

Bryant Planning Commission Meeting

Boswell Municipal Complex - City Hall Court Room

210 SW 3rd Street

YouTube: https://www.youtube.com/c/bryantarkansas

Date: August 14, 2023 - **Time:** 6:00 PM

Call to Order

Approval of Minutes

- 1. Planning Commission Meeting Minutes 7/10/2023
 - · 2023-7-10 Planning Commision Meeting Minutes.pdf

Announcements

Director's Report

DRC Report

2. Pikewood Subdivision II - Lots 78R and 79R - Replat

Jeff Porter - Requesting Approval for Replat - RECOMMENDED APPROVAL

3. Pikewood Subdivision II - Lot 78R - Conditional Use Permit

Jeff Porter - Requesting Approval for CUP for Accessory Building on Lot without Primary Structure - RECOMMENDED APPROVAL

4. First Security Bank - 1819 N Reynolds Road - Remodel and Site Changes

Murray Contractors - Requesting Approval for Remodel and Site Changes - APPROVED

- 0766-PLN-01.pdf
- 5. Cornerstone Christian Montessori School 4910 Springhill Road Site Plan

Hope Consulting- Requesting Site Plan Approval - APPROVED, Contingent upon remaining comments being addressed

- <u>0767-PLN-02.pdf</u>
- 0767-ELV-01.pdf
- · 0767-PLN-01.pdf
- 6. Krispy Krunchy Chicken 400 Bryant Ave Sign Permit

Action Signs - Requesting Sign Permit Approval - STAFF APPROVED

- · 0763-PLN-01.pdf
- 0763-APP-01.pdf

7. First Security Bank - 1819 N Reynolds Road - Sign Permit

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

- 0764-APP-01.pdf
- <u>0764-PLN-01.pdf</u>

8. Bryant Vision Clinic - 2213 N Reynolds Road - Sign Permit

L Graphics - Requesting Sign Permit Approval - STAFF APPROVED

• 0765-APP-01.pdf

9. Hilltop Landing Subdivision - Preliminary Plat

Hope Consulting - Requesting Recommendation for Approval of Preliminary Plat - RECOMMENDED APPROVAL, Contingent upon remaining comments being met

Public Hearing

10. Pikewood Subdivision II - Lot 78R - Conditional Use Permit

Jeff Porter - Requesting Approval for CUP for Accessory Building on Lot without Primary Structure

- <u>0761-APP-01.pdf</u>
- 0760-PLT-01.pdf

Old Business

New Business

11. Pikewood Subdivision II - Lots 78R and 79R - Replat

Jeff Porter - Requesting Approval for Replat

• 0760-PLT-01.pdf

12. Hilltop Landing Subdivision - Preliminary Plat

Hope Consulting - Requesting Recommendation for Approval of Preliminary Plat

- <u>0690-PLN-08.pdf</u>
- 0690-GTR-01.pdf
- <u>0690-PLN-07.pdf</u>
- 0690-MTN-02.pdf
- <u>0690-DRN-03.pdf</u>
- <u>0690-SWP-02.pdf</u>
- 0690-SWB-01.pdf0690-MTN-01.pdf
- 0690-DRN-02.pdf
- 0690-SWP-01.pdf

Adjournments



Bryant Planning Commission Meeting Minutes

Monday, July 10, 2023 Boswell Municipal Complex – City Hall Courtroom 6:00 PM

Agenda

CALL TO ORDER

- Chairman Rick Johnson calls the meeting to order.
- Commissioners Present: Johnson, Statton, Hooten, Penfield, Edwards, Erwin
- Commissioners Absent: Burgess

ANNOUNCEMENTS

None

APPROVAL OF MINUTES

1. Planning Commission Meeting Minutes 6/12/2023

Motion to Approve minutes made by Commissioner Statton, Seconded by Commissioner Hooten. Voice Vote, 6 Yays, 0 nays. 1 Absent. Minutes were approved.

Chairman Johnson read the DRC Report.

DRC REPORT

- 2. **307 SW 4th Street** Conditional Use Permit

 Bill Gray Requesting Approval of CUP for New Addition to Accessory Structure that

 Exceeds 25% of Principal Building Size. NO RECOMMENDATION
- 3. **Coral Ridge Subdivision Lots 7&8 -** Modification from Code on Sidewalk Location Hope Consulting Requesting Approval of Modification from Code for Sidewalks to be Located Closer to the Curb. RECOMMENDED APPROVAL with location being 2 ft from BOC and Sidewalks having a curved radius connecting to adjacent properties.

4. Meadow Ridge Subdivision Phase 4 - Lot 72 - Final Plat

Derek Van Tassel - Requesting Approval for Final Plat - RECOMMENDED APPROVAL with requirement of detention pond improvements, fire hydrant, and sidewalk being built.

5. Bryant High School - New Fencing

Lewis Architects Engineers - Requesting Approval for New Fencing at Bryant High School - APPROVED

6. **Five Star Fireworks** - Temporary Business Permit

Mark Bradford - Requesting Approval for Temporary Business Permits at 23395 I-30 and 5041 Hwy 5. - APPROVED

7. **Arnold Fireworks** - Temporary Business Permit

Terry Harper - Requesting Approval for Temporary Business Permits at 604 S Reynolds Road and 2703 Springhill Road APPROVED

- 8. **Accutrac Spray Equipment** 105 SW 4th- Site Plan Additions

 Joe Fast Requesting Approval for New Carport and Fencing on Site APPROVED
- 9. **Restore Habitat for Humanity** 3801 HWY 5- Sign Permit Velocity Graphics - Requesting Sign Permit Approval - STAFF APPROVED
- 10. **Abby Road Shopping Center** 1812 N Reynolds Road- Sign Permit Neonics Sign & Neon Requesting Sign Permit Approval APPROVED
- 11. **Splash Carwash N. Reynolds Road** Sign Permit *Encinos Sign - Requesting Sign Permit Approval - APPROVED*
- 12. **Arkansas Christian Academy/ Family Church** Fencing

 Perry Black Requesting Approval for Fencing on Site APPROVED
- 13. **Blue House Bakery and Cafe Progress Way** Sign Permit Signs of Integrity - Requesting Approval for Facade Sign - STAFF APPROVED

PUBLIC HEARING

14. 307 SW 4th Street - Conditional Use Permit

Bill Gray - Requesting Approval of CUP for New Addition to Accessory Structure that Exceeds 25% of Principal Building Size.

The applicant stated that Peter Cunningham, Pastor of abutting church property to the South, and the neighbor to the West, Joe Casey, were both ok with the addition of the structure.

Chairman Johnson opened the public hearing and asked for people here to speak on the Conditional Use to come forward. Seeing no members of the public coming forward to speak, Chairman Johnson Called for a Roll Call Vote to approve. 6 yays, 0 nays, Burgess Absent.

Motion to Close Public Hearing made by Commissioner Penfield, Seconded by Commissioner Edwards. Voice Vote, 6 Yays, 0 nays. 1 Absent.

NEW BUSINESS

15. **Coral Ridge Subdivision Lots 7 & 8 -** Modification from Code on Sidewalk Location Hope Consulting - Requesting Approval of Modification from Code for Sidewalks to be Located Closer to the Curb.

After brief discussion on the item, Chairman Johnson Called for a roll call vote to approve sidewalks being located no closer than 2ft to the BOC, and having the sidewalks gradually curve back to 6ft from BOC at the abutting property lines. 6 yays, 0 nays, Burgess Absent.

16. Meadow Ridge Subdivision Phase 4 - Lot 72 - Final Plat

Derek Van Tassel - Requesting Approval for Final Plat

After discussion on the item, Chairman Johnson Called for a roll call vote to approve, contingent upon the remaining items from DRC being met. (Fire Hydrant, Detention pond improvements, Sidewalk being built and BOA for Plat.) The signing and filing of the plat will not take place until those items are completed. 6 yays, 0 nays, Burgess Absent.

DIRECTOR'S REPORT

No Directors Report

ADJOURNMENT

-	•	enfield, Seconded by Commissioner s Absent. Meeting was adjourned.
Chairman, Rick Johnson		
Secretary, Tracy Picanco	 Date	

FIRST SECURITY BANK

BRYANT SOUTH RENOVATION

1823 N. REYNOLDS ROAD BRYANT, AR 72022



January 19, 2023 **SCM**

1/19/23

DATE:

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THESE PLANS AND SCM SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH ARCHITECTS THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS PLLC

10411 West Markham, Suite 220 Little Rock, Arkansas 72205 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

T1.01

SCM ARCHITECTS P. L. L.

FIRE RESISTANCE RATING FOR BUILDING ELEMENTS

PARTITIONS - 0 HOUR (PER TABLE 601)

STRUCTURAL FRAME - 0 HOUR (PER TABLE 601)

NON-BEARING EXTERIOR/INTERIOR WALLS AND

FLOOR CONSTRUCTION - 0 HOUR (PER TABLE 601)

ROOF CONSTRUCTION - 0 HOUR (PER TABLE 601)

RICHARDSON ENGINEERING 210 2. SEVIER STREET

ELECTRICAL ENGINEERING

201 E. MARKHAM, SUITE 400

LITTLE ROCK, AR 72201

PETTIT & PETTIT CONSULTING ENGINEERS

BENTON, AR 72015

ERIC RICHARDSON

(501) 315-7225

TONY AYCOCK taycock@pettitinc.com

ARCHITECTS P. L. L. C.

1400 Kirk Road, Suite 2:
Little Rock, Arkansas 7222

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

SCM SCM ARCHITECTS CAMPACTURE CAM

FIRST SECURITY BANK BRYANT SOUTH RENOVATIO 1823 N. REYNOLDS ROAD BRYANT, AR 72022

REVISIONS:

PROJECT NO

22031 **DATE:** January 19, 2023

INDEX OF DRAWINGS,

DRAWINGS, GENERAL NOTES

SCM ARCHITECTS P.L.L.

Γ1.02

FIN. FL. - FINISH FLOOR

H.M. - HOLLOW METAL

INSUL. - INSULATION

GYP. BD. - GYPSUM BOARD

F.F.E. - FINISH FLOOR ELEVATION

TYP. - TYPICAL

VER. - VERIFY

WD. - WOOD

V.I.F. - VERIFY IN FEILD

N.I.C. - NOT IN CONTRACT

DEMOLITION WALL TYPE LEGEND					
SYMBOL	DESCRIPTION				
	EXISTING WALL TO REMAIN				
	ITEMS TO BE REMOVED				

D22 D03 D01 D01 D01 D01 D02 D03 D03 D04 D05 D05 D05 D05 D05 D05 D07	D15 D23 D23 D15	COORDINATE WORK REQUIREMENTS WITH ELEC. DRAWINGS D02 D02 D02 D02 D02 D02 D02 D0	
EXISTING SAFETY DEPOSIT BOXES TO REMAIN D01 D01 D22	D02 D14	D02 D08 D20 D07 D10 D10	
EXISTING PYLON SIGN TO BE REMOVED IN ITS ENTIRETY. EXISTING ELECTRICAL UTILITIES TO BE CAPPED AND CLEARLY MARKED FOR FUTURE USE	DIMENSION PLAN 1/4" = 1'-0"	0 1' 2' 4' 8' 12' SCALE AT FULL SIZE: 1/4" = 1'-0"	

GENERAL DEMOLITION NOTES:

1. GENERAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING SITE AND STRUCTURE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK.

2. OBTAIN ALL REQUIRED PERMITS FROM THE PROPER AUTHORITIES.

3. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. CONTRACTOR SHALL IDENTIFY THE LOCATION OF EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO ELECTRICAL UTILITIES, DOMESTIC WATER, SANITARY SEWER, NATURAL GAS, CABLE TV, TELEPHONE AND INTERNET. CONTRACTOR SHALL PROTECT EXISTING

4. CONFORM TO APPLICABLE CODES FOR DEMOLITION WORK, SAFETY OF STRUCTURE, DUST CONTROL, AND ITEMS STORED WITHIN THE STRUCTURE.

5. CONFORM TO APPLICABLE REGULATORY PROCEDURES IF HAZARDOUS OR CONTAMINATED MATERIALS ARE DISCOVERED.

6. DRAWINGS SHOWING EXISTING CONSTRUCTION AND UTILITIES ARE BASED ON CASUAL FIELD OBSERVATION ONLY. VERIFY THAT CONSTRUCTION AND UTILITY ARRANGEMENTS ARE AS SHOWN. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION. BEGINNING OF ALTERATIONS WORK CONSTITUTES ACCEPTANCE OF EXISTING

7. MANY DIMENSIONS ARE DEPENDENT UPON EXISTING BUILDING CONDITIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDITIONS AND DIMENSIONS PRIOR TO PRICING AND DURING CONSTRUCTION, AS NECESSARY, TO ASSURE CONSTRUCTIONS ADHERENCE TO DRAWINGS. THE SUBMISSION OF A PRICE CONSTITUTES THE ACCEPTANCE OF EXISTING CONDITIONS. BY ENTERING INTO A CONSTRUCTION CONTRACT FOR THIS WORK, THE GENERAL CONTRACTOR HAS INDICATED HIS / HER FAMILIARITY WITH THE FIELD CONDITIONS. ANY DIMENSION REVISIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR REVIEW / APPROVAL.

8. SCHEDULE WORK TO AVOID EXCESSIVE EXPOSURE OF BUILDING ELEMENTS TO THE

9. ERECT AND MAINTAIN WEATHERPROOF ENCLOSURES FOR ALL EXTERIOR OPENINGS.

10. EXECUTE WORK BY METHODS WHICH WILL AVOID DAMAGE TO OTHER WORK. REPAIR OR REPLACE ITEMS DAMAGED DURING CONSTRUCTION. PROVIDE PROPER SURFACES TO RECEIVE PATCHING AND FINISHING.

11. PROTECT EXISTING MATERIALS AND SURFACES, FIXTURES, EQUIPMENTS AND OTHER ITEMS WHICH ARE NOT TO BE REMOVED.

12. THE CONTRACTOR SHALL REMOVE, CUT, AND PATCH WORK IN A MANNER TO MINIMIZE DAMAGE, AND PROVIDE A MEANS OF RESTORING PRODUCTS AND FINISHES TO THEIR ORIGINAL

13. REMOVE ALL DEBRIS AND ABANDONED ITEMS (SUCH AS UTILITIES) FROM CONCEALED AREAS WITHIN THE EXISTING STRUCTURE.

14. WHERE NEW WORK ABUTS OR ALIGNS WITH EXISTING, PERFORM A SMOOTH AND EVEN TRANSITION. PATCH WORK AND USE MATERIALS THAT MATCH EXISTING ADJACENT WORK IN TEXTURE AND APPEARANCE.

15. DEMO ALL EXISTING INTERIOR PARTITIONS, DOORS, AND WINDOWS SHOWN TO BE REMOVED ON THE PLANS, ELEVATIONS, AND SECTIONS BY DASHED LINES. COORDINATE EXTENTS OF DEMOLITION WITH NEW PLANS.

16. WHERE DEMOLTION OF PIPING AND CONDUIT FROM EXISTING WALLS TO REMAIN OCCURS, PATCH WALL COMPLETE WITH SIMILAR MATERIAL AND PREPARE FOR WALL FINISH.

17. FILL ALL FLOOR PENETRATIONS; APPLY FLOOR PREPARATION AFTER FILLING OF PENETRATION BEFORE APPLICATION OF FLOOR FINISH - TYPICAL FOR ALL FLOOR ELECTRICAL BOXES, CONDUIT PENETRATIONS, PIPING PENETRATIONS, ETC.

18. REMOVE TEMPORARY WORK THAT IS NOT TO REMAIN.

19. DO NOT BURN OR BURY MATERIALS ON SITE.

20. COORDINATE FULL EXTENTS OF DEMOLITION WITH NEW CONSTRUCTION REQUIREMENTS.

REFER TO T1.02 FOR ADDITIONAL NOTES / GENERAL CONTRACT REQUIREMENTS AFFECTING ALL TRADES

DEMOLITION KEYNOTES

REMOVE EXISTING CARPET, WALL BASE, AND ASSOCIATED ADHESIVE. PREP FOR

INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN.

REMOVE EXISTING CERAMIC TILE. WALL BASE, AND ASSOCIATED GROUT / ADHESIVE, PREP FOR INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN.

REMOVE EXISTING VINYL COMPOSITE TILE, WALL BASE, AND ASSOCIATED ADHESIVE. PREP FOR INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN.

REMOVE EXISTING DOOR AND FRAME. EXISTING DOOR TO BE PROTECTED FOR RE-USE IN

EXISTING SAFETY DEPOSIT BOXES TO REMAIN IN PLACE AND IN USE THROUGHOUT THE PROJECT. EXISTING FLOORING FINISHES TO BE CUT OUT TIGHT AROUND BOXES. COORDINATE ACCESS TO THIS ROOM WITH OWNER'S REPRESENTATIVE

REMOVE EXISTING THRESHOLD.

D07 PREP EXISTING PAINTED GYP BOARD WALLS TO RECEIVE NEW VINYL WALLCOVERING.

EXISTING WALL TILE ON WET WALL TO REMAIN. PROTECT THROUGHOUT DEMOLITION AND NEW CONSTRUCTION PHASES.

D09 EXISTING WALL COVERING TO BE REMOVED. PREP WALLS TO RECEIVE NEW VINYL WALLCOVERING D10 EXISTING WINDOW SHADES AND BLINDS TO REMAIN. PROTECT THROUGHOUT DEMOLITION

AND NEW CONSTRUCTION PHASES. REMOVE EXISTING MILLWORK AS INDICATED.

D12 EXISTING MASONRY MECHANICAL YARD ENCLOSURE TO REMAIN. D13 REMOVE EXISTING CURVED SUSPENDED CEILING.

REMOVE EXISTING METAL PARTITION. REMOVE EXISTING COUNTERTOP.

D16 REMOVE OLD COMMERCIAL TUBE OPENING. REPAIR GYP. BOARD AND PREP FOR NEW FINISH REMOVE EXISTING DOOR MOUNTED KEYPAD. PREP DOOR FOR COVER PLATE.

REMOVE EXISTING LIGHT FIXTURE. RE: ELEC. MODIFY SOUTH END OF COUNTER AND MILLWORK AS REQUIRED FOR INSTALLATION OF NEW

END. PROTECT COUNTERTOP THROUGHOUT DURATION OF PROJECT. EXISTING PLUMBING FIXTURES AND TOILET ACCESSORIES TO REMAIN. PROTECT THROUGHOUT PROJECT.

EXISTING GYP. BD. CEILING TO REMAIN UNLESS OTHERWISE NOTED, REPAIR AS REQUIRED. PROTECT THROUGHOUT DEMOLITION AND NEW CONSTRUCTION PHASES. PREP FOR NEW

CLEAN, REPAIR MINOR DENTS/GOUGES, AND PREP EXISTING WALLS FOR NEW FINISH. EXISTING MILLWORK TO REMAIN. PROTECT THROUGHTOUT DEMOLITION & CONSTRUCTION PHASES. PREP FOR NEW PAINT FINISH.

REMOVE EXISTING RESTROOM SIGNAGE.

EXISTING SAFE TO REMAIN. PROTECT THROUGHOUT DEMOLITIION AND CONSTRUCTION

EXISTING FIRE EXTINGUISHER CABINET TO REMAIN. EXISTING GYP. BD. FURR DOWN TO REMAIN. REPAIR AS REQUIRED. PROTECT THROUGHOUT DEMOLITION AND NEW CONSTRUCTION PHASES. PREP FOR NEW FINISH.

REMOVE EXISTING LIGHT FIXTURE. REPAIR GYP. BOARD. D29 EXISTING SUSPENDED LAY-IN CEILING TO REMAIN. REMOVE EXISTING LAY-IN CEILING TILES.

D30 ALTERNATE 01 - REPLACE LIGHT FIXTURES NOT INCLUDED IN BASE BID. COORDINATE FIXTURES WITH ARCHITECTURAL RCP AND ELECTRICAL DRAWINGS.

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com



\Box

DEMOLITION FLOOR

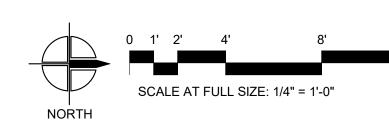
SCM ARCHITECTS P.L.L.

REVISIONS:

PROJECT NO.

January 19, 2023





GENERAL DEMOLITION NOTES:

1. GENERAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING SITE AND STRUCTURE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK.

2. OBTAIN ALL REQUIRED PERMITS FROM THE PROPER AUTHORITIES.

3. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. CONTRACTOR SHALL IDENTIFY THE LOCATION OF EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO ELECTRICAL UTILITIES, DOMESTIC WATER, SANITARY SEWER, NATURAL GAS, CABLE TV, TELEPHONE AND INTERNET. CONTRACTOR SHALL PROTECT EXISTING

4. CONFORM TO APPLICABLE CODES FOR DEMOLITION WORK, SAFETY OF STRUCTURE, DUST CONTROL, AND ITEMS STORED WITHIN THE STRUCTURE.

5. CONFORM TO APPLICABLE REGULATORY PROCEDURES IF HAZARDOUS OR CONTAMINATED MATERIALS ARE DISCOVERED.

6. DRAWINGS SHOWING EXISTING CONSTRUCTION AND UTILITIES ARE BASED ON CASUAL FIELD OBSERVATION ONLY. VERIFY THAT CONSTRUCTION AND UTILITY ARRANGEMENTS ARE AS SHOWN. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION. BEGINNING OF ALTERATIONS WORK CONSTITUTES ACCEPTANCE OF EXISTING

7. MANY DIMENSIONS ARE DEPENDENT UPON EXISTING BUILDING CONDITIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDITIONS AND DIMENSIONS PRIOR TO PRICING AND DURING CONSTRUCTION, AS NECESSARY, TO ASSURE CONSTRUCTIONS ADHERENCE TO DRAWINGS. THE SUBMISSION OF A PRICE CONSTITUTES THE ACCEPTANCE OF EXISTING CONDITIONS. BY ENTERING INTO A CONSTRUCTION CONTRACT FOR THIS WORK, THE GENERAL CONTRACTOR HAS INDICATED HIS / HER FAMILIARITY WITH THE FIELD CONDITIONS. ANY DIMENSION REVISIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR REVIEW / APPROVAL.

8. SCHEDULE WORK TO AVOID EXCESSIVE EXPOSURE OF BUILDING ELEMENTS TO THE

9. ERECT AND MAINTAIN WEATHERPROOF ENCLOSURES FOR ALL EXTERIOR OPENINGS.

10. EXECUTE WORK BY METHODS WHICH WILL AVOID DAMAGE TO OTHER WORK. REPAIR OR REPLACE ITEMS DAMAGED DURING CONSTRUCTION. PROVIDE PROPER SURFACES TO RECEIVE PATCHING AND FINISHING.

11. PROTECT EXISTING MATERIALS AND SURFACES, FIXTURES, EQUIPMENTS AND OTHER ITEMS WHICH ARE NOT TO BE REMOVED.

12. THE CONTRACTOR SHALL REMOVE, CUT, AND PATCH WORK IN A MANNER TO MINIMIZE DAMAGE, AND PROVIDE A MEANS OF RESTORING PRODUCTS AND FINISHES TO THEIR ORIGINAL

13. REMOVE ALL DEBRIS AND ABANDONED ITEMS (SUCH AS UTILITIES) FROM CONCEALED AREAS WITHIN THE EXISTING STRUCTURE.

14. WHERE NEW WORK ABUTS OR ALIGNS WITH EXISTING, PERFORM A SMOOTH AND EVEN TRANSITION. PATCH WORK AND USE MATERIALS THAT MATCH EXISTING ADJACENT WORK IN TEXTURE AND APPEARANCE.

15. DEMO ALL EXISTING INTERIOR PARTITIONS, DOORS, AND WINDOWS SHOWN TO BE REMOVED ON THE PLANS, ELEVATIONS, AND SECTIONS BY DASHED LINES. COORDINATE EXTENTS OF DEMOLITION WITH NEW PLANS.

16. WHERE DEMOLTION OF PIPING AND CONDUIT FROM EXISTING WALLS TO REMAIN OCCURS, PATCH WALL COMPLETE WITH SIMILAR MATERIAL AND PREPARE FOR WALL FINISH.

17. FILL ALL FLOOR PENETRATIONS; APPLY FLOOR PREPARATION AFTER FILLING OF PENETRATION BEFORE APPLICATION OF FLOOR FINISH - TYPICAL FOR ALL FLOOR ELECTRICAL BOXES, CONDUIT PENETRATIONS, PIPING PENETRATIONS, ETC.

18. REMOVE TEMPORARY WORK THAT IS NOT TO REMAIN.

19. DO NOT BURN OR BURY MATERIALS ON SITE.

20. COORDINATE FULL EXTENTS OF DEMOLITION WITH NEW CONSTRUCTION REQUIREMENTS.

REFER TO T1.02 FOR ADDITIONAL NOTES / GENERAL CONTRACT REQUIREMENTS AFFECTING ALL TRADES

DEMOLITION KEYNOTES

REMOVE EXISTING CARPET, WALL BASE, AND ASSOCIATED ADHESIVE. PREP FOR

INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN. REMOVE EXISTING CERAMIC TILE, WALL BASE, AND ASSOCIATED GROUT / ADHESIVE. PREP

FOR INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN.

REMOVE EXISTING VINYL COMPOSITE TILE, WALL BASE, AND ASSOCIATED ADHESIVE. PREP FOR INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN.

REMOVE EXISTING DOOR AND FRAME. EXISTING DOOR TO BE PROTECTED FOR RE-USE IN

EXISTING SAFETY DEPOSIT BOXES TO REMAIN IN PLACE AND IN USE THROUGHOUT THE PROJECT. EXISTING FLOORING FINISHES TO BE CUT OUT TIGHT AROUND BOXES.

COORDINATE ACCESS TO THIS ROOM WITH OWNER'S REPRESENTATIVE REMOVE EXISTING THRESHOLD.

PREP EXISTING PAINTED GYP BOARD WALLS TO RECEIVE NEW VINYL WALLCOVERING.

D08 EXISTING WALL TILE ON WET WALL TO REMAIN. PROTECT THROUGHOUT DEMOLITION AND NEW CONSTRUCTION PHASES.

EXISTING WALL COVERING TO BE REMOVED. PREP WALLS TO RECEIVE NEW VINYL

WALLCOVERING

EXISTING WINDOW SHADES AND BLINDS TO REMAIN. PROTECT THROUGHOUT DEMOLITION

AND NEW CONSTRUCTION PHASES. REMOVE EXISTING MILLWORK AS INDICATED.

12 EXISTING MASONRY MECHANICAL YARD ENCLOSURE TO REMAIN.

REMOVE EXISTING CURVED SUSPENDED CEILING.

REMOVE EXISTING METAL PARTITION.

THROUGHOUT PROJECT.

REMOVE EXISTING COUNTERTOP. REMOVE OLD COMMERCIAL TUBE OPENING. REPAIR GYP. BOARD AND PREP FOR NEW FINISH. REMOVE EXISTING DOOR MOUNTED KEYPAD. PREP DOOR FOR COVER PLATE.

D18 REMOVE EXISTING LIGHT FIXTURE. RE: ELEC. MODIFY SOUTH END OF COUNTER AND MILLWORK AS REQUIRED FOR INSTALLATION OF NEW

END. PROTECT COUNTERTOP THROUGHOUT DURATION OF PROJECT. EXISTING PLUMBING FIXTURES AND TOILET ACCESSORIES TO REMAIN. PROTECT

EXISTING GYP. BD. CEILING TO REMAIN UNLESS OTHERWISE NOTED, REPAIR AS REQUIRED. PROTECT THROUGHOUT DEMOLITION AND NEW CONSTRUCTION PHASES. PREP FOR NEW

D22 CLEAN, REPAIR MINOR DENTS/GOUGES, AND PREP EXISTING WALLS FOR NEW FINISH. D23 EXISTING MILLWORK TO REMAIN. PROTECT THROUGHTOUT DEMOLITION & CONSTRUCTION

PHASES. PREP FOR NEW PAINT FINISH. D24 REMOVE EXISTING RESTROOM SIGNAGE.

D25 EXISTING SAFE TO REMAIN. PROTECT THROUGHOUT DEMOLITIION AND CONSTRUCTION PHASES

D26 EXISTING FIRE EXTINGUISHER CABINET TO REMAIN.

EXISTING GYP. BD. FURR DOWN TO REMAIN. REPAIR AS REQUIRED. PROTECT THROUGHOUT DEMOLITION AND NEW CONSTRUCTION PHASES. PREP FOR NEW FINISH.

REMOVE EXISTING LIGHT FIXTURE. REPAIR GYP. BOARD. EXISTING SUSPENDED LAY-IN CEILING TO REMAIN. REMOVE EXISTING LAY-IN CEILING TILES. ALTERNATE 01 - REPLACE LIGHT FIXTURES NOT INCLUDED IN BASE BID. COORDINATE

FIXTURES WITH ARCHITECTURAL RCP AND ELECTRICAL DRAWINGS.

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

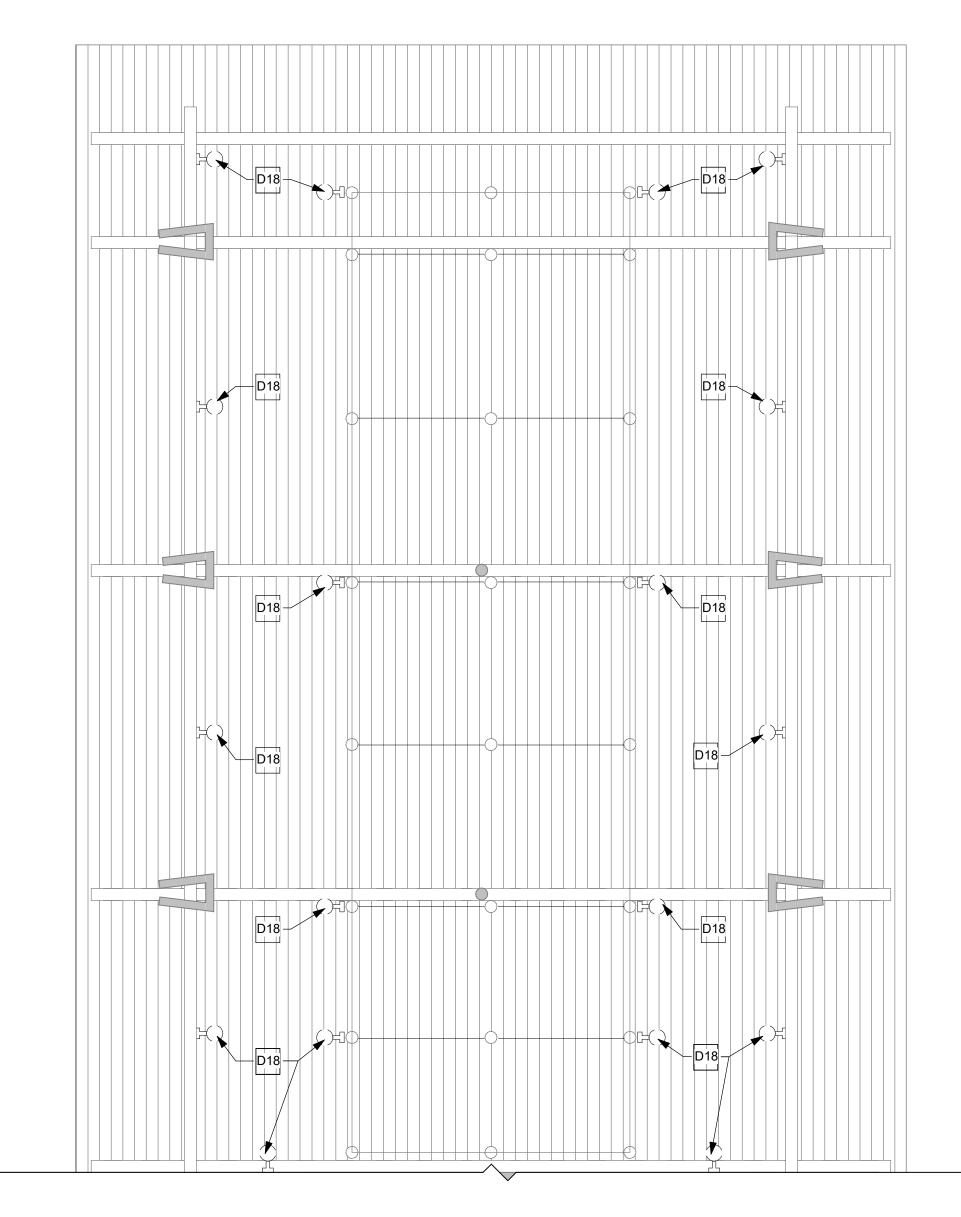


20

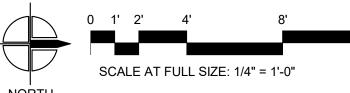
REVISIONS:

PROJECT NO. January 19, 2023

DEMOLITION REFLECTED **CEILING PLAN**







GENERAL DEMOLITION NOTES:

1. GENERAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING SITE AND STRUCTURE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK.

2. OBTAIN ALL REQUIRED PERMITS FROM THE PROPER AUTHORITIES.

3. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. CONTRACTOR SHALL IDENTIFY THE LOCATION OF EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO ELECTRICAL UTILITIES, DOMESTIC WATER, SANITARY SEWER, NATURAL GAS, CABLE TV, TELEPHONE AND INTERNET. CONTRACTOR SHALL PROTECT EXISTING

4. CONFORM TO APPLICABLE CODES FOR DEMOLITION WORK, SAFETY OF STRUCTURE, DUST CONTROL, AND ITEMS STORED WITHIN THE STRUCTURE.

5. CONFORM TO APPLICABLE REGULATORY PROCEDURES IF HAZARDOUS OR CONTAMINATED MATERIALS ARE DISCOVERED.

6. DRAWINGS SHOWING EXISTING CONSTRUCTION AND UTILITIES ARE BASED ON CASUAL FIELD OBSERVATION ONLY. VERIFY THAT CONSTRUCTION AND UTILITY ARRANGEMENTS ARE AS SHOWN. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION. BEGINNING OF ALTERATIONS WORK CONSTITUTES ACCEPTANCE OF EXISTING

7. MANY DIMENSIONS ARE DEPENDENT UPON EXISTING BUILDING CONDITIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDITIONS AND DIMENSIONS PRIOR TO PRICING AND DURING CONSTRUCTION, AS NECESSARY, TO ASSURE CONSTRUCTIONS ADHERENCE TO DRAWINGS. THE SUBMISSION OF A PRICE CONSTITUTES THE ACCEPTANCE OF EXISTING CONDITIONS. BY ENTERING INTO A CONSTRUCTION CONTRACT FOR THIS WORK, THE GENERAL CONTRACTOR HAS INDICATED HIS / HER FAMILIARITY WITH THE FIELD CONDITIONS. ANY DIMENSION REVISIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR REVIEW / APPROVAL.

8. SCHEDULE WORK TO AVOID EXCESSIVE EXPOSURE OF BUILDING ELEMENTS TO THE

9. ERECT AND MAINTAIN WEATHERPROOF ENCLOSURES FOR ALL EXTERIOR OPENINGS.

10. EXECUTE WORK BY METHODS WHICH WILL AVOID DAMAGE TO OTHER WORK. REPAIR OR REPLACE ITEMS DAMAGED DURING CONSTRUCTION. PROVIDE PROPER SURFACES TO RECEIVE PATCHING AND FINISHING.

11. PROTECT EXISTING MATERIALS AND SURFACES, FIXTURES, EQUIPMENTS AND OTHER ITEMS WHICH ARE NOT TO BE REMOVED.

12. THE CONTRACTOR SHALL REMOVE, CUT, AND PATCH WORK IN A MANNER TO MINIMIZE DAMAGE, AND PROVIDE A MEANS OF RESTORING PRODUCTS AND FINISHES TO THEIR ORIGINAL CONDITION.

13. REMOVE ALL DEBRIS AND ABANDONED ITEMS (SUCH AS UTILITIES) FROM CONCEALED AREAS WITHIN THE EXISTING STRUCTURE.

14. WHERE NEW WORK ABUTS OR ALIGNS WITH EXISTING, PERFORM A SMOOTH AND EVEN TRANSITION. PATCH WORK AND USE MATERIALS THAT MATCH EXISTING ADJACENT WORK IN TEXTURE AND APPEARANCE.

15. DEMO ALL EXISTING INTERIOR PARTITIONS, DOORS, AND WINDOWS SHOWN TO BE REMOVED ON THE PLANS, ELEVATIONS, AND SECTIONS BY DASHED LINES. COORDINATE EXTENTS OF DEMOLITION WITH NEW PLANS.

16. WHERE DEMOLTION OF PIPING AND CONDUIT FROM EXISTING WALLS TO REMAIN OCCURS, PATCH WALL COMPLETE WITH SIMILAR MATERIAL AND PREPARE FOR WALL FINISH.

17. FILL ALL FLOOR PENETRATIONS; APPLY FLOOR PREPARATION AFTER FILLING OF PENETRATION BEFORE APPLICATION OF FLOOR FINISH - TYPICAL FOR ALL FLOOR ELECTRICAL BOXES, CONDUIT PENETRATIONS, PIPING PENETRATIONS, ETC.

18. REMOVE TEMPORARY WORK THAT IS NOT TO REMAIN.

19. DO NOT BURN OR BURY MATERIALS ON SITE.

20. COORDINATE FULL EXTENTS OF DEMOLITION WITH NEW CONSTRUCTION REQUIREMENTS.

REFER TO T1.02 FOR ADDITIONAL NOTES / GENERAL CONTRACT REQUIREMENTS AFFECTING ALL TRADES

DEMOLITION KEYNOTES

- REMOVE EXISTING CARPET, WALL BASE, AND ASSOCIATED ADHESIVE. PREP FOR
- INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN. REMOVE EXISTING CERAMIC TILE, WALL BASE, AND ASSOCIATED GROUT / ADHESIVE. PREP
- FOR INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN. REMOVE EXISTING VINYL COMPOSITE TILE, WALL BASE, AND ASSOCIATED ADHESIVE. PREP FOR INSTALLATION OF NEW FLOOR AND BASE. REFER TO FINISH PLAN.
- REMOVE EXISTING DOOR AND FRAME. EXISTING DOOR TO BE PROTECTED FOR RE-USE IN
- 05 EXISTING SAFETY DEPOSIT BOXES TO REMAIN IN PLACE AND IN USE THROUGHOUT THE PROJECT. EXISTING FLOORING FINISHES TO BE CUT OUT TIGHT AROUND BOXES.
- COORDINATE ACCESS TO THIS ROOM WITH OWNER'S REPRESENTATIVE
- D06 REMOVE EXISTING THRESHOLD. PREP EXISTING PAINTED GYP BOARD WALLS TO RECEIVE NEW VINYL WALLCOVERING. EXISTING WALL TILE ON WET WALL TO REMAIN. PROTECT THROUGHOUT DEMOLITION AND
- NEW CONSTRUCTION PHASES. EXISTING WALL COVERING TO BE REMOVED. PREP WALLS TO RECEIVE NEW VINYL
- 10 EXISTING WINDOW SHADES AND BLINDS TO REMAIN. PROTECT THROUGHOUT DEMOLITION
- AND NEW CONSTRUCTION PHASES.
- REMOVE EXISTING MILLWORK AS INDICATED. 2 EXISTING MASONRY MECHANICAL YARD ENCLOSURE TO REMAIN.
- REMOVE EXISTING CURVED SUSPENDED CEILING.
- REMOVE EXISTING METAL PARTITION. REMOVE EXISTING COUNTERTOP.

THROUGHOUT PROJECT.

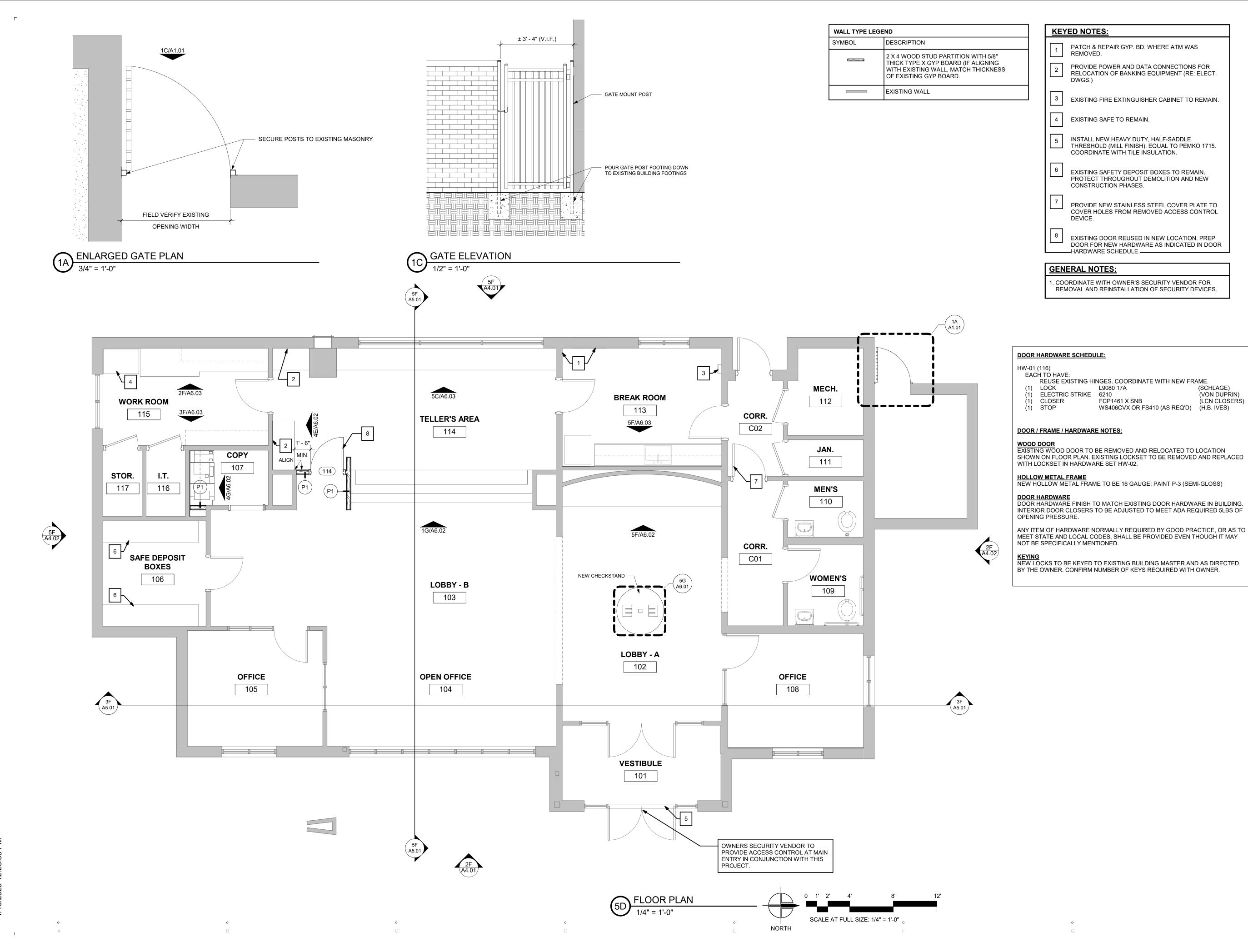
- REMOVE OLD COMMERCIAL TUBE OPENING. REPAIR GYP. BOARD AND PREP FOR NEW FINISH.
- REMOVE EXISTING DOOR MOUNTED KEYPAD. PREP DOOR FOR COVER PLATE. REMOVE EXISTING LIGHT FIXTURE. RE: ELEC.
- MODIFY SOUTH END OF COUNTER AND MILLWORK AS REQUIRED FOR INSTALLATION OF NEW END. PROTECT COUNTERTOP THROUGHOUT DURATION OF PROJECT.
- EXISTING PLUMBING FIXTURES AND TOILET ACCESSORIES TO REMAIN. PROTECT
- EXISTING GYP. BD. CEILING TO REMAIN UNLESS OTHERWISE NOTED, REPAIR AS REQUIRED. PROTECT THROUGHOUT DEMOLITION AND NEW CONSTRUCTION PHASES. PREP FOR NEW
- D22 CLEAN, REPAIR MINOR DENTS/GOUGES, AND PREP EXISTING WALLS FOR NEW FINISH.
- 23 EXISTING MILLWORK TO REMAIN. PROTECT THROUGHTOUT DEMOLITION & CONSTRUCTION
- PHASES. PREP FOR NEW PAINT FINISH. 24 REMOVE EXISTING RESTROOM SIGNAGE.
- D25 EXISTING SAFE TO REMAIN. PROTECT THROUGHOUT DEMOLITION AND CONSTRUCTION
- D26 EXISTING FIRE EXTINGUISHER CABINET TO REMAIN.
- D27 EXISTING GYP. BD. FURR DOWN TO REMAIN. REPAIR AS REQUIRED. PROTECT THROUGHOUT
- DEMOLITION AND NEW CONSTRUCTION PHASES. PREP FOR NEW FINISH.
- REMOVE EXISTING LIGHT FIXTURE. REPAIR GYP. BOARD. D29 EXISTING SUSPENDED LAY-IN CEILING TO REMAIN. REMOVE EXISTING LAY-IN CEILING TILES. D30 ALTERNATE 01 - REPLACE LIGHT FIXTURES NOT INCLUDED IN BASE BID. COORDINATE FIXTURES WITH ARCHITECTURAL RCP AND ELECTRICAL DRAWINGS.

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

7

PROJECT NO. January 19, 2023

DEMOLITION REFLECTED **CEILING PLAN**



SCM

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com



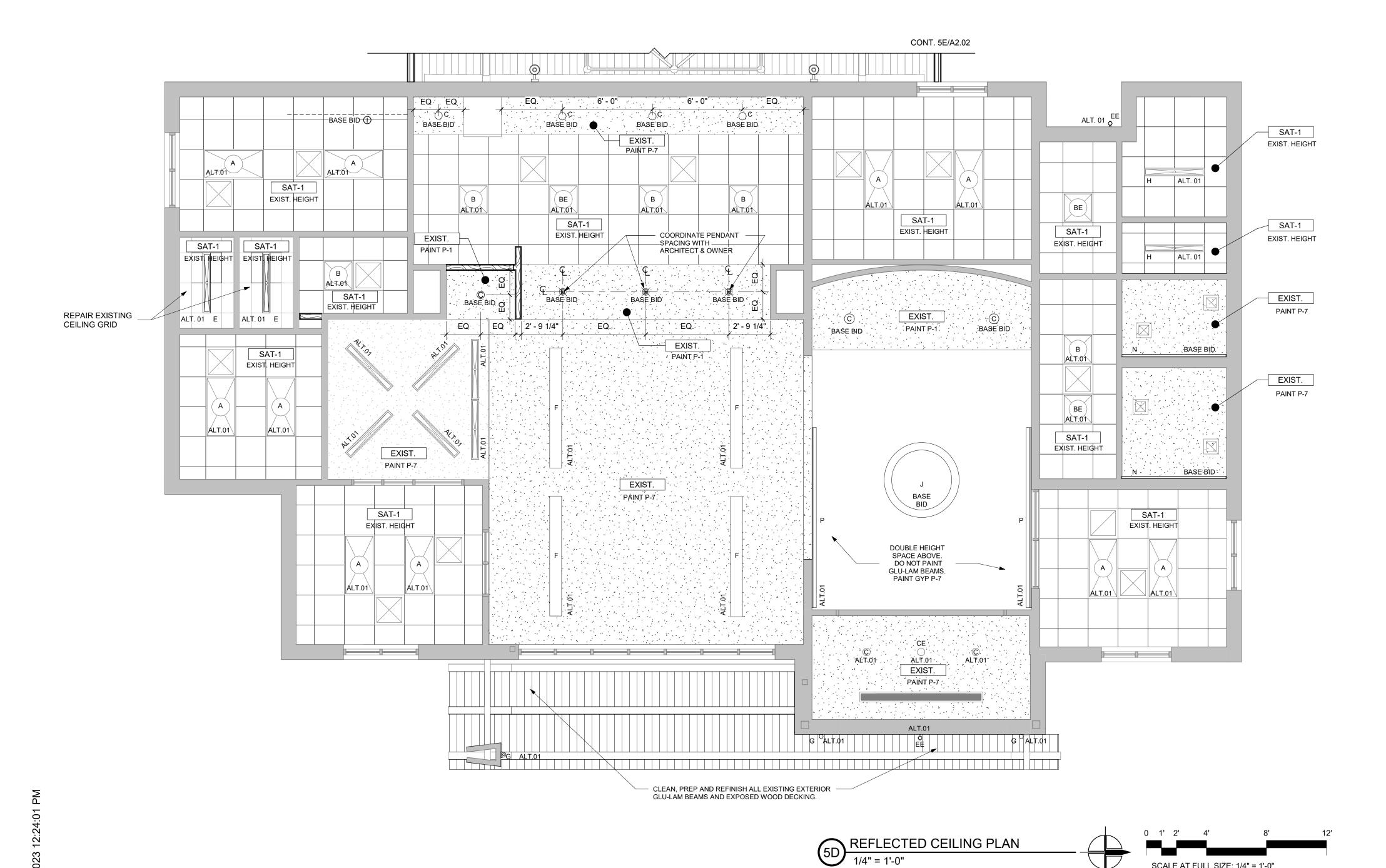
AST SECURITY BANK YANT SOUTH RENOVATION 3 N. REYNOLDS ROAD ANT, AR 72022

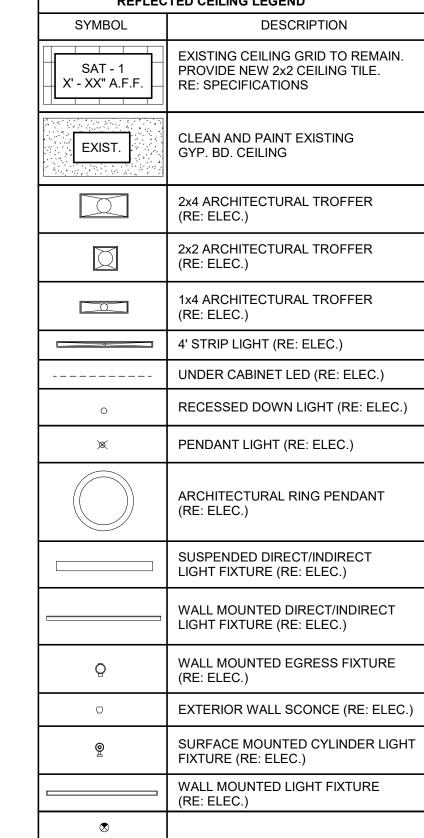
REVISIONS:

PROJECT NO. 22031 DATE: January 19, 2023

FLOOR PLAN

A1.01





REFLECTED CEILING LEGEND

REFER TO SPECIFICATIONS SECTION 01 03 00 ALTERNATES

FOR INSTRUCTIONS FOR ALTERNATE PRICING.

SCALE AT FULL SIZE: 1/4" = 1'-0"

o 2

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

REVISIONS:

PROJECT NO. DATE: January 19, 2023

REFLECTED **CEILING PLAN**

REFLECTED CEILING LEGEND

OL DESCRIPTION

EXISTING CEILING GRID TO REMAIN. PROVIDE NEW 2x2 CEILING TILE. RE: SPECIFICATIONS

1 4 0 0 K ir k R o a d, S u i t e 2 2 0 Little Rock, Arkansas 72223 (501) 224-3055 fax: (501) 224-6934 www.scmarchitects.com



o 1

o 2

J

CLEAN, PREP AND REFINISH ALL EXISTING EXTERIOR GLU-LAM BEAMS AND EXPOSED WOOD DECKING

SYMBOL

SAT - 1

X' - XX" A.F.F.

EXIST.

0

INSTALL THESE TWO FIXTURES

GYP. BD. CEILING

(RE: ELEC.)

(RE: ELEC.)

(RE: ELEC.)

(RE: ELEC.)

(RE: ELEC.)

(RE: ELEC.)

FIXTURE (RE: ELEC.)

REFER TO SPECIFICATIONS SECTION 01 03 00 ALTERNATES FOR INSTRUCTIONS FOR ALTERNATE PRICING.

2x4 ARCHITECTURAL TROFFER

2x2 ARCHITECTURAL TROFFER

1x4 ARCHITECTURAL TROFFER

UNDER CABINET LED (RE: ELEC.)

PENDANT LIGHT (RE: ELEC.)

RECESSED DOWN LIGHT (RE: ELEC.)

ARCHITECTURAL RING PENDANT

SUSPENDED DIRECT/INDIRECT LIGHT FIXTURE (RE: ELEC.)

WALL MOUNTED DIRECT/INDIRECT

WALL MOUNTED EGRESS FIXTURE

EXTERIOR WALL SCONCE (RE: ELEC.)

SURFACE MOUNTED CYLINDER LIGHT

WALL MOUNTED LIGHT FIXTURE

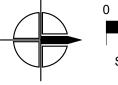
LIGHT FIXTURE (RE: ELEC.)

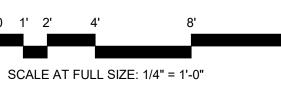
4' STRIP LIGHT (RE: ELEC.)

ROTATED TO THE WEST TO PROVIDE MORE LIGHTING OVER THE ATM CLEAN, PREP AND REFINISH ALL EXISTING EXTERIOR GLU-LAM BEAMS AND EXPOSED WOOD DECKING

REFLECTED CEILING PLAN AT DRIVE-THRU CANOPY

1/4" = 1'-0"





REVISIONS:

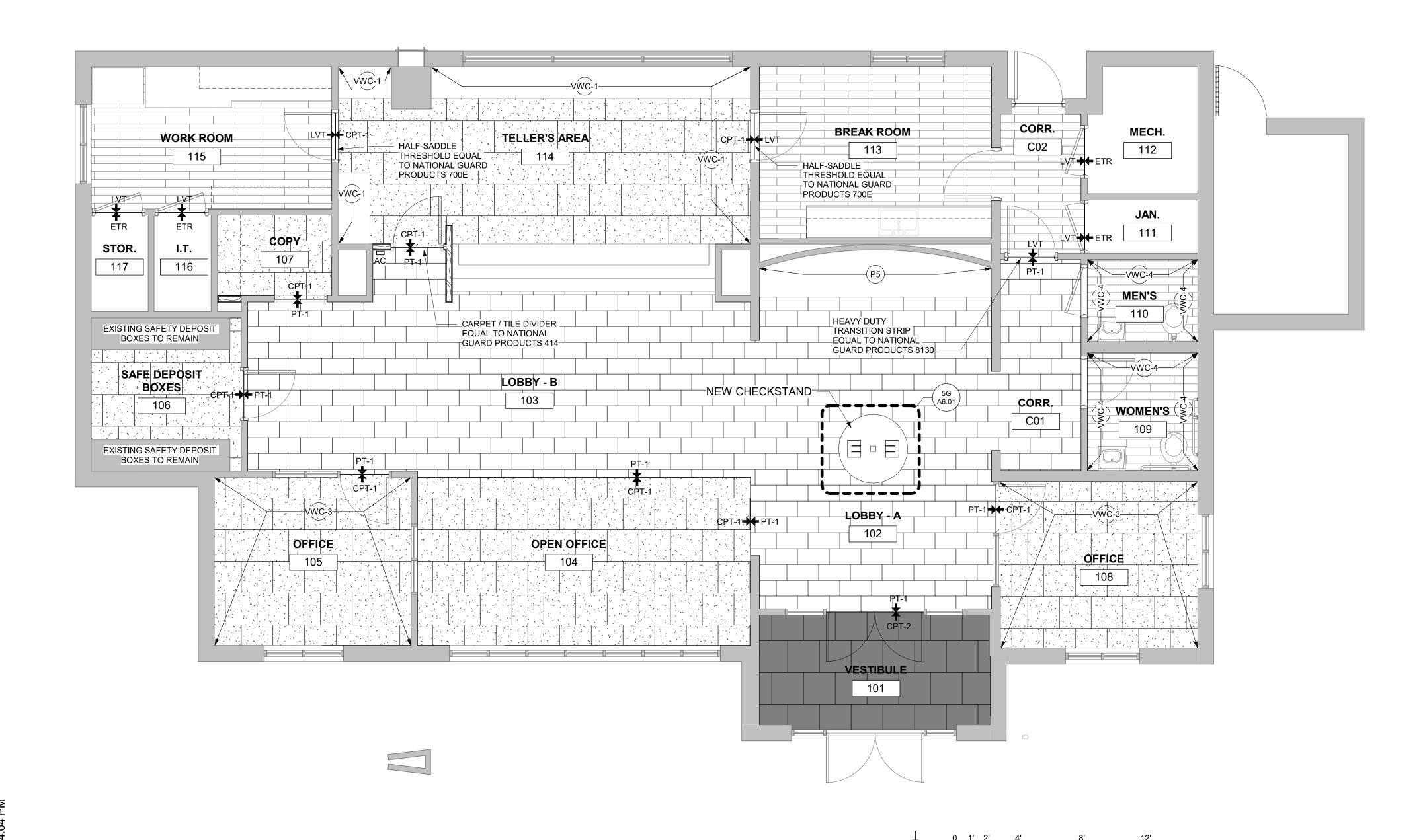
PROJECT NO.
22031
DATE:
January 19, 2023

REFLECTED CEILING PLAN

A2.02

	ROOM FINISH SCHEDULE								
WALLS								1	
ROOM NO	ROOM NAME	BASE	FLOOR	NORTH	EAST	SOUTH	WEST	NOTES	
101	VESTIBULE	EWB	CPT-2	P-1	P-1	P-1	P-1		1
102	LOBBY - A	EWB	PT-1	P-1	P-1	P-1	P-1 / P-5	EXISTING WOOD JAMB/HEAD TRIM AROUND CASED OPENING TO BE PAINTED P-3	1
103	LOBBY - B	EWB	PT-1	P-1	P-1	P-1	P-1	EXISTING WOOD JAMB/HEAD TRIM AROUND CASED OPENING TO BE PAINTED P-3	1
104	OPEN OFFICE	EWB	CPT-1	P-1	P-1	P-1	P-1		1
105	OFFICE	RB-1	CPT-1	VWC-3	VWC-3	VWC-3	VWC-3		1
106	SAFE DEPOSIT BOXES	RB-1	CPT-1	P-1	P-1	P-1	P-1	EXISTING SAFETY DEPOSIT BOXES ARE TO REMAIN. NEW FINISHES WILL HAVE TO BE INSTALLED AROUND THESE ITEMS. SAFETY DEPOSIT BOXES ARE TO BE PROTECTED THROUGHOUT THE PROJECT.	
107	COPY	RB-1	CPT-1	P-1	P-1	P-1	P-1		1
108	OFFICE	RB-1	CPT-1	VWC-3	VWC-3	VWC-3	VWC-3		1
109	WOMEN'S	RB-1	LVT-1	VWC-4	ETR	VWC-4	VWC-4	NO WALL BASE TO BE INSTALLED ON EAST WALL WHERE EXISTING WALL TILE WILL REMAIN.	1
110	MEN'S	RB-1	LVT-1	VWC-4	ETR	VWC-4	VWC-4	NO WALL BASE TO BE INSTALLED ON EAST WALL WHERE EXISTING WALL TILE WILL REMAIN.	
111	JAN.	ETR	ETR	ETR	ETR	ETR	ETR		1
112	MECH.	ETR	ETR	ETR	ETR	ETR	ETR		1
113	BREAK ROOM	RB-1	LVT-1	P-1	P-1	P-1	P-1	EXISTING MILLWORK TO BE PAINTED P-3	1
114	TELLER'S AREA	RB-1	CPT-1	VWC-1	P-1	VWC-1	VWC-1	EXISTING MILLWORK TO BE PAINTED P-3	1
115	WORK ROOM	RB-1	LVT-1	P-1	P-1	P-1	P-1	EXISTING MILLWORK TO BE PAINTED P-3	1
116	I.T.	ETR	ETR	ETR	ETR	ETR	ETR		1
117	STOR.	ETR	ETR	ETR	ETR	ETR	ETR		1
C01	CORR.	EWB	PT-1	P-1	P-1	P-1	P-1		1
C02	CORR.	RB-1	LVT-1	P-1	P-1	P-1	P-1		1

SCALE AT FULL SIZE: 1/4" = 1'-0"



FLOOR FINISH PLAN



- 1. REFER TO ARCHITECTURAL DOCUMENTS FOR ADDITIONAL FINISH MATERIAL REQUIREMENTS. ANY DISCREPANCY BETWEEN THIS SCHEDULE AND OTHER CONTRACT DOCUMENTS OR FIELD CONDITIONS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT FOR RESOLUTION AS OUTLINED IN THE GENERAL CONDITIONS AND DIVISION 01 SECTION 'QUALITY REQUIREMENTS'.
- IT IS THE INTENT OF THESE DRAWINGS THAT ALL EXPOSED SURFACES RECEIVE NEW FINISHES AS INDICATED ON THE DRAWINGS OR WRITTEN SPECIFICATIONS UNLESS SPECIFICALLY NOTED OTHERWISE. ANY SURFACE WHICH DOES NOT HAVE A FINISH NOTED SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND FINISHED PER THE ARCHITECT'S INSTRUCTIONS.
- PRODUCTS LISTED AS BASIS OF DESIGN HEREIN AND ON THE FINISH SCHEDULE HAVE BEEN COORDINATED WITH OTHER FINISHES AND APPROVED BY THE OWNER. SUBMITTALS MUST COMPLY WITH SPECIFICATION SECTION 01 33 00 'SUBMITTAL PROCEDURES'.
- THE CONTRACTOR SHALL IDENTIFY AND PRIORITIZE ALL LEAD TIMES FOR MATERIALS SPECIFIED TO AVOID SCHEDULE CONFLICTS. THIS INCLUDES MATERIALS REQUIRING MOCKUPS. NEITHER THE OWNER NOR ARCHITECT WILL BE HELD RESPONSIBLE FOR INACTION ON THE PART OF THE CONTRACTOR RESULTING IN ADDITIONAL EXPEDITED SHIPPING COSTS OR DELAYS TO THE CONSTRUCTION SCHEDULE.
- CONTRACTOR TO CONFIRM ALL TRANSITIONS TO EXISTING FLOORING MATERIALS WITH THE ARCHITECT BEFORE PROCEEDING.
- PROVIDE SUBFLOOR LEVELERS WHERE NECESSARY FOR SMOOTH TRANSITIONS OF ALL FLOOR FINISH MATERIALS.
- 7. ALL WALL FINISHES TO BE APPLIED FROM BREAK-IN-PLANE TO BREAK-IN-PLANE EVEN IF IT EXTENDS BEYOND AREA DISTURBED BY RENOVATION WORK.
- DRYWALL SOFFITS, FASCIAS, AND CEILINGS TO BE PAINTED FINISH (P-1) UNO.
- CONTRACTOR TO PROVIDE MAINTENANCE INSTRUCTIONS FOR ALL FINISHES TO OWNER AT SUBSTANTIAL COMPLETION.

GENERAL NOTES - FINISHES

- 1. PAINT ALL FURR-DOWNS P-1, UNLESS OTHERWISE NOTED ON DRAWINGS
- PAINT ALL INTERIOR DOOR FRAMES P-3

 EXTERIOR HOLLOW METAL DOORS AND FRAMES TO BE PAINTED P-1
- BOLLARDS TO BE PAINTED P-1.

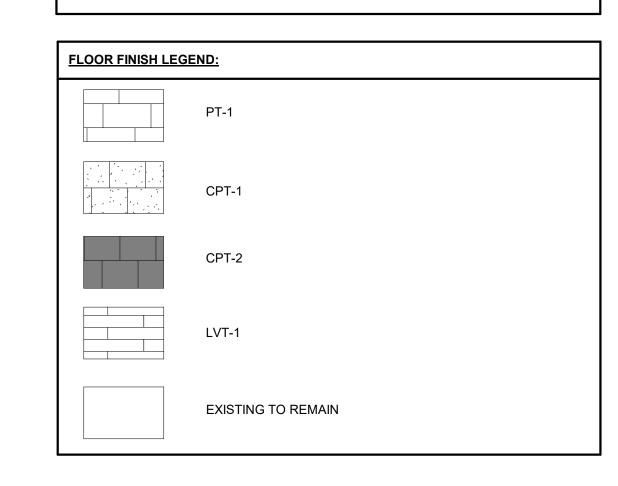
INTERIOR ARCHITECTURAL FINISHES

- P-1 SHERWIN WILLIAMS SW7036 "ACCESSIBLE BEIGE"
- P-2 SHERWIN WILLIAMS SW7037 "BALANCED BEIGE"
 P-3 SHERWIN WILLIAMS SW7038 "TONY TAUPE"
- P-4 SHERWIN WILLIAMS SW7032 "WARM STONE"
- P-5 SHERWIN WILLIAMS SW6488 "GRAND CANAL"
- P-6 SHERWIN WILLIAMS SW6258 "TRICORN BLACK" P-7 SHERWIN WILLIAMS SW7056 "RESERVED WHITE"
- VWC-1 NATIONAL WALLCOVERING "CASBAH SILK," COLOR: "TAGINE" #Y46477CSS VWC-2 NOT USED
- VWC-3 NATIONAL WALLCOVERING VVP424, COLOR: "BRONZE" VWC-4 EYKON BY VERSA, "MANDOLIN" A181-213 "TROPICS"
- SS-1 STARON SOLID SURFACE, COLOR: FW145 "WHIPPOORWILL"
- PL-1 WILSONART PLASTIC LAMINATE, #4656-60 "BRONZE LEGACY"
- PL-1 WILSONART PLASTIC LAMINATE, #4050-00 BRONZE L
 PL-2 NOT USED
- PL-3 WILSONART PLASTIC LAMINATE, #1595-60 "BLACK"
- CPT-1 MOHAWK "SERENITY", "WELLBEING / GT325", COLOR "579 HARMONY", 24"X24" MODULAR CARPET TILE, LAID IN "VERTICAL ASHLAR" PATTERN CPT-2 MOHAWK "TUFF STUFF II", "FIRST STEP II / GT 315", COLOR "OBSIDIAN -
- PT-1 AMERICAN OLEAN "CONCRETE CHIC", 12"X24" STYLISH CHARCOAL CC68 WITH COVE BASE, WITH 1/8" GROUT JOINTS.

989" MODULAR WALK-OFF TILE, LAID IN "BRICK ASHLAR" PATTERN

- GROUT COLOR FOR PT-1 CUSTOM BUILDING PRODUCTS #60 CHARCOAL

 LVT-1 PARTERRE VINYL WOOD PLANK, "NATURAL GUNSTOCK" #11415;
- SC SEALED CONCRETE
- RB-1 FLEXCO RUBBER BASE, 4" COVE, COLOR: 077 "DRIFTWOOD"
- EWB EXISTING WOOD BASE
- WS-1 INTERIOR STAINED WOOD, RIFT CUT RED OAK, SHALL BE STAINED TO MATCH STAINED WOOD SAMPLE PROVIDED BY OWNER/ARCHITECT
- ETR EXISTING TO REMAIN





1 4 0 0 Kirk Road, Suite 2 2 0 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com



FIRST SECURITY BANK BRYANT SOUTH RENOVATION 1823 N. REYNOLDS ROAD BRYANT, AR 72022

REVISIONS:

PROJECT NO.
22031
DATE:
January 19, 2023

FINISH FLOOR PLAN

A3.01

SCM ARCHITECTS P.L.L. C. c 2014

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com



FINISH FLOOR

PRESSURE WASH PRECAST

CONCRETE COPING

PROVIDE .040 PRE-FINISHED ALUMINUM END CAPS AT GLU-LAM BEAMS (TYPICAL). FINISH TO BE SELECTED BY ARCHITECT TO MATCH COLOR OF GLU-LAM BEAM.

CLEAN, PRIME AND PAINT EXISTING PRE-FINISHED METAL FASCIA. FINISH COLOR TO BE TEAL GREEN TO MATCH FIRST SECURITY STANDARD (PAC-CLAD

CLEAN, PRIME AND PAINT EXISTING PRE-FINISHED

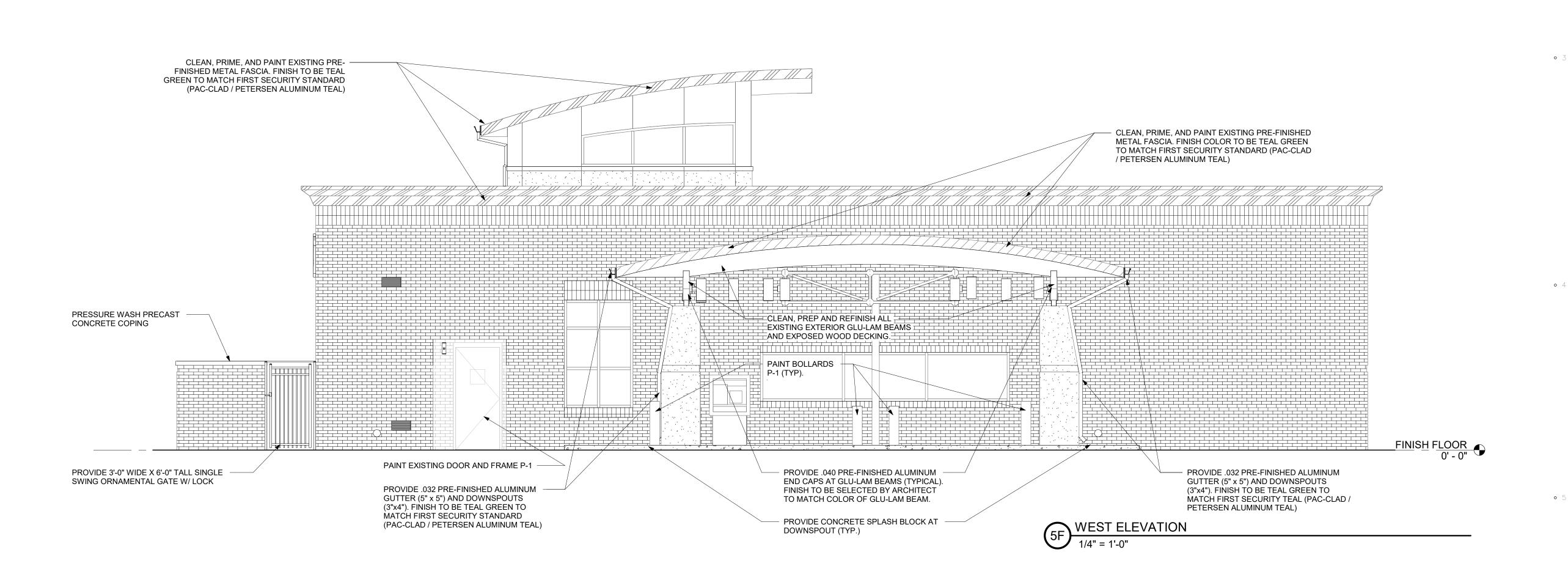
METAL GUTTER AND DOWNSPOUTS. FINISH TO BE

(PAC-CLAD / PETERSEN ALUMINUM TEAL)

TEAL GREEN TO MATCH FIRST SECURITY STANDARD

/ PETERSEN ALUMNINUM TEAL)

ALTERNATE 01: NEW LIGHT \sqsubseteq FIXTURE (RE: ELEC.) \sqsubseteq



EXISTING BUILDING

□CLEAN, PREP, AND REFINISH ALL EXISTING EXTERIOR GLU-LAM BEAMS AND EXPOSED WOOD DECKING

ALTERNATE 01: NEW LIGHT FIXTURE (RE: ELEC.)

SIGNAGE TO REMAIN

FirstSecurity

CLEAN, PRIME, AND PAINT EXISTING

PRE-FINISHED METAL FASCIA. FINISH

TO BE TEAL GREEN TO MATCH FIRST

SECURITY STANDARD (PAC-CLAD /

PETERSEN ALUMINUM TEAL)

PROVIDE .032 PRE-FINISHED ALUMINUM GUTTER (5" —

x 5") AND DOWNSPOUTS (3"x4"). FINISH TO BE TEAL

GREEN TO MATCH FIRST SECURITY STANDARD

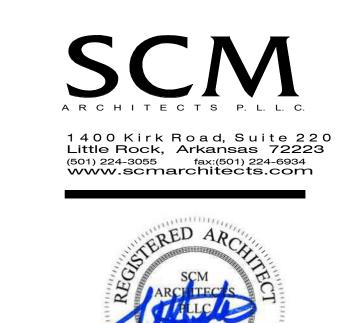
(PAC-CLAD / PETERSEN ALUMINUM TEAL) PROVIDE CONCRETE SPLASH BLOCK AT

DOWNSPOUT (TYP.)

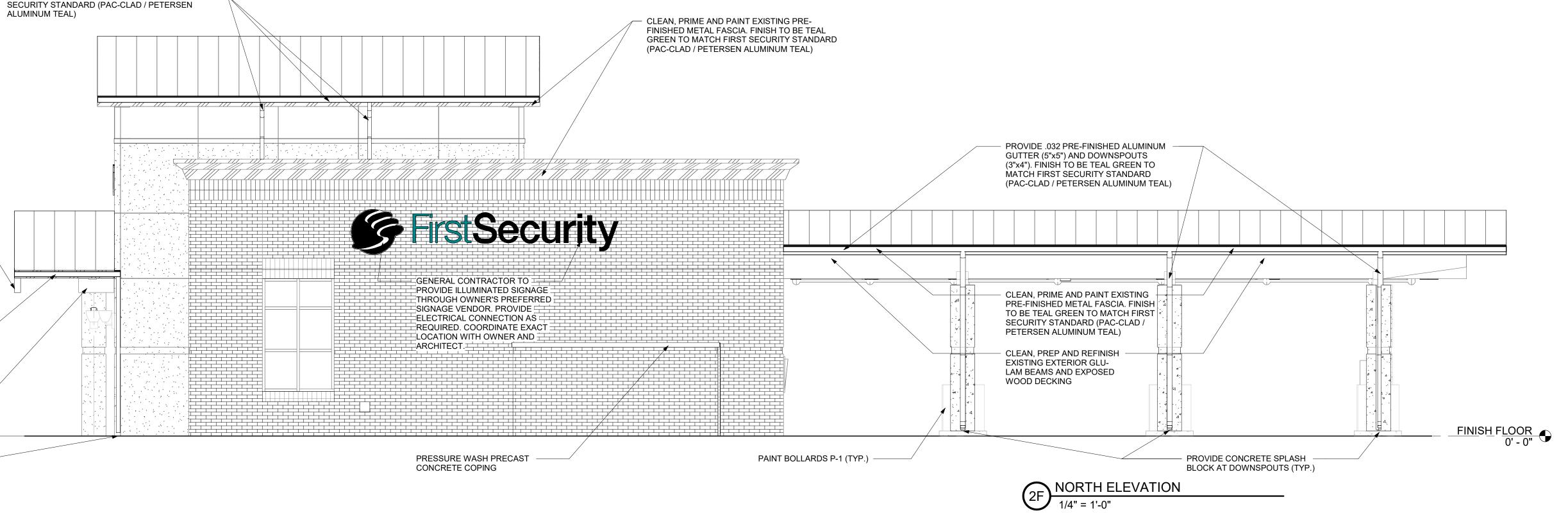
PROJECT NO.

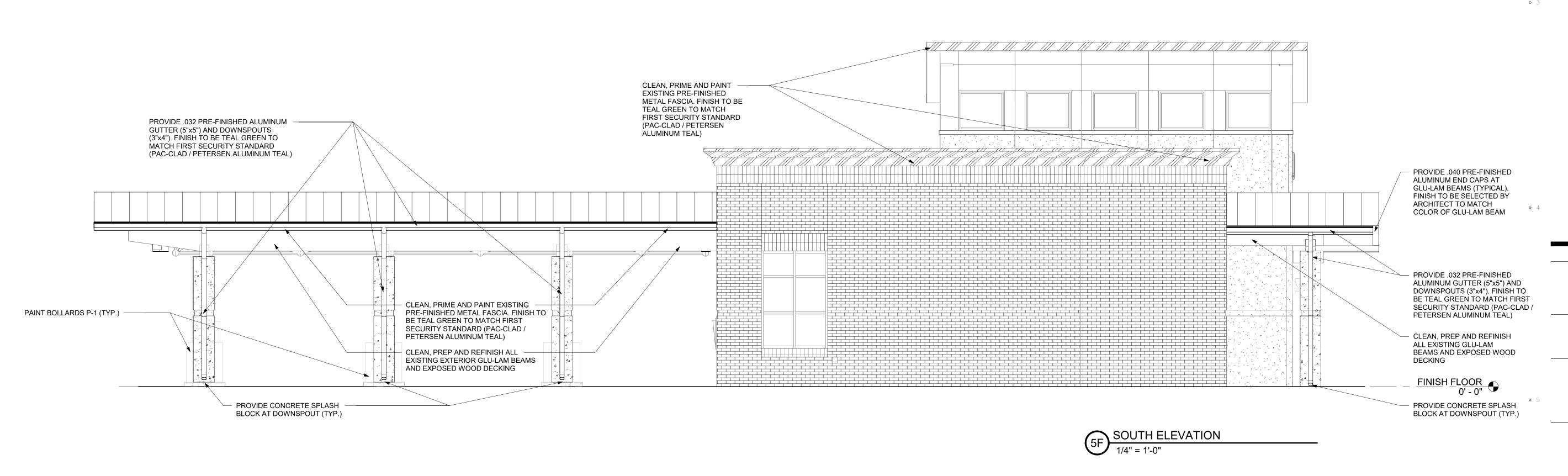
January 19, 2023

BUILDING **ELEVATIONS**



SCM ARCHTEC'S CI





FIRST SECURITY BANK BRYANT SOUTH RENOVATION

REVISIONS:

PROJECT NO.
22031
DATE:
January 19, 2023

BUILDING ELEVATIONS

A4.02

S C M A R C H I T E C T S P. L. L.

PROVIDE .040 PRE-FINISHED ALUMINUM END CAPS AT GLU-LAM BEAMS (TYPICAL). FINISH TO BE SELECTED BY

ARCHITECT TO MATCH

COLOR OF GLU-LAM BEAM

PROVIDE .032 PRE-FINISHED ALUMINUM

(PAC-CLAD / PETERSEN ALUMINUM TEAL)

GUTTER (5"x5") AND DOWNSPOUTS

(3"x4"). FINISH TO BE TEAL GREEN TO

EXISTING EXTERIOR GLU-LAM BEAMS AND EXPOSED WOOD DECKING

MATCH FIRST SECURITY STANDARD

CLEAN, PREP AND REFINISH

PROVIDE CONCRETE SPLASH

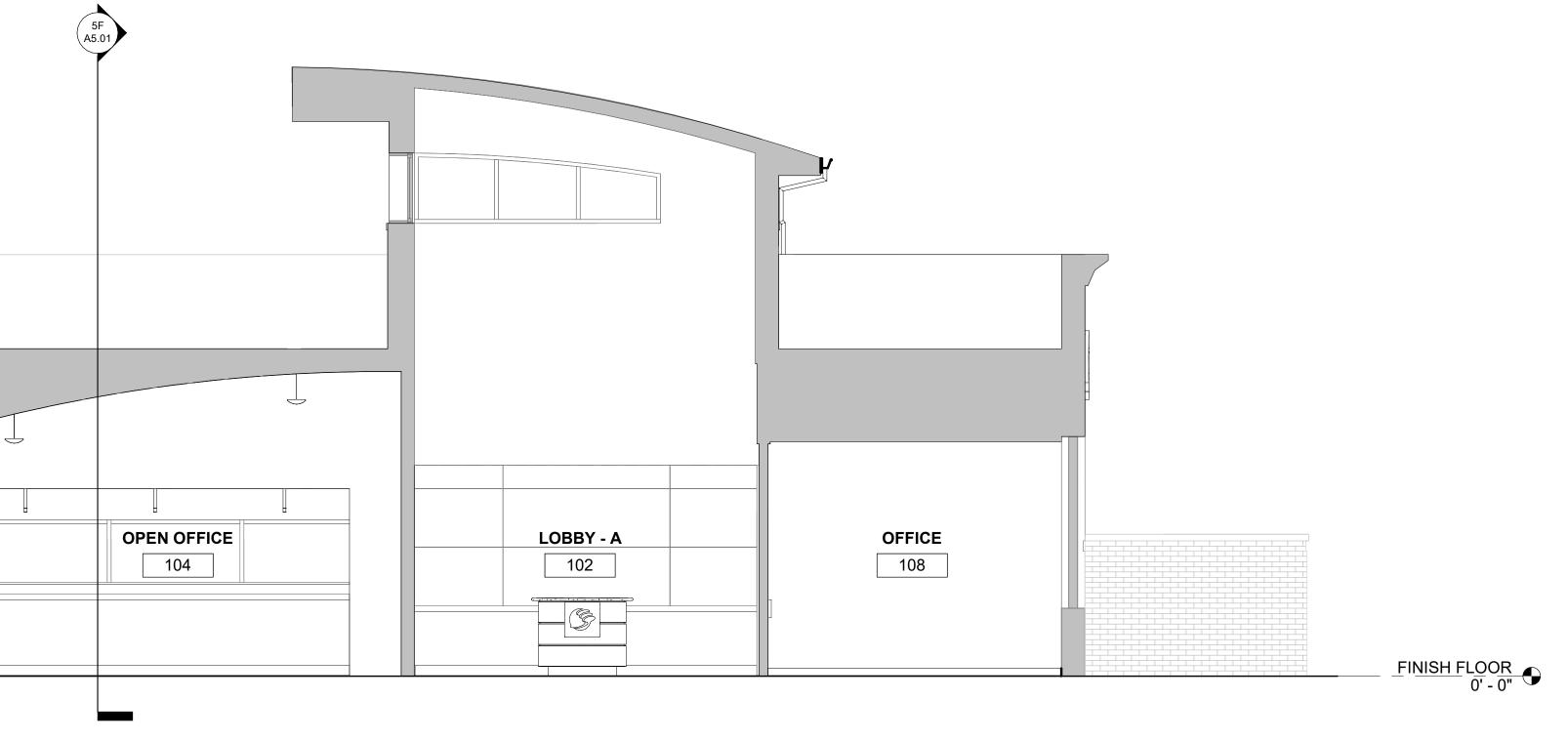
BLOCK AT DOWNSPOUT (TYP.)

CLEAN, PRIME AND PAINT EXISTING PRE-FINISHED METAL GUTTER AND DOWNSPOUTS. FINISH TO BE TEAL GREEN TO MATCH FIRST



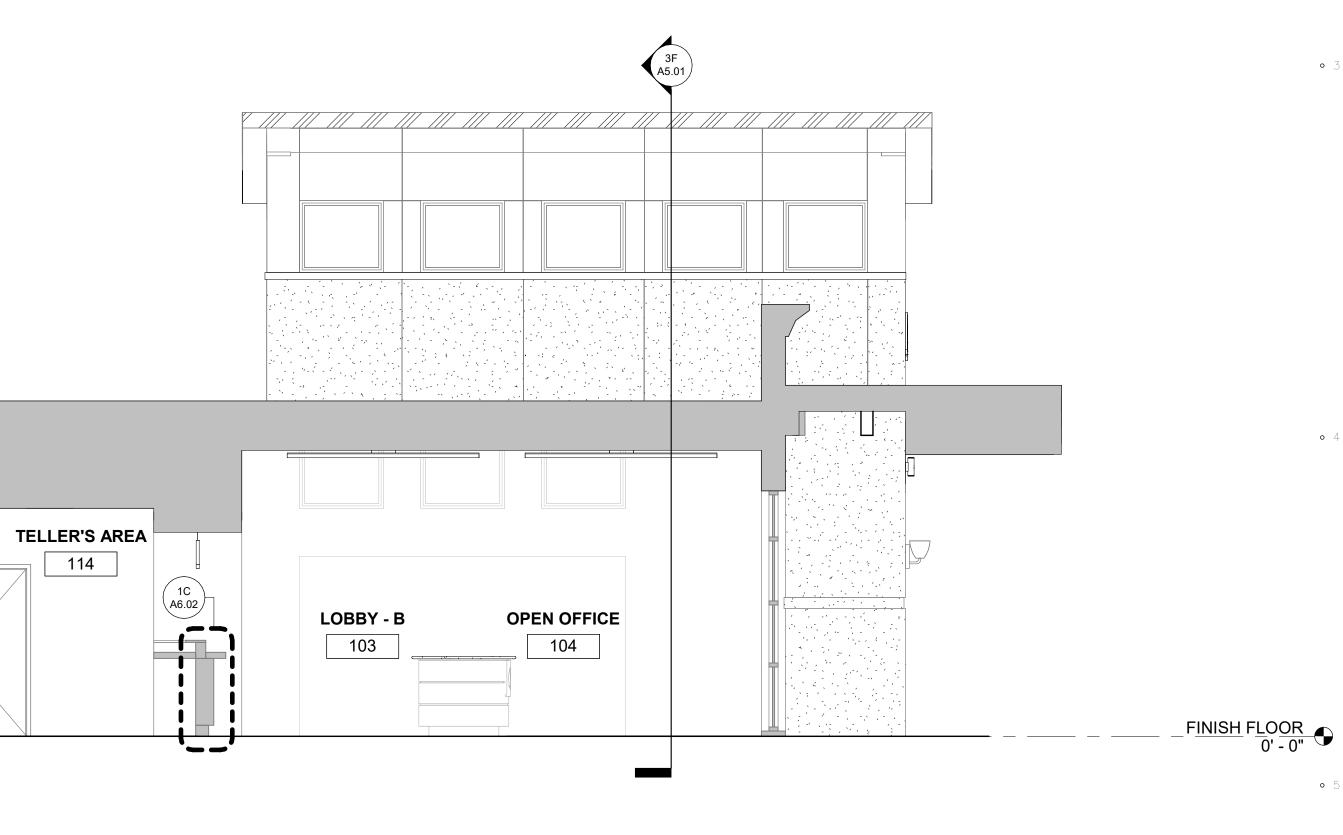






TRANSVERSE SECTION

1/4" = 1'-0"



LONGITUDINAL SECTION

1/4" = 1'-0"

114

REVISIONS:

PROJECT NO. 22031 DATE: January 19, 2023

BUILDING SECTIONS

A5.01

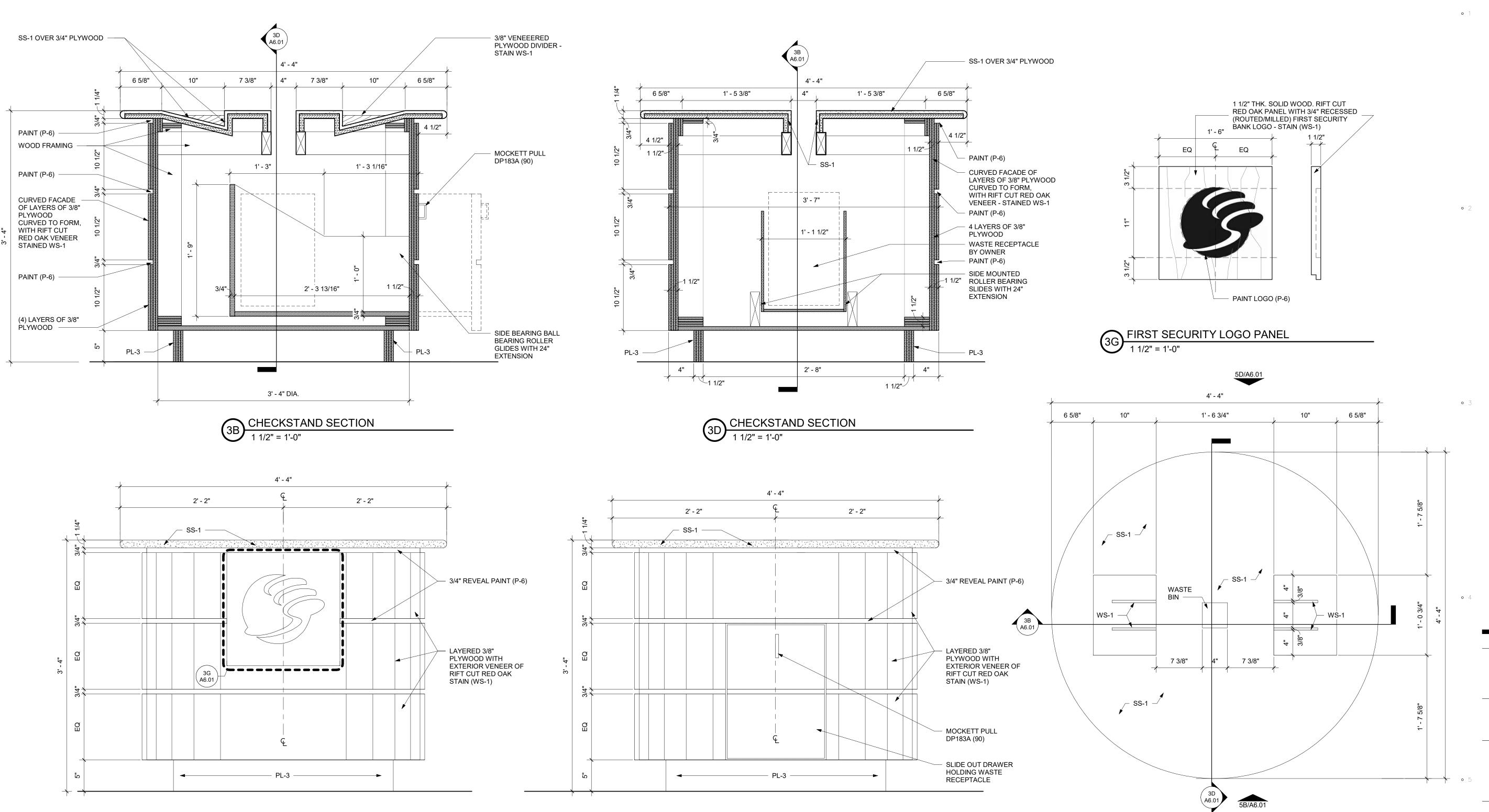
S C M A R C H I T E C T S P. L. L. C. c 2014

OFFICE

105







CHECK STAND REAR ELEVATION
1 1/2" = 1'-0"

FIRST SECURITY BANK
BRYANT SOUTH RENOV/
1823 N. REYNOLDS ROAD
BRYANT, AR 72022

REVISIONS:

PROJECT NO.
22031
DATE:
January 19, 2023
MILLWORK
ELEVATIONS,
SECTIONS &
DETAILS

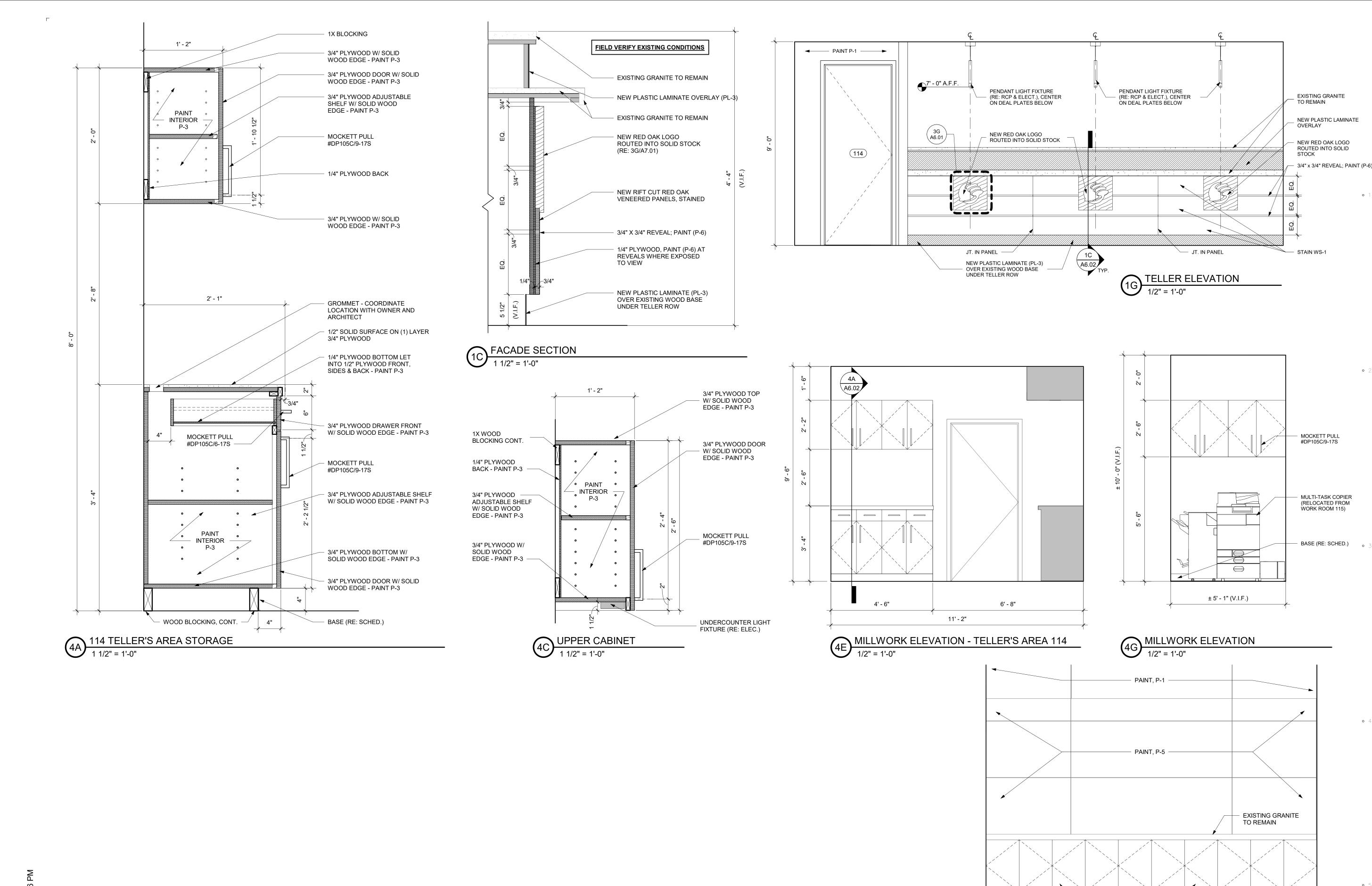
A6.01

S C M A R C H I T E C T S P. L. L. C. c 2014

ENLARGED CHECKSTAND PLAN
1 1/2" = 1'-0"

CHECK STAND FRONT ELEVATION

1 1/2" = 1'-0"



1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223

(501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

RO

REVISIONS:

PROJECT NO. 22031 DATE: January 19, 2023 MILLWORK ELEVATION, SECTIONS & DETAILS

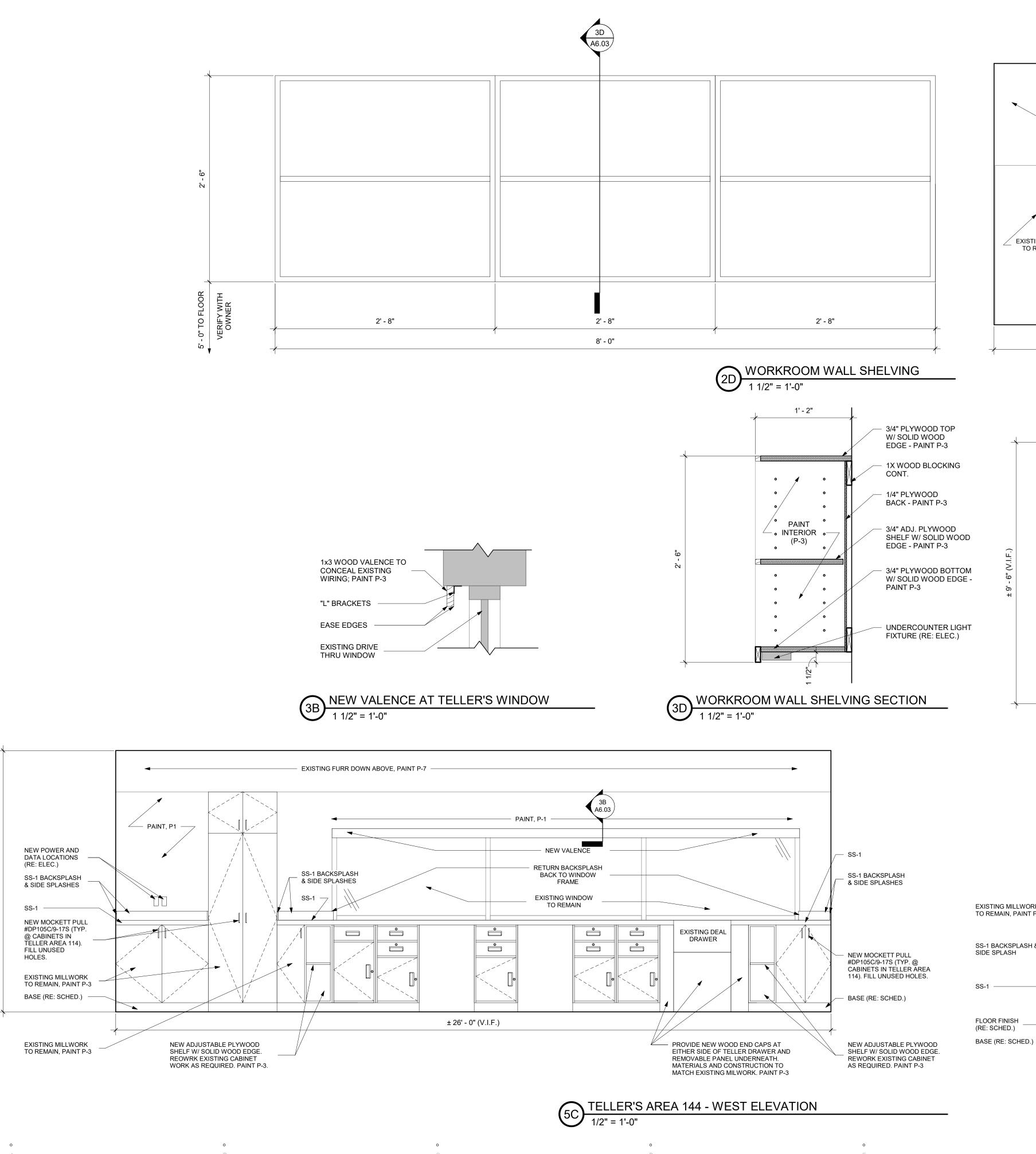
S C M A R C H I T E C T S P. L. L.

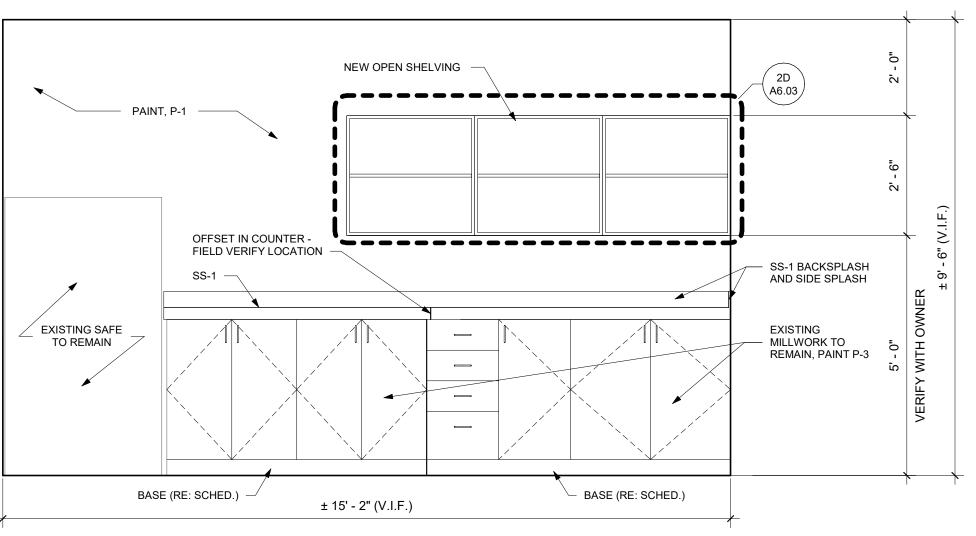
EXISTING MILLWORK -TO REMAIN, PAINT P-3

MILLWORK ELEVATION - LOBBY - A 102

1/2" = 1'-0"

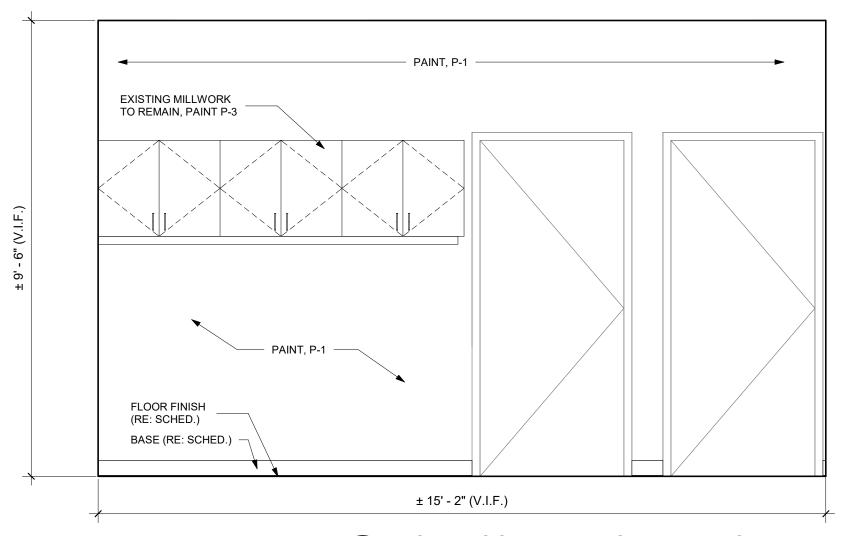
EXISTING WOOD BASE TO REMAIN





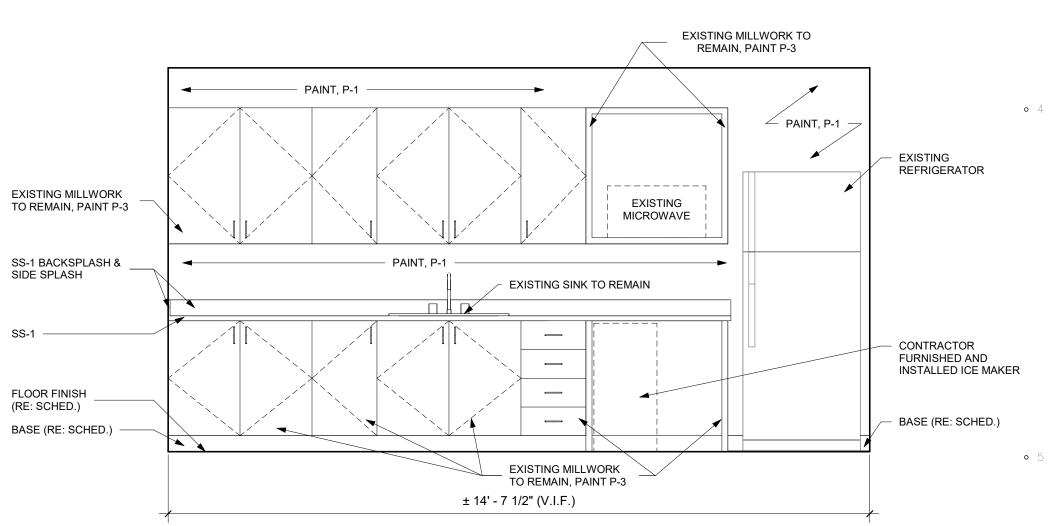
WORK ROOM 115 - WEST ELEVATION

1/2" = 1'-0"



WORK ROOM 115 - EAST ELEVATION

1/2" = 1'-0"



BREAK ROOM 113 MILWORK ELEVATION

1/2" = 1'-0"

PROJECT NO.
22031
DATE:
January 19, 2023
MILLWORK
ELEVATIONS,
SECTIONS &
DETAILS

ROA

OLDS 72022

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

A6.03

GENERAL DEMOLITION NOTES

- . THE ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO VISIT THE SITE TO FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS PRIOR TO BID.
- 2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL DEMOLITION INDICATED ON THESE DRAWINGS. ALL WIRING DEVICES, LIGHT FIXTURES, WIRE, & CONDUIT THAT IS TO BE REMOVED SHALL BE STORED AS DIRECTED BY THE OWNER OR RELOCATED AS SHOWN ON THE NEW FLOOR PLAN. APPROPRIATE MEASURES SHALL BE TAKEN TO ASSURE CONTINUITY OF EXISTING CIRCUITS WHERE REQUIRED, AND ALL OUTAGES WHICH MAY RESULT SHALL BE COORDINATED WITH THE OWNER PRIOR TO THE WORK.
- 3. ALL EXISTING BRANCH CIRCUITS NOT USED SHALL BE REMOVED BACK TO SERVING PANELBOARD. THE CIRCUIT BREAKERS SHALL BE LABELED AS SPARE.

(1)

DEMOLITION PLAN - ELECTRICAL

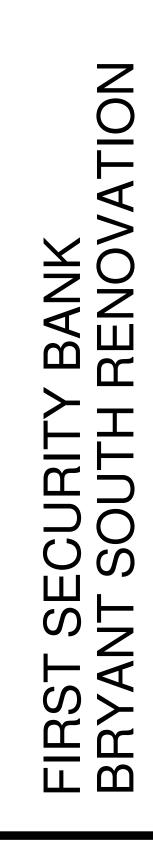
1/8" = 1'-0"

4. COORDINATE EXTENTS OF DEMOLITION WITH ALTERNATE 01.

ELECTRICAL DEMOLITION KEYED NOTES

- REMOVE EXISTING LIGHT FIXTURE AND DISPOSE OFF SITE. INSTALL NEW LIGHT FIXTURE IN SAME LOCATION AS SHOWN ON NEW PLAN AND RECONNECT TO EXISTING BRANCH CIRCUIT.
- 2 REMOVE EXISTING LIGHT FIXTURE AND DISPOSE OFF SITE. INSTALL BLANK COVER OVER EXISTING LIGHT FIXTURE J-BOX.
- REMOVE EXISTING LIGHT FIXTURE AND DISPOSE OFF SITE. MAINTAIN CONTINUITY OF EXISTING LIGHTING BRANCH CIRCUIT TO CONNECT TO NEW FIXTURES AS SHOWN ON NEW FLOOR PLAN.
- REMOVE EXISTING FLUORESCENT LAMPS AND BALLAST'S AND RETROFIT WITH NEW LED TUBE 35K LAMPS IN EXISTING LIGHT FIXTURE. REMOVE EXISTING LENS AND REPLACE WITH NEW LENS.
- $\langle 5 \rangle$ WORK PERFORMED UNDER ALTERNATE 01.





SCALE AT FULL SIZE: 1/8" = 1'-0"

PROJECT NO.

January 19, 2023 DEMOLITION PLAN -ELECTRICAL

E0.01

1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223 (501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

ARKANSAS

REGISTERED

PROFESSIONAL

NO. 12363

DAVID

DAVID

REGISTERED

PETTIT & PETTIT

CONSULTING

ENGINEERS, INC.

No. 78

No. 78

PETTIT & PETTIT

CONSULTING

PROFESSIONAL

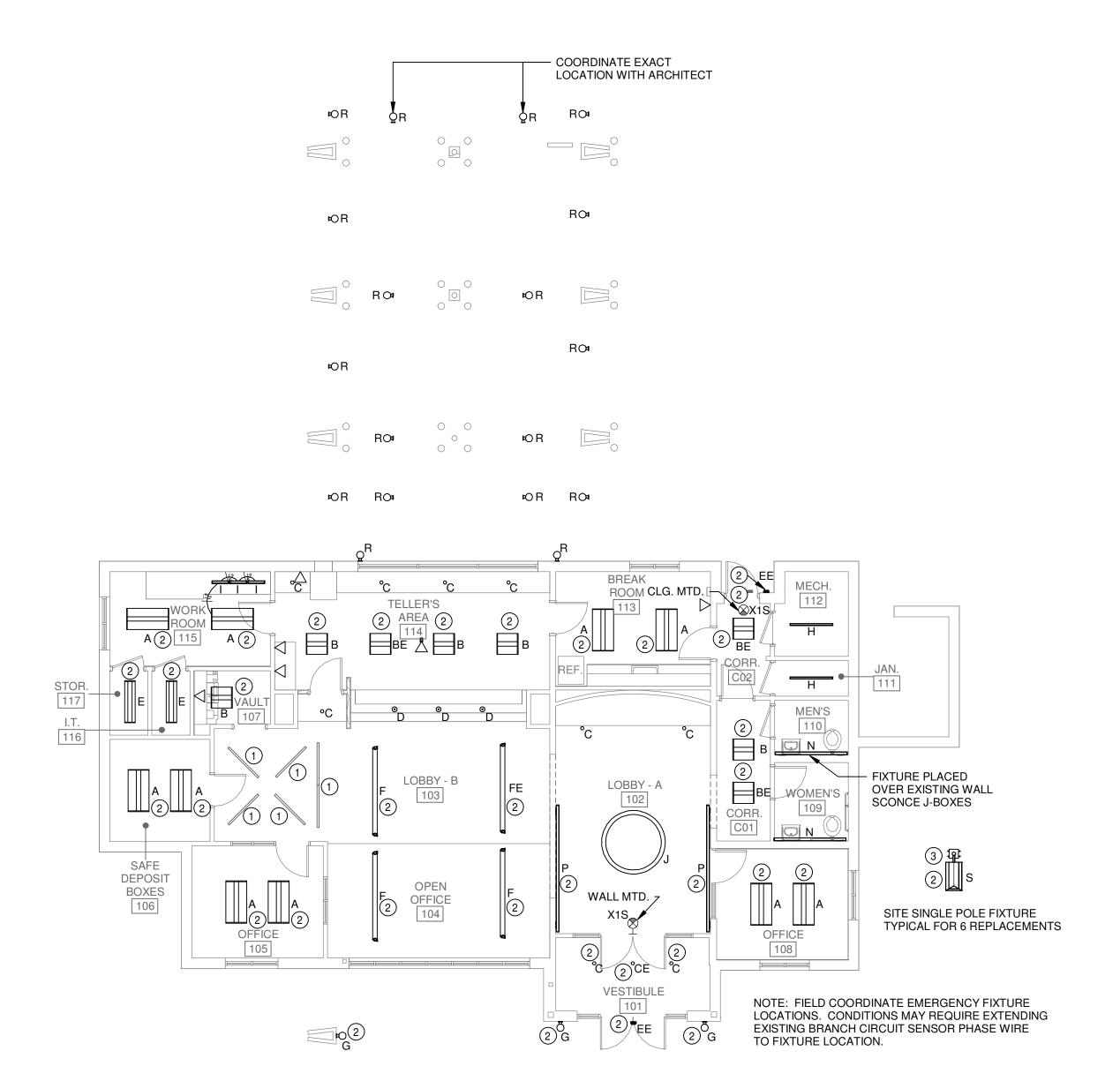
O 2023

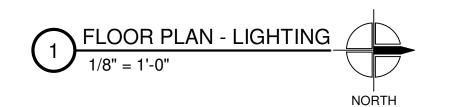
PETTIT & PETTIT

CONSULTING ENGINEERS, INC.

LIGHTING KEYED NOTES

- (1) INSTALL NEW SMOOTH OPAQUE LENS IN EXISTING RECESSED LINEAR LIGHT FIXTURE.
- 2 LIGHT FIXTURE INSTALLED UNDER ALTERNATE 01.
- 3 ELIMINATE EXISTING SITE LIGHTING SWITCH CONTROL AND INSTALL NEW PHOTOCELL ONLY LIGHTING CONTROL FOR EXISTING SITE POLE LIGHTS. RE-USE EXISTING CONTACTOR AND PROVIDE 120V CONTROL WIRING BETWEEN PHOTOCELL MOUNTED ON EXTERIOR OF BUILDING AND LIGHTING CONTACTOR.





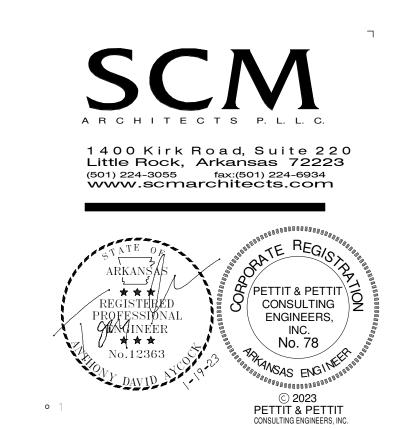
BRYANT, AR 72022
BRYANT, AR 72022

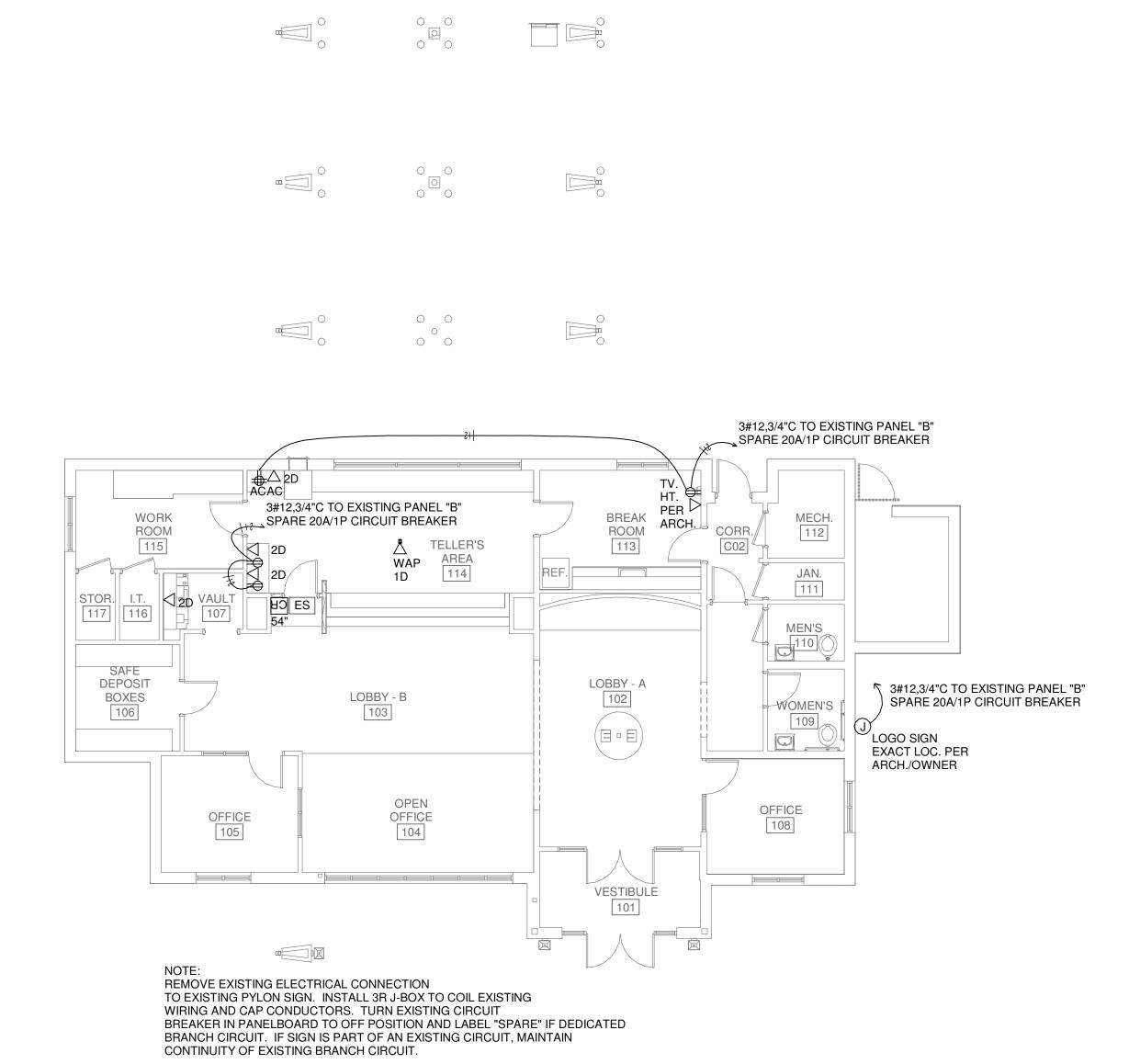
ADD 01 2-9-2023

PROJECT NO. 22031 DATE: January 19, 2023

FLOOR PLAN -LIGHTING

E1.01





1 FLOOR PLAN - POWER 1/8" = 1'-0"

NORTH

FIRST SECURITY BANK
BRYANT SOUTH RENOVATI
1823 N. REYNOLDS ROAD
BRYANT, AR 72022

o 2

REVISIONS:

PROJECT NO.
22031
DATE:
January 19, 2023

FLOOR PLAN -POWER

E1.02

S C M A R C H I T E C T S P. L. L. C. c 2014

0 2' 4' 8' 16'

SCALE AT FULL SIZE: 1/8" = 1'-0"

	LIGHT FIXTURE SCHEDULE							
TYPE				ELECTRICAL				
MARK	MANUFACTURER	MODEL	LAMP	DATA	DESCRIPTION			
4	PINNACLE	LU24-A-835MO-GX-U-FSD-1-0-WX	LED-3996L-35K	120 V/1-34 VA	2'x4' ARCHITECTURAL TROFFER			
3	PINNACLE	LU22-A-835HO-GX-U-FSD-1-0-WX	LED-4406L-35K	120 V/1-34 VA	2'X2' ARCHITECTURAL TROFFER			
3E	DAYBRITE	SAME AS B W/EMERG. BATTERY	LED-3990L-35K	120 V/1-34 VA	2'X2' ARCHITECTURAL TROFFER			
)	ALPHABET LIGHTING	NU4RDXTM1920LM35K83D60NLUNVDIM10RET-CBA	LED-1730L-35K	120 V/1-22 VA	4" RECESSED DOWNLIGHT			
Œ	ALPHABET LIGHTING	SAME AS C W/EMERG. BATTERY	LED-1730L-35K	120 V/1-22 VA	4" RECESSED DOWNLIGHT			
)	OCL	GS1P1X14CRXLED135KUNVXDM1	LED-825L-35K	120 V/1-11 VA	14" PENDANT			
Ī	DAYBRITE	1CAXG38L-8354DSUNVDIMX	LED-3800L-35K	120 V/1-26 VA	1'X4' ARCHITECTURAL TROFFER			
E	EVENLITE	WLEM-BZ-CT	LED	120 V/1-20 VA	SELF CONTAINED EMERGENCY LIGHT EXTERIOR			
	FLUXWERX	FD1XFD35XDF2MX	LED-8864L-35K	120 V/1-76 VA	SUSPENDED DIRECT/INDIRECT			
E	FLUXWERX	SAME AS F W/EMERG. BATTERY	LED-8864L-35K	120 V/1-76 VA	SUSPENDED DIRECT/INDIRECT			
	OCL	VA2-O10A-08-WF-CBA-LED3-40K-UNV-DM1	LED-3035L-35K	120 V/1-24 VA	WALL MOUNTED CYLINDER UP/DN WIDE THROW			
ł	DELVIRO	ZIP4408035KUFRWHXXX	LED-5378L-35K	120 V/1-42 VA	4' STRIP LIGHT			
	DAYBRITE	LINCS100EL19935UNVWHGDIM	LED-391L-35K	120 V/1-5 VA	19" UNDER CABINET LED			
	OCL	GL1P1X-72-MW-CBA-LED2-35KUNVDM1-X	LED-16275L-35K	120 V/1-175 VA	ARCHITECTURAL RING PENDANT			
1	GAMMALUX	GB24B2-1/1SL358-UNIV-ZTV10-6'-10"-WSP-LDC/ASLHD-CBAX-X	LED-6943L-35K	120 V/1-67 VA	6'-10" WALL MOUNT BIDRECTIONAL			
)	GAMMALUX	GB34U2-2SL358-UNIV-ZTV10-12'N-WMX-X-XX	LED-5428L-35K	120 V/1-76 VA	12' WALL MOUNTED INDIRECT			
?	PATHWAY LIGHTING	C77WLB79VD204KML9D8-X	LED-3035L-35K	120 V/1-15 VA	WALL MOUNTED CYLINDER			
3	NLS LIGHTING	NV-2-T4-48L-1-40K8-UNV-MATCH-X	LED-18876L-40K	120 V/1-156 VA	PARKING LOT FIXTURE REPLACEMENT EX. POLE TO REMAIN			
<1S	EVENLITE	TEXZ-URC-EM-R-URC	LED	120 V/1-3 VA	EDGE LIT EXIT SIGN SEE PLANS FOR MOUNTING			

NOTE: COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN AND EXISTING CONDITIONS FOR ANY ADDITIONAL TRIM THAT MAY BE REQUIRED ON LIGHT FIXTURES.

20/2023 10:38:32 AM

SCM
ARCHITECTS P. L. C.
1400 Kirk Road, Suite 220 Little Rock, Arkansas 72223

(501) 224-3055 fax:(501) 224-6934 www.scmarchitects.com

PETTIT & PETTIT ON SULTING

ENGINEERS,

No. 78

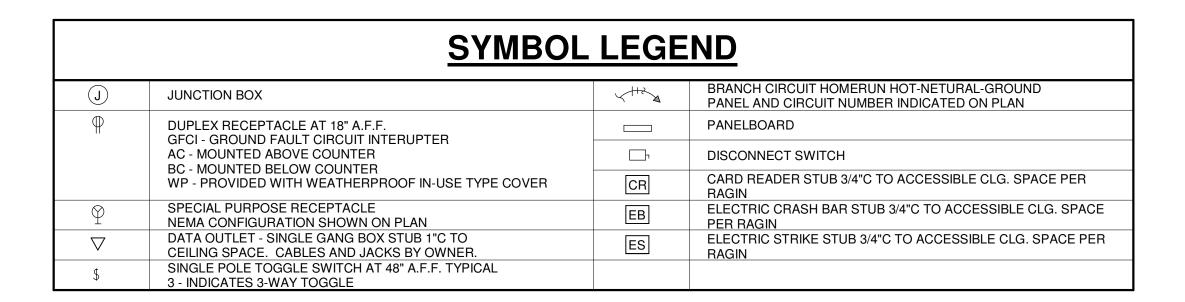
PETTIT & PETTIT
CONSULTING ENGINEERS, INC.

ARKANŞAS

REGISTERED PROFESSIONAL JUNGINEER

'/ **★★★**

No.12363



ELECTRICAL GENERAL NOTES

- CIRCUITS OF DIFFERENT PHASES MAY SHARE EQUIPMENT GROUND. EQUIPMENT GROUND CONDUCTOR SIZE SHALL NOT BE LESS THAN #12 AWG OR AS INDICATED ON THE DRAWINGS.
- 2. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID COPPER THW, THHN, THWN, AND ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER USING BOLTED LUGS AT TERMINALS.
- 3. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED. SEE SPECS FOR CONDUIT REQUIREMENTS. ALL CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
- MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS OTHERWISE NOTED.
- ALL WORK SHALL COMPLY WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.
- 6. ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE WITH MECHANICAL AND PLUMBING CONTRACTORS FOR EXACT LOCATION OF HVAC AND PLUMBING EQUIPMENT.
- 7. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SIZING OF ALL MOTOR OVERLOAD DEVICES (HEATERS) IN STARTERS BASED ON ACTUAL NAMEPLATE RATINGS ON THE MOTOR BEING INSTALLED.
- 3. USE COMPRESSION FITTINGS ON CONDUIT, SET SCREW FITTINGS ARE NOT ALLOWED.
- 9. LABEL ALL NEW CIRCUITS ON PANEL SCHEDULES.
- 10. 6'-0" MAXIMUM LENGTH ON FLEXIBLE CONDUIT.
- 11. FIRE PROOF ALL PENETRATIONS MADE THROUGH FIRE RATED WALLS.
- 12. ALL DEVICES SHALL BE RATED 20 AMP MINIMUM, VERIFY COLOR WITH ARCHITECT.
- 13. CONNECT DEVICES BY WRAPPING WIRE AROUND SCREW TERMINAL IN A CLOCKWISE DIRECTION AND TIGHTEN SCREW, BACK-CONNECTED SPRING DEVICES ARE NOT ALLOWED.
- 14. PULL ALL THE CONDUCTORS THROUGH RACEWAY AT THE SAME TIME.
- 15. ALL BOXES SHALL BE INDEPENDANTLY SUPPORTED TO THE BUILDINGS STRUCTURE.
- 16. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL ELEVATIONS AND MILLWORK DETAILS FOR EXACT LOCATIONS OF ALL WIRING DEVICES
- 17. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LAY-IN LIGHT FIXTURES.
- 18. THE SPECIFICATIONS ARE AS BINDING ON THE CONTRACTOR AS THE DRAWINGS. THE CONTRACTOR SHALL READ THE SPECIFICATIONS AND SHALL INCLUDE ALL ITEMS REQUIRED BY THE SPECIFICATIONS BEFORE SUBMITTING A BID.
- 19. ALL SPARE CIRCUIT BREAKERS SHALL BE TURNED TO THE OFF

FIRST SECURITY BANK BRYANT SOUTH RENOVATION

REVISIONS:

PROJECT NO.
22031
DATE:
January 19, 2023

ELECTRICAL SCHEDULES AND NOTES

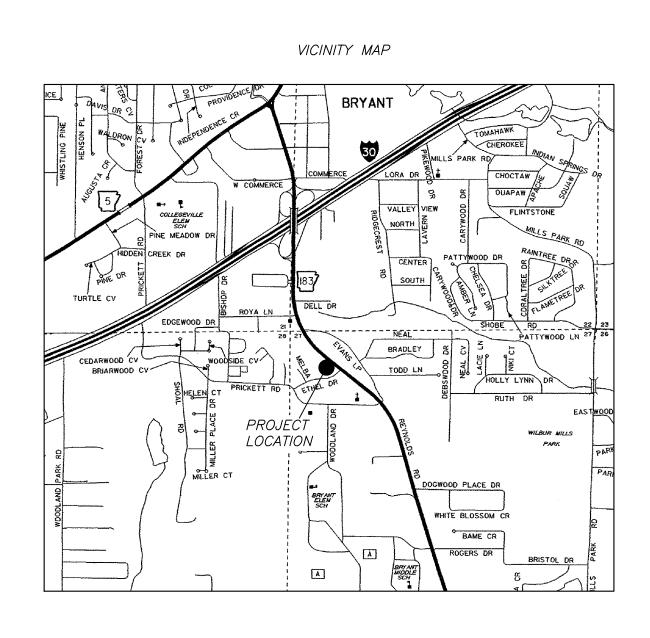
E2.01

DETAILED PLANS:

FIRST SECURITY BANK

ENTRANCE & DRIVE THROUGH IMPROVEMENTS

1823 N. REYNOLDS RD BRYANT, ARKANSAS



Prepared By:



1/19/2023

PREPARED FOR:

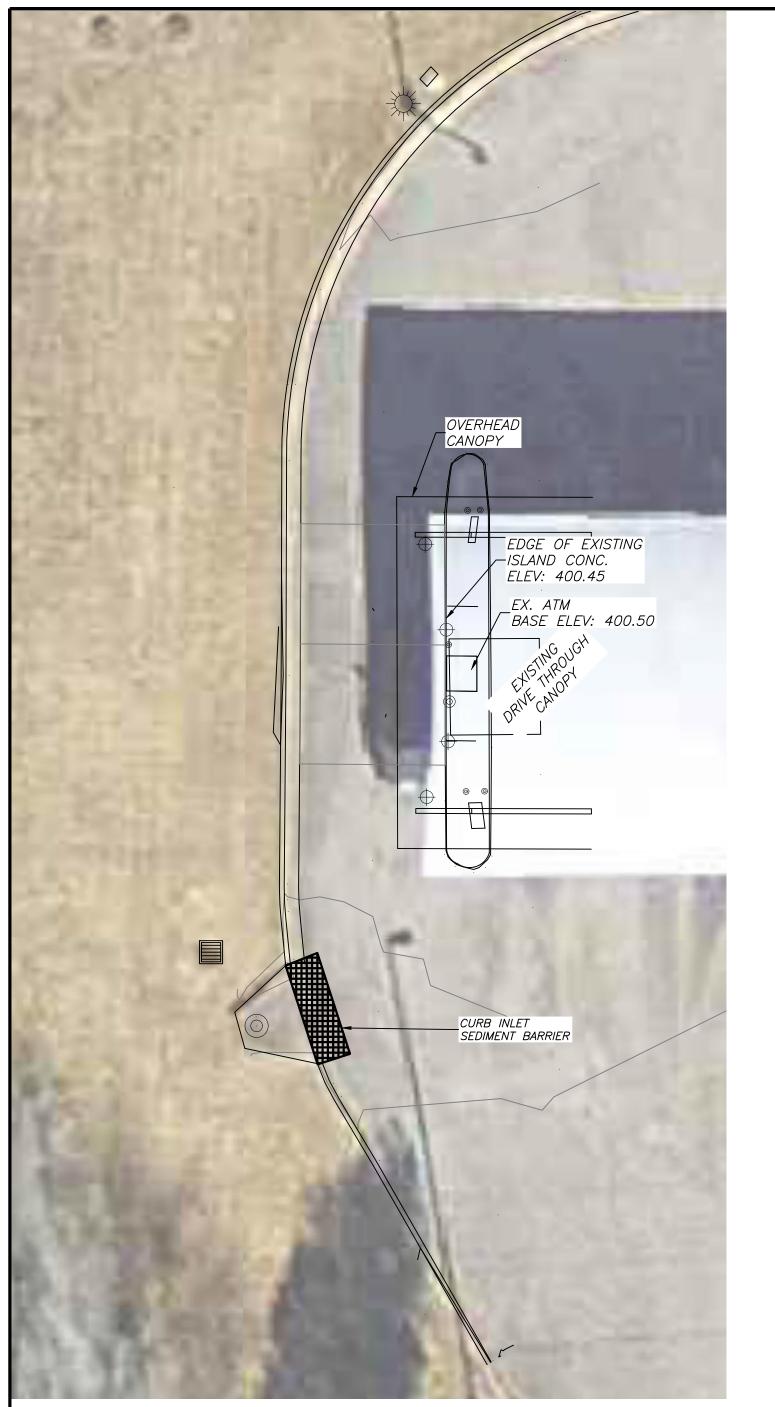
FIRST SECURITY BANK 1823 N. REYNOLDS RD BRYANT, AR 72022



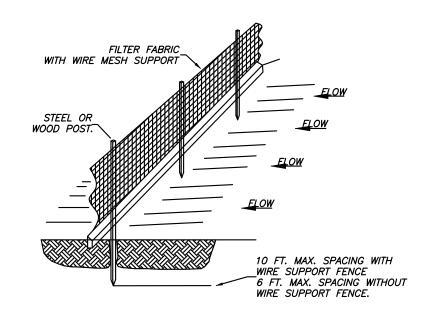
PRE-CONSTRUCTION COPY -

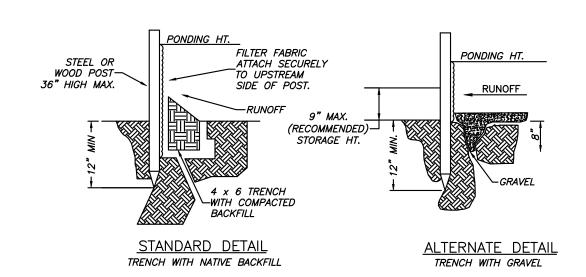
PLANS FOR BIDDING PURPOSES.
QUANTITIES TO BE VERIFIED PRIOR
TO CONSTRUCTION. CONTRACTOR
TO VERIFY GRADES WITH ENGINEER
PRIOR TO CONSTRUCTION.

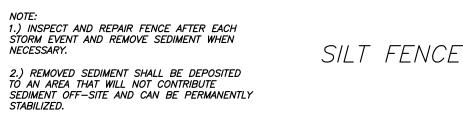
INDEX OF SHEETS	
COVERSHEET	
SWPPP	C. 1
DEMOLITION PLAN	C.2
SITE PLAN	C.3
GRADING PLAN	C.4











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

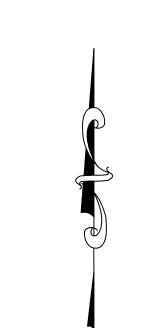


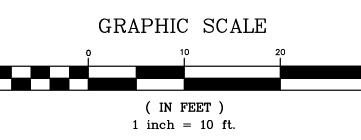


ZAT 10

NORTH & WILBUR MILLS LOCATION

VICINITY MAP





GENERAL EROSION CONTROL NOTES

1. THE LOCATION OF KNOWN SURFACE & SUBSURFACE STRUCTURES, PIPE, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INFORMATION AND SATISFYING HIMSELF AS TO THE LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SHOWN. ALL REPAIRS OR RELOCATIONS NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITY OR STRUCTURE. THE COST OF SUCH REPAIRS OR RELOCATIONS NECESSARY SHALL BE BORNE BY THE CONTRACTOR.

2. ALL STREETS, DRIVES, WALKS, DRAINAGE STRUCTURES, FENCES, ETC. THAT ARE DISTURBED SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION USING LIKE MATERIALS. COST OF SUCH REPAIRS SHALL BE BORNE BY THE CONTRACTOR UNLESS PROVISION FOR PAYMENT IS MADE IN THE PROPOSAL.

3. EROSION CONTROL DEVICES SHALL BE INSTALLED AS THE PROJECT PROGRESSES AND AREAS ARE DISTURBED.

4. THE CONTRACTOR IS REQUIRED TO NOTIFY THE ONE CALL CENTER AT 1-800-482-8998 48 HOURS PRIOR TO DIGGING IN ORDER THAT UNDERGROUND UTILITIES IN THE AREA CAN BE LOCATED.

5. ALL INLETS ON AND ADJACENT TO THE SITE SHALL BE PROTECTED FROM SEDIMENT.

6. STORM WATER CONTROLS SHALL BE INSPECTED AT LEAST ONCE EVERY 14 DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.25 INCHES OR GREATER

7. ALL EROSION CONTROL DEVICES ARE TO BE MAINTAINED IN GOOD WORKING CONDITION THROUGHOUT THE DURATION OF THIS PROJECT AND UNTIL PERMANENT VEGETATION IS ESTABLISHED. ALL SEDIMENT TRAPS ARE TO BE CLEANED AS REQUIRED.

8. ALL DISTURBED AREAS LEFT IDLE FOR A PERIOD OF 14 DAYS OR LONGER ARE TO RECEIVE TEMPORARY VEGETATION AND MULCHED.

VEGETATION IS ESTABLISHED. 10. DEVELOPMENT SHALL ADHERE TO CITY OF BRYANT AND ADEQ

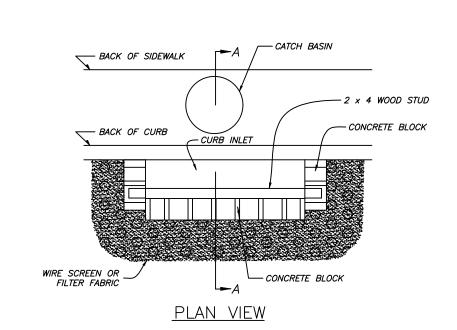
9. REMOVE EROSION CONTROL DEVICES AFTER PERMANENT

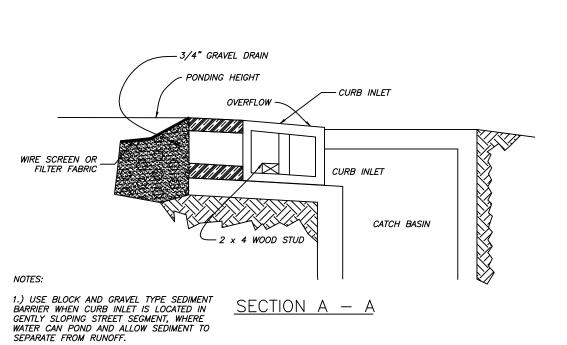
STORM WATER REQUIREMENTS.

11. ADDITIONAL EROSION CONTROL MEASURES TO BE EMPLOYED WHERE NECESSARY BY SITE CONDITIONS.

12. CONTRACTOR TO COMPLY WITH ALL OSHA SAFETY REQUIREMENTS. 13. ARDOT PERMIT SHALL BE OBTAINED PRIOR TO WORKING ON HIGHWAY DEPARTMENT RIGHT OF WAY.

- 1. GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625 (AHTD SPECS).
- 2. TYPE A USE ON SMALL DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS LESS THAN SIX MONTHS AND THE SLOPE GRADIENT IS LESS THAN 3:1.
- 3. TYPE B USE ON DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS GREATER THAN SIX MONTHS AND WHERE THE SLOPE GRADIENT IS 3:1 OR GREATER.
- 4. TYPE C USE WHERE SLOPES EXCEED A VERTICAL HEIGHT OF 20 FEET AND THE SLOPE GRADIENT IS STEEPER THEN 3:1.
- 5. INSPECT BARRIERS AT THE END OF EACH WORKING DAY, OR AFTER EACH RAIN, AND REPAIR OR CLEAN AS NECESSARY.
- 6. REMOVE SEDIMENT FROM BARRIER WHEN ONE HALF FULL.
- 7. DISPOSE OF SEDIMENT AND STABLIZE IT WITH VEGETATION.
- 8. REPLACE FILTER FABRIC WHEN DETRIORATED.
- 9. DESIGN LIFE OF A SYNTHETIC SILT FENCE IS APPROXIMATELY 6 MONTHS.
- 10. MAINTAIN UNTIL THE PROJECT IS VEGETATED OR OTHERWISE STABILIZED.
- 11. REMOVE BARRIERS AND ACCUMULATED SEDIMENT AND STABILIZE THE EXPOSED AREA WHEN THE PROJECT IS STABILIZED.
- 12. SILT FENCE SHALL BE INSTALLED ALONG THE CONTOUR, NEVER UP OR DOWN A
- 13. THE MAXIMUM DRAINAGE AREA FOR A CONTINUOUS FENCE WITHOUT BACKING SHALL BE 1/4 ACRE PER 100 LINEAR FEET OF FENCE LENGTH, UP TO A MAXIMUM AREA OF 2 ACRES. THE MAXIMUM SLOPE LENGTH BEHIND THE FENCE ON THE UPSLOPE SIDE SHOULD BE 110 FEET (AS MEASURED ALONG THE GROUND SURFACE).
- 14. THE MAXIMUM DRAINAGE AREA FOR A CONTINUOUS SILT FENCE WITH BACKING SHALL BE 1 ACRE PER 150 LINEAR FEET OF FENCE LENGTH. THE SLOPE LENGTH ABOVE THE SILT FENCE WITH BACKING SHOULD BE NO MORE THAN 300 FEET.





2.) BARRIER SHALL ALLOW FOR OVERFLOW FROM SEVERE STORM EVENT. 3.) INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

CURB INLET SEDIMENT BARRIER

ROGERS DR



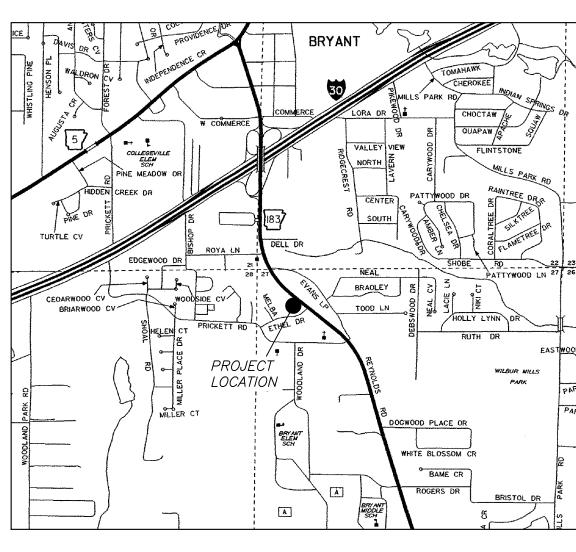
GENERAL CONSTRUCTION NOTES

- A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.
- B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING
- C. ALL SITE AND UTILITY IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE BRYANT STANDARD SPECIFICATIONS.
- D. THE APPROXIMATE LOCATION OF KNOWN SURFACE AND SUBSURFACE STRUCTURES, PIPES, POWER GAS, PHONE, SERVICE CONNECTIONS, ETC. ARE SHOWN ON THE DESIGN DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SHOWN.
- E. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
- F. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
- G. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY BRYANT. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.
- H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.
- I. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.
- J. CONTRACTOR TO COMPLY WITH ALL OSHA SAFETY REQUIREMENTS.
- K. ARDOT PERMIT SHALL BE OBTAINED PRIOR TO WORKING ON HIGHWAY DEPARTMENT RIGHT OF WAY.





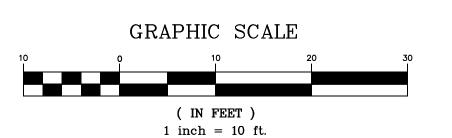
VICINITY MAP



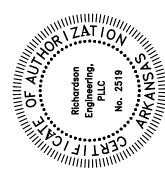
DEMO NOTES:

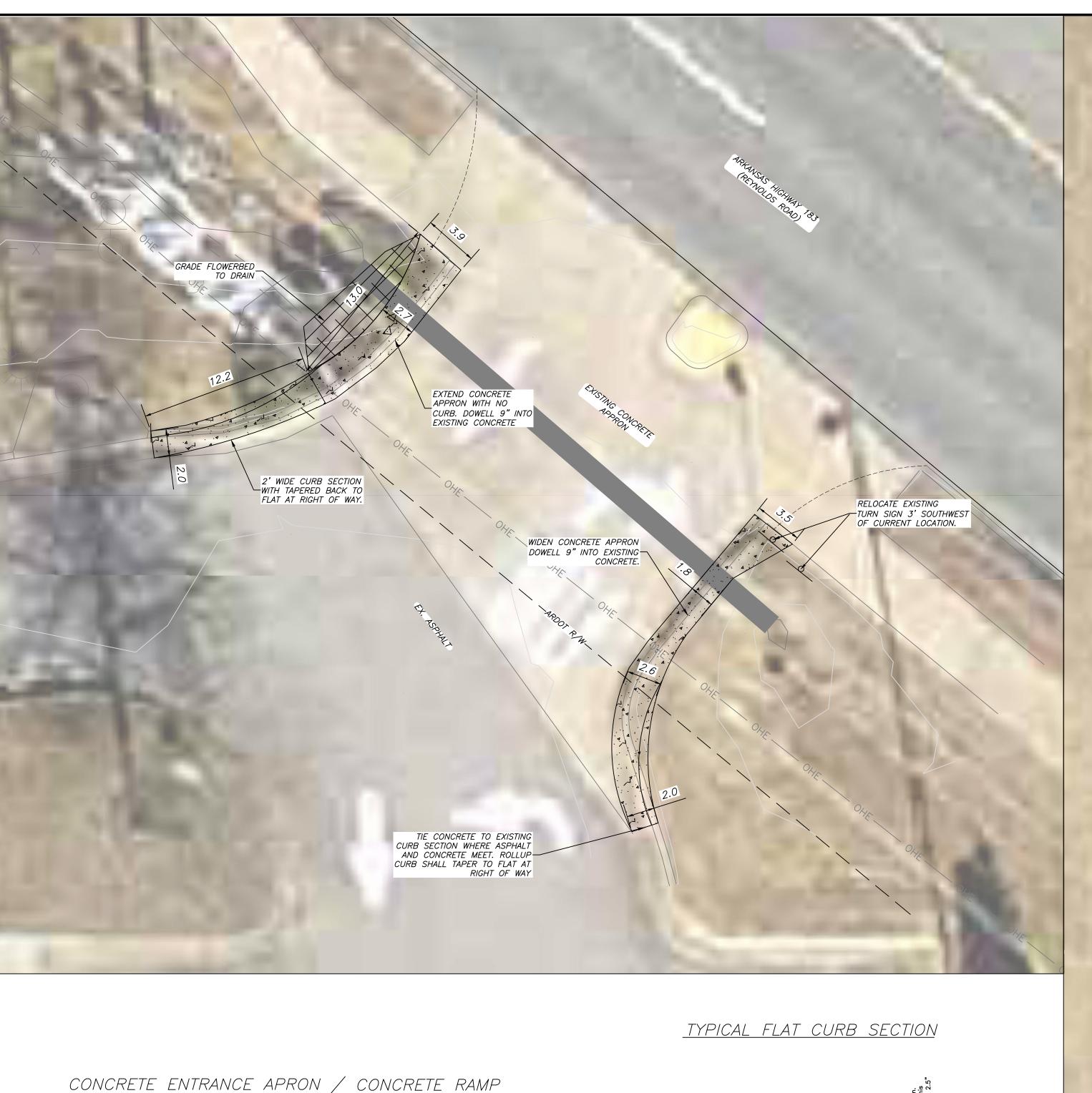
1) QUANTITATIVE AREAS ARE APPROXIMATE, TO BE VERIFIED BY THE DEMOLITION CONTRACTOR.

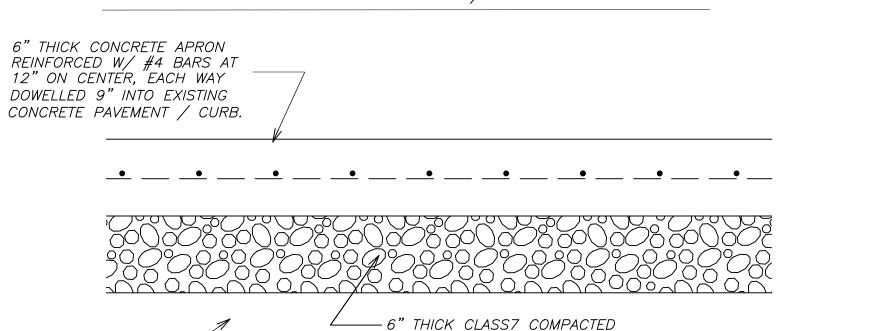










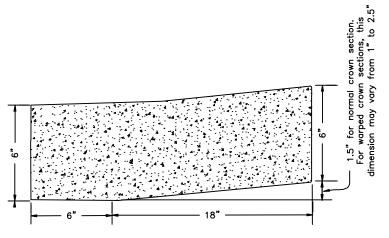


TO 95% MODIFIED PROCTOR

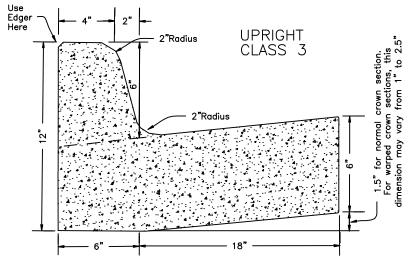
DENSITY

-6" THICK SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY

> * CONCRETE PAVEMENT SECTION SUBJECT TO GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.



TYPICAL PARKING CURB SECTION





PROPOSED

CONTROL JOINT -

18" W X 1" D

EXISTING CURB TO REMAIN.

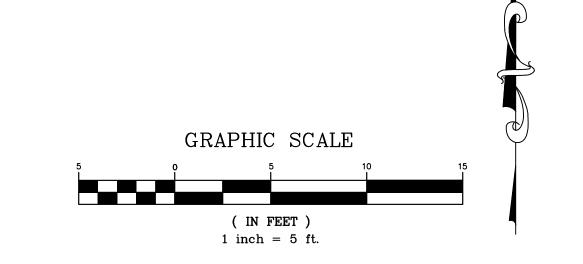
DOWELL 9" INTO EXISTING CURB. (USE SMOOTH DOWELLS

THIS SECTION.)

EXISTING ASPHALT

CONCRETE RAMP

SAW CUT EXISTING ASPHALT



GENERAL CONSTRUCTION NOTES

- A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.
- B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING
- C. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITIY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
- D. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
- E. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
- F. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.
- G. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY
- H. ARDOT PERMIT SHALL BE OBTAINED PRIOR TO WORKING ON HIGHWAY DEPARTMENT RIGHT OF WAY.

SITE NOTES

EDGE OF EXISTING

BASE ELEV: 400.50

__ISLAND CONC.

EX. ATM

EXISTING ISLAND CONCRETE

EXISTING CONCRETE. (USE SMOOTH DOWELL THIS SECITON.)

TO REMAIN. DOWELL 9" INTO

ELEV: 400.45

- 1.) PROJECT DIMENSIONS ARE SHOWN FOR REFERENCE AND MAY REQUIRE FIELD
- 2.) PROJECT PROVIDES IMPROVED ACCESS FROM HIGHWAY 183 AND TO ATM MACHINE 3.) CURRENT ZONING: C2 CURRENT USE: PARKING ENTRANCE & BANK DRIVE THROUGH
- 5.) PROPOSED LOCATIONS OF TRAFFIC CONTROL MARKERS ARE APPROXIMATE. ACTUAL LOCATION AND INSTALLATION MUST MEET MUTCD AND BRYANT STREET
- 6.) PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH AHTD SPECIFICATIONS, AND BASED ON GEOTECHNICAL ANALYSIS OF THE SOIL CONDITIONS. 7.) CONTRACTOR SHALL INCLUDE IN BID THE COST FOR COMPACTION TESTS
- ON SUBGRADE & BASE. TEST TO BE CONDUCTED AS PER GEOTECHNICAL SPECS. 9.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, UTILITY OWNER, ETC.) 10.) CONTRACTOR TO ADHERE TO CURRENT OSHA REGULATIONS TO INCLUDE EXCAVATION
- 11.) THE APPROXIMATE LOCATION OF KNOWN SURFACE AND SUBSURFACE STRUCTURES, PIPES, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE DESIGN DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF
- THE AFOREMENTIONED ITEMS, SHOWN AND NOT SHOWN. 12.) ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO MEET THE CITY

UTILITIES

SUMMIT

SANITARY SEWER: BRYANT WASTEWATER 1019 SW SECOND ST. BRYANT, AR 72022

OF BRYANT SPECIFICATIONS.

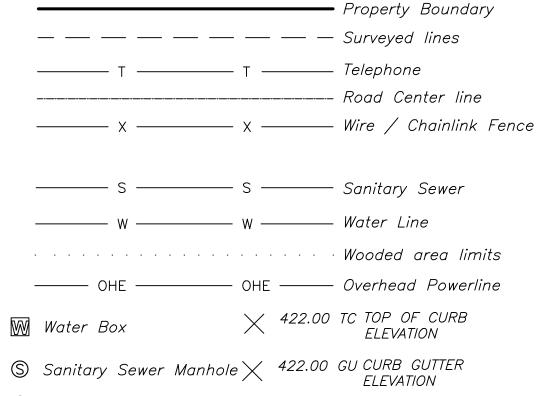
BRYANT 1019 SW SECOND ST. BRYANT, AR 72022

ELECTRIC: ENTERGY 425 W. CAPITAL AVE. LITTLE ROCK, AR 72201 NATURAL GAS:

400 WEST CAPITOL #600 LITTLE ROCK, ARKAŃSAS



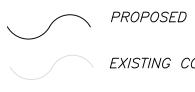
Legend



Sanitary Sewer Manhole
 422.00 TP TOP OF PAVEMENT

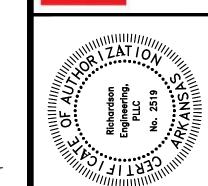
T Telephone Pedistal

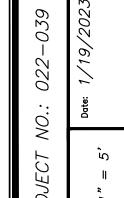
PROPOSED CONCRETE



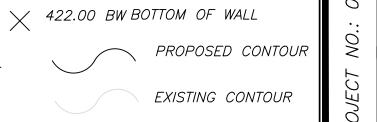
X 422.00 TW TOP OF WALL

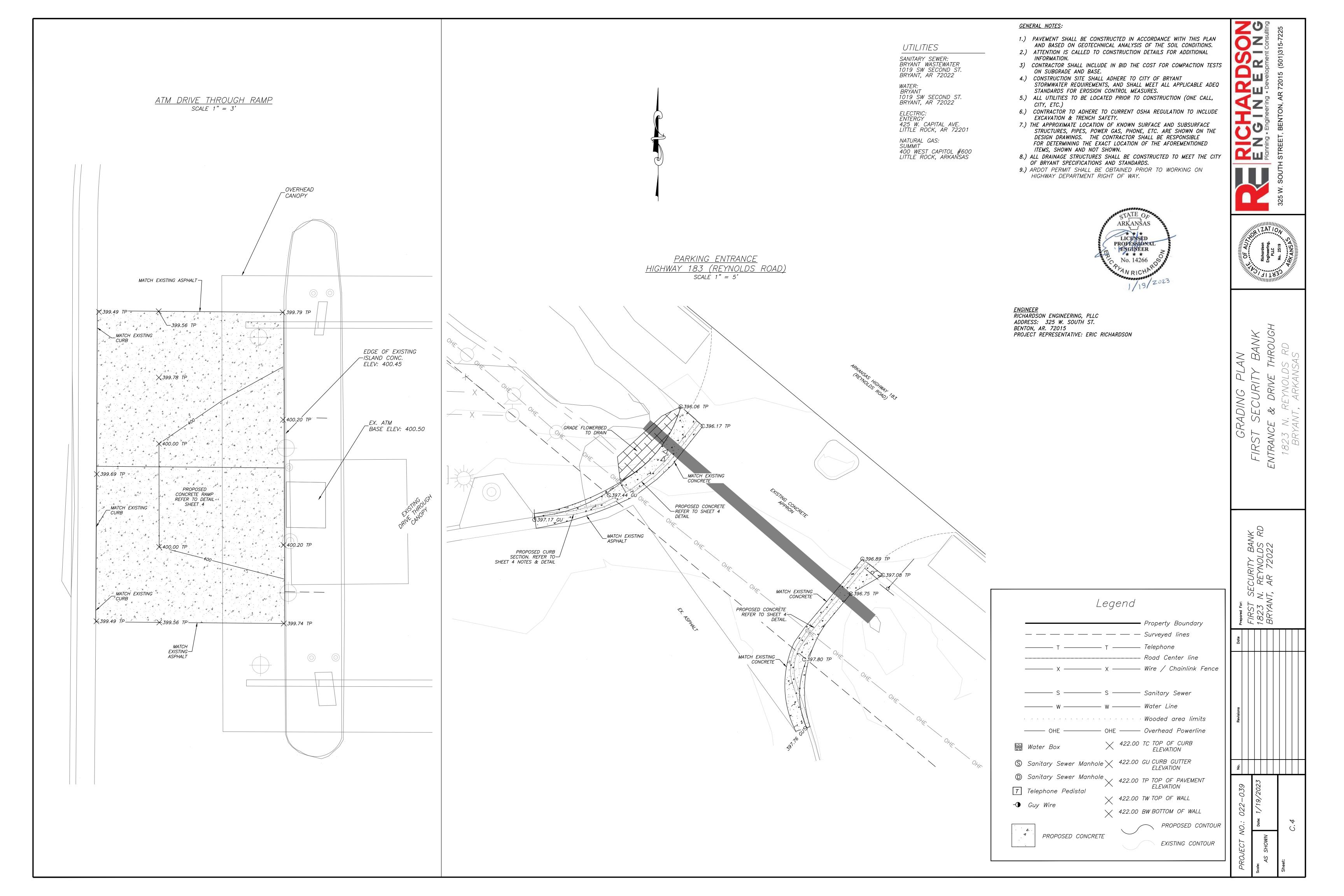
ELEVATION











DATE



PROJECT NAME BRIAN LEONARD

PROJECT DESCRIPTION

Branch MAJOR PROJECTS CENTRAL

Address brianl@satelliteco.com

LOCATION Phone 918-645-1010

Fax

		RES	SPONSIBIL	ITY			
ITEM			Customer		NOTES		
Section 1, Design & Engineering							
A. Site inspection.			Х				
B. Provide suggested pier or foundation plan with anchoring locations, blocking points & KIP loads to		х					
to-grade piers, or dry-block set. C. Provide engineered foundation drawing includi		-					
building anchoring system.				X			
D. A/E fees & soil reports for engineered foundation				Х			
Provide modular building drawings for approval b or owner's representative.		X					
F. Provide drawings detailing stub-down locations for water, & electrical.	or sewer,			х			
Local code compliance, fire alarm and sprinkler systems, site plan	ns,			Х			
testing services, planning & zoning submissions, surveys & stakes	out of			Х			
site are by Customer.							
Section 2, Contractual							
A. Payment/Performance Bond				Х			
B. Insurance: Liability and Workmen's Compensation	on			X			
C. Insurance: Property and Builder's Risk			Χ				
D. Taxes: Sales, Use, Excise or Personal Property			Χ				
E. Wages: Non-prevailing, non-union				Х			
Language Committee of Controlling to the state of the sta							
Lease/rental contracts on Satellite paper. Other contracts shall have							
agreeable terms and conditions; all quotes subject to verification of	or crean						
Section 3, Permits, Fees, & Inspections							
A. Bldg. module transportation permits & fees.		X					
B. Bldg. permit application & inspections			X				
C. Bldg. permit fee.			Х				
All tap and impact fees, zoning approvals and any other permit or							
or use fees and inspections (elec/mechanical/gas) are by Custome	er						
Section 4, Site Preparation							
A. Install flush-to-grade piers for dry blocking			Х				
B. Install engineered, mortared foundation & blocks			^	Х			
C. Install step & ramp foundation per plans			Х				
D. Install footings or foundations			X				
E. Sure-Wall piers			-	Х			
F. Spread foundation spoils on site				X			
G. Remove soils from site				Х			
H. Site clearing			Χ				
Site shall be level (to within 1' in 70'), truck accessible, with a minimum so							
2,000 PSF clear of obstructions above and below ground. Satellite is not							
for settling due to improper foundations, inadequate soil bearing, poor site	-						
Pricing is based on normal soils. Adequate secure staging area by Custo	omer.						

	ITEM	Satellite	Customer	NIC*	NOTES				
Sec	tion 5, Installation								
A.	Receive & sign for modules; inspect for damage		Х						
B.	Position module units over flush to grade piers with truck	Х							
	(Dry stack block set).			.,					
C.	Crane set module units Remove hitches	V		X					
D. E.	Remove axles and tires	Х		Х					
F.	Store hitches, axles and tires under building			X					
G.	Install in-ground anchors or weld to foundation plates per								
	drawings			X					
Н.	Adjust all doors - install ship loose items	Х							
I	Install lockers, marker/tack boards, other items			X					
J.	Complete factory supplied suspended ceiling	X							
K.	Complete gypsum ceiling at seam lines			X					
L.	Complete scuppers or gutters & downspouts			X					
M.	Site install floor covering with materials as specified	X							
N.	Complete all exterior trim & skirting to match exterior.	Х	X						
0. P	Install steps & ramps per drawings Install canopies per drawings		^	Х					
	ilistali caliopies pei urawings			^					
All lar	ndscaping, parking lots, walkways, curbs, gutters, site restoration and								
and a	Il site improvements/enhancements are by Customer.								
Sec	tion 6, Utilities, HVAC, Electrical								
A.	Complete inner module plumbing/elec/ductwork			Х					
	connections								
В.	Heat trace all exposed water lines in crawl space.			X					
C.	Provide bottled water if required by state code & drinking		Х						
_	fountains not specified. Provide O&M Manuals			V					
D.	Provide O&ivi ivianuais			Х					
All uti	lities, both supply and connect, are by Customer. All meters, hydrants,								
	es, testing, chlorination of lines, balance of HVAC and system start ups								
	Customer. CATA, PA, TV, security, fire alarms are by Customer.								
_									
_	tion 7, Miscellaneous		W						
A.	Provide dumpster on site. Provide temporary sanitary (portable restroom) on site.		X						
B.	, ,		X						
C.	Remove debris from site & leave building broom clean.		X						
D.	Final clean of building (includes wipe down all walls & cleaning windows).		X						
E.	Strip, seal, & wax all vinyl composition floor tile.		X						
Sec	tion 11, Dismantle								
A.	Notify Satellite Shelters per contract or lease		х						
	requirements of building removal.								
В.	Remove furniture & furnishings & clean building.		X						
C.	Disconnect all utilities & properly terminate.		X						
D.	Remove steps & ramps. Dismantling & return freight.	v	X						
E. F.	Site restoration.	Х	X						
	cial Notes								
Spe	Cidi Notes								
cus	TOMER SIGN-OFF								
	Signature:								



Double Wide Hi-Rib Steel Portable Classrooms

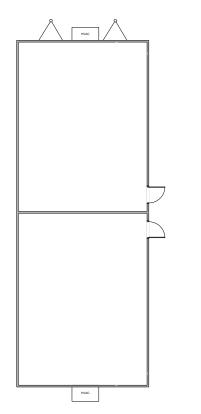


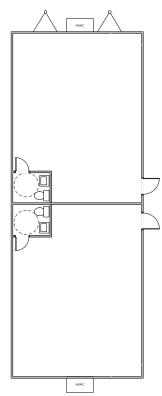




General Specifications

- 24' x 64' Building
- Vinyl Covered Gypsum Walls
- Vinyl Tile or Carpeted Flooring
- T-Grid Ceiling
- Electric Heating and Cooling System
- Hi-Rib Steel Exterior Siding
- Diffused Fluorescent Ceiling Lights
- Vertical Sliding Windows
- 220 Volt Power
- Models with and without ADA Restrooms
- Galvalume Hi-Rib Steel Roof
- ADA & Multi-State Coded





Perks of Being A Satellite Customer

- No Hidden Fees Don't Get Surprises on your Invoice
- Full Circle Solutions Get all your Amenities in one stop
- Pick From the Newest Fleet in the Industry
- Transparent Pricing
- Work With Local Experts

Satellite Shelters, Inc.

Since 1972, we have been the national provider of temporary and permanent space solutions including Mobile Offices, Modular Buildings, Ground-Level Offices, Storage Containers and Blast Resistant Modules.

Flexible Financing

We have rental, lease and purchase options to fit your needs.

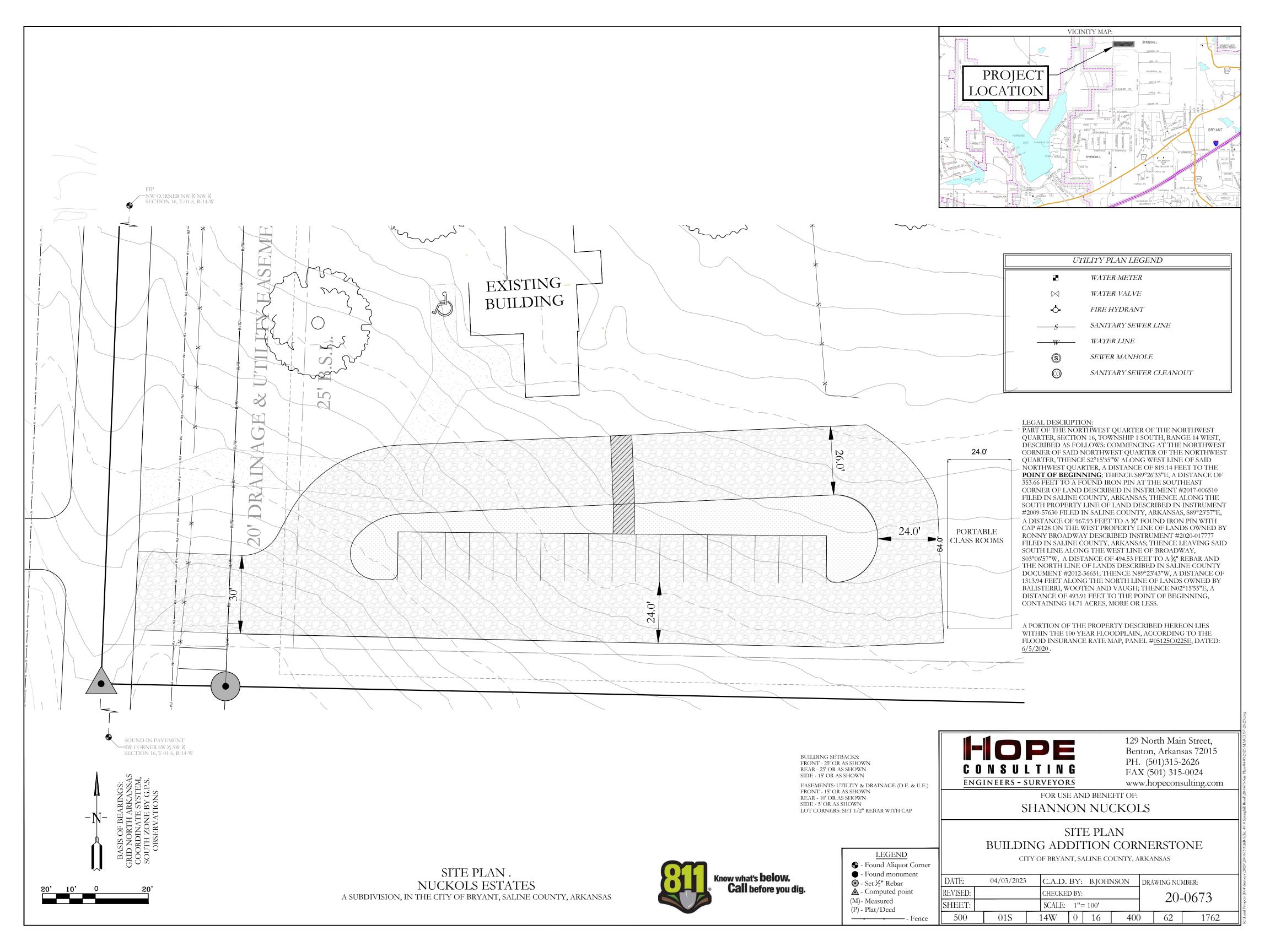
*Building exteriors and interiors may differ based on region. For more information, contact your local Satellite office.













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

Date: 7.14.23		Required, Please contact the Community Development Office for more information.
Sign Co. or Sign Owner	Property Owner	
Name_Action Signs	Name <u>Lisa Kirkpatr</u>	ick
Address 2700 John Harden Drive	Address <u>737 Wildw</u>	ood Drive
City, State, Zip_Jacksonville, AR 72076_	City, State, Zip <u>Cabot</u>	, AR 72023
Phone 501.457.7391	Phone <u>501.615.433</u>	36
Email Address tim@actionsignandneon.com	Email Address <u>Ikirkpatricl</u>	k.foodconcepts@yahoo.com
GENERAL INFORMATION		
Name of Business Krispy Krunchy Chicken		
Address/Location of sign 400 Bryant Ave Bryant, AR		
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.

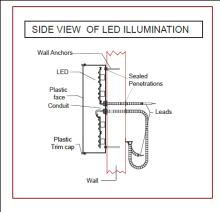
READ CAREFULLY BEFORE SIGNING

, 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	
Α	Stud Mounted Channel Letters	26.5"x107"	19.7 SQ FT	26'	24'	
В						
С						
E						
F						
G						



Krispy Krunchy Chicken Walmart Store #3230 Bryant, AR

Cap Heights 203.1"

WRUNCHY CHICKEN 12.7"

01/16/2023

P: 480.368.7446

info@lmage360Scottsdale.con

8230 E. Raintree Dr. Suite 101 Scottsdale, AZ 85260

Client:

Order #:

Date:

Krispy Krunch Chicken

Client Phone #:

Install Address:

Notes:



Interior Signs

Qty. 1 Each

Single Sided 3" Deep Channel Letters LED Illuminated White Acrylic Faces with Yellow Translucent Vinyl Black Returns & Trim Caps Stud Mounted to Wall *Client to Confirm Sizes Before Final Production

Proof #:

Each order includes an initial proof and one revision. Each additional proof is charged at \$15.00 each.

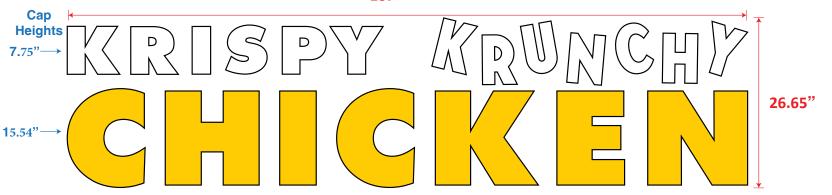
This proof is an original rendering by Reproduction of this design or construction based on this design is prohibited and subject to legal remedy

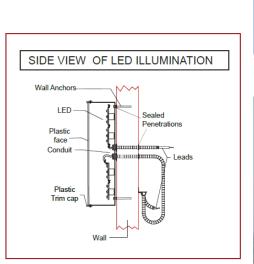
Page:

Krispy Krunchy Chicken Walmart Store 3220

400 Bryant Ave Bryant, AR

107"









P: 480.368.7446

info@Image360Scottsdale.com

8230 E. Raintree Dr. Suite 101 Scottsdale, AZ 85260

Date:

01/11/2023

Order #:

Client:

Krispy Krunchy Chicken

Client Phone #:

Install Address:

Notes:

Single Sided
3" Deep Channel
Letters LED
Illuminated
White Acrylic
Faces with Yellow
Translucent Vinyl
Black Returns &
Trim Caps Stud
Mounted to Wall

Proof #:

7

Each order includes an initial proof and one revision. Each additional proof is charged at \$15.00 each.

This proof is an original rendering by Image360 - Scottsdale.

Reproduction of this design or construction based on this design is prohibited and subject to legal remedy.

Page:

1 of 1



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.

Date: <u>07/14/2023</u>		Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.
Sign Co. or Sign Owner	Property Owner	
Name ARKANSAS SIGN & NEON	Name FIRST SECU	IRITY BANK
Address 8525 DISTRIBUTION DR	Address	REYNOLDS RD
City, State, ZIJTLE ROCK AR 72209	City, State, Zip BR	YANT AR
Phone 501.562.3942	Phone	
lora@arkansassign.com Email Address	Email Address	
GENERAL INFORMATION Name of Business FIRST SECURITY BANK Address/Location of sign 823 N. REYNOLDS RD, Zoning Classification	BRYANT AR	

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.

, 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

READ CAREFULLY BEFORE SIGNING

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)		t of Sign om lot surface)	Column for Admin Certifying Approval
				Top of Sign	Bottom of Sign	
Α	wall	37.5" x 245.5"	63.06	18'	14'7"	
В						
С						
E						
F						
G						

LANDLORD APPROVAL

DATE:

8525 DISTRIBUTION DR LITTLE ROCK. AR 72209

501.562.3942 (P) 501.562.6651 (F)

REPRESENTATIVE: DAVID ASHLEY

DATE/DWG: 03/06/2023 - DWG1

DESIGNER: LORA RAND

(EXCEPT FOR REGISTERED TRADEMARKS) ARE OWNED BY AND ARE THE PROPERTY O ARKANSAS SIGN & NEON. USE OF THIS DOCUMENT IS PROHIBITED UNLESS

DELIVERY TIMES VARY PER SCOPE OF WORK TYPICAL DELIVERY TIME FROM ACCEPTANCE

(UL)

CLIENT: ECO CONST/1ST SECURITY

LOCATION: 1823 N. REYNOLDS RD, BRYANT AR 72022

SIGNATURE OF APPROVAL REQUIRED FOR PRODUCTION

raceway

rev1

raceway allows for only one electrical hole for the entire set of letters and logo to be drilled in wall

CUSTOMERS IS RESPONSIBLE TO OBTAIN ANY/ALL LANDLORD APPROVALS IF APPLICABLE.

raceway is 7" tall x 4" deep to be painted to match bldg

and with fewer mounting holes

channel letter



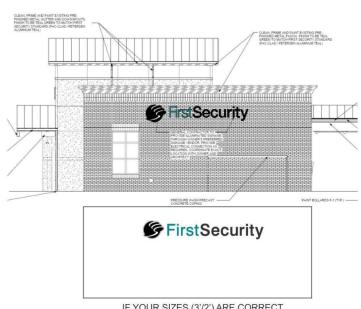
SPECS:

(1) SET OF LED ILLUMINATED CHANNEL LETTERS, FLUSH-MOUNTED (RECOMMEND RACEWAY), BLACK RETURNS, BLACK TRIMCAP, ACRYLIC FACES W/ VINYL APPLIED 1ST SURFACE LOGO TO HAVE TEAL VINYL, LETTERS TO HAVE PERFORATED PRINT VINYL FOR COLOR DAY APPEARANCE,/ WHITE NIGHT APPEARANCE

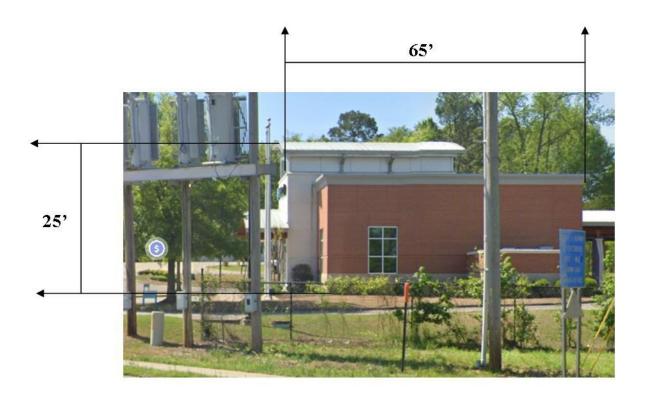
NORTH ELEVATION



PROPOSED NIGHT VIEW



IF YOUR SIZES (3'/2') ARE CORRECT THEN THIS IS HOW IT WILL APPEAR ON THE BUILDING







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.

Date: 7/14/2023		Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.
Sign Co. or Sign Owner	Property Owner	
Name L. Graphics (Jollan) Address 701 N. Reynolds Rd	Name Brad	
Address 701 N. Reynolds Rd		1. RugosoldsRd
City, State, Zip Bryant, AR72022	City, State, Zip Bry	ant, AR72022
Phone (501) 653-4444	Phone(501)	36/-760/
Alternate Phone 501-773-0544	Alternate Phone	101 3-2 197 Party - Markedonian sanay asandari 4-2 187 alian kiraya a
GENERAL INFORMATION Name of Business Bryant Vicion Address/Location of sign 22/3 N. Ruyr	<u>Clinic</u>	
Address/Location of sign 22/3 N. Rug	nolds Rd _ Ba	and, AR 72022
Zoning Classification		,
Please use following page to provide details on the provided on this application, a Site Plan showing plant property is required to be submitted. Renderings of required to be submitted with the application. A this collected at the time of permit issuance. According to special sign permit request shall be one hundred doll required by Sign Administrator.	cement of sign(s) and a the sign(s) showing th rty-five dollar (\$35) per to the Sign Ordinance a	any existing sign(s) on the e correct dimensions is also sign payment will be fee for and sign variance or
READ CAREFULLY BEFORE SIGNING		
and correct. I fully understand that the terms of the Sign Ordinance signs must fully comply with all terms of the Sign Ordinance regar authorized by the owner of the property and that I am authorized	ce supersede the Sign Admir dless of approval. I further o	sistrator's approval and that all tertify that the proposed sign is

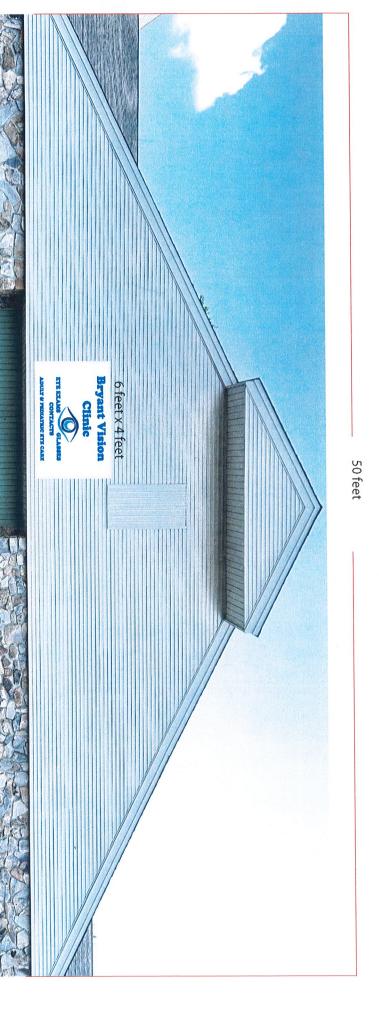
that no sign may be placed in public right of way. I understand that I must comply with all Building and Electrical Codes and that it is my responsibility to obtain all necessary permits.

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)	Heigh (Measured fi	Column for Admin Certifying Approval	
				Top of	Bottom of	
				Sign	Sign	
Α	wall mout	48"×72"	24	16	12	
В						
С						
E						
F						
G				1		

Bryant disson Chinic dall N. Ruynolds Rd Bryant, AR 72022

72 in x48 in wall mounted cabinet w/ LED lighting





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

Conditional Use Permit Application

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

Date: 7/11/23	
Applicant or Designee:	Project Location:
Name KENWETH (JEFF) PORTER Address POBOX 732, BRYANT	Property Address 518 North ST. BRYANT AR 72022
Phone 501-779-2146 Email Address: Kieff @.sbcg/obg/.WET	Parcel Number
Property Owner (If different from Applicant):	
Phone Soldy - 2146 Address 3511 LAVEAN #2 Email Address Kieffp & skeglobal ne Additional Information: Legal Description (Attach description if necessary	
Description of Conditional Use Request (Attach a 1. REPLAT OF PART OF LOT TO TO EXISTING SEPTEMBERS) Proposed/Current Use of Property	19 TO BECKER ADDED TO LOT 78R

Application Checklist

Requirements for Submission

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

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

Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process.

Additional information is available in the Bryant Zoning Ordinance.

Additional information is available in the bryant zoning ordinance.
READ CAREFULLY BEFORE SIGNING
I
comply with all City ϕ odes and that it is my responsibility to obtain all necessary permits required.

NOTICE OF PUBLIC HEARING

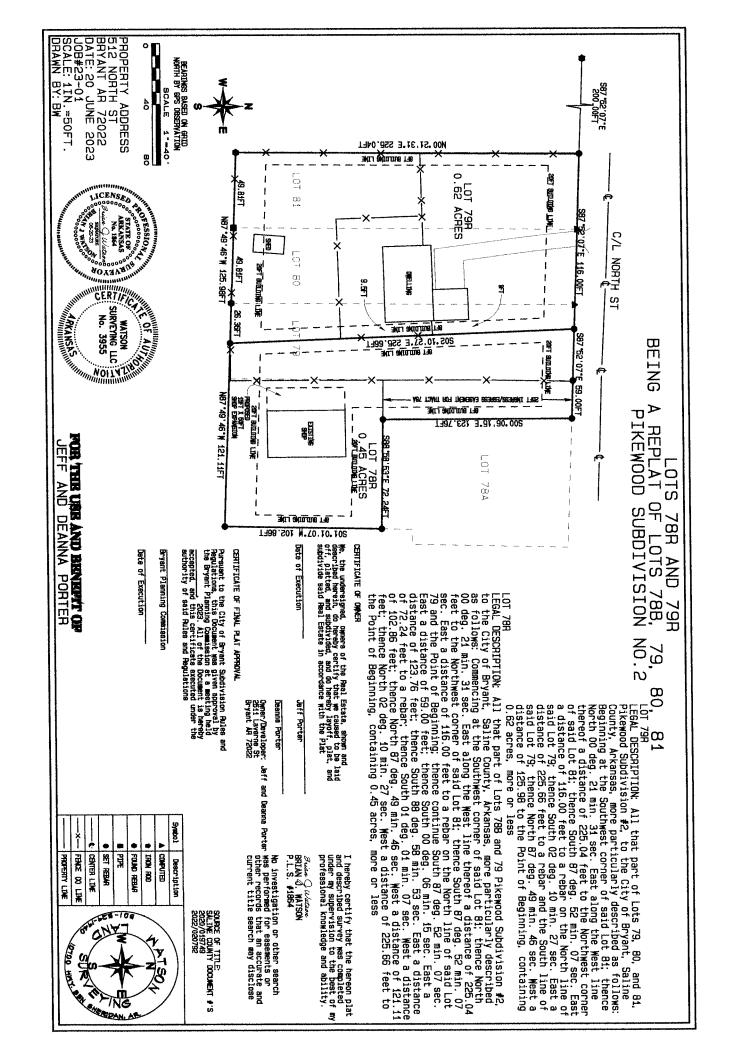
A public hearing will be held on Monday, Aug 14th	_ at 6:00 P.M.
at the Bryant City Office Complex, 210 Southwest 3 rd Street, City of Bryant,	Saline
County, for the purpose of public comment on a conditional use request at 518 North St.	the site of(address).
A legal description of this property can be obtained by contacting the Bryan	nt Department
of Community Development.	

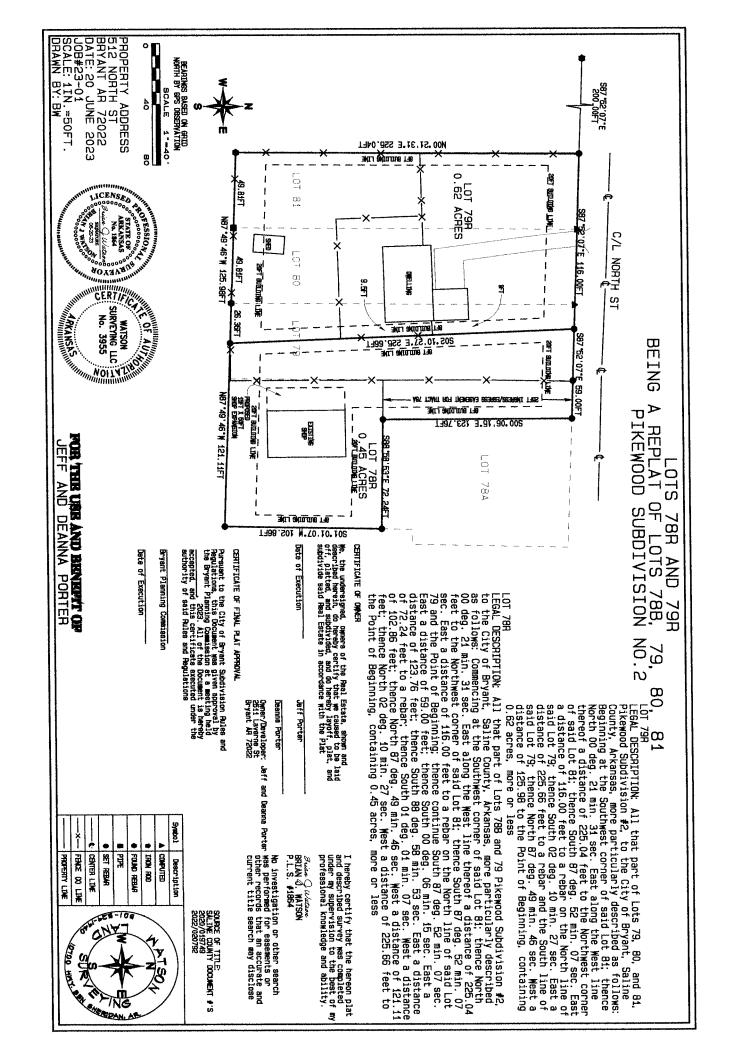
Rick Johnson Chairman Board of Zoning Adjustment City of Bryant

This notice is to be run in the legal notices section of the Saline Courier no less than 15 days prior to the public hearing.

I, Kenneth Jeffery Porter, would like to apply for a conditional use permit to replat part of Lot 79 in Pikewood II addition into Lot 78R and to add a 15X50 addition on to the existing shop on Lot 78R.

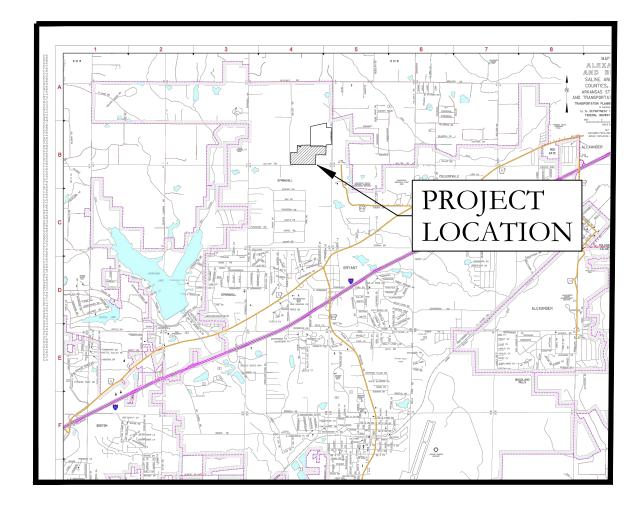
Kenneth J. Porter



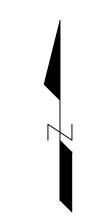


CONSTRUCTION PLANS HILLTOP LANDING

HILLTOP ROAD & MILLER ROAD, BRYANT, AR



VICINITY MAP



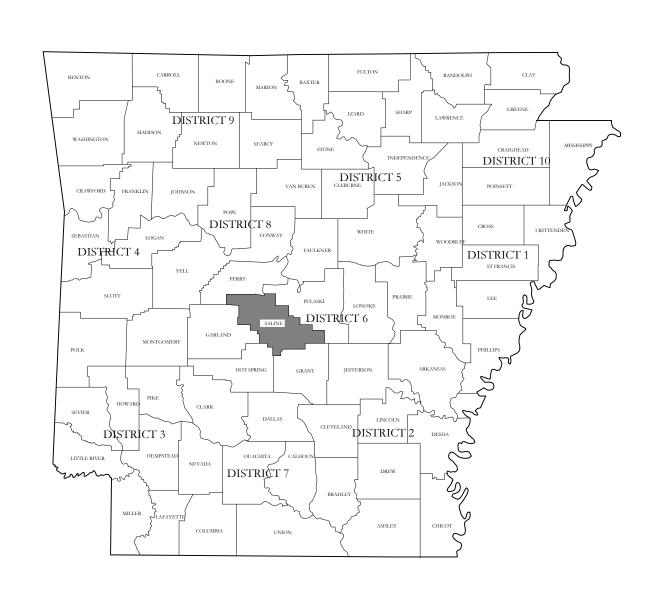
PREPARED BY:



129 N. Main Street, www.hopeconsulting.com

DRAWING INDEX

SHEET NO.	TITLE
	PLAT
C-1.0	STREET PLAN & PROFILE
C-1.1	STREET PLAN & PROFILE
C-1.2	STREET PLAN & PROFILE
C-2.0	UTILITY PLAN
C-2.1	SEWER PLAN & PROFILE
C-2.2	SEWER PLAN & PROFILE
C-2.3	SEWER PLAN & PROFILE
C-3.1	STORM PLAN & PROFILE
C-3.2	STORM PLAN & PROFILE
C-3.3	STORM PLAN & PROFILE
C-3.4	STORM PLAN & PROFILE
C-4.0	TRENCH AND SPECIAL DETAILS
C-5.0	CIVIL SPECIFICATIONS
C-6.0	DETENTION
C-6.1	DETENTION
C-7.0	EROSION CONTROL PLAN

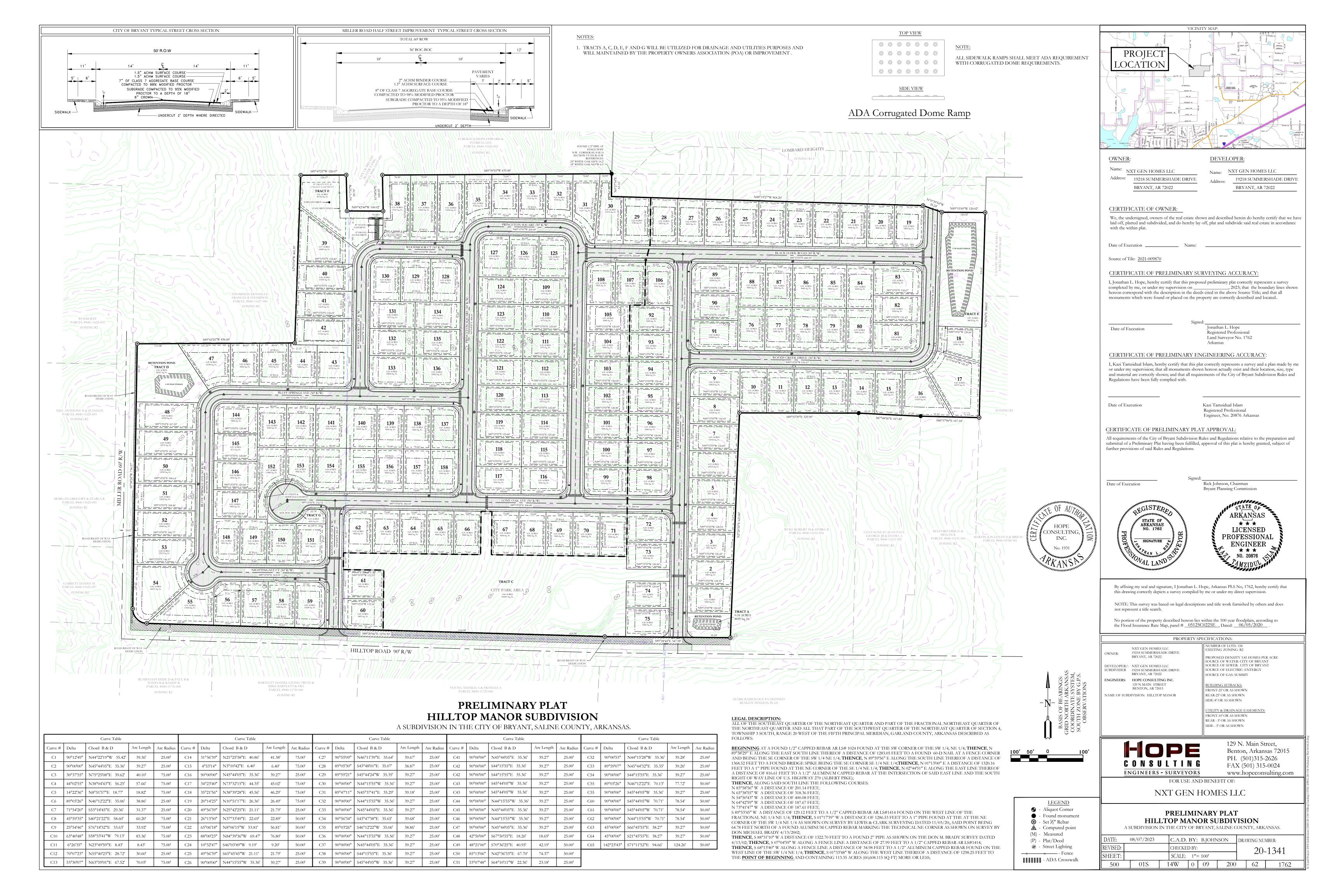


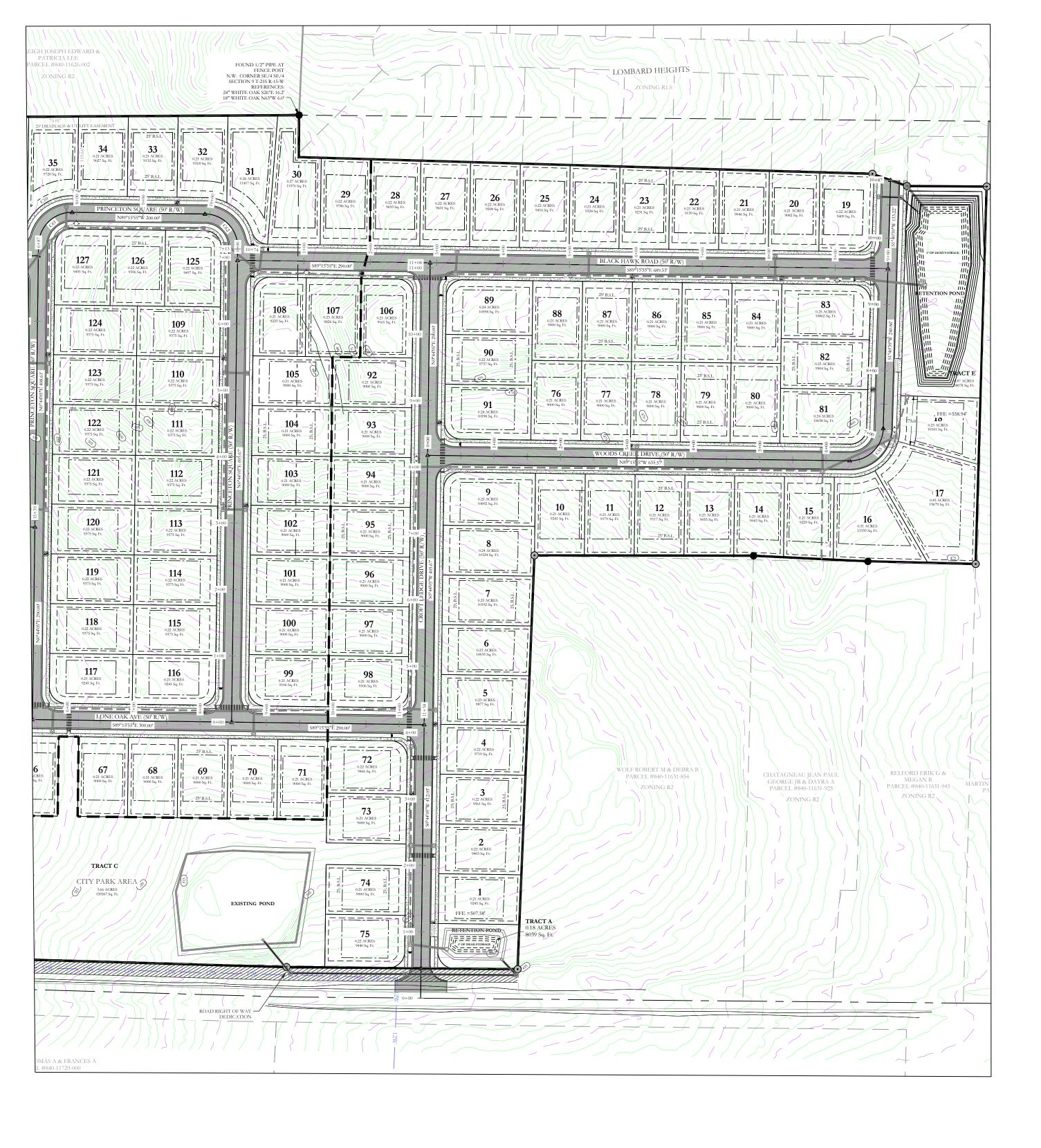


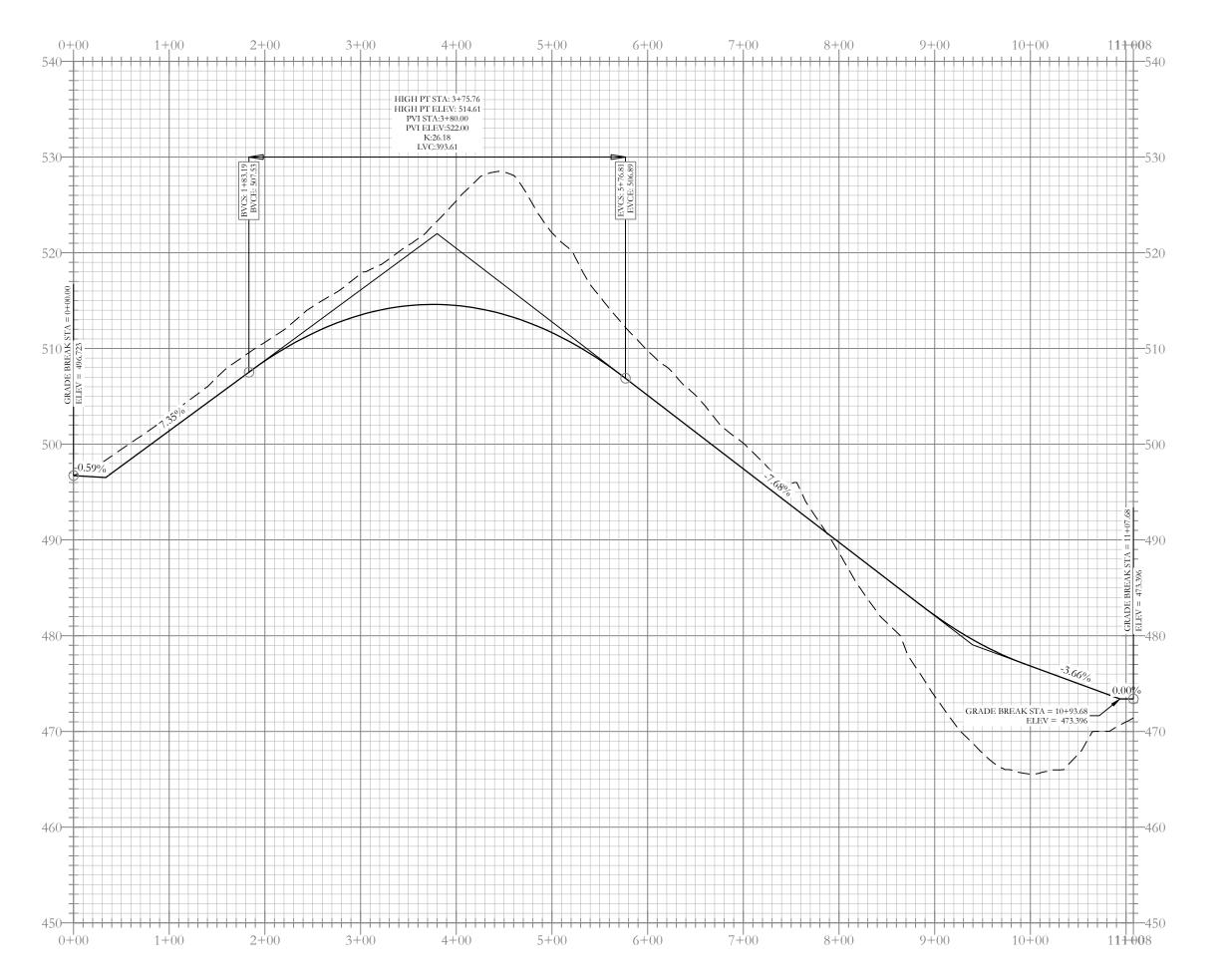
FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING A SUBDIVISION IN THE CITY OF BRYANT, AR HILLTOP ROAD & MILLER ROAD, BRYANT, AR

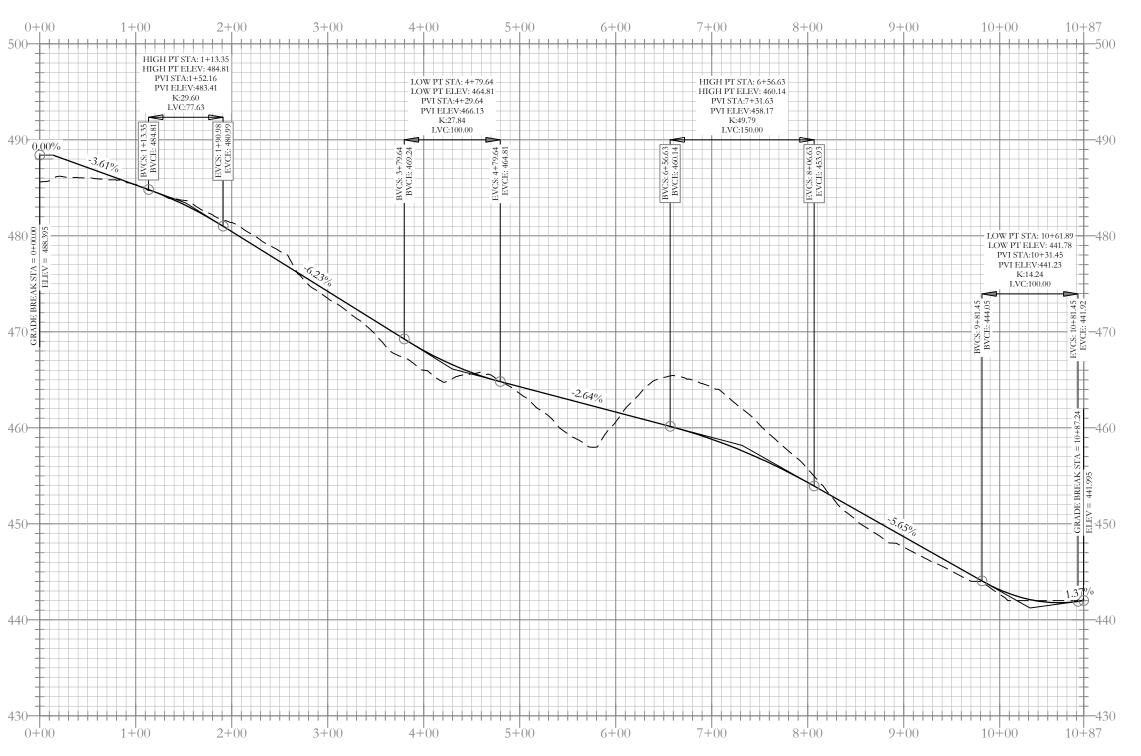
DRAWING NUMBER: 02/16/2023 C.A.D. BY: REVISED: 08-07-2023 CHECKED BY: 20-1341
 500
 01S
 14W
 0
 9
 200
 62
 1762













VICINITY MAP:



- - - - HDPE

129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

CONSULTING FAX ENGINEERS - SURVEYORS WWW.

FOR USE AND BENEFIT OF:
NXT GEN HOMES LLC.

HILLTOP LANDING STREET PLAN & PROFILE

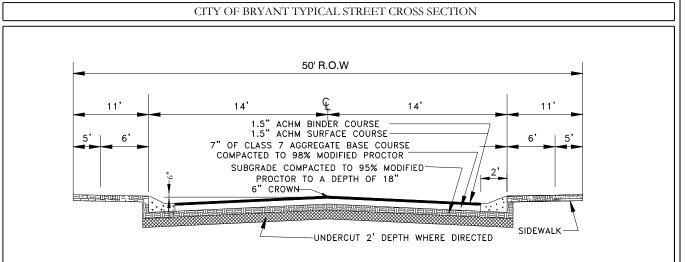
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

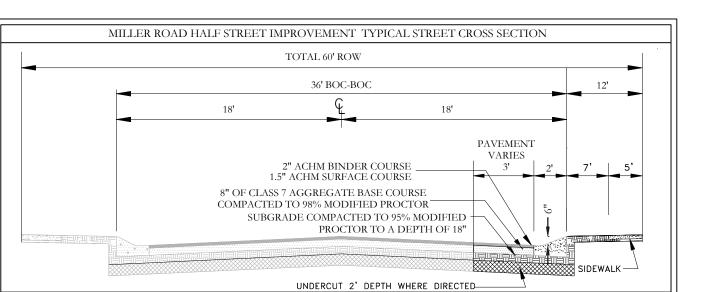
 DATE:
 03/08/2023
 C.A.D. BY:
 DRAWING NUMBER:

 REVISED:
 08/07/2023
 CHECKED BY:
 20-1341

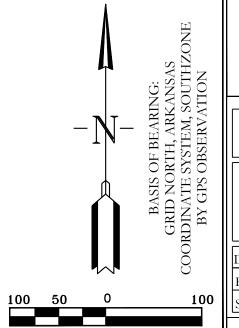
 SHEET:
 C-1.0
 SCALE:
 1" = 100'
 20
 62
 1762

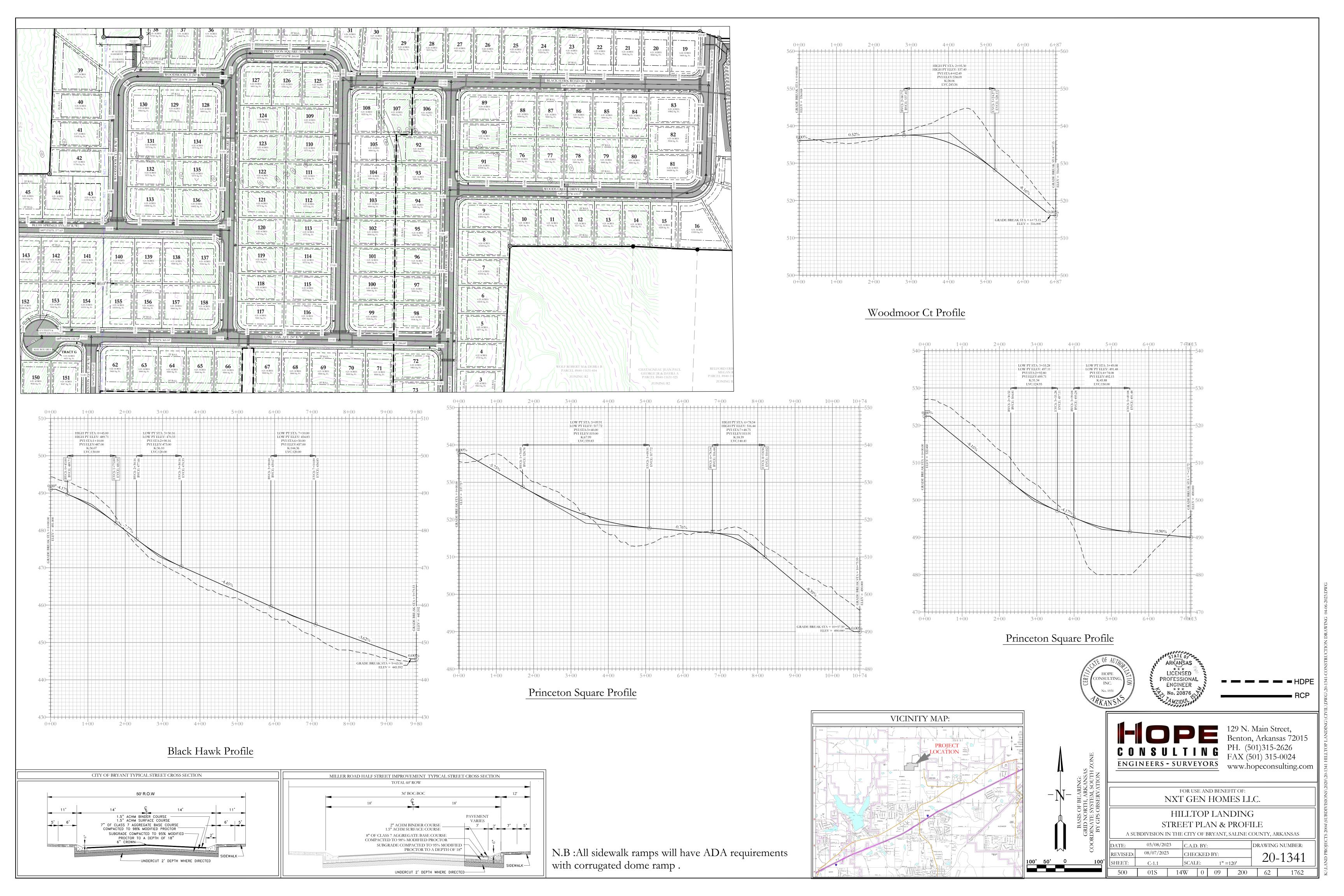
N.B :All sidewalk ramps will have ADA requirements with corrugated dome ramp .

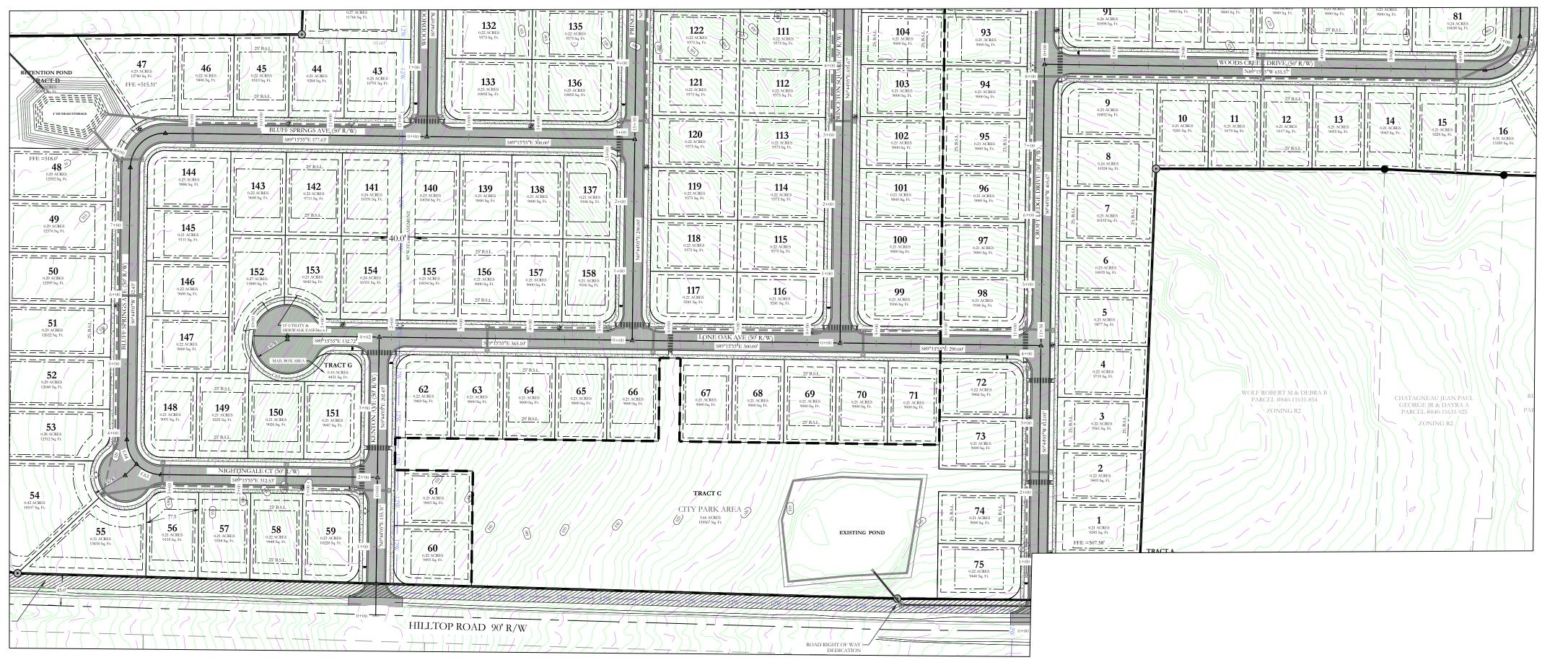


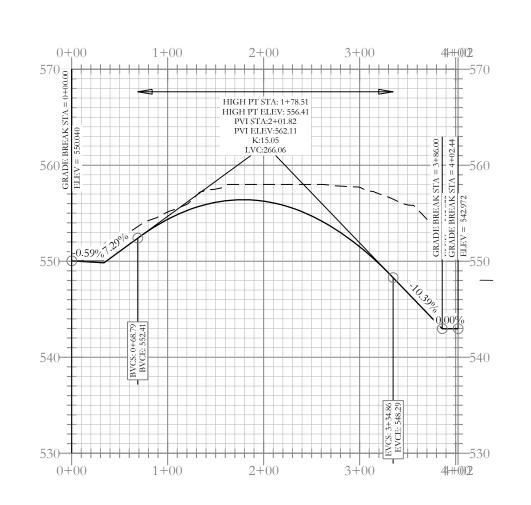








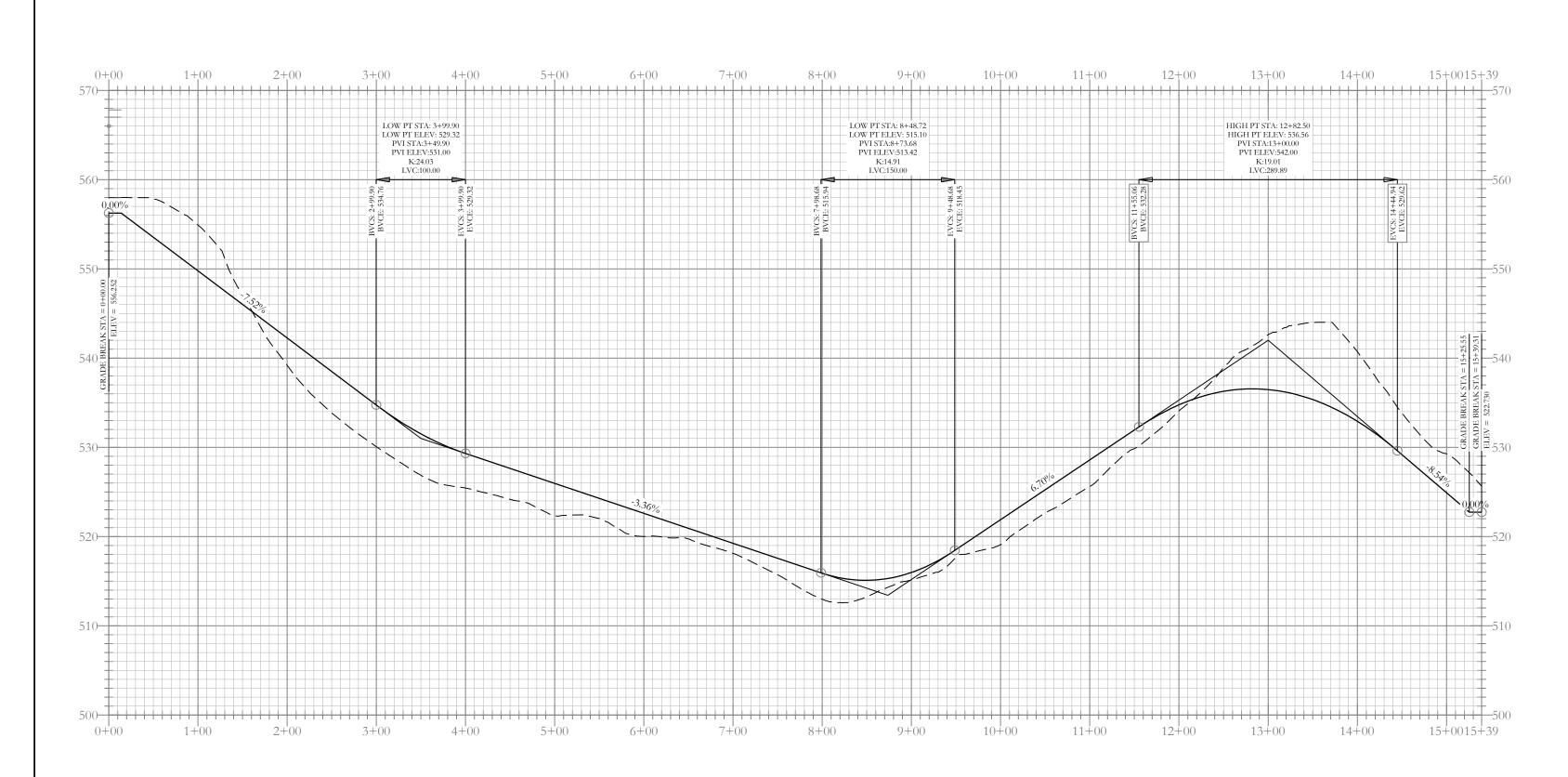




Kenton Ave Profile

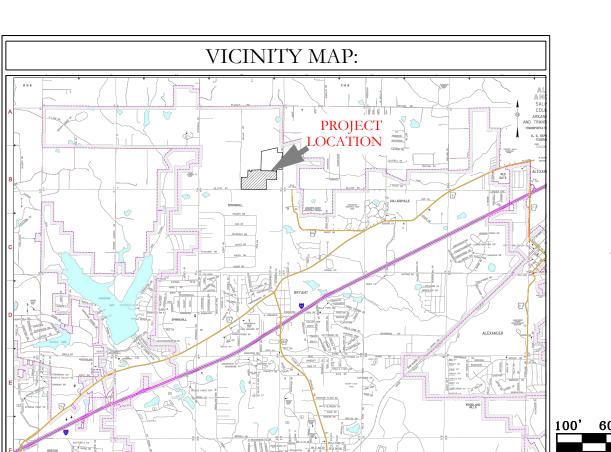


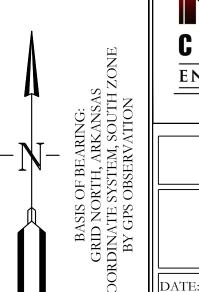




Lone Oak Ave Profile

-----RC





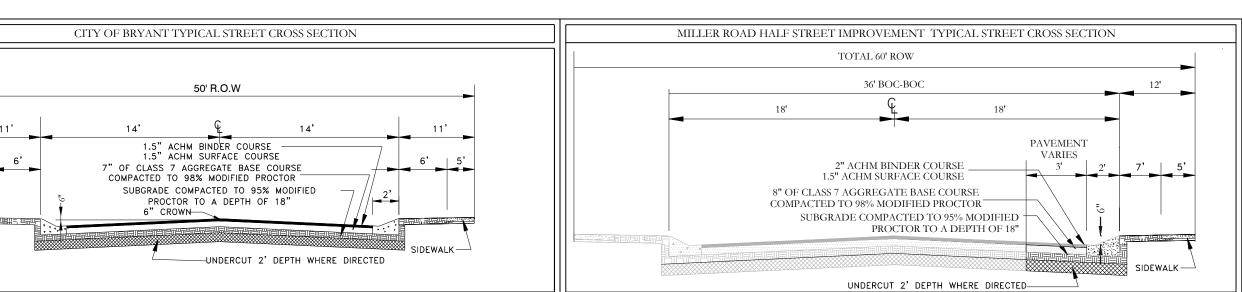
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

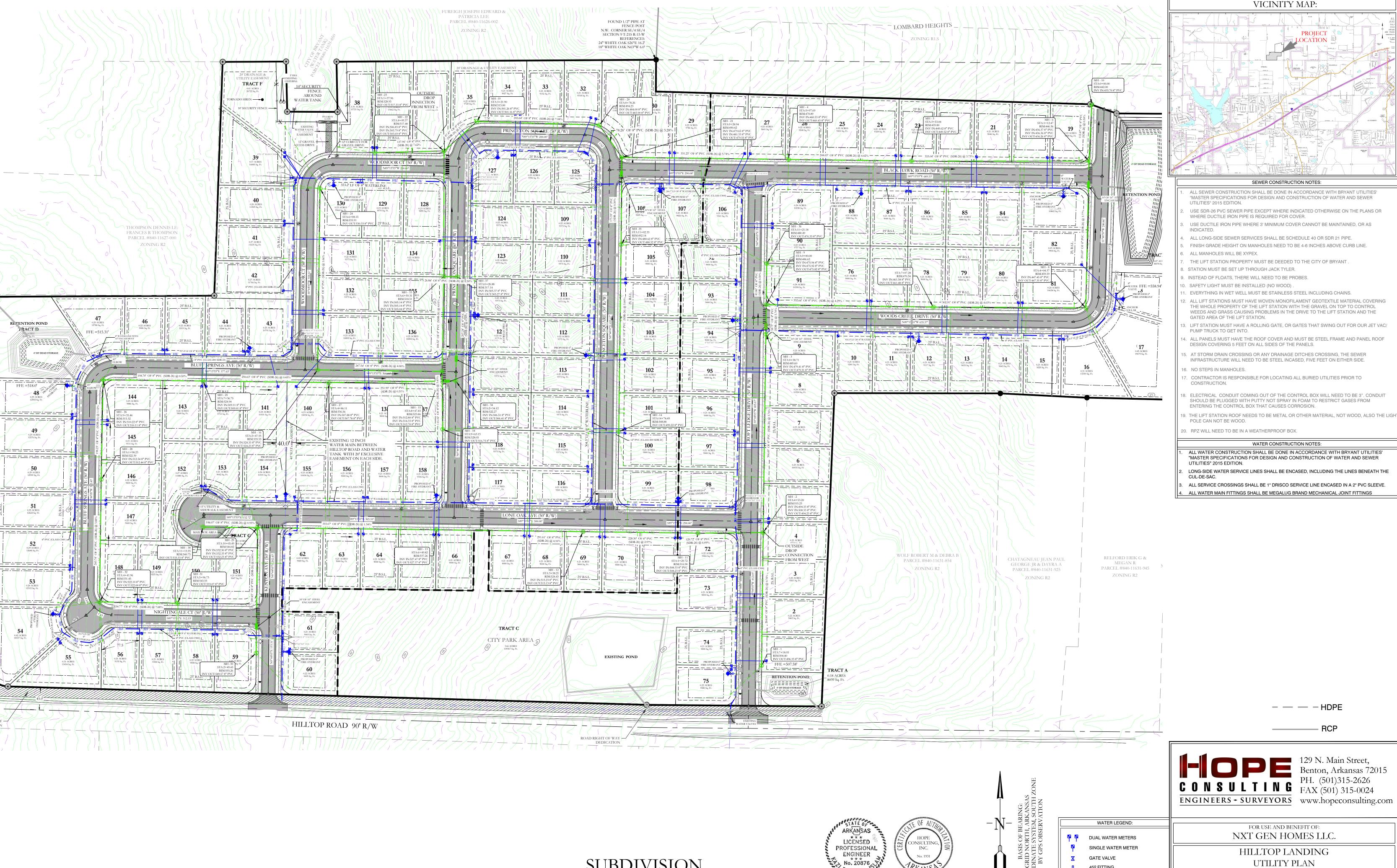
HILLTOP LANDING STREET PLAN & PROFILE

A SU	BDIVISION I	N THE (CITY OF B	RYANT,	SALINE C	COUNTY, Al	RKANSAS
DATE:	03/08/2023		C.A.D. BY:			DRAWING NUMBER:	
REVISED:	08/07/2023		CHECKED BY:			20-1341	
SHEET:	C-1.2	SCALE:		1" = 120'		<u> </u>	-1341
500	01S	14V	V 0	09	200	62	1762

Nightingale Ct-Bluff Springs Ave Profile



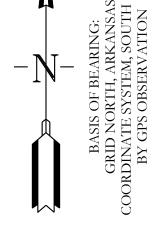
N.B :All sidewalk ramps will have ADA requirements with corrugated dome ramp.



SUBDIVISION

UTILITY PLAN





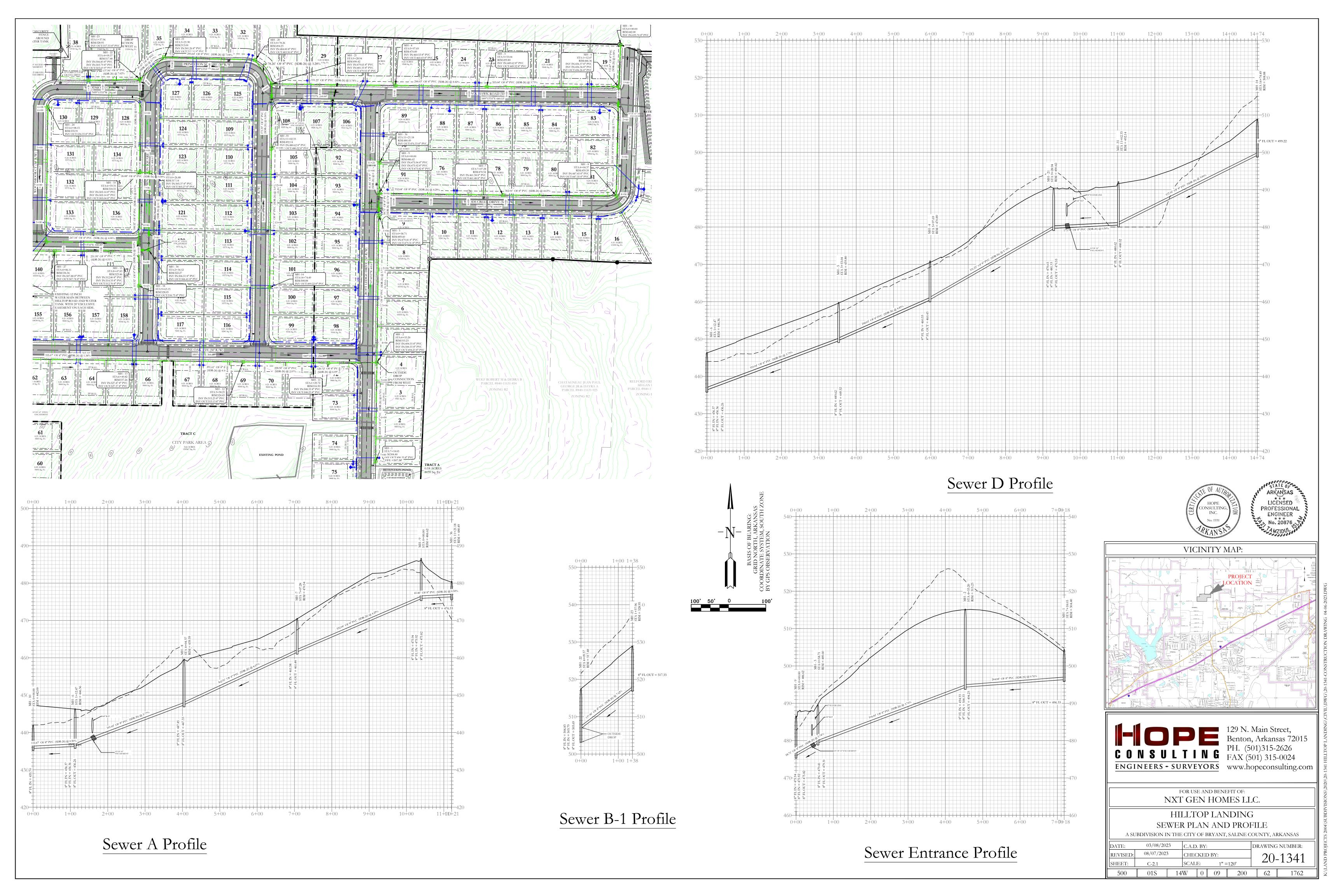
DUAL WATER METERS GATE VALVE 45º FITTING ♦ 90º FITTING TEE FITTING

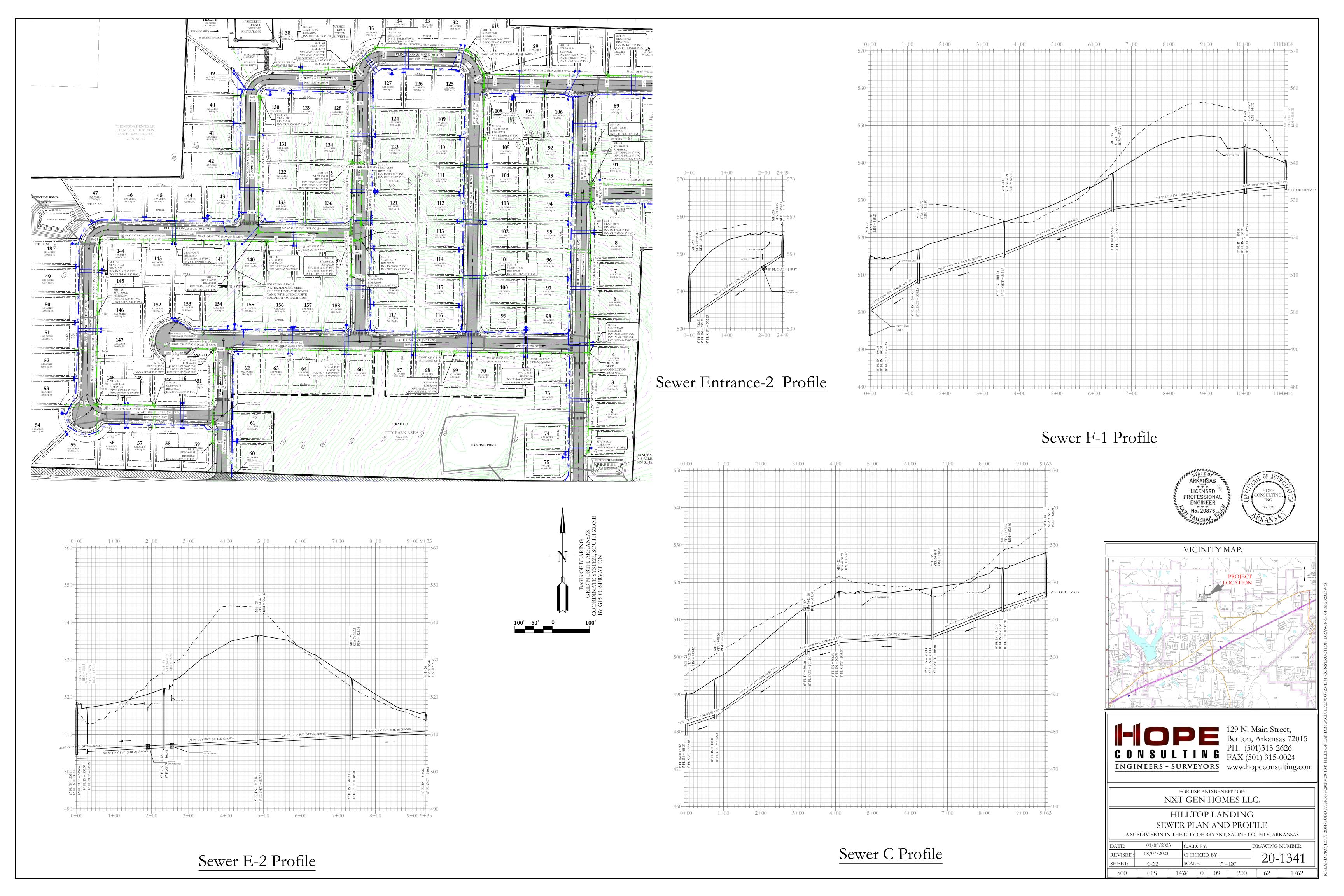
SINGLE WATER METER

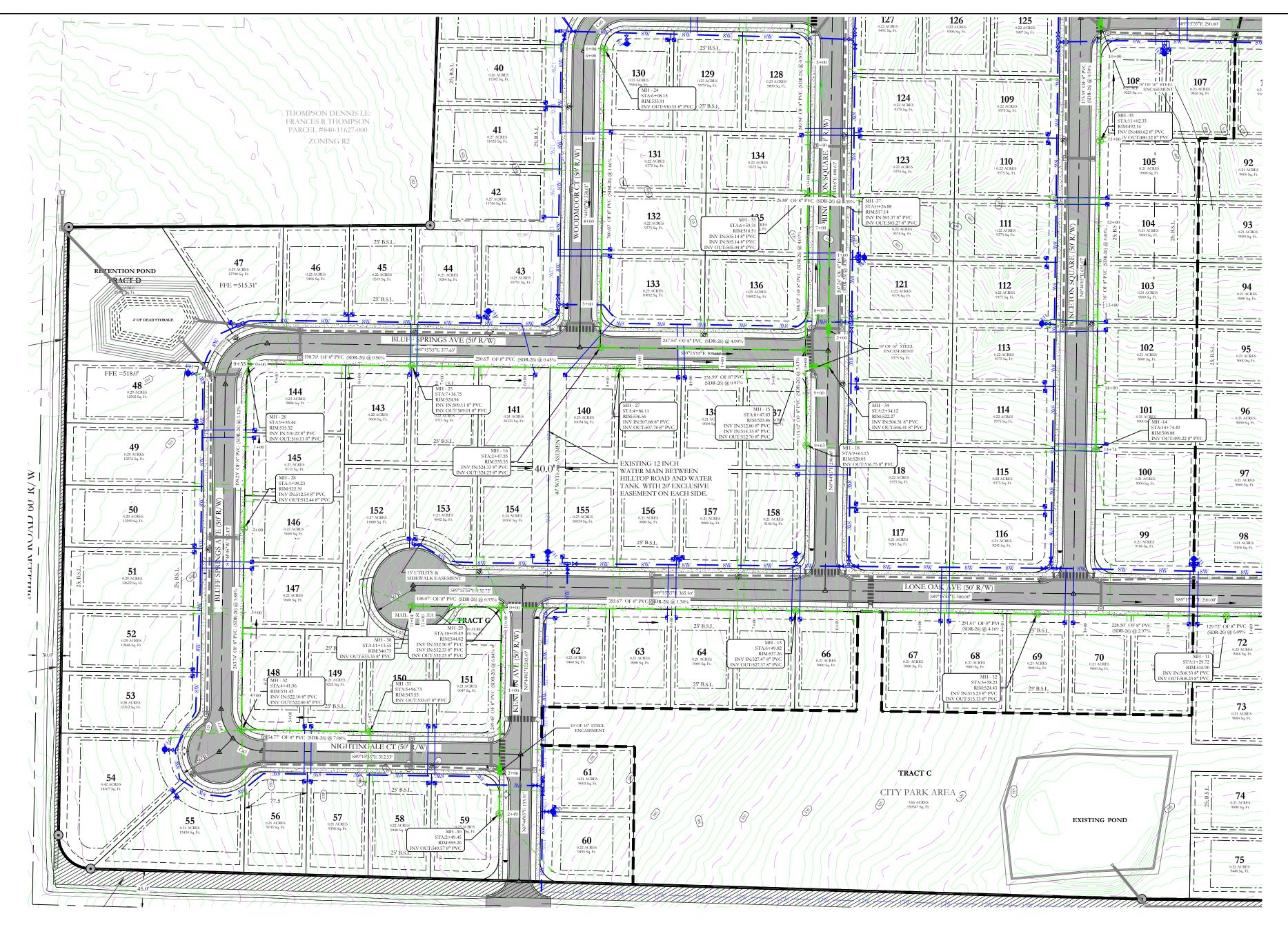
CROSS FITTING FIRE HYDRANT

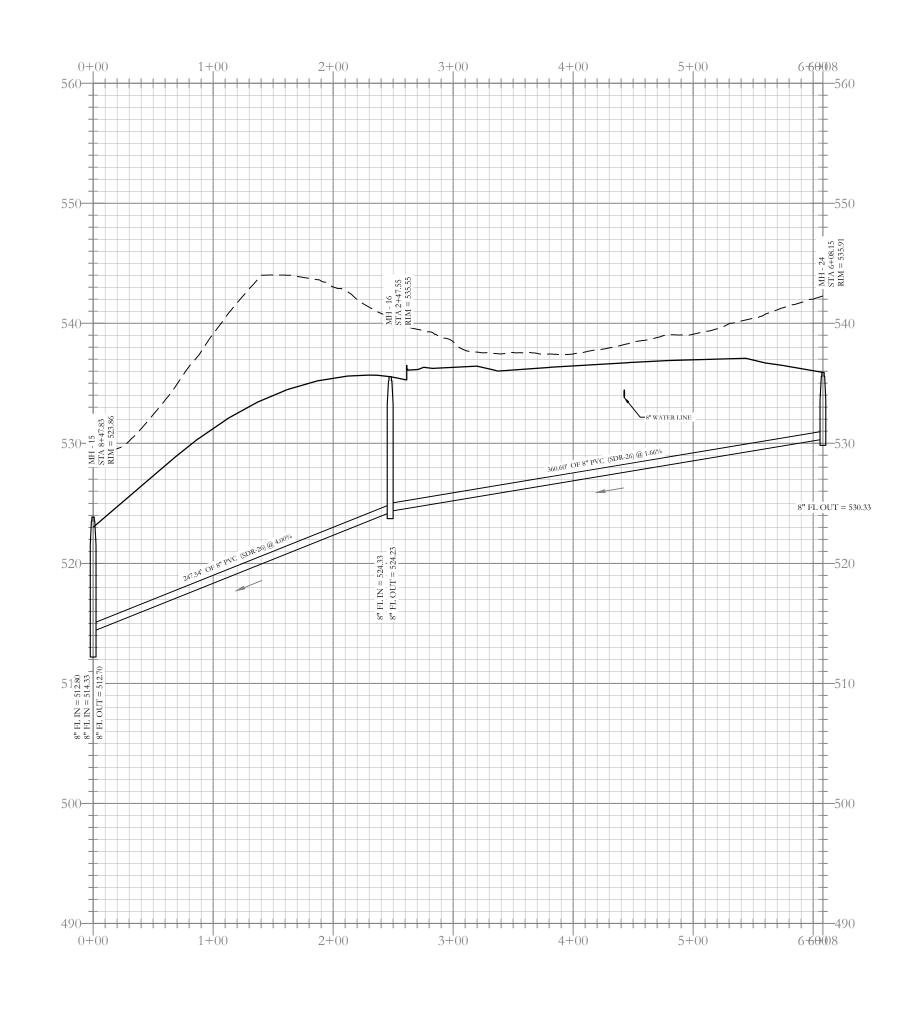
HILLTOP LANDING UTILITY PLAN

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS 03/08/2023 DRAWING NUMBER: REVISED: CHECKED BY: 20-1341 01S 14W 0 09 200 62 1762

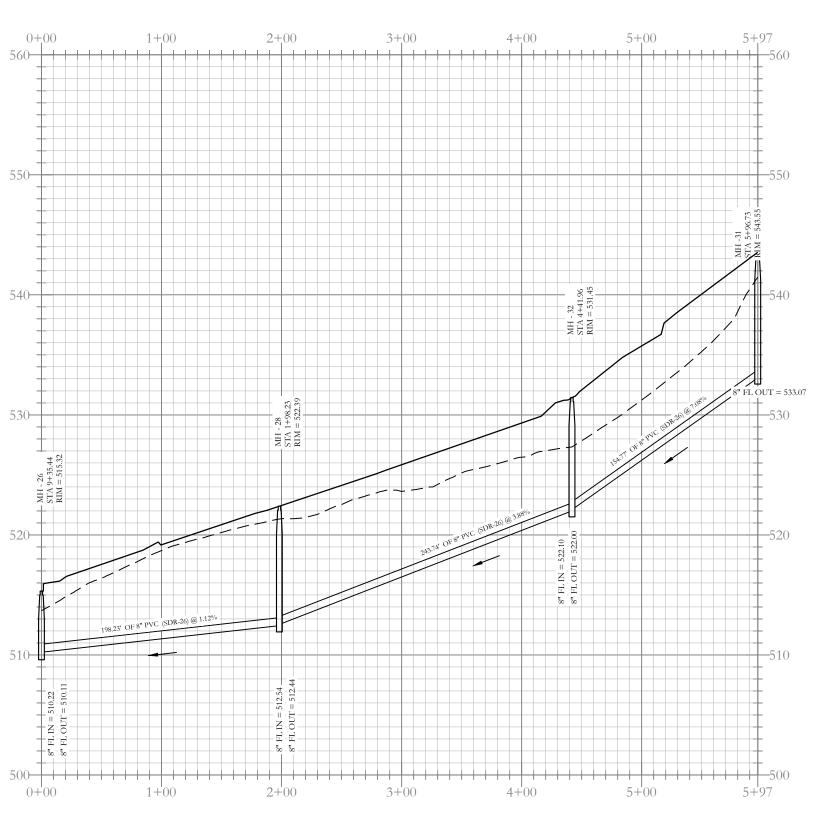




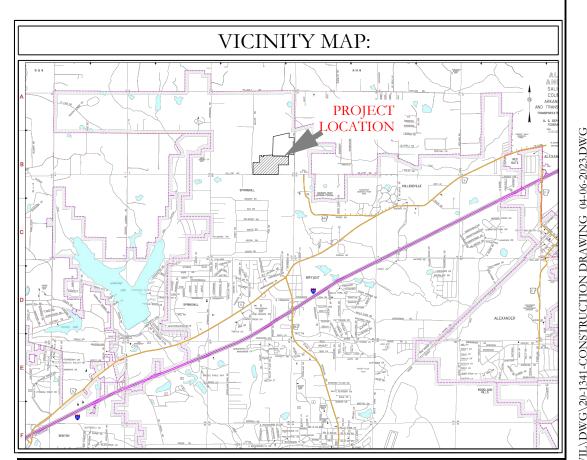




Sewer B-2 Profile



Sewer E-1 Profile





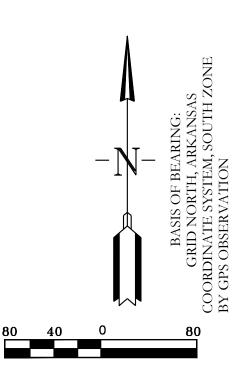
FOR USE AND BENEFIT OF:
NXT GEN HOMES LLC.

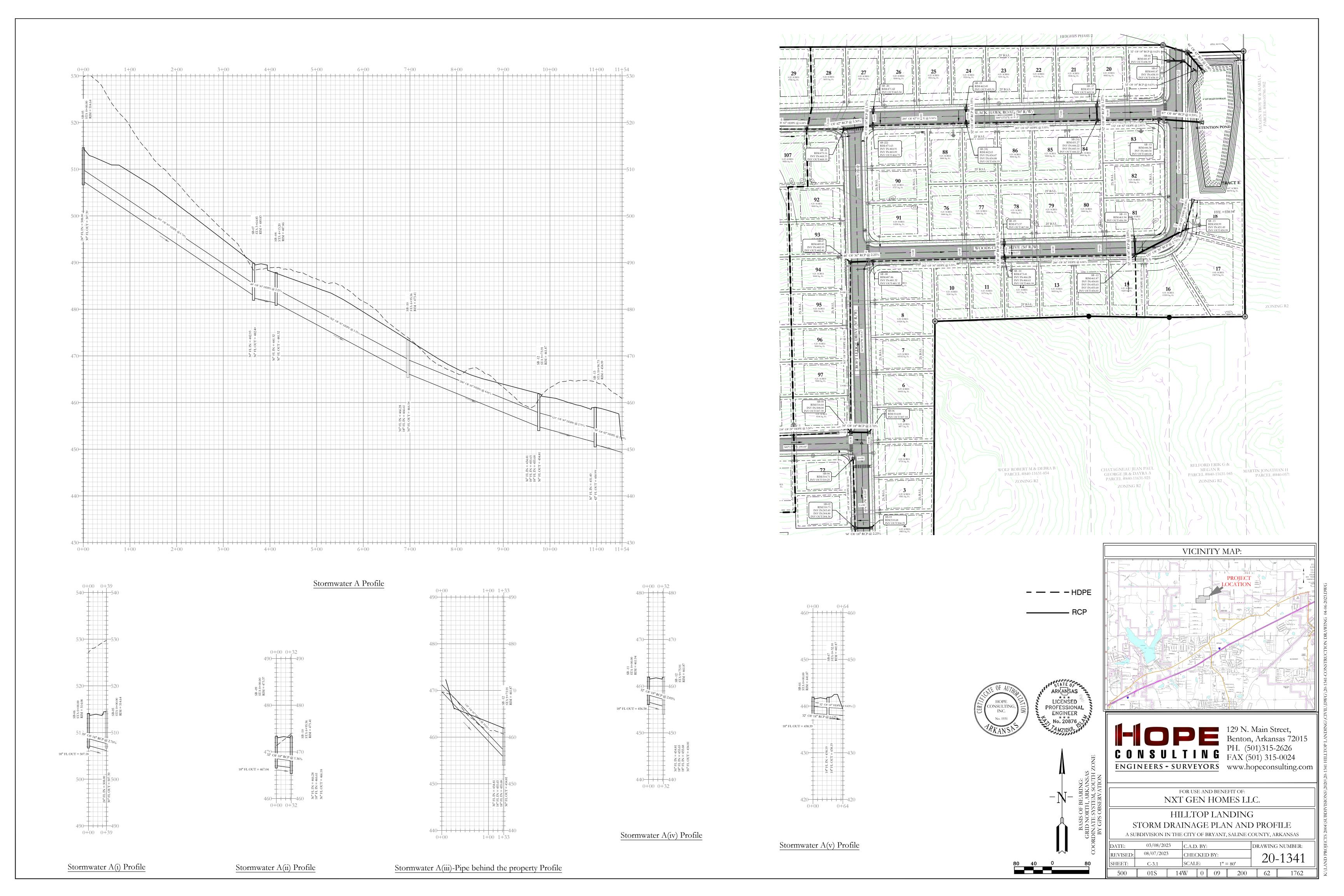
HILLTOP LANDING SEWER PLAN AND PROFILE

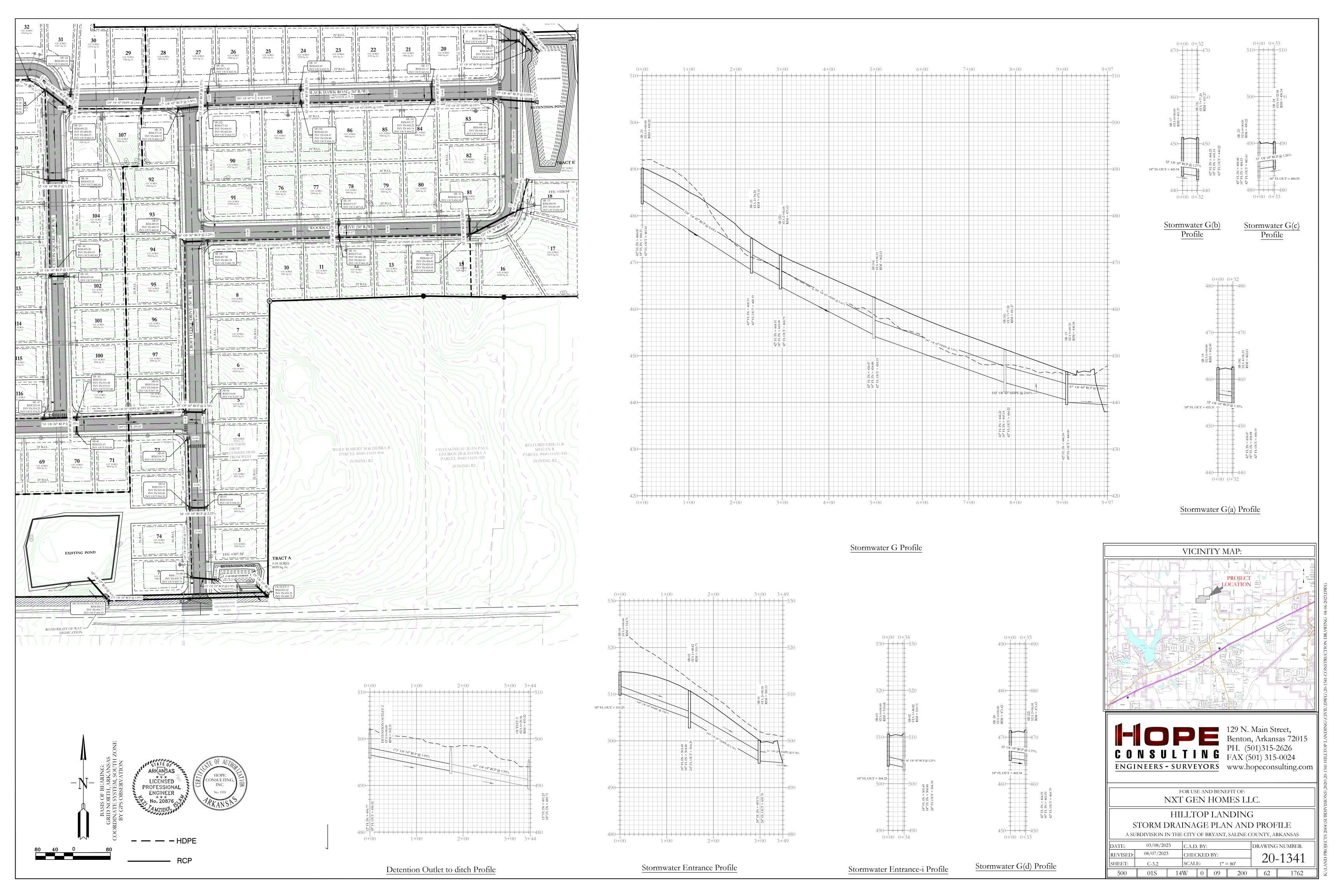
A SU	BDIVISION I	N THE	E CITY	OF I	BRYANT,	SALINE C	COUNTY, A	RKANSAS
DATE: 03/08/2023		C.A.D. BY:				DRAWING NUMBER:		
REVISED:	08/07/2023		CHECKED BY:				20-1341	
SHEET:	C-2.3	C-2.3		SCALE: 1" =80'		=80'	20	-1341
500	01S	14	W	0	09	200	62	1762

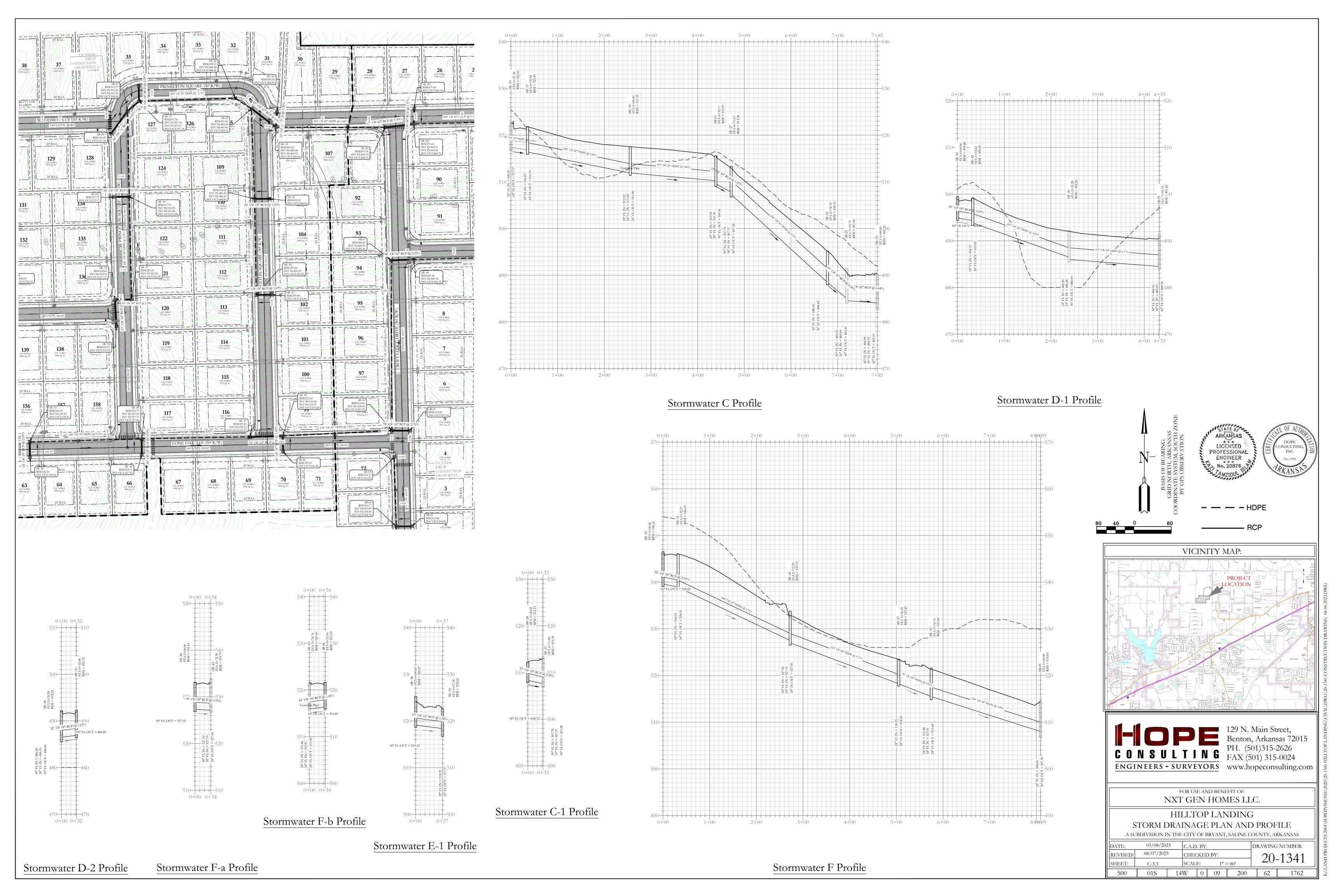


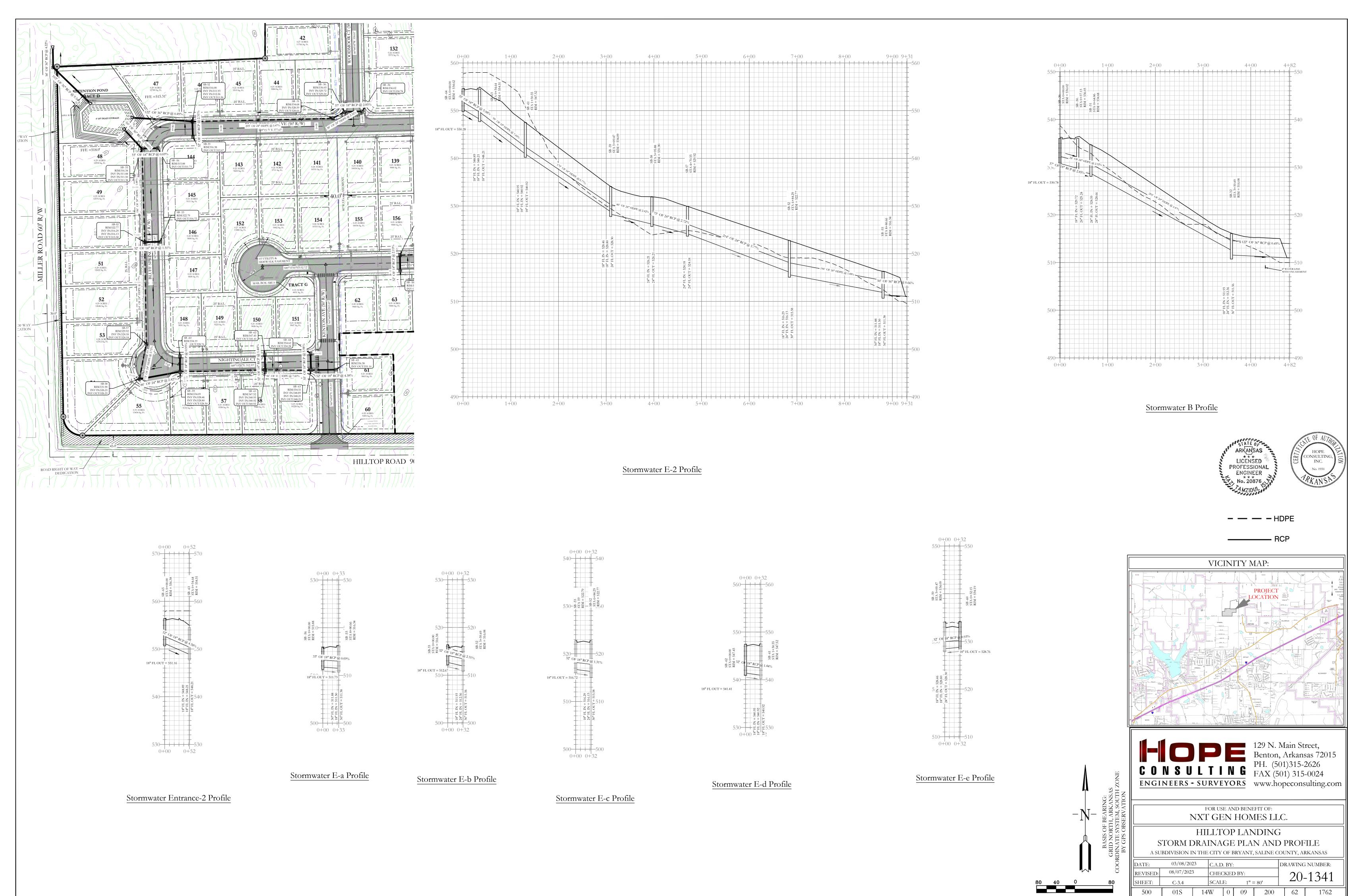


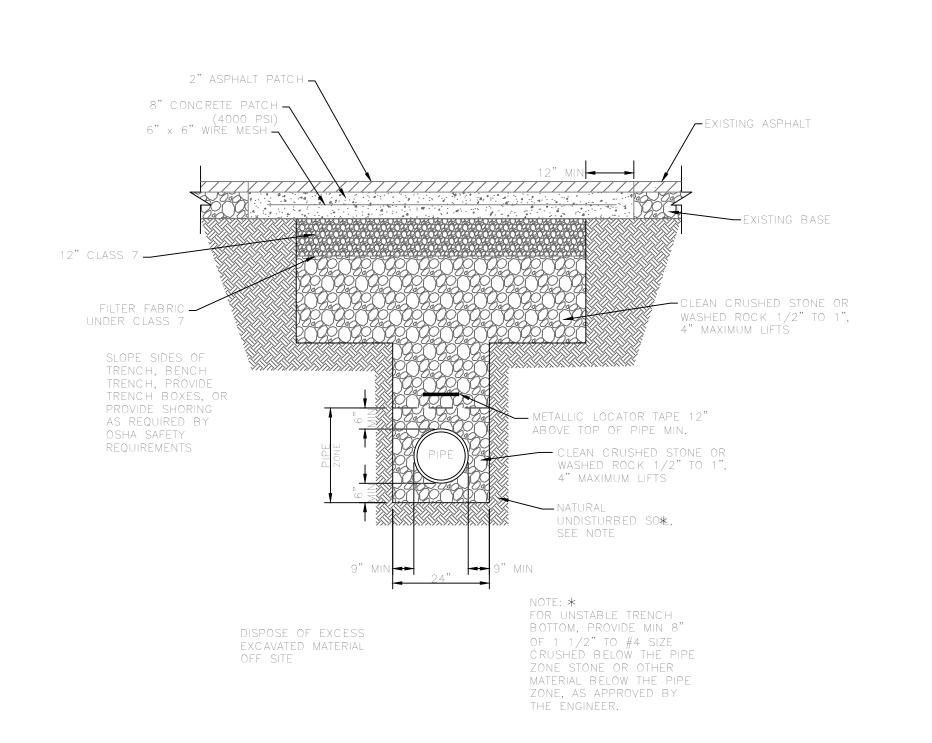












PVC SEWER TRENCH UNDER

EXISTING ASPHALT STREET

DETAIL-VALVE BOX

4-#4's EACH WAY

CENTER IN SLAB (TYP.)

2'x 2'x 4" CONCRETE-

PAD AROUND VALVE (TYP.)

VALVE BOX LID~

TO BE BOLTED

TWO PIECE C.I., -SLIDING TYPE

VALVE BOX (SEE SPEC'S.)

DOWN.

PVC SEWER TRENCH UNDER **FUTURE ASPHALT STREET**

FUTURE PAVEMENT

SLOPE SIDES OF-

TRENCH, PROVIDE

AS REQUIRED BY OSHA SAFETY

TRENCH BOXES, OR

DISPOSE OF EXCESS

EXCAVATED MATERIAL

1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOD TO MATCH EXISTING. 2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE

MATERIAL BELOW THE PIPE

ZONE, AS APPROVED BY

ArDOT A.B.C. CLASS 7 8" MAXIMUM LIFTS COMPACTED

TO 98% MODIFIED PROCTOR

METALLIC LOCATOR TAPE 12' ABOVE TOP OF PIPE MIN.

4" MAXIMUM LIFTS

SEE NOTE*

BOTTOM, PROVIDE MIN 8"

OF 1 1/2" TO #4 SIZE

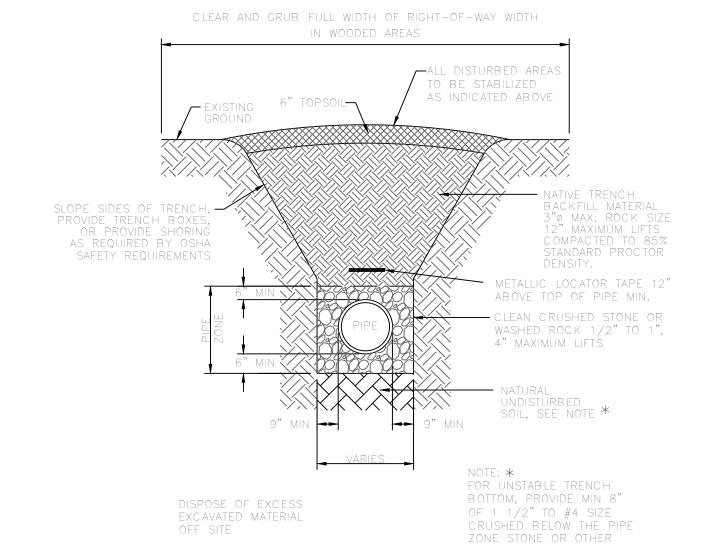
CRUSHED BELOW THE PIPE

MATERIAL BELOW THE PIPE

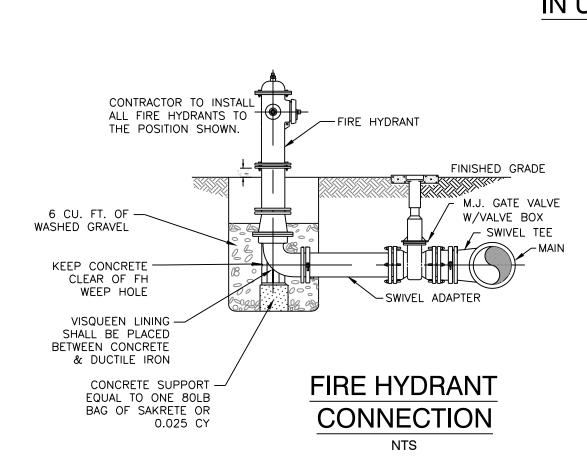
ZONE, AS APPROVED BY

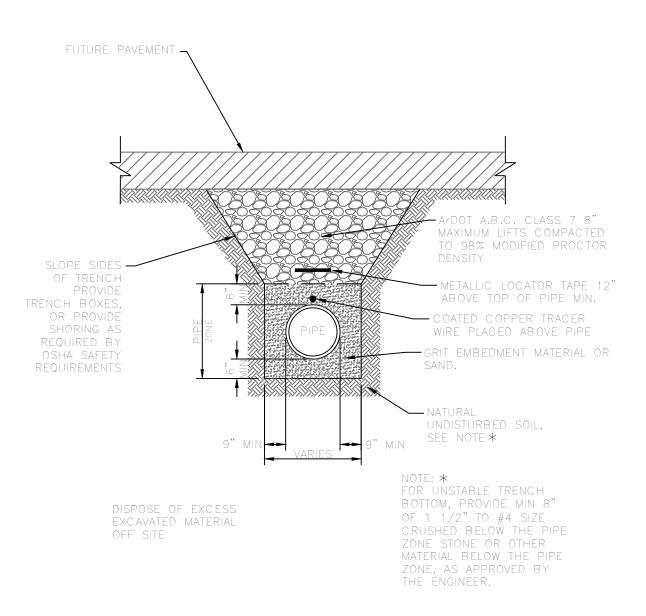
NOTE: *

WASHED ROCK 1/2" TO 1".

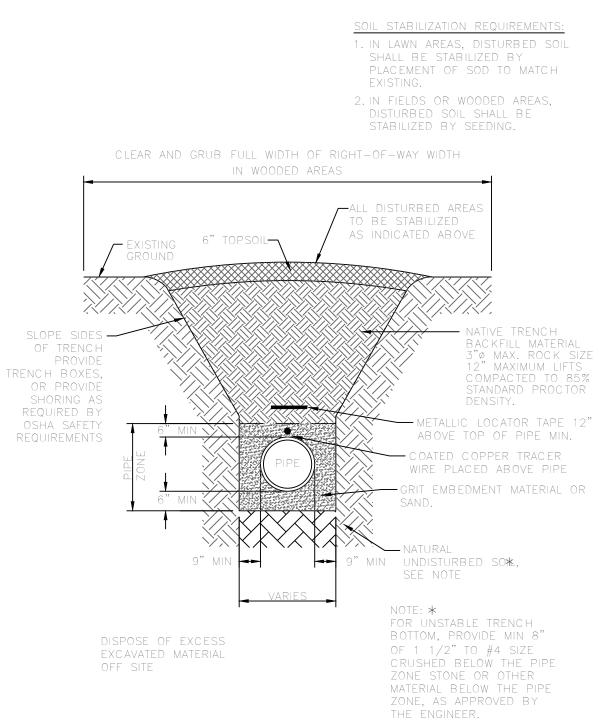


PVC SEWER TRENCH IN UNPAVED AREAS

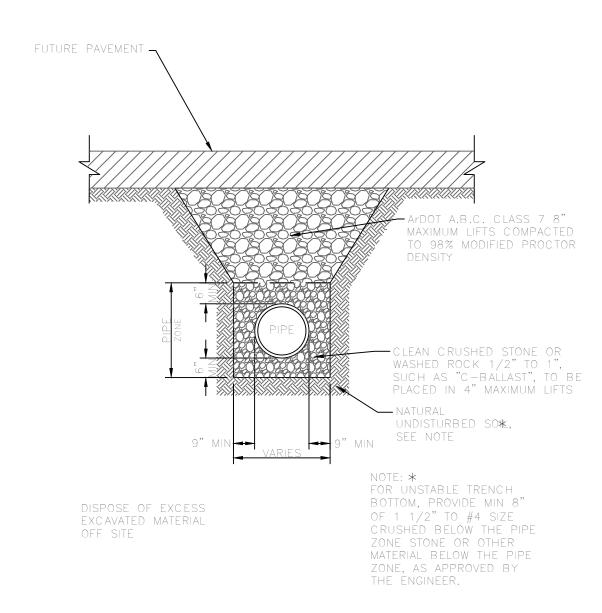




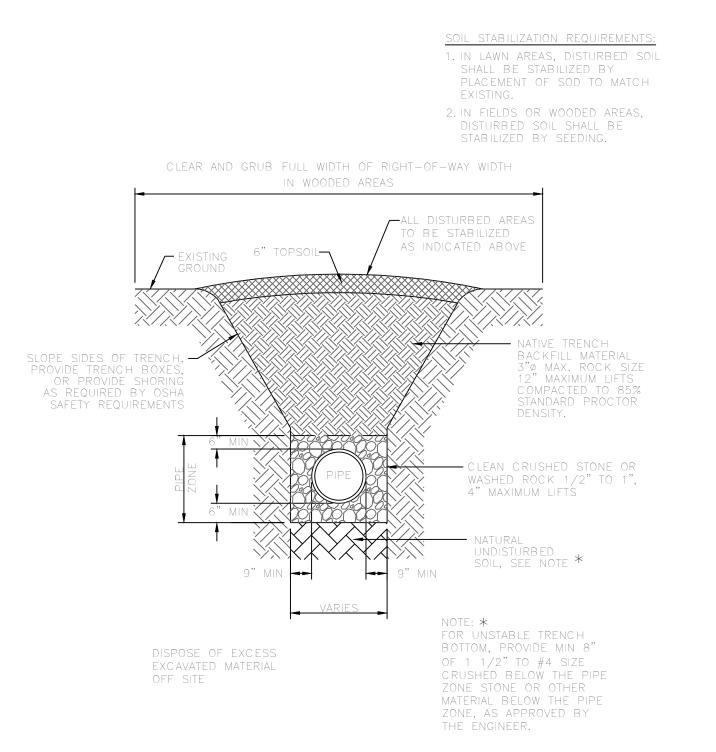
PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET



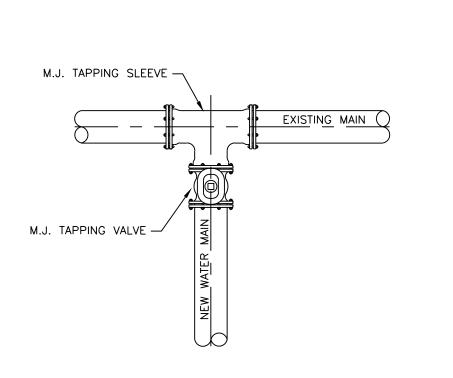
PVC WATER LINE TRENCH IN UNPAVED AREAS



DRAINAGE PIPE TRENCH UNDER **FUTURE ASPHALT STREET**



DRAINAGE PIPES IN UNPAVED AREAS



WATER MAIN CONNECTION DETAIL

2" BLOW-OFF RISER

2" METER BOX WITH

CAST IRON LID

EXIST. GRADE -

CONCRETE BLOCKING TO BE IN ACCORDANCE WITH BLOCKING DETAIL

BRASS ELL —

BRASS NIPPLE -

—— GALV. ELL

REMOVE AND DISCARD AFTER USE

- SCH. 40 GALV. PIPE

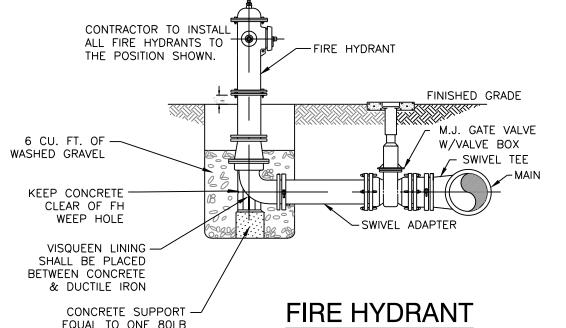
- AFTER BLOW-OFF

INSTALL MALE QUICK CONNECTION & CAP

BRASS BALL VALVE

-BRASS THREAD PIPE

∠MJ TAPPED CAP



CONSULTING FAX (501) 315-2020 ENGINEERS - SURVEYORS www.hopeconsulting.com

01S

129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626

FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING TRENCH DETAILS

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS 03/08/2023 DRAWING NUMBER: 08/07/2023 REVISED: CHECKED BY: 20-1341 SCALE:

14W 0 09 200 62 1762

SPECIFICATIONS

SUBGRADE MATERIAL

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subrades for pavement shall be stabilized by mechanical compaction. Stabilization methods such as fabrics and chemical stabilization may be submitted for approval when supported by engineering data and calculations to substantiate the adequacy of the stabilized procedure.
- C. Subgrade shall be compacted to 95 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- D. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects. E. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost
- F. In-situ soils meeting the requirements outlined in these specifications may be utilized as subgrade shall be scarified to a minimum depth of 8-inches below finish subgrade, recompacted and tested as described below. Fill material for subgrade shall be placed in lifts not to exceed 8-inches compacted depth.
- G. Methods and procedures for establishing the total depth of soil replacement and/or modification shall be as specified by the design engineer and geotechnical investigations. The adequacy of in-situ soils and fill materials as pavement subgrade shall be evaluated based upon the soils classification, liquid
- H. Soils with a liquid limit greater than 40, or a plasticity index greater than 15 shall be undercut and removed from the street section or improved by a design method of stabilization approved by the City.
- I. Quality control testing shall be as specified below.
- Undercut 24" of soil below finished street base course. Proof roll to verify stability
- K. Backfill the undercut subgrade with Class 7 aggregate or soil meeting the requirements of this section and compact in lifts not exceeding 8".

BASE COURSE

- A. Base course material shall be crushed stone meeting the requirements of ArDOT Class 7 aggregate base course as specified in the latest edition of ArDOT Standard Specifications.
- B. Base course shall be compacted to 98 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture.

SURFACE COURSE

A. Surface course for flexible pavement designs shall utilize plant mix bituminous base and binder courses conforming to ArDOT Standard Specifications.

CURB AND GUTTER

- A. Curb and gutter shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi. Concrete shall be air-entrained with a maximum of 4-inch slump.
- B. Compaction requirements under curb and gutter shall conform to the requirements for street subgrade materials. Compaction requirements shall extend to a minimum of 1 foot behond the back of curb and gutter removing all soft spots and replacing with suitable material. C. Curb and gutter shall conform to the typical detail within these specifications or ArDOT Standard Roadway Drawing Details for curbing.
- D. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at intervals not exceeding 195 feet, intersection radii, driveways, stationary structures, and sidewalks.
- E. Contraction joints shall be sawed or fromed at intervals not greater than 20 feet. Depth of saw-cut hall be 1 1/2-inch and have a width of 1/4-inch. Contraction joints shall be sealed in accordance with ArDOT Standard Specifications.
- F. Forms shall be made of metal or wood and shall be properly braced. The minimum length of each section of form used shall be uniform and free from undesirable bends or warps. Forms shall be of such cross section and strength and so secured as to resist the pressure of the impact and vibration on any equipment which they support without springing or settlement.
- G. Curb and gutter placed with slip form or extruding equipment will be acceptable providing it complies with all of the above requirements.
- H. After curing, the curb shall be immediately backfilled to within 4 inches of the top curb to eliminate the possibility of washing beneath the curb. The remaining 4 inches shall be topsoil. I. Cold weather protection shall meet the requirements of the latest edition of ArDOT Standard Specifications.

SIDEWALKS

General

- A. Sidewalks shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi.
- B. Sidewalks shall be on both sides of streets in line with sidewalks on opposite corners of roads.
- C. All sidewalks including ramps shall meet all current Federal Americans with Disabilities (ADA) design guidelines or requirements.
- D. Traverse slopes shall not exceed 2 percent.
- E. Subgrade under sidewalks shall be compacted to 90 percent modified proctor density minimum.
- F. Sidewalks shall not be placed upon grassy or organic materials.
- G. Sidewalks which extend or link existing sidewalks shall adjoin the existing sidewalks to form a continuous, even pathway.
- H. Utility poles, utility boxes, mailboxes, fire hydrants, and other similar obstructions shall not be located in sidewalks Sidewalk location may vary at the discretion of the City to avoid such obstacles. I. All sidewalk ramps shall meet ADA requirements with corrugated dome ramp requirements.

Minimum thickness and reinforcement

- A. Sidewalks shall have a minimum thickness of 4 inches.
- B. Sidewalks shall be reinforced, at a minimum, with woven wire fabric reinforcement.

Contraction and expansion joints

- A. Contraction joints shall be provided perpendicular to the sidewalk at intervals equal to the sidewalk width.
- B. Expansion joints shall be constructed perpendicular to the sidewalk at intervals equal to five times the sidewalk width. Expansion joints shall be made with 1/2-inch preformed expansion joints shall be placed at driveways, drop inlets, and curbs.

Quality control testing and inspection by the City

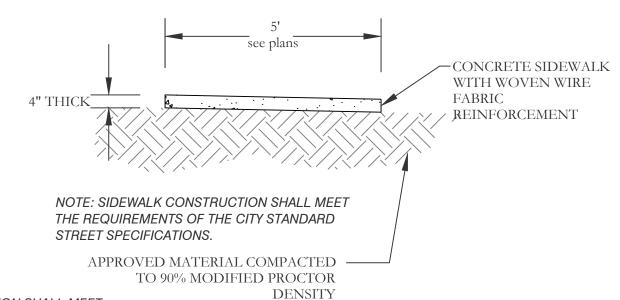
- A. Subgrade and formwork for sidewalks shall be inspected by the City prior to pouring of the sidewalk.
- B. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- D. All testing shall be accomplished by a testing firm approved by the City and shall be performed under the supervision of a licensed Professional Engineer.
- E. Sampling and testing locations shall be subject to approval by the City.
- F. Density tests on subgrades shall be taken every 300 feet or portion thereof. G. The City shall be notified at least one day in advance of the need to inspect subgrade and formwork of sidewalks.

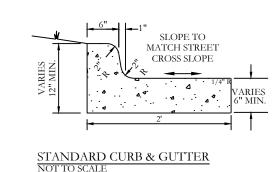
- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrade shall be compacted to 90 percent modified proctor desnity minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- C. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- D. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost

QUALITY CONTROL TESTING AND INSPECTIONS

General

- A. Materials and construction employed in street improvements shall be subject to inspection and quality control testing. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- B. The Developer/Owner shall provide for inspections of street improvements during construction. The Engineer of Record. The Engineer of Record shall provide certification that all materials and construction conform to the approved plans and specifications and with these minimum street standards.
- C. The Engineer of Record shall furnish inspection whenever a critical construction activity is taking place. This means that a representative of the Engineer of Record must be on-site whenever a critical construction activity is taking place.
- D. All field tests required for a project shall be witnessed by the City, Engineer of Record, contractor, or other authorized representatives.
- E. The City shall be notified at least one day in advance of any test(s). It is the responsibility of the contractor to coordinated the scheduling of all tests with the City.





TYPICAL CURB DETAILS & NOTES

NOTE: SIDEWALK CONSTRUCTION SHALL MEET ADA REQUIREMENTS WITH CORRUGATED DOME RAMP REQUIREMENTS

Typical Sidewalk Detail

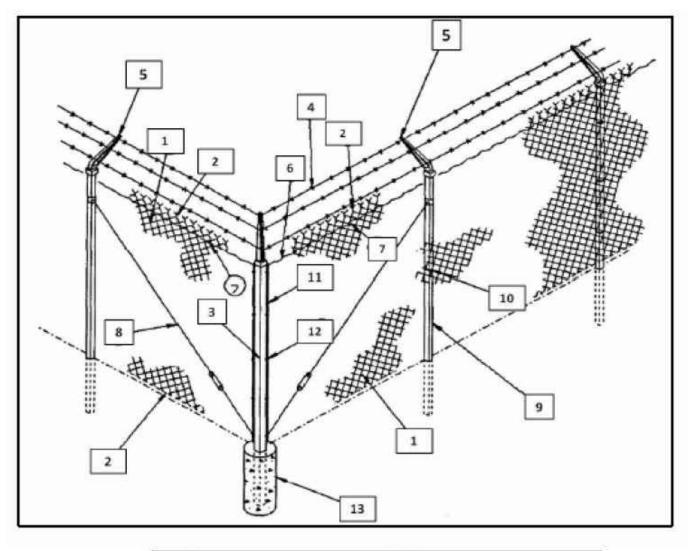
Typical Curb & Gutter Detail

4,000 psi concrete

ADA Corrugated Dome Ramp

Top View

Side View



1	Fabric
2	Selvage
3	Corner Post
4	Barbed Wire/Barbed Tape
5	Outrigger/Barbed Wire Arm
6	Tension Wire (Top and Bottom)
7	Hog Ring
8	Truss Rod
9	Line Post
10	Tie Wire
11	Tension Bar
12	Tension Clip
13	Concrete Footing

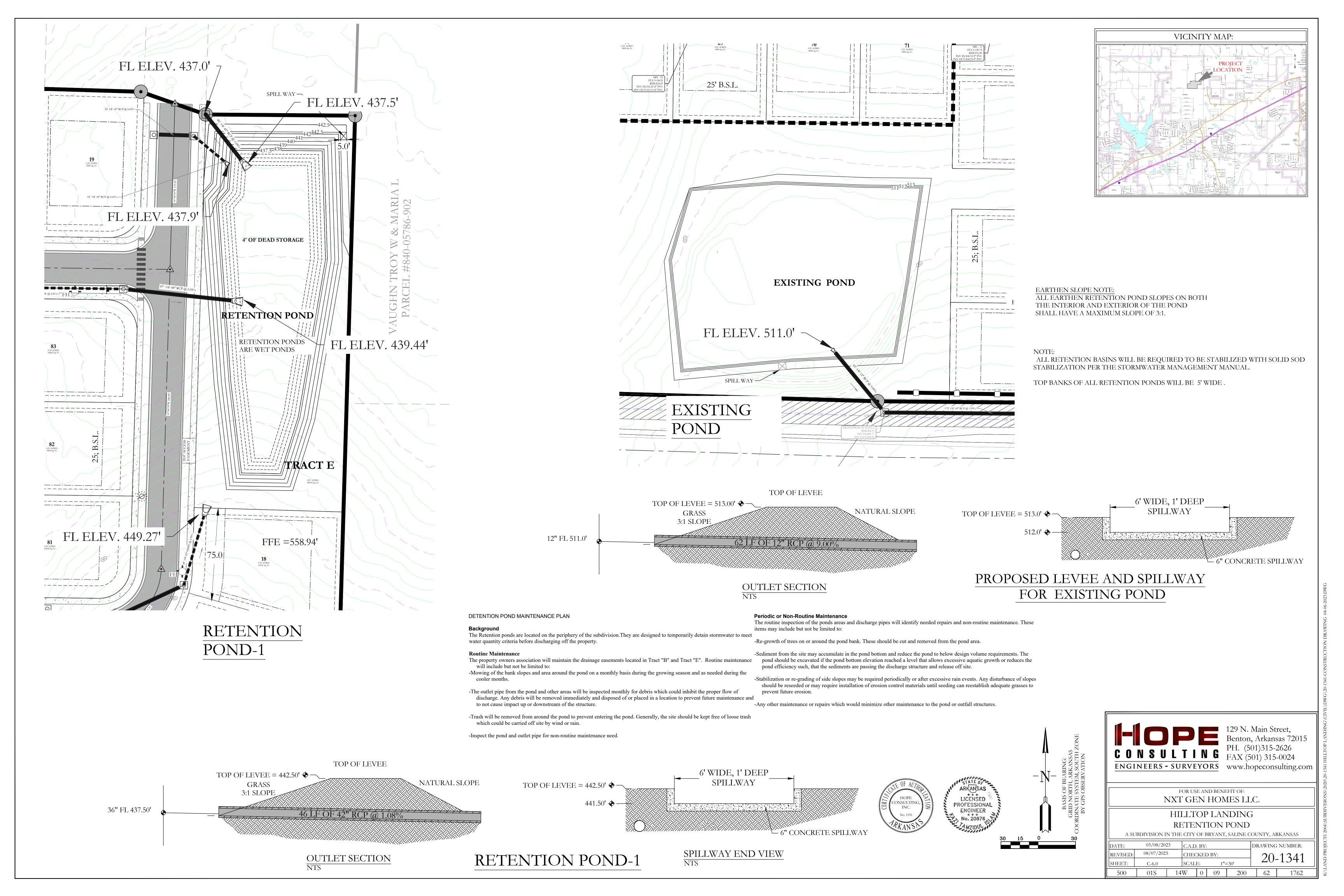
SECURITY FENCE DETAILS

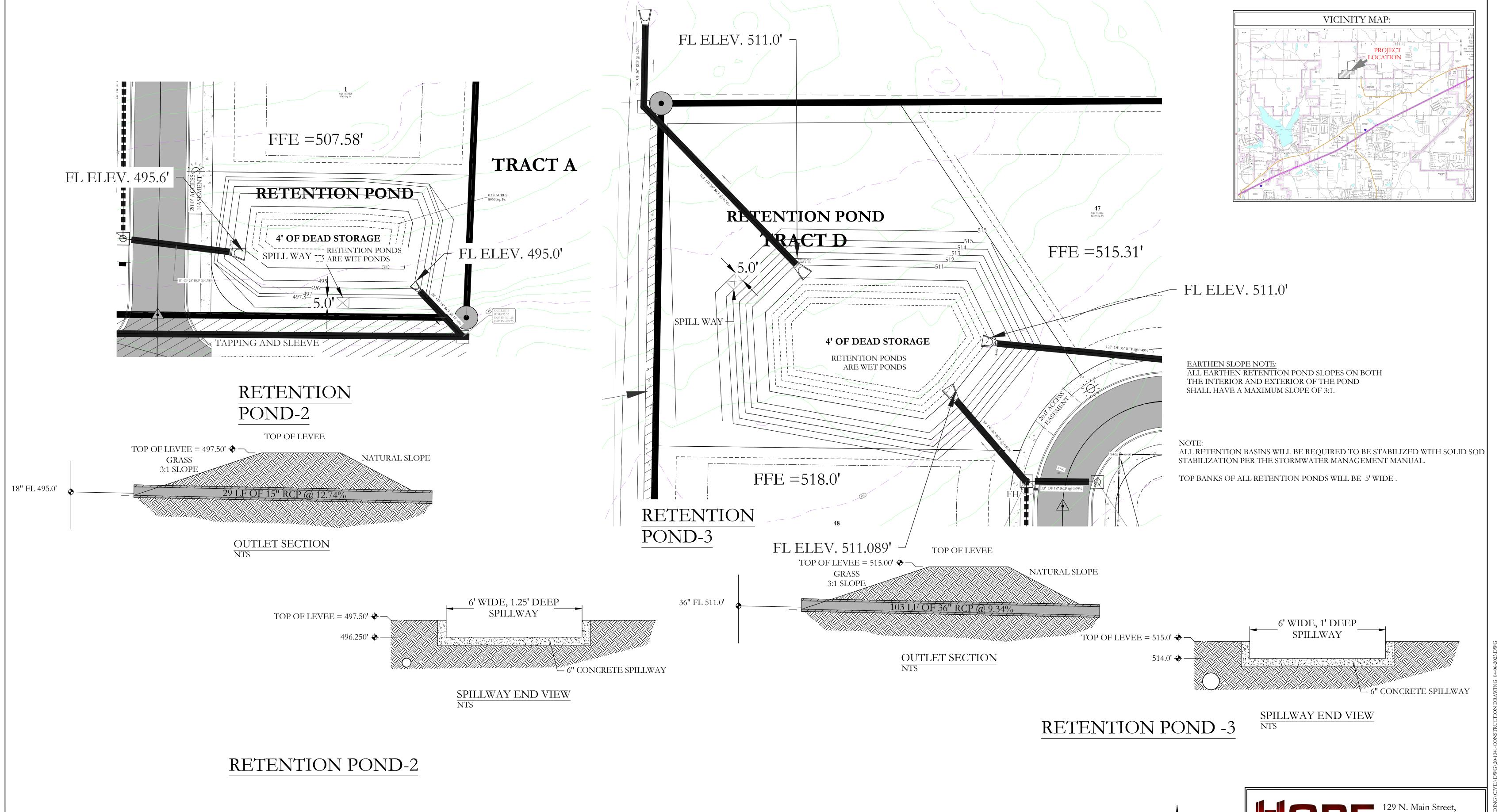
CONSULTING FAX (501) 315-0024 ENGINEERS - SURVEYORS www.hopeconsulting.com

FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING CIVIL SPECIFICATIONS

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS 03/08/2023 C.A.D. BY: DRAWING NUMBER: 08/07/2023 REVISED: CHECKED BY: 20-1341 14W 0 09 200 62





DETENTION POND MAINTENANCE PLAN

The Retention ponds are located on the perphery of the subdivision. They are designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

The property owners association will maintain the drainage easements located in Tract "A" and Tract "D".

Routine maintenance will include but not be limited to: -Mowing of the bank slopes and area around the pond on a monthly basis during the growing season and as needed during the

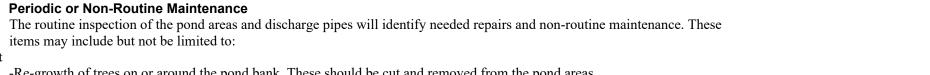
cooler months. -The outlet pipes from the ponds and other areas will be inspected monthly for debris which could inhibit the proper flow of

to not cause impact up or downstream of the structure.

discharge. Any debris will be removed immediately and disposed of or placed in a location to prevent future maintenance and

-Trash will be removed from around the pond to prevent entering the pond. Generally, the site should be kept free of loose trash which could be carried off site by wind or rain.

-Inspect the pond and outlet pipe for non-routine maintenance need.



-Re-growth of trees on or around the pond bank. These should be cut and removed from the pond areas.

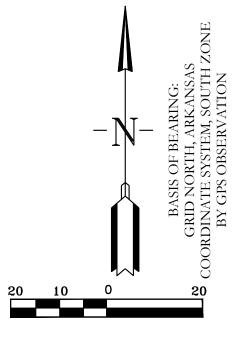
-Sediment from the site may accumulate in the pond bottom and reduce the pond to below design volume requirements. The pond should be excavated if the pond bottom elevation reached a level that allows excessive aquatic growth or reduces the pond efficiency such, that the sediments are passing the discharge structure and release off site.

-Stabilization or re-grading of side slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to prevent future erosion.

-Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.









FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING

RETENTION POND A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

C.A.D. BY: DRAWING NUMBER: 08/07/2023 CHECKED BY: 20-1341 14W 0 09 200 62 1762



MTA ENGINEERS

- Geotechnical Engineering
- Materials Testing Special Inspections
 - Design

mtaengineers.com

GEOTECHNICAL ENGINEERING EXPLORATION

Proposed 50 Acres Subdivision along Hilltop Road Bryant, Arkansas

PREPARED FOR:

Jonathan Hope Hope Consulting 117 South Market Street Benton, AR 72015

PREPARED BY:

MTA Engineers

8001 National Drive Little Rock, AR 72209

Report of Geotechnical Engineering Exploration Proposed 50 Acres Subdivision along Hilltop Road Bryant, Arkansas June 27th, 2023



June 27th, 2023

Jonathan Hope Hope Consulting 117 South Market Street Benton, AR 72015

Subject: Report of Geotechnical Engineering Exploration

Proposed 50 Acres Subdivision along Hilltop Road

Bryant, Arkansas

Mr. Hope:

MTA Engineers has completed the authorized Geotechnical Engineering Exploration for the above referred project. This work was conducted in accordance with the agreement between MTA Engineers and Hope Consulting, detailed in MTA Engineers Proposal dated June 25th, 2023.

The purpose of our work was to review general surface and subsurface conditions within the project site area, and to gather and present data relative to the design and construction of the proposed 50 Acres Subdivision located in Bryant, Arkansas. This report outlines the exploration procedures used, exhibits the data obtained, and presents our recommendations.

MTA Engineers appreciates this opportunity to provide these services and looks forward to working with you on future projects. Please contact us if you have any questions or require additional information.

Sincerely,

MTA Engineers

Kelton Price, P.E.

Project Engineer
Office +1 501-753-2

keltonp@mtaenginee



TABLE OF CONTENTS

SECTION

EXECUTIVE S	4	
INTRODUCTION		6
FIELD EXPLORATION		6
GENERAL SITE AND SUBSURFACE CONDITIONS		7
LABORATORY TESTING		8
ANALYSIS & RECOMMENDATIONS		8
•	SITE PREPARATION	8
•	STRUCTURAL FILL	9
•	BUILDING FOUNDATION	10
•	FOUNDATIONS / SLAB	10
•	PAVEMENT DESIGN	11
•	UN-COMPACTED FILL	12
•	STUMP/ ORGANIC FINDINGS	12
•	SEISMIC CONSIDERATION	12
•	CONSTRUCTION PROCEDURES	12

APPENDICES

APPENDIX A: Boring Location Plan

APPENDIX B: Boring Logs

APPENDIX C: Key to Terms and Symbols APPENDIX D: Laboratory Test Summary APPENDIX E: Seismic Design Criteria

TABLES

1	Soil Types Encountered in Borings	4
2	General Strata Classification of Boring Logs	7
3	Compaction Requirements	9
4	Pavement Design Assumption Values	11
5	Pavement Design Recommendations	12



EXECUTIVE SUMMARY

The geotechnical exploration was conducted near Hilltop Road located in Bryant, Arkansas. The general topography of the site was varying elevations. In general, the soil will consist of clayey sand with gravel and lean clay. Subsurface conditions were consistent throughout the entirety of the proposed development. The potential to find buried stumps or other organic material is low.

Major soil types encountered at each boring may be summarized as follow:

Table 1. Soil Types Encountered

SOIL TYPE	DESCRIPTION
SC	Clayey Sand w/ Surface Organics
CL	Lean Clay

See Table 2 General Strata Classification of Soil Logs or the individual soil logs found in Appendix B for a more detailed overview of the soils encountered on site.

Based on the nature of the existing strata encountered at the time of exploration, it is assumed that proposed improvements will be at/or above existing grades. The surface soil contains organic and loose clayey sand. In grass covered areas, the soil of Stratum I is loose and will contain 6-in of topsoil. The stability of these soils will depend on soil moisture conditions at the time of construction, area of improvements may require over-excavation of 2-ft to remove loose isolated surface soils (deeper during wetter seasons). Additional over-excavation may be required in the footing trenches, depending upon weather conditions.

Based on the anticipated bearing load, it is recommended that the store's structures be supported on traditional shallow footings founded a minimum of 24-in below final grade, within <u>Structural fill.</u> Footings founded as recommended may be designed using a net allowable bearing capacity of 2,000-psf for continuous and 2,500-psf for individual spread footings.

The net allowable end bearing pressures are based on a factor of safety in excess of 3.0 with respect to the anticipated shear strength of the structural fill. Total and differential settlement is anticipated in the order of $\frac{1}{2}$ -in.



SUMMARY

Rock/Hard Dig:

- No rock was encountered.
- Medium to heavy duty equipment will be required for deep utilities.

Soils:

- Soils generally consist of medium dense clayey sand and lean clay.
- Structural fill should be placed according to the "Structural Fill" section of this report.
- Stripping in the order of 6-in to remove organics.
- Subgrade soil must meet requirements of City of Bryant.

• Foundations/Slabs:

 Shallow footings founded a minimum of 24-in beneath final grade may be sized using a bearing pressure of 2,000-psf for continuous and 2,500-psf for individual spread footings.

Un-compacted Fill:

No un-compacted fill was encountered on the property during the exploration.

Stump/Organic Findings:

The potential to find stumps or other organic material beneath the surface is low.

Pavement:

- Recommended pavement sections are presented within this report.
- Pavement must meet the requirement of City of Bryant

• Miscellaneous:

The building is anticipated to be at/or above existing grade.



<u>INTRODUCTION</u>

This exploration was requested in order to evaluate existing subsurface conditions and provide geotechnical design recommendations. The results of this exploration and the geotechnical design recommendations for site construction are presented in this report.

Exploration was accomplished by:

- 1. Boring 5 locations up to 10-ft or refusal explore subsurface soil, and groundwater conditions.
- 2. Obtaining samples from each stratum, within the accessible areas, using standard geotechnical sampling technique or standard penetration test.
- 3. Performing laboratory tests on various samples to determine pertinent engineering properties of the subsurface strata.
- 4. Analyzing field and laboratory test data to develop design recommendations.

The scope of this geotechnical exploration did not include an environmental assessment to determine the presence of wetlands and/ or hazardous or toxic materials in the soil or groundwater on or near this site. If there is concern of wetlands or a hazardous/ toxic material presence, a qualified environmental assessment consultant should be contacted to perform a site investigation before construction begins.

FIELD EXPLORATION

Subsurface conditions at the site were explored by using dry auger methods and a split spoon sampler to a depth of up to 10-ft at 5 boring locations. The approximate boring locations are shown on the Plan of Borings, Appendix A. Boring logs presenting descriptions of the soil strata encountered are included in Appendix B. Laboratory testing results of the different soil types are located in Appendix D.

Samples were obtained throughout the entirety of most locations in general accordance with Standard Penetration Sampling (SPT). The recorded N-Values (Blows per foot) are indicated on the Boring Logs in the Blows per foot column. All soil samples encountered were removed from the field in moisture



tight containers and transported to our laboratory for further examination. At the lab, a visual classification was performed for each sample.

All various soil types were then analyzed for specific engineering properties. The dry auger drilling procedures facilitated observation of shallow groundwater conditions.

GENERAL SITE AND SUBSURFACE CONDITIONS

The exploration for the proposed Subdivision located along Hilltop Road in Bryant, Arkansas. It is anticipated that proposed roads will be constructed near the existing grade. Soil as explored consisted of lean clays, and clayey sands. Borings were advanced to a depth of 10-ft or refusal within the building and pavement areas using dry auger procedures.

For a more detailed description of soils encountered while testing see the boring log sheets found in the attached report.

Table2. General Strata Classification of Boring Logs

STRATA	DEPTH (ft)	SOIL CLASSIFICATION	SOIL DESCRIPTION	SIGNIFICANT PROPERTIES
STRATUM I	0 to Completion	SC Except B-3	Clayey Sand Surface Organics	Loose to Medium Dense Low Shrink Swell Potential Moderate bearing capacity
STRATUM II	0 to completion	CL Only in B-3 & 5	Lean Clay	Firm to Stiff Moderate Bearing

The significant properties and characteristics of the subsurface strata pertinent to design and constructions are as follows:

- A. The topography of the site and planned building location.
- B. The anticipated bearing loads.
- C. The anticipated pavement Loading.
- D. The anticipated pavement loading.



LABORATORY TESTING

Description of the soils encountered in the borings was prepared in general accordance with applicable ASTM standards. The soil stratification shown on the boring logs represents soil conditions at the specific boring locations. There may be some variations that occur between or beyond the boring locations. The stratification lines on the boring logs represent the approximate boundaries between soil types, but the actual transitions between soil layers in the subsurface of the proposed site may be gradual.

Laboratory soil testing was performed to verify/evaluate classification, volumetric stability, and to determine water content. The laboratory testing for soil properties was limited in this report. The results of the gradations, plasticity and moisture testing is attached as Appendix D. The results are also presented on the Boring Logs in Appendix B.

ANALYSIS AND RECOMMENDATIONS

SITE PREPARATION

Prior to the addition of any fill or the construction of any improvements, areas of the proposed building and parking should be grubbed approximately 6-in to remove organics. Existing soils do not meet the requirements for subgrade within the top 24-in, per City of Bryant. A minimum of 24-in of suitable fill shall be placed. To maintain grades over-excavation may be required. If grades allow fill can be placed above the in-situ soils. All fill/ backfill shall meet City of Bryant requirements for material as well as compaction. Once fill is placed, the area should be proof rolled using a loaded dump truck, or 62,000-lbs equivalent load, to locate any areas of instability. Isolated area of unstable soils should be evaluated at that time. Due to the nature of the in-situ soils, instability will increase significantly with increased soil moisture. Fill should be placed as described in the <u>Structural Fill</u> section of this report. Soils near surface are loose (<u>Stratum I</u>), Stability of these soils is dependent on moisture condition at the time of construction. As stated previously unstable areas will require over-excavation and backfill.

Excavation should be performed under dry conditions, using equipment adequate to perform the work. Depending upon the weather conditions, isolated undercuts of saturated soft clay may be necessary. Structural fill, where needed, should be placed as recommended in the "Structural Fill" section of the



report. Positive drainage should be maintained throughout this process. The addition of excessive moisture could cause a significant loss of soil stability.

STRUCTURAL FILL

Structural Fill within roadways must conform to City of Bryant requirements. Fill should consist of approved materials, which are free of organic matter and debris. For approval, samples of the proposed fill material should be submitted to MTA Engineers for classification testing. Select fill consisting of low plasticity soil such as lean clay or clayey gravel classifying as SC, CL, or GC according to the Unified Soils Classification System are generally considered suitable. High plasticity clay soils (soils with a Liquid Limit above 50) should not be used as fill.

Placement of approved fill should be achieved in multiple thin lifts. Each lift should not exceed 8-in in loose thickness. Compaction of these lifts should be performed with suitable equipment to achieve the compaction requirements noted in Table 3. Care should be taken that all compaction recommendations are performed.

If cohesive soils are to be used, compaction should be performed using a kneading-type vibratory compactor, such as a vibratory sheepsfoot. The material should be broken down sufficiently to provide a dense matrix of particles. All fill within the roadway must comply with City of Bryant Specifications.

Table 3: Compaction Requirements

Material Type and Location	Minimum Compaction (percent of ASTM D1557)	Allowable variance in moisture from optimum
Structural Fill Beneath Pavement Sections	95%	Optimum to +3 (Clay Shale) -3 to +3 (Other Approved Select Fill)
Structural Fill Beneath Buildings	95%	Optimum to +3 (Clay Shale) -3 to +3 (Other Approved Select Fill)
Utility Backfill in Building Area and Pavement	95%	-3 to +3
Miscellaneous and Green Areas	90%	-3 to +3
Aggregate Base Course	95%	-3 to +3 at time of compaction



BUILDING FOUNDATIONS

All foundations must satisfy two basic and independent design criteria. First, foundations must have an acceptable factor of safety against bearing failure under maximum design loads. Secondly, movement of the foundation due to consolidation, shrinkage, and/or swelling of the supporting strata should not exceed tolerable limits for the structure.

Construction factors such as installation of foundations units, excavation procedures, and surface and groundwater conditions should also be considered. These factors and the aforementioned subsurface conditions were influential in the development of the following statement.

In view of the anticipated foundation loading and subsurface conditions encountered, it is suggested that the proposed structures be supported on a foundation system designed in accordance with the following recommendations.

FOUNDATIONS/ SLABS

Shallow Foundations

Based on the nature of existing soils encountered at the time of exploration and the anticipated loading, it is recommended that all structures be supported on traditional shallow footings founded a minimum of 24-in beneath final exterior grade, within <u>Structural fill</u>. In addition, to minimize the potential for localized shear failure within the soils, a minimum footing width of 24-in is recommended. Shallow foundations founded as accounted may be designed using a net allowable bearing pressure of 2,000-psf for continuous and 2,500-psf for individual spread footings. The net allowable end bearing pressures will be based on a factor or safety in excess of 3.0. Total and differential settlement is anticipated to be less than ½-in.

Slab-on-grade type construction is considered appropriate for the floor slab. We recommend that the slab be supported on 4-in of clean crushed stone or gravel (ASTM C-33 #57 or equivalent) on prepared subgrade. A Class A impervious moisture barrier with a minimum thickness of 10-mils, specified according to ASTM E-1745, should be provided between slab and the granular fill due to the potential for perched water to develop during the wetter seasons.



PAVEMENT DESIGN

Paved parking and drives will be constructed as part of the project. Design traffic volumes and loadings have not been determined. However, we anticipate that the drives will be subject to light vehicles and weekly service trucks. We anticipate that the drives will be placed at/or above the existing elevation. The following design criteria were used to develop the recommended pavement sections in conjunction with the AASHTO Design Guide 1996:

Table 3. Pavement Design Assumption Values

PAVEMENT DESIGN ASSUMPTION VALUES							
CBR	5						
R-VALUE	15						
SOIL SUPPORT VALUE (S)	5						

Based on information obtained during this study, subgrade soils in the paved areas should generally consist of proof-rolled properly compacted <u>Structural fill</u>. Structural fill should be placed as recommended in the Structural fill section of the report. It is recommended that positive site drainage should be provided during construction and be incorporated during the final design.

All pavement sections must comply with the City of Bryant minimum requirements. It should be recognized that some periodic maintenance of pavement will be required. As a minimum, this should include periodic sealing of all joints and cracks to prevent surface water infiltration.

UN-COMPACTED FILL

No uncompacted fill was encountered on the property during our exploration.

STUMP/ ORGANIC FINDINGS

potential to find stumps or other organic material below the surface is low.



SEISMIC CONSIDERATION

Based on IBC-2015, a site soil **Class D** may be used for design purposes. Liquefaction potential of the soils in <u>Stratum I & II</u> is negligible. Additional design information on Seismic Consideration is attached as Appendix E.

CONSTRUCTION PROCEDURES

The potential exists for increased perched water to develop during wetter seasons. Therefore, foundation excavation and any other site grading should be performed during drier periods to reduce the possibility of changes in conditions.

Subsurface conditions significantly at variance with those encountered within the borings should be brought to the attention of the engineer, and work delayed pending evaluation and/or preparation of additional recommendations, if warranted.

* * * *

The following illustrations are attached and complete this report:

Appendix A: Excavation Location Plan

Appendix B: Test Pit Logs

Appendix C: Key to terms and Symbols

Appendix D: Laboratory Test Summary

Appendix E: Seismic Design Criteria

* * * *



Appendix A: Boring Location Plan





Appendix B: Boring Logs

M		2	MTA ENGINEERS a division of		Вс	ring	Log F	Repoi	rt		
	Γ , , , , , , , , , , , , , , , , , , ,	,	MATERIALS TESTING OF ARKANSAS www.mtaengineers.com			RING					
JOB N	_ O.		GEO23-097			GE TE:			-13-20	23	
JOB N	AME:	•	50 ACRES SUBDIVISION		TY	TYPE OF DRILLING: DRY AUGER					
	COORDINATES: NORTH: EAST: STATION:									OB 7822	
	LOCATION: BRYANT, AR						3Y: 3Y:		COR P. K	ING	
D		S			_ ļ						
Ε	S Y	Α								S	
P T	М	M P	DESCRIPTION OF MATERIAL					ITY	#200	ГОМ	
Н	ВО	L		UP	STIC T	JIST	OL L	STIC	ENT	OF B.	lue
FT.	L	ES	SURFACE ELEVATION: EXISTING GRADE	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	PLASTICITY INDEX	PERCENT PASSING #200	NO. OF BLOWS PER 6-IN.	N-Value
			LOOSE, RED-BROWN, CLAYEY SAND W/ SANDSTONE FRAGMENTS & SURFACE		22	9.7	38	16	36.6	5 4-4	8
			ORGANICS							4-4	12
			MEDIUM DENSE, RED-TAN, SANDY CLAY							5-7	12
— — 5			W/ SANDSTONE FRAGMENTS							5	8
_ _				SC						4-4	
			LOOSE TANNISH BED TO CRAV CANDY							5-4	9
			LOOSE, TANNISH RED TO GRAY, SANDY CLAY							4	11
10										5-6	
			Boring Terminated								
 15											
 20											
 25											
 30											
COM	PLET	ION	I DEPTH: 10 WATER DEPTH> INITI	AL:			AF	TER :	24 HO	URS:	
REMA	ARKS	<u>-</u>									

505 Sanders Ave. • Springdale, AR 72764 Ph. 479.756.0061 • Fax 479.756.9254

M) Part	MTA ENGINEERS a division of		Вс	ring l	Log F	Repor	't		
	Γ , , , , , , , , , , , , , , , , , , ,		MATERIALS TESTING OF ARKANSAS www.mtaengineers.com			RING I					
JOB N	 O.	-	GEO23-097			PAGE 1 OF 1 DATE: 6-13-2023					
JOB N		-	50 ACRES SUBDIVISION			TYPE OF DRILLING: DRY AUGER					
										OB 7822	
STATI LOCA		-	BRYANT, AR		LO	GGED B	Y:		COR P. K	Y.S ING	
	HON.	S	BITTANT, AIT		- DR	ILLED) i :		r. K	INO	
D E P T	S Y M B	A M P	DESCRIPTION OF MATERIAL		.	ŗ.		YIIY	T 3 #200	SLOWS	
H FT.	O L	LES	SURFACE ELEVATION: EXISTING GRADE	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	PLASTICITY INDEX	PERCENT PASSING #200	NO. OF BLOWS PER 6-IN.	N-Value
										5	11
			LOOSE TO MEDIUM DENSE, TANNISH GRAY TO RED, SANDY CLAY W/ SANDSTONE FRAGMENTS & SURFACE		22	18.2	38	16	38.0	6-5 3 2-5	7
5			ORGANICS	sc						5 5-6	11
			MEDIUM DENSE, TANNISH RED TO GRAY,							5 5-8	13
 			CLAYEY SAND								15
			Boring Terminated								
 15											
13											
 20											
 25											
23											
 30											
COM	L PLET	ION	DEPTH: 10 WATER DEPTH> INITI	AL:			AF	TER 2	24 HO	URS:	
REM											

505 Sanders Ave. • Springdale, AR 72764 Ph. 479.756.0061 • Fax 479.756.9254

M		2	MTA ENGINEERS a division of		E	Boring	Log F	Repor	t		
	Γ Αχ [*]	۶ .	MATERIALS TESTING OF ARKANSAS www.mtaengineers.com			ORING I					
JOB N	<u></u> , О.		GEO23-097			AGE OATE:			-13-20	23	
JOB N			50 ACRES SUBDIVISION		_ T	YPE OF D	RILLIN	IG:	DR	Y AUGEI	R
COOR		TES:	NORTH: EAST:			QUIPMEN OGGED B				OB 7822 Y S	
LOCA'			BRYANT, AR		_ D	RILLED E	BY:		P. K	ING	
H H d	S Y M B O	SAMPL	DESCRIPTION OF MATERIAL	JP	TIC	IST.	D.	PLASTICITY INDEX	PERCENT PASSING #200	NO. OF BLOWS PER 6-IN.	ue
FT.	L	E S	SURFACE ELEVATION: EXISTING GRADE	SOIL GROUP	PLASTIC	% MOIST.	LIQUID LIMIT	PLAS' INDE	PERCI PASSI		N-Value
 			STIFF, TAN-RED, SANDY CLAY W/ SURFACE ORGANICS							5 7-6 7 9-10	13 19
5				CL							12
			FIRM TO STIFF, TAN-RED, SANDY CLAY							<u>6</u> 7-15	22
 										<u>8</u> 9-11	20
	<u> </u>		Boring Terminated								
 15											
 20											
 25											
30											
			DEPTH: 10 WATER DEPTH> INIT	AL:			AF	TER 2	24 HO	URS:	
REMA	ARKS) :									

505 Sanders Ave. • Springdale, AR 72764 Ph. 479.756.0061 • Fax 479.756.9254

M		2	MTA ENGINEERS a division of		В	oring	Log F	Repoi	t		
	Γ , Α ,		MATERIALS TESTING OF ARKANSAS www.mtaengineers.com			RING					
JOB N	O.		GEO23-097			GE TE:			-13-202	23	
JOB N	AME:		50 ACRES SUBDIVISION		TY	TYPE OF DRILLING: DRY AUGER					
	COORDINATES: NORTH: EAST: STATION:									OB 7822	
	LOCATION: BRYANT, AR						5Y: — 3Y:		COR P. K	ING	
D		S									
E P T H	S Y M B	A M P L	DESCRIPTION OF MATERIAL	P	IC	ST.	Q	ICITY	PERCENT PASSING #200	NO. OF BLOWS PER 6-IN.	e
FT.	O L	E S	SURFACE ELEVATION: EXISTING GRADE	SOIL GROUP	PLASTIC LIMIT		LIQUID LIMIT	PLASTICITY INDEX		NO. OF BI PER 6-IN.	N-Value
 			LOOSE, TAN-RED, CLAYEY SAND W/ SURFACE ORGANICS & SANDSTONE FRAGMENTS		14	10.7	24	10	39.2	5-4 6 5-5	9
5				sc						7-10	17
			MEDIUM DENSE, TAN-RED, CLAYEY SAND							5-8	13
 										6-8	14
			Boring Terminated								
 15											
 20											
 25											
20											
30											
			DEPTH: 10 WATER DEPTH> INIT	AL:			AF	TER :	24 HO	URS:	
REMA	AKKS	:									

505 Sanders Ave. • Springdale, AR 72764 Ph. 479.756.0061 • Fax 479.756.9254

M) Part	MTA Engineers a division of MATERIALS TESTING OF ARKANSAS		Вс	ring	Log F	Repoi	't		
	Γ Ag		WATERIALS TESTING OF ARKANSAS www.mtaengineers.com			RING I					
JOB N	O.		GEO23-097			PAGE 1 OF 1 DATE: 6-13-2023					
JOB N			50 ACRES SUBDIVISION			TYPE OF DRILLING: DRY AUGER EQUIPMENT: GEOPROB 7822					
	COORDINATES: NORTH: EAST: STATION:								COR		
LOCA		-	BRYANT, AR			ILLED I					
D		S									
E P	S Y	A M	DECODIDITION OF MATERIAL						00	WS	
Τ	M B	Р	DESCRIPTION OF MATERIAL		ט	T.		PLASTICITY INDEX	PERCENT PASSING #200	NO. OF BLOWS PER 6-IN.	
Н	0	L E		SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	ASTIONEX	SSIN	NO. OF B. PER 6-IN.	N-Value
FT.	L	S	SURFACE ELEVATION: EXISTING GRADE	SOI							
					14	14.6	27	13	37.6	3-3	6
			LOOSE, TAN-RED, CLAYEY SAND W/ SURFACE ORGANICS	SC						3	5
										2-3	
5					18	36.1	35	17	87.2	2-4	6
			FIRM TO STIFF, TANNISH RED TO GRAY,	CL						<u>3</u> 6-8	14
			SANDY CLAY							5	14
										6-8	
			Boring Terminated								
 15											
20											
25											
30											
COM	PLET	ION	DEPTH: 10 WATER DEPTH> INIT	IAL:		l .	AF	TER :	24 HO	URS:	
REM	ARKS	:		_		_			_		

505 Sanders Ave. • Springdale, AR 72764 Ph. 479.756.0061 • Fax 479.756.9254



Appendix C: Key to Terms

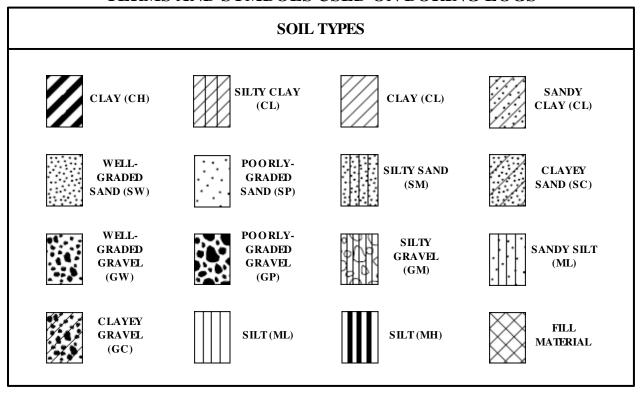


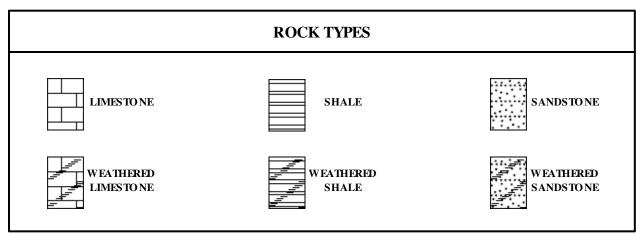
P.O. Box 23715 • Little Rock, AR 72221 Ph. 501.753.2526

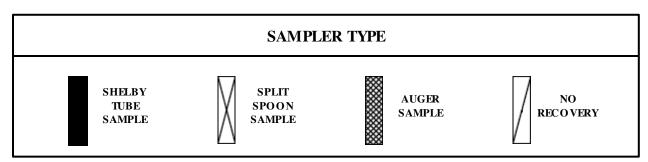
P.O. Box 688 • Springdale, AR 72765 Ph. 479.756.0061

101 S. Church Street, Box 4 • Jonesboro, AR 72401 Ph. 870.530.8380

TERMS AND SYMBOLS USED ON BORING LOGS









a division of Materials Testing of Arkansas, Inc.

LINIOONICINICD

P.O. Box 23715 • Little Rock, AR 72221 Ph. 501.753.2526

P.O. Box 688 • Springdale, AR 72765 Ph. 479.756.0061

101 S. Church Street, Box 4 • Jonesboro, AR 72401 Ph. 870.530.8380

SOIL GRAIN SIZE

	U.S. STANDARD SIEVE							
12"	3"	3/4"	4	10	40	200		
DOLL DEDC	CODDIES	COBBLES GRAVEL COARSE FINE COARSE			SAND		CH T	CLAY
BUULDERS	COBBLES			COARSE	MEDIUM	FINE	SILT	
304	76.2	19.1	4.75	2	0.42	0.074	0.002	
	SOIL GRAIN SIZE IN MILIMETERS							

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE GRAINED SOILS (major portion retained on No 200 sieve): Includes (1) clean gravels and sands, and (2) silty clayey gravels and sands condition is rated according to relative density, as determined by laboratory tests.

DESCRIPTIVE TERMS	N VALUE	RELATIVE DENSITY
VERY LOOSE	0-4	0 – 15 %
LOOSE	4-10	15 – 35 %
MEDIUM DENSE	10-30	35 – 65 %
DENSE	30-50	65 – 85 %
VERY DENSE	50 and above	85 – 100 %

FINE GRAINED SOILS (major portion passing No 200 sieve): include (1) inorganic and organic silt and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer reading or by unconfined compression tests.

		UNCONFINED
		COMPRESSIVE STRENGTH
DESCRIPTIVE TERMS	N VALUE	TON / SQ. FT.
VERY SOFT	0-3	less than 0.25
SOFT	3-6	0.25 - 0.50
FIRM	6-12	0.50 - 1.00
STIFF	13-20	1.00 - 2.00
VERY STIFF	20-50	2.00- 4.00
HARD	50 and above	4.00 and higher

NOTE: Slickensided and fissured clays may have lower unconfined compressive strengths than shown above because of planes of weakness or cracks in the soil. The consistency rating of such soils are based on penetrometer readings

TERMS CHARACTERIZING MOISTURE CONTENT

DRY: No water evident in sample; fines less than plastic limit.

MOIST: Sample feels damp; fines near the plastic limit.

VERY MOIST: Water visible on sample; fines greater than plastic limit and less than liquid limit.

WET: Sample bears free water; fines greater than liquid limit.

TERMS CHARACTERIZING SOIL STRUCTURE

SLICKENSIDED: Having inclined planes of weakness that are slick and glassy in appearance.

FISSURED: Containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical.

LAMINATED: Composed of thin layer of varying color and texture.

INTERBEDDED: Composed of alternate layers of different soil types

CALCAREOUS: Containing appreciable quantities of calcium carbonate.

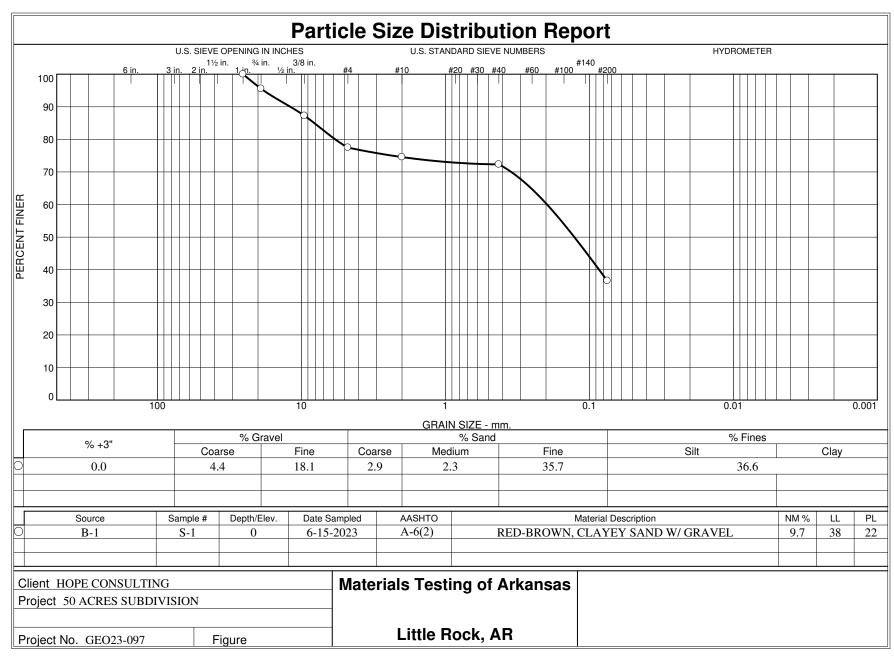
WELL GRADED: Having wide range in grain sizes and substantial amounts of all intermediate particle size.

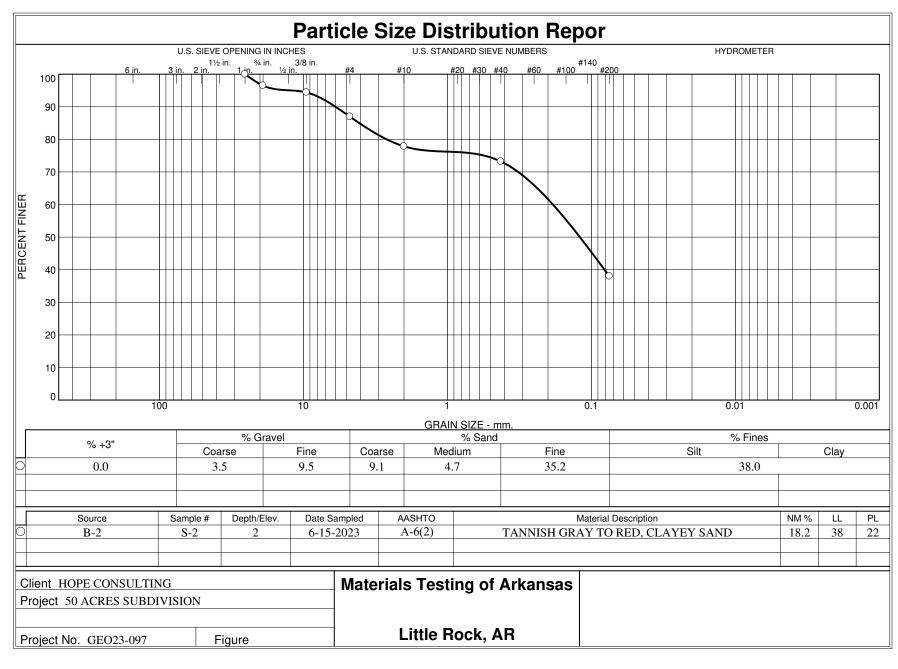
POORLY GRADED: Predominantly of one grain size, or having a range of sizes with some intermediate size missing

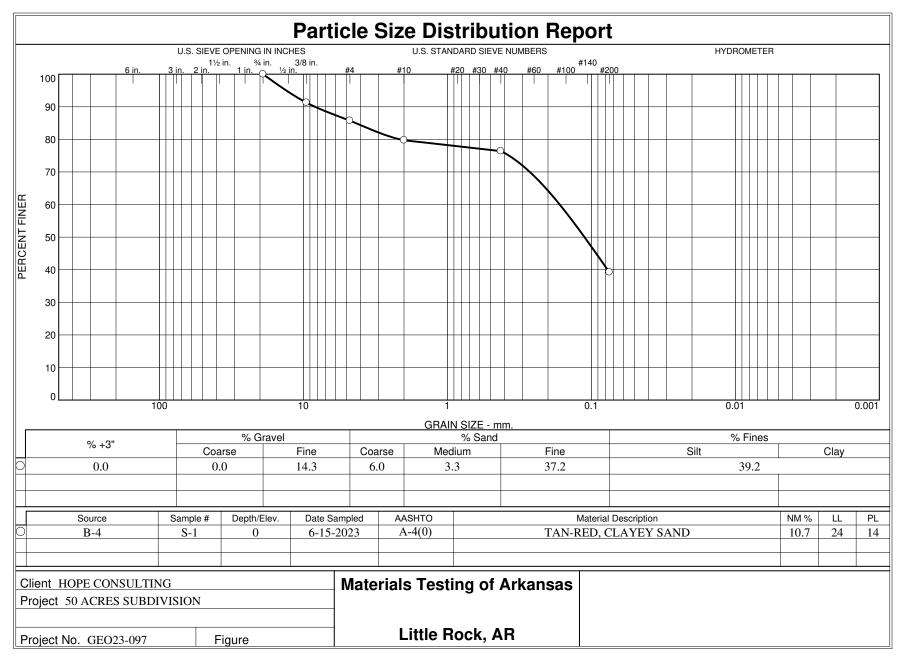
Terms used in this report for describing soils according to their texture or grain size distribution are in accordance with UNIFIED SOIL CLASSIFICATION SYSTEM as described in technical Memorandum No 3-357, Waterways Experiment Station, March 1953

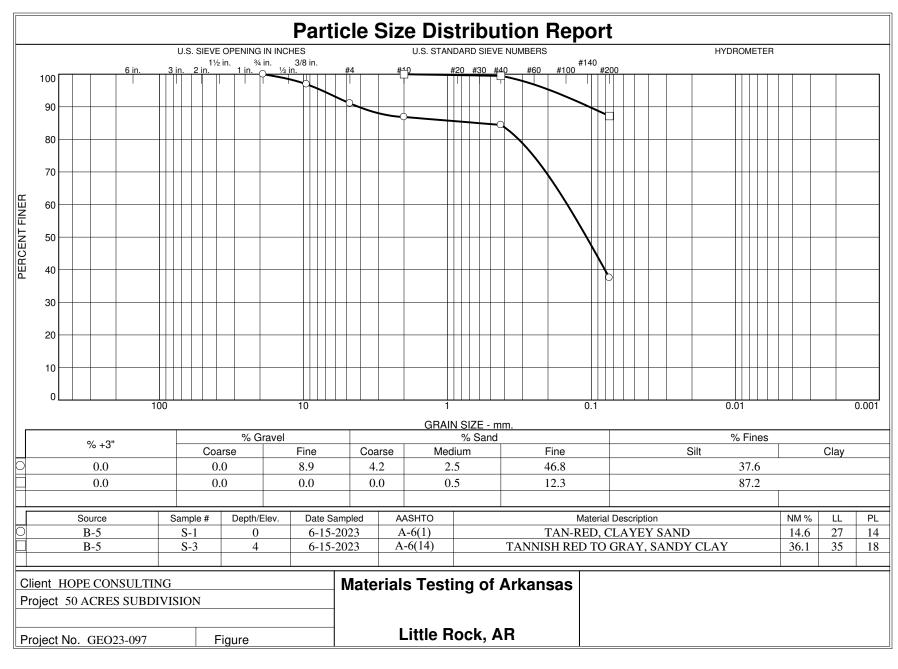


Appendix D: Laboratory Test Summary











Appendix E: Seismic Design Criteria

1 The ATC Hazards by Location website will not be updated to support ASCE 7-22. Find out why.

ATC Hazards by Location

Search Information

Coordinates: 34.643606998951, -92.50461665805817

542 ft Elevation:

Timestamp: 2023-06-27T19:08:20.123Z

Seismic **Hazard Type:** Reference Document: IBC-2015

Risk Category: Site Class: D

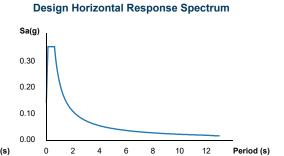


Map data @2023 Imagery @2023 , Maxar Technologies, Pulaski Area GIS, State of Arkansas, U.S. Geological Survey, USDA/FPAC/GEO

MCER Horizontal Response Spectrum

П

Sa(g) 0.50 0.40 0.30 0.20 0.10 Period (s) 10 12 0



Basic Parameters

Name	Value	Description
S _S	0.352	MCE _R ground motion (period=0.2s)
S ₁	0.148	MCE _R ground motion (period=1.0s)
S _{MS}	0.534	Site-modified spectral acceleration value
S _{M1}	0.326	Site-modified spectral acceleration value
S _{DS}	0.356	Numeric seismic design value at 0.2s SA
S _{D1}	0.218	Numeric seismic design value at 1.0s SA

▼Additional Information

Name	Value	Description
SDC	D	Seismic design category
Fa	1.519	Site amplification factor at 0.2s
F _v	2.209	Site amplification factor at 1.0s
CR _S	0.839	Coefficient of risk (0.2s)
CR ₁	0.817	Coefficient of risk (1.0s)
PGA	0.18	MCE _G peak ground acceleration
F _{PGA}	1.439	Site amplification factor at PGA
PGA _M	0.26	Site modified peak ground acceleration
T_L	12	Long-period transition period (s)
SsRT	0.352	Probabilistic risk-targeted ground motion (0.2s)
SsUH	0.419	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)
SsD	1.5	Factored deterministic acceleration value (0.2s)
S1RT	0.148	Probabilistic risk-targeted ground motion (1.0s)
S1UH	0.181	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)
S1D	0.6	Factored deterministic acceleration value (1.0s)

0.6

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Please note that the ATC Hazards by Location website will not be updated to support ASCE 7-22. Find out why.

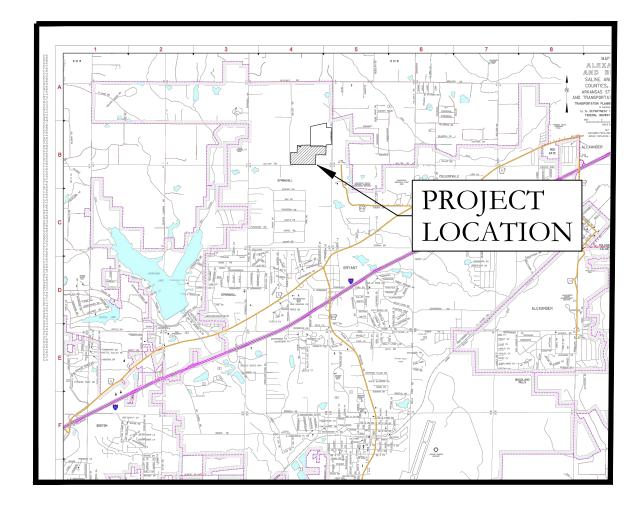
Disclaimer

Hazard loads are provided by the U.S. Geological Survey Seismic Design Web Services.

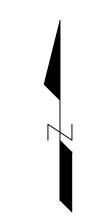
While the information presented on this website is believed to be correct, ATC and its sponsors and contributors assume no responsibility or liability for its accuracy. The material presented in the report should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. ATC does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the report provided by this website. Users of the information from this website assume all liability arising from such use. Use of the output of this website does not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the report.

CONSTRUCTION PLANS HILLTOP LANDING

HILLTOP ROAD & MILLER ROAD, BRYANT, AR



VICINITY MAP



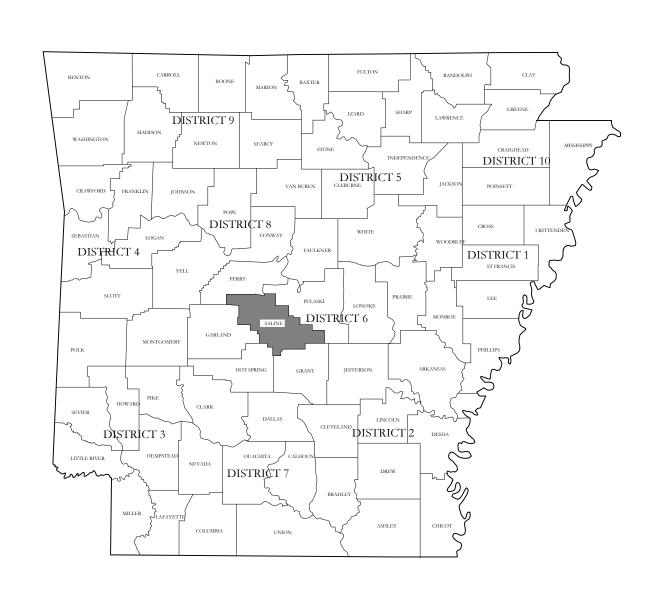
PREPARED BY:



129 N. Main Street, www.hopeconsulting.com

DRAWING INDEX

SHEET NO.	TITLE
	PLAT
C-1.0	STREET PLAN & PROFILE
C-1.1	STREET PLAN & PROFILE
C-1.2	STREET PLAN & PROFILE
C-2.0	UTILITY PLAN
C-2.1	SEWER PLAN & PROFILE
C-2.2	SEWER PLAN & PROFILE
C-2.3	SEWER PLAN & PROFILE
C-3.1	STORM PLAN & PROFILE
C-3.2	STORM PLAN & PROFILE
C-3.3	STORM PLAN & PROFILE
C-3.4	STORM PLAN & PROFILE
C-4.0	TRENCH AND SPECIAL DETAILS
C-5.0	CIVIL SPECIFICATIONS
C-6.0	DETENTION
C-6.1	DETENTION
C-7.0	EROSION CONTROL PLAN

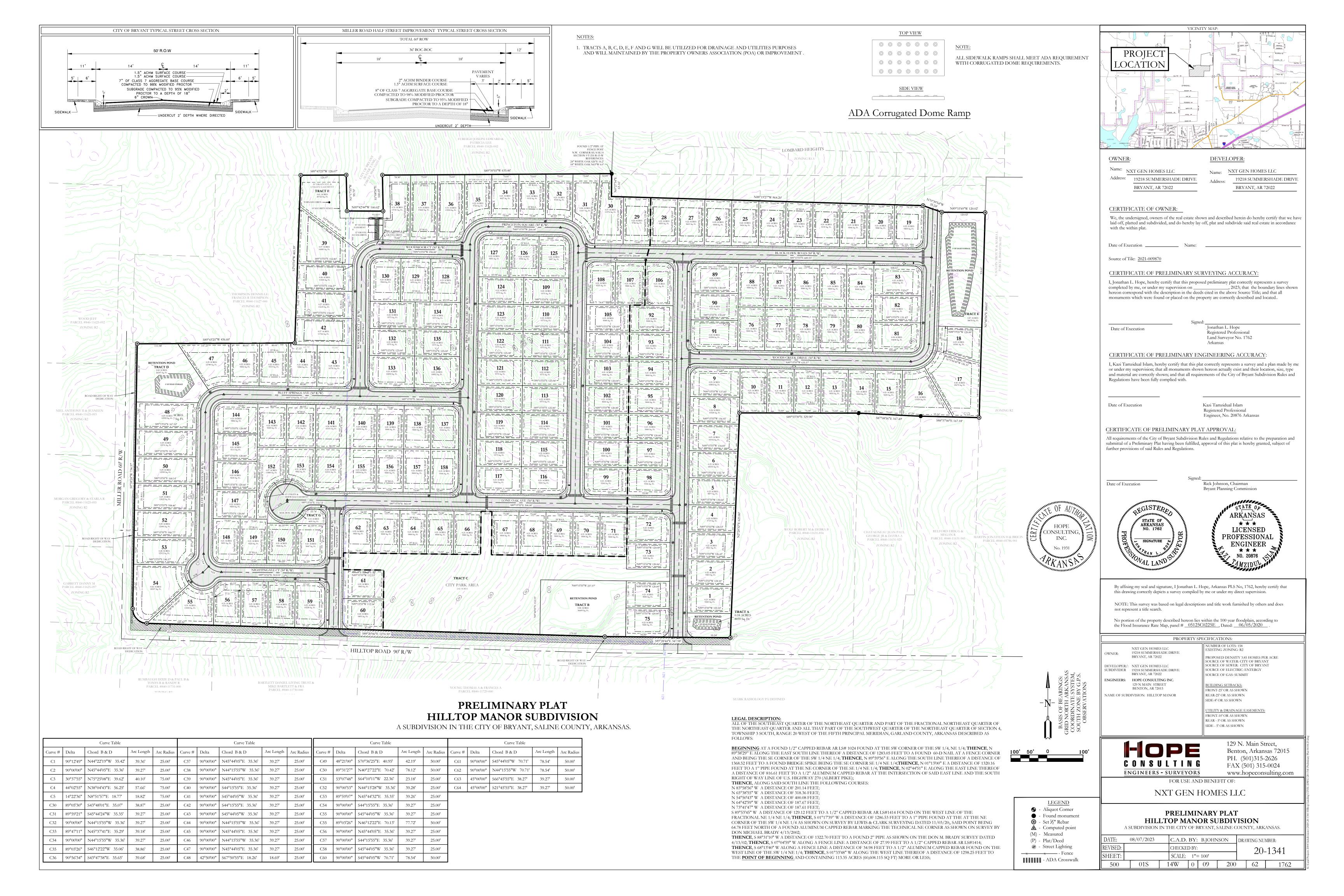




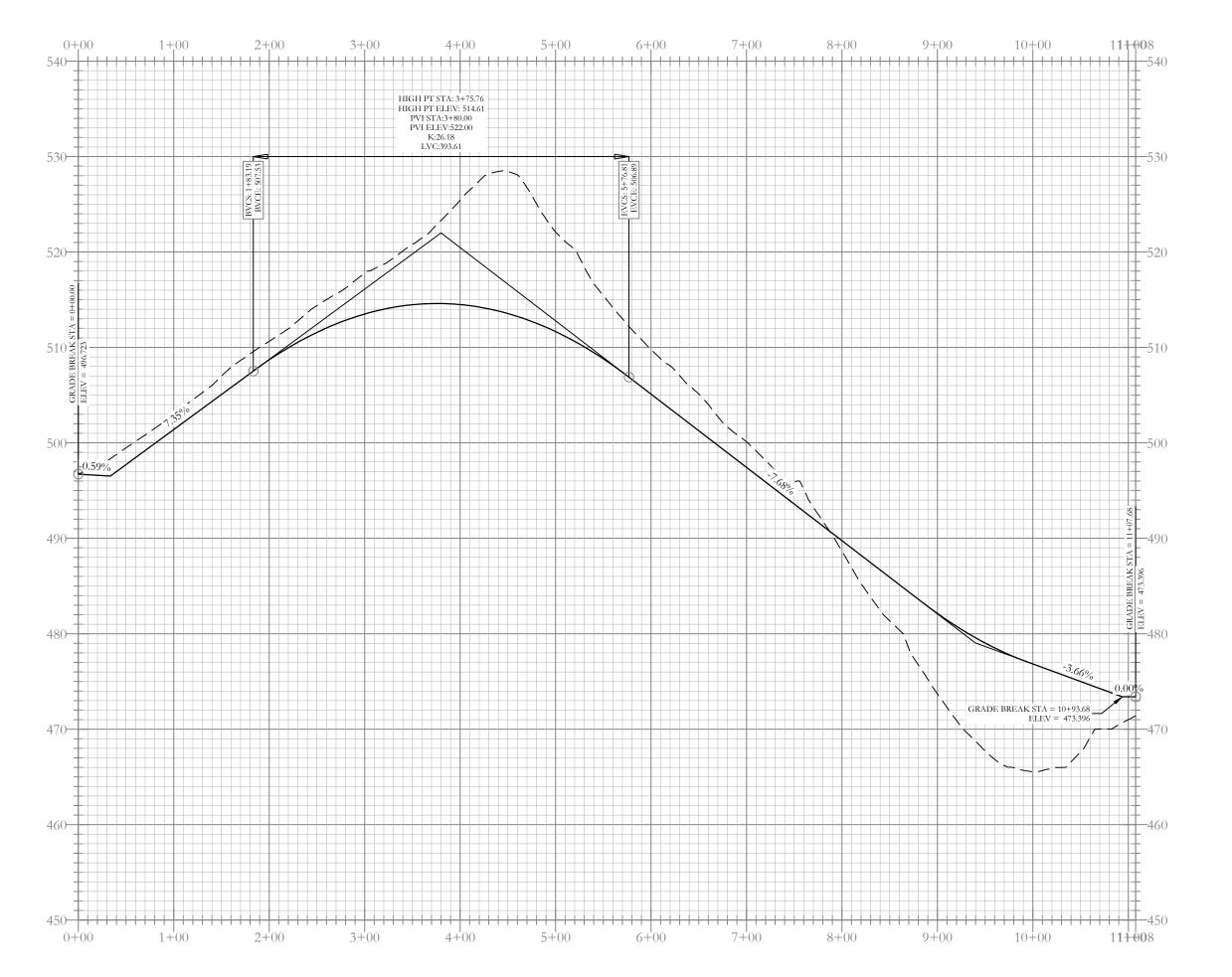
FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING A SUBDIVISION IN THE CITY OF BRYANT, AR HILLTOP ROAD & MILLER ROAD, BRYANT, AR

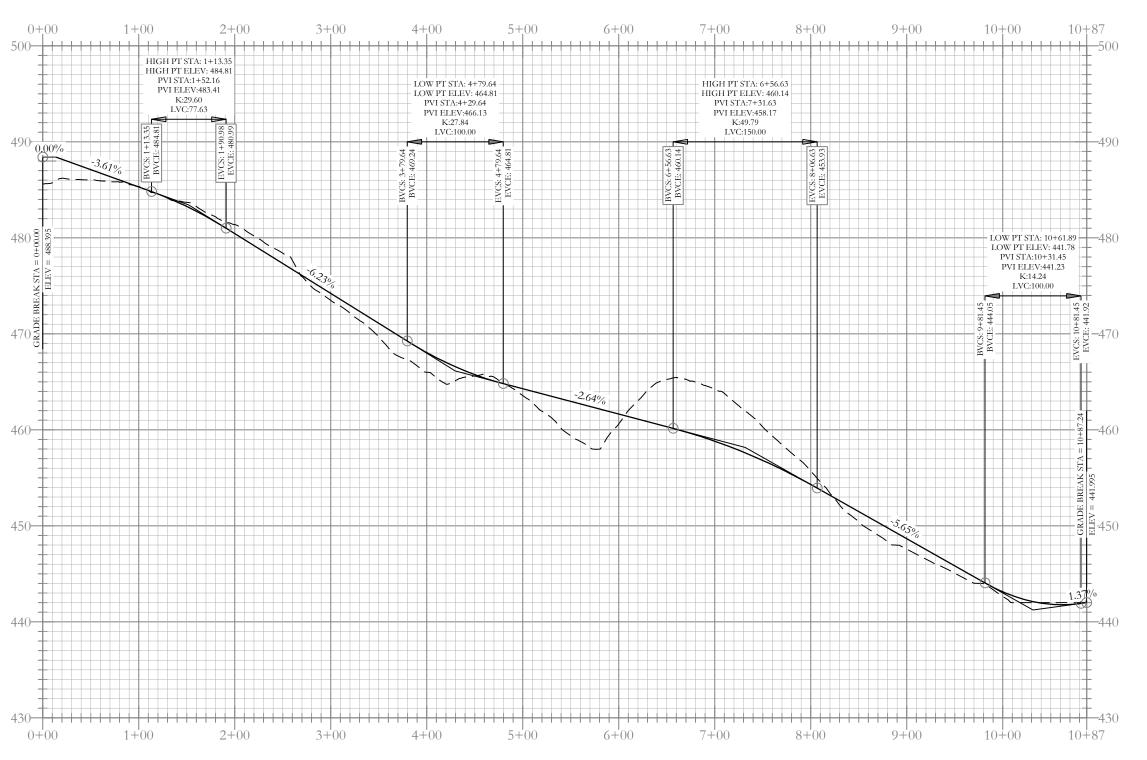
DRAWING NUMBER: 02/16/2023 C.A.D. BY: REVISED: 08-07-2023 CHECKED BY: 20-1341
 500
 01S
 14W
 0
 9
 200
 62
 1762











HOPE CONSULTING, INC. No. 1931

VICINITY MAP:



- - - - HDPE



129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com

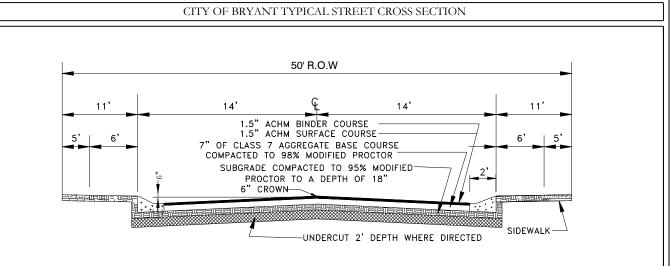
FOR USE AND BENEFIT OF:

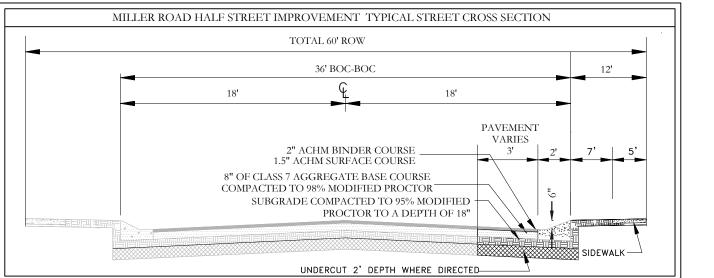
NXT GEN HOMES LLC.

HILLTOP LANDING
STREET PLAN & PROFILE
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

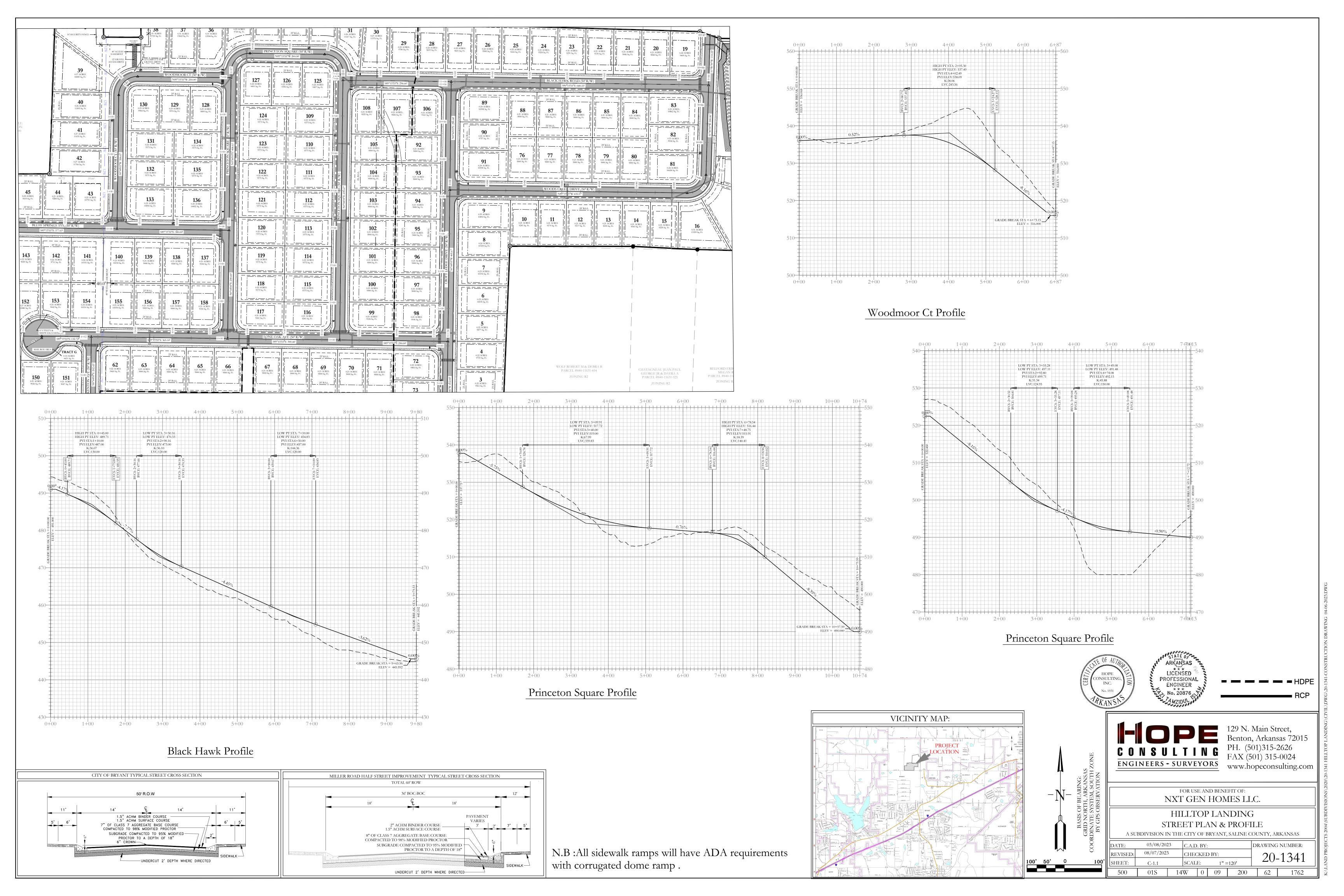
DATE: 03/08/2023 C.A.D. BY: DRAWING NUMBER: REVISED: 08/07/2023 CHECKED BY: SHEET: C-1.0 SCALE: 1" = 100' 20 62 1762

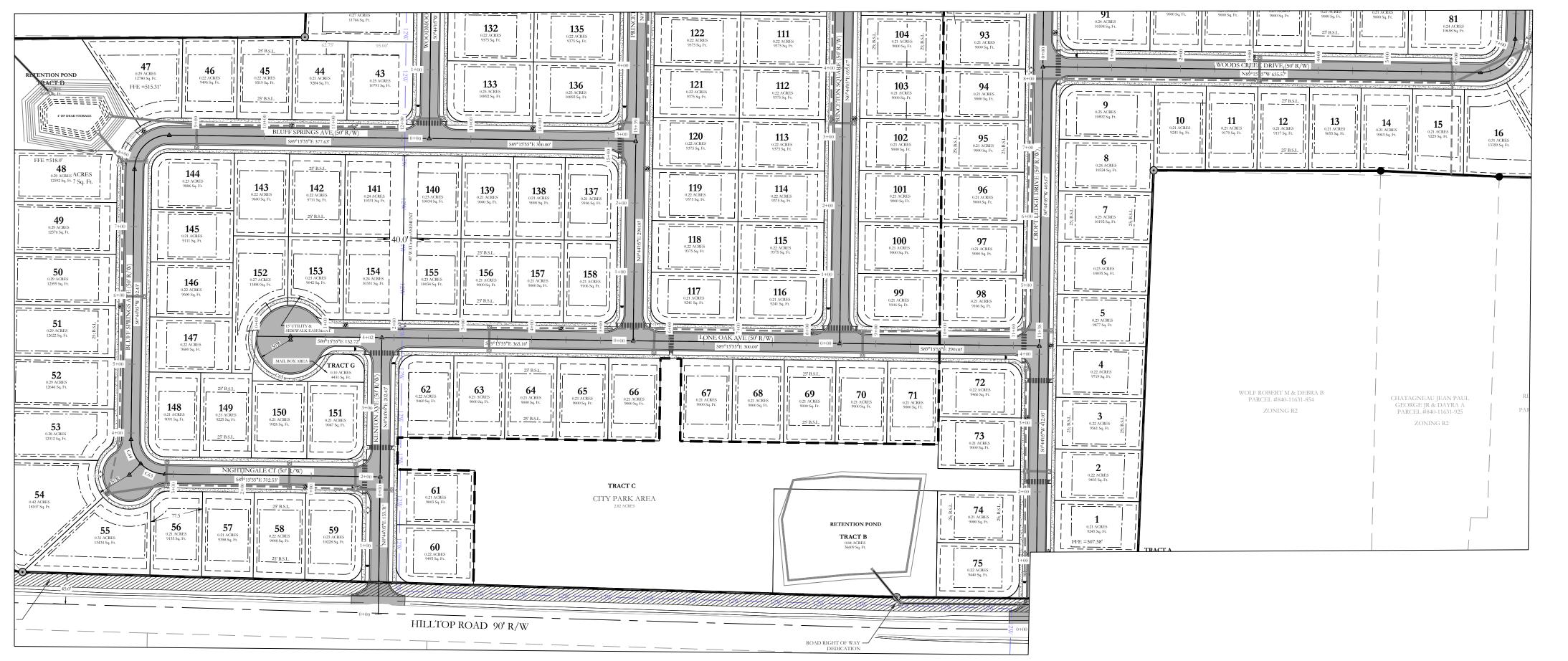
N.B :All sidewalk ramps will have ADA requirements with corrugated dome ramp .

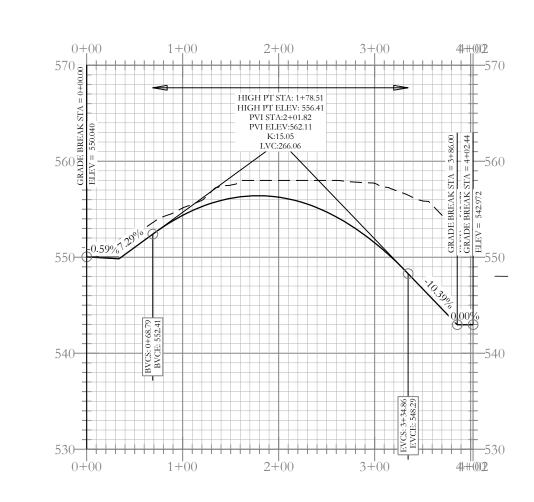








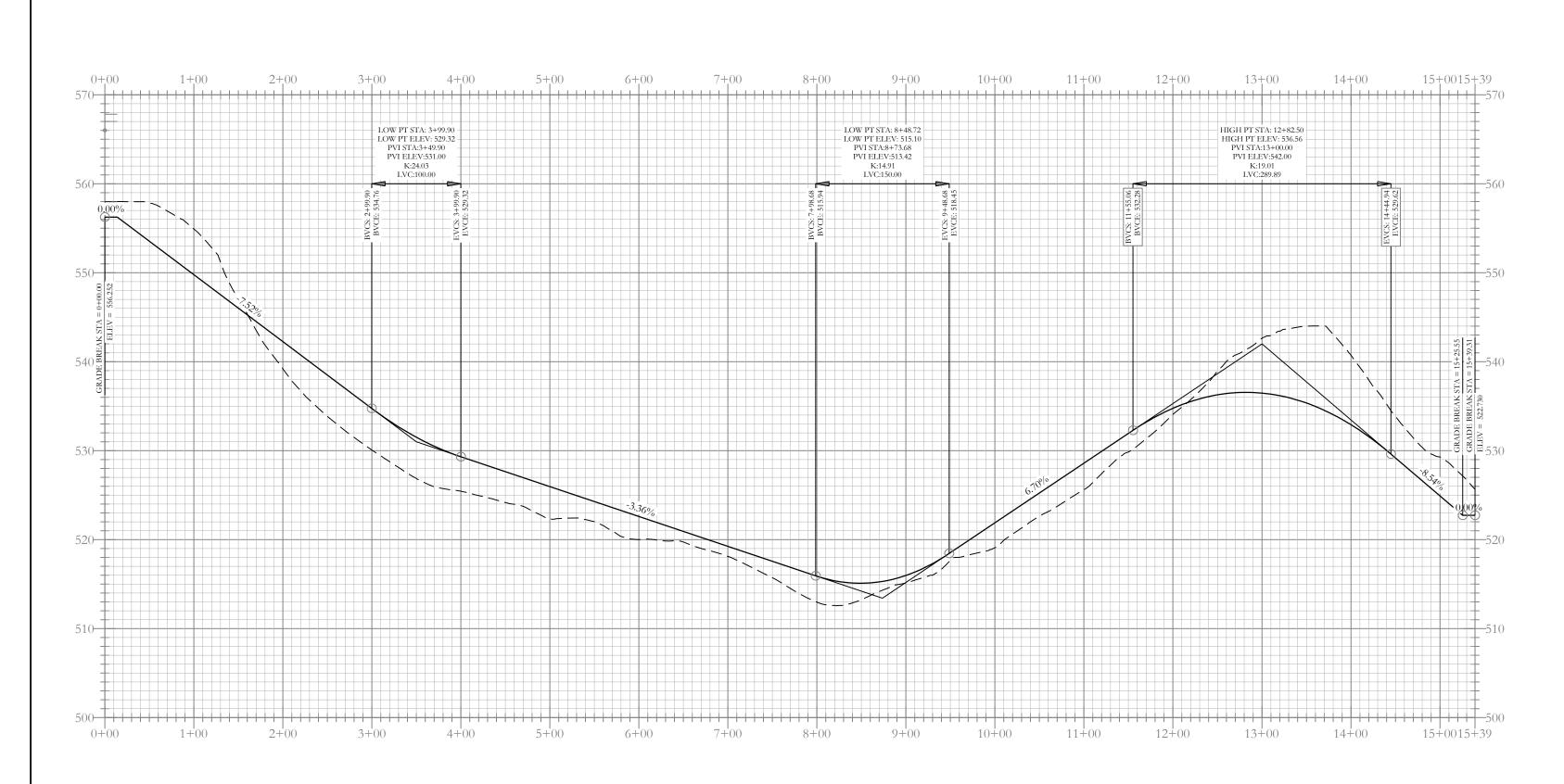




Kenton Ave Profile





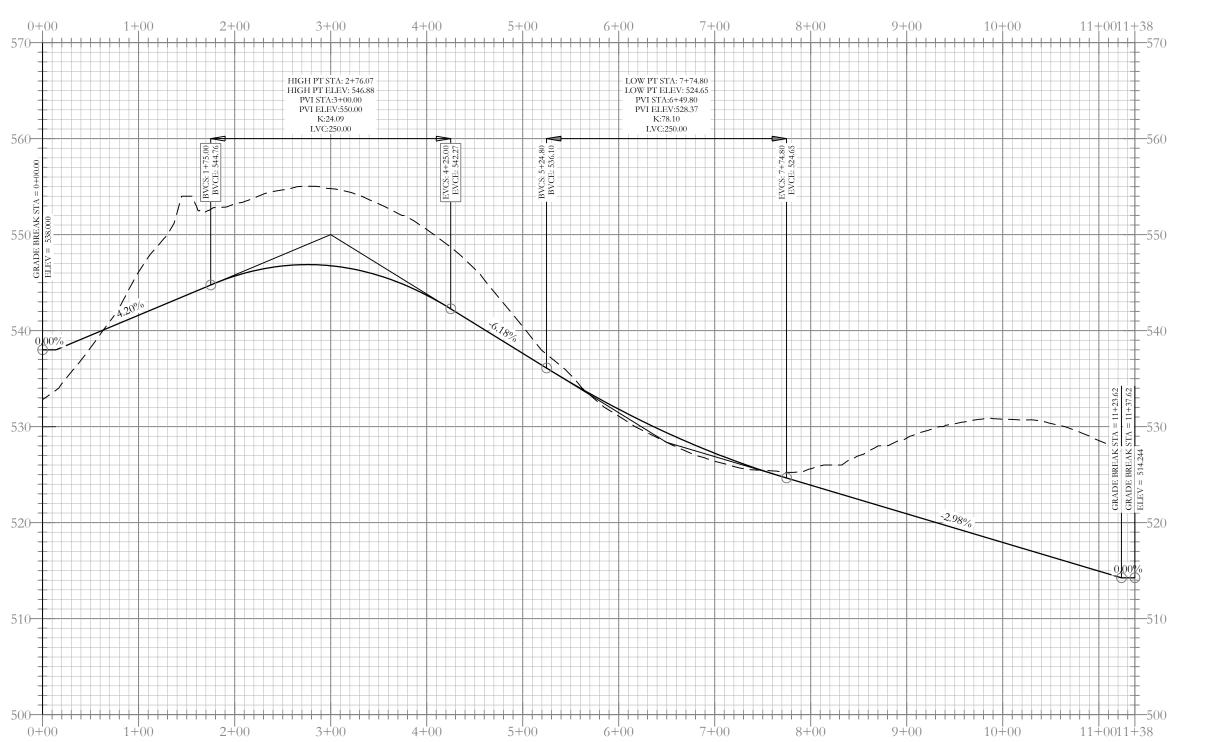


CITY OF BRYANT TYPICAL STREET CROSS SECTION

50' R.O.W

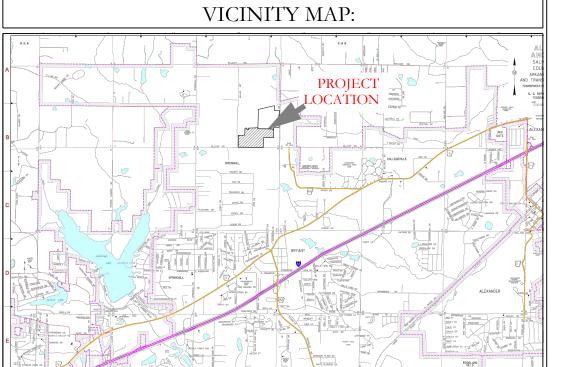
1.5" ACHM BINDER COURSE — 1.5" ACHM SURFACE COURSE

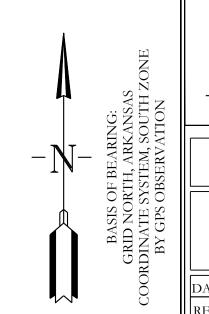
7" OF CLASS 7 AGGREGATE BASE COURSE COMPACTED TO 98% MODIFIED PROCTOR SUBGRADE COMPACTED TO 95% MODIFIED PROCTOR TO A DEPTH OF 18"



Lone Oak Ave Profile

----RC





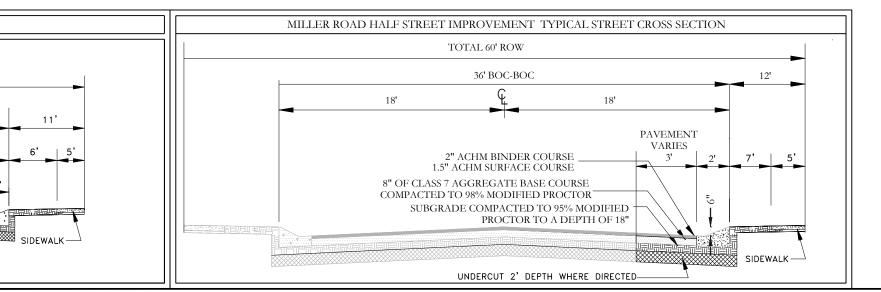
ENGINEERS - SURVEYORS FAX (501) 315-0024 www.hopeconsulting.com

FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

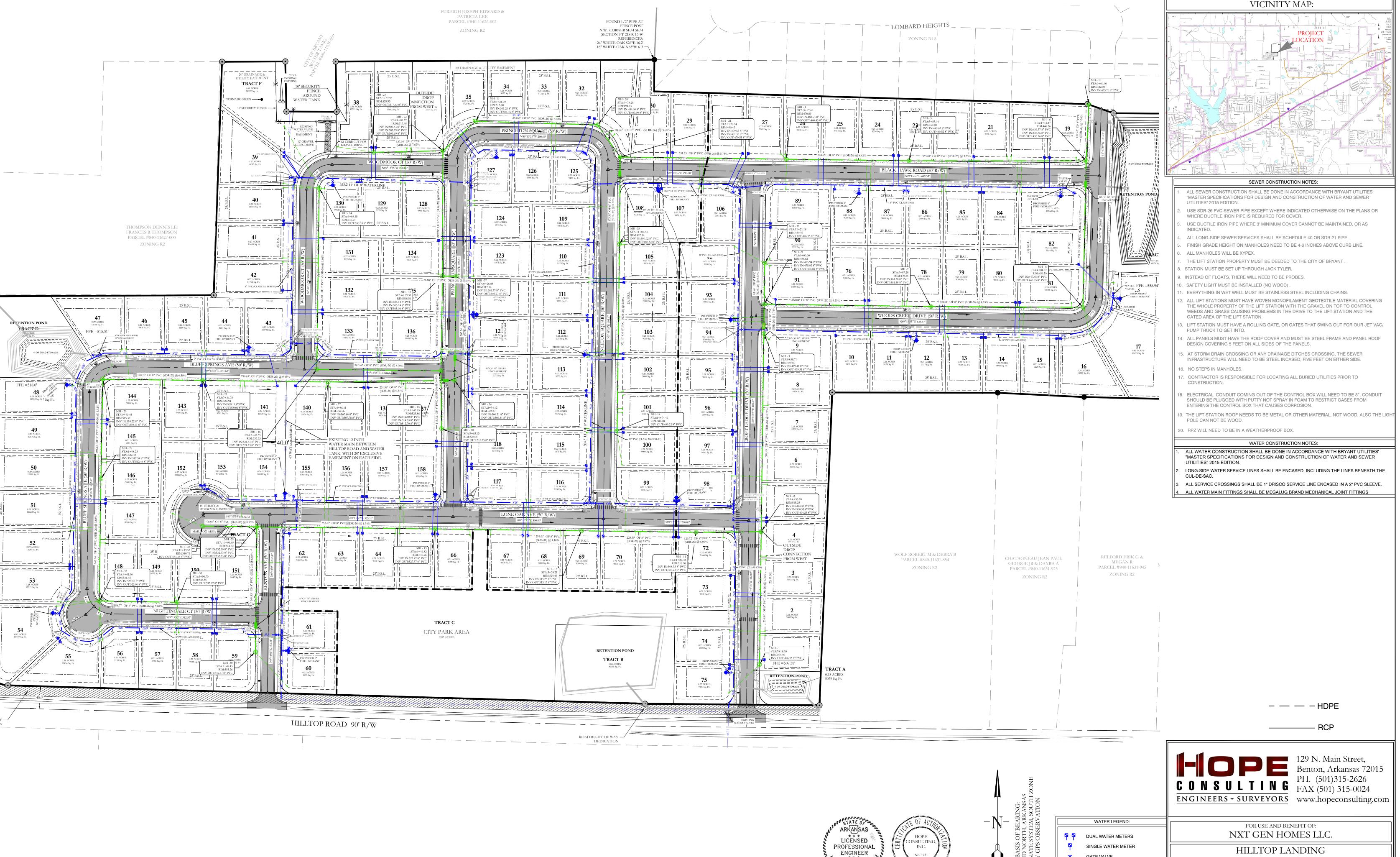
HILLTOP LANDING STREET PLAN & PROFILE

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS											
DATE:	03/08/202	C.A.D. BY:				DRAWING NUMBER:					
REVISED:	08/07/2023		CHECKED BY:				20-1341				
SHEET:	C-1.2		SCALE: 1" = 120'			: 120'	20-1341				
500	01S	14W		0	09	200	62	1762			

Nightingale Ct-Bluff Springs Ave Profile

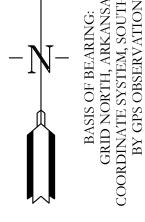


N.B :All sidewalk ramps will have ADA requirements with corrugated dome ramp.



SUBDIVISION UTILITY PLAN





GATE VALVE 45º FITTING ♦ 90º FITTING

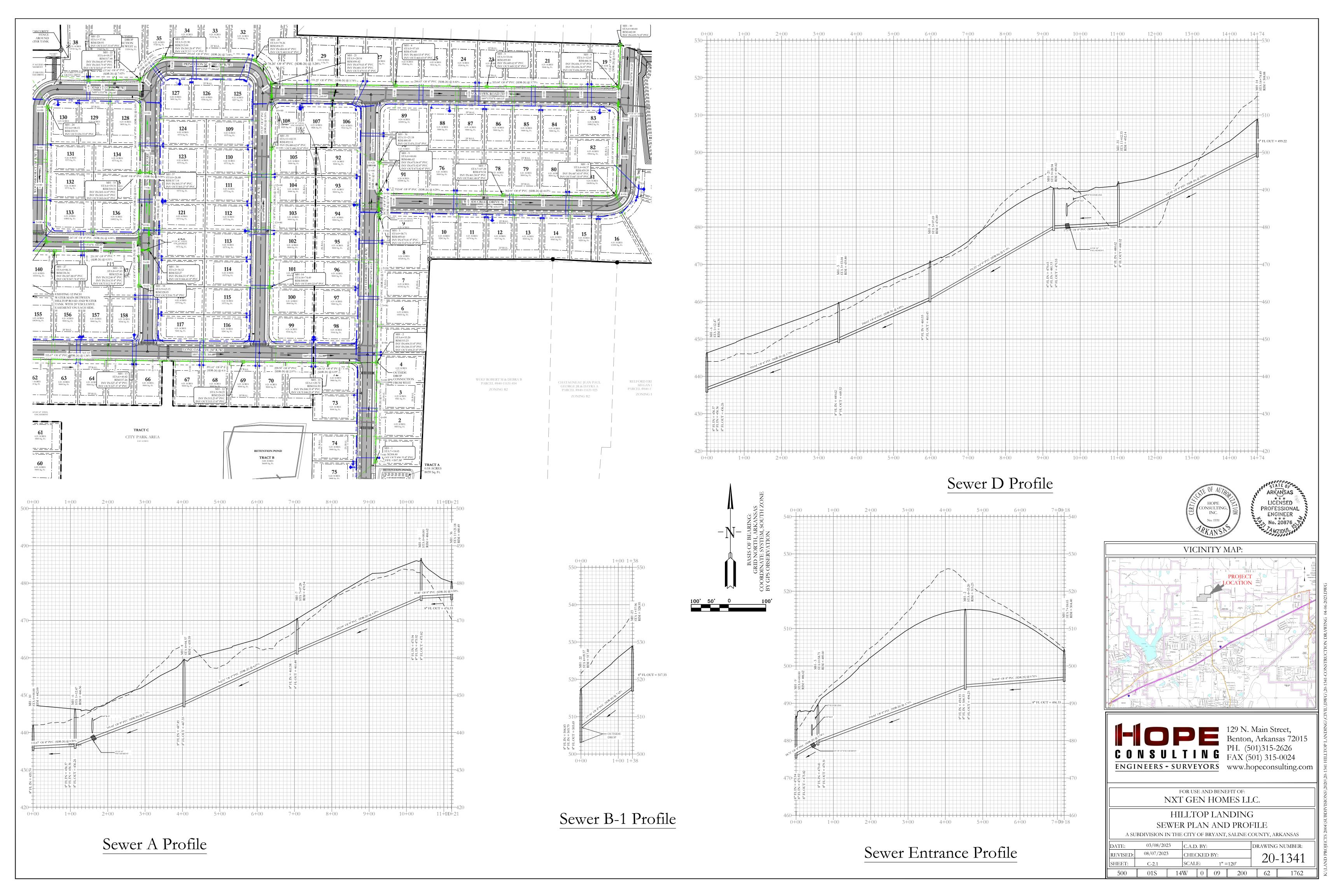
✓ TEE FITTING

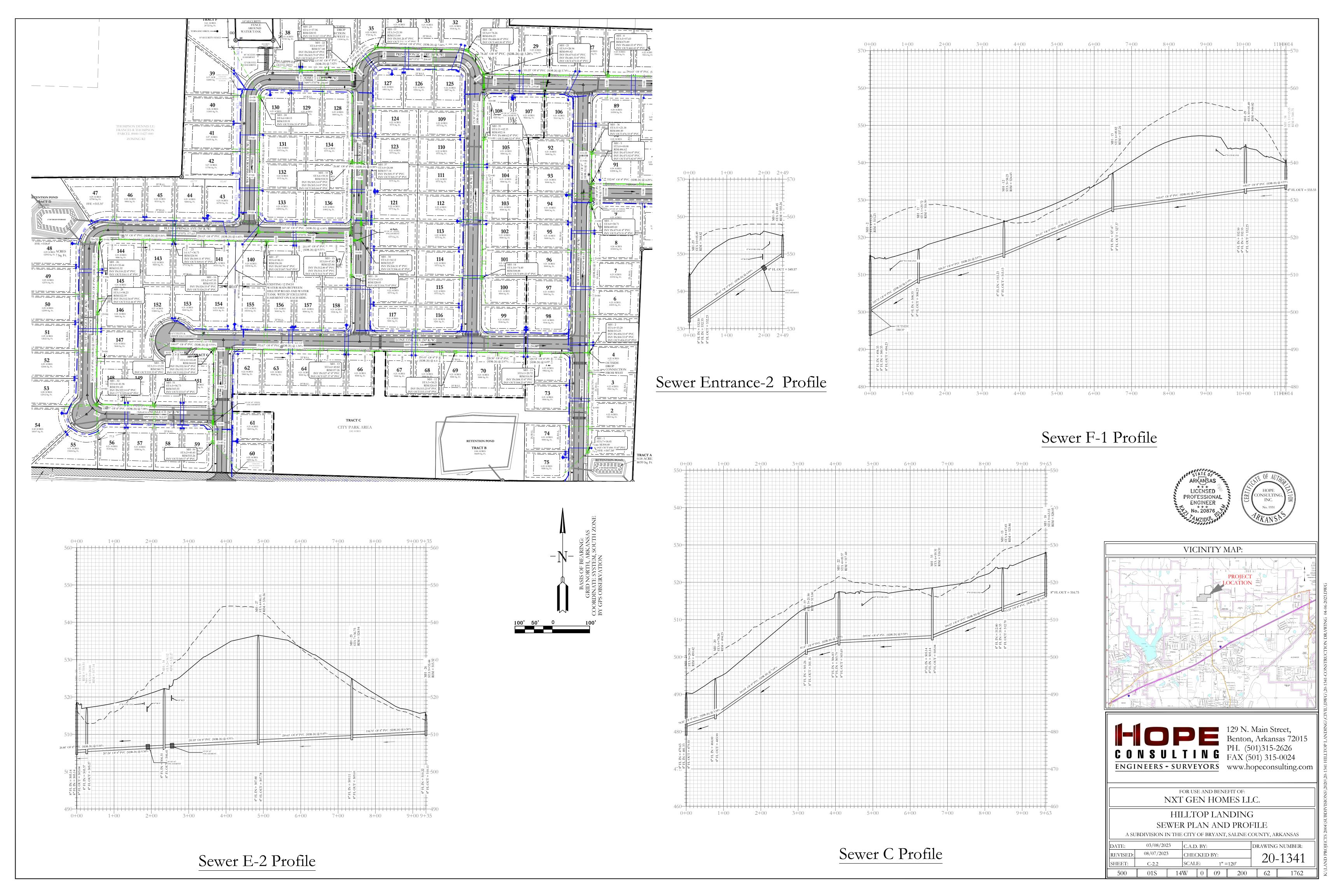
CROSS FITTING

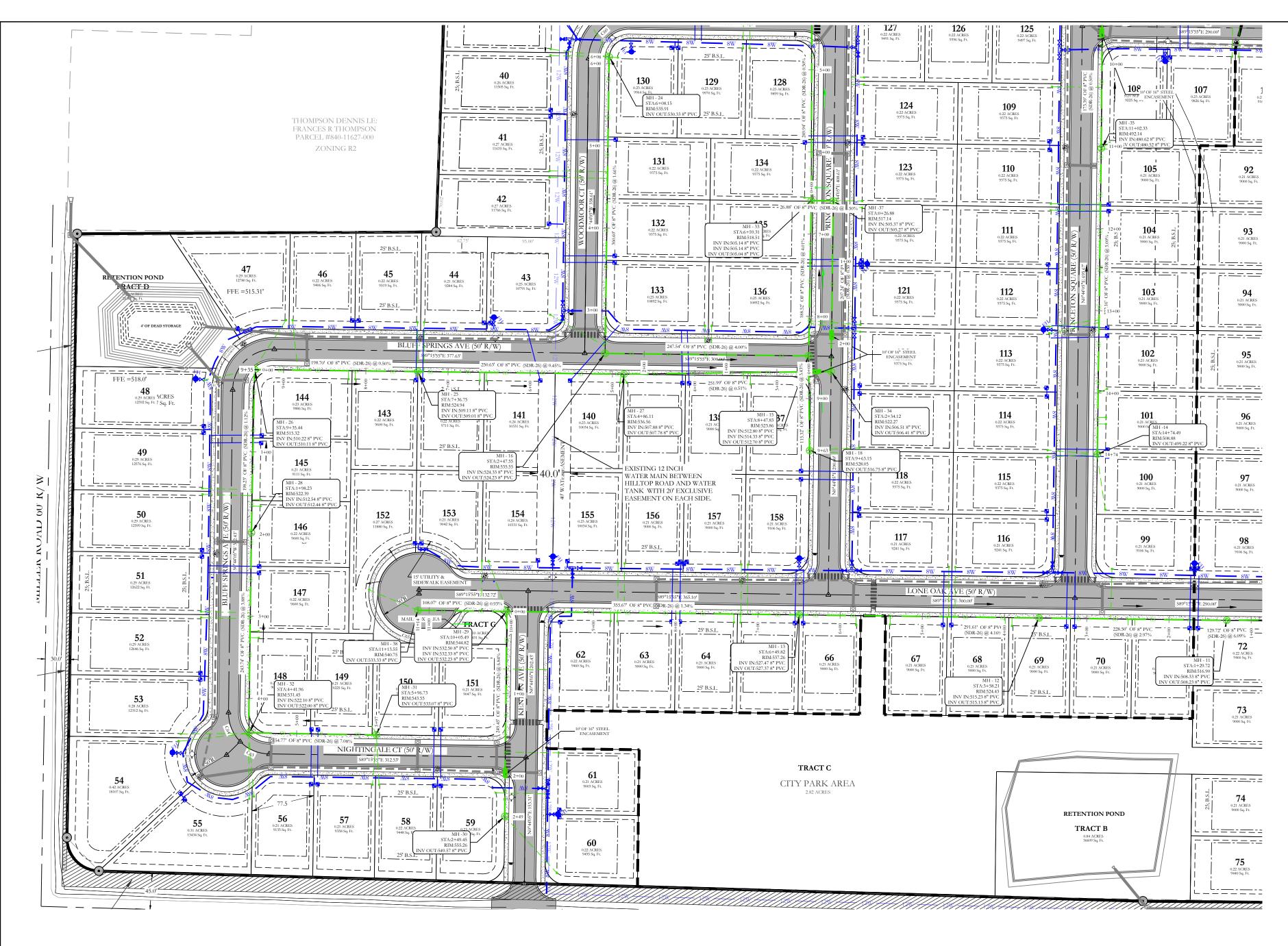
FIRE HYDRANT

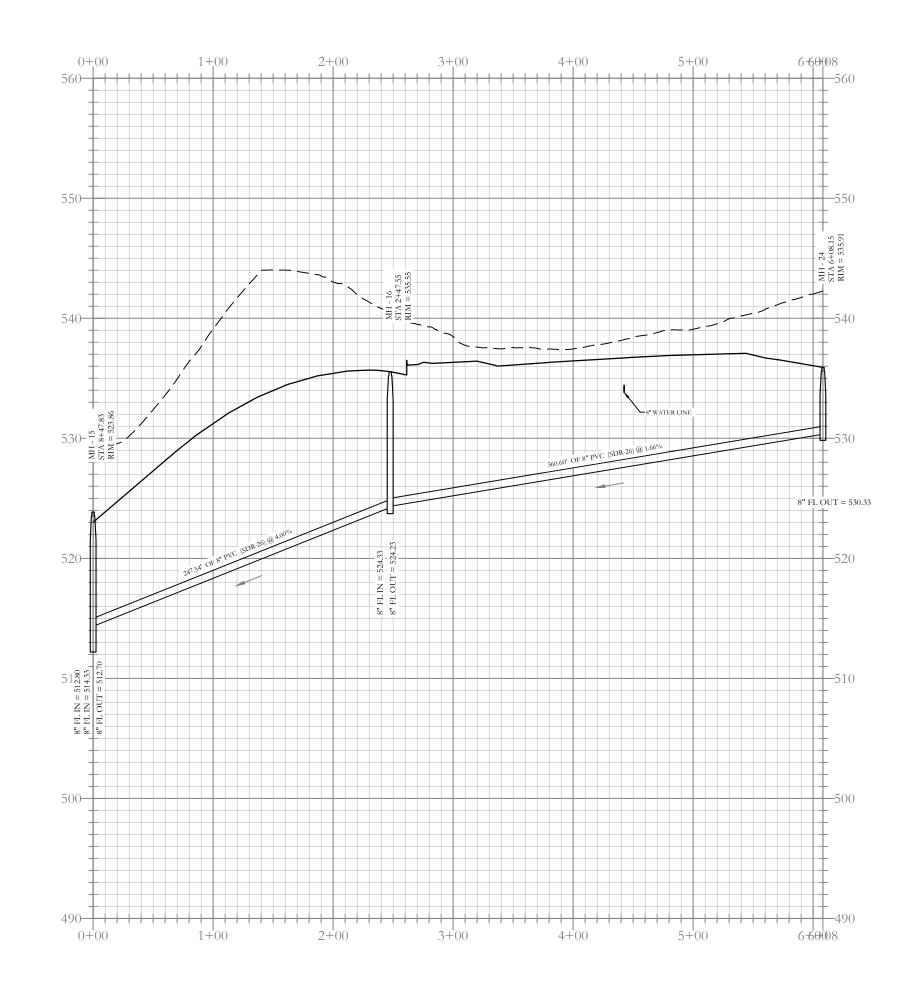
UTILITY PLAN

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS 03/08/2023 DRAWING NUMBER: 08/07/2023 REVISED: CHECKED BY: 20-1341 01S | 14W | 0 | 09 | 200 | 62 | 1762

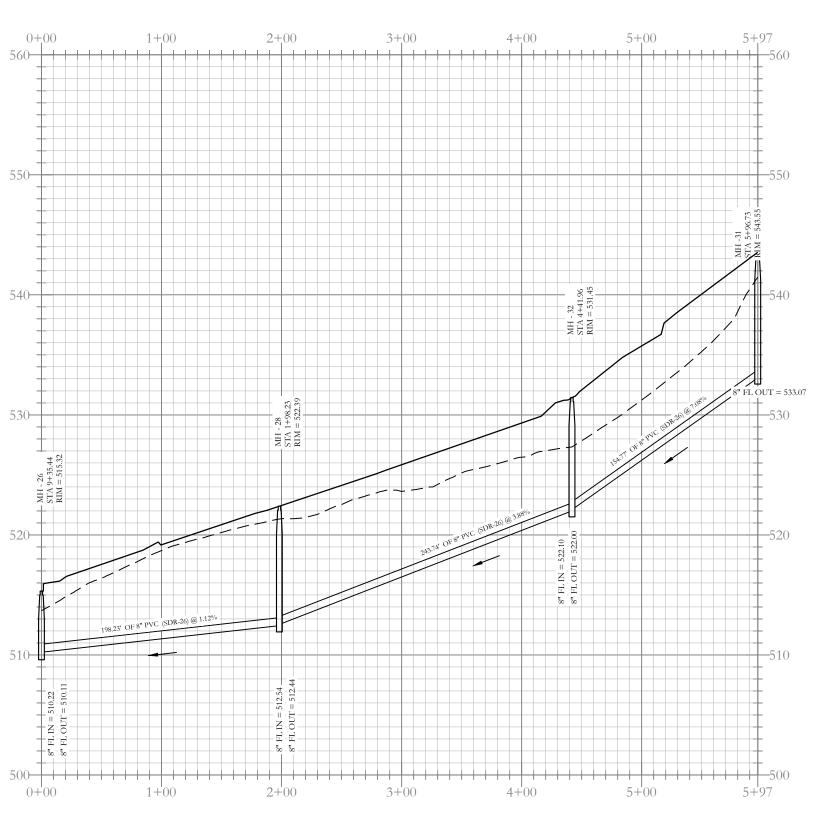




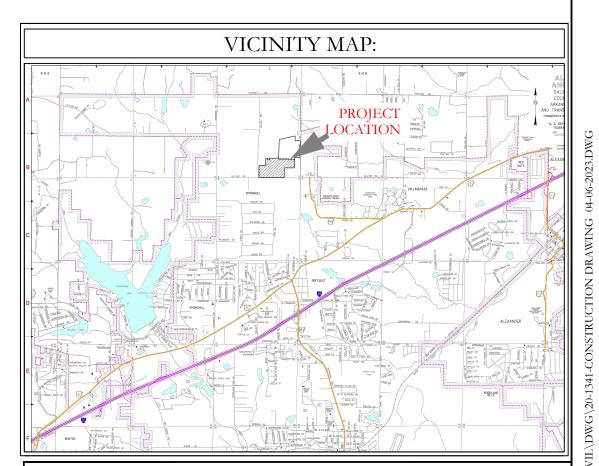




Sewer B-2 Profile



Sewer E-1 Profile





FOR USE AND BENEFIT OF:
NXT GEN HOMES LLC.

HILLTOP LANDING SEWER PLAN AND PROFILE

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

ATE: 03/08/2023 C.A.D. BY: DRAWING NUMBER:

EVISED: 08/07/2023 CHECKED BY: 20 1 2 1 1

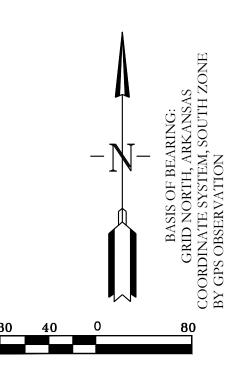
 08/07/2023
 CHECKED BY:
 20-1341

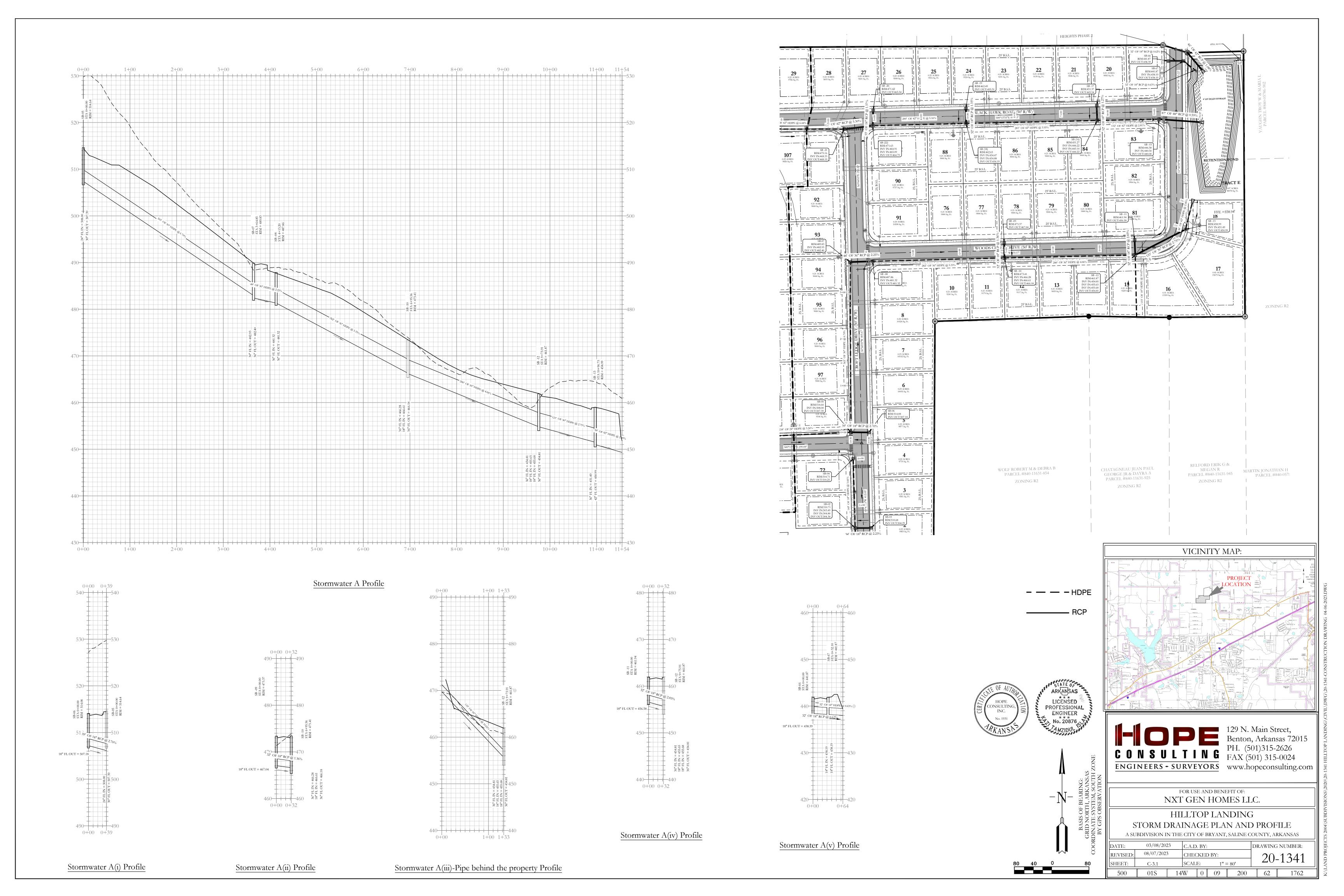
 C-2.3
 SCALE:
 1" = 80'
 20 degree 1762

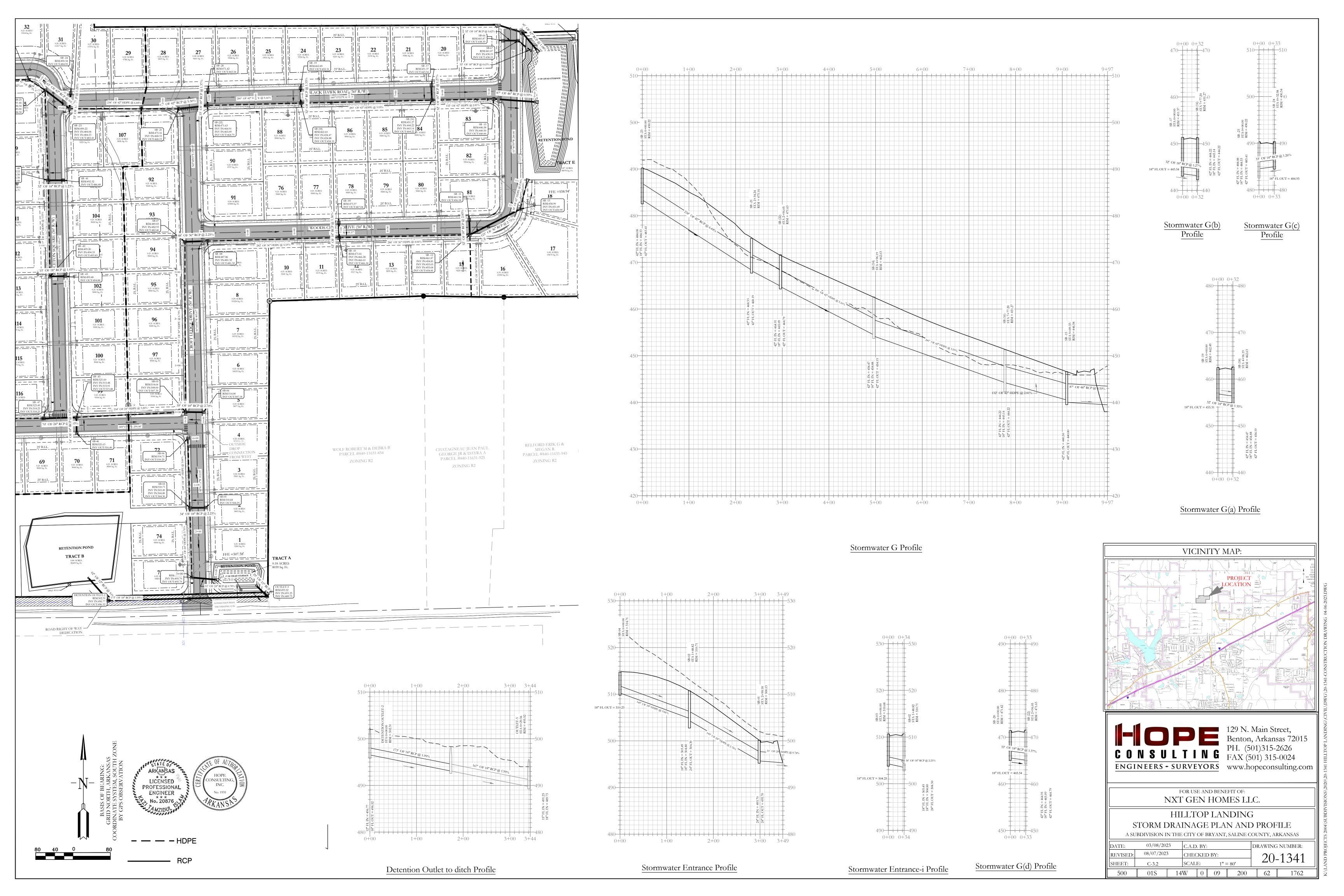
 01S
 14W
 0
 09
 200
 62
 1762

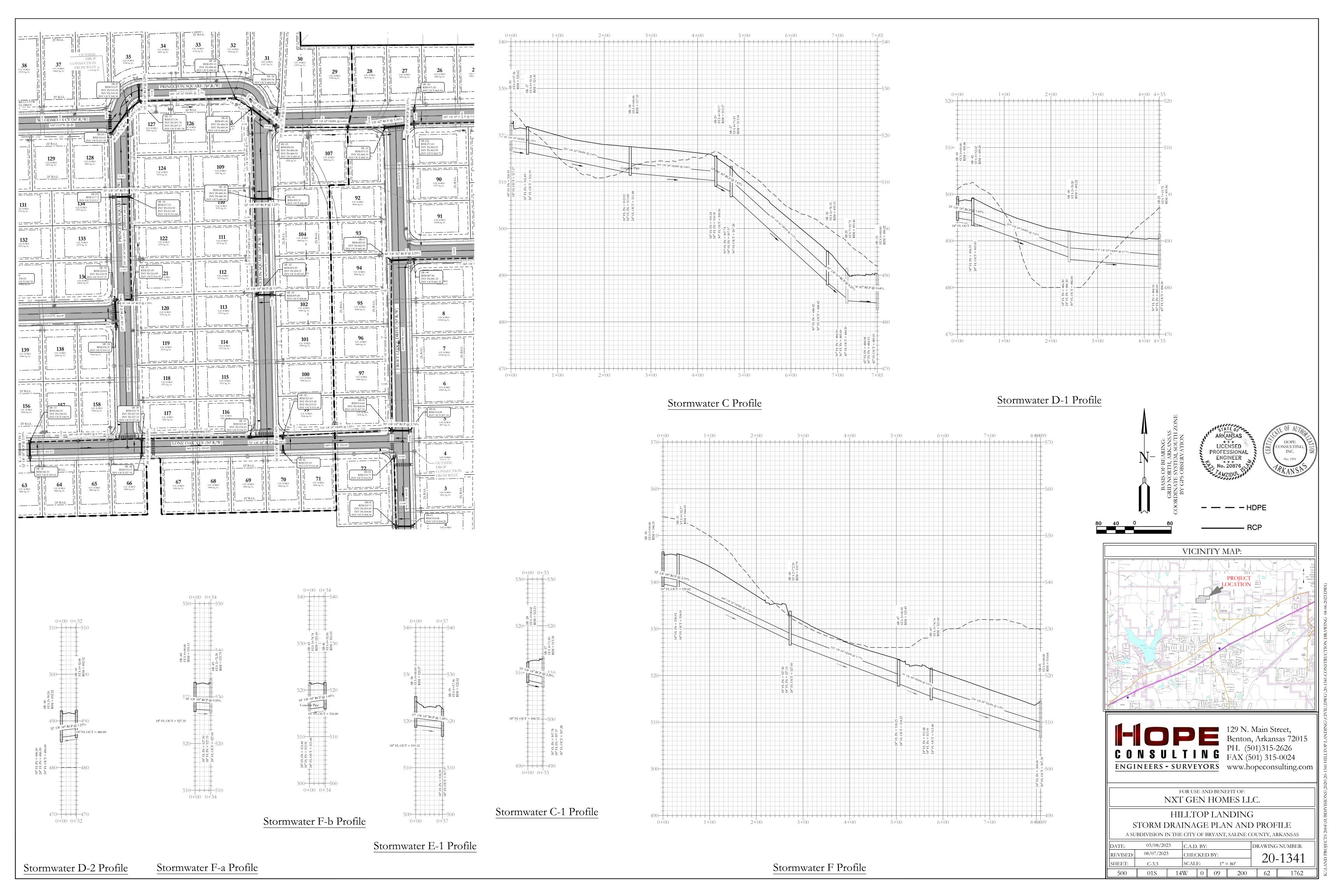


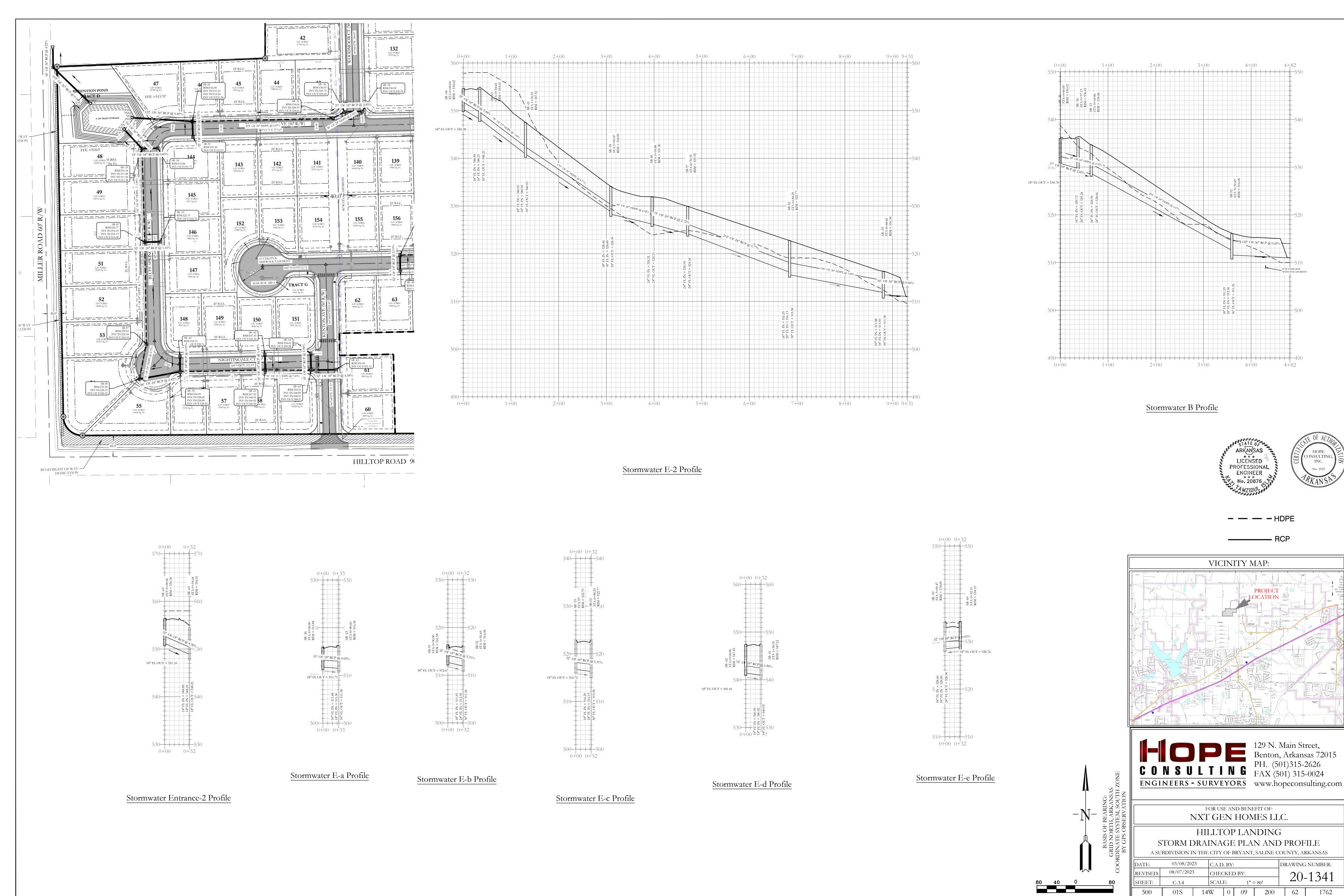




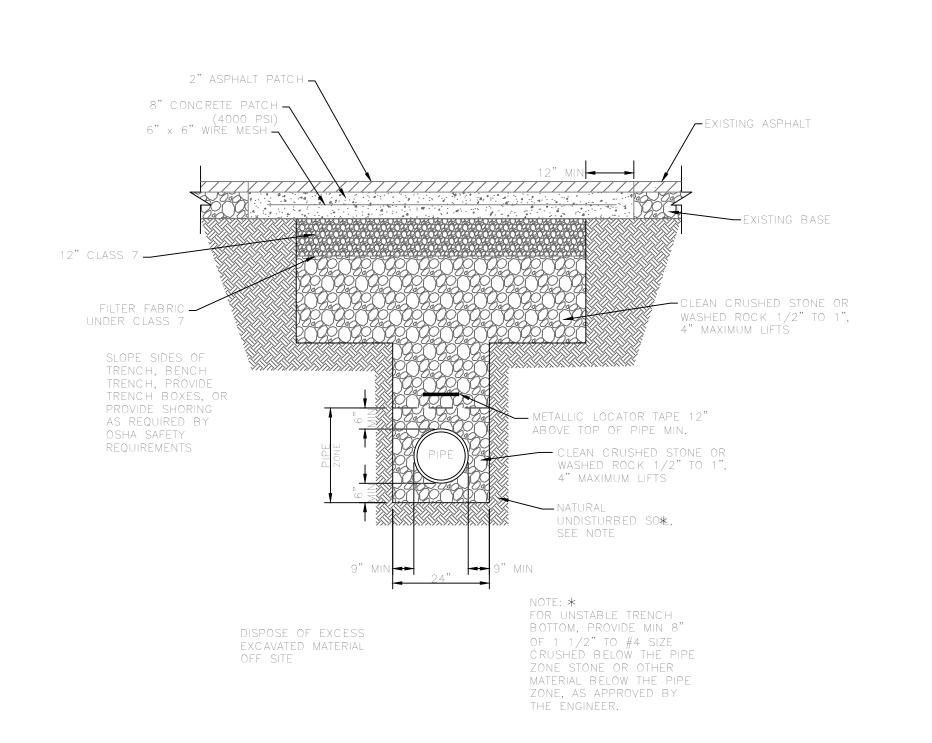








LAND PROJECTS 2004\SUBDIVISIONS\2020\20-1341 HILLTOP LANDING\CIVIL\DWG\20-1341-CONS



PVC SEWER TRENCH UNDER

EXISTING ASPHALT STREET

DETAIL-VALVE BOX

4-#4's EACH WAY

CENTER IN SLAB (TYP.)

2'x 2'x 4" CONCRETE-

PAD AROUND VALVE (TYP.)

VALVE BOX LID~

TO BE BOLTED

TWO PIECE C.I., -SLIDING TYPE

VALVE BOX (SEE SPEC'S.)

DOWN.

PVC SEWER TRENCH UNDER **FUTURE ASPHALT STREET**

FUTURE PAVEMENT

SLOPE SIDES OF-

TRENCH, PROVIDE

AS REQUIRED BY OSHA SAFETY

TRENCH BOXES, OR

DISPOSE OF EXCESS

EXCAVATED MATERIAL

SHALL BE STABILIZED BY PLACEMENT OF SOD TO MATCH EXISTING. 2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE

1. IN LAWN AREAS, DISTURBED SOIL

ArDOT A.B.C. CLASS 7 8" MAXIMUM LIFTS COMPACTED

TO 98% MODIFIED PROCTOR

METALLIC LOCATOR TAPE 12' ABOVE TOP OF PIPE MIN.

4" MAXIMUM LIFTS

SEE NOTE*

BOTTOM, PROVIDE MIN 8"

OF 1 1/2" TO #4 SIZE

CRUSHED BELOW THE PIPE

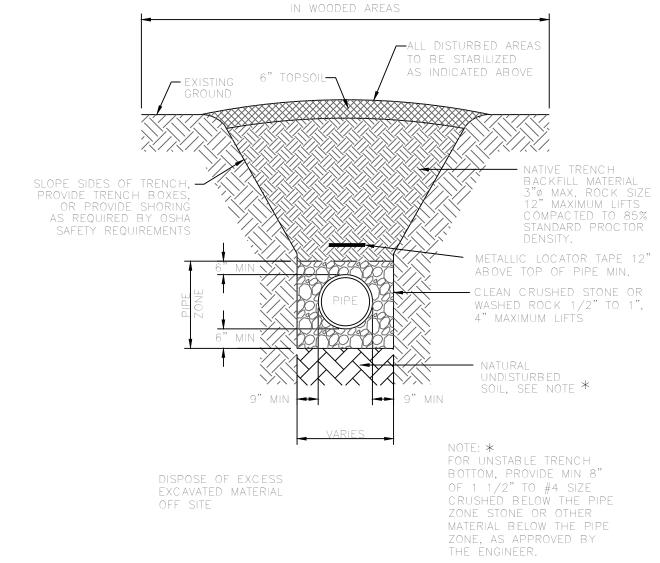
MATERIAL BELOW THE PIPE

ZONE, AS APPROVED BY

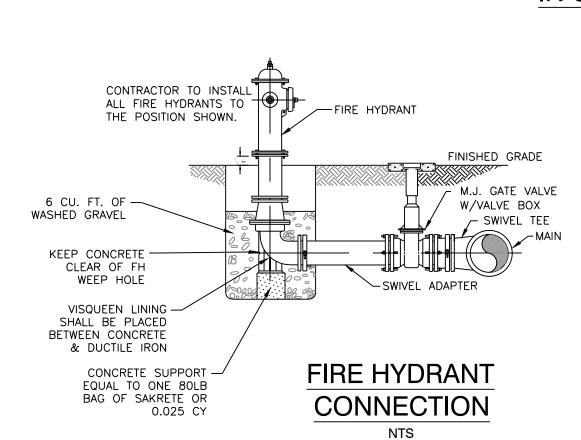
NOTE: *

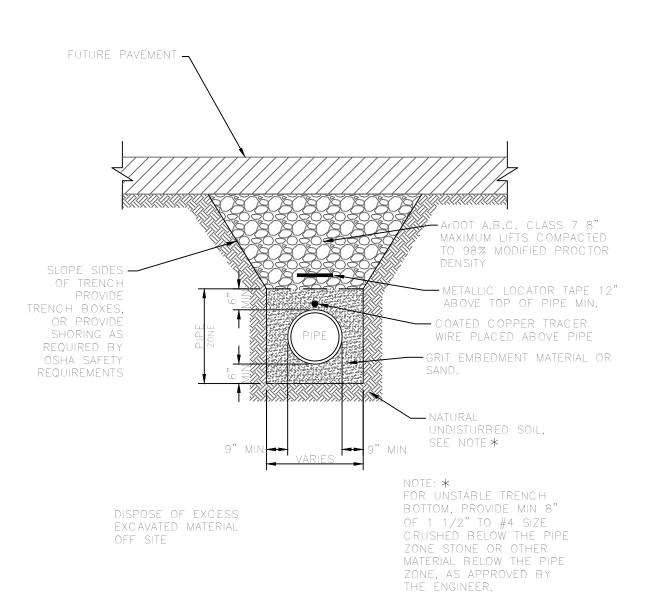
WASHED ROCK 1/2" TO 1".



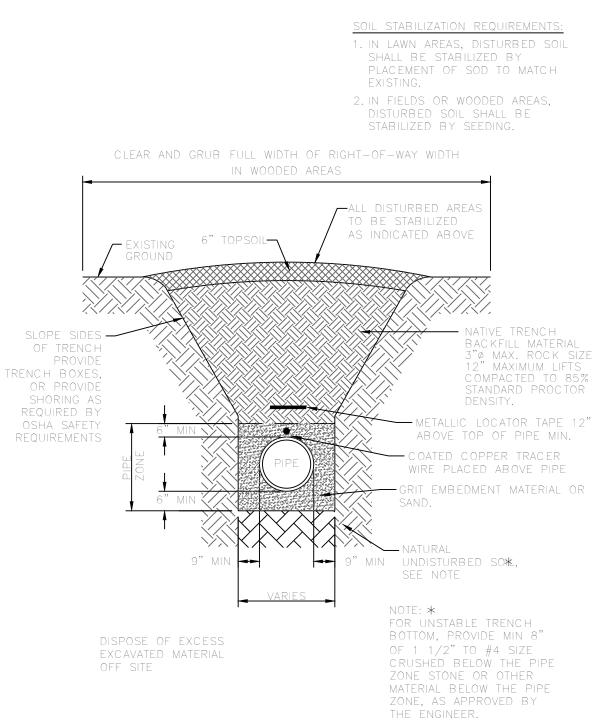


PVC SEWER TRENCH IN UNPAVED AREAS

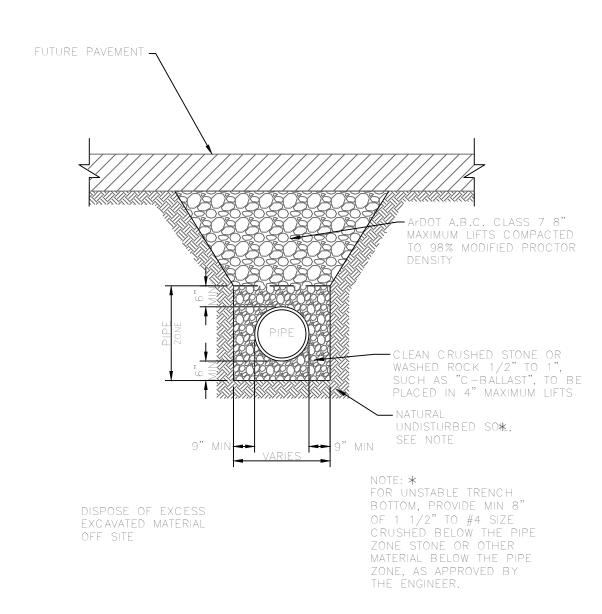




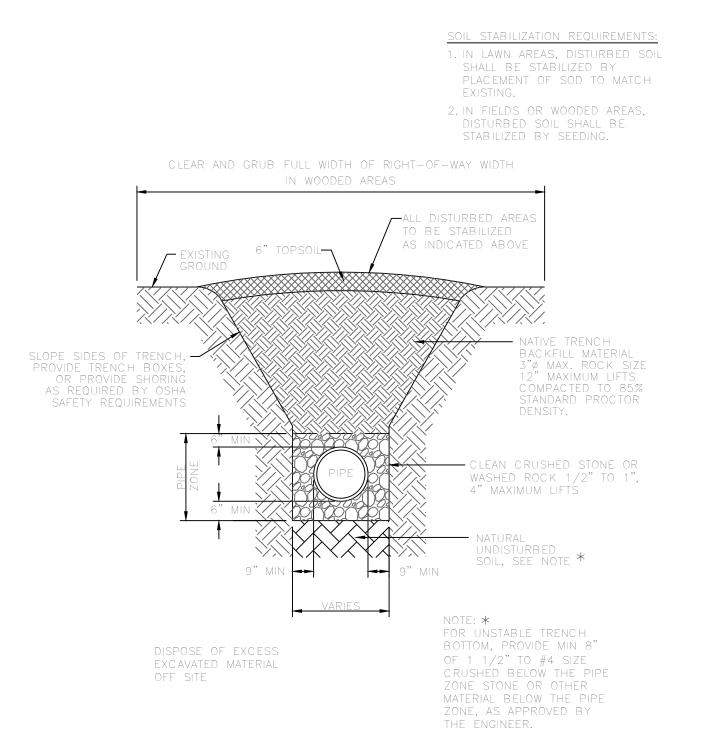
PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET



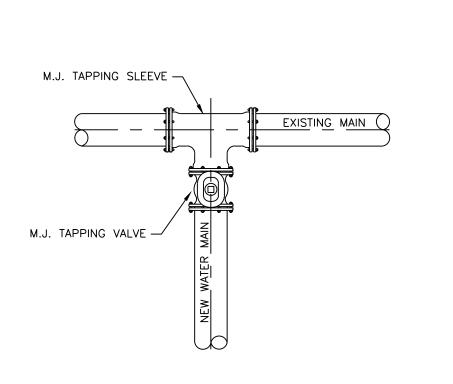
PVC WATER LINE TRENCH IN UNPAVED AREAS



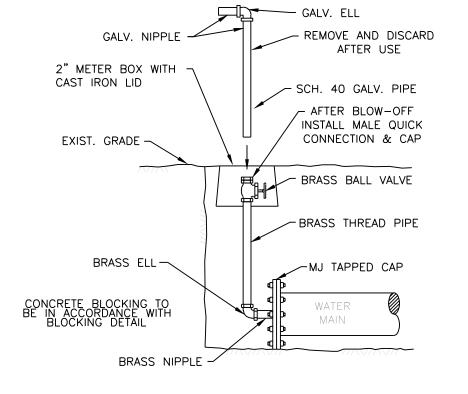
DRAINAGE PIPE TRENCH UNDER **FUTURE ASPHALT STREET**



DRAINAGE PIPES IN UNPAVED AREAS



WATER MAIN CONNECTION DETAIL



2" BLOW-OFF RISER

CONSULTING FAX (501) 315-2020 ENGINEERS - SURVEYORS www.hopeconsulting.com

129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626

FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING TRENCH DETAILS

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS 03/08/2023 DRAWING NUMBER: 08/07/2023 CHECKED BY:

REVISED: 20-1341 SCALE: 14W 0 09 200 62 1762 01S

SPECIFICATIONS

SUBGRADE MATERIAL

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subrades for pavement shall be stabilized by mechanical compaction. Stabilization methods such as fabrics and chemical stabilization may be submitted for approval when supported by engineering data and calculations to substantiate the adequacy of the stabilized procedure.
- C. Subgrade shall be compacted to 95 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City. D. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- E. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost
- F. In-situ soils meeting the requirements outlined in these specifications may be utilized as subgrade shall be scarified to a minimum depth of 8-inches below finish subgrade, recompacted and tested as described below. Fill material for subgrade shall be placed in lifts not to exceed 8-inches compacted depth.
- G. Methods and procedures for establishing the total depth of soil replacement and/or modification shall be as specified by the design engineer and geotechnical investigations. The adequacy of in-situ soils and fill materials as pavement subgrade shall be evaluated based upon the soils classification, liquid
- H. Soils with a liquid limit greater than 40, or a plasticity index greater than 15 shall be undercut and removed from the street section or improved by a design method of stabilization approved by the City.
- I. Quality control testing shall be as specified below.
- Undercut 24" of soil below finished street base course. Proof roll to verify stability
- K. Backfill the undercut subgrade with Class 7 aggregate or soil meeting the requirements of this section and compact in lifts not exceeding 8".

BASE COURSE

- A. Base course material shall be crushed stone meeting the requirements of ArDOT Class 7 aggregate base course as specified in the latest edition of ArDOT Standard Specifications.
- B. Base course shall be compacted to 98 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture.

SURFACE COURSE

A. Surface course for flexible pavement designs shall utilize plant mix bituminous base and binder courses conforming to ArDOT Standard Specifications.

CURB AND GUTTER

- A. Curb and gutter shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi. Concrete shall be air-entrained with a maximum of 4-inch slump.
- B. Compaction requirements under curb and gutter shall conform to the requirements for street subgrade materials. Compaction requirements shall extend to a minimum of 1 foot behond the back of curb and gutter removing all soft spots and replacing with suitable material. C. Curb and gutter shall conform to the typical detail within these specifications or ArDOT Standard Roadway Drawing Details for curbing.
- D. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at intervals not exceeding 195 feet, intersection radii, driveways, stationary structures, and sidewalks.
- E. Contraction joints shall be sawed or fromed at intervals not greater than 20 feet. Depth of saw-cut hall be 1 1/2-inch and have a width of 1/4-inch. Contraction joints shall be sealed in accordance with ArDOT Standard Specifications.
- F. Forms shall be made of metal or wood and shall be properly braced. The minimum length of each section of form used shall be uniform and free from undesirable bends or warps. Forms shall be of such cross section and strength and so secured as to resist the
- pressure of the impact and vibration on any equipment which they support without springing or settlement. G. Curb and gutter placed with slip form or extruding equipment will be acceptable providing it complies with all of the above requirements.
- H. After curing, the curb shall be immediately backfilled to within 4 inches of the top curb to eliminate the possibility of washing beneath the curb. The remaining 4 inches shall be topsoil.
- I. Cold weather protection shall meet the requirements of the latest edition of ArDOT Standard Specifications.

SIDEWALKS

General

- A. Sidewalks shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi.
- B. Sidewalks shall be on both sides of streets in line with sidewalks on opposite corners of roads.
- C. All sidewalks including ramps shall meet all current Federal Americans with Disabilities (ADA) design guidelines or requirements.
- D. Traverse slopes shall not exceed 2 percent.
- E. Subgrade under sidewalks shall be compacted to 90 percent modified proctor density minimum.
- F. Sidewalks shall not be placed upon grassy or organic materials.
- G. Sidewalks which extend or link existing sidewalks shall adjoin the existing sidewalks to form a continuous, even pathway.
- H. Utility poles, utility boxes, mailboxes, fire hydrants, and other similar obstructions shall not be located in sidewalks Sidewalk location may vary at the discretion of the City to avoid such obstacles.
- I. All sidewalk ramps shall meet ADA requirements with corrugated dome ramp requirements.

Minimum thickness and reinforcement

- A. Sidewalks shall have a minimum thickness of 4 inches.
- B. Sidewalks shall be reinforced, at a minimum, with woven wire fabric reinforcement.

Contraction and expansion joints

- A. Contraction joints shall be provided perpendicular to the sidewalk at intervals equal to the sidewalk width.
- B. Expansion joints shall be constructed perpendicular to the sidewalk at intervals equal to five times the sidewalk width. Expansion joints shall be made with 1/2-inch preformed expansion joints shall be placed at driveways, drop inlets, and curbs.

Quality control testing and inspection by the City

- A. Subgrade and formwork for sidewalks shall be inspected by the City prior to pouring of the sidewalk.
- B. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- D. All testing shall be accomplished by a testing firm approved by the City and shall be performed under the supervision of a licensed Professional Engineer. E. Sampling and testing locations shall be subject to approval by the City.
- F. Density tests on subgrades shall be taken every 300 feet or portion thereof. G. The City shall be notified at least one day in advance of the need to inspect subgrade and formwork of sidewalks.

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrade shall be compacted to 90 percent modified proctor desnity minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- C. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- D. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost

QUALITY CONTROL TESTING AND INSPECTIONS

General

- A. Materials and construction employed in street improvements shall be subject to inspection and quality control testing. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- B. The Developer/Owner shall provide for inspections of street improvements during construction. The Engineer of Record. The Engineer of Record shall provide certification that all materials and construction conform to the approved plans and specifications and with these minimum street standards.
- C. The Engineer of Record shall furnish inspection whenever a critical construction activity is taking place. This means that a representative of the Engineer of Record must be on-site whenever a critical construction activity is taking place.
- D. All field tests required for a project shall be witnessed by the City, Engineer of Record, contractor, or other authorized representatives. E. The City shall be notified at least one day in advance of any test(s). It is the responsibility of the contractor to coordinated the scheduling of all tests with the City.
 - CONCRETE SIDEWALK WITH WOVEN WIRE REINFORCEMENT NOTE: SIDEWALK CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE CITY STANDARD STREET SPECIFICATIONS. APPROVED MATERIAL COMPACTED TO 90% MODIFIED PROCTOR

NOTE: SIDEWALK CONSTRUCTION SHALL MEET ADA REQUIREMENTS WITH CORRUGATED DOME RAMP REQUIREMENTS

STANDARD CURB & GUTTER NOT TO SCALE

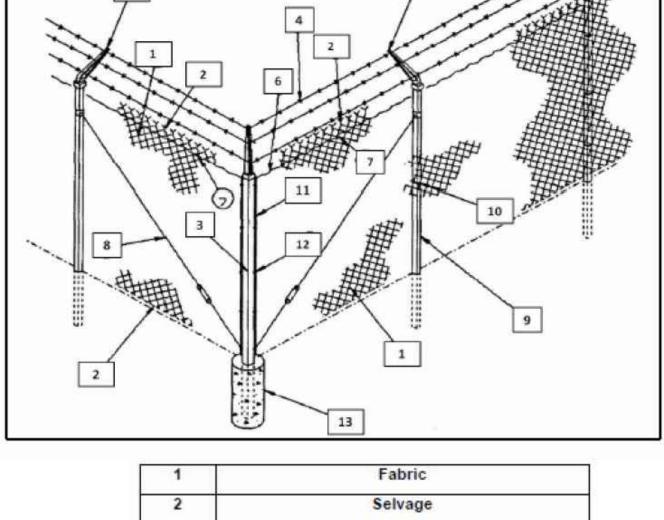
TYPICAL CURB DETAILS & NOTES

Typical Sidewalk Detail

DENSITY

Typical Curb & Gutter Detail

4,000 psi concrete



1	Fabric
2	Selvage
3	Corner Post
4	Barbed Wire/Barbed Tape
5	Outrigger/Barbed Wire Arm
6	Tension Wire (Top and Bottom)
7	Hog Ring
8	Truss Rod
9	Line Post
10	Tie Wire
11	Tension Bar
12	Tension Clip
13	Concrete Footing

SECURITY FENCE DETAILS

Top View

Side View

ADA Corrugated Dome Ramp

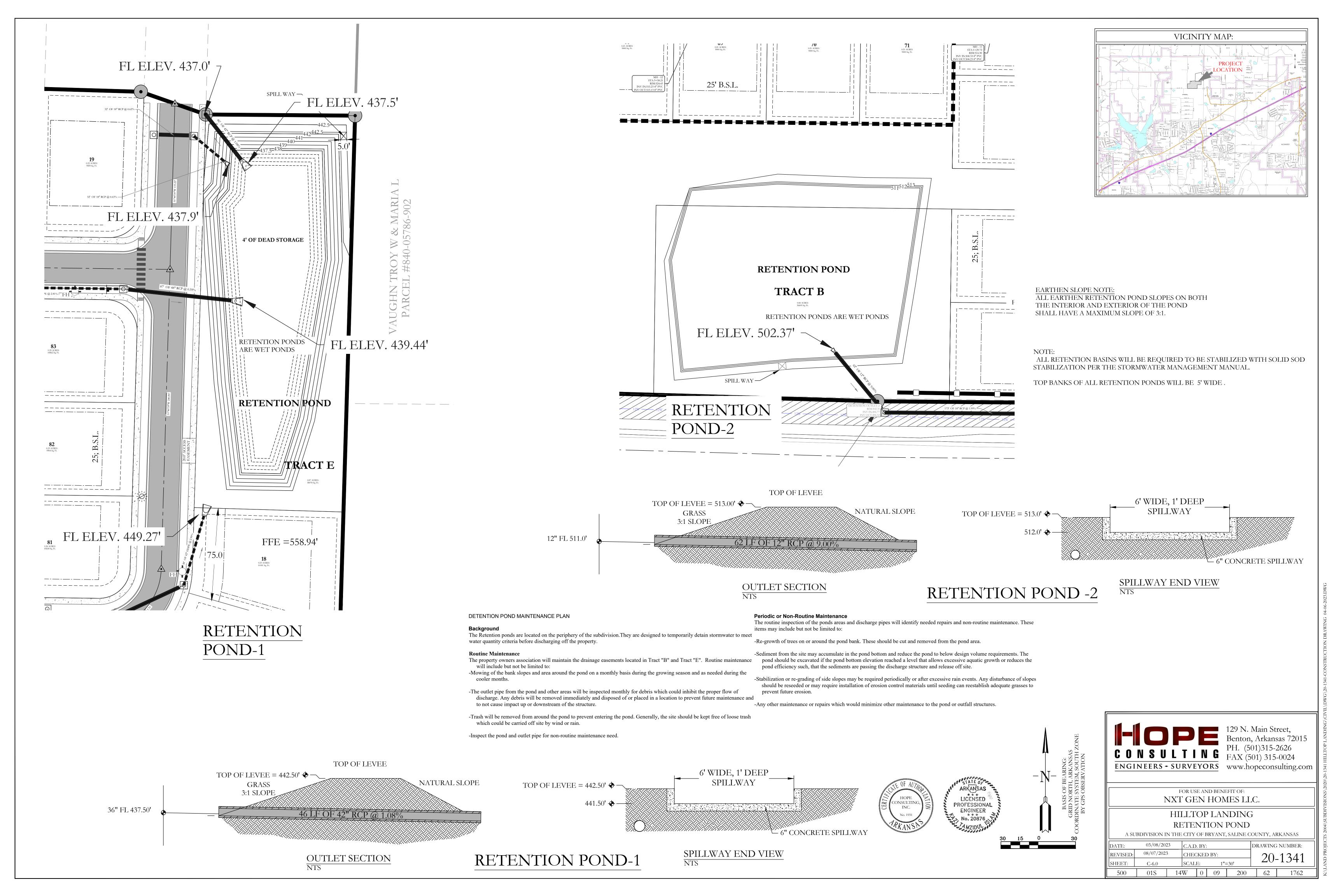


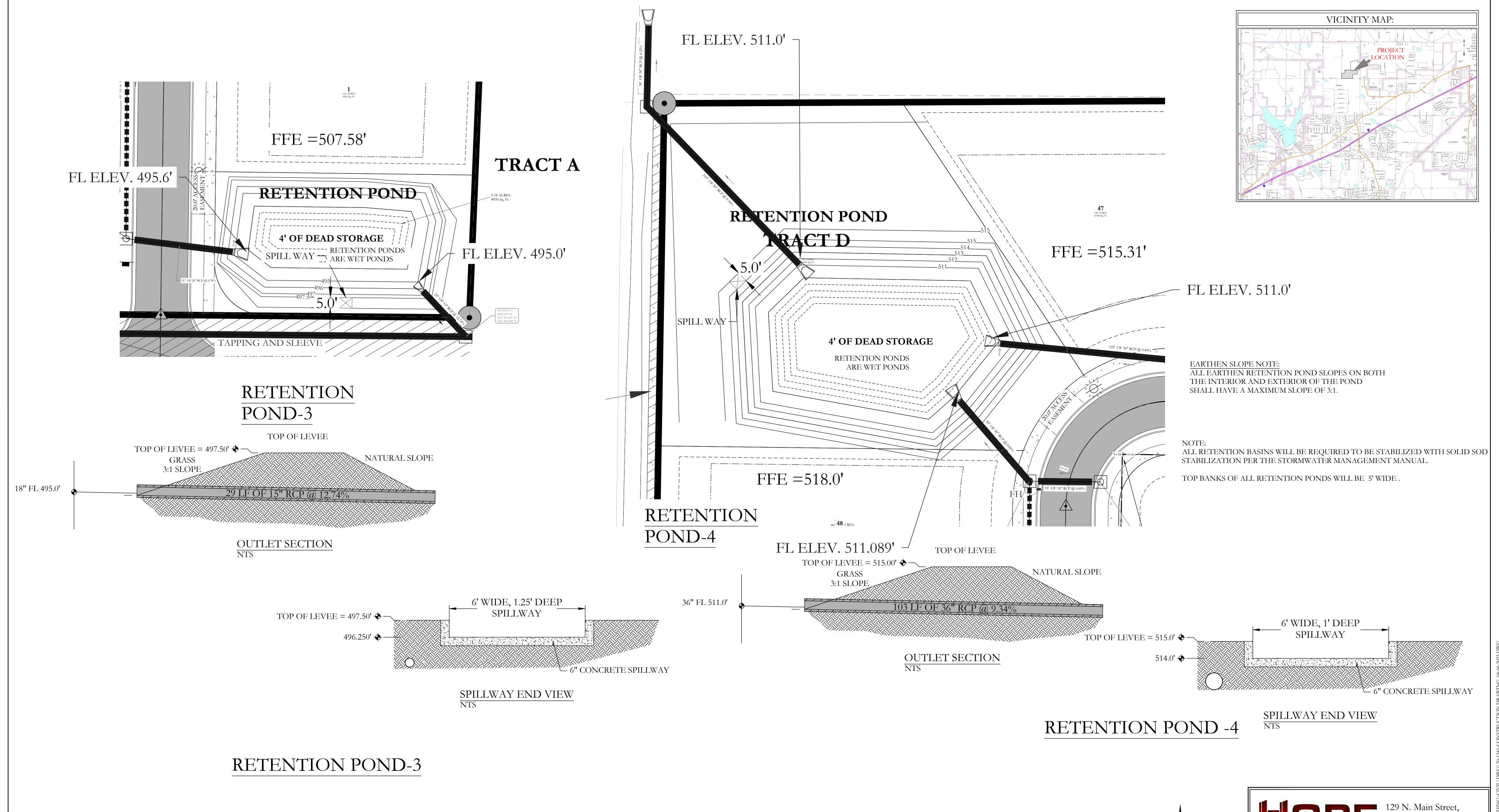
62

FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING CIVIL SPECIFICATIONS

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS 03/08/2023 C.A.D. BY: DRAWING NUMBER: 08/07/2023 REVISED: CHECKED BY: 20-1341 14W 0 09 200





DETENTION POND MAINTENANCE PLAN

water quantity criteria before discharging off the property.

The Retention ponds are located on the perphery of the subdivision. They are designed to temporarily detain stormwater to meet

The property owners association will maintain the drainage easements located in Tract "A" and Tract "D".

Routine maintenance will include but not be limited to:

-Mowing of the bank slopes and area around the pond on a monthly basis during the growing season and as needed during the cooler months.

-The outlet pipes from the ponds and other areas will be inspected monthly for debris which could inhibit the proper flow of discharge. Any debris will be removed immediately and disposed of or placed in a location to prevent future maintenance and to not cause impact up or downstream of the structure.

-Trash will be removed from around the pond to prevent entering the pond. Generally, the site should be kept free of loose trash which could be carried off site by wind or rain.

-Inspect the pond and outlet pipe for non-routine maintenance need.

Periodic or Non-Routine Maintenance

The routine inspection of the pond areas and discharge pipes will identify needed repairs and non-routine maintenance. These items may include but not be limited to:

-Re-growth of trees on or around the pond bank. These should be cut and removed from the pond areas.

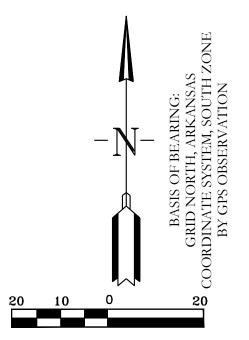
-Sediment from the site may accumulate in the pond bottom and reduce the pond to below design volume requirements. The pond should be excavated if the pond bottom elevation reached a level that allows excessive aquatic growth or reduces the pond efficiency such, that the sediments are passing the discharge structure and release off site.

-Stabilization or re-grading of side slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to

-Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.









FOR USE AND BENEFIT OF: NXT GEN HOMES LLC.

HILLTOP LANDING RETENTION POND

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS C.A.D. BY: DRAWING NUMBER: 08/07/2023 CHECKED BY: 20-1341

14W 0 09 200 62 1762





Stormwater Infrastructure Maintenance Plan Agreement

Scott m. Hurley AR Land & Realty 501.240.0049 Mobile scott@arlr.net

Hilltop Landing Subdivision - Hilltop Road and Miller Road

All maintenance basin maintenance plans shall contain or uphold, without limitation, the following provisions:

- (1) A description of the property on which the stormwater management facility is located and all easements from the site to the facility;
- (2) Size and configuration of the facility;
- (3) A statement that properties which will be served by the facility are granted rights to construct, use, reconstruct, repair and maintain access to the facility;
- (4) A statement that each lot served by the facility is responsible for repairs and maintenance of the facility and any unpaid ad valorem taxes, public assessments for improvements, and unsafe building and public nuisance abatement liens charged against the facility, including all interest charges together with attorney fees, costs, and expenses of collection. If an association is delegated these responsibilities, then membership into the association shall be mandatory for each parcel served by the facility and any successive buyer. The association shall have the power to levy assessments for these obligations, and all that unpaid assessments levied by the association shall become a lien on the individual parcel;
- (5) All stormwater facilities must be designed to minimize the need for maintenance, to provide easy vehicle and personal access for maintenance purpose, and be structurally sound. It shall be the responsibility of the applicant to obtain any necessary easements or other property interested to allow access to the facilities for inspection or maintenance;
- (6) Detention/retention areas, earthen berms, intake structures, piping, discharge structures, trickle channels, spillways, pipe flares, weirs and fencing shall be regularly inspected, maintained and repaired to ensure their proper operation and to prevent the creation of any hazards or nuisances;
- (7) Major deposits of sediment shall be removed from the detention/retention area on an annual basis or after any extreme storm event. Excavated materials shall be properly disposed of off-site. Every five years the detention area(s) shall be

surveyed to confirm that the original as-constructed contours have been maintained;

- (8) Every three months piping and outlet structures shall be inspected and cleared of any accumulated debris;
- (9) Erosion in detention/retention areas shall be promptly repaired and stabilized with appropriate Best Management Practices (BMP's);
- (10) Detention/retention area shall be mowed during the growing season May through September to maintain the turf height of 6-inches or less. Any brush or trees that may grow within the detention areas bottom, slopes or banks shall be removed;
- (11) Litter and foreign materials shall be removed from the detention area(s) weekly. Large or noxious pieces of litter shall be removed immediately. The area(s) shall be inspected visually after rainfall events in excess of 1" in 24 hours;
- (12) Inspections of overall detention/retention area(s) and detention/retention components shall occur monthly with their conditions noted on an inspection form. If any remedial action is required, it should be noted and corrected;
- (13) All inspection forms must be retained on-site, including the "As-Built" drawings and photographs of the improvements in their original condition;
- (14) Items 1-13 shall be listed on the Stormwater Infrastructure Maintenance Plan Agreement.

(15) Inspection forms for Stormwater Infrastructure components are required. (An example of inspection forms are attached.)

Scott M. Hurley

data

HILLTOP LANDING SUBDIVISION

HILLTOP ROAD & MILLER ROAD, BRYANT, AR 72022

DRAINAGE REPORT

FOR
City of Bryant, Saline County, AR

April 2023

Owner & Developer: NXT GEN HOMES LLC.

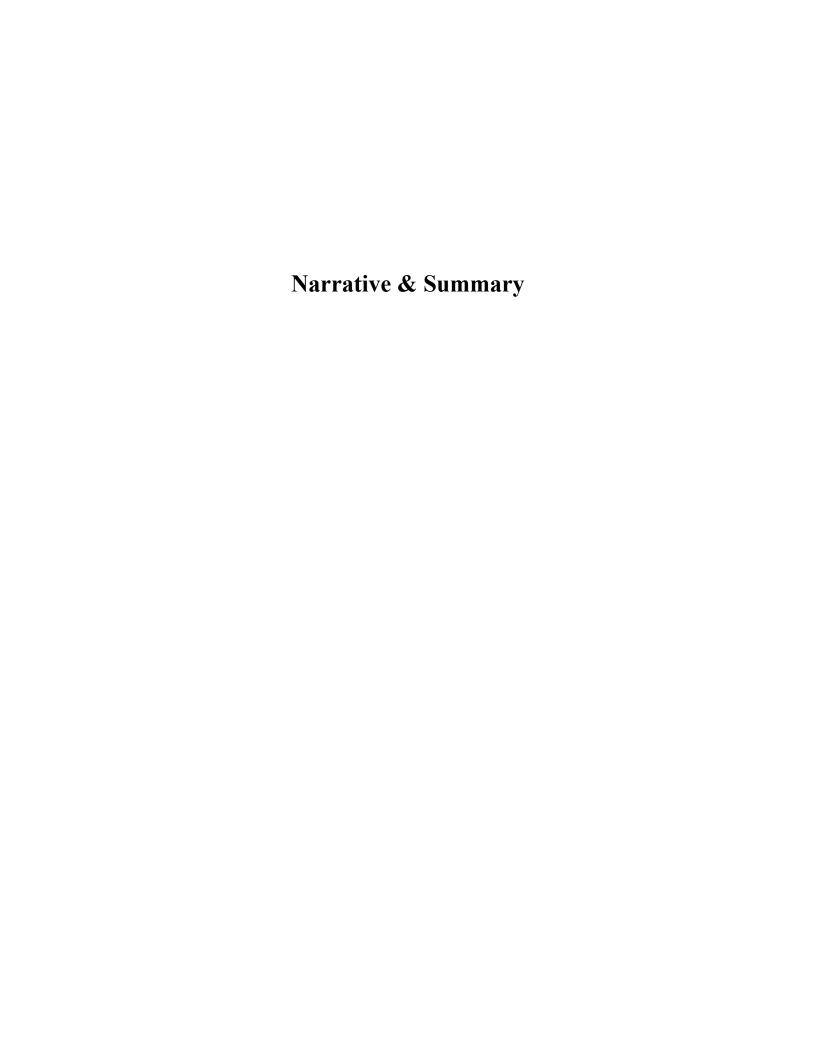
By:



TABLE OF CONTENTS

ITEM DESCRIPTION

- 1. Narrative & Summary
- 2. Hydrograph Report



PROJECT TITLE

Hilltop Landing Subdivision

PROJECT PROPERTY OWNER

Nxt Gen Homes LLC.

PROJECT LOCATION

Hilltop Road and Miller Road, Bryant, AR

PROJECT DESCRIPTION

The proposed sub divisional development is on Hilltop Road and Miller Road, Bryant, AR. Total development site area is 54.0 acres.

DRAINAGE ANALYSIS

On Site Drainage- Rational method was used to determine the existing and proposed flows from proposed site. There will be four detention ponds to detain water from this development. Detailed drainage calculations considering the future expected development has been conducted to determine the required detention ponds and culvert dimensions. Summary of the calculations are below:

Detention Pond-1

- Pond is situated on the north east side of the property.
- Pre-development area 34.50 acres.
- Post-development area 36.28 acres.
- Pre-development runoff coefficient 0.47.
- Post-development runoff cumulative coefficient 0.65
- Pond has a bottom area of 18,760 sft with bottom elevation of 437.50'.
- One 42" HDPE with 1.08% slope are proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	65.96	90.29	32.54
5-Year	72.96	99.87	35.52
10-Year	85.63	117.23	39.88
25-Year	98.15	134.37	45.74
50-Year	111.88	153.15	57.52
100-Year	118.85	162.70	63.55

Detention Pond-2

- Pond is situated on the South-west side of the property.
- Pre-development area 7.2 acres.
- Post-development area 4.11 acres.
- Pre-development runoff coefficient 0.40.
- Post-development runoff cumulative coefficient 0.40
- Pond has a bottom area of 18,270 sft with bottom elevation of 511.00'.
- One 12" HDPE with 9% slope are proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	12.77	6.629	0.387
5-Year	14.20	7.333	0.462
10-Year	16.42	8.607	0.613
25-Year	18.77	9.865	0.773
50-Year	21.35	11.24	0.959
100-Year	22.64	11.95	1.059

Detention Pond-3

- Pond is situated on the south east side of the property.
- Pre-development area 2.25 acres.
- Post-development area 3.21 acres.
- Pre-development runoff coefficient 0.47.
- Post-development runoff cumulative coefficient 0.65
- Pond has a bottom area of 5,512 sft with bottom elevation of 495.00'.
- One 18" HDPE with 12.74% slope are proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	5.039	9.942	2.797
5-Year	5.635	11.12	3.269
10-Year	6.430	12.69	3.910
25-Year	7.337	14.48	4.642
50-Year	8.326	16.43	5.424
100-Year	8.825	17.40	5.810

Detention Pond-4

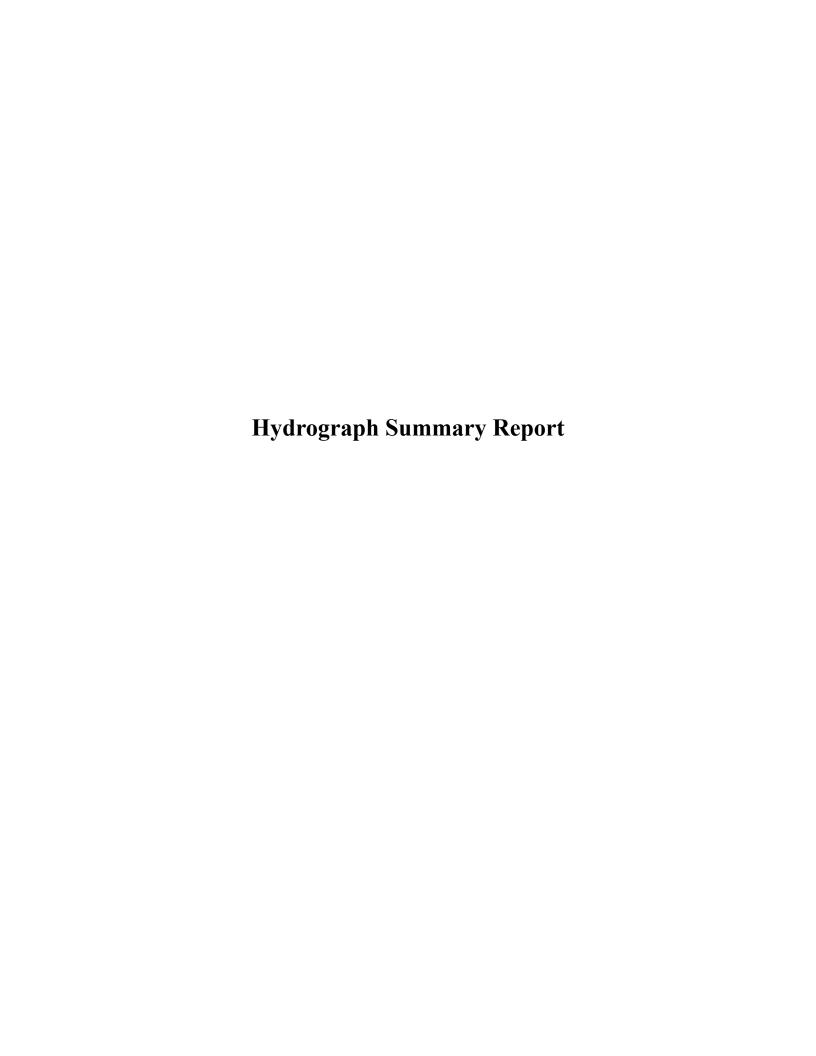
- Pond is situated on the West side of the property.
- Pre-development area 14.40 acres.
- Post-development area 13.97 acres.
- Pre-development runoff coefficient 0.47.
- Post-development runoff cumulative coefficient 0.65
- Pond has a bottom area of 7,680 sft with bottom elevation of 511.00'.
- One 36" HDPE with 9.34% slope is proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

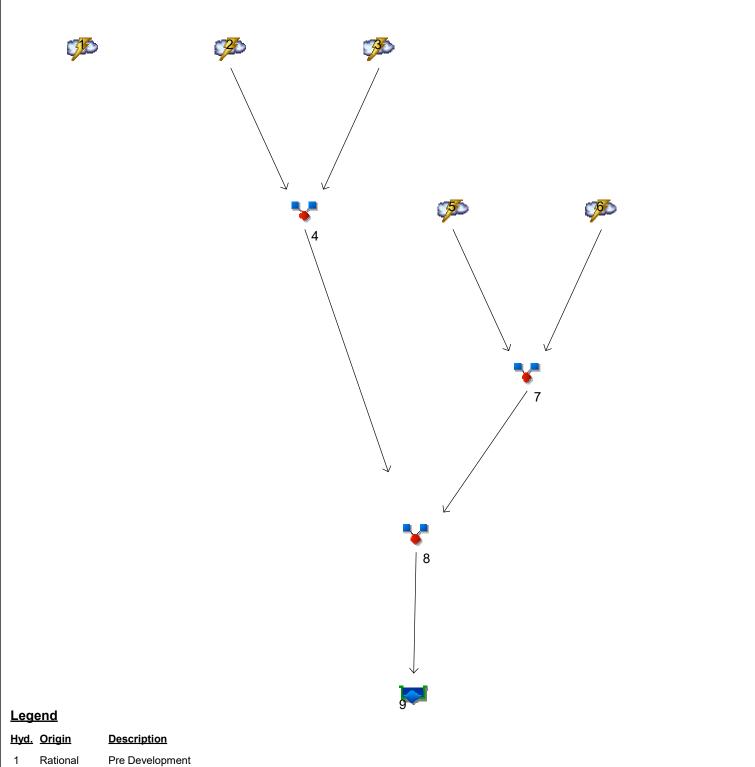
Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	31.09	43.27	18.44
5-Year	34.66	48.39	21.11
10-Year	39.81	55.21	24.59
25-Year	45.47	63.00	28.39
50-Year	51.67	71.49	32.15
100-Year	54.77	75.78	33.77

CONCLUSION

From the onsite drainage calculation, it is seen that there is decrease in flow for all storm events due to the proposed detention ponds.



Watershed Model Schematic



<u>Hyd.</u>	<u>Origin</u>	<u>Description</u>
1	Rational	Pre Development
2	Rational	Post development-1a
3	Rational	post development-1b
4	Combine	combine-1
5	Rational	post development-2a
6	Rational	post development-2b
7	Combine	combine-2
8	Combine	<no description=""></no>
9	Reservoir	detention pond 1

Project: drainage one pond_04-18-2023.gpw

Wednesday, 04 / 19 / 2023

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

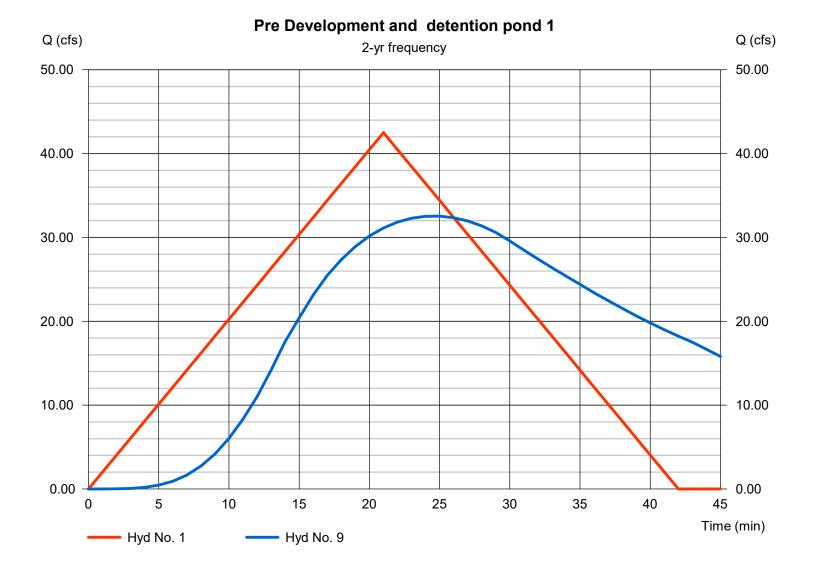
Pre Development

Hydrograph type = Rational
Peak discharge = 42.51 cfs
Time to peak = 21 min
Hyd. Volume = 53,568 cuft

Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 32.54 cfs
Time to peak = 25 min
Hyd. Volume = 81,205 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

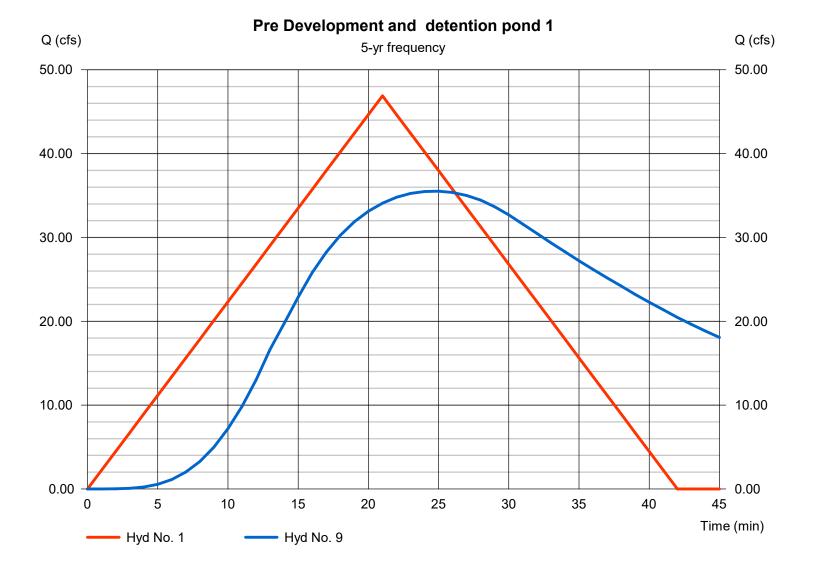
Pre Development

Hydrograph type = Rational Peak discharge = 46.89 cfs Time to peak = 21 min Hyd. Volume = 59,077 cuft

Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 35.52 cfs
Time to peak = 25 min
Hyd. Volume = 89,828 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

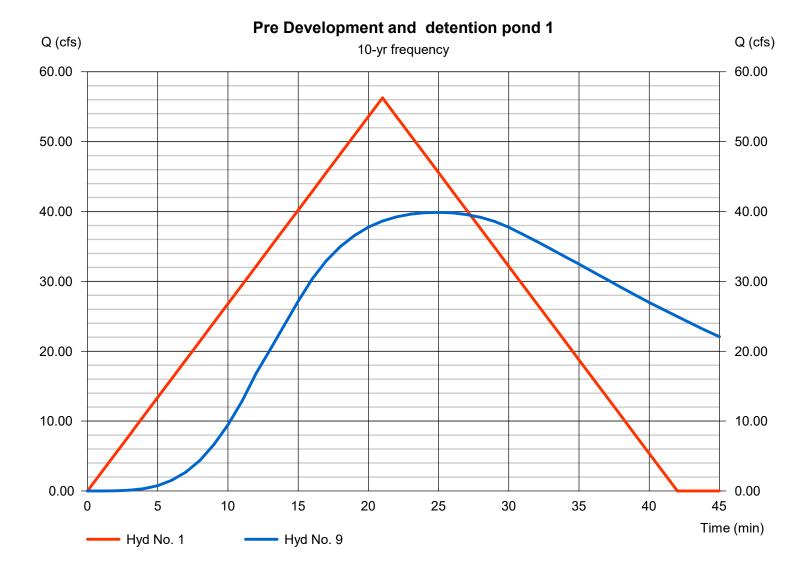
Pre Development

Hydrograph type = Rational
Peak discharge = 56.26 cfs
Time to peak = 21 min
Hyd. Volume = 70,892 cuft

Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 39.88 cfs
Time to peak = 25 min
Hyd. Volume = 105,448 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

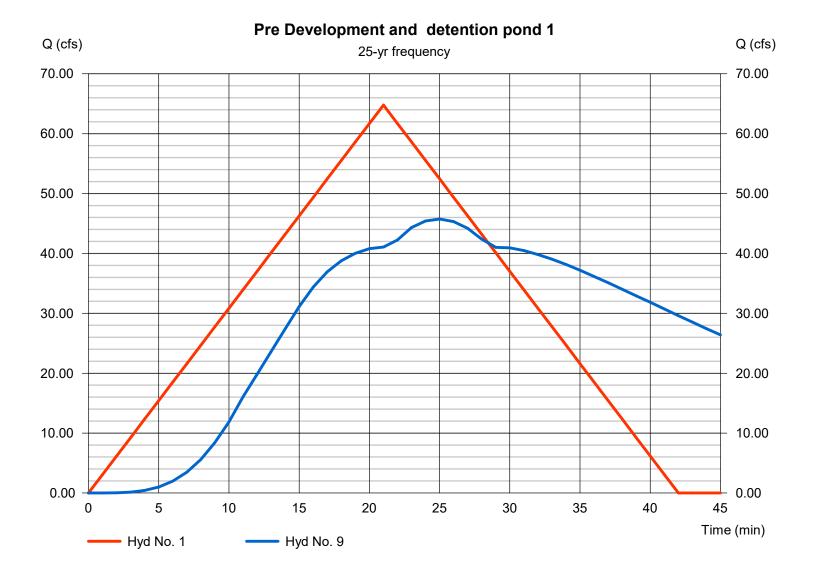
Hyd. No. 9

Hyd. No. 1

Pre Development detention pond 1

Hydrograph type = Rational
Peak discharge = 64.78 cfs
Time to peak = 21 min
Hyd. Volume = 81,626 cuft

Hydrograph type = Reservoir
Peak discharge = 45.74 cfs
Time to peak = 25 min
Hyd. Volume = 120,872 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

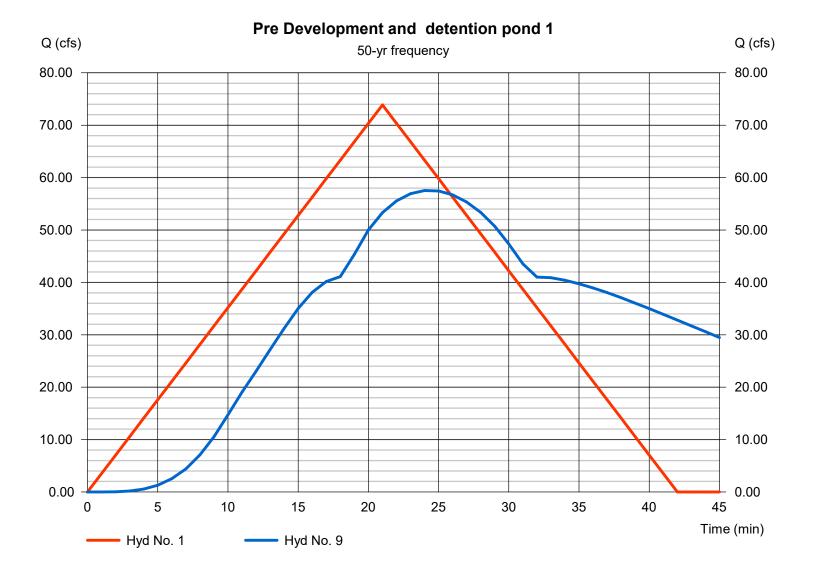
Pre Development

Hydrograph type = Rational
Peak discharge = 73.87 cfs
Time to peak = 21 min
Hyd. Volume = 93,080 cuft

Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 57.52 cfs
Time to peak = 24 min
Hyd. Volume = 137,777 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

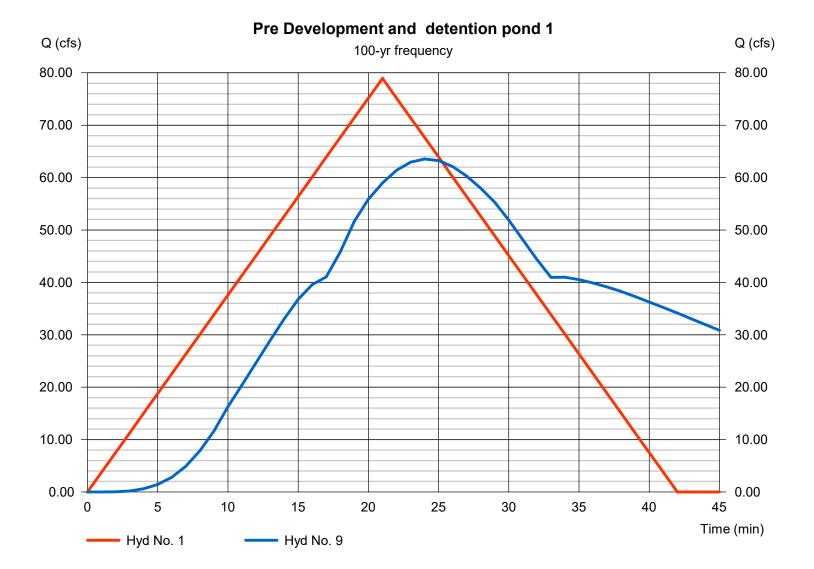
Hyd. No. 1

Pre Development

Hydrograph type = Rational Peak discharge = 78.94 cfs Time to peak = 21 min Hyd. Volume = 99,461 cuft Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 63.55 cfs
Time to peak = 24 min
Hyd. Volume = 146,374 cuft



Pond No. 2 - Detention Pond 1

Pond Data

Trapezoid -Bottom L x W = 268.0 x 70.0 ft, Side slope = 3.00:1, Bottom elev. = 437.50 ft, Depth = 5.00 ft

Stage / Storage Table

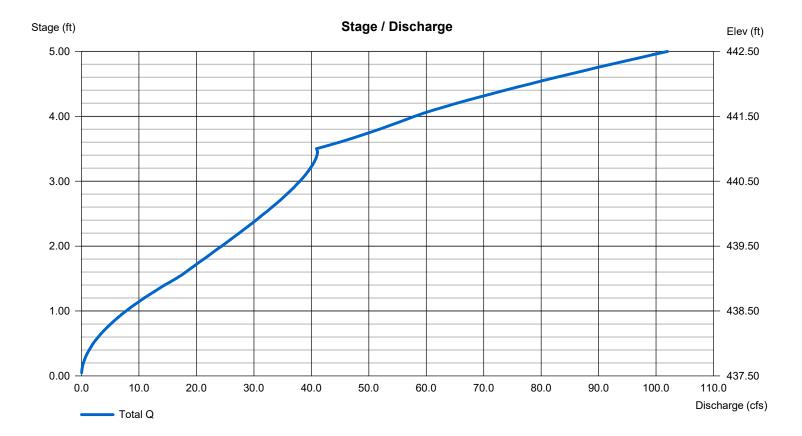
Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	437.50	18,760	0	0
0.50	438.00	19,783	9,635	9,635
1.00	438.50	20,824	10,151	19,786
1.50	439.00	21,883	10,676	30,462
2.00	439.50	22,960	11,210	41,672
2.50	440.00	24,055	11,753	53,425
3.00	440.50	25,168	12,305	65,730
3.50	441.00	26,299	12,866	78,596
4.00	441.50	27,448	13,436	92,032
4.50	442.00	28,615	14,015	106,047
5.00	442.50	29,800	14,603	120,650

Culvert / Orifice Structures

Weir Structures

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 42.00	Inactive	Inactive	0.00	Crest Len (ft)	= 6.00	Inactive	Inactive	0.00
Span (in)	= 42.00	0.00	0.00	0.00	Crest El. (ft)	= 441.50	0.00	0.00	0.00
No. Barrels	= 1	0	0	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 437.50	0.00	0.00	0.00	Weir Type	= Rect			
Length (ft)	= 46.00	0.00	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 1.08	0.00	0.00	n/a					
N-Value	= .013	.013	.013	n/a					
Orifice Coeff.	= 0.60	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Wet area)		
Multi-Stage	= n/a	No	No	No	TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	42.51	1	21	53,568				Pre Development
2	Rational	60.00	1	15	53,998				Post development-1a
3	Rational	5.960	1	15	5,364				post development-1b
4	Combine	65.96	1	15	59,362	2, 3			combine-1
5	Rational	18.19	1	15	16,367				post development-2a
6	Rational	6.149	1	15	5,534				post development-2b
7	Combine	24.33	1	15	21,901	5, 6			combine-2
8	Combine	90.29	1	15	81,262	4, 7			<no description=""></no>
9	Reservoir	32.54	1	25	81,205	8	440.05	54,740	detention pond 1
dra	inage one po	 nd_04-18	-2023.gr) W	Return F	Period: 2 Ye	 ear	Wednesda	

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	46.89	1	21	59,077				Pre Development
2	Rational	66.36	1	15	59,728				Post development-1a
3	Rational	6.592	1	15	5,933				post development-1b
4	Combine	72.96	1	15	65,661	2, 3			combine-1
5	Rational	20.11	1	15	18,103				post development-2a
6	Rational	6.801	1	15	6,121				post development-2b
7	Combine	26.92	1	15	24,225	5, 6			combine-2
8	Combine	99.87	1	15	89,885	4, 7			<no description=""></no>
9	Reservoir	35.52	1	25	89,828	8	440.28	60,392	detention pond 1
dra	inage one por	l nd_04-18-		w w	Return P	eriod: 5 Ye	 ear	Wednesday	/, 04 / 19 / 2023

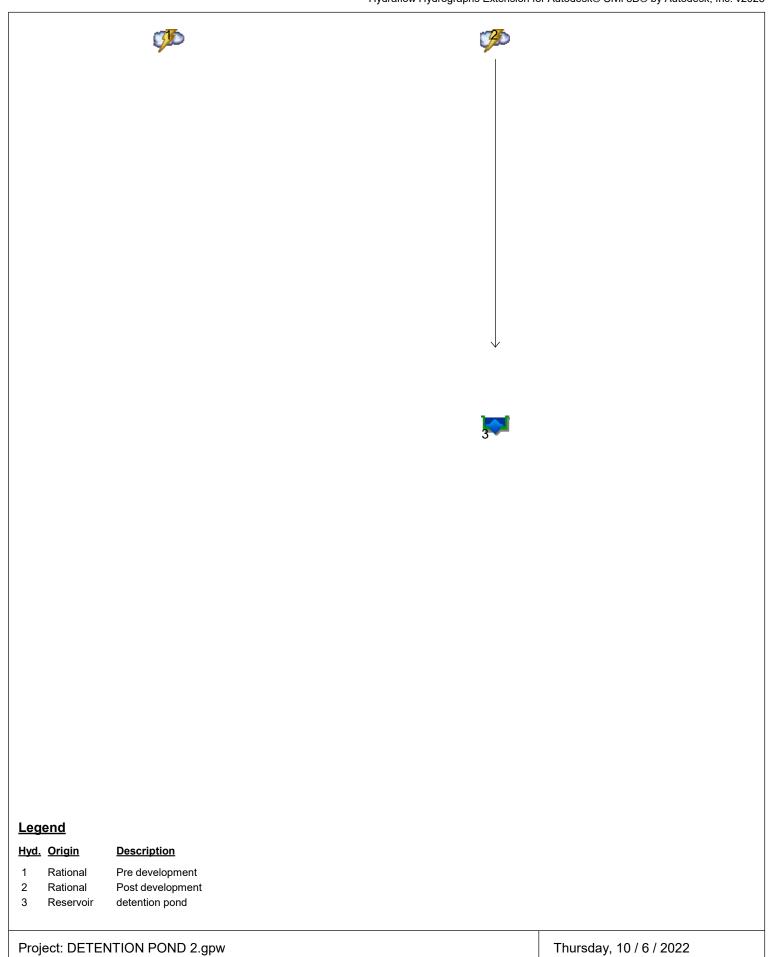
lyd. Hydrograph lo. type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1 Rational	56.26	1	21	70,892				Pre Development
2 Rational	77.90	1	15	70,107				Post development-1a
3 Rational	7.738	1	15	6,964				post development-1b
4 Combine	85.63	1	15	77,071	2, 3			combine-1
5 Rational	23.61	1	15	21,249				post development-2a
6 Rational	7.983	1	15	7,185				post development-2b
7 Combine	31.59	1	15	28,434	5, 6			combine-2
8 Combine	117.23	1	15	105,505	4, 7			<no description=""></no>
drainage one por					Period: 10 N		Wednesda	

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	64.78	1	21	81,626				Pre Development
2	Rational	89.29	1	15	80,357				Post development-1a
3	Rational	8.869	1	15	7,982				post development-1b
4	Combine	98.15	1	15	88,339	2, 3			combine-1
5	Rational	27.06	1	15	24,356				post development-2a
6	Rational	9.151	1	15	8,235				post development-2b
7	Combine	36.21	1	15	32,591	5, 6			combine-2
8	Combine	134.37	1	15	120,930	4, 7			<no description=""></no>
dra	inage one po	nd_04-18	-2023.gp	ow.	Return F	Period: 25 Y	'ear	Wednesday	y, 04 / 19 / 2023

lyd. Hydrograph lo. type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1 Rational	73.87	1	21	93,080				Pre Development
2 Rational	101.77	1	15	91,590				Post development-1a
3 Rational	10.11	1	15	9,098				post development-1b
4 Combine	111.88	1	15	100,688	2, 3			combine-1
5 Rational	30.85	1	15	27,761				post development-2a
6 Rational	10.43	1	15	9,387				post development-2b
7 Combine	41.27	1	15	37,147	5, 6			combine-2
8 Combine	153.15	1	15	137,835	4, 7			<no description=""></no>
drainage one po					Period: 50 \			ay, 04 / 19 / 2023

	, · · · · · · · · · · · · · · · · · · ·					Hydrafi	ow Hydrograpns	Extension for Autodesk® Civil 3D® by Autodesk, Inc. v202		
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	Rational	78.94	1	21	99,461				Pre Development	
2	Rational	108.11	1	15	97,303				Post development-1a	
3	Rational	10.74	1	15	9,665				post development-1b	
4	Combine	118.85	1	15	106,968	2, 3			combine-1	
5	Rational	32.77	1	15	29,492				post development-2a	
6	Rational	11.08	1	15	9,972				post development-2b	
7	Combine	43.85	1	15	39,464	5, 6			combine-2	
8	Combine	162.70	1	15	146,433	4, 7			<no description=""></no>	
9	Reservoir	63.55	1	24	146,374	8	441.66	96,403	detention pond 1	
drainage one pond_04-18-2023.gpw				Return Period: 100 Year			Wednesday, 04 / 19 / 2023			

Watershed Model Schematic



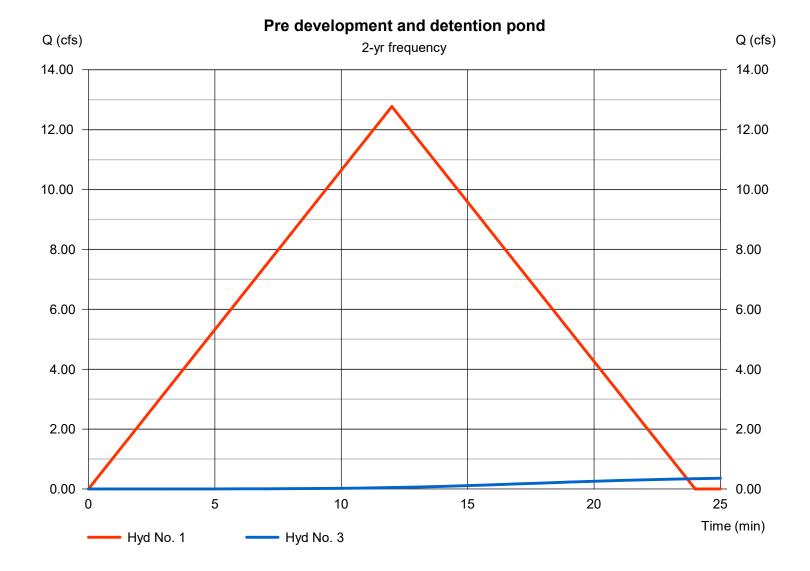
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational
Peak discharge = 12.77 cfs
Time to peak = 12 min
Hyd. Volume = 9,197 cuft

Hydrograph type = Reservoir
Peak discharge = 0.39 cfs
Time to peak = 29 min
Hyd. Volume = 5,573 cuft



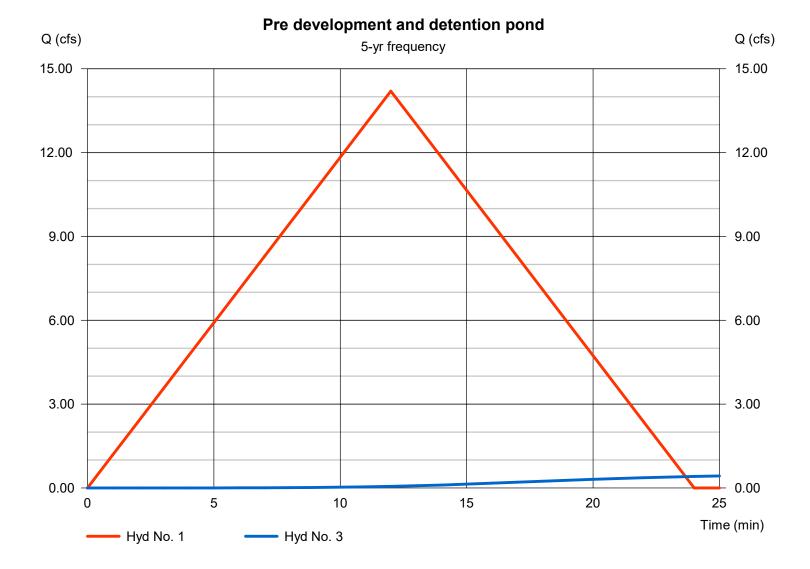
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational
Peak discharge = 14.20 cfs
Time to peak = 12 min
Hyd. Volume = 10,226 cuft

Hydrograph type = Reservoir
Peak discharge = 0.46 cfs
Time to peak = 29 min
Hyd. Volume = 6,203 cuft



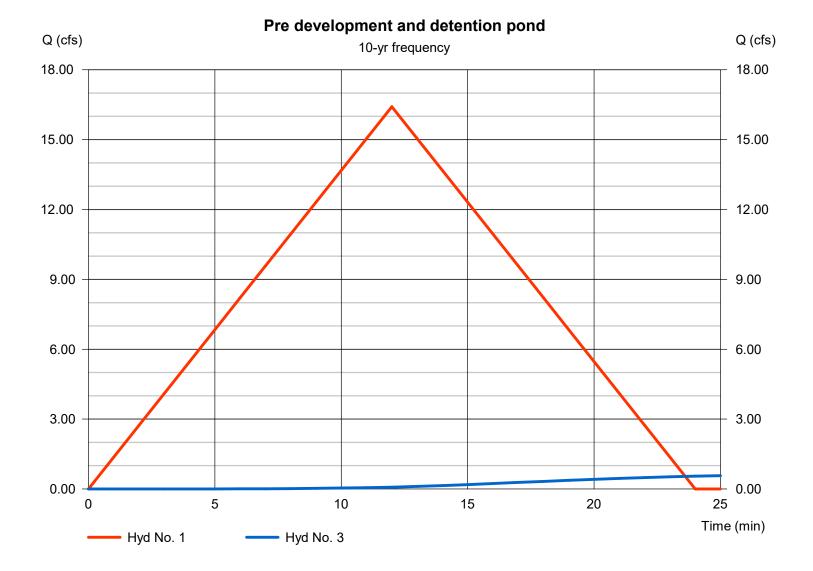
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational
Peak discharge = 16.42 cfs
Time to peak = 12 min
Hyd. Volume = 11,819 cuft

Hydrograph type = Reservoir
Peak discharge = 0.61 cfs
Time to peak = 29 min
Hyd. Volume = 7,345 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

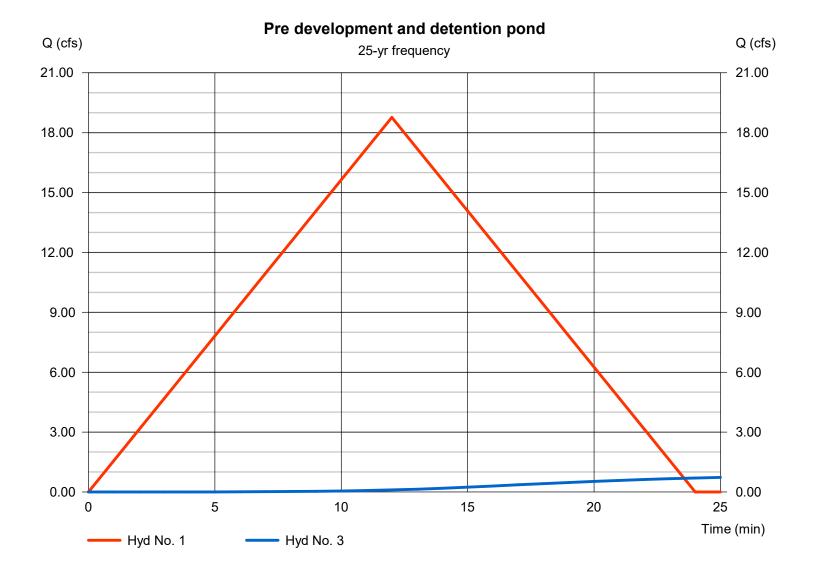
Pre development

Hydrograph type = Rational
Peak discharge = 18.77 cfs
Time to peak = 12 min
Hyd. Volume = 13,512 cuft

Hyd. No. 3

detention pond

Hydrograph type = Reservoir
Peak discharge = 0.77 cfs
Time to peak = 29 min
Hyd. Volume = 8,475 cuft

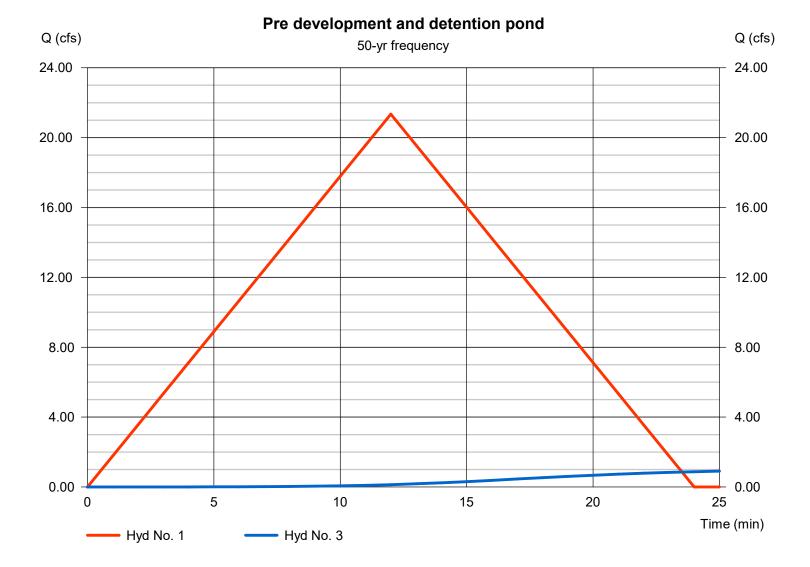


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 21.35 cfs= 0.96 cfsTime to peak = 12 min Time to peak = 29 min Hyd. Volume = 15,370 cuft Hyd. Volume = 9,713 cuft

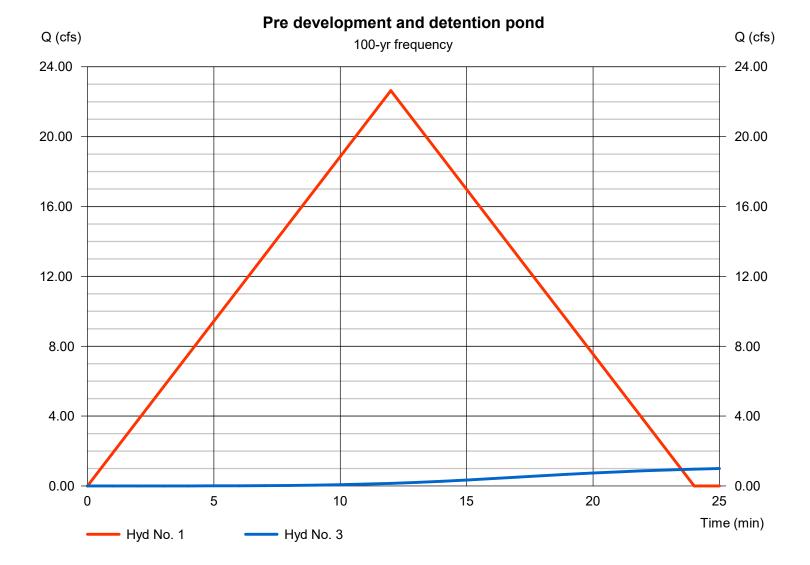


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 22.64 cfs= 1.06 cfsTime to peak = 12 min Time to peak = 29 min Hyd. Volume = 16,299 cuft Hyd. Volume = 10,343 cuft



Thursday, 10 / 6 / 2022

Pond No. 1 - Detention Pond 2

Pond Data

Trapezoid -Bottom L x W = 145.0 x 126.0 ft, Side slope = 3.00:1, Bottom elev. = 511.00 ft, Depth = 2.00 ft

Stage / Storage Table

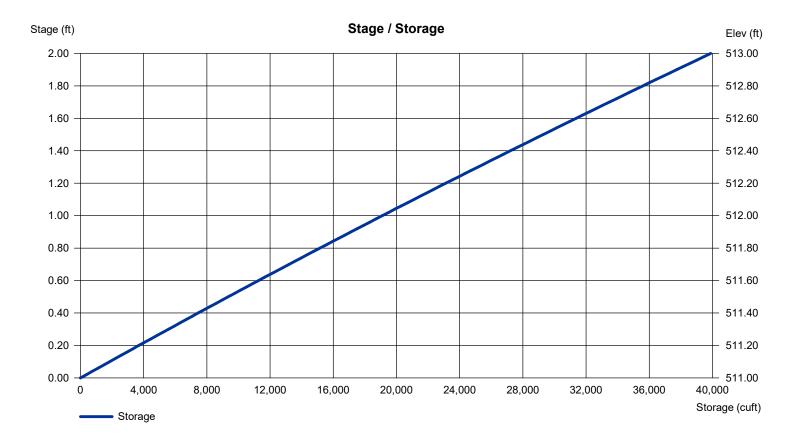
Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	511.00	18,270	0	0
0.20	511.20	18,597	3,687	3,687
0.40	511.40	18,926	3,752	7,439
0.60	511.60	19,259	3,818	11,257
0.80	511.80	19,594	3,885	15,142
1.00	512.00	19,932	3,953	19,095
1.20	512.20	20,273	4,020	23,115
1.40	512.40	20,617	4,089	27,204
1.60	512.60	20,964	4,158	31,362
1.80	512.80	21,313	4,228	35,590
2.00	513.00	21,666	4,298	39,888

Culvert / Orifice Structures

Weir Structures

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 12.00	Inactive	Inactive	0.00	Crest Len (ft)	= 6.00	0.00	0.00	0.00
Span (in)	= 12.00	0.00	0.00	0.00	Crest El. (ft)	= 512.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 511.00	0.00	0.00	0.00	Weir Type	= Rect			
Length (ft)	= 64.00	0.00	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 9.00	0.00	0.00	n/a					
N-Value	= .013	.013	.013	n/a					
Orifice Coeff.	= 0.60	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Contour)		
Multi-Stage	= n/a	No	No	No	TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	12.77	1	12	9,197				Pre development
2	Rational	6.629	1	15	5,966				Post development
DETENTION POND 2.gpw				Return F	□ Period: 2 Ye	ear	Thursday, 1	 0 / 6 / 2022	

lo.	lydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1 F	Rational	14.20	1	12	10,226				Pre development
2 F	Rational	7.333	1	15	6,599				Post development
2 F						2	511.34	6,272	

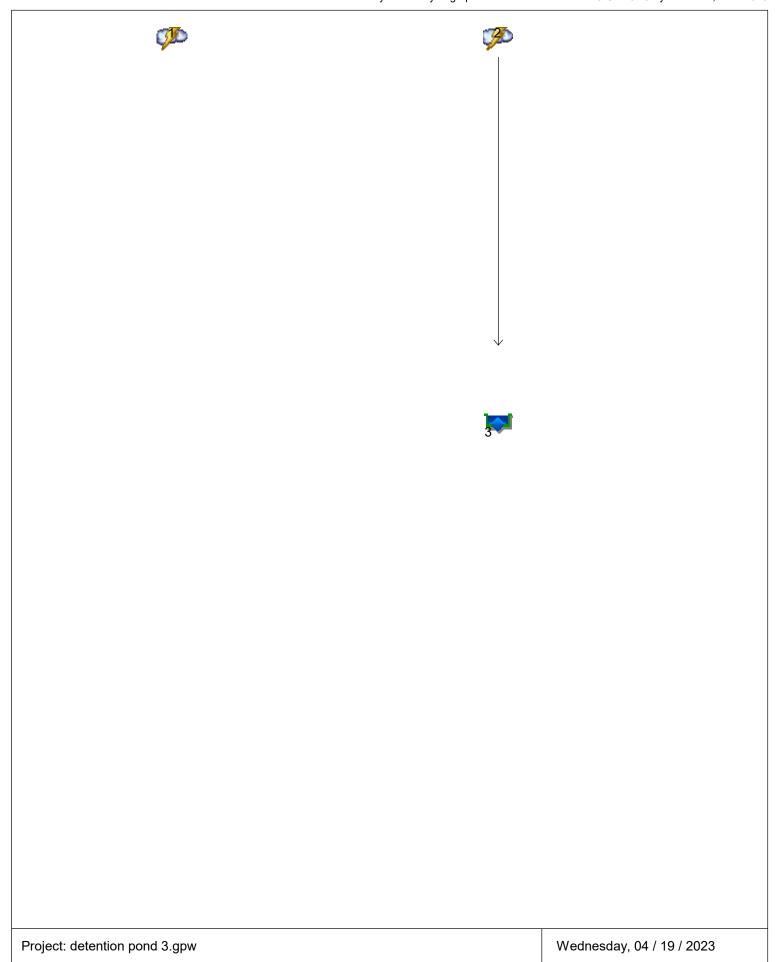
lyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	16.42	1	12	11,819				Pre development
2	Rational	8.607	1	15	7,746				Post development
3	Reservoir	0.613	1	29	7,345	2	511.39	7,310	detention pond
DETENTION POND 2.gpw					Return I	Period: 10 \	/ear	Thursday,	10 / 6 / 2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	18.77	1	12	13,512				Pre development
2	Rational	9.865	1	15	8,879				Post development
2 3	Rational	9.865	1 1	15 29	8,879 8,475	2	511.45	8,325	Post development detention pond

				Hydrallow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2						
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	Rational	21.35	1	12	15,370				Pre development	
2	Rational	11.24	1	15	10,120				Post development	
3	Reservoir	0.959	1	29	9,713	2	511.50	9,427	detention pond	
DE	DETENTION POND 2.gpw			Return P	eriod: 50 Y	'ear	Thursday, 10 / 6 / 2022			

lyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	22.64	1	12	16,299				Pre development
2	Rational	11.95	1	15	10,751				Post development
3	Reservoir	1.059	1	29	10,343	2	511.53	9,983	detention pond
DETENTION POND 2.gpw					Return F	Period: 100	Year	Thursday,	10 / 6 / 2022

Watershed Model Schematic



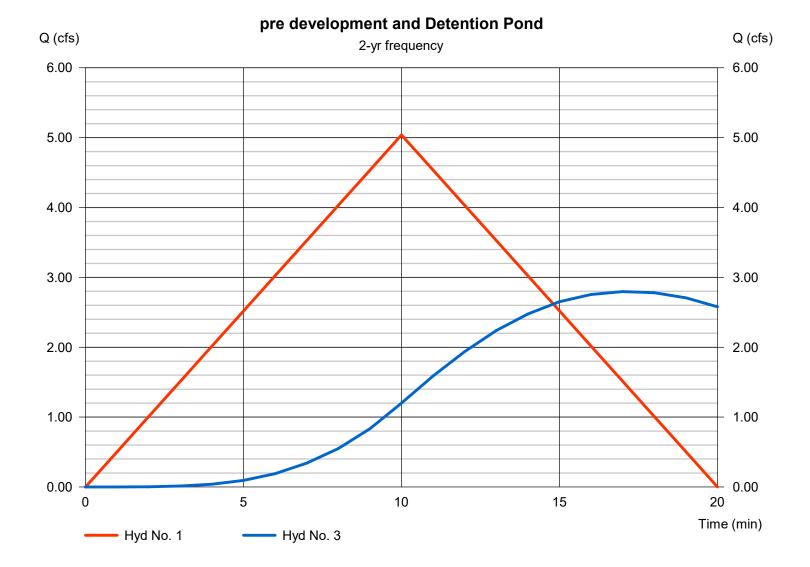
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational
Peak discharge = 5.039 cfs
Time to peak = 10 min
Hyd. Volume = 3,023 cuft

Hydrograph type = Reservoir
Peak discharge = 2.80 cfs
Time to peak = 17 min
Hyd. Volume = 5,925 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

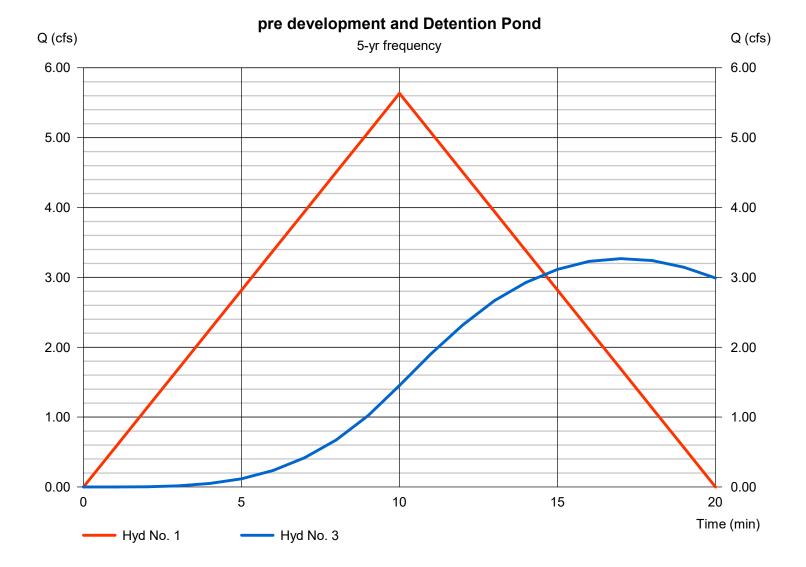
Hyd. No. 1

pre development

Hydrograph type = Rational Peak discharge = 5.635 cfs Time to peak = 10 min Hyd. Volume = 3,381 cuft Hyd. No. 3

Detention Pond

Hydrograph type = Reservoir
Peak discharge = 3.27 cfs
Time to peak = 17 min
Hyd. Volume = 6,630 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

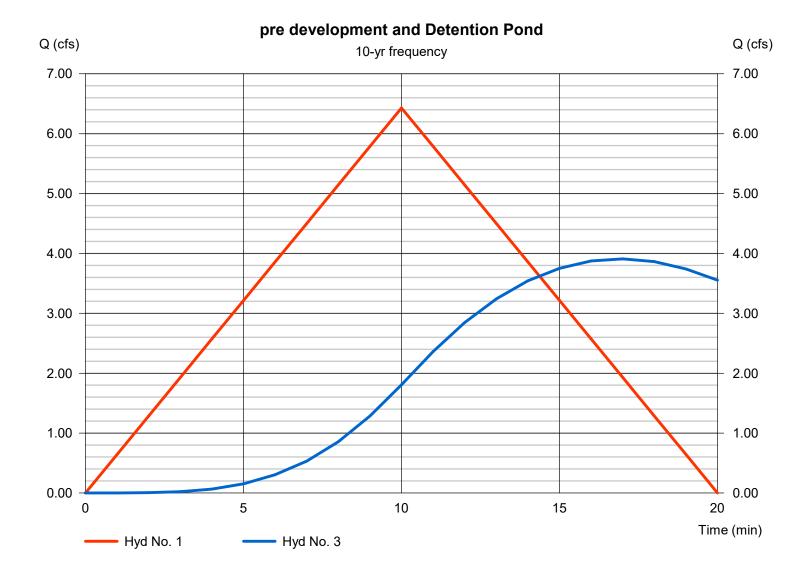
Hyd. No. 1

pre development

Hydrograph type = Rational Peak discharge = 6.430 cfs Time to peak = 10 min Hyd. Volume = 3,858 cuft Hyd. No. 3

Detention Pond

Hydrograph type = Reservoir
Peak discharge = 3.91 cfs
Time to peak = 17 min
Hyd. Volume = 7,571 cuft

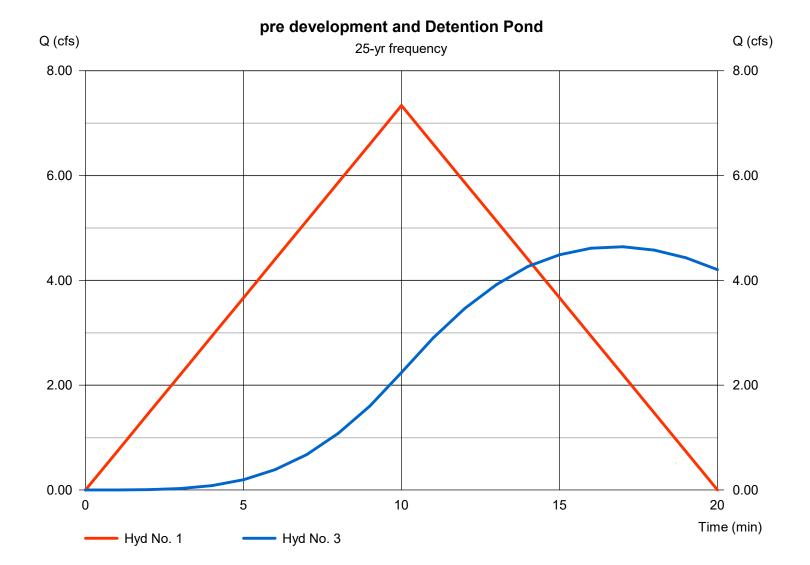


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational Peak discharge = 7.337 cfs Time to peak = 10 min Hyd. Volume = 4,402 cuft Hydrograph type = Reservoir
Peak discharge = 4.64 cfs
Time to peak = 17 min
Hyd. Volume = 8,645 cuft

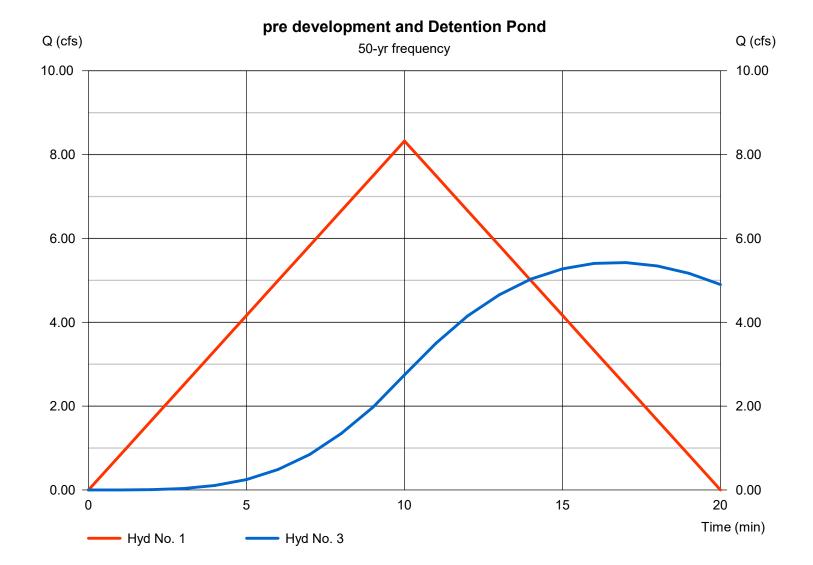


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational Peak discharge = 8.326 cfs Time to peak = 10 min Hyd. Volume = 4,995 cuft Hydrograph type = Reservoir
Peak discharge = 5.42 cfs
Time to peak = 17 min
Hyd. Volume = 9,816 cuft

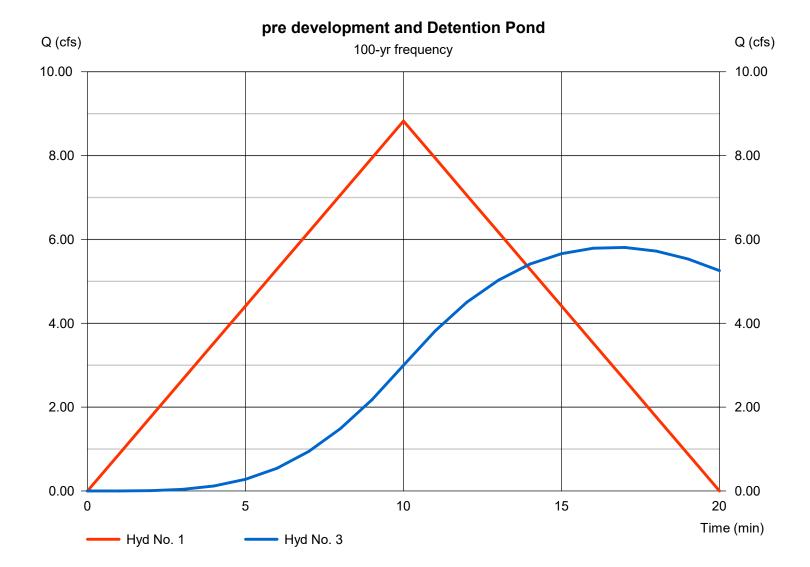


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 8.825 cfs= 5.81 cfsTime to peak = 10 min Time to peak = 17 min Hyd. Volume = 5,295 cuft Hyd. Volume = 10,406 cuft



Pond No. 1 - Detention Pond -3

Pond Data

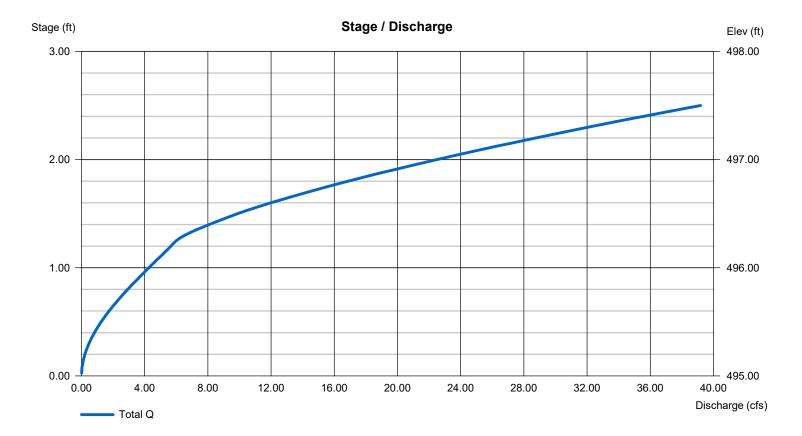
Trapezoid -Bottom L x W = 106.0 x 52.0 ft, Side slope = 3.00:1, Bottom elev. = 495.00 ft, Depth = 2.50 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	495.00	5,512	0	0
0.25	495.25	5,751	1,408	1,408
0.50	495.50	5,995	1,468	2,876
0.75	495.75	6,243	1,530	4,406
1.00	496.00	6,496	1,592	5,998
1.25	496.25	6,753	1,656	7,654
1.50	496.50	7,015	1,721	9,375
1.75	496.75	7,281	1,787	11,162
2.00	497.00	7,552	1,854	13,016
2.25	497.25	7,827	1,922	14,938
2.50	497.50	8,107	1,992	16,930

Culvert / Orifice Structures Weir Structures [B] [PrfRsr] [A] [C] [D] [A] [C] [B] = 18.00 0.00 0.00 0.00 = 6.00 0.00 0.00 0.00 Rise (in) Crest Len (ft) Span (in) = 18.000.00 0.00 0.00 Crest El. (ft) = 496.25 0.00 0.00 0.00 No. Barrels = 1 0 0 0 Weir Coeff. = 3.333.33 3.33 3.33 0.00 0.00 Weir Type Invert El. (ft) = 495.00 0.00 = Rect = 29.00 0.00 0.00 0.00 Multi-Stage = No No No No Length (ft) = 12.74 0.00 0.00 Slope (%) n/a = .013 .013 N-Value .013 n/a Orifice Coeff. = 0.600.60 0.60 0.60 Exfil.(in/hr) = 0.000 (by Wet area) = n/a No No No = 0.00Multi-Stage TW Elev. (ft)

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	5.039	1	10	3,023				pre development
2	Rational	9.942	1	10	5,965				post development
3	Reservoir	2.797	1	17	5,925	2	495.78	4,598	Detention Pond
det	ention pond 3	3.gpw			Return I	Period: 2 Ye	ear	Wednesda	ıy, 04 / 19 / 2023

					Hydrallow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v						
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description		
1	Rational	5.635	1	10	3,381				pre development		
2	Rational	11.12	1	10	6,671				post development		
3	Reservoir	3.269	1	17	6,630	2	495.85	5,064	Detention Pond		
detention pond 3.gpw			Return F	eriod: 5 Ye	 ear	Wednesday	/, 04 / 19 / 2023				

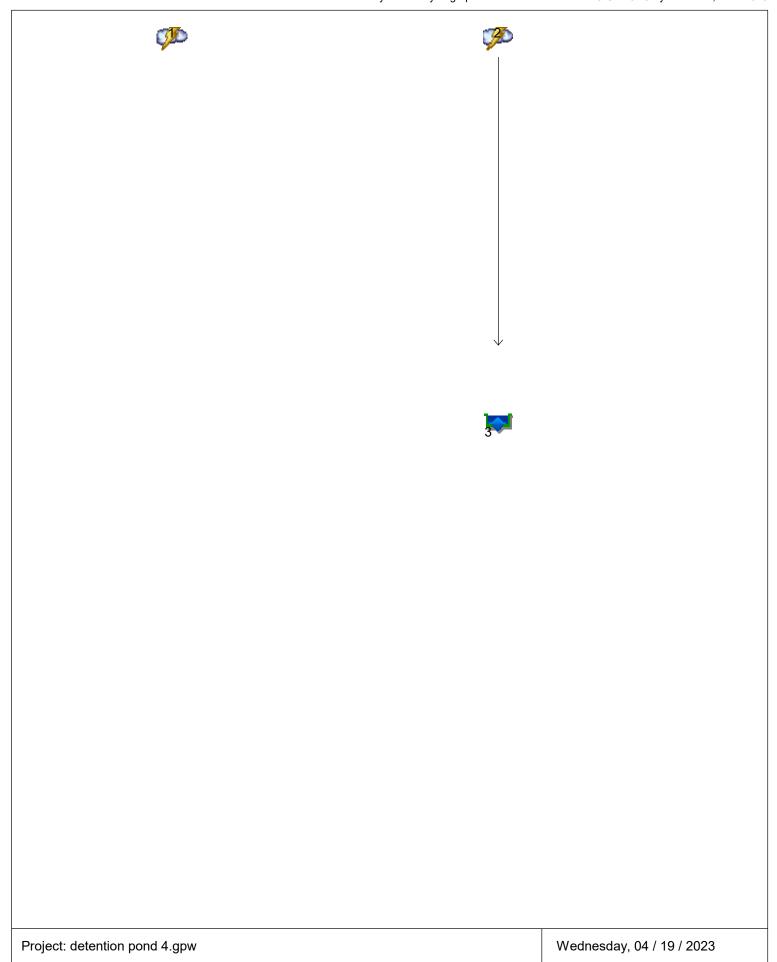
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	6.430	1	10	3,858				pre development
2	Rational	12.69	1	10	7,612				post development
det	detention pond 3.gpw				Return F	Period: 10 \	 ⁄ear	Wednesda	y, 04 / 19 / 2023

lyd. lo.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	7.337	1	10	4,402				pre development
2	Rational	14.48	1	10	8,686				post development
3	Reservoir	4.642	1	17	8,645	2	496.05	6,359	Detention Pond
detention pond 3.gpw				Return	Period: 25 `	Year	Wednesda	y, 04 / 19 / 2023	

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	8.326	1	10	4,995				pre development
2	Rational	16.43	1	10	9,856				post development
3	Reservoir	5.424	1	17	9,836	2	496.17	7,100	Detention Pond
det	ention pond 3	3.gpw			Return f	Period: 50	∸ ∕ear	Wednesda	y, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	8.825	1	10	5,295				pre development
2	Rational	17.41	1	10	10,447				post development
det	ention pond 3	detention pond 3.gpw				Period: 100	Year	Wednesda	y, 04 / 19 / 2023

Watershed Model Schematic



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

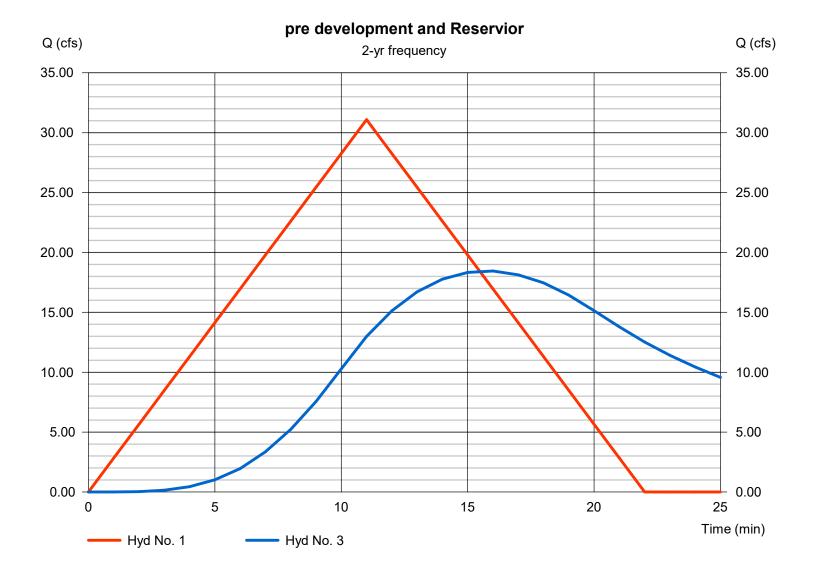
pre development

Hydrograph type = Rational
Peak discharge = 31.09 cfs
Time to peak = 11 min
Hyd. Volume = 20,519 cuft

Hyd. No. 3

Reservior

Hydrograph type = Reservoir
Peak discharge = 18.44 cfs
Time to peak = 16 min
Hyd. Volume = 25,931 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

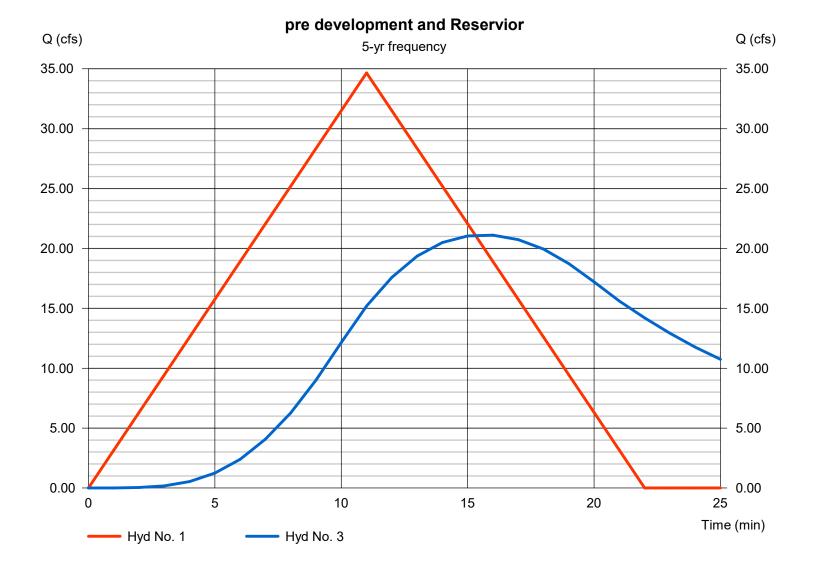
pre development

Hydrograph type = Rational
Peak discharge = 34.66 cfs
Time to peak = 11 min
Hyd. Volume = 22,873 cuft

Hyd. No. 3

Reservior

Hydrograph type = Reservoir
Peak discharge = 21.11 cfs
Time to peak = 16 min
Hyd. Volume = 29,001 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

= Reservoir

= 24.59 cfs

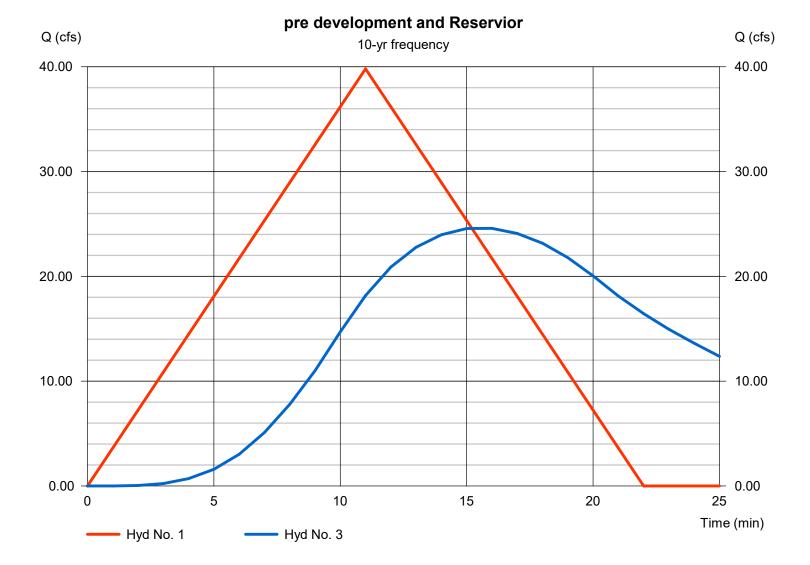
= 33,097 cuft

= 16 min

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type= RationalHydrograph typePeak discharge= 39.81 cfsPeak dischargeTime to peak= 11 minTime to peakHyd. Volume= 26,276 cuftHyd. Volume

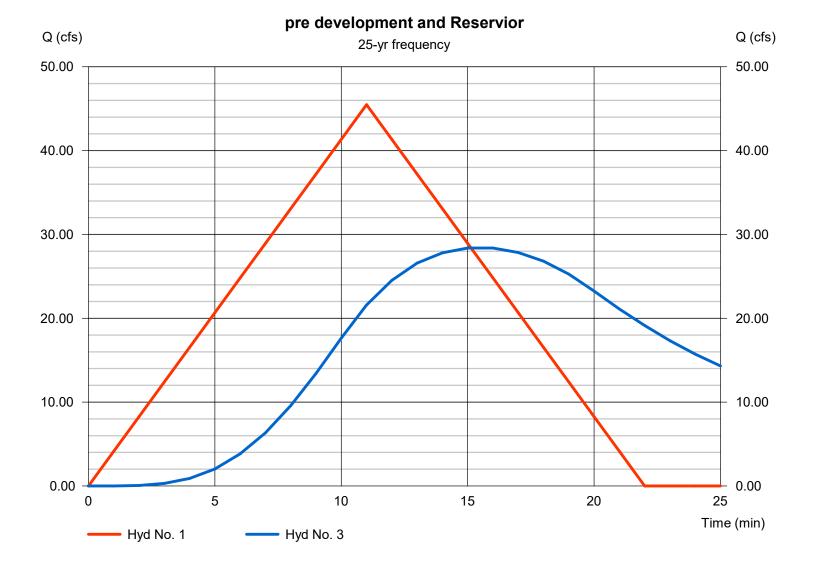


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 28.39 cfs= 45.47 cfsTime to peak = 11 min Time to peak = 15 min Hyd. Volume = 30,012 cuft Hyd. Volume = 37,772 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

= Reservoir

= 32.15 cfs

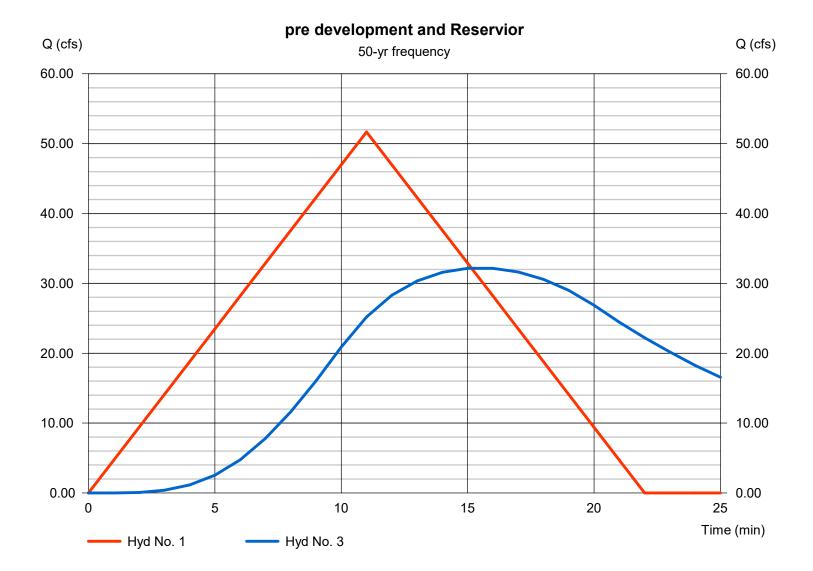
= 42,865 cuft

= 16 min

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type= RationalHydrograph typePeak discharge= 51.67 cfsPeak dischargeTime to peak= 11 minTime to peakHyd. Volume= 34,102 cuftHyd. Volume

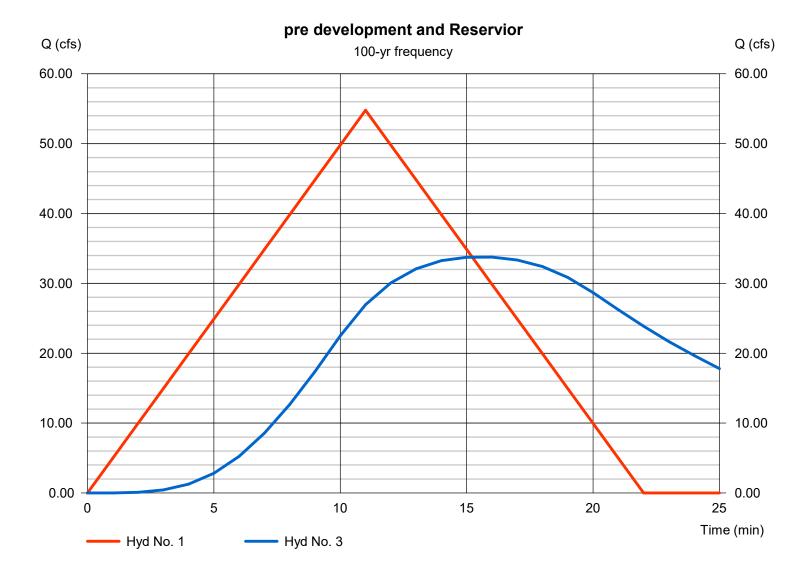


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 54.77 cfs= 33.77 cfsTime to peak = 11 min Time to peak = 16 min Hyd. Volume = 36,151 cuft Hyd. Volume = 45,435 cuft



Pond No. 1 - Detention Pond -4

Pond Data

Trapezoid -Bottom L x W = 120.0 x 64.0 ft, Side slope = 3.00:1, Bottom elev. = 511.00 ft, Depth = 4.00 ft

Stage / Storage Table

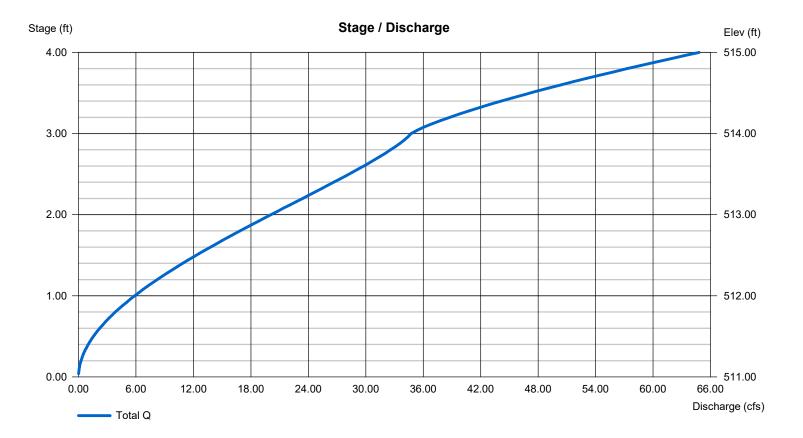
Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	511.00	7,680	0	0
0.40	511.40	8,127	3,161	3,161
0.80	511.80	8,586	3,342	6,503
1.20	512.20	9,057	3,528	10,032
1.60	512.60	9,539	3,719	13,750
2.00	513.00	10,032	3,914	17,664
2.40	513.40	10,537	4,113	21,777
2.80	513.80	11,053	4,318	26,095
3.20	514.20	11,581	4,527	30,622
3.60	514.60	12,121	4,740	35,362
4.00	515.00	12,672	4,958	40,320

Culvert / Orifice Structures

Weir Structures

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 36.00	Inactive	Inactive	0.00	Crest Len (ft)	Inactive	6.00	Inactive	0.00
Span (in)	= 36.00	24.00	24.00	0.00	Crest El. (ft)	= 511.00	514.00	511.00	0.00
No. Barrels	= 1	1	1	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 511.00	511.00	513.00	0.00	Weir Type	= Rect	Rect	Rect	
Length (ft)	= 103.00	0.50	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 9.34	0.01	0.00	n/a					
N-Value	= .013	.013	.013	n/a					
Orifice Coeff.	= 0.50	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Contour)		
Multi-Stage	= n/a	No	No	No	TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description		
1	Rational	31.09	1	11	20,519				pre development		
2	Rational	43.27	1	10	25,961				post development		
det	detention pond 4.gpw				Return F	Period: 2 Ye	 ear	Wednesday	Wednesday, 04 / 19 / 2023		

					Hydrallow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v						
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description		
1	Rational	34.66	1	11	22,873				pre development		
2	Rational	48.39	1	10	29,031				post development		
3	Reservoir	21.11	1	16	29,001	2	513.06	18,301	Reservior		
detention pond 4.gpw			Return P	eriod: 5 Ye	ear	Wednesday	/, 04 / 19 / 2023				

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	39.81	1	11	26,276				pre development
2	Rational	55.21	1	10	33,127				post development
1 2 3									
detention pond 4.gpw				Return F	Period: 10 \	⊥ ∕ear	Wednesday	y, 04 / 19 / 2023	

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

	·					- Tryurun	- Tyurograpiio	- Extension for Au	llodesk® Civii 3D® by Autodesk, Inc. v20.
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	45.47	1	11	30,012				pre development
2	Rational	63.00	1	10	37,802				post development
3	Reservoir	28.39	1	15	37,772	2	513.51	22,950	Reservior
dete	ention pond 4	.gpw	1		Return F	Period: 25 Y	ear	Wednesday	y, 04 / 19 / 2023

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	51.67	1	11	34,102				pre development
2	Rational	71.49	1	10	42,895				post development
3	Reservoir	32.15	1	16	42,865	2	513.77	25,730	Reservior
det	ention pond 4	1.gpw			Return I	Period: 50 \	∕ear	Wednesda	y, 04 / 19 / 2023

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	54.77	1	11	36,151				pre development
2	Rational	75.78	1	10	45,465				post development
3	Reservoir	33.77	1	16	45,435	2	513.90	27,191	Reservior
det	ention pond 4	1.gpw			Return F	Period: 100	Year	Wednesda	y, 04 / 19 / 2023

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

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

Prepared for: NXT GEN HOMES LLC

HILLTOP LANDING

Proposed Subdivision

Hilltop Landing Subdivison
Saline County

Date:

19 April 2023

Prepared by:



Project Name and Location: <u>Hilltop Landing Subdivision, NE corner of Miller Rd and Hilltop Rd,</u> **Bryant, Saline County**

Property Parcel Number (Optional): 840-11625-125

Owner: NXT GEN HOMES LLC 501-217-8400;

19218 Summershade Dr., Bryant, AR 72022 graham@grahamsmithcompanies.com

Developer/Contractor/Operator: <u>Graham Smith – NXT GEN HOMES LLC- 501-217-8400</u>,

19218 Summershade Dr., Bryant, AR 72022

grahamsmithcompanies.com

- A. Site Description
 - a. Project description, intended use after NOI is filed: 165 Lot subdivision
 - Sequence of major activities which disturb soils: <u>Construction entrance</u>, <u>ROW clearing</u>, <u>silt fence</u>, <u>drainage channels</u>, <u>trenching for utilities</u>, <u>rock ckeck dams</u>, <u>grading</u>, <u>road construction</u>, <u>lot clearing</u>, <u>home construction</u>. <u>Detention will be temp sediment pond</u>, (<u>see erosion control plan</u>).
 - c. Total Area¹: Disturbed Area²: 54 Ac± 54 Ac±
 - d. Soils Information:
 - i. Runoff Coefficient Pre-Construction (See Appendix A): 0.36
 - ii. Runoff Coefficient Post-Construction (See Appendix A): **0.65**
 - iii. Describe the soil or the quality of any discharge from the site: **OK**
- B. Responsible Parties

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

Individual/Company	Phone Number	Service Provided for SWPPP (i.e., Inspector, SWPPP revisions, Stabilization Activities, BMP
		Maintenance, etc.)
Hope Consulting	501-315-2626	SWPPP Revisions
Graham Smith – NXT GEN	501-217-8400	Inspection, Stabilization
HOMES LLC- Operator		Activities, BMP Maintenance

C. Receiving Waters

a. The following waterbody (or waterbodies) receives stormwater from this construction site: unnamedTributary, thence Owen, thence Fourche Creek, thence Arkansas River

b.	Is the project located within the jurisdiction of	of an MS4? ⊠Yes ⊡No
	i. If yes, Name of MS4: Bryant	
c.	Ultimate Receiving Water:	
	Red River	Ouachita River

4RR1500)00			
ſ	Wh	ite Rive	⊠Arkansas River er	St. Francis River Mississippi River
ubmitted	to ADEC	ე .		n updated SWPPP and a \$200 modification fee to be
Increases	in only	disturbed	acreage require an additional acreage i	request and an updated SWPPP to be submitted to ADEQ.
D. [Docun	nentatio	on of Permit Eligibility Related	I to the 303(d) list and Total Maximum Daily
L	_oads	(TMDL)	(https://www.adeq.state.ar.us/	<u>/water/planning/)</u>
	a.		he stormwater enter a water ?	body on the 303(d) list or with an approved
	b.	If yes:		
		•	Waterbody identified on 303	3(d) list:
		ii.	·	- · · · · -
		iii.		erally construction activity i.e. surface erosion
			is identified on 303(d) list or	associated assumptions and allocations
			identified in the TMDL for th	ie discharge: Xes No
		iv.	Additional controls impleme	nted: <u>.</u> .
F. <i>A</i>	Attain	ment of	f Water Quality Standards Aft	er Authorization
_, ,	a.		•	mplement, and maintain BMPs at the
		-		utants in the discharge as necessary to meet
			•	In general, except in situations explained
				emented, and updated to be considered as
			• • •	at the discharges do not cause or contribute
			excursion above any applicable	
	b.			Department may determine that the
		-		have reasonable potential to cause, or
				ny applicable water quality standard. If such a
				nent will require the permittee to:
			· ·	P action plan describing SWPPP modifications
				lentified water quality concerns and submit
			valid and verifiable data and	information that are representative of
			ambient conditions and indi	cate that the receiving water is attaining
			water quality standards; or	
		ii.	• •	its from construction activity and submit an
			individual permit application	•
I	unde	rstand a	and agree to follow the above	e text regarding the attainment of water

quality standards after authorization. \square Yes \square No

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

G. Stormwater Controls

- a. Initial Site Stabilization, Erosion and Sediment Controls, and Best Management Practices:
 - i. Initial Site Stabilization: <u>existing vegetation</u>, <u>silt fencing on toe of slopes and along major drainage pathways</u>. <u>All silt fencing may not be necessary initially</u>, <u>but rather as construction progresses</u>.
 - ii. Erosion and Sediment Controls: Rip rap check dams, additional silt fencing (as needed),

	If No, explain:
iv.	Off-site accumulations of sediment will be removed at a frequency sufficient to minimize off-site impacts: Yes No If No, explain:
V.	Sediment will be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%: Yes No If No, explain:
vi.	Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges: Yes No If No, explain:
vii.	Off-site material storage areas used solely by the permitted project are being covered by this SWPPP: Yes No If Yes, explain additional BMPs implemented at off-site material storage area:
b. Stabili	zation Practices
i.	Description and Schedule: Final stabilization will be concrete, stone, sod
	landscape. Permit will be closed when all exposed areas are 100%
	covered with 80% density.
II.	Are buffer areas required? Yes No
	If Yes, are buffer areas being used? ☑Yes ☑No
	If Yes, describe natural buffer areas:
	If No, explain why not:
iii.	A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included with the plan.
iv.	Deadlines for stabilization: Stabilization procedures will be initiated 14 days after construction activity temporarily ceases on a portion of the site. Yes No If No, explain:

- v. Deadlines for stabilization:
 - 1. Stabilization procedures will be initiated immediately after construction activity temporarily ceases on a portion of the site.
 - 2. Stabilization procedures will be initiated immediately in portions of the site where construction activities have permanently ceased.

_	Structura	D:
\boldsymbol{r}	\tri\ctile	I Dractica:
c.	Juluctura	rracuces

c.	Struct	ural Practices
	i.	Describe any structural practices to divert flows from exposed soils, store
		flows, or otherwise limit runoff and the discharge of pollutants from
		exposed areas of the site: <u>silt fencing, check dams</u>
	ii.	Describe Velocity Dissipation Devices: rip rap check dams as needed
	iii.	Sediment Basins:
		Are 10 or more acres draining to a common point? $igtherightarrow$ Yes $igcap$ No
		Is a sediment basin included in the project? ⊠Yes ☐No
		If Yes, what is the designed capacity for the storage?
		3600 cubic feet per acre = :
		or
		\boxtimes 10 year, 24 hour storm =
		:70,892
		Other criteria were used to design basin:
		If No, explain why no sedimentation basin was included and
		describe required natural buffer areas and other controls
		implemented instead: Each lot will have plenty of buffer space
		around the perimeter
H. Other	r Control	s
a.	Solid r	naterials, including building materials, shall be prevented from being
	discha	rged to Waters of the State: Xes No
b	Off-sit	e vehicle tracking of sediments and the generation of dust shall be
	minim	ized through the use of:
		A stabilized construction entrance and exit
		Vehicle tire washing
		Other controls, describe: Street needs to be swept if needed.

c. Temporary Sanitary Facilities: Contractor to provide and maintain facitilities.

	d.	Concrete Waste Area Provided:
		⊠Yes
		No. Concrete is used on the site, but no concrete washout is provided.
		Explain why:
		,
		N/A, no concrete will be used with this project
	e.	Fuel Storage Areas, Hazardous Waste Storage, and Truck Wash Areas: <u>No</u>
		hazardous waste will be produced as a result of this project. Fuel storage areas will
		not be used and truck wash areas will not be needed.
I.	Non-S	tormwater Discharges
	a.	The following allowable non-stormwater discharges comingled with stormwater
		are present or anticipated at the site:
		Fire-fighting activities;
		Fire hydrant flushings;
		Water used to wash vehicles (where detergents or other chemicals are
		not used) or control dust in accordance with Part II.A.4.H.2;
		Potable water sources including uncontaminated waterline flushings;
		Landscape Irrigation;
		Routine external building wash down which does not use detergents or
		other chemicals;
		Pavement wash waters where spills or leaks of toxic or hazardous
		materials have not occurred (unless all spilled materials have been removed)
		and where detergents or other chemicals are not used;
		Uncontaminated air conditioning, compressor condensate (See Part I.B.13.C of the permit);
		Uncontaminated springs, excavation dewatering and groundwater (See
		Part I.B.13.C of the permit);
		Foundation or footing drains where flows are not contaminated with
		process materials such as solvents (See Part I.B.13.C of the permit);
	b.	Describe any controls associated with non-stormwater discharges present at the
		site: There are no non storm water discharges that warrant extra controls. The
		activities which will be non storm water discharges will be not be regularly occuring
		and will be monitored.
J.	Perma	nent Controls for Post-Construction Stormwater Management:
٠.		scribe measures installed during the construction process to control pollutants in
		ormwater discharges that will occur after construction operations have been
		mpleted: Project area will be stabilized before SWPPP is terminated. Yards will be
		Ided/seeded and/or landscaped.
	Per	mit won't be closed until obtain 100% coverage and 80% density

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

L. Inspections

a. Inspection frequency	1 .	Inspection	trequenc
-------------------------	----------------	------------	----------

Every 7 calendar days and within 24 hours of the end of a storm event 0.5 inches or greater (a rain gauge must be maintained on-site)

b. Inspections:

Completed inspection forms will be kept with the SWPPP.
△ADEQ's inspection form will be used (See Appendix B)
or
A form other than ADEQ's inspection form will be used and is attached
(See inspection form requirements Part II.A.4.L.2)

- c. Inspection records will be retained as part of the SWPPP for at least 3 years from the date of termination.
- d. It is understood that the following sections describe waivers of site inspection requirements. All applicable documentation requirements will be followed in accordance with the referenced sections.
 - i. Winter Conditions (Part II.A.4.L.4)
 - ii. Adverse Weather Conditions (Part II.A.4.L.5)

M. Maintenance:

The following procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition will be followed: As homes are completed, lots will be sodded, seeded, and/or landscaped, contractors will be responsible for keeping individual lots during home construction.

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

N. Employee Training:

The following is a description of the training plan for personnel (including contractors and subcontractors) on this project: <u>The operator is well trained and familiar with erosion control practices</u>. Workers who are under the operator will be briefed and trained on erosion control practices and the SWPPP contents.

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

Certification

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible or Cognizant Official:	Kazi Blum		
Title: $P \cdot \mathcal{E}$.	Date:	04-15-2023	

Computation Sheet for Determining Runoff Coefficients

Appendix A

Total Site Area =	Acres	[A]
Existing Site Conditions Impervious Site Area ¹ = Impervious Site Area Runoff Coefficient ^{2, 4} =	Acres	[B] [C]
Pervious Site Area ³ =	Acres	[D]
Pervious Site Area Runoff Coefficient ⁴ =		[E]
Pre-Construction Runoff Coefficient	= This is your pre-construc	tion runoff coefficient.

Proposed Site Conditions (after construction)

Impervious Site Area ¹ =	Acres	[F]
Impervious Site Area Runoff Coefficient ^{2, 4} =		[G]
Pervious Site Area ³ =	Acres	[H]
Pervious Site Area Runoff Coefficient ⁴ =		[۱]

Post-Construction Runoff Coefficient

- 1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
- 2. Use 0.95 unless lower or higher runoff coefficient can be verified.
- 3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
- 4. Refer to local Hydrology Manual for typical C values.

Note: The impervious and pervious surfaces should equal the total area.

Inspector Name:				Date of Inspection:					
nspector Title:									
Date of Rainfall	:		Du	ration of Rainf	fall:				
Days Since Last Rain Event: days				Rainfall Since Last Rain Event: inches					
	iny Discharges Durir harges of Sediment								
	ed of Additional BM Location of Constru								
Location		Activity Begin Date	Activity Occuring Now (y/n)?	Activity Ceased Date	Stabilizatio Initiated Da				
nformation on	BMPs in Need of M	aintenance							
_ocation	In Working Order?	Maintenance : Date	Scheduled	Maintenance Date	Completed	Maintenance to be Performed By			
Changes require	ed to the SWPPP:		Rea	asons for chan	ges:				
	completed (date):								
direction or s the informat responsible f and complet	supervision in accordation submitted. Based for gathering the info	ance with a system of the control of	designed to ensible to	sure that qualifi ersons who ma is, to the best o	ed personnel portion of the syster of my knowledge	n were prepared under m roperly gather and evaluat m, or those persons directl te and belief, true, accurate luding the possibility of fin			
Signature of Res	sponsible or Cogniza	ant Official:				Date:			
		Title:				_			

ARR150000 Inspection Form

Appendix B

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP should be checked as "Not Used" with a brief statement describing why it is not being used.

Note: Appendix C and D do not have to be submitted with the SWPPP. These attachments are for use during the development of the SWPPP.

EROSION CONTROL BMPs							
	ВМР						
	Considered				BMP Not		If not used, state
ВМР	for p	roject	BMP	Used	Used	<u> </u>	reason
EC-1 Scheduling		<u> </u>		\succeq		<u>Ц </u>	
EC-2 Preservation of Existing Vegetation				\boxtimes		<u> </u>	
EC-3 Hydraulic Mulch							
EC-4 Hydroseeding				\boxtimes			
EC-5 Soil Binders							
EC-6 Straw Mulch							
EC-7 Geotextiles & Mats							
EC-8 Wood Mulching							
EC-9 Earth Dikes & Drainage Swales				\boxtimes			
EC-10 Velocity Dissipation Devices							
EC-11 Slope Drains							
EC-12 Stream bank Stabilization				\boxtimes			
SI	EDIMEN	IT CONT	ROL BM	Ps	•		
	ВМР						
	Considered				BMP Not		
							If not used, state
BMP		idered roject	ВМР	Used	Used		If not used, state reason
SE-1 Silt Fence			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier			ВМР	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier			BMP	Used			
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment	for pi						
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment	for pi	Froject			Used		reason
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment WIN	ID EROS BMP Consi	roject	NTROL E	M M M BMPs	BMP	Not	If not used, state
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment	ID EROS BMP Consi	Froject		M M M BMPs	Used	Not	reason

TR	ACKIN	G (CONTR	ROL BM	IPs					_
	ВМР									
DMD	Considered for project		BMP Used		BMP Not		ot	If not used, state		
TD 1 Stabilized Construction Entrance/Evit	ior p	roje	eci	DIVIP		ea 	Used		1	reason
TR-1 Stabilized Construction Entrance/Exit						<u> </u>		┢	<u> </u>	BMPs not used are
TR-2 Stabilized Construction Roadway]		┢	<u> </u>	needed
TR-3 Entrance/Outlet Tire Wash	 	TE	D 8481			T DA	De.	<u> </u>		
NON-STOP	BMP	\IE	K IVIAI	NAGEIV	IEN	I I BIVI	PS			
	Cons	ide	red				ВМЕ	N	ot	If not used, state
ВМР	for p			ВМР	Us	ed	Used			reason
NS-1 Water Conservation Practices	•	Ó								BMPs not used are
NS-2 Dewatering Operations								Ī		needed
NS-3 Paving and Grinding Operations								Ī		
NS-4 Temporary Stream Crossing								Ī		
NS-5 Clear Water Diversion								Ī		
NS-6 Illicit Connection/ Discharge								Ī		
NS-7 Potable Water/Irrigation					X			Ī		
NS-8 Vehicle and Equipment Cleaning									1	
NS-9 Vehicle and Equipment Fueling										
NS-10 Vehicle and Equipment Maintenance								Ī		
NS-11 Pile Driving Operations								Ī		
NS-12 Concrete Curing										
NS-13 Concrete Finishing										
NS-14 Material and Equipment Use Over Water										
NS-15 Demolition Adjacent to Water										
NS-16 Temporary Batch Plants										
WASTE MANAGEMENT	AND I	VΑ.	TERIA	LS POLI	LU1	ION (CONTR	OL	BMPs	
	ВМР									
200	Cons						BMF		ot	If not used, state
BMP	for p	roje	ect	ВМР	Us	ed	Used	<u></u>	1	reason
WM-1 Material Delivery and Storage]		┢	<u>]</u>	BMPs not used are
WM-2 Material Use						1		_	 	needed
WM-3 Stockpile Management						1		누	<u></u>	
WM-4 Spill Prevention and Control						<u> </u> 1		╁	<u> </u>	
WM-5 Solid Waste Management						<u> </u> 		F	<u> </u>	
WM-6 Hazardous Waste Management						<u> </u> 		上	<u> </u>	
WM-7 Contaminated Soil Management] 1		<u> </u>		
WM-8 Concrete Waste Management						<u> </u> 		Ļ	<u> </u>	
WM-9 Sanitary/Septic Waste Management						<u> </u> 1		누	<u></u>	
WM-10 Liquid Waste Management								L		

SWPPP Completion Checklist

Appendix D

Yes = Complete

No = Incomplete/Deficient

N/A = Not applicable to project

Yes	No	N/A	_A. A site description, including:	Permit Section Citation
			1. Project description, intended use after NOT	Part II.A.4.A.1
			2. Sequence of major activities	Part II.A.4.A.2
			3. Total & disturbed acreage	Part II.A.4.A.3
			4. Pre- and post-construction runoff coefficient OR soil/discharge data	Part II.A.4.A.4
	T		B. Responsible Parties: All parties dealing with the SWPPP and the areas they are	:
			responsible for on-site.	Part II.A.4.B
	1	1	C. Receiving Water.	Part II.A.4.C
	1	+	-MS4 Name	Part II.A.4.C
			-Ultimate Receiving Water	Part II.A.4.C
	1	1	D. Documentation of permit eligibility related to Impaired Water Bodies and Tota	
	-	+	1. Identify pollutant on 303(d) list or TMDL	Part II.A.4.D.1
	1		2. Is construction activity or the specific site listed as cause?	Part II.A.4.D.2
			3. Measures taken to reduce pollutants from the site.	Part II.A.4.D.3
			E. Attainment of Water Quality Standards After Authorization.	Part II.A.4.E
			F. Site Map See End of Evaluation Form	Part II.A.4.F
			G. Description of Controls:	
			Erosion and sediment controls, including:	
			a. Initial site stabilization	Part II.A.4.G.1.a
			b. Erosion and sediment controls	Part II.A.4.G.1.b
			c. Replacement of inadequate controls	Part II.A.4.G.1.c
			d. Removal of off-site accumulations	Part II.A.4.G.1.d
			e. Maintenance of sediment traps/basins @ 50% capacity	Part II.A.4.G.1.e
	1		f. Litter, construction debris and chemicals properly handled	Part II.A.4.G.1.f
			g. Off-site storage areas and controls	Part II.A.4.G.1.g
			2. Stabilization practices:	
			a. Description and schedule for stabilization	Part II.A.4.G.2.a
			b. Description of buffer areas	Part II.A.4.G.2.b
	1	+	c. Records of stabilization	Part II.A.4.G.2.c
			d. Deadlines for stabilization	Part II.A.4.G.2.d
			3. Structural Practices:	
			Describe structural processes to discret flavor store flavor or otherwise limit proof.	Part II.A.4.G.3
	1	+	-Describe structural practices to divert flows, store flows, or otherwise limit runoff a. Sediment basins	
			a. Sediment basins	Part II.A.4.G.3.a.1
			-Are more than 10 acres draining to a common point? If so, are sediment basins included?	
			-Sediment basin dimensions and capacity description and calculations	Part II.A.4.G.3.a.1
			-If a basin wasn't practicable, are other controls sufficient?	Part II.A.4.G.3.a.1
			b. Velocity dissipation devices concentrated flow from 2 or more acres	Part II.A.4.G.3.b
	_		H. Other controls including:	
			1. Solid waste control measures	Part II.A.4.H.1
			2. Vehicle off-site tracking controls	Part II.A.4.H.2
			3. Compliance with sanitary waste disposal	Part II.A.4.H.4
			4. Does the site have a concrete washout area controls?	Part II.A.4.H.5
			5. Does the site have fuel storage areas, hazardous waste storage and/or truck wash areas	
			controls?	Part II.A.4.H.6

SWPPP Completion Checklist

Appendix D

Yes	No	N/A		Permit Section Citation
			I. Identification of allowable non-storm water discharges	Part II.A.4.I
			-Appropriate controls for dewatering, if present	Part I.B.12.C
			J. Post construction stormwater management.	Part II.A.4.J
	T		K. State or local requirements incorporated into the plan.	Part II.A.4.K
•	•	•		
			L. Inspections	
			1. Inspection frequency listed?	Part II.A.4.L.1
	_		2. Inspection form	Part II.A.4.L.2
			Ours.	
			If not ours, does it contain the following items:	
			a. Inspector name and title	Part II.A.4.L.2.a
			b. Date of inspection.	Part II.A.4.L.2.b
			c. Amount of rainfall and days since last rain event (14 day only)	Part II.A.4.L.2.c
			d. Approx beginning and duration of storm event	Part II.A.4.L.2.d
			e. Description of any discharges during inspection	Part II.A.4.L.2.e
			f. Locations of discharges of sediment/other pollutants	Part II.A.4.L.2.f
			g. BMPs in need of maintenance	Part II.A.4.L.2.g
			h. BMPs in working order, if maintenance needed (scheduled and completed)	Part II.A.4.L.2.h
			i. Locations that are in need of additional controls	Part II.A.4.L.2.i
			j. Location and dates when major construction activities begin, occur or cease	Part II.A.4.L.2.j
			k. Signature of responsible/cognizant official	Part II.A.4.L.2.k
			3. Inspection Records	Part II.A.4.L.3
			4. Winter Conditions	Part II.A.4.L.4
			5. Adverse Weather Conditions	Part II.A.4.L.5
			M. Maintenance Procedures	Part II.A.4.M
			N. Employee Training	Part II.A.4.N
			Signed Plan Certification	Part II.A.5. and Part II.B.10
	·	•		
1	1	1	F. Site Map showing:	D4 H A 4 E 1
			1. Pre-construction topographic view	Part II.A.4.F.1
	+		2. Drainage flow	Part II.A.4.F.2
	+	1	3. Approximate slopes after grading activities	Part II.A.4.F.2
		_	4. Areas of soil disturbance and areas not disturbed	Part II.A.4.F.3
		_	5. Location of major structural and non-structural controls.	Part II.A.4.F.4
			6. Location of main construction entrance and exit.	Part II.A.4.F.5
			7. Areas where stabilization practices are expected to occur.	Part II.A.4.F.6
		_	8. Locations of off-site materials, waste, borrow area or storage area.	Part II.A.4.F.7
			9. Locations of areas used for concrete wash-out.	Part II.A.4.F.8
			10. Locations of surface waters on site.	Part II.A.4.F.9
	1		11. Locations where water is discharged to a surface water or MS4.	Part II.A.4.F.10
			12. Storm water discharge locations.	Part II.A.4.F.11
	1		13. Areas where final stabilization has been accomplished.	Part II.A.4.F.12
	1		14. Legend for symbols/labels used	Part II.A.4.F.13
			15. Location of storm drain inlets on site or in immediate vicinity	Part II.A.4.F.14



City of Bryant Stormwater Department

1019 SW 2nd St. Bryant, Arkansas 72022 Office (501) 943-0453; Fax (501) 943-0851

WARRANTY BOND PROCEDURES

For Stormwater Infrastructure Public & Private

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

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

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

- 1. Stormwater Infrastructure Warranty Bond. A one year maintenance bond against defects in workmanship shall be required by the Administrative Authority for any portion of the stormwater management facilities privately owned or stormwater management improvements dedicated to the city, said maintenance bond is to be provide by cashier's check, irrevocable letter of credit or acceptable surety authorized to do business in the State of Arkansas. All forms of maintenance bonds shall be subject to approval by the Administrative Authority. The value of the bond shall be an amount equal to 100% of the value of the privately owned stormwater management facilities or stormwater system improvements being privately owned or dedicated to the city. A cost list must be provide to prove and verify the amount of the maintenance bond. The cost list shall include cost of stormwater infrastructure construction and components (piping, weirs, spillway structures, junction boxes, trickle channels, inlets, grates, riprap and site stabilization).
- **Procedurals.** These procedures are applicable to Stormwater Infrastructure that is to be dedicated to the public and maintained by the City of Bryant and for Private Stormwater Infrastructure that will be connected to overall City of Bryant Stormwater Infrastructure.
 - In accordance with Ordinance No. 2019-32 Article V., City of Bryant Stormwater Department will require a Maintenance Warranty Bond as part of the process for approving Stormwater Infrastructure. The bond will be equal to 100% of the cost of construction of the Stormwater Infrastructure System at the time of completion of the Stormwater Infrastructure System. The purpose of the bond is to cover the cost of correcting deficiencies not addressed by the developer during the warranty period and to insure no adverse effects will occur to the overall function of the City of Bryant Stormwater Infrastructure.
- 3. Determining the Maintenance Warranty Bond Amount. During the final inspection process, the City of Bryant Stormwater Department will verify and approve the Warranty Bond estimate for all Stormwater Infrastructure within the proposed unit using:

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

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

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

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

	Hilltop Landing
	Name of Project Site/Addition
Scott M. Hurley	
Applicant Name (Print)	(Signature)
New Con House H.C.	PO BOX 242146 Little
Nxt Gen Homes, LLC	19218 Summershade Dr., Bryant, AR 7202
Applicant Business Name	Applicant Mailing Address
State of	10-10-29
Signature of Notary Notary Seal Stamp Here:	My commission expires: My commission expires: PUBLIC #12373843 ONES 101/00/20 ARKENTING ARKEN



Stormwater Infrastructure Maintenance Plan Agreement

Scott m. Hurley AR Land & Realty 501.240.0049 Mobile scott@arlr.net

Hilltop Landing Subdivision - Hilltop Road and Miller Road

All maintenance basin maintenance plans shall contain or uphold, without limitation, the following provisions:

- (1) A description of the property on which the stormwater management facility is located and all easements from the site to the facility;
- (2) Size and configuration of the facility;
- (3) A statement that properties which will be served by the facility are granted rights to construct, use, reconstruct, repair and maintain access to the facility;
- (4) A statement that each lot served by the facility is responsible for repairs and maintenance of the facility and any unpaid ad valorem taxes, public assessments for improvements, and unsafe building and public nuisance abatement liens charged against the facility, including all interest charges together with attorney fees, costs, and expenses of collection. If an association is delegated these responsibilities, then membership into the association shall be mandatory for each parcel served by the facility and any successive buyer. The association shall have the power to levy assessments for these obligations, and all that unpaid assessments levied by the association shall become a lien on the individual parcel:
- (5) All stormwater facilities must be designed to minimize the need for maintenance, to provide easy vehicle and personal access for maintenance purpose, and be structurally sound. It shall be the responsibility of the applicant to obtain any necessary easements or other property interested to allow access to the facilities for inspection or maintenance;
- (6) Detention/retention areas, earthen berms, intake structures, piping, discharge structures, trickle channels, spillways, pipe flares, weirs and fencing shall be regularly inspected, maintained and repaired to ensure their proper operation and to prevent the creation of any hazards or nuisances;
- (7) Major deposits of sediment shall be removed from the detention/retention area on an annual basis or after any extreme storm event. Excavated materials shall be properly disposed of off-site. Every five years the detention area(s) shall be

surveyed to confirm that the original as-constructed contours have been maintained;

- (8) Every three months piping and outlet structures shall be inspected and cleared of any accumulated debris;
- (9) Erosion in detention/retention areas shall be promptly repaired and stabilized with appropriate Best Management Practices (BMP's);
- (10) Detention/retention area shall be mowed during the growing season May through September to maintain the turf height of 6-inches or less. Any brush or trees that may grow within the detention areas bottom, slopes or banks shall be removed;
- (11) Litter and foreign materials shall be removed from the detention area(s) weekly. Large or noxious pieces of litter shall be removed immediately. The area(s) shall be inspected visually after rainfall events in excess of 1" in 24 hours;
- (12) Inspections of overall detention/retention area(s) and detention/retention components shall occur monthly with their conditions noted on an inspection form. If any remedial action is required, it should be noted and corrected;
- (13) All inspection forms must be retained on-site, including the "As-Built" drawings and photographs of the improvements in their original condition;
- (14) Items 1-13 shall be listed on the Stormwater Infrastructure Maintenance Plan Agreement.

(15) Inspection forms for Stormwater Infrastructure components are required. (An example of inspection forms are attached.)

Scott M. Hurley

data

HILLTOP LANDING SUBDIVISION

HILLTOP ROAD & MILLER ROAD, BRYANT, AR 72022

DRAINAGE REPORT

FOR
City of Bryant, Saline County, AR

April 2023

Owner & Developer: NXT GEN HOMES LLC.

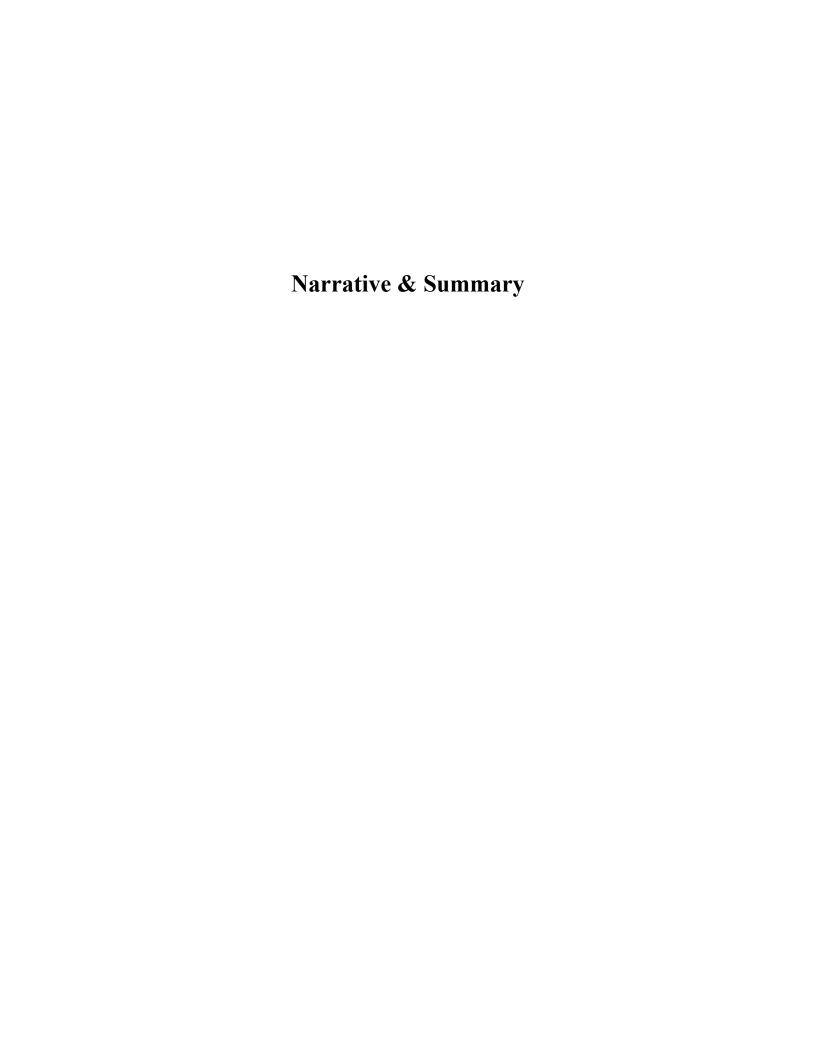
By:



TABLE OF CONTENTS

ITEM DESCRIPTION

- 1. Narrative & Summary
- 2. Hydrograph Report



PROJECT TITLE

Hilltop Landing Subdivision

PROJECT PROPERTY OWNER

Nxt Gen Homes LLC.

PROJECT LOCATION

Hilltop Road and Miller Road, Bryant, AR

PROJECT DESCRIPTION

The proposed sub divisional development is on Hilltop Road and Miller Road, Bryant, AR. Total development site area is 54.0 acres.

DRAINAGE ANALYSIS

On Site Drainage- Rational method was used to determine the existing and proposed flows from proposed site. There will be four detention ponds to detain water from this development. Detailed drainage calculations considering the future expected development has been conducted to determine the required detention ponds and culvert dimensions. Summary of the calculations are below:

Detention Pond-1

- Pond is situated on the north east side of the property.
- Pre-development area 34.50 acres.
- Post-development area 36.28 acres.
- Pre-development runoff coefficient 0.47.
- Post-development runoff cumulative coefficient 0.65
- Pond has a bottom area of 18,760 sft with bottom elevation of 437.50'.
- One 42" HDPE with 1.08% slope are proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	65.96	90.29	32.54
5-Year	72.96	99.87	35.52
10-Year	85.63	117.23	39.88
25-Year	98.15	134.37	45.74
50-Year	111.88	153.15	57.52
100-Year	118.85	162.70	63.55

Detention Pond-2

- Pond is situated on the South-west side of the property.
- Pre-development area 7.2 acres.
- Post-development area 4.11 acres.
- Pre-development runoff coefficient 0.40.
- Post-development runoff cumulative coefficient 0.40
- Pond has a bottom area of 18,270 sft with bottom elevation of 511.00'.
- One 12" HDPE with 9% slope are proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	12.77	6.629	0.387
5-Year	14.20	7.333	0.462
10-Year	16.42	8.607	0.613
25-Year	18.77	9.865	0.773
50-Year	21.35	11.24	0.959
100-Year	22.64	11.95	1.059

Detention Pond-3

- Pond is situated on the south east side of the property.
- Pre-development area 2.25 acres.
- Post-development area 3.21 acres.
- Pre-development runoff coefficient 0.47.
- Post-development runoff cumulative coefficient 0.65
- Pond has a bottom area of 5,512 sft with bottom elevation of 495.00'.
- One 18" HDPE with 12.74% slope are proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	5.039	9.942	2.797
5-Year	5.635	11.12	3.269
10-Year	6.430	12.69	3.910
25-Year	7.337	14.48	4.642
50-Year	8.326	16.43	5.424
100-Year	8.825	17.40	5.810

Detention Pond-4

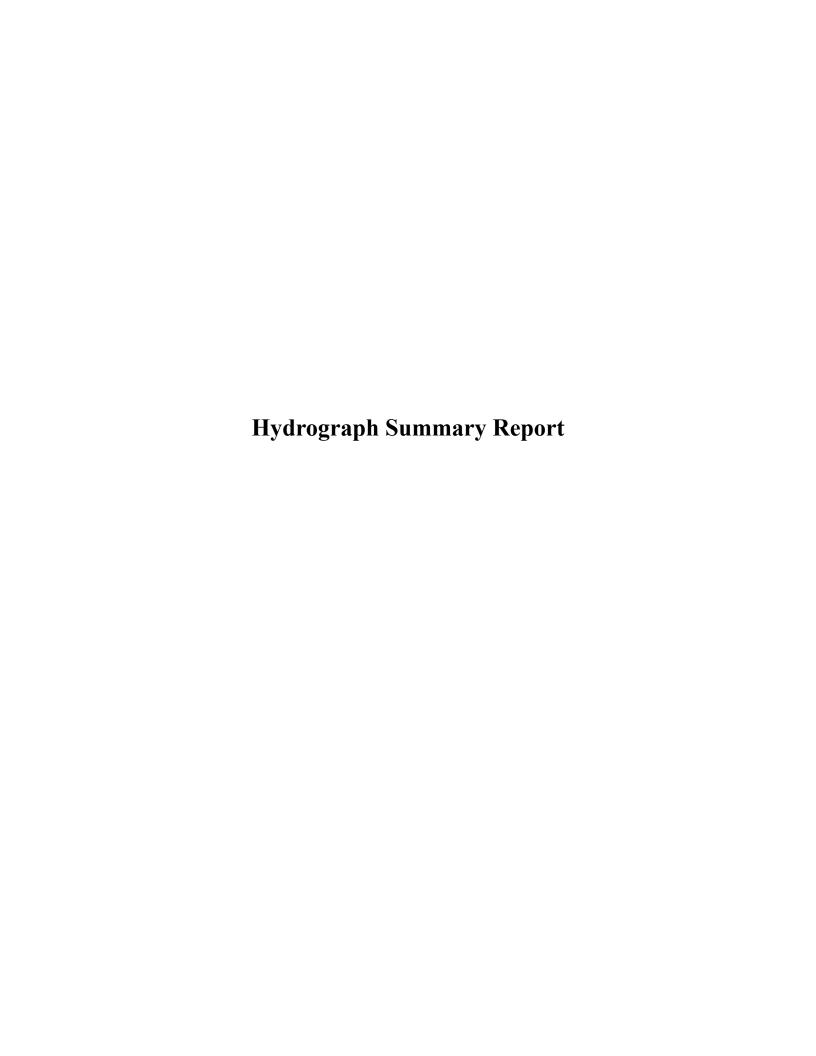
- Pond is situated on the West side of the property.
- Pre-development area 14.40 acres.
- Post-development area 13.97 acres.
- Pre-development runoff coefficient 0.47.
- Post-development runoff cumulative coefficient 0.65
- Pond has a bottom area of 7,680 sft with bottom elevation of 511.00'.
- One 36" HDPE with 9.34% slope is proposed for outflow pipes.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

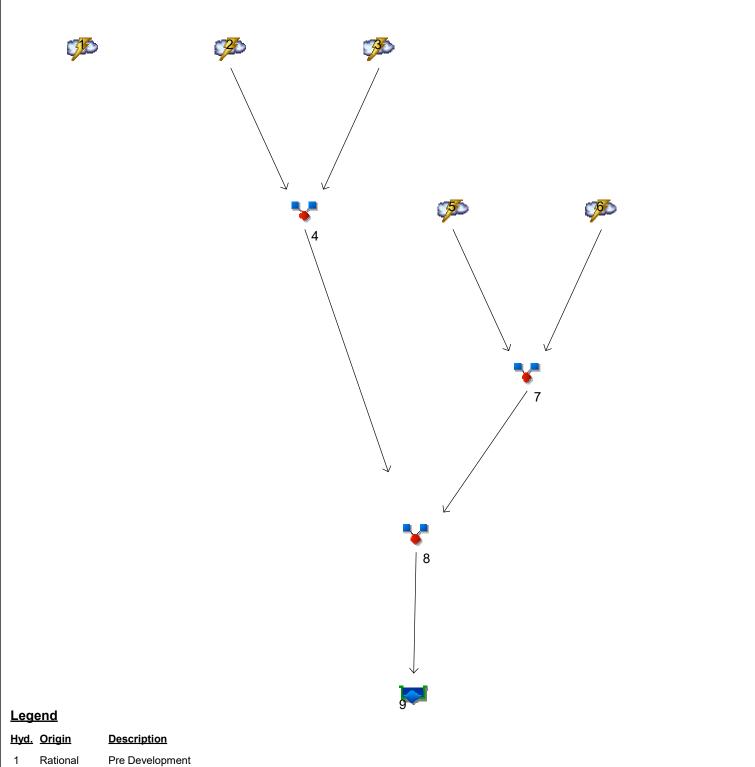
Period of	Pre-development	Post-dev. Without	Post-dev. With detention
time		detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	31.09	43.27	18.44
5-Year	34.66	48.39	21.11
10-Year	39.81	55.21	24.59
25-Year	45.47	63.00	28.39
50-Year	51.67	71.49	32.15
100-Year	54.77	75.78	33.77

CONCLUSION

From the onsite drainage calculation, it is seen that there is decrease in flow for all storm events due to the proposed detention ponds.



Watershed Model Schematic



<u>Hy</u>	<u>d.</u> <u>Origin</u>	<u>Description</u>
1	Rational	Pre Development
2	Rational	Post development-1a
3	Rational	post development-1b
4	Combine	combine-1
5	Rational	post development-2a
6	Rational	post development-2b
7	Combine	combine-2
8	Combine	<no description=""></no>
9	Reservoir	detention pond 1

Project: drainage one pond_04-18-2023.gpw

Wednesday, 04 / 19 / 2023

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

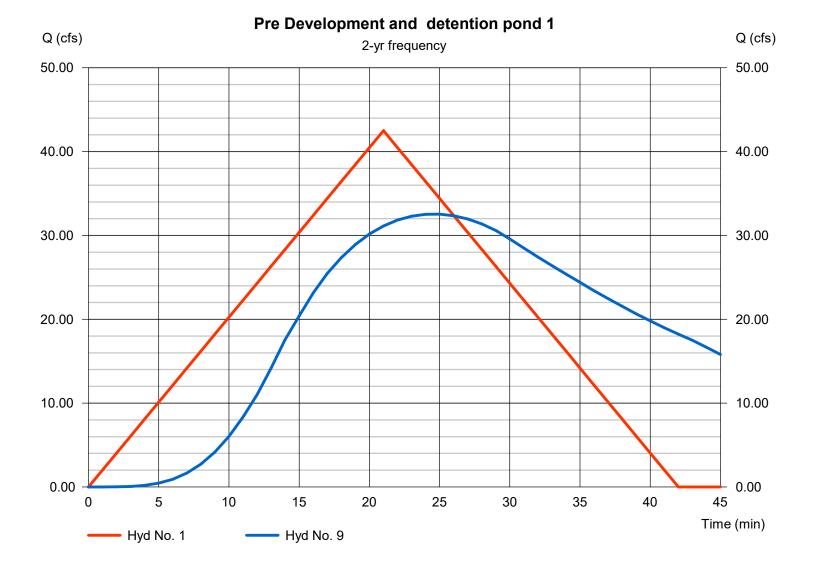
Hyd. No. 9

Hyd. No. 1

Pre Development detention pond 1

Hydrograph type = Rational
Peak discharge = 42.51 cfs
Time to peak = 21 min
Hyd. Volume = 53,568 cuft

Hydrograph type = Reservoir
Peak discharge = 32.54 cfs
Time to peak = 25 min
Hyd. Volume = 81,205 cuft



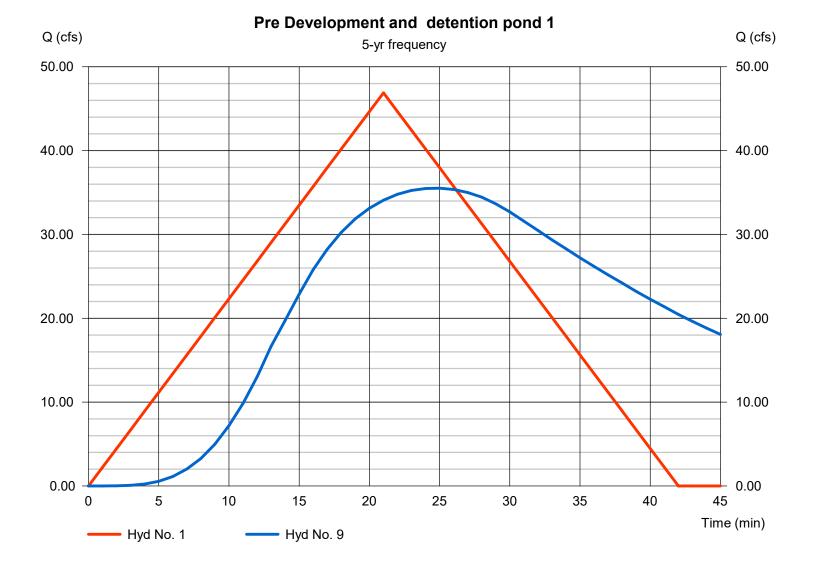
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 9

Hyd. No. 1

Pre Development detention pond 1

Hydrograph type = Rational Peak discharge = 46.89 cfs Time to peak = 21 min Hyd. Volume = 59,077 cuft Hydrograph type = Reservoir
Peak discharge = 35.52 cfs
Time to peak = 25 min
Hyd. Volume = 89,828 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

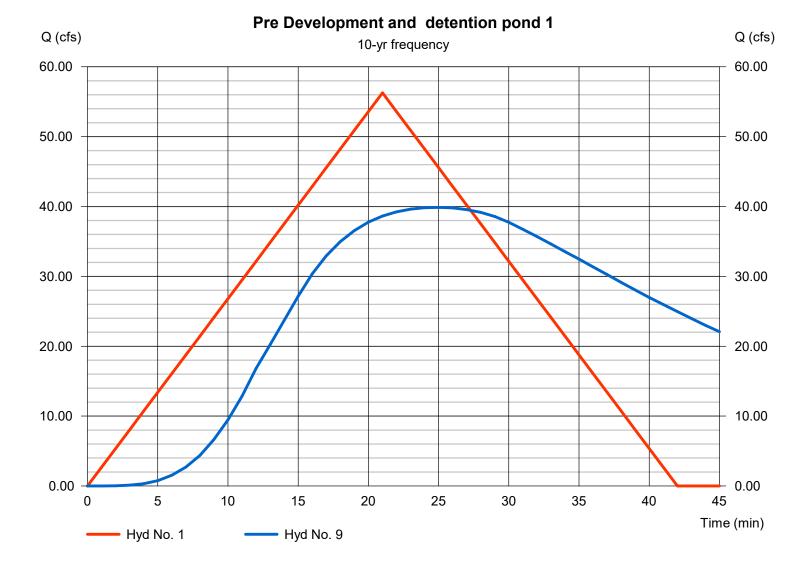
Pre Development

Hydrograph type = Rational
Peak discharge = 56.26 cfs
Time to peak = 21 min
Hyd. Volume = 70,892 cuft

Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 39.88 cfs
Time to peak = 25 min
Hyd. Volume = 105,448 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 9

Hyd. No. 1

Pre Development detention pond 1

Hydrograph type = Rational Peak discharge = 64.78 cfs Time to peak = 21 min Hyd. Volume = 81,626 cuft Hydrograph type = Reservoir
Peak discharge = 45.74 cfs
Time to peak = 25 min
Hyd. Volume = 120,872 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

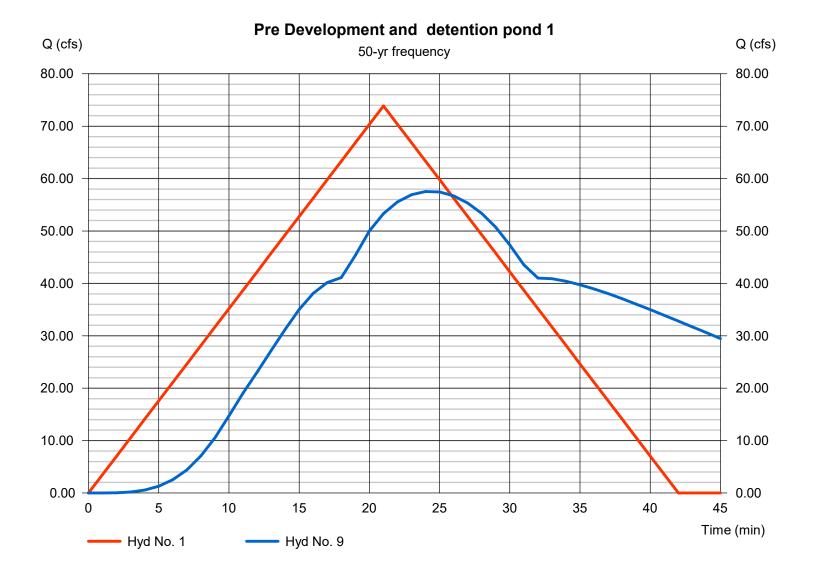
Pre Development

Hydrograph type = Rational Peak discharge = 73.87 cfs Time to peak = 21 min Hyd. Volume = 93,080 cuft

Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 57.52 cfs
Time to peak = 24 min
Hyd. Volume = 137,777 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

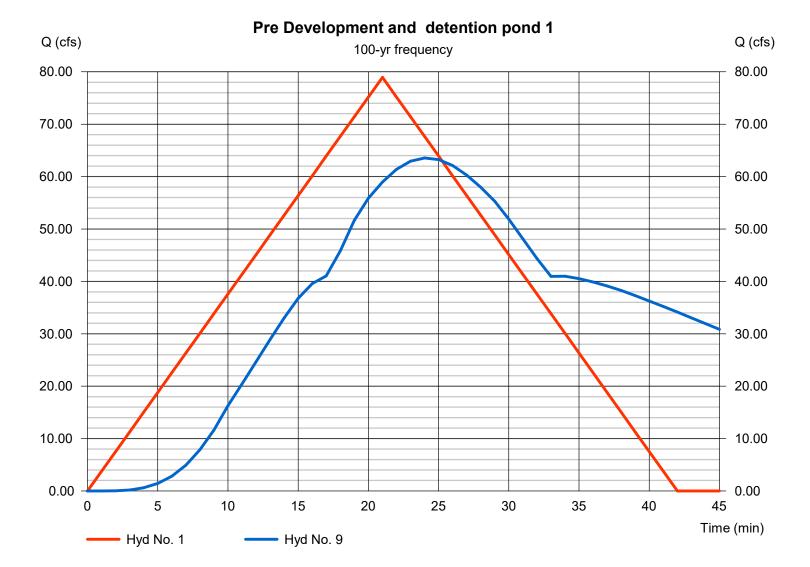
Pre Development

Hydrograph type = Rational
Peak discharge = 78.94 cfs
Time to peak = 21 min
Hyd. Volume = 99,461 cuft

Hyd. No. 9

detention pond 1

Hydrograph type = Reservoir
Peak discharge = 63.55 cfs
Time to peak = 24 min
Hyd. Volume = 146,374 cuft



Pond No. 2 - Detention Pond 1

Pond Data

Trapezoid -Bottom L x W = 268.0 x 70.0 ft, Side slope = 3.00:1, Bottom elev. = 437.50 ft, Depth = 5.00 ft

Stage / Storage Table

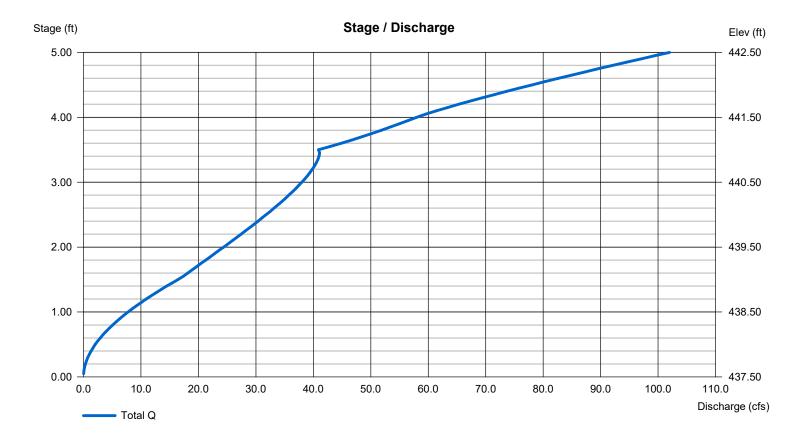
Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	437.50	18,760	0	0
0.50	438.00	19,783	9,635	9,635
1.00	438.50	20,824	10,151	19,786
1.50	439.00	21,883	10,676	30,462
2.00	439.50	22,960	11,210	41,672
2.50	440.00	24,055	11,753	53,425
3.00	440.50	25,168	12,305	65,730
3.50	441.00	26,299	12,866	78,596
4.00	441.50	27,448	13,436	92,032
4.50	442.00	28,615	14,015	106,047
5.00	442.50	29,800	14,603	120,650

Culvert / Orifice Structures

Weir Structures

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 42.00	Inactive	Inactive	0.00	Crest Len (ft)	= 6.00	Inactive	Inactive	0.00
Span (in)	= 42.00	0.00	0.00	0.00	Crest El. (ft)	= 441.50	0.00	0.00	0.00
No. Barrels	= 1	0	0	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 437.50	0.00	0.00	0.00	Weir Type	= Rect			
Length (ft)	= 46.00	0.00	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 1.08	0.00	0.00	n/a					
N-Value	= .013	.013	.013	n/a					
Orifice Coeff.	= 0.60	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Wet area)		
Multi-Stage	= n/a	No	No	No	TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



lyd. Hydrograph lo. type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1 Rational	42.51	1	21	53,568				Pre Development
2 Rational	60.00	1	15	53,998				Post development-1a
3 Rational	5.960	1	15	5,364				post development-1b
4 Combine	65.96	1	15	59,362	2, 3			combine-1
5 Rational	18.19	1	15	16,367				post development-2a
6 Rational	6.149	1	15	5,534				post development-2b
7 Combine	24.33	1	15	21,901	5, 6			combine-2
8 Combine	90.29	1	15	81,262	4, 7			<no description=""></no>
drainage one por					Period: 2 Ye			ay, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	46.89	1	21	59,077				Pre Development
2	Rational	66.36	1	15	59,728				Post development-1a
3	Rational	6.592	1	15	5,933				post development-1b
4	Combine	72.96	1	15	65,661	2, 3			combine-1
5	Rational	20.11	1	15	18,103				post development-2a
6	Rational	6.801	1	15	6,121				post development-2b
7	Combine	26.92	1	15	24,225	5, 6			combine-2
8	Combine	99.87	1	15	89,885	4, 7			<no description=""></no>
drainage one pond_04-18-2023.gpw				w	Return F	Period: 5 Ye	ear	Wednesday	y, 04 / 19 / 2023

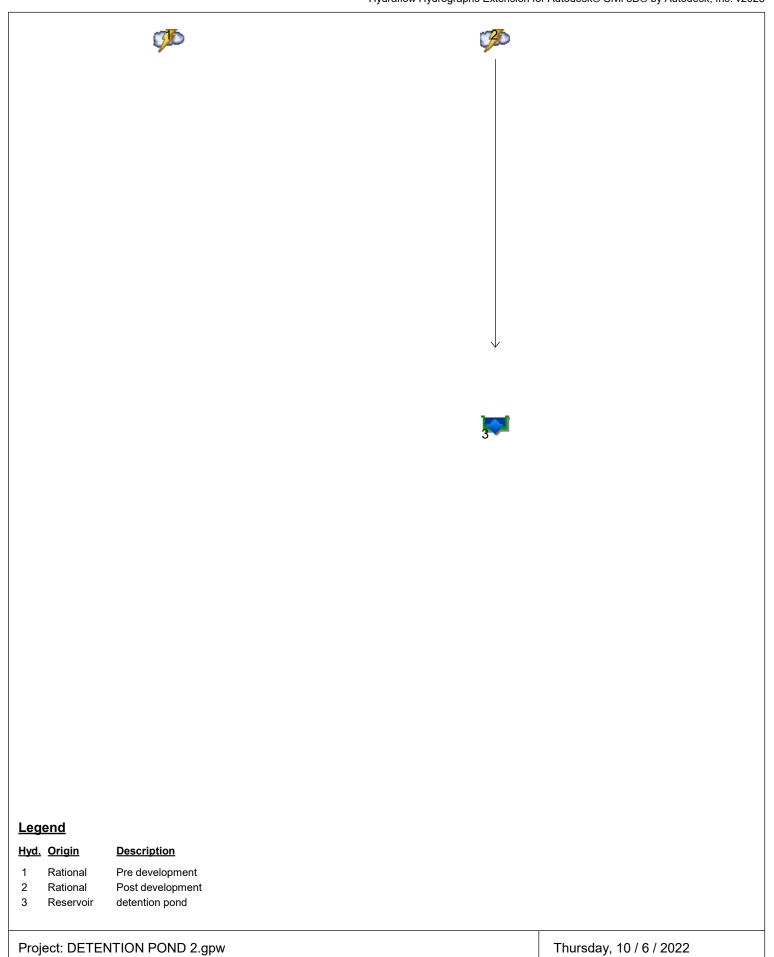
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	56.26	1	21	70,892				Pre Development
2	Rational	77.90	1	15	70,107				Post development-1a
3	Rational	7.738	1	15	6,964				post development-1b
4	Combine	85.63	1	15	77,071	2, 3			combine-1
5	Rational	23.61	1	15	21,249				post development-2a
6	Rational	7.983	1	15	7,185				post development-2b
7	Combine	31.59	1	15	28,434	5, 6			combine-2
8	Combine	117.23	1	15	105,505	4, 7			<no description=""></no>
9	Reservoir	39.88	1	25	105,448	8	440.71	71,054	detention pond 1
dra	inage one po	and_04-18	-2023.gr	ow.	Return F	Period: 10 \	/ear	Wednesda	y, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	64.78	1	21	81,626				Pre Development
2	Rational	89.29	1	15	80,357				Post development-1a
3	Rational	8.869	1	15	7,982				post development-1b
4	Combine	98.15	1	15	88,339	2, 3			combine-1
5	Rational	27.06	1	15	24,356				post development-2a
6	Rational	9.151	1	15	8,235				post development-2b
7	Combine	36.21	1	15	32,591	5, 6			combine-2
8	Combine	134.37	1	15	120,930	4, 7			<no description=""></no>
dra	inage one po	nd_04-18	-2023.gp	ow.	Return F	Period: 25 Y	'ear	Wednesday	y, 04 / 19 / 2023

łyd. lo.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	73.87	1	21	93,080				Pre Development
2	Rational	101.77	1	15	91,590				Post development-1a
3	Rational	10.11	1	15	9,098				post development-1b
4	Combine	111.88	1	15	100,688	2, 3			combine-1
5	Rational	30.85	1	15	27,761				post development-2a
6	Rational	10.43	1	15	9,387				post development-2b
7	Combine	41.27	1	15	37,147	5, 6			combine-2
3	Combine	153.15	1	15	137,835	4, 7			<no description=""></no>
dra	l inage one po	nd_04-18	-2023.gp) DW	Return F	Period: 50	/ear	Wednesda	ny, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	78.94	1	21	99,461				Pre Development
2	Rational	108.11	1	15	97,303				Post development-1a
3	Rational	10.74	1	15	9,665				post development-1b
4	Combine	118.85	1	15	106,968	2, 3			combine-1
5	Rational	32.77	1	15	29,492				post development-2a
6	Rational	11.08	1	15	9,972				post development-2b
7	Combine	43.85	1	15	39,464	5, 6			combine-2
8	Combine	162.70	1	15	146,433	4, 7			<no description=""></no>
dra	inage one po	nd_04-18	-2023.gp	ow.	Return F	Period: 100	Year	Wednesday	y, 04 / 19 / 2023

Watershed Model Schematic



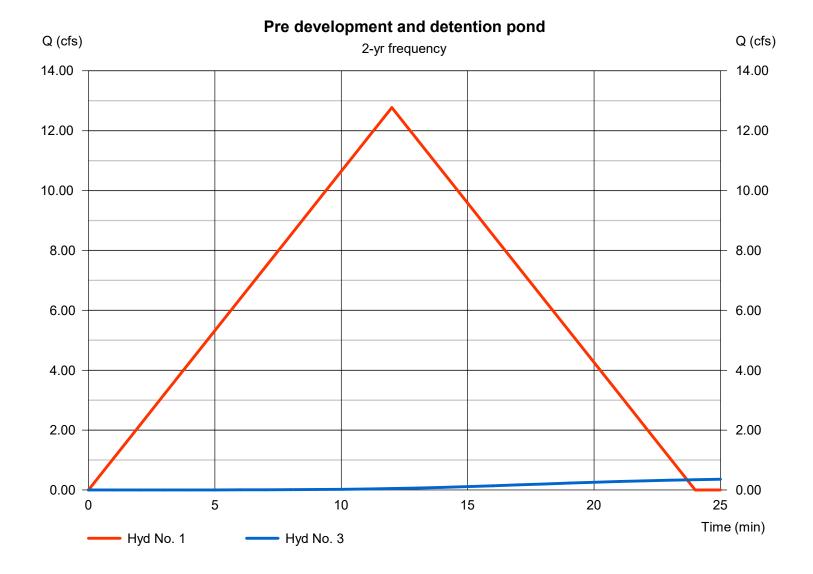
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational
Peak discharge = 12.77 cfs
Time to peak = 12 min
Hyd. Volume = 9,197 cuft

Hydrograph type = Reservoir
Peak discharge = 0.39 cfs
Time to peak = 29 min
Hyd. Volume = 5,573 cuft

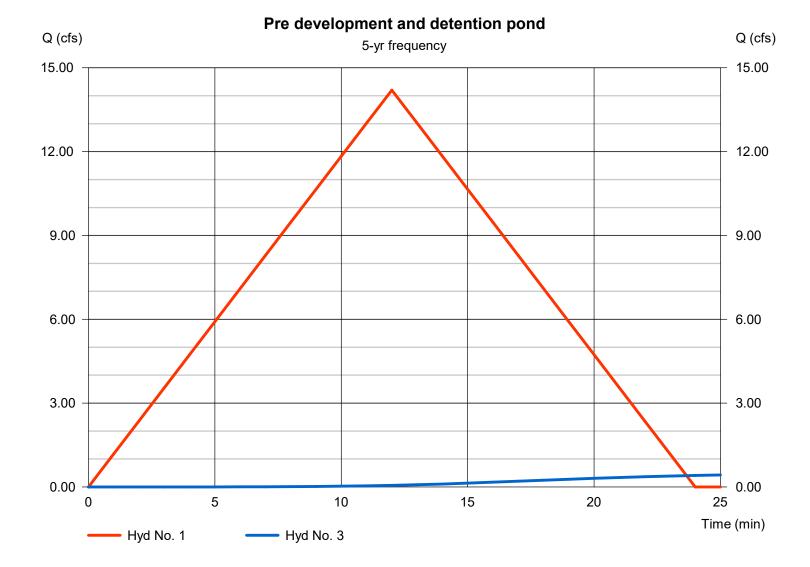


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 14.20 cfs= 0.46 cfsTime to peak = 12 min Time to peak = 29 min Hyd. Volume = 10,226 cuft Hyd. Volume = 6,203 cuft



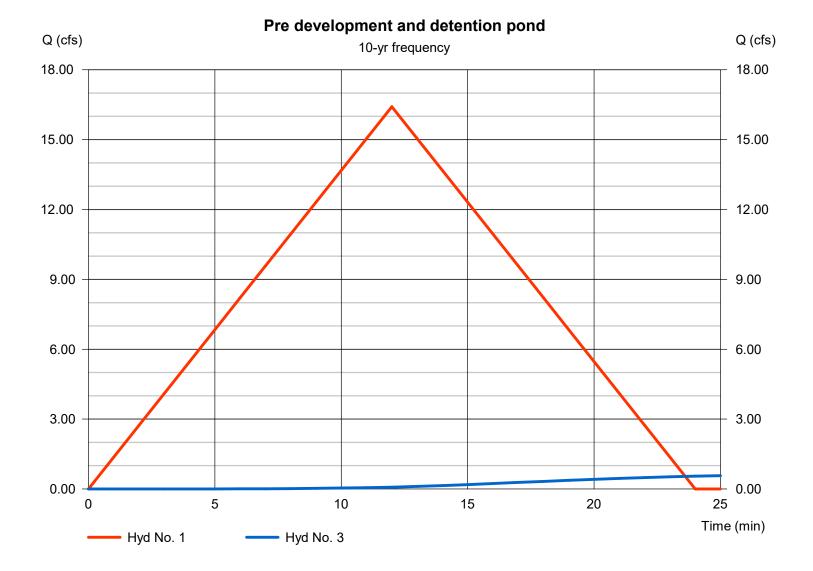
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational
Peak discharge = 16.42 cfs
Time to peak = 12 min
Hyd. Volume = 11,819 cuft

Hydrograph type = Reservoir
Peak discharge = 0.61 cfs
Time to peak = 29 min
Hyd. Volume = 7,345 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

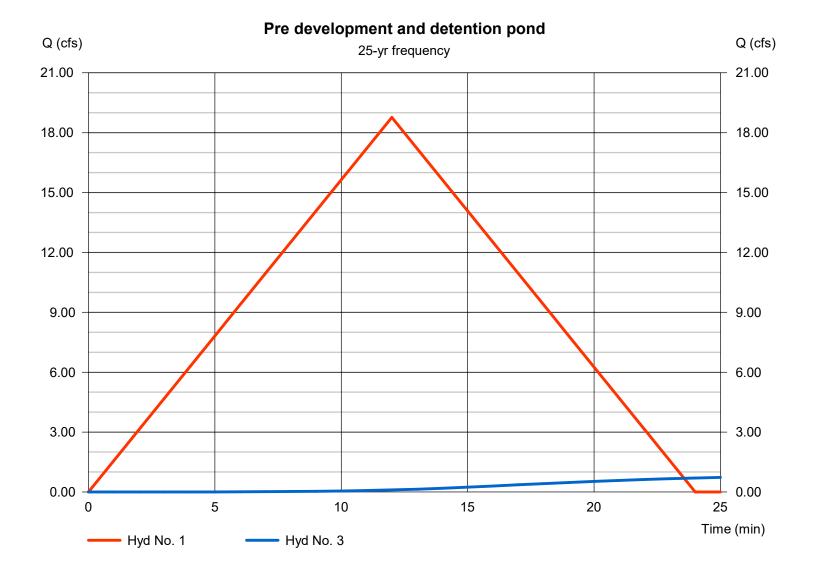
Pre development

Hydrograph type = Rational
Peak discharge = 18.77 cfs
Time to peak = 12 min
Hyd. Volume = 13,512 cuft

Hyd. No. 3

detention pond

Hydrograph type = Reservoir
Peak discharge = 0.77 cfs
Time to peak = 29 min
Hyd. Volume = 8,475 cuft

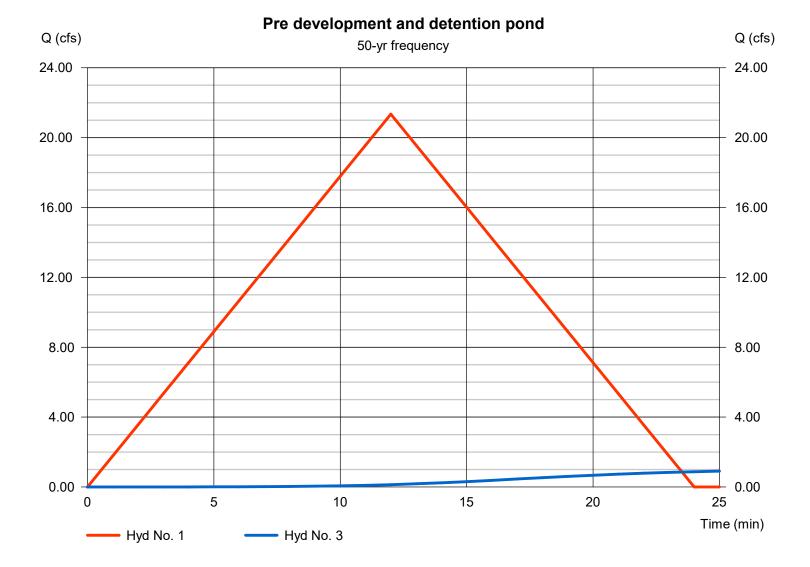


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 21.35 cfs= 0.96 cfsTime to peak = 12 min Time to peak = 29 min Hyd. Volume = 15,370 cuft Hyd. Volume = 9,713 cuft

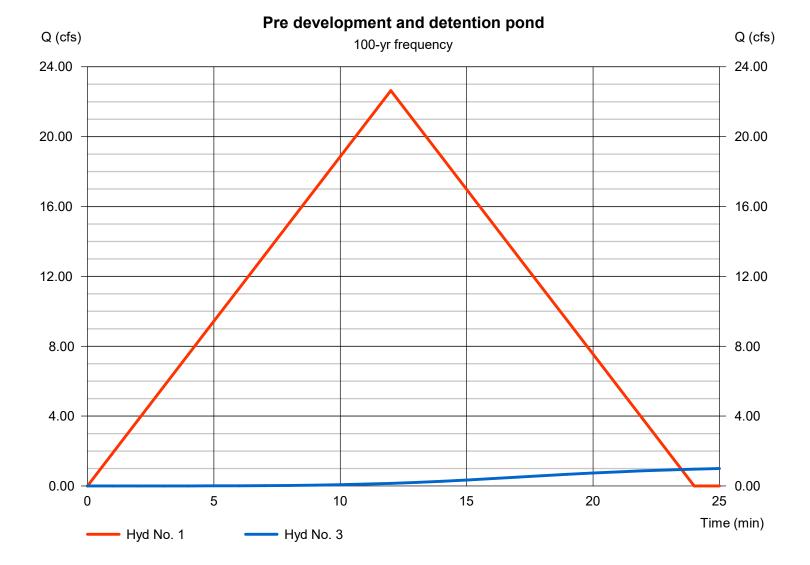


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

Pre development detention pond

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 22.64 cfs= 1.06 cfsTime to peak = 12 min Time to peak = 29 min Hyd. Volume = 16,299 cuft Hyd. Volume = 10,343 cuft



Thursday, 10 / 6 / 2022

Pond No. 1 - Detention Pond 2

Pond Data

Trapezoid -Bottom L x W = 145.0 x 126.0 ft, Side slope = 3.00:1, Bottom elev. = 511.00 ft, Depth = 2.00 ft

Stage / Storage Table

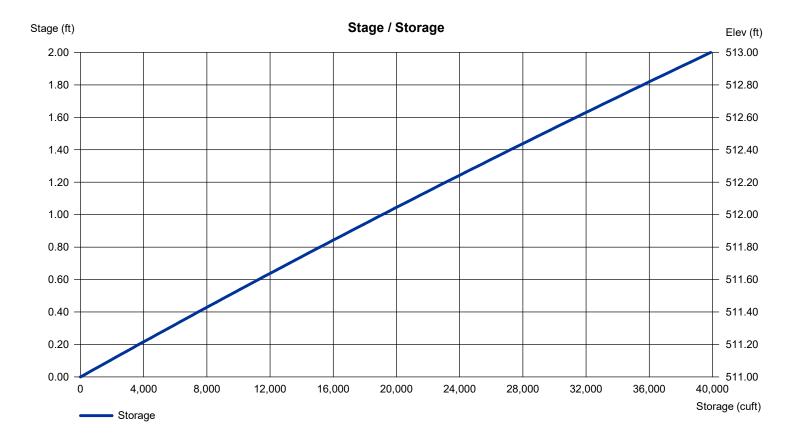
Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	511.00	18,270	0	0
0.20	511.20	18,597	3,687	3,687
0.40	511.40	18,926	3,752	7,439
0.60	511.60	19,259	3,818	11,257
0.80	511.80	19,594	3,885	15,142
1.00	512.00	19,932	3,953	19,095
1.20	512.20	20,273	4,020	23,115
1.40	512.40	20,617	4,089	27,204
1.60	512.60	20,964	4,158	31,362
1.80	512.80	21,313	4,228	35,590
2.00	513.00	21,666	4,298	39,888

Culvert / Orifice Structures

Weir Structures

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 12.00	Inactive	Inactive	0.00	Crest Len (ft)	= 6.00	0.00	0.00	0.00
Span (in)	= 12.00	0.00	0.00	0.00	Crest El. (ft)	= 512.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 511.00	0.00	0.00	0.00	Weir Type	= Rect			
Length (ft)	= 64.00	0.00	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 9.00	0.00	0.00	n/a					
N-Value	= .013	.013	.013	n/a					
Orifice Coeff.	= 0.60	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Contour)		
Multi-Stage	= n/a	No	No	No	TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	12.77	1	12	9,197				Pre development
2	Rational	6.629	1	15	5,966				Post development
DETENTION POND 2.gpw				Return F	Return Period: 2 Year			 0 / 6 / 2022	

lo.	lydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1 F	Rational	14.20	1	12	10,226				Pre development
2 F	Rational	7.333	1	15	6,599				Post development
2 F						2	511.34	6,272	

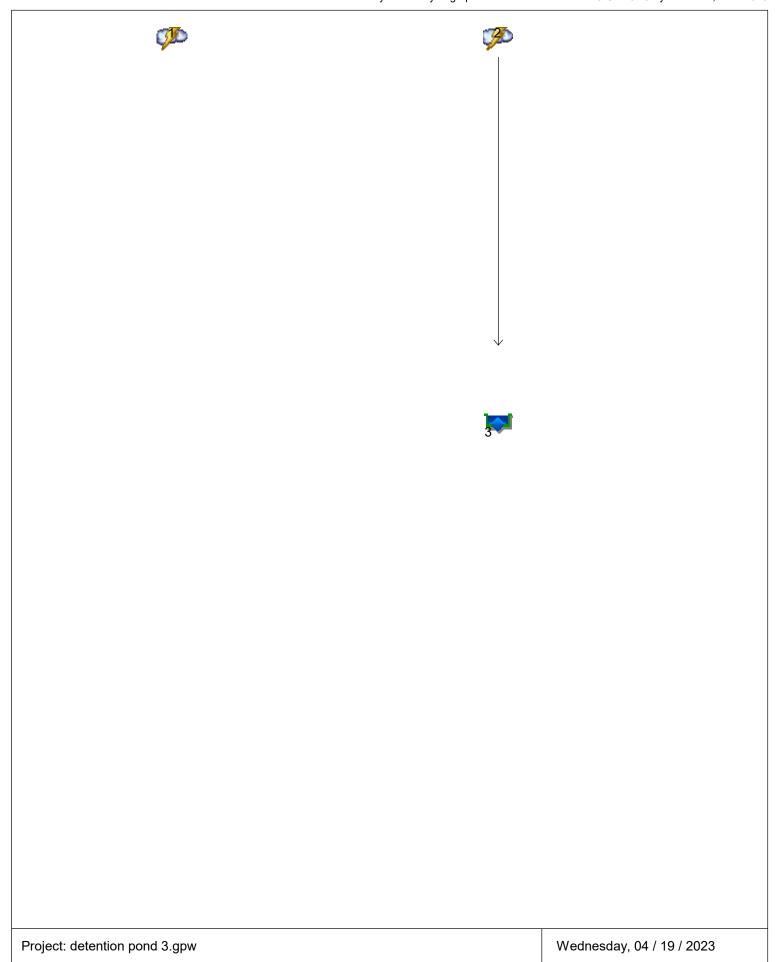
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	16.42	1	12	11,819				Pre development
2	Rational	8.607	1	15	7,746				Post development
3	Reservoir	0.613	1	29	7,345	2	511.39	7,310	detention pond
DETENTION POND 2.gpw					Return I	Period: 10 \	/ear	Thursday,	10 / 6 / 2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	18.77	1	12	13,512				Pre development
2	Rational	9.865	1	15	8,879				Post development
2 3	Rational	9.865 0.773	1 1	15 29	8,879 8,475	2	511.45	8,325	Post development detention pond

			_			Tiyuran		LATERISION IOI AU	lodesk® Civil 3D® by Autodesk, Inc. v2023	
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	Rational	21.35	1	12	15,370				Pre development	
2	Rational	11.24	1	15	10,120				Post development	
3	Reservoir	0.959	1	29	9,713	2	511.50	9,427	detention pond	
DE	DETENTION POND 2.gpw					eriod: 50 Y	'ear	Thursday, 10 / 6 / 2022		

lyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	22.64	1	12	16,299				Pre development
2	Rational	11.95	1	15	10,751				Post development
3	Reservoir	1.059	1	29	10,343	2	511.53	9,983	detention pond
DE	DETENTION POND 2.gpw					Period: 100	Year	Thursday,	10 / 6 / 2022

Watershed Model Schematic



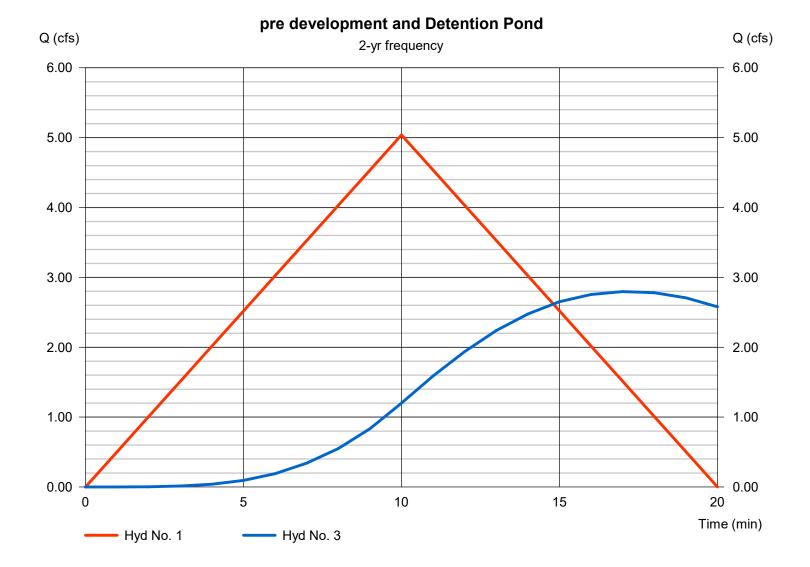
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational
Peak discharge = 5.039 cfs
Time to peak = 10 min
Hyd. Volume = 3,023 cuft

Hydrograph type = Reservoir
Peak discharge = 2.80 cfs
Time to peak = 17 min
Hyd. Volume = 5,925 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

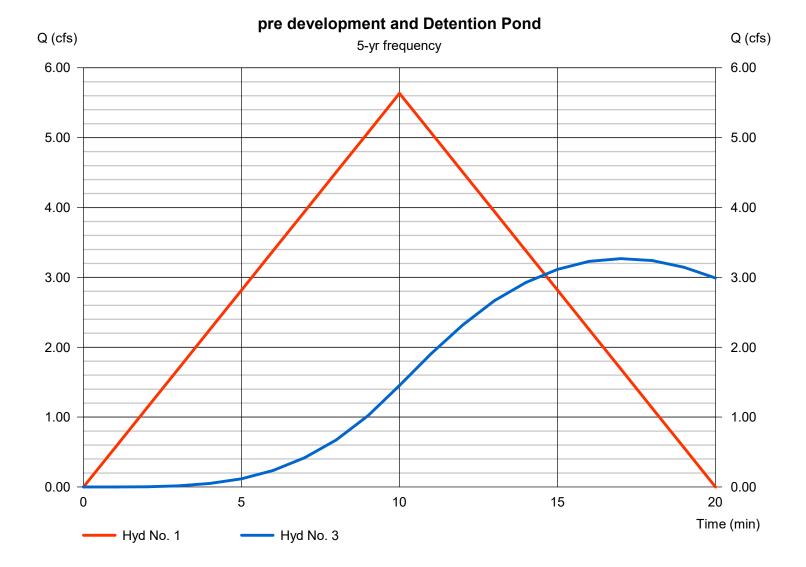
Hyd. No. 1

pre development

Hydrograph type = Rational Peak discharge = 5.635 cfs Time to peak = 10 min Hyd. Volume = 3,381 cuft Hyd. No. 3

Detention Pond

Hydrograph type = Reservoir
Peak discharge = 3.27 cfs
Time to peak = 17 min
Hyd. Volume = 6,630 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

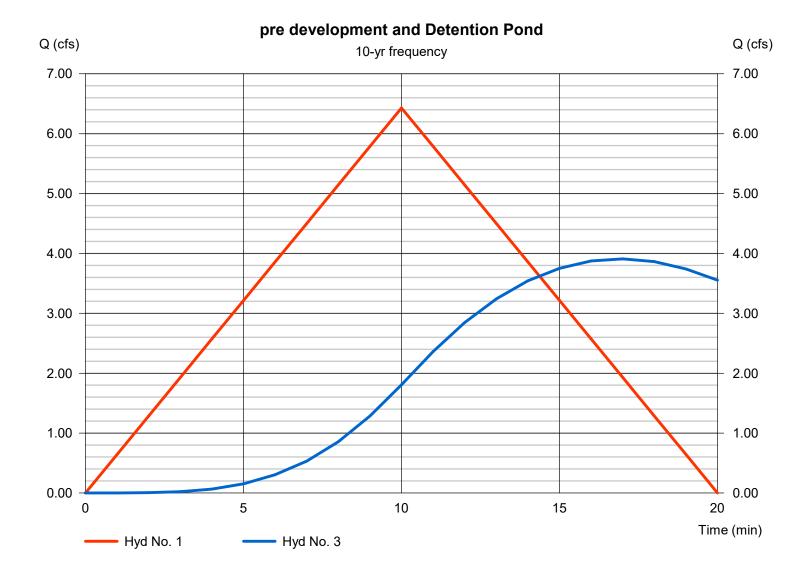
Hyd. No. 1

pre development

Hydrograph type = Rational Peak discharge = 6.430 cfs Time to peak = 10 min Hyd. Volume = 3,858 cuft Hyd. No. 3

Detention Pond

Hydrograph type = Reservoir
Peak discharge = 3.91 cfs
Time to peak = 17 min
Hyd. Volume = 7,571 cuft

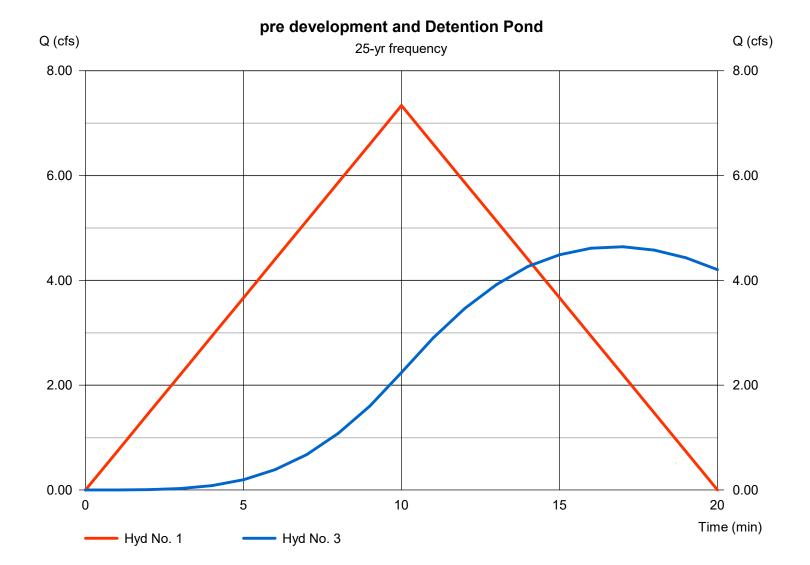


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational Peak discharge = 7.337 cfs Time to peak = 10 min Hyd. Volume = 4,402 cuft Hydrograph type = Reservoir
Peak discharge = 4.64 cfs
Time to peak = 17 min
Hyd. Volume = 8,645 cuft

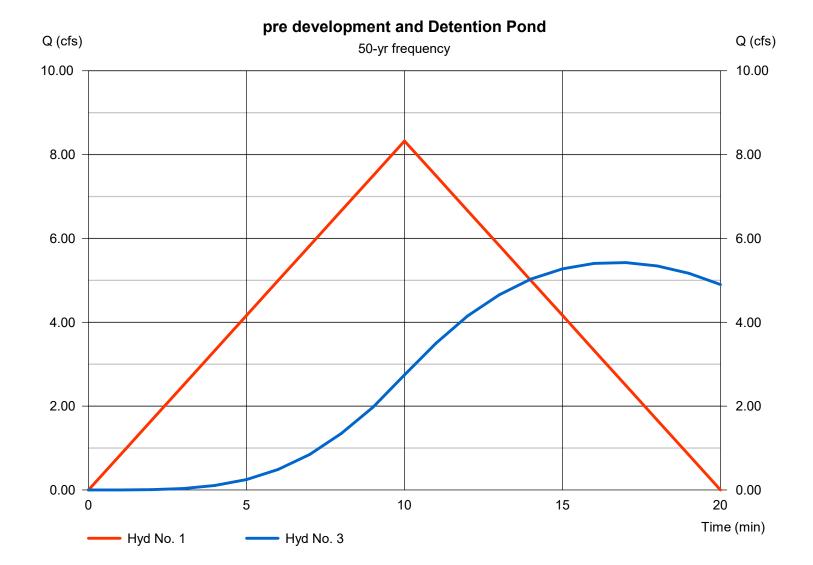


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational Peak discharge = 8.326 cfs Time to peak = 10 min Hyd. Volume = 4,995 cuft Hydrograph type = Reservoir
Peak discharge = 5.42 cfs
Time to peak = 17 min
Hyd. Volume = 9,816 cuft

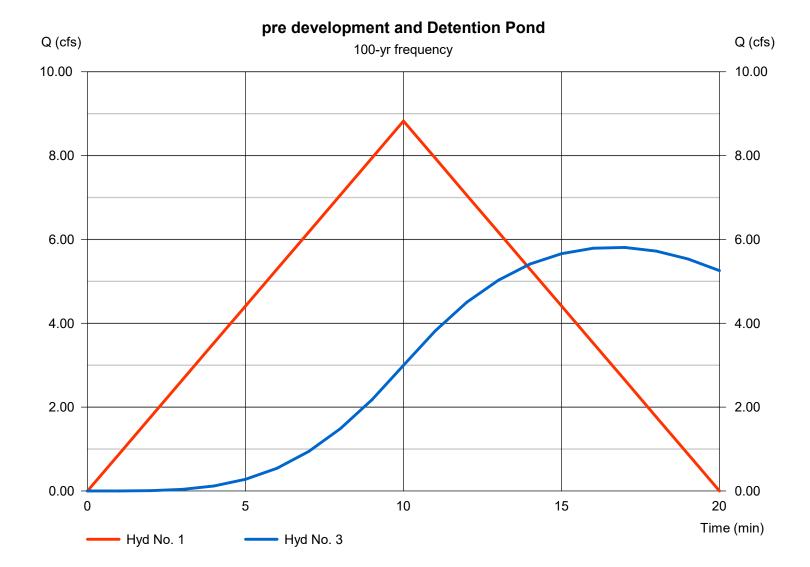


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Detention Pond

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 8.825 cfs= 5.81 cfsTime to peak = 10 min Time to peak = 17 min Hyd. Volume = 5,295 cuft Hyd. Volume = 10,406 cuft



Pond No. 1 - Detention Pond -3

Pond Data

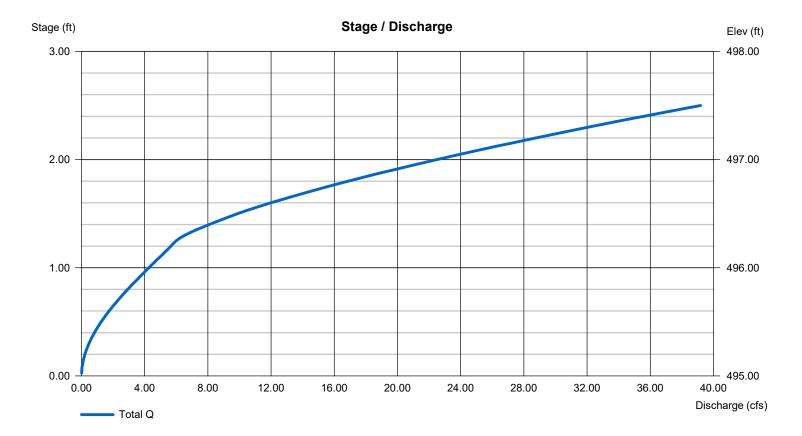
Trapezoid -Bottom L x W = 106.0 x 52.0 ft, Side slope = 3.00:1, Bottom elev. = 495.00 ft, Depth = 2.50 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	495.00	5,512	0	0
0.25	495.25	5,751	1,408	1,408
0.50	495.50	5,995	1,468	2,876
0.75	495.75	6,243	1,530	4,406
1.00	496.00	6,496	1,592	5,998
1.25	496.25	6,753	1,656	7,654
1.50	496.50	7,015	1,721	9,375
1.75	496.75	7,281	1,787	11,162
2.00	497.00	7,552	1,854	13,016
2.25	497.25	7,827	1,922	14,938
2.50	497.50	8,107	1,992	16,930

Culvert / Orifice Structures Weir Structures [B] [PrfRsr] [A] [C] [D] [A] [C] [B] = 18.00 0.00 0.00 0.00 = 6.00 0.00 0.00 0.00 Rise (in) Crest Len (ft) Span (in) = 18.000.00 0.00 0.00 Crest El. (ft) = 496.25 0.00 0.00 0.00 No. Barrels = 1 0 0 0 Weir Coeff. = 3.333.33 3.33 3.33 0.00 0.00 Weir Type Invert El. (ft) = 495.00 0.00 = Rect = 29.00 0.00 0.00 0.00 Multi-Stage = No No No No Length (ft) = 12.74 0.00 0.00 Slope (%) n/a = .013 .013 N-Value .013 n/a Orifice Coeff. = 0.600.60 0.60 0.60 Exfil.(in/hr) = 0.000 (by Wet area) = n/a No No No = 0.00Multi-Stage TW Elev. (ft)

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	5.039	1	10	3,023				pre development
2	Rational	9.942	1	10	5,965				post development
3	Reservoir	2.797	1	17	5,925	2	495.78	4,598	Detention Pond
ما ما	ention pond 3					Period: 2 Ye			uy, 04 / 19 / 2023

					Hydrallow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc					
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	Rational	5.635	1	10	3,381				pre development	
2	Rational	11.12	1	10	6,671				post development	
3	Reservoir	3.269	1	17	6,630	2	495.85	5,064	Detention Pond	
det	detention pond 3.gpw					eriod: 5 Ye	ear	Wednesday	v, 04 / 19 / 2023	

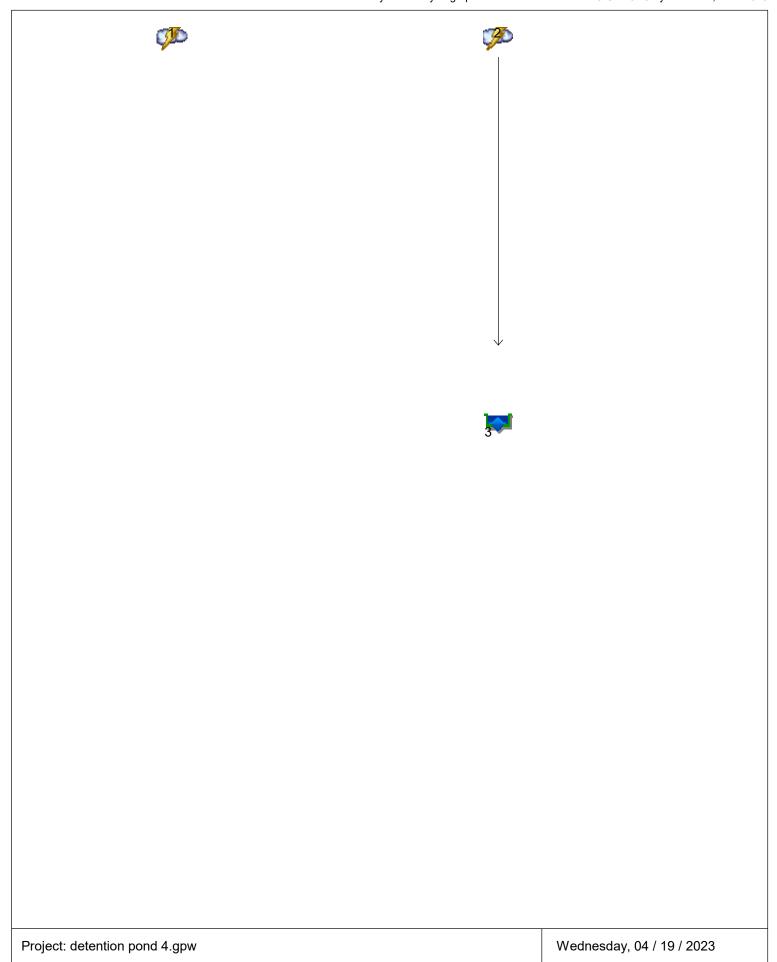
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	6.430	1	10	3,858				pre development
2	Rational	12.69	1	10	7,612				post development
det	detention pond 3.gpw					Period: 10 \	/ear	Wednesda	y, 04 / 19 / 2023

lyd. lo.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	7.337	1	10	4,402				pre development
2	Rational	14.48	1	10	8,686				post development
3	Reservoir	4.642	1	10	8,645	2	496.05	6,359	Detention Pond
detention pond 3.gpw					Return	Period: 25 `	Year	Wednesda	y, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	8.326	1	10	4,995				pre development
2	Rational	16.43	1	10	9,856				post development
3	Reservoir	5.424	1	17	9,836	2	496.17	7,100	Detention Pond
detention pond 3.gpw					Return f	Period: 50	∸ ∕ear	Wednesda	y, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	8.825	1	10	5,295				pre development
2	Rational	17.41	1	10	10,447				post development
det	detention pond 3.gpw					Period: 100	Year	Wednesda	y, 04 / 19 / 2023

Watershed Model Schematic



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

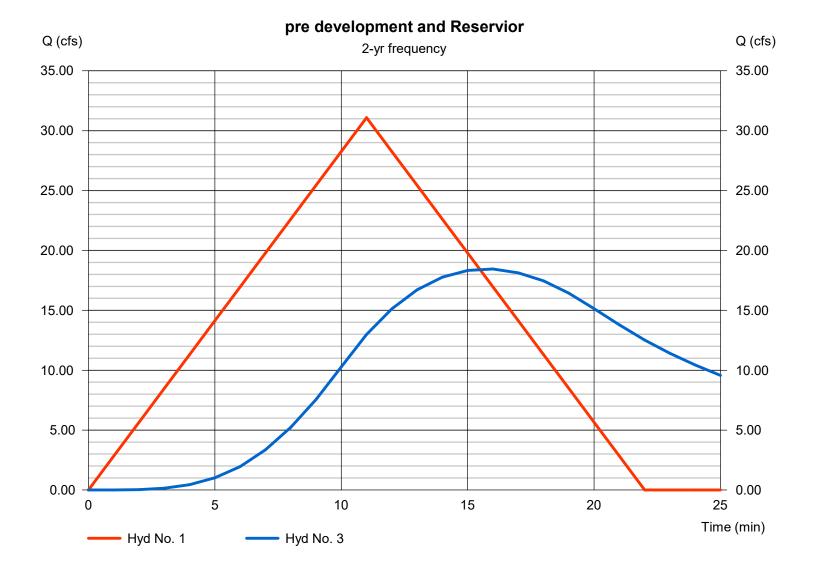
pre development

Hydrograph type = Rational
Peak discharge = 31.09 cfs
Time to peak = 11 min
Hyd. Volume = 20,519 cuft

Hyd. No. 3

Reservior

Hydrograph type = Reservoir
Peak discharge = 18.44 cfs
Time to peak = 16 min
Hyd. Volume = 25,931 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

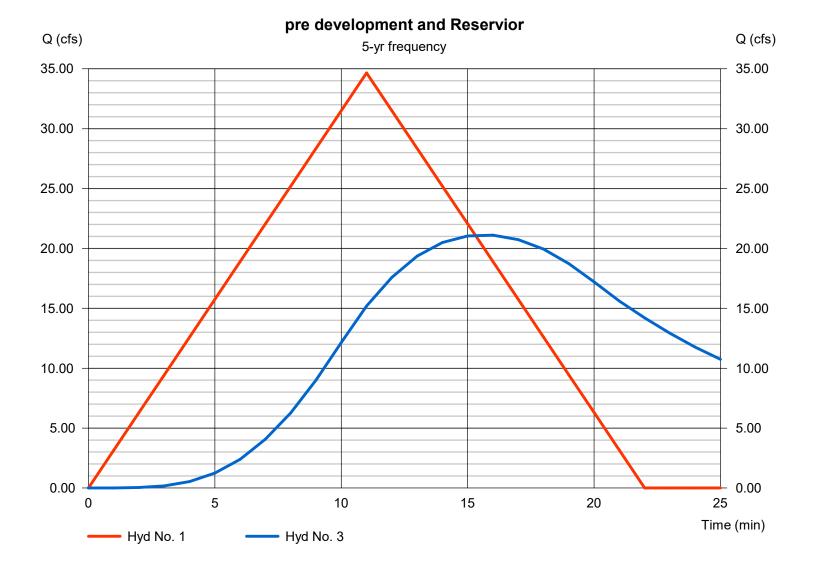
pre development

Hydrograph type = Rational
Peak discharge = 34.66 cfs
Time to peak = 11 min
Hyd. Volume = 22,873 cuft

Hyd. No. 3

Reservior

Hydrograph type = Reservoir
Peak discharge = 21.11 cfs
Time to peak = 16 min
Hyd. Volume = 29,001 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

= Reservoir

= 24.59 cfs

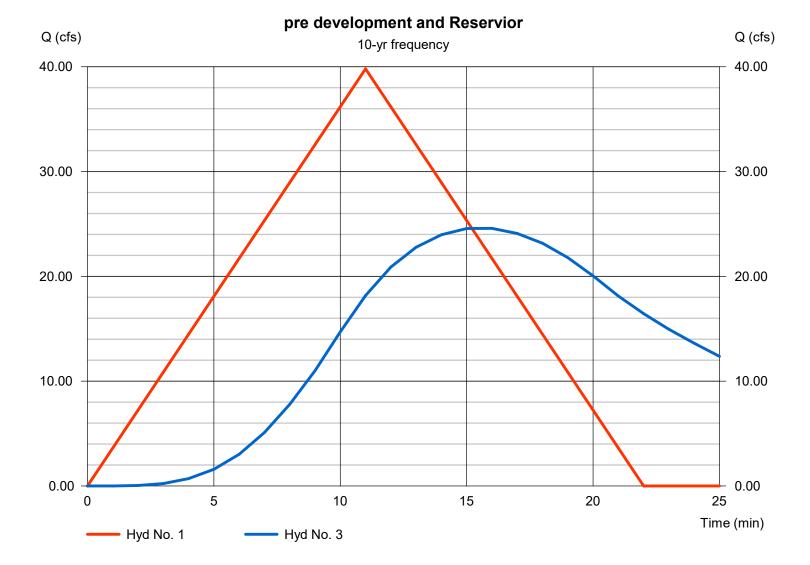
= 33,097 cuft

= 16 min

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type= RationalHydrograph typePeak discharge= 39.81 cfsPeak dischargeTime to peak= 11 minTime to peakHyd. Volume= 26,276 cuftHyd. Volume

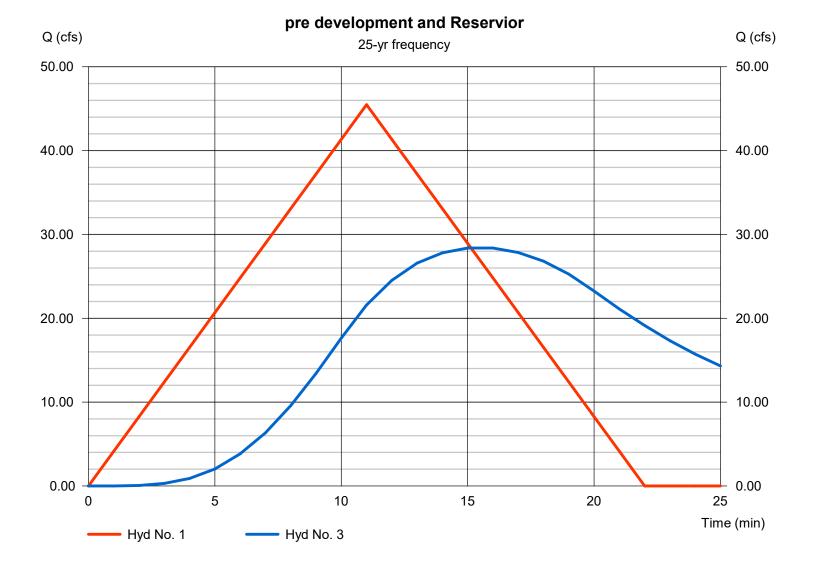


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 28.39 cfs= 45.47 cfsTime to peak = 11 min Time to peak = 15 min Hyd. Volume = 30,012 cuft Hyd. Volume = 37,772 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

= Reservoir

= 32.15 cfs

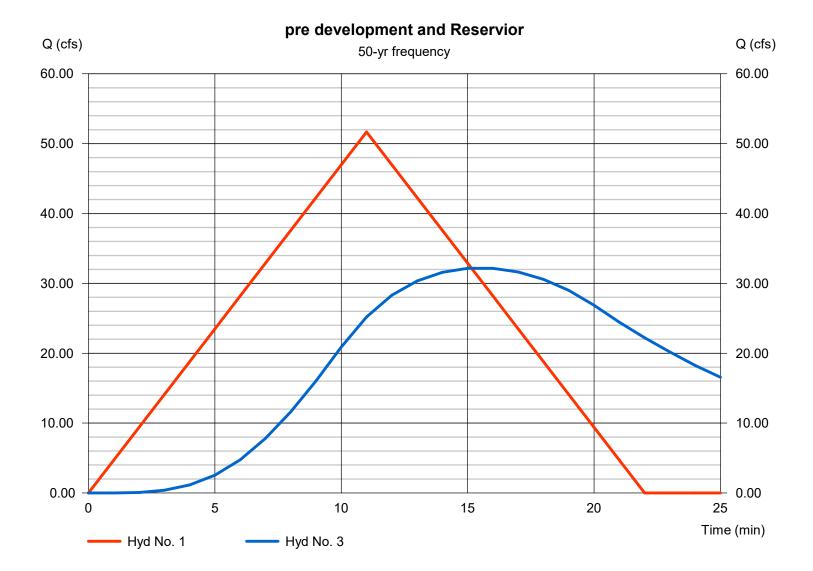
= 42,865 cuft

= 16 min

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type= RationalHydrograph typePeak discharge= 51.67 cfsPeak dischargeTime to peak= 11 minTime to peakHyd. Volume= 34,102 cuftHyd. Volume

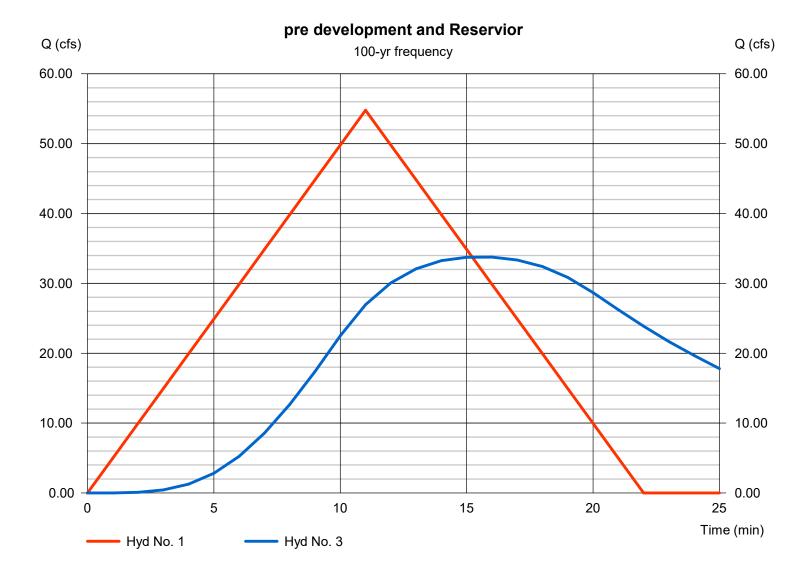


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1 Hyd. No. 3

pre development Reservior

Hydrograph type = Rational Hydrograph type = Reservoir Peak discharge Peak discharge = 54.77 cfs= 33.77 cfsTime to peak = 11 min Time to peak = 16 min Hyd. Volume = 36,151 cuft Hyd. Volume = 45,435 cuft



Pond No. 1 - Detention Pond -4

Pond Data

Trapezoid -Bottom L x W = 120.0 x 64.0 ft, Side slope = 3.00:1, Bottom elev. = 511.00 ft, Depth = 4.00 ft

Stage / Storage Table

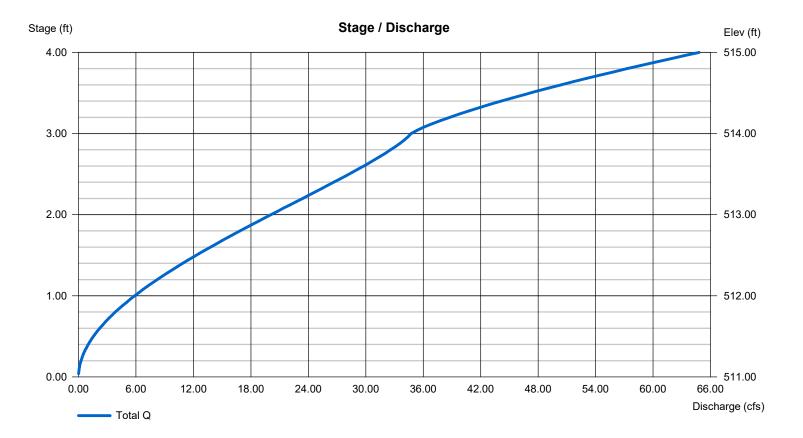
Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	511.00	7,680	0	0
0.40	511.40	8,127	3,161	3,161
0.80	511.80	8,586	3,342	6,503
1.20	512.20	9,057	3,528	10,032
1.60	512.60	9,539	3,719	13,750
2.00	513.00	10,032	3,914	17,664
2.40	513.40	10,537	4,113	21,777
2.80	513.80	11,053	4,318	26,095
3.20	514.20	11,581	4,527	30,622
3.60	514.60	12,121	4,740	35,362
4.00	515.00	12,672	4,958	40,320

Culvert / Orifice Structures

Weir Structures

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 36.00	Inactive	Inactive	0.00	Crest Len (ft)	Inactive	6.00	Inactive	0.00
Span (in)	= 36.00	24.00	24.00	0.00	Crest El. (ft)	= 511.00	514.00	511.00	0.00
No. Barrels	= 1	1	1	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 511.00	511.00	513.00	0.00	Weir Type	= Rect	Rect	Rect	
Length (ft)	= 103.00	0.50	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 9.34	0.01	0.00	n/a					
N-Value	= .013	.013	.013	n/a					
Orifice Coeff.	= 0.50	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Contour)		
Multi-Stage	= n/a	No	No	No	TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



łyd. lo.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	31.09	1	11	20,519				pre development
2	Rational	43.27	1	10	25,961				post development
det	ention pond 4	1.gpw			Return F	Period: 2 Ye	ear	Wednesday	y, 04 / 19 / 2023

						,			liodesk® Civii 3D® by Autodesk, Inc. v202
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	34.66	1	11	22,873				pre development
2	Rational	48.39	1	10	29,031				post development
2 3	Reservoir	48.39 21.11	1 1	10 16	29,031 29,001	2	513.06	18,301	post development Reservior
	ention pond 4					Period: 5 Ye			y, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	39.81	1	11	26,276				pre development
2	Rational	55.21	1	10	33,127				post development
1 2 3									
det	ention pond 4	1.gpw			Return F	Period: 10 \	⊥ ∕ear	Wednesday	y, 04 / 19 / 2023

	·					- Tryurun	- Tyurograpiio	- Extension for Au	llodesk® Civii 3D® by Autodesk, Inc. v20.
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	45.47	1	11	30,012				pre development
2	Rational	63.00	1	10	37,802				post development
3	Reservoir	28.39	1	15	37,772	2	513.51	22,950	Reservior
dete	ention pond 4	.gpw	1		Return F	Period: 25 Y	ear	Wednesday	y, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	51.67	1	11	34,102				pre development
2	Rational	71.49	1	10	42,895				post development
3	Reservoir	32.15	1	16	42,865	2	513.77	25,730	Reservior
det	ention pond 4	1.gpw			Return I	Period: 50 \	∕ear	Wednesda	y, 04 / 19 / 2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	54.77	1	11	36,151				pre development
2	Rational	75.78	1	10	45,465				post development
3	Reservoir	33.77	1	16	45,435	2	513.90	27,191	Reservior
det	ention pond 4	1.gpw			Return F	Period: 100	Year	Wednesda	y, 04 / 19 / 2023

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

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

Prepared for: NXT GEN HOMES LLC

HILLTOP LANDING

Proposed Subdivision

Hilltop Landing Subdivison
Saline County

Date:

19 April 2023

Prepared by:



Project Name and Location: <u>Hilltop Landing Subdivision, NE corner of Miller Rd and Hilltop Rd,</u> **Bryant, Saline County**

Property Parcel Number (Optional): 840-11625-125

Owner: NXT GEN HOMES LLC 501-217-8400;

19218 Summershade Dr., Bryant, AR 72022 graham@grahamsmithcompanies.com

Developer/Contractor/Operator: <u>Graham Smith – NXT GEN HOMES LLC- 501-217-8400</u>,

19218 Summershade Dr., Bryant, AR 72022

grahamsmithcompanies.com

- A. Site Description
 - a. Project description, intended use after NOI is filed: 165 Lot subdivision
 - Sequence of major activities which disturb soils: <u>Construction entrance</u>, <u>ROW clearing</u>, <u>silt fence</u>, <u>drainage channels</u>, <u>trenching for utilities</u>, <u>rock ckeck dams</u>, <u>grading</u>, <u>road construction</u>, <u>lot clearing</u>, <u>home construction</u>. <u>Detention will be temp sediment pond</u>, (<u>see erosion control plan</u>).
 - c. Total Area¹: Disturbed Area²: 54 Ac± 54 Ac±
 - d. Soils Information:
 - i. Runoff Coefficient Pre-Construction (See Appendix A): 0.36
 - ii. Runoff Coefficient Post-Construction (See Appendix A): **0.65**
 - iii. Describe the soil or the quality of any discharge from the site: **OK**
- B. Responsible Parties

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

Individual/Company	Phone Number	Service Provided for SWPPP (i.e., Inspector, SWPPP revisions, Stabilization Activities, BMP
		Maintenance, etc.)
Hope Consulting	501-315-2626	SWPPP Revisions
Graham Smith – NXT GEN	501-217-8400	Inspection, Stabilization
HOMES LLC- Operator		Activities, BMP Maintenance

C. Receiving Waters

a. The following waterbody (or waterbodies) receives stormwater from this construction site: unnamed Tributary, thence Owen, thence Fourche Creek, thence Arkansas River

b.	Is the project located within the jurisdiction of	of an MS4? ⊠Yes ⊡No
	i. If yes, Name of MS4: Bryant	
c.	Ultimate Receiving Water:	
	Red River	Ouachita River

4RR1500)00			
ſ	Wh	ite Rive	⊠Arkansas River er	St. Francis River Mississippi River
ubmitted	to ADEC	ე .		n updated SWPPP and a \$200 modification fee to be
Increases	in only	disturbed	acreage require an additional acreage i	request and an updated SWPPP to be submitted to ADEQ.
D. [Docun	nentatio	on of Permit Eligibility Related	I to the 303(d) list and Total Maximum Daily
L	_oads	(TMDL)	(https://www.adeq.state.ar.us/	<u>/water/planning/)</u>
	a.		he stormwater enter a water ?	body on the 303(d) list or with an approved
	b.	If yes:		
		•	Waterbody identified on 303	3(d) list:
		ii.	·	- · · · · -
		iii.		erally construction activity i.e. surface erosion
			is identified on 303(d) list or	associated assumptions and allocations
			identified in the TMDL for th	ie discharge: Xes No
		iv.	Additional controls impleme	nted: <u>.</u> .
F. <i>A</i>	Attain	ment of	f Water Quality Standards Aft	er Authorization
_, ,	a.		•	mplement, and maintain BMPs at the
		-		utants in the discharge as necessary to meet
			•	In general, except in situations explained
				emented, and updated to be considered as
			• • •	at the discharges do not cause or contribute
			excursion above any applicable	
	b.			Department may determine that the
		-		have reasonable potential to cause, or
				ny applicable water quality standard. If such a
				nent will require the permittee to:
			· ·	P action plan describing SWPPP modifications
				lentified water quality concerns and submit
			valid and verifiable data and	information that are representative of
			ambient conditions and indi	cate that the receiving water is attaining
			water quality standards; or	
		ii.	• •	its from construction activity and submit an
			individual permit application	•
I	unde	rstand a	and agree to follow the above	e text regarding the attainment of water

quality standards after authorization. \square Yes \square No

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

G. Stormwater Controls

- a. Initial Site Stabilization, Erosion and Sediment Controls, and Best Management Practices:
 - i. Initial Site Stabilization: <u>existing vegetation</u>, <u>silt fencing on toe of slopes and along major drainage pathways</u>. <u>All silt fencing may not be necessary initially</u>, <u>but rather as construction progresses</u>.
 - ii. Erosion and Sediment Controls: Rip rap check dams, additional silt fencing (as needed),

	If No, explain:
iv.	Off-site accumulations of sediment will be removed at a frequency sufficient to minimize off-site impacts: Yes No If No, explain:
V.	Sediment will be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%: Yes No If No, explain:
vi.	Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges: Yes No If No, explain:
vii.	Off-site material storage areas used solely by the permitted project are being covered by this SWPPP: Yes No If Yes, explain additional BMPs implemented at off-site material storage area:
b. Stabili	zation Practices
i.	Description and Schedule: Final stabilization will be concrete, stone, sod
	landscape. Permit will be closed when all exposed areas are 100%
	covered with 80% density.
II.	Are buffer areas required? Yes No
	If Yes, are buffer areas being used? ☑Yes ☑No
	If Yes, describe natural buffer areas:
	If No, explain why not:
iii.	A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included with the plan.
iv.	Deadlines for stabilization: Stabilization procedures will be initiated 14 days after construction activity temporarily ceases on a portion of the site. Yes No If No, explain:

- v. Deadlines for stabilization:
 - 1. Stabilization procedures will be initiated immediately after construction activity temporarily ceases on a portion of the site.
 - 2. Stabilization procedures will be initiated immediately in portions of the site where construction activities have permanently ceased.

_	Structura	D:
\boldsymbol{r}	\tri\ctilra	I Dractica:
c.	Juluctura	rracuces

c.	Struct	ural Practices
	i.	Describe any structural practices to divert flows from exposed soils, store
		flows, or otherwise limit runoff and the discharge of pollutants from
		exposed areas of the site: <u>silt fencing, check dams</u>
	ii.	Describe Velocity Dissipation Devices: rip rap check dams as needed
	iii.	Sediment Basins:
		Are 10 or more acres draining to a common point? $igtherightarrow$ Yes $igcap$ No
		Is a sediment basin included in the project? ⊠Yes ☐No
		If Yes, what is the designed capacity for the storage?
		3600 cubic feet per acre = :
		or
		\boxtimes 10 year, 24 hour storm =
		:70,892
		Other criteria were used to design basin:
		If No, explain why no sedimentation basin was included and
		describe required natural buffer areas and other controls
		implemented instead: Each lot will have plenty of buffer space
		around the perimeter
H. Other	r Control	s
a.	Solid r	naterials, including building materials, shall be prevented from being
	discha	rged to Waters of the State: Xes No
b	Off-sit	e vehicle tracking of sediments and the generation of dust shall be
	minim	ized through the use of:
		A stabilized construction entrance and exit
		Vehicle tire washing
		Other controls, describe: Street needs to be swept if needed.

c. Temporary Sanitary Facilities: Contractor to provide and maintain facitilities.

	d.	Concrete Waste Area Provided:
		⊠Yes
		No. Concrete is used on the site, but no concrete washout is provided.
		Explain why:
		,
		N/A, no concrete will be used with this project
	e.	Fuel Storage Areas, Hazardous Waste Storage, and Truck Wash Areas: <u>No</u>
		hazardous waste will be produced as a result of this project. Fuel storage areas will
		not be used and truck wash areas will not be needed.
I.	Non-S	tormwater Discharges
	a.	The following allowable non-stormwater discharges comingled with stormwater
		are present or anticipated at the site:
		Fire-fighting activities;
		Fire hydrant flushings;
		Water used to wash vehicles (where detergents or other chemicals are
		not used) or control dust in accordance with Part II.A.4.H.2;
		Potable water sources including uncontaminated waterline flushings;
		Landscape Irrigation;
		Routine external building wash down which does not use detergents or
		other chemicals;
		Pavement wash waters where spills or leaks of toxic or hazardous
		materials have not occurred (unless all spilled materials have been removed)
		and where detergents or other chemicals are not used;
		Uncontaminated air conditioning, compressor condensate (See Part I.B.13.C of the permit);
		Uncontaminated springs, excavation dewatering and groundwater (See
		Part I.B.13.C of the permit);
		Foundation or footing drains where flows are not contaminated with
		process materials such as solvents (See Part I.B.13.C of the permit);
	b.	Describe any controls associated with non-stormwater discharges present at the
		site: There are no non storm water discharges that warrant extra controls. The
		activities which will be non storm water discharges will be not be regularly occuring
		and will be monitored.
J.	Perma	nent Controls for Post-Construction Stormwater Management:
٠.		scribe measures installed during the construction process to control pollutants in
		ormwater discharges that will occur after construction operations have been
		mpleted: Project area will be stabilized before SWPPP is terminated. Yards will be
		Ided/seeded and/or landscaped.
	Per	mit won't be closed until obtain 100% coverage and 80% density

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

L. Inspections

a. Inspection frequency	1 .	Inspection	trequenc
-------------------------	----------------	------------	----------

Every 7 calendar days and within 24 hours of the end of a storm event 0.5 inches or greater (a rain gauge must be maintained on-site)

b. Inspections:

Completed inspection forms will be kept with the SWPPP.
△ADEQ's inspection form will be used (See Appendix B)
or
A form other than ADEQ's inspection form will be used and is attached
(See inspection form requirements Part II.A.4.L.2)

- c. Inspection records will be retained as part of the SWPPP for at least 3 years from the date of termination.
- d. It is understood that the following sections describe waivers of site inspection requirements. All applicable documentation requirements will be followed in accordance with the referenced sections.
 - i. Winter Conditions (Part II.A.4.L.4)
 - ii. Adverse Weather Conditions (Part II.A.4.L.5)

M. Maintenance:

The following procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition will be followed: As homes are completed, lots will be sodded, seeded, and/or landscaped, contractors will be responsible for keeping individual lots during home construction.

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

N. Employee Training:

The following is a description of the training plan for personnel (including contractors and subcontractors) on this project: <u>The operator is well trained and familiar with erosion control practices</u>. Workers who are under the operator will be briefed and trained on erosion control practices and the SWPPP contents.

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

Certification

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible or Cognizant Official:	Kazi Blum				
Title: $P \cdot \mathcal{E}$.	Date:	04-15-2023			

Computation Sheet for Determining Runoff Coefficients

Appendix A

Total Site Area =	Acres	[A]
Existing Site Conditions Impervious Site Area ¹ = Impervious Site Area Runoff Coefficient ^{2, 4} =	Acres	[B] [C]
Pervious Site Area ³ =	Acres	[D]
Pervious Site Area Runoff Coefficient ⁴ =		[E]
Pre-Construction Runoff Coefficient	= This is your pre-construc	tion runoff coefficient.

Proposed Site Conditions (after construction)

Impervious Site Area ¹ =	Acres	[F]
Impervious Site Area Runoff Coefficient ^{2, 4} =		[G]
Pervious Site Area ³ =	Acres	[H]
Pervious Site Area Runoff Coefficient ⁴ =		[۱]

Post-Construction Runoff Coefficient

- 1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
- 2. Use 0.95 unless lower or higher runoff coefficient can be verified.
- 3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
- 4. Refer to local Hydrology Manual for typical C values.

Note: The impervious and pervious surfaces should equal the total area.

Inspector Name	2:			Date of Inspection:						
Inspector Title:										
Date of Rainfall	:		Du	ration of Rainf	fall:					
Days Since Last Rain Event: days				nfall Since Las	t Rain Event: _	inches				
	iny Discharges Durir harges of Sediment									
	ed of Additional BM Location of Constru									
Location		Activity Begin Date	Activity Occuring Now (y/n)?	Activity Ceased Date	Stabilizatio Initiated Da					
nformation on	RMPs in Need of M	aintenance								
_ocation	In Working Order?			Maintenance Date	Completed	Maintenance to be Performed By				
Changes require	ed to the SWPPP:		Rea	asons for chan	ges:					
	completed (date):									
direction or s the informat responsible f and complet	supervision in accordation submitted. Based for gathering the info	ance with a system of the control of	designed to ensible the person or partition submitted	sure that qualifi ersons who ma is, to the best o	ed personnel portion of the syster of my knowledge	n were prepared under m roperly gather and evaluat m, or those persons directl te and belief, true, accurate luding the possibility of fin				
Signature of Res	sponsible or Cogniza	ant Official:				Date:				
		Title:				_				

ARR150000 Inspection Form

Appendix B

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP should be checked as "Not Used" with a brief statement describing why it is not being used.

Note: Appendix C and D do not have to be submitted with the SWPPP. These attachments are for use during the development of the SWPPP.

EROSION CONTROL BMPs								
	ВМР							
	Considered				BMP Not		If not used, state	
ВМР	for project		BMP Used		Used	<u> </u>	reason	
EC-1 Scheduling		<u> </u>		\succeq		<u>Ц </u>		
EC-2 Preservation of Existing Vegetation				\boxtimes		<u> </u>		
EC-3 Hydraulic Mulch								
EC-4 Hydroseeding				\boxtimes				
EC-5 Soil Binders								
EC-6 Straw Mulch								
EC-7 Geotextiles & Mats								
EC-8 Wood Mulching								
EC-9 Earth Dikes & Drainage Swales				\boxtimes				
EC-10 Velocity Dissipation Devices								
EC-11 Slope Drains								
EC-12 Stream bank Stabilization								
SEDIMENT CONTROL BMPs								
	ВМР							
	Considered				BMP Not			
							If not used, state	
BMP		idered roject	ВМР	Used	Used		If not used, state reason	
SE-1 Silt Fence			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier			ВМР	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier			BMP	Used				
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment	for pi							
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment	for pi	Froject			Used		reason	
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment WIN	ID EROS BMP Consi	roject	NTROL E	M M M BMPs	BMP	Not	If not used, state	
SE-1 Silt Fence SE-2 Sediment Basin SE-3 Sediment Trap SE-4 Check Dam SE-5 Fiber Rolls SE-6 Gravel Bag Berm SE-7 Street Sweeping and Vacuuming SE-8 Sand Bag Barrier SE-9 Straw Bale Barrier SE-10 Storm Drain Inlet Protection SE-11 Chemical Treatment	ID EROS BMP Consi	Froject		M M M BMPs	Used	Not	reason	

TRACKING CONTROL BMPs											
	ВМР										
DMD	Considered		DAAD Haad		BMP Not		ot	If not used, state			
TD 1 Stabilized Construction Entrance/Evit	for project		BMP Used		Used			reason			
TR-1 Stabilized Construction Entrance/Exit	 				<u> </u>		┢	<u> </u>	BMPs not used are		
TR-2 Stabilized Construction Roadway]		┢	<u> </u>	needed	
TR-3 Entrance/Outlet Tire Wash	 	TE	D 8481			T DA	De.	<u> </u>			
NON-STOP	BMP	\IE	K IVIAI	NAGEIV	IEN	I I BIVI	PS				
	Considered					ВМЕ	N	ot	If not used, state		
ВМР	for p			ВМР	Us	ed	Used			reason	
NS-1 Water Conservation Practices	•	Ó								BMPs not used are	
NS-2 Dewatering Operations								Ī		needed	
NS-3 Paving and Grinding Operations								Ī			
NS-4 Temporary Stream Crossing								Ī			
NS-5 Clear Water Diversion								Ī			
NS-6 Illicit Connection/ Discharge								Ī			
NS-7 Potable Water/Irrigation					X			Ī			
NS-8 Vehicle and Equipment Cleaning									1		
NS-9 Vehicle and Equipment Fueling											
NS-10 Vehicle and Equipment Maintenance								Ī			
NS-11 Pile Driving Operations								Ī			
NS-12 Concrete Curing											
NS-13 Concrete Finishing											
NS-14 Material and Equipment Use Over Water											
NS-15 Demolition Adjacent to Water											
NS-16 Temporary Batch Plants											
WASTE MANAGEMENT	AND I	VΑ.	TERIA	LS POLI	LU1	ION (CONTR	OL	BMPs		
	ВМР										
200	Cons						BMF		ot	If not used, state	
BMP	for p	roje	ect	ВМР	Us	ed	Used	<u></u>	1	reason	
WM-1 Material Delivery and Storage]		┢	<u>]</u>	BMPs not used are	
WM-2 Material Use						1		_	 	needed	
WM-3 Stockpile Management						1		누	<u></u>		
WM-4 Spill Prevention and Control						<u> </u> 1		╁	<u> </u>		
WM-5 Solid Waste Management						<u> </u> 		F	<u> </u>		
WM-6 Hazardous Waste Management						<u> </u> 		上	<u> </u>		
WM-7 Contaminated Soil Management] 1		<u> </u>			
WM-8 Concrete Waste Management						<u> </u> 		Ļ	<u> </u>		
WM-9 Sanitary/Septic Waste Management						<u> </u> 1		누	<u></u>		
WM-10 Liquid Waste Management								L			

SWPPP Completion Checklist

Appendix D

Yes = Complete

No = Incomplete/Deficient

N/A = Not applicable to project

Yes	No	N/A	_A. A site description, including:	Permit Section Citation
			1. Project description, intended use after NOT	Part II.A.4.A.1
			2. Sequence of major activities	Part II.A.4.A.2
			3. Total & disturbed acreage	Part II.A.4.A.3
			4. Pre- and post-construction runoff coefficient OR soil/discharge data	Part II.A.4.A.4
	1		B. Responsible Parties: All parties dealing with the SWPPP and the areas they are	:
			responsible for on-site.	Part II.A.4.B
	1	1	C. Receiving Water.	Part II.A.4.C
	+	+	-MS4 Name	Part II.A.4.C
			-Ultimate Receiving Water	Part II.A.4.C
	1	1	D. Documentation of permit eligibility related to Impaired Water Bodies and Tota	
	1	+	1. Identify pollutant on 303(d) list or TMDL	Part II.A.4.D.1
	1		2. Is construction activity or the specific site listed as cause?	Part II.A.4.D.2
			3. Measures taken to reduce pollutants from the site.	Part II.A.4.D.3
			E. Attainment of Water Quality Standards After Authorization.	Part II.A.4.E
			F. Site Map See End of Evaluation Form	Part II.A.4.F
			G. Description of Controls:	
			Erosion and sediment controls, including:	
			a. Initial site stabilization	Part II.A.4.G.1.a
			b. Erosion and sediment controls	Part II.A.4.G.1.b
			c. Replacement of inadequate controls	Part II.A.4.G.1.c
			d. Removal of off-site accumulations	Part II.A.4.G.1.d
			e. Maintenance of sediment traps/basins @ 50% capacity	Part II.A.4.G.1.e
	1		f. Litter, construction debris and chemicals properly handled	Part II.A.4.G.1.f
			g. Off-site storage areas and controls	Part II.A.4.G.1.g
			2. Stabilization practices:	
	1	1	a. Description and schedule for stabilization	Part II.A.4.G.2.a
			b. Description of buffer areas	Part II.A.4.G.2.b
		+	c. Records of stabilization	Part II.A.4.G.2.c
			d. Deadlines for stabilization	Part II.A.4.G.2.d
		1		
	1		3. Structural Practices:	
			-Describe structural practices to divert flows, store flows, or otherwise limit runoff	Part II.A.4.G.3
			a. Sediment basins	Part II.A.4.G.3.a.1
			-Are more than 10 acres draining to a common point? If so, are sediment basins included?	Part II.A.4.G.3.a.1
			-Sediment basin dimensions and capacity description and calculations	Part II.A.4.G.3.a.1
			-If a basin wasn't practicable, are other controls sufficient?	Part II.A.4.G.3.a.1
			b. Velocity dissipation devices concentrated flow from 2 or more acres	Part II.A.4.G.3.b
			H. Other controls including:	
			1. Solid waste control measures	Part II.A.4.H.1
			2. Vehicle off-site tracking controls	Part II.A.4.H.2
	1		3. Compliance with sanitary waste disposal	Part II.A.4.H.4
			4. Does the site have a concrete washout area controls?	Part II.A.4.H.5
	+		5. Does the site have fuel storage areas, hazardous waste storage and/or truck wash areas	
			controls?	Part II.A.4.H.6

SWPPP Completion Checklist

Appendix D

Yes	No	N/A		Permit Section Citation
			I. Identification of allowable non-storm water discharges	Part II.A.4.I
			-Appropriate controls for dewatering, if present	Part I.B.12.C
			J. Post construction stormwater management.	Part II.A.4.J
			K. State or local requirements incorporated into the plan.	Part II.A.4.K
		ļ		
			_L. Inspections	
			1. Inspection frequency listed?	Part II.A.4.L.1
			2. Inspection form	Part II.A.4.L.2
			Ours.	
			If not ours, does it contain the following items:	
			a. Inspector name and title	Part II.A.4.L.2.a
			b. Date of inspection.	Part II.A.4.L.2.b
			c. Amount of rainfall and days since last rain event (14 day only)	Part II.A.4.L.2.c
			d. Approx beginning and duration of storm event	Part II.A.4.L.2.d
			e. Description of any discharges during inspection	Part II.A.4.L.2.e
			f. Locations of discharges of sediment/other pollutants	Part II.A.4.L.2.f
			g. BMPs in need of maintenance	Part II.A.4.L.2.g
			h. BMPs in working order, if maintenance needed (scheduled and completed)	Part II.A.4.L.2.h
			i. Locations that are in need of additional controls	Part II.A.4.L.2.i
			j. Location and dates when major construction activities begin, occur or cease	Part II.A.4.L.2.j
			k. Signature of responsible/cognizant official	Part II.A.4.L.2.k
			3. Inspection Records	Part II.A.4.L.3
			4. Winter Conditions	Part II.A.4.L.4
			5. Adverse Weather Conditions	Part II.A.4.L.5
			M. Maintenance Procedures	Part II.A.4.M
			N. Employee Training	Part II.A.4.N
			Signed Plan Certification	Part II.A.5. and Part II.B.10
	•	•		
	1		F. Site Map showing:	Part II.A.4.F.1
			Pre-construction topographic view Drainage flow	Part II.A.4.F.2
			3. Approximate slopes after grading activities	Part II.A.4.F.2
	-		Approximate slopes after grading activities Areas of soil disturbance and areas not disturbed	
		-		Part II.A.4.F.3
			5. Location of major structural and non-structural controls.	Part II.A.4.F.4
			6. Location of main construction entrance and exit.	Part II.A.4.F.5
			7. Areas where stabilization practices are expected to occur.	Part II.A.4.F.6
	-		8. Locations of off-site materials, waste, borrow area or storage area.	Part II.A.4.F.7
	1		9. Locations of areas used for concrete wash-out.	Part II.A.4.F.8
			10. Locations of surface waters on site.	Part II.A.4.F.19
	-		11. Locations where water is discharged to a surface water or MS4.	Part II.A.4.F.10
			12. Storm water discharge locations.	Part II.A.4.F.11
			13. Areas where final stabilization has been accomplished.	Part II.A.4.F.12
			14. Legend for symbols/labels used	Part II.A.4.F.13
			15. Location of storm drain inlets on site or in immediate vicinity	Part II.A.4.F.14