Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

Date: August 01, 2024 - **Time:** 9:00 AM

Call to Order

Old Business

New Business

1. **Hillcrest Addition Subdivision** - Springhill Road

   Lemons Engineering Consultants - Requesting Recommendation for Approval of Preliminary Plat

   - 0890-DRN-03.pdf
   - 0890-PLN-02.pdf
   - 0890-DRN-02.pdf
   - 0890-RSP-01.pdf

2. **First United Methodist Church - 506 N Reynolds Road** - Columbarium

   Requesting Site Plan Approval for new Columbarium

   - 0899-PLN-02.pdf
   - 0899-PLN-01.pdf

3. **Leslie Addition** - 1 Lot Subdivision Plat

   Zane Robbins - Requesting Recommendation for Final Plat Approval

   - 0901-PLN-01.pdf

4. **Pathfinder Inc. - 2107 Bishop Rd** - Sign Permit

   Action Sign - Requesting Sign Permit Approval

   - 92605-SGNAPP-02 Pathfinder.jpg
   - 92605-SGNAPP-01 Pathfinder.pdf

Staff Approved

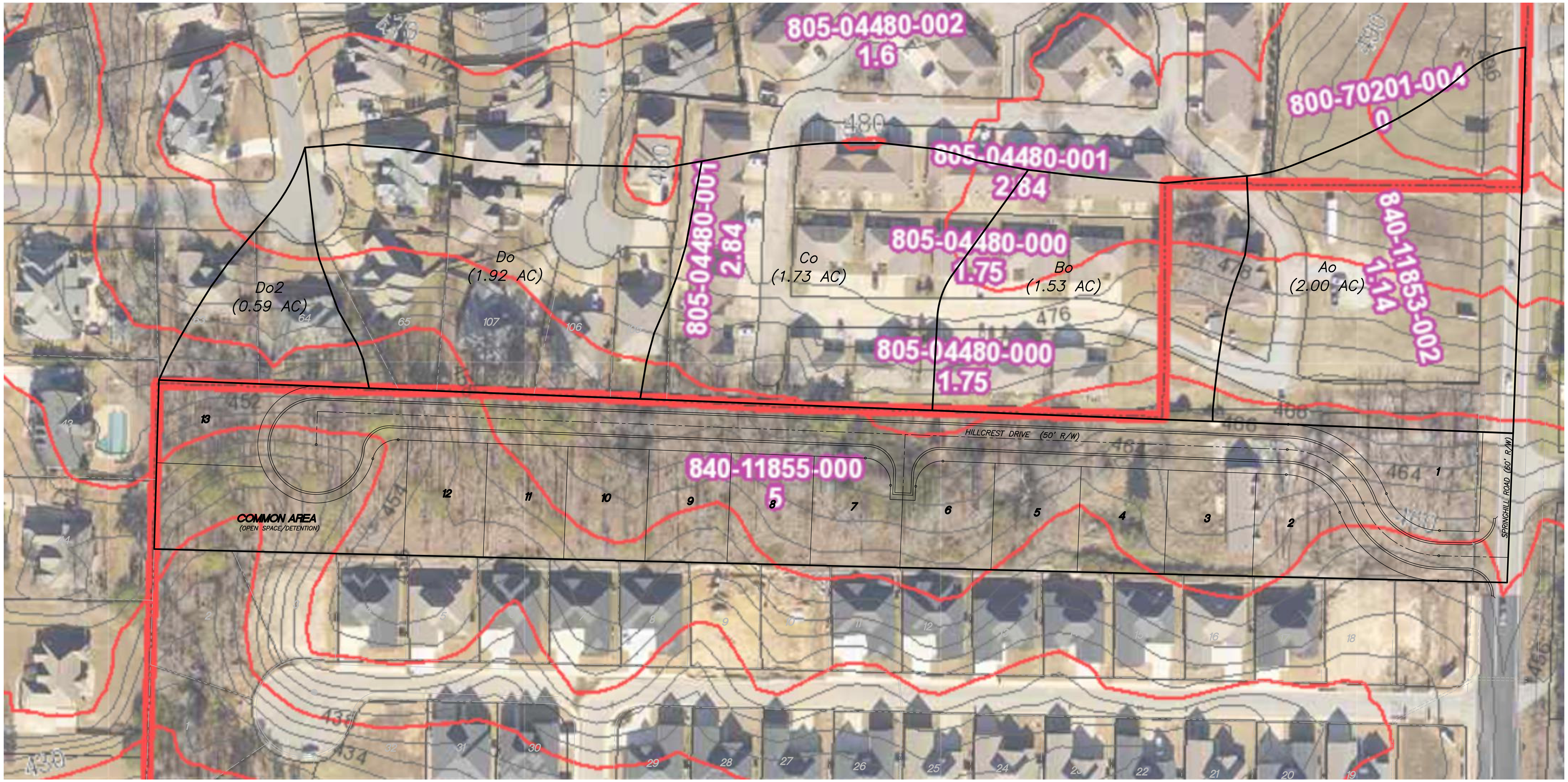
5. **Senor Tequila - 2019 N Reynolds** - Sign Permit

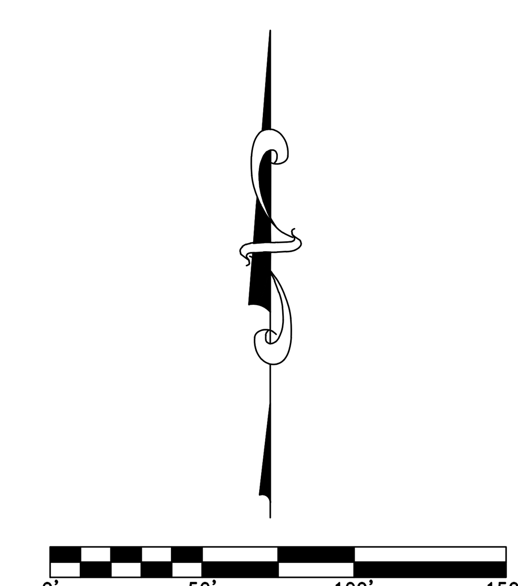
   Arkansas Sign and Neon - Requesting Sign Permit Approval - STAFF APPROVED

   - 92497-SGNAPP-01.pdf

Permit Report

Adjournments





SCALE: 1" = 50'

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
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DRAINAGE MAP (OFF-SITE)
HILLCREST ADDITION

PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By

Project No.: 24-018
Date: JULY 23, 2024
File: Hillcrest Drain Off
Scale: 1" = 50'
Sheet: 1 of 1
Drawn By: B. Judd

DETAILED PLANS:

HILLCREST ADDITION

PART OF SECTION 12, T-4-N, R-10-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

JULY 9, 2024
REVISED: JULY 23, 2024

PREPARED FOR:

SPRINGHILL HWY 5 DEVELOPMENT, LLC
816 E. OAK STREET
CONWAY, ARKANSAS 72032

Arkansas 811
Know what's below. Call before you dig.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7373
TIMOTHY B. LEMONS

Prepared By:

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023

ENGINEERING • SURVEYING • PLANNING

INDEX OF SHEETS

CERTIFICATE OF ENGINEERING ACCURACY:

I, TIMOTHY B. LEMONS, HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A PLAT MADE BY ME, OR UNDER MY SUPERVISION, AND THAT ENGINEERING REQUIREMENTS OF THE BRYANT SUBDIVISION RULES AND REGULATIONS HAVE BEEN COMPLIED WITH.

DATE

TIMOTHY B. LEMONS, REGISTERED PROFESSIONAL ENGINEER
NO. 7373, ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 7373 TIMOTHY B. LEMONS

CERTIFICATE OF SURVEYING ACCURACY:

I, BILLY A. LAWRENCE, HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A BOUNDARY SURVEY MADE BY ME AND ALL MONUMENTS SHOWN HEREON ACTUALLY EXIST AND THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE CORRECTLY SHOWN.

DATE

BILLY A. LAWRENCE, ARKANSAS PROFESSIONAL SURVEYOR,
NO. 1552

REGISTERED STATE OF ARKANSAS NO 1552 BILLY A. LAWRENCE PROFESSIONAL LAND SURVEYOR

CERTIFICATE OF PRELIMINARY PLAT APPROVAL:

ALL REQUIREMENTS OF THE BRYANT SUBDIVISION RULES AND REGULATIONS RELATIVE TO THE PREPARATION AND SUBMITTAL OF A PRELIMINARY PLAT HAVING BEEN FULFILLED, APPROVAL OF THIS DOCUMENT IS HEREBY GRANTED, SUBJECT TO FURTHER PROVISIONS OF SAID RULES AND REGULATIONS, THIS CERTIFICATE SHALL EXPIRE ______
DATE

DATE OF EXECUTION

SIGNED: CHAIRMAN,
BRYANT PLANNING COMMISSION

CERTIFICATE OF OWNERS:

WE, THE UNDERSIGNED, OWNERS OF THE REAL ESTATE SHOWN AND DESCRIBED HEREIN, DO HEREBY CERTIFY THAT WE HAVE LAID OFF, PLATTED, AND SUBDIVIDED, AND DO HEREBY LAY OFF, PLAT AND SUBDIVIDE SAID REAL ESTATE IN ACCORDANCE WITH THIS PLAT.

DATE

SPRINGHILL HWY 5 DEVELOPMENT, LLC
816 E. OAK STREET
CONWAY, ARKANSAS 72032

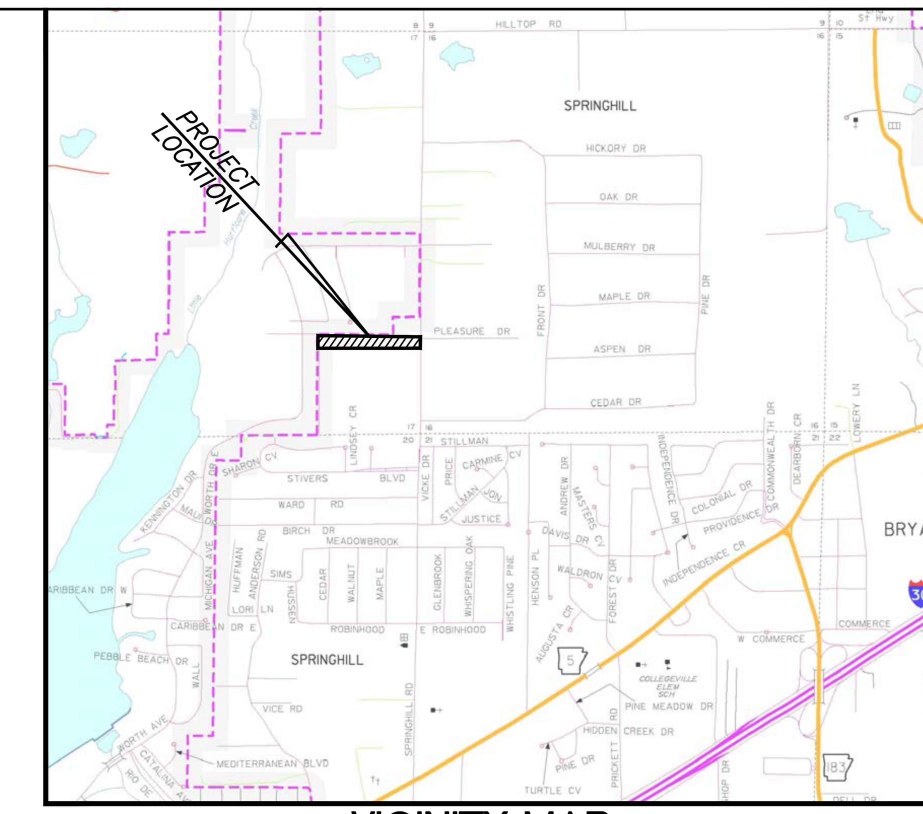
LEGAL DESCRIPTION:

PART OF THE SE ¼, OF THE SE ¼, SECTION 17, T–1–S, R–14–W, SALINE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE SE ¼, OF THE SE ¼, SECTION 17, T–1–S, R–14–W, SALINE COUNTY, ARKANSAS; THENCE N 02°17'33" E, 1167.19 FEET TO THE POINT OF BEGINNING; THENCE N 88°34'40" W, 1344.97 FEET; THENCE N 01°36'19" E, 167.98 FEET; THENCE S 87°44'58" E, 1346.85 FEET; THENCE S 02°18'02" W, 148.52 FEET; TO THE POINT OF BEGINNING, CONTAINING 4.89 ACRES, MORE OR LESS.
SOURCE OF TITLE: 2021–030121

FLOOD CERTIFICATION:

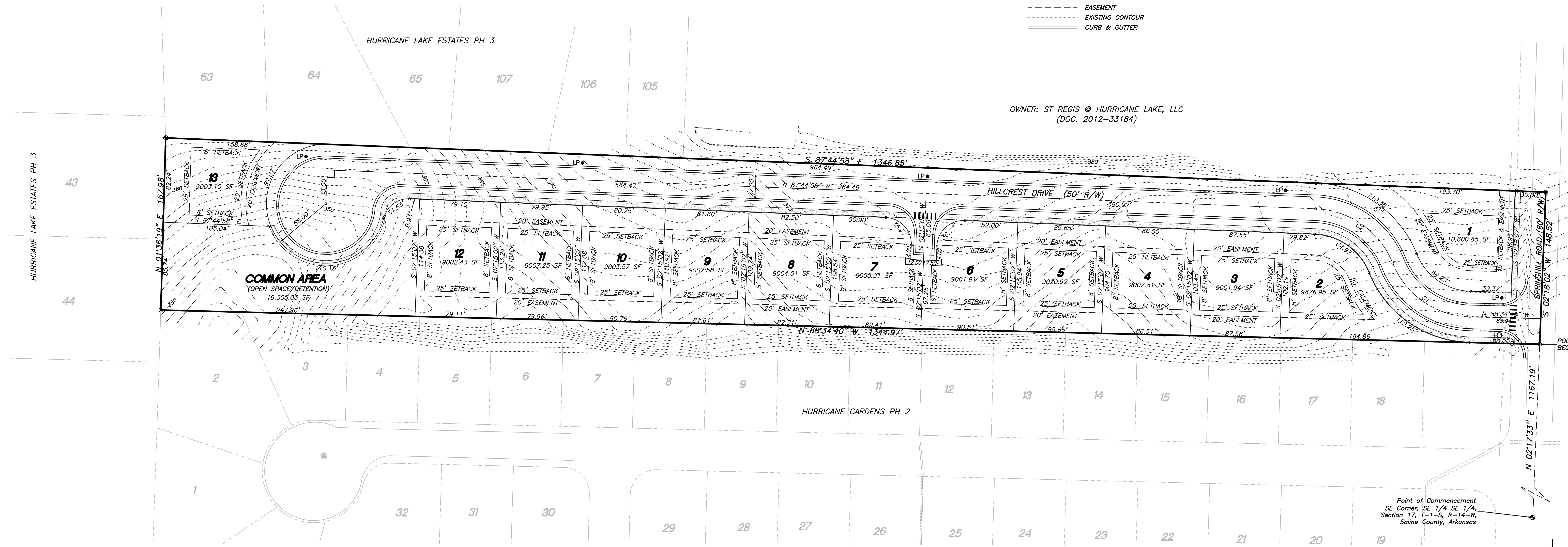
BASED UPON REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM COMMUNITY PANEL NO. 05125C0225E, EFFECTIVE DATE: JUNE 5, 2020 THE PROPERTY DEPICTED ON THIS PLAT IS LOCATED WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.



VICINITY MAP
SCALE: 1" = 2000'

LEGEND:

- FOUND CONC. MONUMENT
- FOUND IRON PIN (FIP)
- LP LIGHT POLE
- STOP/STREET NAME SIGN
- PROPERTY BOUNDARY
- LOT LINE
- CENTERLINE OF ROAD
- BUILDING SETBACK
- EASEMENT
- EXISTING CONTOUR
- CURB & GUTTER



CURVE	RADIUS	ARC LENGTH	TANGENT	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	83.37'	97.14'	54.93'	66°45'36"	N 55°11'52" W	91.74'
C2	84.70'	97.46'	54.93'	65°55'55"	N 54°47'01" W	92.17'

GENERAL NOTES:

1.) IRON PINS TO BE SET AT ALL LOT CORNERS.
2.) EASEMENTS TO BE USED FOR UTILITIES AND DRAINAGE.
3.) ALL EASEMENTS ARE AS NOTED.
4.) ALL BUILDING LINES ARE AS NOTED.
5.) CURRENT ZONING – R2.
6.) WATER – SALEM WATER.
7.) SEWER – CITY OF BRYANT.

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PRELIMINARY PLAT
HILLCREST ADDITION

PART OF THE SE 1/4 OF SECTION 17, T–1–S, R–14–W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By
1	Added sidewalks.	7–23–24	B. Judd

Project No.: 24–018
Date: JULY 9, 2024
File: 01_Hillcrest Plat
Scale: 1" = 50'
Drawn By: B. Judd
Sheet: 1 of 9

Arkansas 811
Know what's below. Call before you dig.

CURVE	RADIUS	ARC LENGTH	TANGENT	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	83.37'	97.14'	54.93'	66°45'36"	N 55°11'52" W	91.74'
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STATE OF ARKANSAS
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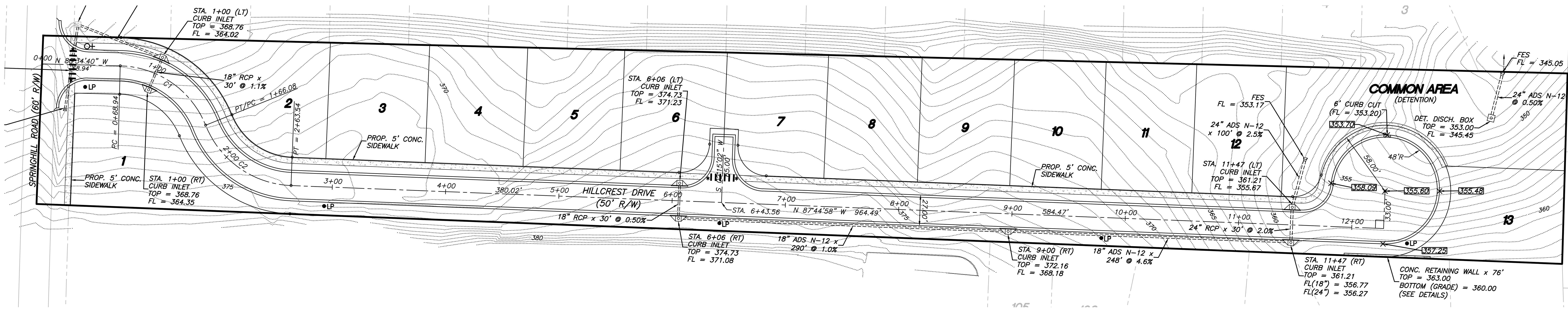
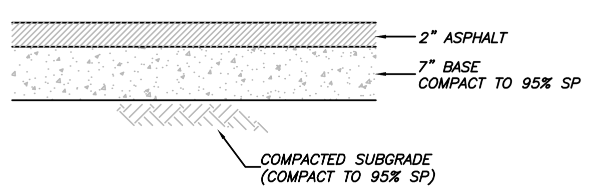
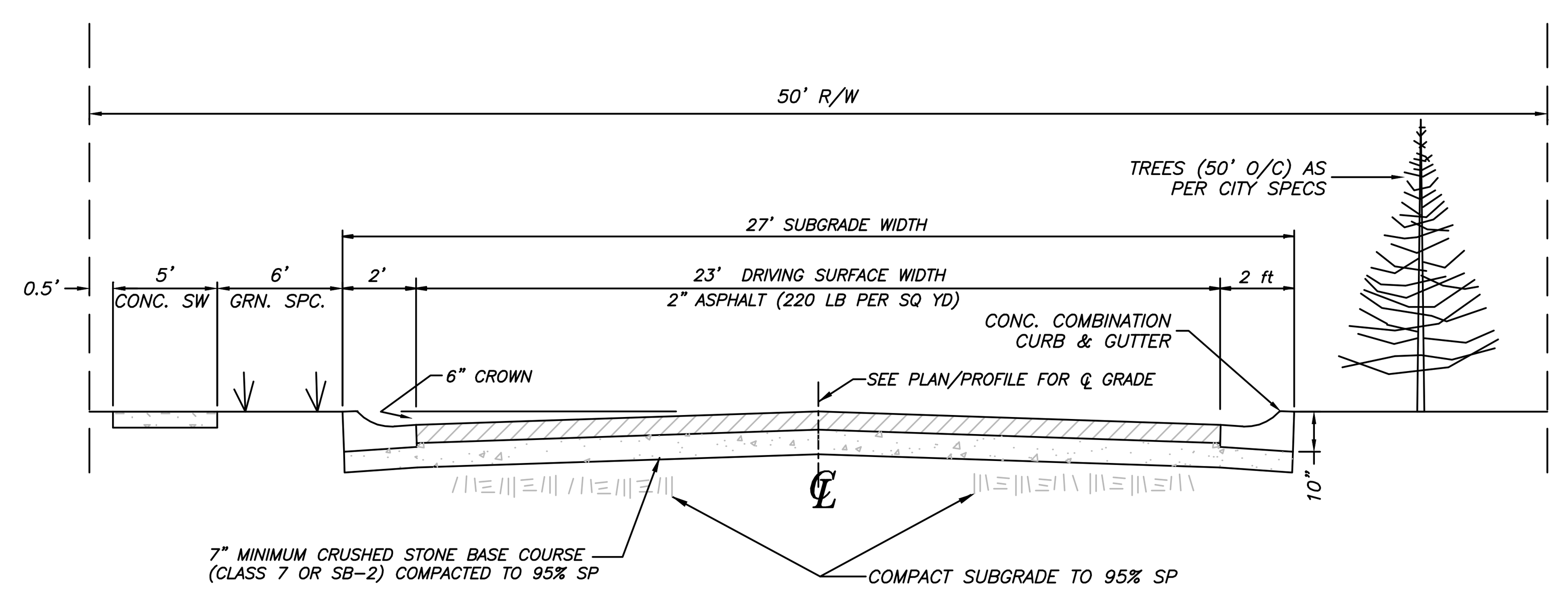
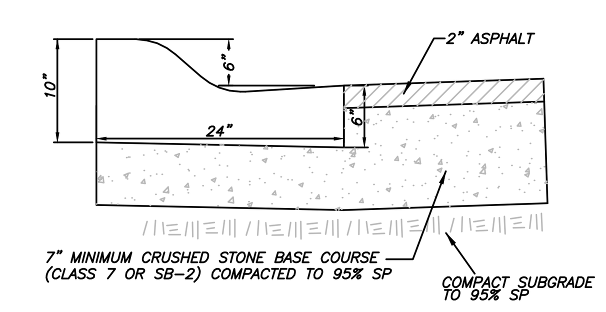




PAVEMENT STRUCTURE
NTS
(TO BE VERIFIED W/ GEOTECHNICAL CONSULTANT PRIOR TO CONSTR.)

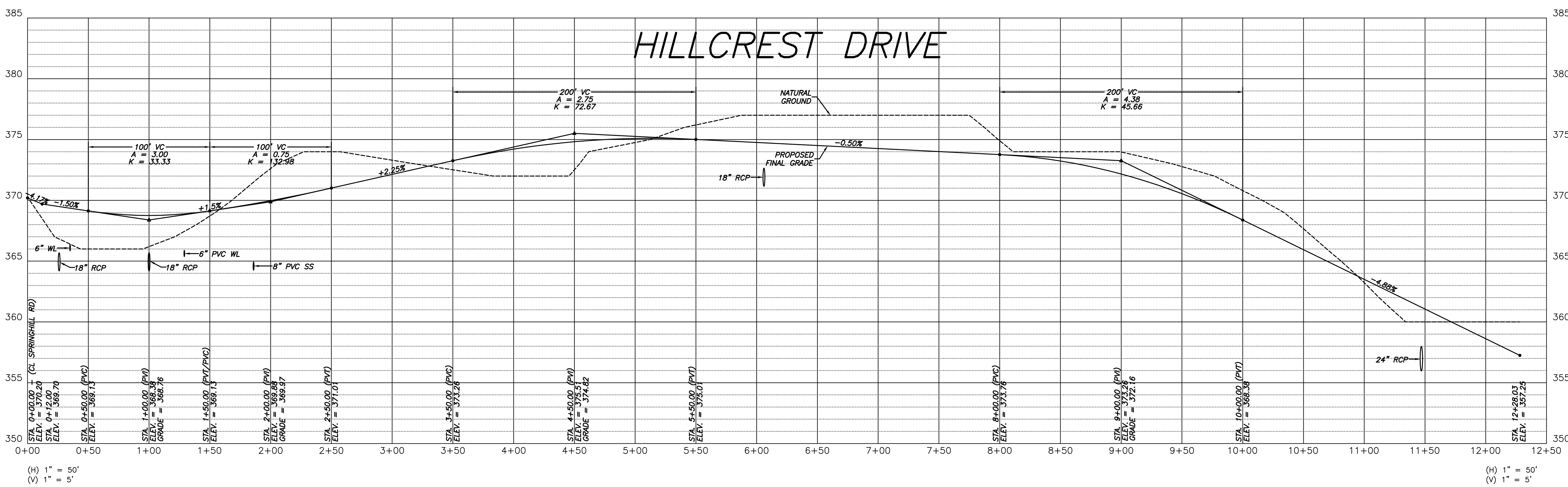


TYPICAL CROSS SECTION
NTS



TYPICAL - CONC. CURB/GUTTER
NTS
PAVEMENT STRUCTURE TO BE DETERMINED BY GEOTECHNICAL CONSULTANT

LEGEND:
- STOP / STREET NAME COMBINATION SIGN
- LIGHT POLE
- HC RAMP
- INLET
- PROPERTY BOUNDARY
- LOT LINE
- CENTERLINE OF ROAD
- EXISTING CONTOUR
- DRAINAGE PIPE
- PROPOSED SIDEWALK



GENERAL NOTES:

1.) ALL STOP SIGNS SHALL BE 30" X 30"
2.) ALL TRAFFIC CONTROL MARKERS MUST MEET MUTCD SPECS.
3.) CONTRACTOR SHALL INCLUDE IN BID THE COST FOR COMPACTION TESTS ON SUBGRADE & SUBBASE. TEST TO BE CONDUCTED ON 500' INTERVALS.
4.) CONTRACTOR TO PROOF ROLL BOTH SUBGRADE AND SUBBASE (CITY TO INSPECT).
5.) LIGHT POLES SHALL BE PLACED AT ALL INTERSECTIONS. ADDITIONAL LOCATIONS TO BE DETERMINED BY THE CITY.
6.) ALL BACK OF CURB RADII AT INTERSECTIONS SHALL BE 25' UNLESS OTHERWISE NOTED.
7.) CONTRACTOR TO INCLUDE IN BID THE COST OF MATERIAL AND INSTALLATION OF STREET SIGNS & TRAFFIC CONTROL SIGNS.
8.) WHERE STOP SIGNS & STREET NAME SIGNS ARE SHOWN ON THE PLAN, A COMBINATION SIGN IS ACCEPTABLE.
10.) SEE PLAN/PROFILE SHEETS FOR ADDITIONAL INFORMATION.
11.) ALL PAVEMENT TO BE TYPE 'A'.
12.) ALL INLETS TO HAVE DOUBLE EXTENDED THROATS UNLESS STATED OTHERWISE.

SCALE: 1" = 50'

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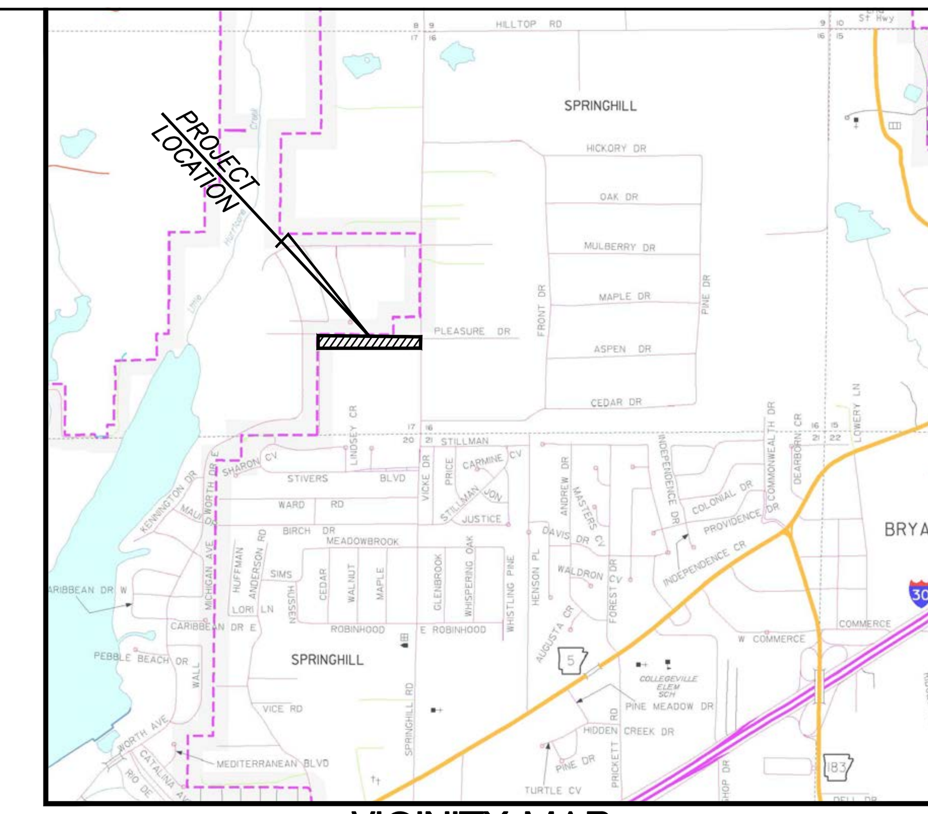
STREET PLAN/PROFILE
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5 Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By
1	Revised street section.	7-23-24	B. Judd

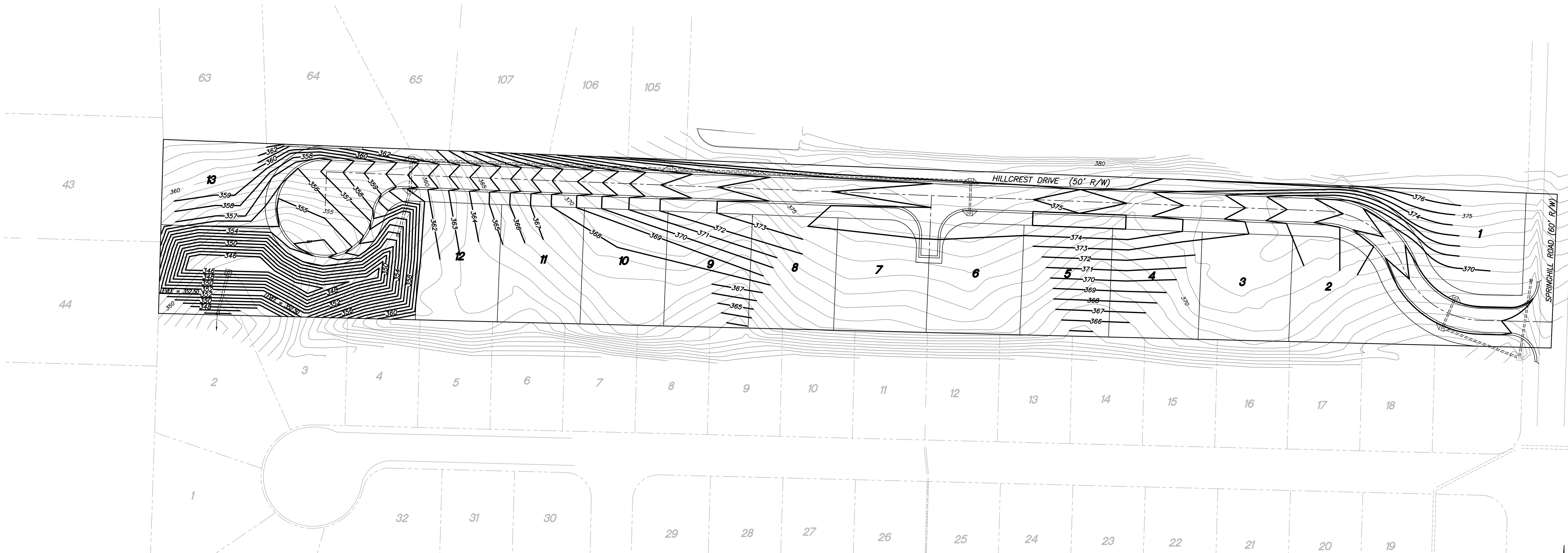
Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Project No. 24-018
File: 02_Hillcrest Street
Sheet: 2 of 9



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO BE VERIFIED BY A GEOTECHNICAL CONSULTANT PRIOR TO CONSTRUCTION.
2.) CONTRACTOR SHALL NOTIFY ENGINEER IF SIGNIFICANT CHANGES ARE MADE TO GRADING PLAN.
3.) ALL MATERIAL TO BE COMPACTED TO 95% STANDARD PROCTOR, INSTALLED IN 6" – 8" LIFTS, OR AS DIRECTED BY GEOTECHNICAL CONSULTANT.
4.) CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL MEASURES UNTIL CONSTRUCTION IS COMPLETE.
5.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.).
6.) CONTRACTOR SHALL NOT DISTURB ANY MORE GROUND THAN IS NECESSARY FOR THE INSTALLATION OF IMPROVEMENTS & GRADING WORK.
7.) CONTRACTOR SHALL GRADE YARDS TO ENSURE THAT GROUND SLOPES AWAY FROM ALL BUILDINGS IN ALL DIRECTIONS.



LEGEND:

350 – EXISTING CONTOUR
350 – PROPOSED CONTOUR

0' 50' 100' 150'
SCALE: 1" = 50'

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GRADING PLAN
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

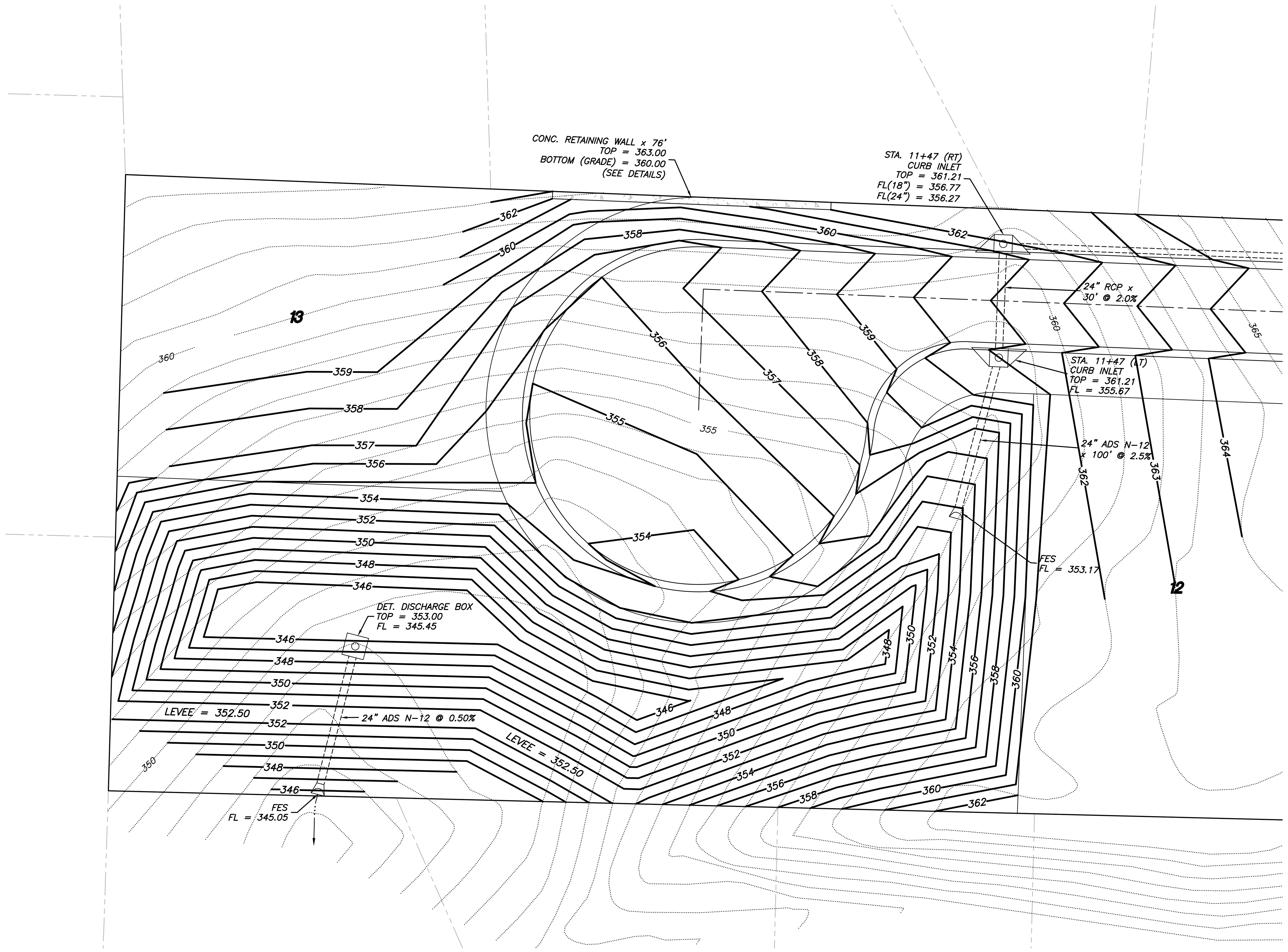
Prepared For:
Springhill HWY 5 Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

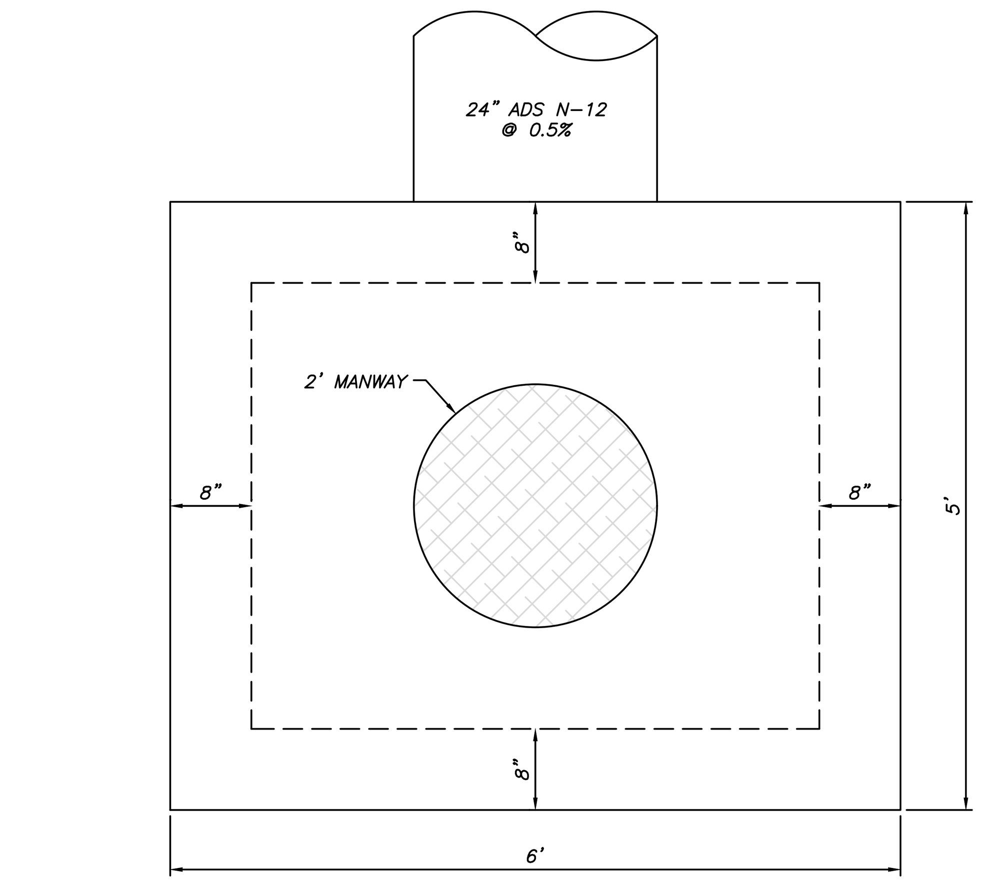
No.	Revisions	Date	By

Project No.: 24-018
File: 03_Hillcrest Grading
Sheet: 3 of 9
Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd

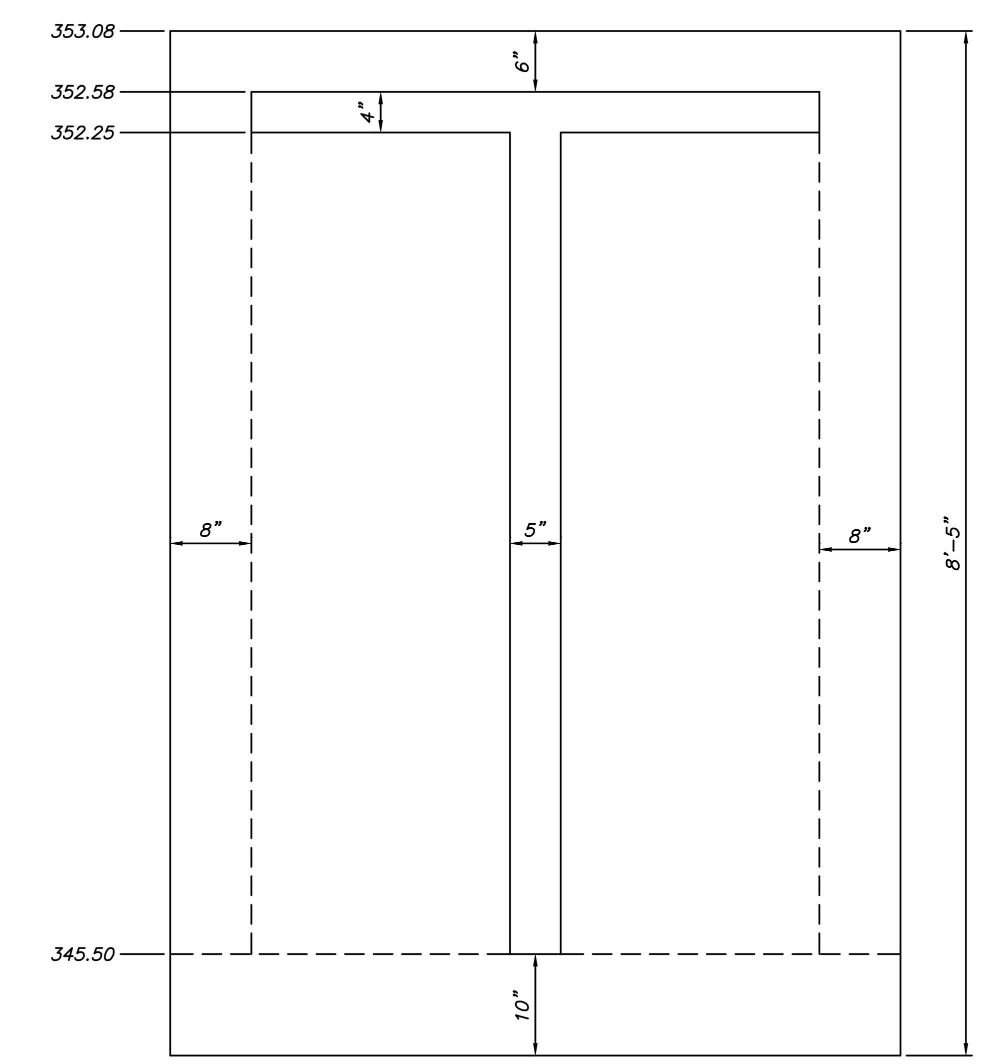
<u>LEGEND:</u>

350 – EXISTING CONTOUR
350 – PROPOSED CONTOUR





TOP VIEW

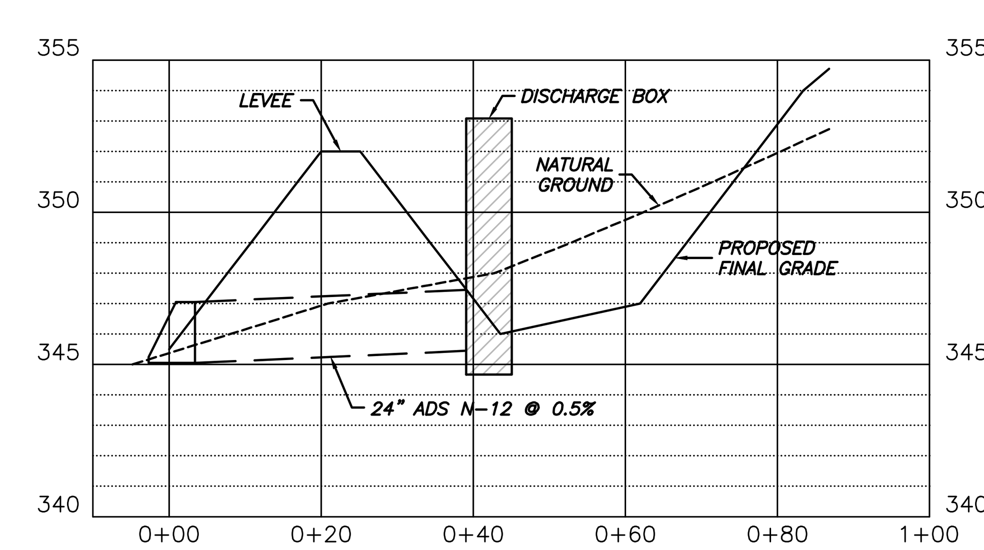


FRONT VIEW

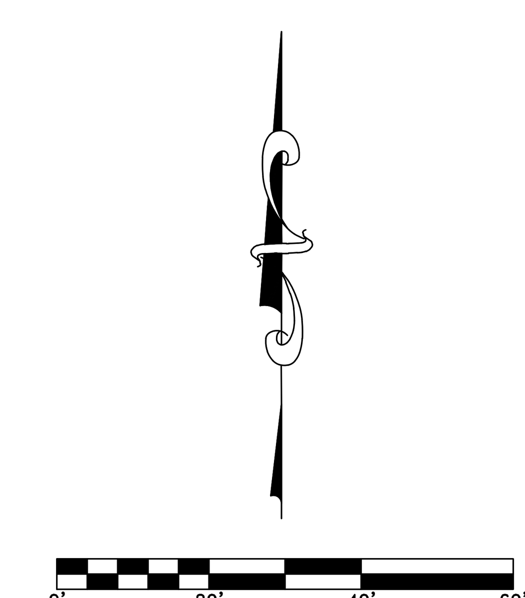
DISCHARGE STRUCTURE
NTS

<u>GENERAL NOTES:</u>

1.) ALL CONSTRUCTION AND MATERIALS TO BE VERIFIED BY A GEOTECHNICAL CONSULTANT PRIOR TO CONSTRUCTION.
2.) CONTRACTOR SHALL NOTIFY ENGINEER IF SIGNIFICANT CHANGES ARE MADE TO GRADING PLAN.
3.) ALL MATERIAL TO BE COMPACTED TO 95% STANDARD PROCTOR, INSTALLED IN 6" – 8" LIFTS, OR AS DIRECTED BY GEOTECHNICAL CONSULTANT.
4.) CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL MEASURES UNTIL CONSTRUCTION IS COMPLETE.
5.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.).
6.) CONTRACTOR SHALL NOT DISTURB ANY MORE GROUND THAN IS NECESSARY FOR THE INSTALLATION OF IMPROVEMENTS & GRADING WORK.
7.) CONTRACTOR SHALL GRADE YARDS TO ENSURE THAT GROUND SLOPES AWAY FROM ALL BUILDINGS IN ALL DIRECTIONS.



(H) 1" = 20'
(V) 1" = 5'



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DETENTION POND PLAN
HILLCREST ADDITION

PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

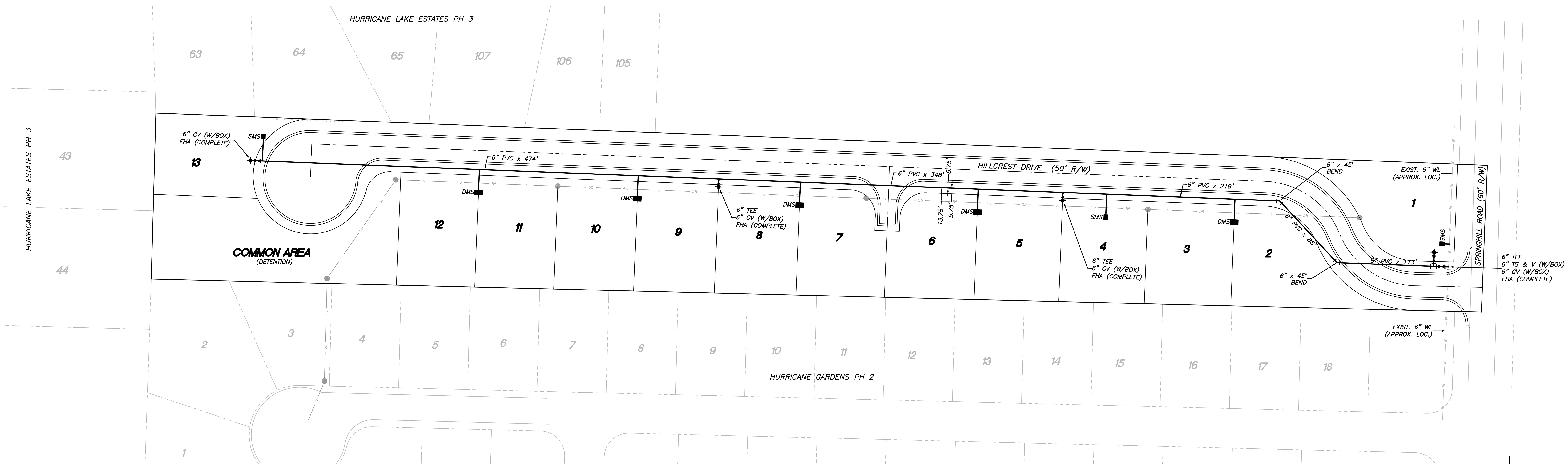
Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By
1	Added cross section.	7-23-24	B. Judd

Date: JULY 9, 2024
Scale: 1" = 20'
Drawn By: B. Judd
Project No.: 24-018
File: 04_Hillcrest Pond
Sheet: 4 of 9

GENERAL NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO MEET OR EXCEED SALEM WATER SPECIFICATIONS.
2.) INSTALL 12ga BLUE POLYETHELENE COATED SOLID COPPER WIRE IN A CONTINUOUS CIRCUIT UNDER ALL WATER MAINS AND SERVICE LINES. DIRECT BURY, WATERPROOF WIRE SPLICE CONNECTORS SHALL BE USED. TRACER WIRE SHALL BE TURNED UP AT ALL VALVES, HYDRANTS, METERS, AND BLOW-OFFS.
3.) ALL FITTINGS SHALL BE DUCTILE IRON M.J. (WHERE AVAILABLE).
4.) ATTENTION IS CALLED TO DETAILS FOR ADDITIONAL INFORMATION.
5.) CONSTRUCTION SHALL COMPLY WITH SECTION XIV.A –ADH RULES PERTAINING TO PUBLIC WATER SYSTEMS THAT STATES: 'THE OPERATING ROUTINE SHALL INCLUDE NECESSARY PROTECTIVE MEASURES TO DETECT AND REMOVE OR DESTROY ANY CONTAMINANT OF CONCERN OR REGULATION THAT MIGHT ENTER THE DISTRIBUTION SYSTEM. EVERY PRECAUTION MUST BE TAKEN AGAINST THE POSSIBILITY OF SEWAGE CONTAMINATION OF THE WATER IN THE DISTRIBUTION SYSTEM. WATER MAINS AND SANITARY SEWERS SHALL BE CONSTRUCTED AS FAR APART AS PRACTICABLE, AND SHALL BE SEPARATED BY UNDISTURBED AND COMPACTED EARTH. A MINIMUM HORIZONTAL DISTANCE OF TEN FEET SHOULD BE MAINTAINED BETWEEN WATER LINES AND SEWER LINES OR OTHER SOURCES OF CONTAMINATION. WATER LINES AND SEWERS SHALL NOT BE LAID IN THE SAME TRENCH EXCEPT ON THE WRITTEN APPROVAL OF THE ARKANSAS DEPARTMENT OF HEALTH. WATER MAINS NECESSARILY IN CLOSE PROXIMITY TO SEWERS MUST BE PLACED SO THAT THE BOTTOM OF THE WATER LINE WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT. IF THIS DISTANCE MUST UNAVOIDABLY BE REDUCED, THE WATER LINE OR THE SEWER LINE MUST BE ENCASED IN WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS EXTENDING AT LEAST TEN FEET EITHER SIDE OF THE CROSSING. ANY JOINT IN THE ENCASEMENT PIPE IS TO BE MECHANICALLY RESTRAINED. THE ENCASEMENT PIPE MAY BE VENTED TO THE SURFACE IF CARRYING WATER OR SEWER UNDER PRESSURE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18 INCHES OF SEPARATION MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENT. EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH. A MINIMUM HORIZONTAL DISTANCE OF THREE FEET SHALL BE MAINTAINED BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OF A NONSANITARY NATURE (GAS, ELECTRIC, ETC.). EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH.
6.) CONTRACTOR SHALL ADHERE TO CURRENT OSHA REGULATIONS FOR EXCAVATION & TRENCH SAFETY.
7.) CONTRACTOR TO ADHERE TO AWWA SPECS FOR BLOCKING.
8.) CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO CONSTRUCTION.
9.) CONTRACTOR SHALL CONTACT WATER & WASTEWATER UTILITIES FOR ALL APPLICABLE INSPECTION & TESTING.
10.) CONTRACTOR SHALL CONTACT WATER & WASTEWATER UTILITIES AT LEAST 24 HOURS PRIOR TO DISRUPTION OF ANY SERVICE.
11.) ALL MATERIALS AND COMPONENTS INSTALLED IN DRINKING WATER SYSTEMS ARE REQUIRED TO COMPLY WITH THE FEDERAL DEFINITION OF "LEAD FREE" CONTAINED IN PUBLIC LAW 111–380.



SCALE: 1" = 50'

ARKANSAS 811
Know what's below.
Call before you dig.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7373
TIMOTHY B. LEMONS

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WATER LAYOUT
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
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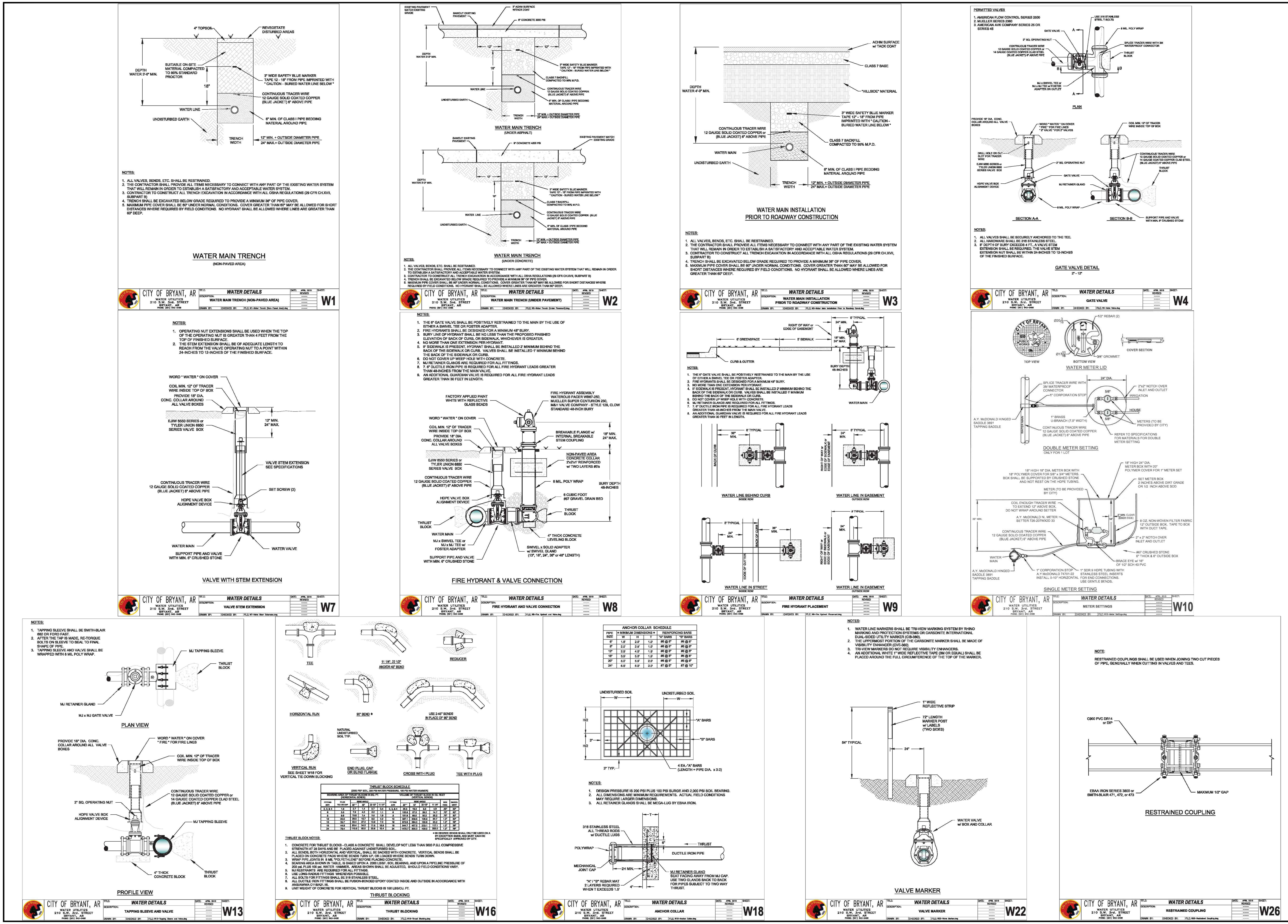
No.	Revisions	Date	By

Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Project No. 24-018
File: 05_Hillcrest Water
Sheet: 5 of 9



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CONSTRUCTION DETAILS – WATER
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
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Project No.: 24-018
Date: JULY 9, 2024
File: 06_Hillcrest CD Water
Scale: N.T.S.
Sheet: 6 of 9
Drawn By: B. Judd

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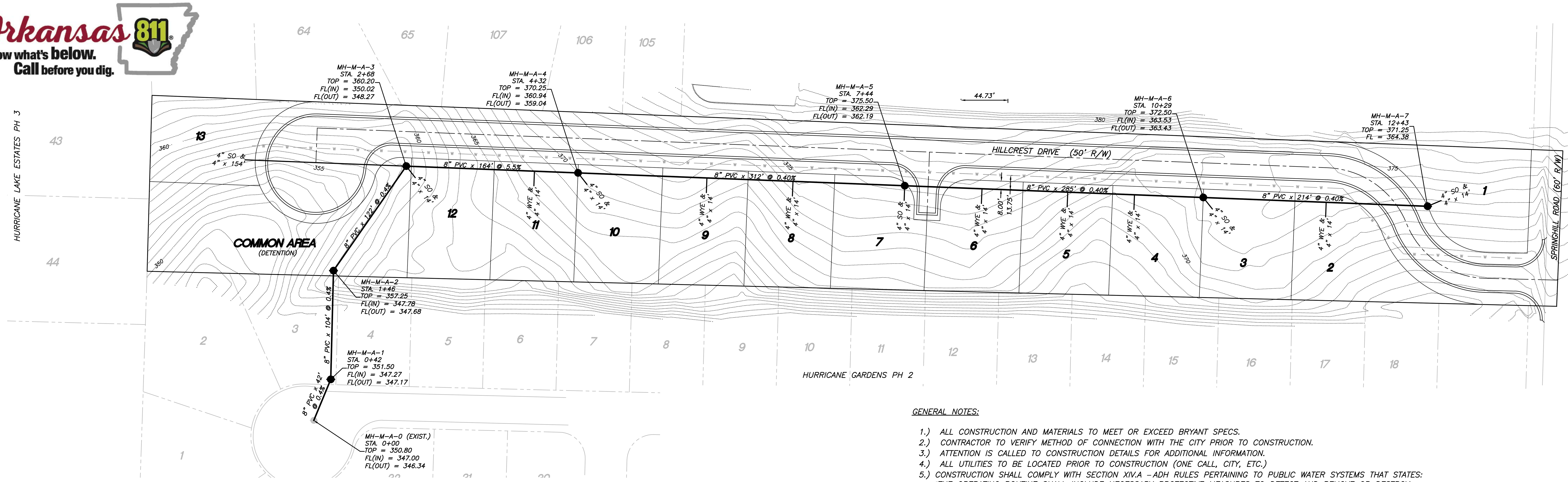
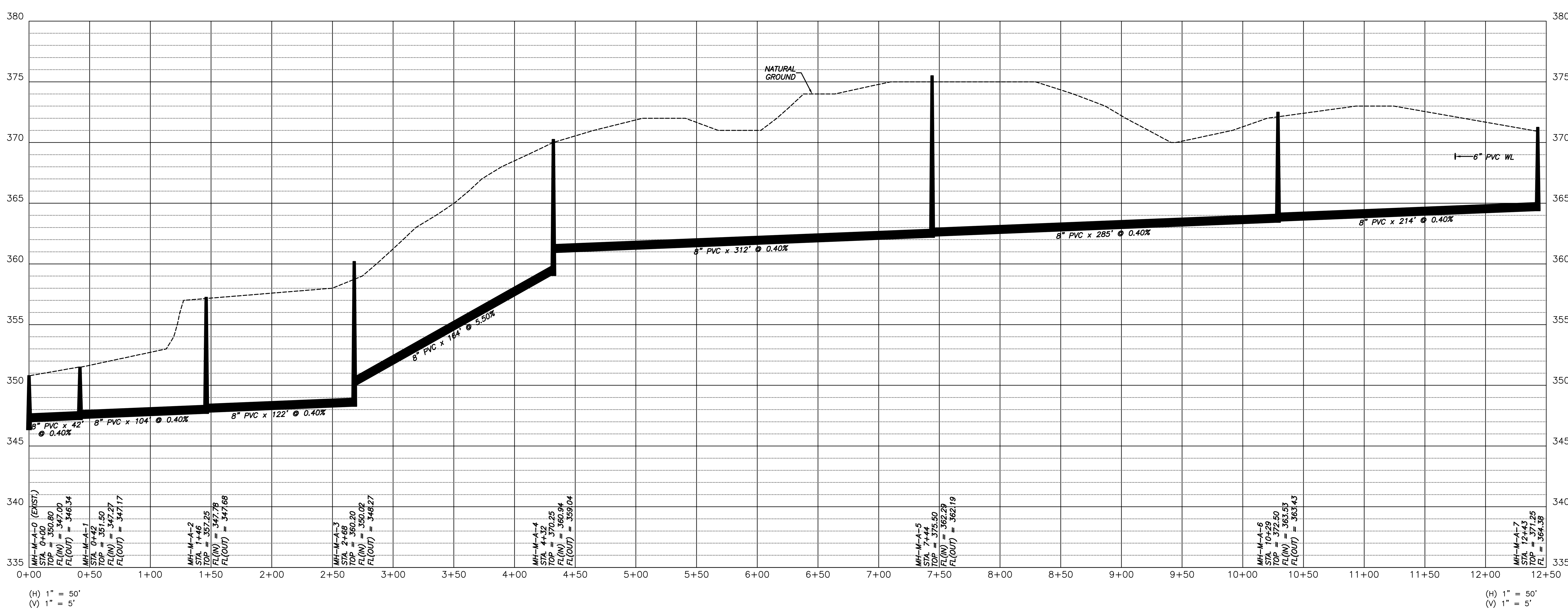
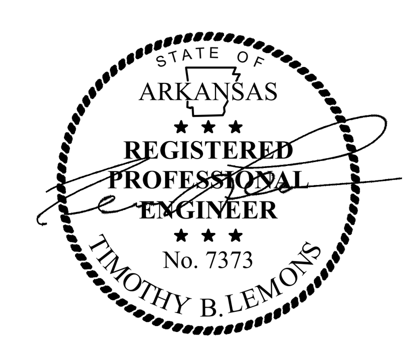


GENERAL NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO MEET OR EXCEED BRYANT SPECS.
2.) CONTRACTOR TO VERIFY METHOD OF CONNECTION WITH THE CITY PRIOR TO CONSTRUCTION.
3.) ATTENTION IS CALLED TO CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
4.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.)
5.) CONSTRUCTION SHALL COMPLY WITH SECTION XIV.A –ADH RULES PERTAINING TO PUBLIC WATER SYSTEMS THAT STATES: "THE OPERATING ROUTINE SHALL INCLUDE NECESSARY PROTECTIVE MEASURES TO DETECT AND REMOVE OR DESTROY ANY CONTAMINANT OF CONCERN OR REGULATION THAT MIGHT ENTER THE DISTRIBUTION SYSTEM. EVERY PRECAUTION MUST BE TAKEN AGAINST THE POSSIBILITY OF SEWAGE CONTAMINATION OF THE WATER IN THE DISTRIBUTION SYSTEM. WATER MAINS AND SANITARY SEWERS SHALL BE CONSTRUCTED AS FAR APART AS PRACTICABLE, AND SHALL BE SEPARATED BY UNDISTURBED AND COMPACTED EARTH. A MINIMUM HORIZONTAL DISTANCE OF TEN FEET SHOULD BE MAINTAINED BETWEEN WATER LINES AND SEWER LINES OR OTHER SOURCES OF CONTAMINATION. WATER LINES AND SEWERS SHALL NOT BE LAID IN THE SAME TRENCH EXCEPT ON THE WRITTEN APPROVAL OF THE ARKANSAS DEPARTMENT OF HEALTH. WATER MAINS NECESSARILY IN CLOSE PROXIMITY TO SEWERS MUST BE PLACED SO THAT THE BOTTOM OF THE WATER LINE WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT. IF THIS DISTANCE MUST UNAVOIDABLY BE REDUCED, THE WATER LINE OR THE SEWER LINE MUST BE ENCASED IN WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS EXTENDING AT LEAST TEN FEET EITHER SIDE OF THE CROSSING. ANY JOINT IN THE ENCASEMENT PIPE IS TO BE MECHANICALLY RESTRAINED. THE ENCASEMENT PIPE MAY BE VENTED TO THE SURFACE IF CARRYING WATER OR SEWER UNDER PRESSURE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18 INCHES OF SEPARATION MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENT. EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH. A MINIMUM HORIZONTAL DISTANCE OF THREE FEET SHALL BE MAINTAINED BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OF A NONSANITARY NATURE (GAS, ELECTRIC, ETC.). EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH.
6.) CONTRACTOR TO ADHERE TO CURRENT OSHA EXCAVATION & TRENCH SAFETY REGULATIONS.
7.) BACKFILL FOR ALL DISTURBED (EXCAVATED) AREAS TO BE COMPACTED TO 95% SP.





SCALE: 1" = 50'

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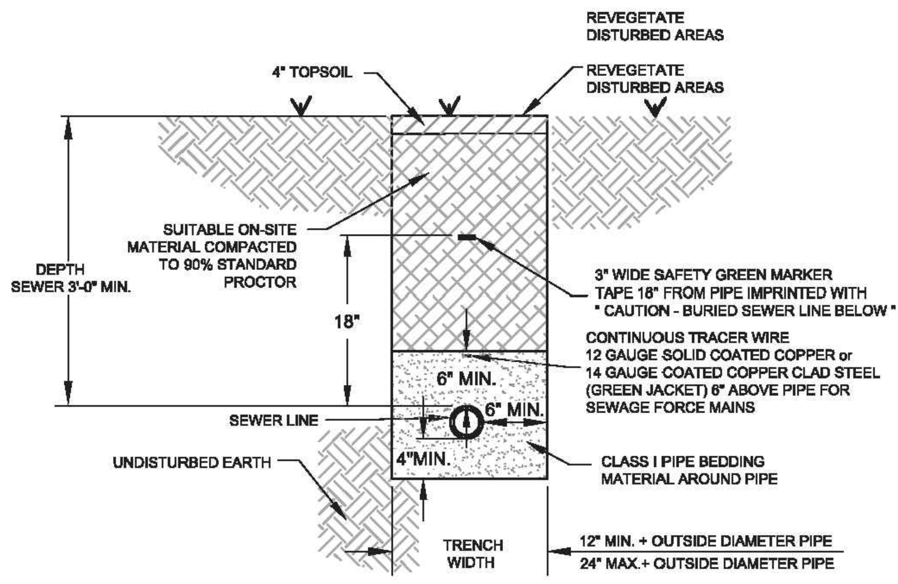
SEWER PLAN/PROFILE
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5 Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By
1	Revised sewer grades	7-23-24	B. Judd

Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Project No. 24-018
File: 07_Hillcrest Sewer
Sheet: 7 of 9

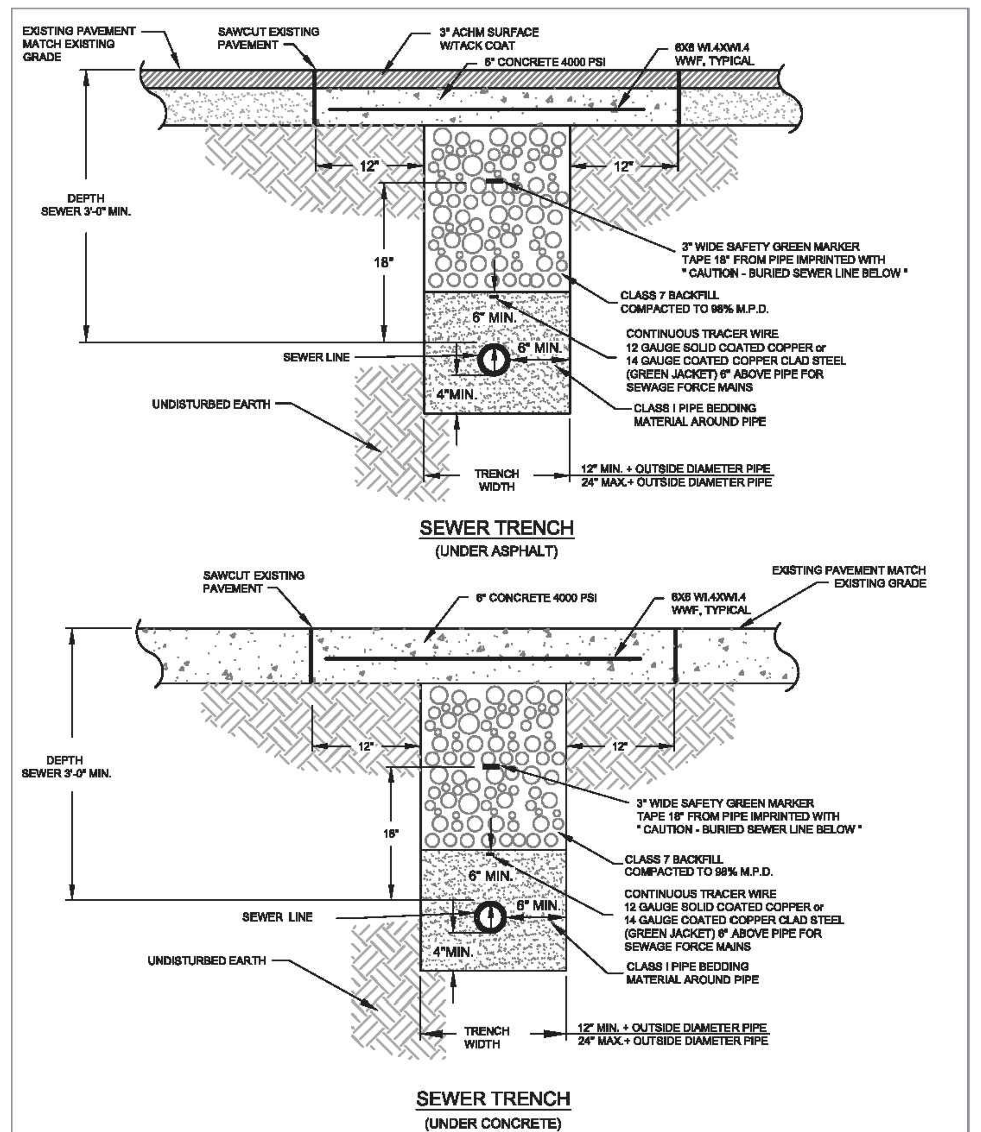


NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

SEWER TRENCH
(NON-PAVED AREA)

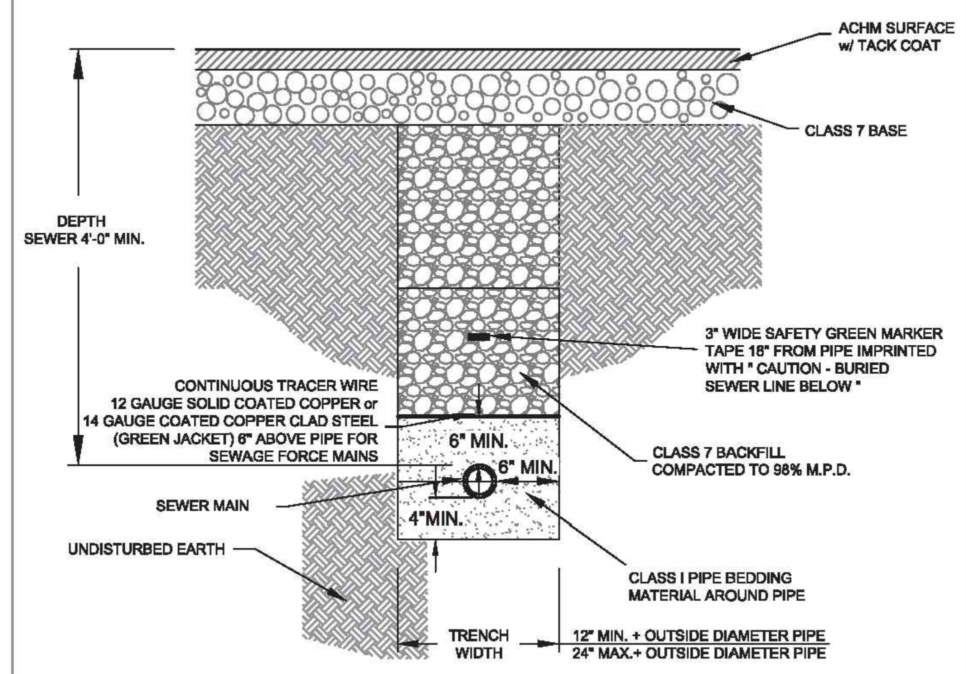
CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR — TITLE: SEWER DETAILS — DESCRIPTION: SEWER TRENCH (NON-PAVED AREA) — DATE: APRIL 2018 — SHEET: S1



NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

CITY OF BRYANT, AR — SEWER DETAILS — SEWER TRENCH (UNDER PAVEMENT) — SHEET: S2



SEWER MAIN INSTALLATION
PRIOR TO ROADWAY CONSTRUCTION

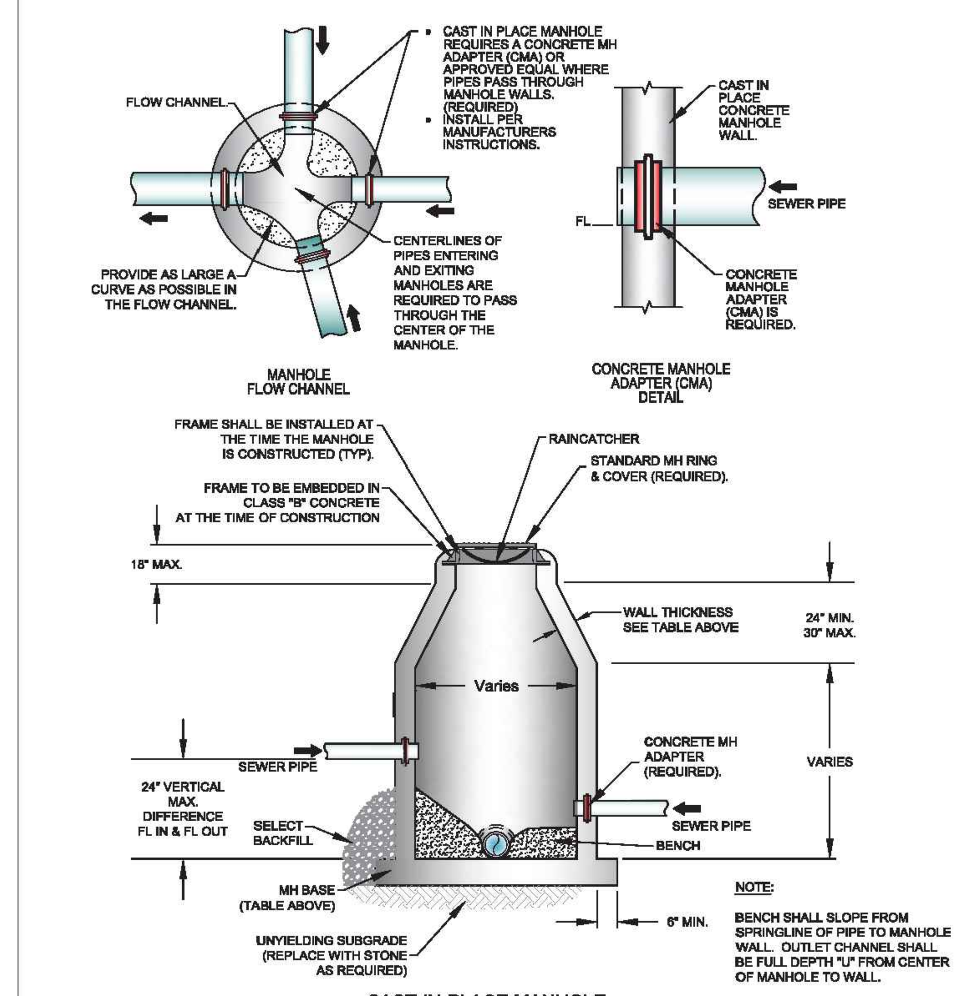
NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

CITY OF BRYANT, AR — SEWER DETAILS — SEWER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION — SHEET: S3

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	6"	6"	24" (< or Equal to 24" Pipes)
5' DIA	8"	8"	
6' DIA	8"	12"	36" (> 24" Pipes)

MANHOLE INFORMATION TABLE

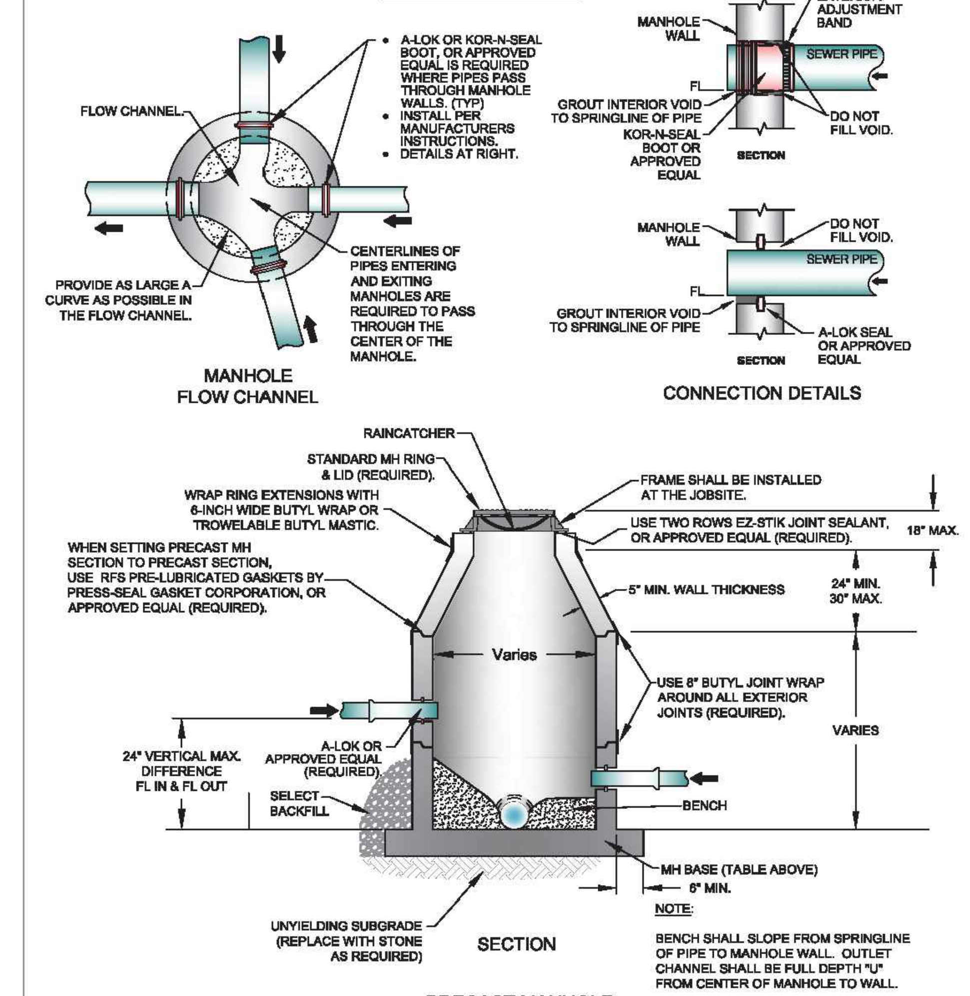


CAST-IN-PLACE MANHOLE

CITY OF BRYANT, AR — SEWER DETAILS — CAST-IN-PLACE MANHOLE — SHEET: S4

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	5"	6"	24" (< or Equal to 24" Pipes)
5' DIA	7"	8"	
6' DIA	7"	8"	36" (> 24" Pipes)

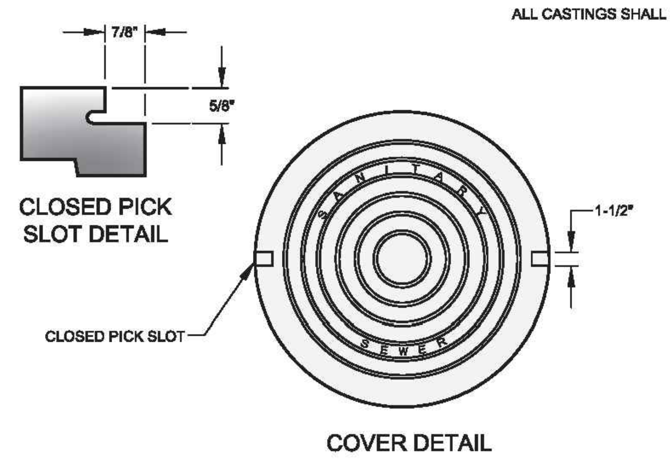
MANHOLE INFORMATION TABLE



PRECAST MANHOLE

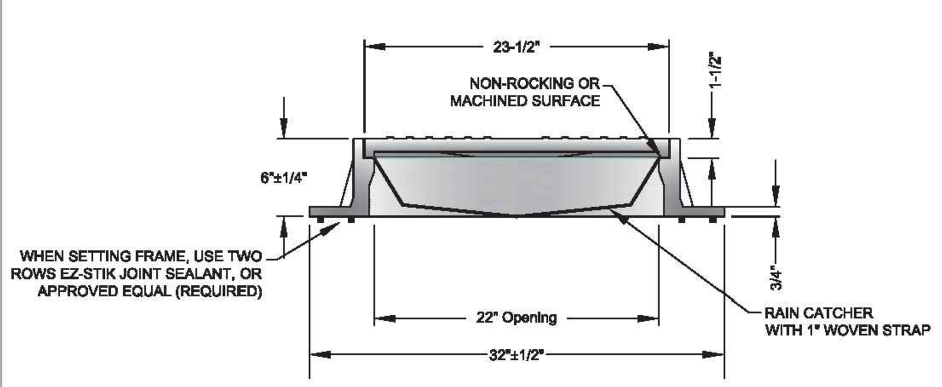
CITY OF BRYANT, AR — SEWER DETAILS — PRECAST MANHOLE — SHEET: S5

ALL CASTINGS SHALL BE "MADE IN USA"



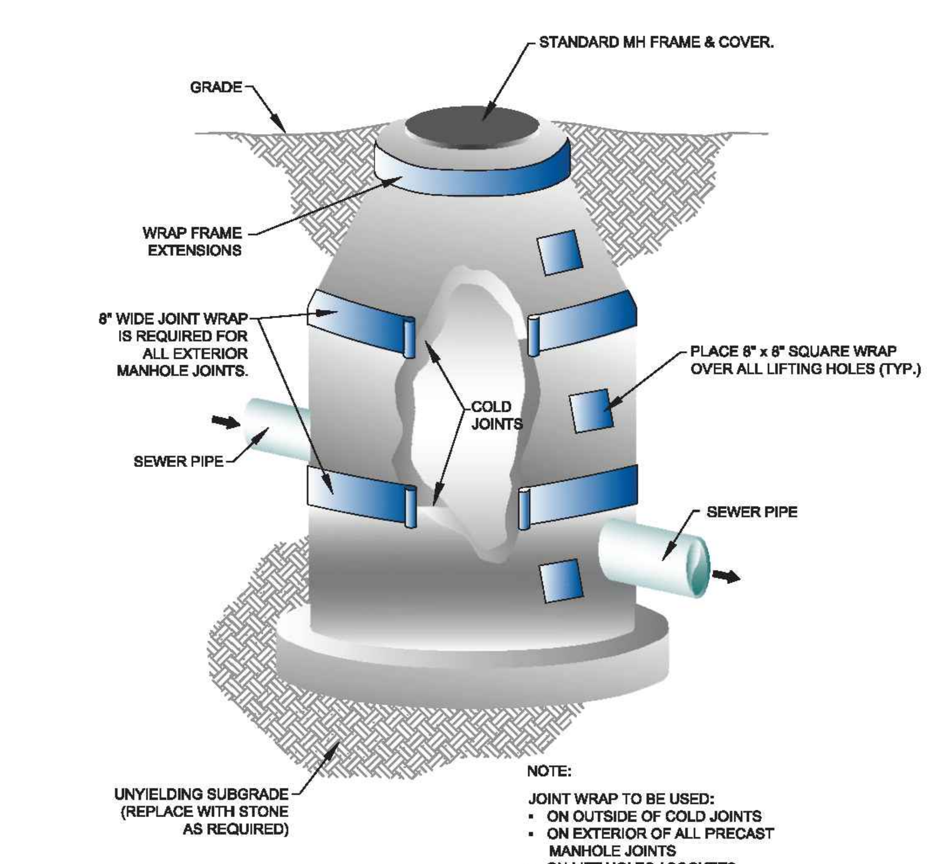
1. MINIMUM WEIGHT OF RING: 100 POUNDS
2. MINIMUM WEIGHT OF COVER: 110 POUNDS
3. COVERS ARE FURNISHED WITH TWO CLOSED PICK SLOTS.
4. CASTINGS SHALL BE "MADE IN USA"

* DIMENSIONAL TOLERANCES SHALL NOT EXCEED 1/16 INCH PER FOOT



FRAME AND COVER DETAIL

CITY OF BRYANT, AR — SEWER DETAILS — MANHOLE FRAME AND COVER — SHEET: S6



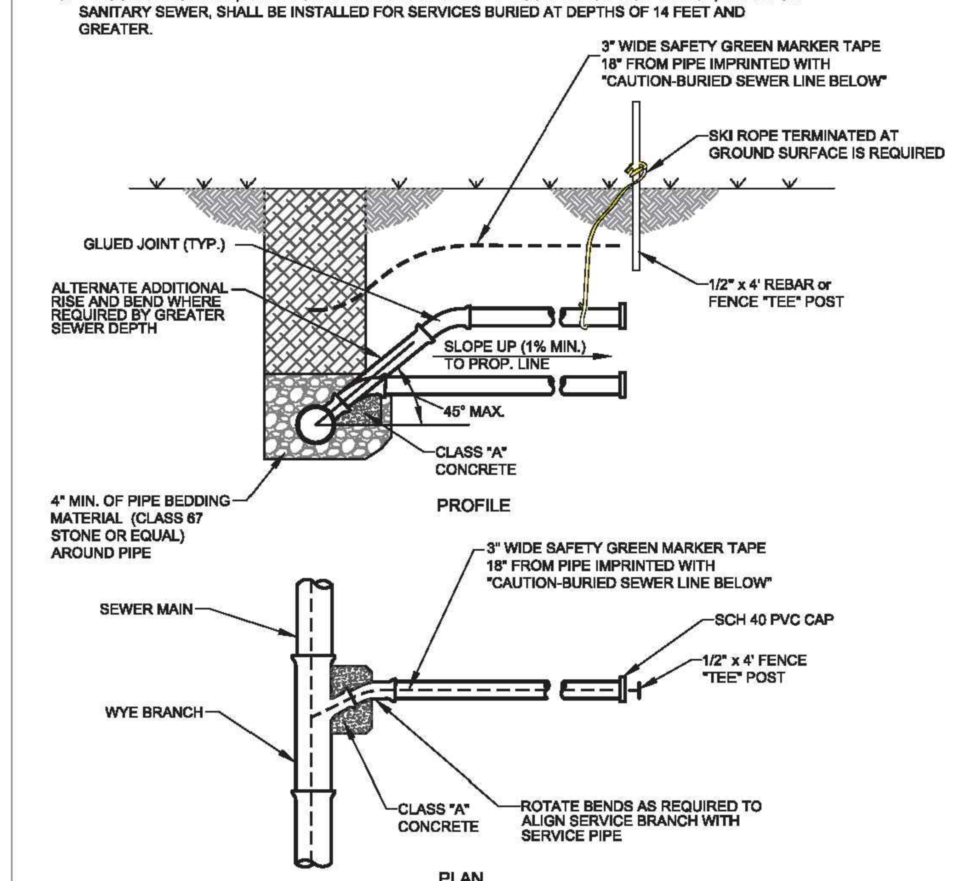
NOTE:
JOINT WRAP TO BE USED:
- ON OUTSIDE OF COLD JOINTS
- ON EXTERIOR OF ALL PRECAST MANHOLE JOINTS
- ON LIFT HOLES / SOCKETS

MANHOLE JOINT WRAP

CITY OF BRYANT, AR — SEWER DETAILS — MANHOLE JOINT WRAP — SHEET: S9

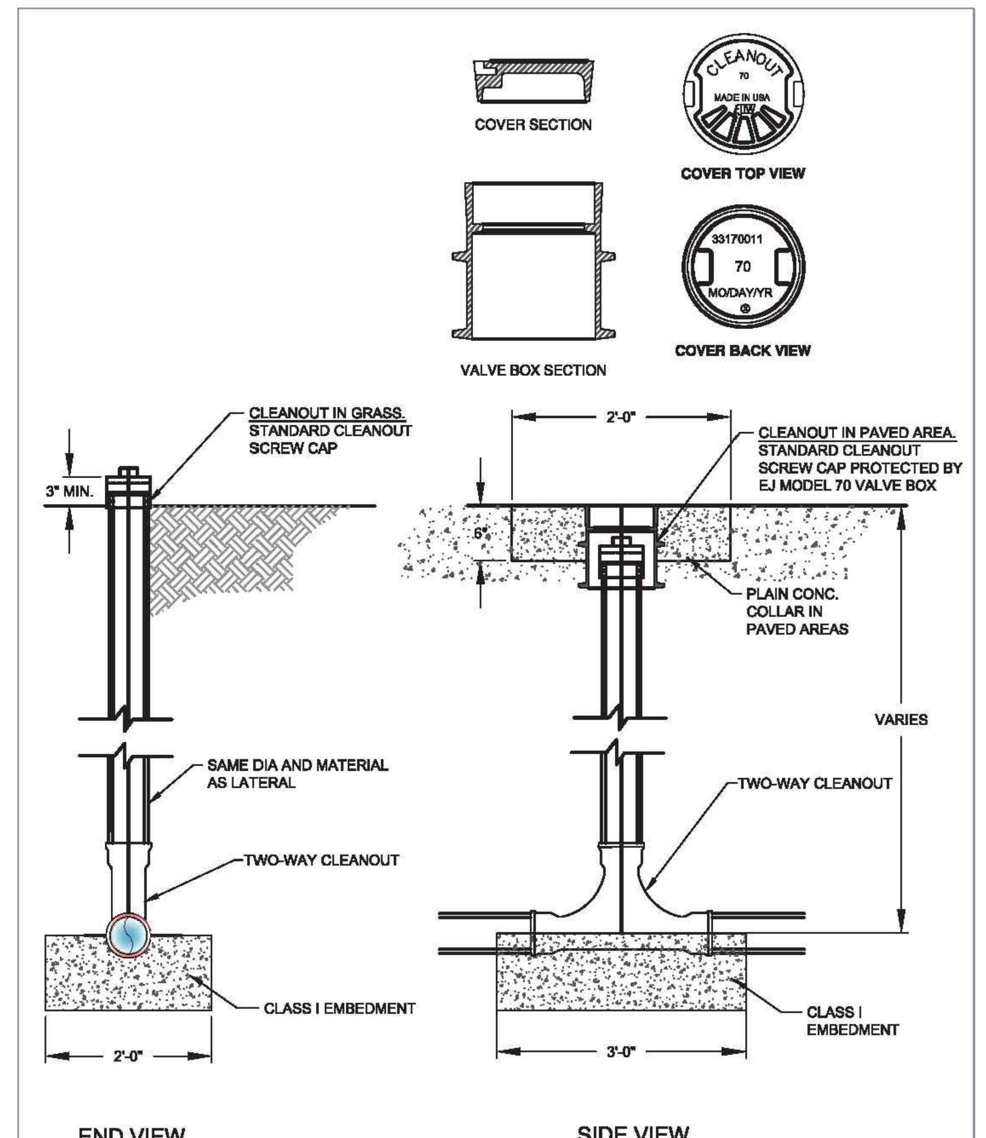
NOTES:

1. MODIFIED RISER LATERAL SHALL BE USED WHEN DEPTH OF COVER EXCEEDS 7'-0"
2. PLACE CLASS "A" CONCRETE UNDER EACH WYE BRANCH TO PREVENT CRACKING OR TWISTING UNDER EARTH LOADS.
3. SERVICE LATERAL STUBS SHALL TERMINATE AT LEAST 2 FEET INSIDE THE PROPERTY LINE BUT IN NO CASE SHALL THE SERVICE LATERAL STUB TERMINATE AT A DISTANCE LESS THAN 8 FEET FROM THE SANITARY SEWER MAIN.
4. BURY A 1/2" x 4' STEEL TEE FENCE POST AT END OF SERVICE LATERAL STUB AND BACKFILL TO FINISHED GRADE OF PROPERTY.
5. 4" DUCTILE IRON PIPE, LINED FOR SANITARY SEWER AND 4" DUCTILE IRON M.J. FITTINGS, LINED FOR SANITARY SEWER, SHALL BE INSTALLED FOR SERVICES BURIED AT DEPTHS OF 14 FEET AND GREATER.



SEWER SERVICE LATERAL

CITY OF BRYANT, AR — SEWER DETAILS — SEWER SERVICE LATERAL — SHEET: S15



TYPICAL CLEANOUT

CITY OF BRYANT, AR — SEWER DETAILS — SEWER SERVICE CLEANOUT — SHEET: S16

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CONSTRUCTION DETAILS – SEWER
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5 Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

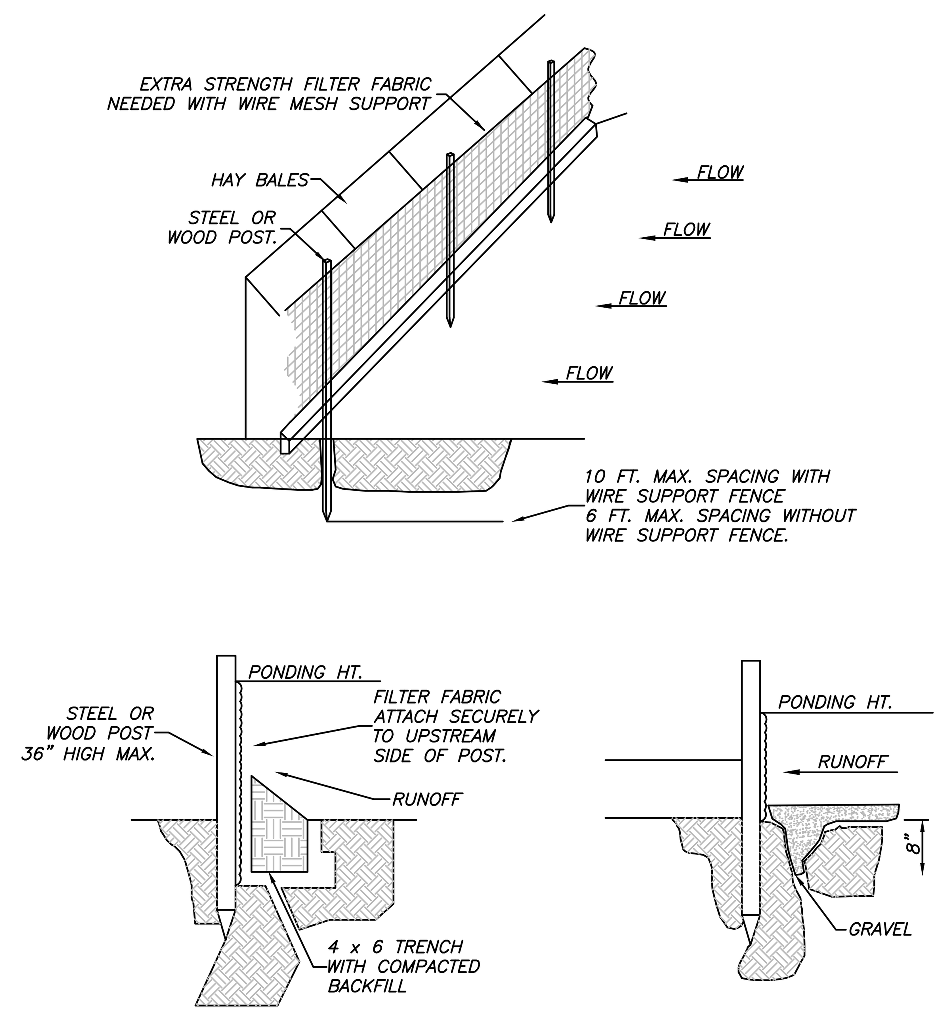
No.	Revisions	Date	By

Project No.: 24-018 — Date: JULY 9, 2024 — File: 08_Hillcrest CD Sewer — Scale: N.T.S. — Sheet: 8 of 9 — Drawn By: B. Judd

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7373
TIMOTHY B. LEMONS

GENERAL NOTES:

1.) A SILT FENCE AND STRAW BALE DIKE SHALL BE PLACED AT POTENTIAL LOCATIONS OF HEAVY EROSION.
2.) TEMPORARY STRAW BALE DIKES ARE TO BE CONSTRUCTED NOT TO POND WATER ON ADJACENT PROPERTY.
3.) ALL TEMPORARY EROSION CONTROLS SHALL BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETE & PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
4.) ONE OF THE FOLLOWING GROUND COVER METHODS SHALL BE USED AT AREAS OF CLEARING OTHER THAN FUTURE PAVEMENT SURFACES:
STRAW OR HAY–LOOSE 2.0 TONS/ACRE
STRAW OR HAY–TIED, ANCHORED, OR TACKED 1.5 TONS/ACRE
5.) SOIL EXPOSED FOR MORE THAN 14 DAYS WITH NO CONSTRUCTION ACTIVITY SHALL BE SEEDED OR REVEGITATED.
6.) CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING ON FLOW OF MUD INTO PUBLIC RIGHT–OF–WAY.
7.) ADDITIONAL EROSION CONTROL MEASURES WILL BE EMPLOYED WHERE NECESSARY BY SITE CONDITIONS.
8.) CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES & PROVIDE RAIN FALL MONITORING & BI–WEEKLY INSPECTION REPORTS IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.
9.) CONTRACTOR SHALL USE "BEST MANAGEMENT PRACTICES" (BMP'S) WHEN IMPLEMENTING & MAINTAINING SEDIMENT & RUN–OFF CONTROLS.
10.) THE USE OF "BIO–DEGRADABLE SOCK" IS ALLOWED AS OPPOSED TO SILT FENCE.



STANDARD DETAIL
TRENCH WITH NATIVE GRAVEL

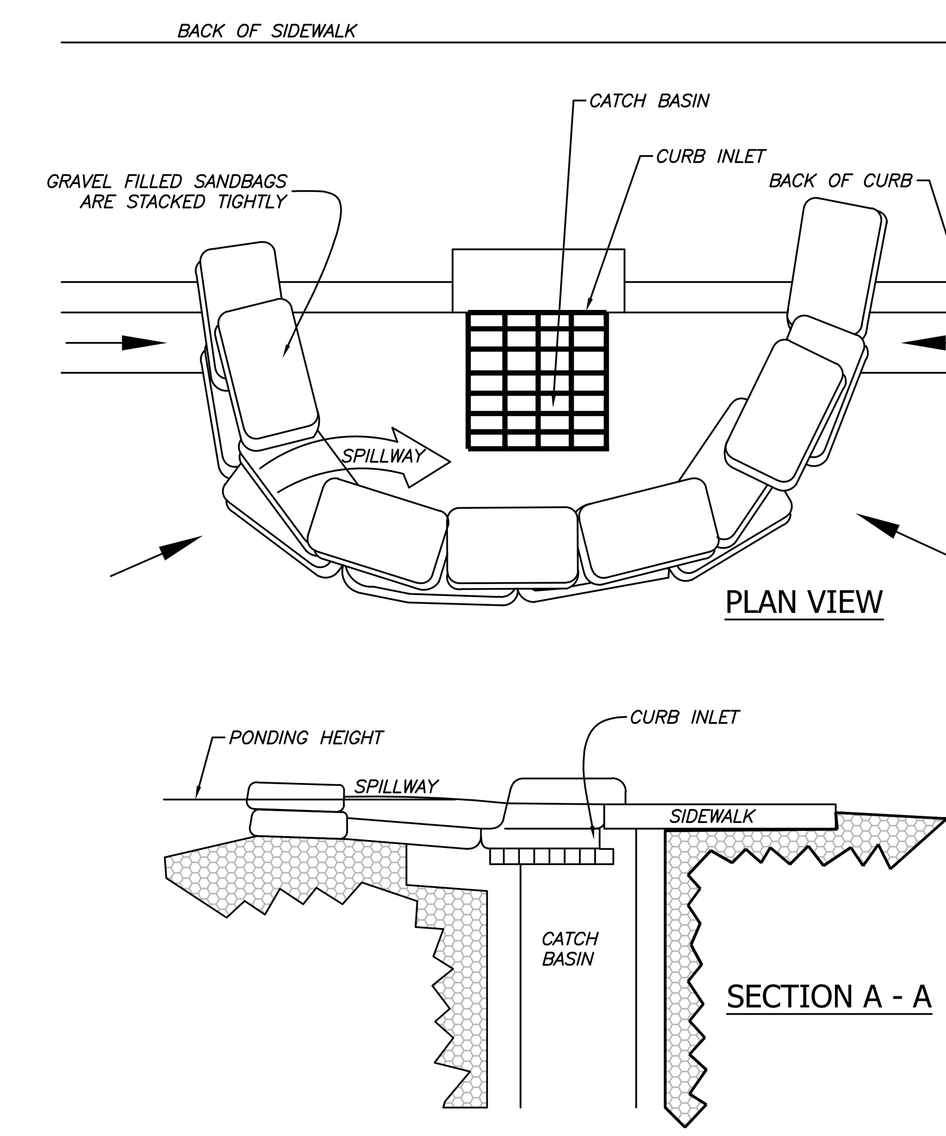
ALTERNATE DETAIL
TRENCH WITH GRAVEL

NOTE:
1.) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.

2.) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF–SITE AND CAN BE PERMANENTLY STABILIZED.

3.) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE
NTS



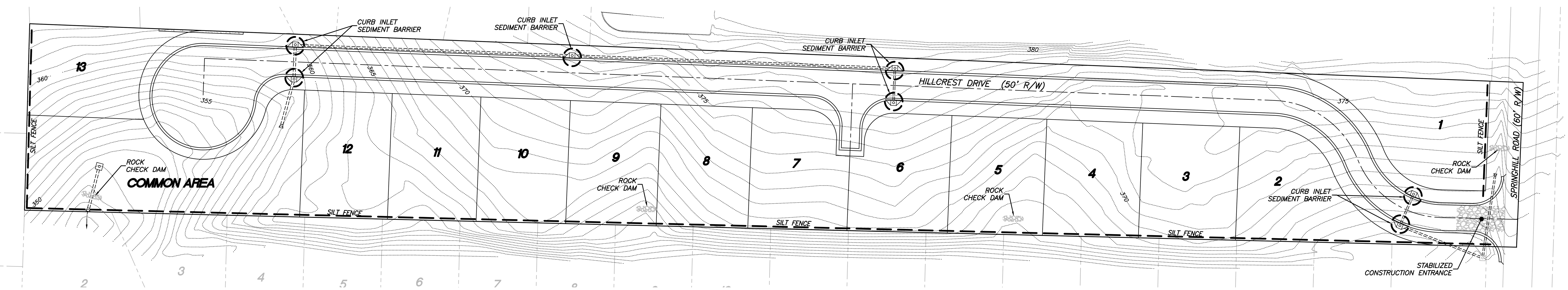
NOTES:
1.) PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.

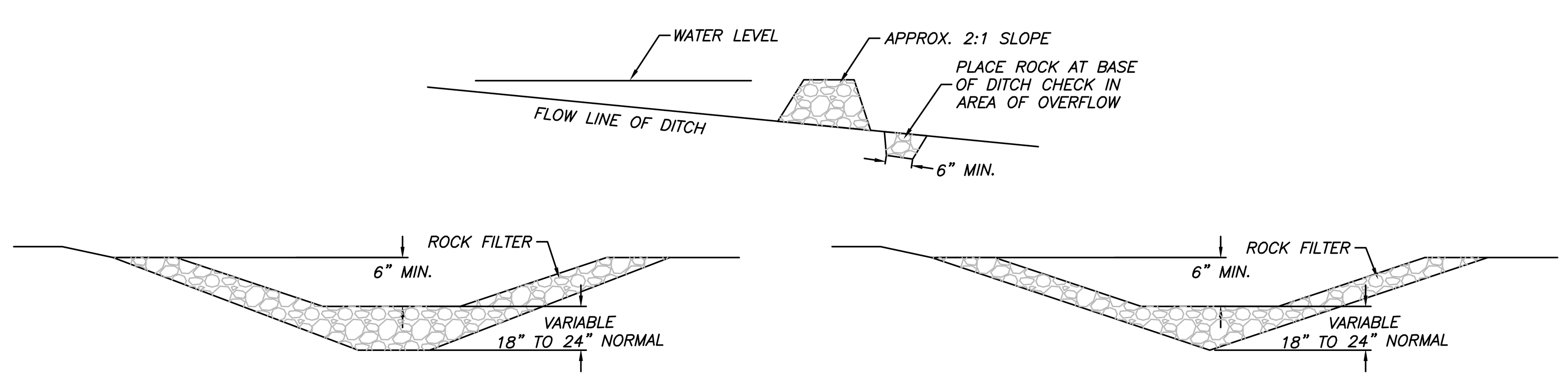
2.) SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC ARE FILLED WITH GRAVEL, LAYERED, AND PACKED TIGHTLY.

3.) LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.

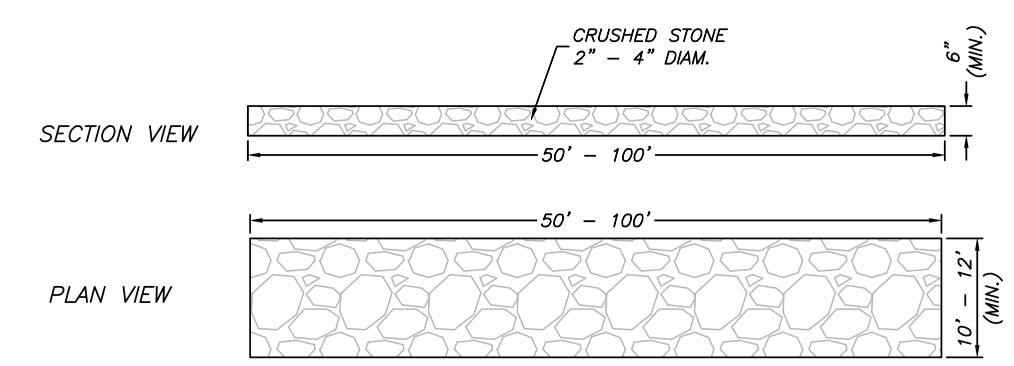
4.) INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

CURB INLET
SEDIMENT BARRIER
NTS

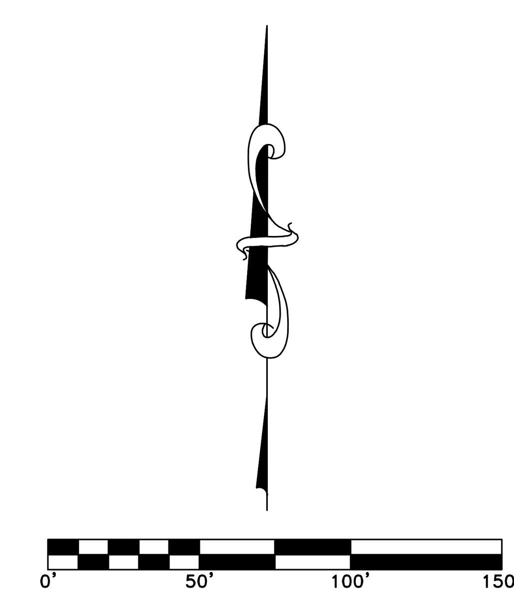




ROCK CHECK DAM
NTS



STABILIZED CONSTRUCTION ENTRANCE
NTS



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EROSION CONTROL PLAN
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T–1–S, R–14–W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By

Project No.: 24–018
Date: JULY 9, 2024
File: 09_Hillcrest Erosion
Scale: 1" = 50'
Sheet: 9 of 9
Drawn By: B. Judd

Drainage Report

For

Hillcrest Addition

Springhill Road
Bryant, Arkansas

Revised: July 22, 2024

Prepared By:

Lemons Engineering Consultants, Inc.
204 West Cherry Street
Cabot, Arkansas 72023
(501) 605-7565
arstrep43@gmail.com

Index

Project Information

Project Title:	Hillcrest Addition
Project Description:	13 lot single family development located on the West side of Springhill Road, North of and adjacent to Hurricane Gardens, Bryant, Arkansas (address: 3927 Springhill Road)
Owner/Developer:	Springhill – Hwy 5 Development, LLC 816 East Oak Street Conway, Arkansas 72032
Engineer of Record:	Lemons Engineering Consultants, Inc. Tim Lemons, PE 204 Cherry Street Cabot, Arkansas 72023 (501) 605-7565

General Information

This proposed development shall include 13 single family lots. This property is essentially the Northern Most tract of land within the city limits of Bryant as they presently exist. The property to the North of the subject site is developed with duplex style residential structures. The property to the South is an established subdivision (Hurricane Gardens). The property drains North to South. There have been several reports of drainage issues by the residents of Hurricane Gardens. At present, the drainage from the subject property, and that to the north of the subject property, flows onto Hurricane Gardens. No detention exists on the property located north of the subject property. In this report, we will design a detention facility to accommodate the possible increase in flow for the subject property (Hillcrest Addition). Also, our goal is to divert a large majority of the drainage falling onto Hurricane Gardens. This diversion will force the runoff to the proposed detention facility on Hillcrest Addition as shown in the civil plans.

Project Vicinity Map

Hydrological Computations

For this analysis, we will use the Rational Method in determining culvert sizes, culvert capacity computations, and other related issues on site. The total watershed size for this development is estimated at 10.57 acres. Attention is called to the Watershed Map included in this report. As per the Rational Method, the following equation is used:

$$Q = C \times I \times A, \text{ where:}$$

Q = Flowrate (cfs)
C = Runoff Coefficient
I = Intensity (from tables)
A = area (acres)

The selection of the appropriate intensity is based on the estimated time of concentration (tc).

Determination of Runoff Coefficients "C"

In determining the Pre Construction C, we must consider the property to the North that is developed, and discharging onto the subject property. The C factor for Pre and Post Conditions are based on Table 400-1 "Runoff Coefficients for Surface Types" as provided in the Bryant Drainage Manual. A factored (weighted) value of C is determined in the following tables:

Pre Construction Conditions

Storm Event	Off Site C1	Off Site A1 (acres)	Off Site C2	Off Site A2 (acres)	On Site C3	On Site A3 (acres)	On Site C4	On Site A4 (acres)	Weighted C Factor
2	0.75	3.04	0.29	4.73	0.75	0.19	0.29	4.59	0.41
5	0.8	3.04	0.32	4.73	0.8	0.19	0.32	4.59	0.44
10	0.83	3.04	0.35	4.73	0.83	0.19	0.35	4.59	0.47
25	0.88	3.04	0.39	4.73	0.88	0.19	0.39	4.59	0.52
50	0.92	3.04	0.42	4.73	0.92	0.19	0.42	4.59	0.55
100	0.97	3.04	0.46	4.73	0.97	0.19	0.46	4.59	0.59

C1 (off site for homes, streets, etc.)
C2 (off site for grass, landscaping, etc.)
C3 (on site for homes, streets, etc.)
C4 (on site for grass. Landscaping, etc.)

A1 (off site area for C1)
A2 (off site area for C2)
A3 (on site area for C3)
A4 (on site area for C4)

Post Construction Conditions

Storm Event	Off Site C1	Off Site A1 (acres)	Off Site C2	Off Site A2 (acres)	On Site C3	On Site A3 (acres)	On Site C4	On Site A4 (acres)	Weighted C Factor
2	0.75	3.04	0.29	4.73	0.75	1.81	0.29	3.07	0.47
5	0.8	3.04	0.32	4.73	0.8	1.81	0.32	3.07	0.50
10	0.83	3.04	0.35	4.73	0.83	1.81	0.35	3.07	0.53
25	0.88	3.04	0.39	4.73	0.88	1.81	0.39	3.07	0.58
50	0.92	3.04	0.42	4.73	0.92	1.81	0.42	3.07	0.61
100	0.97	3.04	0.46	4.73	0.97	1.81	0.46	3.07	0.66

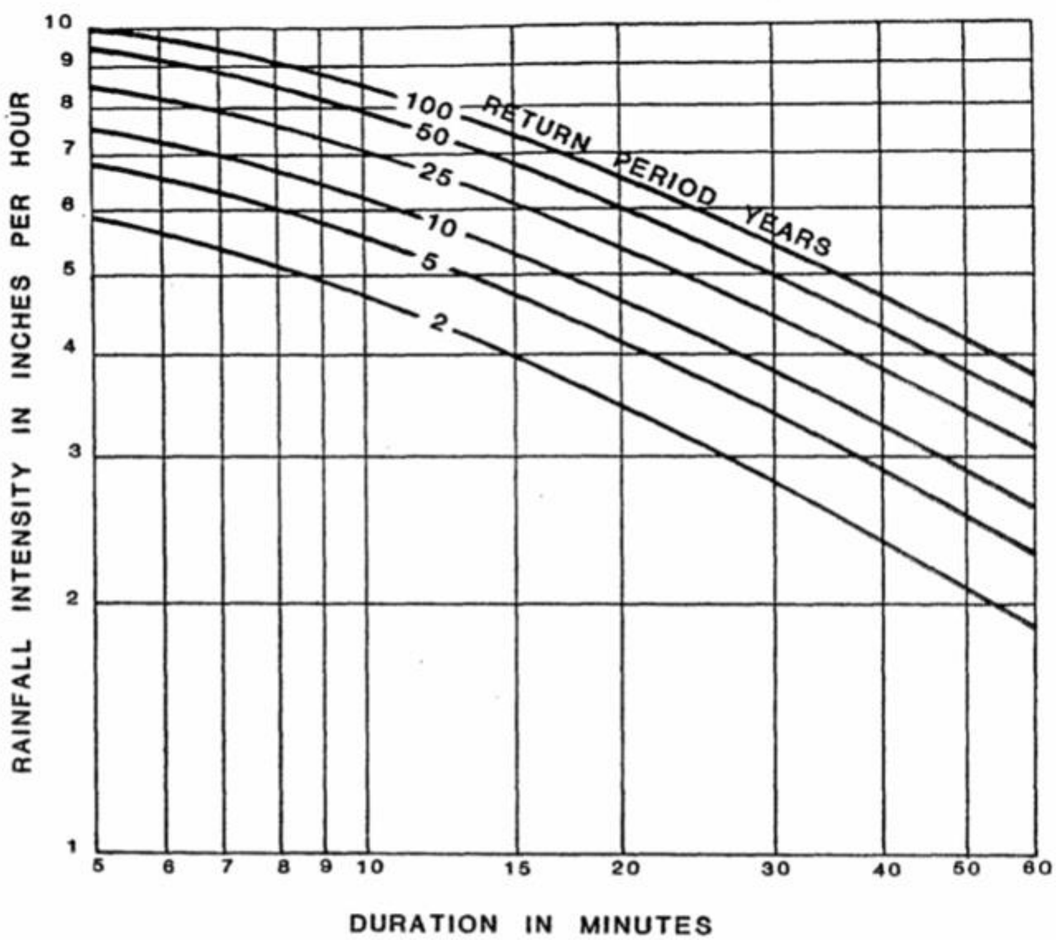
C1 (off site for homes, streets, etc.)
C2 (off site for grass, landscaping, etc.)
C3 (on site for homes, streets, etc.)
C4 (on site for grass. Landscaping, etc.)

A1 (off site area for C1)
A2 (off site area for C2)
A3 (on site area for C3)
A4 (on site area for C4)

The above variable values will be used in designing the Detention Facility. For culvert design, we will use the Post C values for the 25 year storm.

Determination of Intensity Values "I"

For this analysis, we will use the Intensity – Duration - Frequency Chart from the Little Rock Drainage Manual. Whereas the calculated value of I shall be used for Detention, we will use a tc (time of concentration) of 5 min for the culverts to also provide a conservative value.



INTENSITY - DURATION - FREQUENCY

LITTLE ROCK

SOURCE : HYDRO 35 & T.P. No. 40

Determination of Flowrates for Culverts & Spreadflow

Attention is called to the following chart which provides C, Intensity, Area, and Flowrate (Q) of each Tract. Again, the Rational Method is being used for all basins. Attention is called to the Maps on the next two pages for a detailed drawings showing the various watershed tracts. The 25 year storm event will be used for culvert design. A conservative tc of 5 minutes is used for the culvert design.

Tract	C (post)	I	A	Q
		(in/hr)	(ac)	(cfs)
Ao	0.58	8.5	2	9.86
Bo	0.58	8.5	1.53	7.54
Co	0.58	8.5	1.73	8.53
Do1	0.58	8.5	1.92	9.47
Do2	0.58	8.5	0.59	2.91
A1	0.58	8.5	0.54	2.66
A2	0.58	8.5	0.29	1.43
A3	0.58	8.5	0.25	1.23
B1	0.58	8.5	0.47	2.32
B2	0.58	8.5	0.33	1.63
C1	0.58	8.5	0.49	2.42
C2	0.58	8.5	0.36	1.77
D1	0.58	8.5	0.44	2.17
D2	0.58	8.5	0.32	1.58
D3	0.58	8.5	1.15	5.67

Drainage Watershed Map (Off Site)

Drainage Watershed Map (On Site)

Culvert Sizing

All culverts are sized to meet a 25 year storm, and the Rational Method is used. We will use a Manning's Coefficient of 0.012 shall be for all culverts (concrete and HDPE).

FES 1a
Q = Qao (2/3) = 9.86 (2/3) = 6.58 cfs
Use 18" @ 0.7%
Q capacity = 9.23 cfs
V actual = 5.80 fps (d/D = 0.61)

Inlet 1
Q = Qao (2/3) + Qa1 = 9.86 (2/3) + 2.66 = 9.24 cfs
Use 18" @ 1.1%
Q capacity = 12.30 cfs
V actual = 7.45 fps (d/D = 0.66)

Inlet 2
Q = Inlet 1 + Qa2 = 9.24 + 1.43 = 10.67 cfs
Use 18" @ 1.4%
Q capacity = 13.87 cfs
V actual = 8.44 fps (d/D = 0.67)

Junction Box 3 (verify capacity)
Q = Qao + Qa1 + Qa2 + Exist 18" in Hurricane Gardens
(Culvert in Hurricane Gardens is an 18" ADS at 0.46%, Capacity = 7.95 cfs at d/D=0.85)
Q = 9.86 + 2.66 + 1.43 + 7.95 = 21.90 cfs
Existing 24" Discharging from Junc Box is 24" ADS @ 5.20%
Q capacity = 57.58 cfs ***Capacity appears to exist***
V actual = 16.61 fps (d/D = 0.43)

Inlet 4
Q = Qb1 = 2.32 cfs
Use 18" @ 0.5%
Q capacity = 8.29 cfs
V actual = 4.00 fps (d/D = 0.38)

Inlet 5
Q = Inlet 4 + Qbo = 2.32 + 7.54 = 9.86 cfs
Use 18" @ 1.0%
Q capacity = 11.73 cfs
V actual = 7.35 fps (d/D = 0.71)

Inlet 6
Q = Inlet 5 + Qco = 9.86 + 8.53 = 18.39 cfs
Use 18" @ 4.60%
Q capacity = 25.15 cfs
V actual = 15.18 fps (d/D = 0.65)

Inlet 7
Q = Inlet 6 + Qdo1 = 18.39 + 9.47 = 27.86 cfs
Use 24" @ 2.0%
Q capacity = 35.71 cfs
V actual = 12.22 fps (d/D = 0.67)

Inlet 8
Q = Inlet 7 + Qd1 = 27.86 + 2.17 = 30.03 cfs
Use 18" @ 2.25%
Q capacity = 37.87 cfs
V actual = 13.06 fps (d/D = 0.69)

Street Spreadflow Analysis (Gutter Capacity)

In this Section of the Report, we will examine how the stormwater in the street gutters may impact in proposed inlets. We will use our 27' street width (back of curb to back of curb), while giving allowances for the vertical portion of the curb on each side. The crown on the street shall be 3.0%. The available street width, to handle the stormwater, has a width of 26'. Our goal is to provide a minimum "non submerged" street width ("clear space") of 8 feet. A Manning's Coefficient of 0.12 is used for the pavement surface. Attention is called to the Appendix for the spreadsheets used to evaluate these areas.

Check Inlet 1 & 2 – Hillcrest Drive

Inlet 1

Q = Qa0(1/2) + Qa1/2 = 9.86 (0.5) + 2.66 (0.5) = 6.26 cfs
Gutter Slope = 1.50%
Height of water (from gutter) = 0.30’
Width of water (from gutter) = 10.0’
Clear space (half street) = 13.0 – 10.0’ = 3.0’

Inlet 2

Q = Qa2 = 1.43 cfs
Gutter Slope = 1.50%
Height of water (from gutter) = 0.17’
Width of water (from gutter) = 5.5’
Clear space (half street) = 13.0 – 5.5’ = 7.5’
Total Clear Space = 3.0 + 7.5 = 10.5’

Check Inlet 4 & 5 – Hillcrest Drive

Inlet 4

Q = Qb1 = 2.32 cfs
Gutter Slope = 0.5%
Height of water (from gutter) = 0.26’
Width of water (from gutter) = 8.5’
Clear space (half street) = 13.0 – 8.5’ = 4.5’

Inlet 5

Q = Qbo = 7.54 fps
Gutter Slope = 0.5%
Height of water (from gutter) = 0.39’
Width of water (from gutter) = 13.0’
Clear space (half street) = 13.0 – 13.0’ = 0.0’
Total Clear Space = 4.5 + 0.0 = 4.5’

TRY 10 YEAR STORM

Inlet 4

Q = Qb1 = 1.97 cfs
Gutter Slope = 0.5%
Height of water (from gutter) = 0.23’
Width of water (from gutter) = 7.5’
Clear space (half street) = 13.0 – 7.5’ = 5.5’

Inlet 5

Q = Qbo = 6.41 fps
Gutter Slope = 0.5%
Height of water (from gutter) = 0.36’
Width of water (from gutter) = 12.0’
Clear space (half street) = 13.0 – 12.0’ = 1.0’
Total Clear Space = 5.5 + 1.0 = 6.5’

Check Inlet 6 & Across Street – Hillcrest Drive

Inlet 6

Q = Qco = 8.53 cfs

Gutter Slope = 2.67%

Height of water (from gutter) = 0.30'

Width of water (from gutter) = 10.0'

Clear space (half street) = 13.0 – 10.0' = 3.0'

Across from Inlet 6

Q = Qc1 = 2.42 cfs

Gutter Slope = 2.67%

Height of water (from gutter) = 0.18'

Width of water (from gutter) = 6.0'

Clear space (half street) = 13.0 – 6.0' = 7.0'

Total Clear Space = 3.0 + 7.0 = 10.0'

Check Inlet 7 & 8 – Hillcrest

Inlet 7

Q = Qdo1(1/2) = 9.47 (0.5) = 4.74 cfs

Gutter Slope = 4.88%

Height of water (from gutter) = 0.21'

Width of water (from gutter) = 7.0'

Clear space (half street) = 13.0 – 7.0' = 6.0'

Inlet 8

Q = Qc1 + Qd1 = 2.42 + 2.17 = 4.59 cfs

Gutter Slope = 4.88%

Height of water (from gutter) = 0.21'

Width of water (from gutter) = 7.0'

Clear space (half street) = 13.0 – 7.0' = 6.0'

Total Clear Space = 6.0 + 6.0 = 12.0'

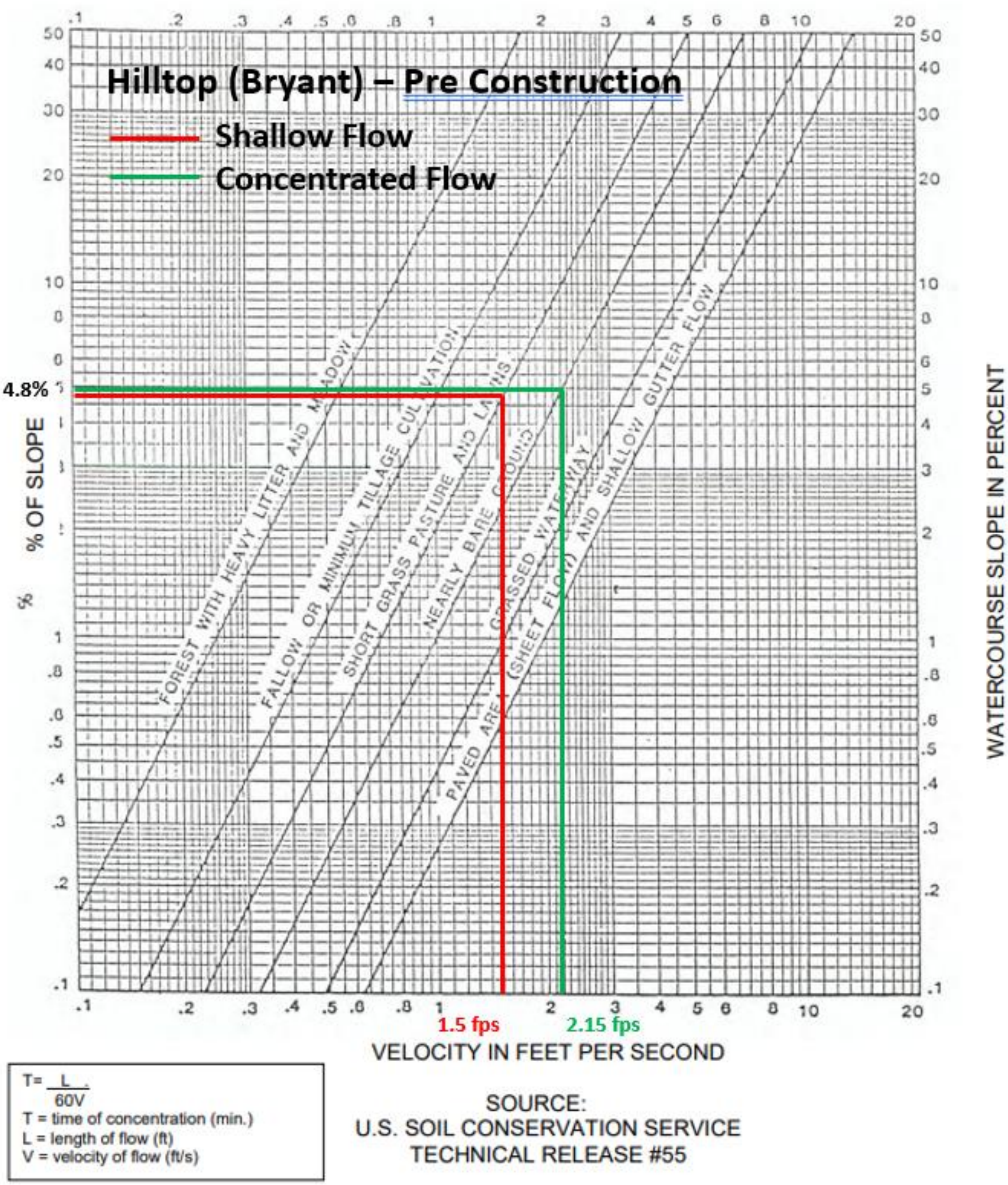
Detention Facility Computations

In this section, we will size the detention facility located in the Common Area (West side of the project). At the completion of this section, a summary of pre and post flows will be provided. Whereas the time of concentration will be used to determine the intensity (I), the runoff coefficient (C) for each storm analysis shall be based on that determined on pages 5 and 6 of this report.

Time of Concentration (tc)

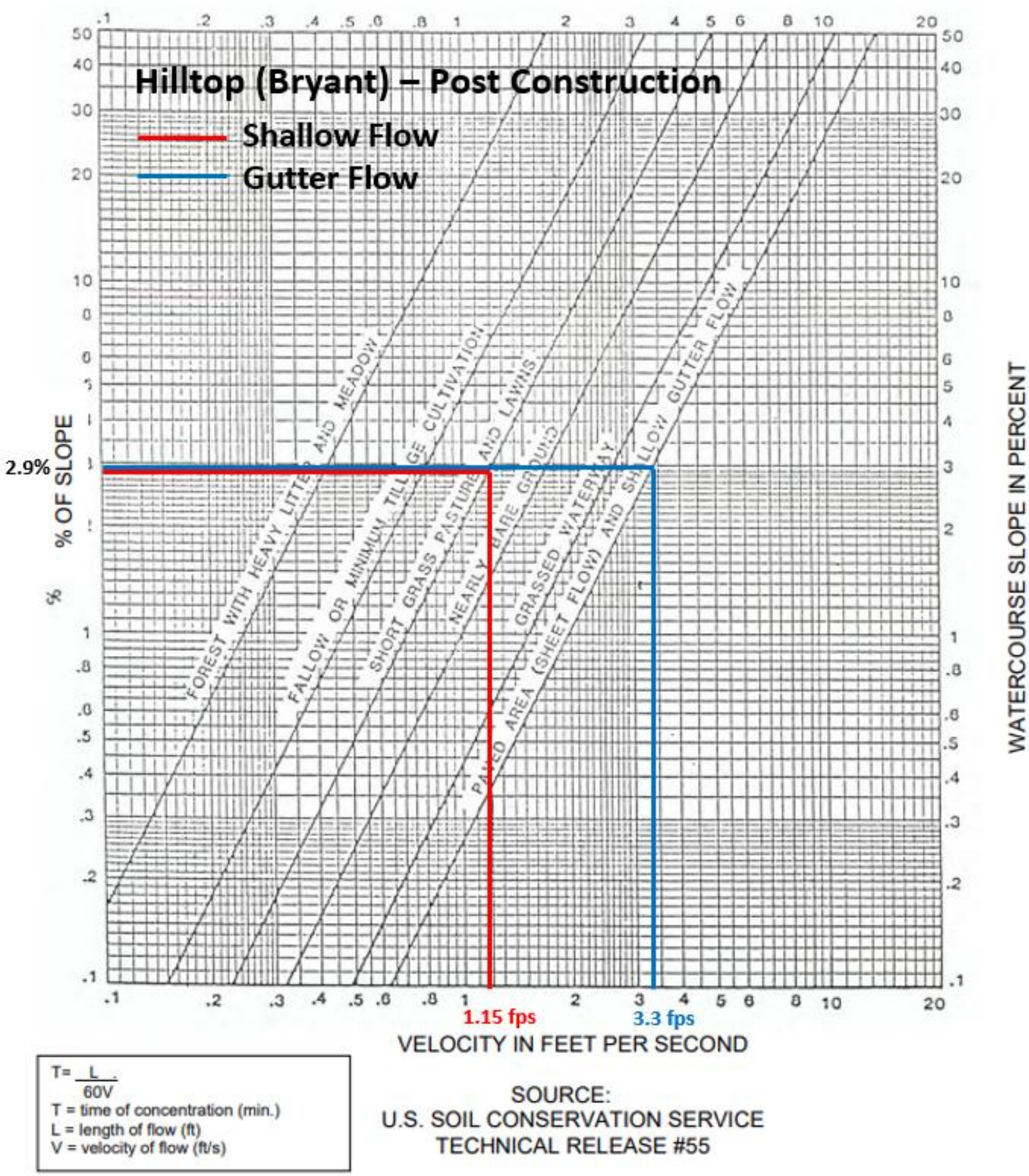
In determining the time of concentration, we must first determine the velocity of the runoff based on the type of ground cover and type of flow. The total tc is a sum of the tc for overland flow, the tc for shallow concentrated flow, and the tc for channelized flow. For this analysis, we will use the US Soil Conservation Service Technical Release #55, “Watercourse Slope vs Velocity” graph. A Pre Construction and Post Construction graph for each watershed is provided on the following pages.

Pre Construction Time of Concentration (tc)



Pre-Construction tc = Σ(L/(60)(V)) = 6 min

Post Construction Time of Concentration (tc)



Pre-Construction tc = Σ(L/(60)(V)) = 9 min

Flow Comparisons (Pre and Post Flow)

Storm Event	C Pre	tc Pre	I Pre	A Pre	Q Pre	C Post	tc Post	I Post	A Post	Q Post	Increase
(Year)			(in/hr)	(ac)	(cfs)			(in/hr)	(ac)	(cfs)	(cfs)
2	0.41	6	5.70	4.33	**10.12**	0.47	9	4.90	9.73	**22.41**	**12.29**
5	0.44	6	6.50	4.33	**12.38**	0.50	9	5.80	9.73	**28.22**	**15.83**
10	0.47	6	7.20	4.33	**14.65**	0.53	9	6.50	9.73	**33.52**	**18.87**
25	0.52	6	8.20	4.33	**18.46**	0.58	9	7.40	9.73	**41.76**	**23.30**
50	0.55	6	9.20	4.33	**21.91**	0.61	9	8.20	9.73	**48.67**	**26.76**
100	0.59	6	9.70	4.33	**24.78**	0.66	9	8.80	9.73	**56.51**	**31.73**

Stage – Storage Table

The following Stage Storage Table is provided, based on the grading plan contained in the Civil Plans. The accumulative storage is provided in the right most column.

TYPE 3			
Stage - Storage for Irregular Detention Basin			
Top Elev	Bottom Elev	Increment	
352.5	345.5	0.5	
Stage	Area	∆ Volume	Volume
msl	sf	cf	cf
345.50	1	0	0
346.00	1369.09	342.52	342.52
346.50	1853.30	805.60	1148.12
347.00	2337.51	1047.70	2195.82
347.50	2951.40	1322.23	3518.05
348.00	3565.28	1629.17	5147.22
348.50	4240.13	1951.35	7098.57
349.00	4914.98	2288.78	9387.35
349.50	5637.46	2638.11	12025.46
350.00	6359.93	2999.35	15024.81
350.50	7118.75	3369.67	18394.48
351.00	7877.57	3749.08	22143.56
351.50	8673.71	4137.82	26281.38
352.00	9469.85	4535.89	30817.27
352.50	10265.99	4933.96	35751.23

Stage – Discharge Table

The following Stage Discharge Table is provided, based on the grading plan contained in the Civil Plans. The discharge structure planned for this facility is shown later in this report.

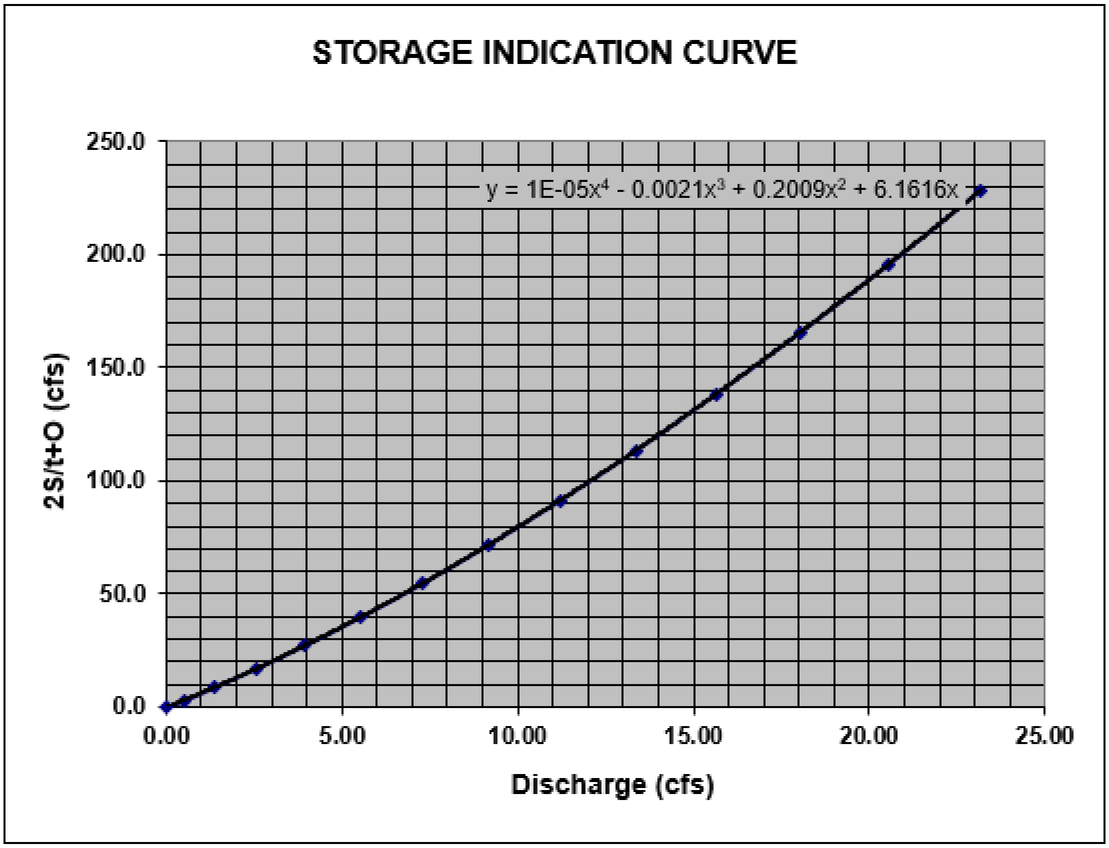
TYPE 2

Stage - Discharge for Rectangular Weir

FL Discharge	Beginning Elevation	Elevation Increment	Top of Basin
345.50	345.50	0.50	352.50

Stage	Head (H)	Weir Length (L)	Area (A)	Orifice Coefficient (C)	Velocity	Discharge (Q)
msl	ft	ft	sf		ft/s	cfs
345.50	0.00	0.42	0.00	3.33	0.00	0.00
346.00	0.50	0.42	0.21	3.33	2.35	0.49
346.50	1.00	0.42	0.42	3.33	3.33	1.40
347.00	1.50	0.42	0.63	3.33	4.08	2.57
347.50	2.00	0.42	0.84	3.33	4.71	3.96
348.00	2.50	0.42	1.05	3.33	5.27	5.53
348.50	3.00	0.42	1.26	3.33	5.77	7.27
349.00	3.50	0.42	1.47	3.33	6.23	9.16
349.50	4.00	0.42	1.68	3.33	6.66	11.19
350.00	4.50	0.42	1.89	3.33	7.06	13.35
350.50	5.00	0.42	2.10	3.33	7.45	15.64
351.00	5.50	0.42	2.31	3.33	7.81	18.04
351.50	6.00	0.42	2.52	3.33	8.16	20.56
352.00	6.50	0.42	2.73	3.33	8.49	23.18
352.50	7.00	0.42	2.94	3.33	8.81	25.90

Storage Indication Curve



Alternate Routing Time

The following spreadsheets represent the Hydrograph Routing for the various storm events. In each case, the Routing Storm Duration time was adjusted to provide the maximum storage required. A time of 40 minute time storm duration is used.

2 YEAR STORM EVENT

Coefficients for Storage Indication Curve from Chart			
Ax^4	Bx^3	Cx^2	Dx
0.0000	-0.0021	0.2009	6.1616

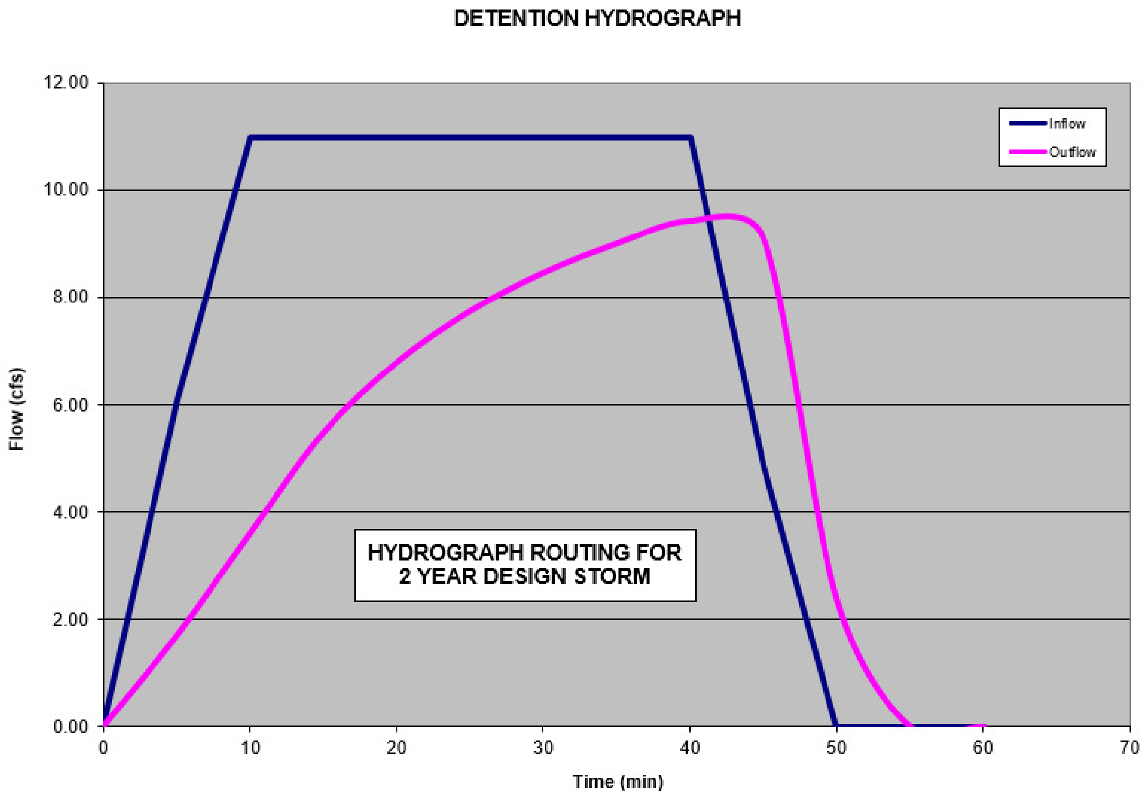
HYDROGRAPH ROUTING FOR 2 YEAR DESIGN STORM

Routing Storm Duration

40 **minutes**

	1	2	3	4	5	6	7	8
Time	I_1	I_1+I_2	$2S_1/t-Q_1$	$2S_2/t+Q_2$	Q_2	S_2	2S/t-Q	Col 4 - 7
min	cfs	cfs	cfs	cfs	cfs	cf	from eqn.	
0	0.00	10.98	0	10.975	0	0	10.976	-0.001
5	6.10	17.07	7.596	24.668	1.690	1392.8	24.668	0.000
10	10.98	21.95	17.474	39.425	3.597	3160.7	39.426	-0.001
15	10.98	21.95	28.474	50.425	5.475	5092.4	50.425	0.000
20	10.98	21.95	36.855	58.806	6.785	6546.0	58.806	0.000
25	10.98	21.95	43.324	65.274	7.741	7659.7	65.275	-0.001
30	10.98	21.95	48.360	70.311	8.457	8522.6	70.310	0.001
35	10.98	21.95	52.304	74.255	9.003	9196.1	74.255	0.000
40	10.98	15.85	55.407	71.260	9.424	9724.6	71.261	-0.001
45	4.88	4.88	53.050	57.928	9.105	9323.2	15.037	42.891
50	0.00	0.00	53.376	53.376	2.376	8332.8	0.000	53.376
55	0.00	0.00	53.576	53.576	0.000	8006.5	0.000	53.576
60	0.00	0.00	53.776	53.776	0.000	8036.5	0.000	53.776

Actual Maximum Storage needed is 9724.6 cubic feet
Maximum Storage required is achieved at an elev. = 349.15
Maximum Allowable (undeveloped) Discharge is 10.12 cfs
Maximum Discharge for the above storm is 9.42 cfs



5 YEAR STORM EVENT

Coefficients for Storage Indication Curve from Chart			
Ax^4	Bx^3	Cx^2	Dx
0.0000	-0.0021	0.2009	6.1616

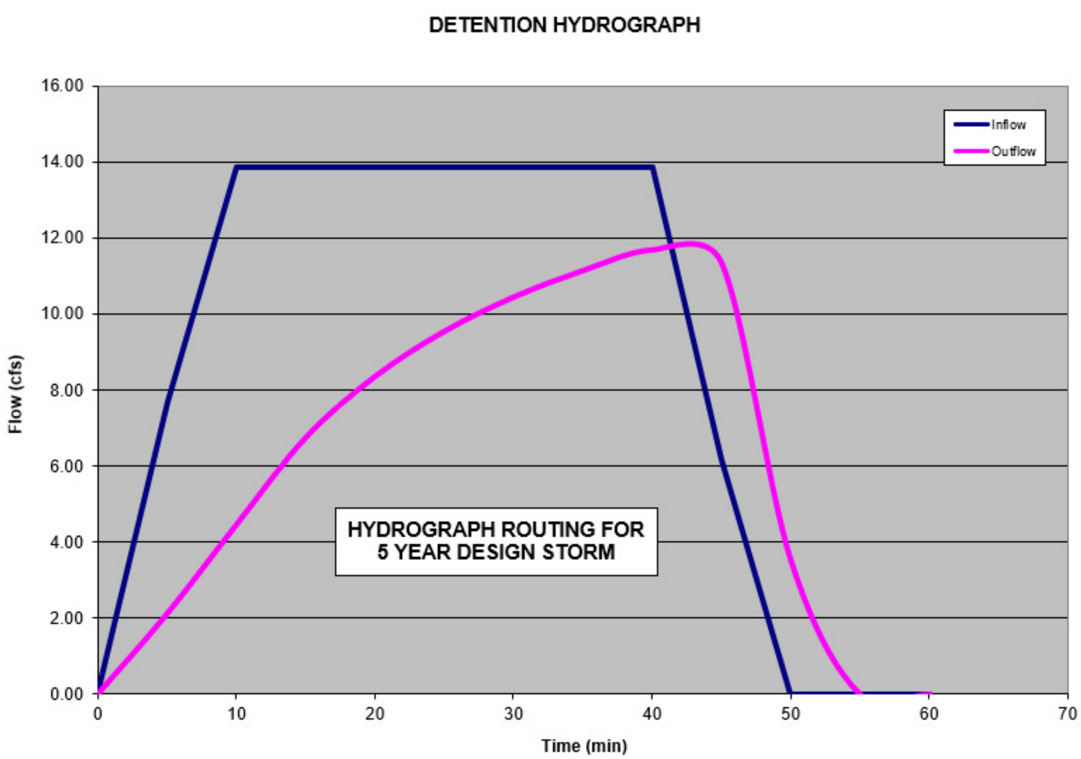
HYDROGRAPH ROUTING FOR 5 YEAR DESIGN STORM

Routing Storm Duration

40 **minutes**

	1	2	3	4	5	6	7	8
Time	I_1	I_1+I_2	$2S_1/t-Q_1$	$2S_2/t+Q_2$	Q_2	S_2	2S/t-Q	Col 4 - 7
min	cfs	cfs	cfs	cfs	cfs	cf	from eqn.	
0	0.00	13.87	0	13.865	0	0	13.864	0.001
5	7.70	21.57	9.649	31.217	2.108	1763.5	31.218	-0.001
10	13.87	27.73	22.316	50.047	4.450	4015.0	50.048	-0.001
15	13.87	27.73	36.564	64.295	6.741	6495.9	64.294	0.000
20	13.87	27.73	47.595	75.326	8.350	8391.8	75.325	0.001
25	13.87	27.73	56.251	83.981	9.537	9868.2	83.980	0.001
30	13.87	27.73	63.103	90.834	10.439	11031.3	90.834	0.000
35	13.87	27.73	68.561	96.292	11.136	11954.6	96.291	0.001
40	13.87	20.03	72.929	92.956	11.682	12691.5	92.955	0.001
45	6.16	6.16	70.258	76.420	11.349	12241.1	23.433	52.987
50	0.00	0.00	69.555	69.555	3.532	10933.2	0.000	69.555
55	0.00	0.00	69.755	69.755	0.000	10433.3	0.000	69.755
60	0.00	0.00	69.955	69.955	0.000	10463.3	0.000	69.955

Actual Maximum Storage needed is 12691.5 cubic feet
Maximum Storage required is achieved at an elev. = 349.66
Maximum Allowable (undeveloped) Discharge is 12.38 cfs
Maximum Discharge for the above storm is 11.68 cfs



10 YEAR STORM EVENT

Coefficients for Storage Indication Curve from Chart			
Ax^4	Bx^3	Cx^2	Dx
0.0000	-0.0021	0.2009	6.1616

HYDROGRAPH ROUTING FOR 10 YEAR DESIGN STORM

Routing Storm Duration

40 **minutes**

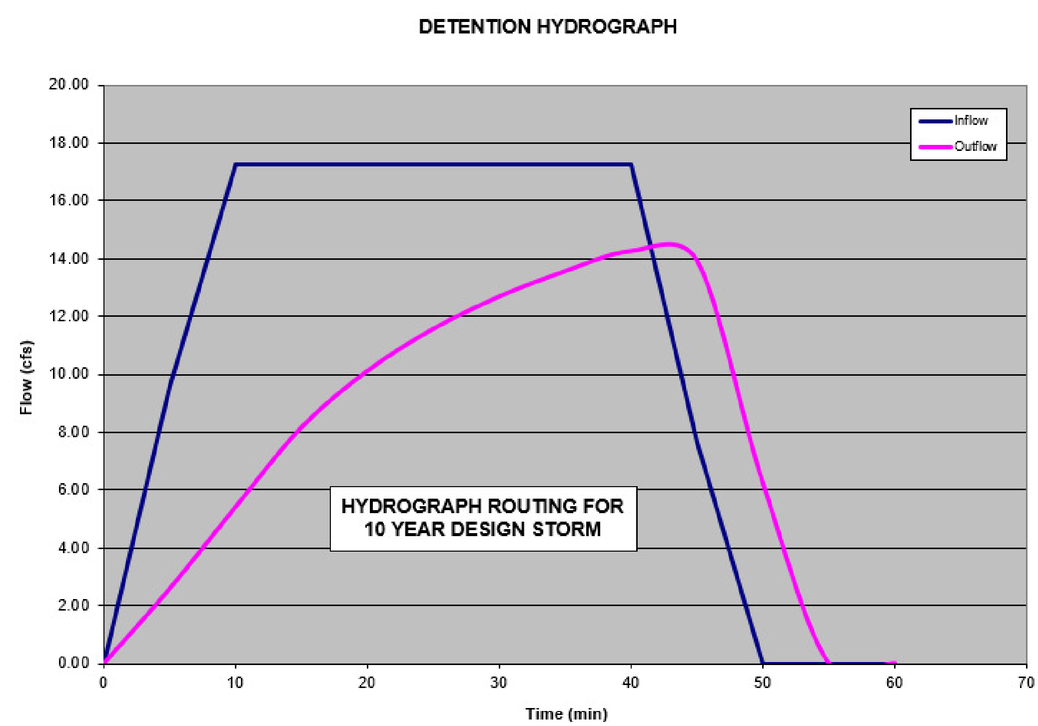
	1	2	3	4	5	6	7	8
Time	I_1	I_1+I_2	$2S_1/t-Q_1$	$2S_2/t+Q_2$	Q_2	S_2	2S/t-Q	Col 4 - 7
min	cfs	cfs	cfs	cfs	cfs	cf	from eqn.	
0	0.00	17.28	0	17.276	0	0	17.275	0.001
5	9.60	26.87	12.094	38.967	2.591	2202.7	38.968	-0.001
10	17.28	34.55	28.129	62.680	5.419	5032.2	62.679	0.001
15	17.28	34.55	46.336	80.887	8.172	8176.2	80.888	-0.001
20	17.28	34.55	60.648	95.199	10.120	10615.1	95.199	-0.001
25	17.28	34.55	72.052	106.604	11.573	12543.8	106.603	0.001
30	17.28	34.55	81.223	115.774	12.690	14087.0	115.773	0.001
35	17.28	34.55	88.642	123.193	13.566	15331.2	123.192	0.001
40	17.28	24.95	94.672	119.626	14.261	16339.9	119.625	0.001
45	7.68	7.68	91.770	99.448	13.928	15854.7	44.900	54.548
50	0.00	0.00	87.177	87.177	6.236	13981.9	0.000	87.177
55	0.00	0.00	87.377	87.377	0.000	13076.5	0.000	87.377
60	0.00	0.00	87.577	87.577	0.000	13106.5	0.000	87.577

Actual Maximum Storage needed is 16339.9 cubic feet

Maximum Storage required is achieved at an elev. = 350.17

Maximum Allowable (undeveloped) Discharge is 14.65 cfs

Maximum Discharge for the above storm is 14.26 cfs



25 YEAR STORM EVENT

Coefficients for Storage Indication Curve from Chart			
Ax^4	Bx^3	Cx^2	Dx
0.0000	-0.0021	0.2009	6.1616

HYDROGRAPH ROUTING FOR 25 YEAR DESIGN STORM

Routing Storm Duration

40 **minutes**

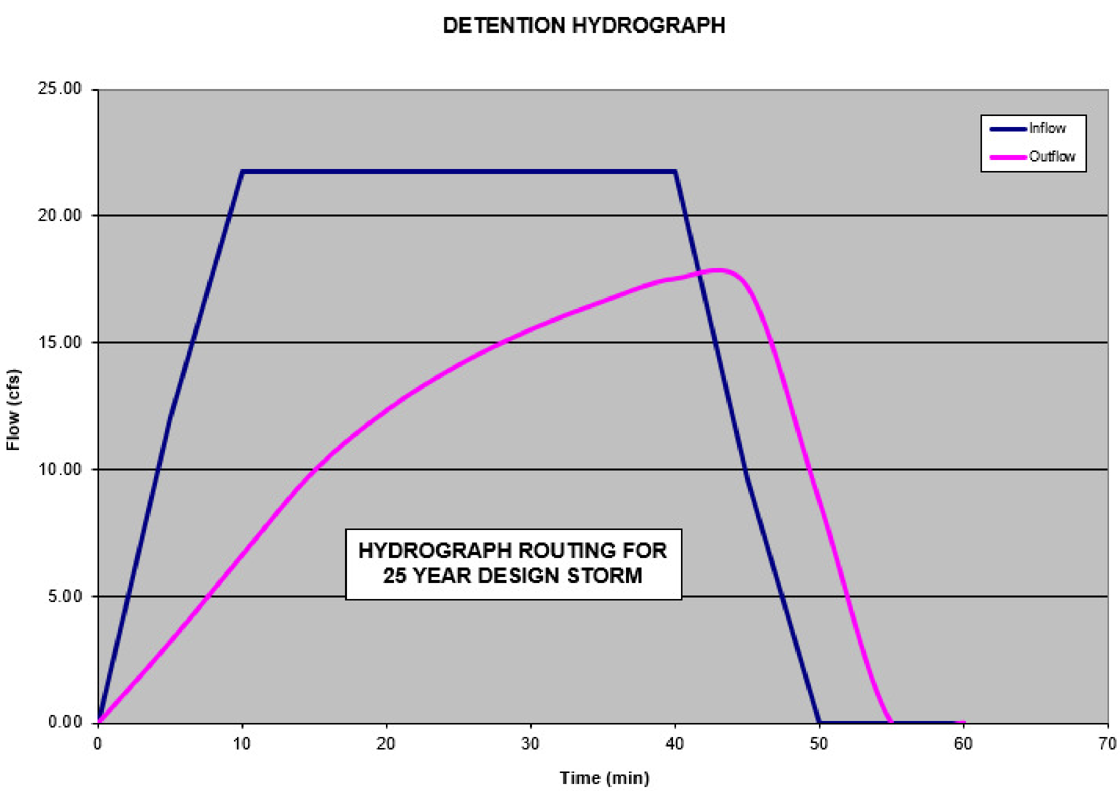
	1	2	3	4	5	6	7	8
Time	I_1	I_1+I_2	$2S_1/t-Q_1$	$2S_2/t+Q_2$	Q_2	S_2	2S/t-Q	Col 4 - 7
min	cfs	cfs	cfs	cfs	cfs	cf	from eqn.	
0	0.00	21.73	0	21.727	0	0	21.726	0.001
5	12.07	33.80	15.322	49.119	3.203	2778.7	49.119	0.001
10	21.73	43.45	35.854	79.308	6.633	6373.0	79.309	-0.001
15	21.73	43.45	59.397	102.851	9.956	10402.8	102.852	-0.001
20	21.73	43.45	78.198	121.652	12.327	13578.6	121.651	0.001
25	21.73	43.45	93.417	136.872	14.117	16130.2	136.873	-0.001
30	21.73	43.45	105.847	149.301	15.512	18203.9	149.302	-0.001
35	21.73	43.45	116.062	159.516	16.620	19902.2	159.515	0.001
40	21.73	31.38	124.494	155.877	17.511	21300.7	155.878	-0.001
45	9.66	9.66	121.486	131.143	17.196	20802.3	66.870	64.273
50	0.00	0.00	113.880	113.880	8.731	18361.7	0.000	113.880
55	0.00	0.00	114.080	114.080	0.000	17082.0	0.000	114.080
60	0.00	0.00	114.280	114.280	0.000	17112.0	0.000	114.280

Actual Maximum Storage needed is 21300.7 cubic feet

Maximum Storage required is achieved at an elev. = 350.82

Maximum Allowable (undeveloped) Discharge is 18.46 cfs

Maximum Discharge for the above storm is 17.51 cfs



50 YEAR STORM EVENT

Coefficients for Storage Indication Curve from Chart			
Ax^4	Bx^3	Cx^2	Dx
0.0000	-0.0021	0.2009	6.1616

HYDROGRAPH ROUTING FOR 50 YEAR DESIGN STORM

Routing Storm Duration

40 **minutes**

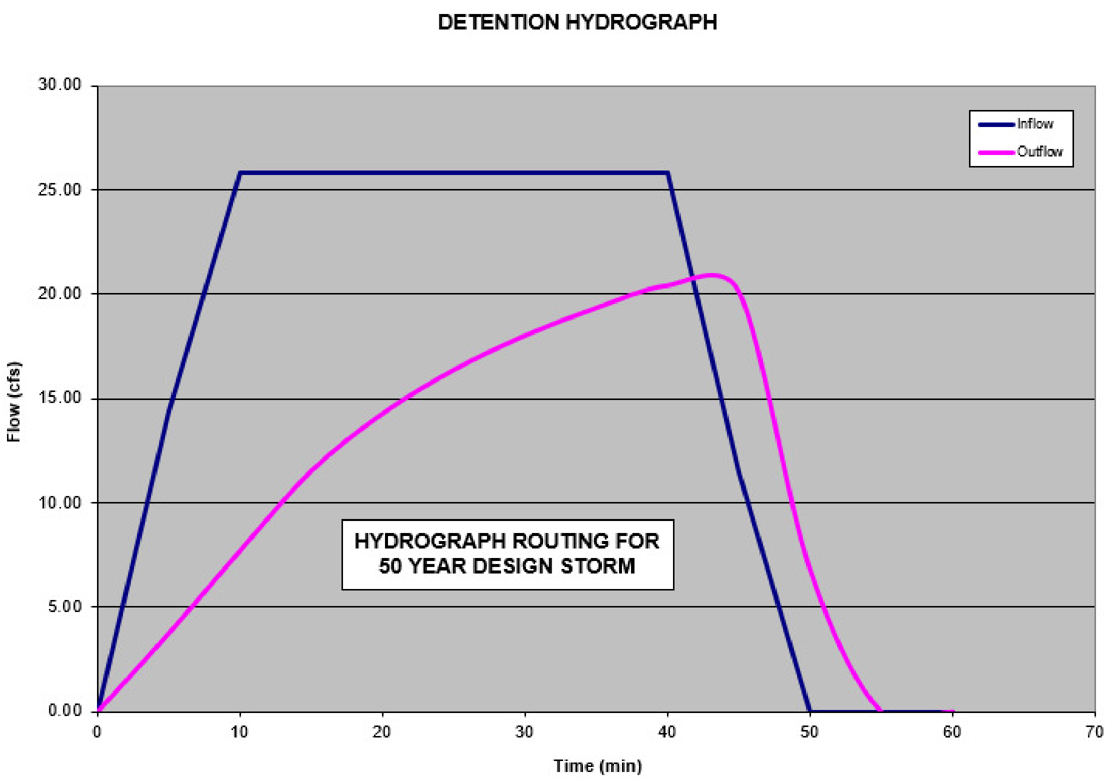
	1	2	3	4	5	6	7	8
Time	I_1	I_1+I_2	$2S_1/t-Q_1$	$2S_2/t+Q_2$	Q_2	S_2	2S/t-Q	Col 4 - 7
min	cfs	cfs	cfs	cfs	cfs	cf	from eqn.	
0	0.00	25.82	0	25.819	0	0	25.818	0.001
5	14.34	40.16	18.320	58.482	3.749	3310.4	58.483	-0.001
10	25.82	51.64	43.072	94.710	7.705	7616.6	94.711	-0.001
15	25.82	51.64	71.661	123.298	11.524	12477.8	123.299	-0.001
20	25.82	51.64	94.757	146.394	14.270	16354.1	146.395	-0.001
25	25.82	51.64	113.668	165.305	16.363	19504.6	165.304	0.000
30	25.82	51.64	129.287	180.924	18.009	22094.4	180.923	0.001
35	25.82	51.64	142.266	193.903	19.329	24239.2	193.903	0.000
40	25.82	37.29	153.099	190.392	20.402	26025.1	190.393	-0.001
45	11.47	11.47	150.165	161.640	20.114	25541.8	49.651	111.989
50	0.00	0.00	148.250	148.250	6.795	23226.7	0.000	148.250
55	0.00	0.00	148.450	148.450	0.000	22237.4	0.000	148.450
60	0.00	0.00	148.650	148.650	0.000	22267.4	0.000	148.650

Actual Maximum Storage needed is 26025.1 cubic feet

Maximum Storage required is achieved at an elev. = 351.46

Maximum Allowable (undeveloped) Discharge is 21.91 cfs

Maximum Discharge for the above storm is 20.4 cfs



100 YEAR STORM EVENT

Coefficients for Storage Indication Curve from Chart			
Ax^4	Bx^3	Cx^2	Dx
0.0000	-0.0021	0.2009	6.1616

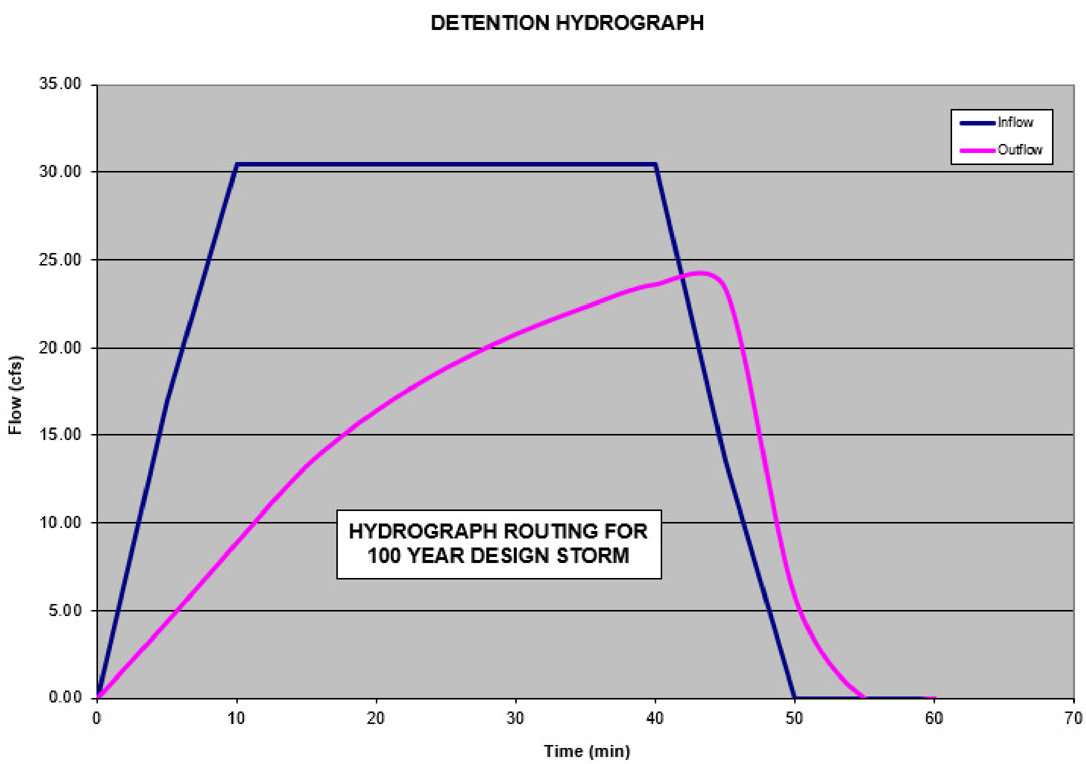
HYDROGRAPH ROUTING FOR 100 YEAR DESIGN STORM

Routing Storm Duration

40 minutes

	1	2	3	4	5	6	7	8
Time	I_1	I_1+I_2	$2S_1/t-Q_1$	$2S_2/t+Q_2$	Q_2	S_2	2S/t-Q	Col 4 - 7
min	cfs	cfs	cfs	cfs	cfs	cf	from eqn.	
0	0.00	30.50	0	30.504	0	0	30.503	0.001
5	16.95	47.45	21.786	69.236	4.359	3921.7	69.235	0.001
10	30.50	61.01	51.461	112.468	8.888	9052.3	112.469	-0.001
15	30.50	61.01	85.963	146.970	13.253	14882.3	146.971	-0.001
20	30.50	61.01	114.142	175.149	16.414	19583.4	175.148	0.001
25	30.50	61.01	137.459	198.466	18.845	23445.6	198.467	-0.001
30	30.50	61.01	156.918	217.925	20.774	26653.8	217.926	-0.001
35	30.50	61.01	173.253	234.260	22.336	29338.3	234.259	0.001
40	30.50	44.06	187.027	231.088	23.617	31596.5	231.087	0.001
45	13.56	13.56	184.348	197.905	23.370	31157.7	41.366	156.539
50	0.00	0.00	186.482	186.482	5.811	28814.0	0.000	186.482
55	0.00	0.00	186.682	186.682	0.000	27972.3	0.000	186.682
60	0.00	0.00	186.882	186.882	0.000	28002.3	0.000	186.882

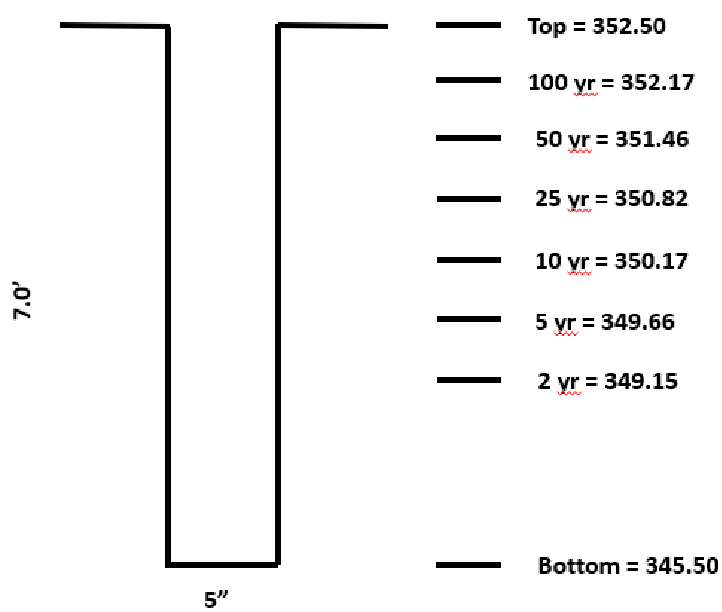
Actual Maximum Storage needed is 31596.5 cubic feet
Maximum Storage required is achieved at an elev. = 352.17
Maximum Allowable (undeveloped) Discharge is 24.78 cfs
Maximum Discharge for the above storm is 23.62 cfs

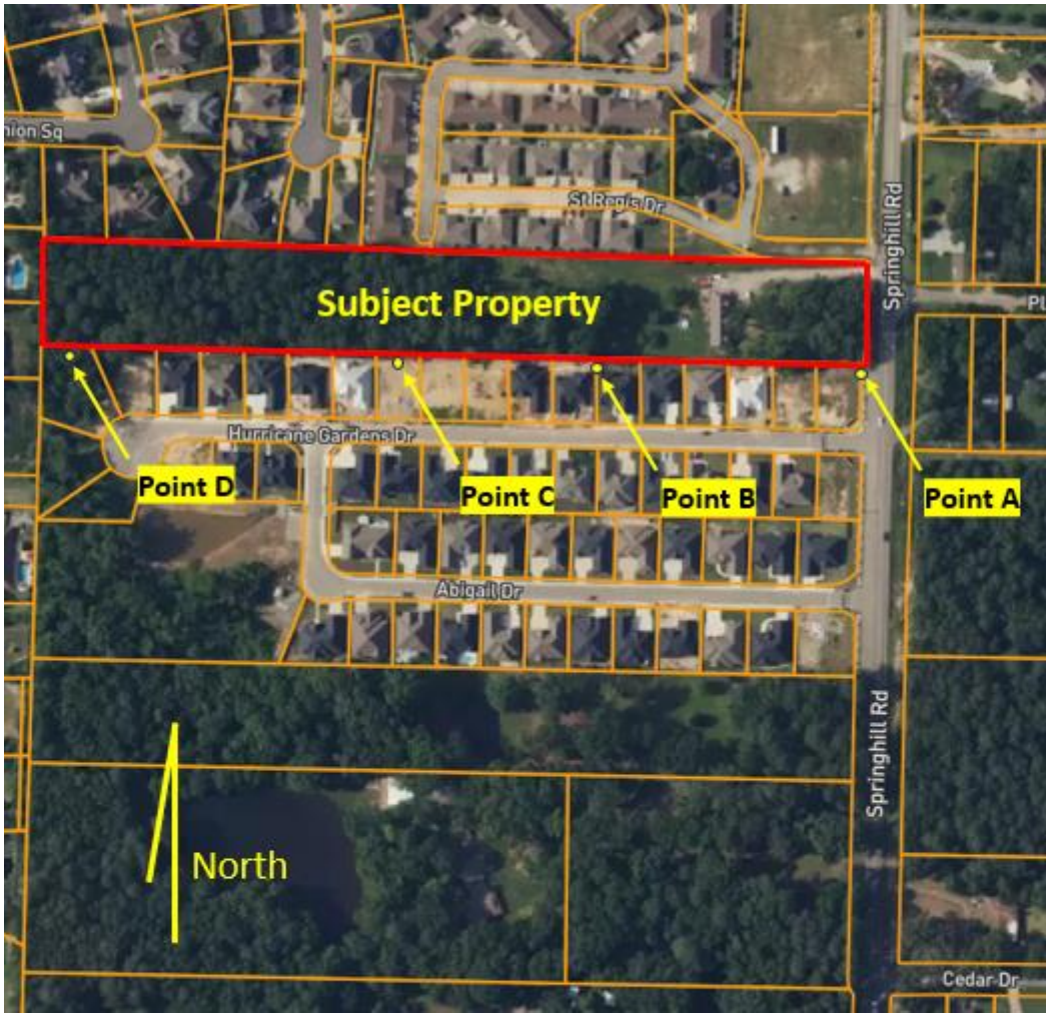


Summary – Detention

Storm Event	Volume Needed (cf)	WSE	Max Discharge Allowed (cfs)	Max Discharge Model (cfs)
2	9724.6	349.15	10.12	9.42
5	12691.5	349.66	12.38	11.68
10	16339.9	350.17	14.65	14.26
25	21300.7	350.82	18.46	17.51
50	26025.1	351.46	21.91	20.40
100	31596.5	352.17	24.78	23.62

Discharge Structure Detail





Study Point Summary (25 yr Storm)

Study Point	Pre Construction	Post Construction	Change
A	15.18 cfs	16.93 cfs	1.75 cfs*
B	11.49 cfs	1.63 cfs	-9.86 cfs
C	12.72 cfs	1.77 cfs	-10.95 cfs
D	18.46 cfs	17.51 cfs	-0.95 cfs
Total:			**-20.01 cfs**

** Existing culvert originating at the Junction Box near the NE corner of Hurricane Gardens has adequate capacity to accept this slight increase in flow.*

Engineering Certification

I, Tim Lemons, Arkansas Registered Professional Engineer No. 7373, hereby certify that the drainage reports, and calculations contained in this report, have been prepared in accordance with sound engineering practice and principles, and based on best known available data. Improvements as outlined in this report and depicted on the preliminary plat and design drawings should not increase the risk of endangerment to life or have negative impacts on adjacent or downstream property or watersheds.

Timothy B. Lemons, PE
Arkansas Professional Engineer, #7373

Appendix

GUTTER CAPACITY OF STREETS - 27' BC to BC								
Slope = 0.5%, n = 0.012								
Width (ft)	Slope	Height (ft)	Area (sf)	R	R^2/3	S	S^1/2	Q (cfs)
0.5	0.030	0.02	0.00	0.01	0.04	0.00500	0.0707	0.00
1	0.030	0.03	0.02	0.01	0.06	0.00500	0.0707	0.01
1.5	0.030	0.05	0.03	0.02	0.08	0.00500	0.0707	0.02
2	0.030	0.06	0.06	0.03	0.10	0.00500	0.0707	0.05
2.5	0.030	0.08	0.09	0.04	0.11	0.00500	0.0707	0.09
3	0.030	0.09	0.14	0.04	0.13	0.00500	0.0707	0.15
3.5	0.030	0.11	0.18	0.05	0.14	0.00500	0.0707	0.22
4	0.030	0.12	0.24	0.06	0.15	0.00500	0.0707	0.32
4.5	0.030	0.14	0.30	0.07	0.16	0.00500	0.0707	0.44
5	0.030	0.15	0.38	0.07	0.18	0.00500	0.0707	0.58
5.5	0.030	0.17	0.45	0.08	0.19	0.00500	0.0707	0.75
6	0.030	0.18	0.54	0.09	0.20	0.00500	0.0707	0.94
6.5	0.030	0.20	0.63	0.10	0.21	0.00500	0.0707	1.17
7	0.030	0.21	0.74	0.10	0.22	0.00500	0.0707	1.43
7.5	0.030	0.23	0.84	0.11	0.23	0.00500	0.0707	1.71
8.5	0.030	0.26	1.08	0.13	0.25	0.00500	0.0707	2.39
9	0.030	0.27	1.22	0.13	0.26	0.00500	0.0707	2.79
9.5	0.030	0.29	1.35	0.14	0.27	0.00500	0.0707	3.22
10	0.030	0.30	1.50	0.15	0.28	0.00500	0.0707	3.69
10.5	0.030	0.32	1.65	0.16	0.29	0.00500	0.0707	4.21
11	0.030	0.33	1.82	0.16	0.30	0.00500	0.0707	4.76
11.5	0.030	0.35	1.98	0.17	0.31	0.00500	0.0707	5.36
12	0.030	0.36	2.16	0.18	0.32	0.00500	0.0707	6.01
12.5	0.030	0.38	2.34	0.19	0.33	0.00500	0.0707	6.70
13	0.030	0.39	2.54	0.19	0.33	0.00500	0.0707	7.44

GUTTER CAPACITY OF STREETS - 27' BC to BC								
Slope = 1.50%, n = 0.012								
Width (ft)	**Slope**	**Height (ft)**	**Area (sf)**	**R**	**R^2/3**	**S**	**S^1/2**	**Q (cfs)**
0.5	0.030	0.02	0.00	0.01	0.04	0.01500	0.1225	0.00
1	0.030	0.03	0.02	0.01	0.06	0.01500	0.1225	0.01
1.5	0.030	0.05	0.03	0.02	0.08	0.01500	0.1225	0.04
2	0.030	0.06	0.06	0.03	0.10	0.01500	0.1225	0.09
2.5	0.030	0.08	0.09	0.04	0.11	0.01500	0.1225	0.16
3	0.030	0.09	0.14	0.04	0.13	0.01500	0.1225	0.26
3.5	0.030	0.11	0.18	0.05	0.14	0.01500	0.1225	0.39
4	0.030	0.12	0.24	0.06	0.15	0.01500	0.1225	0.55
4.5	0.030	0.14	0.30	0.07	0.16	0.01500	0.1225	0.76
5	0.030	0.15	0.38	0.07	0.18	0.01500	0.1225	1.01
5.5	0.030	0.17	0.45	0.08	0.19	0.01500	0.1225	1.30
6	0.030	0.18	0.54	0.09	0.20	0.01500	0.1225	1.64
6.5	0.030	0.20	0.63	0.10	0.21	0.01500	0.1225	2.03
7	0.030	0.21	0.74	0.10	0.22	0.01500	0.1225	2.47
7.5	0.030	0.23	0.84	0.11	0.23	0.01500	0.1225	2.97
8.5	0.030	0.26	1.08	0.13	0.25	0.01500	0.1225	4.15
9	0.030	0.27	1.22	0.13	0.26	0.01500	0.1225	4.83
9.5	0.030	0.29	1.35	0.14	0.27	0.01500	0.1225	5.58
10	0.030	0.30	1.50	0.15	0.28	0.01500	0.1225	6.40
10.5	0.030	0.32	1.65	0.16	0.29	0.01500	0.1225	7.29
11	0.030	0.33	1.82	0.16	0.30	0.01500	0.1225	8.25
11.5	0.030	0.35	1.98	0.17	0.31	0.01500	0.1225	9.29
12	0.030	0.36	2.16	0.18	0.32	0.01500	0.1225	10.41
12.5	0.030	0.38	2.34	0.19	0.33	0.01500	0.1225	11.61
13	0.030	0.39	2.54	0.19	0.33	0.01500	0.1225	12.89

GUTTER CAPACITY OF STREETS - 27' BC to BC

Slope = 2.67%, n = 0.012

Width (ft)	Slope	Height (ft)	Area (sf)	R	R^2/3	S	S^1/2	Q (cfs)
0.5	0.030	0.02	0.00	0.01	0.04	0.02670	0.1634	0.00
1	0.030	0.03	0.02	0.01	0.06	0.02670	0.1634	0.02
1.5	0.030	0.05	0.03	0.02	0.08	0.02670	0.1634	0.05
2	0.030	0.06	0.06	0.03	0.10	0.02670	0.1634	0.12
2.5	0.030	0.08	0.09	0.04	0.11	0.02670	0.1634	0.21
3	0.030	0.09	0.14	0.04	0.13	0.02670	0.1634	0.34
3.5	0.030	0.11	0.18	0.05	0.14	0.02670	0.1634	0.52
4	0.030	0.12	0.24	0.06	0.15	0.02670	0.1634	0.74
4.5	0.030	0.14	0.30	0.07	0.16	0.02670	0.1634	1.01
5	0.030	0.15	0.38	0.07	0.18	0.02670	0.1634	1.34
5.5	0.030	0.17	0.45	0.08	0.19	0.02670	0.1634	1.73
6	0.030	0.18	0.54	0.09	0.20	0.02670	0.1634	2.18
6.5	0.030	0.20	0.63	0.10	0.21	0.02670	0.1634	2.70
7	0.030	0.21	0.74	0.10	0.22	0.02670	0.1634	3.29
7.5	0.030	0.23	0.84	0.11	0.23	0.02670	0.1634	3.96
8.5	0.030	0.26	1.08	0.13	0.25	0.02670	0.1634	5.53
9	0.030	0.27	1.22	0.13	0.26	0.02670	0.1634	6.44
9.5	0.030	0.29	1.35	0.14	0.27	0.02670	0.1634	7.44
10	0.030	0.30	1.50	0.15	0.28	0.02670	0.1634	8.53
10.5	0.030	0.32	1.65	0.16	0.29	0.02670	0.1634	9.72
11	0.030	0.33	1.82	0.16	0.30	0.02670	0.1634	11.01
11.5	0.030	0.35	1.98	0.17	0.31	0.02670	0.1634	12.40
12	0.030	0.36	2.16	0.18	0.32	0.02670	0.1634	13.89
12.5	0.030	0.38	2.34	0.19	0.33	0.02670	0.1634	15.49
13	0.030	0.39	2.54	0.19	0.33	0.02670	0.1634	17.20

GUTTER CAPACITY OF STREETS - 27' BC to BC

Slope = 4.88%, n = 0.012

Width (ft)	Slope	Height (ft)	Area (sf)	R	R^2/3	S	S^1/2	Q (cfs)
0.5	0.030	0.02	0.00	0.01	0.04	0.04880	0.2209	0.00
1	0.030	0.03	0.02	0.01	0.06	0.04880	0.2209	0.02
1.5	0.030	0.05	0.03	0.02	0.08	0.04880	0.2209	0.07
2	0.030	0.06	0.06	0.03	0.10	0.04880	0.2209	0.16
2.5	0.030	0.08	0.09	0.04	0.11	0.04880	0.2209	0.28
3	0.030	0.09	0.14	0.04	0.13	0.04880	0.2209	0.46
3.5	0.030	0.11	0.18	0.05	0.14	0.04880	0.2209	0.70
4	0.030	0.12	0.24	0.06	0.15	0.04880	0.2209	1.00
4.5	0.030	0.14	0.30	0.07	0.16	0.04880	0.2209	1.37
5	0.030	0.15	0.38	0.07	0.18	0.04880	0.2209	1.81
5.5	0.030	0.17	0.45	0.08	0.19	0.04880	0.2209	2.34
6	0.030	0.18	0.54	0.09	0.20	0.04880	0.2209	2.95
6.5	0.030	0.20	0.63	0.10	0.21	0.04880	0.2209	3.65
7	0.030	0.21	0.74	0.10	0.22	0.04880	0.2209	4.45
7.5	0.030	0.23	0.84	0.11	0.23	0.04880	0.2209	5.35
8.5	0.030	0.26	1.08	0.13	0.25	0.04880	0.2209	7.48
9	0.030	0.27	1.22	0.13	0.26	0.04880	0.2209	8.71
9.5	0.030	0.29	1.35	0.14	0.27	0.04880	0.2209	10.06
10	0.030	0.30	1.50	0.15	0.28	0.04880	0.2209	11.54
10.5	0.030	0.32	1.65	0.16	0.29	0.04880	0.2209	13.14
11	0.030	0.33	1.82	0.16	0.30	0.04880	0.2209	14.88
11.5	0.030	0.35	1.98	0.17	0.31	0.04880	0.2209	16.76
12	0.030	0.36	2.16	0.18	0.32	0.04880	0.2209	18.77
12.5	0.030	0.38	2.34	0.19	0.33	0.04880	0.2209	20.94
13	0.030	0.39	2.54	0.19	0.33	0.04880	0.2209	23.25

Lemons Engineering Consultants, Inc.
204 West Cherry Street
Cabot, Arkansas 72023
(501) 605-7565
arstrep43@gmail.com

July 23, 2024

Mr. Colton Leonard, City Planner
City of Bryant, Arkansas
Community Development
210 SW 3rd Street
Bryant, Arkansas 72022

Re: Preliminary Plat
3927 Springhill Road, Bryant, AR
Parcel # 840-11855-000

Dear Mr. Leonard:

Enclosed you will find the revised Civil Plans, and Drainage Report as pertaining to the referenced project. A brief summary of the revisions are as follows. Please review on this attached revised plans, and include on the agenda of the August 12, 2024, City of Bryant Planning Commission Meeting.

Plans

- The proposed street shall be public. I have revised the street cross section detail to match that for local streets. Lots will only exist on one side, therefore we ask that the sidewalk only be installed on the lot side of the street (South side). The property to the North has developed and will not benefit from having the sidewalk on the North side.
- Please provide me with a typical street section for Springhill Road. I will incorporate the half street improvements detail on the plans.
- We have revised the sewer grade on the area where the grade was steep. The revised plans show the new grades.
- A typical section of the Detention Facility levee has been added, complete with the profile for the storm drain.

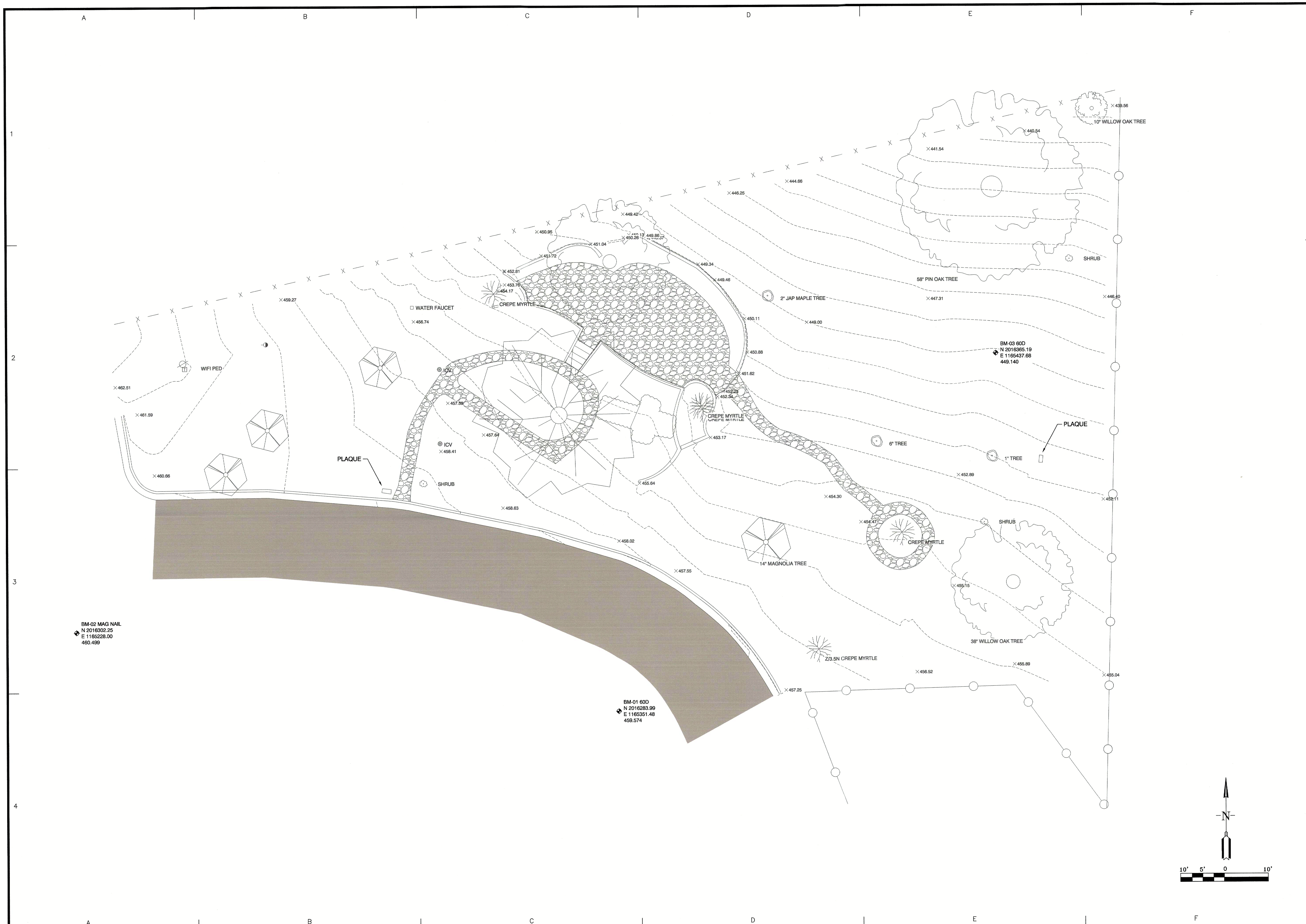
Drainage Report

- The off site area has been better defined using the Saline County GIS maps. A new map is included in the report.
- The runoff coefficients have been revised to match the Bryant Drainage Manual, and all computations have been revised using the new C values.

I will be out of town for the next DR meeting. I would like to join by either Zoom, Teams, or by phone. Please let me know the preferred method.

Sincerely,

Tim Lemons, PE



REVISION | DATE | BY

GNE Designing our client's success

GarNat Engineering, LLC

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

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

BRYANT FIRST UNITED METHODIST CHURCH
COLUMBARIUM
CITY OF BRYANT, ARKANSAS

CONTENTS:
TOPOGRAPHICAL SURVEY

PROJECT NO:
23108

DATE:
AUGUST 2023

SHEET NO:
C1.0

A COLUMBARIUM FOR THE
BRYANT FIRST UNITED METHODIST CHURCH

BRYANT, ARKANSAS

28 JUNE 2024

PRICING SET

WILLIAMS & DEAN
ARCHITECTURE | INTERIOR DESIGN
18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, ARKANSAS 72205
501.224.1900
WWW.WILLIAMSDEAN.COM

INDEX OF DRAWINGS

ARCHITECTURAL

CIVIL | LANDSCAPE
COMPANY NAME
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CITY, STATE ZIP
000.000.0000

STRUCTURAL
COMPANY NAME
ADDRESS
CITY, STATE ZIP
000.000.0000

MECHANICAL
COMPANY NAME
ADDRESS
CITY, STATE ZIP
000.000.0000

CONTRACTOR
COMPANY NAME
ADDRESS
CITY, STATE ZIP
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CERTIFICATION STATEMENT

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECT SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, THESE PLANS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH INTERNATIONAL BUILDING CODE FOR THE STATE OF ARKANSAS.

NOT FOR CONSTRUCTION

23-014:PROJECT NUMBER

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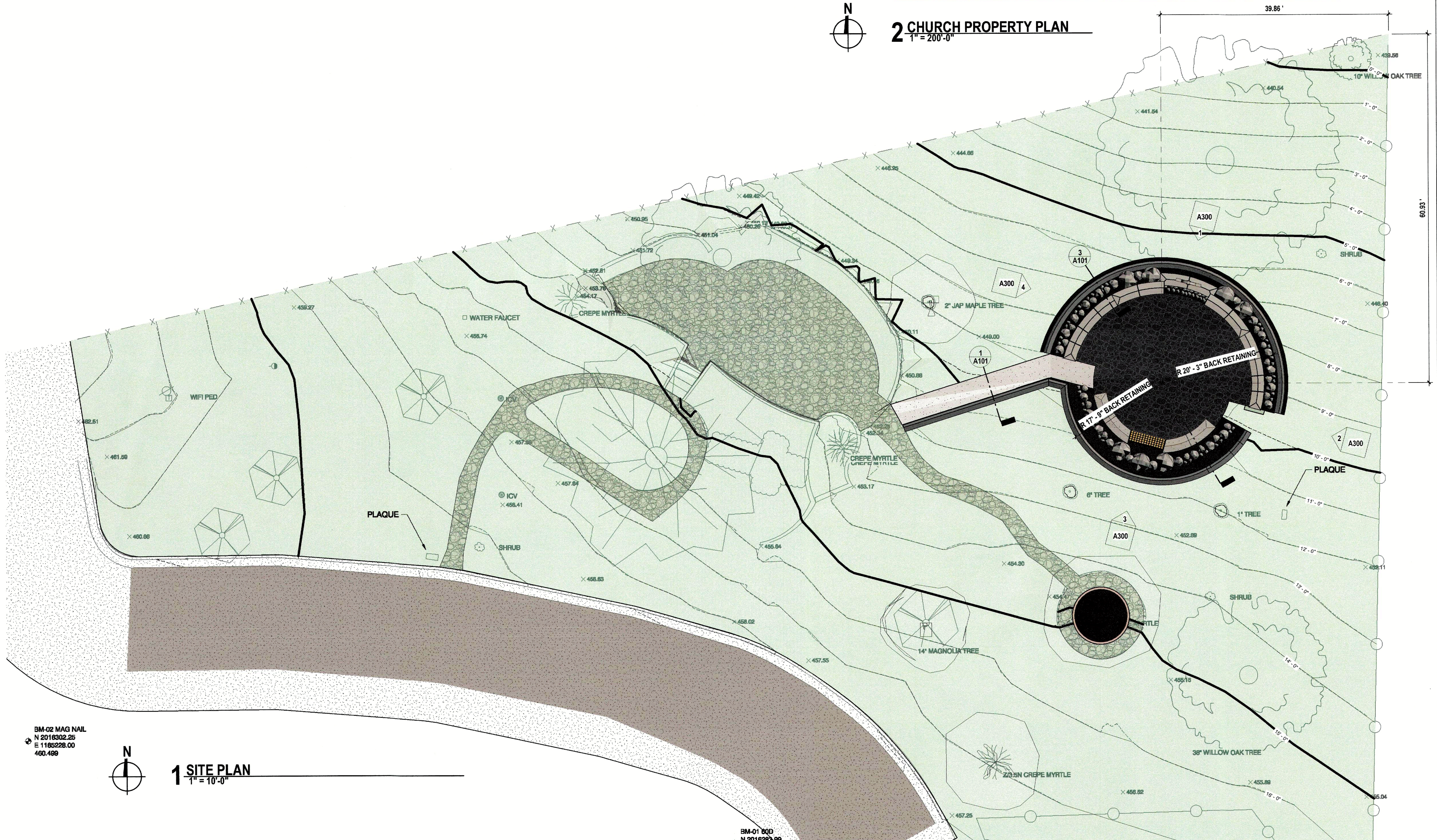
ARKANSAS ONE CALL
811
CALL AT LEAST 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

GENERAL ARCHITECTURAL SITE NOTES

1. GENERAL CONTRACTOR TO BE RESPONSIBLE FOR VERIFYING ALL EXISTING SITE UTILITIES, AND HAVING THEM MARKED PRIOR TO DISTURBING THE SITE IN ANY WAY.
2. GENERAL CONTRACTOR TO VERIFY ALL EXISTING SITE CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH PROVIDED PLANS, SURVEYS, OR DESCRIBED CONDITIONS PRIOR TO PROCEEDING WITH ANY SITE WORK.
3. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS AND POLES, ETC. AS REQUIRED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED BY THE GENERAL CONTRACTOR.
4. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REPLACEMENT OF PROPERTY CORNERS.
5. ALL DIMENSIONS AND RADII ARE TO THE BACK OF CURB, EDGE OF PAVEMENT, CENTER OF STRIPE OR OBJECT, OR FACE OF BUILDING UNLESS NOTED OTHERWISE.
6. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING SITE IMPROVEMENTS (ASPHALT/CONCRETE PAVING, CURBS AND GUTTERS, SIDEWALKS, ETC.) WHICH ARE TO REMAIN.
7. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF EXISTING SITE IMPROVEMENTS (ASPHALT/CONCRETE PAVING, CURBS AND GUTTERS, SIDEWALKS, ETC.) DAMAGED DURING CONSTRUCTION. GENERAL CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE TO SITE ELEMENTS THEY DO NOT WANT TO BE HELD RESPONSIBLE FOR REPAIRING.
8. GENERAL CONTRACTOR TO PROVIDE AND MAINTAIN EROSION AND SEDIMENT CONTROL THROUGHOUT THE DURATION OF CONSTRUCTION.
9. ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. GRASS TYPE TO MATCH SPECIFIED GRASS FOR THE PROJECT.

2 CHURCH PROPERTY PLAN
1" = 200'-0"



1 SITE PLAN
1" = 10'-0"

WILLIAMS & DEAN
ARCHITECTURE | INTERIOR DESIGN
18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
WWW.WILLIAMSDEAN.COM

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BRYANT, ARKANSAS

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ARCHITECTURAL SITE PLAN

:REVISIONS

NO.	DESCRIPTION	DATE

28 JUNE 2024 :ISSUE DATE
23-014 :PROJECT NUMBER
:SHEET NUMBER
A100

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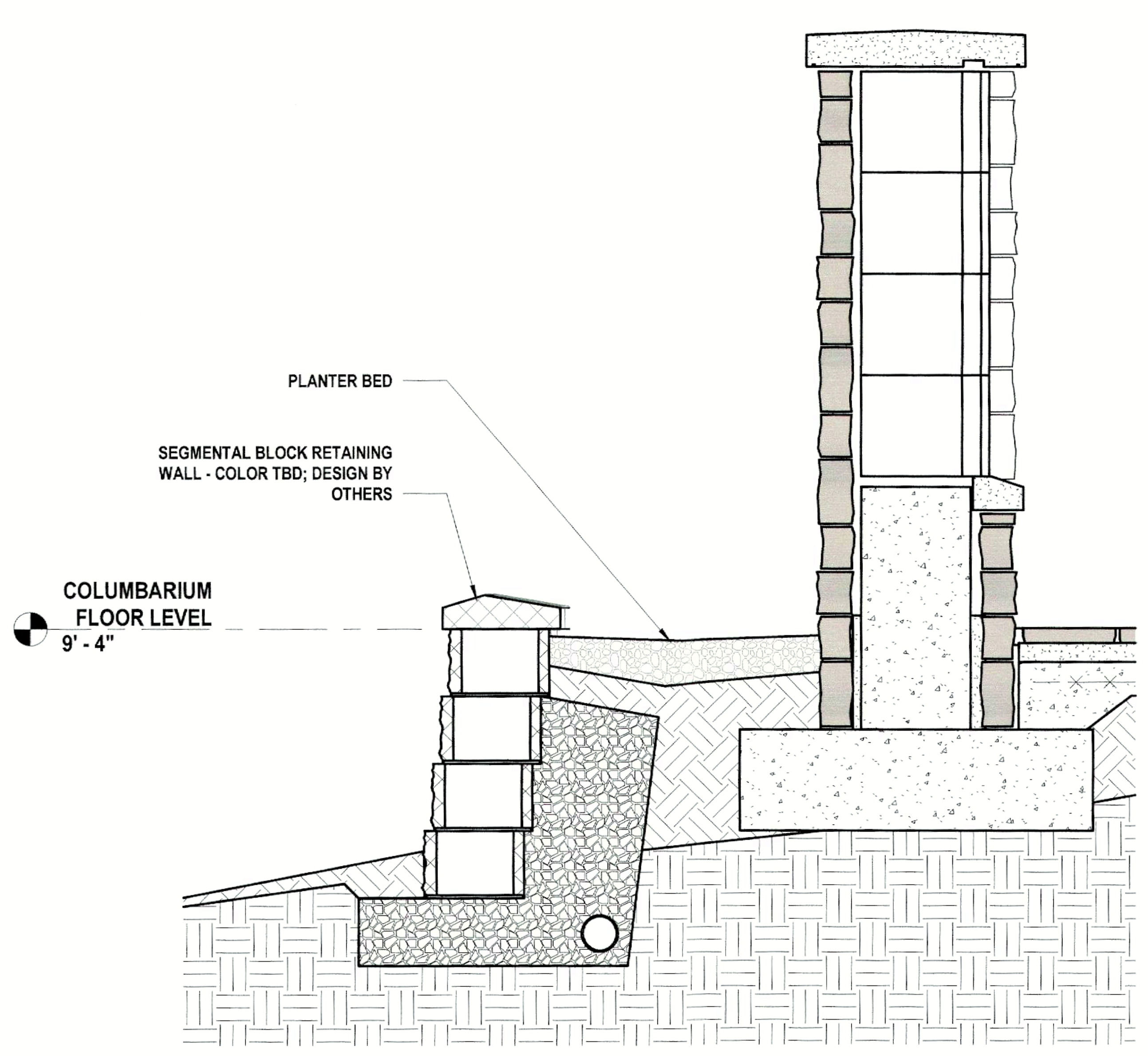
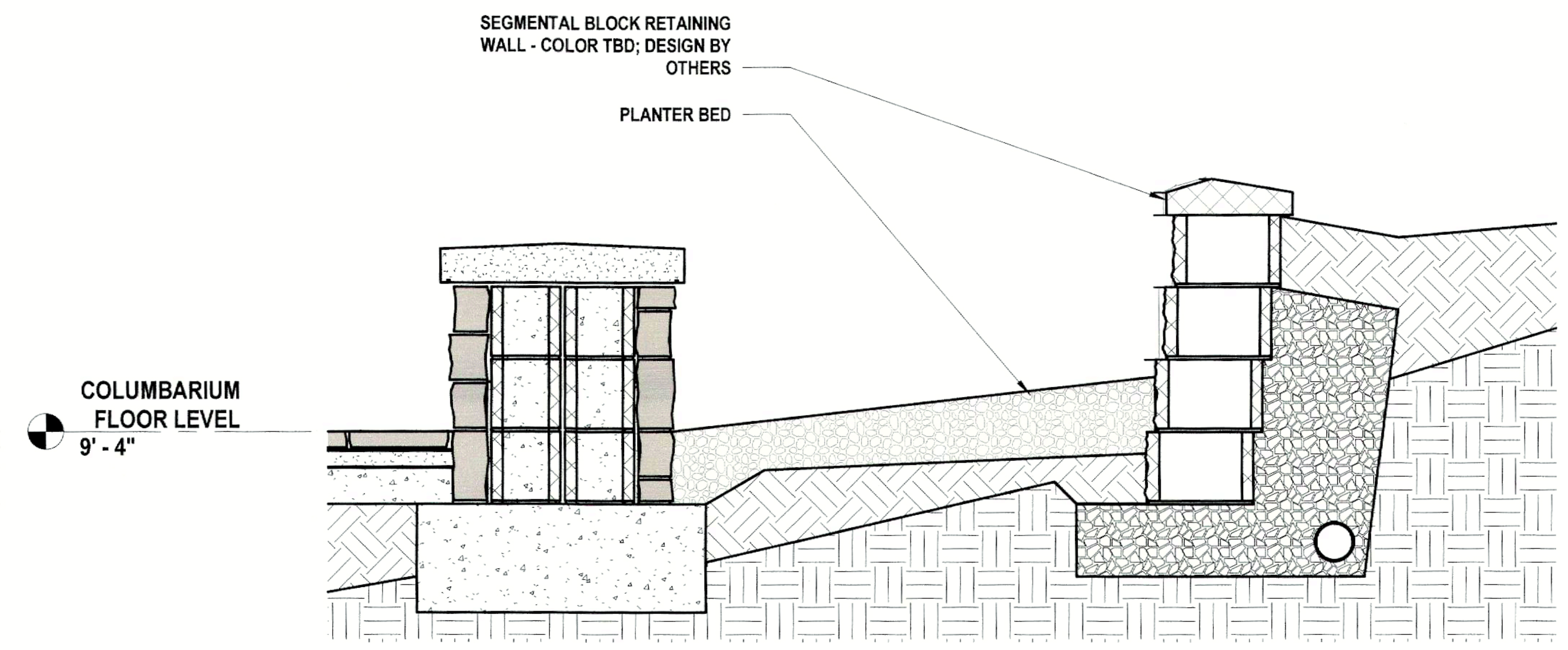
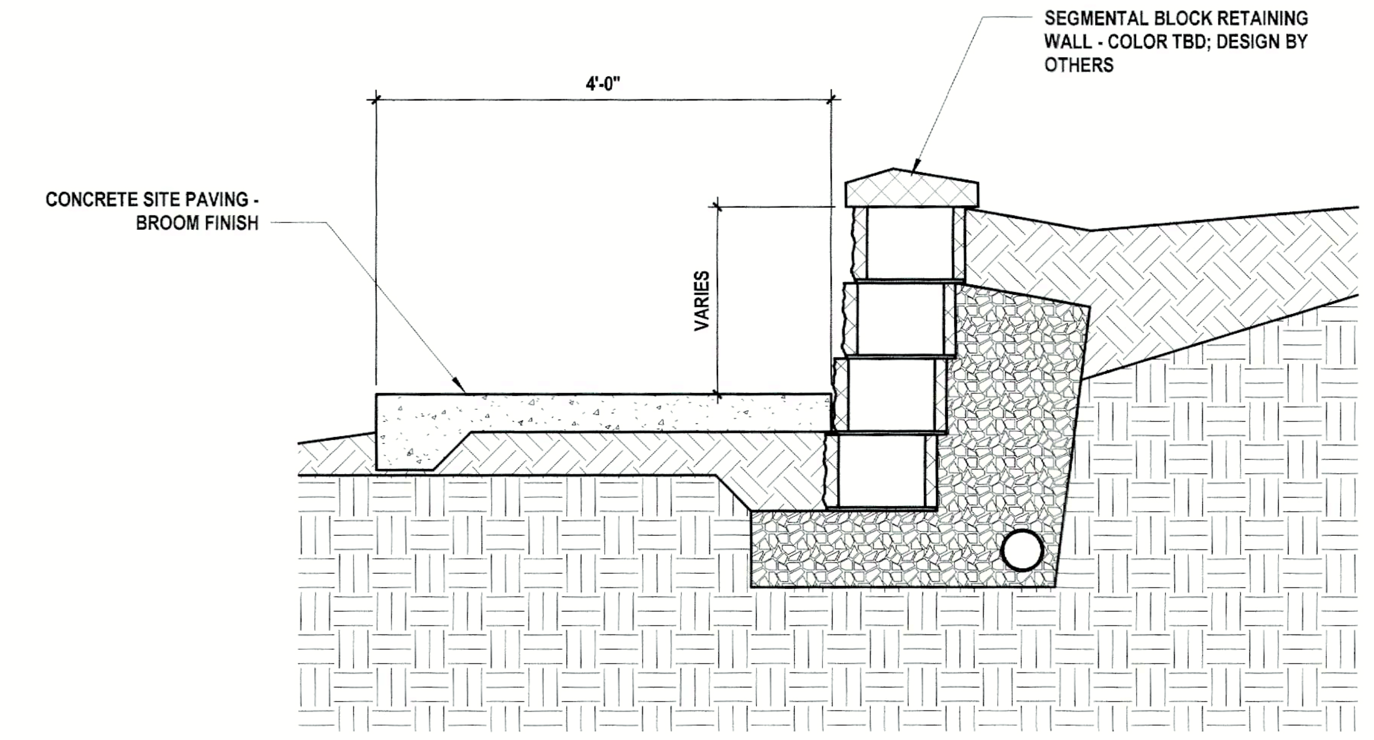


3 LOW SIDE RETAINING WALL
3/4" = 1'-0"



2 HIGH SIDE RETAINING WALL
3/4" = 1'-0"



1 SIDEWALK SECTION
3/4" = 1'-0"

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18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
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BRYANT, ARKANSAS

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SITE DETAILS

:REVISIONS

NO.	DESCRIPTION	DATE

28 JUNE 2024 :ISSUE DATE

23-014 :PROJECT NUMBER

:SHEET NUMBER
A101

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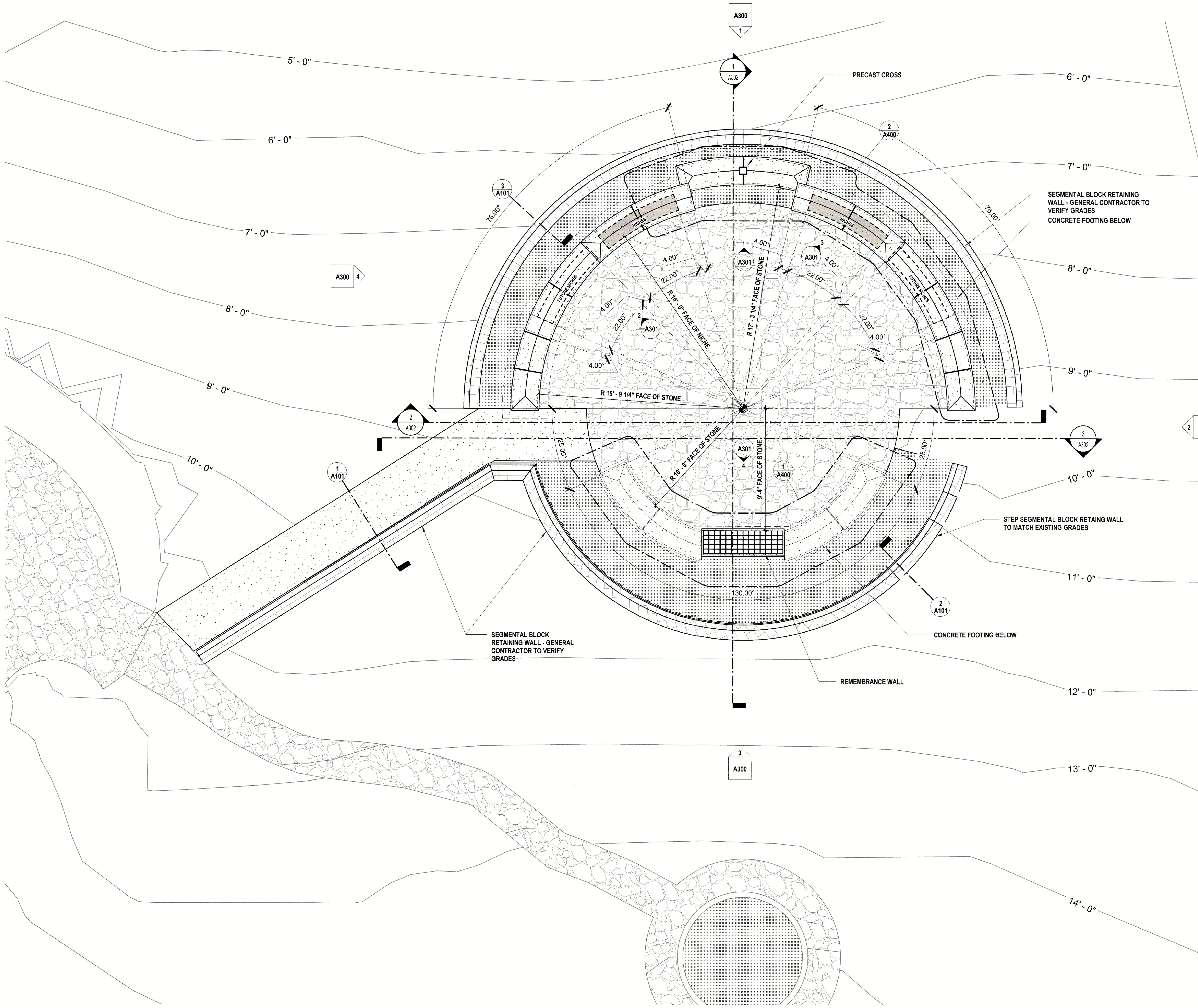
GENERAL PLAN NOTES

1. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO START OF WORK. CONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCY WITH THE PLANS AND SPECIFICATIONS PRIOR TO BEGINNING WORK.
2. GENERAL CONTRACTOR TO COORDINATE ALL ROUGH OPENINGS WITH NICHE MANUFACTURER.
3. ALL DIMENSIONS ARE GIVEN FROM FACE OF STUD OR FACE OF MASONRY (UNLESS NOTED OTHERWISE).
4. COORDINATE ALL OVERHEAD AND UNDER SLAB UTILITIES WITH THE ONWER.
5. REFER TO CIVIL FOR UTILITY WORK 5'-0" OUTSIDE OF THE BUILDING'S FOOTPRINT.



N
TRUE

N
PROJECT

1 COLUMBARIUM
1/4" = 1'-0"

WILLIAMS & DEAN
ARCHITECTURE | INTERIOR DESIGN
18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
WWW.WILLIAMSDEAN.COM

A COLUMBARIUM FOR THE
BRYANT FIRST UNITED METHODIST CHURCH
BRYANT, ARKANSAS

:STAMP

NOT FOR CONSTRUCTION

PRICING SET

:SHEET TITLE
COLUMBARIUM PLAN

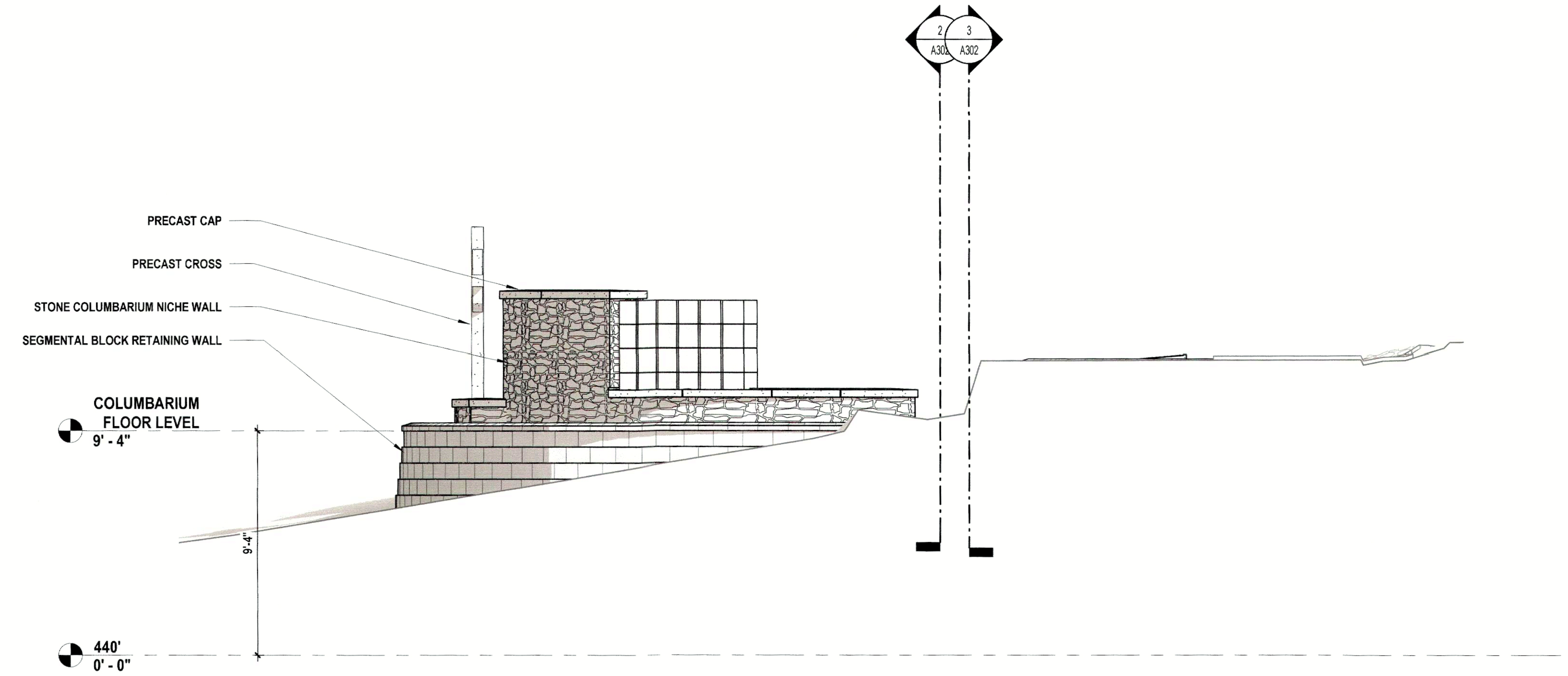
:REVISIONS

NO.	DESCRIPTION	DATE

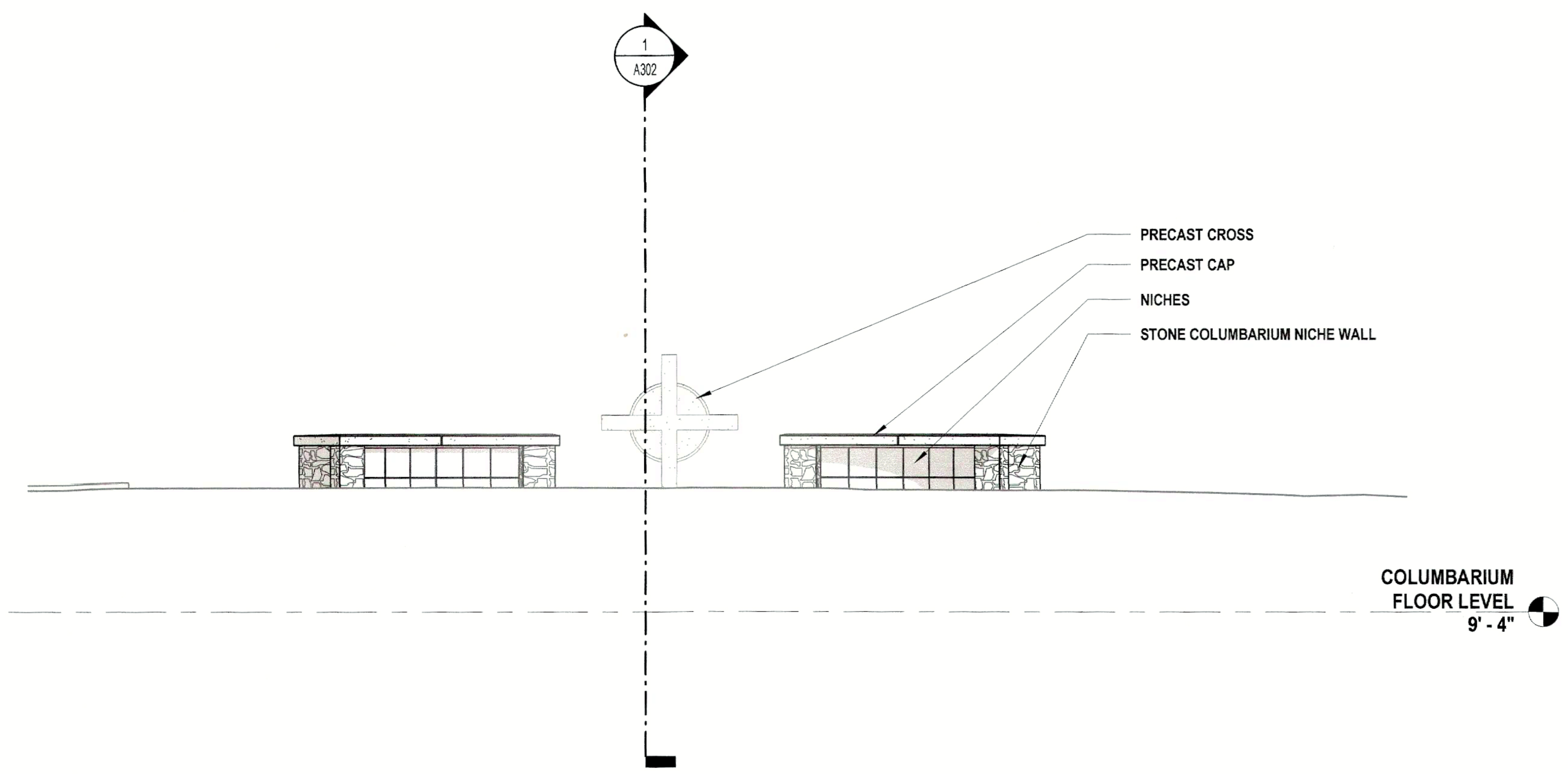
28 JUNE 2024 :ISSUE DATE

23-014 :PROJECT NUMBER

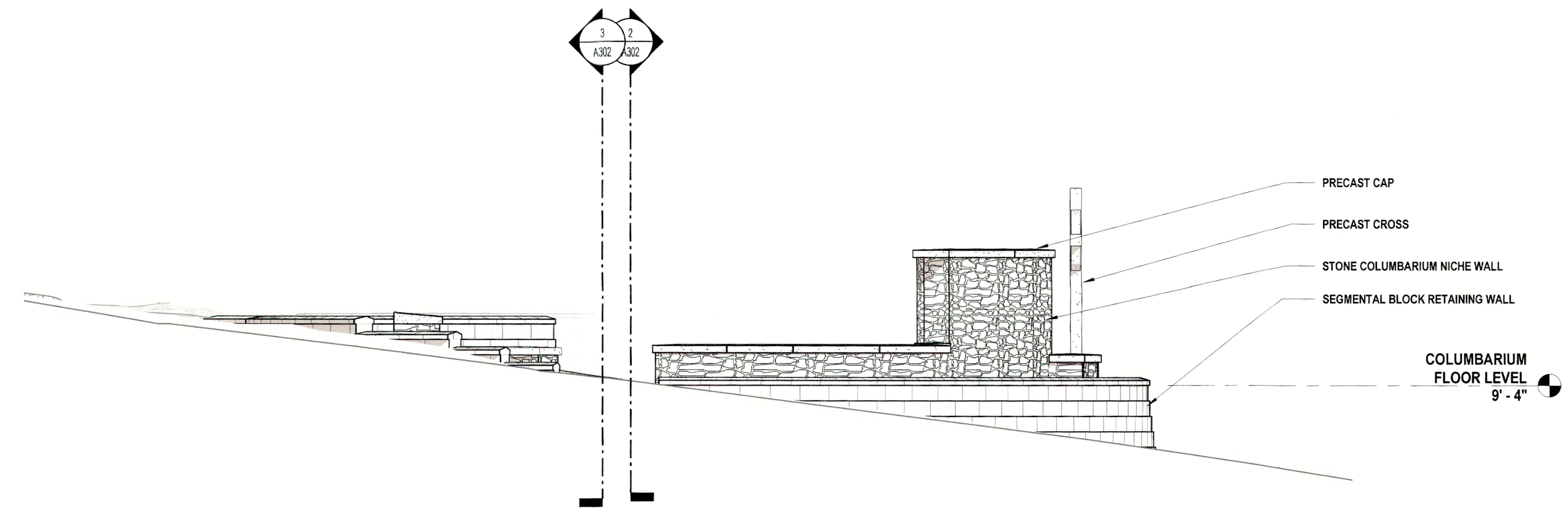
:SHEET NUMBER
A200



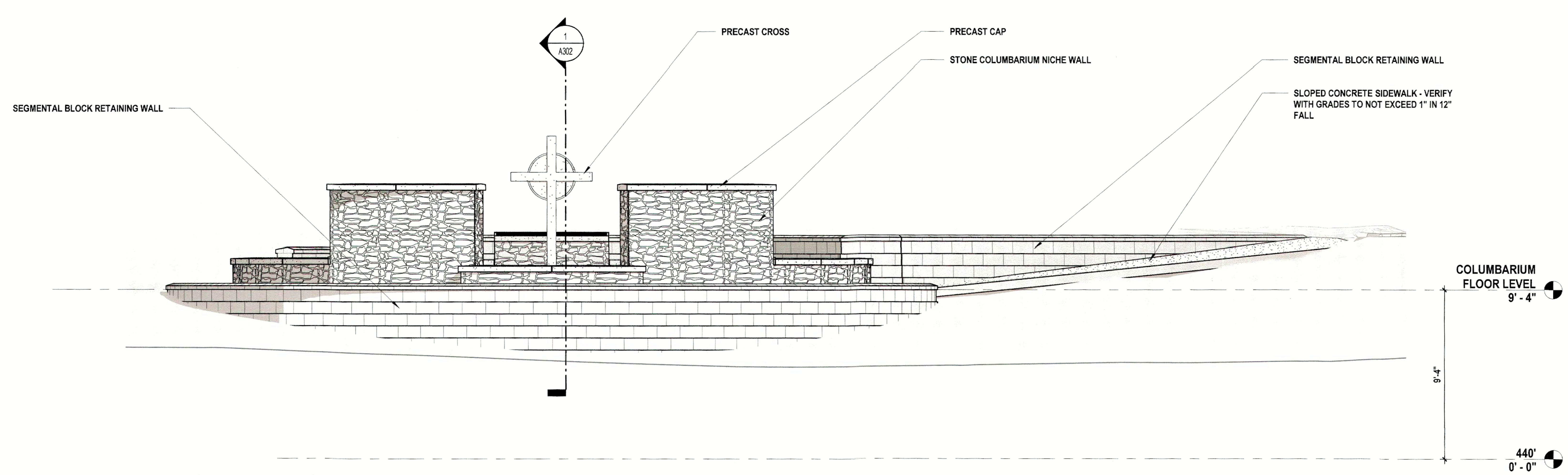
4 WEST ELEVATION
1/4" = 1'-0"



3 SOUTH ELEVATION
1/4" = 1'-0"



2 EAST ELEVATION
1/4" = 1'-0"



1 NORTH ELEVATION
1/4" = 1'-0"

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18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
WWW.WILLIAMSDEAN.COM

A COLUMBARIUM FOR THE
BRYANT FIRST UNITED METHODIST CHURCH
BRYANT, ARKANSAS

:STAMP

NOT FOR CONSTRUCTION

PRICING SET

:SHEET TITLE
OUTSIDE ELEVATIONS

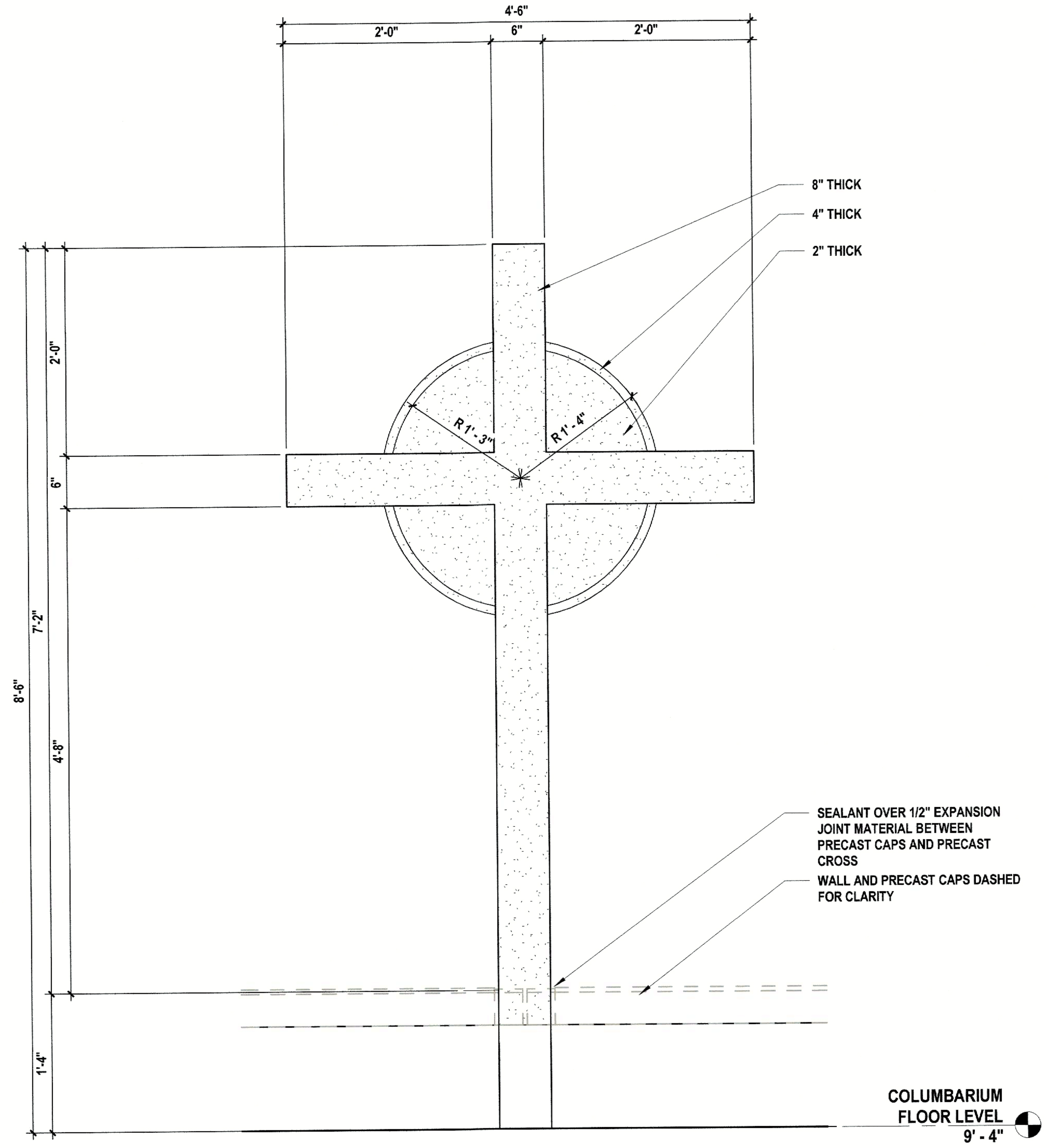
:REVISIONS

NO.	DESCRIPTION	DATE

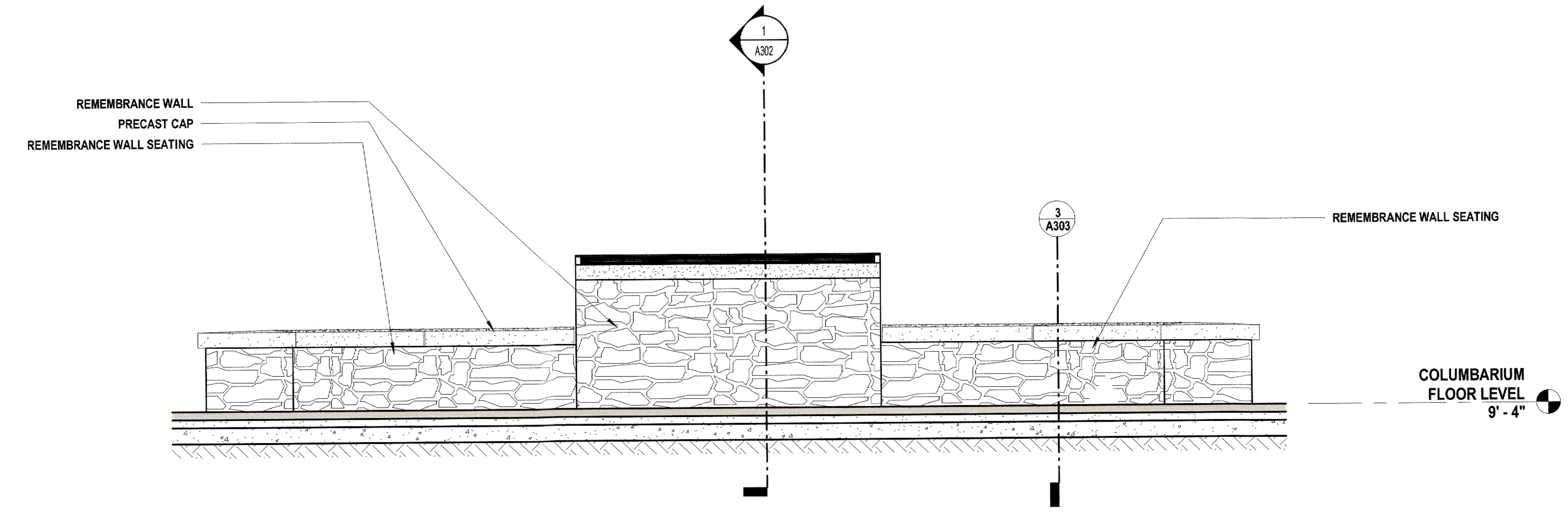
28 JUNE 2024 :ISSUE DATE

23-014 :PROJECT NUMBER

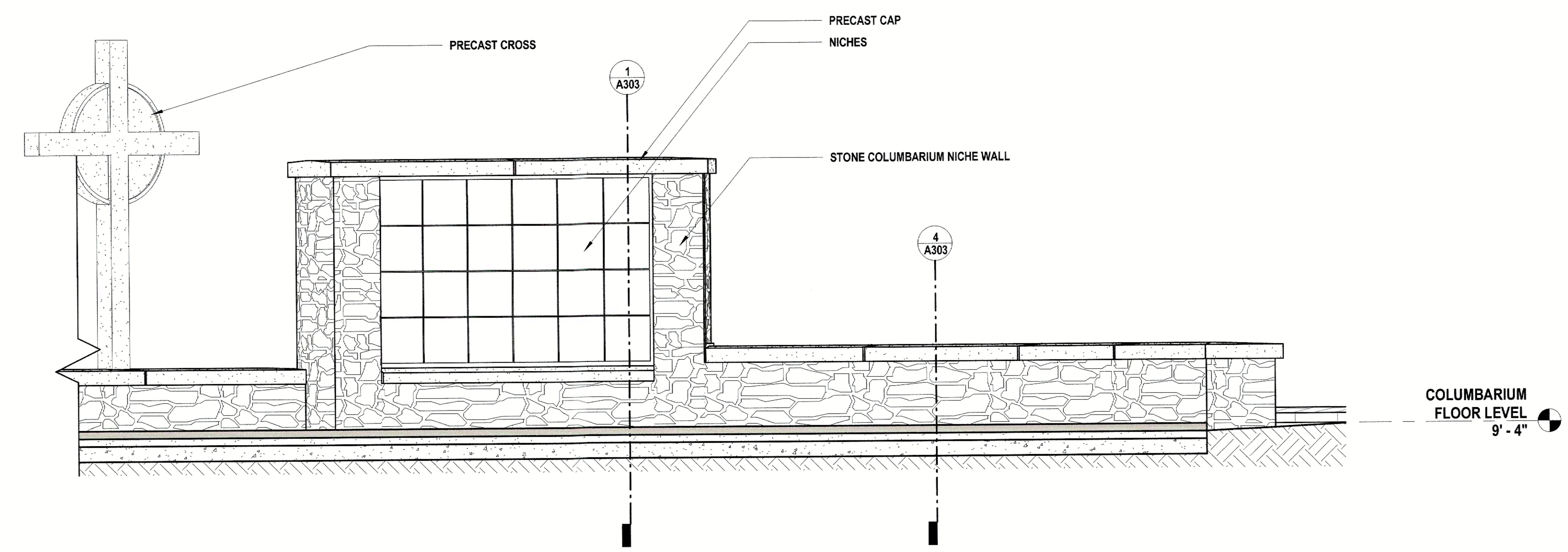
:SHEET NUMBER
A300



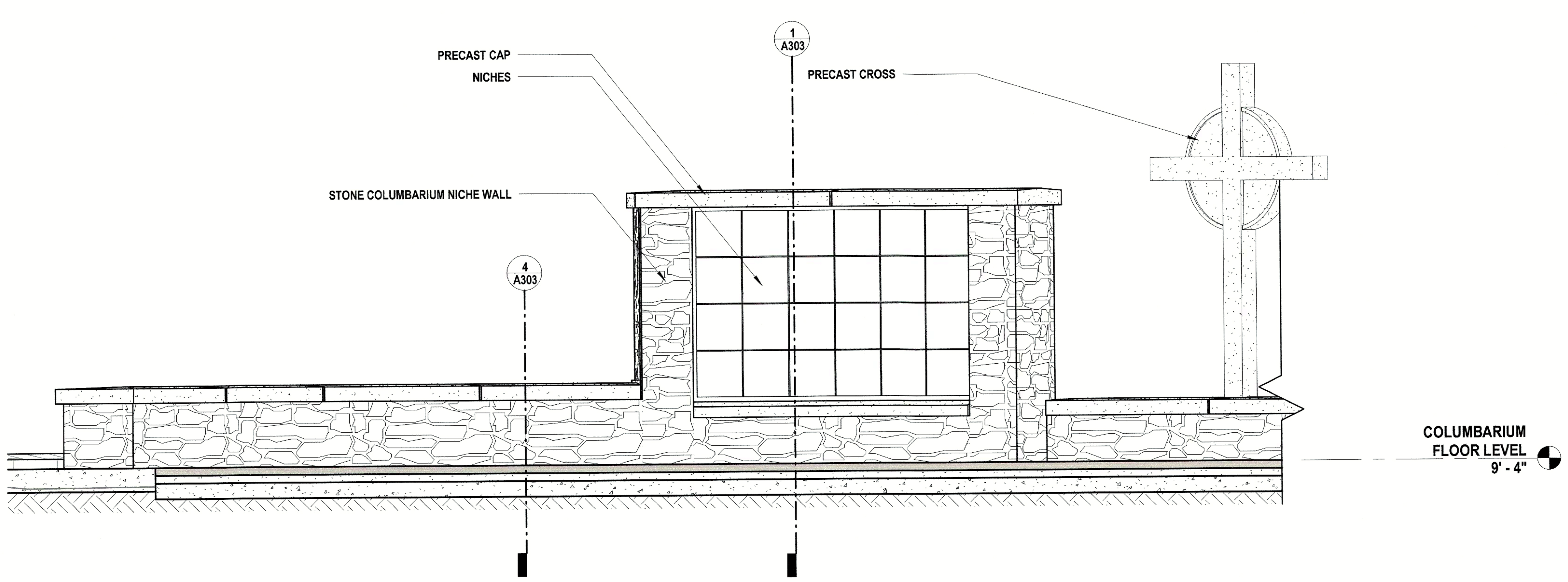
5 ENLARGED CROSS ELEVATION
1" = 1'-0"



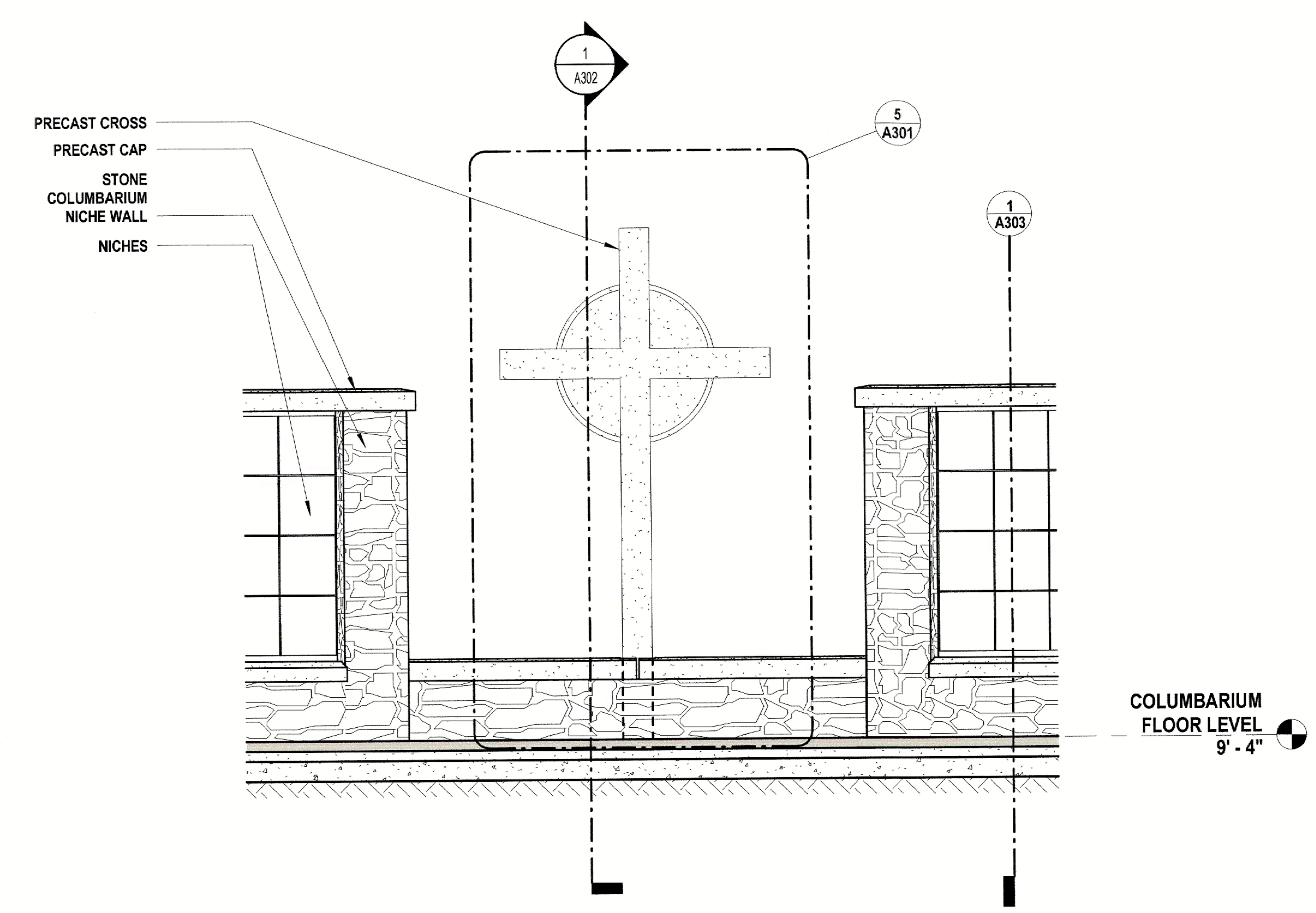
4 REMEMBRANCE WALL ELEVATION
1/2" = 1'-0"



3 COLUMBARIUM ELEVATION - RIGHT
1/2" = 1'-0"



2 COLUMBARIUM ELEVATION - LEFT
1/2" = 1'-0"



1 CROSS ELEVATION
1/2" = 1'-0"

WILLIAMS & DEAN
ARCHITECTURE | INTERIOR DESIGN
18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
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A COLUMBARIUM FOR THE
BRYANT FIRST UNITED METHODIST CHURCH
BRYANT, ARKANSAS

:STAMP

NOT FOR CONSTRUCTION

PRICING SET

:SHEET TITLE
INTERIOR ELEVATIONS

:REVISIONS

NO.	DESCRIPTION	DATE

28 JUNE 2024 :ISSUE DATE

23-014 :PROJECT NUMBER

:SHEET NUMBER
A301

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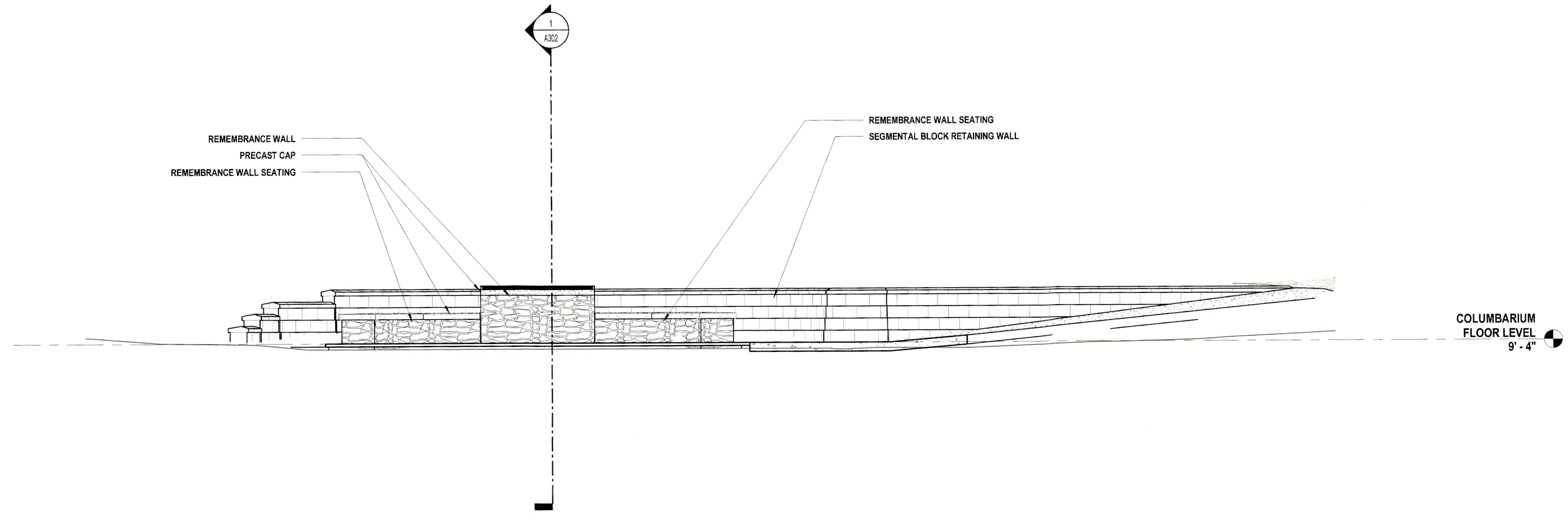
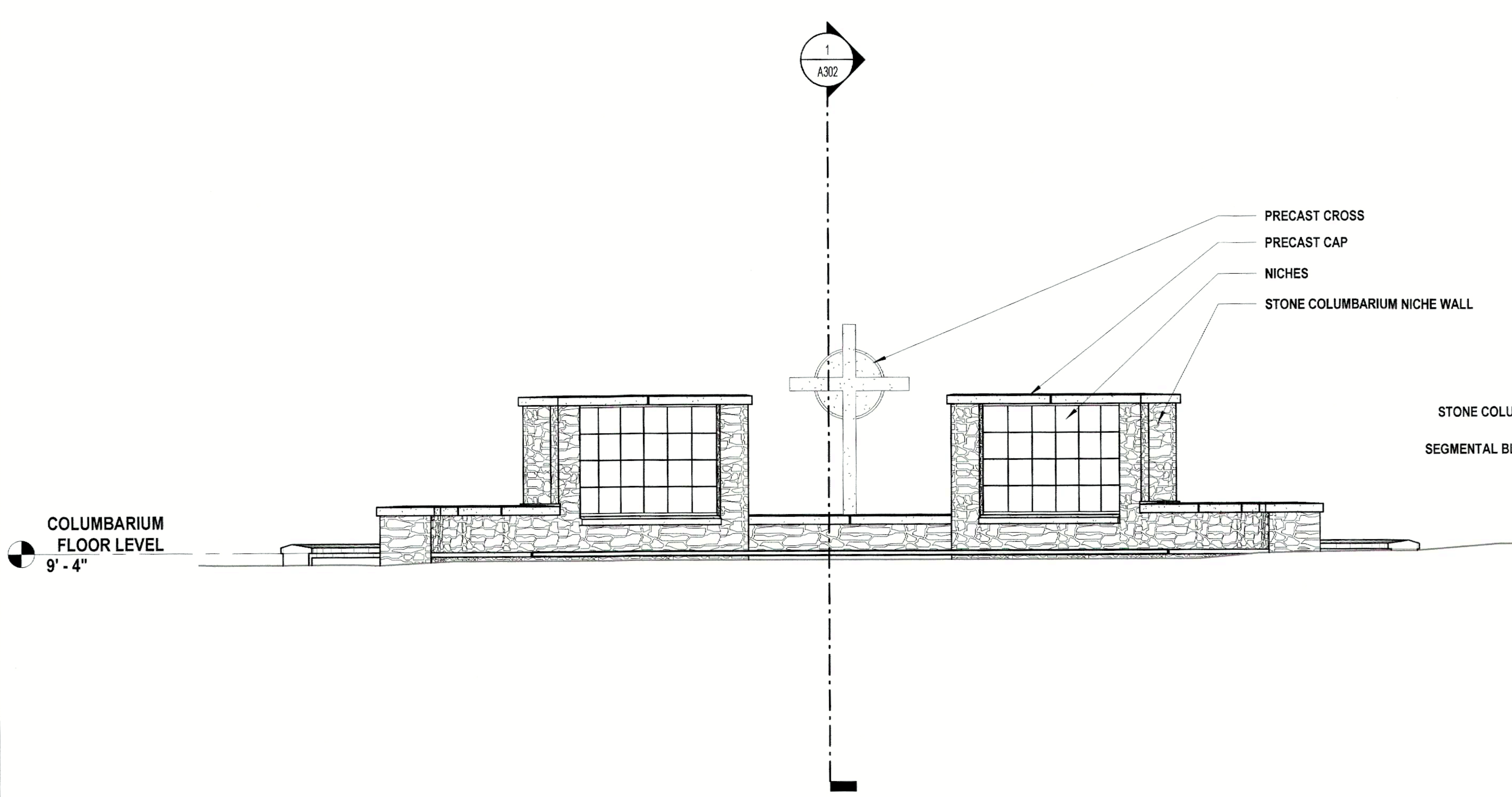
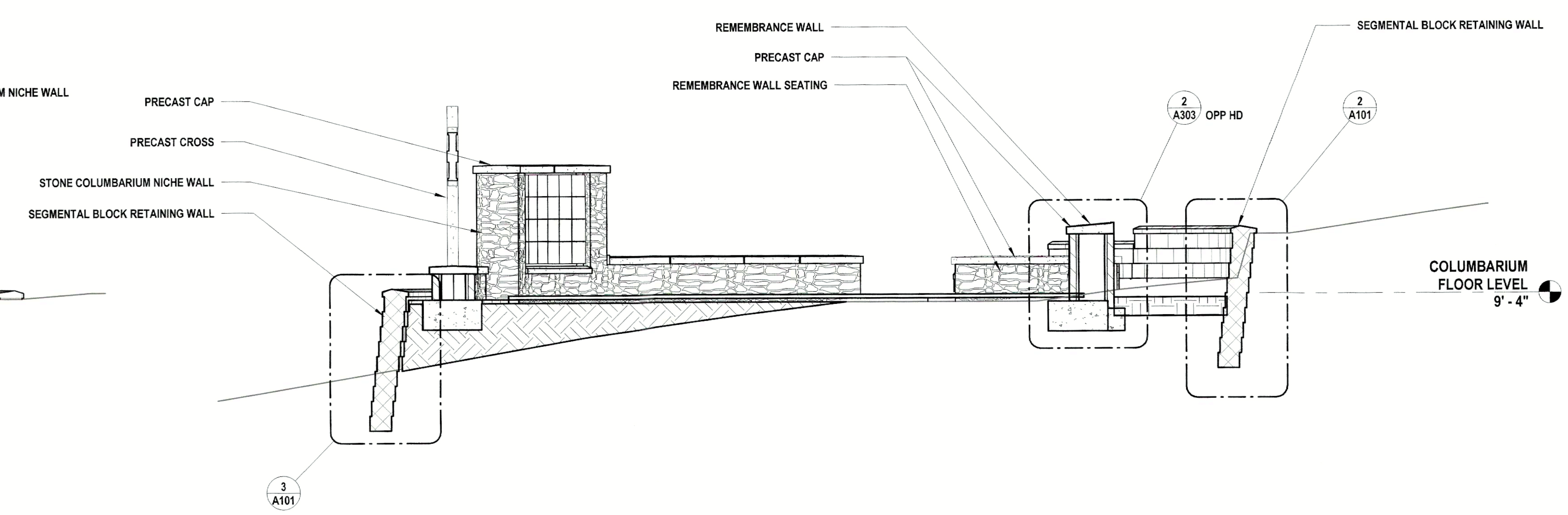


3 REMEMBRANCE WALL SECTION
1/4" = 1'-0"



2 COLUMBARIUM SECTION
1/4" = 1'-0"



1 COLUMBARIUM CROSS SECTION
1/4" = 1'-0"

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ARCHITECTURE | INTERIOR DESIGN
18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
WWW.WILLIAMSDEAN.COM

A COLUMBARIUM FOR THE
BRYANT FIRST UNITED METHODIST CHURCH
BRYANT, ARKANSAS

:STAMP
NOT FOR CONSTRUCTION

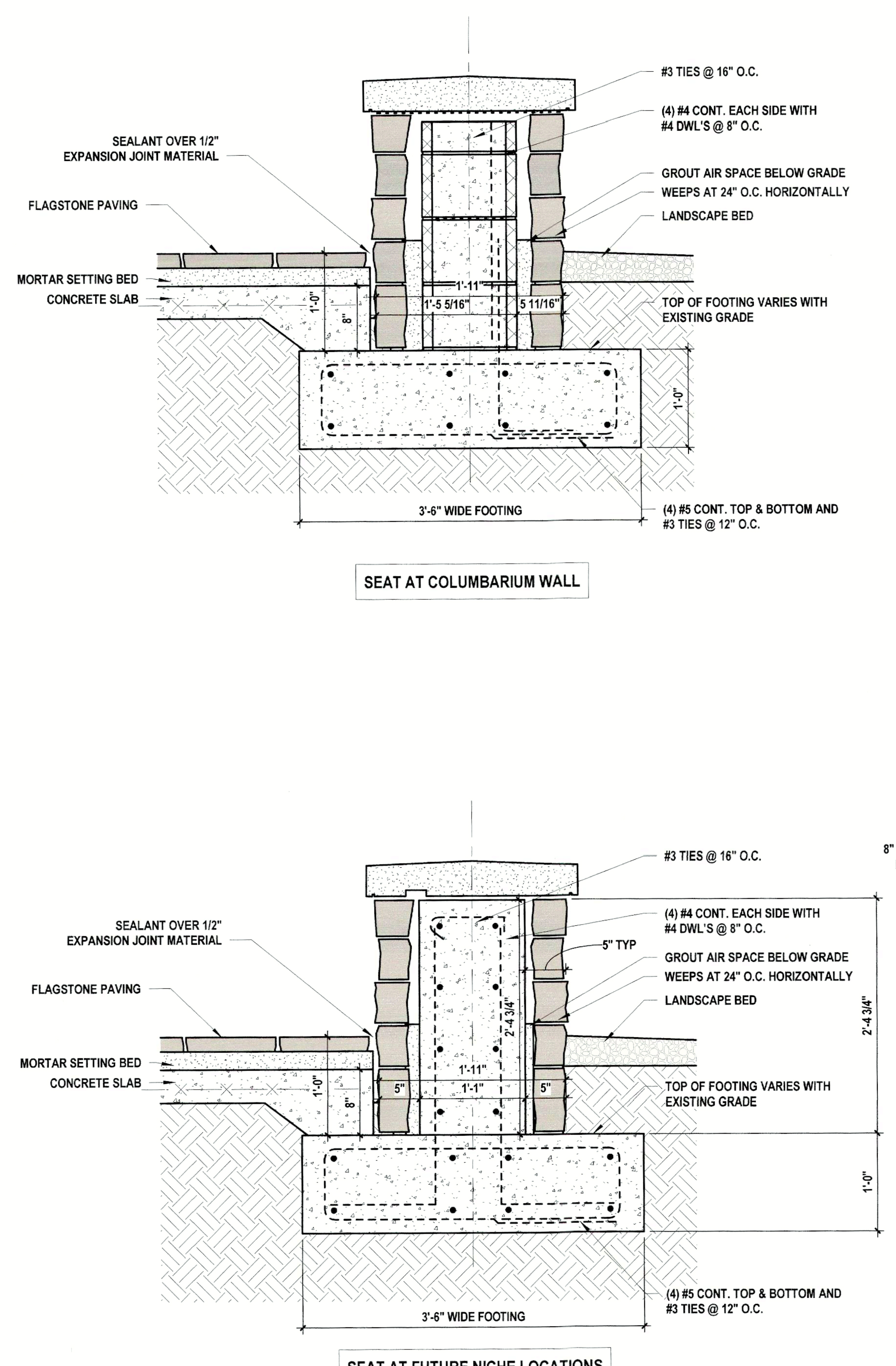
PRICING SET

:SHEET TITLE
BUILDING SECTIONS

:REVISIONS

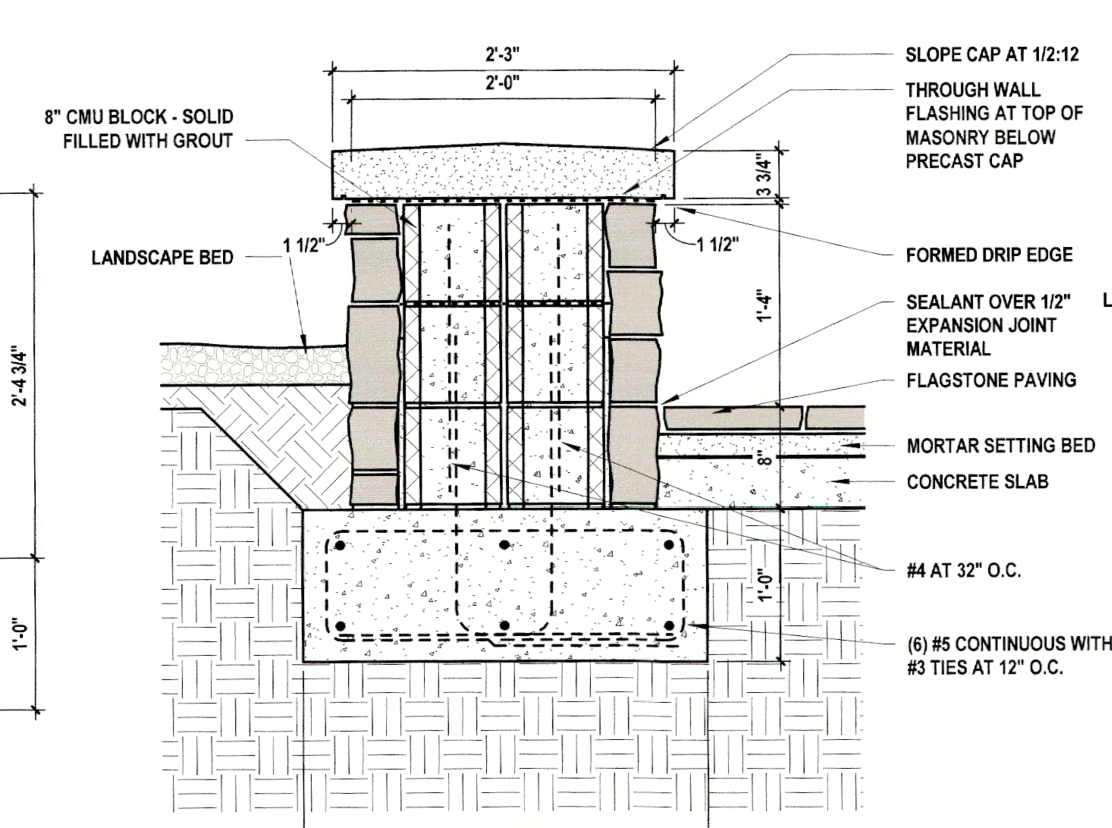
NO.	DESCRIPTION	DATE

28 JUNE 2024 :ISSUE DATE
23-014 :PROJECT NUMBER
:SHEET NUMBER
A302



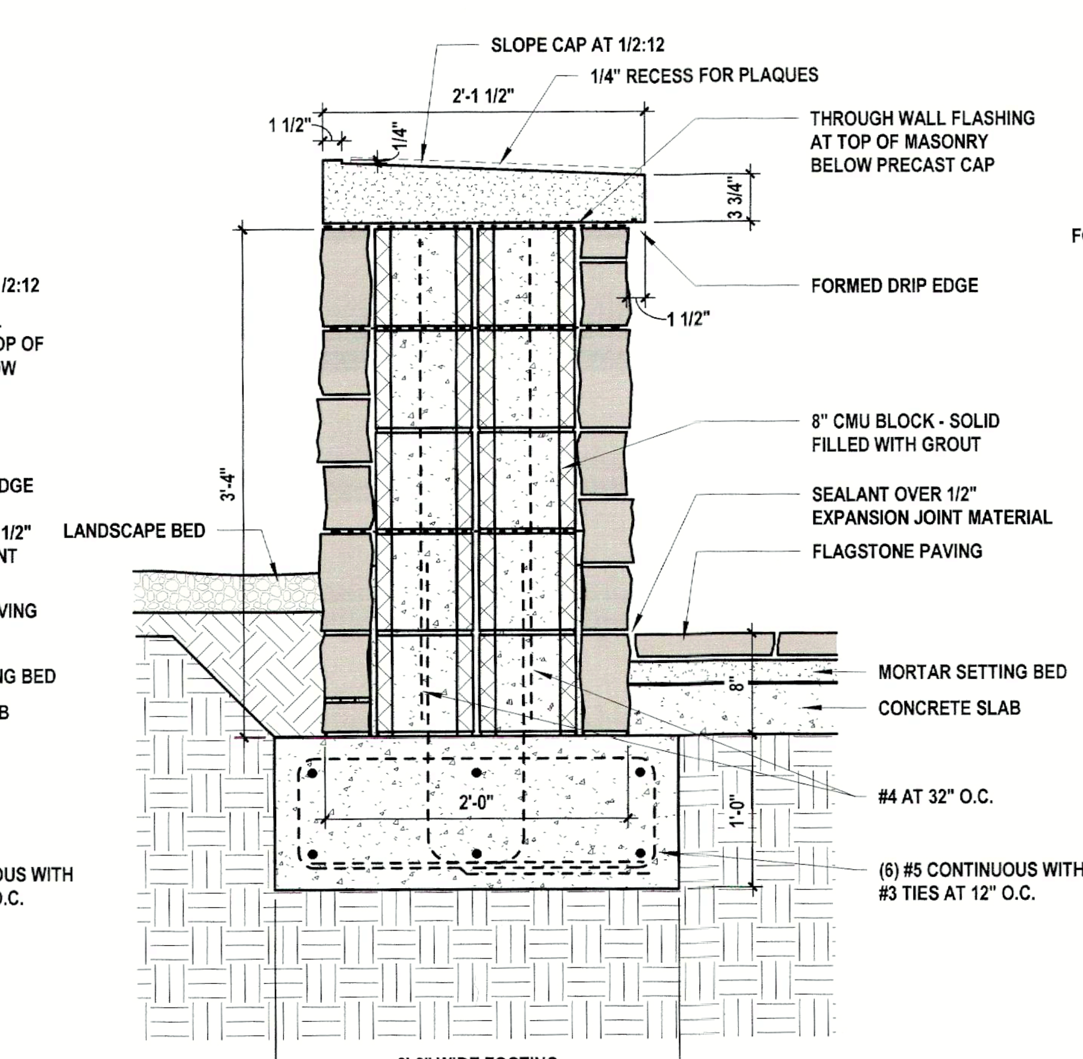
4 COLUMBARIUM WALL SEATING SECTION

1" = 1'-0"



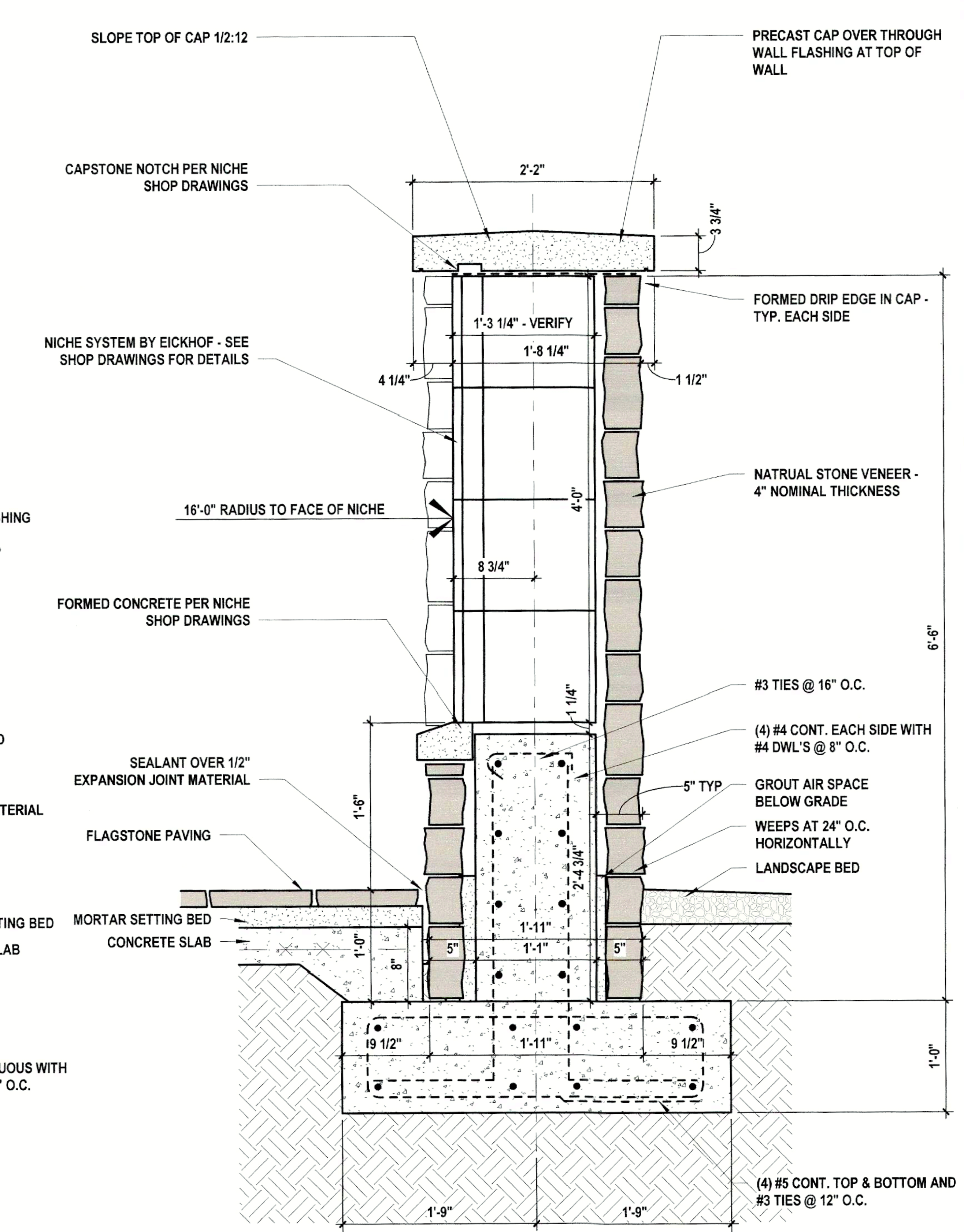
3 REMEMBRANCE WALL SEATING SECTION

1" = 1'-0"



2 REMEMBRANCE WALL SECTION

1" = 1'-0"



1 TYP NICHE WALL SECTION

1" = 1'-0"

WILLIAMS & DEAN
ARCHITECTURE | INTERIOR DESIGN
18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
WWW.WILLIAMSDEAN.COM

A COLUMBARIUM FOR THE
BRYANT FIRST UNITED METHODIST CHURCH
BRYANT, ARKANSAS

:STAMP

NOT FOR CONSTRUCTION

PRICING SET

WALL SECTIONS :SHEET TITLE

:REVISIONS

NO.	DESCRIPTION	DATE

28 JUNE 2024 :ISSUE DATE

23-014 :PROJECT NUMBER

:SHEET NUMBER

A303

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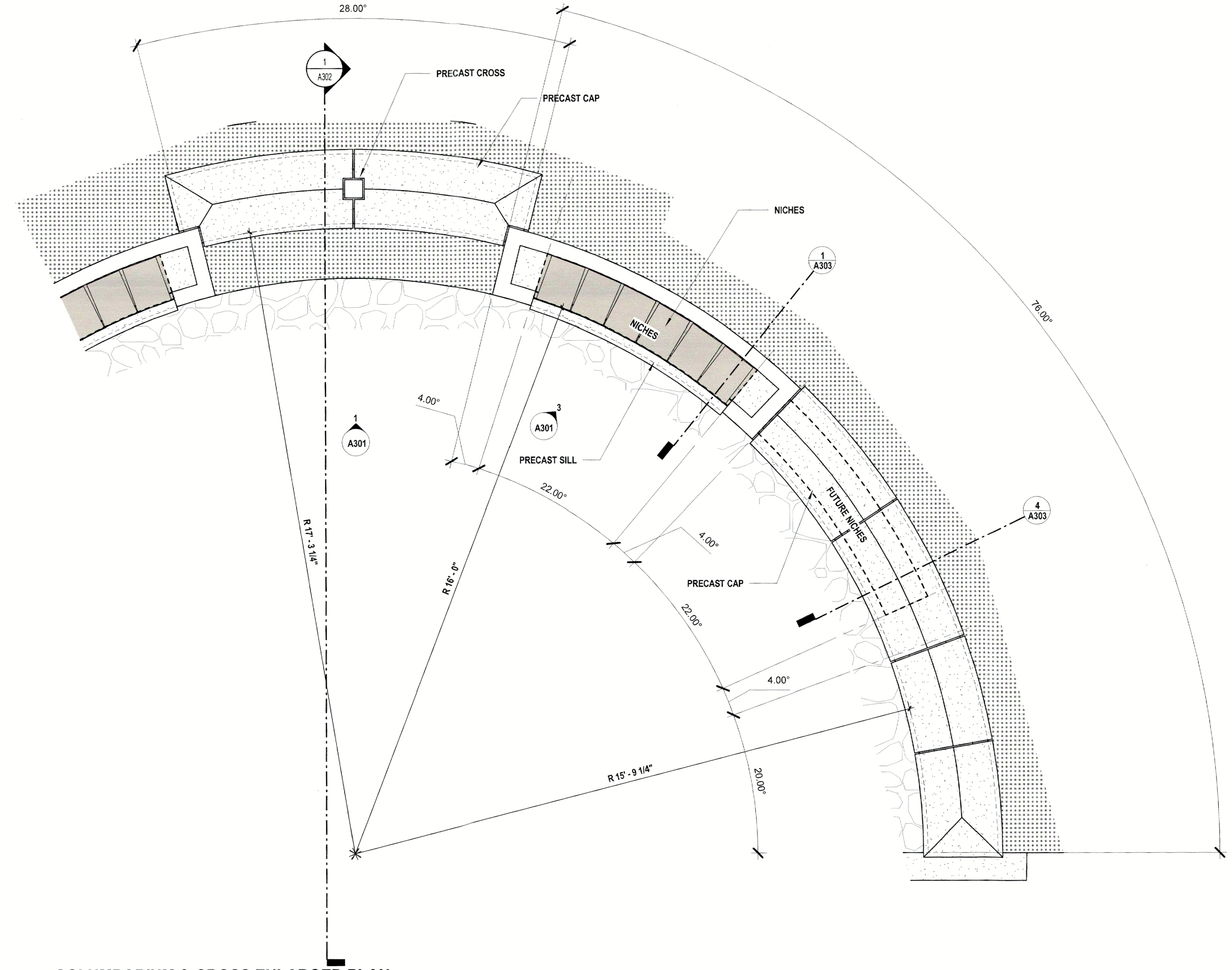
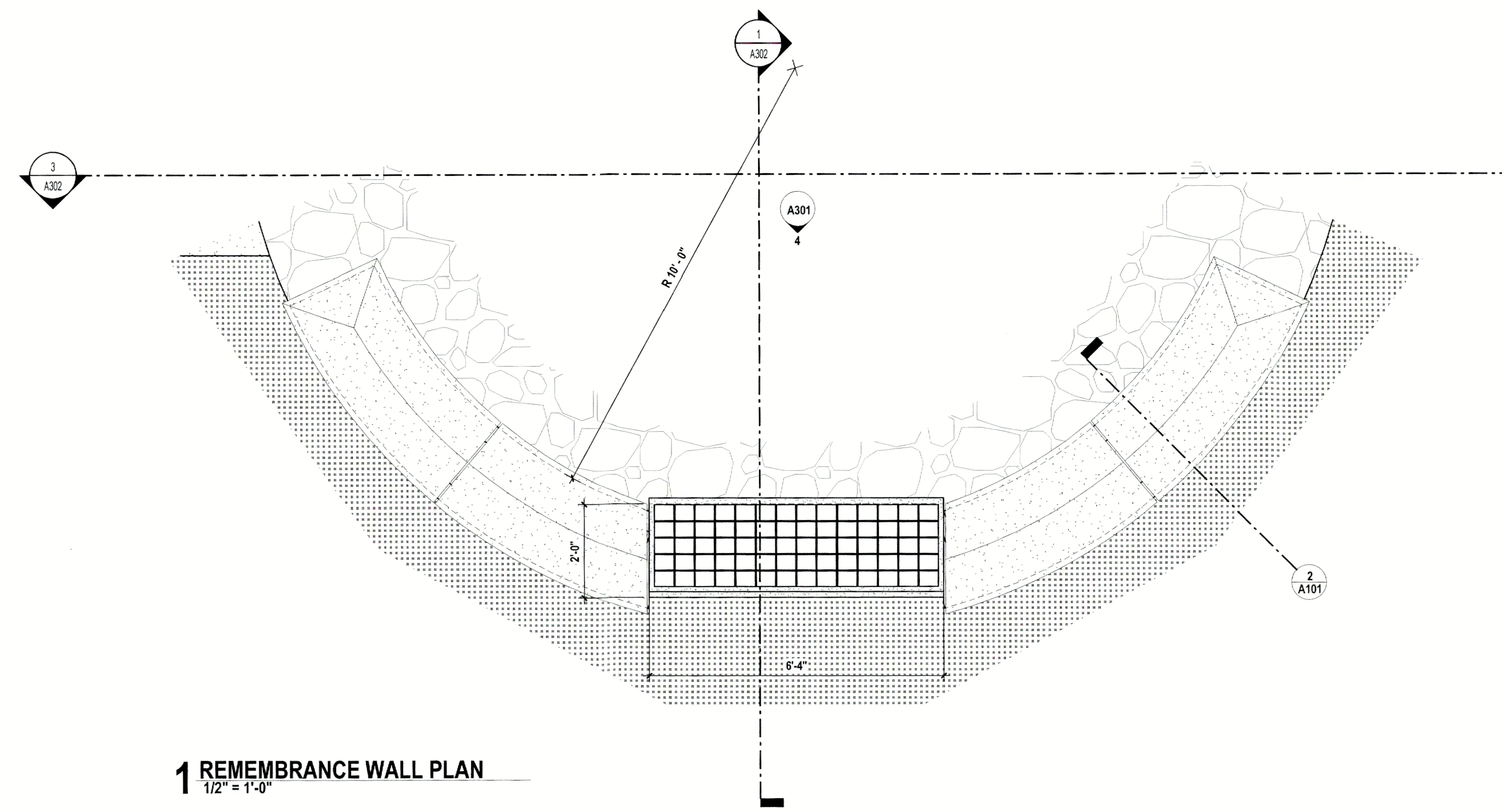


2 **COLUMBARIUM & CROSS ENLARGED PLAN**
1/2" = 1'-0"



1 **REMEMBRANCE WALL PLAN**
1/2" = 1'-0"

WILLIAMS & DEAN
ARCHITECTURE | INTERIOR DESIGN
18 CORPORATE HILL DRIVE, SUITE 210
LITTLE ROCK, AR 72205
P: 501.224.1900
WWW.WILLIAMSDEAN.COM

A COLUMBARIUM FOR THE
BRYANT FIRST UNITED METHODIST CHURCH
BRYANT, ARKANSAS

:STAMP

NOT FOR CONSTRUCTION

PRICING SET

:SHEET TITLE
ENLARGED PLANS & PLAN DETAILS

:REVISIONS

NO.	DESCRIPTION	DATE

28 JUNE 2024 :ISSUE DATE

23-014 :PROJECT NUMBER

:SHEET NUMBER
A400

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CERTIFICATE OF SURVEY ACCURACY

I, ZANE ROBBINS, HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A BOUNDARY SURVEY MADE OR VERIFIED BY ME, THAT ALL SURVEYING REQUIREMENTS OF THE STATE OF ARKANSAS AND CITY OF BRYANT SUBDIVISION RULES AND REGULATIONS HAVE BEEN COMPLIED WITH AND FILED FOR RECORD AS REQUIRED.

6-12-24
DATE OF EXECUTION

REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 1853 ARKANSAS

CERTIFICATE OF OWNER

WE, THE UNDERSIGNED, OWNERS OF THE REAL ESTATE SHOWN AND DESCRIBED HEREIN, DO HEREBY CERTIFY THAT WE HAVE LAID OFF, PLATTED AND SUBDIVIDED, AND DO HEREBY LAY OFF, PLAT AND SUBDIVIDE SAID REAL ESTATE IN ACCORDANCE WITH THIS PLAT.

DATE OF EXECUTION ___________ SIGNED ________________________

NAME ________________________

ADDRESS ________________________

SOURCE OF TITLE: INSTRUMENT No. 2024-004102

LAND DESCRIPTION PROVIDED:

TRACT 1:
All that part of the Northeast Quarter, Section 14, Township 1 South, Range 14 West, Saline County, Arkansas, more particularly described as follows: Commencing at the Southeast corner of said NE 1/4, Section 14, thence North along the East line thereof 536.86 feet, thence North 86 deg. 36 min. West 365.0 feet; thence South 89 deg. 29 min. 58 sec. West 63.0 feet to a rebar; thence South 89 deg. 29 min. 58 sec. West along the North right-of-way line of Leslie Drive 191.913 feet to a rebar and the point of beginning; thence continue South 89 deg. 29 min. 58 sec. West along said Road right-of-way line 191.913 feet to a rebar; thence North 01 deg. 20 min. 00 sec. West leaving said Road 293.43 feet to a 3/4 inch iron pin; thence North 00 deg. 20 min. 00 sec. West along a line common with the land of Central Arkansas Church of Christ 158.416 feet to a rebar; thence North 88 deg. 40 min. 00 sec. East 189.129 feet to a rebar; thence South 01 deg. 20 min. 00 sec. East 454.611 feet to the point of beginning, containing 1.9915 acres of land, more or less.

AND

TRACT 2:
All that part of the Northeast Quarter, Section 14, Township 1 South, Range 14 West, Saline County, Arkansas, more particularly described as follows: Commencing at the Southeast corner of said NE 1/4, Section 14, thence North along the East line thereof 536.86 feet; thence North 86 deg. 36 min. West 365.0 feet; thence South 89 deg. 29 min. 58 sec. West 63.0 feet to a rebar and the point of beginning; thence continue, South 89 deg. 29 min. 58 sec. West along the North right-of-way line of Leslie Drive 191.913 feet to a rebar; thence North 01 deg. 20 min. 00 sec. West leaving said Road 454.611 feet to a rebar; thence North 88 deg. 40 min. 00 sec. East 191.892 feet to a rebar; thence South 01 deg. 20 min. 00 sec. East 457.40 feet to the point of beginning, containing 2.0088 acres of land, more or Less.

GENERAL NOTES

1. BASIS OF BEARING FOR THIS SURVEY IS ARKANSAS GRID SOUTH. DISTANCES SHOWN ARE GROUND DISTANCES.
2. REFERENCES:
   A. DEED IN SALINE COUNTY DEED BOOK 368, PAGE 519.
   B. SURVEY BY HOPE CONSULTING FOR LANCE PENFIELD DATED 7-3-2018.
   C. SURVEY BY KERRY LANE FOR WILLIAM AND SHIRLEY HARTWICK DATED 9-29-10.
   D. SURVEY BY BEN KITTLER JR. FOR LENDERS TITLE COMPANY DATED 2-3-94.
3. ZONING CLASSIFCATION: R-E

CURRENT OWNER OF RECORD
STEVEN G & KAREN A LITTLETON
2620 LESLIE LANE
ALEXANDER AR 72002

PROPERTY ADDRESS
2620 LESLIE LANE
BRYANT, AR 72022

CERTIFICATE OF AUTHORIZATION
ROBBINS PROFESSIONAL LAND SERVICES
#4151
ARKANSAS - SURVEYOR

REGISTERED
STATE OF ARKANSAS
NO. 1853
Zane Robbins
SIGNATURE
7/19/2024
ZANE ROBBINS
PROFESSIONAL LAND SURVEYOR

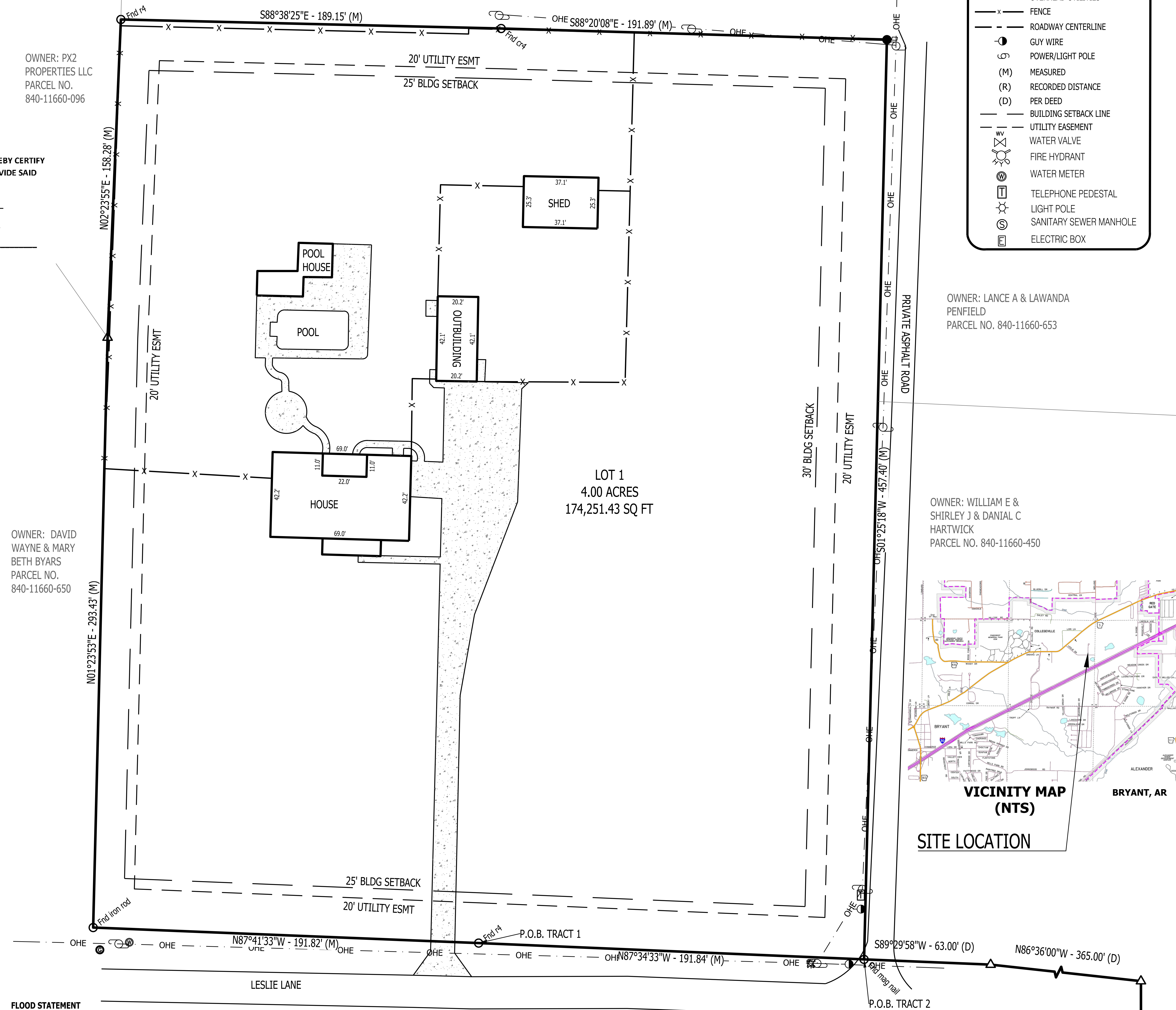
CERTIFICATION

I HEREBY CERTIFY THAT THE ABOVE PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY SUPERVISION ON THIS DAY AND THAT ALL CORNERS ARE SET AS SHOWN. NO INDEPENDENT SEARCH FOR EASEMENTS, COVENANTS, ENCUMBRANCES, OR ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE WAS PERFORMED.

Zane Robbins
ZANE ROBBINS, AR PLS #1853

RESTRICTIVE COVENANTS:

1. THIS PROPERTY SHALL BU USED FOR SINGLE FAMILY RESIDENTIAL PURPOSES ONLY.
2. EACH RESIDENCE SHALL NOT HAVE LESS THAN 1,400 SQUARE FEET OF HEATED AREA.
3. NO MOBILE HOMES, HOUSE TRAILERS, JIM WALTERS HOMES, UNITED-BUILT HOMES, MODULAR HOMES OR PREFABRICATED HOMES OF ANY KIND SHALL BE PERMITTED ON SAID LAND.
4. NO PERMANENT STRUCTURES, NO TEMPORARY STRUCTURES, NO STORAGE OF VEHICLES, NO STORAGE OF FARM TRACTORS OR TRACTOR IMPLEMENTS, NO DOG PENS AND NO JUNK SHALL BE LOCATED WITHIN ANY OF THE PLATTED SETBACK AREAS.



FLOOD STATEMENT

BY GRAPHIC PLOTTING ALONE, ACCORDING TO FEMA FIRM #05125C0240E, DATED JUNE 5, 2020, THIS PROPERTY LIES IN ZONE "X", AREAS OF MINIMAL FLOOD HAZARD.

UTILITIES DISCLAIMER

UTILITIES SHOWN ARE NOTED BY VISIBLE OBSERVATION ONLY. UNDERGROUND UTILITIES ARE TAKEN FROM UTILITY MAPS; EXACT LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AS NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THIS DRAWING.

CERTIFICATE OF FINAL PLAT APPROVAL

ALL REQUIREMENTS OF THE BRYANT SUBDIVISION RULES AND REGULATIONS RELATIVE TO THE PREPARATION AND SUBMITTAL TO A FINAL PLAT HAVE BEEN FULFILLED, APPROVAL OF THIS PLAT IS HEREBY GRANTED, SUBJECT TO FURTHER PROVISIONS OF SAID RULES AND REGULATIONS.

SIGNED,

DATE OF EXECUTION ____________ **BRYANT PLANNING COMMISSION** ____________

DATE	REVISIONS

LOT 1, LESLIE ADDITION CITY OF BRYANT SALINE COUNTY, ARKANSAS

FINAL PLAT

ROBBINS PROFESSIONAL LAND SERVICES
INCORPORATED
SURVEYING | GIS | CONSTRUCTION STAKING
P.O. BOX 939 | BRYANT, ARKANSAS 72089
OFFICE: 501.425.6380 | EMAIL: ZANEROBBINS3@GMAIL.COM

DRAWN BY	ZR
CHECKED BY	ZR
DATE	07/19/2024
SCALE	1"=40'
PROJECT No.	2024400
PAGE	1 of 1

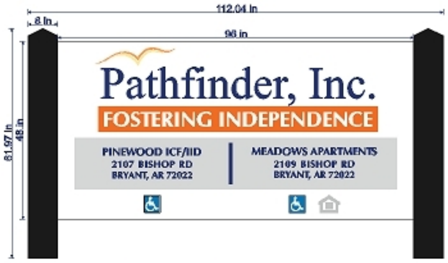
Folder Name
K:\Art Department\2024\Pathfinder

Designer
Courtney

File Name
Pathfinder, Inc..fs

Job Number
30734

QTY: 1 SS Sign w/Acrylic Letters and Brushed Aluminum
Mounted between 2 Metal Posts (See Briarwood Photo for Post Reference



Posts like the below image something that will not rust

Description
QTY: IN FILE

ACTION SIGN
SIGNS WITH DIRECTION

P. O. Box 188
Jacksonville, AR 72076
2700 John Harden Dr.
Jacksonville, AR 72076

Ph 501-457-7391
Ph/Text 501-712-0012
Fax 501-457-7393

ARTWORK APPROVAL **MUST** BE MADE IN WRITING.
THIS CAN BE DONE BY A SIMPLE EMAIL, TEXT, OR FAX
WITH THE APPROVED ARTWORK ATTACHED.
PRODUCTION WILL NOT START OTHERWISE.

Customer Pathfinder, Inc.		**Name** Collin	**Design Time**
Phone 501.596.2090	**Email**	**Date** 7/8/2024	**Minutes**

Design Time Pricing
Design time is at a rate of $60 per hour, in 15 minute increments. Your first 15 minutes is *FREE*.

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

SIGN PERMIT APPLICATION

Applicants are advised to read the Sign Ordinance prior to completing and signing this form. The Sign Ordinance is available at www.cityofbryant.com under the Planning and Community Development tab.

Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.

Date: 7.12.24

Sign Co. or Sign Owner	Property Owner
Name Action Sign	Name Chris Eubanks
Address 2700 John Harden Driv	Address 2107 Bishop Roa
City, State, Zip Jacksonville, AR 7207	City, State, Zip Bryant, AR 7202
Phone 501.457.739	Phone 501.412.086
Email Address tim@actionsignandneon.co	Email Address chris.eubanks@pathfinderinc.o

GENERAL INFORMATION

Name of Business Pathfinder, Inc

Address/Location of sign 2107 Bishop Road Bryant, AR 720

Zoning Classification____________________

Please use following page to provide details on the signs requesting approval. Along with information provided on this application, **a Site Plan showing placement of sign(s) and any existing sign(s) on the property is required** to be submitted**. Renderings of the sign(s) showing the correct dimensions is also required** to be submitted with the application. A thirty-five dollar ($35) per sign payment will be collected at the time of permit issuance. According to the Sign Ordinance a fee for and sign variance or special sign permit request shall be one hundred dollars ($100). Additional documentation may be required by Sign Administrator.

READ CAREFULLY BEFORE SIGNING

I ______________________, do hereby certify that all information contained within this application is true and correct. I fully understand that the terms of the Sign Ordinance supersede the Sign Administrator's approval and that all signs must fully comply with all terms of the Sign Ordinance regardless of approval. I further certify that the proposed sign is authorized by the owner of the property and that I am authorized by the property owner to make this application. I understand that no sign may be placed in public right of way. I understand that I must comply with all Building and Electrical Codes and that it is my responsibility to obtain all necessary permits.

Use table below to enter information regarding each sign for approval. Please use each letter to reference each sign rendering.

SIGN	**Type** (Façade, Pole, Monument, other)	**Dimensions** (Height, Length, Width)	**Sqft** (Measured in whole as rectangle)	**Height of Sign** (Measured from lot surface)		Column for Admin Certifying Approval
				Top of Sign	Bottom of Sign	
A	Pole Sigr	4'x8'	32 SQ F	5'	10"	
B						
C						
E						
F						
G						

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

SIGN PERMIT APPLICATION

Applicants are advised to read the Sign Ordinance prior to completing and signing this form. The Sign Ordinance is available at www.cityofbryant.com under the Planning and Community Development tab.

Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.

Date: 06/20/2024

Sign Co. or Sign Owner

Name ARKANSAS SIGN & NEON

Address 8525 DISTRIBUTION DR

City, State, Zip LITTLE ROCK AR 72209

Phone 501.562.3942

Email Address lora@arkansassign.com

Property Owner

Name SENOR TEQUILA

Address 2019 N. REYNOLDS RD

City, State, Zip BRYANT AR 72022

Phone ____________

Email Address ____________

GENERAL INFORMATION

Name of Business SENOR TEQUILA

Address/Location of sign 2019 N. REYNOLDS RD BRYANT AR 72022

Zoning Classification ____________

Please use following page to provide details on the signs requesting approval. Along with information provided on this application, **a Site Plan showing placement of sign(s) and any existing sign(s) on the property is required** to be submitted**. Renderings of the sign(s) showing the correct dimensions is also required** to be submitted with the application. A thirty-five dollar ($35) per sign payment will be collected at the time of permit issuance. According to the Sign Ordinance a fee for and sign variance or special sign permit request shall be one hundred dollars ($100). Additional documentation may be required by Sign Administrator.

READ CAREFULLY BEFORE SIGNING

I Lora A. Rand, do hereby certify that all information contained within this application is true and correct. I fully understand that the terms of the Sign Ordinance supersede the Sign Administrator's approval and that all signs must fully comply with all terms of the Sign Ordinance regardless of approval. I further certify that the proposed sign is authorized by the owner of the property and that I am authorized by the property owner to make this application. I understand that no sign may be placed in public right of way. I understand that I must comply with all Building and Electrical Codes and that it is my responsibility to obtain all necessary permits.

Use table below to enter information regarding each sign for approval. Please use each letter to reference each sign rendering.

SIGN	**Type** (Façade, Pole, Monument, other)	**Dimensions** (Height, Length, Width)	**Sqft** (Measured in whole as rectangle)	**Height of Sign** (Measured from lot surface)		Column for Admin Certifying Approval
				Top of Sign	Bottom of Sign	
A	WALL-NORTH	51" X 205"	72.54	25'	21'	
B	WALL-SOUTH	48" X 48"	16	22'	18'	
C	WALL-EAST	48" X 189	63	25'	21'	
E	POLE(EXISTING)	7' X 7'	49	20'	13'	
F						
G						

TOTAL JOB COSTS = $19450.00

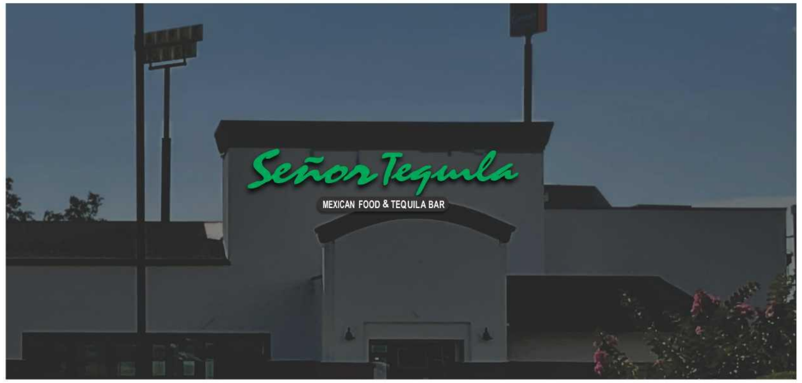
LANDLORD APPROVAL ____________ DATE:	ARKANSAS SIGN & NEON 8525 DISTRIBUTION DR. LITTLE ROCK, AR 72209 501.562.3942 (P) 501.562.6651 (F) arkansassign.com	REPRESENTATIVE: KEVIN HONEA DATE/DWG: 10/24/23 - DWG1 DESIGNER: LORA RAND CUSTOMERS IS RESPONSIBLE TO OBTAIN ANY/ALL LANDLORD APPROVALS IF APPLICABLE.	CLIENT: SENOR TEQUILA LOCATION: 2919 N Reynolds Road SIGNATURE OF APPROVAL REQUIRED FOR PRODUCTION

REV5

NORTH ELEVATION-OPT2

specs:
(1) set of l.e.d. illuminated channel letters
black returns, black trimcap,clear acrylic w/ lime green 3m vinyl second surface applied
flush-mounted

ALL ON UPPER WALL



rev-black “to go”
styled like logo

specs:
(1)4’ X 4’ TO GO LOGO, LED ILLUMINATED, BLACK RETURNS, BLACK TRIMCAP

NOTE: ANY NEEDED WALL REPAIRS ARE NOT ASN RESPONSIBILITY. ANY VIEWS SHOWING REPAIRS ARE FOR VIEWING ONLY.

LANDLORD APPROVAL	ARKANSAS SIGN & NEON 8525 DISTRIBUTION DR. LITTLE ROCK, AR 72209 501.562.3942 (P) 501.562.6651 (F) arkansassign.com	REPRESENTATIVE: KEVIN HONEA DATE/DWG: 10/24/23 - DWG1 DESIGNER: LORA RAND	CLIENT: SENOR TEQUILA LOCATION: 2919 N Reynolds Road
DATE:		CUSTOMERS IS RESPONSIBLE TO OBTAIN ANY/ALL LANDLORD APPROVALS IF APPLICABLE.	SIGNATURE OF APPROVAL REQUIRED FOR PRODUCTION

REV4

EAST ELEVATION

189”

32”

16

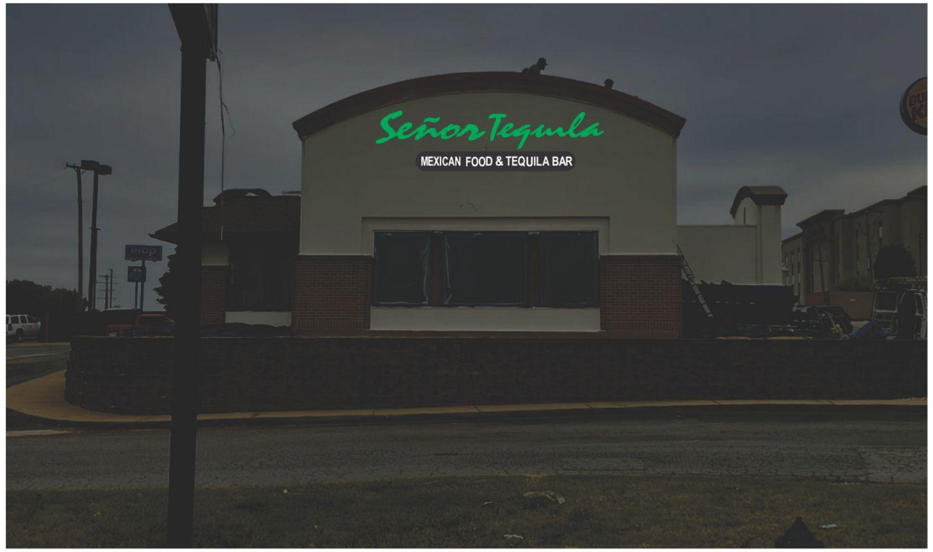
MEXICAN FOOD & TEQUILA BAR

132”

specs:
(1) set of l.e.d. illuminated
channel letters
black returns
black trimcap
clear acrylic w/ lime green
3m vinyl second surface applied

(1) l.e.d. illuminated capsule
black returns
black trimcap
acrylic faces w/ matte black vinyl overlay

flush-mounted



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DELIVERY TIMES VARY PER SCOPE OF WORK. TYPICAL DELIVERY TIME FROM ACCEPTANCE AND PERMITTING ARE 4-8 WEEKS. OUR GOALS IS TO DELIVER IN A TIMELY MANOR BARRING UNFORSEEN CIRCUMSTANCES.

UL Listed

REV4

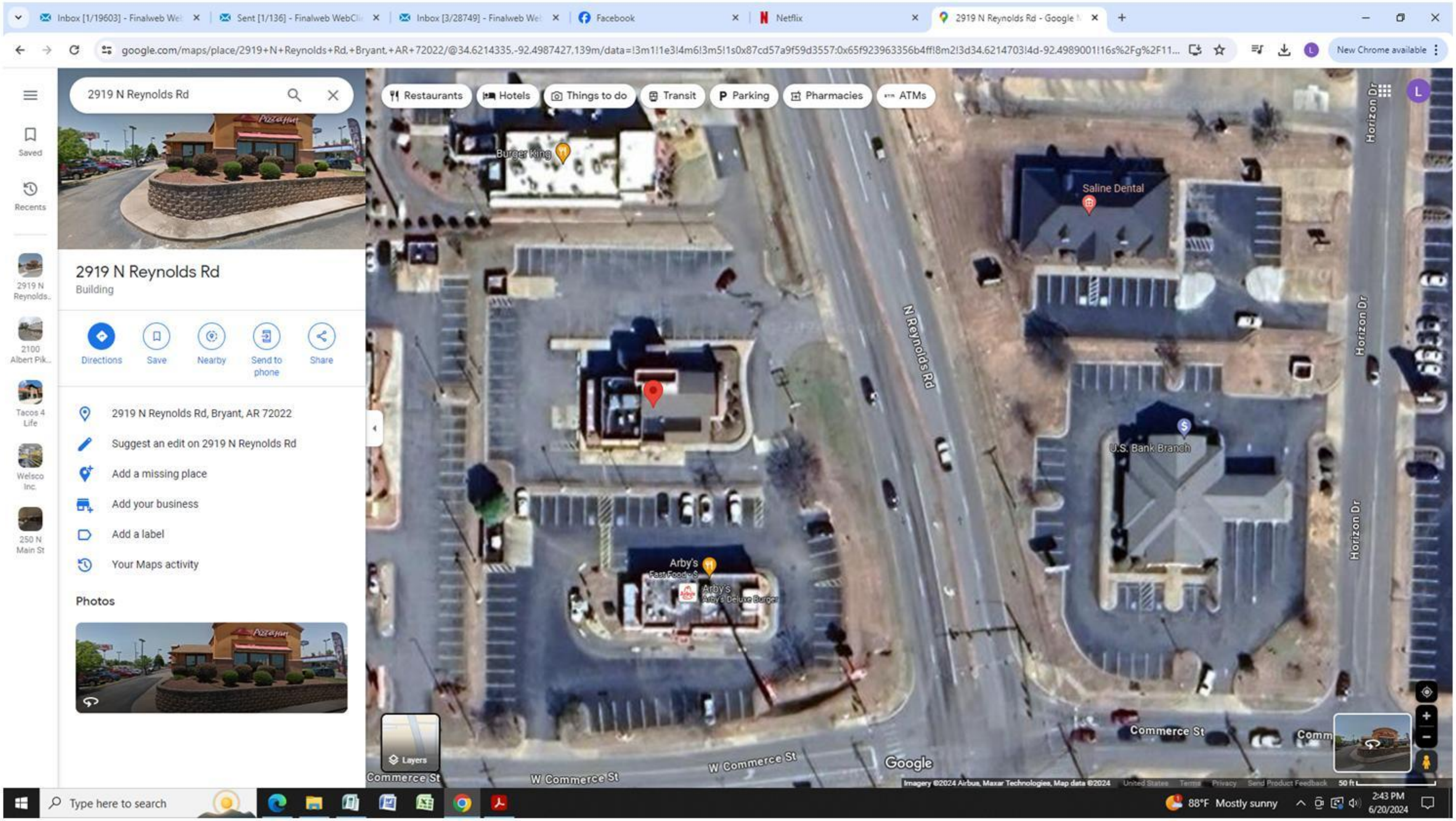
(2) NEW LEXAN FACES FOR EXISTING POLE SIGN CABINET
RETROFIT TO LED
PAINT POLE AND CABINET BLACK

NOTE: ANY NEEDED WALL REPAIRS ARE NOT ASN RESPONSIBILITY. ANY VIEWS SHOWING REPAIRS ARE FOR VIEWING ONLY.

SOUTH ELEVATION 20' X 85'

NORTH ELEVATION 25' X 85'

EAST ELEVATION 20' X 65'



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