DEQ may also take appropriate enforcement action for the period of time the operator was operating under SWPPP that did not meet the minimum requirements of this permit.
- D. The operator shall post the NOC near the main entrance of the construction site and visible to the public. The NOC shall indicate the location of the SWPPP. If the SWPPP location is changed from the initial location, the NOC shall be updated to reflect the correct location of the SWPPP.

3. **Keeping SWPPP Current.** The operator shall amend the SWPPP within seven (7) business days or whenever there is a change in design, construction, operation, or maintenance at the construction site which has or could have a significant effect on the potential for the discharge of pollutants to the waters of the State that has not been previously addressed in the SWPPP. The SWPPP shall also be modified if a determination has been made through inspections, monitoring (if required), *or* investigation by the operator, local, state, or federal officials that the discharges are causing or contributing to water quality violation or the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in stormwater discharges from the construction site.

4. **Contents of the SWPPP.** The SWPPP shall include the following items:

A. **Site Description.** SWPPP shall provide a description of the following:

- 1) A description of the nature of the construction activity and its intended use after the NOI is filed (i.e., residential subdivision, shopping mall, etc.);
- 2) A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading, infrastructure installation, etc.);
- 3) Estimates of the total area of the site including off-site borrow and fill areas and the total area of the site that is expected to be disturbed by excavation, grading or other activities; and
- 4) An estimate of the runoff coefficient of the site for pre- and post-construction activities and existing data describing the soil or the quality of any discharge from the site.

B. **Responsible Parties.** The SWPPP shall identify (as soon as this information is known) all parties (i.e., General Contractors, Landscapers, Project Designers, and Inspectors) responsible for particular construction activities and services they provide to the operator to comply with the requirements of the SWPPP for the project site and construction support activities off site, and areas over which each party has control. If these parties change over the life of the permit, or new parties are added, the SWPPP shall be updated to reflect these changes.

C. **Receiving Waters.** The SWPPP shall include a clear description of the nearest receiving water(s), or if the discharge is to a MS4, the name of the operator of the municipal system, and the ultimate receiving water(s).

D. **Documentation of Permit Eligibility Related to the 303(d) list and Total Maximum Daily Loads (TMDL).** The SWPPP shall include information on whether or not the stormwater discharges from the site enter a waterbody that is on the most recent 303(d) list or with an approved TMDL. If the stormwater discharge does enter a waterbody that is on the most recent 303(d) list or with an approved TMDL, then the SWPPP shall address the following items:

- 1) Identification of the pollutants that the 303(d) list or TMDL addresses, specifically whether the 303(d) list or TMDL addresses sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation);
- 2) Identification of whether the operator's discharge is identified, either specifically or generally, on the 303(d) list or

any associated assumptions and allocations identified in the TMDL for the discharge; and

- 3) Measures taken by the operator to ensure that its discharge of pollutants from the site is consistent with the assumptions and allocations of the TMDL.

If DEQ determines during the review process that the proposed project will be discharging to a receiving water that is on the most recent 303(d) list or with an approved TMDL, then DEQ may notify the applicant to include additional Best Management Practices in the SWPPP.

- E. Documentation of Permit Eligibility Related to Discharges into an ERW, NSW, or ESW. The SWPPP shall include information whether or not the construction site located within a watershed of an ERW, ESW, or NSW. If the construction site is located within a watershed of an ERW, ESW, or NSW, then the SWPPP should consider using additional BMPs for these areas. The practices shall be considered during the progression of site activities and updates to the construction site SWPPP for continued protection of underground water resources.
- F. Documentation of Permit Eligibility related to potential losing stream and/or sensitive aquatic species native to these areas. The SWPPP shall include information whether or not the construction site located within a watershed of a potential losing stream, and/or sensitive aquatic species native to these areas. If the construction site is located within a watershed of a potential losing stream and/or sensitive aquatic species native to these areas, then the SWPPP shall consider using BMPs for losing stream areas. The practices should be considered during the progression of site activities and updates to the facility SWPPP for continued protection of underground water resources.
- G. Attainment of Water Quality Standards After Authorization.
 - 1) The permittee shall select, install, implement, and maintain BMPs at the construction site and at the construction support activities off site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained below, the SWPPP shall be developed, implemented, and updated to be considered as stringent as necessary to ensure that the discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.
 - 2) At any time after authorization, DEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, DEQ will require the permittee to:
 - a. Develop a supplemental BMP action plan describing SWPPP modifications to adequately address the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
 - b. Cease discharges of pollutants from construction activity and submit an individual permit application.
 - 3) All written responses required under this part shall include a signed certification (Part II.B.9).
- H. Site Map. The SWPPP shall contain a legible site map (or multiple maps, if necessary) complete to scale, showing the entire site, that identifies, at a minimum, the following:
 - 1) Pre-construction topographic view;
 - 2) Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
 - 3) Delineate on the site map areas of soil disturbance and areas that will not be disturbed with regards to the construction activities and construction support activities off site under the coverage of this permit;
 - 4) Location of major structural and nonstructural controls identified in the plan;
 - 5) Location of main construction entrance and exit;

- 6) Location where stabilization practices are expected to occur;
- 7) Locations of all construction support activities off-site (i.e. materials, waste, borrow area, or equipment storage areas);
- 8) Location of areas used for concrete wash-out;
- 9) Location of all waters of the State with associated natural buffer boundary lines. Identify floodplain and floodway boundaries, if available;
- 10) Locations where stormwater is discharged to waters of the State or a municipal separate storm sewer system if applicable,
- 11) Locations where stormwater is discharged off-site (shall be continuously updated);
- 12) Areas where final stabilization has been accomplished and no further construction phase permit requirements apply;
- 13) A legend that clearly specifies any erosion and sediment control measure symbols/labels used in the site map and/or detail sheet; and
- 14) Locations of any storm drain inlets on the site and in the immediate vicinity of the site.

I. Stormwater Controls. Each plan shall include a description of appropriate controls and measures that will be installed and implemented at the construction site. The plan shall clearly describe each construction activity identified in the project description control measures associated with the construction activity and the schedule during the construction process that the measures will be implemented. Perimeter controls for the site shall be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls shall be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary controls shall be removed and properly disposed of after final stabilization. The description and implementation of controls shall address the following minimum components:

- 1) Initial Site Stabilization, Erosion, and Sediment Controls and Best Management Practices. Design, install, implement, and maintain effective erosion and sediment controls to minimize the discharge of pollutants. At a minimum the following controls and BMPs shall be designed, installed, implemented, and maintained. Therefore, the SWPPP shall address, at a minimum, the following:
 - a. For larger common plans of development or sale, only streets, drainage, utility areas, areas needed for initial construction of streets (e.g., borrow pits, parking areas, etc.) and areas needed for stormwater structures may be disturbed initially. Upon stabilization of the initial areas, additional areas may be disturbed.
 - b. The construction-phase erosion (such as site stabilization) and sediment controls (such as check dams) shall be designed to retain sediment on-site to the extent practicable.
 - c. All control measures shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications, good engineering, and construction practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee shall replace or modify the control for site situations.
 - d. If sediment escapes the construction site, off site accumulations of sediment shall be removed before the next business day to minimize off-site impacts (e.g., to prevent fugitive sediment in a street could be washed into storm sewers by the next rain or pose a safety hazard to users of public streets). This permit does not give the authority to trespass onto other property; therefore this condition should be carried out along with the permission of neighboring land owners to remove sediment.
 - e. Sediment shall be removed from sediment traps (if used, please specify what type) or sedimentation ponds when design capacity has been reduced by 50%.
 - f. Litter, construction debris, and construction chemicals exposed to precipitation and to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls picked up daily).
 - g. Construction support activities off site (i.e. material storage areas, overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.

- 2) Stabilization practices. The SWPPP shall include, at a minimum, the following information:
- a. Description and Schedule: A description of initial, interim, and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include, but not limited to: mulching, temporary seeding, permanent seeding, geotextiles, sod stabilization, natural buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures.
 - b. Description of natural buffer areas: DEQ requires that a natural buffer zone be established between the top of stream bank and the disturbed area. The SWPPP shall contain a description of how the site will maintain natural buffer zones. For construction projects where clearing and grading activities will occur, SWPPP shall provide at least twenty-five (25) feet of natural buffer zone from any named or unnamed streams, creeks, rivers, lakes or other water bodies. The plan shall also provide at least fifty (50) feet of natural buffer zone from established TMDL waterbodies, waterbodies listed on the 303(d) list, an ERW, ESW, NSW, or other uses at the discretion of the Director. If the site will be disturbed within the recommended buffer zone, then the buffer zone area shall be stabilized as soon as possible. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law. Please note that above-grade clearing that does not disturb the soil in the buffer zone area does not have to comply with buffer zone requirements.
 - c. Records of Stabilization: A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan.
 - d. Deadlines for Stabilization After Construction Activity Temporarily Ceases: Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily ceased, but in no case more than fourteen (14) calendar days after the construction activity in that portion of the site has temporarily ceased, except:
 - (1) Where the initiation of stabilization measures by the fourteenth (14th) calendar day after construction activity temporarily ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.
 - e. Deadline for Stabilization After Construction Activity Permanently Ceases: Stabilization measures shall be initiated immediately in portions of the site where construction activities have permanently ceased, except:
 - (1) Where the initiation of stabilization measures immediately after construction activity permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.
- 3) Structural Practices. A description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may

be subject to Section 404 of the Clean Water Act. Such practices may include but are not limited to:

- silt fences (installed and maintained);
- earthen dikes to prevent run-on;
- drainage swales to prevent run-on;
- check dams;
- subsurface drains;
- pipe slope drains;
- storm drain inlet protection;
- rock outlet protection;
- sediment traps;
- reinforced soil retaining systems;
- gabions;
- temporary or permanent sediment basins.

A combination of erosion and sediment control measures is encouraged to achieve maximum pollutant removal. Adequate spillway cross-sectional area and re-enforcement shall be provided for check dams, sediment traps, and sediment basins.

a. Sediment Basins:

- (1) For common drainage locations that serve an area with ten (10) or more acres (including run-on from other areas) draining to a common point, a temporary or permanent sediment basin that provides storage based on either the smaller of 3600 cubic feet per acre, or a size based on the runoff volume of a 10 year, 24 hour storm, shall be provided where attainable (so as not to adversely impact water quality) until final stabilization of the site. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils, slope, available area on site, etc. Proper hydraulic design of the outlet is critical to achieving the desired performance of the basin. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72) hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. If "non-attainability" is claimed, then an explanation of non-attainability shall be included in the SWPPP. Where a sediment basin is not attainable, smaller sediment basins or sediment traps shall be used. Where a sediment basin is un-attainable, natural buffer strips or other suitable controls which are effective are required for all side slopes and down slope boundaries of the construction area. The plans for removal or final usage of the sediment basin shall be included with the description of the basin in the SWPPP.
- (2) For drainage locations serving an area less than ten (10) acres, sediment traps, silt fences, or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area unless a sediment basin providing storage based on either the smaller of 3600 cubic feet per acre, or a size based on the run off volume of a 10 year, 24 hour storm is provided. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72) hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. However, in order to protect the waters of the State, the Director, at their discretion, may require a sediment basin for any drainage areas draining to a common point.

b. Velocity Dissipation Devices:

Velocity dissipation devices shall be placed at discharge locations, within concentrated flow areas serving two

or more acres, and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (i.e., no significant changes in the hydrological regime of the receiving water). Please note that the use of hay-bales is not recommended in areas of concentrated flow.

J. Other Controls.

- 1) No solid materials identified in Part I.B.13.D shall be discharged to waters of the State or offsite.
- 2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of a stabilized construction entrance and exit or vehicle tire washing.
- 3) For lots that are less than one (1) acre in size an alternative method may be used in addition to a stabilized construction entrance. An example of an alternative method could be daily street sweeping. This could allow for the shortening of the construction entrance.
- 4) The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, temporary and permanent sanitary sewer or septic system regulations.
- 5) No liquid concrete waste shall be discharged to waters of the State. Appropriate controls to prevent the discharge of concrete washout waters shall be implemented if concrete washout will occur on-site.
- 6) No contaminants from fuel storage areas, hazardous waste storage and truck wash areas shall be discharged to waters of the State or offsite. Methods for protecting these areas shall be identified and implemented. These areas shall not be located near a waterbody, if there is a water body on or near the project.

K. Non-stormwater discharges. Sources of non-stormwater listed in Part I.B.10 of this permit that are combined with stormwater discharges associated with construction activity shall be identified in the plan. This list shall be site specific non-stormwater discharges.

L. Post-Construction Stormwater Management. The operator is required to provide a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures shall be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 (Corps of Engineers) of the Clean Water Act. This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. However, post-construction stormwater BMPs that discharge pollutants from a point source once construction is completed may need authorization under a separate DEQ NPDES permit. Such practices may include but are not limited to:

- infiltration of runoff onsite;
- flow attenuation by use of open vegetated swales and natural depressions;
- stormwater retention structures;
- stormwater detention structures (including wet ponds);
- sequential systems, which combine several practices.

A goal of at least eighty percent 80 % removal of total suspended solids from these flows which exceed predevelopment levels should be used in designing and installing stormwater management controls (where practicable). Where this goal is not met, the operator shall provide justification for rejecting each practice listed above based on site conditions.

M. Applicable State or Local Programs. The SWPPP shall be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls implemented at the site.

N. Inspections. Inspections shall be conducted by qualified personnel (provided by the operator). Inspections shall include all areas of the site disturbed by construction activity and construction support activities located off site that are exposed to precipitation and to stormwater. Inspectors shall look for evidence of, or the potential for, pollutants entering

the stormwater conveyance system. All stormwater control measures shall be observed to ensure proper installation, operation, and maintenance. Discharge locations shall be inspected to determine whether all stormwater control measures are effective in preventing significant impacts to waters of the State or offsite, where accessible. Where discharge locations are inaccessible, nearby downstream locations shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking. Inspections may not be required if the remaining lot(s) within a larger common plan of development or sale disturb less than one acre of land. In addition, inspections may not be required on a completed section of a linear project if final stabilization has been completed for that section. Stabilized areas of the project shall be indicated in the SWPPP and site map and show what date they were stabilized. The operator shall ensure that no sediment will leave the lot(s) that are stabilized. These lots shall be identified within the SWPPP and show what date they were stabilized. If the operator is unable to ensure this, then inspections shall continue.

- 1) Inspection Frequency. Inspections shall be conducted in accordance with one of the following schedules listed below. The schedule **must be specified** in the SWPPP.
 - a. At least once every seven (7) calendar days, or
 - b. At least once every fourteen (14) calendar days and within twenty-four (24) hours of the end of a storm event of 0.25 inches or greater (a rain gauge must be maintained on-site).
- 2) Inspection Form. The DEQ inspection form should be used for all inspections. The inspection form shall include all stormwater controls that are being used on site as well as at construction support activities off site. The form is available on DEQ's website www.adeq.state.ar.us. If a different form is used, it shall at a minimum contain the following information:
 - a. Inspector name and title;
 - b. Date of Inspection;
 - c. Amount of rainfall and days since last rain event (only applicable to Part II.A.4.N.1.b);
 - d. Approximate beginning and duration of the storm event;
 - e. Description of any discharges during inspection;
 - f. Locations of discharges of sediment/other pollutants;
 - g. Locations of BMPs in need of maintenance or where maintenance was performed;
 - h. If the BMPs are in working order and if maintenance is required (including when scheduled and completed);
 - i. Locations that are in need of additional controls;
 - j. Location and dates when major construction activities begin, occur or cease;
 - k. Signature of qualified signatory official, in accordance with Part II.B.9.

Additional information may be added to the inspection report at the permittee's discretion.

- 3) Inspection Records. Each report shall be retained as part of the SWPPP for at least three (3) years from the date the site is finally stabilized. Each report shall be signed and have a certification statement in accordance with Parts II.B.9 and 10 of this permit.
- 4) Winter Conditions. Inspections will not be required at construction sites nor the construction support activities located off site where snow cover exists over the entire site for an extended period, and melting conditions do not exist. If there is any runoff from the site at any time during snow cover, melting conditions are considered to be existent at the site and this inspection waiver does not apply. Regular inspections, as required by this permit, are required at all other times as specified in this permit. If winter conditions prevent compliance with the permit, documentation of the beginning and ending date of winter conditions shall be included in the SWPPP.
- 5) Adverse Weather Conditions. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make inspections

impractical, such as extended frozen conditions. When adverse weather conditions prevent the inspection of the site, an inspection shall be completed as soon as is safe and feasible. If adverse weather conditions prevent compliance with the permit, documentation of the beginning and ending date of adverse weather conditions shall be included in the SWPPP.

- O. Maintenance. A description of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition shall be outlined in the plan. Any repairs that are needed based on an inspection shall be completed, when practicable, before the next storm event, but not to exceed a period of three (3) business days of discovery, or as otherwise directed by state or local officials. However, if conditions do not permit large equipment to be used, a longer time frame is allowed if the condition is thoroughly documented on the inspection form. Maintenance for manufactured controls shall be done at a minimum of the manufacturer's specifications. Maintenance for non-manufactured controls, i.e. check dams and sediment traps, shall be done when 50% of treatment capacity remains.
 - P. Employee Training. The permittee/operator is responsible for training personnel, who are responsible for implementing activities identified in the SWPPP, on the components and requirements of the SWPPP and the requirements of the general permit. This includes contractors and subcontractors. Training shall be given by a knowledgeable and qualified trainer. The SWPPP shall identify periodic dates for such training for all personnel and records of training shall be maintained with the SWPPP. Training records that are maintained electronically (i.e. database, etc.) do not need to be maintained with the SWPPP, but shall be accessible upon request. Formal training classes given by Universities or other third-party organizations are not required but recommended for qualified trainers; the permittee is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.
5. Plan Certification. The SWPPP Certification shall be signed by either the operator or the cognizant official identified on the NOI. All documents required by the permit and other information requested by the Director shall be signed by operator or by a duly authorized representative of the operator (Please see Part II.B.10 below for certification).

SECTION B: STANDARD PERMIT CONDITIONS

1. **Retention of Records.**

- A. The operator shall retain records of all Stormwater Pollution Prevention Plans, all inspection reports required by this permit, and records of all data used to complete the NOI to be covered by this permit for a period of at least three (3) years from the date the NOT letter is signed by DEQ. This period may be extended by request of the Director at any time.
- B. The operator shall retain a signed copy of the SWPPP and inspection reports required by this permit at the construction site from the date of project initiation to the date of final stabilization.

2. **Duty to Comply.** The operator shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application.

3. **Penalties for Violations of Permit Conditions.** The Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a criminal penalty of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action. Any person that purposely, knowingly, or recklessly causes pollution of the water of the state in a manner not otherwise permitted by law and thereby places another person in imminent danger of death or serious bodily injury shall be guilty of a felony and shall be subject to imprisonment, a fine not more than two hundred fifty thousand dollars (\$250,000), or both such fine and imprisonment.

4. **Continuance of the General Permit.** Permittees wishing to continue coverage under this general permit shall submit a Renewal NOI (see Part I.B.4 for where to submit documentation) up to 180 days prior to the expiration date, but no later than thirty (30) days prior to the expiration date. No additional fee is required to be submitted along with the Renewal NOI.

An expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with Ark. Code Ann. § 8-4-203(m) and remain in force and effect. If a permittee was granted permit coverage prior to the expiration date, the permittee will remain covered by the continued permit until the earliest of:

- A. The effective date of the re-issuance or replacement of this permit and a timely submittal of a renewal NOI by the operator; or
- B. The operator's submittal and DEQ approval of a NOT; or
- C. Issuance and effectiveness of an individual permit for the project's discharges and completion of item B of this section (see Part I.B.24); or
- D. A formal permit decision by DEQ to not re-issue this general permit, at which time operators must seek coverage under an alternative permit (see Part I.B.24).

Small site operators are responsible for ensuring that the site is in compliance with any changes or updates of this general permit by reviewing DEQ's website at:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>

5. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
6. **Duty to Mitigate.** The operator shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has reasonable likelihood of adversely affecting human health or the environment.
7. **Duty to Provide Information.** The operator shall furnish to the Director, an authorized representative of the Director, the EPA, a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or in the case of a stormwater discharge associated with industrial activity which discharges through a MS4 with an NPDES permit, to the municipal operator of the system, within a reasonable time, any information which is requested to determine compliance with this permit.
8. **Other Information.** When the operator becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Director, he or she shall promptly submit such facts or information.
9. **Signatory Requirements.** All NOIs, reports, or information submitted to the Director shall be signed and certified by the operator.

A. All NOI shall be signed as follows:

- 1) **For a corporation:** by a responsible corporate officer. For purposes of this section, a responsible corporate officer means:
 - a. A president, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2) **For a partnership or sole proprietorship:** by a general partner or the proprietor, respectively;
- 3) **For a municipality, State, Federal or other public agency:** by either a principal executive or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - a. The chief executive officer of the agency; or
 - b. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

B. All reports required by the permit and other information requested by the Director shall be signed by a person described

above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- 1) The authorization is made in writing by a person described above and submitted to the Director;
- 2) The authorization specifies either an individual or a person having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or position of equivalent responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- 3) Changes to authorization. If an authorization under this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

10. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure 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."

Note: For this permit only, "this document" refers to the Stormwater Pollution Prevention Plan, "attachments" refers to the site map and inspection forms, and "system" is referencing the project site.

- 11. Penalties for Falsification of Reports.** The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part II.B.3 of this permit and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.).
- 12. Penalties for Tampering.** The Arkansas Water and Air Pollution Control act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment.
- 13. Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under Section 311 of the Clean Water Act or Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- 14. Property Rights.** The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws or regulations.
- 15. Severability.** The provisions of this permit are severable. If any provisions of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provisions to other circumstances and the remainder of this permit shall not be affected thereby.

16. Transfers. This permit is not transferable to any person except after notice to the Director. A transfer form shall be submitted to DEQ as required by this permit.

17. Proper Operation and Maintenance. The operator shall at all times:

- A. Properly operate and maintain all systems of treatment and control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by an operator only when the operation is necessary to achieve compliance with the conditions of the permit.
- B. Provide an adequate operating staff which is duly qualified to carry out operation, inspection, maintenance, and testing functions required to ensure compliance with the conditions of this permit.

18. Inspection and Entry. The operator shall allow the Director, the EPA, or an authorized representative, or, in the case of a construction site which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator of the separate sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- A. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
- B. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;
- C. Inspect at reasonable times any facilities or equipment, including monitoring and control equipment and practices or operations regulated or required by the permit;
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location on the permitted property.

19. Permit Actions. This permit may be modified, revoked and reissued, or terminated for any cause including, but not limited to, the following;

- A. Violation of any terms or conditions of this permit;
- B. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts;
- C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- E. Failure of the operator to comply with the provisions of DEQ Rule 9 (Fee Rule). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 C.F.R. §122.64 and §124.5(d), as adopted by reference in DEQ Rule 6, and the provisions of DEQ Rule 8.

20. Re-Opener Clause.

- A. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with industrial activity covered by this permit, the operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with Part I.B.24 of this permit, or the permit may be modified to include different limitations and/or requirements.
- B. Permit modification or revocation will be conducted in accordance with the provisions of 40 C.F.R. §122.62, §122.63, §122.64 and §124.5, as adopted by reference in DEQ Rule 6.

21. Local Requirements. All dischargers shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding any discharges of stormwater to storm drain systems or other water sources under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to

comply with the DEQ permits. Dischargers shall comply with local stormwater management requirements, policies, or guidelines including erosion and sediment control.

- 22. Applicable Federal, State, or local Requirements.** Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance policy, or regulation. Nothing in this permit shall be construed to preclude the institution of any legal action or enforcement actions or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable local state, or federal law or regulation.



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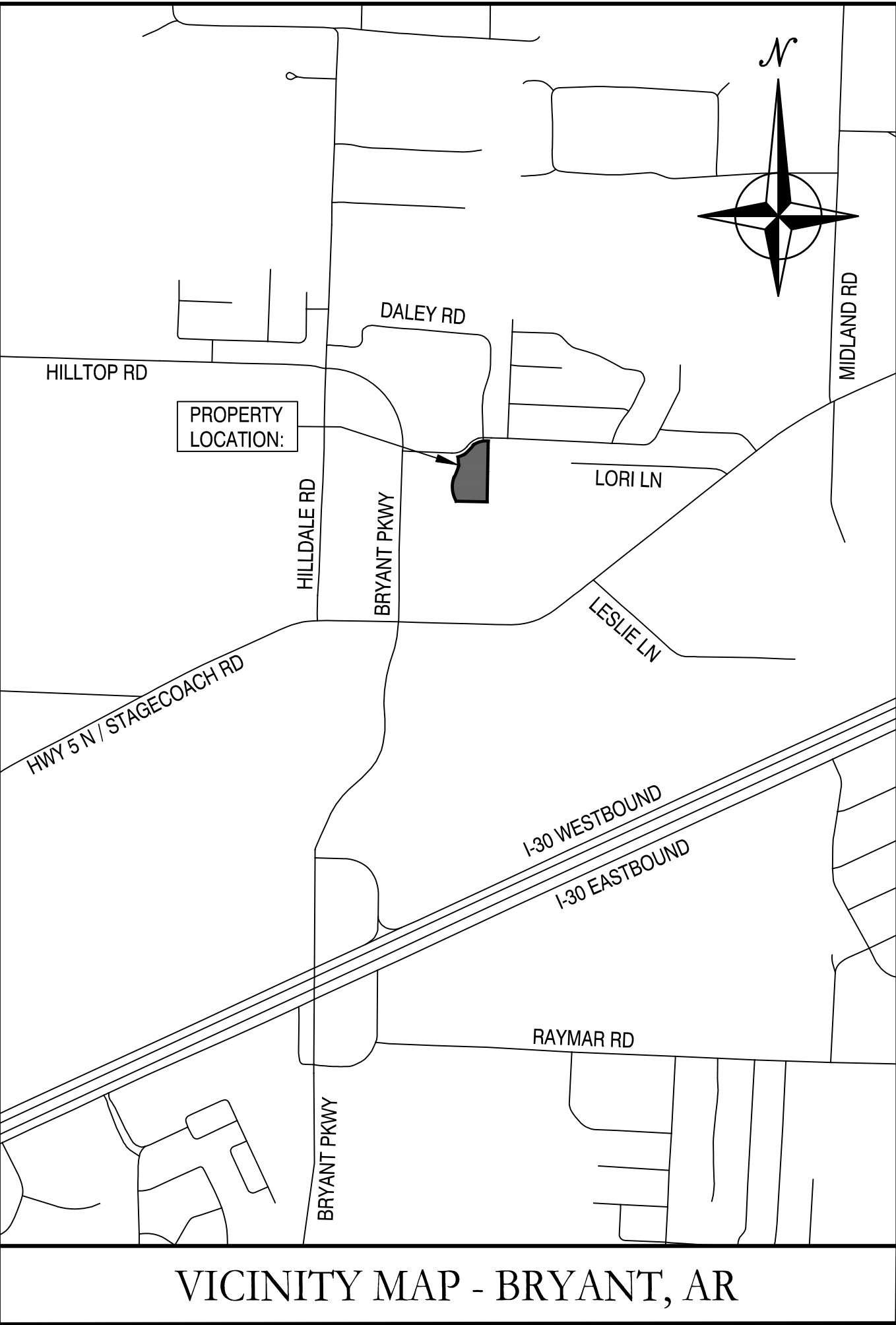
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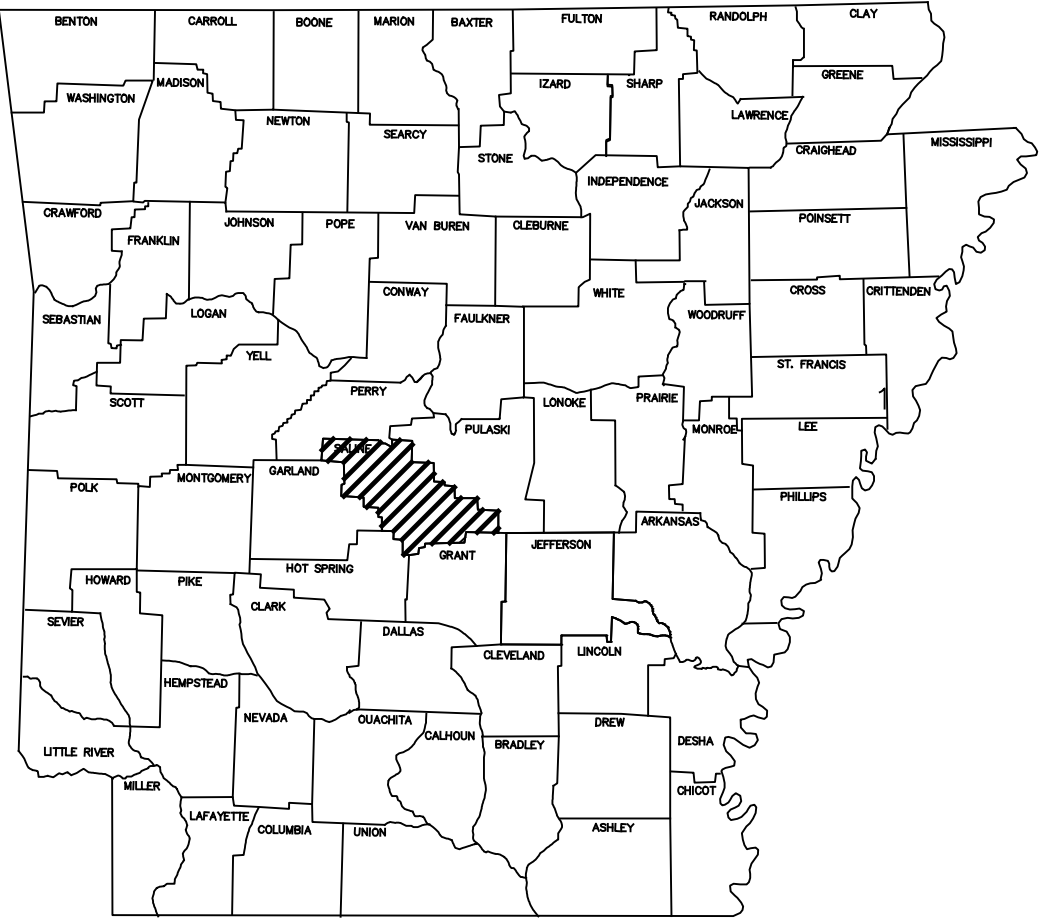
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VICINITY MAP - BRYANT, AR



ARKANSAS



03-13-2023


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V1.0	DRAFT FINAL PLAT
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A		B		C		D		E		F	
1	1. SAFETY			7. STRUCTURES				12. ENVIRONMENTAL			
	1.1. JOBSITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE GENERAL CONTRACTOR.			7.1. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT IN TO INVERT OUT.				12.1. THE CONTRACTOR IS TO MEET ALL ENVIRONMENTAL REQUIREMENTS OF THE OWNER AND ANY REGULATORY AGENCY HAVING AUTHORITY OVER THIS SITE.			
	1.2. THIS RESPONSIBILITY COVERS THEIR OWN WORK FORCE, ALL SUBCONTRACTORS, VISITING PERSONNEL, OFFICIALS, AND THE GENERAL PUBLIC WHICH MAY HAVE ACCESS TO THE JOBSITE.			7.2. BEDDING FOR STORM STRUCTURES SHALL CONSIST OF A MINIMUM OF 6-INCHES OF COMPACTED #57 STONE ON TOP OF COMPACTED SUBGRADE.				12.2. THE CONTRACTOR IS TO UTILIZE BEST MANAGEMENT PRACTICES (BMP'S) FOR CONTROL OF EROSION DURING ALL CONSTRUCTION PHASES OF THIS PROJECT.			
	1.3. THE CONTRACTOR SHALL EXERCISE COMPLETE CONTROL OVER WHO HAS ACCESS TO THE JOBSITE TO ENSURE JOBSITE SAFETY.			7.3. AREAS EXPOSED BY EXCAVATION OR STRIPPING AND ON WHICH SUBGRADE PREPARATIONS ARE TO BE PERFORMED SHALL BE SCARIFIED TO MINIMUM DEPTH OF 0'-8" AND COMPACTED TO MINIMUM OF 95% OPTIMUM DENSITY. ANY AREAS THAT FAIL COMPACTION ARE TO BE STABILIZED AS DIRECTED BY THE ENGINEER.				12.3. MINIMUM BMP'S REQUIRED FOR THE PROJECT ARE LISTED ON SHEET THESE PLANS. CONTRACTOR SHALL PROVIDE THESE BMP'S AND ANY OTHERS REQUIRED FOR THE PROJECT.			
2	1.4. THE CONTRACTOR SHALL CONFORM TO ALL SECURITY AND SAFETY REQUIREMENTS OF THE OWNER.			8. PRIOR TO PLACING FILL IN LOW AREAS, SUCH AS PREVIOUSLY EXISTING CREEKS, PONDS, OR LAKES, PERFORM FOLLOWING PROCEDURES:				12.4. IF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FOR THE CONSTRUCTION PHASE OF THIS PROJECT, THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS FOR EROSION CONTROL INCLUDED IN THE SWPPP DOCUMENTS.			
	1.5. ANY SAFETY OR OTHER TRAINING REQUIRED BY THE OWNER FOR THE WORK FORCE MUST BE PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.			8.1. DRAIN WATER OUT BY GRAVITY WITH DITCH HAVING FLOW LINE LOWER THAN LOWEST ELEVATION IN LOW AREA. IF DRAINAGE CANNOT BE PERFORMED BY GRAVITY DITCH, USE ADEQUATE PUMP TO OBTAIN THE SAME RESULTS.				12.5. CONTRACTOR SHALL KEEP WORK AREA CLEAN AND FREE OF ACCUMULATED TRASH AND DEBRIS. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING MEASURES TO AVOID TRACKING OF MUD, DIRT, ROCKS, AND DEBRIS ONTO AREAS OUTSIDE THE PROJECT AREA. CONTRACTOR SHALL CLEAN PAVEMENTS WHEN NECESSARY OR AS OTHERWISE DIRECTED, AND SHALL CONTROL DUST BY SWEEPING AND WATERING AS NEEDED. DE-TRACKING MAY BE REQUIRED AT ALL ENTRANCES.			
	2. PERMITS			8.2. AFTER DRAINAGE OF LOW AREA IS COMPLETE, REMOVE MULCH, MUD DEBRIS, AND OTHER UNSUITABLE MATERIAL BY USING ACCEPTABLE EQUIPMENT AND METHODS THAT WILL KEEP NATURAL SOILS UNDERLYING LOW AREA DRY AND UNDISTURBED.				13. FINAL SITE CONDITIONS			
	2.1. CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS AS REQUIRED BY REGULATING AUTHORITIES OR BY THE OWNER. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE TERMS AND CONDITIONS ASSOCIATED WITH EACH REQUIRED PERMIT, AS WELL AS ADHERING TO THE RULES AND REGULATIONS OF EACH REGULATING AUTHORITY			9. UTILITIES				13.1. ALL DISTURBED AREAS NOT RECEIVING PAVEMENT OR LANDSCAPING SHALL HAVE VEGETATION ESTABLISHED AT TIME OF FINAL INSPECTION.			
3	3. CONTRACT DOCUMENTS			9.1. AN ATTEMPT HAS BEEN MADE TO APPROXIMATELY LOCATE UTILITIES ON THE DRAWINGS.				13.2. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPE 2H:1V OR STEEPER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.			
	3.1. ALL WORK SHALL CONFORM TO THE PLANS, THESE NOTES, AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.			9.2. UTILITIES SHOWN ON THE DRAWINGS WERE LOCATED BY VISUAL OBSERVATION, AND BY TRANSCRIBING FROM RECORD MAPS AND PLANS.				13.3. ALL CUT OR FILL SLOPES SHALL BE 3H:1V OR FLATTER UNLESS OTHERWISE NOTED.			
	4. INDEMNITY			9.3. NO EXCAVATIONS WERE MADE TO CONFIRM SUB-SURFACE UTILITIES. NEITHER THE SURVEYOR NOR PROJECT ENGINEER GUARANTEES THAT ALL UTILITIES HAVE BEEN SHOWN, OR THAT THOSE SHOWN ARE FULLY ACCURATE.				13.4. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS			
	4.1. BY ACCEPTING THE CONTRACT FOR THIS WORK, THE CONTRACTOR, AT THEIR OWN EXPENSE AND RISK, HEREBY RELEASES AND AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, GARNAT ENGINEERING, THEIR OFFICERS, AGENTS, EMPLOYEES, CONSULTANTS, AND REPRESENTATIVES FOR DAMAGE TO THE PROPERTY OR INJURY TO, OR DEATH, OF ANY PERSONS, FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS OF ANY KIND WHATSOEVER ARISING OUT OF AND IN CONNECTION WITH THE AGREEMENT OR PROSECUTION OF WORK UNDER IT, WHETHER SUCH CLAIMS, DEMANDS, ACTIONS, OR LIABILITY ARE CAUSED BY THE CONTRACTOR, IT'S AGENTS, EMPLOYEES, SUBCONTRACTORS, PRODUCTS INSTALLED ON THE PROJECT OR CAUSED BY ANY OTHER PARTY.			9.4. <u>CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADJUSTMENTS AND/OR RELOCATION OF EXISTING UTILITIES THAT ARE DAMAGED AS A RESULT OF WORK OF THIS PROJECT.</u>				13.5. UPON PARTIAL OR FINAL COMPLETION OF GRADING WORK, SPREAD TOPSOIL, SEED, FERTILIZER, AND MULCH IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE STORM WATER POLLUTION PREVENTION PLAN.			
4	5. CONSTRUCTION PROCEDURES, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING STANDARDS UNLESS OTHERWISE MODIFIED ON THE DRAWINGS OR IN THESE NOTES OR SPECIFICATIONS.			9.5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROPERLY DISCONNECTING, ABANDONING, RELOCATING, AND/OR ADJUSTING ALL AFFECTED UTILITIES WITHIN THE PROJECT AREA.							
	5.1. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT			9.6. ALL UTILITY WORK SHALL BE COORDINATED AND EXECUTED IN ACCORDANCE WITH THE OWNER AND/OR GOVERNING UTILITY COMPANY CODES, SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.							
	5.2. INTERNATIONAL BUILDING CODE			9.7. DESIGN AND ALIGNMENT OF UNDERGROUND TELEPHONE, TV CABLE, GAS AND ELECTRIC SERVICES SHALL BE PROVIDED BY THE INDIVIDUAL UTILITIES AND ARE NOT NECESSARILY SHOWN WITH THESE PLANS. CONTRACTOR SHALL PROVIDE CONDUITS SIZED TO ACCOMMODATE UTILITY ROUTING WITH PULL STRINGS WHERE NECESSARY.							
	5.3. ACI 315 MANUAL OF STANDARD PRACTICES FOR DETAILING REINFORCED CONCRETE STRUCTURES			9.8. CONTRACTOR TO PROVIDE ALL NECESSARY APPURTENANCES NECESSARY FOR COMPLETE UTILITY SERVICES WHICH ARE NOT PROVIDED BY THE UTILITY COMPANY.							
5	5.4. CRSI RECOMMENDED PRACTICE FOR PLACING REINFORCING STEEL.			10. DISPOSAL OF DEBRIS, WASTE OR SPOIL							
	5.5. CITY OF BRYANT STANDARD SPECIFICATIONS.			10.1. BURNING OF DEBRIS AND WASTE IS NOT ALLOWED. CONTRACTOR MAY BE REQUIRED TO PROPERLY HAUL AWAY AND DISPOSE OF ANY WASTE MATERIAL REMOVED FROM THE SITE.							
	5.6. LATEST EDITIONS OF AWWA, ASTM, ADH, AND TEN STATES STANDARDS.			10.2. ANY WASTE OR SPOIL MATERIAL WHICH IS EXCAVATED FROM THE JOB SITE IS TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER OR OWNER.							
	6. SITE			10.3. REMOVAL AND DISPOSAL OF EXCAVATED WASTE MATERIAL IS CONSIDERED SUBSIDIARY TO ALL OTHER ITEMS IN THE PROJECT, AND WILL NOT BE PAID FOR SEPARATELY.							
6	6.1. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS.			10.4. CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE AND FEDERAL REGULATIONS IN DISPOSING OF DEMOLISHED MATERIAL REMOVED FROM THIS SITE.							
	6.2. CONTRACTOR IS NOT TO PERFORM WORK BEYOND THE DESIGNATED WORK LIMITS WITHOUT FIRST OBTAINING WRITTEN AUTHORIZATION FROM THE PROJECT ENGINEER OR OWNER.			10.5. CONTRACTOR SHALL REMOVE FROM SITE AND DISPOSE OF MATERIAL ENCOUNTERED IN GRADING OPERATIONS THAT, IN OPINION OF THE ENGINEER, IS UNSUITABLE OR UNDESIRABLE FOR BACKFILLING OR SUBGRADE PURPOSES. DISPOSE OF IN A MANNER SATISFACTORY TO ENGINEER. BACKFILL UNDERCUT AREAS WITH LAYERS OF SUITABLE MATERIAL AND COMPACT AS SPECIFIED HEREIN.							
	6.3. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO: DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN EXISTING CONDITIONS.			11. SUBSTITUTIONS							
	6.4. CONTRACTOR TO REMOVE OR RELOCATE, WHEN APPLICABLE, ALL ITEMS, SHOWN TO BE REMOVED OR RELOCATED AND NOT SHOWN WITHIN CONSTRUCTION LIMITS AND WHERE REQUIRED TO ALLOW FOR NEW CONSTRUCTION AS SHOWN.			11.1. SUBSTITUTIONS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL FROM THE PROJECT ENGINEER.							
7	6.5. CONTRACTOR TO ADJUST ALL EXISTING AND PROPOSED MANHOLES, VALVE BOXES, ETC. TO FINISH GRADE, WHERE REQUIRED.										
A		B		C		D		E		F	

BY							
REVISION							
DATE							
Designing our client's success		GarNat Engineering, LLC 3025 Mt Carmel Road Bryant, AR 72022 garnatengineering@gmail.com					
GNE		A NEW ELITE VOLLEYBALL ACADEMY GYM FOR JOHN ECKART VERNIA OFFICE PARK 1601 CHRISTY LANE ALEXANDER, ARKANSAS 72002					
							
03-13-2023							
CONTENTS:							
GENERAL NOTES							
PROJECT NO: 20022							
DATE: FEB. 8, 2023							
SHEET NO: G1.0							

A:\Projects\2022 Projects\2022 Work Items\Final\Drawings\Design\22022-Gym-John-Eckart-Sports-Rite-Complex.dwg



PROPERTY SPECIFICATIONS:
ZONING CLASSIFICATION: C-2
SOURCE OF WATER: CITY OF BRYANT
SOURCE OF SEWER: CITY OF BRYANT
BUILDING SETBACKS (SB):
FRONT - 15'
REAR - 25'
INTERIOR (SIDE) - 15' UNLESS OTHERWISE NOTED
EXTERIOR - 15'
LOT CORNERS: SET #4 REBAR WITH CAP



SURVEY PLAT CODE:
500-01S-14W-0-14-410-62-1573



LOT 1 - 2.12 ACRES (92,562 SQUARE FEET)

PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER (SE1/4 NE1/4 NW1/4) AND PART OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER (NE1/4 NE1/4 NW1/4) ALL IN SECTION 14, TOWNSHIP 01 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS: **BEGINNING** AT A FOUND 5/8" REBAR FOR THE NORTHEAST CORNER OF THE SAID SE1/4 NE1/4 NW1/4; THENCE S 02°48'16" W, ALONG THE EAST LINE OF SAID SE1/4 NE1/4 NW1/4, FOR A DISTANCE OF 285.27 FEET TO A SET 1/2" REBAR WITH CAP #1573; THENCE N 87°17'45" W, LEAVING SAID EAST LINE, A DISTANCE OF 256.91 FEET TO A SET 1/2" REBAR WITH CAP #1573 LOCATED ON THE EAST RIGHT OF WAY LINE OF CHRISTY LANE; THENCE ALONG THE SAID EAST RIGHT OF WAY THE FOLLOWING CALLS: THENCE ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 170 FEET AND A LENGTH OF 131.23 FEET, WHOSE CHORD BEARS N 02°08'14" E - 128.00 FEET, THENCE N 24°13'08" E - 50.00 FEET, THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 80 FEET AND A LENGTH OF 89.20 FEET, WHOSE CHORD BEARS N 10°01'23" E - 88.29 FEET, THENCE N 40°10'22" W - 31.53 FEET TO A SET 1/2" REBAR WITH CAP #1573 LOCATED AT THE INTERSECTION WITH THE SOUTH RIGHT OF WAY OF HENRY AVENUE; THENCE ALONG THE SAID SOUTH RIGHT OF WAY THE FOLLOWING CALLS: THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 185.26 FEET AND A LENGTH OF 35.40 FEET, WHOSE CHORD BEARS N 67°21'34" E - 35.35 FEET, THENCE N 53°12'17" E - 42.41 FEET, THENCE N 41°44'12" E - 35.22 FEET, THENCE ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 181.54 FEET AND A LENGTH OF 140.23 FEET, WHOSE CHORD BEARS N 64°03'28" E - 136.77 FEET, THENCE S 86°48'21" E - 26.60 FEET TO A FOUND 1/2" REBAR LOCATED ON THE EAST LINE OF THE SAID NE1/4 NE1/4 NW1/4; THENCE S 02°55'14" W, LEAVING SAID SOUTH RIGHT OF WAY OF HENRY AVENUE AND ALONG THE EAST LINE OF THE SAID NE1/4 NE1/4 NW1/4 FOR A DISTANCE OF 142.90 FEET TO THE **POINT OF BEGINNING**, CONTAINING 2.12 ACRES, MORE OR LESS. SUBJECT TO ANY EASEMENTS OF RECORD AND THE RIGHTS OF WAY OF HENRY AVENUE AND CHRISTY LANE. LESS AND EXCEPT RIGHT OF WAY DEDICATION BELOW.

RIGHT OF WAY DEDICATION - 0.004 ACRES (187 SQUARE FEET)

PART OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER (NE1/4 NE1/4 NW1/4) SECTION 14, TOWNSHIP 01 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS: **COMMENCING** AT A FOUND 5/8" REBAR FOR THE SOUTHEAST CORNER OF THE SAID NE1/4 NE1/4 NW1/4; THENCE N 87°44'28" W, ALONG THE SOUTH LINE OF SAID NE1/4 NE1/4 NW1/4, FOR A DISTANCE OF 231.75 FEET TO A COMPUTED POINT ON THE EAST RIGHT OF WAY OF CHRISTY LANE FOR THE **POINT OF BEGINNING**; THENCE CONTINUING N 87°44'28" W, ALONG SAID SOUTH LINE, A DISTANCE OF 47.39 FEET TO A POINT OF INTERSECTION WITH THE SOUTH RIGHT OF WAY OF HENRY AVENUE; THENCE ALONG SAID SOUTH RIGHT OF WAY AND A CURVE TO THE LEFT WITH A RADIUS OF 185.26 FEET AND A LENGTH OF 47.46 FEET, WHOSE CHORD BEARS N 80°10'22" E - 47.33 FEET TO A SET 1/2" REBAR WITH CAP #1573; THENCE S 04°10'22" E, LEAVING SAID SOUTH RIGHT OF WAY OF HENRY AVENUE FOR A DISTANCE OF 9.97 FEET TO THE **POINT OF BEGINNING**, CONTAINING 0.004 ACRES (187 SQUARE FEET), MORE OR LESS.

DOCUMENTS USED:

- VERNIA PARK SUBDIVISION PHASE 1 FINAL PLAT BY ZANE ROBBINS PLS #1853

BASIS OF BEARINGS:

BENCHMARK(S) PROVIDED ARE REBAR AND COORDINATES ON BENCHMARKS ARE NORTH AMERICAN DATUM 1983, ARKANSAS SOUTH ZONE, US SURVEY FEET, GRID COORDINATES AND ELEVATIONS ARE NAVD 1988. COORDINATES AND ELEVATIONS WERE ESTABLISHED USING GPS AND WERE PROCESSED USING THE NATIONAL GEODETIC SURVEY'S "ONLINE POSITIONING USER SERVICE" (OPUS).

CERTIFICATIONS

BY AFFIXING MY SEAL AND SIGNATURE, I GEORGE P. WOODEN, PS NO.1573, HEREBY CERTIFY THAT THIS DRAWING CORRECTLY DEPICTS A SURVEY COMPILED UNDER MY SUPERVISION ON MARCH 10, 2023.

THIS SURVEY WAS BASED ON LEGAL DESCRIPTIONS AND TITLE WORK FURNISHED BY OTHERS AND DOES NOT REPRESENT A TITLE SEARCH.

THIS PROPERTY IS NOT LOCATED IN THE 100 YEAR FLOOD PLAIN. THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN ZONE "X" OF THE F.E.M.A. MAP PANEL 05125C0240E EFFECTIVE DATE JUNE 05, 2020.

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GarNat Engineering, LLC

P.O. Box 116
Benton, AR 72018
Ph (501) 408-4450

3825 Mt. Carmel Rd
Bryant, AR 72022
garnatengineering@gmail.com

VERNIA PARK NORTHEAST
SUBDIVISION PHASE 1
1601 CHRISTY LANE
ALEXANDER, ARKANSAS 72002



CONTENTS:

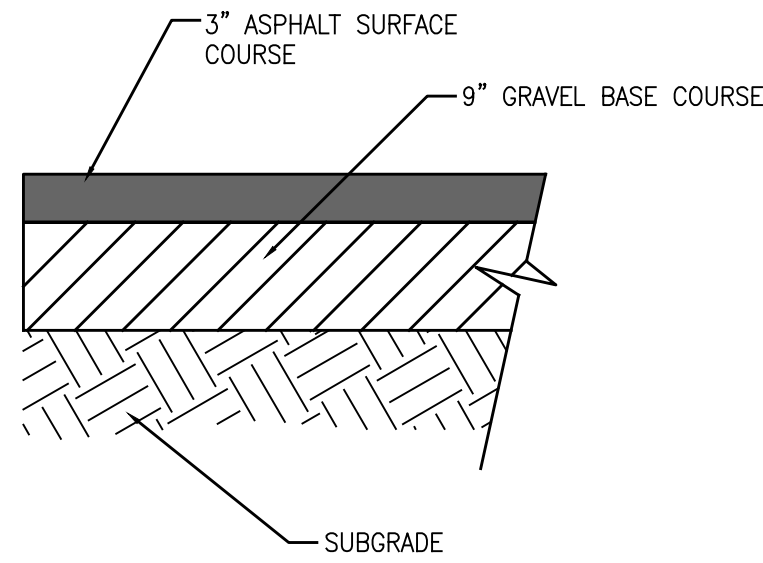
FINAL
PLAT

PROJECT NO:
22140

DATE:
MARCH 10, 2023

SHEET NO

V1.0



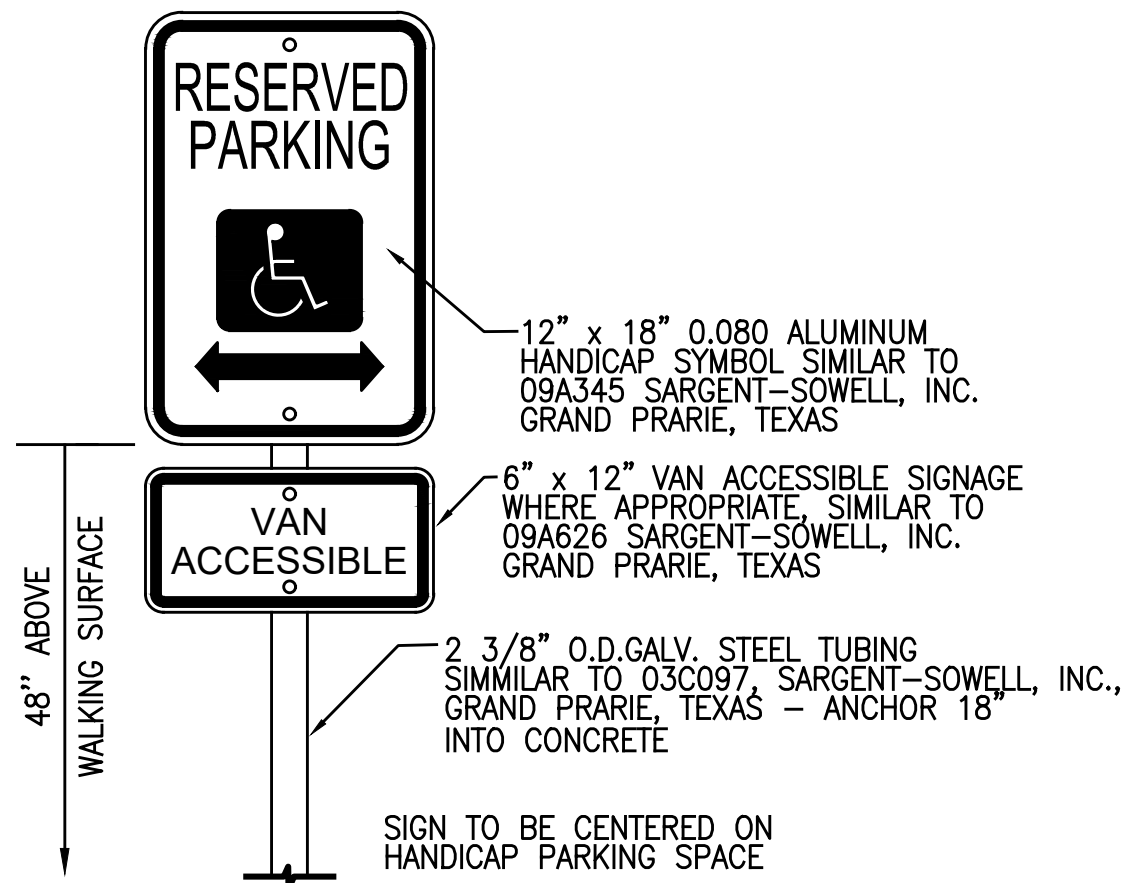
ASPHALT PAVING

NOT TO SCALE

1

NOTES:

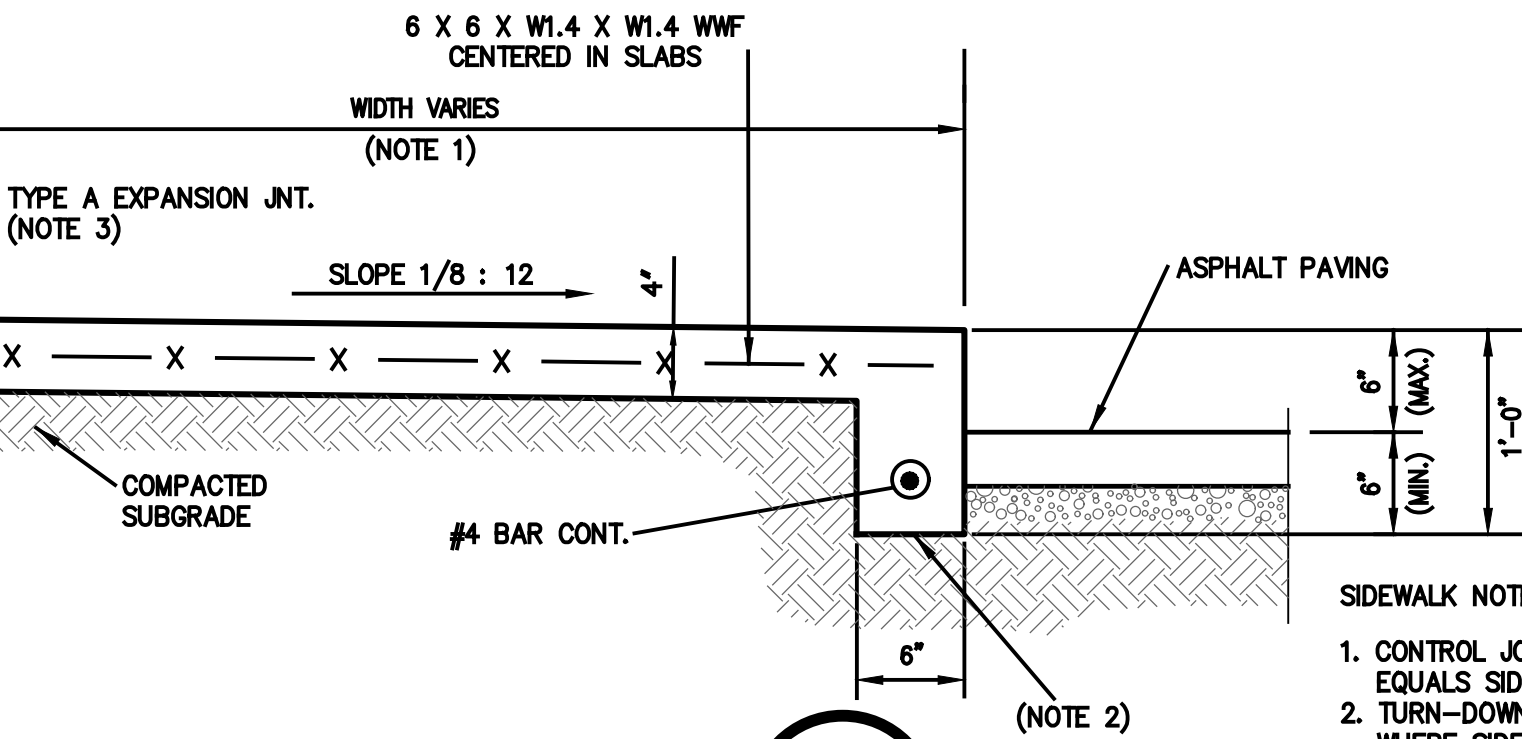
1. ASPHALT SURFACE COURSE SHALL MEET MATERIAL AND INSTALLATION REQUIREMENTS OF SECTION 407 OF AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
2. ASPHALT BINDER COURSE SHALL MEET MATERIAL & INSTALLATION REQUIREMENTS OF SECTION 406 OF AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
3. GRAVEL BASE COURSE SHALL MEET MATERIAL AND INSTALLATION REQUIREMENTS FOR AHTD CLASS 7 AGGREGATE BASE COURSE IN SECTION 303 OF AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
4. SUBGRADE SHALL BE COMPACTED TO A UNIFORM DENSITY OF NOT LESS THAN 95% OF THE MODIFIED PROCTOR.



TYP. H.C. SIGN

NOT TO SCALE

3



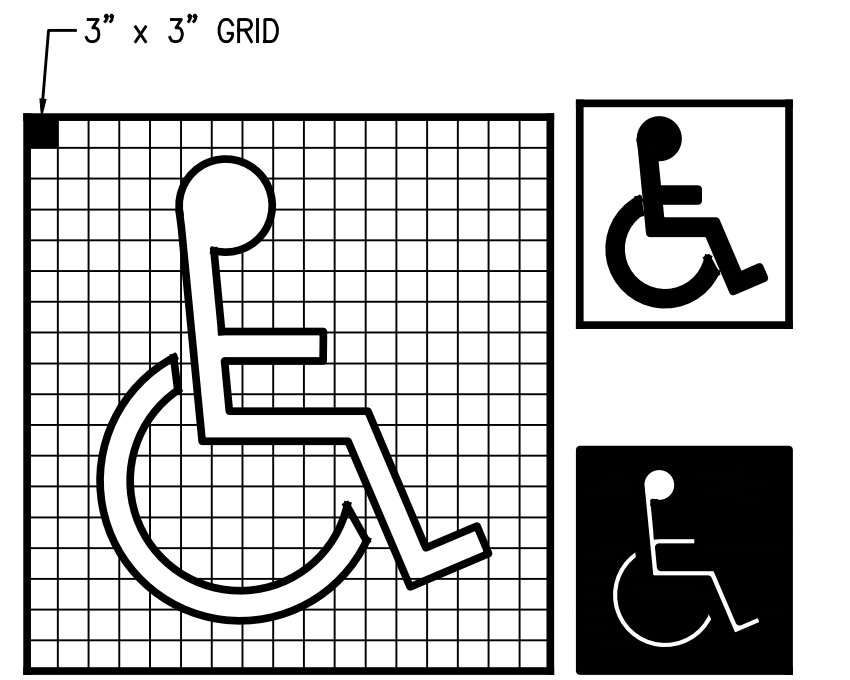
SIDEWALK DETAIL

NOT TO SCALE

2

SIDEWALK NOTES:

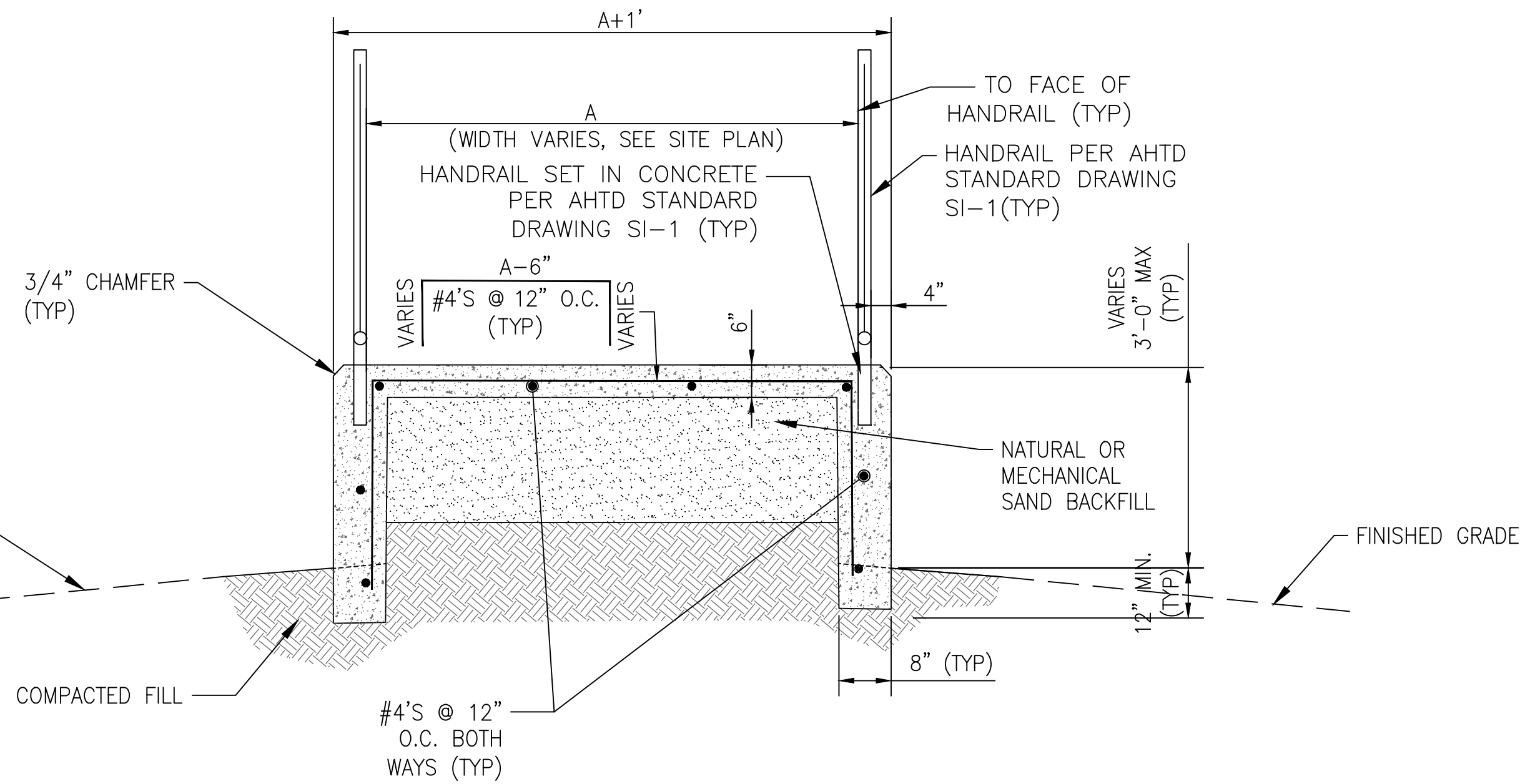
1. CONTROL JOINT SPACING EQUALS SIDEWALK WIDTH
2. TURN-DOWN NOT REQUIRED WHERE SIDEWALK MATCHES SURROUNDING GRADE
3. EXPANSION JOINT REQUIRED AT ALL ADJACENT CONCRETE NOT REQUIRED AT ASPHALT PAVING OR SOIL



H.C. PAVEMENT EMBLEM

NOT TO SCALE

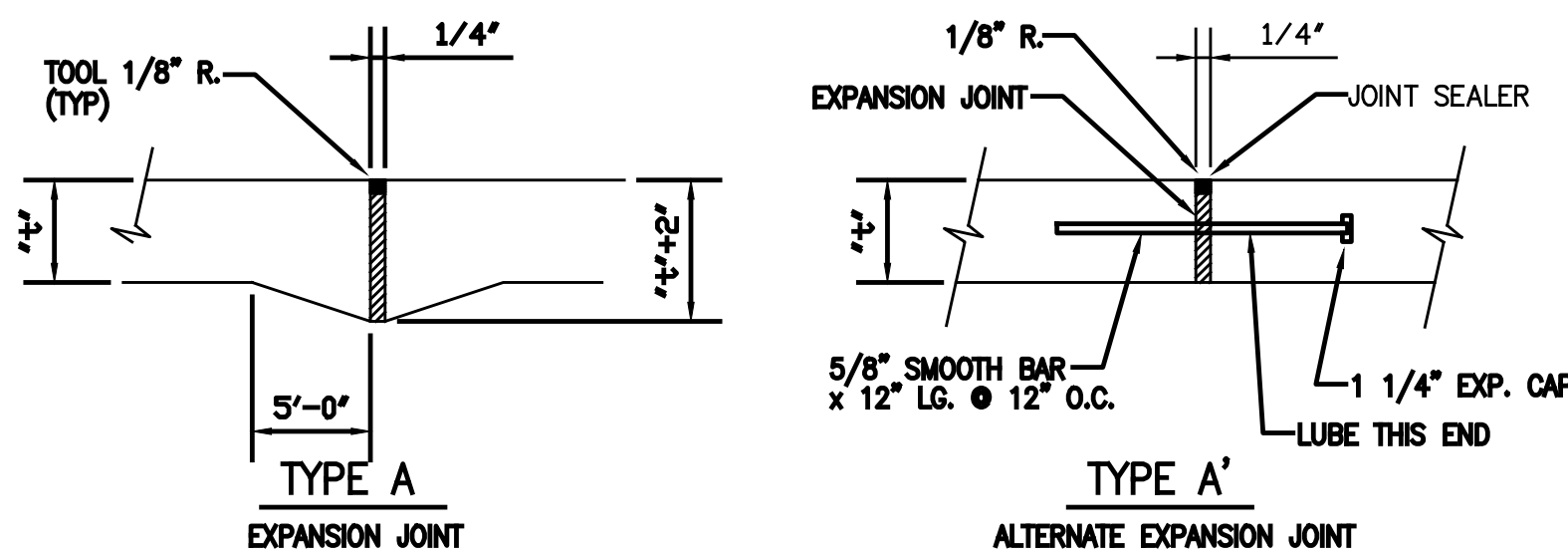
4



RAISED SIDEWALK WITH HANDRAILS

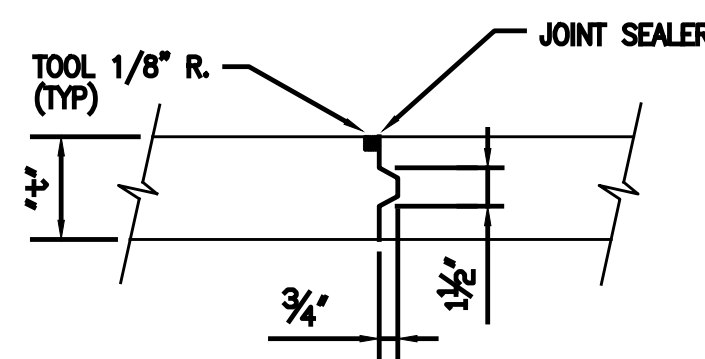
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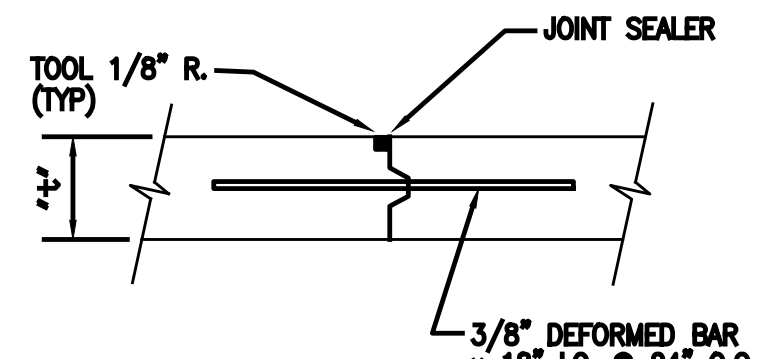


TYPE A
EXPANSION JOINT

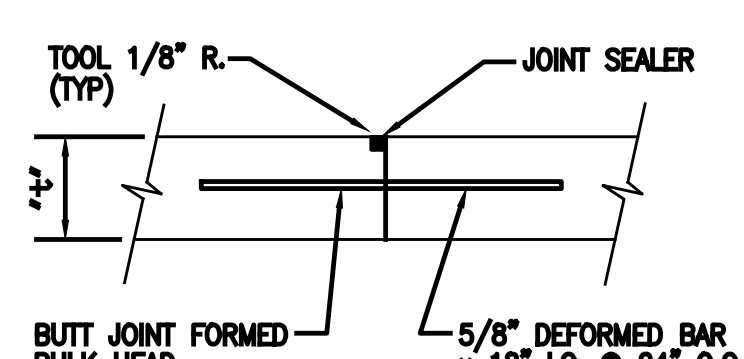
TYPE A'
ALTERNATE EXPANSION JOINT



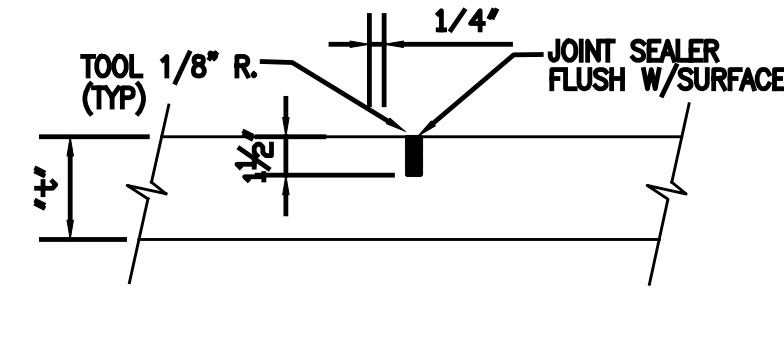
TYPE B
LONGITUDINAL CONSTRUCTION JOINT



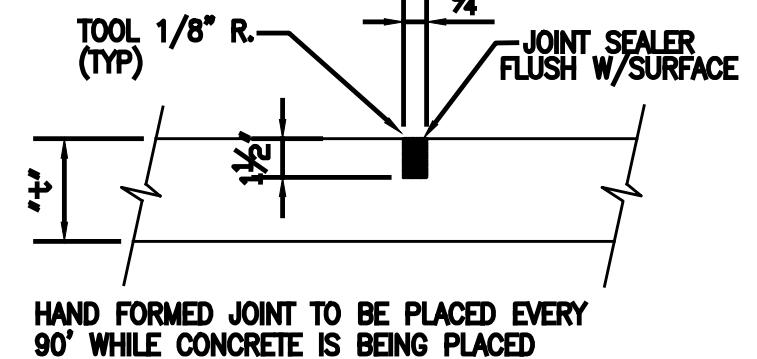
TYPE C
TIED TRANSVERSE CONSTRUCTION JOINT



TYPE D
TRANSVERSE CONSTRUCTION JOINT



TYPE S
LONG. OR TRANS. SAWED CONSTRUCTION JOINT



TYPE SH
LONG. OR TRANS. SAWED CONSTRUCTION JOINT

CONCRETE JOINTING DETAILS

NOT TO SCALE

6

NOTE: ALL JOINT SPACING NOT TO EXCEED 15'-0" INTERVALS

BY	
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DATE	

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A NEW ELITE VOLLEYBALL ACADEMY GYM
FOR JOHN ECKART
VERNIA OFFICE PARK
1601 CHRISTY LANE
ALEXANDER, ARKANSAS 72002

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
KERNON J. WILLIAMS
NO. 9551

03-10-2023

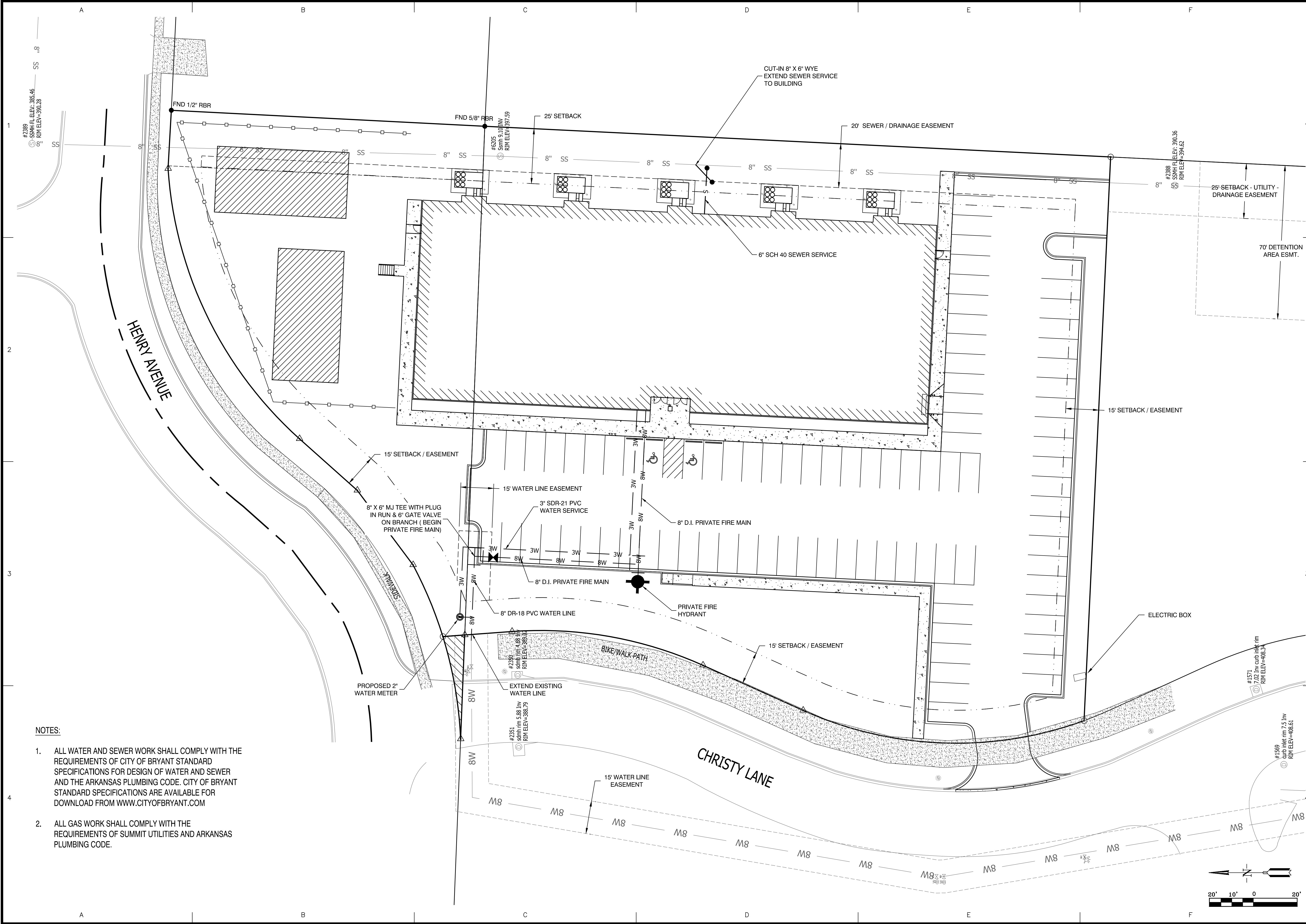
CONTENTS:
SITE DETAILS

PROJECT NO:
22140

DATE:
MAR 2023

SHEET NO:

C1.1



- NOTES:
- ALL WATER AND SEWER WORK SHALL COMPLY WITH THE REQUIREMENTS OF CITY OF BRYANT STANDARD SPECIFICATIONS FOR DESIGN OF WATER AND SEWER AND THE ARKANSAS PLUMBING CODE. CITY OF BRYANT STANDARD SPECIFICATIONS ARE AVAILABLE FOR DOWNLOAD FROM WWW.CITYOFBRYANT.COM
 - ALL GAS WORK SHALL COMPLY WITH THE REQUIREMENTS OF SUMMIT UTILITIES AND ARKANSAS PLUMBING CODE.

REVISION		DATE	BY
1			
2			
3			
4			

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**A NEW ELITE VOLLEYBALL ACADEMY
GYM FOR JOHN ECKART
VERNIA OFFICE PARK
1601 CHRISTY LANE
ALEXANDER, ARKANSAS 72002**

03-13-2023

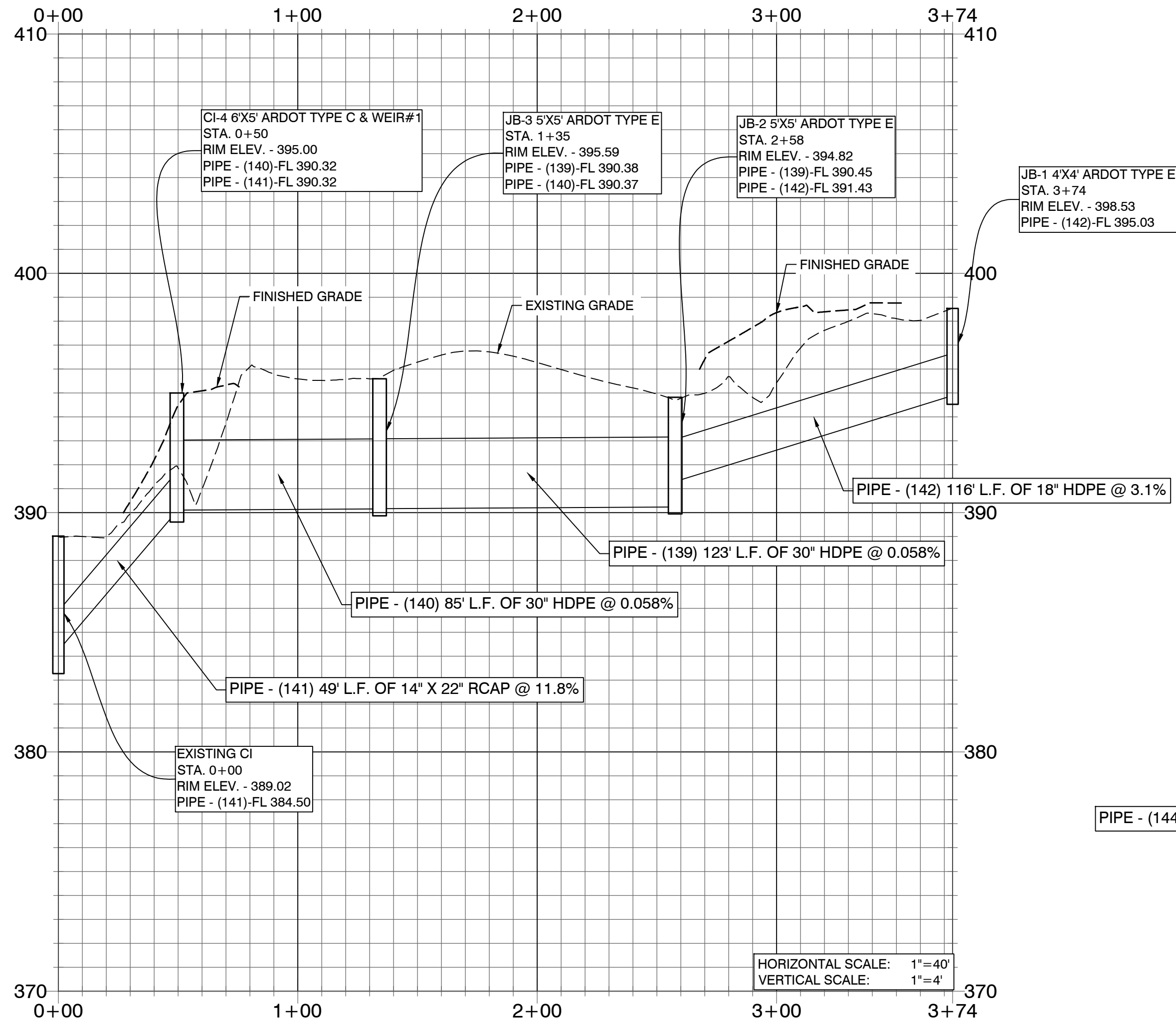
CONTENTS:
UTILITY PLAN

PROJECT NO:
22140

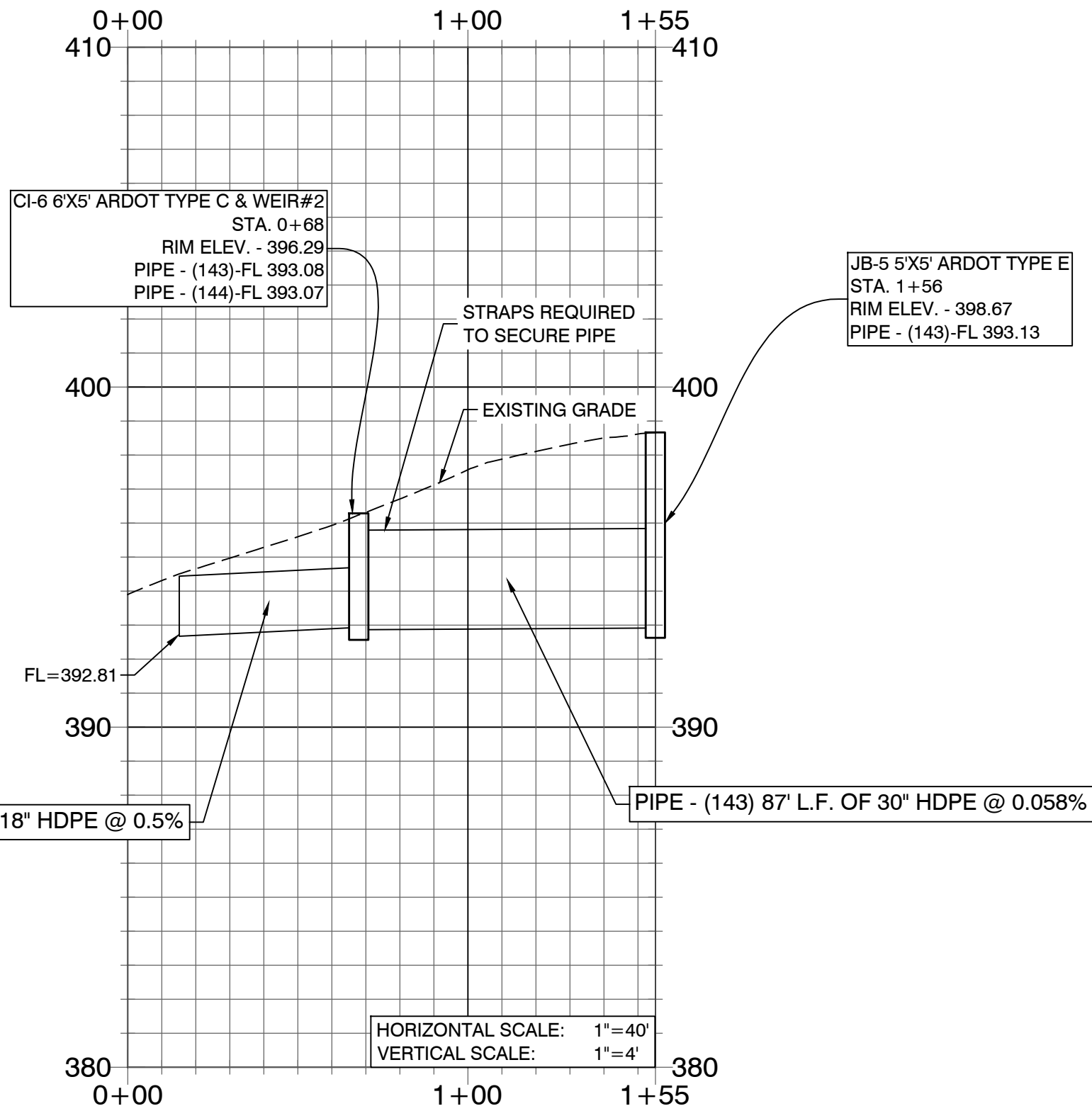
DATE:
MARCH 13, 2023

SHEET NO:
C2.0

NORTH STORM DETENTION PROFILE



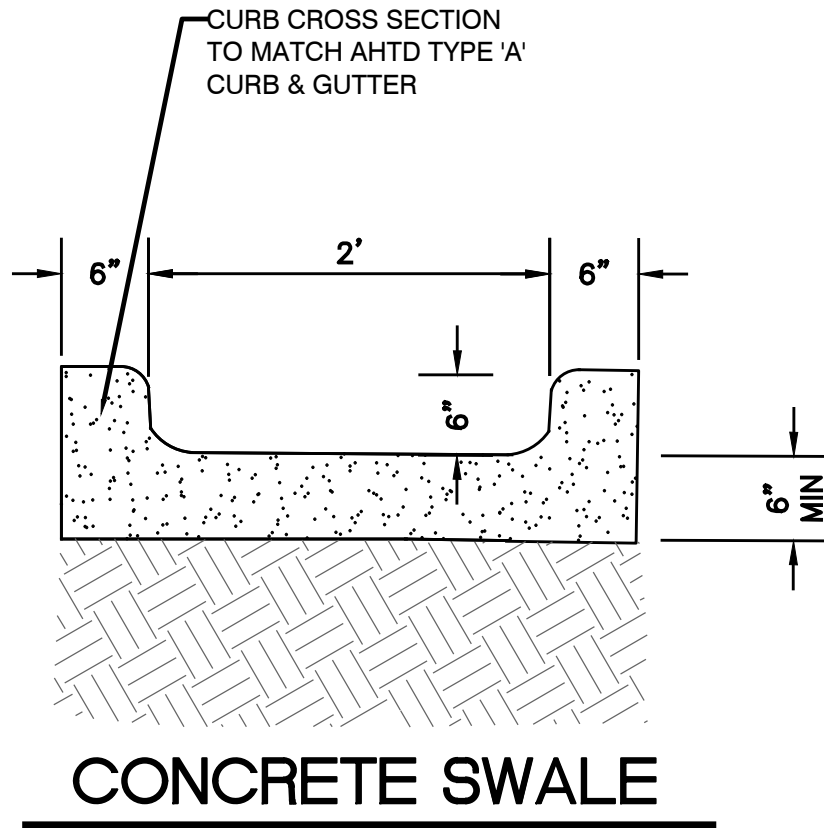
SOUTH STORM DETENTION PROFILE



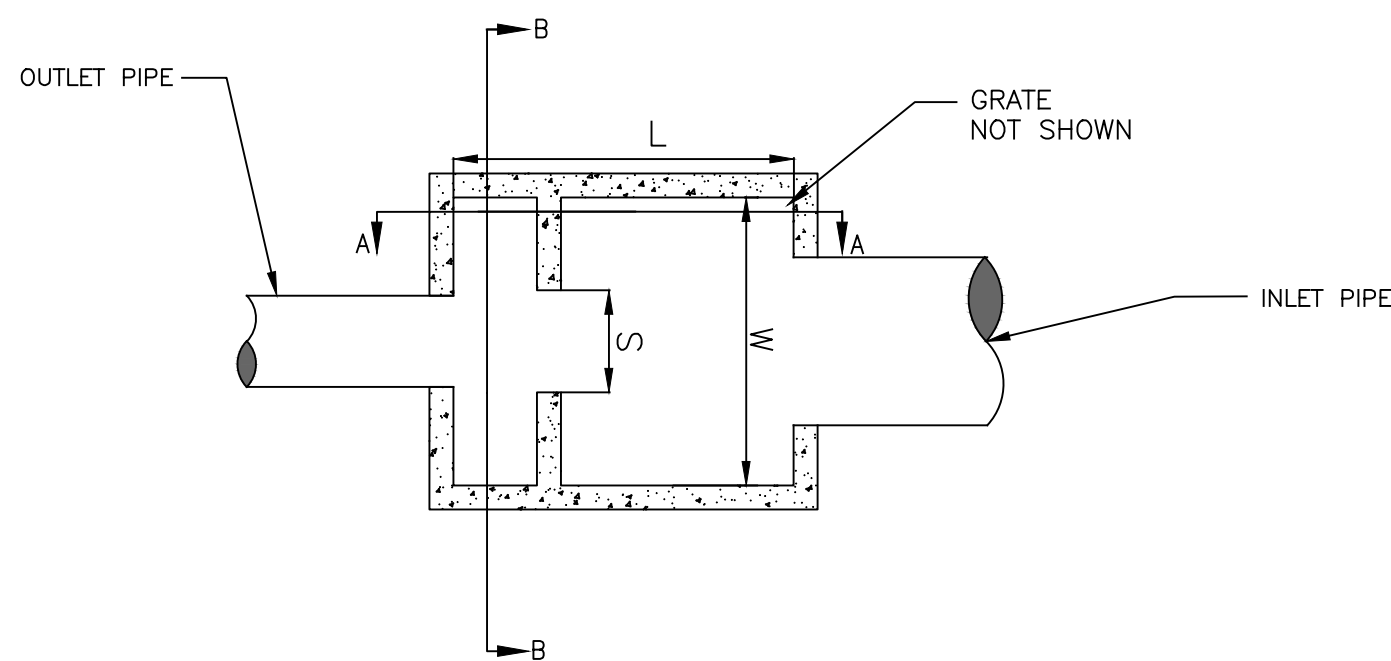
****HDPE PIPE MINIMUM**
COVER REQUIREMENTS:**

30" HDPE - 22" MIN. COVER

**IF THERE IS NOT MINIMUM COVER
THEN THE PIPE NEEDS STRAPS
TO BE SECURED.****

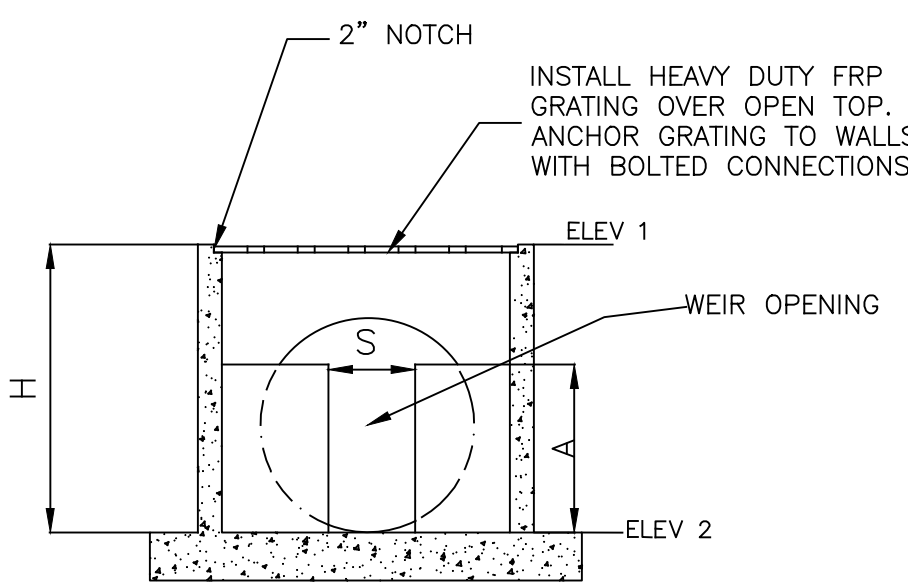


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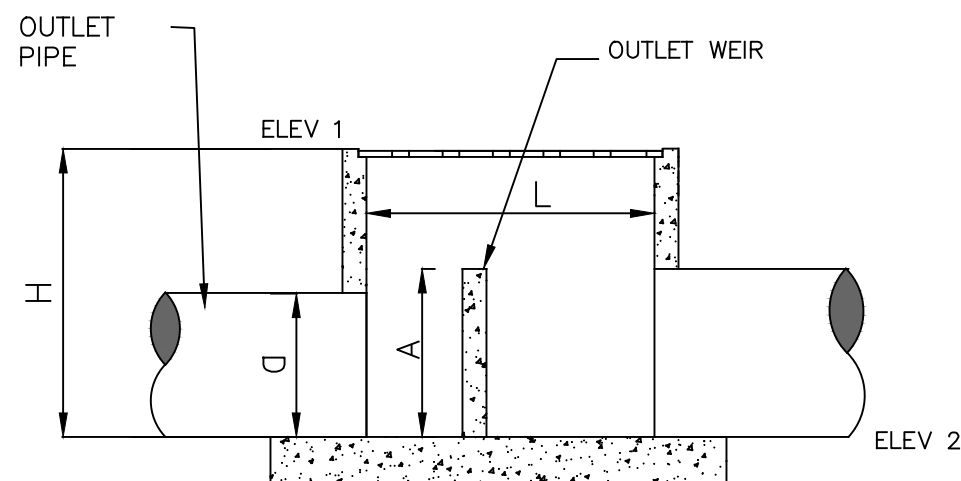
**OUTLET STRUCTURE - WEIR
PLAN VIEW**

NOT TO SCALE



**OUTLET STRUCTURE - WEIR
SECTION B-B**

NOT TO SCALE



**OUTLET STRUCTURE - WEIR
SECTION A-A**

NOT TO SCALE

OUTLET STRUCTURE								
OUTLET STRUCTURE	L	W	H	ELEV 1	ELEV 2	S	A	D
WEIR#1	6'-0"	5'-0"	4'-8"	395.00	390.32	0'-8"	2'-6"	14"X22"
WEIR#2	6'-0"	5'-0"	3'-3"	396.30	393.08	0'-4"	2'-6"	18"

DETENTION OUTLET NOTES:

- ALL CONCRETE WALLS SHALL BE A MINIMUM OF 6" THICK & REINFORCED WITH #4'S @ 12" O.C. BOTH WAYS.
- BOTTOM SLAB SHALL BE 12" THICK & REINFORCED WITH #4'S @ 12" O.C. BOTH WAYS.

BY	REVISION	DATE

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garnatengineering@gmail.com

A NEW ELITE VOLLEYBALL ACADEMY
GYM FOR JOHN ECKART
VERNIA OFFICE PARK
1601 CHRISTY LANE
ALEXANDER, ARKANSAS 72002

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 9551
VERNON J. WILLIAMS

03-10-2023

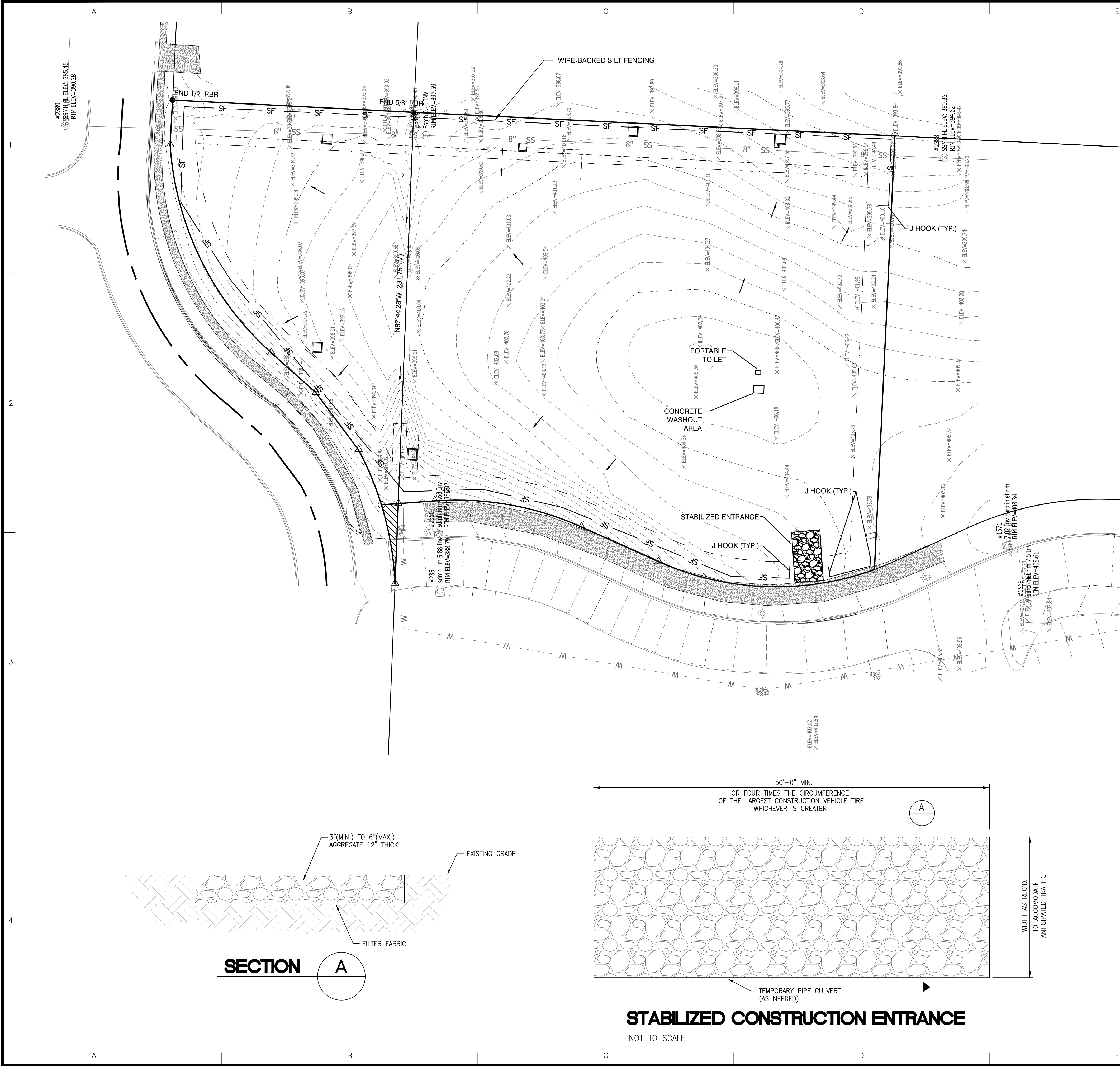
CONTENTS:
**DRAINAGE
PROFILES &
DRAINAGE
DETAILS**

PROJECT NO:
22140

DATE:
DATE

SHEET NO:

C3.1

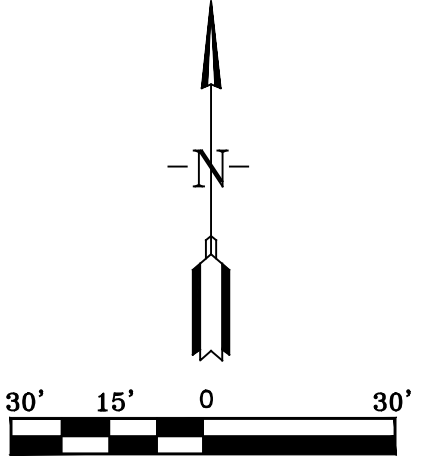


- BMP NOTES:**
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
 - DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
 - RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIAL SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
 - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
 - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
 - IF THE ACTION OF VEHICLES TRAVELING OVER THE SITE IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF OF THE SITE.
 - ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
 - CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
 - ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
 - ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

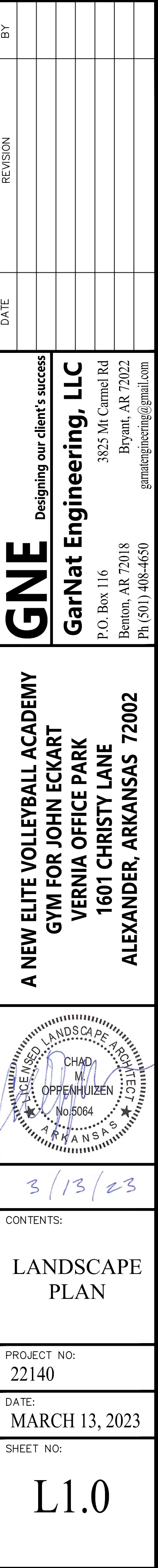
TOTAL SITE: 2.13 ACRES (INCLUDES R-O-W)

TOTAL DISTURBED AREA: 2.13 ACRES (INCLUDES R-O-W)

- LEGEND:**
- 500 EXISTING CONTOURS
 - DIRECTION OF OVERLAND FLOW
 - SF SILT FENCING



BY	REVISION	DATE	1
2	3	4	5
<p>Designing our client's success</p> <p>GarNat Engineering, LLC</p> <p>P.O. Box 116 Benton, AR 72018 Ph (501) 408-4650 gamateengineering@gmail.com</p>			
<p>A NEW ELITE VOLLEYBALL ACADEMY</p> <p>GYM FOR JOHN ECKART</p> <p>VERNIA OFFICE PARK</p> <p>1601 CHRISTY LANE</p> <p>ALEXANDER, ARKANSAS 72002</p>			
<p>STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER VERNON J. WILLIAMS NO. 9551</p>			
<p>03-10-2023</p>			
<p>CONTENTS:</p> <p>EROSION CONTROL PLAN</p>			
<p>PROJECT NO: 22140</p>			
<p>DATE: DATE</p>			
<p>SHEET NO: C4.0</p>			



[illegible]

QUANTITY:	COMMON NAME / BOTANICAL NAME:	SIZE:	REMARKS:
5	October Glory Red Maple Acer rubrum 'October Glory'	2" caliper	Specimen with positive upright form and symmetrical. Well branched canopies.
4	Nellie R. Stevens Holly Ilex x 'Nellie R. Stevens'	5-6' tall	Specimen with positive upright form and symmetrical. Well branched canopies.
46	Compacta Holly Ilex crenata 'Compacta'	3 gallon	Full well branched shrub with uniform shape.
44	Stella D'Oro Daylily Hemerocallis x Stella D'oro	1 gallon	Plant 18" o.c.
CONTRACTOR TO MEASURE	Bermuda Tifway 419 Cynodon Dactylon var. Tifway 419	SOD	Solid sod, all areas indicated with close knit joints

1

DATE

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2

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Bryant, AR 72022
garnatengineering@gmail.com

AREAS AND LIMITS OF SODDING ARE INDICATED BASED ON ANTICIPATED DISTURBANCE BY GRADING OPERATIONS. CONTRACTOR TO PROVIDE ADDITIONAL SODDING IN ANY OTHER AREAS DISTURBED BY WORK UNDER THIS CONTRACT. EXCAVATE AND REMOVE ANY REMAINING TURF AND SOIL TO A 4-INCH MINIMUM DEPTH WITHIN NEW SOD AREAS. HAND EXCAVATION REQUIRED WITHIN DRIP LINES OF TREE AREAS TO AVOID DAMAGE TO EXISTING ROOTS. CONTRACTOR TO INSTALL MINIMUM OF 3" OF TOPSOIL TO ALL AREAS TO BE SODDED OR SEEDED. FINE GRADE THE TOPSOIL TO ENSURE POSITIVE DRAINAGE AND A SMOOTH SURFACE FOR SOD INSTALLATION.

CONTRACTOR TO PROVIDE FULL MAINTENANCE OF INSTALLED LANDSCAPE AND IRRIGATION UNTIL DATE OF FINAL ACCEPTANCE. ADDITIONALLY, CONTRACTOR TO PROVIDE ONE YEAR WARRANTY FOR ALL LANDSCAPE AND IRRIGATION WORK FROM THE DATE OF FINAL ACCEPTANCE.

12"

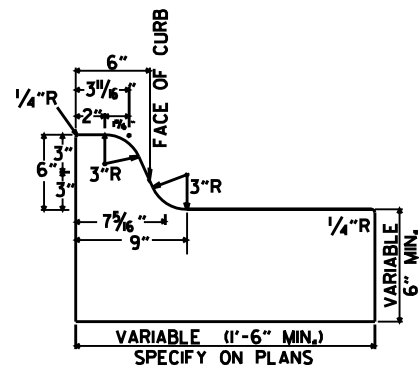
WHEN PRESENT, REMOVE BURLAP

3/13/23

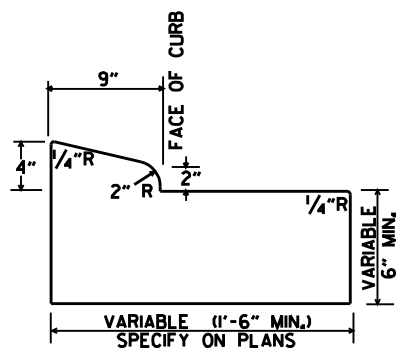
CONTENTS:

CONTRACTOR TO PROVIDE AUTOMATIC IRRIGATION SYSTEM FOR ALL NEW LANDSCAPE AND TURF AREAS SHOWN ON THE PLANS. SYSTEM WILL REQUIRE PROVIDING BACKFLOW PREVENTER, PERMITTING, POWER CONNECTION, CONTROLLER, AND ALL OTHER WORK REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM THAT PROVIDES 100% COVERAGE. COORDINATE LOCATION OF CONTROLLER WITH OWNER, GENERAL CONTRACTOR, AND ELECTRICAL CONTRACTOR. COORDINATE LOCATION OF IRRIGATION SLEEVES WITH GENERAL CONTRACTOR PRIOR TO FULLY MOBILIZING TO SITE. CONTRACTOR TO REFER TO THE UTILITY PLAN SHEET FOR CURRENT FIRE FLOW INFORMATION.

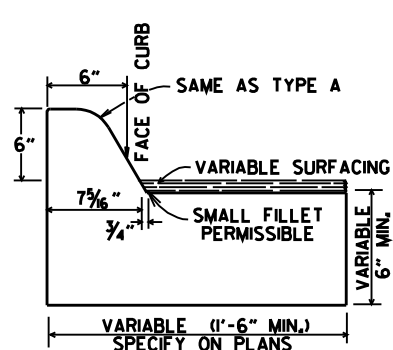
[illegible]



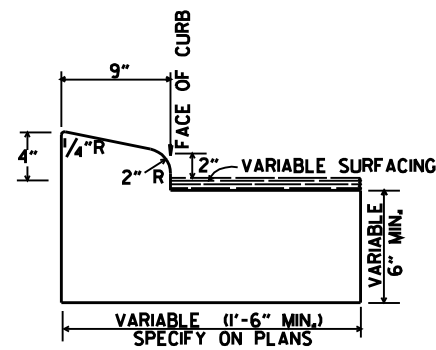
TYPE A



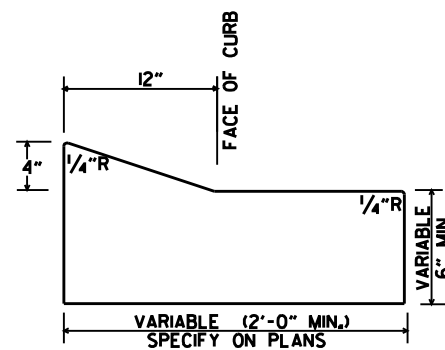
TYPE B-1



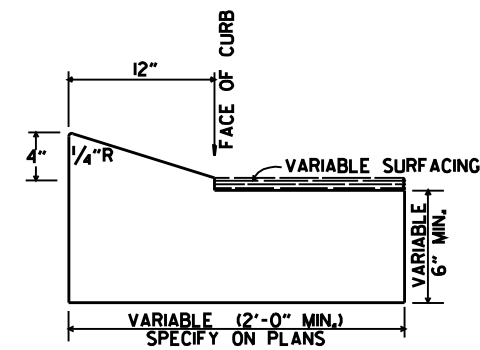
TYPE C



TYPE B-2

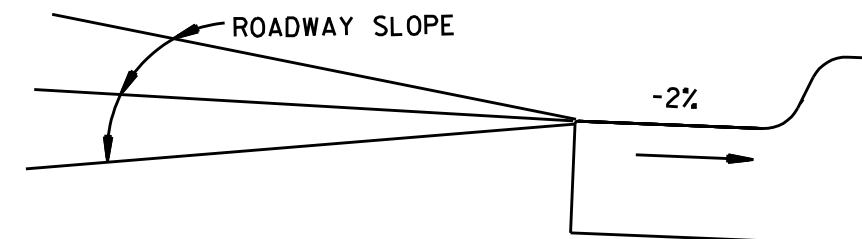


TYPE E-1

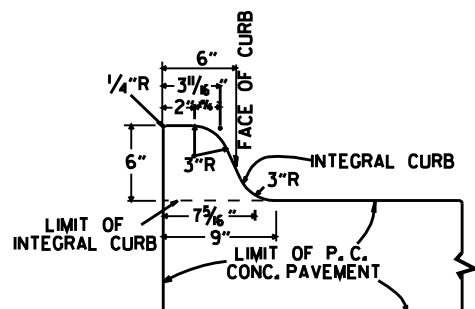


TYPE E-2

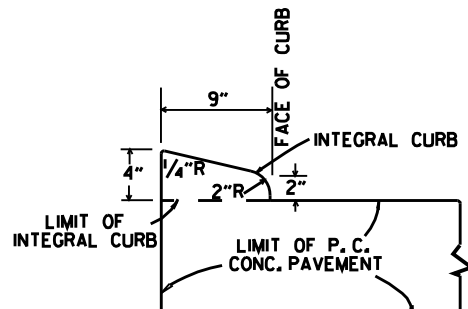
CONCRETE COMBINATION CURB AND GUTTER



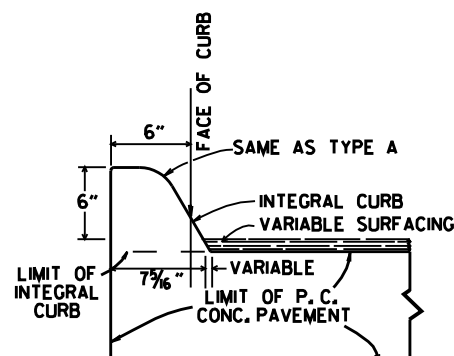
DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

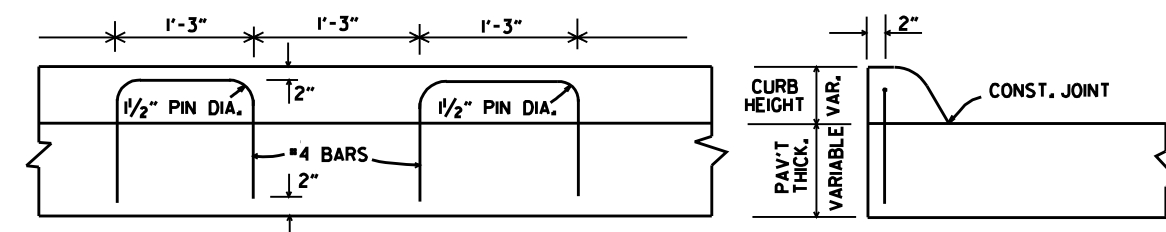


TYPE B



TYPE C

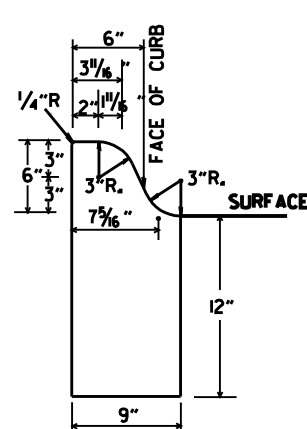
INTEGRAL CURB



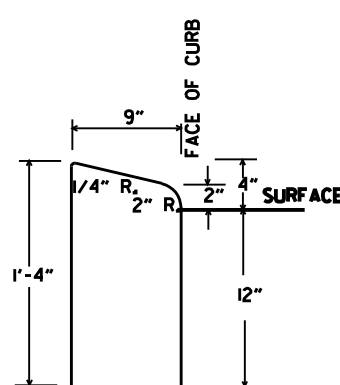
LONGITUDINAL SECTION

ELEVATION

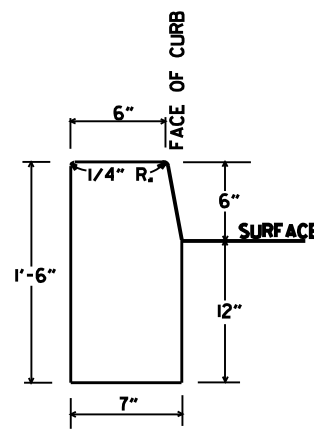
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



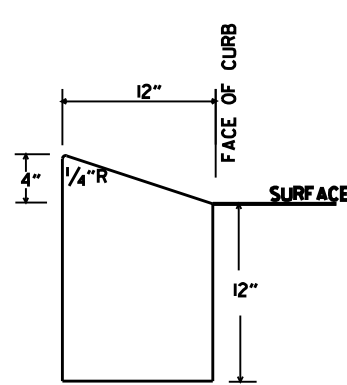
TYPE A



TYPE B

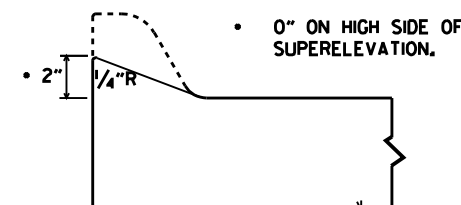


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1.
COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

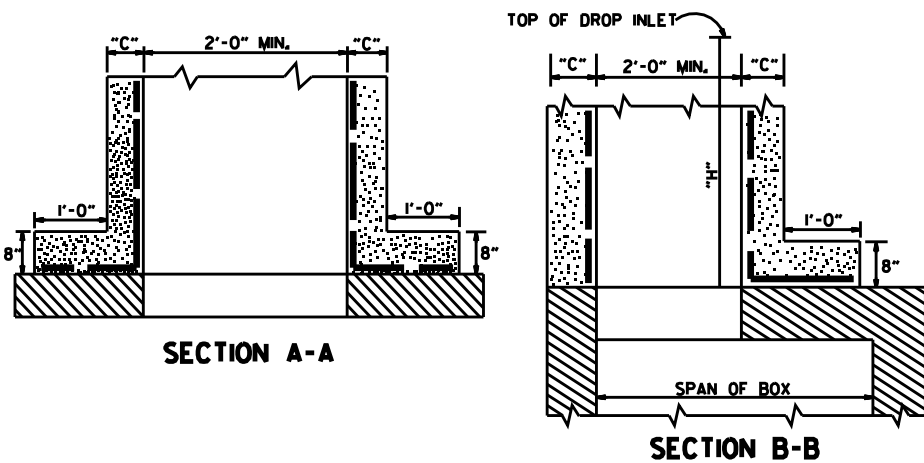
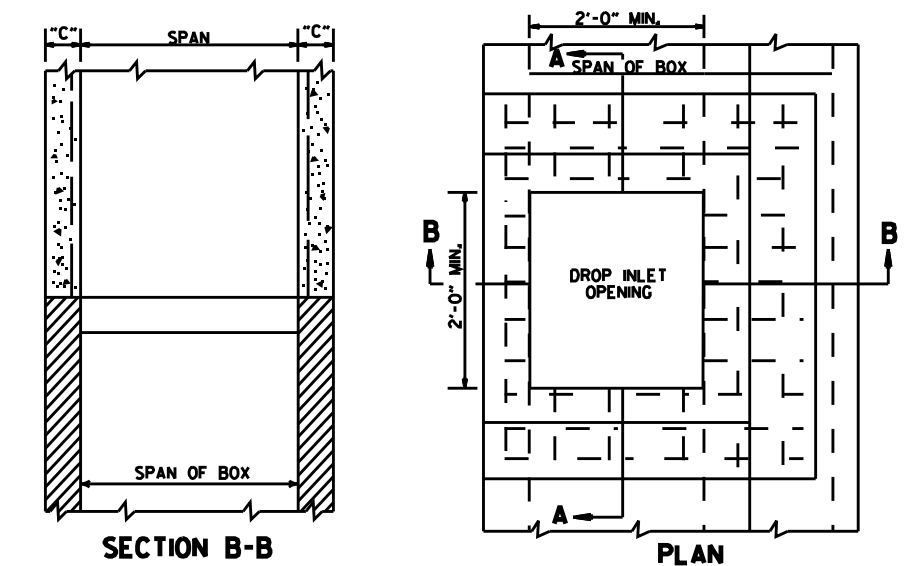
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIABLE DEPTH TYPE A & B 1	11-30-89
7-16-88	REVISED MODIFIED CURB	630-7-16-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

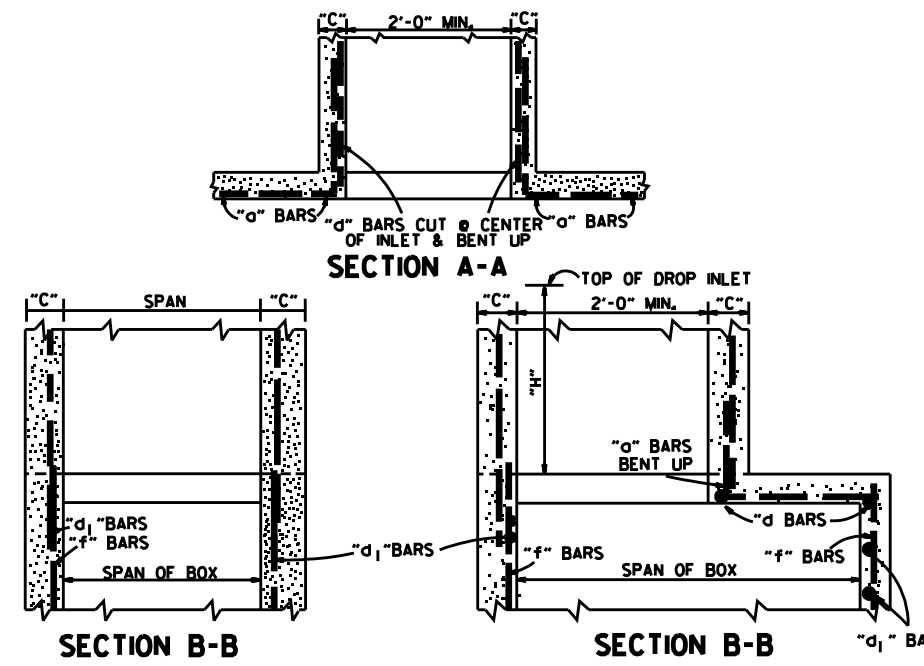
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

STANDARD DRAWING CG-1

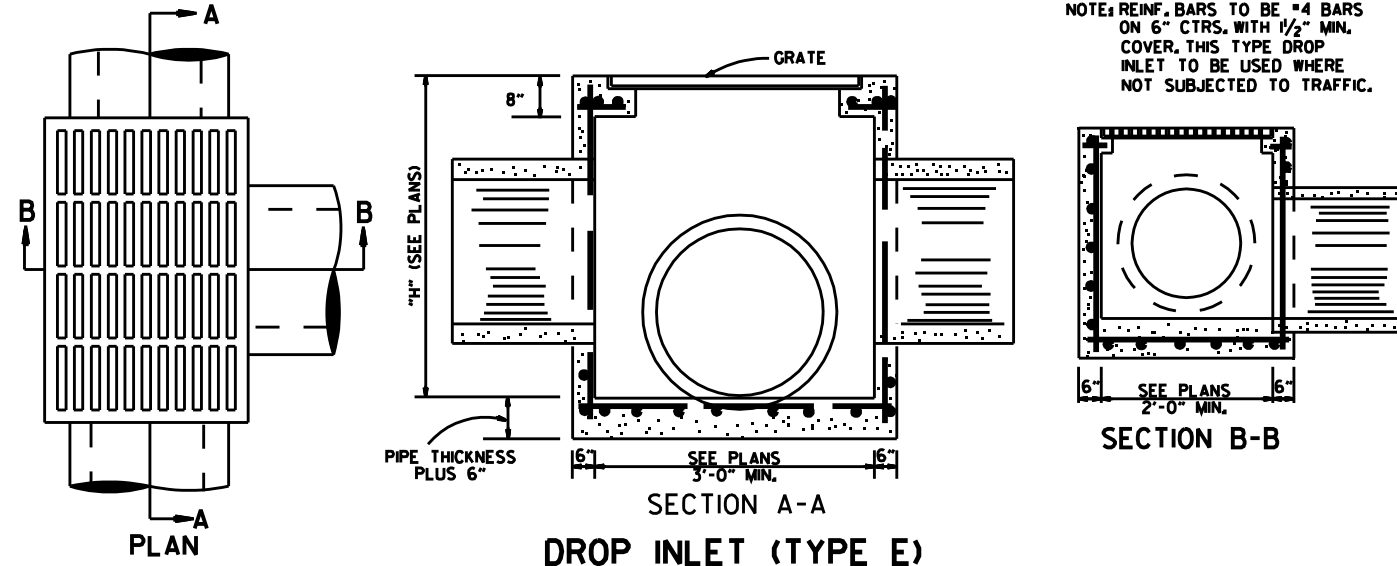


METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



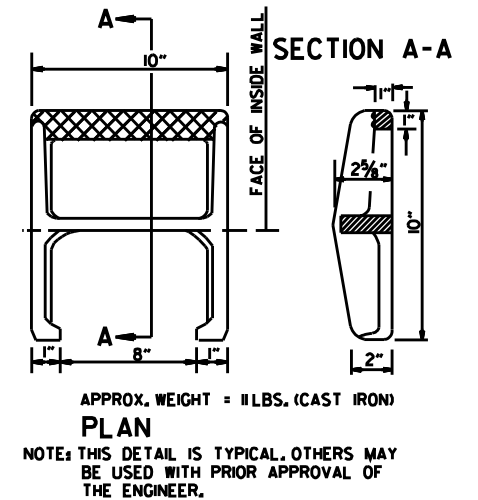
METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

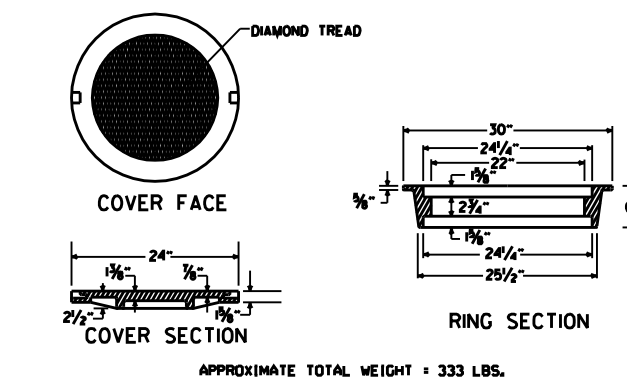


DROP INLET (TYPE E)

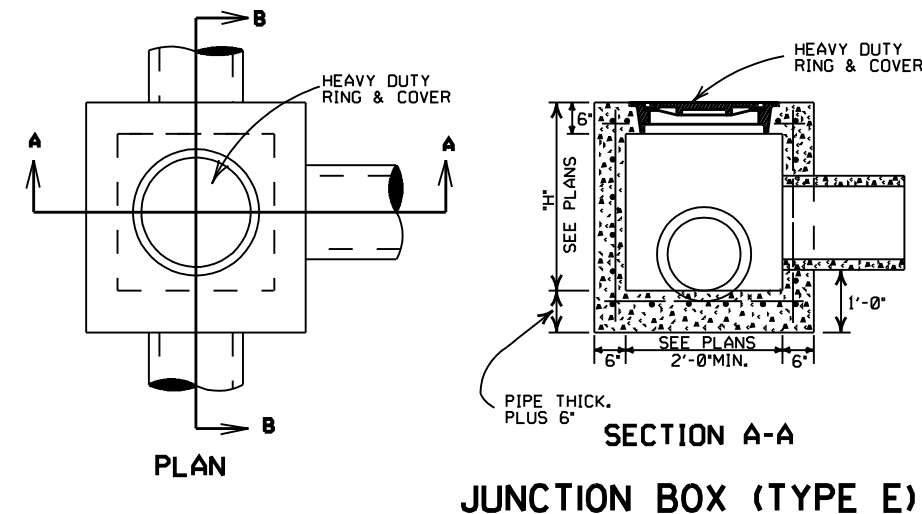
NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



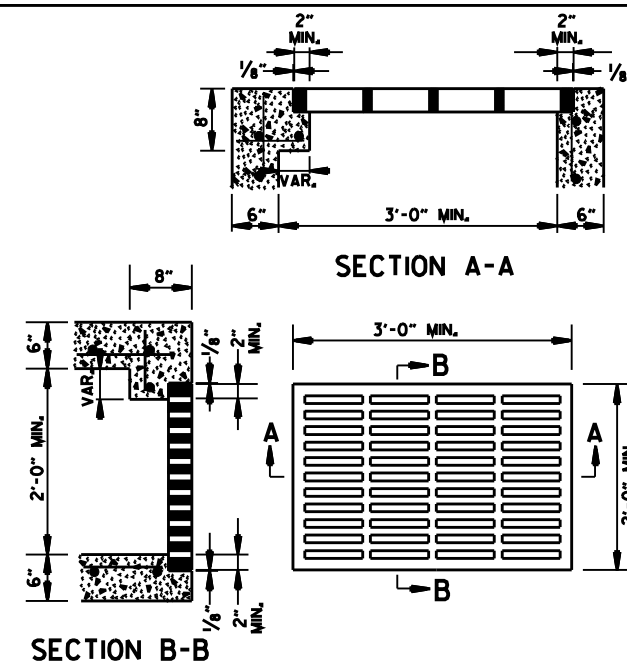
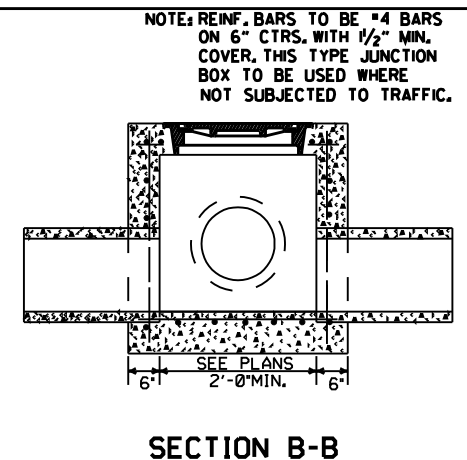
DETAIL OF STEP FOR DROP INLET



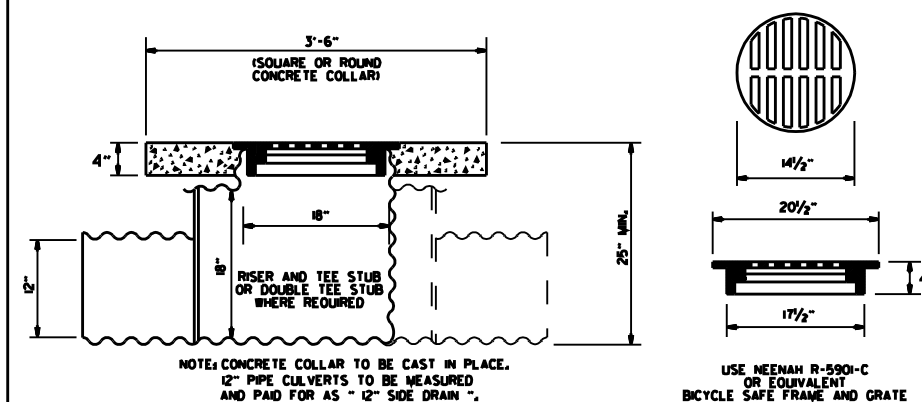
HEAVY DUTY RING & COVER



JUNCTION BOX (TYPE E)



GRATE FOR TYPE E DROP INLET



DETAIL OF YARD DRAIN

11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL, DELETED D1 (TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	
DATE REV.	REVISION	DATE FILMED

- GENERAL NOTES:**
1. ALL EXPOSED CORNERS SHALL BE 3/4" CHAMFERED.
 2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
 3. EXPANSION JOINT MATERIAL SHALL BE 3/4" PREFORMED FIBER.
 4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
 5. GRATE AND FRAME SHALL NOT BE PAINTED.
 6. GRATE SHALL BE BICYCLE SAFE.
 7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
 8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B & AASHTO M 306.
 9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
 10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER, REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

ARKANSAS STATE HIGHWAY COMMISSION
DETAILS OF DROP INLETS
& JUNCTION BOXES
STANDARD DRAWING FPC-9

REINFORCED CONCRETE
ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDOT NOMINAL	AASHTO M 206	ARDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43¾	44	26¾	27
42	51½	51	31¾	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87½	87
120	154	154	96¾	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN + 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE
HORIZONTAL ELLIPTICAL
PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(F)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

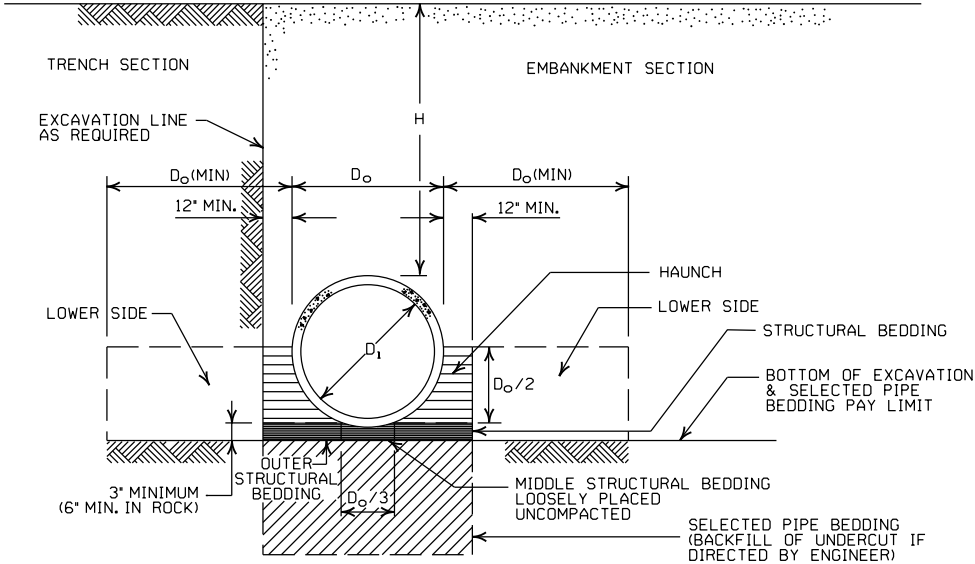
- LEGEND -

D_i = NORMAL INSIDE DIAMETER OF PIPE
D_o = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
= UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170. R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H"
OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE			
	CLASS III		CLASS IV	CLASS V
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MINIMUM HEIGHT OF FILL "H"
OVER R.C. ARCH & HORIZONTAL
ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF
FILL "H" OVER CIRCULAR
R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MAXIMUM HEIGHT OF FILL "H"
OVER R.C. ARCH & HORIZONTAL
ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT
FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1



INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

- AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.
 - SM3 WILL NOT BE ALLOWED.
 - STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1/2 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.
- STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF HDPE PIPE.

MINIMUM TRENCH WIDTH
BASED ON FILL HEIGHT “H”

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	“H” < 10’-0”	“H” ≥ 10’-0”
18”	4’-6”	4’-6”
24”	5’-0”	6’-0”
30”	5’-6”	7’-6”
36”	6’-0”	9’-0”
42”	7’-0”	10’-6”
48”	8’-0”	12’-0”

①NOTE:
18” MIN. (18” - 30” DIAMETERS)
24” MIN. (36” - 48” DIAMETERS)

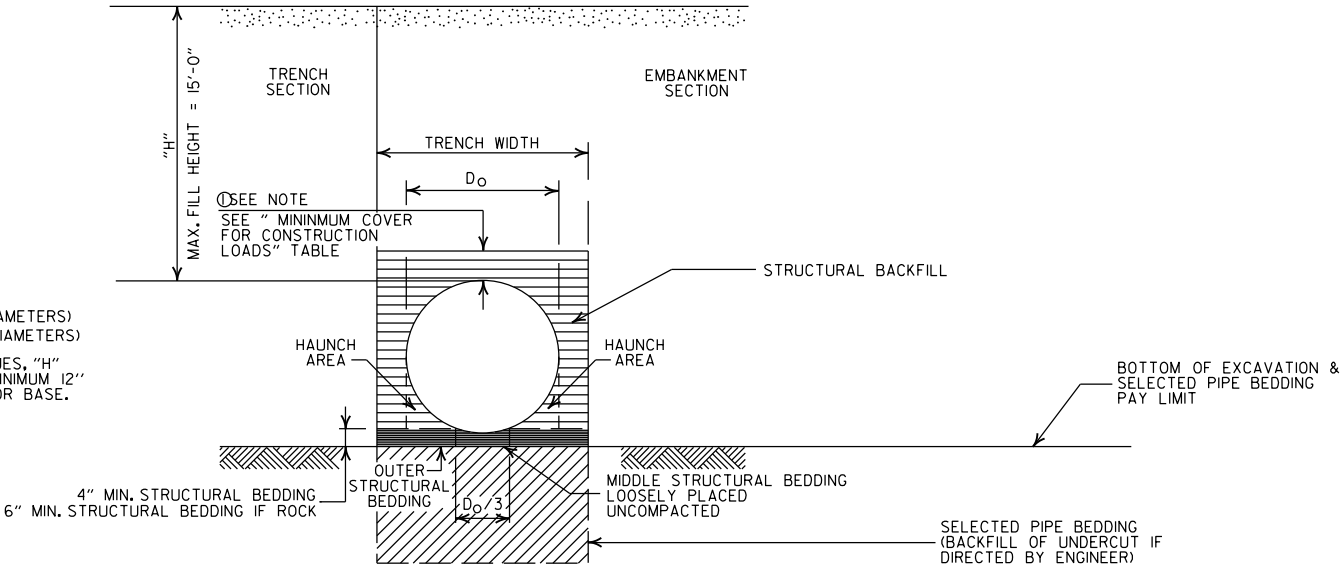
MINIMUM COVER VALUES, “H”
SHALL INCLUDE A MINIMUM 12”
OF PAVEMENT AND/OR BASE.

MULTIPLE INSTALLATION OF
HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18”	1’-6”
24”	2’-0”
30”	2’-6”
36”	3’-0”
42”	3’-6”
48”	4’-0”

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36” OR LESS	2’-0”	2’-6”	3’-0”	3’-0”
42” OR GREATER	3’-0”	3’-0”	3’-6”	4’-0”

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE
MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

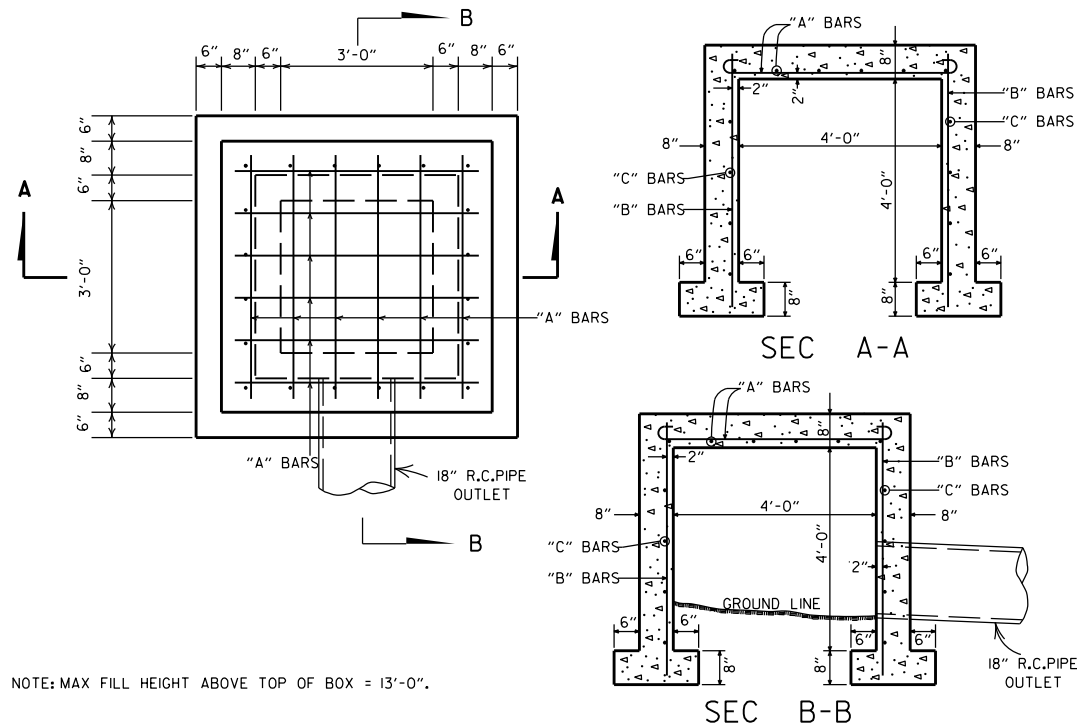
- LEGEND -

- H = FILL HEIGHT (FT.)
Ø = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM
- ===== = STRUCTURAL BACKFILL MATERIAL
===== = UNDISTURBED SOIL

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION “PLASTIC PIPE” AND SECTION 606 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS “STRUCTURAL BEDDING” ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS “SELECTED PIPE BEDDING.”
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF “SELECTED PIPE BACKFILL.”
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 “AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS.” JOINTS SHALL BE INSTALLED PER MANUFACTURER’S RECOMMENDATIONS.

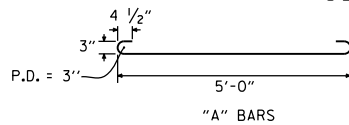
			ARKANSAS STATE HIGHWAY COMMISSION
			PLASTIC PIPE CULVERT
			(HIGH DENSITY POLYETHYLENE)
2-27-14	REVISED GENERAL NOTE 1.		
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE		
11-17-10	ISSUED		
DATE	REVISION	DATE FILMED	STANDARD DRAWING PCP-1



NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

STEEL SCHEDULE			
BARS	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 1/2"
"C"	16	5'-0"	12"

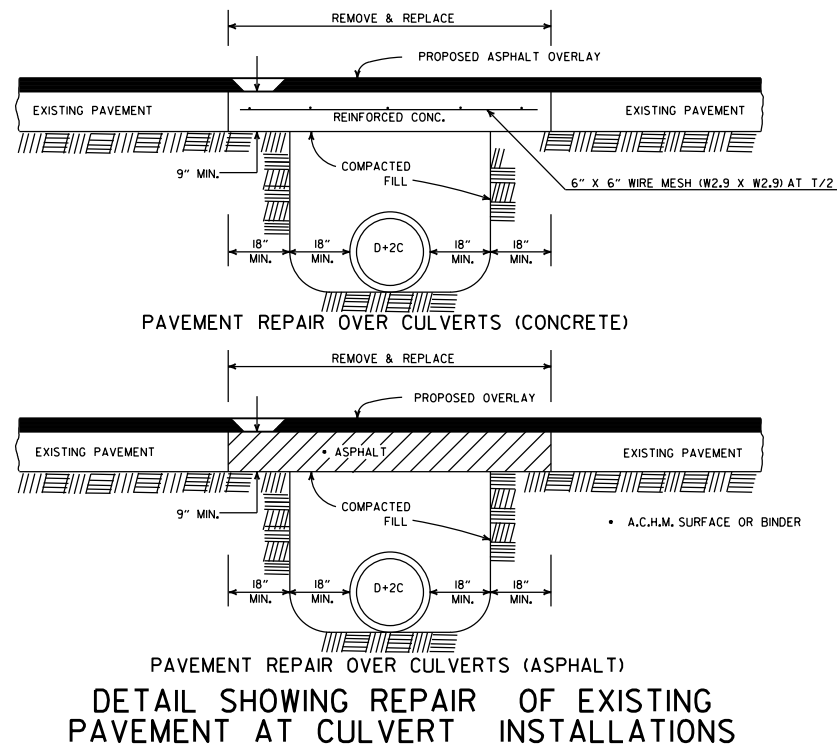
ALL STEEL TO BE #4 BARS



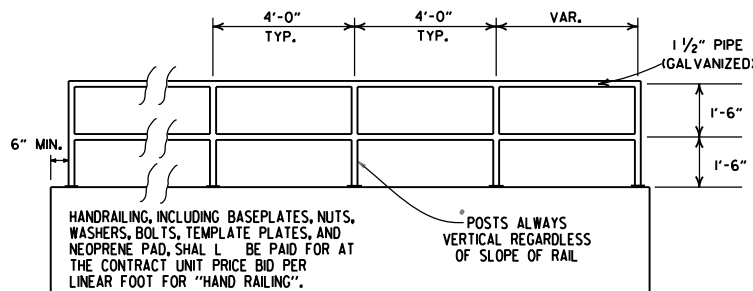
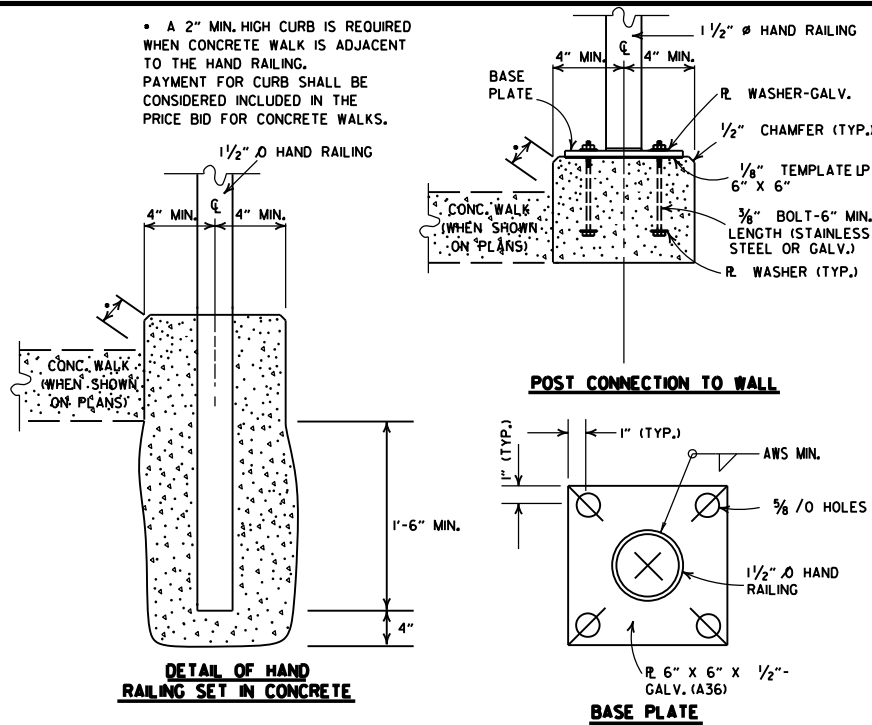
QUANTITIES
CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

GENERAL NOTE:
THE PAY ITEMS FOR REINFORCED CONCRETE SPRING BOXES SHALL BE FOR THE QUANTITIES OF CONCRETE OF THE CLASS SPECIFIED, REINFORCING STEEL, EXCAVATION FOR STRUCTURES AND 18" R.C. PIPE CULVERT.

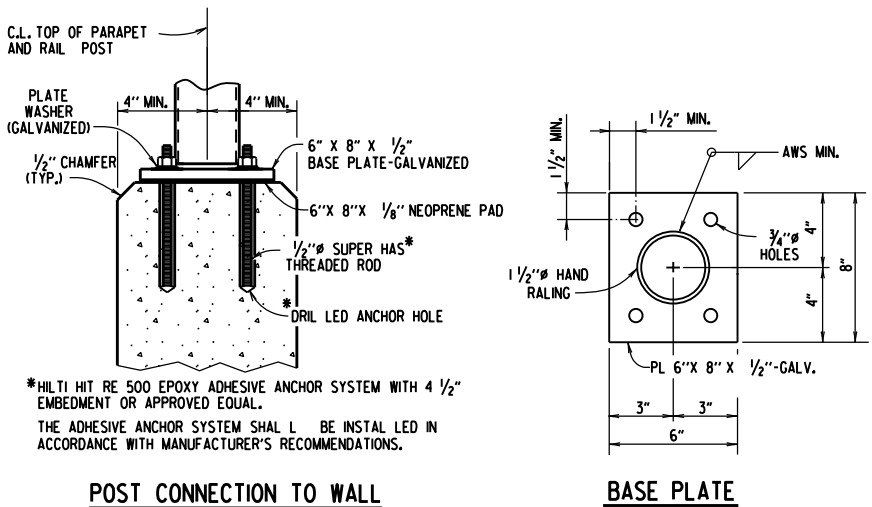
REINFORCED CONCRETE SPRING BOX



DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS



HAND RAILING SHALL CONFORM TO SECTION 633.

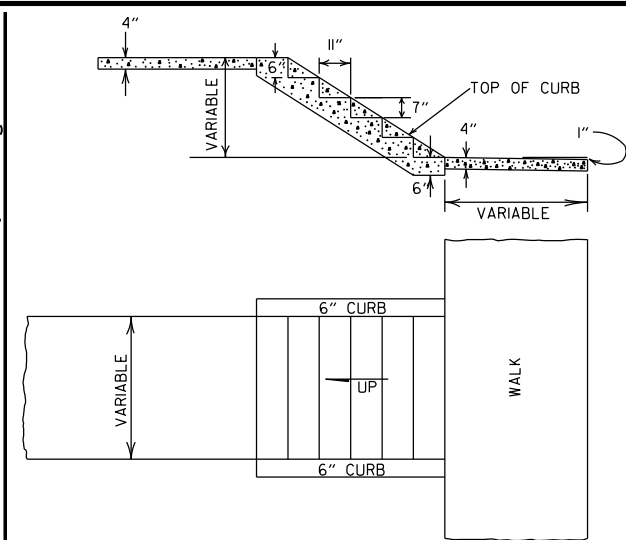


POST CONNECTION TO WALL

BASE PLATE

DETAILS OF ALTERNATE POST ANCHOR SYSTEM (EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



DETAILS OF CONCRETE STEPS & WALKS

- GENERAL NOTES
1. RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
 2. 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-96	ADD WEEP HOLE; REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	
10-1-92	CHANGED MESH FABRIC TO WIRE MESH	10-1-92
8-15-91	DELETED HDWL MODIFICATION DETAIL	8-15-91
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-8-90
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V. BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR	649-7-15-88
11-1-84	ADDED HDWL. MODS. DEL. PIPE UNDERDRAINS	
1-4-83	REV. TRENCH FOR PIPE UNDERDRAIN	510-11-1-84
	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
3-2-81	SPELLING OF "UNDERDRAIN"	721-3-2-81
4-20-79	REV. UNDERDRAIN DET & PAVEMENT REPAIR	674-4-20-79
2-2-76	12" MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
4-10-75	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
5-22-74	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
10-2-72	REVISED AND REDRAWN	564-10-16-72
DATE	REVISION	DATE FILMED

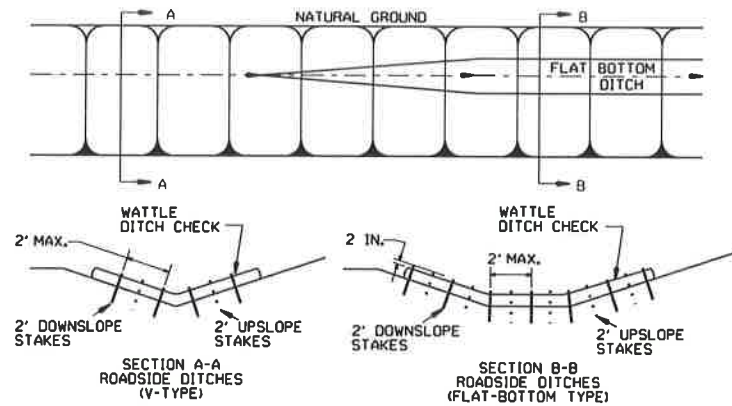
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI - 1

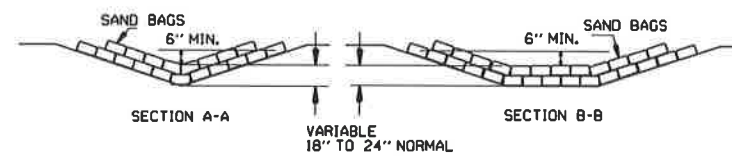
GENERAL NOTES

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

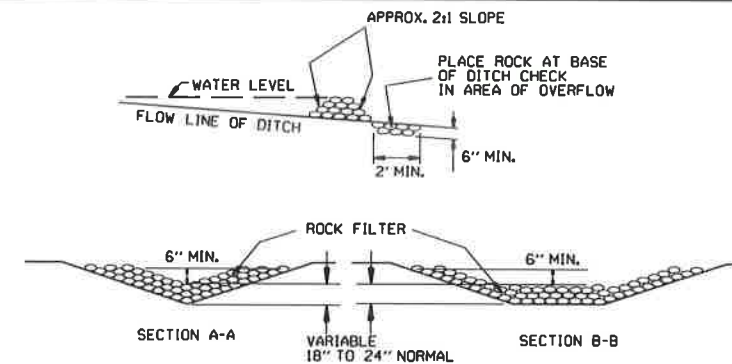


WATTLE DITCH CHECK (E-1)

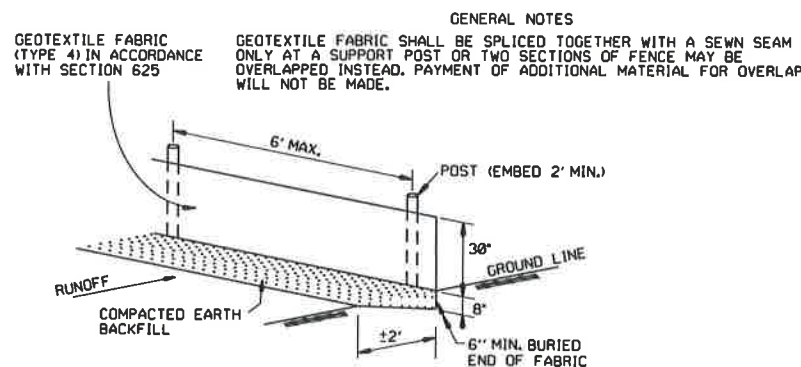
NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS. PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW.



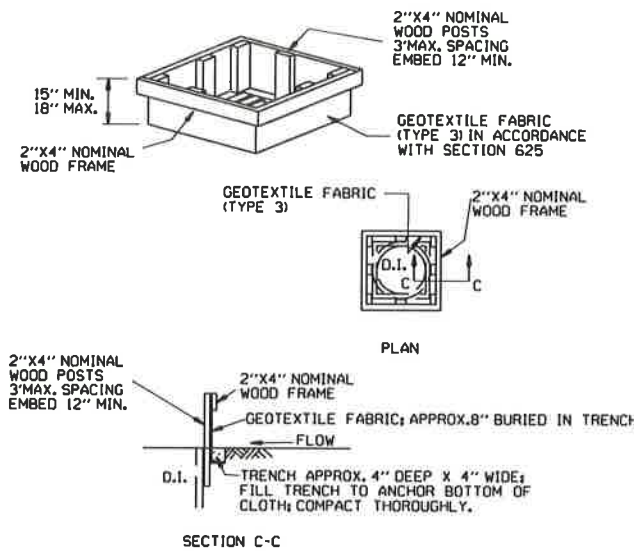
SAND BAG DITCH CHECK (E-5)



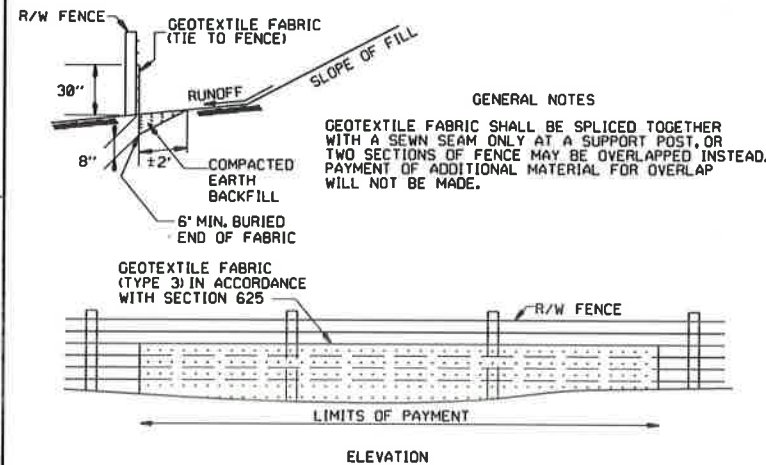
ROCK DITCH CHECK (E-6)



SILTS FENCE (E-11)

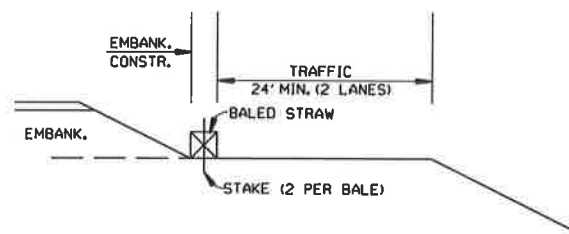


DROP INLET SILTS FENCE (E-7)

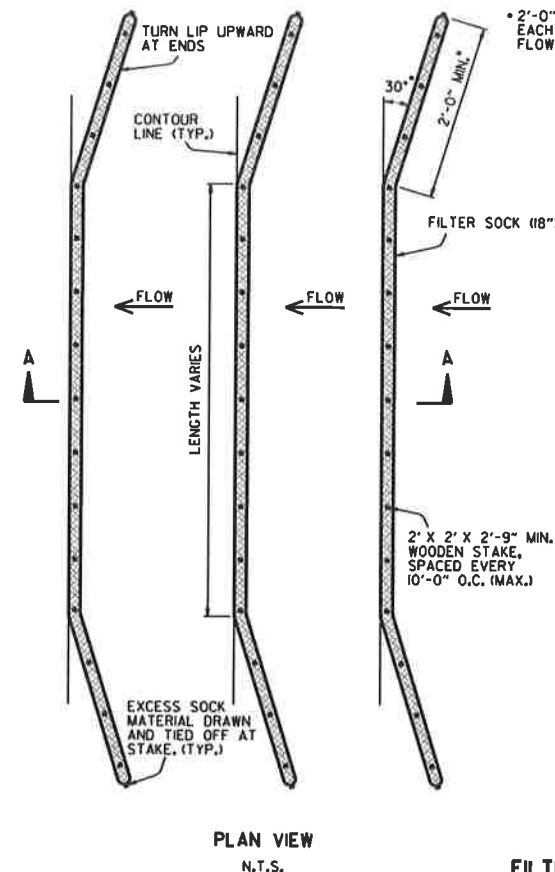


SILTS FENCE ON R/W FENCE (E-4)

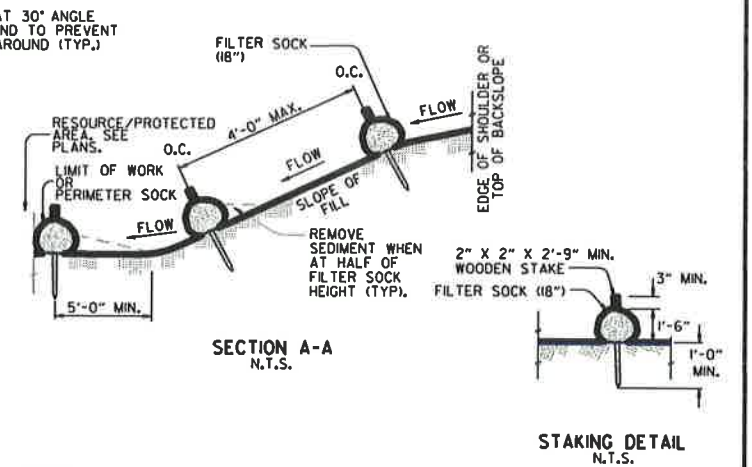
GENERAL NOTES
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. NO GAPS SHALL BE LEFT BETWEEN BALES.
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



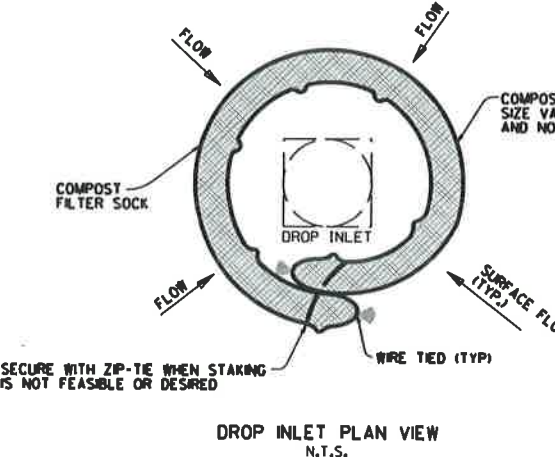
BALED STRAW FILTER BARRIER (E-2)



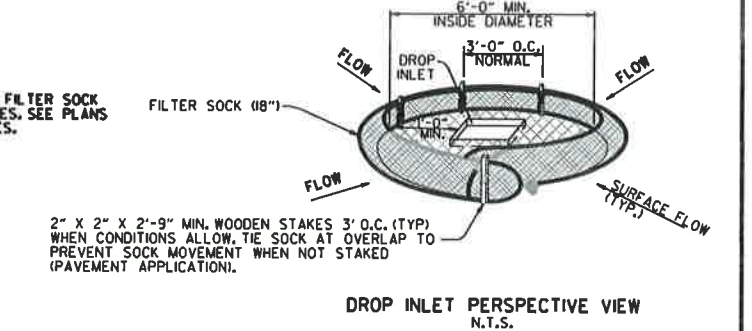
FILTER SOCK ALONG SLOPE (E-3)



NOTES:
1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.
3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBSIDIARY TO "FILTER SOCK (18")."
4. FILTER SOCKS MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED OR STAGGERED AS SHOWN IN DETAILS.
5. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.



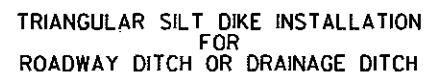
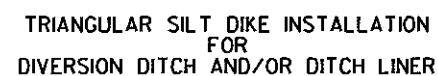
COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)



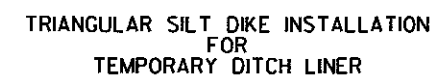
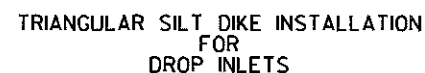
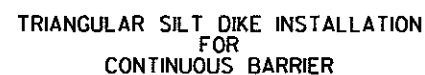
NOTES:
1. OVERLAP ENDS OF SOCK (1" MIN. 3" MAX.).
2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
4-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SILTS FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1, 4, 7 & 11 DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.O.M.	298-7-28-76
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION
TEMPORARY EROSION
CONTROL DEVICES
STANDARD DRAWING TEC-1



- POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.

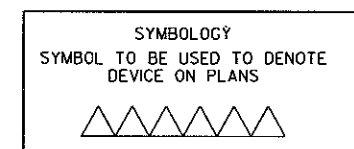


GENERAL NOTES

1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.
 2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE THINNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE ALDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.
- THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.
3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.

3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

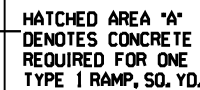


NOTE: SILT DIKE SHOULD ONLY BE USED FOR
DROP INLETS IN SUMP LOCATIONS.

			ARKANSAS STATE HIGHWAY COMMISSION
			TEMPORARY EROSION CONTROL DEVICES
7-26-12	REVISED	GENERAL NOTE 2.	
12-15-11	ISSUED		
DATE	REVISION		FILMED
			STANDARD DRAWING TEC-4



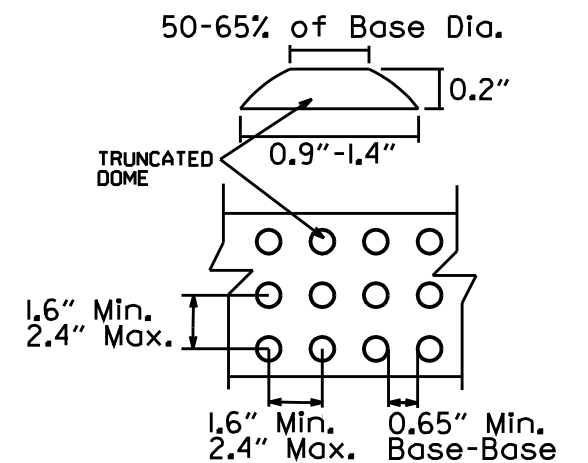
RADIUS "R"	DISTANCE "X"	DISTANCE "Y"	LENGTH "L"	RAMP AREA "A"
FEET	FEET	FEET	FEET	SQ. YD.
15	1.67	18.82	32.18	26.21
20	1.52	22.28	35.46	30.07
25	1.43	26.60	38.77	33.80
30	1.37	30.26	40.93	36.90
35	1.33	33.51	43.11	39.77
40	1.30	36.45	45.26	42.45
45	1.27	39.16	47.34	44.97
50	1.25	41.69	49.36	47.35
55	1.24	44.07	51.31	49.63
60	1.22	46.33	53.21	51.80



NOTE:
THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS,
AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS
REQUIRED TO MATCH STREET LONGITUDINAL GRADE.



THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB. TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. DETECTABLE WARNING DEVICE SHALL BE ON THE AHTD QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



DETECTABLE WARNING DEVICE DETAIL

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS.

IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.

THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.

THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.

ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.

THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4".
THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36",
WHICHEVER IS GREATER.

RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.

THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR
A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED
INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

RAMP SELECTION CRITERIA

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE	IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.	

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED. AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

11-10-05	REVISED TO NEW SHOEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD SLOPE TRANS. & REV. ISL. DIMS.	
11-8-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-8-96	CORRECTED DIMENSIONS	10-8-96
5-24-90	FROM BOSTON MAX. SLOPES	5-24-90
7-8-88	ADJUSTED MAX. SLOPE	652-7-8-88
7-14-88	INCLD. "CONC. ISL. IN PAY ITEM	
6-02-76	ISSUED - P.D.L.	299-7-28-76
DATE	REVISION	DATE FILED

ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS

STANDARD DRAWING WR-1

**New Facility For:
Elite Volleyball
NE Lot of Vernia
Bryant, AR 72022**

STORM WATER MAINTENANCE PLAN


The NE Lot of Vernia owner will be responsible for the inspection and maintenance of the stormwater detention pond located on its.

Inspections are to be scheduled as directed in this document. All documentation on scheduled inspections, dates of inspections, and maintenance completed shall be retained by the NE Lot of Vernia owner for a period of three years.

DETENTION PIPES

Annual Maintenance (as applicable):

- ☐ Check pipes for sediment in-fill, clean when necessary
- ☐ Check outlets for clogging with trash or dead vegetation, clean when necessary



John Eckart
EVA Real Estate

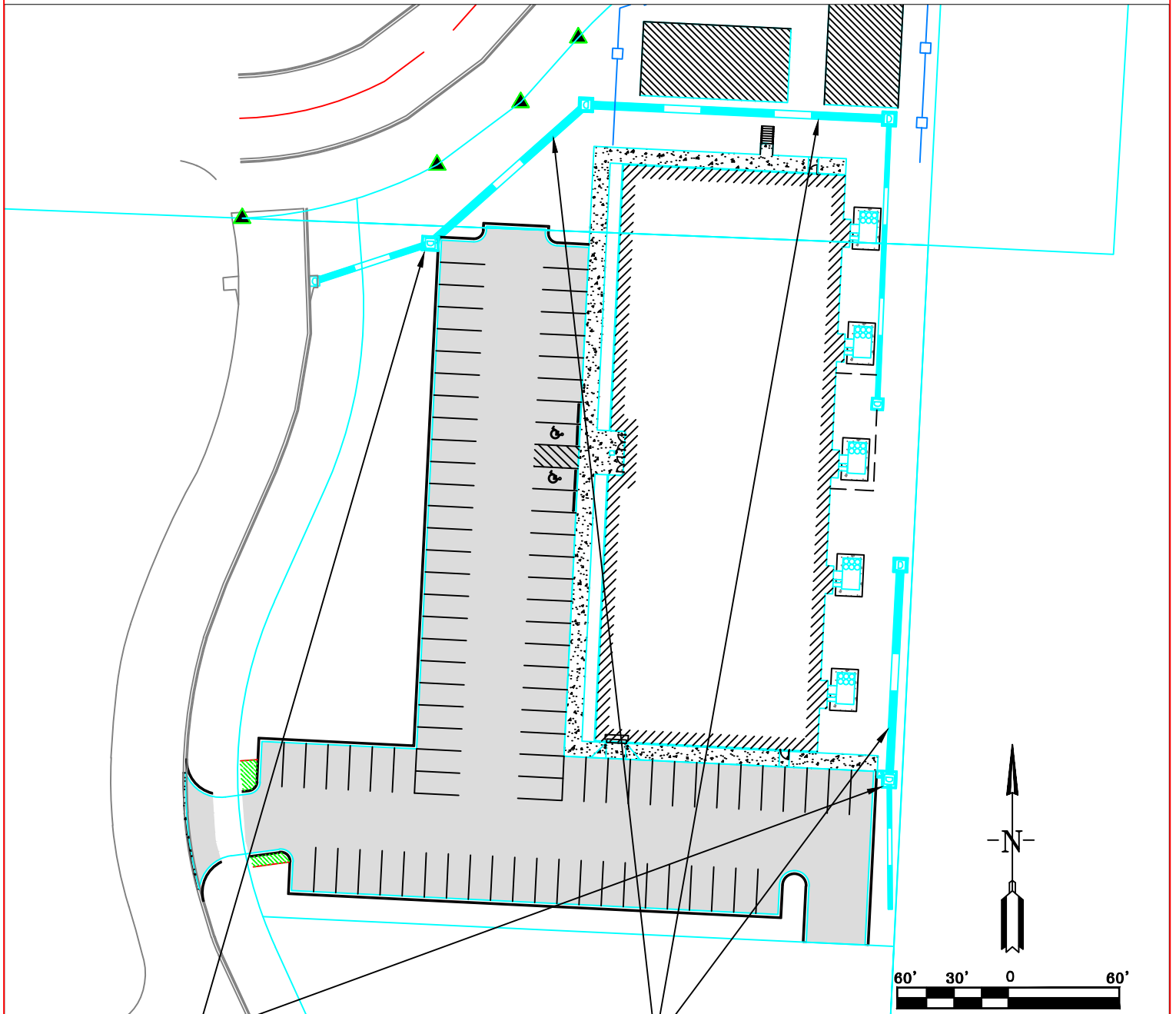
3/17/2023

Date

INSPECTION REPORT

DATE: / /

ELITE VOLLEYBALL ACADEMY



OUTLET

DETENTION PIPE

COMMENT

SITE WITH AUTOMATIC COVERAGE (LESS THAN 5 ACRES) CONSTRUCTION SITE NOTICE

FOR THE
Arkansas Department of Environmental Quality (ADEQ)
Storm Water Program
NPDES GENERAL PERMIT NO. ARR150000

The following information is posted in compliance with **Part I.B.8.A** of the ADEQ General Permit Number **ARR150000** for discharges of stormwater runoff from sites with automatic coverage. Additional information regarding the ADEQ stormwater program may be found on the internet at:

www.adeq.state.ar.us/water/branch_npdes/stormwater

Permit Number	ARR150000
Contact Name:	John Eckart
Phone Number:	(786) 256-0080
Project Description (Name, Location, etc.):	Elite Volleyball Academy Gym Alexander, AR
Start Date:	7/2002
End Date:	
Total Acres:	2.13
Location of Stormwater Pollution Prevention Plan:	Mailbox on site

For Construction Sites Authorized under **Part I.B.6.A** (Automatic Coverage) the following certification must be completed:

I _____ (Typed or Printed Name of Person Completing this Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part I.B.2. of the ADEQ General Permit Number ARR150000. A stormwater pollution prevention plan has been developed and implemented according to the requirements contained in Part II.A.2.B & D of the permit. I am aware there are significant penalties for providing false information or for conducted unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title

Date

Stormwater Pollution Prevention Plan (SWPPP) for Construction Activity
for Small Construction Sites

National Pollutant Discharge Elimination System (NPDES)
General Permit # ARR150000

Prepared for:

Elite Volleyball Academy Gym
For John Eckert

Date:

03/17/2023

Prepared by:

GprNat Engineering, LLC

Table of Contents
Elite Volleyball Academy Gym
Alexander, Arkansas 72002

SWPPP for Construction Activity for Small Construction Sites

Appendix A- ARR150000 Inspection Form

SWPPP Figures

Elite Volleyball Academy Gym Erosion Control Plan

AHTD Standard Drawings:

TEC-1 – Temporary Erosion Control Devices

TEC-4 – Temporary Erosion Control Devices

NPDES ARR150000

Project Name and Location: Elite Volleyball Academy Gym, 1601 Christy Lane, Alexander, Arkansas 72002

Property Parcel Number (Optional): _____

Operator Name and Address: _____

A. Site Description

- a. Project description, intended use after NOI is filed: Development of a Volleyball Gym
- b. Sequence of major activities which disturb soils: Earthwork, Drainage Structures, Utilities
- c. Total Area: 2.13 Ac Disturbed Area: 2.13 Ac

B. Responsible Parties

Be sure to assign all SWPPP related activities to an individual or position; even if the specific individual is not yet known (i.e. contractor has not been chosen).

Individual/Company	Phone Number	Service Provided for SWPPP (i.e., Inspector, SWPPP revisions, Stabilization Activities, BMP Maintenance, etc.)
John Eckart	786-256-0080	

C. Receiving Waters

- a. The following waterbody (or waterbodies) receives stormwater from this construction site: Unnamed tributaries of Owen Creek
- b. Is the project located within the jurisdiction of an MS4? ☒ Yes ☐ No
- i. If yes, Name of MS4: Bryant
- c. Ultimate Receiving Water:
- | | |
|--|--|
| <input type="checkbox"/> Red River | <input type="checkbox"/> White River |
| <input type="checkbox"/> Ouachita River | <input type="checkbox"/> St. Francis River |
| <input checked="" type="checkbox"/> Arkansas River | <input type="checkbox"/> Mississippi River |

D. Site Map Requirements (Attach Site Map):

- a. Pre-construction topographic view;

- b. Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
- c. Delineate on the site map areas of soil disturbance and areas that will not be disturbed under the coverage of this permit;
- d. Location of major structural and nonstructural controls identified in the plan;
- e. Location of main construction entrance and exit;
- f. Location where stabilization practices are expected to occur;
- g. Locations of off-site materials, waste, borrow area, or equipment storage area;
- h. Location of areas used for concrete wash-out;
- i. Location of all surface water bodies (including wetlands) with associated natural buffer boundary lines. Identify floodplain and floodway boundaries, if available;
- j. Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system if applicable,
- k. Locations where stormwater is discharged off-site (should be continuously updated);
- l. Areas where final stabilization has been accomplished and no further construction phase permit requirements apply;
- m. A legend that identifies any erosion and sediment control measure symbols/labels used in the site map and/or detail sheet; and
- n. Locations of any storm drain inlets on the site and in the immediate vicinity of the site.

E. Stormwater Controls

- a. Initial Site Stabilization, Erosion and Sediment Controls, and Best Management Practices:

- i. Initial Site Stabilization: Prior to starting clearing activities, the BMP's shown on the Erosion Control Plan will be installed.
- ii. Erosion and Sediment Controls: Erosion and sediment controls are shown on the erosion control plan. They will be constructed per AHJD standard details
- iii. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the operator will replace or modify the control for site situations: ☒ Yes ☐ No
If No, explain: _____
- iv. Off-site accumulations of sediment will be removed at a frequency sufficient to minimize off-site impacts: ☒ Yes ☐ No

If No, explain: _____

- v. Sediment will be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%: ☒ Yes ☐ No

If No, explain: _____

- vi. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges: ☒ Yes ☐ No

If No, explain: _____

- vii. Off-site material storage areas used solely by the permitted project are being covered by this SWPPP: ☐ Yes ☒ No (there are no such sites)

If Yes, explain additional BMPs implemented at off-site material storage area: _____

b. Stabilization Practices

- i. Description and Schedule: As soon as practical, the contractor will spread topsoil and seed the disturbed area with a perennial vegetation. Vegetation will be reseeded or required to establish the 80% coverage of perennial vegetation.

- ii. Are buffer areas required? ☐ Yes ☒ No

If Yes, are buffer areas being used? ☐ Yes ☐ No

If No, explain why not: _____

If Yes, describe natural buffer areas: _____

- iii. A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included with the plan.

☒ Yes ☐ No

If No, explain: _____

- iv. Deadlines for stabilization:

1. Stabilization procedures will be initiated 14 days after construction activity temporarily ceases on a portion of the site.
2. Stabilization procedures will be initiated immediately in portions of the site where construction activities have permanently ceased.

c. Structural Practices

- i. Describe any structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site: BMPs shown on the erosion control plan will be used to limit sediment from leaving the site

- ii. Describe Velocity Dissipation Devices: _____

iii. Sediment Basins:

Are 10 or more acres draining to a common point? ☐ Yes ☒ No

Is a sediment basin included in the project? ☐ Yes ☒ No

If Yes, what is the designed capacity for the storage?

☐ 3600 cubic feet per acre = : _____

or

☐ 10 year, 24 hour storm = : _____

☐ Other criteria were used to design basin: _____

If No, explain why no sedimentation basin was included and describe required natural buffer areas and other controls implemented instead: Not appropriate for this project.

F. Other Controls

- a. Solid materials, including building materials, shall be prevented from being discharged to Waters of the State: ☒ Yes ☐ No

- b. Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of:

☒ A stabilized construction entrance and exit

☐ Vehicle tire washing

☒ Other controls, describe: * see below

- c. Temporary Sanitary Facilities: A portable toilet will be provided. The location is shown on the Erosion control Plan.

* The road adjacent to the property will be swept to remove offside vehicle tracks. Disturbed areas will be watered during construction.

d. Concrete Waste Area Provided:

☒ Yes

☐ No. Concrete is used on the site, but no concrete washout is provided.

Explain why: _____

☐ N/A, no concrete will be used with this project

e. Fuel Storage Areas, Hazardous Waste Storage, and Truck Wash Areas: _____

G. Non-Stormwater Discharges

a. The following allowable non-stormwater discharges comingled with stormwater are present or anticipated at the site:

☒ Fire-fighting activities;

☒ Fire hydrant flushings;

☒ Water used to wash vehicles (where detergents or other chemicals are not used) or control dust in accordance with Part II.A.4.H.2;

☒ Potable water sources including uncontaminated waterline flushings;

☒ Landscape Irrigation;

☒ Routine external building wash down which does not use detergents or other chemicals;

☒ Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents or other chemicals are not used;

☒ Uncontaminated air conditioning, compressor condensate (See Part I.B.12.C of the permit);,

☒ Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.13.C of the permit);

☒ Foundation or footing drains where flows are not contaminated with process materials such as solvents (See Part I.B.13.C of the permit);

b. Describe any controls associated with non-stormwater discharges present at the site: BMP's shown on the Erosion Control plan will also be

utilized to prevent sedimentation from leaving site during construction.

H. Applicable State or Local Programs: The SWPPP will be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls implemented at the site. ☒ Yes ☐ No

I. Inspections

a. Inspection frequency:

☒ Every 7 calendar days

or

☐ At least once every 14 calendar days and within 24 hours of the end of a storm even 0.25 inches or greater (a rain gauge must be maintained on-site)

b. Inspections:

Completed inspection forms will be kept with the SWPPP.

☒ ADEQ's inspection form will be used (See Appendix B)

or

☐ A form other than ADEQ's inspection form will be used and is attached
(See inspection form requirements Part II.A.4.L.2)

c. Inspection records will be retained as part of the SWPPP for at least 3 years from the date of termination.

d. It is understood that the following sections describe waivers of site inspection requirements. All applicable documentation requirements will be followed in accordance with the referenced sections.

i. Winter Conditions (Part II.A.4.L.4)

ii. Adverse Weather Conditions (Part II.A.4.L.5)

J. Maintenance:

The following procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition will be followed: see below*

Any necessary repairs will be completed, when practicable, before the next storm event, but not to exceed a period of 3 business days of discovery, or as otherwise directed by state or local officials.

K. Employee Training:

The following is a description of the training plan for personnel (including contractors and subcontractors) on this project: Operator will submit proof of training to engineer. Engineer will provide additional training as required to ensure that SWPPP is properly implemented.

****Note, Formal training classes given by Universities or other third-party organizations are not required, but recommended for qualified trainers; the permittee is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.**

* Built up sediment will be removed from silt fencing when it has reached $\frac{1}{3}$ of the height of the fence. Silt fences will be inspected for the depth of sediment, tears, fabric attachment to the fence posts, and to see that the fence posts are firmly in the ground. Temporary and permanent seeding will be inspected for bare spots, washouts, and healthy growth. Entrance will be inspected for sediment tracked on roads.

Revised date: 10/20/2016

Certification

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure 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."

Signature of Responsible or Cognizant Official: _____

Title: _____

Date: _____

ARR150000 Inspection Form

Appendix A

Inspector Name: _____

Date of Inspection: _____

Inspector Title: _____

Date of Rainfall: _____

Duration of Rainfall: _____

Days Since Last Rain Event: _____ days

Rainfall Since Last Rain Event: _____ inches

Description of any Discharges During Inspection: _____

Location of Discharges of Sediment/Other Pollutant (specify pollutant & location): _____

Locations in Need of Additional BMPs: _____

Information on Location of Construction Activities

Location	Activity Begin Date	Activity Occuring Now (y/n)?	Activity Ceased Date	Stabilization Initiated Date	Stabilization Complete Date

Information on BMPs in Need of Maintenance

Location	In Working Order?	Maintenance Scheduled Date	Maintenance Completed Date	Maintenance to be Performed By

Changes required to the SWPPP: _____

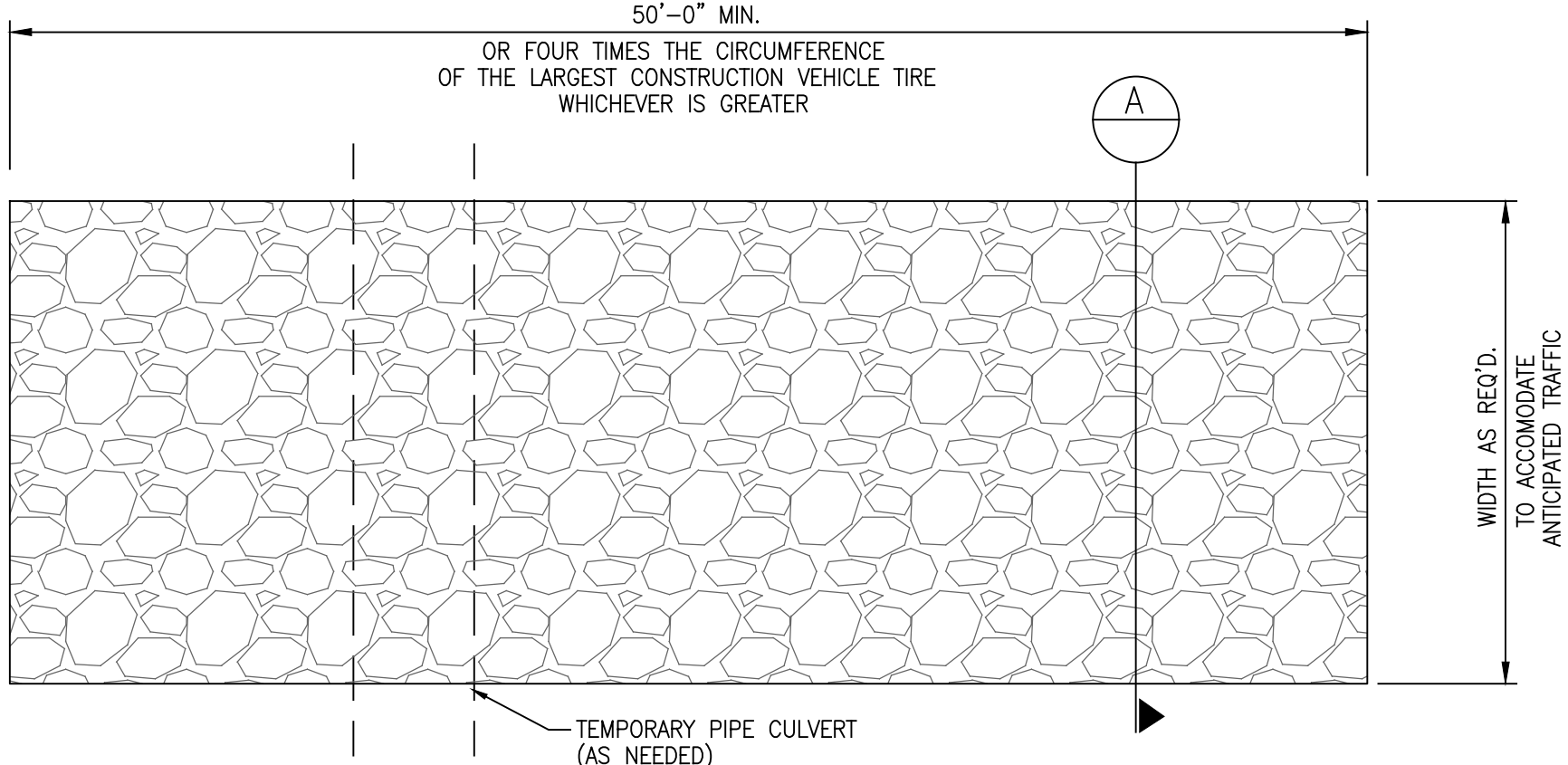
Reasons for changes: _____

SWPPP changes completed (date): _____

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure 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."

Signature of Responsible or Cognizant Official: _____ Date: _____

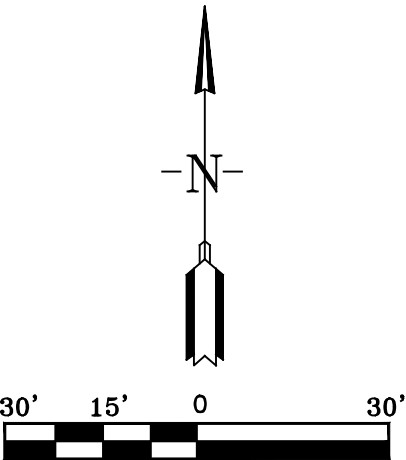
Title: _____

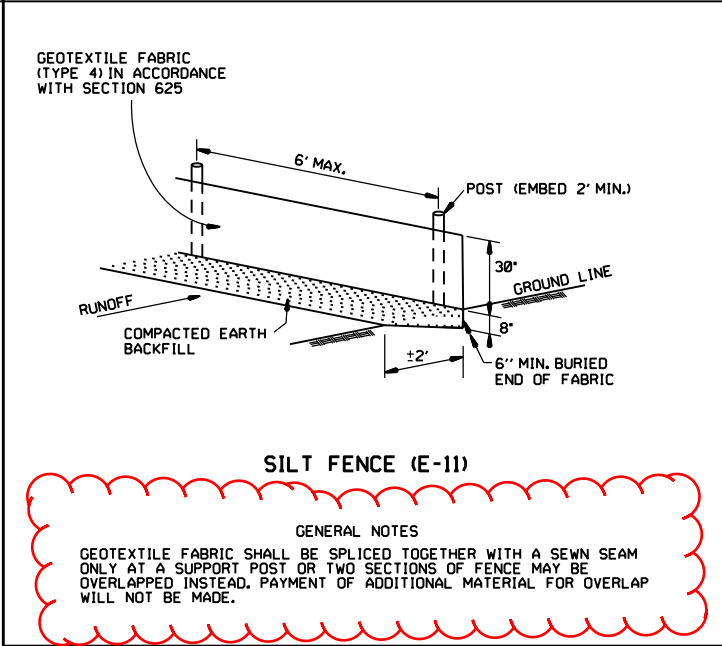
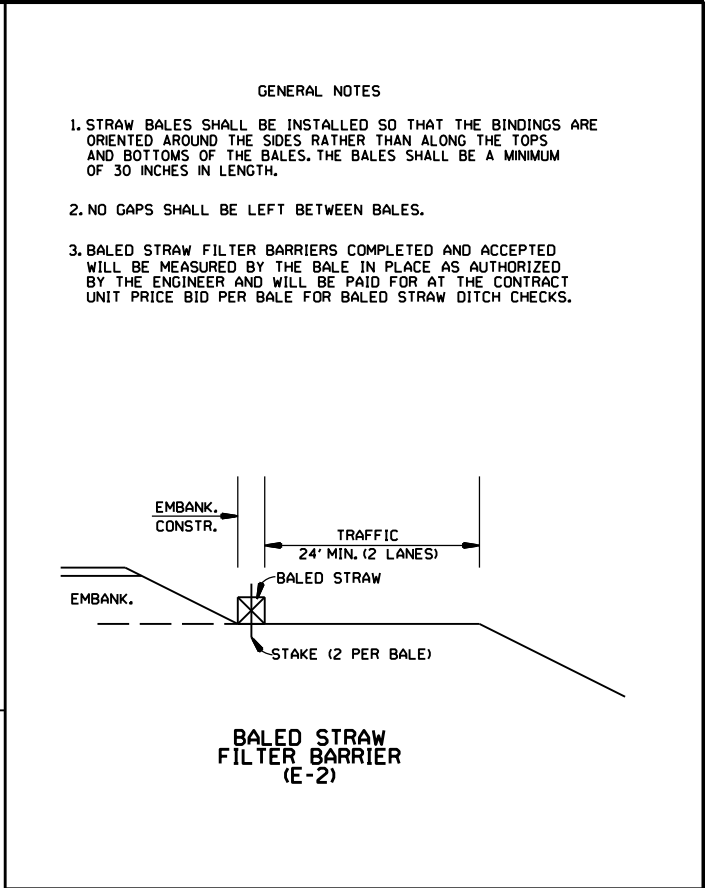
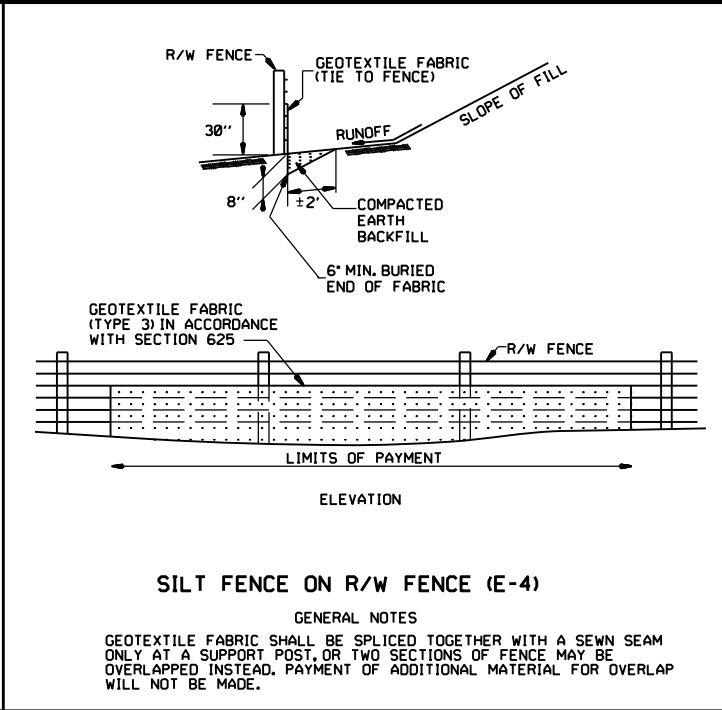
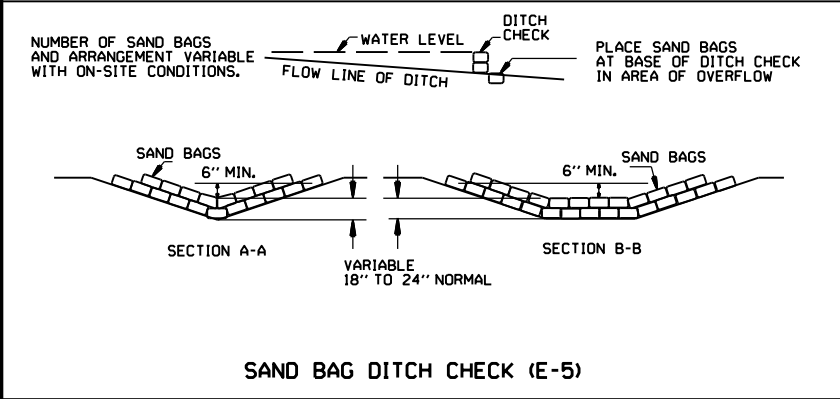
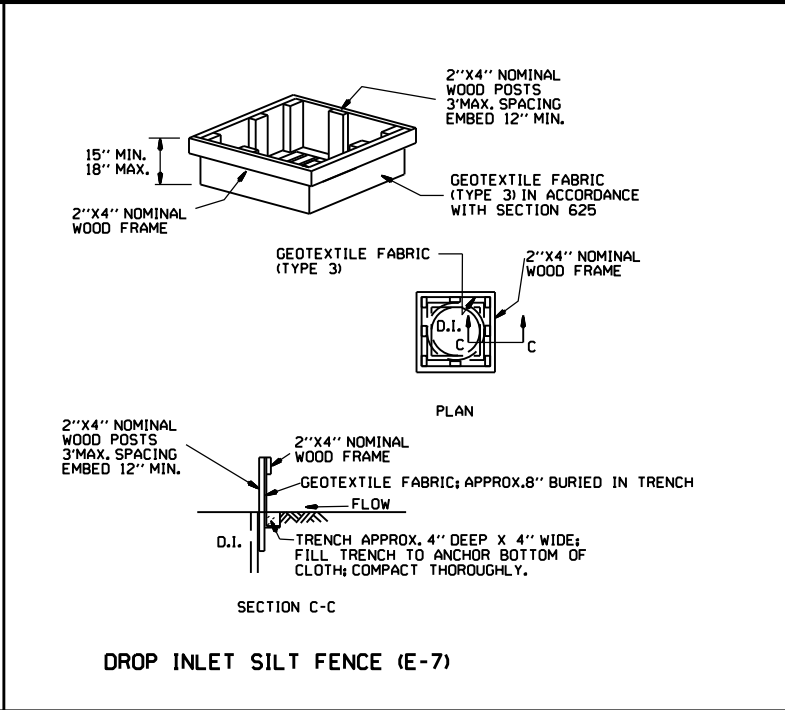
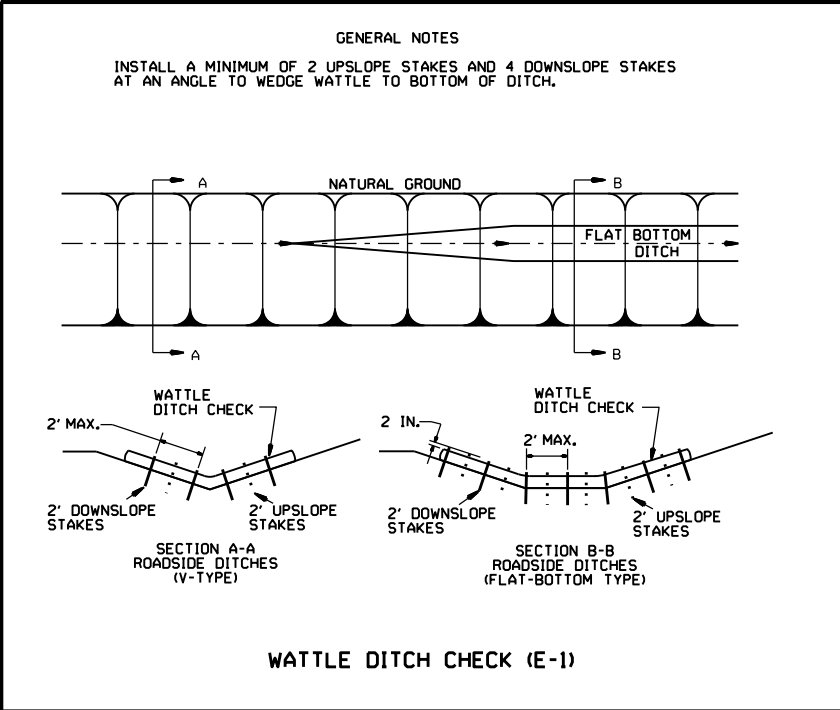


TOTAL SITE: 2.13 ACRES (INCLUDES R-O-W)

TOTAL DISTURBED AREA: 2.13 ACRES (INCLUDES R-O-W)

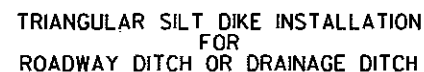
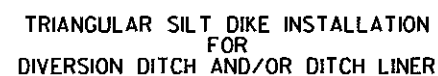
- LEGEND:
-
- 500 — EXISTING CONTOURS
- ← DIRECTION OF OVERLAND FLOW
- SF — SILT FENCING

[illegible]

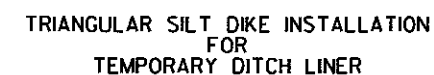
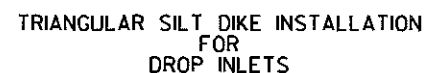
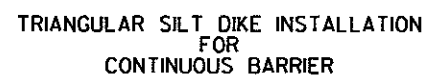


PER CITY OF BRYANT REQUIREMENTS, REQUIRES WIRED BACK FENCE.

12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK		ARKANSAS STATE HIGHWAY COMMISSION
11-18-98	ADDED NOTES		
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95	
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC		
6-2-94	REVISED E-1, 4, 7 & 11; DELETED E-2 & 3	6-2-94	
4-1-93	REDRAWN		
10-1-92	REDRAWN		
8-2-76	ISSUED R.D.M.	298-7-28-76	
DATE	REVISION	FILMED	STANDARD DRAWING TEC-1



- POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



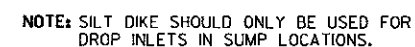
1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.
2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE THINNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE ALDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.

THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.

3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

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			ARKANSAS STATE HIGHWAY COMMISSION
			TEMPORARY EROSION CONTROL DEVICES
7-26-12	REVISED GENERAL NOTE 2.		STANDARD DRAWING TEC-4
12-15-11	ISSUED		
DATE	REVISION	FILED	

**AUTHORIZATION TO DISCHARGE STORMWATER UNDER
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE
ARKANSAS WATER AND AIR POLLUTION CONTROL ACT**

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.), an

Operator of Facilities with Stormwater Discharges Associated with Construction Activity

is authorized to discharge to all receiving waters except as stated in Part I.B.11 (Exclusions).

For large construction sites that are eligible for coverage under this General Permit (GP), the Arkansas Department of Energy and Environment - Division of Environmental Quality (DEQ), Office of Water Quality will provide a Notice of Coverage (NOC) with tracking permit number which starts with ARR15 and a copy of the permit to the facility. The cover letter includes the DEQ's determination that a facility is covered under the GP and may specify alternate requirements outlined in the permit.

Small construction sites that are eligible for coverage under this GP will be considered to have automatic coverage under this GP and must follow the permit requirements outlined in Condition 6 of Part I.

Effective Date: November 1, 2021

Expiration Date: October 31, 2026



Digitally signed by Alan J. York
DN: cn=Alan J. York, o, ou,
email=alan.york@adeq.state.ar.us,
c=US
Date: 2021.05.04 09:13:53 -05'00'

Alan J. York
Associate Director, Office of Water Quality
Division of Environmental Quality

05/04/2021

Issue Date

PART I PERMIT REQUIREMENTS

Information in **Part I** is organized as follows:

Section A: Definitions with Included Commentary

Section B: Coverage Under this Permit:

1. Permitted Area
2. Eligibility
3. Responsibilities of the Operator
4. Where to Submit
5. Requirements for Qualifying Local Program (QLP)
6. Requirements for Coverage
7. Notice of Intent (NOI) Requirements
8. Posting Notice of Coverage (NOC)
9. Applicable Federal, State or Local Requirements
10. Allowable Non-Stormwater Discharges
11. Limitations on Coverage (Exclusions)
12. Short Term Activity Authorization (STAA)
13. Effluent Limitation Guidelines (ELG)
14. Natural Buffer Zones
15. Waivers from Permit Coverage
16. Notice of Termination (NOT)
17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision
18. Change in Operator
19. Late Notifications
20. Failure to Notify
21. Maintenance
22. Releases in Excess of Reportable Quantities
23. Attainment of Water Quality Standards
24. Requiring an Individual Permit

SECTION A: DEFINITIONS WITH INCLUDED COMMENTARY

1. **"Arkansas Pollution Control and Ecology Commission"** shall be referred to as APC&EC throughout this permit.
2. **"Automatic Coverage"** is a term used to define the method of coverage for a small construction site.
3. **"Best Management Practices (BMPs)"** schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. According to the EPA BMP manual, the use of hay-bales in concentrated flow areas is not recommended as a BMP.
4. **"Cognizant Official"** is a duly authorized representative, as defined in Part II.B.9.B.
5. **"Commencement of Construction"** is the initial disturbance of soils (or breaking ground) associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material; placement of raw materials at the site).
6. **"Contaminated"** is a substance the entry of which into the MS4, waters of the State, or Waters of the United States may cause or contribute to a violation of Arkansas water quality standards.
7. **"Control Measure"** as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.
8. **"Construction Activity"** earth-disturbing activities, such as the clearing, grading, and excavation of land, and other construction-related activities (e.g., stockpiling of fill material; placement of raw materials at the site) that could lead to the generation of pollutants.
9. **"Construction Site"** is an area upon which one or more land disturbing construction activities occur that in total will disturb one acre or more of land, including areas that are part of a larger common plan of development or sale that may be less than one acre where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan such that the total disturbed area is one acre or more.
10. **"Construction Support Activity"** a construction-related activity that specifically supports the construction activity and involves earth disturbance of pollutant-generating activities of its own, and can include, but not limited to, activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and burrow areas.
11. **"CWA"** is the Clean Water Act or the Federal Water Pollution Control Act.
12. **"Department"** is referencing the Department of Energy and Environment.
13. **"DEQ"** or **"Division"** is referencing the Division of Environmental Quality. The Division is the governing authority for the National Pollutant Discharge Elimination System program in the state of Arkansas.

14. "**Detention Basin**" is an area where excess stormwater is stored or held temporarily and then slowly drains when water levels in the receiving channel recede. In essence, the water in a detention basin is temporarily detained until additional room becomes available in the receiving channel.
15. "**Director**" is the Director of the Division of Environmental Quality, or a designated representative.
16. "**Discharge**" is when used without qualification means the "discharge of a pollutant".
17. "**Disturbed area**" is the total area of the site where any construction activity is expected to disturb the ground surface. This includes any activity that could increase the rate of erosion, including, but not limited to, clearing, grubbing, grading, excavation, demolition activities, haul roads, and areas used for staging. Also included are stockpiles of topsoil, fill material and any other stockpiles with a potential to create additional runoff.
18. "**Drainageway**" is an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.
19. "**Duly Authorized Representative**" is a representative of the Responsible Official meeting the requirements specified in Part II.B.9.B.
20. "**Eligible**" refers to being qualified for authorization to discharge stormwater under this general permit.
21. "**Erosion**" is the process by which the land's surface is worn away by the action of wind, water, ice or gravity.
22. "**ERW**" Extraordinary Resource Water, in accordance with Rule 2.
23. "**ESW**" Ecologically Sensitive Waterbodies, in accordance with Rule 2.
24. "**Facility**" or "**Activity**" is any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.
25. "**Final Stabilization**":
- A. All soil disturbing activities at the site have been completed and either of the two following criteria are met:
 - 1) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% or more of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
 - 2) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
 - B. When background native vegetation will cover less than 100% of the ground (e.g., arid areas, beaches), the 80% coverage criteria is adjusted as follows: if the native vegetation covers 50% of the ground, 80% of 50% ($0.80 \times 0.50 = 0.40$) would require 40% total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.
 - C. For individual lots in residential construction, final stabilization means that either:
 - 1) The homebuilder has completed final stabilization as specified above, or

- 2) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

D. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to “waters of the State”, and areas which are not being returned to their pre-construction agricultural use shall meet the final stabilization criteria in A, B, or C above.

26. **"Grading Activities"** as used in this permit are those actions that disturb the surface layer of the ground to change the contouring, surface drainage pattern, or any other slope characteristics of the land without significantly adding or removing on-site rock, soil, and other materials. This can include demolition, excavation, and filling.

27. **"Impaired Water"** is a waterbody listed in the current, approved Arkansas 303(d) list.

28. **"Infrastructure"** refers to streets, drainage, curbs, utilities, etc.

29. **"Landscaping"** is improving the natural beauty of a piece of land (i.e. entrance of subdivision) through plantings or altering the contours of the ground.

30. **"Large Construction Site"** is a construction site in which construction activity including clearing, grading and excavation. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or greater. (Please see Part I.B.15 for partial waivers.)

31. **"Larger Common Plan of Development or Sale"** is a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g. a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development). All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a “Common Plan of Development or Sale.” The “plan” in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. The applicant shall still meet the definition of operator in order to be required to get permit coverage, regardless of the acreage that is personally disturbed.

If a smaller project (i.e., less than 1 acre) is part of a larger common plan of development or sale (e.g., you are building a residential home on a ½ acre lot in a 40 acre subdivision or are putting in a fast food restaurant on a ¾ acre pad that is part of a 20 acre retail center), permit coverage is required.

32. **"Losing Stream Segment"** a stream segment which, beginning at the point of existing or proposed discharge and extending two (2) miles downstream, contribute thirty percent (30%) or more of its flow at a 7Q10 flow or one (1) cfs, whichever is greater, through natural processes such as permeable subsoil or cavernous bedrock into an aquifer.

33. **"Natural Buffer"** for purposes of this permit, an area of undisturbed natural cover surrounding waters of the State. Natural cover includes vegetation, exposed rock, or barren ground that exists prior to commencement of construction activities

at the site.

- 34. "**NOC**" Notice of Coverage.
- 35. "**NOI**" Notice of Intent to be covered by this permit.
- 36. "**NOT**" Notice of Termination.
- 37. "**NSW**" Natural and Scenic Waterways, in accordance with Rule 2.

38. "**Operator**"/"**Permittee**" for the purpose of this permit and in the context of stormwater associated with construction activity, means any person(s), an individual, association, partnership, corporation, municipality, state or federal agency, associated with a construction project that has financial and operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; additionally, the Division may require any person(s), an individual, association, partnership, corporation, municipality, state or federal agency, associated with a construction project that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions can be named as a co-permittee.

In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline or a landowner who allows a mining company to remove dirt, shale, clay, sand, gravel, etc. from a portion of his property). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

- 39. "**Outfall**" a point source where stormwater leaves the construction site.
- 40. "**Owner**" refers to the owner or operator of any "facility or activity" subject to regulation under the NPDES program. In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g. having a house built by a residential homebuilder).
- 41. "**Physically Interconnected**" means that one municipal separate storm sewer system is connected to a second municipal separate storm sewer system in such a way that it allows for direct discharges into the second system.
- 42. "**Point Source**" is any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.
- 43. "**Qualified Local Program**" is a municipal program for stormwater discharges associated with construction sites that has been formally approved by DEQ.
- 44. "**Qualified personnel**" a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the

construction activity.

45. "**Regulated Small Municipal Separate Storm Sewer System**" are all municipal separate storm sewer systems that are either:

- A. Located within the boundaries of an "urbanized area" with a population of 50,000 or more as determined by the latest Decennial Census by the Bureau of Census; or
- B. Owned or operated by a municipality other than those described in paragraph A and that serve a jurisdiction with a population of at least 10,000 and a population density of at least 1,000 people per square mile; or
- C. Owned or operated by a municipality other than those described in paragraphs A and B and that contributes substantially to the pollutant loadings of a "physically interconnected" municipal separate storm sewer system.

46. "**Responsible Official**" is the authorized representative, as defined in Part II.B.9.A.

47. "**Retention Basin**" a basin that is designed to hold the stormwater from a rain event and allow the water to infiltrate through the bottom of the basin. A retention basin also stores stormwater, but the storage of the stormwater would be on a more permanent basis. In fact, water often remains in a retention basin indefinitely, with the exception of the volume lost to evaporation and the volume absorbed into the soils. This differs greatly from a detention basin, which typically drains after the peak of the storm flow has passed, sometimes while it is still raining.

48. "**Runoff Coefficient**" is the fraction of total rainfall that will appear at the conveyance as runoff.

49. "**Sediment**" is material that settles to the bottom of a liquid.

50. "**Sediment Basin**" is a basin that is designed to maintain a 10 year-24 hour storm event for a minimum of 24-hours in order to allow sediment to settle out of the water.

51. "**Small Construction Site**" is a construction site in which construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

52. "**Stormwater**" is stormwater runoff from rainfall, snow melt runoff, and surface runoff and drainage.

53. "**Stormwater Discharge Associated with Construction Activity**" refers to the discharge of runoff from any conveyance which is used for collecting and conveying stormwater and which is directly related to construction activity.

54. "**Stormwater Pollution Prevention Plan (SWPPP or SWP3)**" is a plan that includes site map(s), an identification of construction/contractor, activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants.

55. "**Temporary Sediment Controls**" are controls that are installed to control sediment runoff from the site during construction activity. These could be silt fencing, rock check dams, etc.

56. "**Total Maximum Daily Load**" or "**TMDL**" is the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources and natural background. If the receiving water has only one point

source discharger, the TMDL is the sum of that point source WLA plus the LAs for any non-point sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measure.

57. "Uncontaminated" means that the water will not exceed the water quality standards as set forth in APC&EC Rule 2; also not containing a harmful quantity of any substance.

58. "Urbanized Area" means the areas of urban population density delineated by the Bureau of the Census for statistical purposes and generally consisting of the land area comprising one or more central place(s) and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census.

59. "Waters of the State" waters of the State means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.

SECTION B: COVERAGE UNDER THIS PERMIT

Introduction

This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre or less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This permit also authorizes stormwater discharges from any other construction activity designated by DEQ where DEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the State. This permit replaces the permit issued in 2016. The goal of this permit is to minimize the discharge of stormwater pollutants from construction activity into waters of the State. The operator shall read and understand the conditions of the permit. A copy of the CGP is available on the DEQ web site at <https://www.adeg.state.ar.us/water/permits/npdes/stormwater/>. A hard copy may be obtained by contacting the DEQ's General Permits Section at (501) 682-0623.

1. **Permitted Area.** If a large or small construction activity is located within the State of Arkansas, the operator may be eligible to obtain coverage under this permit.
2. **Eligibility.** Permit eligibility is limited to discharges from “large” and “small” construction activity, or as otherwise designated by DEQ. This general permit contains eligibility restrictions, as well as permit conditions and requirements. Operators shall meet the requirements of Part I.B.6.A or Part I.B.6.B to be eligible for coverage under this permit. In such cases, operators shall continue to satisfy those eligibility provisions to maintain permit authorization. If operators do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if operators are eligible for coverage under this permit and do not comply with the requirements of the general permit, they may be in violation of the general permit for otherwise eligible discharges.
 - A. This general permit authorizes discharges from construction activities as defined in 40 C.F.R. §122.26(a), 40 C.F.R. §122.26(b)(14)(x), 40 C.F.R. §122.26(b)(15)(i)-(ii) and 40 C.F.R. §450.
 - B. This permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, concrete truck washout, fueling, equipment staging yards, materials storage areas, excavated material disposal areas, stockpiles of top soil, borrow areas) provided:
 - 1) The support activity is directly related to a specific construction site that is required to have NPDES permit coverage for discharges of stormwater associated with the construction activity;
 - 2) The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects; and does not continue to operate beyond the completion of the construction activity at the project it supports;
 - 3) Pollutant discharges from support activity areas are minimized in compliance with conditions of this permit; and
 - 4) Discharges from the support activity areas shall be identified in a Stormwater Pollution Prevention Plan (SWPPP) stating appropriate controls and measures for the areas off the construction site.
 - C. Other activities may be considered for this permit at the discretion of the Director as defined in 40 C.F.R. §122.26(b)(15)(ii).

3. **Responsibilities of the Operator.** Permittees with operational control are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on the construction site including construction support activities off site, including protection of endangered species and implementation of BMPs and other controls required by the SWPPP. Receipt of this general permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.
4. **Where to Submit.** The operator shall submit a complete and signed Notice of Intent (NOI) and SWPPP to DEQ through ePortal, unless the operator receives a waiver from DEQ, which can be found on the following website:

<https://eportal.adeq.state.ar.us/>

- A. The operator shall submit the application fee to DEQ through ePortal (when available), submit an email requesting an invoice to be created to pay online, or mail in invoice from ePortal with a check (listing the invoice number on the check) to the follow address:

Division of Environmental Quality
ATTN: Fiscal
5301 Northshore Drive
North Little Rock, AR 72118-5317

NOTE: Notice of Coverage (NOC) will **NOT** be issued until payment has been received by DEQ.

- B. Waivers from electronic reporting may be granted based on one of the following conditions:

- 1) If the operational headquarters is physically located in a geographic area (i.e. Zip code or census tract) that is identified as under-served for broadcast internet access in the most recent report from the Federal Communications Commission;
- 2) If available computer access or computer capability is limited; or
- 3) If the operator is a religious community that choose not to use certain modern technologies pursuant to 40 C.F.R. §127.15(c)(1).

- C. In order to apply for a waiver from the electronic reporting, the operator must submit the required information outlined in 40 C.F.R. §127.15(b)(2).

- D. If DEQ grants a waiver approval to use a paper NOI, and operator elects to use it, the operator **must** use the approved form developed by DEQ.

5. **Requirements for Qualifying Local Program (QLP).** DEQ reviews and approves the QLPs to ensure that they meet or supersede both state and federal requirements outlined in this permit and 40 C.F.R. §122.44(s). DEQ will review the QLP at least every 5 years for recertification. If DEQ approves a QLP, then the QLP requirements shall at the minimum meet the DEQ's requirements. This includes all templates and forms. This permit may be modified to add new QLPs or modify existing QLPs at DEQ's discretion. All public notice and other applicable costs incurred by the modification of the permit for the addition or modification of a QLP will be paid by the QLP.

If a small construction site is within the jurisdiction of a QLP, the operator of the small construction site is authorized to discharge stormwater associated with construction activity under QLP permit requirements only.

At the time of issuance of this permit, only the City of Hot Springs is meeting the DEQ minimum requirements.

6. Requirements for Coverage.

A. Small Construction Sites. An operator of a small construction site will be considered to have automatic coverage under this general permit and may discharge without submitting a NOI, SWPPP or fee if the following conditions are met:

- 1) A completed Notice of Coverage (NOC) must be posted at the site prior to commencing construction and remain posted until final stabilization is completed;
- 2) A Stormwater Pollution Prevention Plan must be prepared in accordance with good engineering practice as described in Rule 6.203(B), completed prior to posting the NOC, implemented upon commencement of construction activities, and the latest copy must be maintained at the construction site;
- 3) All permit conditions set forth in this general permit must be followed; and
- 4) The operator is responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting DEQ or reviewing the DEQ website:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>

B. Large Construction Sites. An operator of a large construction site discharging under this general permit shall submit the following items at least ten (10) business days prior to the commencement of construction activities:

- 1) A complete NOI in accordance with the requirements of Part I.B.7 of this permit.
- 2) A complete SWPPP in accordance with the requirements of Part II.A of this permit.
- 3) An initial permit fee shall accompany the NOI under the provisions of APC&EC Rule 9. Subsequent annual fees will be billed by DEQ until the operator has requested a termination of coverage by submitting a Notice of Termination (NOT). Failure to remit the required initial permit fee shall be grounds for the Director to deny coverage under this general permit. Failure to remit the required annual fees shall be grounds for the Director to revoke coverage under this permit.

C. Modification of Permit Coverage to Include Additional Acreage. Any request to increase the total acreage of a construction site shall be accompanied by a \$200 permit modification fee and an updated SWPPP. Any request to only increase the disturbed acreage without changing the total acreage shall be accompanied by an updated SWPPP. A \$200 permit modification fee is not required with an increase in disturbed acreage. The operator shall submit a complete and signed Additional Acreage Request Form to DEQ through ePortal, which can be found on the following website:

<https://eportal.adeq.state.ar.us/>

7. Notice of Intent (NOI) Requirements.

A. NOI Form. Large construction site operators who intend to seek coverage for a stormwater discharge under this general permit shall submit a complete and accurate DEQ NOI form through the ePortal system (at <https://eportal.adeq.state.ar.us/>) at least ten (10) business days prior to the date coverage under this permit is desired, unless granted a waiver in accordance with Part I.B.4.D. The NOI form completed **must** be the current version obtained from ePortal.

If the NOI is deemed incomplete, DEQ will notify the applicant with regard to the deficiencies by a letter, email, or phone within ten (10) business days of the receipt of the NOI. If the operator does not receive a notification of deficiencies from DEQ's receipt of the NOI, the NOI is deemed complete. If the applicant does not provide DEQ with the requested deficiencies within the deadline set by DEQ, then DEQ will return the NOI, fee and SWPPP back to the

applicant.

B. Contents of the NOI. The NOI form contains, at a minimum, the following information:

- 1) Operator (Permittee) information (name, mailing address, telephone, and E-mail address)
- 2) Whether the operator is a federal, state, private, public, corporation, or other entity
- 3) Invoice mailing information (name, address, and telephone and fax numbers)
- 4) Project Construction site information (name, county, address, contact person, directions to the site, latitude and longitude for the entrance of the site or the endpoints for linear project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, the total project acreage and the acreage to be disturbed by the operator submitting the NOI, type of the project (subdivision, school, etc), whether the project is part of a larger common plan of development or sale.)
- 5) Discharge information (name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
- 6) List of current permits
- 7) The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APC&EC Rule 6
- 8) The certification of the facility corporation
- 9) Other information (location of the SWPPP)
- 10) And the SIC Code.

C. Notice of Coverage (NOC). Unless notified by the Director to the contrary, operators who submit a complete NOI and SWPPP in accordance with the requirements of this permit are authorized to discharge stormwater from the construction sites under the terms and conditions of this permit ten (10) business days after the date the NOI is deemed complete (which may not be the original submission date if revisions or additions were necessary) by DEQ. If the NOC has not been received by the permittee ten (10) business days after the date the NOI is deemed complete by DEQ, the NOI may be posted until the NOC is received. Upon review of the NOI and other available information, the Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

8. Posting Notice of Coverage (NOC).

A. Automatic Coverage Sites. The NOC for small sites, as defined in Part I.A.51, shall be obtained from the DEQ's Stormwater website:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/> .

The NOC must be posted at the site prior to commencing construction. In addition, a copy of the latest signed and certified SWPPP must be available at the construction site in accordance with Part II.A.2.B and D prior to commencing construction.

B. Large Sites: NOC Posting for Large Construction Sites. The posting for large construction sites shall be obtained from DEQ only after the permittee has submitted the required NOI, permit fee and complete SWPPP to DEQ for the coverage.

C. Linear Projects. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice shall be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

Please note, this permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that the permittee allow members of the public access to a construction site.

9. **Applicable Federal, State or Local Requirements.** The operator shall ensure that the stormwater controls implemented at the site are consistent with all applicable federal, state, or local requirements. Additionally, an operator who is operating under approved local erosion and sediment plans, grading plans, local stormwater permits, or stormwater management plans shall submit signed copies of the NOI to the local agency (or authority) upon the local agency's request.

10. **Allowable Non-Stormwater Discharges.**

- A. The following non-stormwater discharges as part of the construction activity may be authorized by this permit through appropriate controls. Non-stormwater discharges shall be addressed in the stormwater pollution prevention plan and measures to minimize or eliminate non-stormwater discharge should be taken if reasonably possible.
- 1) Fire-fighting activities;
 - 2) Fire hydrant flushings;
 - 3) Water used to wash vehicles and equipment (where detergents, soaps, solvents or other chemicals are not used) or to control dust in accordance with Part II.A.4.J.2;
 - 4) Potable water sources including uncontaminated waterline flushings;
 - 5) Uncontaminated landscape irrigation;
 - 6) Uncontaminated routine external building wash down which does not use detergents, soaps, solvents or other chemicals;
 - 7) Uncontaminated pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents, soaps, solvents or other chemicals are not used);
 - 8) Uncontaminated air conditioning compressor condensate (See Part I.B.13.C of this permit);
 - 9) Uncontaminated springs, excavation dewatering and uncontaminated groundwater (See Part I.B.13.C of this permit);
 - 10) Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater (See Part I.B.13.C of this permit).

11. **Limitations on Coverage (Exclusions).** The following stormwater discharges associated with construction activity are not covered by this permit:

- A. **Post Construction Discharge.** Stormwater discharges associated with construction activities that originate from the site, as well as construction support activities located off site, after construction activities have been completed, the site has undergone final stabilization, and the permit has been terminated.
- B. **Discharges Mixed with Non-Stormwater.** Stormwater discharges that are mixed with sources of non-stormwater other than those identified in Part I.B.10.
- C. **Discharges Covered by another Permit.** Stormwater discharges associated with construction activity that are covered under an individual or an alternative general permit may be authorized by this permit after an existing permit expires, provided the expired permit did not establish numeric effluent limitations for such discharges.
- D. **Discharges into Receiving Waters with an Approved TMDL.** Discharges from a site into receiving waters for which there is an established total maximum daily load (TMDL) allocation (<https://www.adeg.state.ar.us/water/planning/integrated/tmdl/>) are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that is consistent with the assumptions and requirements in the EPA approved TMDL. To be eligible for coverage under this general permit, operators shall incorporate into their SWPPP all conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within the timeframes established in the TMDL. If a specific numeric allocation has been established that

applies to the project's discharges, the operator shall incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation. If a numeric limit has been assigned to the facility, quarterly monitoring shall be submitted to DEQ demonstrating compliance with the assigned Waste Load Allocation established in the TMDL. Please note that DEQ will be reviewing this information. If it is determined that the project will discharge into a receiving stream with a TMDL, then DEQ may require additional BMPs.

- E. Discharges into Impaired Receiving Waters (303(d) List). If stormwater discharges from a construction site enters the receiving water listed as impaired under Section 303(d) of the Clean Water Act (<https://www.adeq.state.ar.us/water/planning/integrated/>), the permittee shall incorporate into the SWPPP the additional BMPs needed to sufficiently protect water quality. Please note that DEQ will be reviewing this information. If it is determined that the project will discharge to an impaired water body, then DEQ may require additional BMPs.
- F. Discharges into an Extraordinary Resource Water (ERW), Natural and Scenic Waterway (NSW), or Ecologically Sensitive Waterbody (ESW). Discharges from a construction site located within the watershed of any water body or waterway designated as an Outstanding Resource Water as defined in the APC&EC Rule 2.203, including ERWs, NSWs, or ESWs are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that includes additional BMPs needed to prevent to the maximum extent possible exposure to precipitation and to stormwater of pollutants that could potentially impact water quality. For the purposes of this permit, the watershed of an Outstanding Resource Water will be identified by the United States Geological Survey's twelve (12) digit Hydrological Unit Code (HUC). Please note that DEQ will be reviewing this information. If the site will discharge to an ERW, NSW, or ESW, then DEQ may determine that additional requirements are necessary.
- G. Discharges into an area of the state which includes potential losing stream and/or sensitive aquatic species native to these areas. Discharges from a construction site located within the watershed of any potential losing stream and/or sensitive aquatic species native to the area are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that includes additional BMPs needed to prevent to the maximum extent possible exposure to precipitation and to stormwater of pollutants that could potentially impact water quality. In accordance with Part I.B.3, it is the responsibility of the permittee to prevent activity which may take or otherwise risk harm to endangered species. Please note that DEQ will be reviewing this information. If the site will discharge to an area of the state which includes potential losing stream and/or sensitive aquatic species native to these areas, then DEQ may determine that additional requirements are necessary.

- 12. Short Term Activity Authorization (STAA).** Any work being conducted in waters of the State will require a STAA from DEQ in accordance with Rule 2.305. An STAA is necessary for any in-stream activity that has the potential to exceed the water quality standards, including, but not limited to: gravel removal, bridge or crossing repair/maintenance, bank stabilization, debris removal, culvert replacement, flood control projects, and stream relocation. Any work being conducted in Waters of the United States may require a Section 404 permit from the U.S. Army Corps of Engineers. This permit does not authorize any activity under an STAA, Individual 401 Certification, or Section 404 permit. The necessary forms to apply for coverage under an STAA or Individual 401 Certification can be found on the following website:

<https://www.adeq.state.ar.us/water/planning/instream/>

The SWPPP shall be updated to include a copy of the STAA letter (and Individual 401 Certification if needed) upon receipt. Re-submittal of the SWPPP is not required unless specifically requested by DEQ.

- 13. Effluent Limitation Guidelines (ELG).** All permittees shall comply with the following effluent limits:

- A. Erosion and Sediment Controls. Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls shall be designed, installed and maintained to:

- 1) Control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges;
 - 2) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
 - 3) Minimize the amount of soil exposed during construction activity;
 - 4) Minimize the disturbance of steep slopes;
 - 5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls shall address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - 6) Provide and maintain natural buffers around waters of the State, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
 - 7) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
 - 8) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.
- B. Soil Stabilization. Stabilization of disturbed areas must, at a minimum, be initiated immediately (unless weather conditions do not allow immediate initiation) whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority. Stabilization must be completed within fourteen (14) calendar days. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.
- C. Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. There shall be no turbid discharges to waters of the State resulting from dewatering activities. If trench or ground waters contain sediment, it shall pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag, or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care shall be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.
- D. Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures shall be designed, installed, implemented and maintained to:
- 1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters shall be treated in a sediment basin or BMP control that provides equivalent or better treatment prior to discharge;
 - 2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
 - 3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

E. Prohibited discharges. The following discharges are prohibited:

- 1) Wastewater from washout of concrete, unless managed by an appropriate control;
- 2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
- 3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- 4) Soaps, solvents, or detergents used in vehicle, equipment washing, or external building washdown.
- 5) Toxic or hazardous substances from a spill or release.

F. Surface Outlets. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

14. Natural Buffer Zones. A natural buffer zone as stated below shall be maintained at all times and direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law.

- A. For construction projects where construction activities or construction support activities occur, the SWPPP shall provide at least twenty-five (25) feet of natural buffer zone, as measured horizontally from the top of the bank to the disturbed area, from any waters of the State.
- B. DEQ will require at least fifty (50) feet of natural buffer zone, as measured horizontally from the top of the bank to the disturbed area, from established TMDL water bodies, streams listed on the 303(d) list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), or any other uses at the discretion of the Director.
- C. Linear projects will be evaluated individually by DEQ to determine natural buffer zone setbacks.

15. Waivers from Permit Coverage. The Director may waive the otherwise applicable requirements of this general permit for stormwater discharges from construction activities under the terms and conditions described in this section.

- A. Waiver Applicability and Coverage. Based upon 40 C.F.R. §122.26.b.15.i.A, operators of small construction activities may apply for and receive a waiver from the requirements to obtain this permit.
- B. No Stormwater Leaving the Site. If all of the stormwater from the construction activity is captured on-site under any size storm event and allowed to evaporate, soak into the ground on-site, or is used for irrigation, a permit is not needed.
- C. TMDL Waivers. This waiver is available for sites with automatic coverage if the DEQ has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the Director that construction activity will take place, and storm water discharges will occur within the drainage area addressed by the TMDL or equivalent analysis. Information on approved TMDLs is available on DEQ's website:

<https://www.adeq.state.ar.us/water/planning/integrated/tmdl/>.

16. Notice of Termination (NOT). When all construction activities that disturbed soil are complete, the site has reached final stabilization (100% stabilization with 80% density or greater, or as defined in Part I.A.25.B for sites where background native vegetation will cover less than 100% of the ground), all stormwater discharges from construction activities authorized by this permit are eliminated and all temporary sediment controls are removed and properly disposed, the operator of the facility may submit a complete Notice of Termination (NOT) to the Director. Along with the NOT, pictures that represent the entire site shall be submitted for review. Final stabilization is not required if the land is returned to its pre-construction agriculture use. Operators of small construction sites are not required to submit NOTs for their construction sites. However, final stabilization is required on all sites. If a NOT is not submitted when the project is completed, the operator will be responsible for annual fees.

17. Responsibilities of the Operator of a Larger Common Plan of Development or Sale.

- A. The operator is ultimately responsible for the runoff from the perimeter of the entire development. Regardless of the reason for the runoff, the operator is responsible for ensuring sufficient overall controls of the development.
- B. The operator shall not terminate the permit coverage until the following conditions have been met:
 - 1) After all construction activities including landscaping and lot development has been completed; and
 - 2) All lots are sold and developed.

The following exceptions to this requirement may apply:

- a. Less than 100% sold and developed at the discretion of the Director, or
 - b. Separation of the larger common plan if twenty-four (24) months have passed with no construction activity, or
 - c. All lots are developed and there are no temporary common controls for subdivision outfalls, i.e. sediment basins, large sediment traps, check dams, etc.
- 3) If lots are sold and then re-sold to a third party, permit coverage shall be obtained by each of the operators while they have ownership of the lots. The second owner is responsible for obtaining the same certification from the third owner (i.e. the certification shall pass from owner to owner).
- C. The operator shall not terminate permit coverage until the operators of all of the individual lots within the larger common plan of development or sale are notified of their permitting requirements under this general permit. In this case, the signed certification statements from each operator of individual lots shall be maintained in the stormwater pollution prevention plan for the larger common plan of development or sale. A copy of the signed certifications shall be submitted to DEQ with the NOT. The certification shall be as follows:

“I, _____, operator of an individual lot #_____, block #_____ of _____ subdivision, certify under penalty of law that I was notified by the operator of the larger common plan of the stormwater permitting requirements for my construction site(s). I understand prior to commencement of any construction activity I have to prepare and comply with a SWPPP and post the Construction Site Notice . I understand that prior to the sale of this lot to another party; I must notify the new owner of DEQ requirements and obtain this certification from the new owner.”

Signature _____

- D. The following examples are provided as clarification:

- 1) If a small portion of the original common plan of development remains undeveloped and there has been a period of time (i.e., more than 24 months) where there are no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), operators may re-evaluate the original project based on the acreage remaining from the original “larger common plan of development or sale.” If less than five (5) but more than one (1) acre remains to build out the original “common plan”, coverage under the large permit may not be required. However, operators will need to comply with the terms and conditions for Small Construction Sites in the Construction General Permit. If less than one acre remains of the original common plan, the individual project may be treated as a part of a less than one acre development and no permit would be required.
- 2) If operators have a long-range master plan of development or sale where some portions of the master plan are conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time (i.e., more than 24 months), operators may consider the “conceptual” phases of development to be separate “common plans” provided the periods of construction for the physically interconnected phases will not overlap.
- 3) Where discrete construction projects within a larger common plan of development or sale are located ¼ mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed. For example, if an interconnecting access road or pipeline were under construction at the same time, they would generally be considered as a part of a single “common plan” for permitting purposes.
- 4) If the operator sells all the lots in the subdivision to one or more multi-lot homebuilder(s), provisions shall be made to obtain stormwater permit coverage by one of the following options:
 - a. The permit may be transferred from the first “operator” to the new/second “operator”.
 - b. A new, separate permit coverage may be obtained by the second “operator”.NOTE: If a new permit coverage is to be obtained, then it shall be obtained before the first/original permit is terminated.
- 5) If the operator retains ownership of any lots in the subdivision, the operator shall maintain permit coverage for those lots under the original permit coverage. The operator shall modify the SWPPP by stating which lots are owned and marking the lots on the site map. If there are one (1) or two (2) lots remaining and the total acreage is less than five (5) acres, the original permit coverage could be terminated and those lots could be covered as a small site.

18. Change in Operator. For stormwater discharges from large construction sites where the operator changes, including instances where an operator is added after the initial NOI has been submitted, the new operator shall ensure that a permit transfer form is received by DEQ at least two (2) weeks prior to the new operator beginning work at the site.

19. Late Notifications. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Part I.B.7 of this permit. In such instances, the Director may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of stormwater associated with construction activity that have occurred on or after the dates specified in this permit.

20. Failure to Notify. The operator of a construction site who fails to notify the Director of their intent to be covered under this permit, and who potentially discharges pollutants (sediment, debris, etc.) to waters of the State without an NPDES permit, is in violation of the Arkansas Water and Air Pollution Control Act.

21. Maintenance. Determination of the acreage of disturbance does not typically include disturbance for routine maintenance activities on existing roads where the original line and grade, hydraulic capacity, or original purpose of the road is not being altered, nor does it include the paving of existing roads. Maintenance activities (returning to original conditions) are not

regulated under this permit unless one or more acres of underlying or surrounding soil are cleared, graded, or excavated as part of the operation.

22. Releases in Excess of Reportable Quantities.

A. The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the operator of the reporting requirements of 40 C.F.R. §110, §117 and §302. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under either 40 C.F.R. §110, 40 C.F.R. §117, or 40 C.F.R. §302, occurs during a twenty-four (24) hour period, the following action shall be taken:

- 1) Any person in charge of the facility is required to notify the National Response Center (NRC) (800-424-8802) in accordance with the requirements of 40 C.F.R. §110, 40 C.F.R. §117, or 40 C.F.R. §302 as soon as he/she has knowledge of the discharge;
- 2) The operator shall submit within five (5) calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, and the circumstances leading to the release, and steps to be taken in accordance with Part II.B.17 of this permit to the DEQ.
- 3) The SWPPP described in Part II.A of this permit shall be modified within fourteen (14) calendar days of knowledge of the release to:
 - a. Provide a description of the release and the circumstances leading to the release; and
 - b. The date of the release;
- 4) Additionally, the SWPPP shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan shall be modified where appropriate.

B. Spills. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

23. Attainment of Water Quality Standards.

The operator shall select, install, implement, and maintain control measures at the construction site and construction support activities off site that minimize the discharge of pollutants for which a stream is impaired at the discretion of the Director as necessary to protect water quality. In general, except in situations explained below, the stormwater controls developed, implemented, and updated to be considered stringent enough to ensure that discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

At any time after authorization, DEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, DEQ will require the permittee to:

- A. Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
- B. Cease discharges of pollutants from construction activity and submit an individual permit application.

All written responses required under this part shall include a signed certification consistent with Part II.B.9.

24. Requiring an Individual Permit

The Director may require any person eligible for coverage under the general permit to apply for and obtain an individual permit. In addition, any interested person(s) may submit an application for an individual permit. The Director may consider the issuance of individual permits according to the criteria in 40 C.F.R. §122.28(b)(3).

Coverage of the facility under this general permit is may be terminated by DEQ if the operator fails to submit or respond to the permitting process or requests for information in a timely manner.

Any operator covered under this general permit may request to be excluded from the coverage of this permit by applying for an APC&EC Rule 6 individual permit. The operator shall submit an application for an individual permit with the reasons supporting the application to DEQ. If a final, individual NPDES permit is issued to an operator otherwise subject to this general permit, the operator is required to submit a NOT. Coverage under this general permit will then be terminated no earlier than the effective date of the individual NPDES permit. Otherwise, the applicability of this general permit to the facility remains in full force and effect.

PART II

STANDARD CONDITIONS

Information in **Part II** is organized as follows:

Section A: Stormwater Pollution Prevention Plans (SWPPP):

1. Deadlines for Plan Preparation and Compliance
2. Signature, SWPPP, Inspection Reports, and Notice of Coverage (NOC)
3. Keeping SWPPP Current
4. Contents of the Stormwater Pollution Prevention Plan
5. Plan Certification

Section B: Standard Permit Conditions:

1. Retention of Records
2. Duty to Comply
3. Penalties for Violations of Permit Conditions
4. Continuance of the General Permit
5. Need to Halt or Reduce Activity Not a Defense
6. Duty to Mitigate
7. Duty to Provide Information
8. Other Information
9. Signatory Requirements
10. Certification
11. Penalties for Falsification of Reports
12. Penalties for Tampering
13. Oil and Hazardous Substance Liability
14. Property Rights
15. Severability
16. Transfers
17. Proper Operation and Maintenance
18. Inspection and Entry
19. Permit Actions
20. Re-Opener Clause
21. Local Requirements
22. Applicable Federal, State Requirements

SECTION A: STORMWATER POLLUTION PREVENTION PLANS (SWPPP)

The operator shall prepare a SWPPP before permit coverage. The SWPPP shall follow the order outlined in Part II.A.4 & 5 below. This basic DEQ format is available through DEQ's website <https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>. Other formats may be used at the discretion of the Director if the format has been approved by DEQ prior to use. The operator shall implement the SWPPP as written from initial commencement of construction activity until final stabilization is complete, with changes being made as deemed necessary by the permittee, local, state or federal officials. The plan shall be prepared in accordance with good engineering practices, by qualified personnel and shall:

- Identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction site and construction support activities off site;
- Identify, describe and ensure the implementation of BMPs, with emphasis on initial site stabilization, which are to be used to reduce pollutants in stormwater discharges from the construction site and construction support activities off site;
- Be site specific to what is taking place on a particular construction site;
- Ensure compliance with the terms and conditions of this permit; and
- Identify the responsible party for on-site SWPPP implementation.

1. Deadlines for Plan Preparation and Compliance.

A. Automatic Coverage Sites.

The plan shall be completed prior to obtaining permit coverage and commencement of construction activities and updated as appropriate. Submittal of the NOI, permit fee and SWPPP is not required. All conditions set forth in Part II.A must be followed, and the NOC must be posted at the site prior to commencing construction activities. In addition, a copy of the SWPPP must be available at the construction site in accordance with Part II.A.2.B and D prior to commencing construction.

B. Large Construction Sites.

The plan shall be completed and submitted for review, along with an NOI and initial permit fee ten (10) business days prior to the commencement of construction activities. Submittals of updates to the plan during the construction process are required in accordance with Part I.B.6.C or if requested by the Director.

C. Existing Permittees.

Existing permittees that were permitted prior to the issuance of this renewal permit are required to update their plan as appropriate to come into compliance with the requirements contained in Part II.A.4 by the effective date of this permit.

2. Signature, SWPPP, Inspection Reports and Notice of Coverage (NOC).

- A. The SWPPP and inspection reports shall be signed by the operator (or cognizant official) in accordance with Part II.B.9 and be retained at the construction site during normal business hours (8:00 A.M. – 5:00 P.M.). The inspections frequency shall be conducted in accordance with Part II.A.4.N.1.
- B. The operator shall make SWPPP and inspection reports available, upon request, to the Director, the EPA, or a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or, in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.

- C. The Director, or authorized representative, may notify the operator at any time that the plan does not meet one or more of the minimum requirements of this Part. Within seven (7) business days of such notification from the Director (or as otherwise provided by the Director) or authorized representative, the operator shall make the required changes to the plan and submit to the Director a written certification that the requested changes have been made. DEQ may request re-submittal of the SWPPP to confirm that all deficiencies have been adequately addressed. DEQ may also take appropriate enforcement action for the period of time the operator was operating under SWPPP that did not meet the minimum requirements of this permit.
- D. The operator shall post the NOC near the main entrance of the construction site and visible to the public. The NOC shall indicate the location of the SWPPP. If the SWPPP location is changed from the initial location, the NOC shall be updated to reflect the correct location of the SWPPP.

3. **Keeping SWPPP Current.** The operator shall amend the SWPPP within seven (7) business days or whenever there is a change in design, construction, operation, or maintenance at the construction site which has or could have a significant effect on the potential for the discharge of pollutants to the waters of the State that has not been previously addressed in the SWPPP. The SWPPP shall also be modified if a determination has been made through inspections, monitoring (if required), *or* investigation by the operator, local, state, or federal officials that the discharges are causing or contributing to water quality violation or the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in stormwater discharges from the construction site.

4. **Contents of the SWPPP.** The SWPPP shall include the following items:

A. **Site Description.** SWPPP shall provide a description of the following:

- 1) A description of the nature of the construction activity and its intended use after the NOI is filed (i.e., residential subdivision, shopping mall, etc.);
- 2) A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading, infrastructure installation, etc.);
- 3) Estimates of the total area of the site including off-site borrow and fill areas and the total area of the site that is expected to be disturbed by excavation, grading or other activities; and
- 4) An estimate of the runoff coefficient of the site for pre- and post-construction activities and existing data describing the soil or the quality of any discharge from the site.

B. **Responsible Parties.** The SWPPP shall identify (as soon as this information is known) all parties (i.e., General Contractors, Landscapers, Project Designers, and Inspectors) responsible for particular construction activities and services they provide to the operator to comply with the requirements of the SWPPP for the project site and construction support activities off site, and areas over which each party has control. If these parties change over the life of the permit, or new parties are added, the SWPPP shall be updated to reflect these changes.

C. **Receiving Waters.** The SWPPP shall include a clear description of the nearest receiving water(s), or if the discharge is to a MS4, the name of the operator of the municipal system, and the ultimate receiving water(s).

D. **Documentation of Permit Eligibility Related to the 303(d) list and Total Maximum Daily Loads (TMDL).** The SWPPP shall include information on whether or not the stormwater discharges from the site enter a waterbody that is on the most recent 303(d) list or with an approved TMDL. If the stormwater discharge does enter a waterbody that is on the most recent 303(d) list or with an approved TMDL, then the SWPPP shall address the following items:

- 1) Identification of the pollutants that the 303(d) list or TMDL addresses, specifically whether the 303(d) list or TMDL addresses sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation);
- 2) Identification of whether the operator's discharge is identified, either specifically or generally, on the 303(d) list or

any associated assumptions and allocations identified in the TMDL for the discharge; and

- 3) Measures taken by the operator to ensure that its discharge of pollutants from the site is consistent with the assumptions and allocations of the TMDL.

If DEQ determines during the review process that the proposed project will be discharging to a receiving water that is on the most recent 303(d) list or with an approved TMDL, then DEQ may notify the applicant to include additional Best Management Practices in the SWPPP.

- E. Documentation of Permit Eligibility Related to Discharges into an ERW, NSW, or ESW. The SWPPP shall include information whether or not the construction site located within a watershed of an ERW, ESW, or NSW. If the construction site is located within a watershed of an ERW, ESW, or NSW, then the SWPPP should consider using additional BMPs for these areas. The practices shall be considered during the progression of site activities and updates to the construction site SWPPP for continued protection of underground water resources.
- F. Documentation of Permit Eligibility related to potential losing stream and/or sensitive aquatic species native to these areas. The SWPPP shall include information whether or not the construction site located within a watershed of a potential losing stream, and/or sensitive aquatic species native to these areas. If the construction site is located within a watershed of a potential losing stream and/or sensitive aquatic species native to these areas, then the SWPPP shall consider using BMPs for losing stream areas. The practices should be considered during the progression of site activities and updates to the facility SWPPP for continued protection of underground water resources.
- G. Attainment of Water Quality Standards After Authorization.
 - 1) The permittee shall select, install, implement, and maintain BMPs at the construction site and at the construction support activities off site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained below, the SWPPP shall be developed, implemented, and updated to be considered as stringent as necessary to ensure that the discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.
 - 2) At any time after authorization, DEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, DEQ will require the permittee to:
 - a. Develop a supplemental BMP action plan describing SWPPP modifications to adequately address the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
 - b. Cease discharges of pollutants from construction activity and submit an individual permit application.
 - 3) All written responses required under this part shall include a signed certification (Part II.B.9).
- H. Site Map. The SWPPP shall contain a legible site map (or multiple maps, if necessary) complete to scale, showing the entire site, that identifies, at a minimum, the following:
 - 1) Pre-construction topographic view;
 - 2) Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
 - 3) Delineate on the site map areas of soil disturbance and areas that will not be disturbed with regards to the construction activities and construction support activities off site under the coverage of this permit;
 - 4) Location of major structural and nonstructural controls identified in the plan;
 - 5) Location of main construction entrance and exit;

- 6) Location where stabilization practices are expected to occur;
- 7) Locations of all construction support activities off-site (i.e. materials, waste, borrow area, or equipment storage areas);
- 8) Location of areas used for concrete wash-out;
- 9) Location of all waters of the State with associated natural buffer boundary lines. Identify floodplain and floodway boundaries, if available;
- 10) Locations where stormwater is discharged to waters of the State or a municipal separate storm sewer system if applicable,
- 11) Locations where stormwater is discharged off-site (shall be continuously updated);
- 12) Areas where final stabilization has been accomplished and no further construction phase permit requirements apply;
- 13) A legend that clearly specifies any erosion and sediment control measure symbols/labels used in the site map and/or detail sheet; and
- 14) Locations of any storm drain inlets on the site and in the immediate vicinity of the site.

I. Stormwater Controls. Each plan shall include a description of appropriate controls and measures that will be installed and implemented at the construction site. The plan shall clearly describe each construction activity identified in the project description control measures associated with the construction activity and the schedule during the construction process that the measures will be implemented. Perimeter controls for the site shall be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls shall be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary controls shall be removed and properly disposed of after final stabilization. The description and implementation of controls shall address the following minimum components:

- 1) Initial Site Stabilization, Erosion, and Sediment Controls and Best Management Practices. Design, install, implement, and maintain effective erosion and sediment controls to minimize the discharge of pollutants. At a minimum the following controls and BMPs shall be designed, installed, implemented, and maintained. Therefore, the SWPPP shall address, at a minimum, the following:
 - a. For larger common plans of development or sale, only streets, drainage, utility areas, areas needed for initial construction of streets (e.g., borrow pits, parking areas, etc.) and areas needed for stormwater structures may be disturbed initially. Upon stabilization of the initial areas, additional areas may be disturbed.
 - b. The construction-phase erosion (such as site stabilization) and sediment controls (such as check dams) shall be designed to retain sediment on-site to the extent practicable.
 - c. All control measures shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications, good engineering, and construction practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee shall replace or modify the control for site situations.
 - d. If sediment escapes the construction site, off site accumulations of sediment shall be removed before the next business day to minimize off-site impacts (e.g., to prevent fugitive sediment in a street could be washed into storm sewers by the next rain or pose a safety hazard to users of public streets). This permit does not give the authority to trespass onto other property; therefore this condition should be carried out along with the permission of neighboring land owners to remove sediment.
 - e. Sediment shall be removed from sediment traps (if used, please specify what type) or sedimentation ponds when design capacity has been reduced by 50%.
 - f. Litter, construction debris, and construction chemicals exposed to precipitation and to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls picked up daily).
 - g. Construction support activities off site (i.e. material storage areas, overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.

- 2) Stabilization practices. The SWPPP shall include, at a minimum, the following information:
- a. Description and Schedule: A description of initial, interim, and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include, but not limited to: mulching, temporary seeding, permanent seeding, geotextiles, sod stabilization, natural buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures.
 - b. Description of natural buffer areas: DEQ requires that a natural buffer zone be established between the top of stream bank and the disturbed area. The SWPPP shall contain a description of how the site will maintain natural buffer zones. For construction projects where clearing and grading activities will occur, SWPPP shall provide at least twenty-five (25) feet of natural buffer zone from any named or unnamed streams, creeks, rivers, lakes or other water bodies. The plan shall also provide at least fifty (50) feet of natural buffer zone from established TMDL waterbodies, waterbodies listed on the 303(d) list, an ERW, ESW, NSW, or other uses at the discretion of the Director. If the site will be disturbed within the recommended buffer zone, then the buffer zone area shall be stabilized as soon as possible. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law. Please note that above-grade clearing that does not disturb the soil in the buffer zone area does not have to comply with buffer zone requirements.
 - c. Records of Stabilization: A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan.
 - d. Deadlines for Stabilization After Construction Activity Temporarily Ceases: Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily ceased, but in no case more than fourteen (14) calendar days after the construction activity in that portion of the site has temporarily ceased, except:
 - (1) Where the initiation of stabilization measures by the fourteenth (14th) calendar day after construction activity temporarily ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.
 - e. Deadline for Stabilization After Construction Activity Permanently Ceases: Stabilization measures shall be initiated immediately in portions of the site where construction activities have permanently ceased, except:
 - (1) Where the initiation of stabilization measures immediately after construction activity permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.
- 3) Structural Practices. A description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may

be subject to Section 404 of the Clean Water Act. Such practices may include but are not limited to:

- silt fences (installed and maintained);
- earthen dikes to prevent run-on;
- drainage swales to prevent run-on;
- check dams;
- subsurface drains;
- pipe slope drains;
- storm drain inlet protection;
- rock outlet protection;
- sediment traps;
- reinforced soil retaining systems;
- gabions;
- temporary or permanent sediment basins.

A combination of erosion and sediment control measures is encouraged to achieve maximum pollutant removal. Adequate spillway cross-sectional area and re-enforcement shall be provided for check dams, sediment traps, and sediment basins.

a. Sediment Basins:

- (1) For common drainage locations that serve an area with ten (10) or more acres (including run-on from other areas) draining to a common point, a temporary or permanent sediment basin that provides storage based on either the smaller of 3600 cubic feet per acre, or a size based on the runoff volume of a 10 year, 24 hour storm, shall be provided where attainable (so as not to adversely impact water quality) until final stabilization of the site. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils, slope, available area on site, etc. Proper hydraulic design of the outlet is critical to achieving the desired performance of the basin. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72) hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. If "non-attainability" is claimed, then an explanation of non-attainability shall be included in the SWPPP. Where a sediment basin is not attainable, smaller sediment basins or sediment traps shall be used. Where a sediment basin is un-attainable, natural buffer strips or other suitable controls which are effective are required for all side slopes and down slope boundaries of the construction area. The plans for removal or final usage of the sediment basin shall be included with the description of the basin in the SWPPP.
- (2) For drainage locations serving an area less than ten (10) acres, sediment traps, silt fences, or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area unless a sediment basin providing storage based on either the smaller of 3600 cubic feet per acre, or a size based on the run off volume of a 10 year, 24 hour storm is provided. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72) hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. However, in order to protect the waters of the State, the Director, at their discretion, may require a sediment basin for any drainage areas draining to a common point.

b. Velocity Dissipation Devices:

Velocity dissipation devices shall be placed at discharge locations, within concentrated flow areas serving two

or more acres, and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (i.e., no significant changes in the hydrological regime of the receiving water). Please note that the use of hay-bales is not recommended in areas of concentrated flow.

J. Other Controls.

- 1) No solid materials identified in Part I.B.13.D shall be discharged to waters of the State or offsite.
- 2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of a stabilized construction entrance and exit or vehicle tire washing.
- 3) For lots that are less than one (1) acre in size an alternative method may be used in addition to a stabilized construction entrance. An example of an alternative method could be daily street sweeping. This could allow for the shortening of the construction entrance.
- 4) The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, temporary and permanent sanitary sewer or septic system regulations.
- 5) No liquid concrete waste shall be discharged to waters of the State. Appropriate controls to prevent the discharge of concrete washout waters shall be implemented if concrete washout will occur on-site.
- 6) No contaminants from fuel storage areas, hazardous waste storage and truck wash areas shall be discharged to waters of the State or offsite. Methods for protecting these areas shall be identified and implemented. These areas shall not be located near a waterbody, if there is a water body on or near the project.

K. Non-stormwater discharges. Sources of non-stormwater listed in Part I.B.10 of this permit that are combined with stormwater discharges associated with construction activity shall be identified in the plan. This list shall be site specific non-stormwater discharges.

L. Post-Construction Stormwater Management. The operator is required to provide a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures shall be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 (Corps of Engineers) of the Clean Water Act. This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. However, post-construction stormwater BMPs that discharge pollutants from a point source once construction is completed may need authorization under a separate DEQ NPDES permit. Such practices may include but are not limited to:

- infiltration of runoff onsite;
- flow attenuation by use of open vegetated swales and natural depressions;
- stormwater retention structures;
- stormwater detention structures (including wet ponds);
- sequential systems, which combine several practices.

A goal of at least eighty percent 80 % removal of total suspended solids from these flows which exceed predevelopment levels should be used in designing and installing stormwater management controls (where practicable). Where this goal is not met, the operator shall provide justification for rejecting each practice listed above based on site conditions.

M. Applicable State or Local Programs. The SWPPP shall be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls implemented at the site.

N. Inspections. Inspections shall be conducted by qualified personnel (provided by the operator). Inspections shall include all areas of the site disturbed by construction activity and construction support activities located off site that are exposed to precipitation and to stormwater. Inspectors shall look for evidence of, or the potential for, pollutants entering

the stormwater conveyance system. All stormwater control measures shall be observed to ensure proper installation, operation, and maintenance. Discharge locations shall be inspected to determine whether all stormwater control measures are effective in preventing significant impacts to waters of the State or offsite, where accessible. Where discharge locations are inaccessible, nearby downstream locations shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking. Inspections may not be required if the remaining lot(s) within a larger common plan of development or sale disturb less than one acre of land. In addition, inspections may not be required on a completed section of a linear project if final stabilization has been completed for that section. Stabilized areas of the project shall be indicated in the SWPPP and site map and show what date they were stabilized. The operator shall ensure that no sediment will leave the lot(s) that are stabilized. These lots shall be identified within the SWPPP and show what date they were stabilized. If the operator is unable to ensure this, then inspections shall continue.

- 1) Inspection Frequency. Inspections shall be conducted in accordance with one of the following schedules listed below. The schedule **must be specified** in the SWPPP.
 - a. At least once every seven (7) calendar days, or
 - b. At least once every fourteen (14) calendar days and within twenty-four (24) hours of the end of a storm event of 0.25 inches or greater (a rain gauge must be maintained on-site).
- 2) Inspection Form. The DEQ inspection form should be used for all inspections. The inspection form shall include all stormwater controls that are being used on site as well as at construction support activities off site. The form is available on DEQ's website www.adeq.state.ar.us. If a different form is used, it shall at a minimum contain the following information:
 - a. Inspector name and title;
 - b. Date of Inspection;
 - c. Amount of rainfall and days since last rain event (only applicable to Part II.A.4.N.1.b);
 - d. Approximate beginning and duration of the storm event;
 - e. Description of any discharges during inspection;
 - f. Locations of discharges of sediment/other pollutants;
 - g. Locations of BMPs in need of maintenance or where maintenance was performed;
 - h. If the BMPs are in working order and if maintenance is required (including when scheduled and completed);
 - i. Locations that are in need of additional controls;
 - j. Location and dates when major construction activities begin, occur or cease;
 - k. Signature of qualified signatory official, in accordance with Part II.B.9.

Additional information may be added to the inspection report at the permittee's discretion.

- 3) Inspection Records. Each report shall be retained as part of the SWPPP for at least three (3) years from the date the site is finally stabilized. Each report shall be signed and have a certification statement in accordance with Parts II.B.9 and 10 of this permit.
- 4) Winter Conditions. Inspections will not be required at construction sites nor the construction support activities located off site where snow cover exists over the entire site for an extended period, and melting conditions do not exist. If there is any runoff from the site at any time during snow cover, melting conditions are considered to be existent at the site and this inspection waiver does not apply. Regular inspections, as required by this permit, are required at all other times as specified in this permit. If winter conditions prevent compliance with the permit, documentation of the beginning and ending date of winter conditions shall be included in the SWPPP.
- 5) Adverse Weather Conditions. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make inspections

impractical, such as extended frozen conditions. When adverse weather conditions prevent the inspection of the site, an inspection shall be completed as soon as is safe and feasible. If adverse weather conditions prevent compliance with the permit, documentation of the beginning and ending date of adverse weather conditions shall be included in the SWPPP.

- O. *Maintenance*. A description of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition shall be outlined in the plan. Any repairs that are needed based on an inspection shall be completed, when practicable, before the next storm event, but not to exceed a period of three (3) business days of discovery, or as otherwise directed by state or local officials. However, if conditions do not permit large equipment to be used, a longer time frame is allowed if the condition is thoroughly documented on the inspection form. Maintenance for manufactured controls shall be done at a minimum of the manufacturer's specifications. Maintenance for non-manufactured controls, i.e. check dams and sediment traps, shall be done when 50% of treatment capacity remains.
- P. *Employee Training*. The permittee/operator is responsible for training personnel, who are responsible for implementing activities identified in the SWPPP, on the components and requirements of the SWPPP and the requirements of the general permit. This includes contractors and subcontractors. Training shall be given by a knowledgeable and qualified trainer. The SWPPP shall identify periodic dates for such training for all personnel and records of training shall be maintained with the SWPPP. Training records that are maintained electronically (i.e. database, etc.) do not need to be maintained with the SWPPP, but shall be accessible upon request. Formal training classes given by Universities or other third-party organizations are not required but recommended for qualified trainers; the permittee is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.

- 5. **Plan Certification**. The SWPPP Certification shall be signed by either the operator or the cognizant official identified on the NOI. All documents required by the permit and other information requested by the Director shall be signed by operator or by a duly authorized representative of the operator (Please see Part II.B.10 below for certification).

SECTION B: STANDARD PERMIT CONDITIONS

1. **Retention of Records.**

- A. The operator shall retain records of all Stormwater Pollution Prevention Plans, all inspection reports required by this permit, and records of all data used to complete the NOI to be covered by this permit for a period of at least three (3) years from the date the NOT letter is signed by DEQ. This period may be extended by request of the Director at any time.
- B. The operator shall retain a signed copy of the SWPPP and inspection reports required by this permit at the construction site from the date of project initiation to the date of final stabilization.

2. **Duty to Comply.** The operator shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application.

3. **Penalties for Violations of Permit Conditions.** The Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a criminal penalty of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action. Any person that purposely, knowingly, or recklessly causes pollution of the water of the state in a manner not otherwise permitted by law and thereby places another person in imminent danger of death or serious bodily injury shall be guilty of a felony and shall be subject to imprisonment, a fine not more than two hundred fifty thousand dollars (\$250,000), or both such fine and imprisonment.

4. **Continuance of the General Permit.** Permittees wishing to continue coverage under this general permit shall submit a Renewal NOI (see Part I.B.4 for where to submit documentation) up to 180 days prior to the expiration date, but no later than thirty (30) days prior to the expiration date. No additional fee is required to be submitted along with the Renewal NOI.

An expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with Ark. Code Ann. § 8-4-203(m) and remain in force and effect. If a permittee was granted permit coverage prior to the expiration date, the permittee will remain covered by the continued permit until the earliest of:

- A. The effective date of the re-issuance or replacement of this permit and a timely submittal of a renewal NOI by the operator; or
- B. The operator's submittal and DEQ approval of a NOT; or
- C. Issuance and effectiveness of an individual permit for the project's discharges and completion of item B of this section (see Part I.B.24); or
- D. A formal permit decision by DEQ to not re-issue this general permit, at which time operators must seek coverage under an alternative permit (see Part I.B.24).

Small site operators are responsible for ensuring that the site is in compliance with any changes or updates of this general permit by reviewing DEQ's website at:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>

5. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
6. **Duty to Mitigate.** The operator shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has reasonable likelihood of adversely affecting human health or the environment.
7. **Duty to Provide Information.** The operator shall furnish to the Director, an authorized representative of the Director, the EPA, a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or in the case of a stormwater discharge associated with industrial activity which discharges through a MS4 with an NPDES permit, to the municipal operator of the system, within a reasonable time, any information which is requested to determine compliance with this permit.
8. **Other Information.** When the operator becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Director, he or she shall promptly submit such facts or information.
9. **Signatory Requirements.** All NOIs, reports, or information submitted to the Director shall be signed and certified by the operator.

A. All NOI shall be signed as follows:

- 1) **For a corporation:** by a responsible corporate officer. For purposes of this section, a responsible corporate officer means:
 - a. A president, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2) **For a partnership or sole proprietorship:** by a general partner or the proprietor, respectively;
- 3) **For a municipality, State, Federal or other public agency:** by either a principal executive or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - a. The chief executive officer of the agency; or
 - b. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

B. All reports required by the permit and other information requested by the Director shall be signed by a person described

above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- 1) The authorization is made in writing by a person described above and submitted to the Director;
- 2) The authorization specifies either an individual or a person having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or position of equivalent responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- 3) Changes to authorization. If an authorization under this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

10. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure 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."

Note: For this permit only, "this document" refers to the Stormwater Pollution Prevention Plan, "attachments" refers to the site map and inspection forms, and "system" is referencing the project site.

- 11. Penalties for Falsification of Reports.** The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part II.B.3 of this permit and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.).
- 12. Penalties for Tampering.** The Arkansas Water and Air Pollution Control act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment.
- 13. Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under Section 311 of the Clean Water Act or Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- 14. Property Rights.** The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws or regulations.
- 15. Severability.** The provisions of this permit are severable. If any provisions of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provisions to other circumstances and the remainder of this permit shall not be affected thereby.

16. Transfers. This permit is not transferable to any person except after notice to the Director. A transfer form shall be submitted to DEQ as required by this permit.

17. Proper Operation and Maintenance. The operator shall at all times:

- A. Properly operate and maintain all systems of treatment and control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by an operator only when the operation is necessary to achieve compliance with the conditions of the permit.
- B. Provide an adequate operating staff which is duly qualified to carry out operation, inspection, maintenance, and testing functions required to ensure compliance with the conditions of this permit.

18. Inspection and Entry. The operator shall allow the Director, the EPA, or an authorized representative, or, in the case of a construction site which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator of the separate sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- A. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
- B. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;
- C. Inspect at reasonable times any facilities or equipment, including monitoring and control equipment and practices or operations regulated or required by the permit;
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location on the permitted property.

19. Permit Actions. This permit may be modified, revoked and reissued, or terminated for any cause including, but not limited to, the following;

- A. Violation of any terms or conditions of this permit;
- B. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts;
- C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- E. Failure of the operator to comply with the provisions of DEQ Rule 9 (Fee Rule). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 C.F.R. §122.64 and §124.5(d), as adopted by reference in DEQ Rule 6, and the provisions of DEQ Rule 8.

20. Re-Opener Clause.

- A. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with industrial activity covered by this permit, the operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with Part I.B.24 of this permit, or the permit may be modified to include different limitations and/or requirements.
- B. Permit modification or revocation will be conducted in accordance with the provisions of 40 C.F.R. §122.62, §122.63, §122.64 and §124.5, as adopted by reference in DEQ Rule 6.

21. Local Requirements. All dischargers shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding any discharges of stormwater to storm drain systems or other water sources under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to

comply with the DEQ permits. Dischargers shall comply with local stormwater management requirements, policies, or guidelines including erosion and sediment control.

- 22. Applicable Federal, State, or local Requirements.** Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance policy, or regulation. Nothing in this permit shall be construed to preclude the institution of any legal action or enforcement actions or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable local state, or federal law or regulation.



George Wooden <georgewooden98@gmail.com>

Fwd: DRC Staff Comments 3/16/2023

1 message

Tariq Morshed <tariqgarnat@gmail.com>
To: George Wooden <GEORGEWOODEN98@gmail.com>

Wed, Mar 22, 2023 at 1:57 PM

----- Forwarded message -----

From: **Vernon Williams** <garnatengineering@gmail.com>
Date: Thu, Mar 16, 2023 at 8:57 AM
Subject: Fwd: DRC Staff Comments 3/16/2023
To: Tariq Morshed <tariqgarnat@gmail.com>

Vernon J. Williams, P.E.
GarNat Engineering, LLC
Mailing Address: Physical Address:
P.O. Box 116 3825 Mt Carmel Road
Benton, AR 72018 Bryant, AR 72022
Ph: (501) 408-4650 Cell: (501) 425-2771
Fax: (888) 900-3068 www.garnatengineering.com

----- Forwarded message -----

From: **Colton Leonard** <cleonard@cityofbryant.com>
Date: Thu, Mar 16, 2023 at 8:46 AM
Subject: DRC Staff Comments 3/16/2023
To: Vernon Williams <Garnatengineering@gmail.com>

Vernon,

Here are the comments for this morning's meeting.

Best,

Colton

1. Butler Center - Site Plan/Rezoning/Variance

Public Works

1. Site will require a ADEQ Small Scale Development Permit.
2. Developer will be required to submit signed and notarized Stormwater Infrastructure Warranty Bond SOP per Ordinance 2019-32.
3. Plans show that only top banks and slopes of v-bottom ditch shall be stabilized to with solid sod stabilization, this shall be updated to show bottom of ditch being solid sod stabilization as well.
4. Erosion control plan does not show specific specs for silt fencing and installation. (detail needs to be shown on plans)

Engineering

Water:

1. Site plan only indicates 7 water meters however request is for 8.
2. Bryant W/WW Specification 1100-1.22 B Fire hydrants for apartments, commercial and industrial sites shall exceed 400 feet spacing. Confirm with Bryant Fire Marshal Fire Hydrant Placement.
3. Discuss provision of extended water main to adjoining property to the west.

Wastewater:

4. Bryant W/WW Specification 3100-312 E Connection to existing manhole shall be Cored and Booted. Indicate on Utility Drawings. See Manholes 4578.
5. Provide documentation as to use of structure for Sanitary Sewer needs. Food preparation may be subject to an appropriate grease trap installation.

Stormwater:

6. Discuss discharge off site onto adjacent property and downstream choke points .
7. Discuss the use of Storage Facility Personnel to maintain the onsite Drainage detention system.

Streets:

8. A Designed driveway will be required in accordance with ArDOT.

Planning

1. Provide building Elevations showing facades/materials.
2. One lot commercial subdivision Plat?
3. Building setbacks not shown on plans. For C-2: 15ft Front Min, 15ft Side, 25ft Rear. 3X Multiplier for commercial abutting residential zoned lot.
4. Cross-access agreement in place for property owners to the West? Should probably be shown on plat.
5. Pedestrian access from building sidewalks to Reynolds Road sidewalk.

Fire

1. None

1. Elite Volleyball Academy**Public Works**

1. Site will require ADEQ Small Scale Development permit. [Will comply](#)
2. Site will require a Stormwater Detention Maintenance Plan. [Added](#)
3. Developer will be required to submit signed and notarized Stormwater Infrastructure Warranty Bond SOP per Ordinance 2019-32.
4. Erosion control plan will be required to be updated to show use of wire-backed silt fencing. [Updated.](#)

Engineering

1. Fire line shall be 8" Ductile Iron per section 1100-2-1.05-B. [Will comply.](#)
2. Show 15' easement on water main extension 1100-4-1.11-A, water main easements on Plat. [Added to Plat.](#)
3. Discuss water main extension to extend to the east property line.

4. Existing gravity sewer running north and south must have dedicated easement of 20'.
Show on Plat [Added to Plat.](#)
5. Provide stormwater calculations. **PROVIDED - UNDER REVIEW**
6. Discuss extension of Water line to edge of development.

Planning

1. Elevations - Commercial Design Standards
2. Sidewalk Access to building [Added](#)
3. Discuss building setbacks as it relates to variance requests. Can [Planning Dept. said yes.](#)
electrical/mechanical equipment be placed in the Building setback area?
4. Provide landscape plan [Added](#)

Fire

1. Building shall be sprinkled with 5" Storz FDC connection [Will comply.](#)
2. Knox Box required for facility
3. Fire hydrant shall be within 100' of FDC. [Will comply.](#)

--



Colton Leonard

City Planner

501-943-0301

cleonard@cityofbryant.com

www.cityofbryant.com

[210 SW 3rd St, Bryant, AR 72022](#)

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M M Tariq Morshed, E. I.

GarNat Engineering, LLC

Mailing Address:

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[Benton, AR 72018](#)

Ph: (501) 408-4650

Fax: (888) 900-3068

Physical Address:

[3825 Mt Carmel Road](#)

[Bryant, AR 72022](#)

Cell: (870) 273-9256

www.garnatengineering.com



CHRISTY LN

CITY OF BENTON
HEARING
NOTICE

March 10, 2023

Mr. Truett Smith
Bryant Planning Coordinator/Planning Commission Secretary
210 SW 3rd Street
Bryant, AR 72022

Re: Variance Request for A New Elite Volleyball Academy Gym
Parcel Number 840-11661-034

Dear Mr. Smith:

Please allow this letter and following list of variances and enclosures to serve as my application for variance approval of the referenced project.

List of Variances

- The rear tract (east of our property) owned by the Whitley James Matthew & Melania is zoned R-1.S. We request a variance of 25' setback from this property.

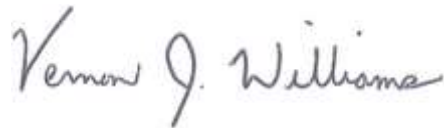
List of Enclosures

- Variance Application.
- Draft of Completed Public Notice.
- Draft of the Newspaper Advertising.

If you have questions or need any additional information, please do not hesitate to contact me.

Sincerely,

GarNat Engineering, LLC



Vernon J. Williams, P.E., President

1. 25300 I-30 - CUP for Self Storage

Public Works

1. Discuss Stormwater Design (Stormwater Design shall be in accordance with Ordinance 2019-32 & 2019-31.

We understand the concern shared at DRC regarding downstream flooding to the east of this property. If the Conditional Use Permit is approved we agree to follow Stormwater Ordinance.

2. Site will require a Stormwater Detention Maintenance Plan.

If the Conditional Use Permit is approved we agree to complete a Stormwater Detention Maintenance Plan.

3. Developer will be required to submit signed and notarized Stormwater Infrastructure Warranty Bond SOP per Ordinance 2019-32.

If the Conditional Use Permit is approved we agree to complete a Stormwater Infrastructure Maintenance Plan.

We agree to provide a

Site will require basin study in accordance with parameters set by the City Engineer. We understand the concern shared at DRC regarding downstream flooding to the east of this property. If the Conditional Use Permit is approved we agree to complete basin study of this area.

Discuss proximity of four buildings in proximity to detention/retention pond . Our layout is very preliminary and we have not completed civil drawings of this site. These buildings may prove to be too close to the future detention pond location. If the Conditional Use Permit is approved we agree to take all comments regarding the proximity of the buildings into consideration with respect to the detention pond.

4. Site will be required to submit wetlands study to ensure the existing pond is not a federally protected wetland. If the Conditional Use Permit is approved we agree to complete Jurisdictional Determination of the area in proximity to the existing detention pond.

Engineering

1. Water main Easement with Access will be required for final design. Sanitary Sewer Easement with Access will be required for final design. We understand the concern shared at DRC regarding downstream existing sewer force main along the west side of this property. If the Conditional Use Permit is approved we agree to protect this sewer force main in an sewer and ingress/egress easement.

2. Discuss Storm water Design.

We understand the concern shared at DRC regarding downstream flooding to the east of this property. If the Conditional Use Permit is approved we agree to follow Stormwater Ordinance.

3. Setback violations on the North West corner [Corrected](#)
4. Discuss plat division. [Will follow Subdivision Requirements if CUP is Approved](#)
5. Discuss access locations. [We agree to incorporate input from ArDOT and Bryant Fire Department if the CUP is Approved](#)

Planning

1. Building Setbacks for C-3 Zoning are 50' min. Front, 25' Side, and 25' Rear. Where it abuts residentially zoned property the setback is 3X. [Updated Drawing](#)
2. More detailed Development Plan is needed: Show proposed lighting; landscape and screening; Location, size, and arrangement of driveways and parking and loading areas as well as any vehicular maneuvering areas [Lighting and landscaping have been added. This project has an existing driveway on frontage road.](#)
3. Property needs to be posted with signs and public hearing notice in paper by March 26th. [Signs and notices will be conducted.](#)

Fire

1. Buildings 12,000 sqft or > shall be sprinkled with 5" Storz FDC connection We have revised our building sizes and. [Building sq footage has been added.](#)
2. Knox Box required for facility [We agree to the required Knox Box as mentioned if the CUP is approved](#)
3. Fire hydrant shall be within 100' of FDC. [We agree with comment if CUP is Approved.](#)
4. Need road dimensions to determine Fire Dept. Access Roads. [Dimensions between buildings have been added.](#)



**Saline County Road Department
5500 Cynamide Road
Benton, Arkansas 72015
(501) 303-5690**

March 22, 2023

Jonathan Hope
Hope Consulting
Engineers-Surveyors
129 N Main Street
Benton, Arkansas 72015

Ref: Road and Drainage Improvements to a part of Rudolph Road

Dear Mr. Hope:

Based on inspections of the work to improve Rudolph Road including drainage facilities and the satisfactory results of a observations to determine final in place base gravel (minimum of 8") and observing the laying of the asphalt (minimum of 2.5") thicknesses and the satisfactory results of a representative sample of subgrade density test (minimum of 95% modified) and base gravel density test (minimum 98% modified), the road and drainage structures are deemed to be complete and constructed to County standards. But based on an inspection today the following things need to be done; 1. Rework shoulders and make sure back fill soil is placed along edge of shoulders, 2. Re-shape and maybe use smaller rip rap, the existing stones stick up too high may even cause sight problems, 3. Remove or rework and clean out rock checks.

John Wofford PE, PLS

Saline County Engineer

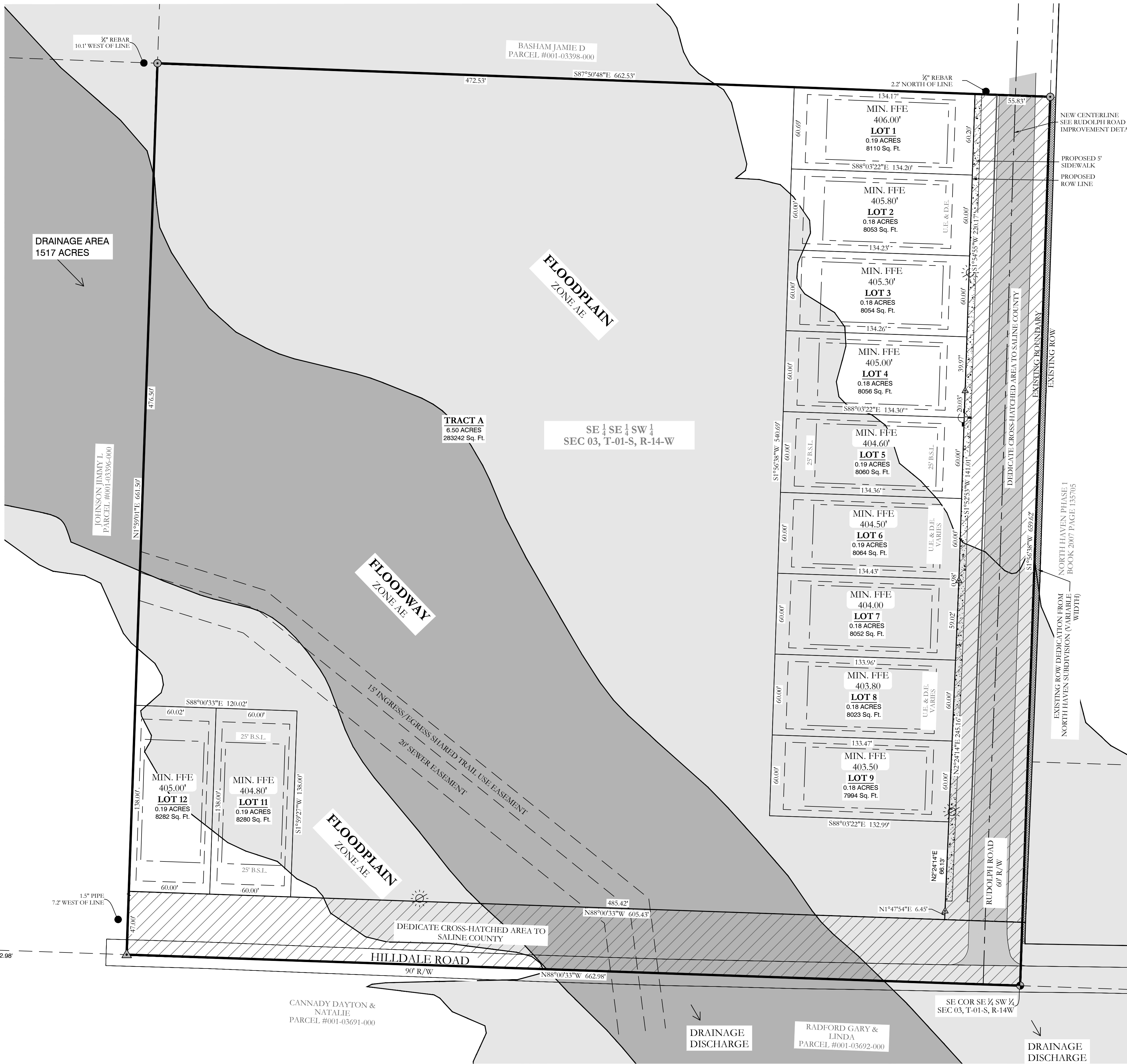
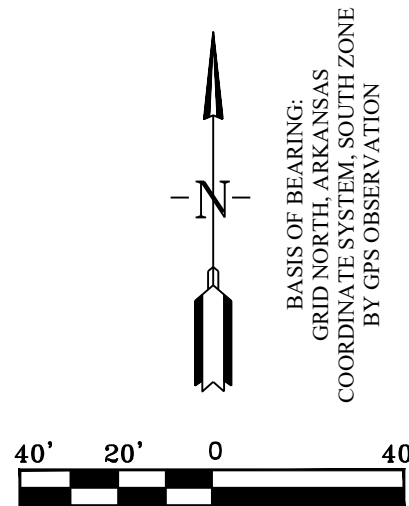
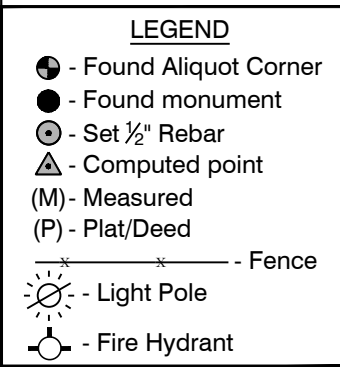
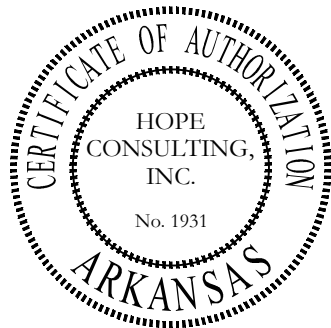


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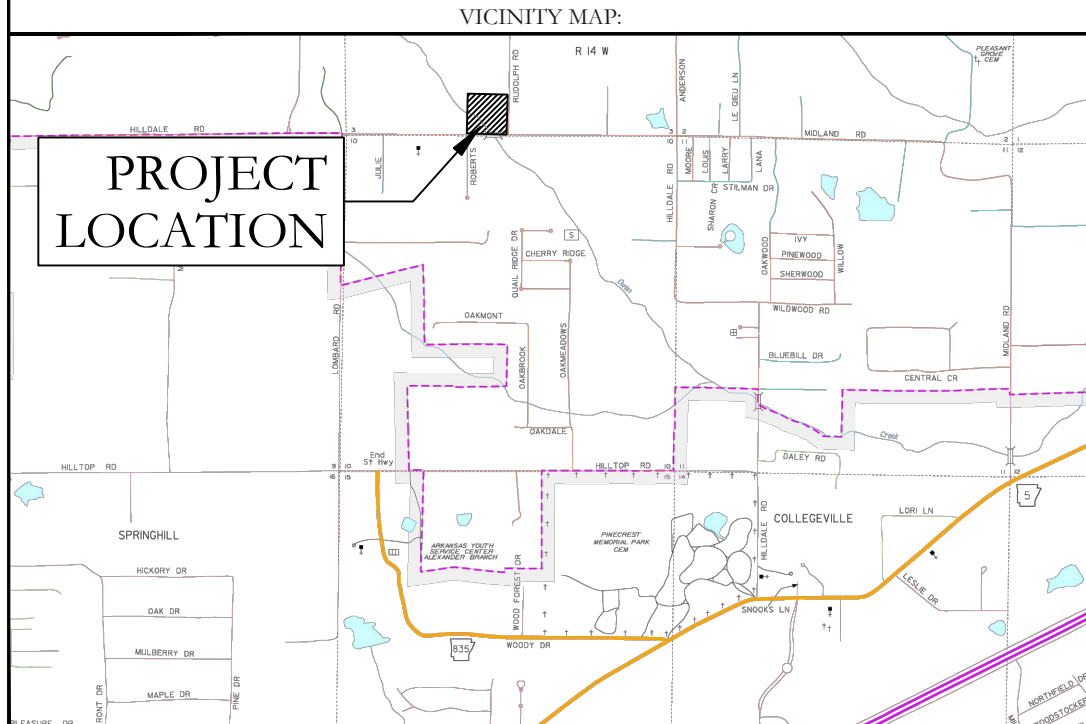
THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER SECTION 03, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY ARKANSAS.

CONTAINING 437,787.7 SQUARE FEET, OR 10.05 ACRES, MORE OR LESS.

SUBJECT TO BUILDING LINES, EASEMENTS, MINERAL RESERVATIONS AND/OR CONVEYANCES, AND RESTRICTIONS OF RECORD, IF ANY.



FINAL PLAT OF
JACOB'S CORNER
A SUBDIVISION IN SALINE COUNTY, ARKANSAS



CITY OF BRYANT CERTIFICATIONS:	
OWNER:	DEVELOPER:
Name: GIRON BUILDERS INC.	Name: GIRON BUILDERS INC.
Address: 3420 HILDALE ROAD ALEXANDER, AR 72002	Address: 3420 HILDALE ROAD ALEXANDER, AR 72002

CERTIFICATE OF OWNER:
We, the undersigned, owners of the real estate shown and described herein do hereby certify that we have caused to be laid off, platted and subdivided, and to hereby lay off, plat and subdivide said real estate in accordance with the plat.

Date of Execution _____ Name: _____
Source of Title: D.R. BOOK _____ PAGE _____

CERTIFICATE OF FINAL SURVEYING ACCURACY:
I, Jonathan L. Hope, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actually exist and their location, size, type and material are correctly shown; and that all interior lot lines have been adjusted to "as built conditions" and are accurately described on the plat and identified on the ground in terms of length and direction of the property side as required in accord with the City of Bryant Subdivision Regulation Ordinance.

Date of Execution _____ Jonathan L. Hope
Registered Professional
Land Surveyor No. 1762 Arkansas

CERTIFICATE OF FINAL ENGINEERING ACCURACY:
I, Kazi Islam, hereby certify that this plat correctly represents a plat made by me, and that the engineering requirements of the City of Bryant Subdivision Rules and Regulations have been complied with.

Date of Execution _____ Kazi Islam
Registered Professional
Engineer, No. 20876 Arkansas

CERTIFICATE OF FINAL PLAT APPROVAL:
Pursuant to the City of Bryant Subdivision Rules and Regulations, and all of the conditions of approval having been completed, this document is hereby accepted. This certificate is hereby executed under the authority of said rules and regulations.

Date of Execution _____ Rick Johnson,
Bryant Planning Commission Chairman

FLOODPLAIN CERTIFICATION:
By affixing my seal and signature, I Jonathan L. Hope, PLS No. 1762, hereby certify that this drawing correctly depicts a survey compiled under my supervision.
NOTE: This survey was based on legal descriptions and title work furnished by others and does not represent a title search.
According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Saline County unincorporated areas, panel # 05125-0240E, dated 06/05/2020, Most of the property described hereon does lie within the 100 year flood hazard boundary.

PROPERTY SPECIFICATIONS:	
OWNER: GIRON BUILDERS INC. 3420 HILDALE ROAD ALEXANDER, AR 72002	MIN. LOT SIZE: 8,400 S.F. NUMBER OF LOTS: 11 SOURCE OF WATER: SALEM WATER USERS SOURCE OF SEWER: CITY OF BRYANT SOURCE OF ELECTRIC: FIRST ELECTRIC COOP SOURCE OF GAS: CENTERPOINT ENERGY
DEVELOPER: GIRON BUILDERS INC. 3420 HILDALE ROAD ALEXANDER, AR 72002	BUILDING SETBACKS: FRONT - 25' OR AS SHOWN REAR - 25' OR AS SHOWN SIDE - 8' OR AS SHOWN
ENGINEERS: HOPE CONSULTING INC. 129 N. MAIN STREET BENTON, AR 72015	EASEMENTS: UTILITY & DRAINAGE (D.E. & U.E.) FRONT - 10' OR AS SHOWN REAR - 10' OR AS SHOWN SIDE - 5' OR AS SHOWN
NAME OF SUBDIVISION: JACOB'S CORNER	LOT CORNERS: SET 1/2" REBAR WITH CAP
ZONING CLASSIFICATION: PROPOSED R-1-S	
SOURCE OF TITLE: SALINE COUNTY DOCUMENT BOOK: 2020/PAGE: 006574	

HOPE CONSULTING ENGINEERS - SURVEYORS
129 North Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: GIRON BUILDERS INC.						
FINAL PLAT JACOB'S CORNER A SUBDIVISION IN SALINE COUNTY, ARKANSAS						
DATE: 03/08/2023	C.A.D. BY: JPP	DRAWING NUMBER: 20-0722				
REVISED:	CHECKED BY:	SCALE: 1"= 40'				
500	01S	14W	0	03	320	62 1762

K:\LAND PROJECTS\2020\SUBDIVISIONS\2020-0722 GIRON SUBDIVISION\DWG\20-0722 JACOB'S CORNER FINAL PLAT.DWG