

ENVIRONMENTAL ASSESSMENT

APPENDIX A

Agency and Tribal Coordination

Agencies Consulted

- **Arkansas Department of Health (ADH)**
 - Response received March 9, 2018 and December 20, 2018.
- **Arkansas Department of Parks, Heritage, and Tourism (ADPHT)**
 - Responses received October 4, 2018 and March 30 and August 21, 2020.
- **Arkansas Historic Preservation Program (AHPP)**
 - Response received April 18, 2018 and January 10, 2021 (provided in Appendix F)
- **Arkansas Natural Heritage Commission (ANHC)**
 - Response received on February 11, 2019 (provided in Appendix C).
- **U.S. Fish and Wildlife Service (USFWS)**
 - IPaC Official Species List received and Consistency Letter received July 16, 2020 (both provided in Appendix C).
- **Federal Aviation Administration (FAA)**
 - Conditional approval of the MPU and ALP received November 6, 2019.
- **Federal Emergency Management Agency (FEMA)**
 - CLOMR submitted November 29, 2018.
 - Response received November 1, 2019 and January 31, 2019.
- **U.S. Army Corps of Engineers (USACE)**
 - Wetland Delineation and PJD request submitted November 9, 2018.
 - Preliminary Jurisdictional Determination (PJD) issued March 25, 2019 (provided in Appendix H).
- **Arkansas Department of Energy and Environment's Division of Environmental Quality (DEQ)**
 - Response received October 12, 2020.
- **Arkansas Natural Resources Commission (ANRC)**
 - Agency coordination letter sent February 23, 2018; No response received to date.
- **Arkansas Game and Fish Commission (AGFC)**
 - Agency coordination letter sent February 23, 2018; No response received to date.
- **Natural Resources Conservation Service (NRCS)**
 - Agency coordination letter sent February 23, 2018; No response received to date.



Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000

Governor Asa Hutchinson

Nathaniel Smith, MD, MPH, Director and State Health Officer

Engineering Section, Slot 37
www.healthy.arkansas.gov

Ph 501-661-2623

Fax 501-661-2032

After Hours Emergency 800-554-5738

March 9, 2018

Cassie Schmidt
Environmental Scientist
Garver, LLC
2049 East Joyce Blvd., Ste. 400
Fayetteville, Arkansas 72703

RE: Bryant Parkway, Shobe Rd. to Hwy 183
Bryant, Saline County, Arkansas

Dear Ms. Schmidt:

The report for the above captioned project, dated February 23, 2018, has been reviewed and we concur, with the following comments:

1. Plans and specifications for any water and sewer utility relocations, etc. shall be submitted to and approved by the Engineering Section prior to beginning construction.

The report is being retained for our records.

Sincerely,

Lance A. Jones, P.E.
Chief Engineer
Engineering Section

LAJ: ACH: SGB: sgb

Schmidt, Cassie P.

From: Tyler Couch <Tyler.Couch@arkansas.gov>
Sent: Thursday, December 20, 2018 2:13 PM
To: Schmidt, Cassie P.
Subject: RE: Data Request for surface water intake and wellhead protection areas
Attachments: BryantParkway_Sources_Inactive.cpg; BryantParkway_Sources_Inactive.dbf; BryantParkway_Sources_Inactive.prj; BryantParkway_Sources_Inactive.sbn; BryantParkway_Sources_Inactive.sbx; BryantParkway_Sources_Inactive.shp; BryantParkway_Sources_Inactive.shp.xml; BryantParkway_Sources_Inactive.shx

Categories: Filed by Newforma

Hey Cassie,

I completed your data request this afternoon. It looks like there are zero active drinking water sources within 5 miles of the project area. There are, however, 3 inactive drinking water sources and 3 inactive WHPAs within the 5 mile radius. Also, there are a total of 7 WHPAs or SWAAs that intersect with the 5 mile radius.

Benton Parkway Project Proximity Analysis (5 Miles)			
<i>Active Sources</i>	<i>Active WHPA/SWAA</i>	<i>Inactive Sources</i>	<i>Inactive WHPA/SWAA</i>
x	Arkansas Health Center	K Mobile Home Park	K Mobile Home Park
x	Benton Waterworks	Saline Co WW SS PFB (2 wells)	Saline Co WW SS PFB (2 WHP)
x	Sardis Water Association (5 WHPAs)		

All of these sources that are listed above are represented in the .shp files that I have attached in this email. A following email will be sent containing the WHPA/SWAA for these sources.

If you have any questions, please let me know!

Thanks,

Tyler Couch

*Environmental Health Specialist
 Source Water Protection
 Engineering Section, AR Dept. of Health
 4815 W Markham ST
 Little Rock AR 72205
 501-280-4428
 Tyler.Couch@arkansas.gov*

From: Schmidt, Cassie P. [mailto:CPSchmidt@GarverUSA.com]
Sent: Wednesday, December 19, 2018 3:07 PM
To: Tyler Couch <Tyler.Couch@arkansas.gov>
Subject: Data Request for surface water intake and wellhead protection areas

Hi Tyler,

We are currently working on an environmental document for ARDOT's proposed Bryant Parkway project located in the City of Bryant, Saline County, Arkansas. I have attached the shapefiles showing the entire project's study area. If you could please provide us with a GIS shapefile or layer showing any surface water intake and wellhead protection areas (and any other environmental information/constraints you have record of) within a 5 mile radius of our projects' boundary line, I'd appreciate it very much. I have also attached the ADH data agreement that I used last time I submitted a request with you in case you no longer have it on file. If you need me to sign a new one with today's date, just let me know. Please let me know if you have any questions or need any additional information.

Thank you for your time and assistance, and Merry (almost) Christmas.

Sincerely,



Cassie Schmidt
Environmental Scientist/Environmental Specialist
Transportation Team
Office: 479-287-4673



October 4, 2018

**DEPARTMENT OF
PARKS & TOURISM**

1 Capitol Mall
Little Rock, AR 72201
501-682-7777

Central Administration
Division
501-682-2039

Great River Road Division
870-295-2005
Arkansas.com

Human Resources Section
501-682-7742 (TDD)

Keep Arkansas
Beautiful Division
501-682-3507 (TDD)
KeepArkansasBeautiful.com

State Parks Division
501-682-1191 (TDD)
ArkansasStateParks.com

Tourism Division
501-682-7777 (TDD)
Arkansas.com

**Asa Hutchinson
GOVERNOR**

**Kane Webb
EXECUTIVE DIRECTOR**

DIVISION DIRECTORS

Cynthia Dunlap
ADMINISTRATION

Grady Spann
STATE PARKS

Jim Dailey
TOURISM

Kim Williams
GREAT RIVER ROAD

Mark Camp
KEEP ARKANSAS
BEAUTIFUL

The Honorable Jill Dabbs
Mayor of Bryant
210 S.W. 3rd
Bryant, Arkansas 72022

Mayor Dabbs:

This letter is to inform you that the proposal submitted to this office by the City of Bryant in the matter of Alcoa 40 Park has been accepted. Per this proposal, the City of Bryant will replace ~2.42 adversely-impacted acres of Alcoa 40 Park with ~5.94 acres of undeveloped land for the purposes of public outdoor recreation (see map, enclosed).

Under this agreement, the new acreage will remain encumbered in perpetuity, and will be used only for purposes of public outdoor recreation. Please consult with this office before undertaking any project within the encumbered boundary; also, please note that the remainder of the existing Alcoa 40 Park remains encumbered, and may be used only for public outdoor recreation. Any adverse impacts to the existing park or the newly-encumbered area will result in the requirement of additional replacement property.

Thank you for your attention to this matter. If I can be of further assistance, please do not hesitate to call me at (501) 682-1301.

Sincerely,

John Boneke, Director
Outdoor Recreation Grants Program

Enclosure

**AN EQUAL
OPPORTUNITY/
AFFIRMATIVE ACTION/
AMERICANS WITH
DISABILITIES ACT
EMPLOYER**



Alcoa 40 Park Project Boundary Conversion Map

Legend Converted Property - 2.42 Acres Replacement Property - 5.94 Acres Existing Project Boundary	Project Numbers: A-10305 A-10088 A-10070	Sponsor: City of Bryant	Land Control: Deed	Outdoor Recreation Grants Program, Arkansas Department of Parks and Tourism One Capitol Mall, Little Rock, AR 72201 Phone: 501-682-1301 Fax: 501-682-0081 www.OutdoorGrants.com

John Beneke Outdoor Recreation Grants Program Director	 Signature	10/16/2018 Date
The Honorable Jill Dabbs, Mayor Of Bryant	 Signature	10/17/2018 Date

Schmidt, Cassie P.

Subject: FW: Swap is swapped.

From: Matt McNair <matt.mcnair@arkansas.gov>
Sent: Monday, March 30, 2020 5:10 PM
To: Corbyn, Richard C. <RCCorbyn@GarverUSA.com>
Subject: Re: Swap is swapped.

Mr. Corbyn:

As I understand the provided documents and information, the Arkansas Department of Parks, Heritage, and Tourism agrees with the *de minimus* finding regarding potential Section 4(f) [U.S. Dept. of Transportation] and Section 6(f)3 [National Park Service] concerns during the construction of the Bryant Parkway (AR-HWY 183 to Shobe Road), Bryant (Saline County), Arkansas. The project appears to minimize disturbance in both time and scope, and to assure continued access by the public to affected sites during and after construction. There appears to be no permanent disturbance to, or compromise of, this public recreation resource.

Thank you for the opportunity to assist in this project. If you have any more questions or concerns, please contact me at any time.

Respectfully,

Matt McNair
Environmental Review Coordinator
Arkansas Department of Parks, Heritage, and Tourism
1 Capitol Mall, Little Rock, AR 72201
501-682-1227

From: Corbyn, Richard C.
Sent: Monday, March 23, 2020 3:15 PM
To: Matt McNair <matt.mcnair@arkansas.gov>
Cc: Ted Taylor <ttaylor@cityofbryant.com>; mgrimmnett@cityofbryant.com; Chris Treat <ctreat@cityofbryant.com>; Mueller, Todd, E. <TEMueller@GarverUSA.com>; Schmidt, Cassie P. <CPSchmidt@GarverUSA.com>
Subject: RE: Swap is swapped.

Mr. McNair,

Hope all is well. We're finalizing the Environmental Assessment NEPA document for the Bryant Parkway: Hwy. 183 to Shobe Rd. project and we need to provide documentation that ADPT is agreeable to the minor temporary grading that will occur along the east side of Alcoa 40 Park and within the newly encumbered triangle of parkland SE of Alcoa Park. For reference, page 6 of the attached Section 4(f) evaluation document includes an exhibit showing the limits of temporary disturbance inside Alcoa 40 Park and the newly encumbered triangle of parkland. At your convenience, can you please review the below information and confirm that this temporary grading is acceptable to ADPT.

Based on our correspondence in Summer of 2018, the limits of the Land Swap only included the area impacted by the roadway, which only included the permanent roadway features such as curbs and pavement. Due to the existing

topography, minor grading is required behind the back of curb in order to tie-in with the existing ground. Approximately 0.12 acres of this temporary grading extends into Alcoa 40 Park. This area will be graded to a slope of 3:1 or flatter, will be sodded, and will remain available for use as parkland upon completion.

Additionally, 0.18 acres of the newly encumbered triangle of parkland (5.94 acres) located southeast of Alcoa 40 Park will require some minor grading to improve the 100 year floodplain for Crooked Creek. This area will be graded to lower the existing ground 1' – 5', will be sodded, and will remain available for use as parkland upon completion. No permanent structures or features will be installed within the encumbered parkland.

At your convenience, can you please review this information and confirm that this temporary grading is acceptable to ADPT.

Feel free to call if you have any questions.

Thanks,
Richard Corbyn, PE
Garver
501-376-3633

Schmidt, Cassie P.

From: Matt McNair <matt.mcnair@arkansas.gov>
Sent: Friday, August 21, 2020 11:57 AM
To: Schmidt, Cassie P.
Cc: Mountain, Ryan C.; McAbee, William C.; Corbyn, Richard C.
Subject: RE: Alcoa 40 Park impacts for the Bryant Parkway Extension (Bryant, AR)

Categories: Filed by Newforma

Yes, we are aware of both the permanent and temporary disturbances to Alcoa 40 Park. It is our understanding that the 2.42 acres of Alcoa 40 Park converted through the land-swap process encompasses both the permanent and temporary disturbances. We are also aware that a small portion of the land provided in exchange for the disturbed acreage in Alcoa 40 Park might itself be temporarily disturbed by road construction.

Provided that the disturbance is temporary and that no 6(f)3-encumbered land is permanently compromised by the resulting structure, the Arkansas Department of Parks, Heritage, and Tourism has no issue with the Bryant Parkway project going forward at this time. It is my understanding of the maps provided, as well as the map and letter on file from the previous land swap, that the conditions agreed upon by the City of Bryant and the ADP(H)T are being, and will be, met.

So long as the disturbances of encumbered land are temporary and this office is kept apprised of progress (and informed upon completion of the project), there should be no conflict between the project and the rules and regulations governing the encumbered land in question.

Hope this helps. If you need this statement, or something akin, on letterhead and signed I will be happy to gin up something suitably tangible. Just let me know!

Cheers,

MATT McNAIR
 Project Officer and State Trails Coordinator

Division of Arkansas State Parks
 Outdoor Recreation Grants Program
 One Capitol Mall
 Little Rock, AR 72201
matt.mcnair@arkansas.gov
 p: 501.682.1227 | f: 501.682.0081

OutdoorGrants.com



From: Schmidt, Cassie P. <CPSchmidt@GarverUSA.com>
Sent: Friday, August 21, 2020 11:44 AM
To: Matt McNair <matt.mcnair@arkansas.gov>



U.S. Department
of Transportation
**Federal Aviation
Administration**

Airports Division
Southwest Region
Arkansas/Oklahoma

10101 Hillwood Parkway
Fort Worth, Texas 76117

November 6, 2019

The Honorable Jeff Arey
Saline County Judge
200 N. Main Street
Benton, AR 72015

Dear Judge Arey:

The Saline County Regional Airport Layout Plan (ALP), prepared by Morrison Shipley Engineers, and bearing the signature of the Chairman of the Saline County Airport Commission, is conditionally approved and the Airport Master Plan is accepted.

My signature on the enclosed ALP does not necessarily reflect the FAA's official views or policy, authorize construction of the development, nor constitute FAA's commitment to participate in the cost of any proposed development. Airport Improvement Program (AIP) funding requires proposed development to be eligible and justified at the time of the funding request.

Prior to undertaking the construction of any proposed structure or development depicted on the plan, such development requires a 45-day advance notification to FAA (for review in accordance with applicable Federal Aviation Regulations (i.e., CFR Parts 77, 157, 152, etc.). We highly encourage airport sponsors to notify the FAA as early as possible to ensure all statutory, regulatory, technical and operational issues can be addressed in a timely manner. Notwithstanding, all items of development shall comply with the requirements of the National Environmental Policies Act of 1969 (P.L. 91-190).

An aeronautical study (no. 2019-ASW-3400-NRA) was conducted on the updated ALP. It is a determination with respect to the safe and efficient use of navigable airspace by aircraft and with respect to the safety of persons and property on the ground. An aeronautical determination and subsequent approval of an ALP does not relieve the airport sponsor from submitting OE/AAA studies prior to development and/or construction. Specifically, prior to initiating any development that relocates the runway thresholds, or has the potential to impact a current or future flight procedure, timely coordination with FAA to complete and submit survey data will be needed.

The FAA has only limited means to prevent the construction of structures near an airport. The airport sponsor has the primary responsibility to protect the airport environs through such means as local zoning ordinances, property acquisition, avigation easements, letters of agreement or other means. The appropriate local agencies are encouraged to adopt compatible land use and height restrictive zoning based on the updated plan.

The principal "planning" changes reflected on this updated ALP (vs. the FAA approved ALP dated February 2007) include the following:

1. Proposed ultimate public parkway road alignment
2. Adjustments to internal airport perimeter roads
3. Extension of the main apron
4. Relocated direct access taxiway on main apron to Taxiway A
5. Additional general parking
6. Runway 02-20 extension
 - a. Phase I – Proposed Near Term: 409-foot extension
 - b. Phase II – Ultimate: Preserve conditions for additional 591-foot extension
7. Depictions of glideslope, localizer, and AWOS critical areas
8. Changed existing critical aircraft from Gulfstream III to Citation XL
9. Changed ultimate critical aircraft from DC-9 to Gulfstream III
10. Changed future RDC from C-III to C-II
11. Depicted conservation easement
12. Beyond planning horizon west-side build-out
 - a. T-hangars
 - b. Box hangars
 - c. Apron
 - d. General parking expansion
13. Beyond planning horizon east side build-out
 - a. Full-length taxiway with connectors
 - b. Main apron
 - c. Potential buildings/hangars

We are enclosing two copies of the approved ALP drawing set for your records. Please attach this letter to both ALP's and retain one ALP set at the airport. If you have any questions please contact Mike Branum, Community Planner, at 817-222-5669.

Sincerely,



Glenn A. Boles
Manager, Arkansas/Oklahoma
Airports District Office

Enclosure (2)

Cc w/ enclosure:

Jerry Chism, Director, Arkansas Department of Aeronautics
Dane Pruitt, Airport Manager, Saline County Regional Airport
Greg Shipley, Civil Engineer, Morrison Shipley Engineers



Federal Emergency Management Agency

Washington, D.C. 20472

November 1, 2019

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:

Case No.: 19-06-0660R

The Honorable Allen E. Scott
Mayor, City of Bryant
210 Southwest 3rd Street
Bryant, AR 72022

Community Name: City of Bryant, AR
Community No.: 050308

104

Dear Mayor Scott:

We are providing our comments with the enclosed Conditional Letter of Map Revision (CLOMR) on a proposed project within your community that, if constructed as proposed, could revise the effective Flood Insurance Study report and Flood Insurance Rate Map for your community.

If you have any questions regarding the floodplain management regulations for your community, the National Flood Insurance Program (NFIP) in general, or technical questions regarding this CLOMR, please contact the Director, Mitigation Division of the Federal Emergency Management Agency (FEMA) Regional Office in Denton, Texas, at (940) 898-5127, or the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick F. Sacbibit".

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

List of Enclosures:

Conditional Letter of Map Revision Comment Document

cc: The Honorable Paul Mitchell
Mayor, Town of Alexander

Mr. Greg Huggs, CFM
Code Enforcement Director
City of Bryant

Ms. Kathryn L. McCoy, P.E.
Project Engineer
Garver, LLC



NATIONAL FLOOD INSURANCE PROGRAM

FEMA PRODUCTION AND TECHNICAL SERVICES CONTRACTOR

January 31, 2019

Ms. Kathryn L. McCoy, P.E.
 Garver, LLC
 4701 Northshore Drive
 North Little Rock, AR 72118

IN REPLY REFER TO:
 Case No.: 19-06-0660R
 Community: City of Bryant, Arkansas
 Community No.: 050308

316-AD

Dear Ms. McCoy:

This responds to your submittal dated December 5, 2018, that the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issue a conditional revision to the Flood Insurance Rate Map (FIRM) for Saline County, Arkansas, and Incorporated Areas. Pertinent information about the request is listed below.

Identifier:	Bryant Parkway Proposed Bridge Over Crooked Creek
Flooding Sources:	Crooked Creek
FIRM Panels Affected:	05125C0380D

The data required to complete our review, which must be submitted within 90 days of the date of this letter, are listed on the attached summary.

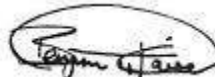
If we do not receive the required data within 90 days, we will suspend our processing of your request. Any data submitted after 90 days will be treated as an original submittal and will be subject to all submittal/payment procedures, including the flat review and processing fee for requests of this type established by the current fee schedule. The fee schedule is available for your information on the FEMA website at <https://www.fema.gov/flood-map-related-fees>.

FEMA receives a very large volume of requests and cannot maintain inactive requests for an indefinite period of time. Therefore, we are unable to grant extensions for the submission of required data for revision requests.

If a requester is informed by letter that additional data are required to complete our review of a request, the data must be submitted within 90 days of the date of the letter. Any fees already paid will be forfeited if the requested data are not received within 90 days.

If you have general questions about your request, FEMA policy, or the National Flood Insurance Program (NFIP), please contact the FEMA Map Information eXchange (FMIX), toll free, at 1-877-FEMA MAP (1-877-336-2627). If you have specific questions concerning your request, please contact your case reviewer, Mr. Daniel Koehler, E.I.T, by e-mail at daniel.koehler@aecom.com or by telephone at (972) 729-5840, or the Revisions Coordinator for your state, Mr. Bosulu Lokulutu, E.I.T, CFM, by e-mail at bosulu.lokulutu@aecom.com or by telephone at (972) 735-7093.

Sincerely,

A handwritten signature in black ink, appearing to read "Benjamin Kaiser", enclosed within a hand-drawn oval.

Benjamin Kaiser, P.E., CFM
Revisions Manager
Compass PTS JV

Attachment:

Summary of Additional Data
Draft Notification Letter

cc: Mr. Greg Huggs, CFM
Code Enforcement Director
City of Bryant



NATIONAL FLOOD INSURANCE PROGRAM

FEMA PRODUCTION AND TECHNICAL SERVICES CONTRACTOR

Summary of Additional Data Required to Support a Conditional Letter of Map Revision (CLOMR)

Case No.: 19-06-0660R

Requester: Ms. Kathryn L. McCoy, P.E.

Community: City of Bryant, Arkansas

Community No.: 050308

The issues listed below must be addressed before we can continue the review of your request.

1. Our review revealed that the Town of Alexander is affected by this conditional revision. Please submit a copy of MT-2 Application/Certification Form 1, entitled "Overview and Concurrence Form" where the second signature block has been signed by a Town of Alexander official (preferably the Floodplain Administer). Alternatively, please provide documentation that the corporate limits shown on the Flood Insurance Rate Map (FIRM) map are not accurate and the Town of Alexander is not actually affected by this revision. Acceptable documentation includes a current corporate limits map provided by the community along with an annexation agreement, if applicable.
2. Our review revealed a surcharge greater than 1.0 foot between the natural (unencroached) and encroached profiles of the existing conditions HEC-RAS hydraulic model at Cross Sections 5.456, 5.409, 5.377, 5.347, 5.304, 5.283, 5.261, 5.238, and 5.209. Please revise the floodway analysis to produce maximum surcharges of no more than 1.00 foot throughout the revised reach of Crooked Creek.
3. Overbank Manning's "n" values are usually larger than 0.030. Please revise the existing and proposed conditions hydraulic models at Cross Sections 5.347, 5.377, 5.409, 5.456, 5.507, 5.55, 5.56 (Culver-UP), and 5.578, or provide an explanation why the overbank "n" values are less than 0.030.
4. Please ensure that the design plans are certified (sealed, signed, and dated) by a Professional Engineer who is registered in Arkansas.
5. Please ensure that the work map is certified (sealed, signed, and dated) by a Professional Engineer who is registered in Arkansas.
6. Subparagraph 65.6(a)(2) of the National Flood Insurance Program (NFIP) regulations states that to avoid discontinuities between revised and unrevised flood data, hydraulic analyses must have a logical transition between revised elevations of the 1-percent-annual-chance (base) flood and those developed previously for areas not affected by the revision. Please ensure that the revised base flood elevation (BFE) ties-in to the effective BFE within 0.5 foot, or within 0.0 feet, if practical, upstream of the revised reach. Please extend the hydraulic analysis upstream until BFE tie-in is achieved. Please note that the work map will need to be extended upstream as well along with the contours, flood hazard delineations, and cross section labels and locations.
7. Our review indicates that the streamline has shifted from what is shown on the effective FIRM. Please show both the effective and revised streamlines and how the revised streamline ties-in to the effective streamline at the upstream and downstream ends of the revised reach.
8. The top widths of the base floodplain and floodway computed in the proposed conditions hydraulic

LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426 PH: 1-877-FEMA MAP

model match do not match the floodplain and floodway top widths shown on the topographic work map at the cross sections listed below. Please revise the work map or hydraulic model as appropriate to resolve these discrepancies. The geometry of the cross sections in the proposed conditions hydraulic model should reflect the topography shown on the work map.

Crooked Creek	Base Floodplain Top Width (feet)	
	Model	Map (approximate)
5.238	638	741

9. Our review indicates that the proposed project encroaches upon a regulatory floodway and will cause increases in BFEs. Please provide evidence that the proposed project satisfies the requirements of Section 65.12 of the NFIP regulations, including the items stated below. A copy of Part 65 of the regulations can be accessed at https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title44/44cfr65_main_02.tpl.
 - a. Evaluation of alternatives which would not result in any increase in BFEs and an explanation why these alternatives are not feasible.
 - b. Documentation that individual legal notices have been sent to all property owners affected by the increases in BFEs due to the proposed project. Documentation of legal notice may take the form of a signed copy of the letter sent and either a mailing list or certified mailing receipts. The attached Combined CLOMR Notice template may be used to prepare the legal notice. **Prior to distribution, please submit a draft copy of the notice for verification of content.**
 - c. Certification by a registered Professional Engineer that no structures are located in areas which would be impacted by the increased BFEs due to the project.

10. Please submit a copy of the newspaper notice distributed by the City of Tulsa and Town of Alexander, Oklahoma, stating their intent to revise the effective flood hazard information (i.e., revise or establish base flood elevations, the base floodplain, and/or regulatory floodway) along Eagle Creek. Alternatively, please submit documentation that individual legal notices were sent to all the property owners affected by any changes in the flood hazard information. Documentation of legal notice may take the form of a signed copy of the letter sent and either a mailing list or certified mailing receipts. Individual notices that are not sent on community letterhead must also include certification from the community that all affected property owners have been notified of the floodway revision. The newspaper notice or the individual legal notices must include the extent of revision and contact information for any interested parties and must also mention the community's intent to revise the regulatory floodway. **Please use the attached revised draft and submit a final draft copy of the notification for verification of content, prior to publication or distribution.**

Please send the required data and fee to:

LOMC Clearinghouse
 Attention: LOMR Manager
 3601 Eisenhower Avenue, Suite 500
 Alexandria, VA 22304-6426

For identification purposes, please include the case number referenced above on all correspondence.

316-AD



ARKANSAS

ENERGY & ENVIRONMENT

October 12, 2020

Cassie Schmidt
Environmental Scientist
Garver
2049 E. Joyce Blvd., Suite 400
Fayetteville, AR 72703
Via email: CPSchmidt@GarverUSA.com

RE: National Environmental Policy Act (NEPA) Comments Requested Regarding ARDOT Job 061705 – Bryant Parkway Extension (S)

Dear Ms. Schmidt:

The Division of Environmental Quality (DEQ) is pleased to comment on the proposed extension of Bryant Parkway from Shobe Road to Highway 183 in Bryant. Funding is provided by the Federal Highway Administration.

From an environmental compliance standpoint, based on the information provided there are areas of concern. Prior to the start of construction, a Construction Stormwater General Permit ARR150000 is required when the project disturbs one acre or more. Information on these regulations can be found on DEQ's website, <http://www.adeq.state.ar.us/water/permits/npdes/>, or by contacting DEQ's Office of Water Quality (OWQ), Stormwater Section, at 501.682.0620.

If the project causes water utilities to be relocated, the project will require obtaining coverage under the Non-Stormwater Hydrostatic Testing General Permit ARG670000. All applicable State and Federal laws must be met before, during, and after completion of the project.

Further, the Stormwater Construction General permit does not authorize any activity to be conducted in Waters of the State or Waters of the United States. Work in the Waters of the State requires a short-term activity authorization (STAA) from DEQ prior to working in the wetted area of a stream or water body, and may require a U.S. Corps of Engineers permit. A STAA is necessary for any in-stream activity that may cause an exceedance of applicable 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. For more information and forms see DEQ's website, www.adeq.state.ar.us/water/planning/instream/, or call 501.682.0040.

The Office of Land Resources agrees with the areas identified as human health or environmental concerns. However, the Reynolds Metals Research and Development landfill (R&D) is not identified on Figure 2 and should be considered of potential environmental concern. This landfill is located adjacent to and west of Site 13. The Office of Land Resources requests to review the Environmental Assessment, when available.

This letter is issued in reliance upon the statements and representations made in the submittal. DEQ has no responsibility for adequacy or proper functioning of the proposed project. Please contact the respective Offices with any questions.

In the future, please address National Environmental Policy Act correspondence to DEQ's Enterprise Services section. You may also email requests for comment to EnterpriseServices@adeq.state.ar.us.

Sincerely,

A handwritten signature in black ink that reads "Julie Nicol". The signature is written in a cursive, flowing style.

Julie Nicol
Director of Enterprise Services, Division of Environmental Quality
5301 Northshore Drive, North Little Rock, AR 72118

JN: mlg



2049 E. Joyce Blvd.
Suite 400
Fayetteville, AR 72703
TEL 479.527.9100
FAX 479.527.9101
www.GarverUSA.com

February 23, 2018

Joe Moore
Environmental Program Coordinator
Arkansas Natural Resources Commission
101 East Capitol Avenue, Suite 350
Little Rock, Arkansas 72201
501 231-9653
joe.moore@arkansas.gov

Re: Bryant Parkway, Shobe Rd. to Hwy 183
Saline County, Arkansas

Mr. Moore:

Garver, LLC (Garver) has been retained by the City of Bryant to conduct environmental studies in connection with the Bryant Parkway, Shobe Rd. to S. Reynolds Rd. Project, located in the City of Bryant, Saline County, Arkansas (see attached Site Location Maps). As part of the project, Garver will be investigating the environmental implications related to the proposed improvements of this road extension project.

The City of Bryant is planning to construct a two lane roadway extension of Bryant Parkway, beginning from Shobe Road and connecting to Highway 183 (S. Reynolds Rd.) at a point south of the Saline County Regional Airport.

We are currently assessing potential environmental impacts and views from federal, state, and local agencies are solicited. Specialized views from various groups can assist with early identification of possible adverse environmental, historical, social, and economic effects or concerns. Your assistance in this regard will be appreciated. Views from local, state, and federal agencies, and the public as a whole, will be solicited and reviewed separately.

In addition, we request your written response to this letter describing any concerns related to the proposed action's potential effects. Providing Garver with your responses or comments in advance will allow the project team an opportunity to compile these concerns prior to project implementation. Formal, written replies should be addressed to:

Mr. Moore
February 23, 2018
Page 2 of 2

Cassie Schmidt
Environmental Scientist
Garver, LLC
2049 East Joyce Blvd., Ste. 400
Fayetteville, Arkansas 72703
Office: 479-287-4673
Fax: 479-527-9101

Thank you for your cooperation.

Sincerely,

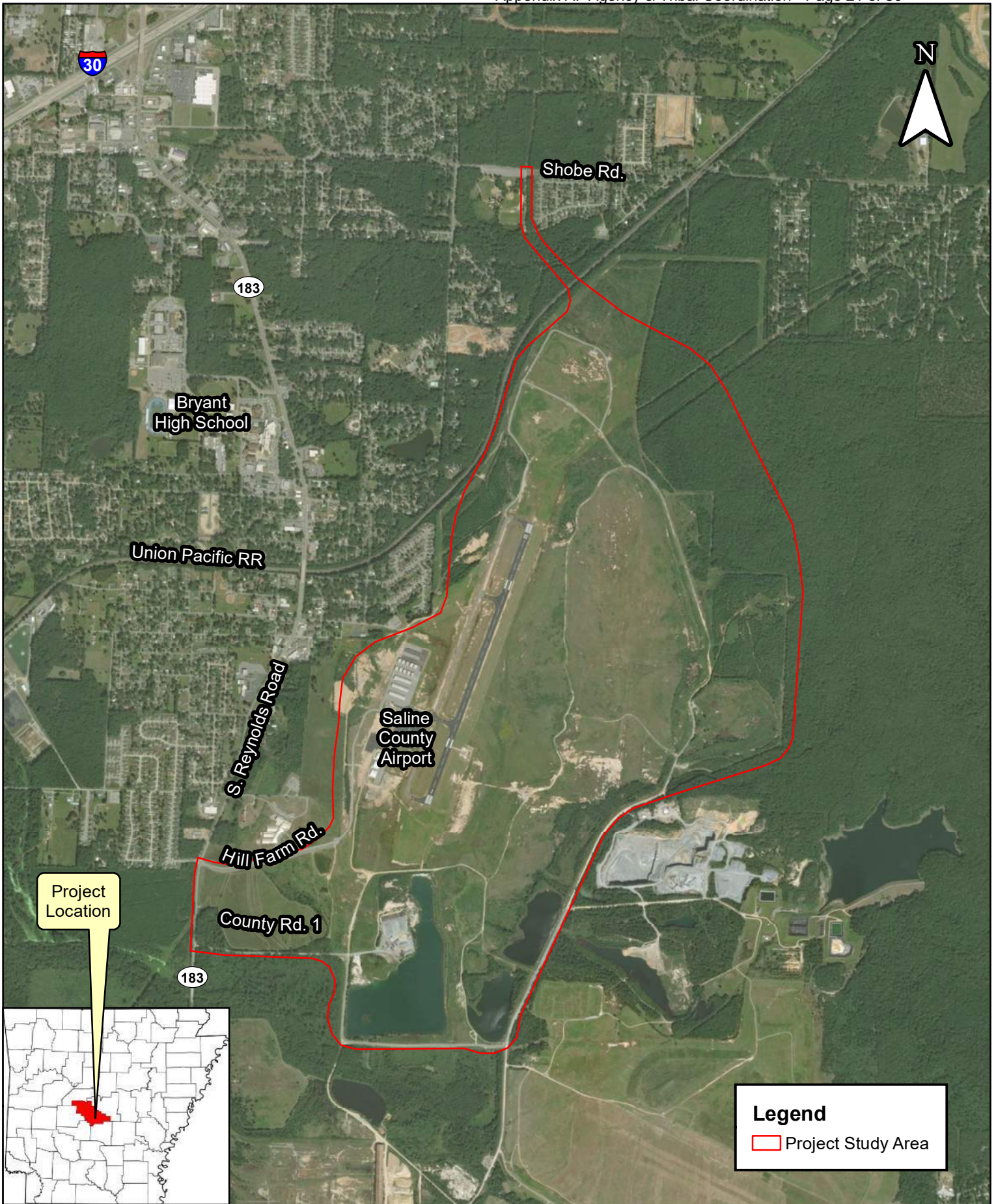
GARVER



Cassie Schmidt
Environmental Scientist

cc: Charles Cullen, PE – Garver
Ryan Mountain, PWS – Garver

Enclosures: Site Location Map
Topographic Map



Project Location



Legend
 Project Study Area



SITE LOCATION MAP
 Bryant Parkway, Project 2
 Saline County, Bryant, Arkansas

Beginning of Project Lat/Long
 34.613010, -92.476685
 End of Project Lat/Long
 34.577328, -92.495128

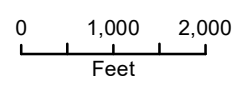
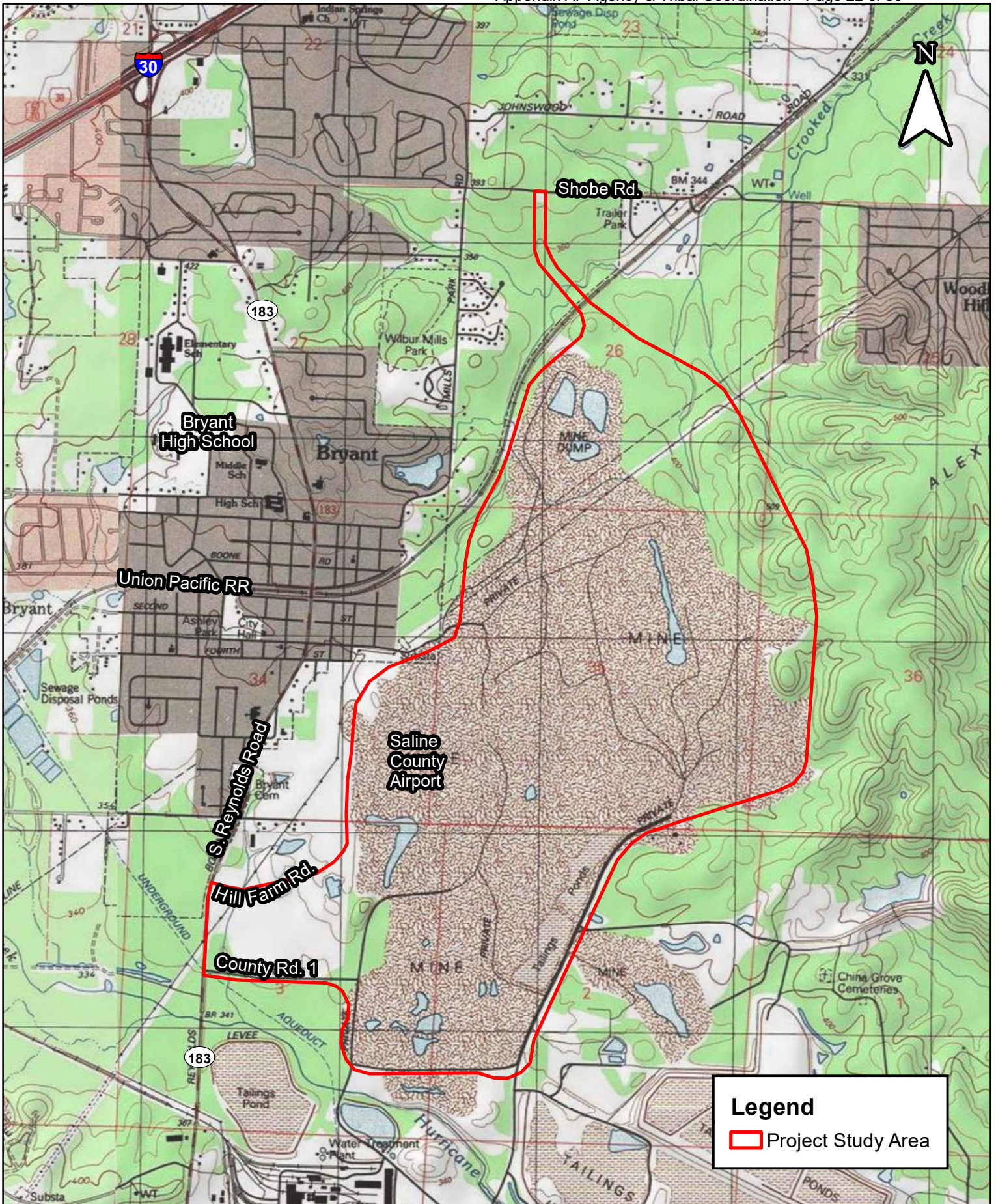


Figure 1



Legend
 Project Study Area



TOPOGRAPHIC MAP
 Bryant Parkway, Project 2
 Saline County, Bryant, Arkansas

Beginning of Project Lat/Long
 34.613010, -92.476685
 End of Project Lat/Long
 34.577328, -92.495128

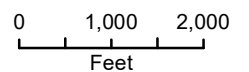


Figure 2



2049 E. Joyce Blvd.
Suite 400
Fayetteville, AR 72703
TEL 479.527.9100
FAX 479.527.9101
www.GarverUSA.com

February 23, 2018

Jennifer Sheehan
Arkansas Game and Fish Commission
2 Natural Resources Drive
Little Rock, Arkansas 72205
jennifer.sheehan@agfc.ar.gov
501-223-6356

Re: Bryant Parkway, Shobe Rd. to Hwy 183
Bryant, Saline County, Arkansas

Ms. Sheehan:

Garver, LLC (Garver) has been retained by the City of Bryant to conduct environmental studies in connection with the Bryant Parkway, Shobe Rd. to S. Reynolds Rd. Project, located in the City of Bryant, Saline County, Arkansas (see attached Site Location Maps). As part of the project, Garver will be investigating the environmental implications related to the proposed improvements of this road extension project.

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Ms. Sheehan
February 23, 2018
Page 2 of 2

Cassie Schmidt
Environmental Scientist
Garver, LLC
2049 East Joyce Blvd., Ste. 400
Fayetteville, Arkansas 72703
Office: 479-287-4673
Fax: 479-527-9101

Thank you for your cooperation.

Sincerely,

GARVER



Cassie Schmidt
Environmental Scientist

cc: Charles Cullen, PE – Garver
Ryan Mountain, PWS – Garver

Enclosures: Site Location Map
Topographic Map



2049 E. Joyce Blvd.
Suite 400
Fayetteville, AR 72703
TEL 479.527.9100
FAX 479.527.9101
www.GarverUSA.com

February 23, 2018

Derrek Nokes
District Conservationist
Natural Resources Conservation Service
Malvern Service Center
220 Olive Street, Suite 3
Malvern, Arkansas 72104-3728
501-337-7381
derrek.nokes@ar.usda.gov

Re: Bryant Parkway, Shobe Rd. to Hwy 183
Bryant, Saline County, Arkansas

Mr. Nokes:

Garver, LLC (Garver) has been retained by the City of Bryant to conduct environmental studies in connection with the Bryant Parkway, Shobe Rd. to S. Reynolds Rd. Project, located in the City of Bryant, Saline County, Arkansas (see attached Site Location Maps). As part of the project, Garver will be investigating the environmental implications related to the proposed improvements of this road extension project.

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Mr. Nokes
February 23, 2018
Page 2 of 2

Cassie Schmidt
Environmental Scientist
Garver, LLC
2049 East Joyce Blvd., Ste. 400
Fayetteville, Arkansas 72703
Office: 479-287-4673
Fax: 479-527-9101

Thank you for your cooperation.

Sincerely,

GARVER



Cassie Schmidt
Environmental Scientist

cc: Charles Cullen, PE – Garver
Ryan Mountain, PWS – Garver

Enclosures: Site Location Map
Topographic Map

Tribes Consulted

FHWA initiated tribal consultation with each of the below tribes on December 8, 2020.

- **Caddo Nation**
 - No response received to date.
- **Choctaw Nation of Oklahoma**
 - No response received to date.
- **Mississippi Band of Choctaw Indians**
 - No response received to date.
- **Osage Nation**
 - No response received to date.
- **Quapaw Nation**
 - Response received December 17, 2020.
- **Shawnee Tribe**
 - No response received to date.
- **Tunica-Biloxi Tribe of Louisiana, Inc**
 - No response received to date.
- **United Keetoowah Band of Cherokee Indians in Oklahoma**
 - Response received December 28, 2020.

QUAPAW NATION

P.O. Box 765
Quapaw, OK 74363-0765

(918) 542-1853
FAX (918) 542-4694

December 17, 2020

Arkansas State Highway and Transportation Department
P.O. Box 2261
Little Rock, Arkansas 72203-2261

Re: ArDot Job 061705 Bryant Pkwy. Extension (S) Saline County, Arkansas HAD-AR

To whom it may concern,

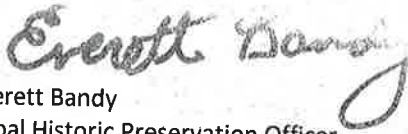
The Quapaw Nation Historic Preservation Office has received and reviewed the information you have provided for the proposed ArDot Job 061705 Bryant Pkwy. Extension (S) Saline County, Arkansas HAD-AR. Our office finds that this project is not likely to adversely affect the properties of cultural or sacred significance to the Quapaw Nation.

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d) (6) (A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Quapaw Nation has vital interests in protecting its historical and ancestral cultural resources. We do not anticipate that this project will adversely impact any cultural resources or human remains protected under the NHPA, NEPA, or the Native American Graves Protection and Repatriation Act. If however, artifacts or human remains are discovered during project construction, we ask that work cease immediately and that you contact the Quapaw Nation Historic Preservation Office.

Should you have any questions or need any additional information, please feel free to contact me at the number listed below. Thank you for consulting with the Quapaw Nation on this matter.

Sincerely,



Everett Bandy
Tribal Historic Preservation Officer
Quapaw Nation
P.O. Box 765
Quapaw, OK 74363
(w) 918-238-3100



**United Keetoowah Band
Of Cherokee Indians in Oklahoma
Office of Historic Preservation**

P.O. Box 746 • Tahlequah, OK 74465

4547 S Whitmore Lane • Tahlequah, OK 74464 Phone: (918) 871-
2800 • Fax: (918) 414-4038 ukbthpo@ukb-nsn.gov



December 28, 2020

RE: ArDOT Job 061705 Bryant Pkwy Extension Saline County, Arkansas

To whom it may concern,

Thank you for consulting with the United Keetoowah Band of Cherokee Indians in Oklahoma (UKB). This response is regarding the request from your office for a review of the project listed above located in Bryant, Saline County Arkansas. We have reviewed the information provided in your letter and we find after review, that we concur with your findings of “no adverse effects”.

We remain interested in further communication regarding this project due to the location. The UKB people have a documented historical presence in Jay County, Oklahoma. While there are no documented village sites within the project site or within a proximity outside the project site, there is always the potential of finding unknown sites in and surrounding the project location. There is the possibility that unrecorded cultural resources, including archaeological artifact or human remains, may be encountered during construction, demolition, or earthmoving activities of this project. Should this occur, we require that you contact our office immediately so we may offer appropriate comments under 36 CFR 800.13. As the project moves forward, we request the following conditions be followed:

Condition 1: Inadvertent Discoveries - If human remains, burials, funerary items, sacred objects, or objects of cultural patrimony are found during project implementation, the proponent or his/her authorized agent shall cease work immediately within 200 ft of the find. They shall take steps to protect the find from further damage or disruption. They shall contact the Certified Tribal Historic Preservation Officer (CTHPO), Whitney Warrior to report the find. The CTHPO shall contact the appropriate law enforcement authority if human remains are found. No further work shall be allowed on the project until the CTHPO has approved a plan for managing or preserving the remains or items.

Condition 2: Post Review Discoveries - If pre-contact artifacts (i.e., arrowheads, spear points, mortars, pestles, other ground stone tools, knives, scrapers, pottery, or flakes from



**United Keetoowah Band
Of Cherokee Indians in Oklahoma
Office of Historic Preservation**

P.O. Box 746 • Tahlequah, OK 74465

4547 S Whitmore Lane • Tahlequah, OK 74464 Phone: (918) 871-
2800 • Fax: (918) 414-4038 ukbthpo@ukb-nsn.gov



the manufacture of tools, fire pits, culturally modified trees, etc.) or historic period artifacts or features (i.e., fragments of old plates or ceramic vessels, weathered glass, dumps of old cans, cabins, root cellars, etc.) are found during project implementation, the proponent or his/her authorized agent shall cease work immediately within 200 ft of the find. They then shall contact the Certified Tribal Historic Preservation Officer, Whitney Warrior to report the find. No further work shall be allowed on the project until the CTHPO has approved a work plan for managing or preserving the artifacts or features.

Condition 3: Activities that have the potential to disturb cultural resources outside the areas specified in the accompanying document(s) are not approved and will not proceed until cultural resources review of potential adverse effects in the new area has been completed.

Please note that due to COVID-19, response times are longer than expected for correspondences. Thank you for your patience during this time. We are diligently working to complete all Section 106 consultations in as timely a manner as possible. If you have any questions or concerns, please feel free to contact our office. These comments are based on information available to us at the time of the project review. We reserve the right to revise our comments as information becomes available. If you have any questions or concerns, please contact Certified Tribal Historic Preservation Officer/NAGPRA Coordinator, Whitney Warrior at (918) 871-2838 or by email wwarrior@ukbnsn.gov.

Thank you for your consultation,

Whitney Warrior

Whitney Warrior

Director

Office of Historic Preservation

United Keetoowah Band of Cherokee

918-871-2838

wwarrior@ukb-nsn.gov

ENVIRONMENTAL ASSESSMENT

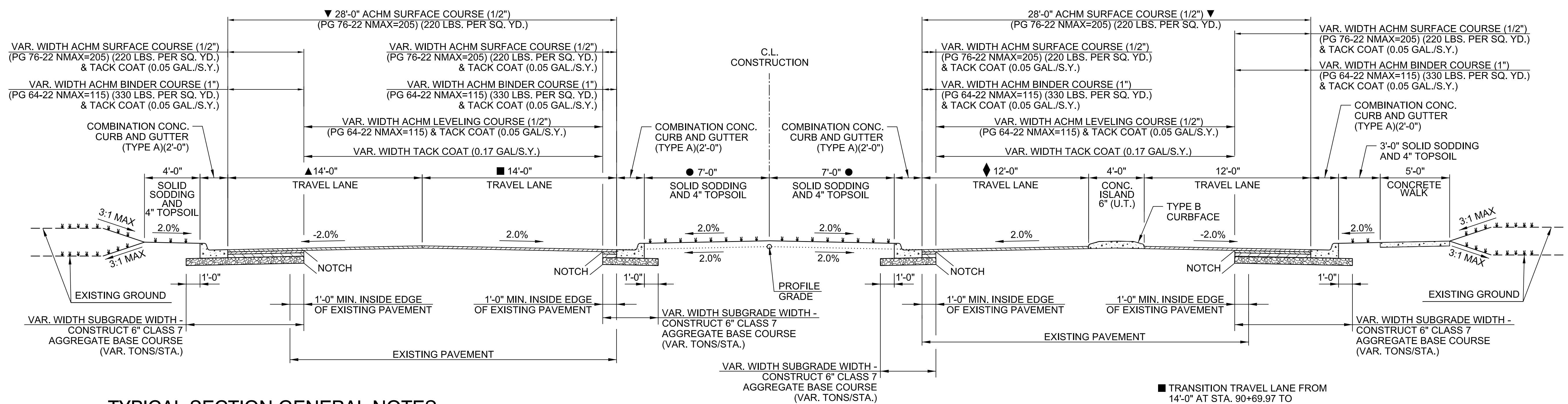
APPENDIX B

Proposed Roadway and Bridge Details



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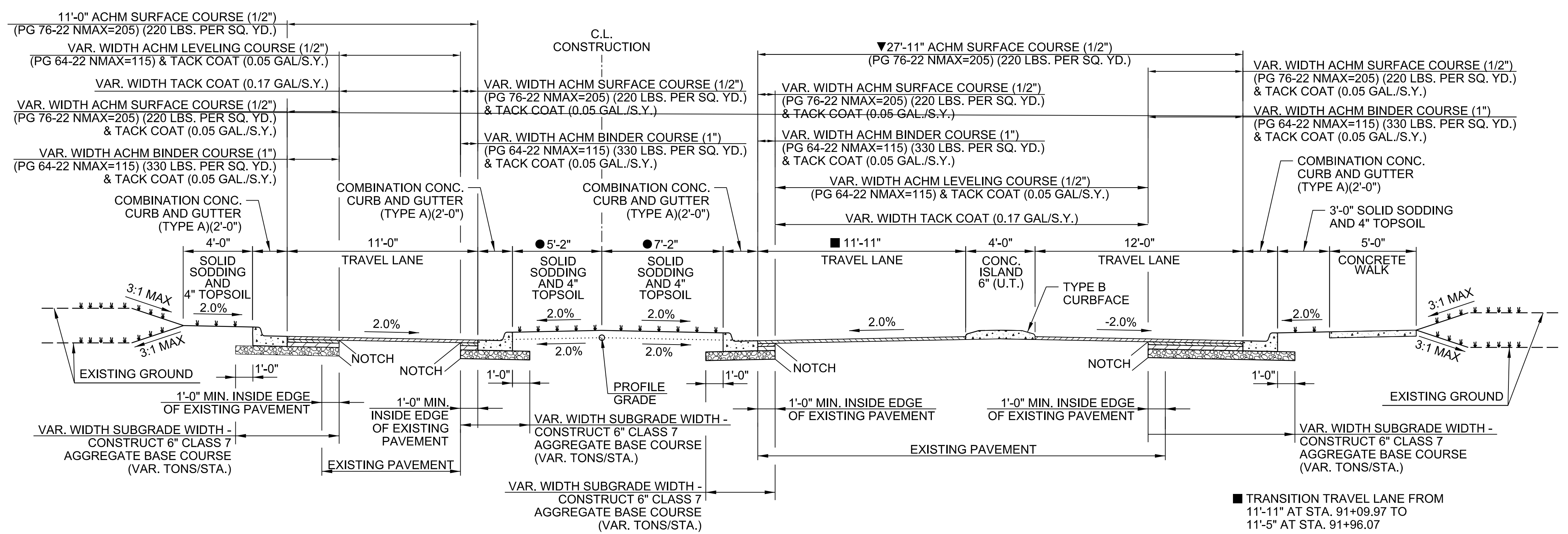
TYPICAL SECTION GENERAL NOTES

- REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
- THE THICKNESS OF AGG. BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.
- THE EXISTING PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE TO THE PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

TYPICAL SECTION ①

BRYANT PARKWAY
STA. 90+69.97 TO STA. 91+09.97

- TRANSITION TRAVEL LANE FROM 14'-0" AT STA. 90+69.97 TO 11'-0" AT STA. 91+09.97
- ▲ TRANSITION TRAVEL LANE FROM 14'-0" AT STA. 90+69.97 TO 0'-0" AT STA. 91+09.97
- TRANSITION GRASSED MEDIAN FROM 7'-0" LT. OF C.L. AND 7'-0" RT. OF C.L. AT STA. 90+69.97 TO 5'-2" LT. OF C.L. AND 7'-2" RT. OF C.L. AT STA. 91+09.97
- ◆ TRANSITION TRAVEL LANE FROM 12'-0" AT STA. 90+69.97 TO 11'-11" AT STA. 91+09.97
- ▼ TRANSITION WIDTH WITH LANE TRANSITIONS



TYPICAL SECTION ②

BRYANT PARKWAY
STA. 91+09.97 TO STA. 91+96.07

- TRANSITION TRAVEL LANE FROM 11'-11" AT STA. 91+09.97 TO 11'-5" AT STA. 91+96.07
- TRANSITION GRASSED MEDIAN FROM 5'-2" LT. OF C.L. AND 7'-2" RT. OF C.L. AT STA. 91+09.97 TO 3'-0" LT. OF C.L. AT STA. 91+51.97 AND 5'-7" RT. OF C.L. AT STA. 91+96.07
- ▼ TRANSITION WIDTH WITH LANE TRANSITIONS

BY	DESCRIPTION	DATE	REV.



CITY OF BRYANT
BRYANT, ARKANSAS

BRYANT PKWY. EXTENSION (S)

TYPICAL SECTIONS

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DATE: DEC. 2020
DESIGNED BY: RCC
DRAWN BY: MJM

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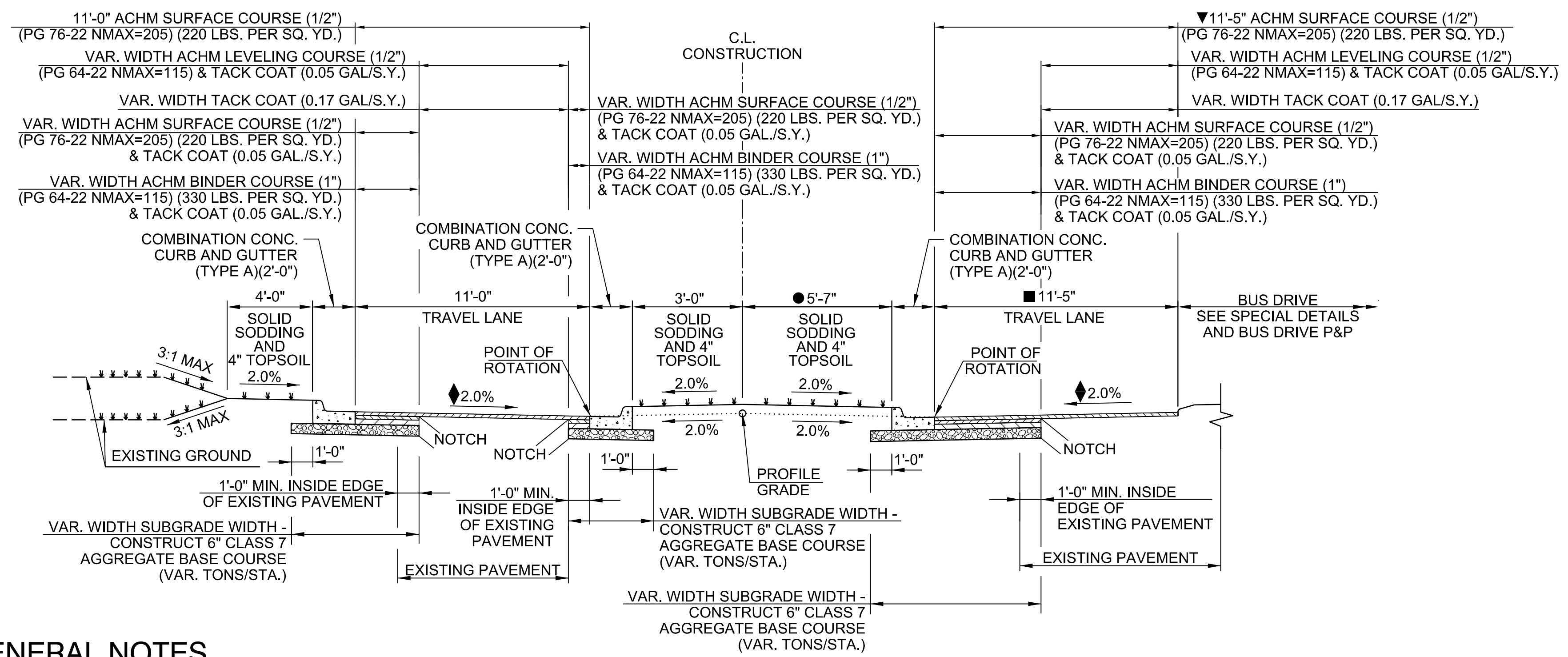
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90% PLANS
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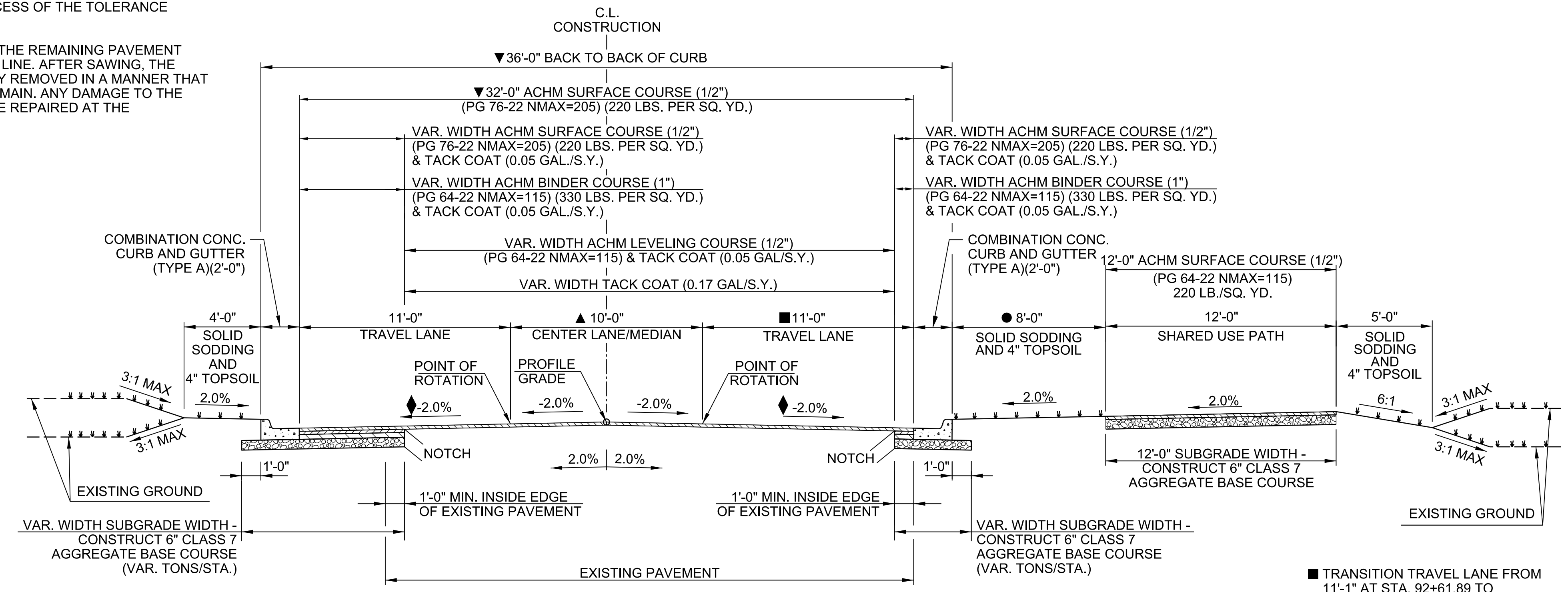
TYPICAL SECTION ③

BRYANT PARKWAY
STA. 91+96.07 TO STA. 92+61.89

- TRANSITION TRAVEL LANE FROM 11'-5" AT STA. 91+96.07 TO 11'-1" AT STA. 92+61.89
- TRANSITION GRASSED MEDIAN FROM 5'-7" RT. OF C.L. AT STA. 91+96.07 TO 3'-4" RT. OF C.L. AT STA. 92+61.89
- ◆ TRANSITION CROSS SLOPE FROM 2.00% AT STA. 92+38.00 TO 0.77% AT STA. 92+61.89
- ▼ TRANSITION WIDTH WITH LANE TRANSITIONS

TYPICAL SECTION GENERAL NOTES

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
2. THE THICKNESS OF AGG. BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.
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TYPICAL SECTION ④

BRYANT PARKWAY
STA. 92+61.89 TO STA. 95+01.48

- TRANSITION TRAVEL LANE FROM 11'-1" AT STA. 92+61.89 TO 11'-0" AT STA. 92+90.00
- ▲ TRANSITION CENTER LANE/MEDIAN FROM 10'-4" AT STA. 92+61.89 TO 10'-0" AT STA. 92+90.00
- ◆ TRANSITION CROSS SLOPE FROM 0.77% AT STA. 92+61.89 TO -2.00 AT STA. 93+16.00
- VAR. WIDTH. SEE SPECIAL DETAILS
- ▼ TRANSITION WIDTH WITH LANE TRANSITIONS

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BY	DESCRIPTION	DATE	REV.



CITY OF BRYANT
BRYANT, ARKANSAS

BRYANT PKWY. EXTENSION (S)

TYPICAL SECTIONS

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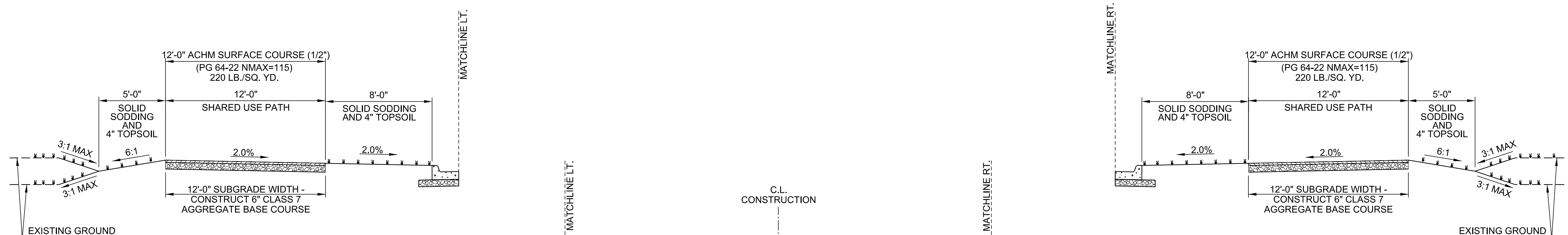
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90% PLANS
NOT FOR CONSTRUCTION

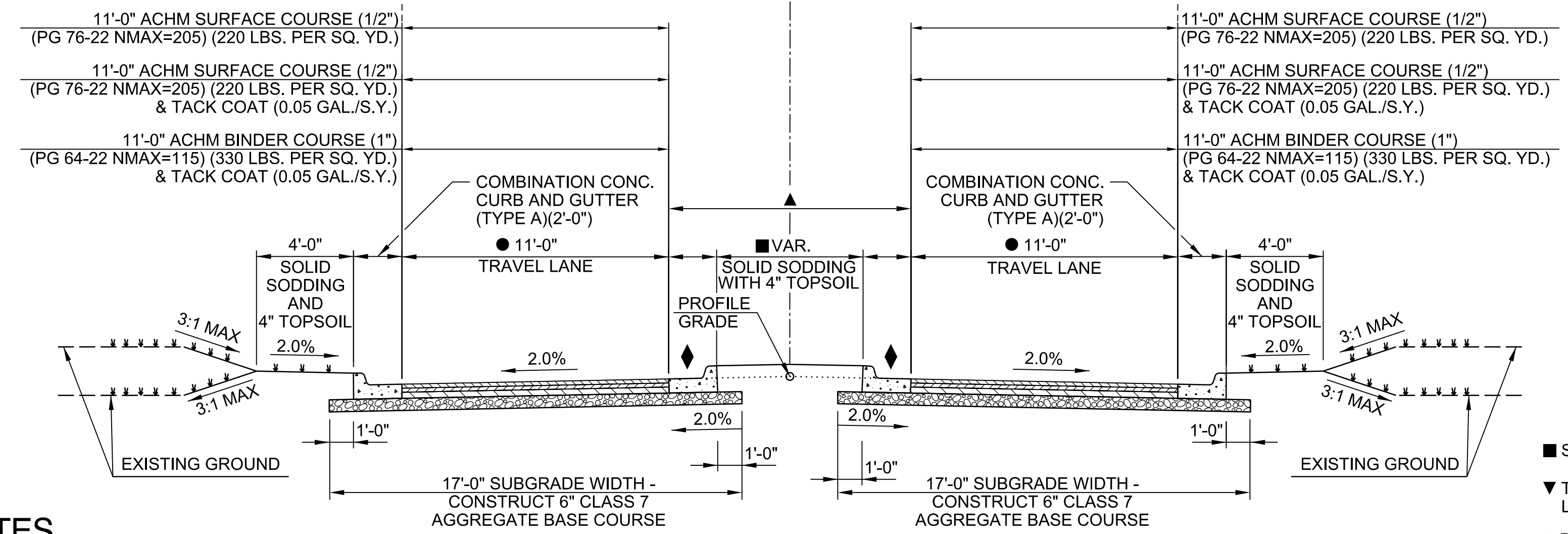


END CONDITION

BRYANT PARKWAY
STA. 100+96.98 TO STA. 102+38.00

END CONDITION

BRYANT PARKWAY
STA. 99+85.65 TO STA. 101+08.98



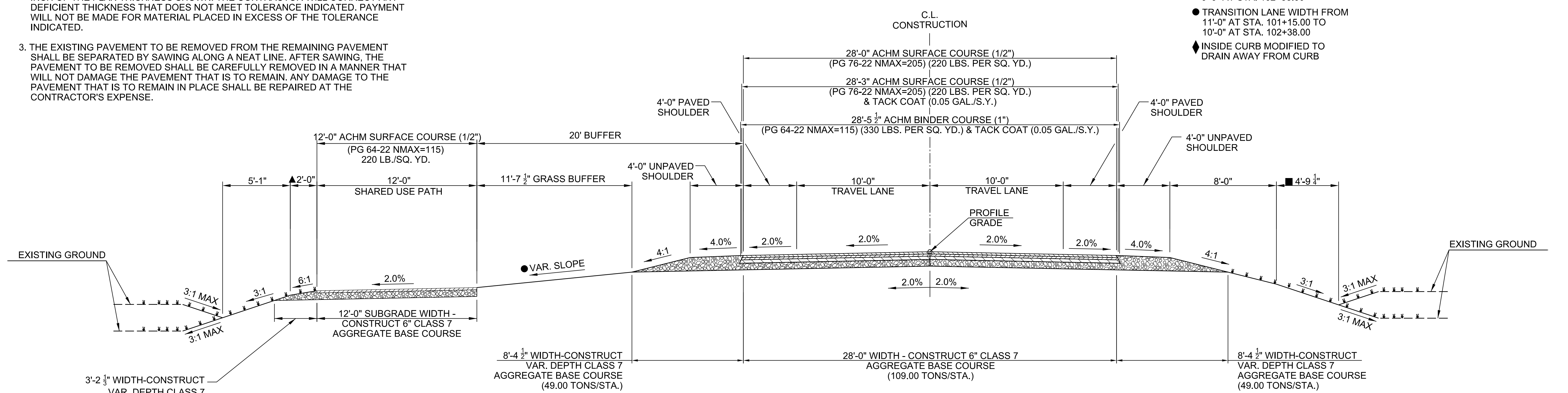
TYPICAL SECTION ⑤

BRYANT PARKWAY
STA. 99+85.65 TO STA. 102+38.00

- SEE SPECIAL DETAILS
- ▼ TRANSITION WIDTH WITH LANE TRANSITIONS
- ▲ PAINTED MEDIAN FROM STA. 99+85.65 TO STA. 100+70.31 AND FROM STA. 101+43.51 TO STA. 102+38.00
- ▲ TRANSITION WIDTH FROM 10'-0" AT STA. 101+15.00 TO 0'-0" AT STA. 102+38.00
- TRANSITION LANE WIDTH FROM 11'-0" AT STA. 101+15.00 TO 10'-0" AT STA. 102+38.00
- ◆ INSIDE CURB MODIFIED TO DRAIN AWAY FROM CURB

TYPICAL SECTION GENERAL NOTES

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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TYPICAL SECTION ⑥

BRYANT PARKWAY
STA. 102+38.00 TO STA. 127+85.00
STA. 139+00.00 TO STA. 186+66.73
STA. 192+62.31 TO STA. 192+68.96

- SLOPE VARIES AS FOLLOWS:
- 2% STA. 102+38.00 TO STA. 127+85.00
- 2% STA. 139+00.00 TO STA. 143+00.00
- 10:1 STA. 143+00.00 TO STA. 147+00.00
- 2% STA. 147+00.00 TO STA. 153+20.00
- 4:1 STA. 153+20.00 TO STA. 180+00.00
- 10:1 STA. 180+00.00 TO STA. 180+50.00
- 4:1 STA. 180+50.00 TO STA. 186+66.73
- 4:1 STA. 192+62.31 TO STA. 192+68.96

- ▲ WIDTH IS 5'-0" FROM STA. 161+70.00 TO STA. 172+10.00
- WIDTH IS 6'-9 3/8" FROM STA. 144+00.00 TO STA. 180+00.00

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WORKSPACE:Garver_2012
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BY	DESCRIPTION	DATE	REV.



CITY OF BRYANT
BRYANT, ARKANSAS

TYPICAL SECTIONS


JOB NO.: 16017140
DATE: DEC. 2020
DESIGNED BY: RCC
DRAWN BY: MJM

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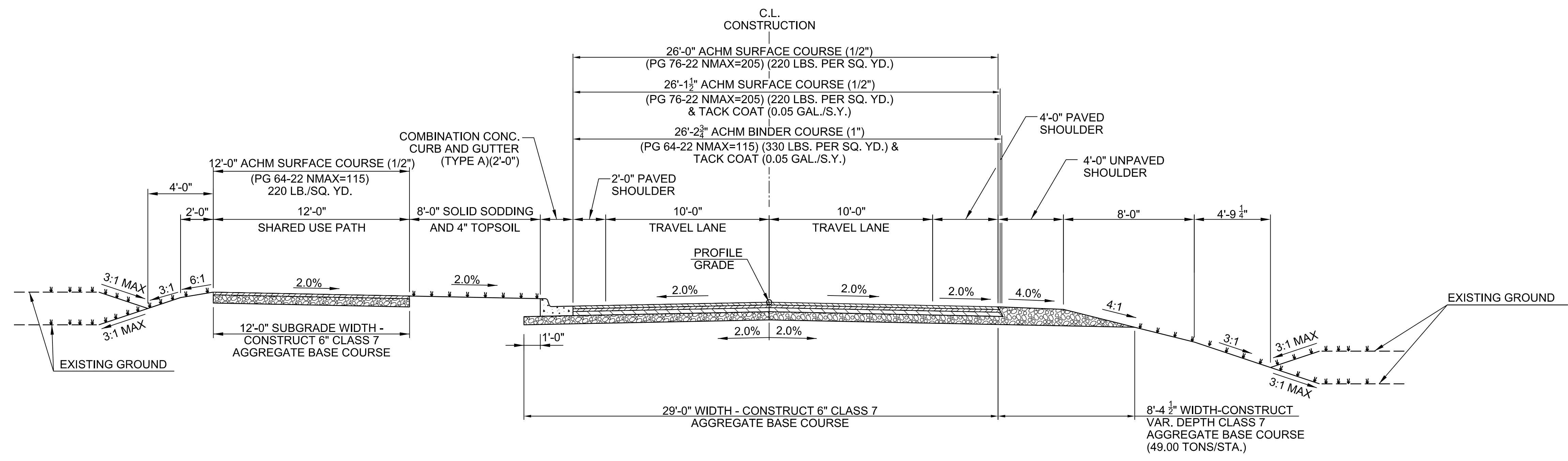
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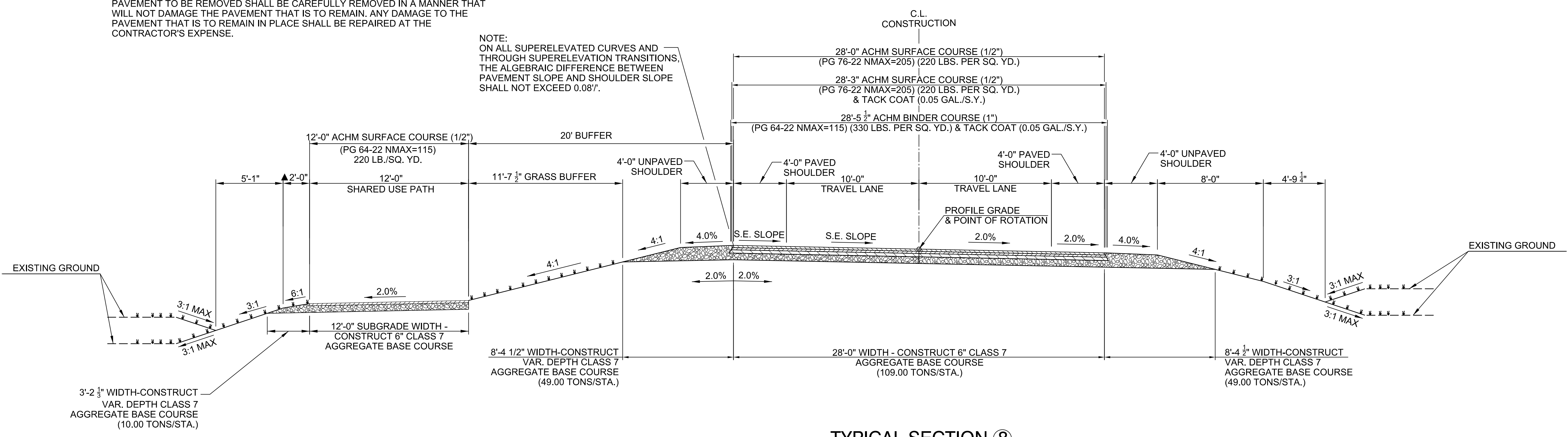
TYPICAL SECTION ⑦

BRYANT PARKWAY
STA. 127+85.00 TO STA. 139+00.00

TYPICAL SECTION GENERAL NOTES

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
2. THE THICKNESS OF AGG. BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.
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NOTE:
ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATION TRANSITIONS, THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 0.08'/.




TYPICAL SECTION ⑧

BRYANT PARKWAY
STA. 186+66.73 TO STA. 192+62.31

▲ WIDTH IS 5'-0" FROM
STA. 186+66.73 TO STA. 188+90.00

90% PLANS
NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	BY



CITY OF BRYANT
BRYANT, ARKANSAS

BRYANT PKWY. EXTENSION (S)

TYPICAL SECTIONS

JOB NO.: 16017140
DATE: DEC. 2020
DESIGNED BY: RCC
DRAWN BY: MJM

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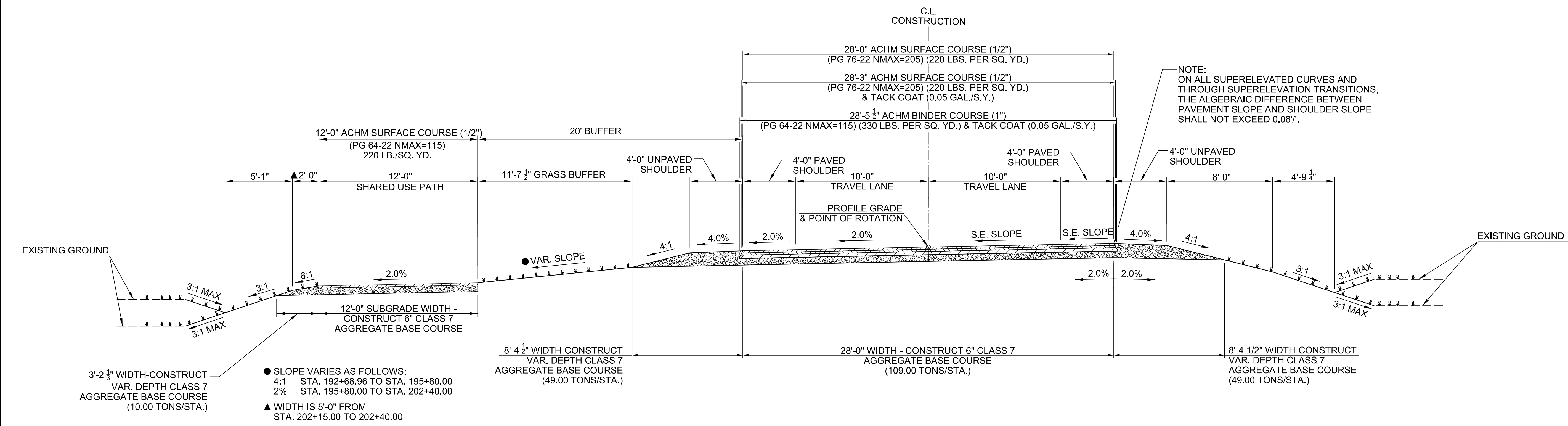
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SHEET NUMBER

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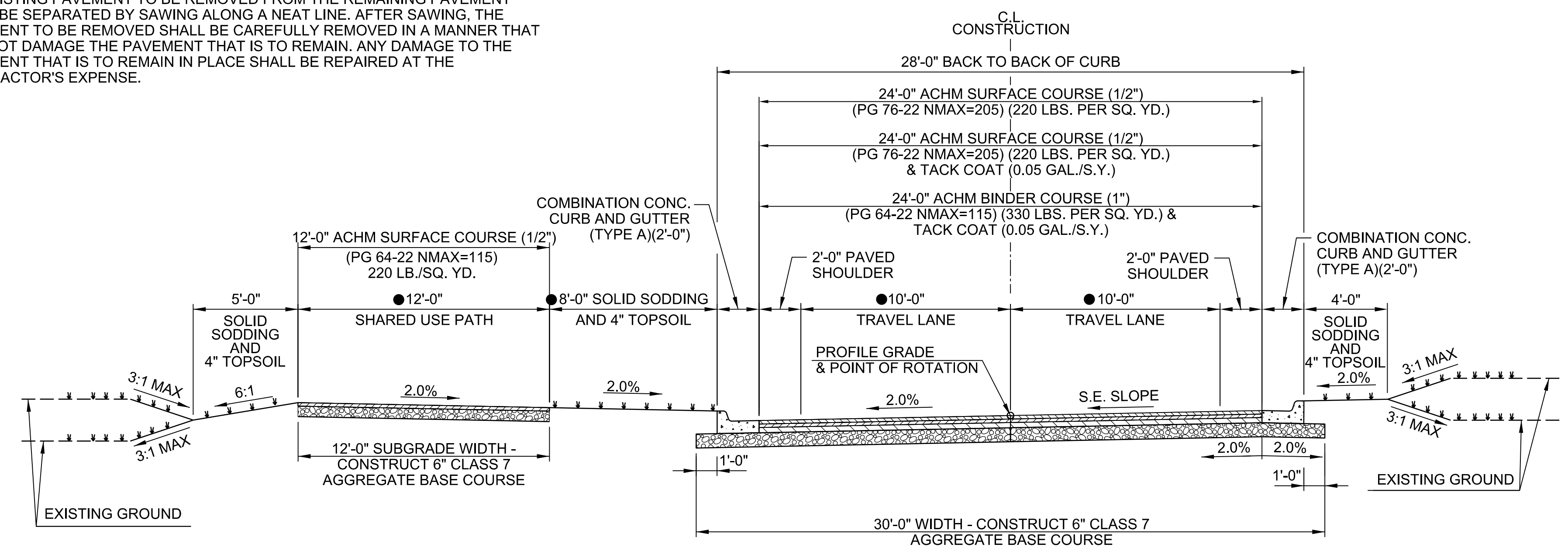
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● SLOPE VARIES AS FOLLOWS:
4:1 STA. 192+68.96 TO STA. 195+80.00
2% STA. 195+80.00 TO STA. 202+40.00
▲ WIDTH IS 5'-0" FROM STA. 202+15.00 TO 202+40.00

TYPICAL SECTION ⑨

BRYANT PARKWAY
STA. 192+68.96 TO STA. 202+40.00



TYPICAL SECTION ⑩

BRYANT PARKWAY
STA. 202+40.00 TO STA. 203+35.91

REV.	DATE	DESCRIPTION	BY



CITY OF BRYANT
BRYANT, ARKANSAS
BRYANT PKWY. EXTENSION (S)

TYPICAL SECTIONS

JOB NO.: 16017140
DATE: DEC. 2020
DESIGNED BY: RCC
DRAWN BY: MJM

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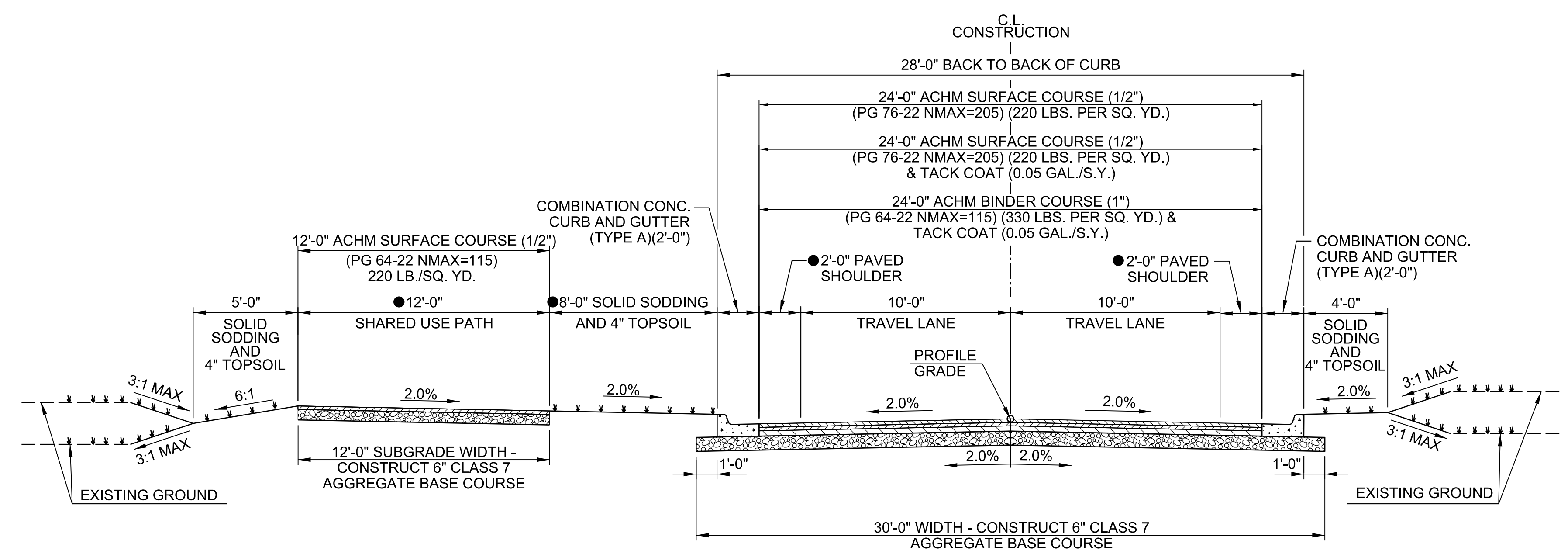
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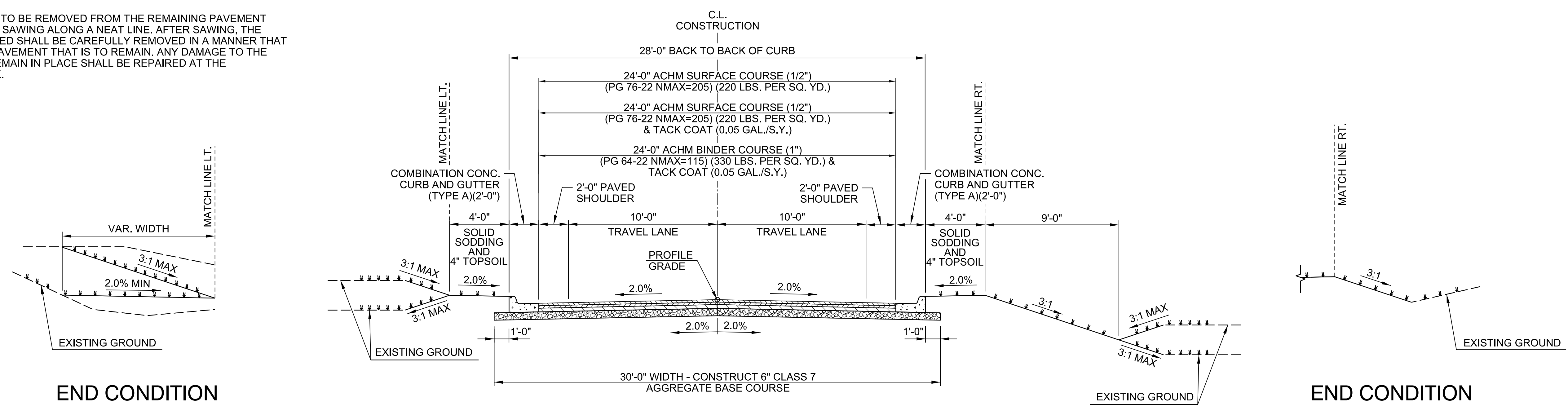
TYPICAL SECTION 11

BRYANT PARKWAY
STA. 203+35.91 TO STA. 203+57.95
STA. 210+50.25 TO STA. 216+00.00

● WIDTH VARIES. SEE BRIDGE TRANSITION DETAILS. 2
C-201

TYPICAL SECTION GENERAL NOTES

- REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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TYPICAL SECTION 12

BRYANT PARKWAY
STA. 216+00.00 TO STA. 222+70.00

END CONDITION

BRYANT PARKWAY
STA. 218+00 TO STA. 222+60

END CONDITION

BRYANT PARKWAY
STA. 216+00 TO STA. 217+40

90% PLANS
NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	BY



CITY OF BRYANT
BRYANT, ARKANSAS
BRYANT PKWY. EXTENSION (S)

TYPICAL SECTIONS

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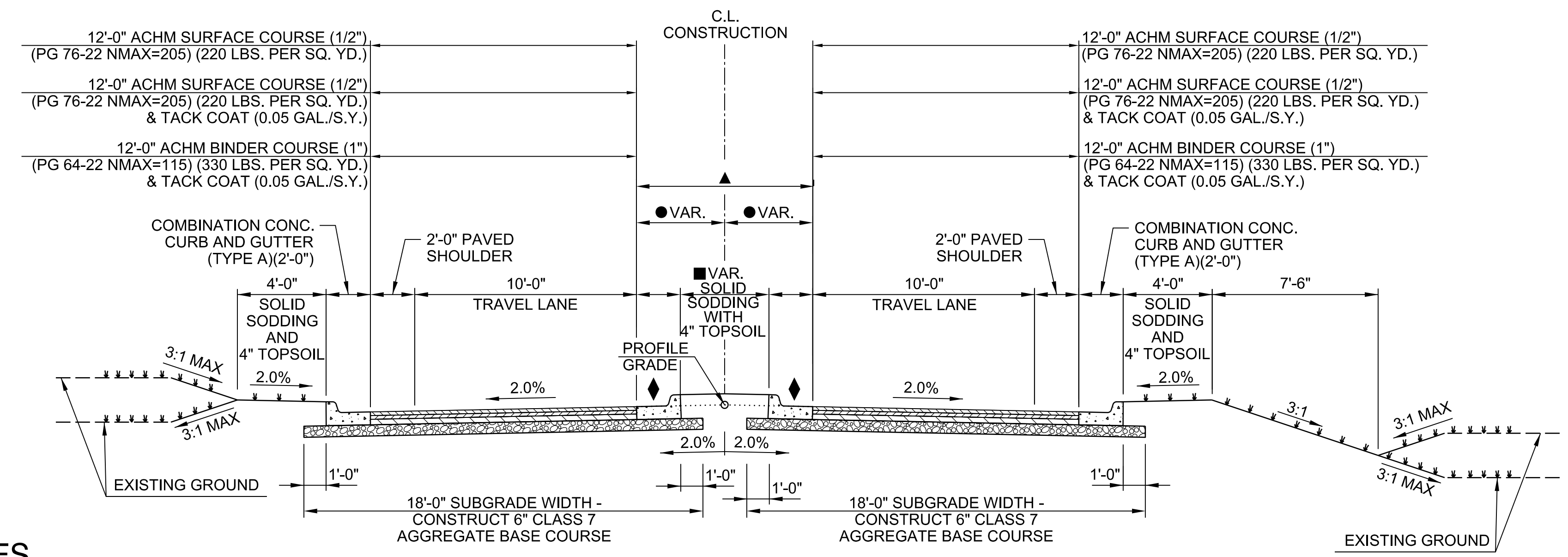
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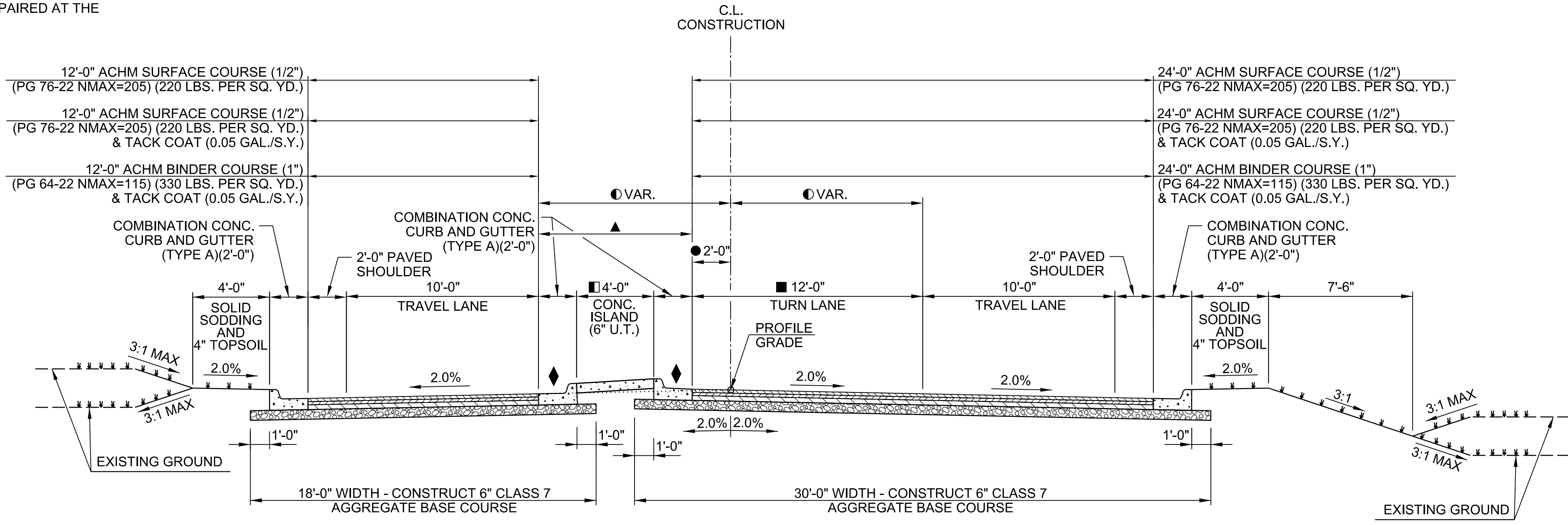
TYPICAL SECTION 13

BRYANT PARKWAY
STA. 222+70.00 TO STA. 224+00.00

TYPICAL SECTION GENERAL NOTES

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
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- ▲ PAINTED MEDIAN FROM STA. 222+70.00 TO STA. 223+48.10.
- TRANSITION EDGE OF TRAVEL LANE FROM 0'-0" LT. AND RT. OF C.L. AT STA. 222+70.00 TO 6'-4.1" LT. AND RT. OF C.L. AT STA. 224+00.00.
- TRANSITION GRASSED ISLAND WIDTH FROM 4'-0" AT STA. 223+51.90 TO 8'-8" AT STA. 224+00.00.
- ◆ INSIDE CURB MODIFIED TO DRAIN AWAY FROM CURB



TYPICAL SECTION 14

BRYANT PARKWAY
STA. 224+00.00 TO STA. 226+50.69

- TRANSITION TURN LANE FROM 0'-0" AT STA. 224+00.00 TO 12'-0" AT STA. 224+75.00
- TRANSITION EDGE OF TURN LANE FROM 6'-4.1" RT. OF C.L. AT STA. 224+00.00 TO 2'-0" LT. OF C.L. AT STA. 224+75.00
- TRANSITION GRASSED ISLAND WIDTH FROM 8'-8" AT STA. 224+00.00 TO 4'-0" AT STA. 224+75.00. CONCRETE ISLAND FROM STA. 224+75.00 TO STA. 226+08.98
- TRANSITION EDGE OF TRAVEL LANE FROM 6'-4.1" LT. AND RT. OF C.L. AT STA. 224+00.00 TO 10'-0" LT. AND RT. OF C.L. AT STA. 224+75.00
- ▲ PAINTED MEDIAN FROM STA. 226+08.98 TO STA. 226+50.69. SEE SPECIAL DETAILS.
- ◆ INSIDE CURB MODIFIED TO DRAIN AWAY FROM CURB

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REV.	DATE	DESCRIPTION	BY



CITY OF BRYANT
BRYANT, ARKANSAS
BRYANT PKWY. EXTENSION (S)

TYPICAL SECTIONS

JOB NO.: 16017140
DATE: DEC. 2020
DESIGNED BY: RCC
DRAWN BY: MJM

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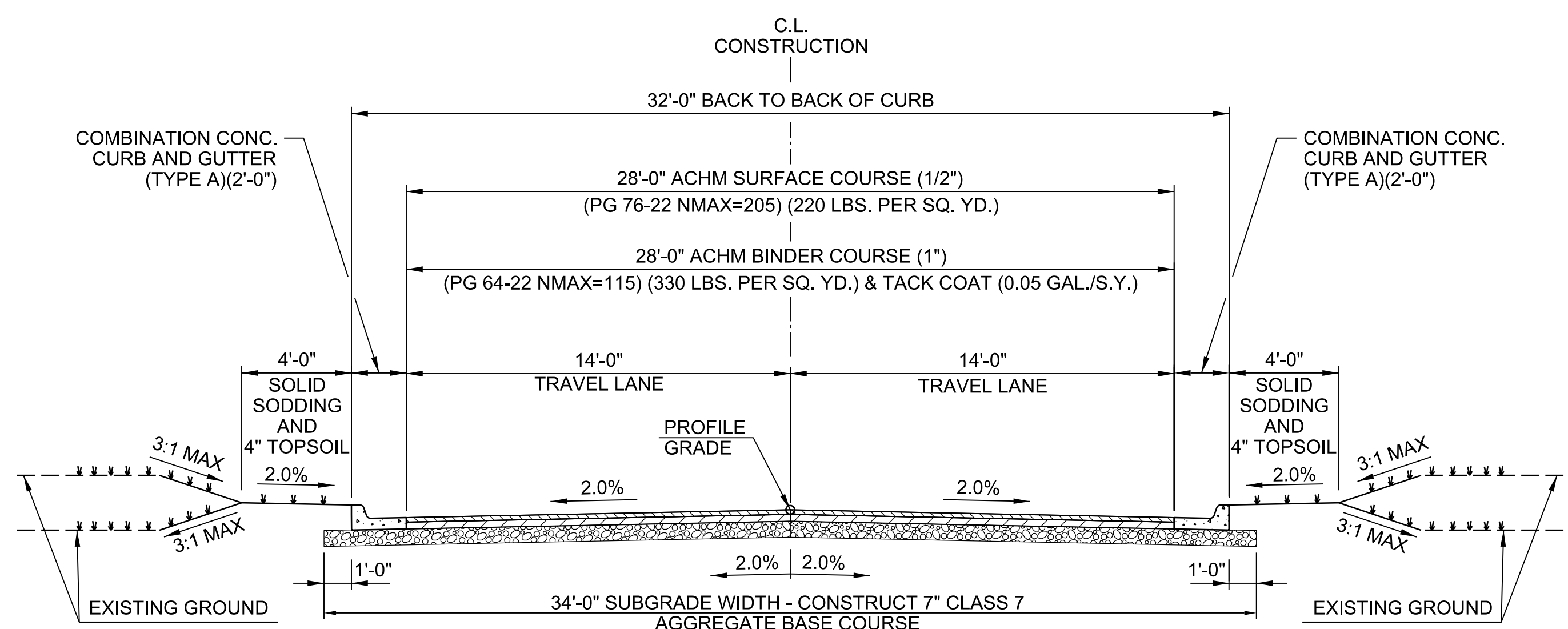
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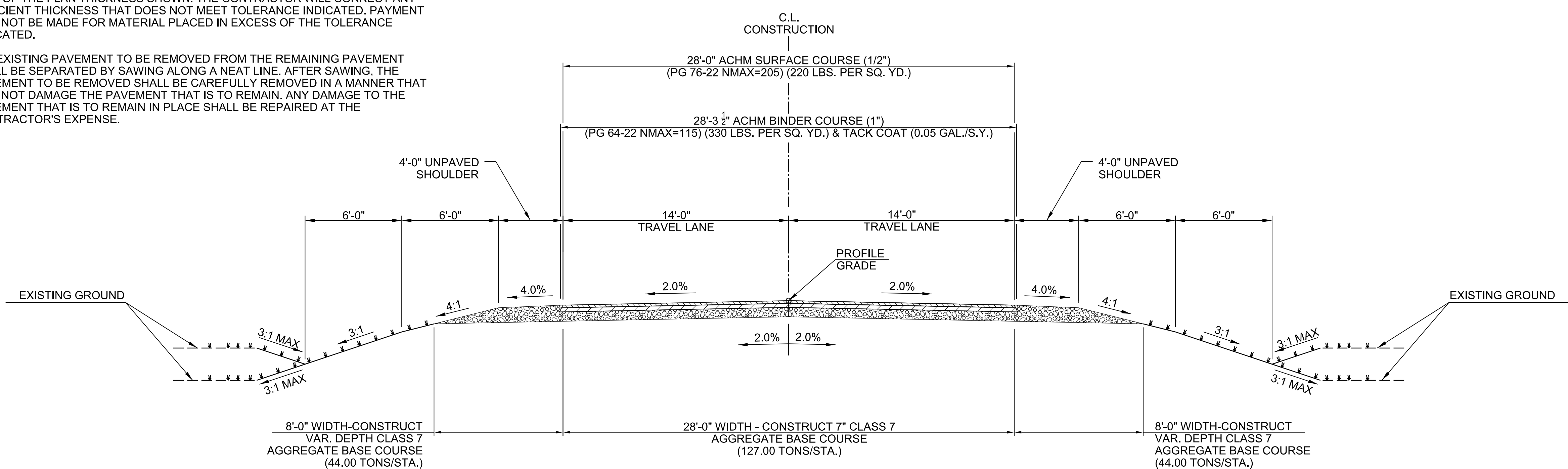


TYPICAL SECTION 15

BUS DRIVE
 STA. 10+36.92 TO STA. 12+40.96
 AIRPORT ENTRANCE ROAD
 STA. 12+18.00 TO STA. 14+30.96
 AIRPORT ENTRANCE ROAD CONNECTOR
 STA. 12+02.95 TO STA. 12+86.00

TYPICAL SECTION GENERAL NOTES

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TYPICAL SECTION 16

AIRPORT ENTRANCE ROAD
 STA. 10+14.00 TO STA. 12+18.00

BY	DESCRIPTION	DATE	REV.



CITY OF BRYANT
 BRYANT, ARKANSAS
 BRYANT PKWY. EXTENSION (S)

TYPICAL SECTIONS

JOB NO.: 16017140
 DATE: DEC. 2020
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 DRAWN BY: MJM

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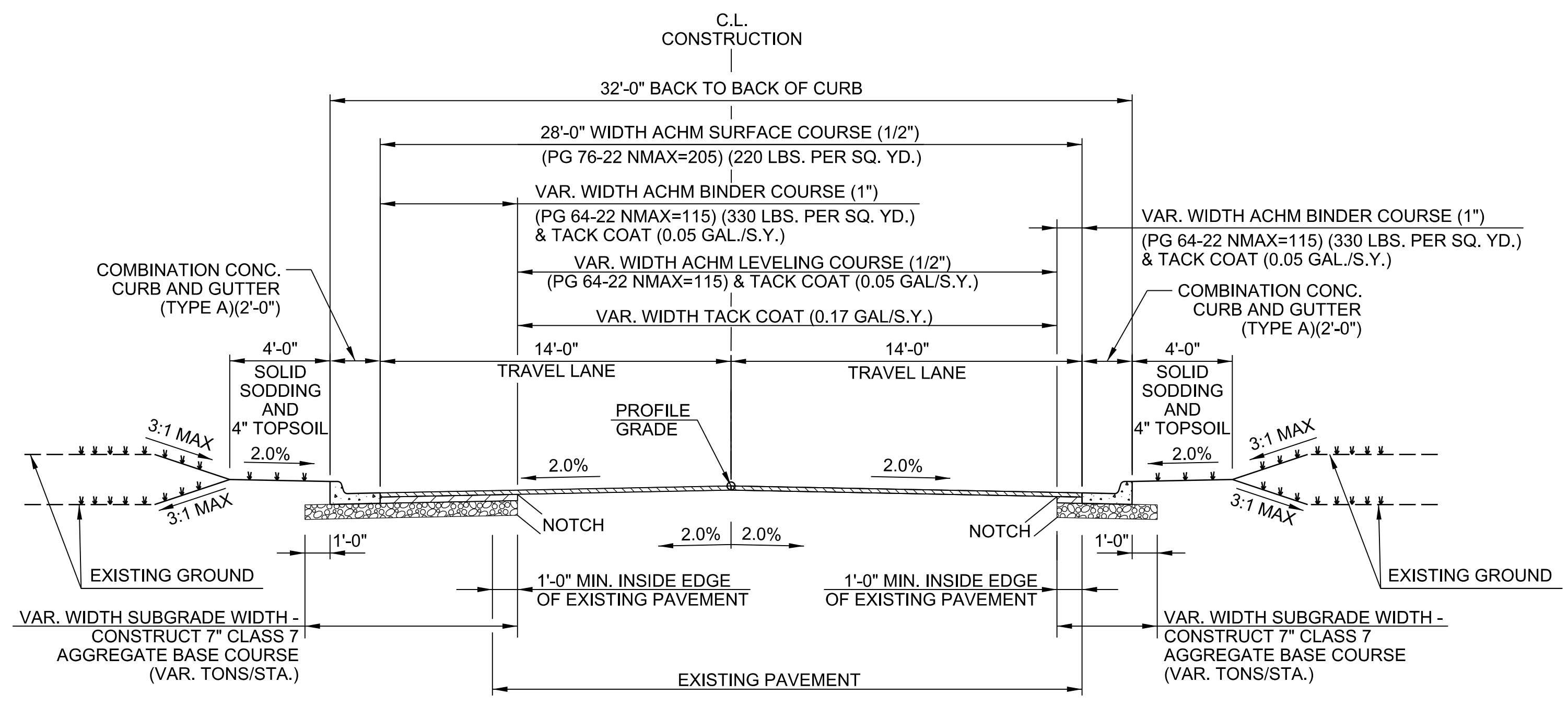
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TYPICAL SECTION 17

AIRPORT ENTRANCE ROAD
 STA. 14+30.96 TO STA. 15+37.00
 AIRPORT ENTRANCE ROAD CONNECTOR
 STA. 10+40.00 TO STA. 12+02.95

TYPICAL SECTION GENERAL NOTES

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CITY OF BRYANT
BRYANT, ARKANSAS

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TYPICAL SECTIONS

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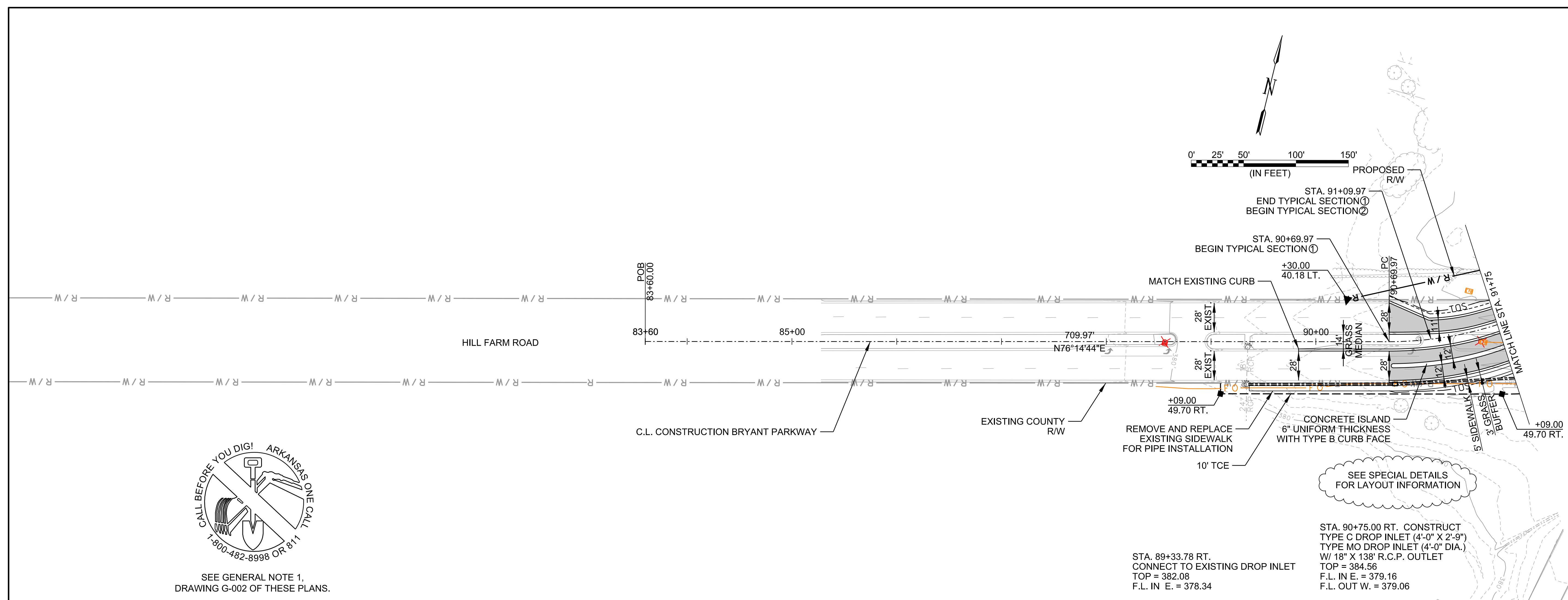
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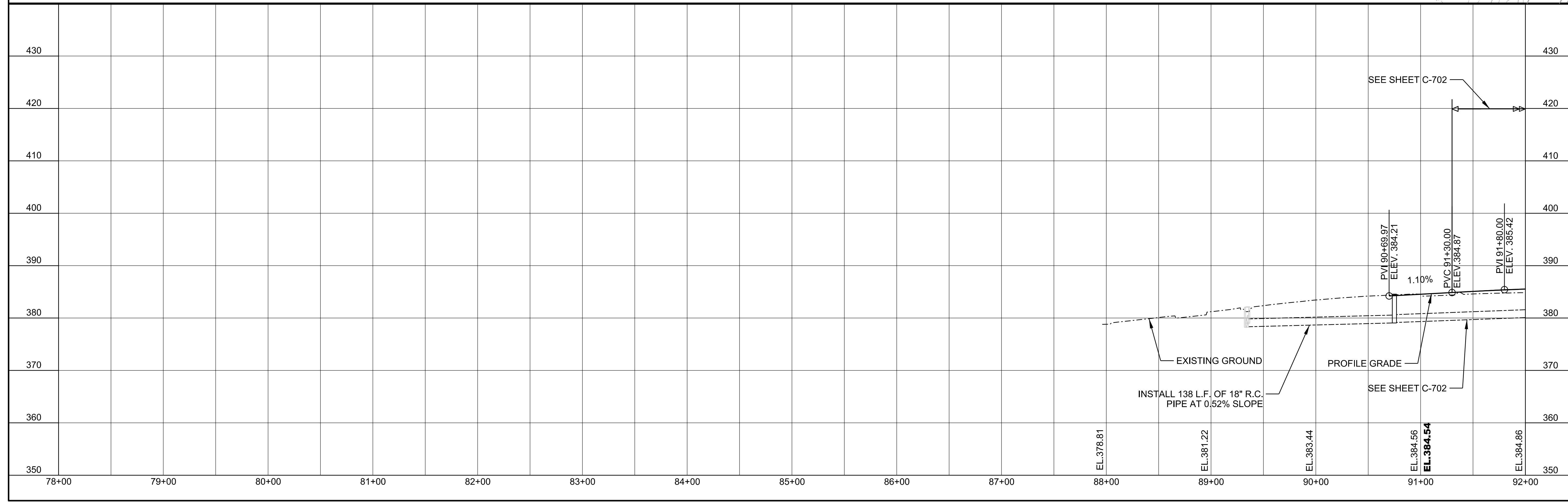


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60% PLANS
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SEE GENERAL NOTE 1, DRAWING G-002 OF THESE PLANS.



REV.	DATE	DESCRIPTION	BY



CITY OF BRYANT
 BRYANT, ARKANSAS
 BRYANT PKWY. EXTENSION (S)

PLAN AND PROFILE
 BRYANT PARKWAY

JOB NO.: 1601740
 DATE: DEC. 2020
 DESIGNED BY: RCC
 DRAWN BY: MJM

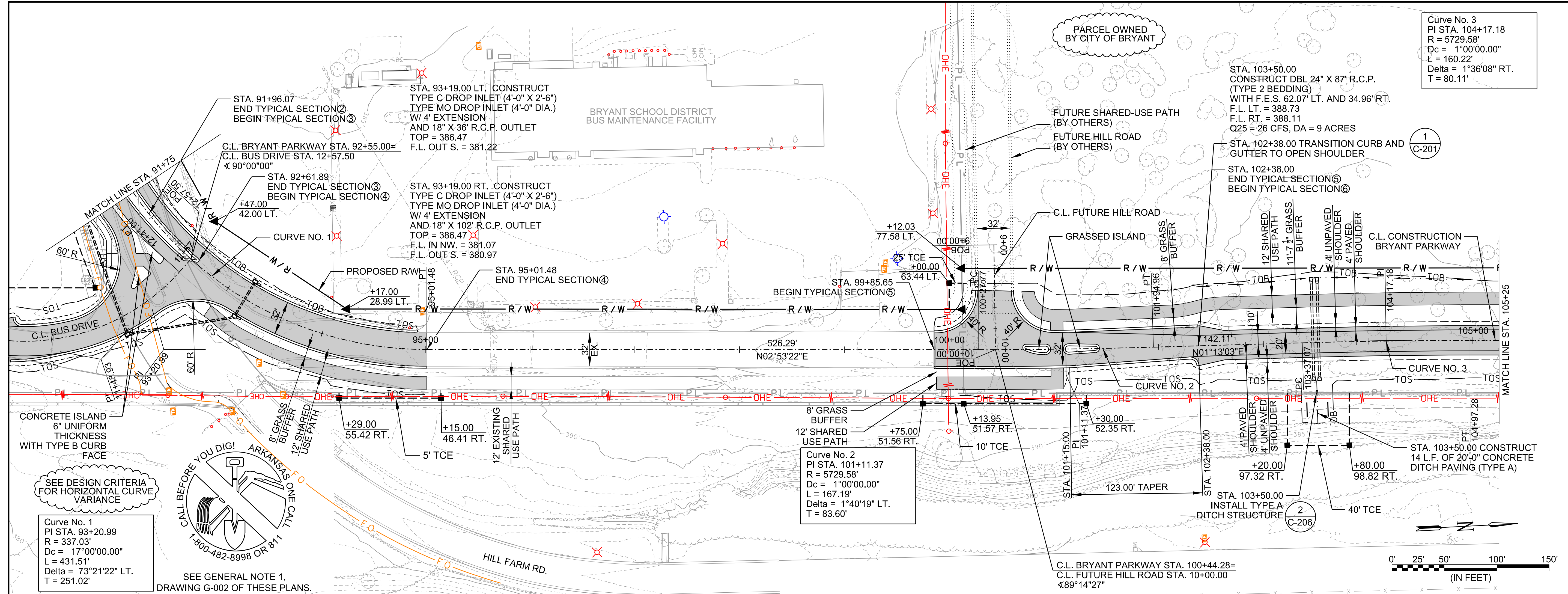
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C-701
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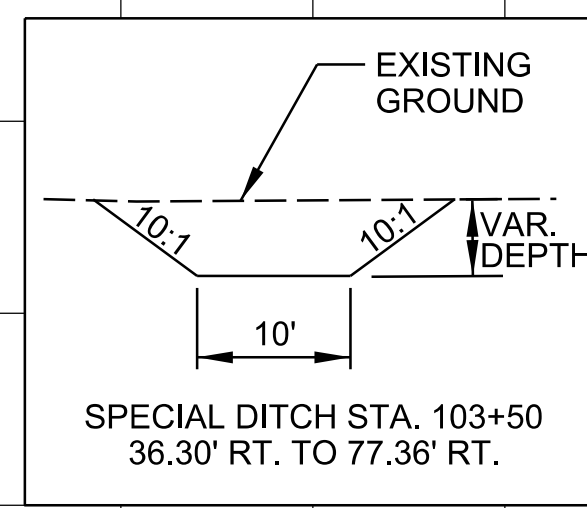
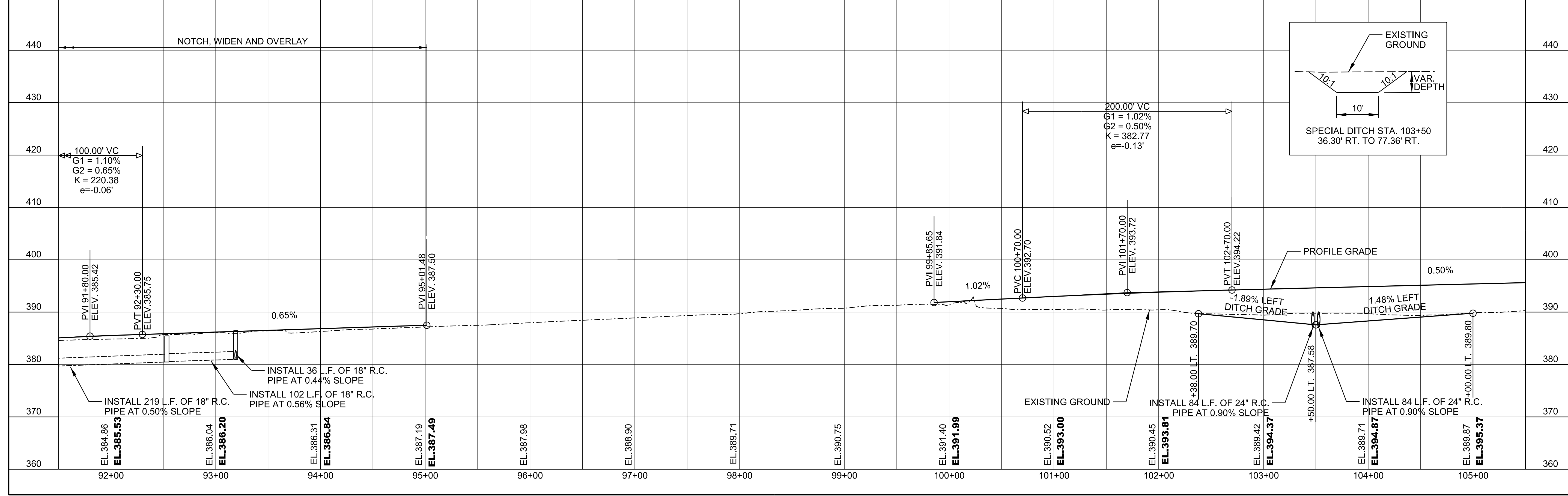
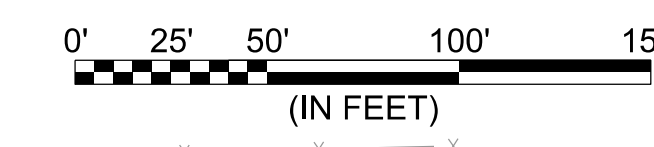
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SEE DESIGN CRITERIA FOR HORIZONTAL CURVE VARIANCE

SEE GENERAL NOTE 1, DRAWING G-002 OF THESE PLANS.



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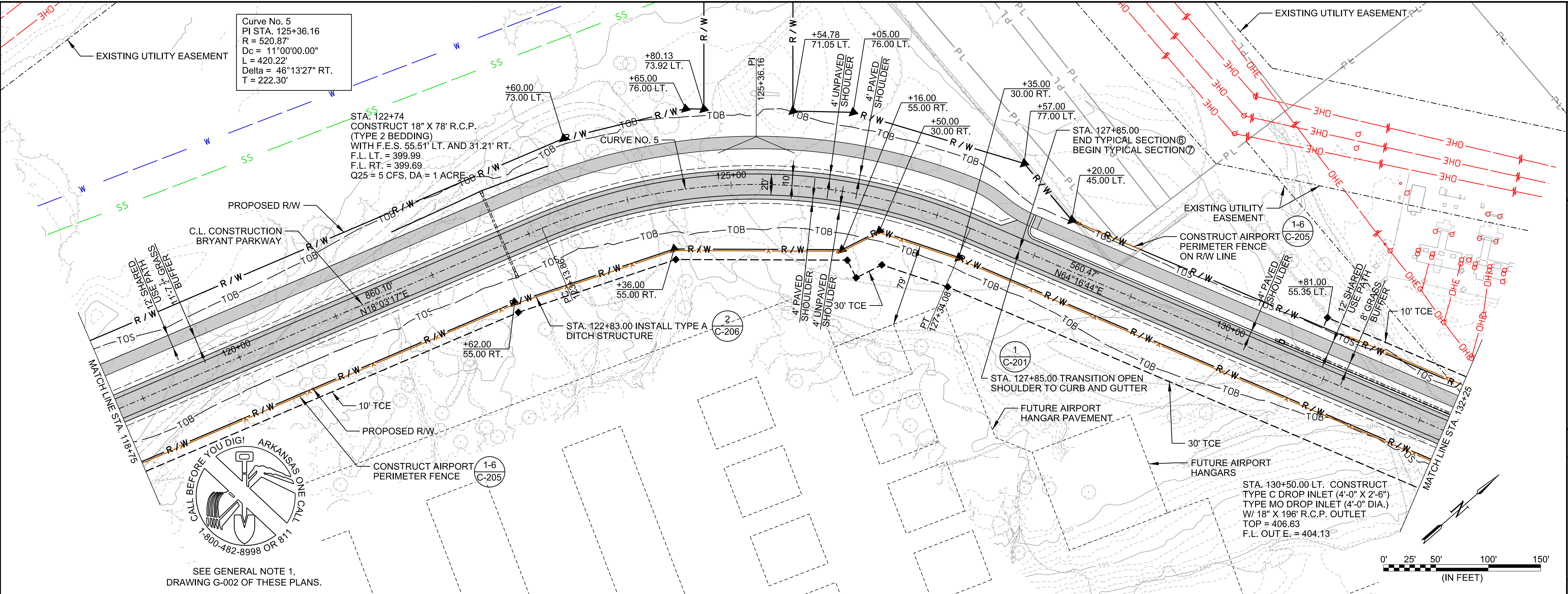
CITY OF BRYANT
BRYANT, ARKANSAS

PLAN AND PROFILE
BRYANT PARKWAY

BRYANT PKWY. EXTENSION (S)	
JOB NO.:	16017140
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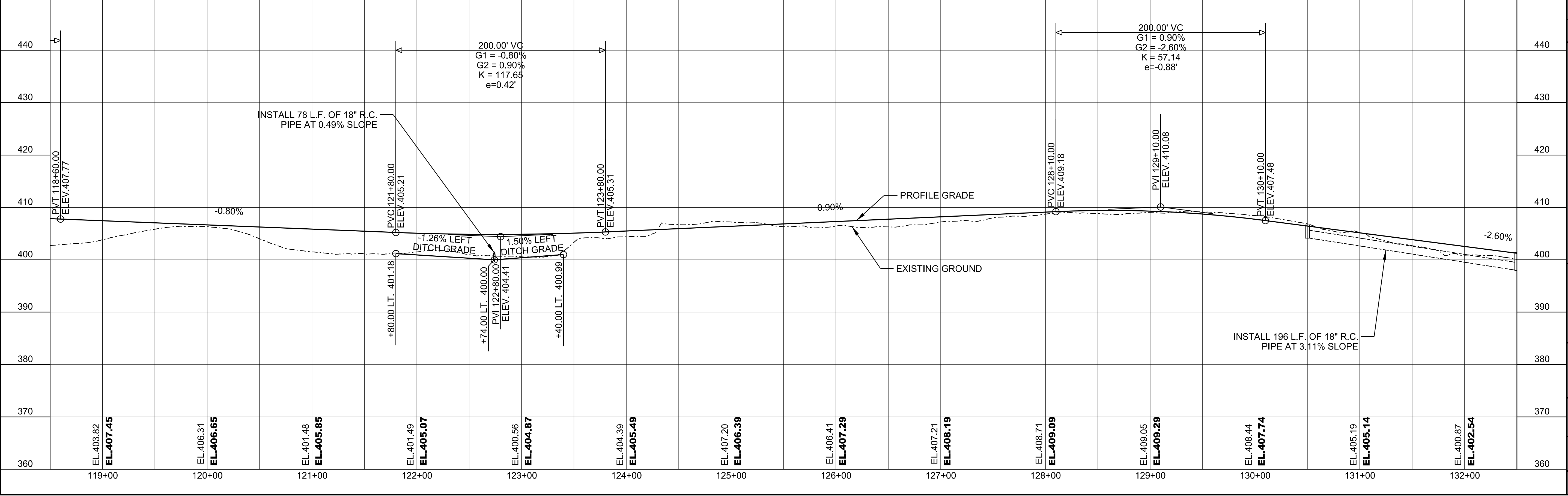



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CITY OF BRYANT
 BRYANT, ARKANSAS

PLAN AND PROFILE
 BRYANT PARKWAY

BRYANT PKWY. EXTENSION (S)

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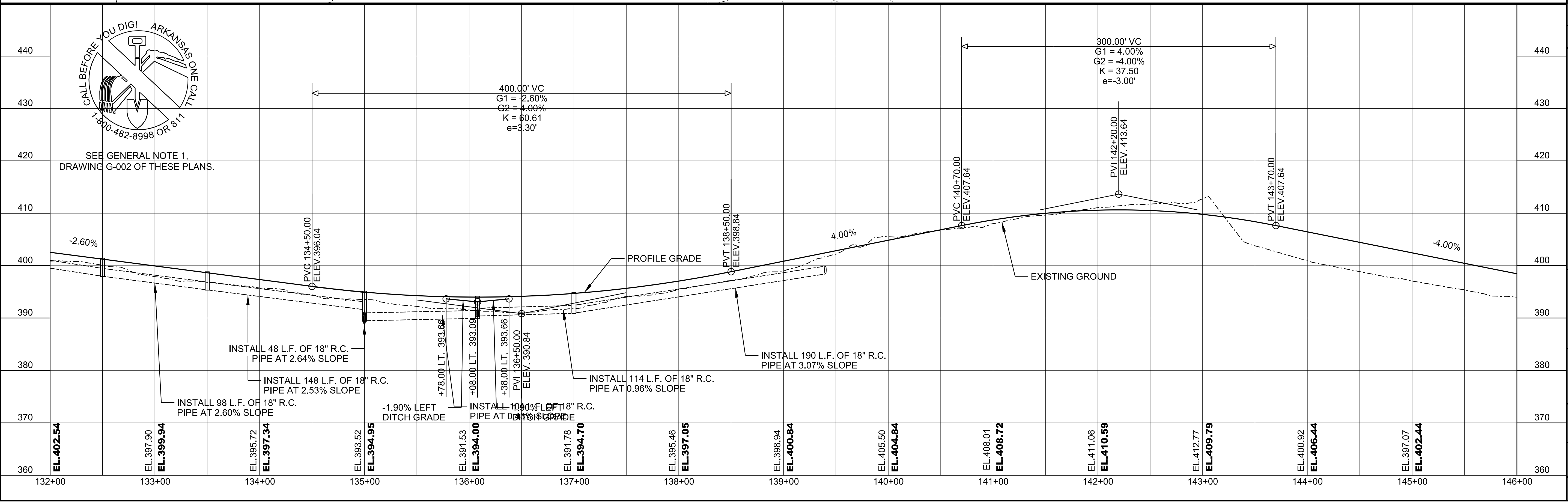
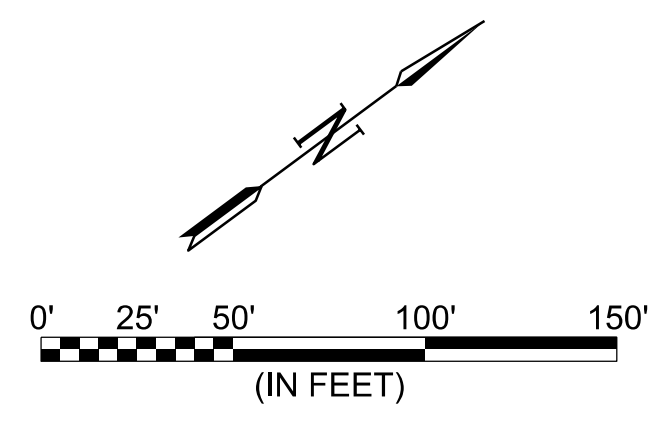
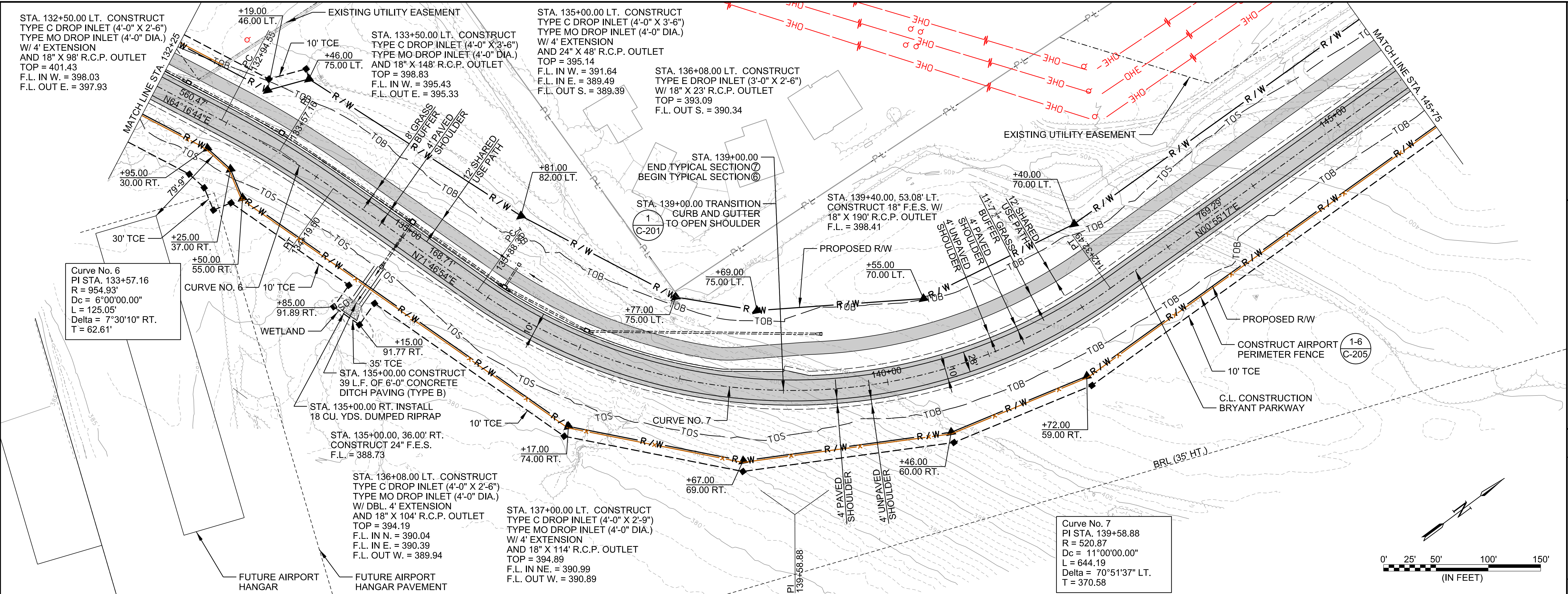
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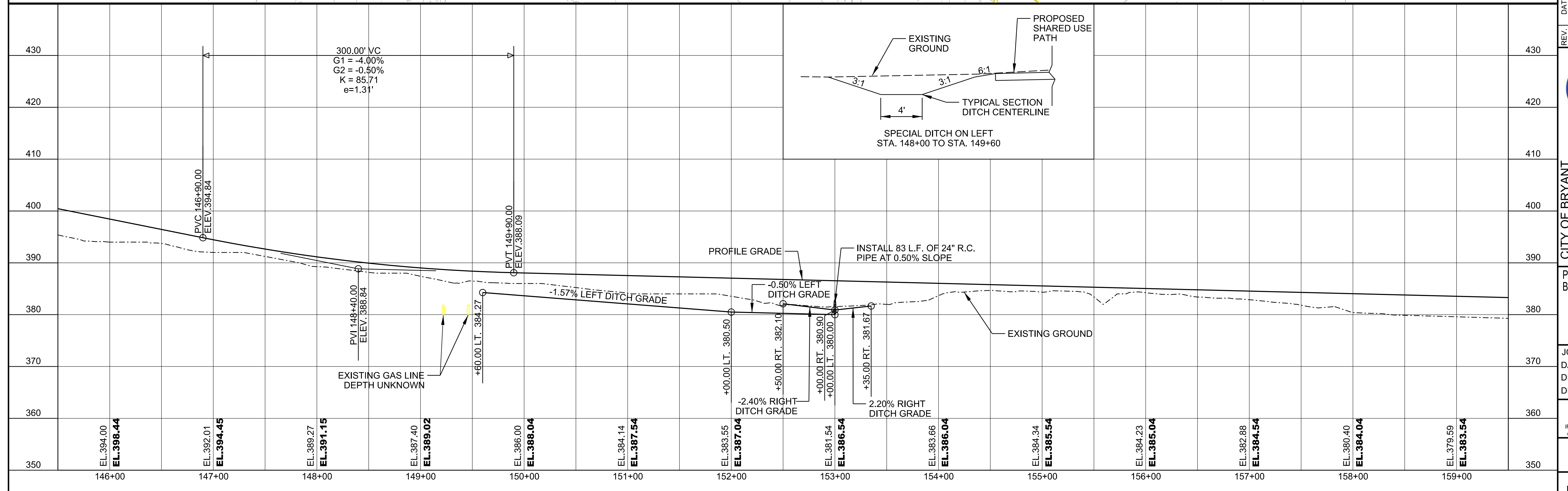
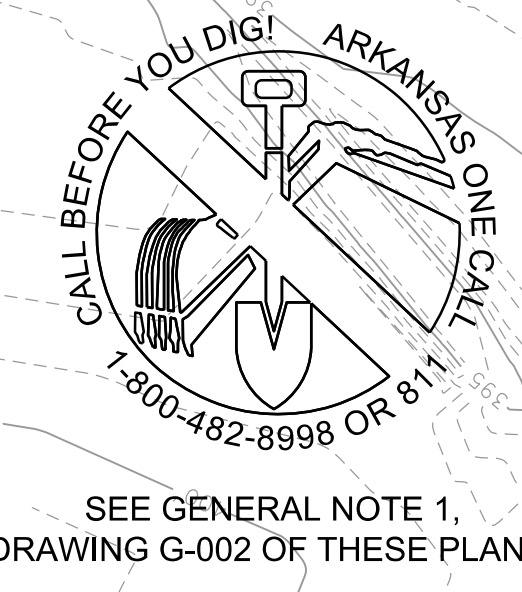
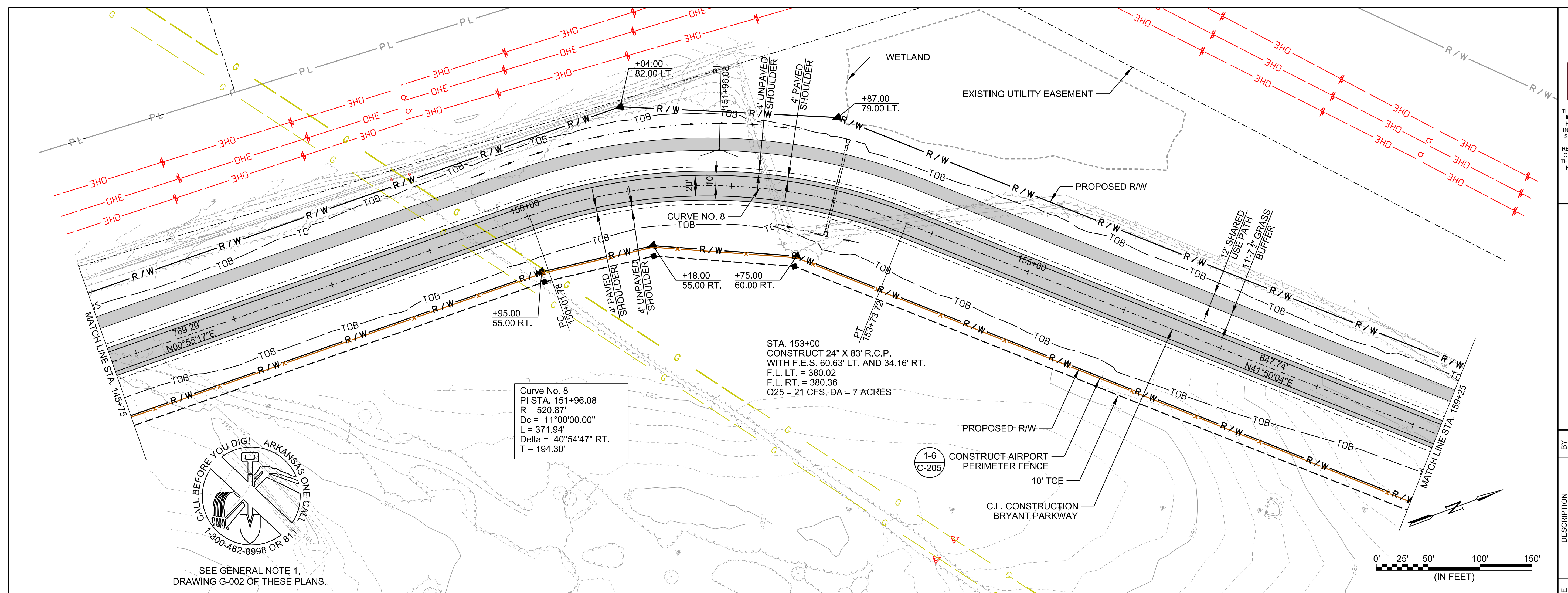
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CITY OF BRYANT BRYANT, ARKANSAS	
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JOB NO.: 16017140 DATE: DEC. 2020 DESIGNED BY: RCC DRAWN BY: MJM	
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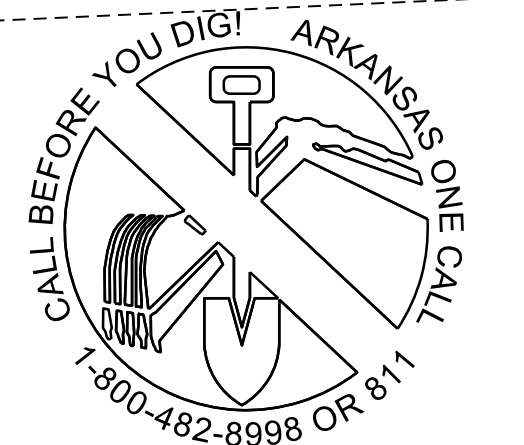
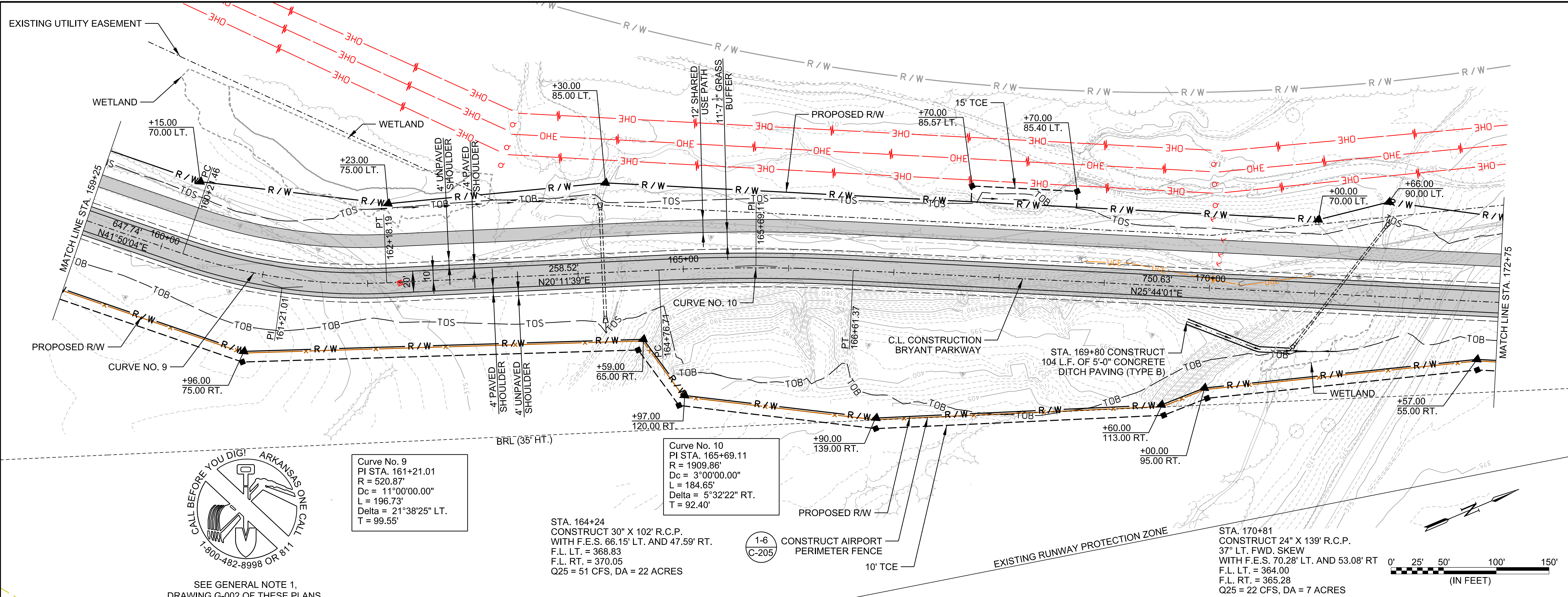
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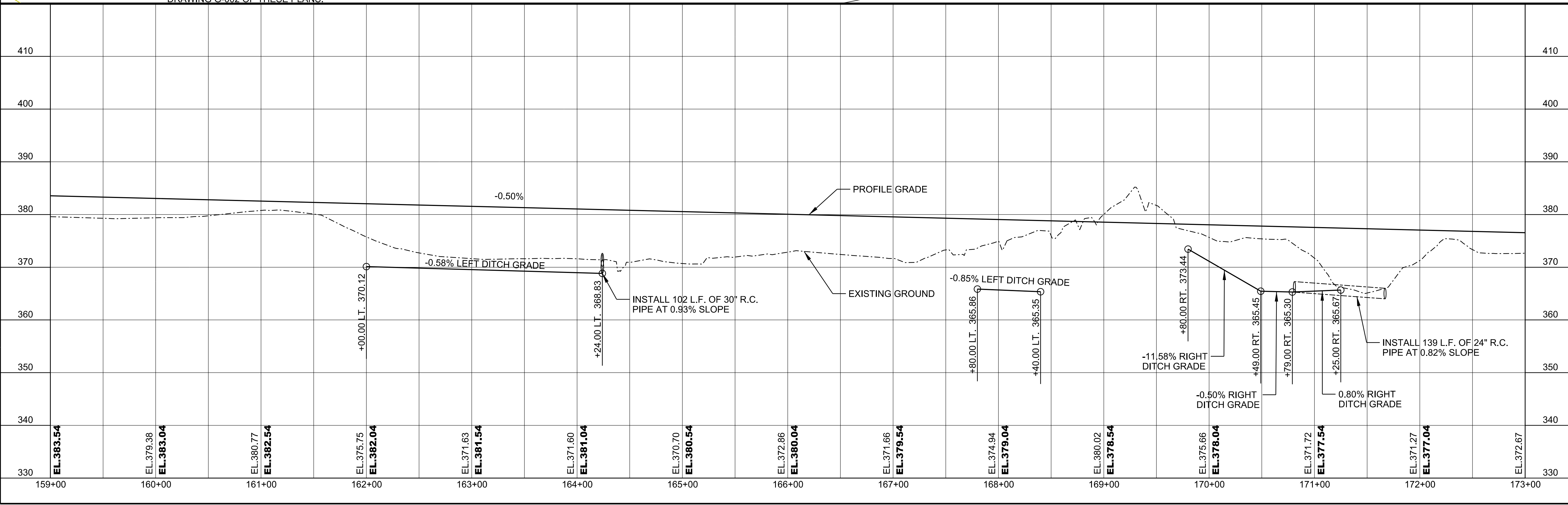


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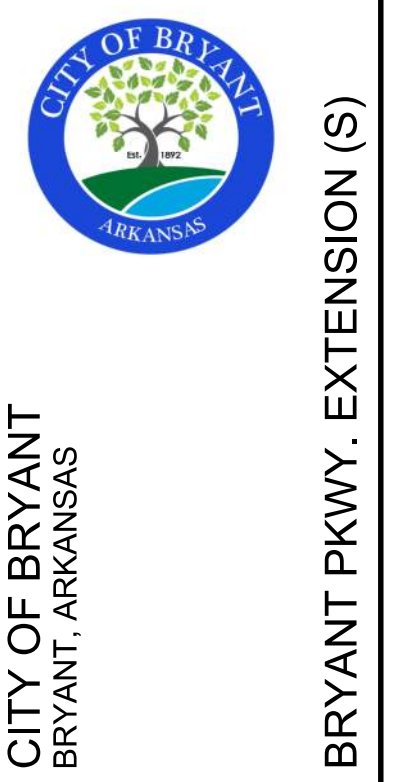
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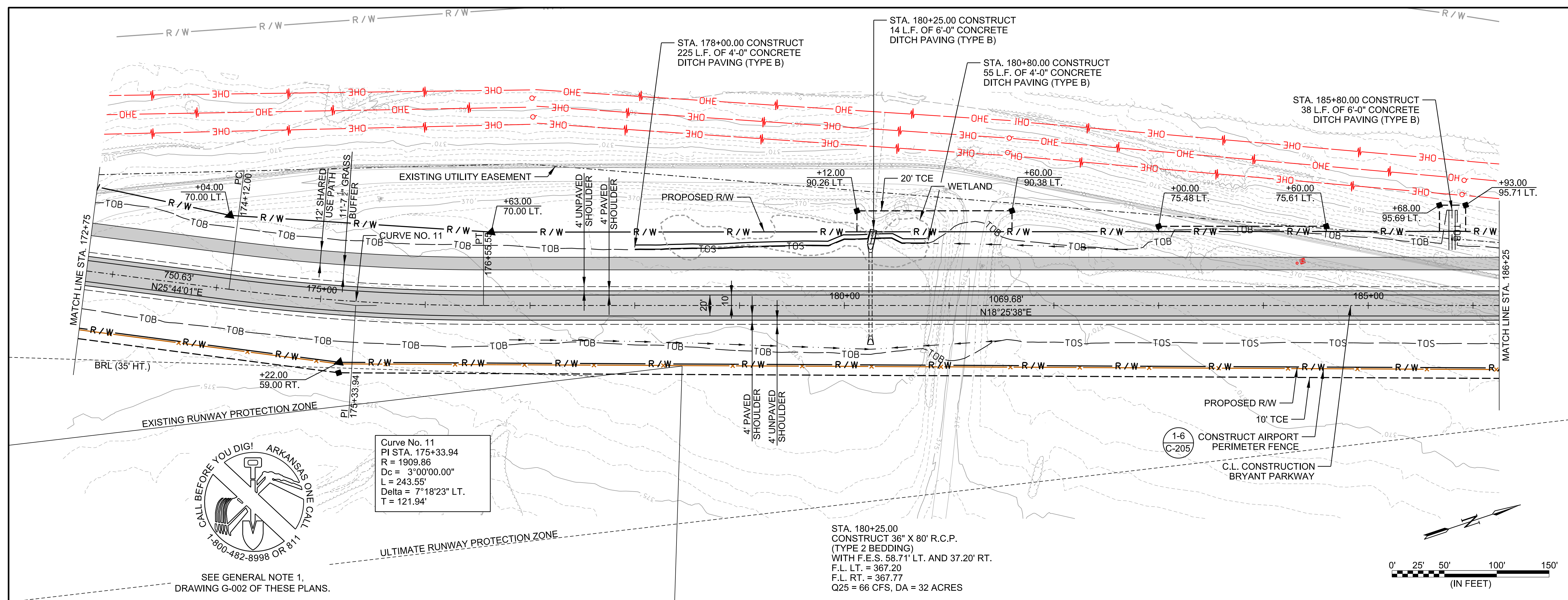
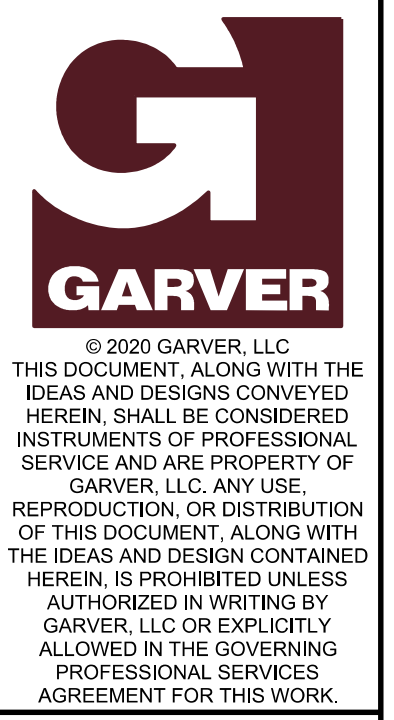
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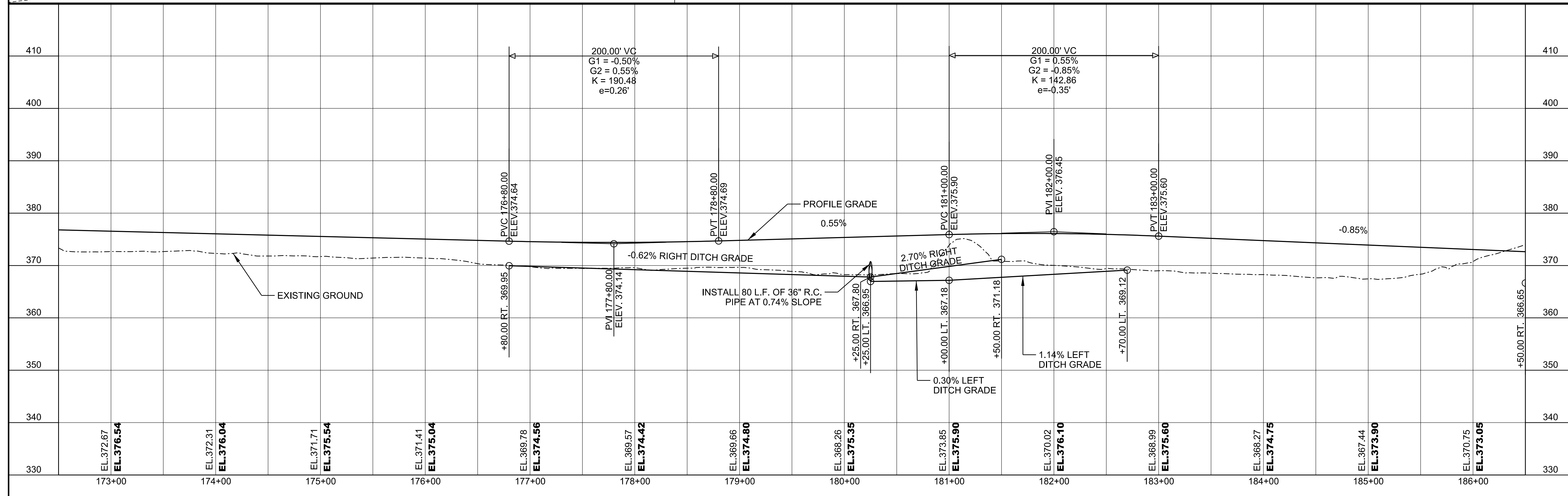
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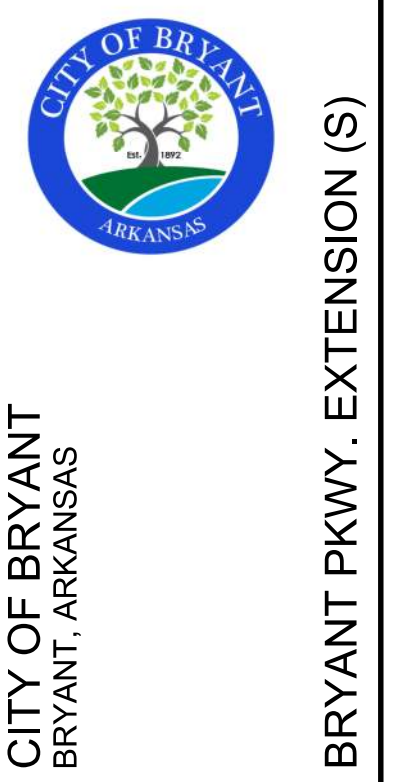
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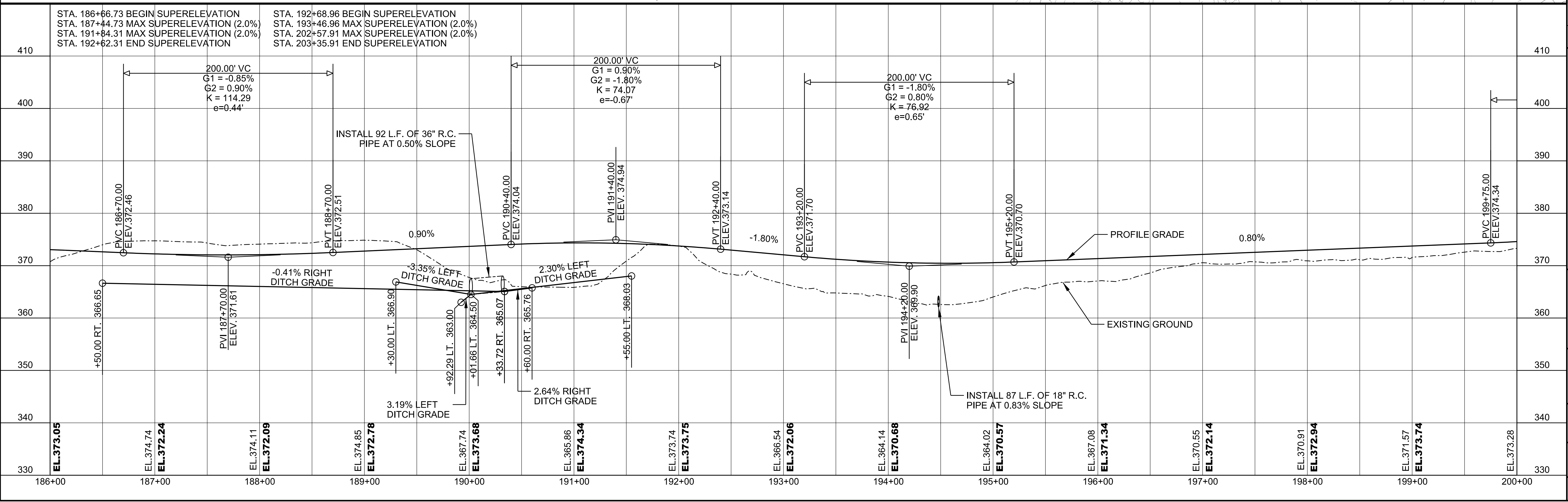
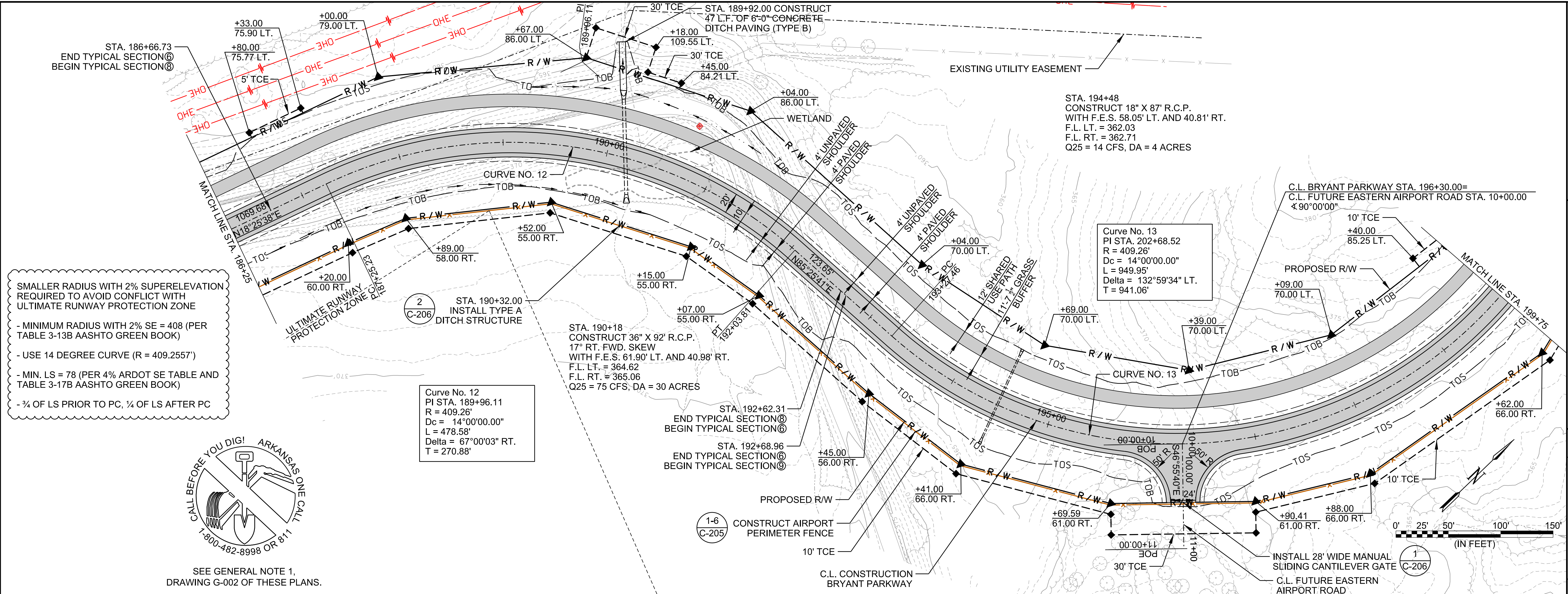
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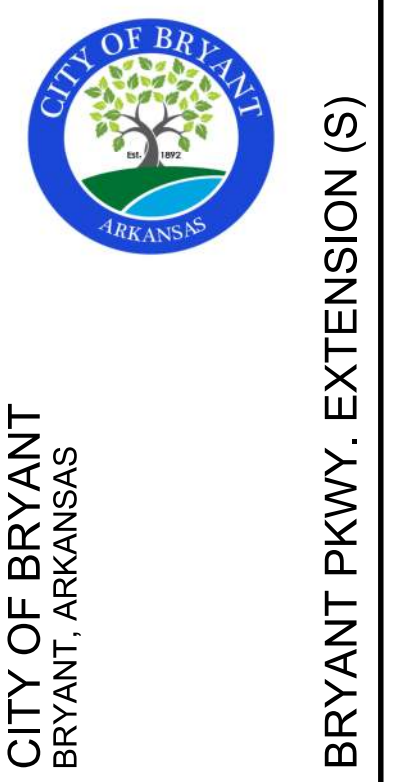


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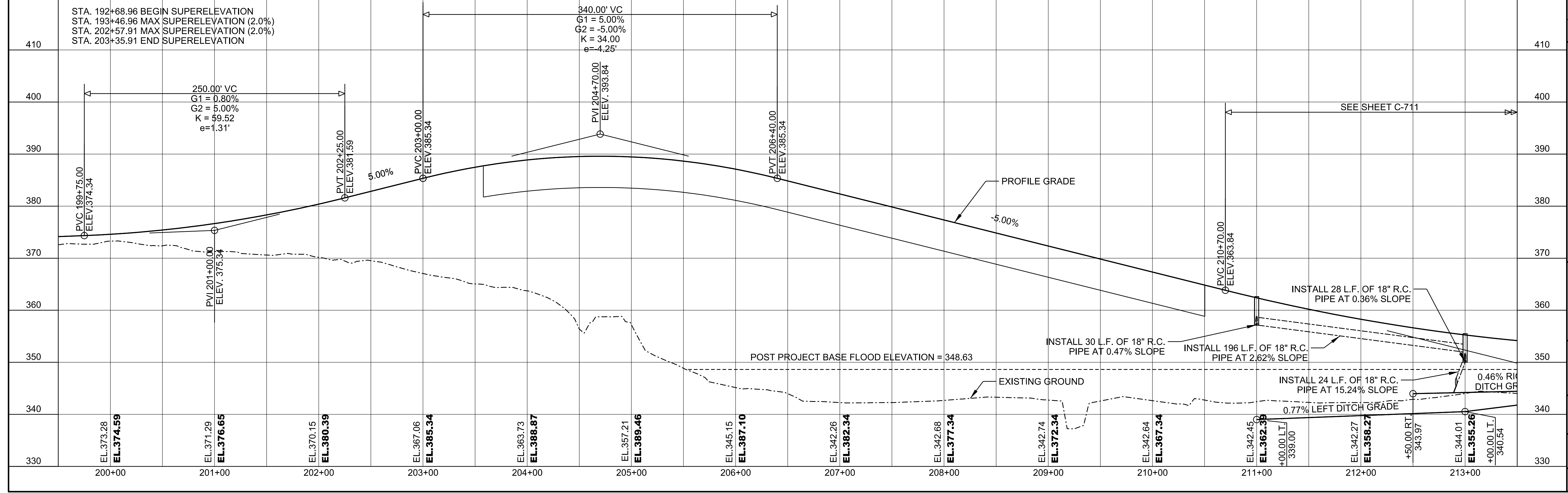
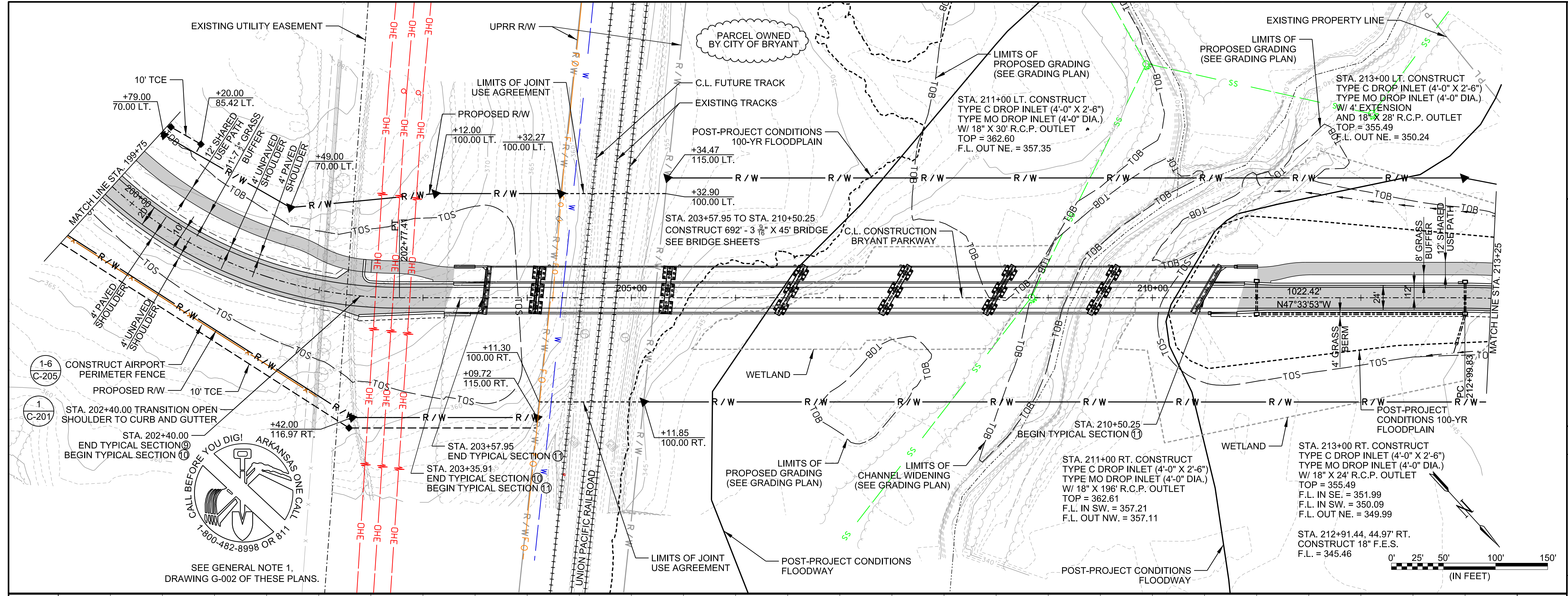
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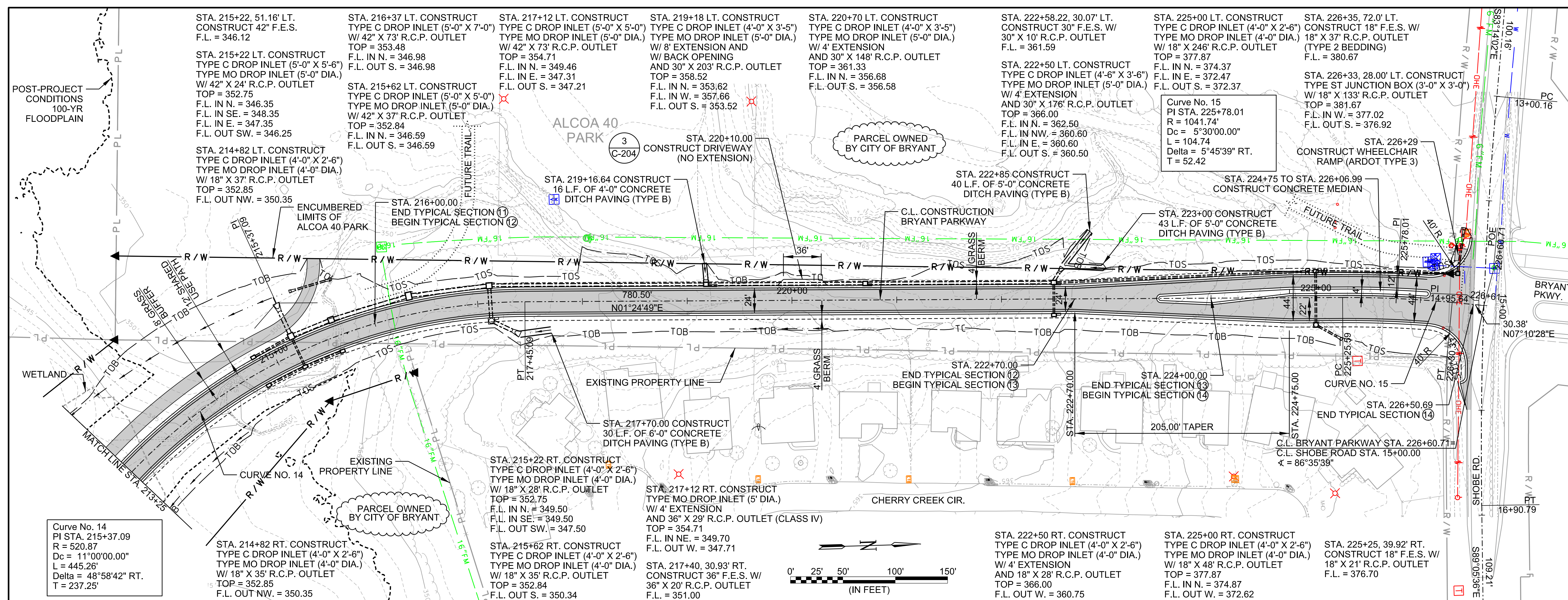
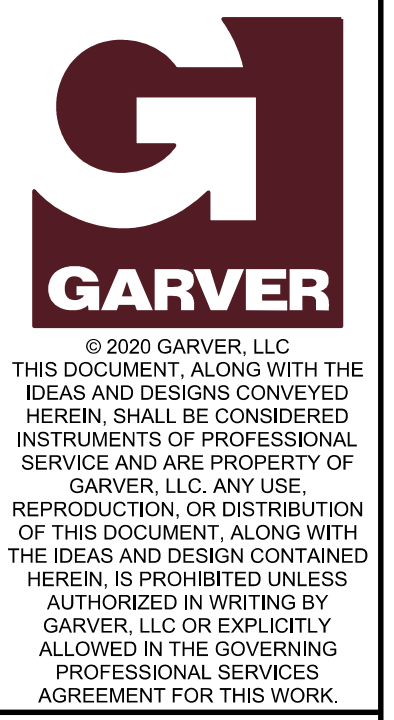
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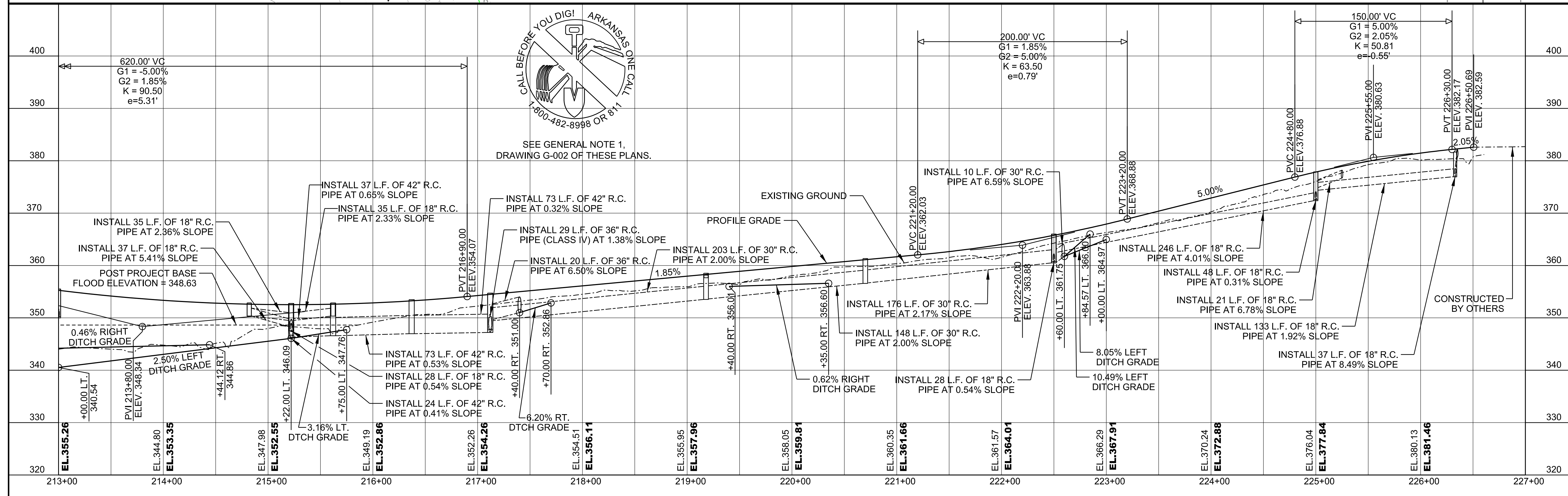


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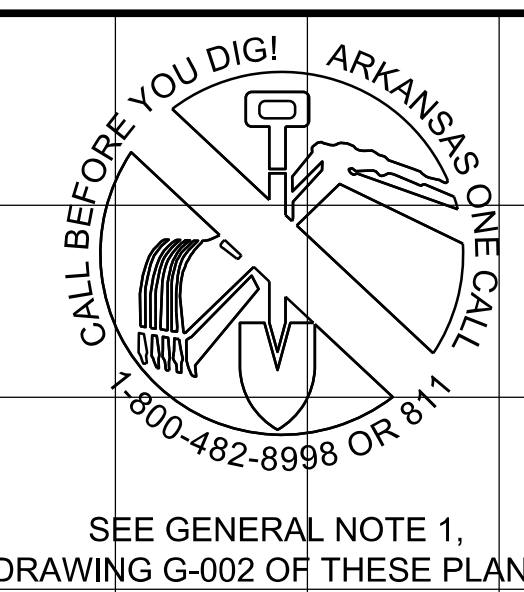


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PLAN AND PROFILE BRYANT PARKWAY

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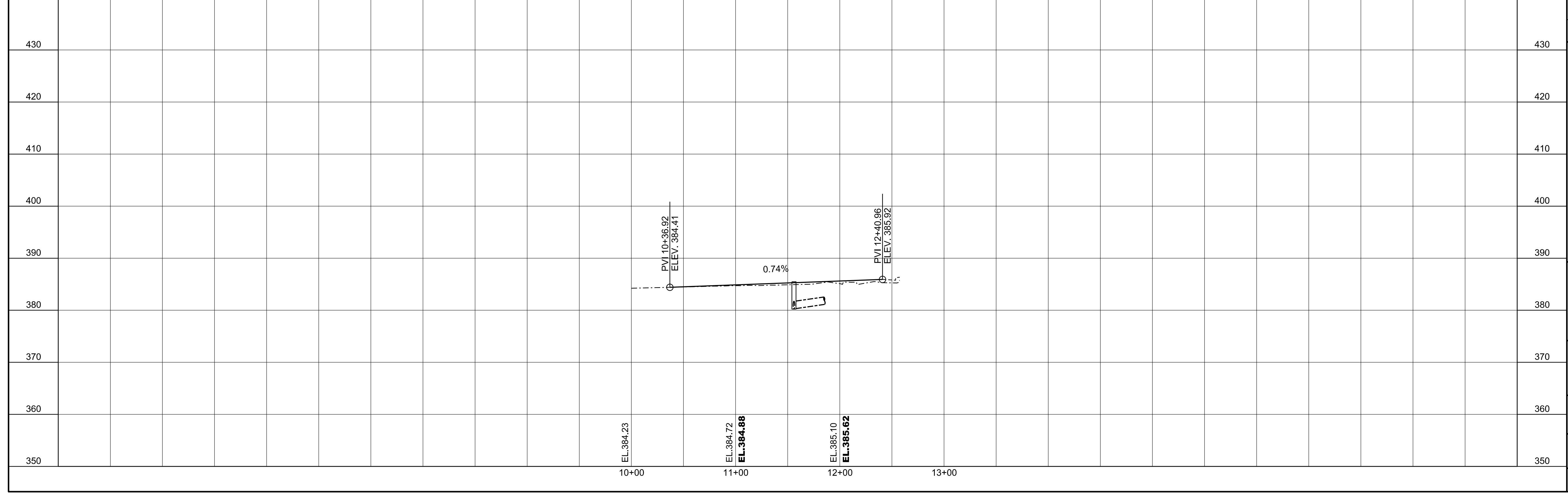
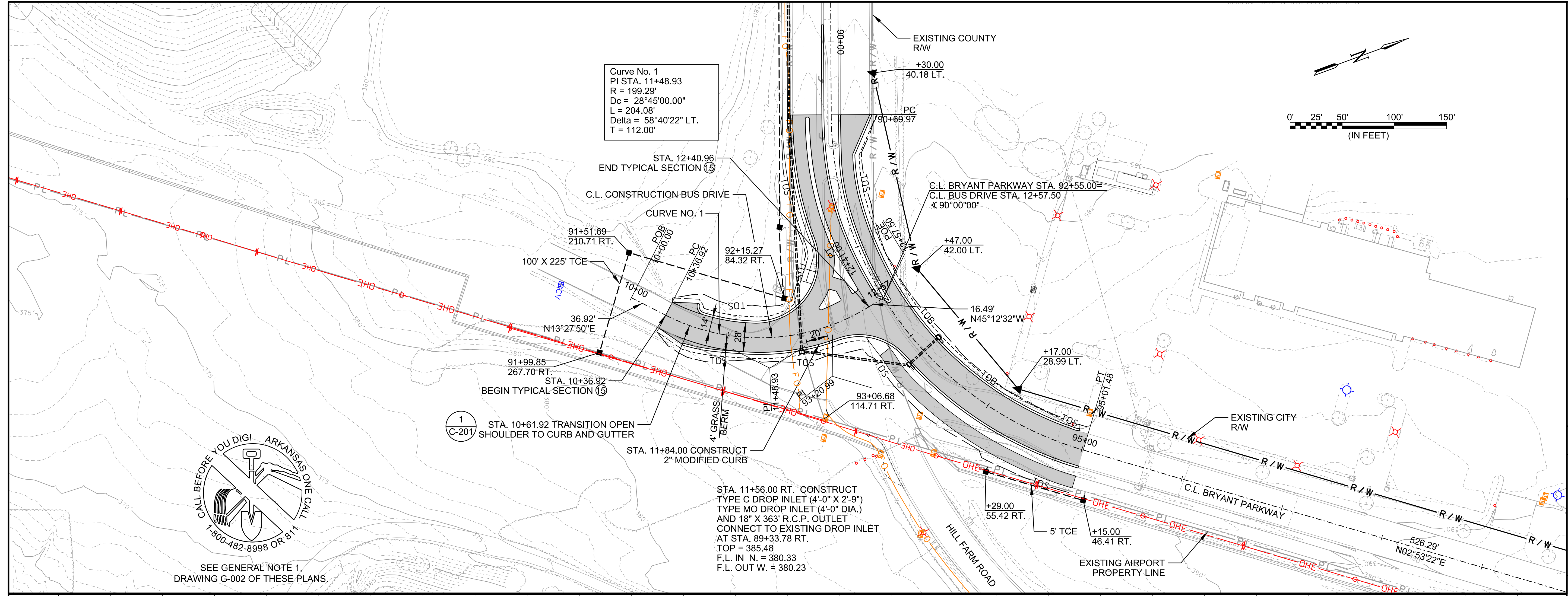
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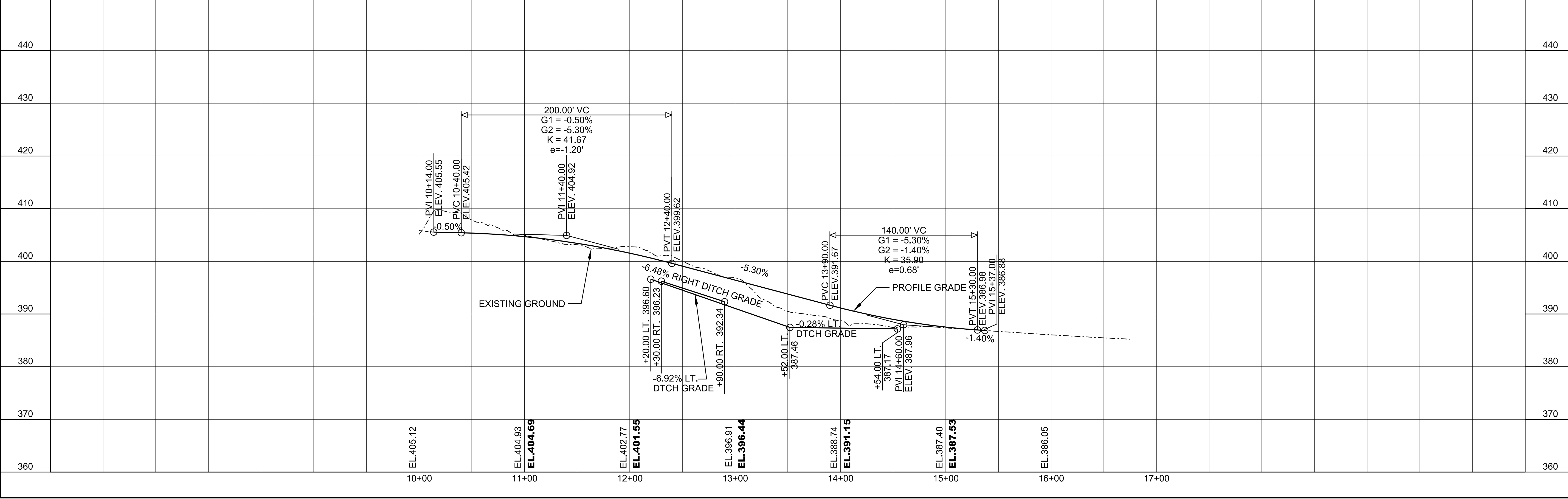
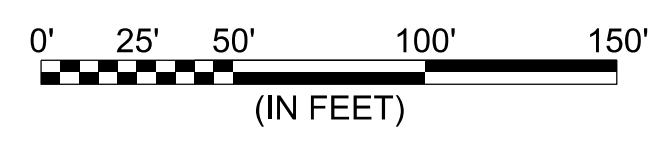
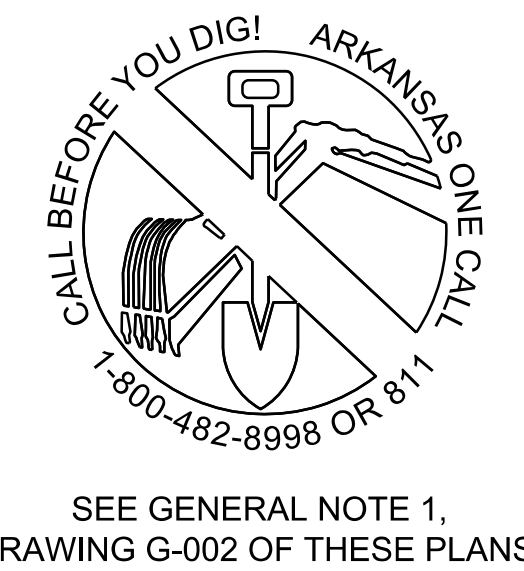
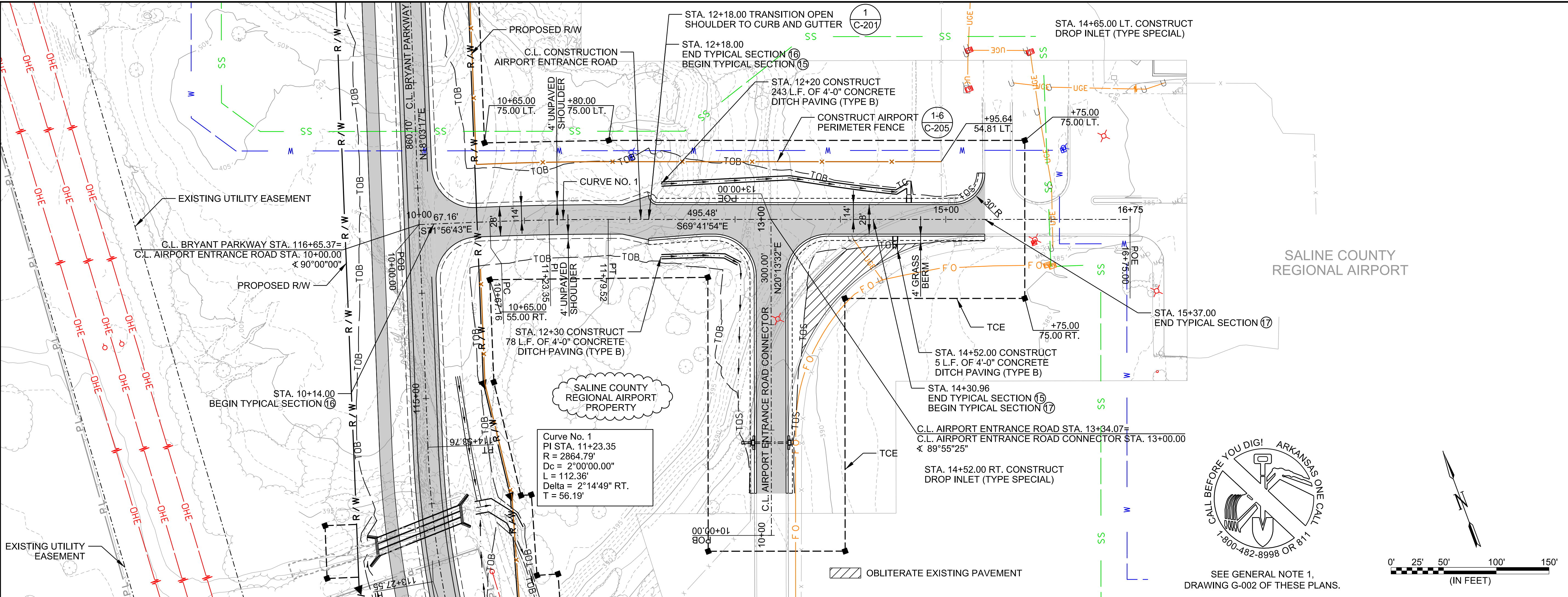
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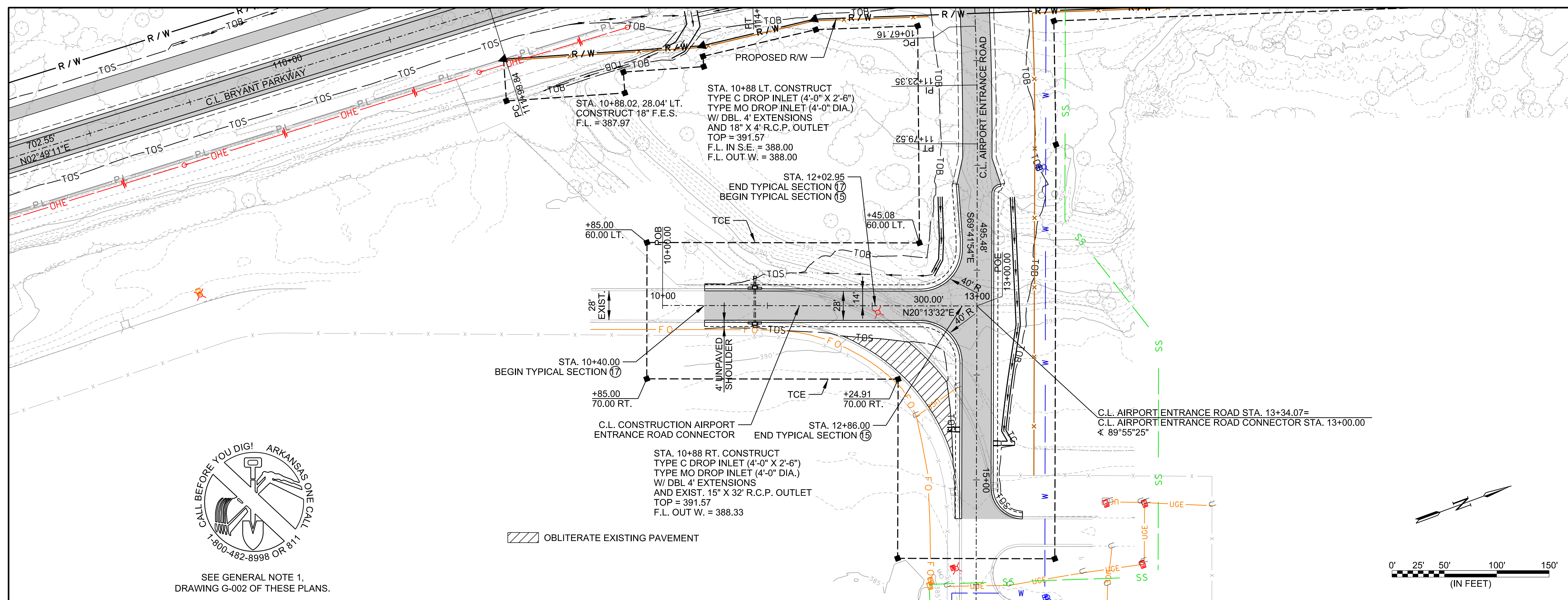
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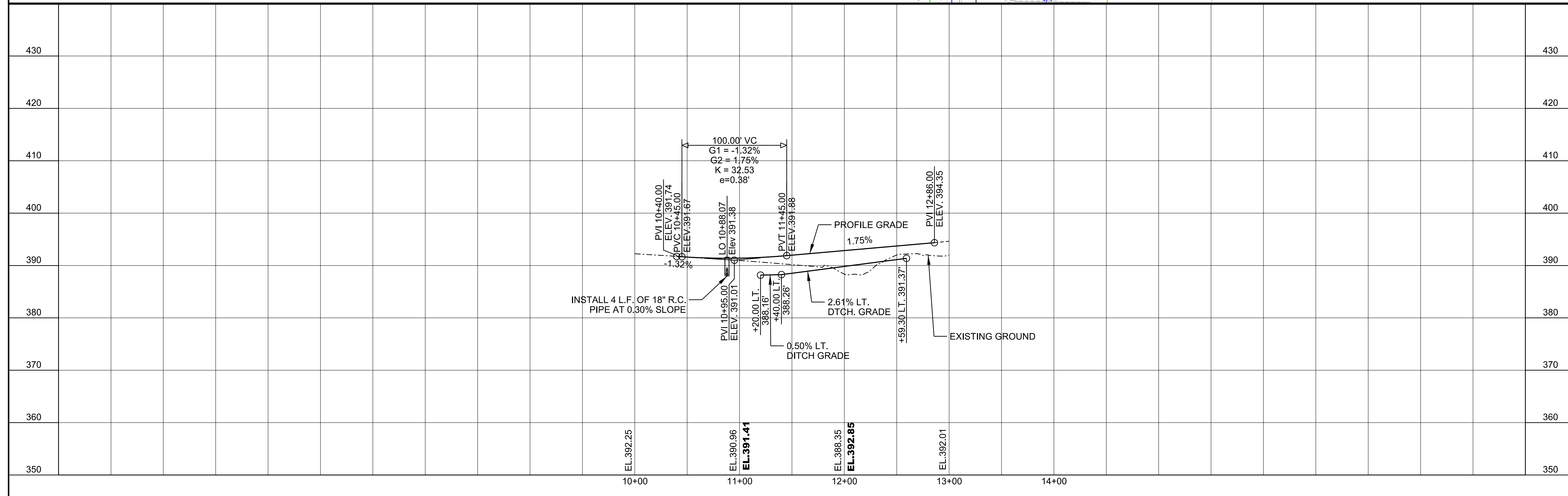
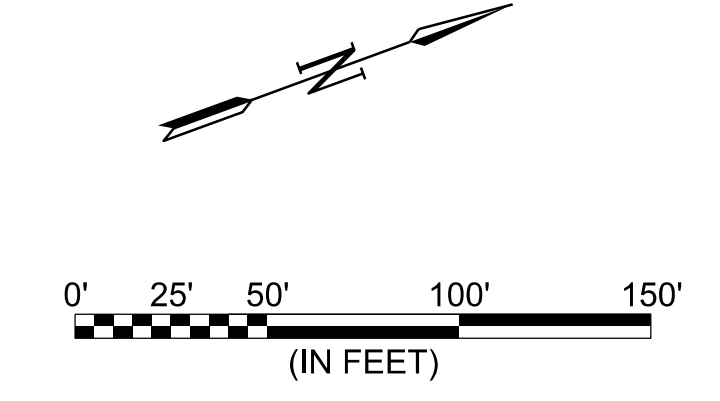
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ENVIRONMENTAL ASSESSMENT

APPENDIX C

Threatened and Endangered Species Assessment



4701 Northshore Drive
North Little Rock, AR 72118

TEL 501.376.3633
FAX 501.372.8042

www.GarverUSA.com

HABITAT ASSESSMENT MEMO

Date: August 24, 2020

To: Project File 16017140

Prepared By: Cassie Schmidt, Environmental Scientist - Garver

RE: Bryant Parkway Extension (Project 2)
Bryant, Saline County, Arkansas
Federally Protected Threatened & Endangered Species – Habitat Assessment
& Preliminary Effects Determination

Copies To: Richard Corbyn, Garver Project Manager
Ryan Mountain, Garver Senior Environmental Scientist

This memo serves to provide information on the occurrence of suitable habitat for the federally protected threatened and endangered species listed by the Information for Planning and Consultation (IPaC) project planning tool provided by the USFWS for the proposed Bryant Parkway Road Extension project in Bryant, Arkansas. USFWS protected species that could potentially occur within the study area are listed in **Table 1**. An Environmental Assessment (EA) to be approved by the Federal Aviation Administration (FAA) is being prepared for this project.

The City of Bryant plans to extend Bryant Parkway, a south to north minor arterial street whose southern terminus currently dead ends at Shobe Road. The proposed project would begin at Shobe Road (connecting to the existing Bryant Parkway), extend south, and terminate south of the Saline County Regional Airport near Hill Farm Road or County Road 1. Two build alternatives (Alternatives B and D; shown in **Figure 1**) are being evaluated. The proposed roadway for both alternatives would typically consist of a two-lane open shoulder facility with 10-foot-wide driving lanes, 4-foot-wide outside shoulders, and a variable width (125-foot average width) proposed right-of-way. The proposed alignment includes a new bridge with pedestrian and bicycle friendly considerations spanning Crooked Creek and the Union Pacific Railroad. Widening of Crooked Creek and excavation of the floodway in three areas are also associated with the project. These floodway improvements are required in order to mitigate for the minor obstruction of flow caused by bridge piers within the floodway. The floodway is 351 feet wide so spanning the entire floodway is cost prohibitive. Work is planned to begin at the end of 2020 and be completed in the spring of 2022 without seasonal work restrictions. Additional details on the project can be found in the EA document.

A habitat assessment was conducted at the site on October 4-5, 2018. No significant changes have occurred in the project area since the original habitat assessment. The location of aquatic features impacted by Alternatives A and D are shown in **Figures 2 and 3**, respectively. A summary of habitats within the study area and preliminary effects determinations for the three federally-listed bird species is provided in Table 1.

While no suitable habitat was observed within the study area for the Red Knot (*Calidris canutus rufa*) or Piping Plover (*Charadrius melodus*), according to the effects determination provided in the Consistency Letter generated by utilizing the Arkansas Determination Key, the proposed project has a May Affect, Not Likely to Adversely Affect (NLAA) determination for all three species. These preliminary effect determinations become applicable when the lead Federal action agency or designated non-federal representative submits them as a request to the USFWS to rely on the Arkansas Determination Key in order to satisfy the agency's consultation requirements for this project.

Table 1: Habitat and Preliminary Effects Determination

Species and/or Critical Habitat	Habitat Requirements	Habitat Present within Study Area	Preliminary Effect Determination*
<p>Eastern Black Rail (<i>Laterallus jamaicensis</i> spp. <i>jamaicensis</i>) Proposed Threatened</p>	<p>Eastern black rails occupy wetlands and marshes in areas of moist soil or shallow flooding. They require dense vegetative cover that allows movement underneath the canopy, such as rushes, sedges, and grasses. Water must stay shallow (0-3cm) during breeding season, as higher water levels can flood nests and drown chicks. The species is likely a vagrant in Arkansas, passing through during migration.</p>	<p>Alternative B - A total of approximately 0.12 acre of emergent wetlands would be impacted by Alternative B. These wetlands could contain suitable habitat for the rail. However, based on the scope of the project, distance from known occurrences, and small sizes of individual wetland patches (ranging from 0.01 to 0.11 acre; Figure 2), species impacts are considered to be minimal and unlikely.</p> <p>Alternative D - Approximately 0.51 acre of a single emergent wetland would be impacted by Alternative D (Figure 3). This wetland could contain suitable habitat for the rail. However, based on the scope of the project and distance from known occurrences, species impacts are considered to be minimal and unlikely.</p>	<p>May affect, not likely to adversely affect.</p>
<p>Red Knot (<i>Calidris canutus rufa</i>) Threatened</p>	<p>Red knots are usually found along mudflats associated with reservoirs.</p>	<p>No mudflats or reservoirs occur within or adjacent to the project site.</p>	<p>May affect, not likely to adversely affect.</p>
<p>Piping Plover (<i>Charadrius melodus</i>) Threatened</p>	<p>Piping plovers are usually found along sandbars of major rivers, salt flats, and mudflats of reservoirs.</p>	<p>No sandbars of major rivers, salt flats, or reservoir mudflats occur within or adjacent to the project site. No suitable habitat surrounding Crooked Creek, which is a relatively small perennial watercourse present within the project site, was observed for the piping plover.</p>	<p>May affect, not likely to adversely affect.</p>

* Determination according to the attached Consistency Letter generated by the USFWS IPaC using the Arkansas Determination Key.

As summarized in Table 1, some of the emergent wetlands located within the study area may contain suitable habitat for the Eastern Black Rail. Wetlands 1 and 7 (W-1 and W-7 in Figure 2 for Alternative B) and the 0.51-acre wetland impacted by Alternative D may contain sufficiently dense herbaceous vegetation for the Eastern Black Rail. These wetlands would be impacted by fill and/or installation of culverts/pipe as the roadway and embankments cross these features. Other emergent wetlands (as shown in photographs below) may not provide suitable habitat. Forested wetlands within the study area were not considered suitable habitat for the rail as they did not have sufficiently dense herbaceous vegetation. There is no critical habitat located within the APE.

P1. View of emergent wetland (W-1) that is likely too small to provide suitable rail habitat



P2. View of forested wetland (W-5) which is not likely to provide suitable rail habitat



P3. View of emergent wetland (W-6) which is not likely to provide suitable rail habitat



P4. View of emergent wetland (W-7) that may provide suitable rail habitat



P5. View of forested wetlands (W-8 and W-9) that are not likely to provide suitable rail habitat



P6. View looking upstream to the west at Crooked Creek (OW-5)



- Attachments:** Figure 1 - Site Vicinity Map
Figure 2 - Alternative B Wetland Impacts
Figure 3 - Alternative D Wetland Impacts
Consistency Letter Generated Using the Arkansas Determination Key
USFWS/IPaC Official Species List
Arkansas Natural Heritage Commission (ANHC) Database Search Results

Figure 1: Site Vicinity Map

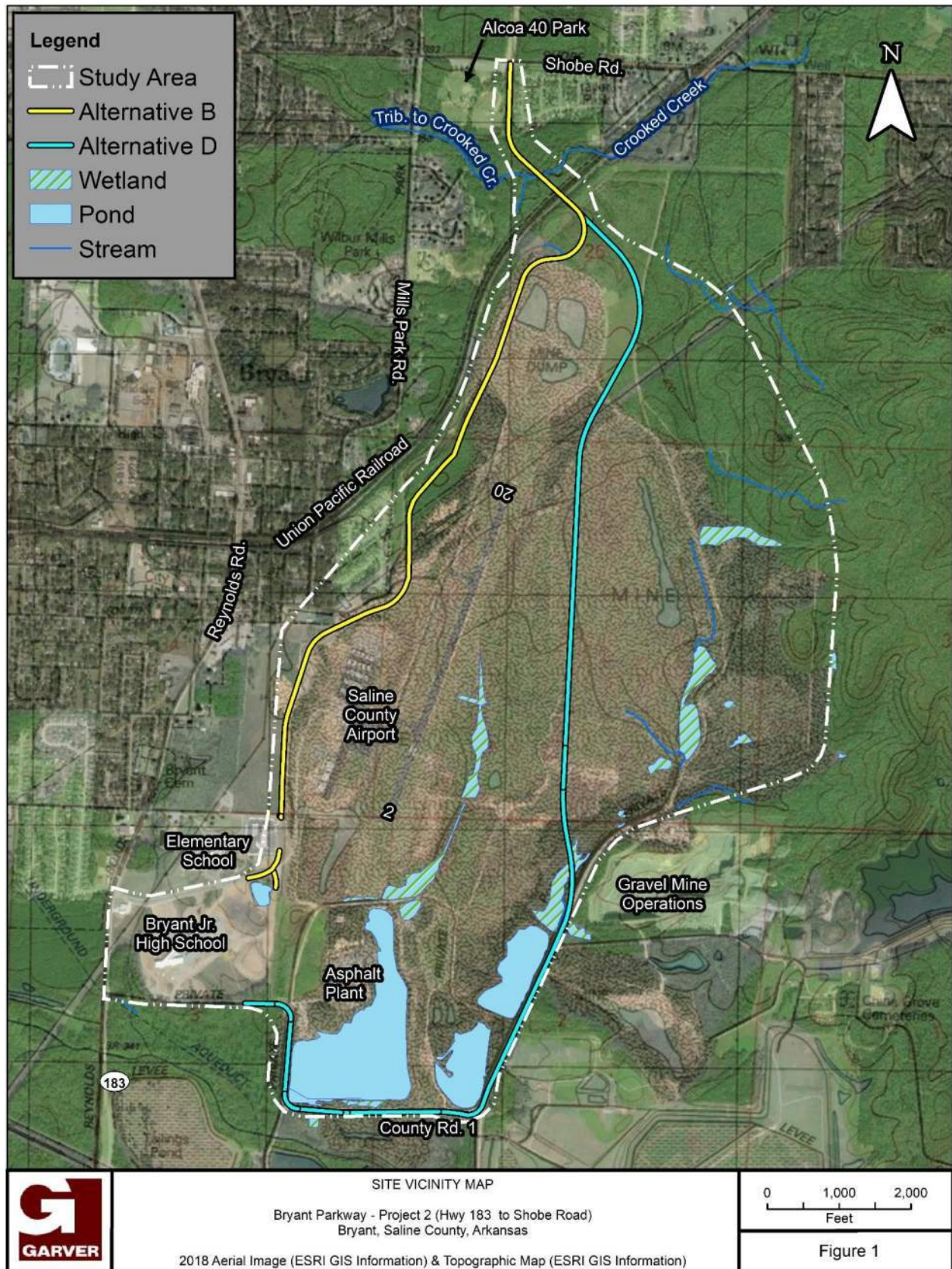


Figure 2: Alternative B Wetland Impacts

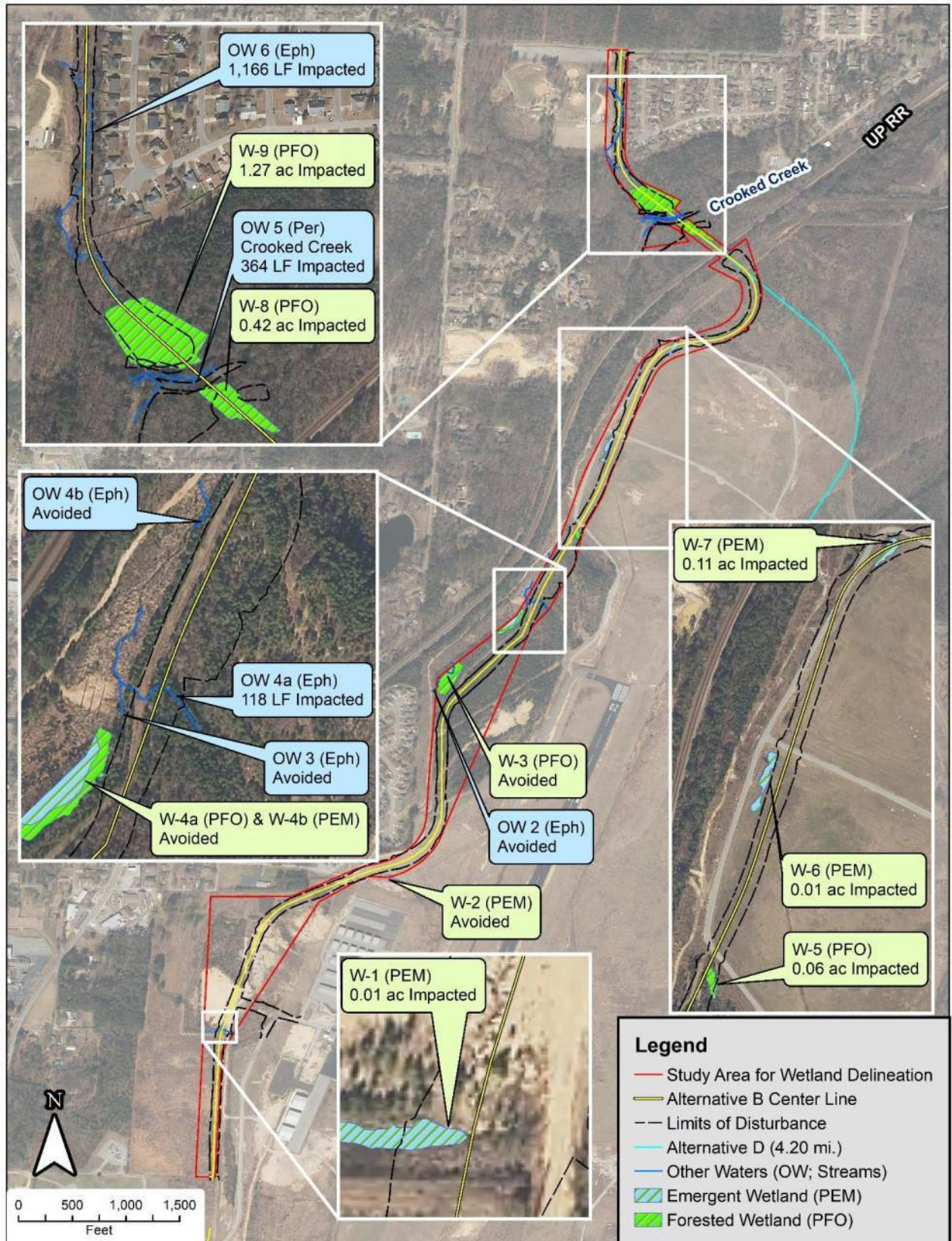
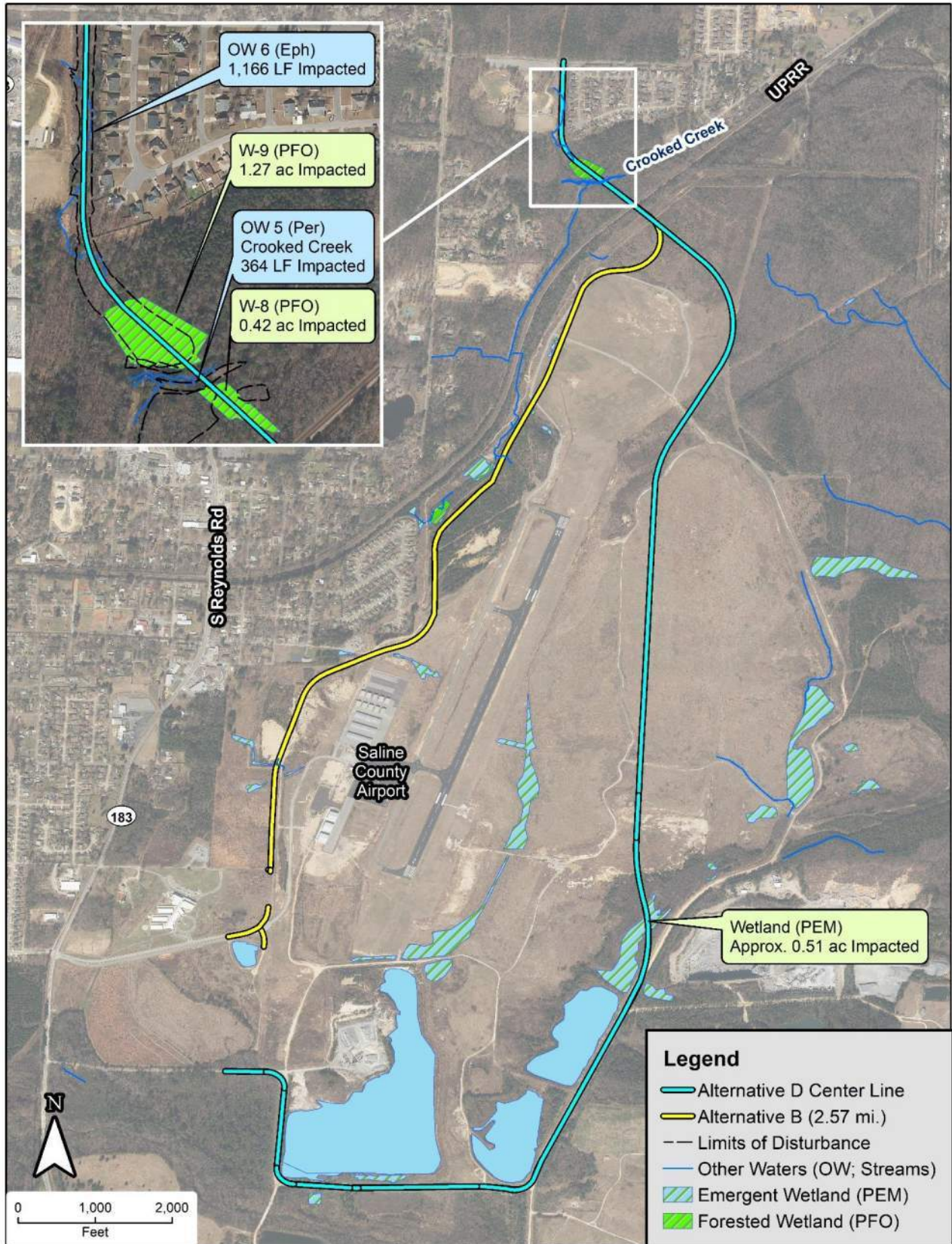


Figure 3: Alternative D Wetland Impacts





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FISH AND WILDLIFE SERVICE
 Arkansas Ecological Services Field Office
 110 South Amity Suite 300
 Conway, AR 72032-8975
 Phone: (501) 513-4470 Fax: (501) 513-4480
<http://www.fws.gov/arkansas-es>

IPaC Record Locator: 177-20580567

July 16, 2020

Subject: Consistency letter for 'Bryant Parkway: Hwy. 183 to Shobe Road' for specified federally threatened and endangered species and designated critical habitat that may occur in your proposed project area consistent with the Arkansas Determination Key for project review and guidance for federally listed species (Arkansas Dkey).

Dear Garver, LLC:

The U.S. Fish and Wildlife Service (Service) received on **July 16, 2020** your effect determination(s) for the 'Bryant Parkway: Hwy. 183 to Shobe Road' (the Action) using the Arkansas DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance in the Service's Arkansas DKey, the proposed Action, including species protective measures that you confirmed will be implemented, is consistent with a determination(s) of "no effect" and/or "may affect, but not likely to adversely affect (NLAA)" for the following species.

Species	Determination
Proposed Threatened Eastern Black Rail (<i>Laterallus jamaicensis</i> spp. <i>jamaicensis</i>)	NLAA
Threatened Red Knot (<i>Calidris canutus rufa</i>)	NLAA
Threatened Piping Plover (<i>Charadrius melodus</i>)	NLAA

Consultation Status

Consultation with the Service is not complete. The above effect determination(s) becomes applicable when the lead Federal action agency or designated non-federal representative submits them as a request to the Service to rely on the Arkansas DKey in order to satisfy the agency's consultation requirements for this project.

Please provide this consistency letter to the lead Federal action agency or its designated non-federal representative with a request for its review, and as the agency deems appropriate, to submit for concurrence verification through the IPaC system. The lead Federal action agency or designated non-federal representative should log into IPaC using their agency email account and click "Search by record locator". They will need to enter the record locator 177-20580567.

The Service recommends that your agency contact the Arkansas Ecological Services Field Office or re-evaluate the project in IPaC if: 1) the scope, timing, duration, or location of the proposed project changes, 2) new information reveals the action may affect listed species or designated critical habitat; 4) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation with the Arkansas Ecological Services Field Office should take place before project changes are final or resources committed.

Bald and Golden Eagle Protection Act: The following resources are provided to project proponents and consulting agencies as additional information. Bald and golden eagles are not included in this section 7(a)(2) consultation and this information does not constitute a determination of effects by the Service.

The Service developed the National Bald Eagle Management Guidelines to advise landowners, land managers, and others who share public and private lands with Bald Eagles when and under what circumstances the protective provisions of the BGEPA may apply to their activities. The guidelines should be consulted prior to conducting new or intermittent activity near an eagle nest. This document may be downloaded from the following site: <https://www.fws.gov/southeast/our-services/permits/eagles/>

To determine if your proposed activity is likely to take or disturb Bald Eagles, complete our step-by-step online self-certification process, which is located at <https://www.fws.gov/southeast/our-services/eagle-technical-assistance/>.

If the recommendations detailed in the National Bald Eagle Management Guidelines cannot be followed, you may apply for a permit to authorize removal or relocation of an eagle nest in certain instances. The application form is located at <http://www.fws.gov/forms/3-200-72.pdf>.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Bryant Parkway: Hwy. 183 to Shobe Road

2. Description

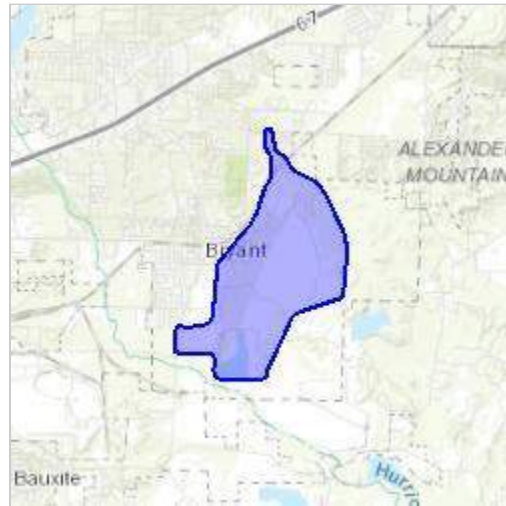
The following description was provided for the project 'Bryant Parkway: Hwy. 183 to Shobe Road':

The proposed project will extend a roadway (Bryant Parkway) on new alignment beginning 0.35 mile east of the intersection of Hill Farm Rd and Reynolds Rd, extending 2.36 miles northward along the west side of the Airport, and terminating at Shobe Road. Bryant Parkway will contribute to the quality of life of Bryant citizens by increasing connectivity, decreasing traffic congestion, and expanding the Bryant Trails System. The new road will encourage economic growth and job creation in Bryant and surrounding rural areas while providing direct access to the Saline Co. Reg. Airport. Bryant Parkway will allow rural communities of Sardis & Bauxite easier access to the Little Rock Metro. area. Primary goals of the Bryant Parkway Project are: (1) Provide access to the east and southeastern parts of the City of Bryant. (2) Alleviate traffic on Highway 183 (Reynolds Road) by providing an alternative route to access southern parts of the City of Bryant and rural communities south of Bryant. (3) Improve safety by providing emergency vehicles an additional route through and around the City, as well as, a grade separation over Union Pacific Railroad and Crooked Creek. (4) Provide a pedestrian connection to serve the eastern side of Bryant. (5) Fulfill planned improvements defined in Bryant's Walk Bike Drive plan. (6) Promote economic growth and job creation by connecting I-30 with a Certified Economic Development Site. Work is planned to begin in the fall of 2020 and be completed in the spring of 2022.

The proposed project includes a bridge spanning Crooked Creek and the Union Pacific Railroad. Flood way improvements will require that 364 linear feet of Crooked Creek be impacted by widening. The creek will be widened 15 feet by moving the right bank 15 feet to the south and lining it with a permanent turf reinforcement mat. Portions of two forested wetlands surrounding Crooked Creek will be excavated in order to improve the flood way. Additionally, areas within these two wetlands will receive fill to construct the north end of the proposed bridge and some areas will be temporarily impacted by clearing below the proposed bridge. Portions of four other wetlands (three emergent, one forested) and two streams (ephemeral unnamed tributaries to Crooked Creek) will be

impacted by fill and installation of culverts/pipe as the roadway and embankments cross these features.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/34.59289232470837N92.47356753308756W>



Species Protection Measures

Qualification Interview

1. Have you made an effects determination of "no effect" for all species in the area of the project? A "no effect" determination means the project will have no beneficial effect, no short-term adverse effects, and no long-term adverse effects on any of the species on the IPaC-generated species list for the proposed project or those species habitat. A project with effects that cannot be meaningfully measured, detected or evaluated, effects that are extremely unlikely to occur, or entirely beneficial effects should not have a "no effect" determination. (If unsure, select "No").

No

2. Choose the consulting agency:

d. Federal Highway Administration

3. Will project proponents follow [Special Provisions for avoidance and minimization](#) measures for listed species in Arkansas?

Yes

4. [Semantic] Does the project intersect designated critical habitat for the Leopard Darter?

Automatically answered

No

5. [Semantic] Does the project intersect designated critical habitat for the Neosho Mucket?

Automatically answered

No

6. [Semantic] Does the project intersect designated critical habitat for Yellowcheek Darter?

Automatically answered

No

7. [Semantic] Does the project intersect designated critical habitat for Rabbitsfoot?

Automatically answered

No

8. [Semantic] Does the project intersect the American burying beetle consultation area ?

Automatically answered

No

9. [Semantic] Does the project intersect the red-cockaded woodpecker AOI?

Automatically answered

No

10. [Semantic] Does the project intersect the Eastern black rail AOI?

Automatically answered

Yes

11. Will the project affect sand and gravel areas or shorelines along rivers, lakes, or reservoirs?

No

12. Does the project take place in marshy or flooded open field habitat?

Yes

13. Will any part of the project take place between March 15 and May 15 OR between July 15 and October 1?

Yes

14. Has Eastern Black Rail been detected at the site?

No

15. [Semantic] Does the project intersect the red knot AOI?

Automatically answered

Yes

16. [Semantic (same answer as "8.1.3")] Will the project affect sand and gravel areas or shorelines along rivers, lakes, or reservoirs?

Automatically answered

No

17. [Semantic (same answer as "8.2")] Does the project take place in marshy or flooded open field habitat?

Automatically answered

Yes

18. [Semantic (same answer as "8.3")] Will any part of the project take place between March 15 and May 15 OR between July 15 and October 1?

Automatically answered

Yes

19. Are red knots present on the site during the proposed action?

No

20. [Semantic] Does the project intersect the Piping Plover AOI?

Automatically answered

Yes

21. [Semantic (same answer as "8.1.3 or 9.3")] Will the project affect sand and gravel areas or shorelines along rivers, lakes, or reservoirs?

Automatically answered

No

22. [Semantic (same answer as "8.3" or "9.9")] Will any part of the project take place between March 15 and May 15 OR between July 15 and October 1?

Automatically answered

Yes

23. [Semantic] Does the project intersect the Whooping Crane AOI?

Automatically answered

No

24. [Semantic] Does the project intersect the interior least tern AOI?

Automatically answered

No

25. [Semantic] Does the project intersect the Gray Bat AOI?

Automatically answered

No

26. [Semantic] Does the project intersect the Ozark Big-eared Bat AOI?

Automatically answered

No

27. [Semantic] Does the project intersect the Indiana bat AOI?

Automatically answered

No

28. [Semantic] Does the project intersect the Northern Long-eared bat AOI?

Automatically answered

No

29. [Semantic] Does the project intersect the Benton County Cave Crayfish AOI?

Automatically answered

No

30. [Semantic] Does the project intersect the Hell Creek Cave Crayfish AOI?

Automatically answered

No

31. [Semantic] Does the project intersect the Ozark cavefish AOI?

Automatically answered

No

32. [Semantic] Does the project intersect the Missouri bladderpod AOI?

Automatically answered

No

33. [Semantic] Does the project intersect the Geocarpon AOI?

Automatically answered

No

34. [Semantic] Does the project intersect the running buffalo clover AOI?

Automatically answered

No

35. [Semantic] Does the project intersect the Pondberry AOI?

Automatically answered

No



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
Phone: (501) 513-4470 Fax: (501) 513-4480
<http://www.fws.gov/arkansas-es>

In Reply Refer To:

July 16, 2020

Consultation Code: 04ER1000-2020-SLI-0607

Event Code: 04ER1000-2020-E-02969

Project Name: Bryant Parkway: Hwy. 183 to Shobe Road

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies endangered, threatened, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). **This letter only provides an official species list and technical assistance; if you determine that listed species and/or designated critical habitat may be affected in any way by the proposed project, even if the effect is wholly beneficial, consultation with the Service will be necessary.**

If you determine that this project will have no effect on listed species and their habitat in any way, then you have completed Section 7 consultation with the Service and may use this letter in your project file or application.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found on our website.

Please visit our website at <http://www.fws.gov/arkansas-es/IPaC/home.html> for species-specific guidance to avoid and minimize adverse effects to federally endangered,

threatened, proposed, and candidate species. Our web site also contains additional information on species life history and habitat requirements that may be useful in project planning.

If your project involves in-stream construction activities, oil and natural gas infrastructure, road construction, transmission lines, or communication towers, please review our project specific guidance at <http://www.fws.gov/arkansas-es/IPaC/ProjSpec.html>.

The karst region of Arkansas is a unique region that covers the **northern third of Arkansas** and we have specific guidance to conserve sensitive cave-obligate and bat species. **Please visit <http://www.fws.gov/arkansas-es/IPaC/Karst.html> to determine if your project occurs in the karst region and to view karst specific-guidance.** Proper implementation and maintenance of best management practices specified in these guidance documents is necessary to avoid adverse effects to federally protected species and often avoids the more lengthy formal consultation process.

If your species list includes any mussels, Northern Long-eared Bat, Indiana Bat, Yellowcheek Darter, Red-cockaded Woodpecker, or American Burying Beetle, your project may require a presence/absence and/or habitat survey prior to commencing project activities. Please check the appropriate species-specific guidance on our website to determine if your project requires a survey. We strongly recommend that you contact the appropriate staff species lead biologist (see office directory or species page) prior to conducting presence/absence surveys to ensure the appropriate level of effort and methodology.

Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/endangered/esa-library/index.html#consultations.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to

federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, **the accuracy of this species list should be verified after 90 days.** This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arkansas Ecological Services Field Office

110 South Amity Suite 300

Conway, AR 72032-8975

(501) 513-4470

Project Summary

Consultation Code: 04ER1000-2020-SLI-0607

Event Code: 04ER1000-2020-E-02969

Project Name: Bryant Parkway: Hwy. 183 to Shobe Road

Project Type: TRANSPORTATION

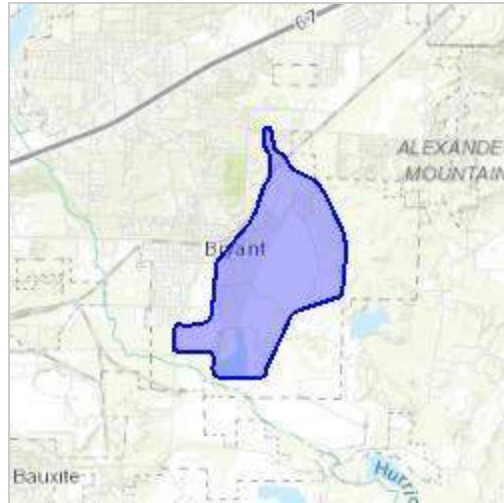
Project Description: The proposed project will extend a roadway (Bryant Parkway) on new alignment beginning 0.35 mile east of the intersection of Hill Farm Rd and Reynolds Rd, extending 2.36 miles northward along the west side of the Airport, and terminating at Shobe Road. Bryant Parkway will contribute to the quality of life of Bryant citizens by increasing connectivity, decreasing traffic congestion, and expanding the Bryant Trails System. The new road will encourage economic growth and job creation in Bryant and surrounding rural areas while providing direct access to the Saline Co. Reg. Airport. Bryant Parkway will allow rural communities of Sardis & Bauxite easier access to the Little Rock Metro. area. Primary goals of the Bryant Parkway Project are: (1) Provide access to the east and southeastern parts of the City of Bryant. (2) Alleviate traffic on Highway 183 (Reynolds Road) by providing an alternative route to access southern parts of the City of Bryant and rural communities south of Bryant. (3) Improve safety by providing emergency vehicles an additional route through and around the City, as well as, a grade separation over Union Pacific Railroad and Crooked Creek. (4) Provide a pedestrian connection to serve the eastern side of Bryant. (5) Fulfill planned improvements defined in Bryant's Walk Bike Drive plan. (6) Promote economic growth and job creation by connecting I-30 with a Certified Economic Development Site. Work is planned to begin in the fall of 2020 and be completed in the spring of 2022.

The proposed project includes a bridge spanning Crooked Creek and the Union Pacific Railroad. Flood way improvements will require that 364 linear feet of Crooked Creek be impacted by widening. The creek will be widened 15 feet by moving the right bank 15 feet to the south and lining it with a permanent turf reinforcement mat. Portions of two forested wetlands surrounding Crooked Creek will be excavated in order to improve the flood way. Additionally, areas within these two wetlands will receive fill to construct the north end of the proposed bridge and some areas will be temporarily impacted by clearing below the proposed bridge. Portions of four other wetlands (three emergent, one forested) and two streams (ephemeral unnamed tributaries to Crooked Creek) will be

impacted by fill and installation of culverts/pipe as the roadway and embankments cross these features.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/34.59289232470837N92.47356753308756W>



Counties: Saline, AR

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Proposed Threatened
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



THE DEPARTMENT OF ARKANSAS
HERITAGE

Asa Hutchinson
Governor

Stacy Hurst
Director

Date: February 11, 2019
Subject: Elements of Special Concern
Bryant Parkway
Saline County, Arkansas
ANHC No.: P-CF..-19-006

Ms. Cassie Schmidt
Garver
2049 E Joyce Blvd.
Fayetteville, AR 72703

Dear Ms. Schmidt:

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

<u>Project Name</u>	<u>County</u>	<u>Quad. Name</u>	<u>Location</u>
Bryant Parkway	Saline	Bryant 7.5'	T2S/R14W/S2 & 3 T1S/R14W/S26, 34, & 35

We find no records at present time.

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

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

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

Sincerely,

Katie Shannon
for

Cindy Osborne
Data Manager/Environmental Review Coordinator

Enclosures: Legend
Saline & Pulaski County Element Lists (annotated)
Invoice

Arkansas Arts Council

Arkansas Historic
Preservation Program

Arkansas Natural
Heritage Commission

Arkansas State Archives

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars Cultural Center

Old State House Museum



1100 North Street
Little Rock, AR 72201

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

info@naturalheritage.com
www.naturalheritage.com

LEGEND

STATUS CODES

FEDERAL STATUS CODES

C	=	Candidate species. The U.S. Fish and Wildlife Service has enough scientific information to warrant proposing this species for listing as endangered or threatened under the Endangered Species Act.
LE	=	Listed Endangered; the U.S. Fish and Wildlife Service has listed this species as endangered under the Endangered Species Act.
LT	=	Listed Threatened; the U.S. Fish and Wildlife Service has listed this species as threatened under the Endangered Species Act.
-PD	=	Proposed for Delisting; the U.S. Fish and Wildlife Service has proposed that this species be removed from the list of Endangered or Threatened Species.
PE	=	Proposed Endangered; the U.S. Fish and Wildlife Service has proposed this species for listing as endangered.
PT	=	Proposed Threatened; the U.S. Fish and Wildlife Service has proposed this species for listing as threatened.
T/SA E/SA	=	Threatened (or Endangered) because of similarity of appearance.

STATE STATUS CODES

INV	=	Inventory Element; The Arkansas Natural Heritage Commission is currently conducting active inventory work on these elements. Available data suggests these elements are of conservation concern. These elements may include outstanding examples of Natural Communities, colonial bird nesting sites, outstanding scenic and geologic features as well as plants and animals, which, according to current information, may be rare, peripheral, or of an undetermined status in the state. The ANHC is gathering detailed location information on these elements.
WAT	=	Watch List Species; The Arkansas Natural Heritage Commission is not conducting active inventory work on these species, however, available information suggests they may be of conservation concern. The ANHC is gathering general information on status and trends of these elements. An "*" indicates the status of the species will be changed to "INV" if the species is verified as occurring in the state (this typically means the agency has received a verified breeding record for the species).
MON	=	Monitored Species; The Arkansas Natural Heritage Commission is currently monitoring information on these species. These species do not have conservation concerns at present. They may be new species to the state, or species on which additional information is needed. The ANHC is gathering detailed location information on these elements
SE	=	State Endangered; this term is applied differently for plants and animals. Animals – These species are afforded protection under Arkansas Game and Fish Commission (AGFC) Regulation. The AGFC states that it is unlawful to import, transport, sell, purchase, hunt, harass or possess any threatened or endangered species of wildlife or parts. The AGFC lists as endangered any wildlife species or subspecies endangered or threatened with extinction, listed or proposed as a candidate for listing by the U.S. Fish and Wildlife Service or any native species or subspecies listed as endangered by the Commission. Plants – These species have been recognized by the Arkansas Natural Heritage Commission as being in danger of being extirpated from the state. This is an administrative designation with no regulatory authority.
ST	=	State Threatened; These species have been recognized by the Arkansas Natural Heritage Commission as being likely to become endangered in Arkansas in the foreseeable future, based on current inventory information. This is an administrative designation with no regulatory authority.

DEFINITION OF RANKS

Global Ranks

G1	=	Critically imperiled globally. At a very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
----	---	---

G2	=	Imperiled globally. At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3	=	Vulnerable globally. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4	=	Apparently secure globally. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5	=	Secure globally. Common, widespread and abundant.
GH	=	Of historical occurrence, possibly extinct globally. Missing; known from only historical occurrences, but still some hope of rediscovery.
GU	=	Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GX	=	Presumed extinct globally. Not located despite intensive searches and virtually no likelihood of rediscovery.
GNR	=	Unranked. The global rank not yet assessed.
GNA	=	Not Applicable. A conservation status rank is not applicable.
T-RANKS=		T subranks are given to global ranks when a subspecies, variety, or race is considered at the state level. The subrank is made up of a "T" plus a number or letter (1, 2, 3, 4, 5, H, U, X) with the same ranking rules as a full species.

State Ranks

S1	=	Critically imperiled in the state due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors making it vulnerable to extirpation.
S2	=	Imperiled in the state due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it vulnerable to extirpation.
S3	=	Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4	=	Apparently secure in the state. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5	=	Secure in the state. Common, widespread and abundant.
SH	=	Of historical occurrence, with some possibility of rediscovery. Its presence may not have been verified in the past 20-40 years. A species may be assigned this rank without the 20-40 year delay if the only known occurrences were destroyed or if it had been extensively and unsuccessfully sought.
SU	=	Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SX	=	Presumed extirpated from the state. Not located despite intensive searches and virtually no likelihood of rediscovery.
SNR	=	Unranked. The state rank not yet assessed.
SNA	=	Not Applicable. A conservation status rank is not applicable.

General Ranking Notes

Q	=	A "Q" in the global rank indicates the element's taxonomic classification as a species is a matter of conjecture among scientists.
RANGES=		Ranges are used to indicate a range of uncertainty about the status of the element.
?	=	A question mark is used to denote an inexact numeric rank.
B	=	Refers to the breeding population of a species in the state.
N	=	Refers to the non-breeding population of a species in the state.

7/20/2018

Arkansas Natural Heritage Commission
Department of Arkansas Heritage
Inventory Research Program
Saline County

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Animals-Invertebrates					
<i>Agapetus medicus</i>	Arkansas Agapetus Caddisfly	-	INV	G1G2	SNR
<i>Alasmidonta marginata</i>	Elktoe	-	INV	G4	S3
<i>Amblyscirtes belli</i>	Bell's Roadside-Skipper	-	INV	G3G4	S3S4
<i>Amblyscirtes linda</i>	Linda's Roadside-Skipper	-	INV	G2G3	S1S3
<i>Caecidotea holti</i>	an isopod	-	INV	GNR	S1
<i>Chlosyne gorgone</i>	Gorgone Checkerspot	-	INV	G5	S3
<i>Crangonyx aka</i>	an amphipod	-	INV	G1	S1?
<i>Cyprogenia sp. cf aberti</i>	Ouachita Fanshell	-	INV	GNR	S3
<i>Erynnis martialis</i>	Mottled Duskywing	-	INV	G3	S2S3
✓ <i>Euphyes dion</i>	Dion Skipper	-	INV	G4	S3
<i>Fusconaia ozarkensis</i>	Ozark Pigtoe	-	INV	G3G4	S3
✓ <i>Hesperia leonardus</i>	Leonard's Skipper	-	INV	G5	S3
<i>Hesperia meskei</i>	Meske's Skipper	-	INV	G3G4	S1S2
<i>Hesperia metea</i>	Cobweb Skipper	-	INV	G4	S3
<i>Lampsilis abrupta</i>	Pink Mucket	LE	SE	G2	S2
<i>Lampsilis ornata</i>	Southern Pocketbook	-	INV	G5	S2
<i>Lampsilis powellii</i>	Arkansas Fatmucket	LT	SE	G2	S2
<i>Lirceus bicuspidatus</i>	an isopod	-	INV	G3Q	S2
<i>Ochrotrichia robisoni</i>	a microcaddisfly	-	INV	G1G3	S1
<i>Ophiogomphus westfalli</i>	Westfall's snaketail	-	INV	G3	S1S2
<i>Paucicalcaria ozarkensis</i>	a microcaddisfly	-	INV	G1	S1
<i>Pleurobema cordatum</i>	Ohio pigtoe	-	INV	G4	S3
<i>Pleurobema rubrum</i>	Pyramid Pigtoe	-	INV	G2G3	S2
<i>Pleurobema sintoxia</i>	Round Pigtoe	-	INV	G4G5	S3
<i>Procambarus parasimulans</i>	Bismark burrowing crayfish	-	INV	G4	S3
<i>Ptychobranhus occidentalis</i>	Ouachita Kidneyshell	-	INV	G3G4	S3
✓ <i>Speyeria diana</i>	Diana Fritillary	-	INV	G3G4	S2S3
<i>Synurella bifurca</i>	an amphipod	-	INV	GNR	S3?
<i>Toxolasma lividum</i>	Purple Lilliput	-	INV	G3Q	S3
<i>Toxolasma parvum</i>	Lilliput	-	INV	G5	S3
<i>Toxolasma texasiense</i>	Texas Lilliput	-	INV	G4	S3
<i>Truncilla donaciformis</i>	Fawnsfoot	-	INV	G5	S3
<i>Uniomerus declivis</i>	Tapered Pondhorn	-	INV	G5	S2
* <i>Uniomerus tetralasmus</i>	Pondhorn	-	INV	G5	S2
<i>Venustaconcha pleasii</i>	Bleedingtooth Mussel	-	INV	G3G4	S3
<i>Villosa lienosa</i>	little spectaclecase	-	INV	G5	S3
Animals-Vertebrates					
<i>Ameiurus nebulosus</i>	brown bullhead	-	INV	G5	S2
<i>Anguilla rostrata</i>	American eel	-	INV	G4	S3
<i>Crotalus atrox</i>	Western Diamond-backed Rattlesnake	-	INV	G5	S2S3
<i>Etheostoma parvipinne</i>	goldstripe darter	-	INV	G4G5	S3
* <i>Eurycea paludicola</i>	Western Dwarf Salamander	-	INV	GNR	S3
<i>Haliaeetus leucocephalus</i>	Bald Eagle	-	INV	G5	S3B,S4N
<i>Hemidactylum scutatum</i>	Four-toed Salamander	-	INV	G5	S2
✓ <i>Hyla avivoca</i>	Bird-voiced Treefrog	-	INV	G5	S3
<i>Lasiurus seminolus</i>	Seminole bat	-	INV	G5	S3
<i>Liodytes rigida</i>	Glossy Swampsnake	-	INV	G5	S3

Saline Co. (cont.)

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Myotis septentrionalis</i>	northern long-eared bat	LT	SE	G1G2	S1S2
<i>Notropis ortenburgeri</i>	Kiamichi shiner	-	INV	G3	S3
<i>Notropis perpallidus</i>	peppered shiner	-	INV	G3	S3
<i>Noturus lachneri</i>	Ouachita madtom	-	INV	G2	S2
<i>Percina uranidea</i>	stargazing darter	-	INV	G3	S2
<i>Percina vigil</i>	saddleback darter	-	INV	G5	S3
<i>Picoides borealis</i>	Red-cockaded Woodpecker	LE	SE	G3	S1
<i>Regina grahamii</i>	Graham's Crayfish Snake	-	INV	G5	S2
<i>Scaphiopus hurterii</i>	Hurter's Spadefoot	-	INV	G5	S2
Plants-Vascular					
<i>Amorpha ouachitensis</i>	Ouachita indigo-bush	-	INV	G3Q	S3
<i>Amsonia hubrichtii</i>	Ouachita bluestar	-	INV	G3	S3
<i>Anthenantia texana</i>	Kral's silkyscale	-	INV	G3G4	S3
<i>Aristida lanosa</i>	woolly three-awn	-	INV	G5	S2
<i>Buchnera floridana</i>	Florida bluehearts	-	INV	GNR	S1
<i>Calopogon tuberosus</i> var. <i>tuberosus</i>	tuberous grass-pink	-	INV	G5T5	S1
✓ <i>Camassia angusta</i>	prairie wild hyacinth	-	INV	G5?Q	S2S3
<i>Cardamine douglassii</i>	purple cress	-	INV	G5	S1
<i>Carex alata</i>	broad-wing sedge	-	INV	G5	S1
<i>Carex atlantica</i> ssp. <i>atlantica</i>	prickly bog sedge	-	INV	G5T5	S2
<i>Carex bullata</i>	button sedge	-	INV	G5	S1
<i>Carex conjuncta</i>	soft fox sedge	-	INV	G4G5	S1
<i>Carex decomposita</i>	cypress-knee sedge	-	INV	G3G4	S2
<i>Carex gigantea</i>	giant sedge	-	INV	G4	S1S2
<i>Carex laevivaginata</i>	smooth-sheath sedge	-	INV	G5	S2
<i>Carex lupuliformis</i>	false hop sedge	-	INV	G4	S1S2
<i>Carex opaca</i>	opaque prairie sedge	-	SE	G4	S2S3
<i>Carex stricta</i>	tussock sedge	-	INV	G5	S3
<i>Carex willdenowii</i>	Willdenow's sedge	-	INV	G5	S1
<i>Chelone glabra</i>	white turtlehead	-	INV	G5	S1
<i>Cirsium nuttallii</i>	Nuttall's thistle	-	INV	G5	S2?
<i>Crataegus ouachitensis</i>	Ouachita hawthorn	-	INV	GNR	S1
<i>Crataegus reverchonii</i>	Reverchon's Hawthorn	-	INV	G4?	S1
✓ <i>Cyperus haspan</i>	haspan flatsedge	-	INV	G5	S2
<i>Cyperus hystrixinus</i>	bristly flatsedge	-	INV	G4	S2S3
<i>Cyripedium kentuckiense</i>	Kentucky lady's-slipper	-	INV	G3	S3
<i>Diphasiastrum digitatum</i>	southern running-pine	-	INV	G5	S1S2
✓ <i>Draba aprica</i>	open-ground whitlow-grass	-	ST	G3	S2
<i>Dryopteris celsa</i>	log fern	-	INV	G4	S2
<i>Dulichium arundinaceum</i> var. <i>arundinaceum</i>	three-way sedge	-	INV	G5T5	S2S3
<i>Eleocharis equisetoides</i>	horsetail spike-rush	-	INV	G4	S1
✓ <i>Eleocharis flavescens</i> var. <i>flavescens</i>	yellow spike-rush	-	INV	G5T5	S1S2
<i>Eleocharis wolfii</i>	Wolf's spike-rush	-	INV	G3G5	S3
<i>Elymus riparius</i>	river-bank wild rye	-	INV	G5	S1S2
✓ <i>Eriocaulon koernickianum</i>	small-head pipewort	-	SE	G2	S2
<i>Erythronium mesochoreum</i>	prairie trout-lily	-	INV	G4G5	S1S2
✓ <i>Euphorbia missurica</i>	Missouri spurge	-	INV	G5	S2
✓ <i>Fuirena bushii</i>	Bush's umbrella sedge	-	INV	G5	S3

Saline Co. (cont.)

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Gratiola brevifolia</i>	sticky hedge-hyssop	-	INV	G4	S3
<i>Gymnopogon brevifolius</i>	short-leaf skeleton grass	-	INV	G5	S2
<i>Hibiscus coccineus</i>	scarlet rose-mallow	-	INV	G4?	S1
<i>Hydrophyllum brownei</i>	Browne's waterleaf	-	INV	G2	S2
<i>Hypericum adpressum</i>	creeping St. John's-wort	-	INV	G3	S1
<i>Hypericum canadense</i>	Canadian St. John's-wort	-	INV	G5	S1
<i>Ilex verticillata</i>	winterberry	-	ST	G5	S2
✓ <i>Ipomoea cordatotriloba</i> var. <i>cordatotriloba</i>	tie-vine morning-glory	-	INV	G5T5	S1
✓ <i>Iris verna</i> var. <i>smalliana</i>	dwarf iris	-	INV	G5T4T5	S2
<i>Juncus canadensis</i>	Canadian rush	-	INV	G5	S1
<i>Lathyrus pusillus</i>	low vetchling	-	INV	G5?	S2
<i>Liatris compacta</i>	Ouachita blazing-star	-	INV	G3	S3
<i>Lycopodiella prostrata</i>	prostrate bog club-moss	-	INV	G5	S1
<i>Muhlenbergia glabrifloris</i>	inland muhly	-	INV	G4?	S1
✓ <i>Nemastylis nuttallii</i>	Nuttall's pleat-leaf	-	INV	G4	S2
<i>Opuntia nemoralis</i>	Ouachita prickly-pear	-	INV	GNR	S2
✓ <i>Panicum rigidulum</i> ssp. <i>pubescens</i>	red-top panic grass	-	INV	G5T5?	S1
✓ <i>Paspalum bifidum</i>	pitchfork paspalum	-	INV	G5	SH
<i>Perideridia americana</i>	eastern yampah	-	INV	G4	S2
* <i>Photinia melanocarpa</i>	black chokeberry	-	INV	G5	S1
✓ <i>Platanthera cristata</i>	crested fringed orchid	-	INV	G5	S1S2
<i>Platanthera peramoena</i>	purple fringeless orchid	-	ST	G5	S2
* <i>Platanthera x channellii</i>	Channell's fringed orchid	-	INV	GNA	S1
<i>Pogonia ophioglossoides</i>	rose pogonia	-	ST	G5	S2
<i>Prenanthes aspera</i>	prairie rattlesnake-root	-	INV	G4?	S2S3
<i>Prenanthes barbata</i>	barbed rattlesnake-root	-	INV	G3	S2
✓ <i>Rhynchospora gracilentia</i>	slender beaksedge	-	INV	G5	S2
<i>Rhynchospora rariflora</i>	few-flower beaksedge	-	ST	G5	S1S2
✓ <i>Rhynchospora scirpoides</i>	long-beak bald-rush	-	INV	G4	S1
<i>Rudbeckia maxima</i>	great coneflower	-	INV	G4?	S3
✓ <i>Sabatia arkansana</i>	Pelton's rose-gentian	-	INV	G1	S1
<i>Sabatia campanulata</i>	slender rose-gentian	-	SE	G5	S1
<i>Scirpus polyphyllus</i>	leafy bulrush	-	INV	G5	S2
✓ <i>Scleria muehlenbergii</i>	Muhlenberg's nut-rush	-	INV	G5	S1S2
✓ <i>Scleria verticillata</i>	whorled nut-rush	-	ST	G5	S1
<i>Scutellaria cardiophylla</i>	Gulf skullcap	-	INV	G4?	S1S2
<i>Spiraea tomentosa</i>	hardhack	-	INV	G5	S2
<i>Spiranthes lacera</i> var. <i>lacera</i>	northern slender ladies'-tresses	-	INV	G5T5	S1
<i>Spiranthes odorata</i>	fragrant ladies'-tresses	-	INV	G5	S1
<i>Stachys iltisii</i>	Ouachita hedge-nettle	-	INV	G3	S3
<i>Stenanthium gramineum</i>	featherbells	-	INV	G4G5	S3
✓ <i>Streptanthus maculatus</i> ssp. <i>obtusifolius</i>	Arkansas twistflower	-	INV	G3T3Q	S3
<i>Thalictrum arkansanum</i>	Arkansas meadow-rue	-	ST	G2Q	S2
<i>Tradescantia paludosa</i>	confederate spiderwort	-	INV	G4?Q	S1S2
<i>Triadenum virginicum</i>	Virginia marsh-St. John's-wort	-	INV	G5	S1
✓ <i>Trifolium carolinianum</i>	Carolina clover	-	INV	G5	S1?
✓ <i>Utricularia subulata</i>	zigzag bladderwort	-	INV	G5	S2
<i>Uvularia perfoliata</i>	perfoliate bellwort	-	INV	G5	S3
<i>Valerianella nuttallii</i>	Nuttall's cornsalad	-	INV	G2?	S2

Saline Co. (cont.)

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Valerianella palmeri</i>	Palmer's cornsalad	-	INV	G3	S3
<i>Veratrum virginicum</i>	bunchflower	-	INV	G5	S2
<i>Veratrum woodii</i>	Wood's false hellebore	-	INV	G5	S3
<i>Viola walteri</i>	Walter's violet	-	INV	G4G5	S1S2
<i>Vitis rupestris</i>	rock grape	-	INV	G3	S3
✓ <i>Xyris ambigua</i>	Coastal Plain yellow-eyed-grass	-	INV	G5	S2S3
Special Elements-Natural Communities					
	Ouachita Shale Glade and Barrens	-	INV	GNR	SNR
	Ozark-Ouachita Shortleaf Pine-Oak Forest	-	INV	GNR	SNR
Special Elements-Other					
✓	Colonial nesting site, water birds	-	INV	GNR	SNR
	Geological feature	-	INV	GNR	SNR

*-These elements of special concern have been recorded within one mile of the Bryant Parkway Study Area.

✓-These elements of special concern have been recorded within five miles of the Bryant Parkway Study Area.

9/21/2018

Arkansas Natural Heritage Commission
Department of Arkansas Heritage
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Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Animals-Invertebrates					
<i>Amblyscirtes aesculapius</i>	Lace-winged Roadside-Skipper	-	INV	G3G4	S1S3
<i>Amblyscirtes belli</i>	Bell's Roadside-Skipper	-	INV	G3G4	S3S4
<i>Arianops copelandi</i>	Copeland's mold beetle	-	INV	GNR	S1
<i>Autochton cellus</i>	Golden Banded-Skipper	-	INV	G4	S2S3
<i>Calephelis borealis</i>	Northern Metalmark	-	INV	G3G4	S3
<i>Chlosyne gorgone</i>	Gorgone Checkerspot	-	INV	G5	S3
<i>Dryobius sexnotatus</i>	six-banded longhorn beetle	-	INV	GNR	S2
<i>Erynnis martialis</i>	Mottled Duskywing	-	INV	G3	S2S3
<i>Euphyes dion</i>	Dion Skipper	-	INV	G4	S3
<i>Euphyes dukesi</i>	Dukes' Skipper	-	INV	G3	S1S2
<i>Hesperia leonardus</i>	Leonard's Skipper	-	INV	G5	S3
<i>Hesperia meskei</i>	Meske's Skipper	-	INV	G3G4	S1S2
<i>Hesperia metea</i>	Cobweb Skipper	-	INV	G4	S3
<i>Lirceus bicuspidatus</i>	an isopod	-	INV	G3Q	S2
<i>Lucanus elaphus</i>	giant stag beetle	-	INV	G3G5	S2
<i>Papaipema eryngii</i>	Rattlesnake-master borer moth	C	INV	G1G2	S1
<i>Poanes yehl</i>	Yehl Skipper	-	INV	G4	S1S3
<i>Polygonia progne</i>	Gray Comma	-	INV	G5	S2S3
<i>Problema byssus</i>	Byssus Skipper	-	INV	G3G4	S3
<i>Satyrium favonius ontario</i>	Oak Hairstreak	-	INV	G4G5T4	S3
<i>Somatochlora ozarkensis</i>	Ozark emerald	-	INV	G3	S1
<i>Speyeria diana</i>	Diana Fritillary	-	INV	G3G4	S2S3
<i>Synurella bifurca</i>	an amphipod	-	INV	GNR	S3?
✓ <i>Toxolasma parvum</i>	Lilliput	-	INV	G5	S3
<i>Uniomerus tetralasmus</i>	Pondhorn	-	INV	G5	S2
Animals-Vertebrates					
<i>Aimophila ruficeps</i>	Rufous-crowned Sparrow	-	INV	G5	S1
<i>Ambystoma annulatum</i>	Ringed Salamander	-	INV	G4	S3
<i>Ammodramus henslowii</i>	Henslow's Sparrow	-	INV	G4	S1B,S2N
<i>Anguilla rostrata</i>	American eel	-	INV	G4	S3
<i>Calcarius pictus</i>	Smith's Longspur	-	INV	G4G5	S2N
<i>Crotalus atrox</i>	Western Diamond-backed Rattlesnake	-	INV	G5	S2S3
<i>Crotaphytus collaris</i>	Eastern Collared Lizard	-	INV	G5	S2
<i>Cycleptus elongatus</i>	blue sucker	-	INV	G3G4	S3
<i>Erimyzon sucetta</i>	lake chubsucker	-	INV	G5	S3
<i>Gallinula galeata</i>	Common Gallinule	-	INV	G5	S2B
<i>Haliaeetus leucocephalus</i>	Bald Eagle	-	INV	G5	S3B,S4N
<i>Hybognathus placitus</i>	plains minnow	-	INV	G4	SH
<i>Hyla avivoca</i>	Bird-voiced Treefrog	-	INV	G5	S3
<i>Ixobrychus exilis</i>	Least Bittern	-	INV	G4G5	S2B
<i>Limnothlypis swainsonii</i>	Swainson's Warbler	-	INV	G4	S3B
<i>Liodytes rigida</i>	Glossy Swampsnake	-	INV	G5	S3
<i>Myotis lucifugus</i>	little brown bat	-	INV	G3	S1
<i>Myotis septentrionalis</i>	northern long-eared bat	LT	SE	G1G2	S1S2
<i>Ophisaurus attenuatus</i>	Slender Glass Lizard	-	INV	G5	S3
<i>Picoides borealis</i>	Red-cockaded Woodpecker	LE	SE	G3	S1
<i>Polyodon spathula</i>	paddlefish	-	INV	G4	S3
<i>Porphyrio martinicus</i>	Purple Gallinule	-	INV	G5	S1B

Pulaski County (cont.)

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Pseudacris streckeri</i>	Strecker's Chorus Frog	-	INV	G5	S2
<i>Rallus elegans</i>	King Rail	-	INV	G4	S1B
<i>Spilogale putorius</i>	eastern spotted skunk	-	INV	G4	S2S3
<i>Sternula antillarum athalassos</i>	Interior Least Tern	LE	SE	G4T2Q	S3B
Plants-Vascular					
<i>Amorpha canescens</i>	lead-plant	-	INV	G5	S1
<i>Amsonia hubrichtii</i>	Ouachita bluestar	-	INV	G3	S3
<i>Apocynum sibiricum</i>	clasping dogbane	-	INV	GNR	S1
<i>Bergia texana</i>	Texas bergia	-	INV	G5	S2
<i>Callirhoe alcaeoides</i>	plains poppy-mallow	-	INV	G5?	S1?
<i>Callirhoe bushii</i>	Bush's poppy-mallow	-	INV	G3	S3
<i>Carex arkansana</i>	Arkansas sedge	-	INV	G4	S1
<i>Carex bromoides</i> ssp. <i>bromoides</i>	brome sedge	-	INV	G5T5	S2
<i>Carex bullata</i>	button sedge	-	INV	G5	S1
<i>Carex comosa</i>	bottle-brush sedge	-	INV	G5	S1S2
<i>Carex decomposita</i>	cypress-knee sedge	-	INV	G3G4	S2
<i>Carex lupuliformis</i>	false hop sedge	-	INV	G4	S1S2
<i>Carex seorsa</i>	swamp star sedge	-	INV	G5	SH
<i>Carex stricta</i>	tussock sedge	-	INV	G5	S3
<i>Clematis glaucophylla</i>	white-leaf leather-flower	-	INV	G4?	S1
<i>Crassula aquatica</i>	water pygmyweed	-	INV	G5	S1S3
<i>Crataegus macrocarpa</i>	fan-leaf hawthorn	-	INV	G5	S1
<i>Cypripedium kentuckiense</i>	Kentucky lady's-slipper	-	INV	G3	S3
<i>Dalea lanata</i> var. <i>lanata</i>	woolly prairie-clover	-	INV	G5TNR	S2S3
<i>Dulichium arundinaceum</i> var. <i>arundinaceum</i>	three-way sedge	-	INV	G5T5	S2S3
<i>Eleocharis wolfii</i>	Wolf's spike-rush	-	INV	G3G5	S3
<i>Equisetum laevigatum</i>	smooth scouring-rush	-	INV	G5	S1
<i>Eriocaulon koernickianum</i>	small-head pipewort	-	SE	G2	S2
<i>Eustoma exaltatum</i>	catchfly prairie-gentian	-	INV	G5	S2
<i>Gaura sinuata</i>	wavy-leaf gaura	-	INV	G4G5	SH
<i>Gratiola brevifolia</i>	sticky hedge-hyssop	-	INV	G4	S3
<i>Heliotropium convolvulaceum</i>	phlox heliotrope	-	INV	G5	S2
<i>Hexalectris spicata</i> var. <i>spicata</i>	crested-coralroot	-	INV	G5T4T5	S2
<i>Hypoxis sessilis</i>	glossy-seed star-grass	-	INV	G4	S1
<i>Lathyrus pusillus</i>	low vetchling	-	INV	G5?	S2
<i>Liatris compacta</i>	Ouachita blazing-star	-	INV	G3	S3
<i>Liatris scariosa</i> var. <i>nieuwlandii</i>	northern blazing-star	-	INV	G5?T3T5	S2?
<i>Marshallia caespitosa</i> var. <i>signata</i>	leafy Barbara's-buttons	-	INV	G4T4	S1
<i>Micranthes virginiana</i>	early saxifrage	-	INV	G5	S1S2
<i>Nemastylis geminiflora</i>	celestial-lily	-	INV	G4	S3
<i>Nemastylis nuttallii</i>	Nuttall's pleat-leaf	-	INV	G4	S2
<i>Panicum rigidulum</i> ssp. <i>pubescens</i>	red-top panic grass	-	INV	G5T5?	S1
<i>Paspalum bifidum</i>	pitchfork paspalum	-	INV	G5	SH
<i>Penstemon cobaea</i>	showy beardtongue	-	INV	G4	S3
<i>Plantago wrightiana</i>	Wright's plantain	-	INV	G5	S1
<i>Platanthera cristata</i>	crested fringed orchid	-	INV	G5	S1S2
<i>Platanthera flava</i>	rein orchid	-	ST	G4?	S2S3
<i>Platanthera peramoena</i>	purple fringeless orchid	-	ST	G5	S2
<i>Polygala incarnata</i>	pink milkwort	-	INV	G5	S1S2

Pulaski County (cont.)

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Prenanthes barbata</i>	barbed rattlesnake-root	-	INV	G3	S2
<i>Ranunculus aquatilis</i> var. <i>diffusus</i>	white water crowfoot	-	INV	G5T5	S2S3
<i>Ranunculus flabellaris</i>	yellow water crowfoot	-	INV	G5	S3
<i>Rhynchospora colorata</i>	white-top sedge	-	SE	G5	S1
<i>Sabatia campanulata</i>	slender rose-gentian	-	SE	G5	S1
<i>Schoenoplectus californicus</i>	California bulrush	-	INV	G5	S1S2
<i>Spiraea tomentosa</i>	hardhack	-	INV	G5	S2
<i>Spiranthes praecox</i>	giant ladies'-tresses	-	INV	G5	S1S2
<i>Stenanthium gramineum</i>	featherbells	-	INV	G4G5	S3
<i>Streptanthus maculatus</i> ssp. <i>obtusifolius</i>	Arkansas twistflower	-	INV	G3T3Q	S3
✓ <i>Thalictrum arkansanum</i>	Arkansas meadow-rue	-	ST	G2Q	S2
<i>Tradescantia paludosa</i>	confederate spiderwort	-	INV	G4?Q	S1S2
<i>Trifolium carolinianum</i>	Carolina clover	-	INV	G5	S1?
<i>Trifolium stoloniferum</i>	running buffalo clover	LE	INV	G3	SH
<i>Trillium ozarkanum</i>	Ozark trillium	-	INV	G3	S3
<i>Utricularia macrorrhiza</i>	greater bladderwort	-	INV	G5	SH
<i>Veratrum virginicum</i>	bunchflower	-	INV	G5	S2
<i>Vicia ludoviciana</i> ssp. <i>ludoviciana</i>	Louisiana vetch	-	INV	G5TNR	SH
Special Elements-Natural Communities					
Lower Mississippi River Bottomland Depression		-	INV	GNR	SNR
Ozark-Ouachita Dry Oak Woodland		-	INV	GNR	SNR
West Gulf Coastal Plain Nepheline Syenite Glade		-	INV	GNR	SNR
Special Elements-Other					
Colonial nesting site, swallows & swifts		-	INV	GNR	SNR
Colonial nesting site, water birds		-	INV	GNR	SNR
Geological feature		-	INV	GNR	SNR

✓-These elements of special concern have been recorded within five miles of the Bryant Parkway Study Area.